



Public Relations and Economic Development Sub (Policy & Resources) Committee

Date: TUESDAY, 3 DECEMBER 2019

Time: 3.00 pm

Venue: COMMITTEE ROOMS

Members: Deputy Catherine McGuinness (Chair)
Simon Duckworth (Deputy Chairman)
Deputy Keith Bottomley
Tijs Broeke
Dominic Christian
Karina Dostalova
Anne Fairweather
Alderman Prem Goyal
Sheriff Christopher Hayward
Deputy Jamie Ingham Clark
Deputy Edward Lord
Andrew Mayer
Jeremy Mayhew
The Rt Hon.the Lord Mayor,Alderman William Russell
Deputy Tom Sleight
Sir Michael Snyder
James Tumbridge
Alderman Sir David Wootton

Enquiries: Emma Cunnington
emma.cunnington@cityoflondon.gov.uk

John Barradell
Town Clerk and Chief Executive

AGENDA

Part 1 - Public Agenda

1. **APOLOGIES FOR ABSENCE**
2. **MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA**
3. **MINUTES**
To agree the public minutes and non-public summary of the meeting held on 5 November 2019.

For Decision
(Pages 1 - 6)
4. **CORPORATE AFFAIRS UPDATE**
Report of the Director of Communications.

For Information
(Pages 7 - 10)
5. **PARLIAMENTARY TEAM UPDATE**
Report of the Remembrancer.

(TO FOLLOW)

For Information
6. **IG MONTHLY UPDATE**
Report of the Director of Innovation & Growth.

For Information
(Pages 11 - 22)
7. **STRATEGIC STAKEHOLDER ENGAGEMENT SUPPORTED BY CUSTOMER RELATIONSHIP MANAGEMENT SOFTWARE**
Report of the Director of Innovation and Growth.

For Information
(Pages 23 - 28)
8. **INSURANCE SECTOR UPDATE**
Report of the Director of Innovation and Growth.

For Information
(Pages 29 - 32)

9. **EPPING FOREST EVENTS TENDER**
Report of the Director of Open Spaces.

For Decision
(Pages 33 - 174)

10. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE SUB-COMMITTEE**

11. **ANY OTHER BUSINESS THAT THE CHAIR CONSIDERS URGENT**

12. **EXCLUSION OF THE PUBLIC**

MOTION - That under Section 100A(4) of the Local Government Act 1972, the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in Part I of Schedule 12A of the Local Government Act.

For Decision

Part 2 - Non-Public Agenda

13. **NON-PUBLIC MINUTES**

To agree the non-public minutes of the meeting held on 5 November 2019.

For Decision
(Pages 175 - 176)

14. **NON-PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE SUB-COMMITTEE**

15. **ANY OTHER BUSINESS THAT THE CHAIR CONSIDERS URGENT AND WHICH THE SUB COMMITTEE AGREES SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED**

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PUBLIC RELATIONS AND ECONOMIC DEVELOPMENT SUB (POLICY & RESOURCES) COMMITTEE

Tuesday, 5 November 2019

Minutes of the meeting of the Public Relations and Economic Development Sub (Policy & Resources) Committee held at the Guildhall EC2 at 3.00 pm

Present

Members:

Deputy Catherine McGuinness (Chairman)	Deputy Jamie Ingham Clark
Simon Duckworth (Deputy Chairman)	Deputy Edward Lord
Deputy Keith Bottomley	Jeremy Mayhew
Tijs Broeke	Deputy Tom Sleigh
Alderman Prem Goyal	Alderman Sir David Wootton

Officers:

John Barradell	- Town Clerk and Chief Executive
Bob Roberts	- Director of Communications
Paul Double	- City Remembrancer
Giles French	- Assistant Director of Economic Development
Damian Nussbaum	- Director of Economic Development
Vic Annells	- Executive Director of Mansion House & CCC
Paul Wright	- Deputy Remembrancer
Nigel Lefton	- Director of Remembrancer's Office
Eugenie de Naurois	- Head of Corporate Affairs
Sam Hutchings	- Corporate Affairs, Communications
Sufina Ahmad	- Corporate Strategy Manager, Town Clerk's
Emma Cunnington	- Town Clerk's

1. APOLOGIES FOR ABSENCE

Apologies for absence were received from Dominic Christian, Karina Dostalova, Anne Fairweather, Sheriff Christopher Hayward, Andy Mayer and James Tumbridge.

2. MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA

There were no declarations of interest.

3. MINUTES

RESOLVED – That the public minutes and summary of the meeting held on 10 October 2019 be approved as a correct record.

4. **CORPORATE AFFAIRS UPDATE**

The Sub-Committee received a report of the Director of Communications providing Members with an update of the Corporate Affairs Team's activities in supporting the City Corporation's strategic political engagement.

Members were also updated on the recently announced party candidates for the Cities of London and Westminster seat. The Chair of Policy and Resources also informed Members that roundtables were being set up with mayoral candidates from different parties ahead of the London mayoralty elections in 2020.

RESOLVED, that:

- The report be noted.

5. **PARLIAMENTARY TEAM UPDATE**

The Sub-Committee received a report of the Remembrancer updating Members on the main elements of the Parliamentary Team's activity in support of the City Corporation's political and parliamentary engagement.

The Remembrancer updated Members on the election of the Speaker of the House of Commons as well as the Emissions Bill.

The Chair of Policy and Resources added that the meeting with Assembly Member, Caroline Russell, had been postponed until after the General Election.

RESOLVED, that:

- The report be noted.

6. **INNOVATION & GROWTH MONTHLY UPDATE**

The Sub-Committee received a report of the Director of Innovation and Growth providing Members with highlights of the key activity undertaken by the Innovation & Growth Directorate (IG) in October 2019.

RESOLVED, that:

- The report be noted.

7. **EU ENGAGEMENT**

The Sub-Committee considered a report of the Director of Innovation and Growth outlining the recently hosted high profile events in Brussels, which promote the City Corporation's core messages regarding its relationship with the EU, with a specific focus on sustainable finance.

RESOLVED, that:

- The report be noted; and
- Member representation at the Brussels Annual Reception include:
 - Chair of the Policy and Resources Committee
 - Deputy and Vice Chair(s)/men of the Policy and Resources Committee, or representatives of the Public Relations and Economic Development Sub-Committee in their absence.

8. **CPR/LM VISIT TO NEW YORK AND CPR VISIT TO WASHINGTON**

Members received two reports concerning the joint Lord Mayor and Chair of Policy & Resources' visit to New York City, and the Chair of Policy and Resources' visit to Washington D.C.

RESOLVED, that:

- The reports be noted.

9. **CPR VISIT TO SWITZERLAND**

The Sub-Committee received a report of the Director of Innovation and Growth concerning the Chair of Policy and Resources visit to Switzerland in September 2019.

RESOLVED, that:

- The report be noted.

10. **DRAFT SPORTS & PHYSICAL ACTIVITY STRATEGY 2020-25**

The Sub-Committee considered a report of the Town Clerk concerning the City Corporation's draft Sport and Physical Activity Strategy 2020-25.

Members discussed the importance of having an overview of the current spend associated with existing activity under the Sport and Physical Activity Strategy ahead of the next meeting of this Sub-Committee to allow for informed prioritisation.

The Sub-Committee also gave officers a steer as to try and ensure the Working Party that would oversee the successful implementation of this strategy was kept rather smaller and that overlap of Members representing different committees be the aim.

RESOLVED, that:

- The draft version of the Sport and Physical Activity Strategy be noted;
- Officers set out the current spend associated with existing activity under the Sport and Physical Activity Strategy ahead of the next meeting of this Sub-Committee.

11. **SOCIAL MOBILITY STRATEGY 2018-28 ANNUAL REPORT**

The Sub-Committee received a report of the Director of City Bridge Trust and Chief Grants Officer presenting the first annual report of the City Corporation's Social Mobility Strategy for 2018-28, which was approved by the Policy and Resources Committee in September 2018.

The Corporate Strategy Manager gave Members an overview of how social mobility links with other strategies (such as Education and Responsible Business strategies) to create a corporate narrative. Members suggested that simple factsheets be created to ensure that the work of this strategy could be clearly communicated, particularly including the work of the City of London Academies Trust.

The Sub-Committee also discussed the City Corporation's ranking on the Social Mobility Employer Index and the Town Clerk suggested he bring a report to the Establishment Committee considering some of the ways that the ranking could improve.

RESOLVED, that:

- The Social Mobility Strategy Annual Report be endorsed and prioritised.

12. DIGITAL SKILLS STRATEGY

The Sub-Committee considered a joint report of the Director of Innovation and Growth and the Director of Community and Children's Services concerning the first annual report of the Digital Skills Strategy, 2018-23.

RESOLVED, that:

- The Digital Skills Strategy Annual Report be endorsed and prioritised.

13. QUESTIONS ON MATTERS RELATING TO THE WORK OF THE SUB-COMMITTEE

Questions were raised as follows -

Battle of Ideas

A Member asked for clarification on the decision made for the City of London Corporation to continue to support the Battle of Ideas conference for future years. The Town Clerk agreed to get more information and discuss with the Member outside of the meeting.

14. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT

The following items of urgent business were raised –

Corporate Strategy Manager

The Chair and the Town Clerk took the opportunity to thank the Corporate Strategy Manager for her work ahead of her imminent departure from the City Corporation.

Regularity of meetings

The Chair raised that this Sub-Committee currently met 11 times a year and suggested that this be reduced in future. Members were in unanimous agreement.

RESOLVED, that:

- The Public Relations and Economic Development Sub-Committee meetings be reduced to six meetings a year from 2020 onwards.

Financial Services Skills Taskforce

The Chair asked the External Affairs Director in Innovation and Growth to update the Sub-Committee on the Financial Services Skills Taskforce launched by the previous Chancellor of the Exchequer to look at the UK's long-term competitiveness in regard to skills in the short to medium term. The External Director advised that although the report was due to be launched shortly, there had now been a delay due to the pre-election period. Members heard that the

Policy and Resources Committee would receive a non-public paper in due course to give a sense of the recommendations from the report.

15. **EXCLUSION OF THE PUBLIC**

RESOLVED – That under Section 100(A) of the Local Government Act 1972, the public be excluded from the meeting for the following items on the grounds that they involve the likely disclosure of exempt information as defined in Part I of the Schedule 12A of the Local Government Act.

Item	Paragraph
16	3

16. **NON-PUBLIC MINUTES**

The non-public minutes and summary of the meeting held on 10 October 2019 were approved.

17. **NON-PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE SUB-COMMITTEE**

One question was raised in respect of departments working together.

18. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE SUB COMMITTEE AGREES SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED**

There were no items of urgent business.

The meeting closed at 3.50 pm

Chairman

Contact Officer: Emma Cunnington
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Agenda Item 4

Committee Public Relations and Economic Development Sub (Policy and Resources) Committee	Dated: 03 December 2019
Subject: Corporate Affairs Update	Public
Report of: Bob Roberts, Director of Communications	For Information
Report author: Meghan Green	

Summary

This report provides a monthly update of the Corporate Affairs Team's activities in supporting the City of London Corporation's strategic political engagement.

The Corporate Affairs Team coordinates and organises the City Corporation's political engagement and supports both Members and Officers in its delivery. The focus of this report is on the activity undertaken by the Lord Mayor and Policy Chair.

The activities documented in this report focus largely on those led by the Corporate Affairs Team. Activities undertaken in partnership with other teams and/or departments are also included and have been appropriately termed.

Each area of activity is linked back to the objectives outlined in the Communications Business Plan.

The timeframe of this report spans the period lapsed between the previous and current meetings of this Sub Committee.

Recommendation

Members are asked to:

- Note this report.

Main Report

Strategic Objectives

1. To fulfil the objectives set out in the Communications Business Plan set out for the Corporate Affairs team.

Overview

2. Based on developments in the domestic political and economic landscape and in line with the City Corporation's corporate priorities, the Corporate Affairs Team has focused its activity in the areas of engagement listed below.

General Election

3. Ahead of the General Election taking place on 12th December 2019, the Corporate Affairs Team:
 - a. Drafted the internal guidance for the City Corporation regarding the pre-election period
 - b. Has been monitoring the parties' political campaigns
 - c. Worked with the REM office on a matrix summarising different parties' manifesto pledges
 - d. Worked on preparing the necessary updates to the CRM in terms of political turnover
 - e. Consulted the relevant departments on priority areas to include when seeking to engage with the new Government.
4. The above links to the following Business Plan objectives:
 - a. To have coordinated political engagement activity across the organisation;
 - b. To remain relevant in the policy-making and political sphere.

Domestic Political Engagement

5. The Corporate Affairs Team organises engagement with key political representatives and decision-makers in government at local, regional and national levels and in September and October, this covers the annual party conference season.

Party Conferences

6. Hotel accommodation and the dinner venues have been secured for the 2020 Autumn Party Conferences.
7. The above links to the following Business Plan objectives:
 - a. To remain relevant in the policy-making and political sphere;
 - b. To bring stakeholders together to discuss policy issues that affect them, and subsequently deliver on any desired outcome of that discussion.

National engagement

8. The Corporate Affairs Team:
 - a. Provided support for the Policy Chair's attendance at Cumberland Lodge and the Ditchley Park Conference
 - b. Provided support for the LM's visit to Leeds and Manchester
 - c. Provided support for the Policy Chair speaking at:
 - The Institutional Investors dinner
 - The reception for the Women of the Future
 - The Lord Mayor's Show Ambassador's lunch
 - The Green Finance Summit
 - The Central London Forward inclusive growth launch

- An address to the Livery
 - The Association of Economic Representatives in London (AERL) event
- d. Provided support for Deputy Chairs and Members of the Policy and Resources Committee speaking at:
- a Freedom Ceremony
 - a Fintech roundtable
 - a Reform dinner
 - A one-day conference with the English Cricket Board
 - The 'Everything in Sport Women's Edition' conference.
- e. Provided support to the Chamberlain for a Freedom Ceremony
9. The above links to the following Business Plan objectives:
- a. To deliver clear, consistent and confident public messaging across the City Corporation;
 - b. To have coordinated political engagement activity across the organisation;
 - c. To remain relevant in the policy-making and political sphere;
 - d. To bring stakeholders together to discuss policy issues that affect them, and subsequently deliver on any desired outcome of that discussion.

International Engagement

10. The Corporate Affairs Team assists the City Corporation's overseas engagements undertaken by the Policy Chair and Lord Mayor. The Corporate Affairs Team has:
- a. Provided support for the Policy Chair's speeches for her visit to China.
11. The above links to the following Business Plan objectives:
- a. To deliver clear, consistent and confident public messaging across the City Corporation.

London – Local engagement and London promotion

12. The Corporate Affairs Team seeks to maintain and develop the City Corporation's engagement with communities, bodies and authorities across London.
- a. The Policy Chair attended and spoke at the Centre for London's annual London Conference on 5 November, of which the City Corporation was a major sponsor.
 - b. The Policy Chair continues to engage with London boroughs and will be seeing the leaders of Lewisham, Merton, Tower Hamlets and Wandsworth.
 - c. The Corporate Affairs team is involved with preparations for the London Government Dinner in January.
 - d. The Policy Chair was briefed ahead of her monthly attendance at London Councils Leaders' Committee.
 - e. London Mayoral candidates have been approached to engage with our business stakeholders ahead of the London Mayoral Election.
13. The above links to the following Business Plan objectives:
- a. To have coordinated political engagement activity across the organisation;
 - b. To remain relevant in the policy-making and political sphere;
 - c. To bring stakeholders together to discuss policy issues that affect them, and subsequently deliver on any desired outcome of that discussion.

Think-tanks and third-party organisations

14. As part of the City Corporation's engagement with think tanks and other external organisations, the Corporate Affairs Team:

- a. Organised and supported the Policy Chair's attendance at Cumberland Lodge (CER), alongside Nick Collier, and the Ditchley Conference (CPS)
- b. Finalised the organisation of the Battle of Ideas Festival, held in the Barbican
- c. Met with Reform, Bright Blue, Centre for Cities and Demos to exchange on areas of mutual interest.

15. The above links to the following Business Plan objectives:

- a. To bring stakeholders together to discuss policy issues that affect them, and subsequently deliver on any desired outcome of that discussion.

Sport

16. As part of the City Corporation's Sport engagement programme, the Corporate Affairs team:

- a. Co-hosted a one-day conference with the English Cricket Board on improving access to cricket opportunities in London. The Chairman of the Hampstead Heath, Highgate Wood and Queens Park Management Committee welcomed guests at the start of the day.
- b. Arranged for the Vice Chair of Policy to speak on a panel at the 'Everything in Sport Women's Edition' conference. The panel considered ways of achieving equality within sport.

Priorities for the next quarter

17. Priorities for the Corporate Affairs Team over the next four months are:

- a. Monitoring the political environment and preparing for a General Election, with associated engagement opportunities
- b. Finalising the London Borough meetings for the Policy Chair
- c. Preparing a series of engagements ahead of the London Mayoral elections and after
- d. Continuing with the sports engagement programme which is the subject of a separate report to this Committee, every quarter.

Committee	Dated:
Public Relations & Economic Development Sub-Committee	18 November 2019
Subject: IG monthly update – November	Public
Report of: Damian Nussbaum, Director of Innovation & Growth	For Information
Report author: Emily Howell – Executive Officer, Innovation & Growth	

Summary

The following report provides Members with highlights of the key activity undertaken by the Innovation & Growth Directorate (IG) in November 2019. The activities covered documented in this report focus largely on those lead by the IG team. Activities undertaken in partnership with other teams and departments are also included and have been appropriately termed. Each area of activity is linked back to the objectives outlined in the IG Business Plan.

Recommendation

Members are asked to:

- Note the progress of IG workstreams.

Main Report

The highlights are structured around our four core objectives:

Innovative Ecosystem

1. The Lord Mayor (LM), the High Commissioner of India and Sir Roger Gifford spoke at the UK-India Sustainable Investing Partnership Forum 2019, where we launched a new report “Untapped Potential Supercharging Green Finance in India”. The report focuses on understanding the barriers restricting the flows of capital into viable green projects in India and the challenges in raising finance.

World Class Business Environment

2. We hosted the final day of Beyond Cyber, where senior cyber experts from central banks across the Commonwealth came together to build resilience against cyber threats. Sheriff Michael Mainelli joined delegates alongside the UK's Cyber Security Ambassador Henry Pearson for the morning roundtable, while Policy Chair Catherine McGuinness (CPR) and Commander Karen Baxter joined the closing lunch.
3. The Skills team hosted the first of seven Investment 20/20's 'Think Investments' sessions. The programme gives over 30 sixth-form students from local

boroughs access to investment firms across the City, networking with C-Suite executives and the opportunity to learn soft skills to succeed in job applications applying. The students heard from investment firms including Aberdeen Standard Investments, Barings and Quilter.

4. The External Relations team hosted the final Leaders of Tomorrow event. Speakers included the LM and the founder of Man Bites Dog, the strategic ideas company, who spoke on their research from working with CEOs and businesses on how to be future ready in periods of disruption.
5. The Skills team also visited Goldman Sachs' new headquarters to review their local labour and procurement performance under Section 106. The building has delivered 1.4 million hours of local labour, which in turn has supported over 50 traineeships and apprenticeships with 57 contracts awarded to local businesses (a total 29.4% of overall procurement).
6. The Skills team hosted a roundtable to scope a collaborative piece of research. We aim to explore career progression for high achieving employees from lower social economic backgrounds. The findings will feed into future discussions about access to skills and productivity. Representatives attended from the FCA, Bank of England, First State, Legal & General, RBS, Lloyds, Cambridge Associates, Standard Chartered and Santander.
7. The Skills team also attended the launch of the Employers' Social Mobility Alliance, co-chaired by Sir Kenneth Olisa and Helen Mahy CBE. The Alliance aims to map social mobility initiatives and research across the country, to provide a coherent readout and recommendations for employers. Justine Greening (now a former MP) and Justin Madders MP are co-chairing the research project, which is due for publication in September 2020.

Access to Global Opportunities

8. The Trade & Investment team held the Nigerian Investment Showcase at Guildhall where we heard from Nigerian public and private sector representatives about Nigeria's economic outlook and about specific projects in Nigeria in a variety of sectors. This was followed by a panel session where UK and international investors discussed some of the challenges preventing the flow of SDG (Sustainable Development Goal) capital from satisfying Nigeria's financing demands. The Nigeria Investment Showcase is part of a series of events taking place in London, ahead of the UK Africa Investment Summit in January 2020.
9. Nick Collier, our Managing Director in Brussels, led a TheCityUK delegation to Luxembourg. The programme included meetings with senior representatives from the Luxembourg Ministry of Finance, the European Investment Bank, CSSF (the Luxembourg financial services regulator), British Embassy; and lunch with Luxembourg for Finance. Luxembourgers are keen to establish a formal dialogue with us as we have with Dublin and other major centres.

Global Recognition of UK's FPS Offer

10. CPR hosted a roundtable with Hong Kong Financial Secretary Paul Chan. The focus was the development of the Greater Bay Area as well as the Belt and Road Initiative, as well as how the UK can support offering its specialist expertise in infrastructure financing and risk management.
11. A new report, "London as a Centre for Management of Financial Risks", was produced together with PwC. This explains what the UK's FPS sector can offer to corporate treasurers at a time when risk management becomes more central to their strategic decision making. The report findings will be tested at the upcoming CPR China visit.
12. A new brochure, "Providing financial services to the world", which showcases the UK's top export markets and foreign direct investment, was produced as part of the theglobalcity.uk campaign. According to new ONS trade data, exports from UK financial services and insurance firms soared to a record high of £82bn last year, up from £78bn in 2017.
13. CPR and LM hosted a VIP dinner for the Board of the Institutional Investors Roundtable (IIR), which represent 40 of the largest global pension and sovereign wealth funds. At the dinner, which replaced their planned participation in the Lord Mayor's Banquet, 15 senior investors were able to meet City business leaders in asset management, investment banking and innovation, as well as a strong City Corporation team. The main theme of discussion was ESG investing, and further City Corporation work on the topic with IIR in the run-up to COP26 in Glasgow in 2020.

Partnerships and Engagement

14. The LM hosted the Governor of Qatar Central Bank, His Excellency Sheikh Abdulla bin Saoud Al Thani, to receive a Freedom of the City. The Governor was recognised for the Qatar Central Bank's contributions and investments into the city, such as the £15m announcement at Qatar Day for the partnership to develop the Qatar Centre for Global Banking and Finance.
15. The new LM underwent his first visit of the mayoralty by visiting the Manchester and Leeds, as part of CoLC's regional engagement. In Manchester, Venture Capital was a key theme, where existing conversations developed on linking London-based VCs with Manchester-based VCs and supporting the Manchester VC ecosystem. In Leeds, the main focus was 'culture', and how we could promote the Lord Mayor's launch of the Institute of Cultural Social Impact. The Lord Mayor also met with Channel 4, who have recently relocated to Leeds.

Appendices:

1. Providing financial services to the world

**Emily Howell | Executive Officer
Innovation and Growth**

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Providing financial services to the world



Foreword



William Russell

The Rt Hon The Lord Mayor
of the City of London



Catherine McGuinness

Chair of Policy and Resources,
City of London Corporation



The UK is the world's first choice supplier of financial and professional services, helping businesses around the world prosper. New figures from the ONS show that the UK exported £82bn worth of financial services in 2018, up from £78bn in 2017.

The UK still has the world's largest trade surplus of financial services – £63bn, up from £61bn in 2017. And these figures also show that financial services is a major driver of the UK economy – this is by far the largest trade surplus of any other UK service industry.

The sector's trade with the European Union rose from £30bn in 2017 to £32.6bn in 2018, with the share of financial services and insurance exports going to this market also climbing from 39% to 40%.

Beyond the EU, exports to key markets increased, including the US

(up from £20.7bn in 2017 to £21.7bn in 2018), Japan (£4bn to £4.4bn) and Canada (£1.8bn to £2bn). Overall trade with non-EU countries actually rose from £47.6bn to £49.6bn, providing the finance and services needed by our international partners.

The success of UK financial services and insurance firms in exporting across the globe is key in balancing our trade deficit and helps to support jobs around the country. In fact, regional hubs up and down the country play a crucial role in driving financial services exports. In Edinburgh, financial services exports accounted for almost half of all its services exports in 2017, while in cities like Birmingham and Leeds this amounted to close to 40% of all their services exports.

The UK's innovative financial services sector also plays a key role in attracting international investors –

in 2017 it had the highest stock of foreign direct investment compared to other sectors and accounted for close to a third of all foreign direct investment stock. Global investment boosts job creation, capital investment, innovation and productivity. As a global leader in attracting investment, the UK benefits from and contributes to the success of international investors locating their operations here.

Despite headline grabbing trade disputes and erection of borders, the facts speak for themselves – London is one of the few truly global cities, and our success depends on remaining open to trade and investment from around the world. Through sharing and developing our financial services expertise, the UK can continue to build and strengthen trade and investment links across the world.

