



Epping Forest & Commons Committee

Date: TUESDAY, 10 MARCH 2020
Time: 11.30 am
Venue: COMMITTEE ROOM - 2ND FLOOR WEST WING, GUILDHALL

Members: Graeme Doshi-Smith (Chairman)
Deputy Philip Woodhouse (Deputy Chairman)
Peter Bennett
Caroline Haines
Alderman Robert Howard
Alderman Robert Hughes-Penney
Gregory Lawrence
Sylvia Moys
Benjamin Murphy
Jeremy Simons
Oliver Sells QC (Ex-Officio Member)

For consideration of Business Relating to Epping Forest Only

Verderer Michael Chapman DL
Verderer Paul Morris
Verderer Nicholas Munday
Verderer William Kennedy

Enquiries: Richard Holt
Richard.Holt@cityoflondon.gov.uk

Lunch will be served in the Guildhall Club at 1pm

NB: Part of this meeting could be the subject of audio or video recording.

John Barradell
Town Clerk and Chief Executive

AGENDA

Agenda

Part 1 - Public Agenda

1. APOLOGIES

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 previous meeting of the Epping Forest and Commons Committee held on the 13th of January 2020.

For Decision
(Pages 1 - 8)

4. ANNUAL REVIEW OF TERMS OF REFERENCE

Report of the Town Clerk.

For Decision
(Pages 9 - 12)

5. EPPING FOREST AND COMMONS COMMITTEE 2020 DATES

Report of the Town Clerk.

For Information
(Pages 13 - 14)

Epping Forest

6. DRAFT MINUTES OF THE EPPING FOREST CONSULTATIVE COMMITTEE MEETING ON THE 29TH OF JANUARY 2020

To receive draft minutes of the Epping Forest Consultative Committee meeting on the 29th of January 2020.

For Information
(Pages 15 - 20)

7. SUPERINTENDENT'S UPDATE

Report of the Superintendent of Epping Forest.

For Information
(Pages 21 - 32)

8. EPPING FOREST EVENTS TENDER (SEF 06/20)

Report of the Director of Open Spaces.

For Decision
(Pages 33 - 168)

9. IMPLEMENTATION OF AN EXPERIMENTAL TRAFFIC REGULATION ORDER ON FAIRMEAD ROAD, HIGH BEACH IN PARTNERSHIP WITH ESSEX HIGHWAYS (SEF 07/20)

Report of the Director of Open Spaces.

For Decision
(Pages 169 - 176)

10. WANSTEAD FLATS INDIVIDUAL SITE PLAN (SEF 03/20B)

Report of the Director of Open Spaces.

For Decision
(Pages 177 - 234)

11. EPPING FOREST WORK PROGRAMME FOR 2020/2021 (SEF 04/20B)

Report of the Director of Open Spaces.

For Decision
(Pages 235 - 250)

12. LONDON BOROUGH OF CULTURE 2019 SUMMARY (SEF 08/20)

Report of the Director of Open Spaces.

For Information
(Pages 251 - 258)

13. EPPING FOREST SAC MITIGATION STRATEGY PROGRESS (SEF 11/20)

Report of the Director of Open Spaces.

For Decision
(Pages 259 - 278)

14. VEGETATION AGAINST PROPERTY: POLICY DEVELOPMENT NOTE SEF 02/20B

Report of the Director of Open Spaces

For Decision
(Pages 279 - 310)

Burnham Beeches & The Commons

15. DRAFT MINUTES OF THE MEETING OF THE BURNHAM BEECHES AND STOKE COMMON CONSULTATION GROUP.

To receive the draft minutes of the Burnham Beeches and Stoke Common Consultation Group held on the 14th of January 2020.

For Information
(Pages 311 - 314)

16. SUPERINTENDENT'S UPDATE

Report of the Superintendent of Burnham Beeches & the Commons.

For Information
(Pages 315 - 322)

17. QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE

18. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT

Part 2 - Non-Public Agenda

19. 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

20. NON-PUBLIC MINUTES

To agree the non-public minutes of the previous meeting of the Epping Forest and Commons Committee held on the 13th of January 2020.

For Decision
(Pages 323 - 324)

21. REPORT OF ACTION TAKEN

Report of the Town Clerk.

For Information
(Pages 325 - 328)

22. BUFFER LAND ESTATE AGRICULTURAL HOLDINGS ACT TENANCY - RENT REDUCTION REQUEST (SEF 09/20)

Report of the Director of Open Spaces.

For Decision
(Pages 329 - 334)

23. SOUTH LODGE - OPTIONS FOLLOWING SUBSIDENCE ISSUES (SEF 10/20)

Joint Report of the Director of Open Spaces and the City Surveyor.

For Decision
(Pages 335 - 346)

24. TERMINATION OF PART OF A TENANCY TO ENABLE THE SALE OF 2 GREEN LANE BUNGALOW, EPPING FOREST

Report of the City Surveyor.

For Decision
(Pages 347 - 352)

25. NON PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE

- a) Minute Clarification - Woodredon Farm and Red Cottage (Pages 353 - 356)
The Town Clerk to be heard.

26. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE COMMITTEE AGREE SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED

Part 3 - Confidential Agenda

27. FIREARMS LICENSING AT EPPING FOREST

Report of the Director of Open Spaces.

For Decision

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EPPING FOREST & COMMONS COMMITTEE

Monday, 13 January 2020

Minutes of the meeting of the Epping Forest & Commons Committee held at
Committee Room - 2nd Floor West Wing, Guildhall on Monday, 13 January 2020 at
11.30 am

Present

Members:

Graeme Doshi-Smith (Chairman)
Peter Bennett
Jeremy Simons
Oliver Sells QC (Ex-Officio Member)
Alderman Robert Howard
Verderer Nicholas Munday
Verderer Michael Chapman DL
Verderer Melissa Murphy
Verderer Dr. Joanna Thomas

Officers:

Richard Holt	- Town Clerk's Department
Kristina Drake	- Media Officer, Town Clerk's Department
Alison Elam	- Group Accountant, Chamberlain's Department
Derek Cobbing	- Finance Manager, Chamberlain's Department
Colin Buttery	- Director of Open Spaces
Paul Thomson	- Superintendent, Epping Forest
Andy Barnard	- Superintendent, The Commons
Jacqueline Eggleston	- Head of Visitor Services, Epping Forest
Benjamin Rosendale	- Visitor Experience Manager, Epping Forest
Jo Hurst	- Business Manager, Epping Forest
Gerry Kiefer	- Open Spaces Business Manager, Open Spaces Department
Dr Helen Read	- Conservation Officer, The Commons

1. APOLOGIES

Apologies were received from Caroline Haines, Gregory Lawrence, Sylvia Moys, Deputy Chairman Deputy Phillip Woodhouse and Alderman Robert Hughes-Penney.

Following a question from a Member of the Committee the Town Clerk confirmed that the meeting was quorate as five Common Councillors were present. It was explained that a quorum of any five Committee members was

required for items of business relating to Epping Forest and five members of the Court of Common Council for all other business.

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

There were no declarations received.

3. **MINUTES**

The Committee considered the public minutes and non-public summary of the Epping Forest and Commons Committee held on 18 November 2019.

RESOLVED- That the public minutes of the Epping Forest and Commons Committee meeting on 18 November 2019 were approved as an accurate record.

4. **EPPING FOREST AND COMMONS COMMITTEE 2020 DATES**

The Committee received a report of the Town Clerk which detailed the various dates of Committee and Group meetings related to the Epping Forest and Commons Committee to be held in 2020.

Members requested that visits to the Commons be included in the schedule in order that Members, particularly any new Verderers elected in February, are able to experience all the sites under the responsibility of the Committee. The Director of Open Spaces explained that the consultative group visits would be added to the schedule of visits and that opportunities for further committee visits would be explored.

RESOLVED- That the report be noted.

5. **DEPARTMENTAL AND SERVICE COMMITTEE BUDGET ESTIMATES AND HIGH-LEVEL SUMMARY BUSINESS PLAN 2020/21 - OPEN SPACES DEPARTMENT**

The Committee considered a joint report of the Chamberlain and Director of Open Spaces on the Committee Budget Estimates and high-level summary Business Plan 2020/21 for the Open Spaces Department. The Chamberlain and Director of Open Spaces introduced the report explaining that the Open Spaces & City Gardens Committee had previously agreed the report.

Following a query from a Member of the Committee the Director of Open Spaces explained that the risk ratings were not based primarily on financial factors but included elements such as reputational risk and health & safety concerns.

Members requested that budgets for the previous five be added to the relevant section of the report to provide comparable historic data.

RESOLVED- That: -

- I. The Epping Forest proposed revenue budget for 2020/21 be approved for submission to the Finance Committee; and

- II. That the Commons proposed revenue budgets for 2020/21 be approved for submission to the Finance Committee; and
- III. That the Epping Forest capital and supplementary revenue project budgets for 2020/21 be approved for submission to the Finance Committee; and
- IV. That the Commons capital and supplementary revenue project budgets for 2020/21 be approved for submission to Finance Committee; and
- V. That the Chamberlain be authorised, in consultation with the Director of Open Spaces to revise these budgets to allow for any further implications arising from the Fundamental Review, Corporate Projects, other reviews and changes to the Cyclical Works Programme; and
- VI. That minor amendments for 2019/20 and 2020/21 budgets arising during budget setting be delegated to the Chamberlain; and
- VII. That the final draft high-level summary Department Business Plan for 2020/21 be noted.

6. DEPARTMENTAL BUSINESS PLAN 2019/20 - SIX MONTH PERFORMANCE UPDATE: APRIL TO SEPTEMBER 2019

The Committee received a report of the Director of Open Spaces on the Departmental Business Plan 2019/20 Six-month performance update: April to September 2019. The report provided Members with an update on progress and performance against the 2019/20 Business Plan by the services which report to the various Open Spaces Committees.

RESOLVED- That the report be noted.

7. SUPERINTENDENT'S UPDATE

The Committee received a report of the Director of Open Spaces which provided an update on issues across the nine sites within 'The Commons' division.

The Superintendent explained that further to paragraph 13 of the report expert advice had been procured and that was supportive of the City's case. . In addition, it was clarified that the staff shortages had been resolved but not with permanent solutions noting that the Fundamental Review outcome would affect the situation. A Member of the Committee suggested that apprentices could be used to mitigate staffing issues and provide valuable experience to prospective permanent staff.

RESOLVED- That the report be noted.

8. BURNHAM BEECHES MANAGEMENT PLAN

The Committee considered a report of the Director of Open Spaces on the Burnham Beeches Management Plan. The report explained that the 'draft' management plan had been carefully matched to the City's commitments under Natural England's ten-year Countryside Stewardship Scheme that provides significant funding to support conservation activities throughout the draft plan and that extensive consultation had been undertaken with a wide range of stakeholders prior to the production of the final draft version. Members

commended Officers on the report and commented on the quality of the Burnham Beeches Management Plan.

Replying to a query from a Member of the Committee the Director of Open Spaces clarified that the Management Plan had received predominately positive feedback in the public consultations conducted.

A Member of the Committee questioned how the success of the Management Plan would be determined with particular importance on the link with the Departmental Budget. The Director of Open Spaces confirmed the review of the previous plan, including whether the aims within it had been achieved, is a central component of the production of each Management Plan. In addition, it was explained that there were still some outstanding issues regarding the future budgeting of the Burnham Beeches management costs but that clarity was expected in the Fundamental Review process.

RESOLVED- That the final draft plan be approved so that it can be submitted to Natural England to grant consent prior to 31st March 2020.

9. **INFRASTRUCTURE - CAR PARK CHARGES AT FARTHING DOWNS, RIDDLEDOWN AND BURNHAM BEECHES**

The Committee received a report of the Director of Open Spaces on the Farthing Downs, Riddlesdown and Burnham Beeches car park charges. The report explained that a data collection exercise had been completed to inform future income expectations. In addition, it explained that a soft market test exercise was also undertaken to identify options, clarify technical challenges such as connectivity, software and hardware, explore administration and enforcement options and to provide indicative capital and revenue costs.

Following a query from a Member of the Committee the Director of Open Spaces confirmed that a communication plan relating to the Car Parks would be developed.

A Member questioned whether the required flexibility was built into the car park system. The Director of Open Spaces confirmed that the technological component of the car park charges system allows for a greater level of flexibility. In addition, it was explained that the terrain at the site of the car parks in question could potentially cause a mixed adoption of the technological options.

RESOLVED- That the progress made leading to the current competitive tender process and the steps that will be taken to ensure delivery by late summer 2020 be noted.

10. **ASHTEAD COMMON AND WEST WICKHAM AND COULSDON COMMONS TIMETABLE**

The Committee received a report of the Director of Open Spaces on ten-year management plans for the Ashted Common & West Wickham and Coulsdon Commons.

A Member questioned if the staffing issues mentioned within the report could be mitigated by procuring the services of consultants as required. The Director of Open Spaces explained that the departmental preference was for in-house staff to work on projects and confirmed that, following prioritisation, staffing provision would be sufficient for the proceeding eighteen months.

RESOLVED- That: -

- I. The necessary actions outlined in the provisional timetable for the various management plans and public consultations be approved; and
- II. That the necessary actions outlined in the provisional timetable for the submission of Woodland Plans and CSSG applications be approved.

11. ASHTEAD COMMON TRUSTEE'S ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2019

The Committee received a report of the Chamberlain on the Trustees Annual Report and Financial Statements for the Year Ended 31 March 2019 for Ashtead Common.

RESOLVED- That the report be noted.

12. BURNHAM BEECHES AND STOKE COMMON TRUSTEE'S ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2019

The Committee received a report of the Chamberlain on the Trustee's Annual Report and Financial Statements for the Year Ended 31 March 2019 for Burnham Beeches and Stoke Common.

RESOLVED- That the report be noted.

13. WEST WICKHAM COMMON AND SPRING PARK WOOD COULSDON AND OTHER COMMONS TRUSTEE'S ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2019

The Committee received a report of the Chamberlain on the Trustee's Annual Report and Financial Statements for the Year Ended 31 March 2019 for West Wickham Common and Spring Park Wood, Coulsdon and Other Commons.

RESOLVED- That the report be noted.

14. SUPERINTENDENT'S UPDATE

The Committee received a report of the Superintendent of Epping Forest which summarised the Epping Forest Division's activities across October to November 2019.

A Member of the Committee noted the work of Officers on the response to the Epping Forest District Plan, particularly highlighting issues regarding air quality and traffic. The Director of Open Spaces commented on the City of London Corporations concerns regarding the lack of engagement from the Epping Forest District Council and explained that the City would be following up with the Chief Executive of the Council regarding these issues.

Replying to a Member's question the Director of Open Spaces explained that an update on air quality would be provided once the statistics had been received noting that these would need to be supplied from Natural England as the City had not received them.

RESOLVED- That the report be noted.

15. **EPPING FOREST TRUSTEE'S ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2019**

The Committee received a report of the Chamberlain on the Trustee's Annual Report and Financial Statements for the Year Ended 31 March 2019 for Epping Forest.

A Member of the Committee noted the lack of legacy donations received by the Epping Forest and commented that there was issue of perception between the City of London Corporation as a wealthy institution and the Charity which fund the management of Epping Forest. The Director of Open Spaces explained that the City of London Corporation was undertaking a review of its charitable functions which would include a review of how the funding of the open spaces related charities are publicised.

RESOLVED- That the report be noted.

16. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE COMMITTEE**

There were no questions considered in the public session.

17. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT**

There was no further business considered.

18. **EXCLUSION OF THE PUBLIC**

RESOLVED: 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.

19. **NON-PUBLIC MINUTES**

The Committee considered the non-public minutes of the Epping Forest and Commons Committee on 18 November 2019.

RESOLVED-That the non-public minutes of the meeting of the Epping Forest and Commons Committee held on 18 November 2019 be deferred to the next meeting of the Committee.

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

There were no questions considered in the non-public session.

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

There was one urgent item received in the non-public session.

The meeting ended at 12.34 pm

Chairman

**Contact Officer: Richard Holt
Richard.Holt@cityoflondon.gov.uk**

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Committee(s)	Dated:
Epping Forest and Commons Committee	10 March 2020
Subject: Terms of Reference	Public
Report of: Town Clerk	For Decision
Report author: Richard Holt – Town Clerk’s Department	

Summary

As part of the post-implementation review of the changes made to the City Corporation’s governance arrangements in 2011, it was agreed that all Committees should review their terms of reference annually. This is to enable any proposed changes to be considered in time for the annual reappointment of Committees by the Court of Common Council.

The terms of reference of the Epping Forest and Commons Committee are attached at Appendix 1 to this report for Members’ consideration.

Recommendations

It is recommended that:

- the terms of reference of the Epping Forest and Commons Committee, subject to any comments, be approved for submission to the Court of Common Council in April, and that any further changes required in the lead up to the Court’s appointment of Committees be delegated to the Town Clerk in consultation with the Chairman and Deputy Chairman; and
- Members consider whether any change is required to the frequency of the Committee’s meetings.

Appendices

- Appendix 1 – Terms of Reference

Richard Holt

Committee and Member Services Officer
Town Clerk’s Department
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ESTLIN, Mayor	RESOLVED: That the Court of Common Council holden in the Guildhall of the City of London on Thursday 25th April 2019, doth hereby appoint the following Committee until the first meeting of the Court in April, 2020.
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EPHING FOREST & COMMONS COMMITTEE

1. **Constitution**

A Non-Ward Committee consisting of,

- two Aldermen nominated by the Court of Aldermen
- 8 Members elected by the Court of Common Council at least one of whom shall have fewer than five years' service on the Court at the time of their appointment
- the Chairman and Deputy Chairman of the Open Spaces & City Gardens Committee (ex-officio)
- plus, for the consideration of business relating to Epping Forest only, four Verderers elected or appointed pursuant to the Epping Forest Act 1878.

2. **Quorum**

The quorum consists of any five Members.

For the purpose of non-Epping Forest related business the quorum must consist of five Committee Members who must be Members of the Court of Common Council.

3. **Membership 2019/20**

ALDERMEN

- 1 Robert Picton Seymour Howard
- 1 Robert Charles Hughes-Penney

COMMONERS

- 4 (4) Jeremy Lewis Simons
- 4 (4) Graeme Martyn Smith
- 3 (3) Peter Gordon Bennett
- 3 (3) Caroline Wilma Haines
- 3 (3) Gregory Alfred Lawrence
- 6 (2) Sylvia Doreen Moys
- 2 (2) Benjamin Daniel Murphy
- 5 (1) Philip John Woodhouse, Deputy

together with the ex-officio Members referred to in paragraph 1 above and:-

Verderers pursuant to the provisions of the Epping Forest Act, 1878:-

- Michael Chapman, D.L.
- Nicholas Munday
- Melissa Murphy
- Dr. Joanna Thomas

4. **Terms of Reference**

To be responsible, having regard to the overall policy laid down by the Open Spaces & City Gardens Committee, for:-

- (a) exercising of the powers and duties of the Court of Common Council as Conservators of Epping Forest (registered charity no. 232990) and the various additional lands which have been acquired to protect the Forest in accordance, where appropriate, with the Epping Forest Acts 1878 and 1880 (as amended) and all other relevant legislation.
- (b) the ownership and management of the following open spaces in accordance with the provisions of the Corporation of London Open Spaces Act 1878:-
 Coulsdon and other Commons (registered charity no. 232989), the other Commons being Kenley Common, Farthing Downs and Riddlesdown
 West Wickham Common and Spring Park (registered charity no. 232988)
 Ashted Common (registered charity no. 1051510)
 Burnham Beeches and Stoke Common (registered charity no. 232987)

- (c) appointing such Consultative Committees as are considered necessary for the better performance of its duties including:-
 - Ashted Common Consultative Committee
 - Burnham Beeches Consultation Group
 - Epping Forest Consultative Committee
 - West Wickham, Spring Park and Coulsdon Commons Consultative Committee
- (d) expressing views or making recommendations to the Open Spaces and City Gardens Committee for that Committee's allocation of grants which relate to Epping Forest and Commons.

Agenda Item 5

Date	Committee/Meeting/Visit
	* LIST UPDATED January 2020 *
13 January 14 January 29 January	Epping Forest & Commons Committee Burnham Beeches and Stoke Common Consultation Group Epping Forest Consultative Committee
3 February 7 February 24 February 26 February 27 February	Open Spaces and City Gardens Committee EFDC Liaison/EF&CC Local Verderer Election Nomination meeting North and South Verderer Election North Verderer Election South
10 March 16 March 30 March	Epping Forest & Commons Committee Ashted Common Consultative Group West Wickham, Spring Park and Coulsdon Commons Consultation Group
3 April 7 April 20 April	LBWF Liaison/EF&CC Local Open Spaces and City Gardens Committee Epping Forest Joint Consultative Committee
16 May 20 May	Epping Forest & Commons Committee Epping Forest Saturday Visit Epping Forest & Commons Committee
2 June 10 June 12 June 27 June	Lord Mayor's visit to Burnham Beeches Epping Forest Consultative Committee LBR Liaison/EF&CC Local Committee visit to Ashted Common
6 July 14 July TBC July	Epping Forest & Commons Committee Open Spaces and City Gardens Committee Epping Forest and Commons Committee Dinner
August	
4 September 5 September 7 September 26 September	EFDC Liaison/EF&CC Local Epping Forest & Commons Committee Epping Forest Saturday Visit Epping Forest & Commons Committee Committee visit to Kenley Common
13 October 16 October 19 October 21 October	Open Spaces and City Gardens Committee LBWF Liaison/EF&CC Local Epping Forest Joint Consultative Committee Epping Forest Consultative Committee
7 November 14 November 16 November	Epping Forest & Commons Committee Epping Forest Saturday Visit Lord Mayor's Show Epping Forest & Commons Committee
2 December 11 December	Open Spaces and City Gardens Committee LBR Liaison/EF&CC Local

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EPHING FOREST CONSULTATIVE COMMITTEE

Wednesday, 29 January 2020

Minutes of the meeting of the Epping Forest Consultative Committee held at the Guildhall EC2 at 7.00 pm

Present

Members:

Deputy Philip Woodhouse (Deputy Chairman)
Carol Pummell (Epping Forest Riders Association)
Gil James (Friends of Wanstead Parklands)
Jill Carter (Highams Residents Association)
Judith Adams (Epping Forest Heritage Trust)
Martin Boyle (Theydon Bois & District Rural Preservation Society)
Paul Morris (Epping Forest Forum)
Gordon Turpin Highams Park Planning Groups (inc Snedders)
Tim Wright Orion Harriers
Robert Levene (Bedford House Residents Association)
Susan Creevy (Loughton Residents Association)
Sybil Ritten as a substitution for Andy Irvine (Bushwood Area Residents Association)
Tim Harris (WREN Wildlife & Conservation Group)
Steve Williamson Royal Epping Forest Golf Club
Verderer Nicholas Munday
Verderer Melissa Murphy
Verderer Michael Chapman DL

Officers:

Richard Holt	- Town Clerk's Department
Colin Buttery	- Director of Open Spaces
Paul Thomson	- Superintendent, Epping Forest
Jeremy Dagley	- Open Spaces Department
Jo Hurst	- Business Manager, Epping Forest
Martin Newnham	- Head Forest Keeper, Epping Forest
Geoff Sinclair	- Head of Operations, Epping Forest
Jacqueline Eggleston	- Head of Visitor Services, Epping Forest

1. APOLOGIES

Apologies were received from the Chairman Graeme Doshi-Smith, Sylvia Moys, Caroline Haines, Mathew Frith, Mark Squire and Verderer Dr Jonna Thomas.

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

There were no declarations received.

3. MINUTES

The Committee considered the minutes of the previous meeting of the Epping Forest Consultative Committee held on the 23rd of October 2019.

Replying to a query from a member of the Committee the Town Clerk confirmed that comments made would be recorded without specific attribution to any group and would be fully anonymised. A Member also noted that they were marked as present when they were not in attendance.

RESOLVED- That the minutes of the Epping Forest Consultative Committee 23rd October 2019, subject to the corrections specified, be approved as an accurate record.

4. **SETTLEMENT OF THE COMMONERS REGISTER AND ARRANGEMENTS FOR THE VERDERERS ELECTION**

The Committee received a verbal update from the Director of Open Spaces on the Election of Verderers 2020. The Committee were informed of the details of the 2020 election including the meetings to settle the register of Commoners and the dates of the Nomination meetings where candidates can be nominated for election.

Replying to a query from a member of the Committee the Director of Open Spaces confirmed that, in compliance with legislation, there was no requirement for voters to provide poll clerks with proof of Identification.

A member of the Committee questioned if the 0.5 qualifying acre and 7 years' service requirements could be relaxed to allow for a greater engagement from residents of Epping Forest. The Director Open Spaces explained the requirements were specified within the Epping Forest Act 1878 and would require adjustment to primary legislation which would be a complex and costly undertaking. It was noted by a member of the Committee that despite the limited electorate for the election they understood that the modern Verderer's role was to represent the interests of the whole forest.

RESOLVED- That the update be noted.

5. **MINUTES OF THE EPPING FOREST & COMMONS COMMITTEE**

The Committee received the minutes of the Epping Forest and Commons Committee on the 18th of November 2019.

RESOLVED- That the minutes be noted.

6. **EPPING FOREST - SUPERINTENDENT'S UPDATE FOR AUGUST TO SEPTEMBER 2019 (SEF 44/19)**

The Committee received a report of the Superintendent of Epping Forest which provided Members with a summary of the Epping Forest Division's activities across August to September 2019.

RESOLVED- That the report be noted.

7. EPPING FOREST - SUPERINTENDENT'S UPDATE FOR OCTOBER TO NOVEMBER 2019 (SEF 01/20)

The Committee received a report of the Superintendent of Epping Forest which provided Members with a summary of the Epping Forest Division's activities in October to November 2019.

RESOLVED- That the report be noted.

8. VEGETATION AGAINST PROPERTY: POLICY DEVELOPMENT NOTE SEF 02/20

The Committee received a report of the Director of Open Spaces which provided the Vegetation against Property Policy Development Note. The report outlined the Policy Development note (PDN) that has been prepared on the management of Vegetation Against Property (VAP) where substantial subsidence compensation claims can arise from the impact of our trees on neighbours' buildings.

Replying to a query from a member of the committee the Director of Open Spaces explained that interventions may not always be financial and may involve the removal of Forest trees. Where monies are required for VAP compensation settlement would not be drawn from the Forest Fund or operational budgets, and instead was met by the City Corporation's Central Funds through a mixture of self-insurance and insurance premiums.

In answer to a Member's question the Director of Open Spaces confirmed that the majority of claims came from three Forest compartments. It was explained that, while modern building regulations made it easier to mitigate issues regarding VAP, many properties affected were built to a less exacting standard. In answer to a further question regarding the primacy of the Forest over later housing, the Director confirmed that legal advice would be procured to test this proposition. In addition, the Director of Open Spaces noted that the department would continue to develop defensive management systems and defend the established legal position.

RESOLVED- That the report be noted.

9. WANSTEAD FLATS INDIVIDUAL SITE PLAN SEF 03/20

The Committee received a report of the Director of Open Spaces on the Wanstead Flats Individual Site Plan. The report outlined the Individual Site Plan (ISP) that had been prepared for Wanstead Flats.

The Committee discussed fly tipping in the forest with Members noting that communication and outreach could be key issues with regard to stopping fly tipping at Wanstead Flats and across the Forest. The Chairman noted the considerable £320,000 cost incurred by the City of London Corporation in combating fly tipping within the Forest. The Committee were informed that the dumping of large quantities of bread had encouraged an increase in brown rat populations at particular Wanstead Flats sites.

It was confirmed that the Epping Forest Management Strategy was the primary mechanism for stakeholder consultation. With regard to the Wanstead Flats ISP, and indeed other ISPs, Officers would consider how best to engage with a wider audience.

A member noted the success of the Duck Champion project which had encouraged visitors to substitute healthier foodstuffs instead of bread.

The Director of Open Spaces, replying to a query regarding the level of ambition regarding skylark numbers from a member of the Committee, explained that Skylark numbers were being actively monitored and that a further report would be produced for the October Committee meeting. In addition, it was confirmed bat numbers were not planned to be recorded due to limitations on resources, but that Officers were aware of a significant number of bats present at a number of sites within the Forest.

Replying to the Committee members' concern on a perceived conflict within the Epping Forest Management Strategy between conservation and events, the Director of Open Spaces confirmed that the Department's events policy had inbuilt habitat impact considerations and noted that Officers were seeking to strike a balance between the effect on the environment and maximising income for the management of the Forest by hosting events.

RESOLVED- That the report be noted.

10. **EPPING FOREST WORK PROGRAMME FOR 2020/2021 SEF 04/20**

The Committee received a report of the Director of Open Spaces on the Epping Forest Work Programme for 2020/2021.

A member of the Committee commented on the requirement to educate on the particulars of wood pasture and pollarding, noting the lack of awareness within some sections of the users of Epping Forest. The Deputy Chairman noted that a clear message from Committee members was that new and varied communications methods would be helpful to inform the public of issues regarding Epping Forest.

RESOLVED- That the report be noted.

11. **QUESTIONS**

In response to a question from a member of the Committee the Director of Open Spaces confirmed that information regarding fly tipping would be emailed to those interested.

The Director of Open Spaces responded to concerns raised about rough sleepers at Bushwood, confirming that Officers worked to No Second Night Out (NSNO) guidance and worked alongside a range of partners including St Mungo's; Local Authority Housing Officers; Metropolitan Police Service and Borders Agency staff to secure the best possible outcomes for rough sleepers. The Director encouraged residents to use the 'what3words' mobile phone application to help accurately locate reports of rough sleeping.

A member of the Committee commented on the damage that had been caused by combination of the wet weather and improper use of the ancient earthworks noting the need to enforce bylaws. The Director of Open Spaces explained that the Voluntary Warden Scheme had been utilised to help alleviate this issue.

12. **ANY OTHER BUSINESS**

There was no further business considered by the Committee.

The meeting closed at 9.01 pm

Chairman

Contact Officer: Richard Holt
richard.holt@cityoflondon.gov.uk

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Committee(s)	Dated:
Epping Forest and Commons	10 03 2020
Subject: Epping Forest - Superintendent's Update for December 2019 to January 2020 (SEF 05/20)	Public
Report of: Colin Buttery, Director of Open Spaces	For Information
Report author: Paul Thomson – Superintendent of Epping Forest	

Summary

This purpose of this report is to summarise the Epping Forest Division's activities across December 2019 to January 2020.

Of particular note was the settlement of the Register of Commoners and arrangements for the election of Verderers; two funding awards for local volunteer organisations from the Enjoying Green Spaces and the Natural Environment funding theme; a new collaborative project with scientists from the Centre of Ecology and Hydrology (CEH) and the University of Reading on Acute Oak Decline and its impact on bird breeding numbers; the successful calving of 49 calves during the winter calving season; the effective testing of new GPS-cattle containment collars; continuing progress on positive engagement with the London Borough of Waltham Forest Local Plan and a major incident activation for the partial flooding in late December of Wanstead Park and a series of flood-related incidents across the Forest.

Recommendation(s)

Members are asked to:

- Note the report.

Main Report

Staff and Volunteers

1. The City Corporation has successfully recruited a Stores person who started on 2 January and a Visitor Experience Manager who commenced work on 6 January.

Verderers

2. The Register of Commoners was settled on 20 January. Nomination meetings were arranged for 24 February. If elections in the Northern and Southern

Forest parishes, were required, arrangements have been made for 26 and 27 February respectively.

Budgets

3. With large changes in income and expenditure due to take place in the next two months, predictions show the Epping Forest local risk revenue budgets to be broadly on target for year end.

Weather

4. December 2019 was a very wet month with 25 days of rain in total, the wettest day was 12 December where 18.8mm of rain fell. The total rainfall for this month was 118.4mm of rain, which is 118.8% above the average of 54.1mm for this time of year.
5. There was 19 days of rain in total during January, with the wettest day being 27 January where 9.4 of rain fell. Total rainfall was 55.8mm, 11.7% below the average total rainfall for this month which is 63.2mm. January soil moisture deficits were close to zero across the whole of the East of England.