Global connections: UK's financial services exports

£82bn

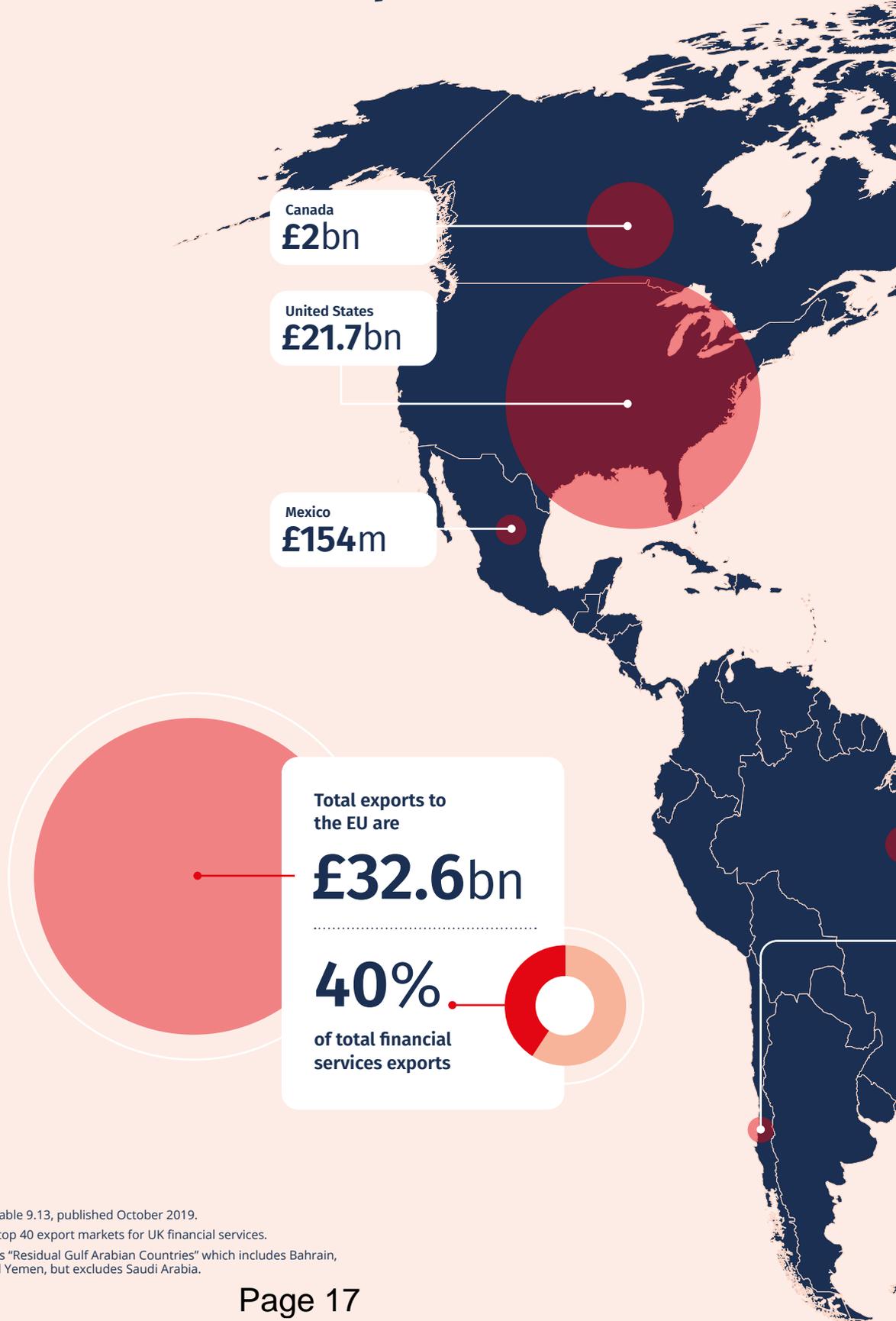
total financial
services exports
in 2018

28%

of all service
exports

13%

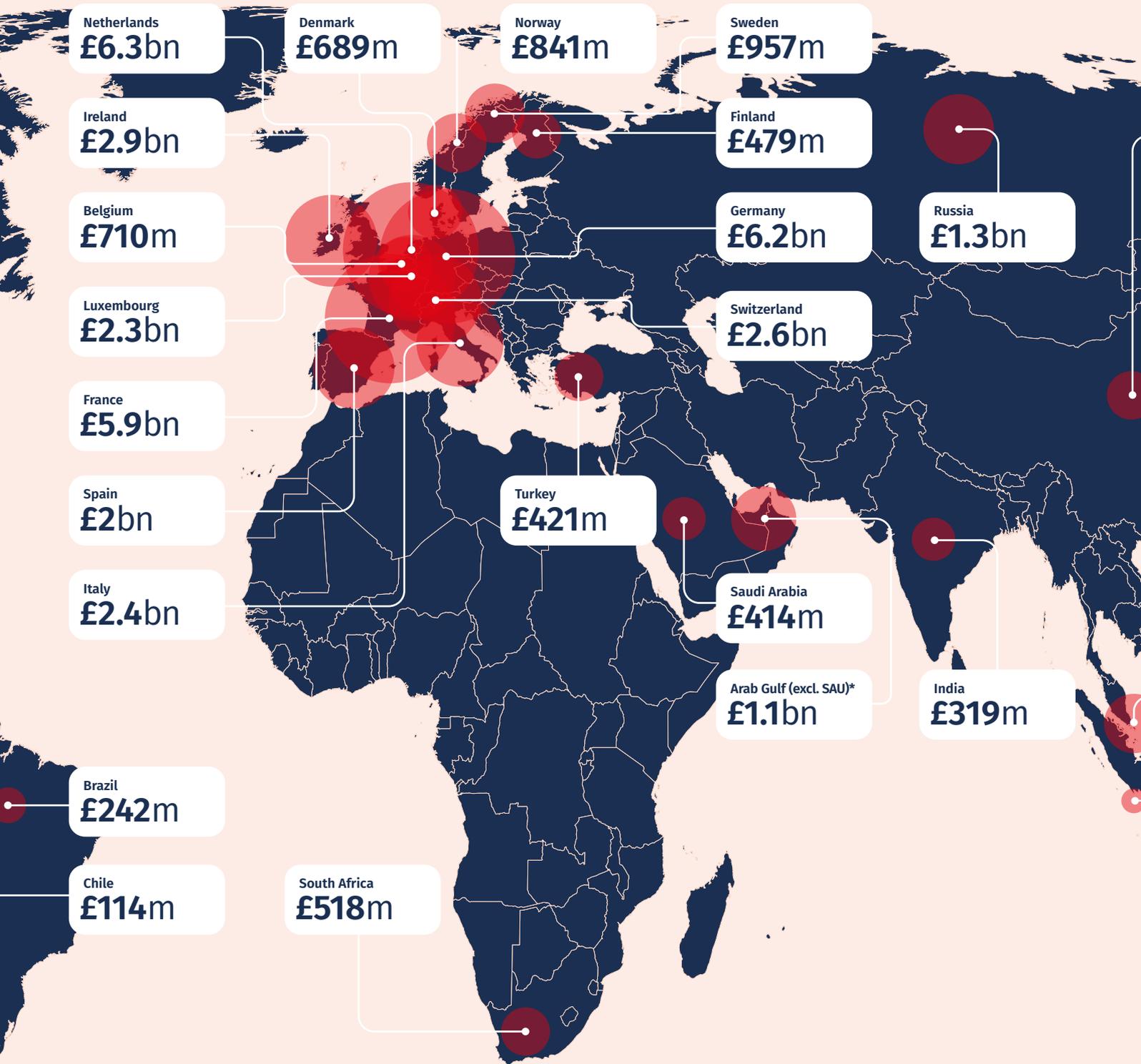
of all exports

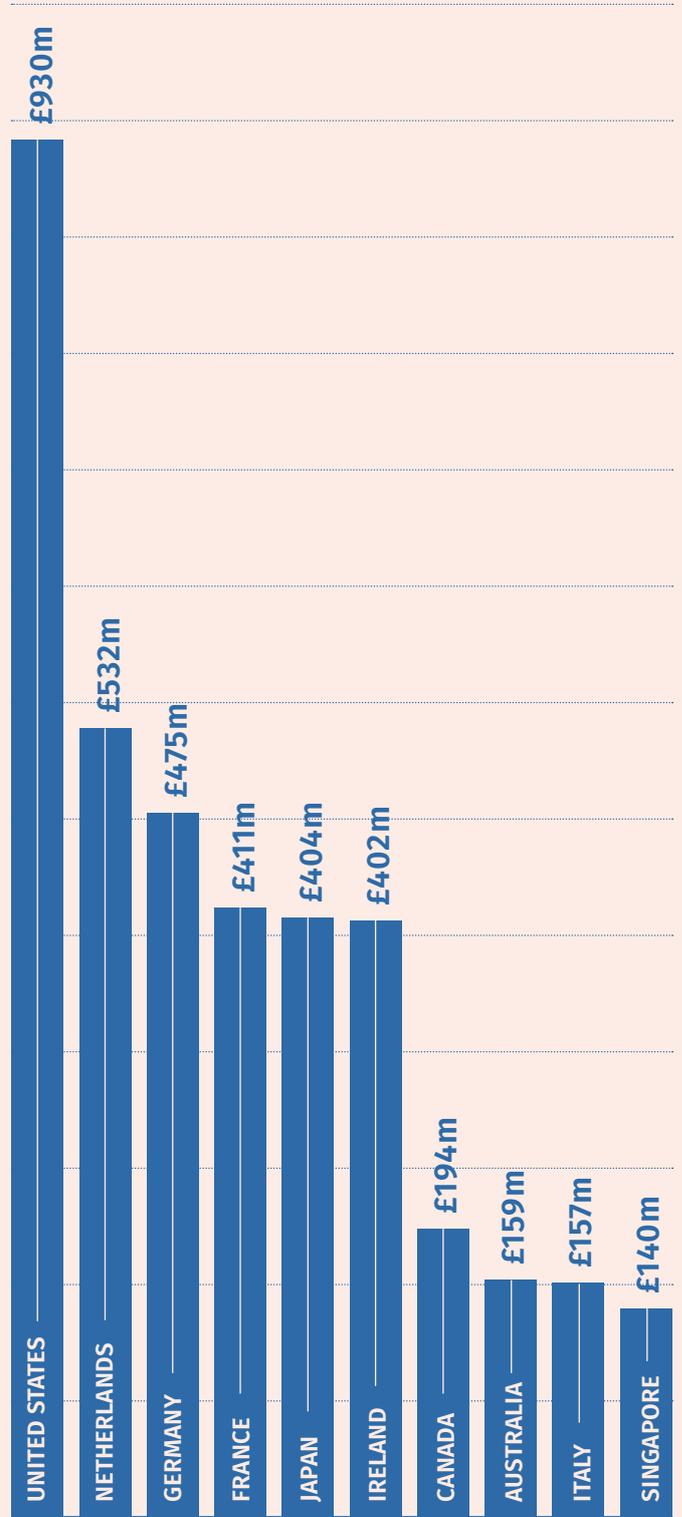


Source: ONS PinkBook 2018, Chapter 9, table 9.13, published October 2019.

Note: This map covers a selection of the top 40 export markets for UK financial services.

* The Arab Gulf region refers to the ONS's "Residual Gulf Arabian Countries" which includes Bahrain, Iraq, Kuwait, Oman, Qatar, the UAE and Yemen, but excludes Saudi Arabia.

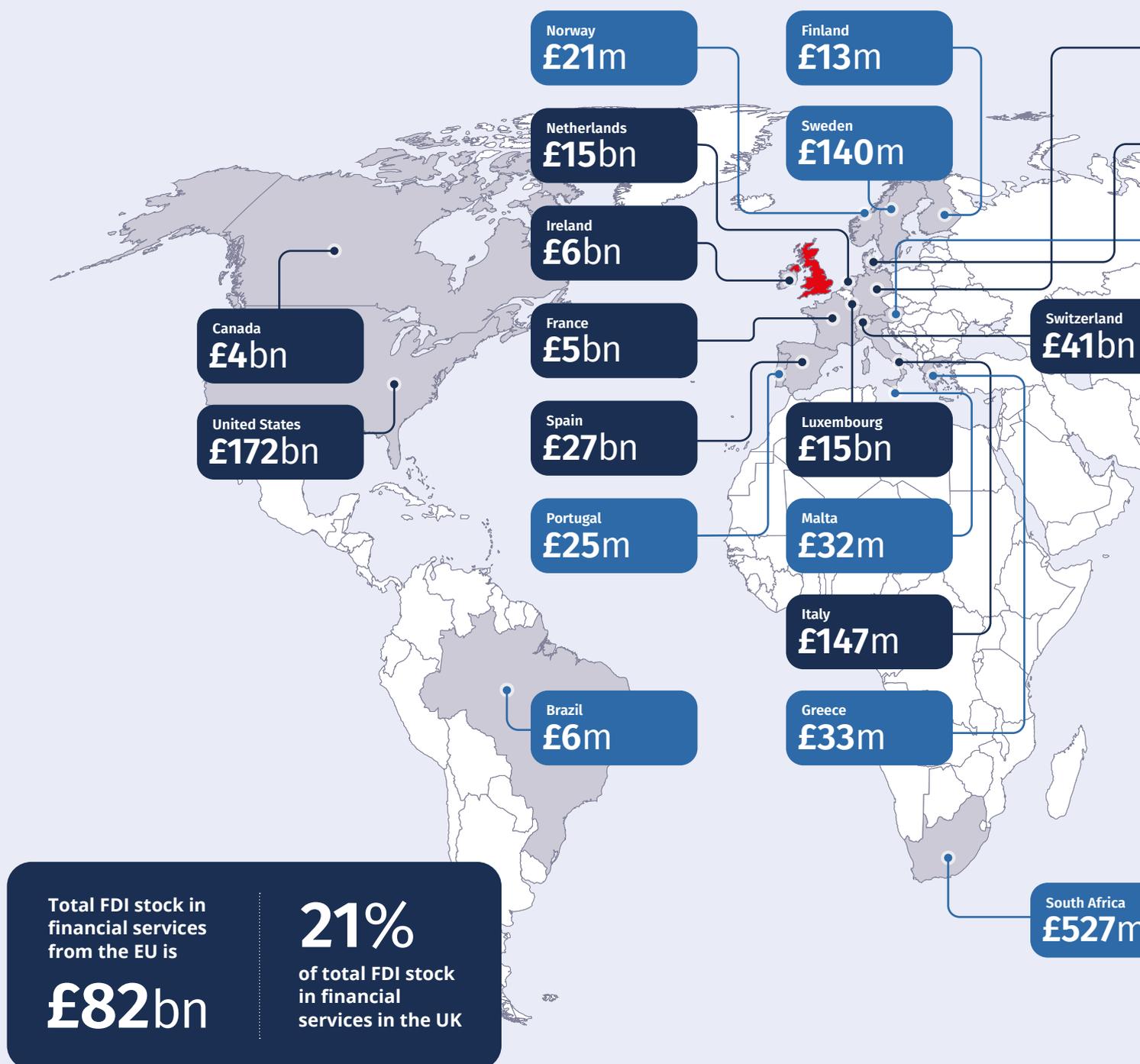




Top 10 highest growth export markets for UK financial services exports

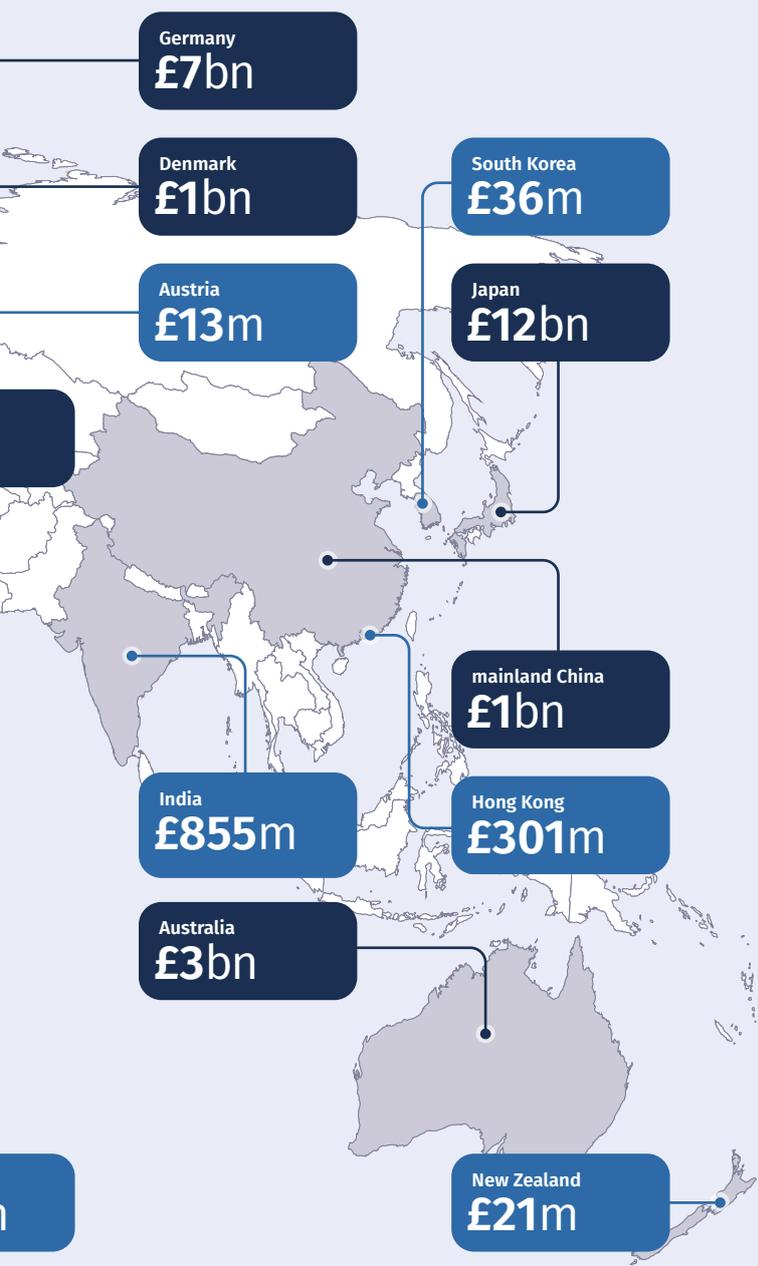
(absolute change, 2017-2018)

Global connections: Foreign direct investment in UK's financial services (Stock)



Source: ONS, Inward Foreign Direct Investment (FDI) Involving UK Companies, 2017, published on 4th December 2018.

Notes: Foreign Direct Investment (FDI) stocks refer to the total value of FDI accumulated over the long term, measured at the end of the year (assets held in the UK by non-resident enterprises). The map covers all 27 countries with available data for 2017.



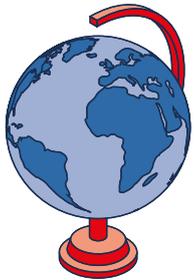
£385bn
total foreign investment
(FDI) stocks in financial
services in 2017

29%
of all FDI stock
in the UK

**Top 10 countries by highest growth
in UK financial services investment**
(absolute change in FDI stock, 2014-2017)



Facts and figures: The UK financial services exports



The UK's financial services exports to the world have **increased 6%** between 2017 and 2018, from £78bn to

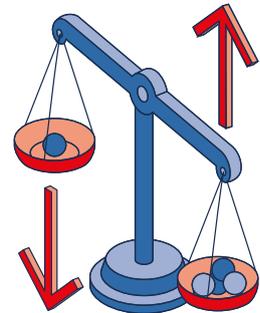
£82bn

showing strong demand for these services from abroad.

The UK exported more than

4 times

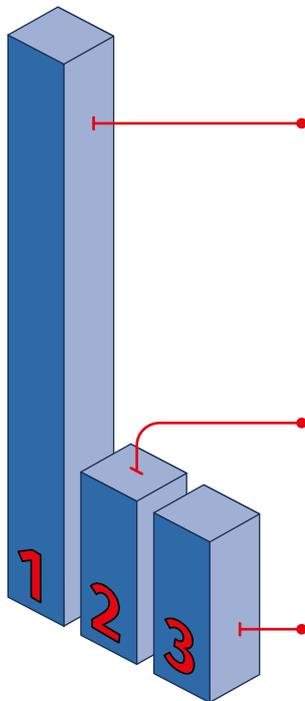
the worth of financial and insurance services that it imported.



The resulting **trade surplus** is the largest of any UK service sector at

£63bn

up from £61bn in 2018. It helps to balance the UK's trade in goods deficit.



The **United States** is by far the UK's **largest export market**, purchasing

£21.7bn

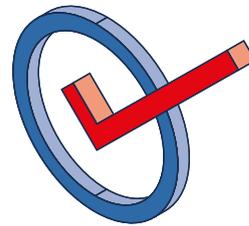
worth in financial and insurance services in 2018.

The **Netherlands** is the second largest export market purchasing

£6.3bn

followed by **Germany**, with annual exports of

£6.2bn

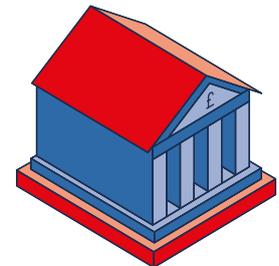


In 2018, financial service **exports to the EU** rose from £30bn in 2017 to

£32.6bn

and the share of financial services going to the EU climbed from 39% to

40%



Outside London, financial services exports made up at **least a third of all services sector** exports across the UK regional financial services hubs such as

Edinburgh

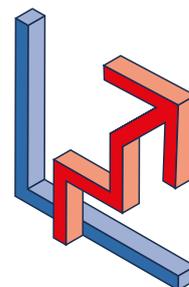
49%

Leeds

39%

Birmingham

39%



Last year, trade with non-EU countries rose from £47.6bn in 2017 to

£49.6bn

Exports to emerging markets grew from £6.7bn to £6.9bn – driven in part by an increase in **exports to the Gulf region**.

Committee(s)	Dated:
Public Relations and Economic Development Subcommittee	3 December 2019
Subject: Strategic stakeholder engagement supported by Customer Relationship Management Software	Public
Report of: Damian Nussbaum, Director of Innovation and Growth	For information
Report author: Ricardo Fajardo, Innovation and Growth	

Summary

To support better targeting and coordination of the City Corporation’s strategic engagement with political and business stakeholders, the City Corporation has implemented a new Customer Relationship Management (CRM) system bringing together Innovation and Growth, Remembrancer’s, Mansion House, Corporate Affairs, and the Chair of Policy and Resources Office.

Now that this CRM platform is operational, this paper reports on progress and future opportunities for improving strategic engagement via CRM, along four dimensions:

- **Legal compliance:** Having a contact management system that enables data to be stored in a clean and well-managed way in line with the City Corporation’s GDPR and legal responsibilities;
- **Shared intelligence:** Ensuring better coordinated planning, briefing, and capturing stakeholder intelligence holistically across different departments and forms of engagement;
- **Assessing and modifying approaches:** Analysing how successful different forms of engagement have been with individuals and organisations, and modifying accordingly; and
- **Active goal alignment:** Using the platform to ensure engagement is aligned with and supports strategic goals.

As the system develops, it will also support several efficiencies in ways of working, including automated systems for electronic registration and invitation of guests to events, automation of diary management, tracking and automated responses for campaigns and literature distribution and live reports in combination with public databases.

In addition, the paper notes how the Strategic Relationship Management (SRM) team in Innovation and Growth will improve the impact of external engagement, supported by the CRM system.

Recommendation(s)

Members are asked to note the report, which they had requested.

Main Report

Background

1. The City of London Corporation's previous approach to Customer Relationship Management (CRM) was ineffective, inefficient, and posed a significant risk to the City Corporation around data protection and GDPR. A new approach bringing together strategic engagement and events management from across Innovation & Growth, Corporate Affairs, Remembrancer's, Mansion House, and central support for the Chair of Policy and Resources onto a new and up to date IT platform supported by a new Business Intelligence Unit (BIU) was approved in May 2018.
2. In order to realise the above, the Public Relations and Economic Development Sub Committee and the Policy and Resources Committee approved the new approach to strategic engagement and events management; the Resource Allocation Sub Committee approved £110,000 funding as a permanent uplift in budget for the strengthened support team (2019/2020); the Finance Committee approved £185,000 of contingency funding for a transition team and the Business Intelligence Unit (2018/2019) and the Establishment Committee approved the necessary steps to undertake the changes in the structure in relation to human resource.
3. These associated costs approved by these committees were used for transition support and re-evaluation of associated staffing, following the division of roles from the previous central team between Electoral Services in support for the City Occupiers Database, and the new Business Intelligence Unit.
4. Innovation and Growth managed this process of change, working closely with IT to implement the technical solution, and across the departments coming onto the system to develop agreed joint ways of working and approaches to data management. A new team – the Business Intelligence Unit – commenced in March 2019. Housed in IG, it took on the responsibility for managing the system and working with users across departments.
5. The new system, based on Microsoft Dynamics and customised in-house, has been operational since July 2019, with 111 users licensed and trained to use this to manage their data records, upload briefings and meeting notes, and capture key information about stakeholders, such as their role, sector, industry, interests, and for political stakeholders, party and roles, constituency and majority.
6. Events management will also be fully integrated on the system by December 2019 with events teams in Mansion House and Remembrancer's able to use the system to plan events, with new functionality to send out and manage invitations, track responses and modify guest lists. The platform's ability to fully integrate table seating planning and reporting will be developed and finalised by February 2020.
7. The system is supported by IT, with Microsoft Dynamics now adopted as the platform for most CRM systems across the City Corporation. There is currently additional temporary development support through to March 2020 to complete the

new events functionality. After this, IT will provide the necessary support to ensure the software is kept up to date and functionality including migration to the new user interface that will allow access for mobile and tablet, automatic scanning of business cards, increased performance and interactive dashboards.

8. As part of the CRM development, we engaged with stakeholders including the CBI and the Law Society to understand industry best practice, while building in the new functionality offered by the latest Dynamics software and tools such as Google Analytics.

Current Position - CRM Benefits

9. The new system supports strategic engagement along four key dimensions, outlined below, while also offering operational efficiencies.
10. **Legal compliance:** A large scale data cleansing exercise was carried out to remove out of date, irrelevant, and duplicated records, reducing the number of records held from 372,000 to 22,000. New data retention and ownership policies have been introduced to ensure active management of records, and training undertaken with every individual using the system to ensure they are aware of their data protection responsibilities. GDPR self-assessment and automatic GDPR email notifications to new contacts have been built into the system. Collectively these measures are helping to ensure that the City Corporation's strategic engagement is GDPR compliant and server encryption measures mean that the information held is significantly more secure than previously.
11. **Shared intelligence:** For the first time, the City Corporation now has a joint system in place to enable contacts from across five departments to be shared. This means that users can see both previous and forthcoming engagements to help coordinate planning, and access previous briefing and meeting notes to ensure coordinated briefings and that meetings build on previous engagement without duplicating it. Work is ongoing to ensure all the LM and CPR's strategic engagements are logged on the system.
12. As the planned functionality of the system further develops, this means it will also be possible to track engagement holistically on an individual or organisation level across different engagement formats – for example to see what events they have attended or declined and which newsletters they receive, alongside more formal meetings, again helping to target and inform engagement better.
13. **Assessing and modifying approaches:** Bringing together and tracking different forms of engagement in this way will also enable the City Corporation to assess how effective different forms of engagement are proving to be – for example, if a specific invitee from a particular company never attended events then we could target different representatives, or ensure particular under-represented sectors are invited.
14. **Active goal alignment:** The new system enables information to be captured at an individual and firm level that will help to ensure proactive strategic alignment in different forms of engagement – for example, by tagging and capturing specific

interests or relevant fora, such as an interest in green finance, or Davos attendance.

15. In addition to the benefits in supporting strategic engagement, the system is supporting a number of **operational efficiencies** and new ways of working, current and planned. These include:
 - Full integration with Outlook and Microsoft Teams, both in desktop and mobile devices, operating with real time analysis of engagement by teams, sectors and industries in the system while allowing collaborative work with colleagues;
 - The use of integrated ClickDimensions for marketing purposes, including email, web forms and surveys; and
 - The ability to digitally register and process event guests, seating plans, and associated information such as dietary requirements, and produce tailored output reports for different uses such as caterers and security.

Strategic Relationship Management

16. The new CRM system provides the platform of intelligence and analysis to enable better strategic engagement. But there are also some changes needed to support how we collectively undertake account management and stakeholder engagement. To this end, following Innovation and Growth's restructure, a dedicated Strategic Relationship Management (SRM) team is being set up, and expected to be in place by end of January 2020.
17. Relationship management is effective, well-coordinated and sustained engagement with key external stakeholders – businesses, policy-makers and representative bodies. It is critical to the City Corporation role in ensuring the UK's financial and professional services offer is innovative and globally competitive. It helps to more easily share business intelligence and mobilise cross-departmental resources in support of our economic, trade, investment, civic, cultural, regulatory and wider policy objectives.
18. By knowing its partners and stakeholders better and systematically developing and maintaining relationships with them over the long term, we will have better understanding of each organisations' priorities and concerns and how these overlap with CoLC's aims and offer to them. This requires an effective and systematic approach to relationship management across the whole organisation.
19. The SRM team will provide dedicated capacity for relationship management of key accounts of businesses, government departments and trade associations. They will also provide strategic oversight and support of relationship management led by other teams in Innovation and Growth and ultimately other Corporation departments.

Next Steps in Developing Strategic Engagement Support

20. All the external engagement teams in Town Clerks, Remembrancers and Mansion House Departments now have fully trained users on the system and are starting

to systematically record information and intelligence both about stakeholders (such as their interests) and from them (eg from meetings).

21. A central record of the City Corporation's stakeholder management will be beneficial for political engagement and will allow Officers across the Corporation, but particularly in Remembrancer's and Corporate Affairs, to co-ordinate strategic relationships and to act as a central repository for briefings and records of meetings.

Proposal

22. Members are asked to note this report.

Corporate & Strategic Implications

23. The use of CRM will support effective external engagement across delivery of the Corporate Plan. Alignment with the SRM strategy ensures that indicators of success, particularly on objective 7b ("Strengthen local, regional, national and international relationships to secure new opportunities for business, collaboration and innovation") are met.

Implications

24. There are no new financial, legal, property or human resource implications.

Conclusion

25. CityDynamics, the Corporation's customised CRM system, has been operational since July 2019 for strategic engagement, meaning that for the first time, the Corporation has a system that enables a holistic view and analysis of engagement at an individual and organisational level across the five departments on the system. This will support the benefits outlined along the four dimensions reported in this paper.
26. Early benefits have so far proven to be GDPR compliance, a much smaller and cleaner set of records, and shared briefings and better coordinated engagement. The system enhances productivity through more efficient processes, deepens the understanding of business and political stakeholders and informs coordinated and impactful engagement.
27. These new approaches will be further enhanced by the new SRM team in Q1 2010, and by technical development supporting mobile integration and integrated digital marketing.
28. Ongoing development will allow Remembrancer's and Mansion House events to be integrated and support digital management, with a first event planned and reported in the new platform during Q1 2020. The new platform will be ready to support further teams in Town Clerks and Mansion House that also undertake event management on a smaller scale.

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Committee	Dated:
Public Relations & Economic Development Sub-Committee	3 December 2019
Subject: The City of London Corporation's work on insurance	Public
Report of: Damian Nussbaum, Director of Innovation & Growth	For Information
Report author: William Elliott, Head of Trade and Investment Strategy	

Summary

The report provides Members with an overview of the City of London Corporation's recent support for the insurance sector, as well as plans for 2020.

The City Corporation engages regularly with the industry, and with the London market in particular. Recent work has focussed on building a stronger and more representative insurance voice at City events, insurance as a theme in international programmes and support for industry initiatives around innovation.

In 2020 the ambition is for the City Corporation to co-host two major events around the theme of insurance in *Resilience*, develop a working group on cyber insurance, and involve a senior figure from the London Market in a Lord Mayor visit to a key market for the industry. The industry will also be closely involved in City Corporation-led discussions about post-Brexit trade arrangements with the EU and other key markets.

Recommendation

Members are asked to:

- Note this report for information.

Main Report

Background

1. Insurance is a complex ecosystem, covering the speciality of the London Market, general (retail) insurance, insurers as providers of pensions/savings products, insurers as asset managers and – increasingly – insurtech.
2. While the City Corporation engages across this landscape, the anchor relationships are with the London Market, which accounts for 25% of the City's GDP and some 50,000 jobs in the Square Mile. Following concerns raised by Members in 2017 that the voice of insurance was under-represented in City events and programmes, Innovation & Growth (IG) has looked to build engagement in four areas:

General insurance

3. **Better insurance representation at City Banquets and other set-piece events:**

Standard guest-lists have been updated, and account management relationships used to boost attendance. At the September Trade Dinner, the figures were 11 insurance (including 4 CEOs) and 13 banking.

4. **Better insurance briefing:**

the incoming Lord Mayor was briefed by the CEOs of Lloyd's and key trade bodies: Association of British Insurers (ABI), London Markets Group (LMG), International Underwriters Association (IUA) and the London International Brokers Association (LIBA). The Policy Chair meets the Director General of the ABI each quarter to discuss policy and regulation issues – particularly Brexit.

The London Market

5. Japanese insurers (major stakeholders in the London Market) met the Policy Chair in London in Jan 2019, and with the Lord Mayor in Tokyo in Feb 2019, organised by Lloyds.
6. The Chief Executive of the IUA joined the Lord Mayor's visit to Singapore in February 2019.
7. The CEO of LMG joined Lord Mayor visit to Indonesia in July 2019. The Policy Chair also has regular contact with the CEO of LMG in the context of Brexit and Switzerland.
8. Insurance workstreams in Sustainable Development Capital Initiative (SCDI), in partnership with Willis Towers Watson.
9. The Lord Mayor launched City Corporation/Accenture/AXA report on cyber insurance in May 2019, which led to follow-up work (see below).
10. Continued discussions with Aon, the Department for International Trade (DIT) and HM Treasury on *Resilience*, leading to two potential events in 2020 (see below).

Other Insurance work

11. Support for UK general (retail) insurers to access key international markets, notably in Asia. For example, the Lord Mayor brought the CEOs of Aviva and Prudential to meet the Chinese Vice-President; CEO of BUPA (Global) joined Lord Mayor visit to Turkey; insurtech mission accompanied Lord Mayor to India.
12. A wide variety of insurance firms and associations are members of the International Regulatory Strategy Group (IRSG) and contribute constructively to common City positions on Brexit and other regulatory issues.
13. Insurance companies (as asset owners) are stakeholders in the Green Finance Institute.
14. The City Corporation has supported development of Insurtech UK, the new trade body for the insurtech industry. The Lord Mayor spoke at June 2019 launch.

Plans for 2020

15. Accenture will shortly produce a follow-up report on cyber insurance, in partnership with the City Corporation. One recommendation is likely to be that it would be useful to have a working group on cyber insurance, to promote the current London offer and address barriers to further developing the market.
16. The City Corporation will host and support a major global conference on Resilience in Feb 2020 with Aon, AXA.
17. IG will again look to secure one or two senior figures from the London Market to accompany the Lord Mayor on overseas visits. Lloyds of London have already requested that their CEO or Chairman join one visit. Cyber insurance, insurtech and resilience will also be explored as themes in relevant markets.

Corporate, strategic or financial implications

18. Our work on insurance delivers against 6d, 7a, 7b and 7c of the Corporate Plan under the objective 'To Support a Thriving Economy'. Furthermore, it is resourced from existing budgets. The Lord Mayor's overseas visits are funded from the MVAC budget.

Conclusion

19. Insurance is a broad and complex ecosystem and yet at the same time highly specialised and difficult to navigate for outsiders. But it is one of the 'crown jewels' of the wider City. London is still the premier insurance hub of the world, in particular for the high-value business in cross-border underwriting, specialty insurance, innovation and insurtech. The City Corporation can play a useful role in promoting the London insurance offer globally, and working with a wider variety of stakeholders on initiatives to retain London's insurance competitiveness.

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Committee(s):	Date(s):
Epping Forest and Commons Public Relations and Economic Development Sub (Policy and Resources) Committee	13 January 2020 3 December 2019
Subject: Epping Forest Events Tender	Public
Report of: Director of Open Spaces	For Decision
Report Author: Jacqueline Eggleston - Head of Visitor Services	

Summary

This report proposes inviting major event organising companies to tender for up to a three-year commercial contract for the use of the land within Epping Forest for the purpose of holding a large-scale event.

Wanstead Flats, Warlies Park and Chingford Plain are proposed as locations and tenderers will be supplied with an environmental appraisal for each site and draft heads of terms which will indicate the constraints each event will need to take account of.

A maximum of three large events per year across the Forest (one per location) are permitted under the Open Spaces Events Policy.

Recommendations

Epping Forest and Commons Committee Members are asked to:

- i. Approve a competitive tender process to invite proposals for a major event at Wanstead Flats, Warlies Park and Chingford Plain with regard to the framework provided by the Open Spaces Events Policy and the constraints indicated in the Environmental Appraisals and the draft Heads of Terms.

Public Relations and Economic Development Sub Committee Members are asked to;

- ii. Comment on the reputational aspects of these proposals.

Main Report

Background

1. Epping Forest is a regional resource and serves all Londoners and beyond as a place for recreation. The largest events held on Forest Land in the past have been the Newham Fireworks Display, held annually on Wanstead Flats with an average attendance of 20-30,000, and the in-house 'Forest Festival' held on Chingford Plain with an attendance of approximately 10,000. The London Borough of Newham also staged a series of Melas or 'gatherings' in 1993, 1994 and 2000 on Wanstead Flats with attendance ranging from 30,000 in 1993 and 35,000 in 1994. A successful 2-day event in 2000 was attended by 56,000 event goers.
2. An Open Spaces Departmental Events Policy was adopted in May 2018. Part 2 of this is the divisional policy for Epping Forest which allows for up to three large events per year across the Forest with no more than one large event per year in any one location. A large event is classed as one having an audience greater than 5000.
3. An initial proposal to licence the use of land for a three-day music concert event at Wanstead Flats was approved at the Epping Forest and Commons Committee on 8 July 2019

Current Position

4. Proposals to licence the use of land for an event on Wanstead Flats in September 2020 agreed by the Epping Forest and Commons Committee at their July meeting this year will not now be taking place as after further detailed planning the operator has made the decision to discontinue with proposals.
5. This opens the opportunity for an alternative event to take place on Wanstead Flats and in accordance with the Events Policy, up to a further two events could take place in the Forest in 2020.
6. The Events Policy determines the following parameters for timing and frequency of events:
 - No more than one large event will normally be approved to take place on the same day;
 - Events will not normally be approved on *consecutive* weekends over the period from May to September in each locality;
 - The overall number of events approved will be restricted to maintain the balance of public enjoyment and unfettered access of the normal character and environment of the Forest;
 - Large events will be limited to three per year throughout the Forest and will have restrictions on noise, scale and impact.
7. Under the Epping Forest Act 1878 the Conservators must preserve the natural aspect of the Forest as far as possible whilst also facilitating its use as

an open space for the recreation and enjoyment of the public. Large events within Epping Forest can contribute to the recreational purpose of the Forest, providing high quality events in the local area, adding to social cohesion and quality of life of audiences and wider community through participation and the event's contribution to local cultural identity.

8. Events could generate significant income for the Epping Forest charity which would be re-invested into the management of the Forest. Public consultation undertaken in recent years around the forward planning of the management of the Forest demonstrated a desire for increased litter management, grounds maintenance and infrastructure provision, which would all represent a growth in expenditure for the charity. Tackling tree and plant disease, fly tipping and anti-social behaviour also present additional and increasing cost obligations for the management of the Forest which could be offset by increased income.

Options

1. Your Committee are asked to consider two options:

Option 1. To agree to a commercial tender process to attract proposals for a large-scale event with potential audiences of over 5000 at any one time, in up to three locations on three occasions within Epping Forest. All proposals would be subject to the necessary consents from the relevant Licensing authority and would need to mitigate against any environmental impacts on the sites.

The income generated from the events would be reinvested into the management of the Forest including maintenance and improvements across each site such as improved signage, interpretation, entrances and grassland and scrub habitat conservation works.

This option is recommended

Option 2. To agree to a competitive tender process for large events but restrict the agreed period to one year only. This may reduce the number of interested parties and potentially reduce financial proposals as the investment in to a one off event only would may increase the risk to the tenderer.

This reduces the ability to secure the best outcome for the Forest both financially and in terms of suitability of events.

This option is not recommended

Option 3. Not to agree to a competitive tender process for large events. This would reduce the number of bids to hold events in Epping Forest and would necessitate a separate report to your committee as and when speculative proposals are received. This reduces the ability to secure the best outcome for the Forest both financially and in terms of suitability of events.

This option is not recommended

Proposals

Scope

9. It is proposed to advertise the opportunity for staging large events in Epping Forest out to potential markets.
10. This should ensure that the best level of income is obtained by allowing a competitive process along with control over the type of the event.
11. The proposals for events will be considered with due regard for best value and can be judged on criteria such as appropriateness to the site, scale and impact on the site and surroundings, and type of the event.
12. To help guide tenderers, an Environmental Appraisal has been conducted for each of the proposed sites (see Appendices A B and C). These outline the key environmental considerations for each site along with likely mitigation measures so that these can be budgeted for at the outset by the tenderer.
13. Three sites within the Forest are proposed as potential locations for large events. These are Wanstead Flats, Warlies Park and Chingford Plain. Alternative locations could be considered but these three are thought to be the most obviously attractive sites for large events.
14. No particular type of event will be specified but suggestions could include:
 - Music concert or festival
 - Exhibition / Expo
 - Other festival – e.g. Food Festival
 - Arena/display events
 - Sporting event
15. The tender will be aimed at large scale events producing significant income; smaller events can be processed by implementing the Events Policy for small and medium sized events as usual.

Tender process

16. Tenders are likely to be for events starting in 2021 but proposals for Autumn 2020 onwards will also be considered.
17. The duration of each event will not be more than 3.5 days maximum plus set up and break down periods, not expected to be more than 28 days in total.
18. To allow event organisers sufficient security and time to build the audience for their event and to attract the right level of interest, the tender will be for proposals of up to a three-year contract; governed by suitable break clauses.

19. Proposals would be considered for each site on its own merits although tenderers could submit proposals for one, two or all three sites.
20. Although the tender process could be limited to one or two sites only rather than all three in this first year, the cost of administrating the tender process is reduced by undertaking in one go and the number of sites actually agreed to can be limited post tender. This allows the market to assess which is/ are the preferable sites and not all three will necessarily receive interested proposals.
21. To allow potential suppliers to undertake due diligence and assess commercial risk and detailed surveys of the potential location, a two-stage tender process is proposed. The first stage, qualification, will filter suppliers of a suitable scale and experience and an indicative value should be submitted by the potential suppliers at this stage. After undertaking more detailed planning suppliers will be invited to submit a tender with full financial proposals.
22. Financial proposals will be non- vatable and based on a rent of land only; no services will be supplied. All costs associated with the staging of the event including obtaining all necessary permissions will be met by the tenderer.
23. If the total supplier revenue for the event (including tickets, food and drink etc) exceeds £4,551,413 the contract will be caught by the Concession Contracts Regulations 2016. In that case the City will need to publicise the opportunity via an OJEU concession notice; and publish the concession documents electronically from the date of the concession notice. City Procurement suggest advertising the requirements for large scale events, regardless of estimated value, in line with good practice.

Corporate & Strategic Implications

24. This proposal supports the Corporate Plan aims to;
 - 24.1 Support a thriving economy
 - 24.2 Shape outstanding environments
25. The proposal supports the Department objective. It will also deliver the Open Spaces Departmental Business Plan top line objectives:
 - A. Open spaces and historic sites are thriving and accessible.
 - B. Spaces enrich people's lives.
 - C. Business practices are responsible and sustainable.

Implications

Financial

26. All costs associated with the staging of the event and reinstatement of the land will be met by the event organisers in addition to a hire fee for the use of the land.
27. Epping Forest Local Risk budget will meet the costs associated with the tender process.

Legal

28. Under section 7 of the City of London Corporation (Open Spaces) Act 2018 the Conservators may temporarily use or permit others to use Forest land for the purposes of an event; provide, or arrange for another person to provide, equipment, facilities or services for the event; so far as necessary restrict, or authorise others to restrict, access to an area of Forest land temporarily in connection with the event; and charge for such permission or provision, or charge or authorise others to charge for admission to the event.
29. The above powers must be exercised having regard to the approved Events Policy. In deciding whether, and on what terms, to permit an event, the Conservators must have regard to the character and local environment of the Forest (or the part of the Forest in which the event is to take place i.e. in this case, Wanstead Flats). An event must not cause material injury to the amenity of the Forest or significant impairment to the public enjoyment of the Forest. The locations in the Forest to which events are confined must be specified in the Policy, and the frequency and duration of events limited.
30. The general duties of the Conservators under the Epping Forest Act 1878 to preserve Epping Forest as an unenclosed public open space and as far as possible to preserve its natural aspect also still apply, subject to the above provisions. Any decision taken must be in the best interests of the Epping Forest charity.
31. Consent may be needed under Section 28E of the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017

Reputational

32. The Events Policy and licensing legislation provides a clear requirement for event managers to engage with the appropriate legislative and licensing regimes to ensure events are being run safely and professionally. This includes a statutory consultation period.

Property

33. Events on the Forest should be governed by suitable licence terms to ensure that the City of London Corporation is suitably indemnified and that consent to use represents best value according to the charitable operating requirements.

Charity

34. Epping Forest is a registered charity (number 232990). Charity Law obliges Members to ensure that the decisions they take in relation to the Charity must be taken in the best interests of the Charity.

Conclusion

35. The City of London's Epping Forest has an agreed events policy allowing for large scale events to take place. A tender process to invite event proposals will help to control the type of the events, provides an equitable process for tenderers and will ensure best value is achieved for the charity.

Appendices

- Appendix A – Environmental Appraisal Wanstead Flats
- Appendix B – Environmental Appraisal Chingford Plain
- Appendix C - Environmental Appraisal Warlies Park
- Appendix D – Draft Heads of Terms

Background Papers:

Application for use of Epping Forest Land at Wanstead Flats for a music concert. SEF 29/19 Epping Forest and Commons Committee 08 07 2019

Open Spaces Events Policy Part 1 – Open Spaces & City Gardens Committee, 16 April 2018.

Epping Forest Events Policy – Part 2 – Epping Forest and Commons Committee, 14 May 2018

Application for major event on Wanstead Flats: consideration of pre-application options -Epping Forest and Commons Committee 10 Sept 2018

Application for major event on Wanstead Flats: further detail for approval – Epping Forest Consultative Committee 10 October 2018

Major Event Wanstead Flats Update – Epping Forest Consultative Committee 13 February 2019

Major Event Wanstead Flats Update Epping Forest and Commons Committee 11 March 2019

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**WANSTEAD FLATS,
EPPING FOREST**

PRELIMINARY ECOLOGICAL APPRAISAL

Final Document

July 2019

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

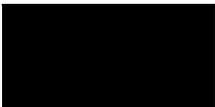
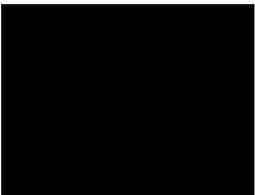
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ECOSA Quality Assurance Record

The Preliminary Ecological Appraisal has been undertaken with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). This report has been produced in accordance with the CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

Description:	Preliminary Ecological Appraisal
Produced For:	City of London Corporation as Conservators of Epping Forest
Issue:	Final
Report Reference:	4879.F0
Date of Issue:	4 th July 2019
Date of Survey Works:	19 th June 2019
Author:	 Lucy Bartlett MSc GradCIEEM Ecologist
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**WANSTEAD FLATS,
EPPING FOREST**

PRELIMINARY ECOLOGICAL APPRAISAL

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by City of London Corporation as Conservators of Epping Forest to undertake a Preliminary Ecological Appraisal of Wanstead Flats, Epping Forest. The purpose of the appraisal is to assess the site's ecological baseline and identify constraints and opportunities associated with delivering large-scale concerts for up to 50,000 people at the site in order to inform their decision process. The event is planned for September. The site is located in Greater London and comprises part of an extensive open grassland managed as sports pitches with boundary vegetation. The main findings of the Preliminary Ecological Appraisal are:

- The site is designated as being part of the wider Wanstead Flats and Bush Wood Site of Importance for Nature Conservation (SINC) of metropolitan importance. However, the site itself comprises a tree line and improved grassland the majority of which is managed as sports fields and does not support the habitats for which the SINC is designated. The site has been assessed as having suitability to support tree roosting bats, foraging and commuting bats, breeding birds, widespread species of reptile, European hedgehog and common toad associated with the tussocky grassland margins and tree line. In the absence of suitable mitigation in respect of bats, widespread species of reptile, European hedgehog and common toad these species could present an ecological constraint to the proposed event.
- Mitigation recommendations include minimising visitors accessing the wider SINC, the erection of Heras fencing (or similar) around the event boundary, maintaining a minimum buffer of 15 metres between the tree line and tussocky grassland along the north-eastern site boundary and event. Further consideration and assessment should be given to species identified and above designated habitats once the layout, timing and access routes of the future event have been established.
- Additionally, recommendations have been made for a sensitive lighting scheme to minimise potential disturbance impacts on foraging and commuting bats. Further consideration will need to be given to bats once the noise levels of any future event are known in order to ensure the species groups will not be disturbed. At this stage, it is considered that subsequent to the findings of such work, there is scope to incorporate suitable mitigation measures in order to allow the event to accord with wildlife legislation.
- If the site boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey

work may be required, particularly if the event does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by City of London Corporation as Conservators of Epping Forest to undertake a Preliminary Ecological Appraisal to identify the ecological constraints and opportunities associated with delivering large-scale concerts at Wanstead Flats, Epping Forest, London E12 5DL (hereafter referred to as the site).

1.2 The Site

The site is located in London, Greater London, locate approximately 1.5 kilometres south of Wanstead, Greater London, centred on National Grid Reference (NGR) TQ 4142 8651 (**Map 1**). The Phase 1 habitat map (**Map 2**) depicts the boundary of the site.

The site measures approximately six hectares and comprises part of an extensive open grassland with boundary vegetation along the north-eastern site boundary. The majority of the site is managed as sports pitches. The site is bounded by A116 Aldersbrook Road to the north-east, the wider Wanstead Flats site to the west, east and south with the car park for the site and Alexandra Lake also situated to the east.

The wider area is dominated by an urbanised landscape associated with Greater London. Areas of open green space are located within proximity to the site include other parts of Epping Forest to the north-west of the site, a number of golf courses and Valentines Park to the north-east of the site.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study carried out during June 2019. The objectives of the appraisal are:

- To provide preliminary baseline information on the current habitats, the suitability of the site to support notable and protected species, and evidence of notable and protected species both on site and in the immediate vicinity of the site, where relevant;
- To identify the proximity of any statutory sites designated for nature conservation importance;
- To identify the likely ecological constraints associated with the proposals;

-
- To identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy'¹;
 - To identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA); and
 - To identify the opportunities offered by the proposals to deliver ecological enhancement

1.4 Site Proposals

City of London Corporation as Conservators of Epping Forest have been approached by event organisers to hold concert style events on land under their ownership. The charitable trust are currently considering hosting a large-scale concert for up to 50,000 people at the site. The event is provisionally planned for a three-day weekend in September 2020.

¹ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

2.0 METHODS

2.1 Introduction

This section details the methods employed during the Preliminary Ecological Appraisal. Any significant limitations to the survey methods are also considered.

2.2 Zone of Influence

To define the total extent of the study area for this appraisal (Zone of Influence²), the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected. The appropriate survey radii for the various elements of the appraisal (i.e. desktop study and field survey) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to appraisal, its surroundings and the nature and scope of the proposals. Determination of the Zone of Influence is an iterative process and will be regularly reviewed and amended as the project evolves.

2.3 Scoping

Protected species considered within this appraisal are those species/species groups considered likely to be encountered given the geographical location and context of the site. These are discussed within the results section (Section 3.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the potential ecological constraints and mitigation measures section (Section 4.0) of this report.

2.4 Desk Study

A full biological record centre desktop study was not undertaken as part of this appraisal.

2.4.1 City of London Corporation as Conservators of Epping Forest

City of London Corporation as Conservators of Epping Forest provided data on 24th June 2019 which included the SINC citation for the site, records of legally protected and notable species (flora and fauna) within the local area, including Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and as listed in the England Biodiversity List (**Appendix 5**).

² The Zone of Influence, as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities.

2.4.2 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) database (DEFRA, 2019) was reviewed on 21st June 2019 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. Where appropriate, the desk study search area has been extended to take account of any appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species, particularly those specifically mentioned in local planning policy. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs.

Sites within two kilometres of the site boundary where European Protected Species Mitigation (EPSM) licences have been granted were reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.

2.4.3 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The presence of ponds or other waterbodies within a 500 metre radius of the site in particular are noted in relation to great crested newt. The 500 metre radius is a standardised search radius to assist in the assessment of the suitability of a site and its surrounding habitat to support this species, based on current Natural England guidance (English Nature, 2001).

2.5 Field Survey

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and comprise a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017). The field survey covered all accessible areas of the site, including boundary features. Habitats described in Section 3.0, have been mapped (**Map 2**) and photographs provided, where relevant. For ease of reference, Target Notes (TN) depict locations of particular ecological interest or features which are too small to map.

2.5.1 Phase 1 Habitat Survey

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 habitat survey methodology (JNCC, 2010). This involved identification of broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each vegetation type was compiled and any invasive species³ encountered as an incidental result of the survey recorded.

2.5.2 Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. The following species/species groups were considered during the appraisal.

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of trees on the site and immediately on the site boundary to support roosting bats based on the presence of Potential Roosting Features such as holes, cracks, splits, loose bark and ivy cladding for trees.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the suitability of the site to support roosting, foraging and commuting bats is based on a four-point scale as detailed in **Appendix 3**.