Projects

Enjoying Green Spaces and the Natural Environment

6. The Open Spaces Department's "Enjoying Green Spaces and the Natural Environment" funding theme, managed by the Central Grants Unit, awards grants annually, of between £2k and £15k to community, charity and voluntary groups under 4 sub themes.
 - a) Connecting communities with their green spaces
 - b) Improving the conservation value of the green spaces
 - c) Improving our knowledge of the biodiversity of the green spaces
 - d) Improving mental health through the use of green spaces
7. Eighteen submissions were received requesting grants totalling £225,000. A budget of up to £132,000 was available to award. Eleven applications across all divisions have been awarded a total of £120k.

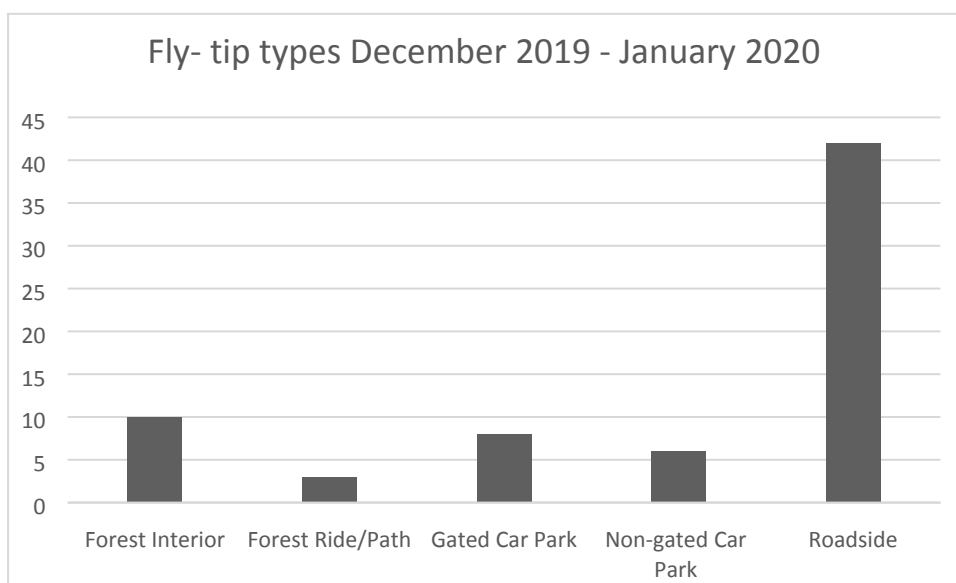
8. Two projects have been funded at Epping Forest as outlined below:

Organisation Name	Purpose of the Grant	Funding Awarded £
Love North Chingford CIC	Regenerating a historic village green, through horticulture, education and outreach.	2,645
Tinder Sticks CIC	Funding for the 'Across the Road' project which provides a targeted programme of Forest health walks, mindfulness sessions, bush craft sessions, conservation tasks and Forest bathing for staff and patients at the Whipps Cross Hospital.	5,176

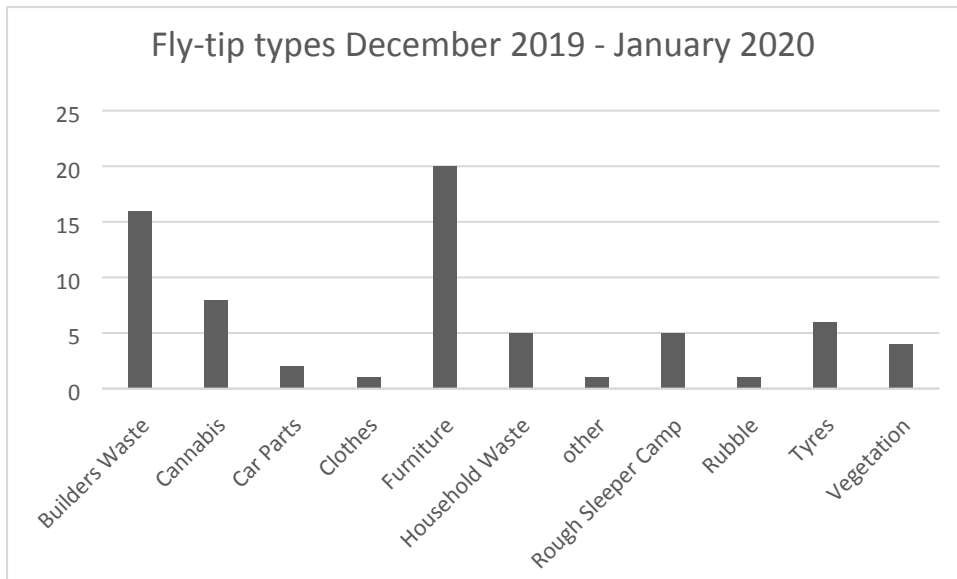
Forest Services

Fly-tipping

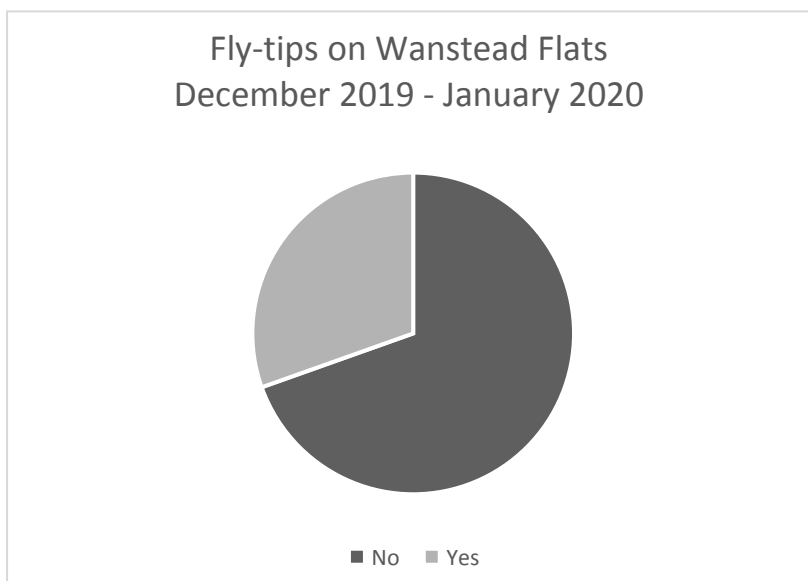
9. During this period there were a total of 69 Fly-tips collected. This period last year there were 28 this is an increase of 146%



10. There was a marked increase of Roadside fly-tipping, comprising 42% of all fly tip types.



11. The fly-tipping of furniture and general builder's waste, which comprised 20% and 16% respectively where the most common fly tip types. There have however been several recent successful prosecutions for section 22 EPA 1990 as documentation was found within these tips. The conviction of the depositors will hopefully act as a deterrent to others.



12. Fly tipping on Wanstead Flats has further reduced to 27% of all fly-tips.

Enforcement Activity

13. No Environmental Protection Act prosecutions took place during the period under report. One written warning was issued.

Licences

14. A total of 30 licences for events were issued during the two months being reported, which yielded an income of £17,629.63 plus VAT. 27 licences were issued during the same period in 2018/19 (income of £7,604.60).

Unexplained Deaths

15. There have been no Unexplained Deaths over the reporting period.

Rough Sleepers

16. There have been 8 rough sleeper camps identified over this reporting period

Locations of camps;

Date	ID No	Location	Cleared
18/12/2019	(289)	Gilbert Slade	18/12/2019
18/12/2019	(291)	Loughton Golf Course	06/01/2020
19/12/2019	(290)	Bush Wood	09/01/2020
29/12/2019	(292)	Wanstead Flats nr Alexandra Lake	08/01/2020
01/01/2020	(297)	Leyton Flats	Needs clearing
12/01/2020	(293)	Leyton Flats	Needs clearing
26/01/2020	(295)	Wanstead Flats	09/03/2020
27/01/2020	(294)	Bury Wood	21/02/2020

Unauthorised Occupations

17. There have been no traveller incursions over the reporting period.

Dog Incidents

18. During the period there have been 2 reports of dog-related incidents over the period:

- 12/12/2019 Dog attacked an assistance dog in Wanstead Park
- 18/12/2019 Huskies harassing Horse riders in Bury Wood

Deer Vehicle Collisions

19. There were a total of 21 Deer Vehicle Collisions (DVC) during this reporting period.

Heritage; Landscape and Nature Conservation

Biodiversity

20. On 31 January a site meeting was held in the Forest with scientists from the Centre of Ecology and Hydrology (CEH) and the University of Reading. They are continuing work on Acute Oak Decline (AOD) and wish to use the Forest as a site for research into bird behaviour and breeding success in relation to AOD. A research programme was agreed, which will involve the siting of nest boxes across the central areas of the Forest so that the scientists can study the breeding success of several bird species, including Great Tits and Nuthatches.

21. Your officers advised on the areas of trees to be chosen and have provided feedback on the research itself and will continue to work with the scientists throughout the project. The work will be carried out under licence over the next 3 years as part of a PhD studentship and represents a continuation of the Forest's involvement and assistance with scientific research into AOD, one of the most significant tree diseases for the UK's native tree populations.

Agri-environment Schemes

22. The Rural Payments Agency (RPA) continue to process the Countryside Stewardship Scheme grant application and wrote to us in January to confirm that the new deadline for completing the process would be 31st March 2020. If successful the grant would be backdated to 1st January 2020, which is the date any of this year's batch of agreement is due to have started. Given that sites with shared grazing rights, like those at Epping Forest, are considered at the end of any application process and the Forest's application is large, there is some uncertainty as to whether RPA will meet the 31st March deadline.
23. In anticipation of a successful grant application, one of the arborist teams has been trialling the veteran tree operations, with particular focus on re-pollarding the ancient Hornbeam pollards. The team has also trialled the recording software so that all works can be appropriately monitored and reported to the RPA if required during the 10-year agreement period. This trial work has been taking place in two locations in Bury Wood, at Ludgate Plain and near Cuckoo Pits.

Grazing

24. 49 calves were born during this period, with another 7-8 due before the end of the winter calving season.
25. The Grazing and Landscape Project Officer and Stockman have again been assisting the volunteer hedge layers to lay a hedge at the Railway field at Great Gregories. This field can be seen from the Central underground line running from between Epping and Theydon Bois.
26. Uther our senior breeding Longhorn bull died suddenly of a suspected heart attack after being in with the cows for 3 weeks. He has produced over 100 offspring in his 3 years in the herd.
27. New GPS-enabled cattle containment collars have been tested for signal strength on grazing sites across the Forest. It is hoped that this technology would become the successor to the current Invisible fencing wired-based technology. The new collars will be trialled on the cows this spring. Should it prove effective it would enable a much wider range of grazing sites and grazing regimes to be considered and reduce the labour involved with running the system.

Heritage

28. In addition to the wide-ranging external redecorating works to The Temple Folly at Wanstead Park during December and January, works revealed the

serious deterioration of the Portico bearer plate which has been replaced with a new oak plate.

Contractors

29. A site visit was carried out in January at Cow Pond, Leyton Flats with contractors commissioned by *FrogLife* as part of the HLF-funded restoration of this pond for toads. The work on clearing access is due to start in February with the pond excavation work carried out in late summer or autumn this year.

Land Management

Town & Country Planning

30. Epping Forest District Council (EFDC) Local Plan work continued during this period as EFDC seeks to respond to the Inspector's interim findings and requests for further modifications or further research. The Head of Conservation attended a meeting on 12th December in London with Natural England and EFDC to determine the most appropriate air pollution modelling methodology.
31. Following this meeting, in January, Forest data was provided to EFDC's consultants to allow the pollution model to be matched to the distribution of vegetation, including ancient trees, for which the Special Area of Conservation (SAC) and SSSI are notified.
32. In the meantime, your officers were invited to the first duty-to-cooperate meeting with the London Borough of Waltham Forest (LBWF) on 5th December. At this meeting your response to the LBWF Regulation 18 consultation on its Local Plan was discussed and LBWF officers agreed to make a range of changes to the Plan text and policies to better protect the Forest. In addition, they were able to set out timelines for the various supplementary documents that will require scrutiny in the near future, including the all-important Strategic Habitats Regulations Assessment (HRA).

Town & Country Planning – Development Control

33. An objection was registered with Epping Forest District Council (EFDC) against a proposal on Forest Land for a 22.5m mobile phone mast by the operator Vodafone (Cornerstone) which had been proposed on Forest Land at the junction of Warren Hill and The High Road, Loughton. This application was refused by EFDC in early January with one of the reasons cited being the protection of the 'natural aspect' of the Forest.
34. The most significant item of development control work related to a detailed objection that was submitted by your officers opposing the proposed *Next Plc* distribution centre at Dowding Way, Waltham Abbey. The hearing that was due in January was postponed due to further work required by *Next* to respond to Highway Agency requests for further details. When the hearing date is finally announced your officers aim to attend to make representations to the EFDC Planning Committee in person. Natural England also made comments in a similar vein to those of your officers in relation to the *Next* transport plan.

35. An objection was registered with Epping Forest District Council for retrospective planning for four ancillary buildings (stables, horse shelter, material store and vet stables) at Albany Stud Farm, Buckhurst Hill. The planning was opposed as a matter of principle, citing that in addition to Green Belt conflicts the construction is within 'Yellow Land' restricting the land to Agricultural and Horticultural users as designated by the Arbitrator's award of 1882 and a restrictive covenant of 1957. Architects representing the owner have conceded that the buildings need to be removed and a timeframe for their demolition and movement to within allowed 'pink land', where broader development is allowed, subject to planning consent will be produced shortly.

Land Registration

36. No further registrations were made during the period. However, the City Corporation did become aware of the registration of a piece of land at Mill House Farm, Bell Common which is believed to be Forest Land. The City Corporation would view this matter as an encroachment case. Epping Forest Officers are now in discussion with the litigation team regarding potential appeal in the first instance to the Land Registry.

Operations

Wood pasture

37. In anticipation of the start of the new Countryside Stewardship Scheme in 2020 the Arborist team undertook a two-week trial to test recording systems and rates of work. There is a more onerous activity recording process that needs to be followed as part of the new CSS program and the trial was testing how best this can be undertaken using existing IT systems.
38. December saw the final area of previously cleared 'wood pasture' land recut with tractor flails. This is part of an annual program of works to control scrub regrowth in wood pasture restoration areas across the Forest. A review of this maintenance work is to be undertaken to better understand the developing maintenance commitment that will be adopted following restoration works.

Leyton Flats

39. The winter project for the grassland team, following the seasonal cessation of grass cutting, has been scrub clearance on the north of Leyton Flats. The work will open up an access corridor linking the roadway improvement by Whipps Cross with Hollow Pond. Much of this land was former acid grassland and the clearance will contribute towards extending this important habitat type over time. The work also complements the Froglife project at the Cow Pond and overall the work in this area will result in a substantial improvement during 2020.

Wanstead Park

40. Major paths in Wanstead Park were substantially cut back during the period using the new multi-blade Quad saw. In particular, the path around the Ornamental waters and the routes leading to it were cleared along with a number of particularly enclosed path sections elsewhere. Further work will be undertaken on this area of work in autumn 2020.

Insurance works

41. During the period three new insurance claims concerning tree root nuisance were received and one public liability claim. The latter is a claim for injury following a rider's horse putting its hoof through a wayleave holder's manhole cover.

Risk Management Works

42. Routine tree safety works arising from the 2019 Survey are still being progressed but are on schedule for completion by the end of March 2020

Access Works

43. In partnership with volunteers from the Higham Park Snedders, a new 50m section of path with a water edge timber 'fishing' platform were installed at Highams Park during the period. Delays in getting the screw piles installed for the decking platform meant this work was later than intended in starting and was then further delayed by the wet weather. This project along with the installation of 13 new orientation signs around Higham Park was completed using funding obtained by the Higham Park Community Interest Company from the City Bridge Trust.

Visitor Services

Events

44. The seasonal Christmas event at Queen Elizabeth's Hunting Lodge, 'A Midwinter Night's Dream Installation' ran from 5 December to 5 January and attracted 1933 visitors (454 adults, 479 children) with a higher than average proportion of first-time and foreign visitors. 76 visitors left overwhelmingly positive comments: 'Love the atmosphere. Please, not enough dressing up for adults. Lovely discovery.': from Madrid. "First time at Lodge. 8 & 7-year-old loved reading about the poisons and all the beautiful exhibits. 'Stunning': from Enfield.
45. The first of a continuing series of forest-inspired adult art and craft Taster Sessions organised by London Borough of Waltham Forest Adult Learning team took place on 14 January at Epping Forest Visitor Centre at Chingford. This session, 'Capturing Winter in Charcoal' was attended by 22 older, and mainly local or wider London-based, participants, at no cost to City of London.

Chingford Golf Course

46. Despite the continuing wet weather the number of visitors increased by 512 rounds or 19% due to weather-related closures of other local courses. To maintain play, ditch clearance work for our main drain was been carried out improving the drainage for the entire course and grounds staff used the robin dagger aerator to help increase the drainage on some of the wetter greens. New irrigation valves have been installed helping reduce the amount of leakage.
47. Significant tree and overgrown vegetation removal works have been carried out on the 10th tee due to reduce anti-social behaviour in this low surveillance location. Th work will also allow the course to operate a two-tee start, which in winter months will allow the course to increase number of peak bookings taken. Tree pruning work was also carried out on the 5th & 7th tees helping to both improve presentation and the growing environment for the turf. Overgrown vegetation removal work was also started outside the flats located next to Jubilee Yard to help with site refurbishment work. Work to improve the staff welfare facilities started in mid-January.
48. The course also suffered some vandalism within the work yard with youths trying to steal a buggy and using it to cause damage to the compound gates.
49. Total revenue from online sales this period is £4,049, total revenue from reception was £32,267.73 broken down into:

Breakdown of figures from Reception			
	2019/20	2018/19	Difference (+/-)
Green fees:	£23,973.84	£19,739.84	+£4,234.00
Drinks:	£650.80	£408.20	+£242.60
Hire Equipment:	£1,121.00	£1,572	-£451
Shop Sales:	£1,651.10	£1,501.30	+£149.80
Wanstead:	£4,605.50	£3,908.40	+£697.10
Horse Riding:	£265.49	£333.20	-£67.71

50. Online bookings for the same period last year was £2,373 compared to £4,049 this year, an increase of £1,676 (71%). Total revenue from reception last year was £27,462.94 compared to £32,267.73 in the current year, an increase amounting to £4,804.79 (17%). Compared to last year the total difference in revenue equates to an increase in income of £6,480.20 (22%). The number of rounds for December & January last year was 2,764. This year number of rounds for December & January was 3,252.

Wanstead Flats

51. Grassroots football play has continued over the wet winter months, with the number of casual bookings his year is up by 10 amounting to an increase in income of £890. This improvement reflects the hard work of staff in keeping the pitches playable when other local pitches were being closed due to the wet

weather. The community Football League also made a 10-week block booking amounting to £3,270.50.

52. Parkrun attracted 2,556 runners in December & January this year. Numbers of runners for last year was 2,574, a decrease of 18 runners, which probably reflects the very poor winter weather.

Visitor Numbers

53. Visitor numbers in December were lower at View and QEHL as no Christmas event was held this year. The Temple opening in December, by contrast was very well attended and supported by activities run by Friends of Wanstead Park. The wet January still received a similar amount of visitors to the previous year.

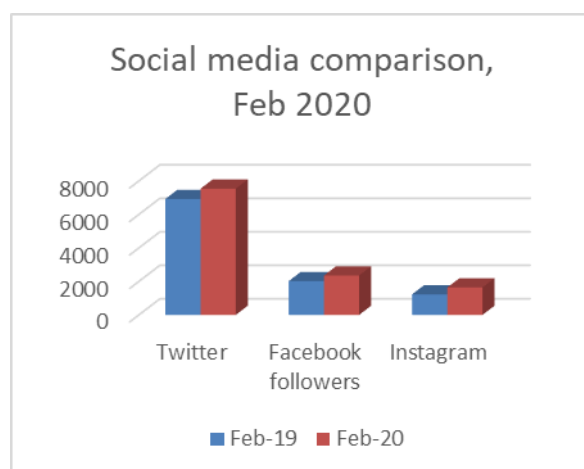
Visitor Numbers	QEHL 2019	2018	View 2019	2018	Temple 2019	2018	High Beach 2019	2018	Total 2019	Total 2018
DEC 19	1219	2473	2330	5488	590	121	1096	1001	5235	9083
JAN 20	1693	1817	3609	3517	159	308	1707	1513	7168	7155

Communication and Information

54. As of February 2020, our social media following is:

- Twitter followers: 7,539 an increase of 9%
- Facebook follows: 2,353 an increase of 17%
- Instagram followers: 1,640, an increase of 34%

55. The chart below shows a comparison of our figures at the same point in 2019:



56. The top tweet for December 2019 with 8,193 impressions provided information on how to spot the Forest's rare lightning trees. January's top tweet, with

6,066 impressions, told the story of the Forest's coal tax posts. The top Instagram Post for December 2019 with 82 likes used imagery of the cold winter light, while in January the top post with 139 likes promoted the relatively mud-free easy access trail as a visitor-destination. The top Facebook post for December 2019, with a reach of 1,234 people, promoted the artist-in-residence's sound Installation, while in January the Forest's New Year message achieved a reach of 950 people.

Major incidents

57. The first two major UK Storms of the 2019/20 winter season – Storm Atiyah 8-9 December - and Storm Brendan 13-14 January - did not adversely affect London and the East of England, and hence Epping Forest.

58. A major incident was declared for 22 December when the River Roding broke its banks and flooded parts of Wanstead Park. There were also a series of localised floods at Staples Hill and Powell's Forest where overwhelmed highways drainage schemes contributed to property damage. Otherwise all Flood Alleviation Schemes (FAS) were in safe operation, and with the exception of the Wanstead Lark cascade, all Large Raised Reservoirs (LRRs), and precautionarily-monitored Small Raised Reservoirs (SRRs) operated within safety tolerances.

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Committee(s):	Date(s):
Epping Forest and Commons	10 03 2020
Subject: Epping Forest Events Tender (SEF 06/20)	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.

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 last 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 2021.
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

9. Your Committee are asked to consider three options:

Option 1. To agree to a commercial tender process to attract proposals for up to three large-scale events per year with potential audiences of over 5000 at any one time, with overall attendance potentially 30-50,000 in up to three locations 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. Each event would also need to go to the Epping Forest Consultative Committee for comment and to the Epping Forest and Commons Committee for approval in the normal way.

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 a one-off event only 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

10. It is proposed to advertise the opportunity for staging large events in Epping Forest out to potential markets.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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
16. 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

17. Tenders are likely to be for events starting in 2021.
18. 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.
19. 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.
20. Proposals would be considered for each site on its own merits although tenderers could submit proposals for one, two or all three sites.
21. Although the tender process could be limited to one or two sites only rather than all three in this first year, the cost of administering 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.

22. 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.
23. 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.
24. 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

25. This proposal supports the Corporate Plan aims to;
 - 25.1 Support a thriving economy
 - 25.2 Shape outstanding environments
26. 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

27. 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.
28. Epping Forest Local Risk budget will meet the costs associated with the tender process.

Legal

29. 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.

30. 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.
31. 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, in conjunction with the above provisions. Any decision taken must be in the best interests of the Epping Forest charity.
32. Consent may be needed under Section 28E of the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017.

Reputational

33. 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 notification period and an opportunity to make representations.
34. The Public Relations and Economic Development Committee received a report on the reputational aspects of this proposal at their meeting of 19 February 2020. The committee offers these observations and guidance on the reputational risk of an open tender process for events and how individual proposals should be addressed further into the process.
35. In the evaluation process a matrix will be used to provide emphasis on operational, environmental and reputational risk. This may eliminate some proposals as unacceptable but there will remain several stages in the process of event approval during which there should continue to be a strong focus on reputational risk.
36. Members should be aware that any large-scale events are likely to attract significant negative local media coverage, given residents and users are more than likely to be worried about the impact of large crowds on their environment.
37. Members should note that this could lead to high-profile campaigns involving local and national figures.
38. However, negative media coverage and campaigns should not act as a veto, and the Communications Team would have communications plans in place to mitigate risks.
39. Events can also generate positive coverage and bring the work of Open Spaces to new audiences.

Property

40. 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

41. 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

42. 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

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

Epping Forest Events Tender Public Relations and Economic Development Sub Committee 19 February 2020

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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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Ecological Survey & Assessment Limited is a Trinity Consultants Company

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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**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, located 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 echinoides*, 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**).

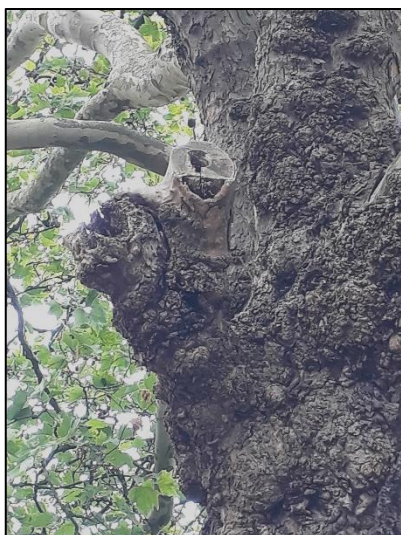


Figure 5: TN1 London plane with cavity



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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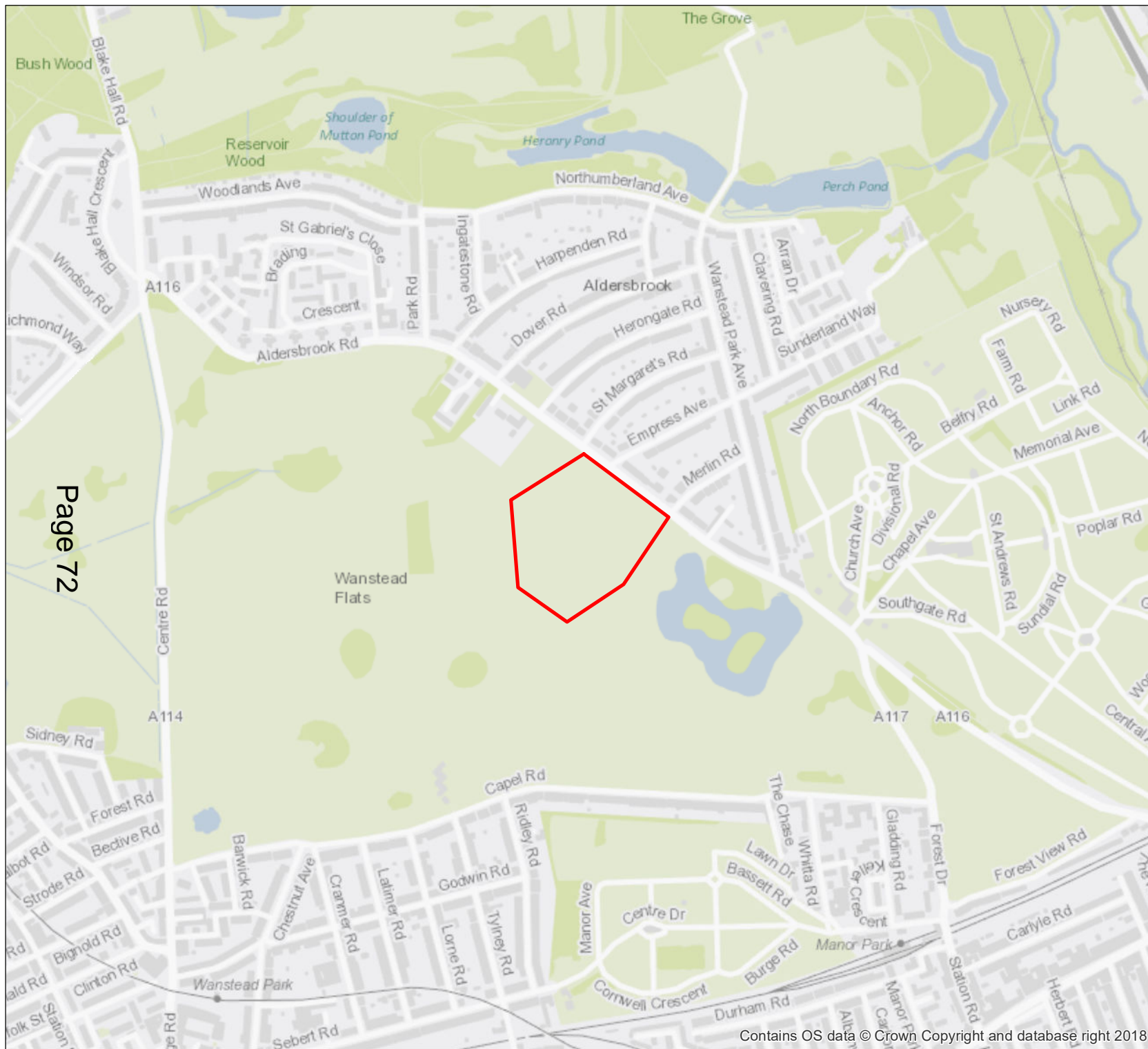
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Map 1 Site Location Plan



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



Scale at A4: 1:10,000
0 100 200 400 Metres

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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
-  Target Note
-  Scattered Trees
-  Improved Grassland

Scale at A4: 1:3,000

0 25 50 100 Metres



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AeroGRID, IGN, and the GIS User Community

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 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


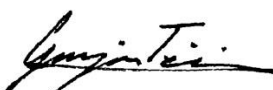

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ECOSA Quality Assurance Record

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 recoded 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 or 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.