Otter

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints, feeding remains, footprints and slides.

Badger

The survey involved an assessment of the suitability of the site to support badger. Evidence of the species was recorded as an incidental result of the Phase 1 habitat survey and included locating badger setts, paths, and signs of territorial activity such as latrine sites.

³ Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

Hazel Dormouse

The appraisal for the suitability of the site to support hazel dormouse was based on an assessment of habitat features that may indicate that the species is present. This includes the presence of key food sources such as hazel and bramble, or plants used as nesting material such as honeysuckle and clematis. Additionally, the species requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features in determining the suitability of the site for hazel dormouse.

Water Vole

The water vole appraisal was based on an assessment of the suitability of the habitat present within the site to support water vole by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), bank structure and the bank side vegetation. Water voles generally require sloping banks in which to burrow and well-developed bank side vegetation to provide shelter and food. During the survey attention was paid to the presence of burrows, latrines, feeding remains, trails and footprints.

Birds

The appraisal of breeding birds on the site was based on the suitability of habitat present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests.

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the suitability for the site to support wintering farmland bird species, waders and wildfowl.

Reptiles

The reptile appraisal was based on an assessment of the suitability of the habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and rough grassland interfaces and the presence of these is a good indication that reptiles may be present on site. In addition, reptiles may utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

Great Crested Newt

The appraisal of the site to support great crested newt included establishing the presence of suitable aquatic habitats such as ponds, lakes or other waterbodies within or adjacent to the site and the presence of suitable terrestrial habitat. Waterbodies that are densely shaded, highly eutrophic or that contain fish are likely to be less suitable

for this species. The suitability of on-site ponds and terrestrial habitat is considered in relation to the presence of ponds within the wider area, as identified within the desktop study (Paragraph 2.4.3), and their suitability to be used as a network.

Invertebrates

An assessment was made of the suitability of the site to support diverse communities of invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include, for example, an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora, waterbodies and water courses and areas of free draining soil exposures. During the field survey there was no attempt made to identify species present as this is a more specialist area of ecological assessment reserved for targeted surveys.

Other Relevant Species

An assessment was made of site suitability for other notable species such as more rarely encountered protected species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the NERC Act 2006 and as listed in the England Biodiversity List, and Local Biodiversity Action Plan (LBAP) species⁴, specific to the study region.

Invasive Species

During the field survey any incidental records of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded. However, it should be considered that the survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

2.6 Field Survey Details

The field survey was carried out by Richard Chilcott, Principal Ecologist of ECOSA and Lucy Bartlett, Ecologist of ECOSA, on 19th June 2019. The weather conditions were mild and overcast with 100% cloud cover, an ambient temperature of 18°C and a gentle breeze.

During the survey, the surveyor was equipped with, 10x40 binoculars, a high powered torch and a digital camera.

2.7 Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The field survey has therefore not produced a complete list of plants and animals and in the absence of

⁴ LBAPs identify local priorities for biodiversity conservation by translating national targets for species into effective action at the local level and identifying targets for species important to the local area.

evidence of any particular species should not be taken as conclusive proof that the species is absent or that it will not occur in the future.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

The desk study data originates from City of London Corporation as Conservators of Epping Forest. A more exhaustive desktop study was not undertaken at this stage. The data search results cannot be taken as an exhaustive list of species present in the area.

A large proportion of the desk study data is historic and, therefore, the purposes of this report only the most recent and relevant records have been referenced within this report.

Given the large number of trees present along the site boundaries, it was not possible to fully inspect each tree for bat roosting suitability. Therefore, potential bat roosting features may be present which were not identified during the survey.

Not all potential bat roosting features are accessible to the surveyor, e.g. gaps beneath roof materials or holes or cracks in trees, and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

3.0 BASELINE ECOLOGICAL CONDITIONS

3.1 Introduction

This section details the results of the Preliminary Ecological Appraisal undertaken for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the ecological features recorded during the field survey.

3.2 Statutory and Non-statutory Designated Sites

3.2.1 Statutory Designated Sites

There is a single statutory designated sites of nature conservation interest situated within one kilometre of the site boundary. This is:

- Epping Forest (SSSI) – Located approximately 720 metres west of the site and designated for supporting notable habitats, invertebrate assemblages and amphibians and breeding birds.

Further details of the statutory designations listed above are provided in **Appendix 1**.

3.2.2 Non-Statutory Designated Sites

The site is designated as being part of the wider Wanstead Flats and Bush Wood SINC of metropolitan importance for supporting notable habitats including acid grassland, ancient woodland, ponds and scrub.

Further information on sites designated for nature conservation are provided in **Appendix 2** with an extract of the citation provided in **Appendix 3**.

3.3 Habitats

3.3.1 Desktop Study Results

The site is part of the wider Wanstead Flats and Bush Wood SINC of metropolitan importance, which is partly designated for its botanical importance, and, therefore is considered to be of high ecological value.

Consultation with MAGIC also identified the site as being the Habitat of Principal Importance wood-pasture and parkland. MAGIC also identified the reliability of the interpretation to be “medium”.

No recent notable plant species have been recorded at the site based on the information provide by City of London Corporation as Conservators of Epping Forest.

3.3.2 Field Survey Results

Habitats within the site are shown on the Phase 1 Habitat Map (**Map 2**), Target Notes and photographs have been provided as appropriate, Target Notes are cross referenced to **Map 2**. Habitats are described in general terms using standard Phase 1 habitat survey terminology. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Tree Line

A number of scattered London Plane *Platanus x hispanica* form a tree line along the north-eastern site boundary (**Figure 1**). Understorey species present include hawthorn *Crataegus monogyna*, plum *Prunus* species, sycamore *Acer pseudoplatanus*, copper beech *Fagus sylvatica* form *purpurea*, apple *Malus* species, elder *Sambucus nigra* sapling, pedunculate oak *Quercus robur* sapling and holly *Ilex aquifolium* sapling.



Figure 1: Tree line along the north-eastern site boundary

Improved Grassland

The majority of the site comprises regularly mown improved grassland with perennial rye-grass *Lolium perenne* being the dominant grass species (**Figure 2**). The grassland is managed as sports pitches. Other species present include red fescue *Festuca rubra*, Yorkshire fog *Holcus lanatus*, ribwort plantain *Plantago lanceolata*, common ragwort *Senecio jacobaea*, dandelion *Taraxacum officinale* aggregate, red clover *Trifolium pratense*, black medick *Medicago lupulina*, bristly oxtongue *Helminthotheca echioides*, cat's-ear *Hypochaeris radicata*, cleavers *Galium aparine*, herb-Robert *Geranium robertianum*, yarrow *Achillea millefolium* and daisy *Bellis perennis*.

A strip of tussocky grassland is present along the north-eastern site boundary (**Figure 3**) and the northern section of the south-eastern site boundary (**Figure 4**). The species composition is largely the same with additional species recorded including wall barley *Hordeum murinum*, soft brome *Bromus hordeaceus*, false-oat grass *Arrhenatherum elatius*, barren brome *Bromus sterilis*, creeping bent *Agrostis stolonifera*, soft rush *Juncus effusus* and pendulous sedge *Carex pendula*. Additional herbaceous species

include broad-leaved dock *Rumex obtusifolius*, dove's-foot crane's-bill *Geranium molle*, common mallow *Malva Sylvestris*, spear thistle *Cirsium vulgare*, common mugwort *Artemisia vulgaris*, green alkanet *Pentaglottis sempervirens* and wood avens *Geum urbanum*. Ivy *Hedera helix* and bramble *Rubus fruticosus* aggregate are also present within the tussocky grassland areas.



Figure 2: Improved grassland viewed to the north-west



Figure 3: Tussocky improved grassland along the north-eastern site boundary



Figure 4: Tussocky improved grassland along the northern part of the south-eastern site boundary

3.3.3 Summary

Wanstead Flats and Bush Wood SINC of metropolitan importance is partly designated for its botanical importance, and, therefore is considered to be of high ecological value. The site has also been identified as being the habitat of principal importance wood-pasture and parkland on the MAGIC website. However, given that the site comprises a tree line and improved grassland of which the majority is regularly mown and managed as sports fields the site does not comprise wood-pasture or parkland. None of the notable habitats for which the SINC is designated were recorded within the site itself with only common plant species recorded during the field survey. The mature tree line and tussocky improved grassland being of relatively greater ecological interest in the context of the site.

3.4 Notable and Legally Protected Species

3.4.1 Bats

Desktop Study Results

No granted European Protected Species Mitigation (EPSM) licences in respect of bats were identified within a two kilometre radius of the site.

Records common pipistrelle *Pipistrellus pipistrellus*, serotine *Eptesicus serotinus* and noctule *Nyctalus noctula* were returned from 1985 within the Wanstead Flats site and the eastern Alexandra Lakes site. More recently a single record of noctule was recorded in 2010 within Alexandra Lakes site.

Tree Assessment

Given the large number of trees present along the north-eastern site boundary, it was not possible to fully inspect each tree for bat roosting suitability during the survey undertaken. The majority of the trees were of the size and age that they may have developed features suitable for roosting bats if not immediately visible from the ground level.

A mature London plane (TN1) was recorded as supporting cavities on the north-eastern and south-western aspect and was therefore assessed as having suitability to support roosting bats (**Figure 5** and **Figure 6**).



Figure 5: TN1 London plane with cavity



Figure 6: TN1 London plane with cavity

Foraging and Commuting Habitat

The tree line and tussocky grassland within the site offer good foraging and commuting habitat for bats. These features also allow connectivity into the wider landscape including blocks of woodland and open green space. Given the extent of suitable

habitats in the vicinity of the site, it is likely that the site is used by bats as part of a larger foraging and commuting route. Overall, the site is assessed as having moderate suitability to support foraging and commuting bats.

3.4.2 Otter

Desktop Study Results

No granted EPSM licences in relation to otter *Lutra lutra* were identified within two kilometres of the site boundary. However, this does not confirm the absence of the species in the local area.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of otter within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site or immediately adjacent habitat does not support suitable habitat for resting otter or for holt creation. The habitat on site is unsuitable for otter and therefore the species is not considered further in this report.

3.4.3 Badger

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of badger *Meles meles* within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

No evidence of foraging or resident badger was recorded during the survey undertaken. The site provides limited suitability to support resident badger given the lack of sloping topography which the species requires for sett construction. The site provides suitable foraging habitat for the species in the form of the improved grassland. Suitable habitat for badger is present in the wider area in the form of woodland blocks, and grassland fields.

3.4.4 Hazel Dormouse

Desktop Study Results

No granted EPSM licences in respect of hazel dormouse *Muscardinus avellanarius* were identified within a two kilometre radius of the site.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of hazel dormouse within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The habitats within the site are considered unsuitable to support hazel dormouse. The tree line along the north-eastern site boundary is species-poor and lacks any significant shrub layer, and, therefore lacking the continuum of food resources which the species requires at different times of the year. The site and immediately surrounding area is isolated from any further suitable habitat, without the connectivity into the wider area that the species requires for dispersal, it is highly unlikely that the site supports the species. The habitat on site is unsuitable for hazel dormouse and therefore the species is not considered further in this report.

3.4.5 Water Vole

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of water vole *Arvicola amphibius* within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The habitat within the site is unsuitable to support water vole without the presence of sloping banks adjacent to water in which to burrow and, therefore, the species is not considered further in this report.

3.4.6 Birds

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced records of 43 notable bird species within the local area. Of these species, the red listed⁵ song thrush *Turdus philomelos* and the amber listed⁶ meadow pipit *Anthus pratensis* are the most likely to breed on site. Skylark *Alauda arvensis* are known to breed within the wider Wanstead Flats site within rough grassland. A number of

⁵ The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Red List criteria include species which are: globally threatened; have been subject to historical population decline in UK during 1800–1995; are in severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period, or; subject to severe (at least 50%) contraction of UK breeding range over last 25 years, or longer-term period.

⁶ The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Amber list criteria include species which are: in unfavourable conservation status in Europe; subject to historical population decline during 1800–1995, but recovering; subject to moderate (25-49%) decline in UK breeding population or contraction of UK breeding range over last 25 years, or the longer-term period; subject to moderate (25-49%) decline in UK non-breeding population over last 25 years, or the longer-term period; rare breeders (1–300 breeding pairs in UK); rare non-breeders (less than 900 individuals), or; internationally important species with at least 20% of European breeding or non-breeding population in UK .

territories known to be within the vicinity of the site, the nearest of which is located approximately 170 metres south-east of the site.

A number of wintering bird records were also returned by City of London Corporation as Conservators of Epping Forest as previously being recorded within the Wanstead Flats site including the red listed redwing *Turdus iliacus* and woodcock *Scolopax rusticola* and the amber listed great black-backed gull *Larus marinus*, green sandpiper *Tringa ochropus*, gadwall *Anas strepera*, mallard *Anas platyrhynchos*, redshank *Tringa tetanus*, shelduck *Tadorna tadorna*, shoveler *Anas clypeata*, snipe *Gallinago gallinago*, teal *Anas crecca* and wood sandpiper *Tringa glareola*,

Field Survey Results

Carrion crow *Corvus corone* and blackbird *Turdus merula* were recorded during the survey. The site contains habitat suitable for supporting breeding birds in the form of the tree lines. A variety of suitable habitats for supporting a range of bird species are also present in the vicinity of the site in the form of woodland blocks, rough grassland and residential gardens.

The site contains limited suitability for wintering birds being subject to regular disturbance by recreational users including dog walkers. The site is likely to support only small numbers of wintering species. Therefore, wintering birds are not considered further in this report.

3.4.7 Reptiles

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of reptiles within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The majority of the site is subject to regular mowing and is of insufficient structure, providing poor suitability for supporting widespread species of reptiles. The tussocky grassland along the north-eastern and south-western site boundaries are subject to less management and have developed a long sward height, providing suitability for supporting foraging, sheltering and basking reptiles. The wider Wanstead Flats also has suitability for supporting widespread species of reptile in the form of areas of tussocky grassland although these areas are not well connected to suitable habitat within the site itself.

3.4.8 Great Crested Newt

Desktop Study Results

No granted EPSM licences in respect of great crested newt *Triturus cristatus* were identified within a two kilometre radius of the site. However, this does not confirm the absence of the species in the local area.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of great crested newt within the local area, however, this does not confirm the absence of the species. It is understood that a targeted survey of Alexandra Lake was undertaken in 1999 and no great crested newt were recorded.

A review of online 1:25,000 OS mapping and aerial imagery concluded that there is a single waterbody present within a 500 metre radius of the site, located approximately 45 metres south-east of the site.

Field Survey Results

The site contains no waterbodies, and, therefore the site is unsuitable to support breeding great crested newt. The site provides generally sub-optimal terrestrial habitat for supporting terrestrial great crested newt with the vast majority of the site comprising regularly mown grassland. However, the tussocky grassland along the north-eastern and south-eastern site boundaries provide suitable foraging and refuge opportunities for the species during their terrestrial life stage. Great crested newt are found within terrestrial habitats of up to 500 metres from their breeding ponds (English Nature, 2001). The absence of a network of ponds in the surrounds reduces the likelihood of great crested newt utilising the waterbody located to the south-west of the site and therefore the terrestrial habitat afforded by the site. The habitat within the site is unsuitable for great crested newt, and, therefore the species is not considered further in this report.

3.4.9 Invertebrates

Desktop Study Results

A number of notable terrestrial invertebrates were returned by City of London Corporation as Conservators of Epping Forest within the local area, including a record of the Species of Principal Importance⁷ stag beetle *Lucanus cervus* from 2009, The majority of records related to Lepidoptera (butterflies and moths) and Hymenoptera (bees, wasps and ants).

⁷ As listed on NERC Act 2006

Field Survey Results

The site offers suitable habitat for supporting invertebrates in the form of the tree lines and improved grassland. The site largely supports common and widespread species which are unlikely to support any rare or notable assemblages of invertebrates.

3.4.10 Other Relevant Species

Desktop Study Results

Four records of European hedgehog *Erinaceus europaeus* were returned by City of London Corporation as Conservators of Epping Forest within the site and local area. Three records of common toad *Bufo bufo* were recorded within the local area in 1998.

Field Survey Results

No evidence of any other relevant species was recorded within the site during the survey undertaken. The site supports suitable habitat for European hedgehog in the form of the tussocky grassland.

3.5 Summary of Key Ecological Features

The following features are those with greatest ecological value that lie within the site's Zone of Influence:

- Habitat of principal importance wood-pasture and parkland;
- Tree line and tussocky grassland along the north-eastern and south-eastern site boundaries;
- Suitability to support tree roosting bats;
- Suitability to support foraging and commuting bats;
- Suitability to support foraging badger;
- Suitability to support breeding birds;
- Suitability to support widespread species of reptiles; and
- Suitability to support European hedgehog and common toad.

4.0 POTENTIAL ECOLOGICAL CONSTRAINTS AND RECOMMENDATIONS

4.1 Introduction

This section identifies potential constraints of holding a large-scale concert event on the site and is based on the key ecological features as identified in Section 3.0 and summarised in Paragraph 3.5. Recommendations are included for mitigation and compensation based on the identified ecological constraints, and opportunities for enhancement are discussed.

4.2 Designated Sites

4.2.1 Potential Constraints

The site is designated as being part of the wider Wanstead Flats and Bush Wood SINC of metropolitan importance for supporting notable habitats including acid grassland, ancient woodland, ponds and scrub.

The site itself is managed as sports pitches and is subject to regular mowing with the exception of the tussocky grassland margins. None of the notable habitats for which the SINC is designated were recorded within the site itself with only common plant species recorded during the field survey.

The movement of people to and from the event, trampling effects and littering has the potential to reduce the diversity and ecological value of the notable habitats for which the SINC is designated for. Any vehicle movements could also result in damage to the SINC if inappropriately managed.

4.2.2 Potential Mitigation and Compensation Measures

An appropriate environmental management plan will need to be implemented at the event to ensure that the site, and surrounding SINC, are fully cleared of any equipment, litter and waste following the completion of the event. This would also need to include appropriate, managed, access routes to the site. This should be designed in consultation with a suitably qualified ecologist.

The wider Wanstead Flats and Bush Wood SINC should be protected by erecting high visibility fencing, such as Heras fencing (or similar) around the event site boundary.

Access to and from the event should minimise visitors accessing the wider Wanstead Flats and Bush Wood SINC. It is recommended that further consideration and assessment is given to designated sites once the layout of the future event has been established.

Any vehicular access to the event for set up would need to be restricted to existing access points from Aldersbrook Road and no machinery, vehicles or other storage should take place outside of the event area.

4.2.3 Enhancement Opportunities

No enhancements in respect of designated sites are recommended.

4.3 Habitats

4.3.1 Potential Constraints

The site has been identified as supporting the habitat of principal importance wood-pasture and parkland. The habitats of importance include the tree line along the north-eastern site boundary and the tussocky grassland along the north-eastern and south-eastern site boundaries. Any damage to the tree line and tussocky grassland during the operational phase in any forthcoming event would reduce the diversity and ecological value of the habitats within the site.

The movement of people to and from the event, trampling effects and littering has the potential to result in the degradation of the existing habitats at the site. The access routes to the site used by both the site set up team and attendees has the potential to degrade habitats in the surrounds.

4.3.2 Potential Mitigation and Compensation Measures

An appropriate environmental management plan will need to be implemented at the event to ensure that the site, and surrounding habitats, are fully cleared of any equipment, litter and waste following the completion of the event. This would also need to include appropriate, managed, access routes to the site. This should be designed in consultation with a suitably qualified ecologist.

The tree line and tussocky grassland along the north-eastern site boundary should be buffered by a minimum of 15 metres between the event area and habitats with no access to this buffer during the site set up or operational phase. The exclusion zone will be marked by high visibility fencing, such as Heras fencing (or similar).

4.3.3 Enhancement Opportunities

No enhancements in respect of habitats are recommended.

4.4 Bats

4.4.1 Potential Constraints

Any future event at the site has the potential to result in disturbance to roosting, foraging and commuting bats through increased noise levels.

The introduction of external lighting has the potential to result in increased light spill on roosting, foraging and commuting features, resulting in the disturbance of bats.

In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Refer to **Appendix 5** for details.

4.4.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 15 metres between the event area and tree line and tussocky grassland along the north-eastern site boundary as discussed in Paragraph 4.3.2 in order to avoid disturbing bats, should they be present. It is recommended that further consideration and assessment is given to bats once the layout and noise levels of the future event have been established.

The tree line should not be lit. Lighting should be restricted to the event itself and not during site set-up or closure. A further assessment of the potential lighting impacts should be undertaken once lighting plans are known.

4.4.3 Enhancement Opportunities

No enhancements in respect of bats are recommended.

4.5 Badger

4.5.1 Potential Constraints

Any future event at the site will result in the loss of badger foraging habitat short-term.

4.5.2 Potential Mitigation and Compensation Measures

Given that the loss of badger foraging habitat is only short-term, no mitigation or compensation measures are recommended.

4.5.3 Enhancement Opportunities

No enhancements in respect of badger are recommended.

4.6 Birds

4.6.1 Potential Constraints

At the time of preparing this report, it has been assumed that the tree line and tussocky grassland will be retained in any forthcoming event, and, therefore there will be no loss of suitable nesting bird habitat. During the operational phase, the event has the potential to result in harm to nesting birds through accidental damage.

At the time of preparing this report, the event is planned for September, and, therefore there will be no significant constraints in relation to breeding birds. However, timing

constraints apply if the event is brought forward and planned to occur during the breeding bird season of March to August, inclusive. Any future event at the site during the breeding bird season has the potential to result in disturbance to nesting birds through increased noise levels and disturbance from attendees traveling to and from the event if planned for

All birds, their nests, eggs and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act 1981. Refer to **Appendix 5** for details.

4.6.2 Potential Mitigation and Compensation Measures

Given the lack of potential constraints in relation to breeding birds, no mitigation or compensation measures are considered necessary. It is recommended that further consideration is given to breeding birds if the proposed timing of the event is altered to occur within the breeding bird season of March to August, inclusive.

4.6.3 Enhancement Opportunities

No enhancements in respect of birds are recommended.

4.7 Reptiles

4.7.1 Potential Constraints

At the time of preparing this report, it has been assumed that the tussocky grassland will be retained in any forthcoming event, and, therefore there will be no loss of suitable reptile habitat. During the operational phase and site set-up, the event has the potential to result in direct effects on widespread species of reptile, if present, if the event affected suitable habitat.

Widespread reptile species (slow-worm *Anguis fragilis*, common lizard *Zootoca vivipara*, grass snake *Natrix helvetica* and adder *Vipera berus*) are protected under the Wildlife and Countryside Act 1981 against harm, see **Appendix 5** for details.

4.7.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 15 metres between the event area and tree line and tussocky grassland as discussed in Paragraph 4.3.2 in order to avoid harm to widespread species of reptile, should they be present.

4.7.3 Enhancement Opportunities

No enhancements in respect of reptiles are recommended.

4.8 Other Relevant Species

4.8.1 Potential Constraints

At the time of preparing this report, it has been assumed that the tussocky grassland will be retained in any forthcoming event, and, therefore there will be no loss of suitable habitat for European hedgehog and common toad. During the operational phase and site set up, the event has the potential to result in direct effects on both species, if present, if the event is allowed to encroach onto tussocky grassland.

4.8.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 15 metres between the event area and tree line and tussocky grassland as discussed in Paragraph 4.3.2 in order to avoid harm to European hedgehog and common toad, should they be present.

4.8.3 Enhancement Opportunities

No enhancements in respect of European hedgehog and common toad are recommended.

5.0 CONCLUSION

5.1 Conclusion

The site is designated as part of the wider Wanstead Flats and Bush Wood SINC of metropolitan importance. The site has also been identified wood-pasture and parkland, a habitat of principal importance on the MAGIC website. However, the majority of the grassland within the site is regularly mown and is managed as sports fields, and, therefore the site itself is not wood-pasture or parkland nor does it support any of the habitats for which the SINC is designated.

The site has been assessed as having suitability to support tree roosting bats, foraging and commuting bats, breeding birds, widespread species of reptile, European hedgehog and common toad associated with the tussocky grassland margins and tree line. The site has also been assessed as having suitability to support foraging badger.

The key issues are timing of the event, access routes, compaction and trampling, noise, lighting and layout of the event. Recommendations made including a sensitive lighting scheme, a minimum 15 metre buffer from the adjacent tree line, perimeter fencing, an environmental management plan and controlled access routes.

Further consideration will need to be given to designated sites once the layout and access routes of any future event is known. Further consideration will also need to be given to bats once the noise levels and layout of any future event are known in order to ensure this species group will not be disturbed. At this stage, it is considered that subsequent to the findings of such work, there is scope to incorporate suitable mitigation measures in order to allow the event to accord with wildlife legislation.

5.2 Updating Site Survey

If the site boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if event does not commence within 18 months of the date of the most recent relevant survey.

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Map 1 Site Location Plan



**WANSTEAD FLATS,
EPPING FOREST, ESSEX**

PRELIMINARY ECOLOGICAL APPRAISAL

Map 1 - Site Location Plan

Client:	City of London Corporation as Conservators of Epping Forest
Date:	July 2019
Status:	Final

KEY

 Site Boundary



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,



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Map 2 Phase 1 Habitat Map



**WANSTEAD FLATS,
EPPING FOREST, ESSEX**

PRELIMINARY ECOLOGICAL APPRAISAL

Map 2 - Phase 1 Habitat Map

Client:	City of London Corporation as Conservators of Epping Forest
Date:	July 2019
Status:	Final

KEY

- Site Boundary
- TN1 Target Note
- Scattered Trees
- Improved Grassland



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Appendix 1 Statutory Designated Sites within the Desktop Study Area

Details of statutory designated sites within the desktop study area, as listed in Paragraph 3.2.1, are provided in **Table 1**.

Table 1: Statutory Designated Sites Located Within the Desktop Study Area

Designation	Name	Approximate Relative Location	Reason for Designation
Epping Forest	SSSI	720 metres west	<p>Epping Forest is one of only a few remaining large-scale examples of ancient wood-pasture in lowland Britain and has retained habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains and scattered wetland. The seminatural woodland is particularly extensive, forming one of the largest coherent blocks in the country. The Forest plains are also a major feature and contain a variety of unimproved acid grasslands which have become uncommon elsewhere in Essex and the London area.</p> <p>In addition, Epping Forest supports a nationally outstanding assemblage of invertebrates, a major amphibian interest and an exceptional breeding bird community.</p>

Appendix 2 Sites Designated for Nature Conservation

Statutory Sites

Internationally Designated Sites - Ramsar Sites, Special Areas of Conservation and Special Protection Areas

Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) form a network of protected sites across the European Union called Natura 2000 sites. In the United Kingdom the primary legislative protection is afforded to these sites under the Conservation of Habitats and Species Regulations 2017 (as amended).