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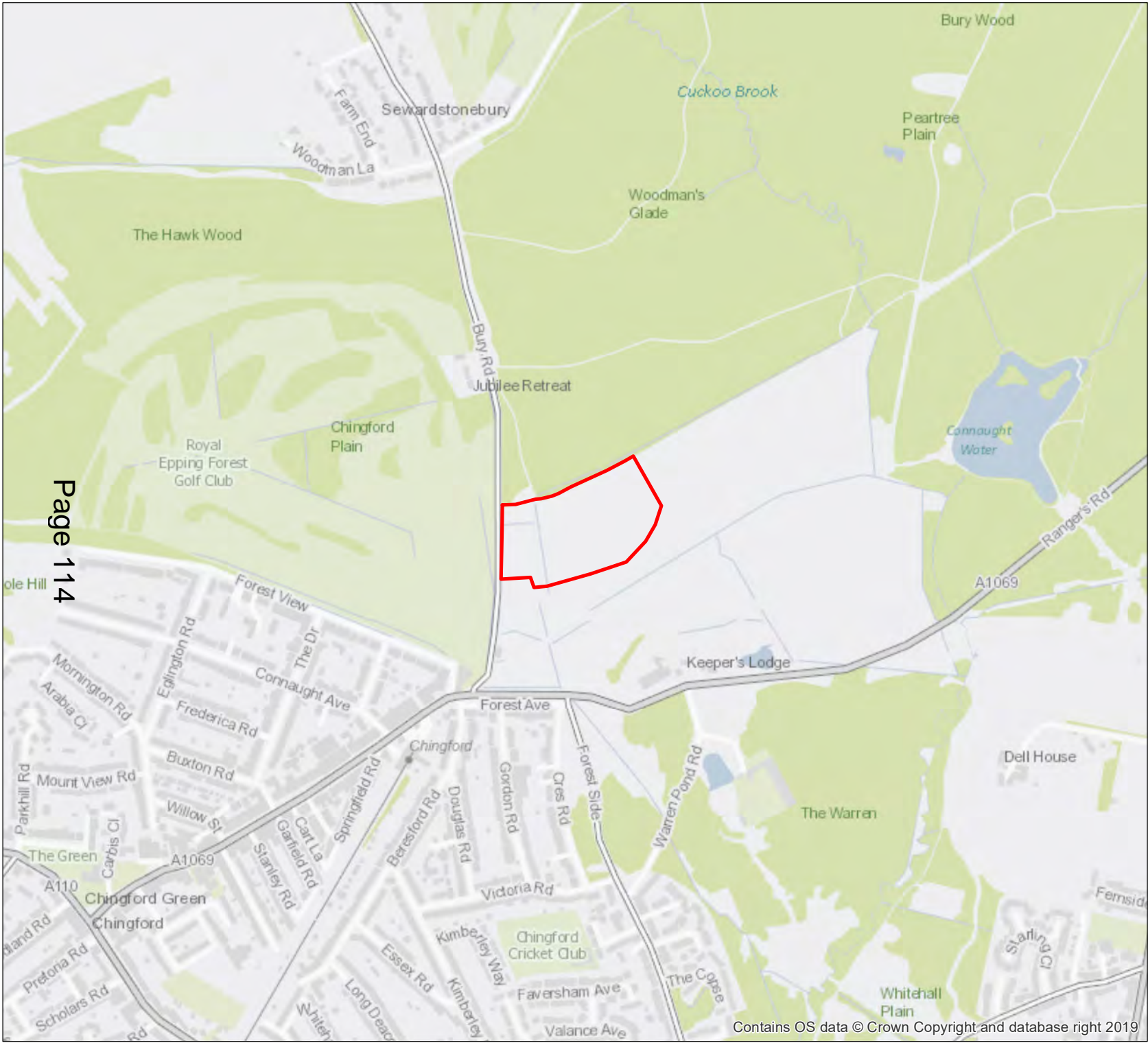
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Map 1 Site Location Plan



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



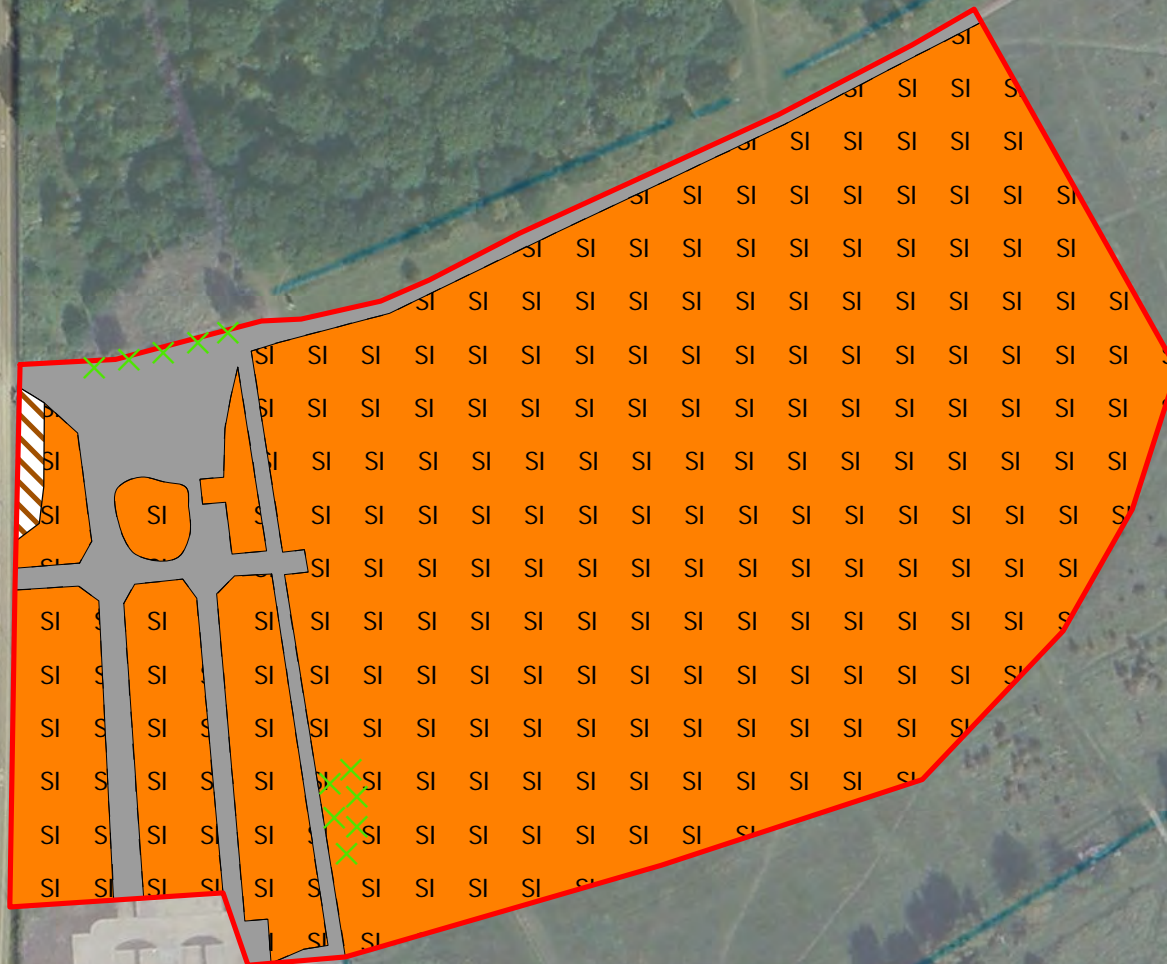
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

Scale at A4: 1:10,000
0 100 200 400 Metres

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Map 2 Phase 1 Habitat Map



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Contains OS data © Crown Copyright and database right 2019

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
- X Scattered Scrub
- Semi-improved Grassland
- Tall Ruderal
- Hardstanding

Scale at A4: 1:2,000

0 20 40 80 Metres

N

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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,
ESSEX**

PRELIMINARY ECOLOGICAL APPRAISAL

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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**WARLIES PARK, WALTHAM ABBEY,
ESSEX**

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 SINC's 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 SINC 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 SINC are 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 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 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 Warlies Park and Cobbins Brook SINC. 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 SINC 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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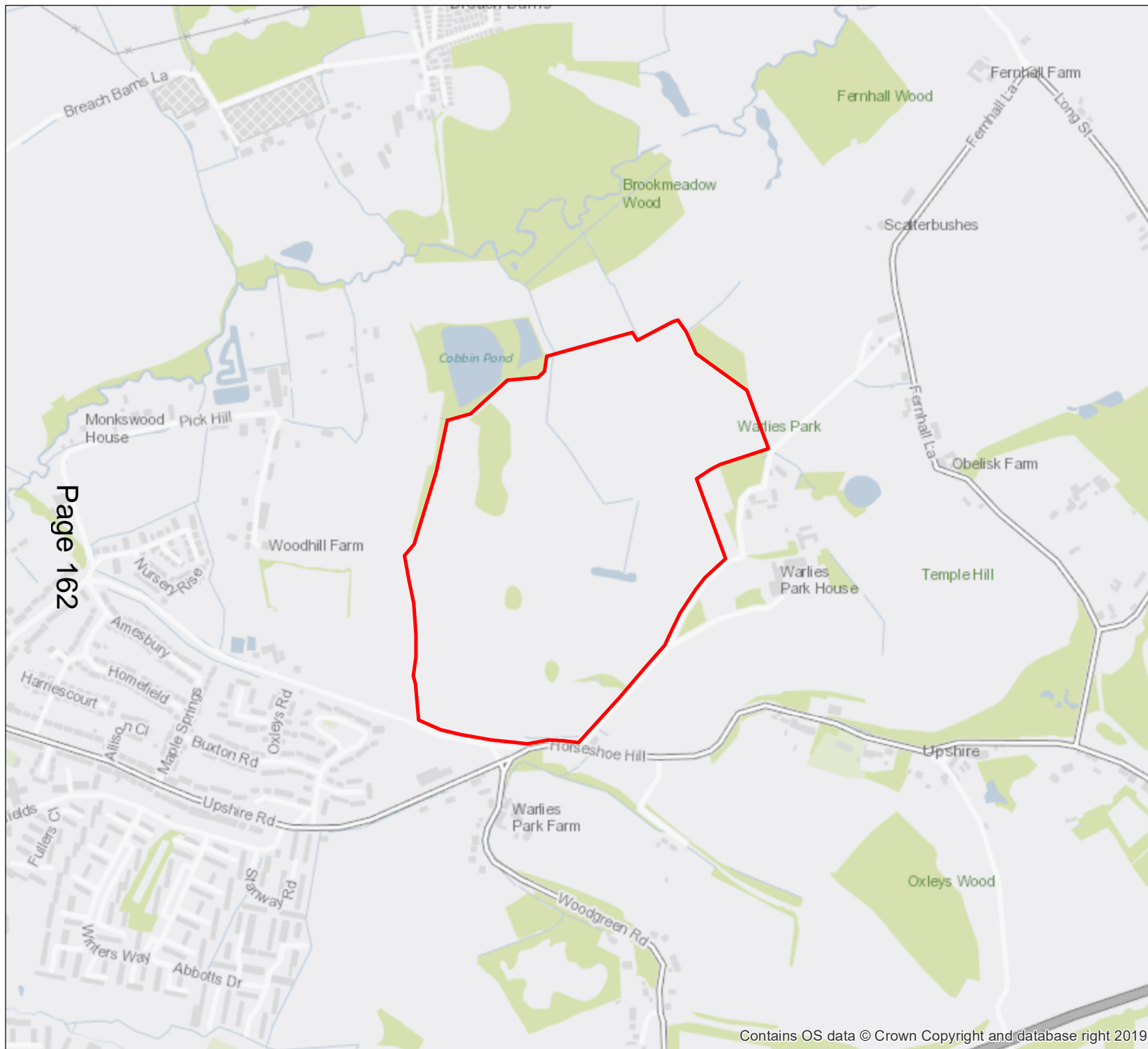
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Map 1 Site Location Plan



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



Scale at A4: 1:10,000
 0 100 200 400 Metres



ECOSA

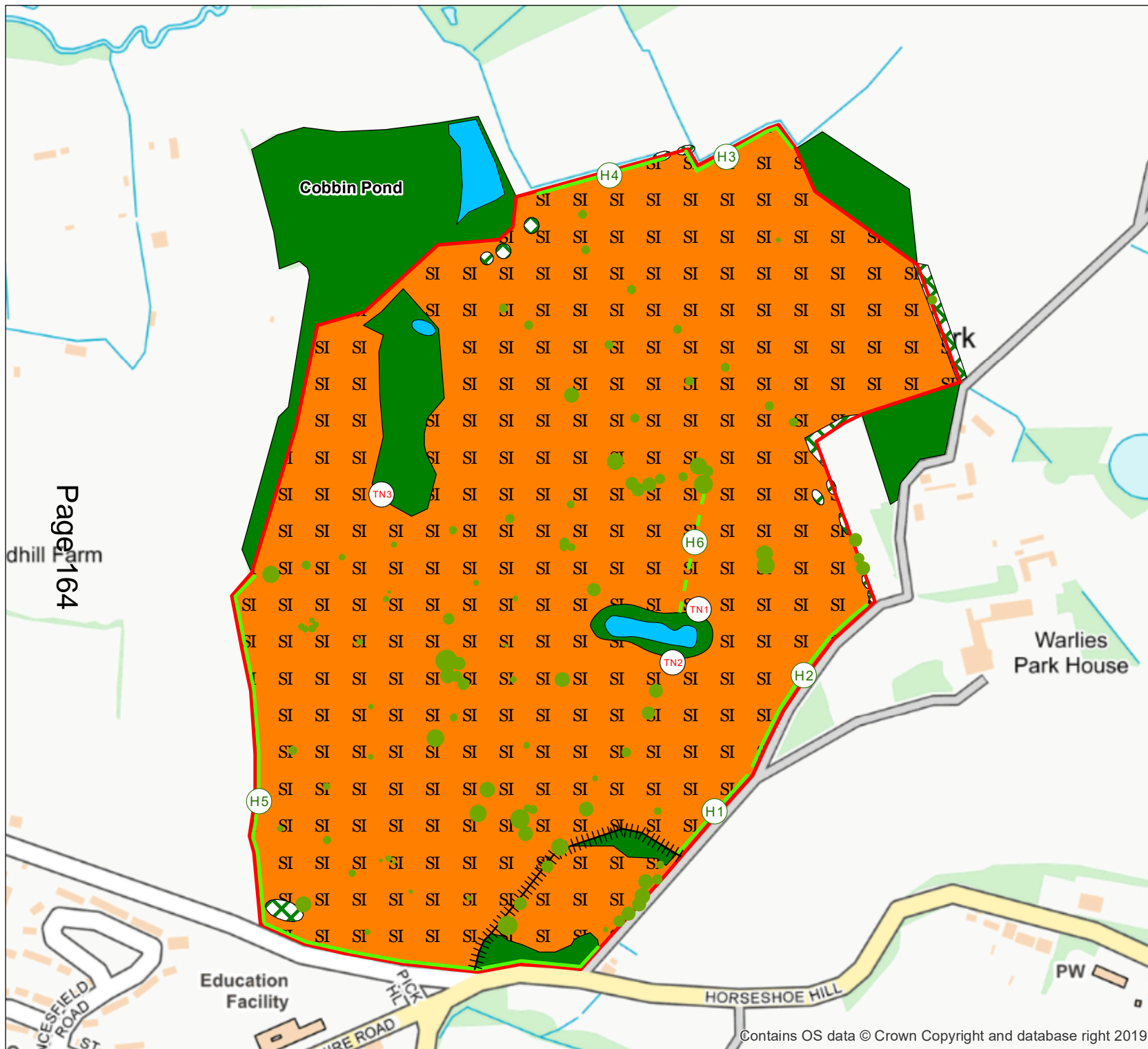
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Map 2 Phase 1 Habitat Map



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
- TN1 Target Note
- H1 Hedgerow Number

Scale at A4: 1:5,000

0 50 100 200 Metres

N

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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.	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. 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. Site is close to and connected to known roosts.
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.	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. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	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). 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.	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). Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch of scrub.
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)

Committee(s)	Dated:
Epping Forest and Commons	10 03 2020
Subject: Implementation of an Experimental Traffic Regulation Order on Fairmead Road, High Beach in partnership with Essex Highways (SEF 07/20)	Public
Report of: Colin Buttery, Director of Open Spaces	For Decision
Report author: Tristan Vetta, Acting Land Agent	

Summary

Your Committee of July 2018 supported a further restriction of the Fairmead Road Traffic Regulation Order implemented in 2012 by the use of an Experimental Traffic Regulation Order to resolve the traffic management and amenity challenges of the Fairmead area of the Forest at a cost of £4,380. Approval was provided subject to the agreement of a mechanism to facilitate continued access to the road for visitors with impaired mobility. This further report is necessary to inform Committee that the use of the area by visitors with impaired mobility may have been overstated and that it has not been possible to identify a cost-effective system that would facilitate preferential access for some users groups to Fairmead Road.

Recommendation(s)

Members are asked to:

- approve the introduction of an Experimental Traffic Regulation Order (ETRO) at Fairmead Road between the Hill Wood Car Park and the existing vehicle barrier, in line with the aims of the Epping Forest Transport Strategy and in partnership with Essex Highways, for an 18-month period.
- commission the preparation of a report on the ETRO at the end of the trial period to assess the impacts of the measure on the Forest, the future status of the public highway and responsibility for long-term maintenance.

Main Report

Background

1. The medieval Fairmead Road forms part of a route from London and Cambridge. The diagonal junction with the Epping New Road at The Warren was closed in 1960s on road safety grounds. The resulting 'No Through Road' has become a particular focus for fly tipping and Anti-Social Behaviour. In addition, the road is recognised by Essex Police as a Public Sex Environment.
2. The Forest Transport Strategy (FTS) 2009-15 adopted by your Committee in 2009 promoted a range of highways improvements including speed

restrictions on Forest roads, improved signage and selected road closures. Fairmead Road was promoted in the FTS for closure to improve Forest tranquillity and your Committee of 10th November 2018 approved a compromise Road Traffic Order across half the road beyond Fairmead Oak car park, which was implemented by Essex Highway in July 2012.

3. The Epping Forest Consultative Committee on the 13th June 2018 and your Committee on the 9th July 2018, recommended that the City of London Corporation should approach Essex Highways with the intention of implementing an Experimental Traffic Regulation Order (ETRO) to permanently close the remaining 500m of Fairmead Road, High Beach to motorised vehicles. The intention of this proposal was to increase amenity in the Forest by providing quiet and traffic free passage through the Forest for visitors, to increase protection of the Special Site of Scientific Interest (SSSI) and Special Area of Conservation (SAC) and to reduce the unacceptable Anti-Social Behaviour that occurred in the area.
4. While supporting the use of an ETRO your Committee sought to retain the use of Fairmead Road by members of the public with disabilities or impaired mobility. A meeting was agreed between selected members of the Committee, Epping Forest Officers and disability stakeholders highlighted by the Committee Members. This meeting has not been held as key contacts could not be established.
5. Instead Officers engaged with Epping Forest District Council's 'LifeWalks' healthy walking scheme targeting visitors over 50s. Contact with the organiser found that Fairmead was a chosen location because of the reliable availability of parking spaces and not because of the ease of access to the Forest. A preference was stated for the Forest's easy access trails at High Beach, Knighton Wood and Connaught Water, together with the open and level landscape of Chingford Plain and Bury Wood, . Instead of continued access to Fairmead Road, EFDC has a requested use of the extension car park at Chingford Plain.

Current

6. The four remaining elements of Fairmead Road which remain accessible to vehicles will require considerable investment to bring the route up to the recognised Fieldfare Trust standard .
 - a. Despite resurfacing in October 2018, the first 300m of Fairmead Road has a poor highway surface with multiple potholes and is prone to flooding. The high verge make it difficult to park along this section of highway without obstructing the thoroughfare to other vehicles.
 - b. At 300m there are two 'layby' type car parks known as Hillwood car parks 'East' and 'West'. Again, the surface of these car parks are not designated, designed or suitable for use by those with impaired mobility and are not recognised officially as car parks that the City of London would encourage visitors to utilise.

- c. The remaining 200m of open highway has an average incline of 10%, which would be considered too steep for wheelchair use. Again, the narrow width of the road at this location does not permit vehicle parking without damage to the Forest occurring.
 - d. Fairmead Oak Car Park has a single entrance gate from Fairmead Road. The car park surface unbonded and is uneven and inconsistent in its material grading. It is also utilised as a cattle storage area during the grazing season, so can be shut without notice in emergency and when operationally required.
7. Access to Connaught Water from Fairmead Oak car park is on a level gradient. However, it is 1,500m between sites and a total of 2.49 miles, if completed as a round trip including a loop of Connaught Water. Apart from the engineered 1km loop around Connaught Water. The 1,500m consists of approximately 750m of tarmac and 750m of rough surface ride that is not designed for wheelchair use. The entirety of this length is also prone to flooding.
 8. Officers have not been able to identify a viable and cost-effective option for preferential 'on demand' gate opening; a RADAR key unlocking option or electronic fob-operated gates to facilitate access for particular groups.
 9. Since the previous report in July 2018 there have been 10 large fly-tips along Fairmead Rd (three of which were cannabis production waste) this equates to around £1,000 in disposal costs, without associated staff and vehicle costs. The gate accessing the car park has been vandalised five times and two cars, including one used in an attempted murder in Woodford in July 2019, have been deposited on Forest adjacent to the highway and burnt out. Litter Pickers still spend on average 5 hours a week clearing rubbish from the open section of highway at the location.

Options

10. Your Committee can consider 3 options:
11. **Option 1** – That the City of London Corporation works in partnership with Essex Highways to trial an Experimental Traffic Regulation Order (ETRO) to restrict motorised vehicle access along the first 500m of Fairmead Road, High Beach between the Hill Wood car park and the existing vehicle barrier. This would bring the remainder of this route in line with the current Road Traffic Order in place on the 700m of highway between Fairmead Oak Car Park and the Epping New Road and would also meet the objectives of the approved Forest Transport Strategy, that was adopted by Essex County Council Highways.
This option is Recommended.
12. **Option 2** – Maintain the continuation of motorised vehicle access along the first 500m of highway, accompanied by action to close off Epping

Forest car parks: Fairmead Road East/West and Fairmead Oak, in an attempt to restrict anti-social behaviour to the public highway. It is believed that this approach will not deter fly tipping and will simply displace Anti-Social Behaviour. **This option is not Recommended.**

13. **Option 3** –Maintain the continuation of motorised vehicle access along the first 500m of highway and keep all car parks within the area open. This approach would enable fly tipping and difficult to control anti-social behaviour to continue. **This option is not Recommended.**

Proposals

14. The use of an Experimental Traffic Regulation Order (ETRO) for the first 500m of Fairmead Road is proposed for traffic management and amenity purposes. Forest Visitors will still be able to access 'Hill Wood Car Park' and the 'Original Tea Hut' tenancy within the trading hours of the 'Original Tea Hut' 0900hrs -1700hrs approx. This will require the installation of a gate beyond the exit of the Hill Wood Car Park, 50m from the junction.
15. Following the 18-month trial period of the ETRO, it is proposed that a report is brought to your Committee with a review and assessment of the impacts of the closure. Should the trial meet expectations it would be further proposed to put forward a scheme for the 'stopping up' or permanent exclusion of vehicular traffic from this route. This would be the outcome envisaged in the approved Forest Transport Strategy and would provide a significant new length of multi-user pathway to enhance the enjoyment of visitors to this part of the Forest, including walkers, horse-riders and cyclists.
16. The costs associated with future adoption and maintenance of this route for Forest visitors would need to be negotiated with Essex County Council Highways and with Epping Forest District Council as a key part of the Mitigation Strategy for the protection of the Epping Forest Special Area of Conservation from the impacts of the residential development in the forthcoming Local Plan.
17. The Local Essex County Council Highways Panel have approved scheme, and their main contractor Ringway Jacobs is able to install at a cost of £4,380 to install highways complaint gates. Unlike the previous TRO, the ETRO is installed without public consultation and therefore there are no advertising costs associated with the scheme.

Corporate & Strategic Implications

18. The proposal meets two of the Corporate Plan 2019-2022 by Contributing to a Flourishing society by making people safe and feeling safe and Shaping Outstanding Environments by ensuring our spaces are secure, resilient and well maintained. The proposal also meets the Open Spaces

Department Outcome 1 that 'Our Open Spaces, heritage and cultural assets are protected, conserved and enhanced'.

19. **Forest Transport Strategy 2009:** This proposal meets one of the key aims of the Forest Transport Strategy by providing improved accessibility to the Forest for all users especially those arriving by public transport on foot and for cyclists.

Implications

20. **Financial:** The £4,380 cost of the ETRO infrastructure will be met from the Epping Forest Local Risk budget.
21. **Legal:** An ETRO is made by the Highway Authority, under Sections 9 and 10 of the Road Traffic Regulation Act 1984. This arrangement ETRO is very similar to a permanent traffic regulation order in that it imposes traffic and parking restrictions such as road closures, controlled parking and other parking regulations. The Experimental Traffic Order can also be used to change the way existing restrictions function. An Experimental Traffic Order is an experimental order which only stay in force for a maximum of 18 months while the effects are monitored and assessed. Changes can be made during the first six months of the experimental period to any of the restrictions (except charges) if necessary, before the Council decides whether or not to continue with the changes brought in by the experimental order on a permanent basis.
22. **Equality:** Equality impacts have been fully considered in relation to restricting vehicle access to this site. As has been demonstrated from the report the Fairmead Road and Fairmead Oak locality do not currently offer specific facilities for disabled users and hence restricted access will not detrimentally affect any of the protected characteristics.
23. **Charity:** 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

24. The 18-month experimental closure of vehicular access to Fairmead Road is expected to have a positive effect on the Forest due to the improve in amenity and traffic management objectives. The current car park arrangement is not engineered for use for those with impaired mobility and alternative suitable options have been installed and are available within the local area.

Appendices

- Appendix 1 – Map Fairmead Road, High Beach – Proposed ETRO

Background papers

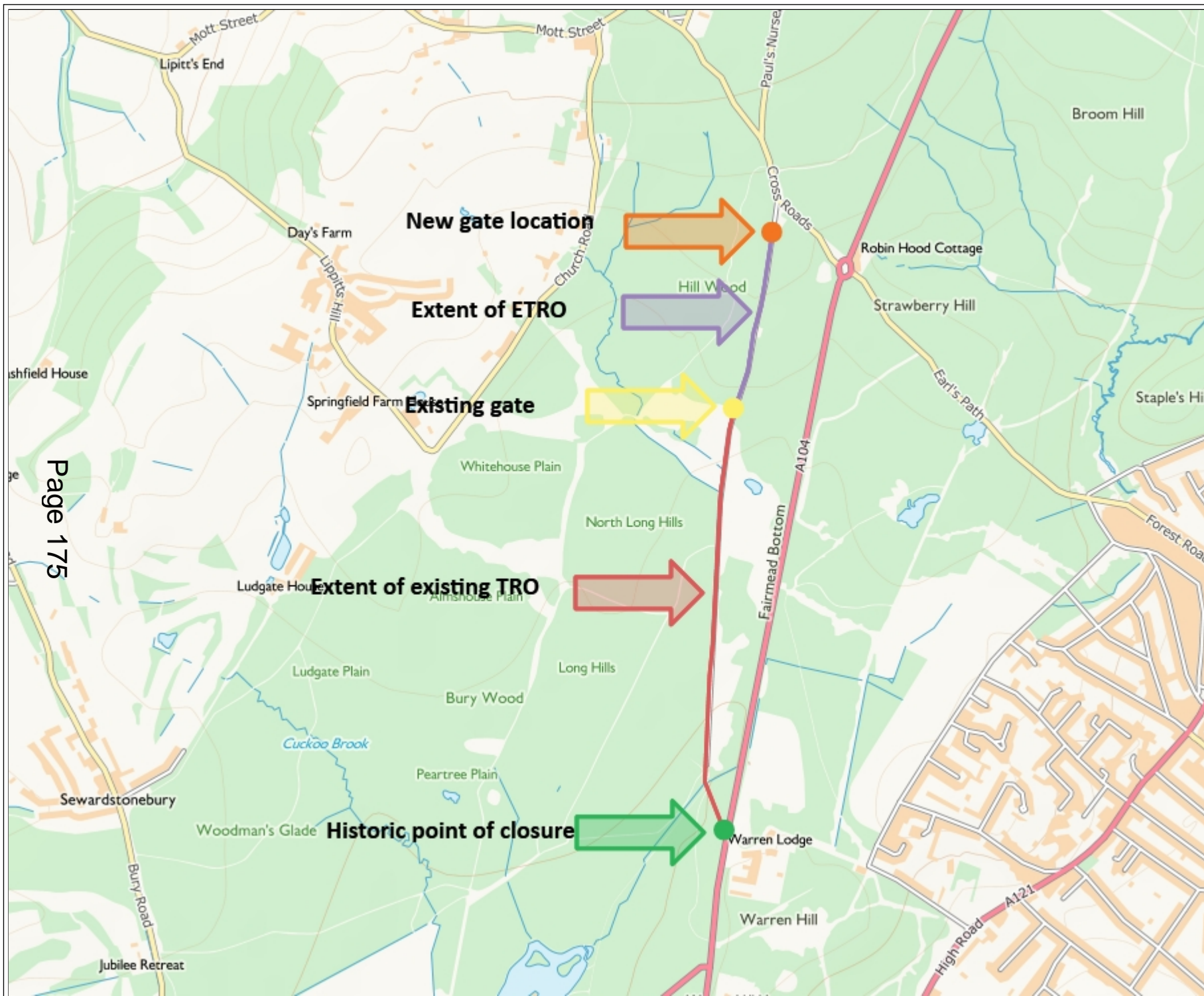
Report to Epping Forest & Commons Committee 10th November 2008: *Forest Transport Strategy* (SEF 36/08)

The Epping Forest Transport Strategy – proposals 2009-2016. City of London and Essex County Council

Epping Forest and Commons Committee - Proposal for Experimental Traffic Regulation Order on Fairmead Road, High Beach in partnership with Essex Highways (SEF 32/18)

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Appendix 1: Fairmead Road ETRO

Created By:
Tristan Vetta

Date Created
28 Feb 2020

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Metres

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Committee(s)	Dated:
Epping Forest Consultative – For Consultation Epping Forest and Commons – For Decision	29 01 2020 10 03 2020
Subject: Wanstead Flats Individual Site Plan SEF 03/20b	Public
Report of: Colin Buttery, Director of Open Spaces	For Decision
Report author: Geoff Sinclair, Head of Operations, Epping Forest	

Summary

A Strategy and Management Plan for Epping Forest for the period of 2020-30 is being developed alongside a 2020-23 Business Plan. Given the relative size of the Forest and the marked variety of the landscapes and habitats, there is a need to describe the discrete management of key areas.

This report outlines the Individual Site Plan (ISP) that has been prepared for Wanstead Flats. The property management context and significant management considerations described in the ISP have been outlined, along with the management strategy proposed for the area.

Recommendation(s)

Members are asked to:

- i. Approve the Wanstead Flats Integrated Site Plan for public consultation

Main Report

Background

1. On the 11 March 2019, it was reported to your committee that a Strategy and Management Plan for Epping Forest for the period of 2020-20 is being developed. As part of the development process, existing operational activity in key geographical locations and for key activities is being reviewed.
2. The review process comprises an audit of the City Corporation's (COL) property management issues alongside other significant management considerations, to provide an overview of current practice and an outline of longer term aspirations.
3. This report outlines the Individual Site Plan (ISP) for Wanstead Flats that has been prepared as part of the review.

Current Position

4. Wanstead Flats forms the largest of the thirty-eight management compartments that comprise Epping Forest and is protected by the Epping Forest Act 1878. It is an area of open acid grassland, sports pitches, heath, scrub, woodland, scattered trees and waterbodies, located at the southern end of Epping Forest.
5. Wanstead Flats has a number of statutory designations and is a hugely important resource for the people of northeast London, both for its provision of sporting facilities and also for the opportunity to experience a natural environment within urban surroundings. It is one of the few breeding sites for Skylark (*Alauda arvensis*) in London and is a notable stop-off for migrating birds. It has a long and well-documented local history and is easily accessible on foot and by public transport from the surrounding communities.
6. Significant predicted housing growth is planned in the local area with consequent additional visitor pressure. The current absence of visitor facilities means that Wanstead Flats is better suited to local short duration visits. The environmental impact of existing visitors is currently adversely affecting important aspects of the biodiversity on Wanstead Flats. The additional visitors resulting from increases in local housing numbers may be detrimental to the special nature of the Flats and to the population of Skylarks, which are vulnerable to disturbance from people and dogs.
7. The Wanstead Flats ISP seeks to define the management and mitigation that will be required to address future threats to the special nature of Wanstead Flats and presents a strategic work program to ensure a sustainable future for the conservation and heritage interest of Wanstead Flats, along with its immense recreational value.

Proposals

8. The ISP first outlines the property management context at Wanstead Flats, followed by the significant management considerations impacting on the area, before presenting a management strategy and outline management program. A more detailed operational work activity plan is presented in the appendices, along with an indicative management map and additional background information.

Management Strategy

9. In addition to the need to discharge its obligations with respect to property management context, the ISP identifies a 10-year management strategy for Wanstead Flats, summarised as follows:
 - a. to identify a program of conservation measures that will contribute towards improving the condition status of the Wanstead Flats SSSI;
 - b. to ensure that COL offers a visitor experience to Wanstead Flats that meets the needs of the communities today and into the future, in a sustainable and welcoming way;

- c. to finance an Infrastructure Improvement Program from increased income generation originating from Wanstead Flats;
- d. to further encourage existing local community involvement in the management and enhancement of the environment of Wanstead Flats; and,
- e. to seek to mitigate the impact of additional visits from new developments within Epping Forest SAC's Zone of Influence (which includes the whole of Wanstead Flats), through a range of measures, including improved landscaping and alternative routes and destinations, alongside more and improved interpretation.

Management Considerations

10. There are a wide range of management considerations given in the ISP and these have been summarised below:

- a. Ecological: Acid grassland, which is a UK Biodiversity Action Plan habitat, represents a large part of the site which is not sports pitches, and this habitat is being adversely impacted by recreational pressure, air pollution, scrub encroachment and the decline in grazing. The nationally declining Skylark, a bird of conservation concern, breeds in the long acid grassland areas of Wanstead Flats, but breeding success is negatively impacted by disturbance from people and their dogs. Notwithstanding scrub encroachment onto acid grassland areas, the scrub habitat is itself important for bird and invertebrate species for breeding, shelter and food, such that a balanced approach to scrub management is required. Wanstead Flats has two large waterbodies (Alexandra Lake and Jubilee Pond). Water quality and supply are notable concerns for both waterbodies;
- b. Heritage and community: Wanstead Flats has a distinctive history and heritage that is well-documented. The western part of Wanstead Flats was historically part of the landscape of the Wanstead Park Estate, listed as Grade II* on Historic England's *Register of Parks and Gardens of Historic Interest*. Remnants of that landscaping are still in evidence today, notably the 1764 'Evelyn Avenue' in Bush Wood and five large veteran Sweet Chestnut trees in Bush Wood, which are around 300 years old. Between 1852-1878, Wanstead Flats played a significant part in the eventual securing of Epping Forest for the nation. The Flats also have a notable World War II legacy, and WWII remains are still in situ. There is a strong tradition of community involvement, with many different community groups serving the varied interests of their members;
- c. Football provision: The provision of football pitches at Wanstead Flats dates to 1890 and is the second largest provision of football pitches for community use at a single location in Europe. The Wanstead Flats football provision is of invaluable importance to the surrounding local communities; four leagues and two soccer schools operate at Wanstead Flats on 44 pitches. The Corporation of London heavily subsidises football provision on Wanstead Flats, with a loss for every pitch booked.

- d. Access/Local Plans: Wanstead Flats is easily accessible on foot and by public transport from the surrounding local communities and is one of the most visited locations in Epping Forest. The visitor infrastructure is under capacity to cope with current use and there is a strong potential for additional increase in visitor pressure from planned housing development; and,
- e. Anti-social Behaviour: Wanstead Flats is adversely impacted by most of the anti-social behaviour problems experienced at Epping Forest. Successfully responding to these issues will be an important aspect of the future management of Wanstead Flats.

Property Management Context

11. The main property management issues, additional to the normal actions such as tree safety management which are undertaken through the Forest, and for which action will be required at Wanstead Flats have been identified as:

- a. Fire Risk: Wanstead Flats has a history of periodic and at times large fires;
- b. Statutory Designations: The northern part of the central section of Wanstead Flats, between Lake House Road and Centre Road, is designated a *Site of Special Scientific Interest* (SSSI). The compartment was assessed by Natural England (NE) in January 2010 as 'unfavourable – recovering';
- c. Invasive / Alien Species: There is a heavy infestation of New Zealand Pigmyweed (*Crassula helmsii*) in Alexandra Lake. Oak Processionary Moth (*Thaumetopoea processionea*) is increasingly prevalent on the many open grown oaks across the site and poses a risk to human health. A large proportion of the London Plane tree avenues on Wanstead Flats are coming to the end of their natural life and, additionally, suffer from *Massaria* fungal disease, which causes sudden branch drop;
- d. Utilities: The Beckton desalination pipeline crosses Wanstead Flats from the southeast to the northwest, with COL required to keep the wayleave clear of woody vegetation;
- e. Infrastructure: Jubilee Pond was relined in 2013, with a new waterproof liner installed. A number of biotic and abiotic factors have resulted in significant bankside erosion of the pond and the islands, which has potential to compromise the effectiveness of the new liner. Several measures to protect the bank have been trialled and have had mixed success.
- f. Properties: Wanstead Flats has football changing rooms at three locations. The Harrow Road changing facilities were upgraded in 2009. Those at Aldersbrook Road and Capel Road have reached the end of their design life. They are currently in a poor condition, do not meet current FA guidelines for separate accesses to changing and toilet facilities, and do not comply with the Equality Act (2010). They are also costly to heat and provide hot water and are inefficient to maintain. The Capel Road changing rooms also suffer from a leaking flat roof and will require upgrading in the near future.

Outline Management Program and Operations Plan spreadsheet

12. The ISP presents a 5-year outline management program which is then further detailed in Appendix 1 of the report (see the Operations Plan spreadsheet). This will be reviewed and updated yearly to monitor the progress of the management program and ensure that it continues to deliver the outcomes set out in the 10-year management strategy.
13. As well as works to be undertaken using existing resources, potential enhancement projects requiring additional support are also identified.

Corporate & Strategic Implications

14. City of London Corporate Plan 2018 - 2023: the restoration and maintenance of the internationally and nationally important habitats of Epping Forest directly underscore the *third pillar* of the Corporate Plan, which is to “*shape outstanding environments*”. The development of ISPs form part of the operational planning to achieve this aim of the Corporate Plan.
15. Open Spaces Department Business Plan 2020-21: The Strategic Vision of this plan is to ‘We enrich people’s lives by enhancing and providing access to ecologically diverse open spaces and outstanding heritage assets across London and beyond.’ and one of the Department Objectives is to ‘Open spaces and historic sites are thriving and accessible.’ The preparation of the Epping Forest Management Strategy and Management Plan for 2019-30 is a key action in the Departmental Business Plan.
16. No negative equality impacts were identified for this proposal, with the prospect of improved accessibility for people with some disabilities and parents with young children.

Financial Implications

17. The outline management program has been framed to fit within existing levels of local risk spend at Wanstead Flats.
18. Several projects have been identified which will only be progressed if additional financial and practical support can be obtained.

Legal Implications

19. Section 3 of the Epping Forest Act 1878 states that Epping Forest shall be regulated and managed under the Act by the Corporation of London as Conservators of Epping Forest. Subject to the provisions of the Epping Forest Act 1878 the Conservators are under a duty at all times to keep Epping Forest uninclosed and unbuilt on as an open space for the recreation and enjoyment of the public. They are also under a duty at all times as far as possible to preserve the natural aspect of the Forest.

Charity

20. 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 and within its powers.

Epping Forest Consultative Committee

21. The EFCC asked how the public were to be consulted on regarding the ISP. Each ISP is prepared in collaboration with key local stakeholders who have a good local working knowledge and involvement with the site concerned. Following consultation with the EF & CC and approval by the EFCC a wider collective of stakeholders will be sent a copy of the ISP for their information. This wider collective of stakeholders are identified in each ISP and will vary with each site.

Conclusion

22. An Individual Site Plan (ISP) has been prepared for Wanstead Flats. This identifies the legal and statutory context and other significant management considerations that should be considered when approaching the management of this area, and which have drawn on the consultation and support of local stakeholders to develop.
23. A management strategy for the next 10 years is presented along with an outline management program and detailed work proposals. These proposals highlight works that can be achieved through existing Local Risk resources, but also where additional support will be required.

Appendices

- Appendix 1 – Wanstead Flats Individual Site Plan

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<i>Author</i>	Fiona Martin/Geoff Sinclair
<i>Land Area</i>	187 ha
<i>Compartment Number</i>	38
<i>Designations</i>	<p><i>Epping Forest Land (1878 Act)</i></p> <p><i>Site of Special Scientific Interest (SSSI)</i></p> <p><i>Registered Park and Garden</i></p> <p><i>Archaeological Priority Area</i></p> <p><i>Site of Metropolitan Importance</i></p> <p><i>Locally Important Geological Site</i></p> <p><i>Green Belt</i></p>

Wanstead Flats

INDIVIDUAL SITE PLAN

SUMMARY

Wanstead Flats forms the largest of the thirty-eight management compartments that comprise Epping Forest. It is an area of open acid grassland, sports pitches, heath, scrub, woodland, scattered trees and waterbodies, located at the southern end of Epping Forest; owned and managed by the City of London Corporation (COL). Wanstead Flats has a number of statutory designations and is a hugely important resource for the people of East London, both for its provision of sporting facilities and also for the opportunity to experience a natural environment within urban surroundings. It is one of the few breeding sites for Skylark (*Alauda arvensis*) in London and is a notable stop-off for migrating birds. It has a long and well-documented history, from the historical right of commoners to graze cattle and the site's protection and management under the Epping Forest Act 1878, through to World War II and modern times. Significant predicted housing growth is planned in the local area with consequent additional visitor pressure. This Individual Site Plan lists current management considerations but also presents a strategic work programme to ensure a sustainable future for the conservation and heritage interest of Wanstead Flats, along with its immense recreational value.

INTRODUCTION

Wanstead Flats (187 hectares), makes up one of 38 management compartments and covers 7.8% of the surface area of Epping Forest. Epping Forest is one of London's largest and most significant natural Open Spaces, managed in perpetuity by the City of London Corporation, as The Conservators of Epping Forest, under the auspices of the Epping Forest Acts 1878 and 1880.

Individual Site Plans (ISPs) aim to review and collate the City Corporation's property management considerations at specific locations, to give an overview of current practice and outline longer term plans. An important part of the process is to work with key local stakeholders to ensure that we capture the management issues impacting each site. Site selection is centred around areas of Epping Forest that have a high number of competing issues and/or high visitor numbers.

The ISPs reflect the current level of activity at each site; however, an important part of each ISP is the identification of any potential improvement and enhancement projects that require additional resources, including support from external operational stakeholders, for example in the form of grant funding or volunteer person-hours. The information gathered in each report will be used by the City Corporation to prioritise work and spending on each site as part of the development of the 2020-30 Management Strategy and subsequent Business Plans for Epping Forest.

Each ISP will aim to follow the same structure, outlined below:

- **Background** – a brief description of the extent of the site covered by the ISP;
- **Property Management Context** – a list of property management constraints for the activity such as legal and statutory obligations directly relevant to the activity or location;
- **Management Considerations** – a list of identified management considerations for the site, with respect to ecology, conservation, community, heritage, landscape and any other identified management issues;
- **Potential Enhancement Projects Requiring External Support** – a list of projects that would enhance the quality of one or more aspects of the site, for which additional support would be required;
- **Management Strategy** – a summary of the key overall objectives for managing the site, as identified by the audit;
- **Outline Management Programme** – a summary of the management actions identified for the site as a result of the audit and consultation process, with anticipated timelines for completion;
- **External Operational Stakeholders** – a list of external stakeholders who have an operational input to the site, who have been consulted as part of the compilation of the Individual Site Plan;
- **Bibliography** – a list of existing reports (if available) that have formed part of the audit for the ISP; and
- **Appendices** – including a detailed activity plan.

BACKGROUND

Wanstead Flats is a large area of open acid grassland, sports grassland, heath and scrub, with patches of woodland, scattered groups of trees and two water bodies. The Flats are located at the southern-most tip of the Forest and sit mainly within the London Borough of Redbridge, with the northern area of Bush Wood within the London Borough of Waltham Forest, with a small part (Manor Park) within the London Borough of Newham. Wanstead Flats is bounded by the communities of Forest Gate, Leytonstone, Aldersbrook and Manor Park, as well as the City of London Cemetery in the southeast, and Wanstead Golf Club in the northeast. It is close to Wanstead Park (also part of Epping Forest) to the northeast and to Manor Park Cemetery in the south. The far northern edge is bounded by the busy A12, before Epping Forest continues northwards towards Leyton Flats via an underpass at the Green Man Roundabout.

The Flats are bisected by four major roads: Bush Road (A114), which separates Bush Wood from Bush Wood North; Centre Road (A114) which runs north-south through the centre of the site; Forest Drive (A117) which separates Manor Park from the main body of Wanstead Flats; and Lake House Road, which divides Bush Wood Flats from the central part of the Flats. In addition to these roads, Aldersbrook Road (A116) runs along the north-eastern boundary, Capel Road runs along the southern boundary and Harrow Road/Dames Road border the southwest of the site. Figure 1 (Appendix 5) shows the locations of the named areas within Wanstead Flats.

Wanstead Flats is accessible from the entire perimeter at all times on foot and there are good public transport links, with eight over ground or underground stations within one mile of the Flats. A large proportion of visitors are likely to be dog-walkers (Epping Forest Visitor Survey 2017 – Footprint Ecology). Wanstead Flats is also well-connected via Transport for London's Cycleways network. There are three main public car parks, at Alexandra Lake, Centre Road and Jubilee Pond. At Jubilee Pond, there is also an easy access path around the pond, which links to a nearby children's play area managed

by the London Borough of Waltham Forest. There are three additional surfaced car parks for seasonal use by those playing football at Capel Road, Harrow Road and Aldersbrook Road.

Within the context of Epping Forest, Wanstead Flats forms the largest of the thirty-eight Forest management compartments. It has a number of statutory designations, and a long history as an important resource for the people of east London, both for its provision of sporting facilities and also for the opportunity to experience a natural environment within urban surroundings. Wanstead Flats is currently home to 44 football pitches and a separate area is set aside for flying model aeroplanes. Wanstead Flats is also heavily used by cyclists, dog-walkers and other pedestrians. Permissive horse-rides are present, though these are much less used by horse riders than in previous years.

Taken together, Leyton Flats, Wanstead Flats and Wanstead Park comprise a very significant area of open space (347.31ha/859.22acres – 14% of Epping Forest's total area) less than 6 miles from central London. The southern part of Epping Forest is hugely valued and visited by a great number of Londoners for recreation and access to nature. The 2014 visitor survey found that Wanstead Flats is the third most visited area within Epping Forest, with almost 300,000 visits per year. Overall, the southern half of the Forest has over half a million visits per year, which is almost twice as many visits as visitor hubs in the northern Forest, for example at High Beach.

In the 1600s, Wanstead Flats was known as 'Wanstead Heath'. It was a wetter, marshy area, with scattered trees and shrubs, grazed by sheep and cattle. Wanstead Flats gets its current name from the 'flats' or 'terraces' of gravels over which it lies, which are fluvial sandy gravel deposits from the River Thames. In 1886, Wanstead Flats was drained, levelled, sown with grass seed and 40,000 young trees were planted. At the turn of the century, Alexandra Lake, Bandstand Pond (formerly Angel Pond) and Jubilee Pond (formerly Dames Road Pond and then Model Yacht Pond) were dug by hand by local unemployed men. Bandstand Pond, and two further ephemeral ponds in Bush Wood, dry out in summer. The Cat and Dog Pond is a small wetland area west of Lake House Road and just north of Harrow Road changing facilities.

Bush Wood and Bush Wood North, in the northwest of Wanstead Flats, are mature secondary woodland over acid grassland and include the remains of ornamental planting from the Wanstead Park Estate, an historic Grade II* listed landscape. The historic Evelyn Avenue of Lime trees on Bush Wood Flats is also a remnant of the historic Wanstead Park Estate. Bush Wood, Bush Wood North and Bush Wood Flats are all within the Grade II* listed Wanstead Park Registered Park and Garden. Wanstead Flats as a whole has a distinctive history and heritage that is well-documented.

Historically, the Flats were a grassy heathland from the 12th century onwards after the Abbots of Stratford were granted the right in 1199 to graze large flocks of sheep. Wanstead Flats was also used by Epping Forest commoners and drovers on the way to London's markets. It is likely that there has been grassland and/or heathland habitat here for over a thousand years. Today, the area is made up of an intricate mix of recreational/sport pitches, planted roundels of trees, scrub, acid grassland and ponds. It is designated as a Site of Metropolitan Importance for its conservation value to London and part of the acid grassland is designated as a Site of Special Scientific Interest. It is also one of the few breeding sites for Skylark (*Alauda arvensis*) in London and is a notable stop-off for migrating birds, especially in the Autumn. It is one of the best recorded areas for wildlife in Epping Forest with considerable work undertaken by volunteers from the local Wren Group.

The absence of visitor facilities such as a café and public toilets means that Wanstead Flats is better suited to local short duration visits. The Flats do not have the infrastructure to support longer duration visitors, and the lack of infrastructure means the Flats may be less attractive as a visitor location for those from further afield. However, the environmental impact of existing visitors is currently adversely affecting important aspects of the biodiversity on Wanstead Flats. For example, excessive feeding of the wildfowl by visitors has resulted in a large increase in the local rat population; the rats predate on the ground nesting Skylark, resulting in a marked decline in population numbers. The additional visitors resulting from increases in local housing numbers will be detrimental to the special nature of the Flats and to the population of Skylark, which are vulnerable to disturbance from people and dogs. This ISP seeks to define the management and mitigation that will be required to address this future threat to the special nature of Wanstead Flats.

PROPERTY MANAGEMENT CONTEXT

Flood risk

- The water bodies on Wanstead Flats fall outside of the Rivers Beam, Ingrebourne and Roding Catchment Management Plan. There are no Environment Agency designated flood risks associated with the water bodies on Wanstead Flats. There are however localised flooding issues.
 - The **Alexandra Lake** outflow, which is piped under Aldersbrook Road, has been known to block due to invasive tree roots entering the Victorian drainage pipes through settlement and age-related deterioration and cracking. The outflow, which is the responsibility of the London Borough of Redbridge as the Highway Authority, is monitored by the City Corporation's City Surveyors Department. Following a CCTV investigation in 2019, it is proposed to install a liner to restrict future root growth from blocking the outfall.
 - The **Alders Brook**, which originally had its source on Wanstead Flats and latterly Alexandra Lake is now culverted beneath the City of London Cemetery before joining the River Roding to the east. CCTV surveys indicate that the culvert is now 95% blocked by progressive sedimentation and will require extensive clearance.
 - The **Jubilee Pond** outflow: During periods of prolonged heavy rainfall, the long pond outfall to the Centre Road drainage ditches can be impeded, leading to flooding immediately to the south and west of the pond.

Statutory Designations

- Site of Special Scientific Interest (SSSI): The northern part of the central section of Wanstead Flats, between Lake House Road and Centre Road, is designated a *Site of Special Scientific Interest* (SSSI). The compartment was assessed by Natural England (NE) in January 2010 as 'unfavourable - recovering', based on habitat assessments and invertebrate assemblage data, together with the effect of all ongoing and planned management. However, Natural England states that, "*notwithstanding the assessment of 'unfavourable - recovering', there remains a very significant issue relating to air quality and the deposition of acidity and nitrogen pollutants. In addition, the anticipated recovery in the condition of the grassland and heathland will not take place unless management continues to be undertaken as planned*".
- Metropolitan Green Belt: In the 2019 draft Local Plan for Waltham Forest, development proposals affecting Epping Forest should be sensitive and proportionate, delivering enhancements

where possible and must not contribute to adverse impacts on ecological integrity, amenity or visitor enjoyment.

- Registered Parks and Gardens: Bush Wood North, Bush Wood and Bush Wood Flats form part of the historic Wanstead Park, listed as Grade II* in the Register of Parks and Gardens (Historic England, 1986). The Registered Park and Garden forms the western flank of the Flats.
- Archaeological Priority Areas (APA):
 - The majority of Wanstead Flats is designated a Tier III Archaeological Priority Area by the London Borough of Redbridge (London Borough of Redbridge, 2019).
 - Manor Park is classified as a Tier III Archaeological Priority Area by the London Borough of Newham due to it being part of an extensive area of historic rural landscape (Newham London, 2015).
 - The north-western tip of Bush Wood North, around the A12 interchange, is part of 'Leytonstone High Street' Archaeological Priority Zone 18 (APZ18), designated by the London Borough of Waltham Forest (2006) as it is an ancient route, which may have evolved from a Roman Road, with medieval and later settlement expanded along the road.
 - A small sliver of land within the London Borough of Waltham Forest, east of APZ18 and west of the boundary with the London Borough of Redbridge, is not designated for its archaeology.
- Site of Metropolitan Importance (SMI): SMIs are the best wildlife sites in London, designated as such in the London Plan (London Assembly, 2016). Epping Forest South SMI, which includes Wanstead Flats, is listed as a Site of Metropolitan Importance in the Redbridge Local Plan (London Borough of Redbridge, 2018), and in the Newham Local Plan (London Borough of Newham, 2018).
- Locally Important Geological Site: The London Geodiversity Partnership has proposed the area of Wanstead Flats south of Bush Road and west of Forest Drive (i.e. not including Bush Wood North or Manor Park Flats) as a Candidate Locally Important Geological Site (LIGS) (London Geodiversity Partnership, 2015, 2016). Consultation regarding this proposed designation is currently being undertaken by the London Geodiversity Partnership (2019), as part of the London Geodiversity Action Plan 2019-2024. Should it be accepted as a LIGS, Wanstead Flats will feature in the next version of *London's Foundations*, which is supplementary guidance to the *London Plan*.

Tree Safety

- Tree Safety: Wanstead Flats has four different tree safety zones identified.
 - Red + Zone Trees along main roads and a group of trees designated as an area for Forest School activities, which are surveyed annually by specialist external tree safety consultants.
 - Red Zone Trees alongside minor highways and around the football changing rooms and Forest Lodges, are surveyed every two years by specialist external tree safety consultants.
 - Amber Zone Trees in areas highly frequented by the public and where trees abut properties, are surveyed every three years by specialist external tree safety consultants.
 - Green Zone Trees alongside the 'Official' path network as identified on the Epping Forest visitor map are surveyed by City Corporation Forest Keepers on a five-year rotation.

Fire Risk

- Whilst contrary to Epping Forest bylaws, the frequent recreational use of disposable barbeques and the setting of cooking fires on the dry grassland of the Flats has contributed to periodic and at times large wildfires, most recently in 2018.
- Wildfire management at Epping Forest is under review at the time of reporting and additional measures may be identified as part of this review.

Damaging Introduced Exotic Species (DIES)

- Oak Processionary Moth (*Thaumetopoea processionea*): The larvae of the non-native Oak Processionary Moths are a risk to human health (GB non-native species secretariat, 2019). There was a heavy infestation of several trees in 2018 and further outbreaks are expected in coming years. Future responses will involve removal of the nests, especially at lower levels, with some pesticide treatment in limited cases.
- New Zealand Pigmyweed (*Crassula helmsii*): There is a heavy infestation of New Zealand Pigmyweed in Alexandra Lake, and it was present in Bandstand Pond when this pond still held water; the species would reappear if and when the pond refills. A report by Native Landscapes (2019) suggests that the difficulty in controlling New Zealand Pigmyweed is such that the best option to eradicate *Crassula helmsii* from Alexandra Lake would be to bury the Lake. However, this is impractical given the size of the Lake, so total eradication is not a feasible option. Consultation with Ken Adams (pers. comm., 2019) suggests that trying to control *Crassula helmsii* with herbicide is ineffective as it only affects the plants above the water level. Ken Adams has consulted botanists in Tasmania (where this population originated from) about how they control the plant, and they use dredging and scraping to keep the *Crassula* infestation under control. Using this method, the aim will be to reduce *Crassula helmsii* to a maximum of 10%.
- *Massaria* disease: This fungal disease causes large lesions on the upper surfaces of major branches of infected London Plane trees (*Platanus x hispanica*), and can cause branch drop, with subsequent tree safety issues. COL surveys London Plane trees three times a year for signs of diseased branches and pro-actively removes branches assessed as being at risk of branch drop.
- Canada Goose (*Branta canadensis*): Canada Geese, a non-native species, are heavy grazers of aquatic and waterside vegetation, their droppings increase nutrient levels in water bodies and soils and their trampling can exacerbate bankside erosion (GB non-native species secretariat, 2019). Currently, COL carries out control of non-native geese populations on Alexandra Lake 2-3 times/year through treating the eggs to prevent hatching, under a new general licence “to kill or take certain species of [non-native] wild birds to conserve [native] wild birds and flora or fauna” (Natural England, 2019a); the general licence includes Canada Goose.
- Ring-necked Parakeets: Ring-necked Parakeets are frequently recorded at Wanstead Flats. There is concern that, in large numbers, this species can have a negative impact on native birds that nest in tree holes, by competing with native birds for a finite number of tree cavities (GB non-native species secretariat, 2019). The new general licence “to kill or take certain species of [non-native] wild birds to conserve [native] wild birds and flora or fauna” (Natural England, 2019a) includes Ring-necked Parakeet. Should the population of Ring-necked Parakeet at Wanstead Flats become large enough to be problematic, COL will be able to rely on this new general licence for the control of this species; however, no management measures are currently undertaken.

- **Brown Rat:** The local population of Brown Rat has been significantly boosted by supplementary feeding of the local wildfowl population by visitors. This artificially enlarged population of Brown rat is potentially having a significant negative impact on the local ground nesting Skylark, a nationally declining bird of conservation concern that breeds on Wanstead Flats. In the most recent breeding season (2019), Skylark were recorded as singing, but did not display any evidence of having bred successfully (6 October 2019 blog update, <http://wansteadbirding.blogspot.com/>).
- **New general licences and SAC/SSSI:** The new Natural England general licence relied upon by COL to control non-native birds on its land no longer includes any land within, or within 300m of, a site of European conservation importance (Natural England, 2019a). However, the northernmost boundary of Wanstead Flats is just over 300m from the southern boundary of the Epping Forest Special Area of Conservation (SAC), which is a European protected area. Natural England (2019a) also states that “*users will need to ensure they have consent from Natural England for any activity on Sites of Special Scientific Interest*”. COL will liaise with Natural England regarding any non-native bird control (and other management activities) it plans to undertake on the SSSI land at Wanstead Flats.

Infrastructure

- **Water body inlets/outlets:**
 - Jubilee Pond has no natural inlet, but there are two man-made inlets to Jubilee Pond. One inlet on the eastern end, adjacent to the outlet, brings water to the pond from land drainage across the festival site. This has an oil trap installed to limit pollution of the pond. A second inlet on the western end brings water to the pond from a bore hole supply. The pond water level is maintained by abstraction under licence from the Environment Agency; the licence is due for renewal in 2025.
 - Jubilee Pond has an outlet on the eastern side of the pond, near the jetty. In 2018, this was found by the City of London’s Surveyors to link with a large drain that runs along the south side of the Festival site. The drain appears to function as a water holding area as it terminates near the festival site roadside entrance with no outfall. Options for achieving an outfall for this drain are currently being developed. The drain itself is relatively shallow and at risk of collapsing and management options to remedy this are also being reviewed.
- **Jubilee Pond liner:** Jubilee Pond was relined in 2013, with a new waterproof liner installed. The original form of the pond was retained with only a few minor alterations to the shape and contours. The pond has a maximum depth of 2.5 metres. The pond has been waterproofed with approximately 12,000 sqm of Firestone EPDM 1.2m Geomembrane, protected on either side with Bontec 300g/sq.m non-woven geotextile (Appendix 3). The Firestone Geomembrane has a 20 year warranty (see Appendix 3).
- **A number of biotic and abiotic factors have resulted in significant bankside erosion of the pond and the islands, which has potential to compromise the effectiveness of the new liner. Several measures to protect the bank have been trialled and have had mixed success:**
 - **Marginal plant establishment:** Repeated attempts to establish pond edge plants to create a natural revetment and protection for the pond edge have had limited success. It has worked especially well at the eastern end of the pond, but elsewhere very intense wildfowl grazing has led to the failure of the plants being established.
 - **Rock revetment:** A small trial section of the pond was protected with a rock based revetment in 2016 using large, manually immovable boulders, back filled with gravel and

surfaced with Coxwell self-binding gravel. This has worked well; however, it is expensive at a material cost of £300/m and also gives a visual finish that may be considered intrusive for some prominent edge sections.

- Faggot revetment: Some of the islands were enclosed with faggot revetment in 2016. This has had mixed success. The bank around the island is steeply shelving and further work to better backfill is desirable, to aid further natural marginal plant establishment. The faggots have proved to be excellent protection for fish fry and some fish populations have increased considerably as a result.
- Fencing: a low wooden fence has been erected around part of the perimeter, to deter visitors from accessing and eroding sections of the pond edge and to allow marginal vegetation to establish. This low fence replaced larger more intrusive fences that detracted from the general amenity of the area and the success of the low fence is being monitored.
- Jetties: There is a jetty towards the eastern end of Jubilee Pond, the maintenance of which is overseen by the City Surveyor's Department.
- Information boards/signposts: A number of signs have recently been updated around Wanstead Flats. As part of this ongoing work, two new information boards about the presence of Skylark at Wanstead Flats have been installed, and there are two new 'Feeding the Birds' information boards at Alexandra Lake and Jubilee Pond.
- Forest Furniture: There are three Broxap picnic tables on the north-eastern side of Jubilee Pond; there are no other formal benches on Wanstead Flats. A bike rack is located at the northern end of the pond.
- Monuments: The Joseph Fry drinking fountain is located at the junction of Woodford Road/Centre Road and Capel Road, erected in the late 1890s in memory of his commitment to the Metropolitan Drinking and Cattle Trough Association. This Association raised funds for the construction of many drinking fountains for people and horses in and around London in the second half of the nineteenth century, thereby providing clean water for London's poor and suitable drinking water for animals (<http://www.e7-nowandthen.org/2016/05/public-monuments-in-forest-gate.html>). The fountain has historic interest but is currently out of operation.

Boundaries / Property

- Football changing facilities:
 - Harrow Road: These facilities were upgraded in 2009, following approval by the Project Sub (Policy and Resources) Committee (17 January 2018, <http://vmtcapp12/ieListDocuments.aspx?CIId=168&MID=19369>), to comply with FA guidelines. FA guidelines require separate access to changing, shower and toilet facilities for children and adults, male and female players, and staff (e.g. match officials or volunteers), who are using the facility at the same time.
 - Aldersbrook/Capel Road: The changing room buildings at these two sites have reached the end of their design life. They are currently in a poor condition, having received no major repairs or refurbishment for some time. Neither do they comply with current FA guidelines for separate accesses to changing and toilet facilities or with the Equality Act (2010), particularly in relation to the protected characteristics of age, sex and disability. They are also costly to heat and provide hot water and are inefficient to maintain. The Capel Road changing rooms also suffer from a leaking flat roof and will require upgrading in the near future.

- Upgrading of changing rooms: There is a proposal to upgrade at least one further facility as part of a Parklife project bid to install artificial grass pitches for all weather and evening use.
- World War II buildings: The buildings at Aldersbrook Road include two buildings purported to be relics from World War II, though these are not listed on Historic England's National Heritage List for England, a register of all nationally protected historic buildings and sites in England. As part of the proposals for redevelopment of the changing facilities at Aldersbrook Road, a survey and report will be commissioned from COL City Surveyors to verify the history of these two buildings.
- Forest lodges: There are six lodge properties on Wanstead Flats; a pair of Forest Lodges off Blake Hall Road in Bush Wood North, one off Bush Wood Road in Bush Wood, a pair of Forest Lodges off Aldersbrook Road, and a Groundsman's Lodge adjacent to the changing facilities at Capel Road. The Capel Road lodge is currently unoccupied pending renovation and possible repurposing.
- Boundary along Capel Road: The Epping Forest boundary along Capel Road is unmarked and does not follow the physical boundary; it is not always clear who has responsibility for which stretch of road verge. There is a strip of land registered to the London Borough of Redbridge opposite house numbers 36-92. Forest land appears to go right up to the edge of Capel Road opposite house numbers 92-162, but 12 of these householders have registered the land opposite their houses, so those parcels are not the responsibility of Epping Forest.
- Long-standing licence holders: There are a number of long-standing licence holders at Wanstead Flats, who have an interest in the site through their operations. These include the Wanstead Model Flying Club, Wanstead Flats Parkrun, the Royal Pigeon Racing Association, Wanstead Flats Forest School and Be Military Fit. Numerous other organisations are granted licences each year on an ad hoc basis to operate on Forest land.

Highway Verges

- The verges along the roads around Wanstead Flats are cut once a year in August/September to prevent encroachment onto the pavements.
- Sightlines at car park entrances and road junctions are cut annually by COL in June/July.

Utilities

- Beckton desalination pipeline: This pipeline transfers drinking water treated at the Thames Water Desalination Plant (also known as the Beckton Desalination Plant) to northeast London for use by local residents. The pipeline crosses Wanstead Flats from the southeast to the northwest. Upon completion of the works Thames Water issued COL with a notice that states: *'After the work is finished, we will send you a plan showing the exact position of the pipe, and the strip of land over the pipe that must be kept clear of structures or trees in case we have to carry out repairs or remedial works'*. The pipeline corridor is currently under short mown football pitches and well-used paths through grassland, so is not likely to develop scrub.

MANAGEMENT CONSIDERATIONS

Ecological

- Climate change: this over-arching and increasingly serious problem will need to be factored into future management decisions for the site and, particularly, the protection of its scarce habitats and species. It is likely to increase the susceptibility of the trees and vegetation to diseases and drought. With the latter problem of drought, there is also an accompanying fire risk with such a large area of dry grassland.
- Favourable Condition of the SSSI – Site Improvement Plan (SIP): Management work will need to try to address the two key problems for favourable condition identified by Natural England: air pollution and recreational pressure. To address the former, a close working relationship is required with other stakeholders, particularly the London Boroughs of Redbridge, in whose area most of the Flats lie, and the neighbouring Waltham Forest and Newham through the updating of their Local Plans and their highways and development proposals. Recreational pressure also needs to be considered and this current ISP outlines management proposals that will address the issues of visitor numbers and help to protect habitats such as the acid grassland and heather.