Ramsar sites are designated as wetlands of international importance which are afforded similar legislative protection to Natura 2000 sites.

SACs are sites which support internationally important habitats or internationally important assemblages or populations of species. SPAs are designated for supporting internationally important populations of birds listed in the annexes of the Birds Directive. SACs, SPAs and Ramsar sites are generally also designated as Sites of Special Scientific Interest.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) there is a legal requirement that competent authorities, such as local planning authorities, need to consider whether plans or projects are likely to have a significant adverse effect on Natura 2000 sites or Ramsar sites, either alone, or in combination with other plans or projects. In the event that a likely significant effect cannot be ruled out, on the basis of objective information, then the competent authority must undertake an “Appropriate Assessment” to fully assess the plan or project against the site’s conservation objectives. Unless certain defined derogation tests can be met, the competent authority may not authorise nor undertake any plan or project which adversely affects the integrity of a Natura 2000 site or Ramsar site.

Nationally Designated Sites – Sites of Special Scientific Interest and National Nature Reserves

Sites of Special Scientific Interest (SSSIs) receive legal protection under the Wildlife and Countryside Act 1981 (as amended). Such sites are designated to protect specific areas of biological or geological interest of national importance. Such sites also generally receive strict protection through the planning system.

National Nature Reserves (NNRs) are also usually designated as SSSIs and are specifically managed for their wildlife value. They receive legal protection through the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). As with SSSIs, these sites generally receive strict protection through the planning system.

Locally Designated Sites – Local Nature Reserves

Local Nature Reserves (LNRs) are designated by local authorities under the National Park and Access to the Countryside Act 1949. These are generally designated not only for their local wildlife value but also for education, scientific and recreational purposes. These sites generally receive protection from development through the planning system.

Non-Statutory Sites

Locally Designated Sites

In addition to statutory designations, local authorities often designate sites of nature conservation importance at the local level. Such designations are named differently by each local authority and may be referred to as Local Wildlife Sites (LWSs), Sites of Importance for Nature Conservation (SINCs) or Sites of Nature Conservation Importance (SNCIs), amongst others. The exact level of protection afforded to these sites varies and is normally defined through local planning policy.

Appendix 3 Wanstead Flats and Bush Wood SINC Citation Extract

M109 Wanstead Flats and Bush Wood

Grid ref: TQ 406 607 Area in Redbridge: 172 ha

Habitats: Acid grassland, ancient woodland, ponds and scrub.

Notes: Almost all of this Metropolitan site is now in Redbridge, with a small part in Newham and a tiny area in Waltham Forest. This site contains some of London's best acid grassland with uncommon plant species. There are large areas dominated by wavy hair grass, various fescues and bents with patches of mat-grass, heath rush and heath wood-rush. There are areas of heather, and petty whin still occurs. There are good record of insects and spiders, with a particularly important assemblage of hymenoptera including the Red Data Book sphecid wasp *Diodontus insidiosus* and the bee wolf *Philanthus triangularum*. Bush Wood is a small area of ancient woodland, mostly oak with some very large sweet chestnuts and an acid ground flora.

Appendix 4 Appraisal Criteria for Bats

The criteria used to assess the suitability of roosting and foraging/commuting habitat for bats is based on industry guidelines and outlined in **Table 2**⁸.

Table 2: Criteria used to Assess Suitability of Roosting and Foraging/Commuting Habitat for Bats

Suitability	Description of roosting habitats	Commuting and foraging habitats
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>
Moderate	A structure of tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).</p> <p>A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by other habitat).</p> <p>Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch or scrub.</p>
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

⁸ Table adapted from (Collins, 2016)

Appendix 5 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - To impair its ability to survive, breed, or rear or nurture their young;
 - To impair its ability to hibernate or migrate;
 - To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Reptiles

The four widespread species of reptile that are native to Britain, namely common or viviparous lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, adder *Vipera berus* and grass snake *Natrix natrix*, are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence to:

- Intentionally kill or injure any of these species.

The remaining native species of British reptile (sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca*) receive a higher level of protection via inclusion under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations (in England and Wales only) and the Wildlife and Countryside Act 1981 (as amended). The distribution of these species are restricted to only a few sites in England.

Species and Habitats of Principal Importance in England

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The England Biodiversity List is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. There are currently 943 species of principal importance and 41 habitats of principal importance included on the England Biodiversity List.

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**CHINGFORD PLAIN,
EPPING FOREST**

PRELIMINARY ECOLOGICAL APPRAISAL

DRAFT

Draft Document

September 2019

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

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ECOSA Quality Assurance Record

The Preliminary Ecological Appraisal has been undertaken with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). This report has been produced in accordance with the CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

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**CHINGFORD PLAIN,
EPPING FOREST**

PRELIMINARY ECOLOGICAL APPRAISAL

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by City of London Corporation as Conservators of Epping Forest to undertake a Preliminary Ecological Appraisal of Chingford Plain, Bury Road, Chingford, Epping Forest. The purpose of the appraisal is to assess the site's ecological baseline and identify constraints and opportunities associated with delivering large-scale concerts at the site in order to inform their decision process. The site is located in Chingford, Greater London and comprises part of a grassland field bounded by woodland to the north.

The main findings of the Preliminary Ecological Appraisal are:

- It is understood that the site is designated as a SINC although the full citation or boundary of the SINC was not available at the time of preparing this report. The site has been assessed as having suitability to support tree roosting bats, foraging and commuting bats, badger, breeding birds, wintering birds, widespread species of reptile, great crested newt, European hedgehog and common toad. In the absence of suitable mitigation in respect of the aforementioned species groups/species, these could present an ecological constraint to the proposed event.
- Mitigation recommendations include minimising visitors accessing to the wider SINC, the erection of Heras fencing (or similar) around the event boundary and maintaining a minimum buffer of 20 metres between the broadleaved woodland. Further consideration to the potential impact of the event on the SINC will be necessary once the citation for the SINC is available and further details for the event come forward.
- Recommendations have been made for a sensitive lighting scheme to minimise potential disturbance impacts on foraging and commuting bats. Further consideration will need to be given to bats and nesting birds once the noise levels of any future event are known in order to ensure the species groups will not be disturbed.
- If the site boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if the event does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by City of London Corporation as Conservators of Epping Forest to undertake a Preliminary Ecological Appraisal to identify the ecological constraints and opportunities associated with delivering large-scale concerts at Chingford Plain, Bury Road, Chingford, Epping Forest (hereafter referred to as the site).

1.2 The Site

The site is located in Chingford, Greater London centred on National Grid Reference (NGR) TQ 3960 9511 (**Map 1**). The Phase 1 habitat map (**Map 2**) depicts the boundary of the site.

The site comprises a grassland field bounded by car parking and Bury Road to the west Epping Forest to the north and the remainder of the field to the east and south.

The wider area is dominated by an urbanised landscape associated with Greater London. Areas of open green space are located within proximity to the site include other parts of Epping Forest surrounding the site.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study carried out during June and August 2019. The objectives of the appraisal are:

- To provide preliminary baseline information on the current habitats, the suitability of the site to support notable and protected species, and evidence of notable and protected species both on site and in the immediate vicinity of the site, where relevant;
- To identify the proximity of any statutory sites designated for nature conservation importance;
- To identify the likely ecological constraints associated with the proposals;
- To identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy'¹;
- To identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA); and

¹ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

- To identify the opportunities offered by the proposals to deliver ecological enhancement

1.4 Site Proposals

City of London Corporation as Conservators of Epping Forest have been approached by event organisers to hold concert style events with audiences in excess of 50,000 on land under their ownership. At the time of preparing this report, there are no detailed plans for the proposed events at the site, however, it is anticipated that this would be a daylong event with associated set up.

2.0 METHODS

2.1 Introduction

This section details the methods employed during the Preliminary Ecological Appraisal. Any significant limitations to the survey methods are also considered.

2.2 Zone of Influence

To define the total extent of the study area for this appraisal (Zone of Influence²), the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected. The appropriate survey radii for the various elements of the appraisal (i.e. desktop study and field survey) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to appraisal, its surroundings and the nature and scope of the proposals. Determination of the Zone of Influence is an iterative process and will be regularly reviewed and amended as the project evolves.

2.3 Scoping

Protected species considered within this appraisal are those species/species groups considered likely to be encountered given the geographical location and context of the site. These are discussed within the results section (Section 3.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the potential ecological constraints and mitigation measures section (Section 4.0) of this report.

2.4 Desk Study

A full biological record centre desktop study was not undertaken as part of this appraisal. However, City of London Corporation as Conservators of Epping Forest hold information relating to non-statutory designated sites and records of protected species within the vicinity of the site.

2.4.1 *City of London Corporation as Conservators of Epping Forest*

City of London Corporation as Conservators of Epping Forest provided data on 24th September 2019. The data supplied included common and widespread species but this appraisal focusses on records of legally protected and notable species (flora and fauna) within the local area, including Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the Natural Environment and Rural

² The Zone of Influence, as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities.

Communities (NERC) Act 2006 and as listed in the England Biodiversity List (**Appendix 4**).

2.4.2 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) database (DEFRA, 2019) was reviewed on 20th August 2019 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. Where appropriate, the desk study search area has been extended to take account of any appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species, particularly those specifically mentioned in local planning policy. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs.

Sites within two kilometres of the site boundary where European Protected Species Mitigation (EPSM) licences have been granted were reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.

2.4.3 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The presence of ponds or other waterbodies within a 500 metre radius of the site in particular are noted in relation to great crested newt. The 500 metre radius is a standardised search radius to assist in the assessment of the suitability of a site and its surrounding habitat to support this species, based on current Natural England guidance (English Nature, 2001).

2.5 Field Survey

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and included a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017). The field survey covered all accessible areas of the site, including

boundary features Habitats described in Section 3.0, have been mapped (**Map 2**) and photographs provided, where relevant.

2.5.1 Phase 1 Habitat Survey

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 habitat survey methodology (JNCC, 2010) . This involved identification of broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each vegetation type was compiled and any invasive species³ encountered as an incidental result of the survey recorded.

2.5.2 Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. The following species/species groups were considered during the appraisal.

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of trees on the site and immediately on the site boundary to support roosting bats based on the presence of Potential Roosting Features such as holes, cracks, splits, loose bark and ivy cladding for trees.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the suitability of the site to support roosting, foraging and commuting bats is based on a four-point scale as detailed in **Appendix 3**.

Otter

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints, feeding remains, footprints and slides.

Badger

The survey involved an assessment of the suitability of the site to support badger. Evidence of the species was recorded as an incidental result of the Phase 1 habitat

³ Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

survey and included locating badger setts, paths, and signs of territorial activity such as latrine sites.

Hazel Dormouse

The appraisal for the suitability of the site to support hazel dormouse was based on an assessment of habitat features that may indicate that the species is present. This includes the presence of key food sources such as hazel and bramble, or plants used as nesting material such as honeysuckle and clematis. Additionally, the species requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features in determining the suitability of the site for hazel dormouse.

Water Vole

The water vole appraisal was based on an assessment of the suitability of the habitat present within the site to support water vole by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), bank structure and the bank side vegetation. Water voles generally require sloping banks in which to burrow and well-developed bank side vegetation to provide shelter and food. During the survey attention was paid to the presence of burrows, latrines, feeding remains, trails and footprints.

Birds

The appraisal of breeding birds on the site was based on the suitability of habitat present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests.

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the suitability for the site to support wintering farmland bird species, waders and wildfowl.

Reptiles

The reptile appraisal was based on an assessment of the suitability of the habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and rough grassland interfaces and the presence of these is a good indication that reptiles may be present on site. In addition, reptiles may utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

Great Crested Newt

The appraisal of the site to support great crested newt included establishing the presence of suitable aquatic habitats such as ponds, lakes or other waterbodies within or adjacent to the site and the presence of suitable terrestrial habitat. Waterbodies that are densely shaded, highly eutrophic or that contain fish are likely to be less suitable for this species. The suitability of on-site ponds and terrestrial habitat is considered in relation to the presence of ponds within the wider area, as identified within the desktop study (Paragraph 2.4.3), and their suitability to be used as a network.

Invertebrates

An assessment was made of the suitability of the site to support diverse communities of invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include, for example, an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora, waterbodies and water courses and areas of free draining soil exposures. During the field survey there was no attempt made to identify species present as this is a more specialist area of ecological assessment reserved for targeted surveys.

Other Relevant Species

An assessment was made of site suitability for other notable species such as more rarely encountered protected species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the NERC Act 2006 and as listed in the England Biodiversity List, and Local Biodiversity Action Plan (LBAP) species⁴, specific to the study region.

Invasive Species

During the field survey any incidental records of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded. However, it should be considered that the survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

2.6 Field Survey Details

The field survey was carried out by Richard Chilcott, Principal Ecologist of ECOSA on 19th June 2019. The weather conditions were humid and overcast with 100% cloud cover, an ambient temperature of 20°C and little to no wind.

During the survey, the surveyor was equipped with 10x40 binoculars and a digital camera.

⁴ LBAPs identify local priorities for biodiversity conservation by translating national targets for species into effective action at the local level and identifying targets for species important to the local area.

2.7 Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The field survey has therefore not produced a complete list of plants and animals and in the absence of evidence of any particular species should not be taken as conclusive proof that the species is absent or that it will not occur in the future.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

The desk study data originates from City of London Corporation as Conservators of Epping Forest. A more exhaustive desktop study was not undertaken at this stage. The data search results cannot be taken as an exhaustive list of species present in the area.

A large proportion of the desk study data is historic (in excess of ten years old) and, therefore, the purposes of this report only the most recent and relevant records have been referenced within this report.

At the time of preparing this report it is understood that the site forms part of a SINC, however, the full citation for the SINC has yet to be provided to ECOSA.

Given the large number of trees present along the site boundaries, it was not possible to fully inspect each tree for bat roosting suitability. Therefore, potential bat roosting features may be present which were not identified during the survey.

Not all potential bat roosting features are accessible to the surveyor, e.g. gaps beneath roof materials or holes or cracks in trees, and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

3.0 BASELINE ECOLOGICAL CONDITIONS

3.1 Introduction

This section details the results of the Preliminary Ecological Appraisal undertaken for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the ecological features recorded during the field survey.

3.2 Statutory and Non-statutory Designated Sites

3.2.1 Statutory Designated Sites

There are two statutory designated sites of nature conservation interest situated within one kilometre of the site boundary. These are:

- Epping Forest (SAC) – Located immediately north of the site at its nearest point and designated for supporting beech forests, northern Atlantic wet heaths, European dry heaths and stag beetle *Lucanus cervus*.
- Epping Forest (SSSI) – Located immediately north of the site at its nearest point and designated for supporting notable habitats, invertebrate assemblages and amphibians and breeding birds.

Further details of the statutory designations listed above are provided in **Appendix 1**.

3.2.2 Non-Statutory Designated Sites

It is understood from correspondence with Epping Forest that the site is also designated as a Site of Importance for Nature Conservation. However, the citation for the SINC was not available at the time of preparation of this report.

Further information on sites designated for nature conservation are provided in **Appendix 2**.

3.3 Habitats

3.3.1 Desktop Study Results

A review of the MAGIC website has identified the site as supporting the Habitat of Principal Importance wood-pasture and parkland. The MAGIC website also identified the presence of the Habitat of Principal Importance deciduous woodland immediately bounding the north of the site. Ancient semi-natural woodland was also identified as abutting the northern boundary of the site at its closest point.

No recent (within the last ten years) notable plant species have been recorded at the site based on the information provide by City of London Corporation as Conservators of Epping Forest.

3.3.2 **Field Survey Results**

Habitats within the site are shown on the Phase 1 Habitat Map (**Map 2**). Habitats are described in general terms using standard Phase 1 habitat survey terminology. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Semi-improved grassland

The site almost entirely comprises semi-improved grassland which comprises part of a larger field. The field was subject to light cattle grazing at the time of survey with mown paths and is tussocky in nature (**Figure 1**). Species recorded within this habitat include soft brome *Bromus hordeaceus*, perennial rye-grass *Lolium perenne*, common bent *Agrostis capillaris*, meadow foxtail *Alopecurus pratensis*, Yorkshire fog *Holcus lanatus*, crested dog's-tail *Cynosurus cristatus*, meadow grasses *Poa* species with herbaceous species including cut-leaved crane's-bill *Geranium dissectum*, ribwort plantain *Plantago lanceolata*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens*, greater plantain *Plantago major*, common sorrel *Rumex acetosa*, common mouse-ear *Cerastium fontanum*, creeping cinquefoil *Potentilla reptans*, bird's-foot trefoil *Lotus corniculatus*, common knapweed *Centaurea nigra*, meadow buttercup *Ranunculus acris* and red clover *Trifolium pratense*.



Figure 1: Semi-improved grassland within the site looking west



Figure 2: Rough grassland around car park

Areas of rough grassland are also present around the car park area to the west of the site (**Figure 2**). Species specifically recorded in this area include barren brome *Bromus sterilis*, false oat-grass *Arrhenatherum elatius*, cock's foot *Dactylus glomerata*, wall barley *Hordeum murinum* and soft brome with forb species typical of more unmanaged ground including cleavers *Galium aparine*, prickly sow thistle *Sonchus asper*, hedge

mustard *Sisymbrium officinale*, bush vetch *Vicia sepium*, hogweed *Heracleum sphondylium*, ribwort plantain and common nettle *Urtica dioica*.

Scattered Scrub

Areas of scrub are present around the margins of the car to the west of the site which area dominated by bramble *Rubus fruticosus* aggregate with occasional willow *Salix* species (**Figure 3**).



Figure 3: Areas of scrub and rough grassland present in the west of the site

Ruderal vegetation

An area of ruderal vegetation is present on the western boundary of the site adjacent to Bury Road (**Figure 4**). Species within this habitat are dominated by common nettle with broad-leaved dock *Rumex obtusifolius* and willowherb *Epilobium* species also present.



Figure 4: Area of ruderal vegetation adjacent to Bury Road

Other Habitats

Areas of hardstanding and bare earth are present in the west of the site associated with the areas of car parking.

An area of woodland forming Epping Forest is also present to the immediate north of the site. This was not fully surveyed as it lies outside of the site boundary however, forms mature broad-leaved woodland (**Figure 5**). Species recorded along the southern boundary of the woodland include pedunculate oak *Quercus robur*, hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, holly *Ilex aquifolium* and willow.



Figure 5: Woodland edge present off site to the north

3.3.3 Summary

The features of relatively greater interest in terms of the site are the broad-leaved woodland (situated offsite to the north) and semi-improved grassland. The site is not considered to be the Habitat of Principal Importance Parkland, as identified as part of the MAGIC search which could comprise scattered trees set over grassland.

3.4 Notable and Legally Protected Species

3.4.1 Bats

Desktop Study Results

A review of the MAGIC website identified a total of two granted EPSM licences in respect of bats within two kilometres of the site. A licence was granted in 2016 for the destruction of a maternity roost of soprano pipistrelle *Pipistrellus pygmaeus* with the second licence granted for the destruction of a resting place of common pipistrelle *Pipistrellus pipistrellus* in 2017.

Consultation with City of London Corporation as Conservators of Epping Forest produced records of common pipistrelle, soprano pipistrelle, Nathusius pipistrelle *Pipistrellus nathusii*, Daubenton's bat *Myotis daubentonii*, Leisler's bat *Nyctalus leisleri* and noctule *Nyctalus noctula* in 2007. These are all field and not roost records which indicates the presence of foraging and/or commuting bats. The exact location is unknown but were located approximately 250 metres south-east of the site.

Tree Assessment

No trees are present within the site itself. However, a number of trees are present along the site boundaries within the woodland to the north of the site. Whilst these were not assessed in detail as part of the survey it is highly likely that tree either along the boundary of within the wider woodland to the north support potential roost features.

Foraging and Commuting Habitat

The site provides good quality habitat for foraging and commuting bats associated with the woodland bounding the site and the tussocky semi-improved grassland across the site. This habitat is also connected to other high quality foraging and commuting habitat in the surrounds (specifically the extensive areas of Epping Forest) and therefore, the site is assessed as having high suitability for foraging and commuting bats.

3.4.2 Otter

Desktop Study Results

No granted EPSM licences in relation to otter *Lutra lutra* were identified within two kilometres of the site boundary. However, this does not confirm the absence of the species in the local area.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of otter within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site or immediately adjacent habitat does not support suitable habitat for resting otter or for holt creation. The habitat on site is unsuitable for otter and therefore the species is not considered further in this report.

3.4.3 Badger

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of badger *Meles meles*, however, this does not confirm the absence of the species in the local area.

Field Survey Results

No evidence of badger was recorded within the site during the survey undertaken. However, the site and the surrounds provide suitable foraging habitat for badger in the form of the semi-improved grassland and scrub present. The woodland forming the boundaries of the site also provides suitable opportunities for badger sett construction.

3.4.4 Hazel Dormouse

Desktop Study Results

No granted EPSM licence in respect of hazel dormouse *Muscardinus avellanarius* were identified on the MAGIC website within two kilometres of the site boundary.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of hazel dormouse, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site itself is unsuitable for supporting hazel dormouse, lacking any well connecting and diverse wooded vegetation which the species generally requires. However, the woodland present along the northern boundary does provide suitability for supporting the species and is well connected to other suitable habitat in the wider area. Notwithstanding this, at the time of writing no records of hazel dormouse had been identified and therefore, no further consideration has been given to this species in this report.

3.4.5 Water Vole

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of water vole *Arvicola amphibius* within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The habitat within the site is unsuitable to support water vole without the presence of sloping banks adjacent to water in which to burrow and, therefore, the species is not considered further in this report.

3.4.6 Birds

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced a large number of notable bird records within the site and surrounds. Records within the last ten years include meadow pipit *Anthus pratensis*, reed bunting *Emberiza schoeniclus*, redwing *Turdus iliacus*, swallow *Hirundo rustica*, bullfinch *Pyrrhula pyrrhula*, song thrush *Turdus philomelos*, skylark *Alauda arvensis*, linnet *Carduelis cannabina*, woodcock *Scolopax rusticola*, dunnoek *Prunella modularis*, short eared owl *Asio flammeus*, whinchat *Saxicola rubetra*, fieldfare *Turdus pilaris* and swift *Apus apus*

Field Survey Results

Species recorded during the field survey undertaken include house sparrow, woodpigeon *Columba palumbus* and blackbird *Turdus merula*. The boundary vegetation is suitable for supporting nesting birds in the form of extensive woodland. The site is also suitable for supporting ground nesting birds such as skylark.

The site will also likely provide suitable habitat for supporting a variety of overwintering birds including fieldfare and redwing, as listed in the desktop study.

3.4.7 Reptiles

Desktop Study Results

A number of records of reptiles were returned by City of London Corporation as Conservators of Epping Forest the most recent of which was grass snake *Natrix helvetica* identified in 2012. Records of common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* were also returned in 2005 and 2006 respectively.

Field Survey Results

The site provides high quality habitat for supporting common reptile species with the tussocky grassland present providing the necessary shelter and foraging opportunities species require. The site is also well connected to suitable hibernation features including the woodland to the north and scrub present in the grassland field to the south and east. Given the presence of records return by Epping Forest it is assumed that a population of common lizard, slow-worm and grass snake would be present at the site.

3.4.8 Great Crested Newt

Desktop Study Results

A single licence granted for great crested newt *Triturus cristatus* was identified by MAGIC approximately 1.6 kilometres to the west of the site in 2011. The record did not clearly establish whether the licence was for damage or destruction to a breeding site or resting place.

A review of online aerial photography and 1:25,000 OS mapping identified the presence of four ponds within 500 metres of the site boundary the nearest of which is present approximately 250 metres to the south-east of the site.

The most recent record of great crested newt provided by City of London Corporation as Conservators of Epping Forest was recorded in 2001 at Chingford Golf Course to the west of the site. No grid reference was provided as part of the record.

Field Survey Results

No waterbodies are present within the site and therefore, the species does not breed within the site. The site offers suitable terrestrial habitat for the species in the form of the tussocky grassland whilst the surrounding habitats in the form of the continued grassland, scrub and woodland also offer suitable terrestrial habitats. Whilst the status of great crested newt is currently unknown in the surrounding ponds it is not possible to rule out the potential presence of the species within terrestrial habitats.

3.4.9 Invertebrates

Desktop Study Results

A large number of invertebrate records were returned by City of London Corporation as Conservators of Epping Forest. However, of those only two notable records were returned from within the last ten years with small heath *Coenonympha pamphilus* and white admiral *Limenitis camilla* recorded in 2010 and 2019 respectively east and west of the site. Stag beetle also forms part of the designation of the Epping Forest SAC situated to the immediate north of the site.

Field Survey Results

The semi-improved grassland within the site offers suitable habitat to support a range of invertebrate species with high quality habitat also present in the surrounds in the form of the mature woodland. The site is unlikely to support stag beetle lacking any areas of deadwood for reproduction.

3.4.10 Other Relevant Species

Desktop Study Results

A single record of European hedgehog *Erinaceus europaeus* was returned by City of London Corporation as Conservators of Epping Forest recorded in 2012 at Chingford Plain. Records of common toad *Bufo bufo* were also returned within the search area the most recent of which was recorded in 1999 in Chingford Golf Course to the west.

Field Survey Results

No evidence of any other relevant species was recorded within the site during the survey undertaken. The site supports suitable habitat European hedgehog and common toad in the form of the tussocky grassland present across the site.

3.5 Summary of Key Ecological Features

The following features are those with greatest ecological value that lie within the site's Zone of Influence:

- Epping Forest SAC and SSSI present to the immediate north;

- Site is designated as a SINC although the citation was unavailable at time of report preparation;
- Suitability for the site to support foraging and commuting bats and tree roosting bats along the northern site boundary;
- Suitability to support foraging badger;
- Suitability to support breeding birds;
- Suitability to support widespread species of reptiles;
- Suitability to support terrestrial great crested newt;
- Suitability to support European hedgehog and common toad; and
- Suitability to support a diversity of invertebrates.