Acid grassland

- Acid grasslands are so-called because they are characterised by nutrient-poor (low nitrogen and phosphorus content) and acidic soils (those with a low pH that are sandy/gravelly). They are closely associated with, and often interweave with, dry heathlands where heather and other heathland plants are characteristic. The low nutrient soils favour a wide diversity of specialist native plants that can thrive where the more dominant grasses cannot easily survive. At Wanstead Flats these native plants give the Forest landscape its distinctive character, and, in fact, much of the area was known as Wanstead Heath in the 19th Century because of its natural vegetation. The native plants include low-growing vegetation such as Sheep's Sorrel, Tormentil, Heath Bedstraw and Heather (a scarce species in Epping Forest). These occur alongside fine-leaved grasses and rushes, including scarce species such as Mat-grass, Heath Grass, Heath Rush and Sheep's-fescue.
- The SSSI area on Wanstead Flats, to the west of Centre Road, was notified in recognition of the habitat's importance and its boundaries incorporate the best remaining area of Heather and the heathland/acid grassland mosaic. However, to the east of Centre Road the acid grasslands, although more homogenous in species, are in fact even more extensive and include rarities like Creeping Willow in a few small patches. Acid grassland is a UK Biodiversity Action Plan Habitat and, as such, is a top priority for wildlife conservation nationally.
- In addition to plant species, the acid grasslands support many scarce specialist insect species, particularly solitary bees and wasps. They are also a very important area in London for breeding Skylark and Meadow Pipits, red-listed and amber-listed respectively as species of conservation concern, following significant declines in the UK in the last 25 years. Migratory birds (see also Scrub section below) that use the grasslands include Wheatear, Stonechat and Whinchat, all declining species.
- The open areas of acid grassland to the east of Centre Road were managed, under a bespoke Environmental Stewardship Scheme prescription, as a mosaic of areas on a 5-year cycle. However, in response to fire management concerns, increasing areas of broom scrub and also concerns about the decline in breeding Skylarks and Meadow Pipits, grassland management at Wanstead Flats has been reviewed and the pattern of rotational cutting is moving to more frequent cutting of the mosaic every one or two years for most areas, depending on the species

make-up of the sward. The aim is to prevent the build-up of a thatch of dead grasses in some areas where there are coarser, broad-leaved grass species.

- Together with Leyton Flats, the acid grassland at Wanstead Flats makes up 10% of the acid grassland in London, the largest single area after Richmond Park and Wimbledon Common. Two major wildfires in recent years (in 2003 and 2018) resulted in the temporary loss of the acid grassland vegetation, but also removed areas of gorse and broom that had encroached on the acid grassland. In order to help regenerate the acid grassland following the most recent wildfire, COL have recently (2019) removed a layer of ash and topsoil to reduce nutrient levels and re-establish an acid grassland sward. These scrapes will be monitored to assess the recovery of and changes in the acid grassland species composition and extent.
- The east-facing bank at the western edge of Brick Field (The Dell) has a mosaic of ephemeral bare ground and tall acid grassland habitat, which is of high conservation importance for specialist invertebrates.
- The quality of the acid grassland is being adversely impacted by the following significant issues:
 - Decline in grazing: Prior to the modern era, Wanstead Flats was an area of largely open acid grassland and heath, kept free of scrub by the grazing of commoners' cattle; this practice ceased following the outbreak in 1996 of mad cow disease (*Bovine spongiform encephalopathy*, BSE).
 - Scrub and tree encroachment: Specialist acid grassland species at Wanstead Flats are declining.
 - Air pollution: Deposition of nitrogen pollutants from the air is causing a rise in soil fertility, allowing more competitive species to dominate the more desirable scarce acid grassland species.
 - Recreational pressure: There is some loss of acid grassland areas through visitor trampling pressure and nitrification from dog mess along the informal path network.

Scrub

- The scrub habitat at Wanstead Flats is valuable for birds as a breeding habitat and during migration periods (particularly autumn/winter), when it provides shelter and food in the form of berries and invertebrates for a diverse number of migrating bird species, such as Redstart, Ring Ouzel, Spotted Flycatcher and Lesser Whitethroat. The location of the Flats close to the Thames corridor coupled with its extensiveness, make it one of the most significant sites for migratory birds in the London area.
- The scrub is also important as a food source for invertebrate species (nectar, dead wood, leaves, honeydew, other invertebrates) and for breeding and shelter. For many early flying insects, hawthorn and blackthorn are particularly important as they are an early source of nectar in the calendar year.
- Following repeated concerns regarding persistent anti-social behaviour in and around the areas of scrub, a Forest Operations Development Plan (COL, 2018) was created to draw together the scrub management issues on Wanstead Flats and outline a management strategy and action plan that reconciles the important conservation objectives with tackling serious antisocial behaviour concerns. This plan also incorporates a reduction in the fire risk, and this has been further reviewed in 2019 by a specialist fire consultant. The areas of Broom scrub burnt down in 2019 will be managed as lower-growing vegetation and existing areas of Broom and Gorse will be kept smaller and more immature.

Ditches and open water

- The ditches on Wanstead Flats provide valuable aquatic habitat for invertebrates, but stretches are currently overgrown with Bramble scrub; succession to dry ditches will follow in time without intervention management. The ditch and wet area in the SW corner of the SSSI area is the highest priority for enhancement and would be likely to benefit a wide range of species.
- Fish surveys of the main aquatic bodies in Epping Forest are undertaken regularly by City Corporation staff.
 - Alexandra Lake: This pond was last surveyed in February 2017 (Pallet, 2017a), and found to contain no fish. Large populations of Canada and Greylag Geese were recorded, but no fish-eating birds such as Grebe or Heron. No toad or frog spawn were seen either.
 - Jubilee Pond: This pond was last surveyed in September 2017 (Pallet, 2017b), and found to contain the largest population of Gudgeon in Epping Forest, as well as healthy populations of Tench and Rudd. However, large numbers of Canada Geese (130+ in the most recent survey) were also recorded.
- An amphibian survey was undertaken on the ponds and lakes within Epping Forest in 2013 (Catherine Bickmore Associates, 2014) to assess their suitability for amphibians and make management recommendations. Alexandra Lake was assessed as being of medium importance for amphibians and medium priority for management. At the time of the assessment, Jubilee Pond was not studied as it was being relined. Further details of the survey and specific management recommendations are in Appendix 2.
- Water quality: The water quality of Jubilee Pond is currently within normal parameters, but Alexandra Lake has become a 'dead water' (Pallet, 2017a). The water quality in Alexandra Lake has been impacted in the following ways:
 - Excessive feeding of wildfowl with bread, which artificially boosts bird population numbers and also boosts local populations of vermin;
 - Birds defecating the processed bread into the water, causing eutrophication and a drop in the pH level; and
 - Littering of plastic bags.
- Loss of open water habitat:
 - Alexandra Lake: Historically, there have been problems with the lake drying up and becoming stagnant in the summer months. The lake was partially dredged in 1992 and 1998, but the issues with low water level remain.
 - Bandstand Pond: Historically, this pond held water in summer and its fringes supported the nationally-scarce grass species, associated with cattle trampling of pond margins, *Alopecurus aequalis* Orange Foxtail. However, in recent years the pond has dried up and is now a wet depression dominated by Rush species and the Foxtail seems to have been extirpated by overgrowing vegetation and lack of grazing animals.

Notable species

- Skylark: This nationally declining bird of conservation concern breeds in the long acid grassland areas of Wanstead Flats. However, in the most recent breeding season (2019), Skylark were recorded as singing, but did not display any evidence of having bred successfully (6 October 2019 blog update, <http://wansteadbirding.blogspot.com/>). High levels of disturbance from people and their dogs is thought to be responsible for unsuccessful breeding attempts, along with a large local Brown Rat population (see above). Temporary signs are erected by COL ahead of the breeding

season to inform visitors of the threat that disturbance poses to successful skylark breeding and to encourage people to keep their dogs to the main paths. The nearest breeding population of Skylark to Wanstead Flats is on Rainham Marshes, nine miles away across a heavily built-up part of London. As such, replenishment of the breeding population at Wanstead Flats by birds currently breeding at Rainham Marshes is unlikely. The continued presence of Skylarks on Wanstead Flats is therefore of significant conservation importance.

- Other birds of conservation interest: the key breeding birds are the summering warblers and Wanstead Flats has supported important populations, significant in a Forest and London context, of both Whitethroat and Lesser Whitethroat in recent years. The fires of 2018 have reduced the areas of scrub for these species and restoration of small areas of scrub and longer grass will be important to retain these species. Birds of prey records for Wanstead Flats include Little Owl (with two breeding pairs in some recent years), Tawny Owl, Kestrel and Sparrowhawk. Also of conservation interest are breeding and wintering Meadow Pipit, wintering Stonechat, and breeding Green Woodpeckers. The area of the Flats is also very important for supporting feeding flocks of Starling and House Sparrows. The closely mown grassland of the football pitches is an important feeding location for populations of wintering gulls; the birds roost overnight on the Walthamstow Reservoirs.
- Green Hairstreak butterfly (*Callophrys rubi*): Wanstead Flats is the only known locality within Epping Forest for this species, which has undergone a national decline in both abundance and occurrence in the last 10 years (Fox, 2015);
- Broom-tip moth (*Chesias rufata*): Wanstead Flats is the only locality within Epping Forest for this species, which has been categorised as ‘vulnerable’ in the IUCN’s Red List of Species of Conservation Concern, having suffered a population change of -73% over the last 25 years, and -84% over the last 35 years (Fox *et al.*, 2006); and,
- *Philodromus rufus* (spider): A rare spider with very few UK locations, and the only site in Epping Forest.
- Creeping Willow (*Salix repens*): The sprawling and diminutive Creeping Willow, which is scarce throughout Epping Forest, is present in six locations on Wanstead Flats, in grassland west of Alexandra Lake between the Aldersbrook Road and Capel Road playing fields. The species is scarce in London and the population on Wanstead Flats is very vulnerable due to their location (outside the SSSI) and isolation, with little opportunity to spread into new areas.
- Ancient / veteran trees: There are five large ancient Sweet Chestnut trees in Bush Wood, which are a legacy of the landscaping carried out when this area was part of the historic Wanstead Park. The trees are believed to be over 300 years old and include one with a girth of 25 feet (7.6m), making it one of the largest trees in Epping Forest. These trees have not yet been mapped and registered formally on the COL veteran tree register but are nonetheless monitored regularly.

Heritage and Landscape

- Site interpretation: Wanstead Flats has a distinctive history and heritage that is well-documented; the Leyton and Leytonstone Historical Society has published several booklets on the various aspects of the history of Wanstead Flats (see Bibliography).
- Wanstead Flats and Wanstead Park Estate: The nearby Wanstead Park Estate is a nationally (potentially internationally) important historic designed landscape, created around Wanstead House during the 17th to 19th centuries (LDA Design (in draft), 2019). It is Grade II* on Historic England’s *Register of Parks and Gardens of Historic Interest* (Historic England, 1986). The

western part of Wanstead Flats, namely Bush Wood North, Bush Wood and Bush Wood Flats, were historically part of the landscape of the Wanstead Park Estate, and remnants of that landscaping is still in evidence today, notably the 1764 'Evelyn Avenue' in Bush Wood – many of the trees are replacements in the original locations.

- Mass review of troops: George III (1760-1820) held a mass review of his troops on Wanstead Flats; and military use continued from time to time. This was also the first instance of the Flats being used for the gathering of a large crowd.
- Markets/fairs: At the end of the 18th century, an annual cattle market was held on the Flats in March and April. An Easter Fair was held on the Flats in the late 19th century, and although this has not been continuous, there are still fairs held on the Flats to this day on the 'Fairground Site'.
- Social History: Wanstead Flats played a significant part in the eventual securing of Epping Forest for the nation. In 1852, Viscount Wellesley, the Lord of Wanstead Manor, fenced off a large area of Wanstead Flats, but a local farmer broke the fencing and drove his cattle back onto the land to assert the commoners' right to allow their cattle to wander freely across the Forest. In 1854 the City of London Corporation bought land at Aldersbrook Farm to provide a cemetery for the City (now the City of London Cemetery). This gave the Corporation commoner status and entitled them to graze cattle on Epping Forest. In 1871, Wellesley's heir, Lord Cowley, enclosed an area south of the present-day Wanstead Park, and allowed his tenants to fence off other parts of the Flats. These illegal actions provoked protest meetings across east London, and in July 1871 a mass demonstration was held on Wanstead Flats which culminated in the destruction of large sections of these fences. At this moment the Corporation took legal action against the Lords of the Manor in Epping Forest and won, thereby outlawing any enclosure of Epping Forest. In 1878, the Epping Forest Act and the Corporation of London (Open Spaces) Act were passed, and the Corporation began to purchase as much of Epping Forest land as possible to protect it for the recreation and enjoyment of the people of London.
- Quarrying: Between 1864-1881, an area of Wanstead Flats now known as 'Brick Field' (also known as 'The Dell') was quarried and bricks were produced to build the nearby new housing estates. The Brick Field quarry was given a 17 year lease by the Mornington Estate as Lord of the Manor of Wanstead. The Brick Field is now a distinctive flat area of short mown grass, with an east-facing earth bank at its western end, which has considerable nature conservation interest.
- Monkey Parade and Bandstand: A Victorian promenade feature, known locally as Monkey's Parade, was located on Wanstead Flats along Capel Road. It had a surfaced path with cast iron benches (sacrificed for the war effort) and a bandstand, erected by the Corporation of West Ham.
- London Plane Avenues: These were planted around the edges of Wanstead Flats by a former Superintendent around 1900.
- World War II: Wanstead Flats has a notable WWII legacy and was used in a variety of ways during WWII, described in detail in publications by the Leyton and Leytonstone Historical Society (see Bibliography). Of particular interest are the use of the Flats to tether barrage balloons (the tethers remain in situ), the location of army telecommunication huts and a major anti-aircraft installation on the Flats and extensive allotments. Both American and British troops gathered on Wanstead Flats in their hundreds in the run-up to D-Day. Surface and buried remains of this period in the history of Wanstead Flats are still on site, and further remains were uncovered as a result of a large wildfire on the Flats in the summer of 2018.
- Post-war period: After the Second World War, there was a major debate in Parliament and elsewhere about the Flats being used for housing. West Ham Council wanted to house its homeless on the Flats, but this was refused. However, along Capel Road, East Ham Council had

already built a large settlement of pre-fabs, erected using labour from the POW camps on the Flats. This settlement existed until eventual demolition in 1960.

- 1953 Plantation: A grove of now mature trees was planted on Wanstead Flats in 1953 to commemorate the coronation of HM Queen Elizabeth II. A small lead plaque with words to that effect is still in situ within the trees, hidden amongst the undergrowth.
- Tree circles: The bandstand near Angel Pond was demolished in 1957, and a circle of trees planted to mark its former location. A second circle of trees was planted on Manor Park Flats, 150 metres from the end of Capel Road. These, together with a metal fence, surrounded an underground Local Government Command Centre (London Borough of Newham). The fence has been removed, the above ground entrance has been dismantled and the below ground structure is understood to have been filled in.

Access and Signage

- Pedestrian access:
 - Wanstead Flats is easily accessible on foot by local people, as well as by public transport. There are eight over ground or underground stations within one mile of Wanstead Flats, and three Transport for London bus routes skirt the edges of the Flats.
 - Shared use trails: Shared use trails run through Wanstead Flats and connect with a north-south route through Epping Forest. The Big Walk (formerly known as the Centenary Walk), a long-distance path through Epping Forest, also uses these shared use trails. As the area is on Thames Gravels, path surfaces are in reasonably good condition and do not become water-logged in winter. Overall, there are approximately 9 miles (14.5km) of paths on the Flats where the COL has a management responsibility.
 - Lime Trail: A 1.5 mile circular path loops around Bush Wood and Bush Wood Flats, which is way-marked with posts (COL, 2019). The route is signposted from Lake House Road car park.
 - There is an opportunity to define pedestrian access locations around the Flats to create a positive sense of welcome, which links to conservation messages, particularly during the bird breeding season. This can be achieved through a combination of entrance enhancement (e.g. regular litter picking) and habitat management works (such as grassland management to provide routes from entrances that reduce disturbance to ground-nesting birds), and the provision of signage appropriate to the size of the entrance.
- Access via cycle routes:
 - Quietway 6 currently connects the south-eastern corner of Wanstead Flats (Manor Park) with Fairlop Waters Country Park, an open space around 3 miles to the northeast. In addition, there is a proposal to extend Quietway 6 along Capel Road to link up with Victoria Park. COL will ensure that the Quietway remains accessible when on COL land by managing scrub encroachment.
 - Northwest of Wanstead Flats, the London Borough of Waltham Forest has recently (2019) inaugurated a new junction at Whipps Cross, which improves cycle links between an Olympic pedestrian and cycle route along Whipps Cross Road (along the western edge of Leyton Flats, also part of Epping Forest) and a cycleway along Lea Bridge Road, thereby linking Leyton Flats and Whipps Cross with Hackney Marsh and the Queen Elizabeth Olympic Park. This expanded cycle network is easily accessible from Wanstead Flats via the shared access route over the Green Man roundabout, which separates Wanstead Flats and Leyton Flats.

- London Borough of Redbridge also installed and cares for a cycle access route from Aldersbrook Road via Empress Avenue, which links to Wanstead Park and Ilford, providing access to Redbridge Underground station further north, Valentines Park further east and Manor Park to the south.
- Overall, London's cycleways projects may increase the number of visitors arriving at Wanstead Flats by bike, and potentially increase the number of visitors to the Flats. Nonetheless, there is an opportunity to link Wanstead Flats and the wider Epping Forest with this extended London cycle route for recreation and commuting north through the Forest. Refer to the Forest Paths Policy Development Note, in development.
- Vehicular access and car parking:
 - There are three gated car parks serving Wanstead Flats at Lake House Road; Centre Road and by Alexandra Lake on Aldersbrook Road. These are locked at night with the time varying through the year in line with daylight hours. Additional football parking is available at Capel Road, Aldersbrook Road and Harrow Road during the football season.
 - Car parking capacity: At weekends and holiday periods, the car parks are frequently full. With the projected increase in the number of visitors to Epping Forest, car park capacity will be a developing concern. The car parks (particularly Centre Road car park) also have a localised negative effect on ground-nesting birds through increased disturbance from visitors and their dogs. Furthermore, the presence of litter bins and litter in the vicinity of the car parks encourages the local rat population; these rats also predate the eggs and young of ground-nesting birds at Wanstead Flats, thereby jeopardising their breeding success. The car parks also suffer from a localised increase in dog faeces, with a corresponding adverse effect on the acid grassland species. These issues will need to be considered in the future car parking strategy.
 - Designated spaces: Lake House car park is currently the only car park that has designated spaces for disabled visitors.
- Signage:
 - New signage is being introduced across Epping Forest to replace the old Palladian style signs as funds and local need dictate. Currently, at Wanstead Flats, there is a mixture of signage and no signage at the northern end of Wanstead Flats, for visitors coming from further north.
 - An entrance to Wanstead Park (Epping Forest land) is located around 260m north of Wanstead Flats, but this route is not signposted. There is an opportunity to better connect the two sites, including providing finger-post signage from Jubilee Pond, thereby enhancing the experience of visitors to the area.
 - Wanstead Flats is a special place for both its conservation and historical interest. This needs to be communicated more effectively, to engender a sense of the high value of this special place to visitors, just 5.6 miles from the City of London.

Community

- There are currently no catering facilities or public conveniences available to the general public visiting Wanstead Flats. Instead, visitors are expected to use local cafes, tea rooms and public houses, including the City of London Cemetery tearoom on Aldersbrook Road.
- A fenced children's playground was installed on Epping Forest land with permission from COL by the London Borough of Waltham Forest, near the southern end of Jubilee Pond. At the time,

the land was within the County of Essex, though the playground is now within the London Borough of Redbridge. Nonetheless, according to the licence issued by COL in 1985, the London Borough of Waltham Forest retains responsibility for the maintenance of the playground.

- Fishing is not allowed on Jubilee Pond or Alexandra Lake, nor in any of the small ephemeral ponds within Bush Wood.
- There is a strong tradition of community involvement with Wanstead Flats, with a large number of different community groups. A summary of the most active community groups and charities involved with Wanstead Flats is provided in Appendix 4.
- A fair visits the dedicated Fairground Site close to Jubilee Pond three times a year at Easter, the early May Bank Holiday and the August Bank Holiday weekends. These are popular events with local residents and visitors from further afield.
- Four areas within Wanstead Flats are being considered for hosting public events as per COL's Events Policy (approved by EF &CC, 14 May 2018). These areas are the Fairground Site, Brick Field (The Dell), the Aldersbrook Road football pitches, and the Harrow Road football pitches.

Football provision at Wanstead Flats

- In 1890, the London Playing Fields Committee approached the Corporation, asking for part of the Flats to be turned into football and cricket pitches for the benefit of the public. It was agreed that an area of 150 acres could be used. Today, 73 teams play throughout the season. The pitches are serviced by three changing room facilities at Aldersbrook Road, Harrow Road and Capel Road and the amenity value of these football pitches is very high. Four leagues operate at Wanstead Flats and two soccer schools play on the pitches on a weekly basis.
- Pitch bookings are taken by staff at Chingford Golf Course (also Epping Forest).
- The football provision at Wanstead Flats is the second largest provision of football pitches for community use at a single location in Europe. It is vitally important to the health and well-being of the surrounding local communities, with around 3000 players every week during the football season (nearly 90,000 a year) and, as such, footballers are by far the most significant user group on Wanstead Flats.
- The Corporation of London heavily subsidises football provision on Wanstead Flats, with a loss for every pitch booked.
- A number of local and national charitable organisations, football leagues and football clubs are associated with the provision of football pitches at Wanstead Flats; details of these can be found in Appendix 4.
- COL are currently in the process of compiling the data required to enter a bid for Parklife funding for artificial pitches on Wanstead Flats, together with modernised and fully compliant changing facilities. Ultimately the provision of Artificial Grass Pitches will cross subsidise grass pitch provision and reduce or eliminate current subsidy levels.

Anti-social Behaviour

- Wanstead Flats is adversely impacted by many anti-social behaviour problems. These include:
 - Rubbish bins and litter: Twenty-four rubbish bins are provided at ten locations around Wanstead Flats for use by the public; these are close to car parks, along busy footpaths, adjacent to Jubilee Pond and Alexandra Lake and by the football changing facilities. The rubbish bins are emptied regularly, though at busy times, they can overspill. A large amount of litter is also collected from the football pitches and adjacent areas after

bookings. As noted above, the presence of litter encourages rats, with a consequent negative effect on the population of ground-nesting birds.

- Fly-tipping: Approximately 25% of fly-tips occurring in Epping Forest are on the Flats, despite Wanstead Flats being around 7.5% of Epping Forest by area. This is likely to be in part because it is the first large area of open space that fly-tippers come across when driving out of central London towards the northeast.
- Fly-tipping of bread: There is a particular problem with fly-tipping of bread by Alexandra Lake and Jubilee Pond. Feeding bread to wildfowl causes them health problems; the dumping of bread in the water negatively impacts the water quality and encourages the local rat population to the detriment of ground-nesting birds.
- Wildfires: There have been a number of large wildfires during drought periods over the latter part of the 20th and early 21st century. Such fires present a number of hazards to public safety and also to the wildlife of the area. Fire hazard reduction and management measures, including access and habitat management, are being enhanced and are included in this ISP.
- Public sex environment: The scrub areas on Manor Park, in the southeast of Wanstead Flats, facilitate a public sex environment (PSE). The PSE is managed by City Corporation and Metropolitan Police Service (MPS) to NPCC (formerly ACPO) guidance, to reduce the impact of the PSE. The Police service is mindful that PSEs can become a focus for prostitution, muggings and hate crime.
- Drug use: Drug-taking of Class A drugs is frequent in and around the areas of scrub on Wanstead Flats. This poses an obvious hazard to the people involved in such activities, but also significant health concerns for staff and visitors. Particular issues of concern are infected needles, which pose a risk from accidental skin punctures following contact with a needle, and the health issues associated with concentrations of human excrement found at heavily used drug-taking locations.
- Rough sleeping: There is a significant amount of rough sleeping in the dense scrub scattered around Wanstead Flats. Staff work actively with a range of government and local services to help vulnerable people rough sleeping on the Forest to find a better outcome.
- Scrub management to reduce anti-social behaviour: In 2018, a Scrub Operations Management Plan for Wanstead Flats (COL, 2018) was prepared by COL in consultation with local stakeholders and its implementation has seen a reduction in the amount of scrub on Wanstead Flats, whilst maintaining a mosaic of scrub habitat for wildlife. The management of scrub in this part of the Flats has resulted in a safer, more pleasant environment for people walking up from Manor Park station to visit the COL Cemetery, just over the road from Wanstead Flats.

Local Plans

- Local Plans: All the surrounding local authorities within the current 6.2km Zone of Influence (see below and also Epping Forest Visitor Survey 2017, Liley et al., Footprint Ecology) are planning a significant increase in housing and employment space.
- The Redbridge Local Plan 2015-2030, which incorporates most of Wanstead Flats, was formally adopted on 15 March 2018, with a commitment to deliver a minimum of 11,232 new homes from 2015-2025 (London Borough of Redbridge, 2018). The London Borough of Waltham Forest is

currently committed to provide for 27,000 additional housing units by 2035, with 18,000 of these by 2030 (London Borough of Waltham Forest Local Plan Regulation 18 Consultation July 2019).

- The London Borough of Newham estimates that under its current Local Plan which runs to 2033 that 445 residential units would be constructed as part of major developments within 3km of Epping Forest SAC (London Borough of Newham Interim Habitats Funding Statement (April 2019)).
- Outer North East London Strategic Housing Market Assessment (SHMA): The London Boroughs of Redbridge, Waltham Forest, Newham, Havering and Barking & Dagenham have cooperated in the production of the Outer North East London SHMA 2016, to assess the overall housing need for the north east London housing market. The SHMA estimated that the LBR's full objectively assessed housing need is 34,296 net additional homes between 2015-2030, more than double the number in the current Local Plan (London Borough of Redbridge, 2019). Similar disparities in housing numbers exist for other London Boroughs and there is pressure from central government to increase the number of new homes created in these London Boroughs, with a likely significant negative effect on the integrity of the Epping Forest SAC, the southern boundary of which is only around 300m north of the northern boundary of Wanstead Flats.
- Recreational Zone of Influence: Natural England, the statutory body responsible for Special Areas of Conservation (SACs), has issued an interim advice relating to the emerging strategic approach for the Epping Forest SAC Mitigation Strategy (Natural England, 2019b). This advice defines the recreational Zone of Influence (ZoI) around the boundary of Epping Forest SAC as being 6.2km, being the distance up to which more than $\frac{3}{4}$ of visitors will travel to visit Epping Forest SAC (see also the Epping Forest Visitor Survey 2017, Liley et al, Footprint Ecology).
- Epping Forest SAC Mitigation Strategy: There is an Interim Strategy which includes costed Strategic (visitor) Access Management Measures (SAMMs) prepared by the City of London Conservators of Epping Forest. This Interim Strategy was prepared by and approved by Epping Forest District Council in consultation with the wider MoU Oversight Group, which includes LB Redbridge, LB Waltham Forest, LB Newham and LB Enfield as well as the Borough of Broxbourne and Harlow District Council all of which have local governance within the ZoI area. However, it awaits formal approval by the London Boroughs and a final SAC Mitigation Strategy incorporating other mitigation measures for the SAC is still required to be completed. The interim Strategy tariffs, for housing developments for which planning permission is sought prior to the completion of the relevant Local Plan, are likely to change once the full Mitigation Strategy has been completed and costed to address outstanding matters such as air pollution impacts (Natural England, 2019b).
- Open space provision: Wanstead Flats is not within the Epping Forest SAC, but the Flats and the built-up areas surrounding it are within the 6.2km Zone of Influence. It is therefore likely that, as the London Boroughs seek to mitigate the effects of increased house-building on Epping Forest SAC, Wanstead Flats (and the adjacent Wanstead Park, which is also not within the SAC) will come under pressure to accommodate increases in visitor numbers. In this respect, Wanstead Flats may be considered as a possible suitable alternative natural green space (SANG) under any future full SAC mitigation strategy.
- Carrying capacities of Wanstead Flats: In terms of some of the wildlife of the Flats, the distribution of visitors and some activities are affecting the area's carrying capacity for biodiversity. The numbers of ground-nesting Skylarks and Meadow Pipits, for example, are affected by disturbance, particularly by dogs off leads and the numerous pathways dividing the acid grassland areas. The management of scrub and grassland, and the scrub-grass mosaic (as

indicated above) is also affected by the impact of some activities. Nutrient enrichment of some areas of grassland by dog faeces and litter is also impacting on some of the plant species. Around Alexandra Lake there is significant soil erosion. The current carrying capacity of visitors to Wanstead Flats is being overstretched with significant impacts on biodiversity and limited infrastructure to support increases in visitor numbers. Additional visitors and numbers of visits, resulting from increases in local housing numbers, is likely to be detrimental to some of the wildlife of the Flats, and in particular to the populations of Skylarks and Meadow Pipits, which are vulnerable to disturbance from people and dogs.

WANSTEAD FLATS MANAGEMENT STRATEGY

‘London’s Great Forest’, a strategy and management plan for Epping Forest 2020-2030 sets out five key strategic priorities for Epping Forest, these being:

1. A welcoming destination for all;
2. A beautiful Forest, sustaining internationally and nationally important wildlife habitats in an ancient wood-pasture mosaic;
3. An inspiring space for people’s health, recreation and enjoyment;
4. A range of special heritage landscapes which are protected and celebrated; and,
5. A resilient environment, where challenges are embraced, and opportunities explored.

Within the context of the overarching strategy and management plan for the whole of Epping Forest (above), this ISP identifies a series of local management strategy objectives for Wanstead Flats, to be implemented over the next 5-10 years (Table 1). The City of London Corporation will also discharge its obligations with respect to property management issues, as identified in this ISP.