4.0 POTENTIAL ECOLOGICAL CONSTRAINTS AND RECOMMENDATIONS

4.1 Introduction

This section identifies potential constraints to the proposed development scheme based on the key ecological features as identified in Section 3.0 and summarised in Paragraph 0. Recommendations are included for mitigation and compensation based on the identified ecological constraints, and opportunities for enhancement are discussed.

4.2 Designated Sites

4.2.1 Potential Constraints

The site immediately adjoins Epping Forest SAC and Epping Forest SSSI to the north. The proposals have the potential to result in direct impacts of these sites through increase in human activity and potential pollution and littering events.

At this stage the citation for the SINC was unavailable and therefore, it is unknown what features the SINC is designated for and therefore, the constraint that this presents to the proposals. The siting of staging, material, machinery, the movement of people to and from the event, trampling effects and littering has the potential to reduce the diversity and ecological value of the notable habitats for which the SINCs are designated for. Any vehicle movements could also result in damage to the SINCs if inappropriately managed.

4.2.2 Potential Mitigation and Compensation Measures

Subject to further assessment it may be possible to offset the impact to the SINC through the implementation of an appropriate environmental management plan to ensure that the site, and surrounding SAC, SSSI and SINC, SSSI are fully cleared of any equipment, litter and waste following the completion of the event. This would also need to include appropriate, managed, access routes to the site and the use of trackways to minimise damage to grassland where possible on any heavy traffic areas within the concert area. This should be designed in consultation with a suitably qualified ecologist. However, this could still result in damage to the SINC habitats. For example, if the SINC is designated for the presence of neutral grassland, then an annual event which would damage the grassland prior to flowering could result in permanent damage to the features the SINC is designated for. Further consideration will need to be given to this as proposals come forward.

Epping Forest SAC and SSSI should be buffered by a minimum of 20 metres between the event area and habitats with no access to these buffers during the site set up or operational phase. The exclusion zone will be marked by high visibility fencing, such as Heras fencing (or similar). As the proposals for the event come forward it will be

necessary for the consenting authority to undertake a Habitats Regulations Assessment to determine whether there would be any likely significant effect on Epping Forest SAC either alone or in-combination with other plans or projects.

4.2.3 Enhancement Opportunities

No enhancements in respect of designated sites are recommended.

4.3 Habitats

4.3.1 Potential Constraints

The proposals have the potential to result in the degradation of the habitats present and temporary loss of their ecological functionality during the period of the event.

The movement of people to and from the event, trampling effects and littering has the potential to result in the degradation of the existing habitats at the site. The access routes to the site used by both the site set up team and attendees has the potential to degrade habitats in the surrounds.

4.3.2 Potential Mitigation and Compensation Measures

As already recommended an appropriate buffer of a minimum of 20 metres will require establishment between the event site and the woodland to the north of the site in order to minimise the risk of any damage to these habitats. No access to these buffers during the site set up or operational phase. The exclusion zone will be marked by high visibility fencing, such as Heras fencing (or similar).

An appropriate environmental management plan will need to be implemented at the event to ensure that the site, and surrounding habitats, are fully cleared of any equipment, litter and waste following the completion of the event. This would also need to include appropriate, managed, access routes to the site and the use of trackways to minimise damage to grassland where possible on any heavy traffic areas within the concert area. This should be designed in consultation with a suitably qualified ecologist.

4.3.3 Enhancement Opportunities

Whilst the existing management regime for the site is currently unknown it is recommended that this is reviewed in order to ensure that the site is subject to sympathetic management to allow recover and enhancement following the completion of the event.

4.4 Bats

4.4.1 Potential Constraints

Any future event at the site has the potential to result in disturbance to roosting, foraging and commuting bats through increased noise levels. The introduction of external

lighting has the potential to result in increased light spill on roosting, foraging and commuting features, resulting in the disturbance of bats.

In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017. Refer to **Appendix 4** for details.

4.4.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 20 metres between the event area and the woodland to the immediately north of the site in Paragraph 4.3.2 in order to avoid disturbing bats, should they be present. It is recommended that further consideration and assessment is given to bats once the layout and noise levels of the future event have been established.

The tree line should not be lit. Lighting should be restricted to the event itself and not during site set-up or closure. A further assessment of the potential lighting impacts should be undertaken once lighting plans are known.

4.4.3 Enhancement Opportunities

No enhancements in respect of bats are recommended.

4.5 Badger

4.5.1 Potential Constraints

Any future event at the site will result in temporary loss of badger foraging habitat short-term.

4.5.2 Potential Mitigation and Compensation Measures

Given that the loss of badger foraging habitat is only short-term (matter of days), no mitigation or compensation measures are recommended.

4.5.3 Enhancement Opportunities

No enhancements in respect of badger are recommended.

4.6 Birds

4.6.1 Potential Constraints

Should the event be undertaken during the nesting bird season (March to August, inclusive) then there is the potential for the proposals to result in disturbance and loss of nest both within the boundary vegetation and within the tussocky grassland within the site.

All birds, their nests, eggs and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act 1981. Refer to **Appendix 4** for details.

4.6.2 Potential Mitigation and Compensation Measures

It is recommended that further consideration is given to birds once the layout and noise levels of any future event have been established. Areas of habitat could be managed in advance of the event in order to reduce the suitability for ground nesting birds.

4.6.3 Enhancement Opportunities

No enhancements in respect of birds are recommended.

4.7 Reptiles

4.7.1 Potential Constraints

Any future event has the potential to result in direct harm on slow-worm, common lizard and grass snake through site set up. Any future event at the site during the active reptile season of April to early October will result in the loss of habitat suitable for widespread species of reptile in the short-term.

Widespread reptile species (slow-worm, common lizard, grass snake and adder *Vipera berus*) are protected under the Wildlife and Countryside Act 1981 against harm, see **Appendix 4** for details.

4.7.2 Potential Mitigation and Compensation Measures

It is recommended that a precautionary method of works be utilised during the event set up. This would include the progressive strimming of grassland habitats down to 30 centimetres to encourage reptiles to disperse to the wider habitat in the surrounds. This would then be left for a minimum of 24 hours and mown to ground level in order to ensure the event area remains unsuitable. This should be included in the set-up plan for the site and should be undertaken under the supervision of an suitability qualified ecologist.

Following the completion of the event the affected area of grassland would be allowed to re-establish with any reptiles re-colonising the site.

4.7.3 Enhancement Opportunities

No enhancements in respect of reptiles is recommended.

4.8 Great Crested Newt

4.8.1 Potential Constraints

A population of great crested newt is present within the surrounding landscape. Any future event has the potential to result in direct effects on great crested newt if the event affected suitable habitat such as the tussocky semi-improved grassland.

Any future event at the site during the active great crested newt season of April to early October will result in the loss of habitat suitable for the species in the short-term.

In England, great crested newt and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, this species is protected under the Conservation of Habitats and Species Regulations 2017. Refer to **Appendix 4** for details.

4.8.2 Potential Mitigation and Compensation Measures

The precautionary method of works for reptile set out in Paragraph 4.7.2 would minimise the potential risk to great crested newt during the event. However, given that great crested newt is a European Protected Species it is recommended that Natural England be consulted through their Discretionary Advice Service (DAS) on the precautionary method of works once details of the event are known.

4.8.3 Enhancement Opportunities

No enhancements in respect of great crested newt are recommended.

4.9 Invertebrates

4.9.1 Potential Constraints

The proposals will like result in the temporary loss of suitable terrestrial invertebrate habitat. However, given that it is anticipated that this would be for a very limited period of time this is not considered to be a significant constraint.

4.9.2 Potential Mitigation and Compensation Measures

Given the absence of potential significant constraints, no mitigation and compensation measures are recommended.

4.9.3 Enhancement Opportunities

No enhancements in respect of invertebrates is recommended.

4.10 Other Relevant Species

4.10.1 Potential Constraints

During the operational phase and site set up, any future event has the potential to result in direct effects on European hedgehog and common toad, if present, if the event is allowed to encroach onto tussocky grassland.

4.10.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 20 metres between the event area and broadleaved woodland and hedgerows as discussed in Paragraph 4.2.2 in order to avoid harm to European hedgehog and common toad, should they be present.

Sensitive clearance methods of the tussocky grassland will be necessary prior to the commencement of any future event as set out in Paragraph 4.7.2. Any individual encountered as part of this work should be relocated to unaffected habitats in the surrounds.

4.10.3 Enhancement Opportunities

No enhancements in respect of European hedgehog and common toad are recommended.

5.0 CONCLUSION

5.1 Conclusion

The site is designated as a SINC with Epping Forest SAC and SSSI situated immediately to the north of the site. The full citation or boundary of the SINC was not available at the time of preparing this report. The site has been assessed as having suitability to support protected species including roosting bats, foraging and commuting bats, badger, breeding birds, wintering birds, great crested newt, widespread species of reptiles, European hedgehog and common toad.

The key constraints are the timing of the event, access routes, compaction and trampling, noise, lighting and layout of the event. Recommendations made including a sensitive lighting scheme, a minimum 20 metre buffer from the broadleaved woodland, establishing Root Protection Zones for mature scattered trees, perimeter fencing, an environmental management plan and controlled access routes.

Further consideration will need to be given to bats once the noise levels and layout of any future event are known in order to ensure these species groups will not be disturbed. Recommendation have also been made for a precautionary method of works during site set up in respect of reptiles and great crested newt. Further consideration will also need to be given to the potential impact of the event on the SINC, once further information on the features for which the SINC is designated are understood.

5.2 Updating Site Survey

If the boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

6.0 REFERENCES

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Map 1 Site Location Plan

CHINGFORD PLAIN, EPPING FOREST

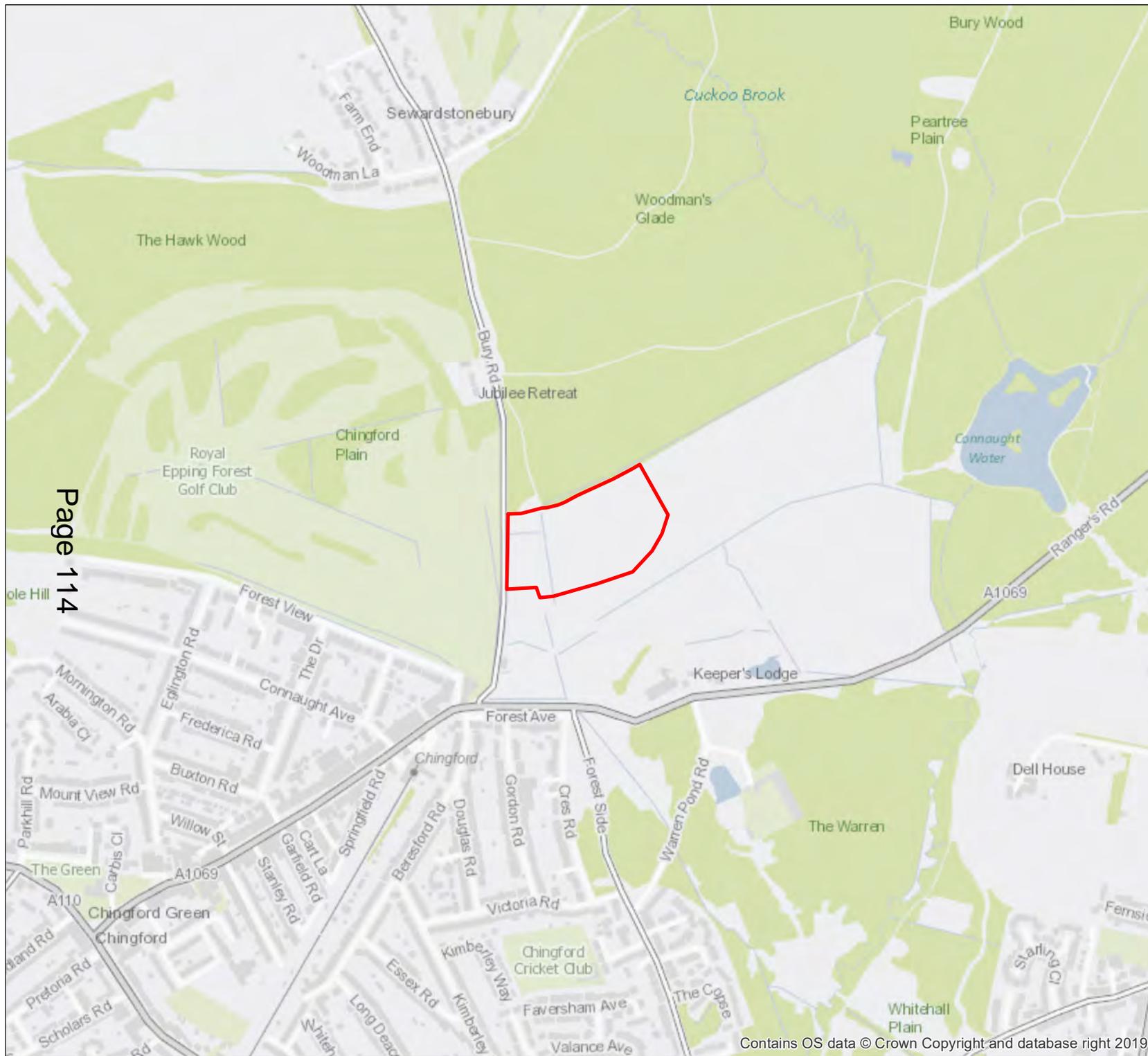
PRELIMINARY ECOLOGICAL APPRAISAL

Map 1 - Site Location Plan

Client:	City of London Corporation as Conservators of Epping Forest
Date:	September 2019
Status:	Final

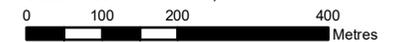
KEY

 Site Boundary



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

Scale at A4: 1:10,000



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Map 2 Phase 1 Habitat Map

CHINGFORD PLAIN, EPPING FOREST

PRELIMINARY ECOLOGICAL APPRAISAL

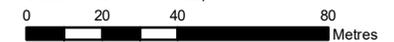
Map 2 - Phase 1 Habitat Map

Client:	City of London Corporation as Conservators of Epping Forest
Date:	September 2019
Status:	Draft

KEY

-  Site Boundary
-  Scattered Scrub
-  Semi-improved Grassland
-  Tall Ruderal
-  Hardstanding

Scale at A4: 1:2,000



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Appendix 1 Statutory Designated Sites within the Desktop Study Area

Details of statutory designated sites within the desktop study area, as listed in Paragraph 3.2.1, are provided in **Table 1**.

Table 1: Statutory Designated Sites Located Within the Desktop Study Area

Designation	Name	Approximate Relative Location	Reason for Designation
Epping Forest	SSSI	Immediately north	<p>Annex I habitats which are a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> ▪ Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrub layer (<i>Quercion robur-petraeae</i> or <i>ilici-Fagenion</i>) <p>Annex I habitats which are present as a qualifying feature but not a primary reason for the selection of the site:</p> <ul style="list-style-type: none"> ▪ Northern Atlantic wet heaths with <i>Erica tetralix</i> ▪ European dry heaths <p>Annex II species that are a primary reason for selection of the site;</p> <ul style="list-style-type: none"> ▪ Stag beetle – records of which are widespread and frequent across the site.
Epping Forest	SSSI	Immediately north	<p>Epping Forest is one of only a few remaining large-scale examples of ancient wood-pasture in lowland Britain and has retained habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains and scattered wetland. The seminatural woodland is particularly extensive, forming one of the largest coherent blocks in the country. The Forest plains are also a major feature and contain a variety of unimproved acid grasslands which have become uncommon elsewhere in Essex and the London area.</p> <p>In addition, Epping Forest supports a nationally outstanding assemblage of invertebrates, a major amphibian interest and an exceptional breeding bird community.</p>

Appendix 2 Sites Designated for Nature Conservation

Statutory Sites

Internationally Designated Sites - Ramsar Sites, Special Areas of Conservation and Special Protection Areas

Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) form a network of protected sites across the European Union called Natura 2000 sites. In the United Kingdom the primary legislative protection is afforded to these sites under the Conservation of Habitats and Species Regulations 2017 (as amended).

Ramsar sites are designated as wetlands of international importance which are afforded similar legislative protection to Natura 2000 sites.

SACs are sites which support internationally important habitats or internationally important assemblages or populations of species. SPAs are designated for supporting internationally important populations of birds listed in the annexes of the Birds Directive. SACs, SPAs and Ramsar sites are generally also designated as Sites of Special Scientific Interest.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) there is a legal requirement that competent authorities, such as local planning authorities, need to consider whether plans or projects are likely to have a significant adverse effect on Natura 2000 sites or Ramsar sites, either alone, or in combination with other plans or projects. In the event that a likely significant effect cannot be ruled out, on the basis of objective information, then the competent authority must undertake an “Appropriate Assessment” to fully assess the plan or project against the site’s conservation objectives. Unless certain defined derogation tests can be met, the competent authority may not authorise nor undertake any plan or project which adversely affects the integrity of a Natura 2000 site or Ramsar site.

Nationally Designated Sites – Sites of Special Scientific Interest and National Nature Reserves

Sites of Special Scientific Interest (SSSIs) receive legal protection under the Wildlife and Countryside Act 1981 (as amended). Such sites are designated to protect specific areas of biological or geological interest of national importance. Such sites also generally receive strict protection through the planning system.

National Nature Reserves (NNRs) are also usually designated as SSSIs and are specifically managed for their wildlife value. They receive legal protection through the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). As with SSSIs, these sites generally receive strict protection through the planning system.

Locally Designated Sites – Local Nature Reserves

Local Nature Reserves (LNRs) are designated by local authorities under the National Park and Access to the Countryside Act 1949. These are generally designated not only for their local wildlife value but also for education, scientific and recreational purposes. These sites generally receive protection from development through the planning system.

Non-Statutory Sites

Locally Designated Sites

In addition to statutory designations, local authorities often designate sites of nature conservation importance at the local level. Such designations are named differently by each local authority and may be referred to as Local Wildlife Sites (LWSs), Sites of Importance for Nature Conservation (SINCs) or Sites of Nature Conservation Importance (SNCIs), amongst others. The exact level of protection afforded to these sites varies and is normally defined through local planning policy.

Appendix 3 Appraisal Criteria for Bats

The criteria used to assess the suitability of roosting and foraging/commuting habitat for bats is based on industry guidelines and outlined in **Table 2**⁵.

Table 2: Criteria used to Assess Suitability of Roosting and Foraging/Commuting Habitat for Bats

Suitability	Description of roosting habitats	Commuting and foraging habitats
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>
Moderate	A structure of tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).</p> <p>A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by other habitat).</p> <p>Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch or scrub.</p>
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

⁵ Table adapted from (Collins, 2016)

Appendix 4 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - To impair its ability to survive, breed, or rear or nurture their young;
 - To impair its ability to hibernate or migrate;
 - To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Great Crested Newt

Great crested newt are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely, to impair its ability to survive, breed, or rear or nurture their young, to impair its ability to hibernate or migrate;
- To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any one of these species uses for shelter or protection.

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Reptiles

The four widespread species of reptile that are native to Britain, namely common or viviparous lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, adder *Vipera berus* and grass snake *Natrix*

natrix, are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence to:

- Intentionally kill or injure any of these species.

The remaining native species of British reptile (sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca*) receive a higher level of protection via inclusion under Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations (in England and Wales only) and the Wildlife and Countryside Act 1981 (as amended). The distribution of these species are restricted to only a few sites in England.

Species and Habitats of Principal Importance in England

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The England Biodiversity List is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. There are currently 943 species of principal importance and 41 habitats of principal importance included on the England Biodiversity List.

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**WARLIES PARK, WALTHAM ABBEY,
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PRELIMINARY ECOLOGICAL APPRAISAL

DRAFT

Draft Document

August 2019

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

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ECOSA Quality Assurance Record

The Preliminary Ecological Appraisal has been undertaken with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). This report has been produced in accordance with the CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

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Produced For:	City of London Corporation as Conservators of Epping Forest
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PRELIMINARY ECOLOGICAL APPRAISAL

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by City of London Corporation as Conservators of Epping Forest to undertake a Preliminary Ecological Appraisal of Warlies Park, Waltham Abbey. The purpose of the appraisal is to assess the site's ecological baseline and identify constraints and opportunities associated with delivering large-scale concerts at the site in order to inform their decision process. The site is located in Greater London and comprises a parkland landscape with areas of woodland and hedgerows present. The main findings of the Preliminary Ecological Appraisal are:

- The site is designated as Warlies Park SINC and may also be designated as Cobbins Brook SINC. The full citation or boundary of the SINC's were not available at the time of preparing this report. The site has been assessed as having suitability to support tree roosting bats, foraging and commuting bats, badger, hazel dormouse, breeding birds, wintering birds, widespread species of reptile, great crested newt, European hare, European hedgehog and common toad. In the absence of suitable mitigation in respect of the aforementioned species groups/species, these could present an ecological constraint to the proposed event.
- Mitigation recommendations include minimising visitors accessing the wider SINC, the erection of Heras fencing (or similar) around the event boundary, maintaining a minimum buffer of 20 metres between the broadleaved woodland and hedgerows and event and the establishment of Root Protection Zones for mature trees.
- Further survey work in relation to reptiles and great crested newt will be required to fully assess the potential ecological impacts of any future proposals. Additionally, recommendations have been made for a sensitive lighting scheme to minimise potential disturbance impacts on foraging and commuting bats and hazel dormouse, should they be present. Further consideration will need to be given to bats and hazel dormouse once the noise levels of any future event are known in order to ensure the species groups will not be disturbed. At this stage, it is considered that subsequent to the findings of such work, there is scope to incorporate suitable mitigation measures in order to allow the event to accord with wildlife legislation.
- If the site boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if the event does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by City of London Corporation as Conservators of Epping Forest to undertake a Preliminary Ecological Appraisal to identify the ecological constraints and opportunities associated with delivering large-scale concert at Warlies Park, Waltham Abbey, Essex EN9 3SL (hereafter referred to as the site).

1.2 The Site

The site is located in Waltham Abbey, Essex centred on National Grid Reference (NGR) TL 4096 0139 (**Map 1**). The Phase 1 habitat map (**Map 2**) depicts the boundary of the site.

The site measures approximately 3.7 hectares and comprises a parkland landscape with areas of woodland and hedgerows present. The site is bounded by Horseshoe Hill to the south, the road Warlies to the east with Warlies House and Warlies Park House further afield, grassland fields and woodland to the north and grassland and nurseries to the west.

The wider landscape is dominated by grassland and agricultural fields with associated hedgerows and extensive blocks of woodland.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study carried out during June and August 2019, respectively. The objectives of the appraisal are:

- To provide preliminary baseline information on the current habitats, the suitability of the site to support notable and protected species, and evidence of notable and protected species both on site and in the immediate vicinity of the site, where relevant;
- To identify the proximity of any statutory sites designated for nature conservation importance;
- To identify the likely ecological constraints associated with the proposals;
- To identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy'¹;

¹ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

- To identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA); and
- To identify the opportunities offered by the proposals to deliver ecological enhancement

1.4 Site Proposals

City of London Corporation as Conservators of Epping Forest have been approached by event organisers to hold concert style events with audiences in excess of 50,000 on land under their ownership. At the time of preparing this report, there are no detailed plans or timings of the proposed events at the site. However, the location could be considered for hosting longer festivals potentially including camping at the site.

2.0 METHODS

2.1 Introduction

This section details the methods employed during the Preliminary Ecological Appraisal. Any significant limitations to the survey methods are also considered.

2.2 Zone of Influence

To define the total extent of the study area for this appraisal (Zone of Influence²), the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected. The appropriate survey radii for the various elements of the appraisal (i.e. desktop study and field survey) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to appraisal, its surroundings and the nature and scope of the proposals. Determination of the Zone of Influence is an iterative process and will be regularly reviewed and amended as the project evolves.

2.3 Scoping

Protected species considered within this appraisal are those species/species groups considered likely to be encountered given the geographical location and context of the site. These are discussed within the results section (Section 3.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the potential ecological constraints and mitigation measures section (Section 4.0) of this report.

2.4 Desk Study

A full biological record centre desktop study was not undertaken as part of this appraisal.

2.4.1 City of London Corporation as Conservators of Epping Forest

City of London Corporation as Conservators of Epping Forest provided data on 24th June 2019 which included records of legally protected and notable species (flora and fauna) within the local area, including Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and as listed in the England Biodiversity List (**Appendix 1**).

² The Zone of Influence, as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities.

2.4.2 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) database (DEFRA, 2019) was reviewed on 20th August 2019 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. Where appropriate, the desk study search area has been extended to take account of any appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species, particularly those specifically mentioned in local planning policy. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs.

Sites within two kilometres of the site boundary where European Protected Species Mitigation (EPSM) licences have been granted were reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.

2.4.3 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The presence of ponds or other waterbodies within a 500 metre radius of the site in particular are noted in relation to great crested newt. The 500 metre radius is a standardised search radius to assist in the assessment of the suitability of a site and its surrounding habitat to support this species, based on current Natural England guidance (English Nature, 2001).

2.5 Field Survey

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and comprised/included a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017). The field survey covered all accessible areas of the site, including boundary features. Habitats described in Section 3.0, have been mapped (**Map 2**) and photographs provided, where relevant. For ease of reference, Target

Notes (TN) depict locations of particular ecological interest or features which are too small to map.

2.5.1 Phase 1 Habitat Survey

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 habitat survey methodology (JNCC, 2010). This involved identification of broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each vegetation type was compiled and any invasive species³ encountered as an incidental result of the survey recorded.

2.5.2 Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. The following species/species groups were considered during the appraisal.

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of trees on the site and immediately on the site boundary to support roosting bats based on the presence of Potential Roosting Features such as holes, cracks, splits, loose bark and ivy cladding. Given the large number of trees present within the site and along the site boundaries, it was not possible to fully inspect each tree for bat roosting suitability. Therefore, potential bat roosting features may be present which were not identified during the survey.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the suitability of the site to support roosting, foraging and commuting bats is based on a four-point scale as detailed in **Appendix 2**.

Otter

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints, feeding remains, footprints and slides.

³ Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

Badger

The survey involved an assessment of the suitability of the site to support badger. Evidence of the species was recorded as an incidental result of the Phase 1 habitat survey and included locating badger setts, paths, and signs of territorial activity such as latrine sites.

Hazel Dormouse

The appraisal for the suitability of the site to support hazel dormouse was based on an assessment of habitat features that may indicate that the species is present. This includes the presence of key food sources such as hazel and bramble, or plants used as nesting material such as honeysuckle and clematis. Additionally, the species requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features in determining the suitability of the site for hazel dormouse.

Water Vole

The water vole appraisal was based on an assessment of the suitability of the habitat present within the site to support water vole by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), bank structure and the bank side vegetation. Water voles generally require sloping banks in which to burrow and well-developed bank side vegetation to provide shelter and food. During the survey attention was paid to the presence of burrows, latrines, feeding remains, trails and footprints.

Birds

The appraisal of breeding birds on the site was based on the suitability of habitat present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests.

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the suitability for the site to support wintering farmland bird species, waders and wildfowl.

Reptiles

The reptile appraisal was based on an assessment of the suitability of the habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and rough grassland interfaces and the presence of these is a good indication that reptiles may be present on site. In addition, reptiles may utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

Great Crested Newt

The appraisal of the site to support great crested newt included establishing the presence of suitable aquatic habitats such as ponds, lakes or other waterbodies within or adjacent to the site and the presence of suitable terrestrial habitat. Waterbodies that are densely shaded, highly eutrophic or that contain fish are likely to be less suitable for this species. The suitability of on-site ponds and terrestrial habitat is considered in relation to the presence of ponds within the wider area, as identified within the desktop study (Paragraph 2.4.3), and their suitability to be used as a network.

Invertebrates

An assessment was made of the suitability of the site to support diverse communities of invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include, for example, an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora, waterbodies and water courses and areas of free draining soil exposures. During the field survey there was no attempt made to identify species present as this is a more specialist area of ecological assessment reserved for targeted surveys.

Other Relevant Species

An assessment was made of site suitability for other notable species such as more rarely encountered protected species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the NERC Act 2006 and as listed in the England Biodiversity List, and Local Biodiversity Action Plan (LBAP) species⁴, specific to the study region.

Invasive Species

During the field survey any incidental records of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded. However, it should be considered that the survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

2.6 Field Survey Details

The field survey was carried out by Richard Chilcott, Principal Ecologist of ECOSA and Lucy Bartlett, Ecologist of ECOSA, on 19th June 2019. The weather conditions were mild and overcast, light to heavy rain with 100% cloud cover, an ambient temperature of 18°C and a gentle breeze.

⁴ LBAPs identify local priorities for biodiversity conservation by translating national targets for species into effective action at the local level and identifying targets for species important to the local area.

During the survey, the surveyor was equipped with 10x40 binoculars, a high powered torch and a digital camera.

2.7 Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The field survey has therefore not produced a complete list of plants and animals and in the absence of evidence of any particular species should not be taken as conclusive proof that the species is absent or that it will not occur in the future.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

The desk study data originates from City of London Corporation as Conservators of Epping Forest. A more exhaustive desktop study was not undertaken at this stage. The data search results cannot be taken as an exhaustive list of species present in the area.

A large proportion of the desk study data is historic and, therefore, the purposes of this report only the most recent and relevant records have been referenced within this report. At the time of preparing this report the full citation or boundary of the SINCs within Warlies Park were not available.

Given the large number of trees present within the site and along the site boundaries, it was not possible to fully inspect each tree for bat roosting suitability. Therefore, potential bat roosting features may be present which were not identified during the survey.

Not all potential bat roosting features are accessible to the surveyor, for example holes or cracks in trees, and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

3.0 BASELINE ECOLOGICAL CONDITIONS

3.1 Introduction

This section details the results of the Preliminary Ecological Appraisal undertaken for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the ecological features recorded during the field survey.

3.2 Statutory and Non-statutory Designated Sites

3.2.1 Statutory Designated Sites

There are no statutory designated sites of nature conservation interest situated within a one kilometre radius of the site boundary. The nearest statutory designated site of nature conservation interest is Epping Forest SAC and SSSI located approximately 1.3 kilometres south-east of the site and designated for supporting notable habitats, invertebrate assemblages and amphibians and breeding birds.

3.2.2 Non-Statutory Designated Sites

The site is designated as Warlies Park SINC for supporting notable habitats including wood-pasture and parkland, hedgerows, lowland mixed deciduous woodland, ancient/species-rich hedgerows and green lanes and species such as invertebrates, lichens and fungi.

Warlies Park is also partly designated as Cobbins Brook SINC for supporting notable habitats including rivers, lowland mixed deciduous woodland, lowland meadows, species-rich grassland, ancient/species-rich hedgerows, green lanes and corridors.

At the time of preparing this report the formal citations of Warlies Park and Cobbins Brook SINC had not been provided to ECOSA by Epping Forest and therefore, the formal boundary of the SINC are currently unknown.

3.3 Habitats

3.3.1 Desktop Study Results

Consultation with MAGIC identified the site as being the Habitat of Principal Importance wood-pasture and parkland. MAGIC also identified the reliability of the interpretation to be “medium”.

No recent notable plant species have been recorded at the site based on the information provide by City of London Corporation as Conservators of Epping Forest.

3.3.2 Field Survey Results

Habitats within the site are shown on the Phase 1 Habitat Map (**Map 2**), Target Notes and photographs have been provided as appropriate, Target Notes are cross referenced to **Map 2**. Habitats are described in general terms using standard Phase 1 habitat survey terminology. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Broadleaved Semi-natural Woodland

Three areas of broadleaved semi-natural woodland are present within the site.

The largest area of woodland located in the north-west of the site has a canopy comprising pedunculate oak *Quercus robur*, ivy *Hedera helix*, sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior*, lime *Tilia x europaea* and hornbeam *Carpinus betulus* (**Figure 1** and **Figure 2**). The understorey is sparse and comprises hawthorn *Crataegus monogyna*, bramble *Rubus fruticosus* aggregate, elder *Sambucus nigra*, blackthorn *Prunus spinosa* and field maple *Acer campestre*. The following species were recorded as part of the ground flora: stinging nettle *Urtica dioica*, dog's mercury *Mercurialis perennis*, wood avens *Geum urbanum*, Yorkshire fog *Holcus lanatus*, annual meadow grass *Poa annua*, false oat-grass *Arrhenatherum elatius*, Cock's-foot *Dactylis glomerata*, ground ivy *Glechoma hederacea* and remote sedge *Carex remota*.



Figure 1: Broadleaved semi-natural woodland viewed to the north



Figure 2: Broadleaved semi-natural woodland viewed to the north-east

An area of woodland is present towards the centre of the site (**Figure 3**). The canopy species present include pedunculate oak, ivy, horse chestnut *Aesculus hippocastanum* and willow *Salix* species. The woodland lacks any significant understorey with species present including hawthorn, bramble and dog-rose *Rosa canina*. Ground flora species present include stinging nettle, broad-leaved dock *Rumex obtusifolius*, annual meadow grass, false-oat grass, Cock's-foot and red campion *Silene dioica*.

Areas of woodland are also present in the south-eastern corner of the site (**Figure 4**) which leads onto a line of scattered trees. Mature pedunculate oak and semi-mature

elm *Ulmus* species and hawthorn form the canopy layer. Other species present within the understorey include hawthorn, dog-rose and elder, which is limited in extent. Stinging nettle, dog's mercury, wood avens, spear thistle *Cirsium vulgare*, cleavers *Galium aparine*, broad-leaved dock and ivy form the ground flora.



Figure 3: Broadleaved semi-natural woodland towards the centre of the site



Figure 4: Broadleaved semi-natural woodland viewed to the east

A number of areas of woodland also form part of the site boundaries. Of particular note is Cobbin Pond woodland to the north of the site, which have not been surveyed.

Dense Scrub

Areas of dense scrub are present throughout the site (**Figure 5** and **Figure 6**). Species present include bramble, dog rose, blackthorn and pedunculate oak saplings.



Figure 5: Scrub located in the north of the site



Figure 6: Scrub along eastern site boundary

Parkland/Scattered Trees

A number of scattered trees are present throughout the site including pedunculate oak, hawthorn and Scot's pine *Pinus Sylvestris* (**Figure 7** and **Figure 8**).



Figure 7: Scattered trees viewed to the north



Figure 8: Scattered trees viewed to the north

Semi-improved Grassland

The majority of the site comprises tussocky grassland dominated by Yorkshire fog in areas (**Figure 9** and **Figure 10**). Other grassland species present include annual meadow grass, false oat-grass, crested dog's-tail *Cynosurus cristatus*, smaller cat's-tail *Phleum bertolonii*, Timothy *Phleum pratense*, perennial rye-grass *Lolium perenne*, creeping bent *Agrostis stolonifera*, soft brome *Bromus hordeaceus*, cock's foot, wall barley *Hordeum murinum* and false brome *Brachypodium sylvaticum*. Herbaceous species are limited in extent and include stinging nettle, cleavers, broad-leaved dock, dandelion *Taraxacum officinale* aggregate, creeping buttercup *Ranunculus repens*, red clover *Trifolium pratense*, common vetch *Vicia sativa*, creeping cinquefoil *Potentilla reptans*, selfheal *Prunella vulgaris*, common mouse-ear *Cerastium fontanum*, common ragwort *Senecio jacobaea*, black medick *Medicago lupulina*, white clover *Trifolium repens*, oxeye daisy *Leucanthemum vulgare* and bramble.



Figure 9: Semi-improved grassland viewed to the north-east



Figure 10: Semi-improved grassland viewed to the south-west

An area of grassland which was recently mown at the time of survey was recorded in the south-eastern corner of the site (**Figure 11**). A comprehensive species list was not recorded during the survey, but largely comprise species present in the surrounding grassland habitat.



Figure 11: Semi-improved grassland in south-eastern corner of site

Standing Water

Two waterbodies are present within the site.

A single pond is present within the broadleaved woodland towards the centre of the site, measuring approximately 150 square metres (**Figure 12**). Aquatic and marginal vegetation present is dominated by greater reedmace *Typha latifolia* with soft rush *Juncus effusus* also recorded.

A single pond is present within the broadleaved woodland in the north-west of the site, measuring approximately 1,270 square metres (**Figure 13**). No aquatic vegetation was recorded within the waterbody.



Figure 12: Pond within the broadleaved woodland towards the centre of the site



Figure 13: Pond within the broadleaved woodland in the north-west of the site

Intact Species-poor Hedgerow

Five intact species-poor hedgerows are present within the site.

Hedgerow (H) 1 and H2 form part of the eastern site boundary and are mature, up to 15 metres in height and set beyond a fence line (**Figure 14** and **Figure 15**). The hedgerows are unmanaged and scrubby in appearance. Species present include elm

Ulmus species, pedunculate oak, hawthorn, bramble, dog-rose, horse chestnut, blackthorn, ash saplings, cherry *Prunus* species and sycamore.



Figure 14: H1 viewed to the north



Figure 15: H2 viewed to the south-west

H3 is mature, up to three metres in height, unmanaged and scrubby in appearance (**Figure 16**). The hedgerow is dominated by blackthorn. Other species present include pedunculate oak, hawthorn and dog-rose.

H4 is up to five metres in height, unmanaged and scrubby in appearance (**Figure 17**). Species present include pedunculate oak, hawthorn, bramble, dog-rose and blackthorn.



Figure 16: H3 viewed to the south-west



Figure 17: H4 viewed to the north-west

HR5 forms the southern part of the western site boundary. The hedgerow is mature, up to eight metres in height and is unmanaged (**Figure 18**). Species present include pedunculate oak, hawthorn, bramble, dog-rose and blackthorn.



Figure 18: H5 viewed to the south-west

Defunct Species-poor Hedgerow

H6 is located towards the centre of the site and is up to 12 metres in height and scrubby in appearance (**Figure 19**). Species present include pedunculate oak, hawthorn, bramble, dog-rose and willow *Salix* species.



Figure 19: H6 viewed the east

3.3.3 Other Habitats

A fence line is present around the field to the south-east.

3.3.4 Summary

The site is the habitat of principal importance wood-pasture and parkland, which is of ecological interest. The broadleaved woodland, mature scattered trees, hedgerows and tussocky grassland are of relatively greater ecological interest in the context of the site.

3.4 Notable and Legally Protected Species

3.4.1 Bats

Desktop Study Results

No granted European Protected Species Mitigation (EPSM) licences in respect of bats were identified within a two kilometre radius of the site.

Consultation with City of London Corporation as Conservators of Epping Forest produced records of common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle bat roosts from Fernhall Wood located approximately 390 metres north-east of the site. Records of foraging noctule *Nyctalus noctula* and brown long-eared bat *Plecotus auritus* from 2017 were also recorded within Warlies approximately 100 metres south-east of the site.

Tree Assessment

Given the large number of trees present within the site and along the site boundaries, it was not possible to fully inspect each tree for bat roosting suitability during the survey undertaken. The majority of the trees were of the size and age that they may have developed features suitable for roosting bats if not immediately visible from the ground level.

A dead oak tree (TN1) was recorded as supporting various potential bat roosting features in the form of split branches and cavities on the north-eastern aspect and was therefore assessed as having high suitability to support roosting bats (**Figure 20**, **Figure 21** and **Figure 22**).



Figure 20: TN1 dead oak tree



Figure 21: TN1 dead oak tree with cavity on flushed section



Figure 22: TN1 dead oak tree with cavity in branch

A pedunculate oak (TN2) was recorded as supporting a woodpecker hole on the northern aspect and was therefore assessed as having high suitability to support roosting bats (**Figure 23**).

A pedunculate oak (TN3) was recorded as supporting cavities on the eastern aspect and was therefore assessed as having high suitability to support roosting bats (**Figure 24**).



Figure 23: TN2 pedunculate oak with woodpecker hole



Figure 24: TN3 pedunculate oak with cavities

Foraging and Commuting Habitat

The broadleaved semi-natural woodland, hedgerows, mature scattered trees and tussocky grassland within the site offer good foraging and commuting habitat for bats. These features also allow connectivity into the wider landscape including extensive blocks of woodland, hedgerow networks and open green space. Given the extent of suitable habitats in the vicinity of the site, it is likely that the site is used by bats as part

of a larger foraging and commuting route. Overall, the site is assessed as having high suitability to support foraging and commuting bats.

3.4.2 Otter

Desktop Study Results

No granted EPSM licences in relation to otter *Lutra lutra* were identified within two kilometres of the site boundary. However, this does not confirm the absence of the species in the local area.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of otter within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site or immediately adjacent habitat does not support suitable habitat for resting otter or for holt creation. The habitat on site is unsuitable for otter and therefore the species is not considered further in this report.

3.4.3 Badger

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of badger *Meles meles* within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

No evidence of foraging or resident badger was recorded during the survey undertaken. The site provides suitability to support resident badger within the woodland and hedgerows which provides opportunities for sett construction. The site also provides suitable foraging habitat for the species in the form of areas of broadleaved semi-natural woodland, hedgerows and grassland. Suitable habitat for badger is present in the wider area in the form of grassland fields, woodland and agricultural fields with hedgerow boundaries.

3.4.4 Hazel Dormouse

Desktop Study Results

No granted EPSM licences in respect of hazel dormouse *Muscardinus avellanarius* were identified within a two kilometre radius of the site.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of hazel dormouse within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site itself is considered to support sub-optimal habitat for hazel dormouse. The broad-leaved woodland, hedgerows and scrub along the site boundaries are generally species-poor and of limited suitability for foraging, lacking the continuum of food resources which the species requires at different times of the year. However, these habitats are connected to suitable habitat within the vicinity of the site, and therefore the site has the connectivity into the wider area which the species requires for dispersal.

3.4.5 Water Vole

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of water vole *Arvicola amphibius* within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The habitat within the site is unsuitable to support water vole without the presence of sloping banks adjacent to water in which to burrow and, therefore, the species is not considered further in this report.

3.4.6 Birds

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced records of six notable bird species within the local area. A single record of the amber listed⁵ kestrel *Falco tinnunculus* within the centre of the site from 2012 was returned as part of the desktop study undertaken. Three records of the red listed⁶ red kite *Milvus milvus* were also returned within the site along the north-eastern site boundary in 2017.

⁵ The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Amber list criteria include species which are: in unfavourable conservation status in Europe; subject to historical population decline during 1800–1995, but recovering; subject to moderate (25-49%) decline in UK breeding population or contraction of UK breeding range over last 25 years, or the longer-term period; subject to moderate (25-49%) decline in UK non-breeding population over last 25 years, or the longer-term period; rare breeders (1–300 breeding pairs in UK); rare non-breeders (less than 900 individuals), or; internationally important species with at least 20% of European breeding or non-breeding population in UK .

⁶ The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Red List criteria include species which are: globally threatened; have been subject to historical population decline in UK during 1800–1995; are in severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period, or; subject to severe (at least 50%) contraction of UK breeding range over last 25 years, or longer-term period.

Field Survey Results

Carrion crow *Corvus corone*, blackbird *Turdus merula* and blue tit *Cyanistes caeruleus* were recorded during the survey. The site supports ground nesting birds including skylark *Alauda arvensis* and lapwing *Vanellus vanellus*.

The site contains habitat suitable for supporting breeding birds in the form of broadleaved semi-natural woodland, dense scrub, scattered trees and tussocky grassland. A variety of suitable habitats for supporting a range of bird species are also present in the vicinity of the site in the form of extensive woodland blocks, rough grassland, agricultural fields and hedgerow networks.

The site also contains suitability for supporting wintering birds in the form of the semi-improved grassland, which forms the majority of the site.

3.4.7 Reptiles

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of reptiles within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The majority of the semi-improved grassland within the site was unmanaged at the time of survey and has developed a long sward height, providing suitability for supporting foraging, sheltering and basking reptiles. The base of the hedgerows and scrub also provides opportunities for reptiles. Additionally, hibernating and sheltering opportunities are associated with the broadleaved semi-natural woodland and onsite hedgerows.

3.4.8 Great Crested Newt

Desktop Study Results

A single granted EPSM licence in respect of great crested newt *Triturus cristatus* were identified within a two kilometre radius of the site. The licence was granted in 2009 for the destruction of a breeding site and resting place of the species and is located approximately 310 metres north of the site.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of great crested newt within the local area, however, this does not confirm the absence of the species.

A review of online 1:25,000 OS mapping and aerial imagery concluded that there are 27 waterbodies present within a 500 metre radius of the site, with three waterbodies within 100 metres of the site, seven waterbodies within 100-250 metres of the site.

Field Survey Results

The site contains two waterbodies. A single pond is present within the broadleaved woodland towards the centre of the site, measuring approximately 150 square metres. Some vegetation is present within the waterbody in the form of greater reedmace and soft rush and the waterbody is assessed as having limited suitability to support breeding great crested newt. The pond within the broadleaved woodland in the north-west of the site lacked any aquatic vegetation at the time the survey was undertaken, however, given the extent of suitable habitat surrounding the pond it is assessed as having suitability to support breeding great crested newt.

The site provides optimal terrestrial habitat for great crested newt with the broadleaved semi-natural woodland, dense scrub, scattered trees, tussocky semi-improved grassland offering suitable foraging, refuge and hibernating opportunities for the species during their terrestrial stage.

Given the large number waterbodies within a 500 metre radius of the site and the known population present within the vicinity of the site, there is a high likelihood of great crested newt using the terrestrial habitat and ponds on site. A large number of waterbodies are within 250 metres of the site which increases the likelihood of great crested newt using terrestrial habitat on site. Great crested newt are found at their greatest densities within terrestrial habitats of up to 250 metres⁷, and, therefore there is a risk of dispersal of great crested newt to the site from the waterbodies in the vicinity of the site.

3.4.9 Invertebrates

Desktop Study Results

No notable terrestrial invertebrates were returned by City of London Corporation as Conservators of Epping Forest within the local area. Records of common species including a record of small tortoiseshell *Aglais urticae*, slender groundhopper *Tetrix subulate*, top-horned hunchback *Acrocera orbiculus*, striped slender robberfly *Leptogaster cylindrica* and cardinal click beetle *Ampedus cardinalis*.

Field Survey Results

The site itself provides suitability to support terrestrial invertebrates associated with the broadleaved semi-natural woodland, dense scrub, scattered trees, semi-improved grassland, standing water and hedgerows.

⁷ English Nature (2001) – Great Crested Newt Mitigation Guidelines

The areas of broadleaved woodland contain log piles which may support notable species of saproxylic invertebrate such as the Species of Principal Importance⁸ stag beetle *Lucanus cervus*.

3.4.10 Other Relevant Species

Desktop Study Results

Two records of European hare *Lepus europaeus* were returned by City of London Corporation as Conservators of Epping Forest within the local area, located approximately 155 metres north-east of the site.

Field Survey Results

No evidence of any other relevant species was recorded within the site during the survey undertaken. The site supports suitable habitat for European hare, European hedgehog *Erinaceus europaeus* and common toad *Bufo bufo* in the form of the broadleaved woodland, tussocky grassland and hedgerows.

3.5 Summary of Key Ecological Features

The following features are those with greatest ecological value that lie within the site's Zone of Influence:

- Habitat of principal importance wood-pasture and parkland;
- Suitability to support tree roosting bats;
- Suitability to support foraging and commuting bats;
- Suitability to support badger;
- Suitability to support hazel dormouse;
- Suitability to support breeding and wintering birds;
- Suitability to support widespread species of reptiles;
- Suitability to support breeding and terrestrial great crested newt; and
- Suitability to support European hare and European hedgehog and common toad.

⁸ As listed on NERC Act 2006

4.0 POTENTIAL ECOLOGICAL CONSTRAINTS AND RECOMMENDATIONS

4.1 Introduction

This section identifies potential constraints of holding a large-scale concert event on the site and is based on the key ecological features as identified in Section 3.0 and summarised in Paragraph 3.5. Recommendations are included for mitigation and compensation based on the identified ecological constraints, and opportunities for enhancement are discussed.

4.2 Designated Sites

4.2.1 Potential Constraints

The site is designated as Warlies Park SINC for supporting notable habitats including wood-pasture and parkland, hedgerows, lowland mixed deciduous woodland, ancient/species-rich hedgerows and green lanes and species such as invertebrates, lichens and fungi.

Warlies Park is also partly designated as Cobbins Brook SINC for supporting notable habitats including rivers, lowland mixed deciduous woodland, lowland meadows, species-rich grassland, ancient/species-rich hedgerows, green lanes and corridors. The full citation and boundaries of both the SINCS were not available at the time of preparing this report.

The movement of people to and from the event, trampling effects and littering has the potential to reduce the diversity and ecological value of the notable habitats for which the SINCS are designated for. Any vehicle movements could also result in damage to the SINCS if inappropriately managed.

4.2.2 Potential Mitigation and Compensation Measures

An appropriate environmental management plan will need to be implemented at the event to ensure that the site, and surrounding SINCS, are fully cleared of any equipment, litter and waste following the completion of the event. This would also need to include appropriate, managed, access routes to the site and the use of trackways to minimise damage to grassland where possible on any heavy traffic areas within the concert area. This should be designed in consultation with a suitably qualified ecologist.

Warlies Park and Cobbins Brook SINCS should be protected by erecting high visibility fencing, such as Heras fencing (or similar) around the event site boundary.

Access to and from the event should minimise visitors accessing Warlies Park and Cobbins Brook SINCS. It is recommended that further consideration and assessment is given to designated sites once the layout of the future event has been established and the boundaries of the SINCS are known.

4.2.3 Enhancement Opportunities

No enhancements in respect of designated sites are recommended.

4.3 Habitats

4.3.1 Potential Constraints

The site has been identified as supporting the habitat of principal importance wood-pasture and parkland. The other habitats of importance include the broadleaved woodland, mature scattered trees, hedgerows and tussocky grassland. Any damage to woodland, mature scattered trees, hedgerows and tussocky grassland during the operational phase in any forthcoming event would reduce the diversity and ecological value of the habitats within the site.

The movement of people to and from the event, trampling effects and littering has the potential to result in the degradation of the existing habitats at the site. The access routes to the site used by both the site set up team and attendees has the potential to degrade habitats in the surrounds.

4.3.2 Potential Mitigation and Compensation Measures

It is recommended that the broadleaved woodland, mature scattered trees, scrub, standing water and hedgerows should be retained in any forthcoming event.

An appropriate environmental management plan will need to be implemented at the event to ensure that the site, and surrounding habitats, are fully cleared of any equipment, litter and waste following the completion of the event. This would also need to include appropriate, managed, access routes to the site and the use of trackways to minimise damage to grassland where possible on any heavy traffic areas within the concert area. This should be designed in consultation with a suitably qualified ecologist.

The broadleaved woodland and hedgerows should be buffered by a minimum of 20 metres between the event area and habitats with no access to these buffers during the site set up or operational phase. The exclusion zone will be marked by high visibility fencing, such as Heras fencing (or similar).

Mature scattered trees should be protected with Root Protection Zones established in accordance with BS:5837:2012 (British Standards, 2012).

4.3.3 Enhancement Opportunities

No enhancements in respect of habitats are recommended.

4.4 Bats

4.4.1 Potential Constraints

Any future event at the site has the potential to result in disturbance to roosting, foraging and commuting bats through increased noise levels.

The introduction of external lighting has the potential to result in increased light spill on roosting, foraging and commuting features, resulting in the disturbance of bats.

In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Refer to **Appendix 1** for details.

4.4.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 20 metres between the event area and broadleaved woodland and hedgerows and the establishment of Root Protection Zones as discussed in Paragraph 4.3.2 in order to avoid disturbing bats, should they be present. It is recommended that further consideration and assessment is given to bats once the layout and noise levels of any future event have been established.

The broadleaved woodland, mature scattered trees, scrub and hedgerows should not be lit. Lighting should be restricted to the event itself and not during site set-up or closure. A further assessment of the potential lighting impacts should be undertaken once lighting plans are known of any future event.

4.4.3 Enhancement Opportunities

No enhancements in respect of bats are recommended.

4.5 Badger

4.5.1 Potential Constraints

Any future event at the site will result in the loss of badger foraging habitat short-term.

Badger are protected from killing and injury, and their setts protected from damage and interference, under the Protection of Badgers Act 1992. Refer to **Appendix 1** for details.

4.5.2 Potential Mitigation and Compensation Measures

Recommendations have already been made for establishing an undisturbed 20 metre buffer between any future event and the broadleaved woodland and hedgerows. This will ensure that no direct impacts arise on any potential badger setts within these habitats.

Given that the loss of badger foraging habitat is only short-term, no mitigation or compensation measures are recommended.

4.5.3 Enhancement Opportunities

No enhancements in respect of badger are recommended.

4.6 Hazel Dormouse

4.6.1 Potential Constraints

Any future event at the site has the potential to result in disturbance to hazel dormouse through increased noise levels.