Table 1: Management Strategy Objectives for Wanstead Flats

Wanstead Flats Management Strategy Objectives		Epping Forest Management Strategy Objectives
A	To identify a programme of conservation measures that will contribute towards improving the condition status of the Wanstead Flats SSSI, and improving the condition of the current extent of acid grassland and dependent species across the Epping Forest South SMI.	2, 5
B	To ensure that COL offers a visitor experience to Wanstead Flats that meets the needs of the communities today and into the future, in a sustainable and welcoming way.	1, 3, 4, 5
C	To finance an Infrastructure Improvement Programme from increased income generation originating from Wanstead Flats.	5
D	To further encourage existing local community involvement in the management and enhancement of the environment of Wanstead Flats.	1, 3, 4
E	To seek to mitigate the impact of additional visits from new developments within Epping Forest SAC’s Zone of Influence, through a range of measures including improved landscaping, alternative routes and destinations, alongside more and improved interpretation.	1, 2, 5

OUTLINE MANAGEMENT PROGRAMME FOR WANSTEAD FLATS

Objective	Action	Timing ¹ (ongoing/years/subject to funding)
City Corporation objectives, A, B	<p><i>Site safety</i></p> <ul style="list-style-type: none"> Continue to undertake COL statutory requirements with respect to site safety . This includes: <ul style="list-style-type: none"> Managing tree safety and Forest furniture according to relevant City Corporation Policies; and, Wildfire management, as advised by fire consultant's (2019 update) fire management strategy and plan. 	<ul style="list-style-type: none"> Ongoing
A, D, E	<p><i>Habitat Management</i></p> <ul style="list-style-type: none"> Agree a programme of conservation measures for Wanstead Flats, including management work funded through Countryside Stewardship. Key targets for the programme will include: <ul style="list-style-type: none"> No net-loss of the breeding population of Skylark and Meadow Pipits on Wanstead Flats; No net-loss of the acid grassland area, both within and outside the SSSI; Identifying options to extend and reduce the fragmentation of the areas of acid grassland; Developing an aquatic habitat management strategy and plan, including protection of the liner at Jubilee Pond and the restoration of Bandstand Pond as a wetter site; Maintaining the area of scrub to a maximum of 25% of the grassland habitat area, while ensuring retained scrub is in a favourable condition (e.g. age structure) for biodiversity; Monitor scrub to ensure acid heath of high conservation value is maintained and bird breeding areas are protected. 	<ul style="list-style-type: none"> (dates to be agreed)
City Corporation	<i>Invasive species management</i>	

¹ Ongoing = task is ongoing on cyclical basis in current management of the site, 2019 = first year of new task, subject to funding = additional funding required for task / project to be progressed

Objective	Action	Timing ¹ (ongoing/years/subject to funding)
n objectives, A, D	<ul style="list-style-type: none"> Monitor and control invasive species to ensure we meet statutory and COL agreed policies and guidelines, including: <ul style="list-style-type: none"> Oak Processionary Moth management, nest removal and awareness raising with visitors through signage and other communication methods; Management of <i>Massaria</i> disease on London Plane trees, including preparation of a consultation document on the replacement of the London Plane trees as they reach end of life; Control of <i>Crassula helmsii</i> in Alexandra pond; and Ongoing control of Canada geese on Alexandra Lake and Jubilee Pond. 	<ul style="list-style-type: none"> (dates to be agreed)
B, C, D	<p><i>Access Management</i></p> <ul style="list-style-type: none"> Develop an Access Management Plan for Wanstead Flats. Key themes for this plan include: <ul style="list-style-type: none"> Improving connectivity across the site and beyond to other parts of Epping Forest; Establishing sustainable and welcoming access points to Wanstead Flats; Protecting sensitive habitats and species; by reducing fragmentation of habitat where possible and, Responding to the projected increase in visitor numbers to Wanstead by considering a re-design/re-distribution of the main access points. 	<ul style="list-style-type: none"> (dates to be agreed)
City Corporatio n objectives, B, E	<p><i>Enforcement</i></p> <ul style="list-style-type: none"> Continue to address enforcement issues at Wanstead Flats, including: <ul style="list-style-type: none"> Working with visitors to manage issues around littering, dog control, dog-fouling, fires and alcohol consumption displaced from Town Centre Alcohol Restriction Zones; Providing interpretation on positive wildfowl feeding to reduce negative 	<ul style="list-style-type: none"> Ongoing 2021

Objective	Action	Timing ¹ (ongoing/years/subject to funding)
	<ul style="list-style-type: none"> impacts and encouraging tenants to sell floating wildfowl food; Working with MPS, LBWF and St Mungo's Trust on No Second Night Out (NSNO) ambitions for rough sleepers; Working with MPS, LBWF & LGBT Groups to monitor the use of the Public Sex Environment (PSE). 	<ul style="list-style-type: none"> 2022 Ongoing
A, B, C, D, E	<p>Resourcing</p> <ul style="list-style-type: none"> Develop an Investment Resourcing Plan for Wanstead Flats. To achieve the required site investment, key aspects of the Plan will include: <ul style="list-style-type: none"> Identifying investment needs; Identifying potential on-site income generation; Exploring opportunities for external grant funding, e.g. Countryside Stewardship and Parklife; Identifying income opportunities arising from the Epping Forest Mitigation Strategy resulting from the emerging Local Authority Local Plans; and, Identifying potential community support opportunities. 	<ul style="list-style-type: none"> (dates to be agreed)
B, D, E	<p>Community</p> <ul style="list-style-type: none"> Develop a Community Engagement Plan for Wanstead Flats (or potentially the wider Leyton Flats, Wanstead Park and Wanstead Flats area), in line with the Community Planning Toolkit (https://www.communityplanningtoolkit.org/). Key aspects of the Plan will include: <ul style="list-style-type: none"> Facilitating local community involvement in the management and future development of Wanstead Flats; Identifying community measures to reduce anti-social behaviour on parts of Wanstead Flats, in conjunction with habitat management works; and 	<ul style="list-style-type: none"> (dates to be agreed)

Objective	Action	Timing ¹ (ongoing/years/subject to funding)
	<ul style="list-style-type: none"> Improving communications with existing and future tenants and long-term licence holders. Ensuring that the conservation scrub management map links with objectives relating to the reduction in fire risk, anti-social behaviour and the existing Scrub Operations Management Plan for Wanstead Flats (COL, 2018). 	
B, D	<p><i>Heritage</i></p> <ul style="list-style-type: none"> Continue to explain the heritage of the site through interpretation and signage, linking heritage with the natural aspect; Enable and facilitate the local history group (Leyton and Leytonstone Historical Society) in their production of local history publications; Review the long-term future of the London Plane avenues and develop proposals for the future management of these avenues. 	<i>(dates to be agreed)</i>
B, C, D	<p><i>Sports Provision</i></p> <ul style="list-style-type: none"> Work within the City of London Sports Strategy and Open Spaces Sports Framework to continue to deliver football, sports events and other recreation on Wanstead Flats; and, Investigate projects and initiatives that will help deliver sport with greater financial sustainability as well as helping to provide for latent recreational needs such as toilets and refreshment. 	<i>(dates to be agreed)</i>

POTENTIAL ENHANCEMENT PROJECTS REQUIRING EXTERNAL ADDITIONAL SUPPORT & RESOURCES

- Visitor access infrastructure: Unquantified at present is the long-term development of the visitor access infrastructure to meet changing community needs, linked to future substantial development in the area. Works arising from such developments does not form part of the current site expenditure and additional funding will need to be identified to progress any changes and to develop plans and mitigation proposals.

- Water quality management: The successful management of invasive species in Alexandra Lake does not form part of the current site expenditure and additional funding will need to be identified to progress any changes
- Pond Liner protection: Work to protect the pond liner at Jubilee pond are increasingly urgent and do not form part of the current site expenditure and additional funding will need to be identified to progress any changes
- Species recovery: The Creeping Willow and Skylark projects are potential community-based projects.
- Ancient tree management: A survey of ancient / veteran trees on the Flats could be undertaken by a community partner.
- Litter Management: Residents already support litter management in a significant way and extending and continuing their involvement will be essential to manage the litter at the Flats.

EXTERNAL OPERATIONAL STAKEHOLDERS

See Appendix 4

GLOSSARY OF TERMS AND ACRONYMS

Term / Acronym	Definition
Acid grassland	Nutrient poor acidic soils and grassy-mossy vegetation, including sheep's sorrel, tormentil, heath bedstraw, wavy hair-grass and sheep's-fescue. Heathers, such as ling, bell heather and cross-leaved heather, may also be present, and the grassland may be a mosaic of herbs and shrubs.
ACPO	Association of Chief Police Officers (replaced in 2015 by NPCC)
APA	Archaeological Priority Area
Barts Health NHS Trust	A NHS Trust responsible for five hospitals, including Whipps Cross University Hospital in Leytonstone
BGA	Blue-green algae
BSE	Bovine Spongiform Encephalopathy
Chalybeat spring	Also known as a ferruginous spring, is a mineral spring containing salts of iron
COL	City of London Corporation
EA	Environment Agency
EF	Epping Forest
Flats	An area of land with a relatively level surface compared to the surrounding, more undulating or hilly areas.
FORA	Forest Residents Association
Gravel workings	An area using for the extraction of gravel, often in a river valley where the water table is high, so that they may naturally fill with water to form ponds or lakes

Term / Acronym	Definition
High risk	In the context of the Flood and Water Management Act 2010, the Environment Agency classifies water bodies as being 'high risk' if an uncontrolled release of water could result in loss of life.
HLF	Heritage Lottery Fund
HMCTS	Her Majesty's Court and Tribunal Service
ISP	Individual Site Plan
Large raised reservoir	In the context of the Reservoirs Act 1975, a water body is classified as a large raised reservoir if it impounds more than 25,000 cubic metres of water
LBR	London Borough of Redbridge
LBWF	London Borough of Waltham Forest
LGBT	Lesbian, Gay, Bi and Transgender
LIGS	Locally Important Geological Site
MPS	Metropolitan Police Service
NE	Natural England
NPCC	National Police Chiefs' Council (replaced ACPO in 2015)
NSNO	'No Second Night Out' (Mayor London initiative)
OPM	Oak Processionary Moth
PDN	Policy Development Note
PSE	Public Sex Environment
SAC	Special Area of Conservation (European designation)
SMI	Site of Metropolitan Importance – the best wildlife sites in London, as designated in the London Plan (2016)
SSSI	Site of Special Scientific Interest (UK designation)
TfL	Transport for London
Wood pasture	An area that has been management by a long-established tradition of grazing, allowing the survival of multiple generations of trees, characteristically with some veteran/ancient trees

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APPENDICES

1. Detailed Activity Plan
2. Amphibian survey results and management recommendations
3. Jubilee Pond liner specifications
4. Community involvement with Wanstead Flats
5. Figures

APPENDIX 1: Detailed Operational Activity Plan

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
AW – Anti-social Behaviour Management	38	Wanstead Flats		2020		1	Litter Management: Review community and COL litter management and liaise with local stakeholders on developing proposals for improving litter management across the Flats	S	VOL/K
AW – Anti-social Behaviour Management	38	Wanstead Flats		2020		1	Public Sex Environment (PSE) management: Continue ongoing collaborative working with PSE stakeholders on the management of PSE issues	S	K
AW – Anti-social Behaviour Management	38	Wanstead Flats		2020		1	Rough Sleeper management: Continue ongoing collaborative working with rough sleeping stakeholders on the management of rough sleeping issues	S	K
AW - Pedestrian access infrastructure	38	Wanstead Flats		2021		0	Access Improvement: Define clearly through vegetation management and signage the strategic N/S Forest access route and local links to Wanstead Park and Leyton Flats		HOP/HVS
AW - Pedestrian access maintenance	38	Wanstead Flats:	Jun	2020		1	Forest Furniture Management: Cut back all ground and arborial vegetation that would impede the visual impact of Gateway and welcome signs.	S	M
AW - Pedestrian access maintenance	38	Wanstead Flats	July	2020		1	Path Management: Ensure all mapped paths meet the Path Maintenance specification	S	Con
AW - Pedestrian access maintenance	38	Wanstead Flats	May	2020		1	Path Management: Ensure all mapped paths meet the Path Maintenance specification	S	Con
LAW - Avenues	38	Wanstead Flats: Plane tree avenues	Sept	2024		0	Tree Avenue: Audit the condition of the London Plane (<i>Platanus x acerifolia</i>) avenues and identify improvement needs	S	Con

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
							and the mechanism to progress these.		
NWH - Grass cutting	38	Manor Park	Early July	2019	5.84		Grassland Management: Cut and collect grass and herbaceous vegetation. Cut as hard into the edges of the site as practical to reduce roadside scrub cover as part of antisocial behaviour management.	S	Con
NWH - Grass cutting	38	Wanstead Flats: SSSI area	Sep	2019	2.6	1	Grassland Management: Cut and collect grass and regrowth including broom. (Cut area to be reviewed 2020)	S	G
NWH - Grass cutting	38	Wanstead Flats	Sep	2019	23	1	Grassland Management: Cut and collect grass and regrowth on non-SSSI areas. Cutting is on a rotation.	S	G
NWH - Grass cutting	38	Bush Wood: Flats and Lime avenue	Aug	2020	1.52	1	Grassland Management: Cut and collect grass from the mapped area including under the Lime avenue and behind the school	S	Con
NWH - Grass cutting	38	Bush Wood North (Green Man)	Aug	2020	0.85	1	Grassland Management: Cut and collect grass from the mapped area.	S	Con
NWH - Grass cutting	38	Bushwood: Quaker meeting house	May	2020	1	1	Grassland Management: Cut and collect grass, bramble and herbaceous vegetation.	S	G
NWH - Maintenance work	38	Wanstead Flats	Oct	2020		1	Grassland Management: On three-year rotation cut and remove coarse grass areas and broom clumps.	S	G
NWH - Maintenance work	38	Wanstead Flats: Creeping Willow stands		2020		0	Survey and monitoring: Map and assess management needs of Creeping Willow stands across the Flats.	S	VOL/HOC
NWH - Pest and disease management	38	Wanstead Flats: Skylark & Meadow Pipit area		2020		1	Pest Control: Rat control undertaken to reduce the population during the season when birds ground nesting. Objective is to reduce predation on birds,	S	Con

Wanstead Flats

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
							especially Skylark & Meadow Pipit, eggs and chicks		
NWH - Pest and disease management	38	Wanstead Flats: Skylark & Meadow Pipit area		2020		1	Pest Control: Site monitoring for active rat populations in the nesting zone.	S	Vol
NWH - Water body management	38	Wanstead Flats: SSSI area	Dec	2020		1	Ditch management: Annual cut and removal of bramble and woody vegetation in the ditch on the SW corner of the SSSI to favour development of damp herbaceous vegetation. Possible volunteer task	S	G/Vol
NWH - Water body management	38	Wanstead Flats: SSSI area	Dec	2020		0	Ditch management: Initial cut back of the bramble and woody vegetation in the ditch on the SW corner of the SSSI. Future management to favour development of damp herbaceous vegetation	S	G/Vol
NWH - Water body management	38	Wanstead Flats: All ponds		2022		0	Invasive non-native species management: Agree a plan to reduce/remove the risk of <i>Crassula helmsii</i> being able to spread from Alexandra Lake to other ponds on Wanstead Flats	S	HOP
NWH - Water body management	38	Wanstead Flats: Jubilee Pond		2020		0	Planning: Prepare costed proposals for safeguarding the pond liner, including actions to protect the pond margin.	S	HOP/CS
OC- External Advisory	38	Wanstead Flats: Aldersbrook Road yard	Dec	2024		0	Survey and Monitoring: Two buildings are purported to be relicts from World War II. A survey and report will be commissioned to verify the history of these two buildings.		Con
OC- Internal Advisory	38	Wanstead Flats		2021		0	Planning - Community Engagement Plan: Develop a Community Engagement Plan for Wanstead Flats	S	HOP/HVS

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
							as part of a wider Southern EF Community Engagement Plan.		
OC- Internal Advisory	38	Wanstead Flats: Access Management Plan		2022		0	Planning: Prepare an Access Management Plan to improve the welcoming and positive feel at site entrances and reduce the visitor impact on sensitive habitats.		HOP/HVS
OC- Internal Advisory	38	Wanstead Flats		2025		0	Planning: Develop interpretation information on the history and cultural heritage of Wanstead Flats. Ensure that heritage information is linked with information on the natural aspect of Wanstead Flats	S	HVS
OC- Internal Advisory	38	Wanstead Flats		2025		0	Planning: Facilitate local community involvement in disseminating heritage information to visitors		HVS
OC- Internal Advisory	38	Wanstead Flats: Access Management Plan		2022		0	Planning: Identify and cost access improvement investment needs as part of the Access Management Plan	S	HOP/HVS
OC- Internal Advisory	38	Wanstead Flats: Access Management Plan		2022		0	Planning: Identify potential on-site income generation including grant aid and commercial licences		HOP/HVS
OC- Internal Advisory	38	Wanstead Flats		2021		0	Planning: Prepare a Resourcing Plan for Wanstead Flats including, income opportunities arising from the Epping Forest Mitigation Strategy and potential community support opportunities		HOP/HVS
OC- Internal Advisory	38	Wanstead Flats: Skylark & Meadow Pipit area	Oct	2020		0	Planning: Prepare costed Species Recovery Plan for improving the success rate of nesting Skylark (& Meadow Pipit,) including nest predation reduction and reducing disturbance.	S	HOP/HOC/ K/Vol

Wanstead Flats

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
OC- Internal Advisory	38	Wanstead Flats: SSSI Grassland		2020		0	Planning: Prepare SSSI grassland management proposals to ensure no net loss of acid grassland, link to CSS proposals	S	HOC
OC- Internal Advisory	38	Wanstead Flats: Becton Desalination Pipeline	Dec	2021		0	Planning: Review maintenance commitments regarding the pipeline. Can these works better align to EF conservation and visitor management needs?	S	HOP/HOC
OC- Internal Advisory	38	Wanstead Flats: Scrub areas		2025		0	Survey and monitoring: Review scrub management and assess whether the abundance, composition, location and age structure is inline with current scrub management guidelines.	S	HOC
SL – Fire Safety Management	38	Wanstead Flats: fire breaks.	Jun	2020		1	Fire Management: Cut and leave grass vegetation along fire breaks. Total of 3500m of cuts at 6m wide cut (See Map ?). (May need to cut and collect if delayed and conditions give rise for concern)	S	Con
SL – Fire Safety Management	38	Wanstead Flats: fire breaks.	July	2020		1	Fire Management: Cut and leave grass vegetation along fire breaks. Total of 3500m of cuts at 6m wide cut (See Map ?). (May need to cut and collect if delayed and conditions give rise for concern)	S	Con
SL – Fire Safety Management	38	Wanstead Flats: fire breaks.	Aug	2020		1	Fire Management: Cut and leave grass vegetation along fire breaks. Total of 3500m of cuts at 6m wide cut (See Map ?). (May need to cut and collect if delayed and conditions give rise for concern)	S	Con
SL – Fire Safety Management	38	Wanstead Flats	Nov	2020		3	Fire Management: Three yearly programme to cut or mulch mature gorse to reduce the fuel available for fires. Arisings to be chipped and left on site on coarse vegetation areas	S	G/A

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
							and away from acid grassland.		
SL-Anti-social behaviour management	38	Wanstead Flats: Jubilee Pond	Nov	2020	0.97	1	Grassland Management: Cut and leave bramble and stump regrowth along roadside edge to keep the understorey open and scrub free to deter rough sleepers and anti-social behaviour.	S	G
SL-Anti-social behaviour management	38	Wanstead Flats: Harrow Road changing Room	Sept	2020	0.25	1	Grassland Management: Cut and leave bramble and stump regrowth to keep the understorey open and scrub free to deter rough sleepers and anti-social behaviour.	S	G
SL-Anti-social behaviour management	38	Wanstead Flats: Jubilee Pond	Jun	2020		1	Grassland Management: Cut and leave cut the open ground around the pond and along the roadside beneath the Plane trees. High public access and need for caution.	S	M
SL-Anti-social behaviour management	38	Wanstead Flats: Centre Road/Sidney Road	Aug	2020	1.41	1	Grassland management: Cut and leave woody and herbaceous vegetation to leave site open to deter anti-social behaviour.	S	G
SL-Anti-social behaviour management	38	Wanstead Flats	Apr	2020		0	Survey and Monitoring: Prepare vegetation management work maps for antisocial behaviour work areas	S	HOP
SL-Ditch and culvert maintenance	38	Wanstead Flats: Jubilee Pond	Dec	2021		0	Ditch Management: Develop and agree plan with City Surveyors for desilting the lake outfall ditch passing through the Cemetery	S	HOP/CS
SL-Ditch and culvert maintenance	38	Wanstead Flats: Alexandra Lake	Dec	2020		0	Ditch Management: Develop and agree plan with City Surveyors for replacing the pond outfall ditch across the Festival Site. Ditch is currently collapsing and	S	HOP/CS

Wanstead Flats

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
							relatively shallow. Proposed outfall location is Bandstand pond.		
SL-Highway verge management	38	Wanstead Flats: Capel Road/Bandstand pond	Jun	2020		1	Highway Verge Management: Cut and leave the regrowth on the road side bund to keep the sightline open	S	M
SL-Highway verge management	38	Wanstead Flats: Capel Road/Bandstand pond	Nov	2020	1.4	1	Highway Verge management: Cut and leave woody vegetation along the roadside and in the site corner to open up sight lines and to stop it forming woodland. Problem with close parked vehicles and need to be careful with flying debris	S	G
SL-Highway verge management	38	Wanstead Flats:	July	2020		1	Highway Verge Management: Cut sightlines as detailed in the High Way verge PDN	S	A
SL-Highway verge management	38	Wanstead Flats:	Aug	2020		1	Highway Verge Management: Verge cutting undertaken as detailed in the Highway verge PDN.	S	Con
WMM - Ancient tree management	38	Wanstead Flats: Evelyn Avenue		2022		0	Survey and monitoring: Audit of the veteran trees present on Wanstead Flats, including GPS location and condition assessment and inclusion in the COL Veteran Tree Database	S	Vol
WMM - Pest and disease management	38	Wanstead Flats: All ponds		2020		1	Invasive non-native species management: Canada Goose control through humane egg control.	S	K/Vol
WMM - Pest and disease management	38	Wanstead Flats	Apr	2020		1	Invasive non-native species management: Monitoring and control of Oak Processionary Moth (OPM) in line with Forestry Commission guidance.	S	A/C

APPENDIX 2: Amphibian Survey Results and Management Recommendations

Catherine Bickmore Associates was commissioned on behalf of City Corporation to undertake an amphibian survey of the ponds and lakes of Epping Forest (Catherine Bickmore Associates, 2014). The first objective of the study was to categorise the ponds in terms of importance for amphibians with particular reference to great crested newt. The second was to categorise the ponds according to management priority, with recommendations for management actions for amphibians.

Table D/1: Summary of results of pond survey for amphibians and management recommendations

Waterbody name	HIS (Habitat Suitability Index)	Invasive non-native species	Fish present (in 2013) (Y/N)	Other factors affecting suitability	Designation	Amphibians recorded	Importance for amphibians	Priority for management	Management recommendations (Catherine Bickmore Associates, 2014)
Alexandra Lake	0.27	<i>Crassula helmsii</i>	Y	None	Y (SSSI and SAC)	Common Toad, Smooth Newt, Common Frog	Medium	Medium	Implement management to eradicate <i>Crassula helmsii</i> , protect areas to encourage macrophyte growth.
Jubilee Pond	No data – not surveyed in 2013 by Catherine Bickmore Associates (2014) – pond was being relined at the time								

APPENDIX 3: Jubilee Pond Liner Specifications

Appendix Three: *Reshaping and installation of new waterproof lake liner*

Completion Date: *June 2013*

Overview

Jubilee Pond is situated on Wanstead Flats, East London in the area of land between Dames Road, Centre Road and Lake House Road. The pond has existed for many years and more recently was lined unsuccessfully with a clay material.

Shape

The existing clay was excavated and removed from the pond where necessary and the slopes improved to create a 1:3 or less in all areas, including the three islands. Generally the original pond shape has been retained. All excavated material was buried in the ground adjacent to the pond.

Waterproofing

A new waterproof liner has been installed to retain the original form of the pond, with a few minor alterations to the shape and contours. The pond has a maximum depth of 2.5 metres. The pond has been waterproofed with approximately 12,000 sqm of Firestone EPDM 1.2m Geomembrane, protected on either side with Bontec 300g/sq.m non-woven geotextile. The geomembrane has been jointed in accordance with manufacturers' guideline including pipe penetrations, the positions of which are indicated on drawing no: 0096E/AB/01. Gravel excavated from the adjacent borrow pit was used to surcharge the new membrane.

Under Liner Drain

In the deeper sections, adjacent to Lakehouse road, a drain consisting of 20mm clean stone has been set into the base of the pond. This leads to a 110mm diameter collection pipe which extends out of the deep area, below ground to a vertical 450mm chamber. This extends to the surface and terminates in a 450x600mm pre-cast concrete access chamber covered with a screw galvanised steel lid. This has been installed to allow for pumping of ground water in the event that levels rise and for use to control ground water should the lake ever require re-lining in the future.

Water Feed

The pond is fed from the existing bore-hole supply via a 50mm MDPE pipe which enters the pond through a small headwall. Next to this headwall is a second headwall containing a 110mm pipe which extends back into the bank to an existing balance chamber. Within the chamber is a probe that automatically shuts off the water feed in the event of over-filling.

Road Drainage

Two 225mm diameter twin wall pipes enter from the direction of Lakehouse Road. These are connected to two existing old clay drain pipes roughly 6 metres back from the pond edge and bring surface water into the pond from Lakehouse Road.

Islands

All three islands feature a perimeter fence just behind the anchor trench. The purpose of the fence is to deter wildfowl from moving in and out of the water to the islands. The fence consists of 100mm half round tantalised timber rails held in place with 100x100mm square tantalised posts. These are held together with galvanised screws and feature an intermediate galvanised wire strand.

Dipping Platform

A 6 x 3m galvanised steel framed cantilevered dipping platform has been designed and installed by Groundsund. The structural calculations for this are included in the Health and Safety File. The unit is held in place by specialist ground anchors, driven directly into the ground outside of the pond. Timber cladding of the structure has been undertaken by others post construction.

Oil/Water Separator and Land Drainage

A Kingspan NSBP class 1 bypass oil/water separator is buried adjacent to the outlet and dipping platform at the south eastern corner of the pond. The inlet for the interceptor takes water from approximately 2000m of land drainage on Wanstead flats and delivers it via a 160mm pipe which enters the pond adjacent to the outlet chamber. The land drain consists of a central 150mm diameter pipe with 100mm diameter laterals; all bedded and surrounded with 20mm clean stone.

Top-up

Replenishing water lost through evaporation and evapotranspiration is achieved by means of a remote switch operated by the City of London. When activated water is pumped from the existing borehole adjacent to the pond. It discharges via a 50mm MDPE pipe and plate headwall into the pond for a specified amount of time which is governed by an Environment Agency abstraction licence. The existing chamber features a new high level probe which is designed to automatically turn off the water supply in the event of an accidental overflow.

Flood Control

Water leaves the pond from the existing 450mm diameter overflow pipe in the south eastern corner of the pond. Water level is defined by means of oak timber boards and a galvanised steel frame held in the existing pre-cast concrete box chamber.

Erosion Control

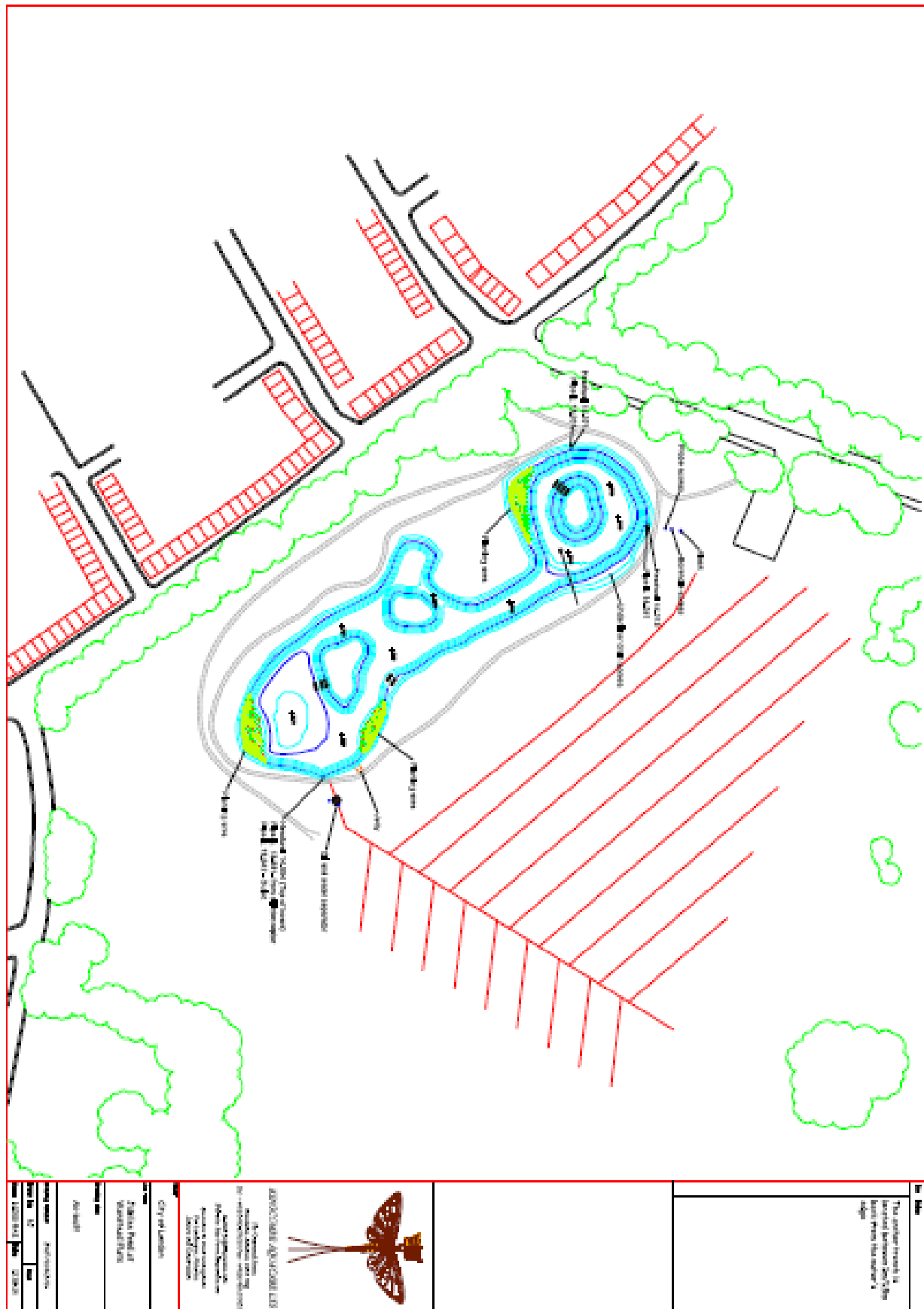
The perimeter of the pond features a geogrid plastic reinforcement mesh to help reduce erosion caused by wildfowl. One end is anchored in the perimeter trench and the other is buried in the surcharge material on the downslope.


Operation and Maintenance

Jubilee Pond has no physical operational requirement, as it is a standing body of water. However, there are various maintenance tasks that should be undertaken regularly. These are:

1. Check all grilles are clear of blockage and remove floating litter with a net or rake to help prevent future blockages;
2. Check weir boards have not been tampered with;
3. Check safety signage (and equipment) is in good order and replace if missing or defaced;
4. As the aquatic plants become established, they will need to be managed by cutting them back annually, normally in the autumn. This can be augmented with applications of an appropriate herbicide, suitable for use in and around water. Prior consent will be required from the Environment Agency to apply herbicide in or around water.
5. Inspect the pond for the presence of invasive weeds. These include:
 - a. Australian Swamp Stonecrop (*Crassula helmsii*)
 - b. Parrots Feather (*Myriophyllum aquaticum*)
 - c. Floating Pennywort (*Hydrocotyle ranunculoides*)
 - d. Creeping Water Primrose (*Ludwigia grandiflora*)
 - e. Water Fern (*Azolla filiculoides*)
 - f. Himalayan Balsam (*Impatiens glandulifera*)
 - g. Japanese Knotweed (*Fallopia japonica*)
6. The following plants should also be avoided as they have particularly invasive root systems that have the potential to damage the waterproof membrane:
 - a. Norfolk reed (*Phragmites australis* of *P communis*)
 - b. Galingale (*Cyperus longus*)
 - c. Reedmace (*Typha latifolia*)
7. Control vermin: It is recommended a professional company keeps the rat population around Jubilee pond under control. Rats have the potential to damage the waterproof membrane if left uncontrolled.
8. Control of Canada Geese: It is recommended that the number of Canada Geese is controlled and a programme put in place to stop them from breeding and raising young at Jubilee Pond. It is very difficult to establish grass and aquatic plants when large numbers of geese are present. They cause bank erosion and compound the problem by eating young plants so they cannot establish. This has a negative effect on biodiversity and encourages growth of algae.
9. Annual electrical safety checks to be undertaken by a qualified electrician. Check operation and electrical safety of borehole pump.

Map of the Pond and drainage system as built





Firestone

BUILDING PRODUCTS

NOBODY COVERS YOU BETTER.®

Warranty # EW-GEO 13-267	FBPCO # 13-267	Project Size 12 000 m ²
Project Owner :	City of London	
Project Identification :	Jubilee Pond	
Project Address :	Dames Road, Forest Gate	
	London	
	United Kingdom	
Installing Contractor :	Kingcombe Aquacare Ltd	
System Description :	Firestone Geomembrane™ EPDM 1.1 mm	

Firestone Building Products Europe Inc. ("Firestone") hereby warrants to the Project Owner ("Owner") that the Firestone Geomembrane™ EPDM lining membrane is free from latent material or manufacturing defects for a period of twenty (20) years.

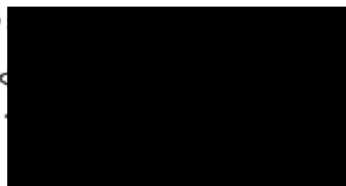
In the event any leak should be discovered in the membrane, the Owner must give written notice to Firestone within thirty (30) days if deterioration of the membrane is suspected as the cause of the leak. By so notifying Firestone, the Owner authorizes Firestone or its designee to promptly inspect the project installation to determine the cause of same. In the event that Firestone reasonably determines that deterioration due to defect in material or manufacturing workmanship has in fact occurred, Firestone shall at its sole option either provide repair materials for the original sheet material or a credit to be applied towards the purchase of new sheet material.

Firestone shall have no obligation under this warranty, or any other liability, now or in the future if a leak or damage is caused by: (a) natural forces, disasters, or acts of God including, but not limited to winds, hurricanes, fires, tornadoes, hail, wind-blown debris, lightning, earthquakes, volcanic activity, (b) insects or animals, (c) negligence, abuse, vandalism, repairs or alterations or attachments or additions to the project, or war or civil disobedience (d) and/or does not directly arise from any defect in material or manufacturing workmanship.

Firestone shall have no obligation under this warranty until Firestone, the Installing Contractor, and material suppliers have been paid in full for all materials, installation, supplies and service, which are included in the project contract.