The introduction of external lighting has the potential to result in increased light spill on suitable habitat for the species, resulting in the disturbance of hazel dormouse, should they be present.

In England, hazel dormouse and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, this species is protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Refer to **Appendix 1** for details.

4.6.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 20 metres between the event area and broadleaved woodland and hedgerows and the establishment of Root Protection Zones as discussed in Paragraph 4.3.2 in order to avoid disturbing hazel dormouse, should they be present. It is recommended that further consideration and assessment is given to the species once the layout and noise levels of any future event have been established.

The broadleaved woodland, mature scattered trees, scrub and hedgerows should not be lit. Lighting should be restricted to the event itself and not during site set-up or closure. A further assessment of the potential lighting impacts should be undertaken once lighting plans are known of any future event.

4.6.3 Enhancement Opportunities

No enhancements in respect of hazel dormouse are recommended.

4.7 Birds

4.7.1 Potential Constraints

Any future event at the site during the breeding bird season of March to August, inclusive, has the potential to result in disturbance to nesting birds through increased noise levels and disturbance from attendees traveling to and from the event.

Any future event at the site during the wintering bird season of September to February, inclusive, has the potential to result in disturbance to wintering birds through increased noise levels and disturbance from attendees traveling to and from the event. These timings also have the potential to result in the loss of wintering bird habitat short-term. At the time of preparing this report these timings are considered unlikely.

All birds, their nests, eggs and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act 1981. Refer to **Appendix 1** for details.

4.7.2 Potential Mitigation and Compensation Measures

It is recommended that the broadleaved woodland, mature scattered trees, scrub and hedgerows will be retained in any forthcoming event to ensure no loss of suitable nesting bird habitat.

During the operational phase, the event has the potential to result in harm to nesting birds through accidental damage.

It is recommended that further consideration is given to birds once the layout and noise levels of any future event have been established. Areas of habitat could be managed in advance of the event in order to reduce the suitability for ground nesting birds.

4.7.3 Enhancement Opportunities

No enhancements in respect of birds are recommended.

4.8 Reptiles

4.8.1 Potential Constraints

Any future event has the potential to result in direct effects on widespread species of reptile, if present, if the event affected suitable habitat such as the tussocky semi-improved grassland.

Any future event at the site during the active reptile season of April to early October will result in the loss of habitat suitable for widespread species of reptile in the short-term.

Widespread reptile species (slow-worm *Anguis fragilis*, common lizard *Zootoca vivipara*, grass snake *Natrix natrix* and adder *Vipera berus*) are protected under the Wildlife and Countryside Act 1981 against harm, see **Appendix 1** for details.

4.8.2 Further Survey

It is recommended that further reptile surveys are undertaken in order to determine the presence/absence of reptiles within suitable habitat within the site. The results of this survey will allow an assessment of impacts on this species group to be made and an appropriate mitigation strategy to be devised.

The reptile survey should involve the distribution of reptile refugia in suitable areas of reptile habitat within the site. The reptile refugia should then be inspected on seven occasions between April and early October (with April, May and September being the optimal time) in order to determine the status of reptiles at the site. The survey should comply with current best practice guidance (Froglife, 1999; Froglife, 2016)

4.8.3 Potential Mitigation and Compensation Measures

Should further survey show the presence of this species group (Paragraph 4.8.2) then sensitive clearance methods will be necessary prior to the commencement of any future event in addition to habitat creation and retention.

4.8.4 Enhancement Opportunities

No enhancements in respect of reptiles is recommended.

4.9 Great Crested Newt

4.9.1 Potential Constraints

A population of great crested newt is present within the surrounding landscape. Any future event has the potential to result in direct effects on great crested newt if the event affected suitable habitat such as the tussocky semi-improved grassland.

Any future event at the site during the active great crested newt season of April to early October will result in the loss of habitat suitable for the species in the short-term.

In England, great crested newt and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, this species is protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Refer to **Appendix 1** for details.

4.9.2 Further Survey

It is recommended that a great crested newt eDNA sampling exercise is undertaken on all waterbodies located within the site itself and within 100 metres of the site. The eDNA sampling exercise is recommended to establish the presence/absence of great crested newt from within these waterbodies. This entails a single visit to the site between mid-April and end of June to collect a water sample which is subsequently tested for the presence of great crested newt DNA. Should great crested newt presence be confirmed within any of the aforementioned waterbodies, population size class assessment surveys may be required.

4.9.3 Potential Mitigation and Compensation Measures

Due to the close proximity of a population of great crested newt associated, a Natural England protected species licence may be required prior to the event. It is recommended that Natural England are engaged through their Discretionary Advice

Service (DAS) in order to seek their consultation response once the eDNA sampling exercise of the waterbodies within the site and within the immediate vicinity of the site has been undertaken.

4.9.4 Enhancement Opportunities

No enhancements in respect of great crested newt is recommended.

4.10 Invertebrates

4.10.1 Potential Constraints

At the time of preparing this report, it has been assumed that the broadleaved woodland will be retained in any forthcoming event, and, therefore there will be no loss of habitat suitable for notable species of saproxylic invertebrate such as stag beetle.

4.10.2 Potential Mitigation and Compensation Measures

Given the absence of potential constraints, no mitigation and compensation measures are recommended.

4.10.3 Enhancement Opportunities

No enhancements in respect of invertebrates is recommended.

4.11 Other Relevant Species

4.11.1 Potential Constraints

During the operational phase and site set up, any future event has the potential to result in direct effects on European hare, European hedgehog and common toad, if present, if the event is allowed to encroach onto tussocky grassland.

4.11.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 20 metres between the event area and broadleaved woodland and hedgerows as discussed in Paragraph 4.3.2 in order to avoid harm to European hare, European hedgehog and common toad, should they be present.

Sensitive clearance methods of the tussocky grassland may be necessary prior to the commencement of any future event.

4.11.3 Enhancement Opportunities

No enhancements in respect of European hare, European hedgehog and common toad are recommended.

5.0 CONCLUSION

5.1 Conclusion

The site is designated as Warlies Park SINC and may also be designated as Cobbins Brook SINC. The full citation or boundary of the SINC's were not available at the time of preparing this report. The site has been identified wood-pasture and parkland, a habitat of principal importance. The site has been assessed as having suitability to support protected species including roosting bats, foraging and commuting bats, badger, hazel dormouse, breeding birds, wintering birds, great crested newt, widespread species of reptiles, European hare, European hedgehog and common toad.

The key issues are the timing of the event, access routes, compaction and trampling, noise, lighting and layout of the event. Recommendations made including a sensitive lighting scheme, a minimum 20 metre buffer from the broadleaved woodland and hedgerows, establishing Root Protection Zones for mature scattered trees, perimeter fencing, an environmental management plan and controlled access routes.

Further survey work in relation to reptiles and great crested newt will be required to fully assess the potential ecological impacts of any future proposals. Further consideration will need to be given to bats and hazel dormouse once the noise levels and layout of any future event are known in order to ensure these species groups will not be disturbed. At this stage, it is considered that subsequent to the findings of such work, there is scope to incorporate suitable mitigation measures in order to allow the event to accord with wildlife legislation.

5.2 Updating Site Survey

If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

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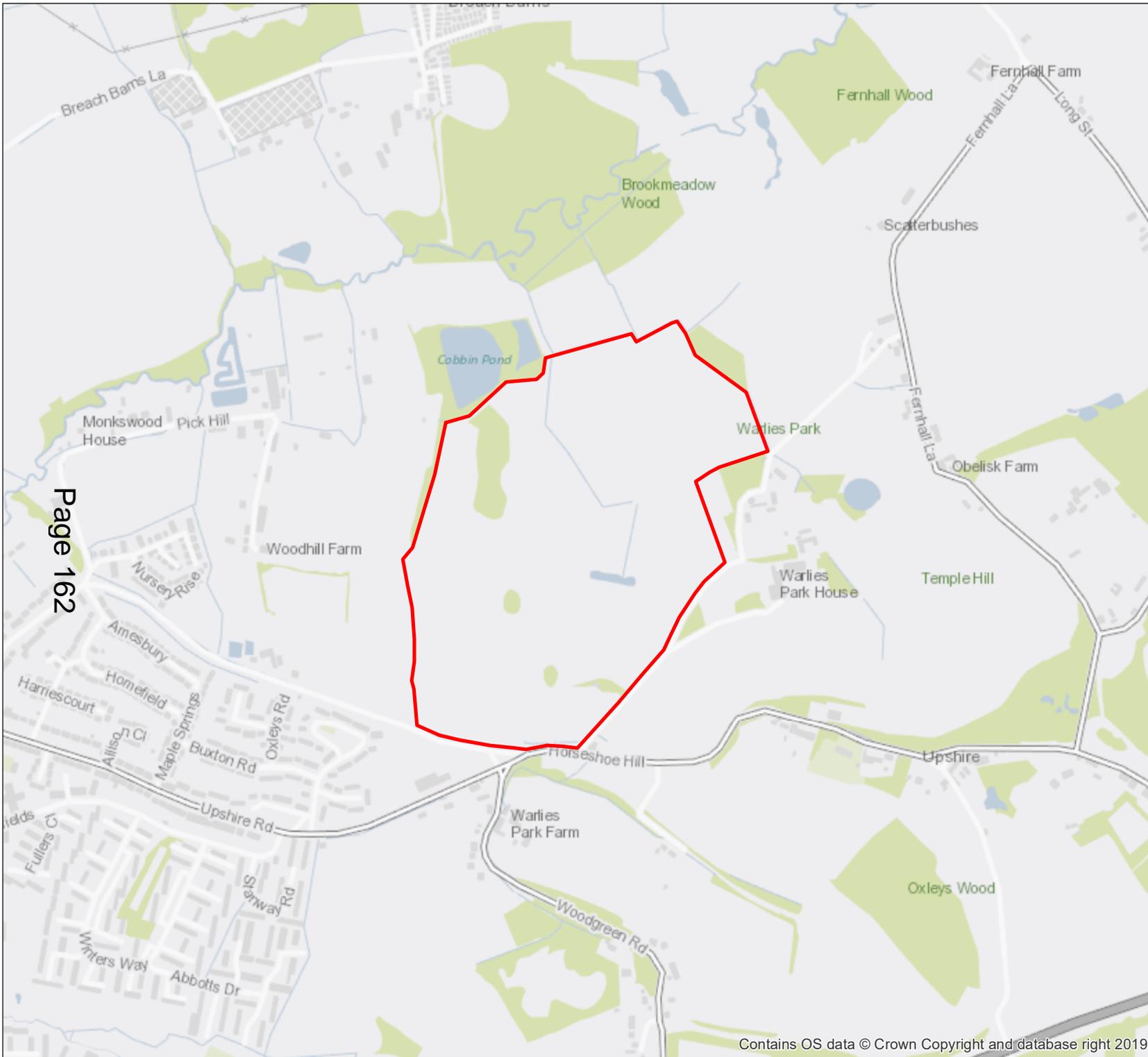
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Map 1 Site Location Plan



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WARLIES PARK, WALTHAM ABBEY, ESSEX

PRELIMINARY ECOLOGICAL APPRAISAL

Map 1 - Site Location Plan

Client:	City of London Corporation as Conservators of Epping Forest
Date:	August 2019
Status:	Final

KEY

 Site Boundary



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,



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Map 2 Phase 1 Habitat Map

WARLIES PARK, WALTHAM ABBEY, ESSEX

PRELIMINARY ECOLOGICAL APPRAISAL

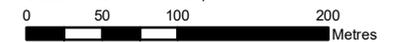
Map 2 - Phase 1 Habitat Map

Client:	City of London Corporation as Conservators of Epping Forest
Date:	August 2019
Status:	Final

KEY

-  Site Boundary
-  Parkland Scattered Trees
-  Broadleaved Semi-natural Woodland
-  Dense Scrub
-  Semi-improved Grassland
-  Standing Water
-  Intact Species-poor Hedgerow
-  Defunct Species-poor Hedgerow
-  Fence
-  Target Note
-  Hedgerow Number

Scale at A4: 1:5,000

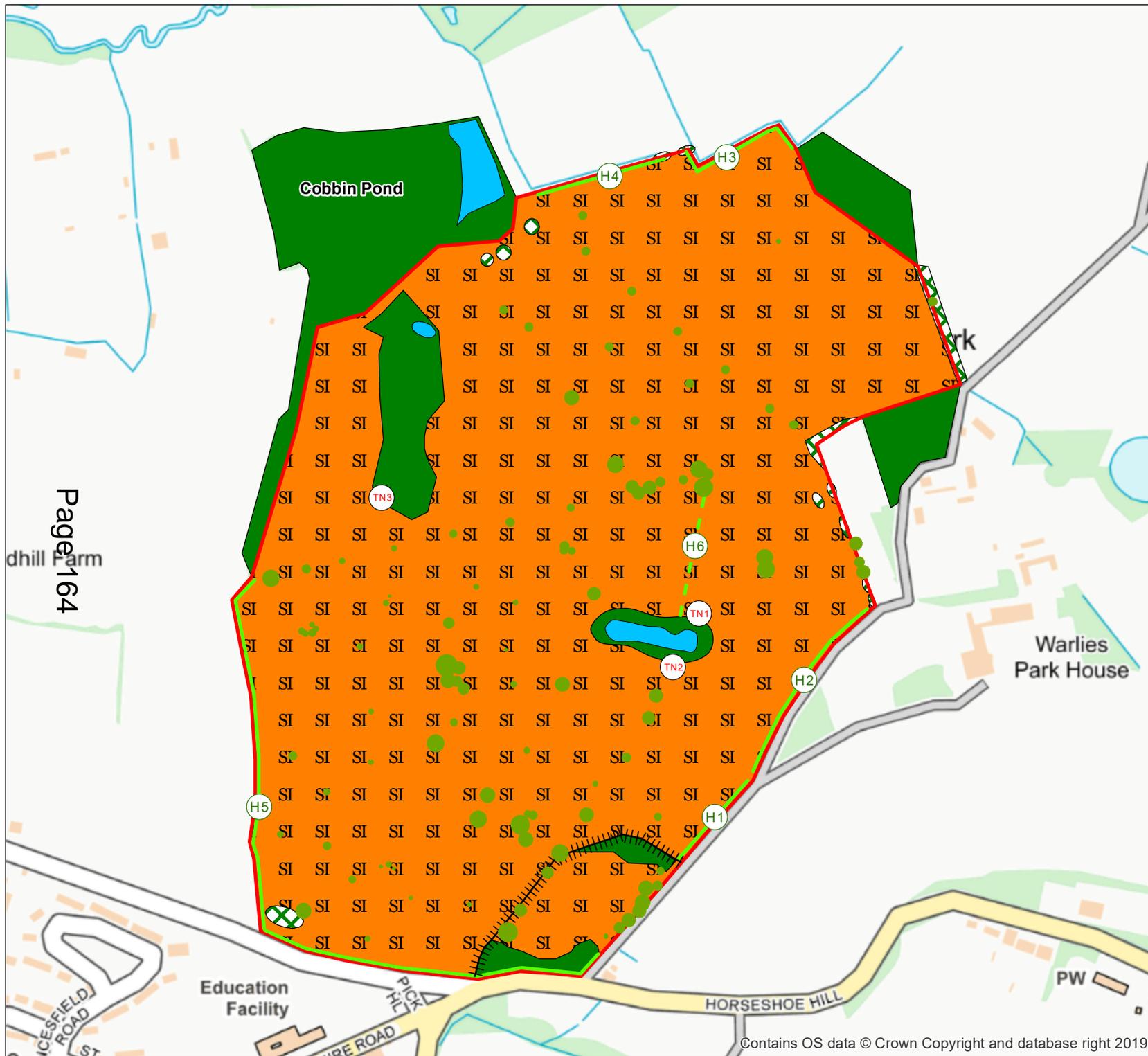


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Appendix 1 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - To impair its ability to survive, breed, or rear or nurture their young;
 - To impair its ability to hibernate or migrate;
 - To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Hazel Dormouse and Great Crested Newt

These species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely, to impair its ability to survive, breed, or rear or nurture their young, to impair its ability to hibernate or migrate;
- To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any one of these species uses for shelter or protection.

Badger

The Protection of Badgers Act 1992 consolidates previous legislation (including the Badgers Acts 1973 and 1991 Badgers (Further Protection) Act 1991). It makes it an offence to:

- Kill, injure or take a badger;
- Attempt to kill, injure or take a badger; or
- To damage or interfere with a sett.

The 1992 Act defines a badger sett as 'any structure or place which displays signs indicating current use by a badger'.

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Reptiles

The four widespread species of reptile that are native to Britain, namely common or viviparous lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, adder *Vipera berus* and grass snake *Natrix natrix*, are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence to:

- Intentionally kill or injure any of these species.

The remaining native species of British reptile (sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca*) receive a higher level of protection via inclusion under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations (in England and Wales only) and the Wildlife and Countryside Act 1981 (as amended). The distribution of these species are restricted to only a few sites in England.

Species and Habitats of Principal Importance in England

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The England Biodiversity List is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. There are currently 943 species of principal importance and 41 habitats of principal importance included on the England Biodiversity List.

Appendix 2 Appraisal Criteria for Bats

The criteria used to assess the suitability of roosting and foraging/commuting habitat for bats is based on industry guidelines and outlined in **Table 1**⁹.

Table 1: Criteria used to Assess Suitability of Roosting and Foraging/Commuting Habitat for Bats

Suitability	Description of roosting habitats	Commuting and foraging habitats
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).</p> <p>A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by other habitat).</p> <p>Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch or scrub.</p>
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

⁹ Table adapted from (Collins, 2016)

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- Parties** (1) The Mayor and Commonalty and Citizens of the City of London whose registered office is PO Box 270, Guildhall, London, EC2P 2EJ (“**The City**”).
- (2) *Tenant Details* (“**The Tenant**”).
- Demise** (3) *Site Description* (“**The Site**”).
- Payment**
- Licence Fee** (4) Base fee of £TBC excluding VAT per event held.
- (5) Additional £TBC excluding VAT per ticket sold over and above a capacity of 30,000 per day, per event held.
- (6) Licence Fees to increase in line with Retail Price Index (RPI) from the 1st April each year of the licence using the latest RPI rate available.
- Surety** (7) The Tenant will provide a bond in the amount of £10,000 to address potential remedial works to The Site following cessation of the Use.
- Terms**
- Term** (8) Upon completion or waiver of any conditions precedent, the agreement shall have an initial terms of 3 years.
- Event Period** (9) The period commencing at 12:00 on a date either at the end of August or the beginning of September TBC, and such other periods as agreed between the parties for the subsequent years, as mutually agreed between the parties taking into consideration the local birds breeding season and ending at 23:00 three days later.
- (10) Any variations to the agreed Event Period would need prior written approval from the Director of Open Spaces, not to be unreasonably withheld.
- Licence Period** (11) The period commencing at 8:00 ten days prior to the event and ending at 8:00 eight days after the event.
- (12) Any variations to the agreed Licence Period would need prior written approval from the Director of Open Spaces, not to be unreasonably withheld.
- Break Clause** (13) The Tenant shall have the right to terminate the agreement for the subsequent year, at any time, by giving the other party notice in the ninety-day period following the previous event.
- (14) If the Tenant does not adhere to the terms of their licence, The City shall have the right to terminate the agreement for the subsequent year, at any time, by given the other party notice in the ninety-day period following the previous event.
- Exclusivity** (15) The Tenant shall have the exclusive right to stage and promote events taking place at The Site with a capacity of 30,000 attendance or more.
- (16) The City shall ensure, to the best of their ability, that no other large-scale events take place on The Site within 45 days before or after the event.
- Access** (17) All access arrangements to The Site be agreed with the Director of Open Spaces at

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- least 30 days before the event start date.
- Alienation** (18) The Tenant will not share or transfer the agreement to any other person or organisation.
- Archaeology** (19) The Tenant will ensure adequate protection to all historically important features that are or may be affected by its Works and it will observe any archaeological protection requirements and the City will additionally reserve the right to have suitably qualified experts supervise the Works and suspend the Works if it deems necessary in the interests of protecting historically important features all wholly at the expense of the Tenant and for which the City will have no liability for compensation.
- Byelaws** (20) The Tenant will ensure that the byelaws of Epping Forest are observed at all times except where varied by the agreement terms or by other statutory enactment.
- Contamination** (21) The City will require full indemnity against any contamination arising as a result of the Works or the Use.
- Costs** (22) The Tenant will pay all such reasonable costs as the City might incur in granting any appropriate documentation or for any abortive work in the event that the transaction alters or does not complete and further any costs for attending and supervising and approving the Works and providing any additional management for Epping Forest due to the Works.
- Documentation** (23) The City reserves the right to require the Tenant to enter into documentation that it deems necessary to deal with the Use of the Site or Epping Forest for the Tenant's installations and Use.
- Indemnity** (24) The Tenant will keep the City indemnified against all actions claims costs damages demands disturbance expenses liabilities losses proceedings (including third party risks) howsoever arising from the Works and the Use.
- (25) The City does not warrant the condition of the Site and the Tenant agrees to accept the Site in its prevailing condition with Use wholly at its risk.
- Insurance** (26) The Tenant will provide at its expense adequate proof of public liability insurance to the satisfaction of the City.
- Maintenance** (27) The Tenant is to maintain its Works in good and substantial condition at all times.
- Reinstatement** (28) All damage as may be caused to the Site and Epping Forest resulting from the Works and the Use is to be rectified by the Director of Open Spaces upon cessation of the Licence Period wholly at the cost of the Tenant for a prior agreed sum. Such sum to include for any further remedial works that may become necessary by the first anniversary of the cessation with any unspent monies thereafter to be refunded to the Tenant within such reasonable period to be agreed by the parties at that time.
- Signs** (29) The Tenant will not display any signs other than suitable and appropriate promotion, direction and warning signs or other signs as the Director of Open Spaces may require and to his satisfaction in every respect.

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- Statements** (30) The Tenant will provide or commission wholly at its expense for the approval of the Director of Open Spaces and to his satisfaction at least 30 days prior to any Works commencement each of the following as separate documents to address the relevant detailed issues connected with the Works;
- (a) Event Safety Management Plan
 - (b) Risk Assessment.
 - (c) Site Management Strategy
 - (d) Method of Works Statement.
 - (e) Scheme of Archaeological Investigation and Mitigation.
 - (f) Waste and Sustainability Plan
 - (g) Noise Mitigation Scheme.
 - (h) Environmental Impact Statement.
 - (i) Crowd Management Plan.
 - (j) Traffic and Travel Management Plan.
 - (k) Crime Management Plan.
 - (l) Equality Impact Statement.
 - (m) Any other documents the Director of Open Spaces may reasonably request.
- Statutory Consents** (31) The Tenant will obtain all such statutory consents and approvals as necessary and will produce copies of the same at its expense to the Director of Open Spaces upon request.
- Temporary Track** (32) Where it may be necessary to create any temporary diversionary track(s) for pedestrians or horse riders, such route(s) will be as identified by the Director of Open Spaces and laid out to his requirements by the Tenant and subject to the Reinstatement provisions.
- Use** (33) An event with a maximum capacity of 50,000 attendees per day,
- VAT** (34) All sums stated herein are exclusive of VAT which is to be paid in addition where relevant.
- Vehicles** (35) The Tenant and its authorised Works contractors will observe a 5 mph speed limit and utilise hazard warning lights at all times while driving on Epping Forest.
- (36) Vehicles must give way to pedestrians on Epping Forest at all times.
- (37) No vehicles will be allowed to manoeuvre on Epping Forest or drive over Epping Forest except the demised area. All vehicular entry and exit and activity must be planned accordingly and approved by the Director of Open Spaces.
- (38) Any vehicle manoeuvring upon the Site which is not separated from the public with a secure boundary must be supervised with banksmen at the front and rear of the vehicle.
- (39) Vehicle gross laden weight must not cause injury to any part of Epping Forest or the Site.
- (40) The Tenant will ensure that every vehicle which is brought onto Epping Forest and onto the Site is roadworthy and fit for its purpose in every respect and does not cause a nuisance and is properly insured under the provisions of the road traffic acts proof of

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- which the Director of Open Spaces may require to be demonstrated.
- Works Commencement & Occupation** (41) The Works may not commence prior to the Tenant first having obtained approval from the Director of Open Spaces to the Statements nor may the Tenant take occupation of the Site prior to having given the Director of Open Spaces a minimum of seven days prior written notice of the intention to commence Works.
- Works** (42) *To be specified.*
- (43) All structures that are to be placed on the Site are to be mobile and temporary and capable of removal and excepting the proposed water supply should not be permanent installations of any description.
- (44) All temporary hardstanding and hardsurfacing Used for siting of any storage vessels including WC facilities must be impermeable and in addition none of the temporary ground surface covering is to cause damage or compaction to the Site.
- (45) The installation of suitable bunds around all storage vessels including WC facilities to prevent the spread of potential pollutants
- (46) The Tenant will keep its Works in a safe and secure condition at all times and ensure that no loose equipment and materials are left lying around on Epping Forest.
- (47) The Tenant will ensure that the Site is kept in a clean and tidy condition but shall not be responsible for matters actions or failures outside of its control. All Works will be undertaken safely and in such a way as to keep noise and dust to a minimum and at times and in a manner that will not inconvenience or endanger the City's staff or the public using Epping Forest in any way whatsoever and in all respects subject to the satisfaction of the Director of Open Spaces.
- (48) No plant or equipment or material may be deposited or dismantled or erected or demolished on Epping Forest except upon the Site and only then according to a prior agreed Works method statement.
- (49) Adequate measures are to be taken to prevent subsidence of surrounding ground into any excavations that may be undertaken by the Tenant.
- (50) All Works will be undertaken using the good established practice and to accepted industry standards and using proper and suitable materials.
- (51) Where relevant disturbance of surrounding soil must be made good according to the soil reinstatement requirements and to the satisfaction of the Director of Open Spaces whose decision shall be final.
- (52) In the execution of the Works the Tenant will undertake such other works as may be reasonably required and directed by the Director of Open Spaces to ensure that the safety and integrity of Epping Forest is not prejudiced.
- (53) All natural finishes to the Site are to be made good wholly to the satisfaction of the Director of Open Spaces acting reasonably and prior to cessation of the Licence Period.

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- (54) Reinstatement of soil where necessary to be according to the soil specification
 - (55) Reinstatement of any affected track where necessary to be according to the track specification.

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