This is the entire warranty covering the Firestone Geomembrane™ EPDM lining membrane. There are no other guarantees or warranties expressed or implied.

FIRESTONE BUILDING PRODUCTS EUROPE, INC.

By 

Dated : 28-06-2013

R17204K0308-10/12

APPENDIX 4: Community Involvement with Wanstead Flats

Charities and community groups

There is a strong tradition of community involvement with Wanstead Flats. A summary of the most active community groups and charities involved with Wanstead Flats is provided below:

- Wren Conservation Group (<https://www.wrengroup.org.uk/home-page/>): This community group exists to further learning and wildlife conservation in East London, centred on Wanstead Park (Epping Forest land), but also including Wanstead Flats. The Wren Conservation Group also undertake wildlife surveys and practical conservation work, and organise local walks. The group is affiliated to the London Natural History Society.
- Wanstead Birding (<http://wansteadbirding.blogspot.com/>): A community group who conduct regular bird surveys on Wanstead Flats and Wanstead Park, compiling species and sightings lists.
- Leyton and Leytonstone Historical Society (<http://www.leytonhistorysociety.org.uk/>): The society exists to research and promote interest in and knowledge of the history of the area of the former Borough of Leyton and its surroundings. The society has published five booklets on the history of Wanstead Flats, as well as three guided walks booklets.
- Friends of Wanstead Parkland (<http://www.wansteadpark.org.uk/>): This community group exists to promote the use of Wanstead Park for the benefit of local residents, to provide and assist in the provision of facilities and opportunities for recreation for visitors, to promote the conservation of the physical and natural environment of the historic Wanstead Park, and to advance public education in the character, archaeology and history of Wanstead Park. The remit of the Friends of Wanstead Park therefore includes parts of Wanstead Flats, as Bush Wood and the avenues on Bush Wood Flats are remnants of the historic Grade II* Wanstead Park.
- London Playing Fields Foundation (<https://lpff.org.uk/>): The London Playing Fields Foundation is London's leading charitable body for the protection, provision and promotion of playing fields in London, which was established in 1890 when it laid the first football pitches on Wanstead Flats. It works with partners such as the Corporation of London to 'stimulate demand for playing fields and address barriers to participation, such as accessibility, cost, quality, transport and lack of joined up thinking'.
- Football Foundation (<https://www.footballfoundation.org.uk/>): The Football Foundation is the UK's largest sports' charity. Funded by the Premier League, The Football Association and the Government, the Foundation directs £60m every year into grass-roots sport. Its mission is to improve facilities, create opportunities and build communities throughout England. The Harrow Road changing facilities were redeveloped in 2009 with £1.4m from the Football Foundation, London Marathon Charitable Trust and the Corporation of London.
- Bush Wood Residents Association (<http://www.bara.london/>) Based in Leytonstone, East London, E11, it was formed way back in 1979 and now has over 500 member households. BARA encourages community spirit, looks after the environment and supports local amenities for the benefit of all our members.
- Lakehouse Road Association

Long-standing annual licence holders

Each year, numerous licences are granted to individuals and businesses to operate on Wanstead Flats, the majority of which are one-off. However, there are a small number of long-term licence holders who have

renewed their licence annually for a number of years, and who therefore have an ongoing business interest in the site:

- Wanstead Model Flying Club (<http://wansteadmodelflying.club/>): The Wanstead Model Flying Club is a long-established model flying club based in east London, whose outdoor flying site is located on Wanstead Flats north of the Centre Road car park. The pits area (with private parking) is accessed through the public car park on Centre Road. Flying is permitted from 10.30am till dusk on weekdays (excluding Thursdays) and from 1pm till dusk at weekends.
- Wanstead Flats Parkrun (<https://www.parkrun.org.uk/wansteadflats/>): Parkrun, a volunteer-led charity, organises a free weekly, timed 5km run on Wanstead Flat, with a current average of 242 attendees per week, though the largest attendance recorded at one session to date (1.1.2019) is 359.
- Royal Pigeon Racing Association (<https://www.rpra.org/>): The Association applies for a licence from COL on a yearly basis to release pigeons on Wanstead Flats for the purpose of racing several times a year. The pigeons are usually released from the Fairground site.
- Wanstead Flats Forest School (<https://wansteadflatsforestschool.wordpress.com/>): Wanstead Flats Forest School is a member of the Forest School Association and offers Forest School sessions to babies, toddlers, children and their parents/carers on Wanstead Flats. Their activities are licensed by COL on a yearly basis.
- Be Military Fit (<https://en-gb.facebook.com/pg/LondonWansteadFlats/about/>): Be Military Fit hold a licence, renewed annually, to run three fitness sessions a week on Wanstead Flats.

Football-related organisations and grant programmes

- Parklife grant programme (<https://www.sportengland.org/funding/parklife/>): The Football Association (<http://www.thefa.com/>), the Premier League and Sport England (<https://www.sportengland.org/>) have developed the Parklife Football Hubs Programme, administered by the Football Foundation, to target areas where pressures on the local game are greatest. The Parklife Vision is ‘to create multi-pitch artificial grass football hubs across England’s major towns and cities, where the need for good quality pitches is greatest, creating a passion and interest in football that lasts a lifetime’.
- 32 Borough Cup: Organised for the first time in summer 2019 by Hackney Wick FC, a two-day tournament on Wanstead Flats aimed at bringing young people together from 32 youth teams across London. The aim of the tournament was ‘to highlight to young people that they are one and the same, and that gang rivalry has to stop’. The organisers wanted ‘to make London feel fluid, with no restrictions on where a young person can travel’. The tournament was a huge success, with a large number of attendees.
- Lovefootball Festival and Inner City World Cup: The Lovefootball Festival has hosted the prestigious Inner City World Cup since 1994, which is a replica World Cup with 32 teams made up from multicultural inner-city communities representing their country of origin in their full national colours. The hugely successful Festival was held at Wanstead Flats over two days in May 2019, with large numbers of attendees.

Local Football Leagues and Clubs associated with Wanstead Flats

AFC Woodford

Alpha FC

Asianos Reserves

Blackwell Rovers FC

Community Football League (London)

Cowley Boys

East London & Essex (ELE) Junior Football League

East London Ladies FC

Eastern Avenue FC

Ilford and District Churches Football League

Kick London Forest Gate Football Academy

Loxford Lions

Lymore Gardens

Newham Wanderers

North East London & Essex Churches Football League (NEL&ECFL)

Peter Hucker Soccer School

Prospect Protégé

Prostar (Youth) FC

R77

Rippleway FC

Senrab FC

St Francis

Wanstead Albion

APPENDIX 5: Figures

Figure 1: Wanstead Flats – named locations

Figure 2: Indicative management plan for Wanstead Flats

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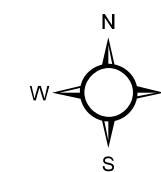
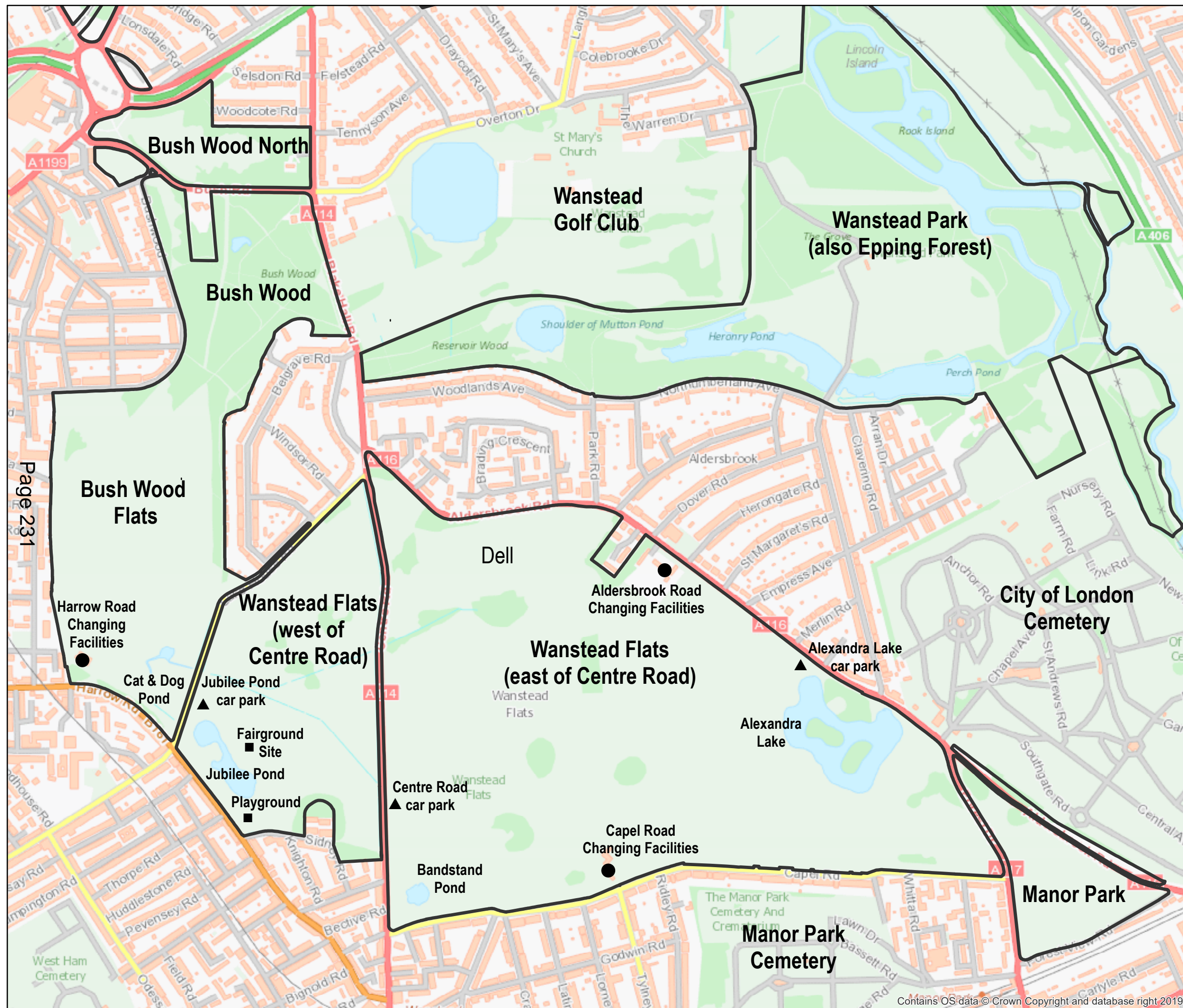


Figure 1
Wanstead Flats:
Locations of named
areas within
and around
Wanstead Flats

~ Epping Forest boundary

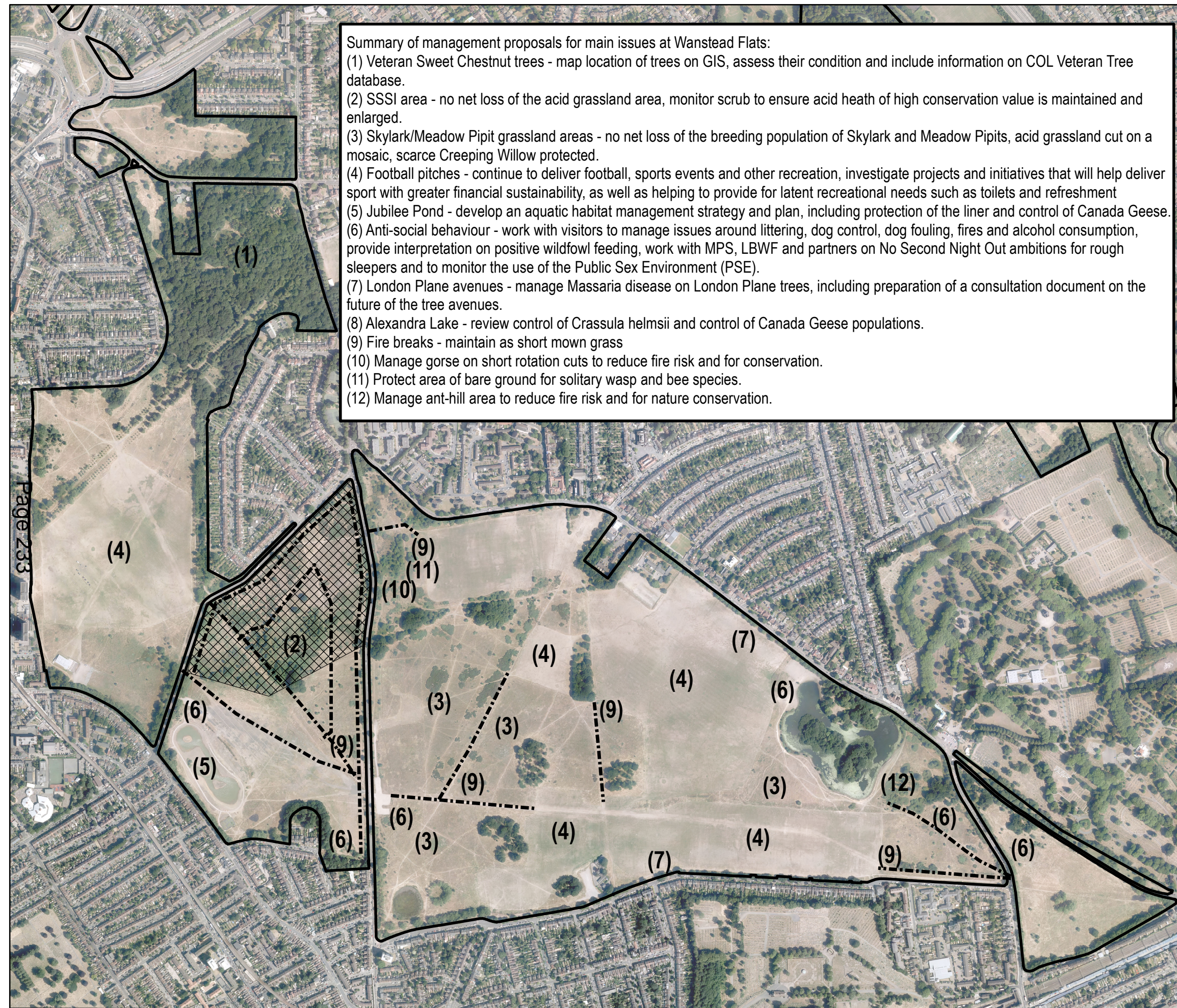
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 Management Planning Assistant

Date Created:
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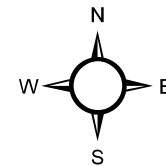
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- Summary of management proposals for main issues at Wanstead Flats:
- (1) Veteran Sweet Chestnut trees - map location of trees on GIS, assess their condition and include information on COL Veteran Tree database.
 - (2) SSSI area - no net loss of the acid grassland area, monitor scrub to ensure acid heath of high conservation value is maintained and enlarged.
 - (3) Skylark/Meadow Pipit grassland areas - no net loss of the breeding population of Skylark and Meadow Pipits, acid grassland cut on a mosaic, scarce Creeping Willow protected.
 - (4) Football pitches - continue to deliver football, sports events and other recreation, investigate projects and initiatives that will help deliver sport with greater financial sustainability, as well as helping to provide for latent recreational needs such as toilets and refreshment
 - (5) Jubilee Pond - develop an aquatic habitat management strategy and plan, including protection of the liner and control of Canada Geese.
 - (6) Anti-social behaviour - work with visitors to manage issues around littering, dog control, dog fouling, fires and alcohol consumption, provide interpretation on positive wildfowl feeding, work with MPS, LBWF and partners on No Second Night Out ambitions for rough sleepers and to monitor the use of the Public Sex Environment (PSE).
 - (7) London Plane avenues - manage Massaria disease on London Plane trees, including preparation of a consultation document on the future of the tree avenues.
 - (8) Alexandra Lake - review control of Crassula helmsii and control of Canada Geese populations.
 - (9) Fire breaks - maintain as short mown grass
 - (10) Manage gorse on short rotation cuts to reduce fire risk and for conservation.
 - (11) Protect area of bare ground for solitary wasp and bee species.
 - (12) Manage ant-hill area to reduce fire risk and for nature conservation.



**Figure 2: Wanstead Flats
Summary Management Proposals**

Themes for Wanstead Flats:

- 1) Continue to undertake COL statutory requirements
- 2) Implement mitigation strategy (externally funded) for SAC buffer land
- 3) Seek to improve conservation condition of the SSSI
- 4) Develop an Access Management Plan
- 5) Continue to address enforcement issues
- 6) Develop an Investment Resourcing Plan
- 7) Develop a Community Engagement Plan
- 8) Develop a Heritage Statement for the site

Created by:
Management Planning Assistant

Date Created:
24 Feb 2020

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Committee(s)	Dated:
Epping Forest Consultative – For Consultation Epping Forest and Commons – For Decision	29 January 2020 10 March 2020
Subject: Epping Forest Work Programme for 2020/2021 SEF 04/20b	Public
Report of: Colin Buttery, Director of Open Spaces	For Decision
Report authors: Geoff Sinclair and Jeremy Dagley, Epping Forest	

Summary

The work described in this report covers a large number of the 38 Forest compartments.

The habitat programme is the continuation of several decades of conservation work and a commitment to achieve the *favourable condition* of the Site of Special Scientific Interest (SSSI) and *favourable conservation status* of the Special Area of Conservation (SAC). The work proposed this year would be part of a new 10-year programme agreed with Natural England and would be supported by a new Countryside Stewardship grant administered by the Rural Payments Agency (RPA). The outcome of this grant bid is still awaited at the time of preparing this report.

The habitat conservation work outlined for the forthcoming year involves work on 353 ancient trees, including the pollarding of ancient hornbeams in several areas where a pollard cycle has been established over the last 30 years. Grassland and heathland management continues to be managed by a combination of extensive grazing by Longhorns and mowing. The mowing work includes the specialist activities of hay-making and fire risk reduction. The varied programme of habitat work will be carried out by a combination of in-house teams, contractors and volunteers.

The access management work outlined covers pathway and wharfing proposals at Highams Park, developing play area proposals for Wanstead Park, a replacement bridge across the River Ching at Whitehall Plain and substantial path network maintenance, particularly in the south of the Forest this year. The risk management work involves the large raised reservoir work, a continuation of the survey and control of the Oak Processionary Moth populations across at least 17 key visitor “hubs” in the Forest and the management of tree safety, which is likely to occupy one arborist team for the whole year.

Recommendation(s)

Members are asked to:

- i. Approve the annual work programme as summarised in the main report.

Main Report

Background

1. This report describes significant habitat and heritage conservation, visitor access and risk management projects proposed in Epping Forest for the programme year 2020-2021.
2. The work outlined below is drawn from the 2020-2030 Epping Forest Management Strategy and its supporting documents (see *Background* papers below). The habitat work proposed is the result of a detailed review of the previous 10 years of habitat conservation work under the Environmental Stewardship-supported programme. It has involved detailed site condition surveys by your staff and various consultants over the last two years. The habitat conservation proposals put forward have been agreed with Natural England and are determined by Site of Special Scientific Interest (SSSI) *Favourable Condition* and Special Area of Conservation (SAC) *Favourable Conservation Status* priorities.
3. The access and safety work proposals also follow detailed fieldwork.

Current Position

4. A 10-year Countryside Stewardship Scheme (CSS) grant application was submitted at the end of August 2019 to Natural England and the Rural Payments Agency (RPA). The grant application sought both revenue and capital funding for a habitat management and conservation programme. At the time of this report the application is awaiting approval by the RPA. The habitat work outlined in this report is based on a successful outcome of this grant bid process and would need to be modified in the light of any changes that the RPA might propose and that might be agreed.
5. A total of 189 ha of our grass and haylage cutting and the bulk of our highway verge cutting is now undertaken by local contractors Warren Smith Farming Ltd and Bush Wheeler Services respectively. Following a tender process, three-year agreements were made in 2018 with these local enterprises to deliver these works.

Proposals

6. Based on the grant application described above, the proposed 2020-21 habitat programme focuses on taking forward the new 10-year CSS ancient tree management and wood-pasture restoration programmes, consolidating the Longhorn cattle breeding herd and ensuring a full grazing programme across the Buffer Lands and those Forest grasslands, heathlands and wood-pastures with suitable fencing controls (invisible, electric, wooden/wire).
7. The 2020-21 programme also seeks to continue to manage potential risks, particularly those related to woody vegetation on highway verges, tree pests and diseases, fly-tipping and tree safety. We will also be working on increasing the pre-emptive and planned responses to risks associated with Forest paths and

tree root nuisance claims, both of which give rise to a significant number of our insurance claims.

8. Following the completion of the Individual Site Management Plans (ISMP) for Theydon Bois Green, Leyton Flats and Highams Park, work priorities will be incorporated into the Forest Management Plan as resources and any further consents or permissions from or joint-working arrangements with external authorities and other stakeholders allow.
9. Following retendering in 2018, and the subsequent good performance of the contractors involved, it is proposed that we continue with bulk contracts for highway verge cutting and grassland management.

A Beautiful Wood Pasture - Wood pasture restoration

10. Should the CSS grant application be successful and without modifications, we would aim to deliver the following habitat conservation programme (see also map at **Appendix 1**) for the period up to March 2021:
11. Undertake re-pollarding work on 353 pollarded trees, comprised of 64 *keystone* trees (beech and oak), 81 in-cycle hornbeam pollards and 208 lapsed hornbeam pollards. Much of this work will be undertaken by the Epping Forest arborist team. This work on the Forest's ancient pollards will be carried out in Bury Wood, Honey Lane Quarters, Powell's Forest, Paul's Nursery, Woodchip Ride and North Long Hills.
12. Maintenance of up to 140 ha of restored wood-pasture through cutting of vegetation (e.g. bramble) by tractor mounted flail. This work would be undertaken by a combination of in-house teams and contractors. The exact acreage cut during the late summer will be determined by a site review to assess which sites require an annual cut and which others may require a rotational cut every other year or longer. The impact of the cattle grazing in the wood-pasture areas of Bury Wood will also be assessed as this should obviate the need for cutting in some of these wood-pasture areas.
13. There will also be additional work, with further wood-pasture restoration carried out in Bury Wood, North Long Hills, Honey Lane Quarters and Warren Hill. This work, involving tree-felling to thin out younger trees and other vegetation around overstood pollards as well as the creation of a new generation of pollards would be undertaken by contractors, following a competitive procurement process during spring and summer 2020.
14. Rhododendron removal would be completed in two areas of wood-pasture at Paul's Nursery, High Beach and St Thomas' Quarters to ensure that Ramorum disease cannot take hold at these two important areas of ancient beech pollards.

Grassland and Heathland Management

15. Open grass areas across the Forest will be cut using a similar programme as in previous years, with the notable addition of the new wild-flower meadow at

Whipps Cross, that was recently returned to the Forest by the London Borough of Waltham Forest from highway dedication as part of its new bus turnaround and cycleway “mini-Holland” development. Dependent on ground conditions, this is likely to require at least a single cut-and-remove once the annuals in the mix have flowered. Further work will also be carried out, as resources allow, to connect this new grassland area to the grassy glades north of Hollow Pond and to the restoration area of Cow Pond (see *Ponds* section below).

16. For the general grass programme, we will be seeking to increase the area cut by contractors, especially from mid to late summer to free up staff time to focus on the maintenance of wood-pasture by tractor mounted flailing. Currently, the contractors undertake around 50% of the mowing by area (72 hectares).
17. In selected heathlands and some of the wood-pasture areas bracken spraying would be carried out to continue the control of this invasive species and to ensure that tree regeneration and other flora can be promoted.
18. At both Leyton Flats and Wanstead Flats, in addition to the mowing work to sustain the grassland habitat, fire control zones will be consolidated around the margins of the sites and along the main access routes. The Wanstead Flats mowing regime, in particular, was reviewed in 2019 for a number of reasons and a new rotational mowing regime implemented:
 - 18.1 To reduce the wildfire risk of the site by reducing the presence of over-mature gorse and broom, especially dead material close to the boundaries of the site, and the amount of old grass or thatch in the sward;
 - 18.2 To promote specialist heathland and acid grassland plants through controlling ruderal plants and coarse grasses, in particular, that established following the emergency sub-soiling undertaken as part of the wildfire control works in 2018;
 - 18.3 To maintain areas of good quality for Skylark and Meadow Pipit nesting (both species are declining nationally and locally).

Volunteer Habitat Management Activity

19. Connected with the work on acid grasslands in the south of the Forest, it is hoped that staff will be able to continue to work with The Wren Conservation Group and others as volunteers monitoring the singing Skylark and Meadow Pipit numbers, as well as the important migratory bird passage on Wanstead Flats.
20. At Wanstead Park Exchange Land support and advice will continue to be given to The Wren Conservation Group in its excellent volunteer conservation work on the grassland mosaic there, restoring butterfly habitats for species such as the Brown Argus. We also propose working with local community stakeholders to identify the range of management issues and opportunities at the exchange lands and to produce an outline development plan to complement the Wanstead Park Parkland Plan produced in 2019.

21. The Epping Forest Conservation Volunteers (EFCV) will also continue their varied and invaluable task programme across the Forest, focusing on the wood-pasture restoration areas, heathlands, ponds and bogs. Their work on wetland sites, in particular, has been critical to the maintenance of the special wildlife interest in these places.
22. The Swaines Green volunteers, Highams Park Snedders and Epping Forest Heritage Trust volunteers also undertake significant works in various parts of the Forest and help to deliver a range of projects to improve the local environment, for both habitats and access, as part of agreed work programmes.
23. During 2020 the Epping Forest Volunteer Wardens will continue with their work on site patrol, auditing of the condition of the path network and cattle monitoring. A programme of pond management works concentrating on ponds in amenity areas will be developed during 2020 with the intention of the volunteer wardens undertaking works from the winter of 2020/21.

Grazing

24. The main aim of the grazing programme (see **Appendix 2**) will be to ensure extensive grazing rotated through the summer across the three large areas bordered by invisible-fencing at Fairmead, Bury Wood and Chingford Plain/Dannett's Hill. Grazing will also be rotated around the northern heathland sites which form an important component feature of the Special Area of Conservation designation. Grazing dates are to be varied from previous years with later start dates to ensure variation in the management to favour insect diversity and flowering (see Appendix 2). All grazing dates will be influenced by the weather and the related grass growth.
25. Subject to funding and staff resources, a *trial* grazing project will be implemented on the East Plain at Wanstead Park. An approximately 1800m *Boviguard*TM invisible fencing (IF) loop will be installed at The Plain with the intention that cattle would graze during a few weeks in the late autumn/winter. The intention would be for the operation to begin after September 2020 for a period of the 2020/21 winter, with a review of the project in 2021. Installing the *Boviguard*TM cable will require Archaeological Priority Area (APA) permission. Although the cable is buried no deeper than 15cm (6 inches), a walk-over survey would be conducted, as has been the case with previous IF cable laying in the Forest. In addition, a supervising archaeologist would be present on the day of the installation.
26. It is hoped this will provide a solution to managing this important area of acid grassland, with its distinctive ant-hills and important butterfly populations, as well as testing a way forward for managing other areas in the Park such as The Long Walk. This project will require a considerable amount of practical community support, as well as consultation.

Ponds/Lakes/Bogs

27. Monthly monitoring for Floating Pennywort at Wanstead Park will be continued during 2020 using a specialist contractor, with any outbreaks responded to as they appear.
28. During 2020 we will be working with colleagues from the City Surveyor's Department to progress design proposals to stabilise the substantial bankside erosion problems at Jubilee Pond. Additionally, at Highams Park with support from the City Surveyors Department we will be looking at a combination of 'hard' and 'soft' wharfing along the lake edge to reduce erosion of the bank and to improve water and habitat quality. Hard wharfing is the more traditional timber edge while soft wharfing is the use of plants to create a natural protective edge. Specialist assessments were completed in 2019 which outline the work requirements. Consent would be sought from Natural England once details are finalised.
29. In addition, there will be further work with the City Surveyors drawing up plans for work on the dam at Deer Sanctuary (Birch Hall Park) Pond. This work will aim to repair and stabilise the dam and improve the spillway. This would be subject to separate consultation as part of a costed capital project process.
30. The charity *Froglife* was successful in securing match-funding for its Heritage Lottery Fund grant. The restoration of Cow Pond, which would involve some deepening of the central pond area and a re-shaping of the margins, is now planned to begin in 2020 once a trial borehole has checked water levels. This pond work will be complemented, as resources allow, by work to improve access and open up scrub habitats and glades in the surrounding oak woodland leading to the wild-flower meadow opposite the new Whipps Cross bus station and cycleway.

Invasive Non-Native Species (INNS) work

31. Monitoring of Oak Processionary Moth (OPM), using external consultants, would continue over at least 17 main sites as in 2019, with control measures taken as required. It is expected to see a year on year increase in the number of trees affected and the number of OPM nests. Removal of nests will be targeted to where the most immediate risks of exposure to visitors are found.
32. Ramorum monitoring will be continued across all Rhododendron sites, both existing and historic, including Knighton Woods, Wanstead Park and The Warren Plantation. In addition, further Rhododendron removal work is to be completed at two small sites in the northern parts of the Forest' wood-pasture (see paragraph 11 above).
33. The annual Japanese Knotweed control will be carried out across the 3 remaining sites – with older sites being re-checked.
34. A programme of managing New Zealand Pygmy Weed (*Crassula helmsii*) on prominent, largely amenity ponds, will be undertaken based on volunteers undertaking the work. The objective will be to maintain the extent of this invasive

weed to as small an area as practically achievable. Strategies for eradicating this pernicious plant have so far proved elusive.

A Welcoming Destination:

Ride and Path Management

35. A path management Policy Development Note (PDN) will be completed for the Spring of 2020 following an audit of paths in 2018. This has taken longer than anticipated to prepare as following the audit and subsequent review the path network has been revised to 189km rather than the previously quoted 80 km .
36. Routine maintenance of path edge vegetation will be continued across the whole network. The works to reduce encroaching and overhanging woody vegetation started in 2019 will be continued in 2020 with the focus of activity being towards the south of the Forest, compartments 33 (Highams), 34 (Walthamstow Forest), and 35 (Gilbert's Slade).
37. Drainage issues identified in the 2018 audit will be assessed during the 2020 and an improvement programme developed. Works are likely to be undertaken by contractors and the cost of this will be assessed during 2020 and implemented as funds allow during this year. Any drainage work considered in the SAC/SSSI areas would be subject to consultation with Natural England.

Whitehall Plain Bridge

38. In association with the Department of the Built Environment we will continue to look at erecting a new bridge or raised boardwalk across the River Ching on Whitehall Plain in the location of the deteriorating culvert bridge. The work on the design proposals has continued from 2018. In addition to the river crossing, sections of the paths leading to the bridge have been cut through by drainage grips creating muddy, deep hollows in places. Improvements over these eroded sections will be reviewed as possible additions to the bridge works. Once design options have been finalised the proposals would be put forward to Natural England for consent and the Environment Agency as required.

Protected and Celebrated Heritage Landscapes

Wanstead Park: Parkland Plan

39. The Parkland Plan was completed and approved by the EF &CC in November 2019. The plan draws together an extensive body of research and stakeholder feedback to identify a strategy to seek the removal of Wanstead Park from the Heritage at Risk register and to identify how best the partners can access external funding programmes. The plan will be a key resource guiding the investment decisions of the Wanstead Park Project Board.
40. The timetable for implementing the parkland plan proposals is likely to be protracted. Working through the Wanstead Park Liaison Group an interim programme of improvement works that are likely to be achievable within existing resources has been identified as a means of maintaining momentum and local

community support. The works proposed for being developed and implemented during 2020-21 are as follows:

- 40.1 Play area: If external funding for a play area is not forthcoming in the foreseeable future it is proposed that a simple natural play area based on timber from Epping Forest and installed by in-house staff be undertaken.
- 40.2 Water supply management: Works started in 2019 to improve the drainage of water into the lake system at Wanstead Park will be continued. Existing drainage outlets will be identified, cleaned and the flow of water from them increased as conditions allow.
- 40.3 Signage: Following on from the successful signage works at Highams park, funded by a grant obtained by the Highams Park Planning Group, we will work with the Friends of Wanstead Parklands to obtain and install around ten new directional signs in the park.
- 40.4 Vegetation management: Targeted work to open up key vistas and paths will be continued.

Highams Park

- 41. Proposals for a north-south multi-user surfaced path will be outlined in the Paths Policy Development Note that will be prepared for consideration by the EFCC and the EF & CC in the Spring of 2020. Following consideration of the proposals it is proposed that we work with local volunteers to seek funding for any proposals through the Park including either the restoration of the west bank original estate coach drive or following the strong 'wish way' on the east side of the lake.
- 42. Any work proposals in Highams Park, which is part of the SSSI and SAC and a locally listed Park, would require consent from Natural England and the London Borough of Waltham Forest, and may also require further consultations locally.

Churchill Avenue: Woodford Green

- 43. A community and stakeholder information process was undertaken in 2019 on proposals for the phased replacement, for tree safety reasons, of the London Plane and Poplar tree avenue at Woodford Green. Proposals have been submitted to the London Borough of Redbridge for permission to undertake the work however agreement was not forthcoming in time for the work to be undertaken in 2019 as originally planned.
- 44. It is proposed that we undertake the phased replanting of the avenue with Common Lime (*Tilia x europea*) with work commencing in September 2020.

A Resilient Environment:

Highway Verge Management

45. Ongoing maintenance of highways edge vegetation will largely be contracted out through a three-year agreement with a local provider. In-house teams will focus on the more challenging locations where there are a number of constraints such as frequent parked cars and on maintaining sightlines at path and road junctions. One significant task started in 2019 and to be completed in 2020 is the management of roadside elm alongside Bell Common, Epping. The dead and dying elm is to be felled and the boundary vegetation subsequently managed as a hedge to reduce long term concerns over dead elm impacting on the road carriageway.

Tree Safety

46. Trees identified for hazard removal will be a significant proportion of spring and summer programmes for the Arborist Teams. The annual tree safety survey programme is undertaken by contractors and this is to be retendered this year on a three-year basis. Overall, works to make good hazardous trees takes up the equivalent of one arborist team's year.

Fire Safety

47. As described above under *Grasslands* management, fire control zones will continue to be mown at Leyton and Wanstead Flats, with the areas managed (including the 6km of routes already cut annually) refined by a survey carried out in 2019 by a specialist fire management consultant. Along the key routes around the edges of these two large grassland sites, grass will either be cut regularly to ensure a short sward along the routes for a 6m width or grass cuttings will be removed after each main cut (depending on the area mown).
48. In addition, areas of older and dead gorse will be cut back and incorporated in regular flailing work at Leyton Flats, particularly the areas of gorse in the south of the Flats close to the boundary pathways.
49. Other areas of open land in the Forest, including Chingford Plain and the heathland sites were also risk assessed. The existing management at these smaller sites was enough for the control of fire risk. All the risk assessments and associated mapping will be provided to the local fire service for their approval prior to summer 2020.

Insurance Claims

50. A Vegetation Against Property (VAP) Policy Development Note has been prepared for this same committee. This outlines our work to manage the potentially significant financial liabilities arising from tree root nuisance claims with new claims currently occurring every four to six weeks.
51. In addition to the case by case response process we commenced work in 2019 to reduce the tree cover along Mays Lane, Chingford. Reducing the tree cover will help to reduce subsidence and tree safety liabilities and will also provide the

opportunity to improve a currently overlooked part of the Forest. Ironically not along after work was scheduled, we received a root nuisance claim arising from Mays Lane.

Large Raised Reservoirs (LRR):

52. Woody and herbaceous vegetation will be kept cut on raised reservoirs. Further works will follow on from the six-monthly Panel Engineer inspections and will be undertaken in association with the Built Environment Department. In line with requirements in our water abstraction licence from the EA we will continue works to improve the flow of water to the lakes via the local drainage network. This will involve some improvement to ditches to ensure the water flows more directly to the lakes and investigation of drainage pipes out falling into the lakes to check they are running smoothly.
53. Working practice and policy regarding our management of LRR's will be brought together into LRR Policy Development Note in 2020 (see also para 26 above concerning the dam at Deer Sanctuary Pond).

Corporate & Strategic Implications

54. Our Corporate Plan (2018-2023), whose vision includes "To shape outstanding environments", aims to:
- a. Provide thriving and biodiverse green spaces and urban habitats
 - b. Provide environmental stewardship and advocacy, in use of resources, emissions, conservation, greening, biodiversity and access to nature
 - c. Protect, curate and promote world-class heritage assets
55. The Open Spaces Business Plan 2019-20 includes the outcomes and departmental activities:
- a. Outcome: Our habitats are flourishing, biodiverse and resilient to
 - b. change
 - c. Outcome: Our open spaces, heritage and cultural assets are protected,
 - d. conserved and enhanced
 - e. Outcome: Nature, heritage and place are valued and understood
 - f. Activity: Protect and enhance our sites' biodiversity
 - g. Activity: Improve the visitor and cultural offer
56. The work programme outlined in this report involves the activities described above and seeks to meet all the Corporate and Business Plan objectives. In particular the programme aims to protect biodiversity whilst improving opportunities for visitors to enjoy the Forest. The programme is also set out according to the new Strategy and Management Plan for Epping Forest 2020-30. The proposals meet a wide range of outcomes identified in this Plan, with the proposals detailed under each of the Plan's five 'Strategic Priorities'.

Implications

57. **Financial:** The work outlined in the proposed work programme is to be covered by the local risk budget of Epping Forest Division and both revenue and capital funding through the Countryside Stewardship Scheme, administered by the Rural Payments Agency. Additional grant aid and public fundraising would be sought where available to fund agreed activity.
58. **Legal:** Formal consent for these works has been sought from Natural England under Section 28E of the Wildlife and Countryside Act 1981 (as amended) for the SSSI and as required under the Conservation of Habitats and Species Regulations 2017 in relation to the SAC. Additional consents for work in locally listed landscapes and APAs will be sought during the year. Any work on main watercourses would be carried out with the agreement of the Environment Agency.
59. **Charity:** Open Spaces Charity: 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.

Conclusions

60. The habitat work programme outlined above has been the subject of a detailed review of the previous ten years of conservation work carried out under the Environmental Stewardship Scheme. It has involved detailed consultations with Natural England, extensive field survey work and reflects the key priorities for the protection of the Site of Special Scientific Interest and Special Area of Conservation. It incorporates the proposals which have been put forward as part of a new 10-year Countryside Stewardship grant application.
61. The access and risk management work proposals also reflect the outcome of detailed fieldwork and regular surveys of the condition of the Forest's infrastructure and boundaries.
62. Volunteers will continue to be instrumental in delivering a significant proportion of the work on a number of key projects in 2019/20, including wood-pasture restoration and ponds work and their important contribution is acknowledged.
63. In-house teams will deliver much of the work detailed in the report. Contractors will be used to support implementation of the grass-cutting and highway vegetation management works and will contribute significantly to the implementation of the proposed new CSS programme.

Appendices

- Appendix 1: Map of distribution of habitat management work.
- Appendix 2: proposed Grazing Programme (subject to weather & ground conditions)

Background Papers

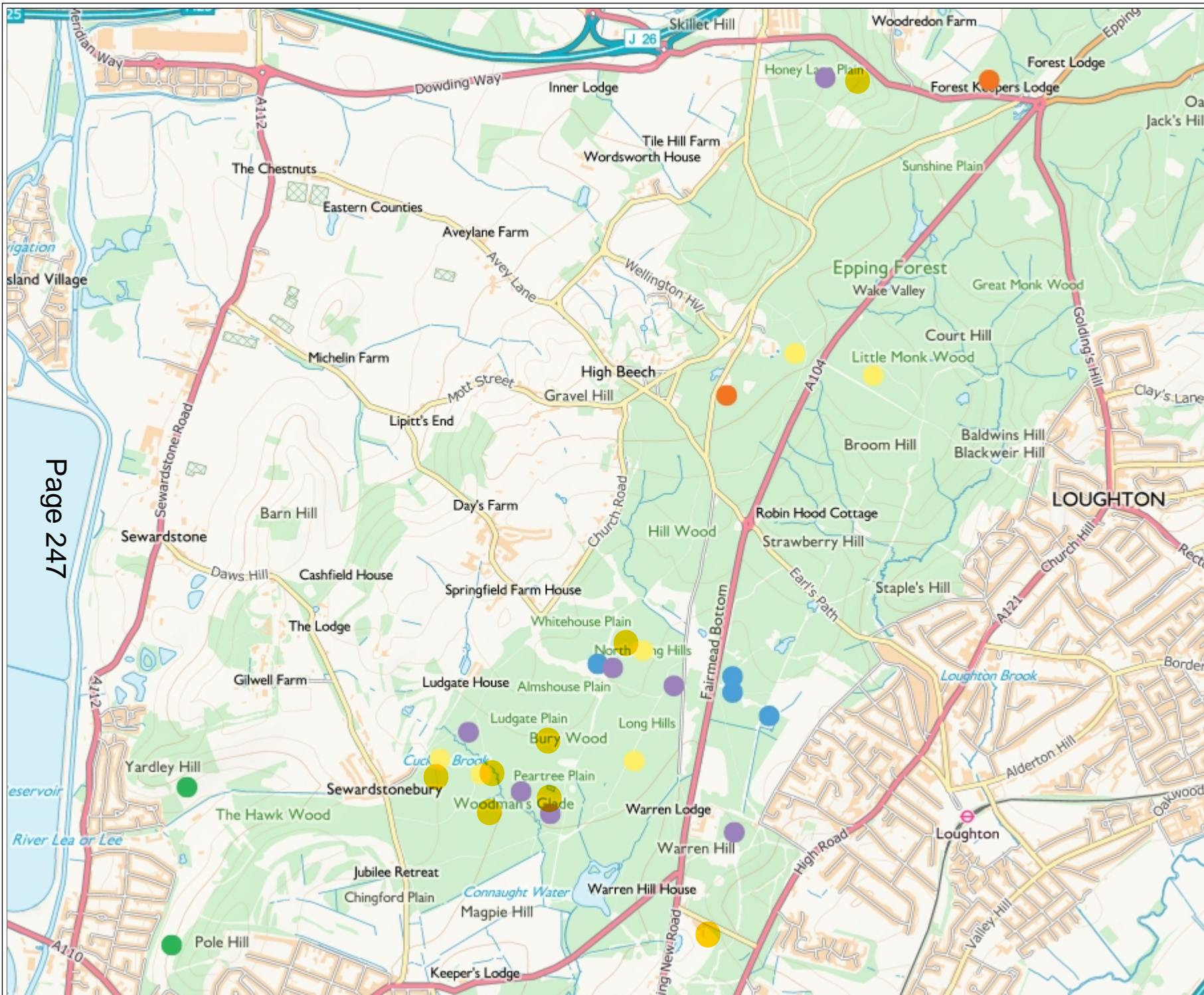
- A Strategy and Management Plan for Epping Forest 2020-30
- SEF28/19 Epping Forest & Commons Committee Report: Countryside Stewardship Grant 2019 Proposals
- The Barn Hoppitt Wood-pasture Restoration Plan 2006-2011;
- The Lords Bushes and Knighton Woods Integrated Site Plan 2004-2010;
- The Wanstead Flats Individual Site Management Plan (2020);
- Theydon Bois Green Individual Site Management Plan (2018)
- Highams Park, Little Sale and Oak Hill Woods Individual Site Management Plan (2019)
- Leyton Flats Individual Site Management Plan (2019)
- Branching Out Stage II Project Plan (Nov 2008) – including the Keystone Trees and Grazing Strategies;
- SEF 01/13 Epping Forest & Commons Committee Report: Grazing Expansion Plan for Implementing the Epping Forest Grazing Strategy. 13th Feb 2013.
- Wanstead Park Conceptual Options Plan (2019);
- SEF 50/16 Epping Forest & Commons Committee Report: Epping Forest Grazing Expansion Plan Continuity Arrangements. 21st November 2016
- The Topology and Vegetational History of Some Epping Forest Sphagnum Bogs (Report to EF Conservators - K.J. Adams 2017).
- Highway Verge Management Policy Development Note (2018)

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Appendix 1

Locations of CSS
work 2020 -
February 2021

**Yellow = beech and
oak pollard
management**

**Light Brown =
hornbeam pollard
management**

**Purple = wood
pasture restoration**

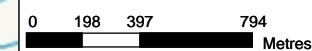
Blue = tree thinning

**Orange =
rhododendron
clearance**

**Green = grassland
restoration**

Date Created

8 Jan 2020



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APPENDIX 2 to WORK PROGRAMME REPORT

Appendix 2a – Forest grazing sites programme 2020

 Grazing
  Hay cutting

Site	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Forest								
Big View								
Chingford Plain (Butlers Loop)								
Chingford Plain North / Burywood								
Bury Wood / Fairmead								
Warren Wood Slope								
Fernhills								
Trueloves								
Wansted Park								
Whitehall Plain / Birbeck								
Addisons Meadow								
Heathlands								
Sunshine North								
Sunshine South								
Long Running								
Deershelter Plain								

Appendix 2b – Buffer Lands grazing sites programme 2020

[illegible]

Committee(s):	Date(s):
Epping Forest and Commons	10 03 2020
Subject: London Borough of Culture 2019 Summary (SEF 08/20)	Public
Report of: Director of Open Spaces	For Information
Report Author: Jacqueline Eggleston - Head of Visitor Services Epping Forest	

Summary

The first ever London Borough of Culture was awarded to London Borough of Waltham Forest for 2019. The City of London Corporation has been a major partner for the initiative, committing support and resources in kind.

Over a dozen events took place on City of London land at Epping Forest and were supported by staff from the Epping Forest Division and with usual hire fees and officer time totalling £68,250 being waived to support the programme.

This report updates your committee on the in-kind support to the London Borough of Culture in its inaugural year and summarises the value to Epping Forest.

Recommendation

Committee Members are asked to:

- Note the report.

Main Report

Background

1. The Mayor of London Sadiq Khan invited applications from London Boroughs to become the first-ever London Borough of Culture. The successful bid was made by Waltham Forest who presented a year of cultural activity in 2019.
2. Deputy Catherine McGuinness, Policy Chair, wrote to Sadiq Khan to offer a partnership with the City of London Corporation to the Year of Culture confirming an in-principle commitment to put assets and services to best use in support of the programme and that officers would work to deliver the best and most beneficial outcome to achieve the London Borough of Culture's objectives.
3. City of London Epping Forest supported the London Borough of Culture, as a member of the London Borough of Culture, Culture Board, working with the creative director and producers to curate and host over 16 events within the Forest.

Current Position

4. Events were held in varying locations within the Forest but all were within the London Borough of Waltham Forest boundaries. Epping Forest staff time and venue hire was given freely to support the programme and in addition to the main events listed here, pop-up dance activities, walks and talks were held or culminated in the Forest.

Africa Express

5. 'Africa Express' was a music concert held inside a big top marquee, placed at Bushwood north on 29 March, hosting a wide range of world music from local and international groups and headlined by Blur to a capacity audience of 3,000.
6. The event ran smoothly and without complaint. The site was vacated within 7 days and all earth bunding reinstated to the required standard. The event was licenced by the LBWF and went through the full Safety Advisory Group scrutiny process. A detailed emergency plan and all relevant certificates were supplied to Epping Forest in advance of the event.

May Day Fayre

7. The May Day Fayre was held on Chingford Plain on 6 May. Unseasonably cold weather let this event down but over 3,000 attended and a safely planned fire sculpture and fireworks were lit at the finale of the day. Our Head of Conservation was heavily involved in the planning stages to ensure there was no adverse impact on the Epping Forest Special Area of Conservation (SAC) area.

Giants Opera

8. Giant took place at Barn Hoppitt on 19 and 20 October and was another of the flagship events. An extraordinary theatrical experience created by Arts and Gardens it featured a children's choir singing from the trees along with professional opera performance with creative lighting and costumes telling the story of the giants through new music and poetry.
9. Our in-house ecologist advised on location to avoid disturbance to wildlife and full tree surveys were undertaken. Arborists prepared the trees before nesting season and were heavily involved in the 8-month planning process. Seven days of rehearsals were accommodated in the QEHL and the Visitor Centre as well as two public climbing days and two performance nights

The People's Forest

10. The People's Forest was a year-long programme of smaller artistic works on the theme of exploring human relationships with the Forest and the myriad of meanings placed on woodland.
11. Commencing with a book launch of producer Luke Turner's *Out of the Woods* on 24 Jan, the Queen Elizabeth's Hunting Lodge and Visitor Centre continued to be the venue for a series of events under the People's Forest programme:
 - An INSET training event for teachers was hosted in Queen Elizabeth's Hunting Lodge on 21 March to promote the City of London Corporation

education programme and provide materials to teach the history of the Forest in the lead up to the May Day Fayre

- ***Women in the Woods*** took place on 23 May and was a women-only walk in the Forest led by artist and poet Clare Archibald followed by a panel discussion exploring the history and ecology of the Forest and relationships with walking alone
- On 20/21 June ***The Dark Outside*** was a live 24-hour radio broadcast from deep within the Forest.
- In July ***Living Symphonies*** took place over 5 days within the Forest near to Chingford Plain. Visitors were overwhelmingly positive about the experience where they heard the musical composition emerging from the undergrowth as they moved between speakers. Each species of resident wildlife was represented by different musical elements, which were combined in real-time by a computer model of the ecosystem to create the composition.
- ***Monstrous Assemblies*** was an exhibition by artist Esther Nelsen who worked with local schools throughout the year to create eight life size sculptures of 'monsters' which were installed at the Visitor Centre courtyard in Chingford for a week in November.
- Working as an artist-in-residence in Epping Forest, Ellie Wilson, is a composer/violinist, and member of 'Britain's most exciting new folk band' (Uncut Magazine) and 4-time BBC Radio 2 Folk Award nominees, Stick In The Wheel. Throughout the year she created a set of new compositions entitled ***Echoes*** inspired by human impact on the forest through the centuries. Throughout November and December these were available to listen to on headphones available at the Chingford Visitor Centre. The headphones were then available in January and February 2020 at the visitor centre in High Beach.
- Artist Una Hamilton-Helles created an immersive soundscape of the Forest, ***Becoming the Forest***, reflecting on sentient plants, trees, ecology from root to the canopy and voices from the Forest. The launch on Halloween night (and installed until Sunday 3rd November) within the Queen Elizabeth's Hunting Lodge it also featured theatrical performance.

Ways of Seeing

12. The Government Art Collection worked with London Borough of Culture to turn the whole borough in to a gallery space. The 'front room' inside the View Visitor Centre hosted Sir Jacob Epstein's Epping Forest (1933) and Clare Woods' Grimm's Ditch (2007). The artwork was displayed from 24 April to 29 August and was accompanied by related talks and activities

Strategic Implications

13. **Resource Implications:** The City of London Corporation supported the programme of events on Forest land through in-kind support. Support was made from a range of staff including Head of Visitor Services, Head of Operations, Head of Conservation, Ecologist, visitor services staff, keepers, arborists and administrators. The hire fee for use of built venues for meetings and licence fee of Forest land was waived. A breakdown of this support is shown in Appendix A.

Total value of support 'in-kind' £68,250

Evaluation

14. Epping Forest benefitted from supporting the programme in a number of ways:
 - Gaining experience of hosting a large-scale concert on Forest land with minimal disruption, damage or adverse comment.
 - Trialling new spaces within the Forest for events with many successes
 - Introducing new audiences to the Forest
 - Opportunity to host new, more adventurous artistic programming without financial risk.
 - Opportunity to work closely with artists and producers who have enjoyed working in the Forest and wish to return with new projects in the future
15. A short film was produced to celebrate the events held in the Forest:
YouTube: <https://www.youtube.com/watch?v=X63B7hcbIkQ>
16. The most recent evaluation of the full programme by London Borough of Waltham Forest is here:
<https://democracy.walthamforest.gov.uk/documents/s69609/Appendix%20%20-%20Evaluation.pdf>
17. Within the evaluation they celebrate the legacy of expanding partnerships through the programme:

City of London Corporation: towards a more creative future for the Forest

As owners of Epping Forest, the City of London has been a key partner. This relationship has offered stunning settings for events, but it has also shaped how the Corporation views the Forest. Jacqueline Eggleston, Head of Visitor Services, told us that while the Forest has hosted events before, this year has seen “**more cultural and artistic events**” – all “**of a higher quality**”. This has pushed the City to **try new things**: “We tend to have events in the same locations, so **we tried out new locations, and they worked...** now we can be flexible with how the forest is used... staff I think will be **far more open to doing things in the future... that’s a great legacy**”.

Implications

18. **Financial:** The £68,250 cost of ‘in-kind’ financial support was met from Epping Forest Local Risk budget.
19. **Legal:** 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.
20. The above powers must be exercised having regard to the approved Events Policy. The general duties of the Conservators to preserve Epping Forest as an unenclosed public open space for the recreation and enjoyment of the public, and as far as possible to preserve its natural aspect also still apply, subject to the above provisions.
21. If events are to be permitted on the Forest, they 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.

22. **Charity:** 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

23. A central element of the LBWF London Borough of Culture Bid was the influence of Open Spaces on the culture of the Borough. Epping Forest forms some 31% of LBWF's Open Space. Consequently, the LBoC programme featured a series of events which celebrated the role of Epping Forest in the life of the Borough.
24. Epping Forest benefitted from participation by developing new partnerships, with the London Borough of Waltham Forest and with artists and producers as well as introducing new audiences to the Forest and new high-quality art experiences in new places.

Appendix A – Summary of events and support 'in-kind'

Jacqueline Eggleston
Head of Visitor Services

T: 020 8532 5315

E: jacqueline.eggleston@cityoflondon.gov.uk

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Asset / department / team	Contact	Offer	Status	Monetary Value / officer time
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	<i>Venue hire fee waived for launch training days, adult learning events and taster sessions</i>	<i>Completed Nov 2018- April 19</i>	<i>£780</i>
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	<i>Africa Express</i> - Concert held on Bushwood Leytonstone <i>Waive venue hire</i> <i>Staff time – operations team works, ecologists, site meetings, SAG meeting attendance</i>	<i>Completed 29 March</i>	<i>£15,817</i> <i>£1225</i>
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	<i>Chingford May Day Fayre</i> <i>Waive venue hire</i> <i>Staff time; Head of Conservation, Head of Visitor Services, operations team, attendance at event, communications officer</i>	<i>Completed Mon 6th May 2019</i>	<i>£18,863</i> <i>£2360</i>
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	<i>Launch event - Out of the Woods – author talk at Queen Elizabeth’s Hunting Lodge.</i> <i>Waive hire fee</i> <i>Staff time</i>	<i>24 Jan</i>	<i>£550</i> <i>£920</i>
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	<i>Lone Women in the Woods</i> <i>Staff time</i>	<i>17 May</i>	<i>£910</i>
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	<i>The Dark Outside</i> – 24hour radio station broadcast from Queen Elizabeth Hunting Lodge <i>Waive venue hire</i> <i>Staff time</i>	<i>20-21 June</i>	<i>£2000</i> <i>£160</i>
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	<i>Becoming the Forest</i> Una Hamilton-Helle – sound-based installation and live theatre event at QEHL <i>Waive venue hire</i> <i>Staff time at event and set up</i>	<i>31 October – 3 Nov</i>	<i>£1000</i> <i>£660</i>
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	<i>Echoes</i> Ellie Wilson – Artist in Residence, music recording and installation at QEHL <i>Waive hire fee – launch</i> <i>Staff time</i>	<i>10 Nov – 20 Dec</i>	<i>£500</i> <i>£680</i>

Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	Monstrous Assembly - Esther Nelsen working with local school children – sculpture installation at the Visitor Centre Waive hire fee Staff time	16-23 November	£700
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	Ways of Seeing – Government Art Collection loan of art works Staff time Venue for launch	24 April - 31 Aug	£500
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	GIANT – operatic performance from the trees Staff time; arborists, ecologists, events, venue staff out of hours Hire fee waived – rehearsals, storage and backstage QEHL and visitor centre Licence fee for event waived	14 Sept -20 Oct	£425 £80 £6140 £3000
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	Wild About Highams Park – sculptures and installations Supply of trees for carving	August	£790 £4000
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	Living Symphonies – sound installation in the Forest Staff time – arborists and scrub clearance	20 July-28 July	£450
Open Spaces, Epping Forest	Jacqueline Eggleston Head of Visitor Services	Pre- planning, site visits and steering group attendance by head of Visitor Services General admin HOVS Health and safety officer Communications officer		£2600 £1950 £200 £1000
TOTAL				£68,250

Committee(s): Epping Forest and Commons	Date(s): 10 03 2020
Subject: Epping Forest SAC Mitigation Strategy progress (SEF 11/20)	Public
Report of: Director of Open Spaces	For Decision
Report author: Jeremy Dagley – Head of Conservation, Epping Forest	

Summary

This report follows from the earlier one to your Committee in November 2019 and seeks approval to send a further three letters to the competent local authorities for the Epping Forest Special Area of Conservation. The letters seek to make clear the City Corporation's position regarding protection of the SAC encourages the competent authorities to achieve an effective Epping Forest Special Area of Conservation Mitigation Strategy in time for local plan adoptions or reviews.

Recommendation(s)

Members are asked to:

- approve the text of the three letters at **Appendices 3, 4 and 5** of this report for circulation to the relevant Local Planning Authorities;
- approve your officers' active participation in the Epping Forest SAC Mitigation Strategy Oversight Group, chaired by Epping Forest District Council, that has now been re-started to bring together the competent authorities for SAC planning issues.

Main Report

Background

1. This report provides an update on progress towards an Epping Forest Special Area of Conservation (EFSAC) Mitigation Strategy that is required by the Conservation of Habitats and Species Regulations 2017 (the Habitat Regulations) in respect of local plans and local authority development planning decisions. This report follows on from a more detailed report to your Committee in November 2019 (SEF47/19) (see *Background Papers* below), which should be read in conjunction with this report.
2. The Habitats Regulations (see paragraph 27 *Negotiations with the European Union* below) set out the ways in which local authorities, as *competent authorities* (as defined by the Habitat Regulations), must work together to protect the *Favourable Conservation Status* of sites of international importance, such as Special Areas of Conservation (SACs).
3. The EFSAC covers two thirds of the Forest's acreage across London and Essex, straddling the boundaries of the local planning authorities of Epping Forest District (EFDC) and the London Boroughs of Redbridge (LBR) and Waltham Forest (LBWF).
4. In order to understand the impacts, and develop policies to avoid or mitigate adverse effects, on the EFSAC the competent authorities are required to undertake Habitat Regulations Assessments (HRAs). The HRA for the EFDC Local Plan, for example, has identified the following adverse effects of proposed local plan projects on the EFSAC:
 - increased air pollution from traffic and homes;
 - increased impacts of urbanisation;
 - increased recreational pressure.
5. The Epping Forest Visitor Survey 2017 (EFVS 2017) confirmed a Zone of Influence (Zoi), for 75% of recreational visits to the EFSAC, of 6.2km. This EFSAC Zoi is important as it requires local authorities to develop policies related to recreational pressures on the Forest that arise from increased housing within this zone. The Zoi stretches across additional local authorities including the London Boroughs of Newham, Haringey and Enfield, the Borough of Broxbourne and Harlow District Council.
6. These competent authorities are also required to provide policies to prevent significant adverse impacts of nitrogenous air pollution on the EFSAC that might arise from their plans and projects.
7. In 2018, an *interim* EFSAC Mitigation Strategy was published that covered proposals to mitigate recreational impacts on the Forest. A meeting of an EFSAC Mitigation Oversight Group of the competent authorities and Natural England was convened to agree this interim strategy. It was approved by EFDC Cabinet in October 2018.

8. Since then there have been no further developments of the Strategy. A full strategy, however, is required to be adopted by all relevant competent authorities to cover two additional, critically-important aspects. The first is to provide a mechanism for the avoidance of adverse recreation impacts on the Forest through the provision of a network of Sustainable Alternative Natural Greenspaces or SANGs. The second is to provide effective mitigation proposals that would prevent further adverse impacts of nitrogenous air pollution on the Forest's vegetation from increased road traffic and housing.
9. The concerns of your Committee about a lack of progress towards a full Strategy, the absence of governance to oversee this work, the lack of coordination between the competent authorities and the lack of costs undertakings led to your Committee's approval of two letters that were sent from the Chairman to the competent authorities on 28th November 2019.

Current Position

10. The Chairman's letters of 28th November received responses from Broxbourne Borough Council in December 2019 and from EFDC in February this year. These are attached as **Appendices 1 and 2** respectively. The response from EFDC was subsequently discussed with EFDC Members in February at the most recent of the twice-yearly liaison meetings at The Warren Offices.
11. A second Visitor Survey (EFVS2019), commissioned by EFDC in consultation with your officers, was circulated to competent authorities by EFDC early in 2020 seeking comments. This EFVS2019 produced a larger Zol than the EFVS2017, of between 6.36km and 6.81km. Competent authorities and Natural England are proposing that the lower figure of 6.36km should provide the updated Zol boundary and this is to be confirmed by agreement with the consultancy which produced the report.
12. EFDC also produced a draft Green & Blue Infrastructure Strategy (G&BIS) in late February and asked for "high-level" responses within 2 weeks, by 2nd March. However, the extensive appendices for this G&BIS were not provided by EFDC before its own deadline and as a result there are many gaps in the strategy, including detail on the important matter of SANGs and Epping Forest SAC mitigation through avoidance of recreational pressure by deployment of SANGs (see paragraph 8 above). EFDC is promising a full public consultation in May, after local elections. Your officers have provided a high-level response as requested with Chairman's approval and await further details from EFDC.
13. Following a duty-to-cooperate meeting with your officers in December, LBWF convened a meeting of London competent authorities on 11th February, including a representative of the Greater London Authority (GLA),
14. This meeting was followed on 24th February, by the second meeting of the EFSAC Mitigation Oversight Group, the first since 25th July 2018. This

meeting was previewed in Cllr Philip's letter of 5th February (Appendix 2) and seems to have been prompted by the offer of governance by The Conservators contained in the Chairman's letter to EFDC of 28th November. The Group was convened and chaired by EFDC officers and it was agreed that this would now become the forum for all the competent authorities, Natural England and your officers to oversee the development of the mitigation strategy.

15. The offer of governance made by your Committee for the Mitigation Strategy, therefore, does not seem to be required at this point although in the proposed letters (see *Proposals* below) this offer is repeated to ensure that there are no further reasons for the current impetus in the mitigation discussions to be lost.

Proposals

16. In the light of the continuing limited progress towards an EFSAC Mitigation Strategy, but in recognition of some of the very recent developments with governance and exchanges of information, it is proposed that further letters are sent by your Chairman to the competent authorities, including the GLA and Essex County Council (ECC).
17. It is proposed to send out three letters so as to allow specific responses to EFDC and Broxbourne (see **Appendices 3 and 4** respectively), as well as a more general letter to the other competent authorities involved in EFSAC mitigation (**Appendix 5**).

Options

18. **Option 1:** no further action to be taken at this stage leaving it until EFDC and other competent authorities develop further proposals for mitigation and provide updated HRAs for review. **This option is not recommended.**
19. **Option 2:** the three letters appended to this report (**Appendices 3, 4 and 5**) should be sent to the respective competent authorities as a follow up to the responses received and the developing governance arrangements. These letters aim to maintain the impetus for proper governance of the EFSAC Mitigation Strategy and to encourage the development of avoidance measures (e.g. SANGs) at a strategic level, involving both GLA and ECC. **This option is recommended.**

Corporate & Strategic Implications

20. The recommendations of this report support the Corporate Plan with particular reference to the following aims:
 - a. **Contribute to a flourishing society**
 - i. People enjoy good health and wellbeing
 - ii. Communities are cohesive and have the facilities they need.
 - b. **Shape Outstanding Environments**
 - i. We inspire enterprise, excellence, creativity and collaboration

- ii. We have clean air, land and water and a thriving and sustainable natural environment
- iii. Our spaces are secure, resilient and well maintained.

21. And supports the Open Spaces Business Plan as follows:

a. Open Spaces and historic sites are thriving and accessible.

- i. Our open spaces, heritage and cultural assets are protected, conserved and enhanced
- ii. London has clean air and mitigates flood risk and climate change

Implications

22. **Financial:** In addition to considerable officer time required to respond to the various local plans, the costs of representations has totalled £55,000 to date over the last two financial years. This cost of representation should be seen in the context of the duration of the various local plans over more than 15 years and the level of mitigation work required across and around the whole Forest. Further representations will be required during the new financial year for the forthcoming London Borough of Waltham Forest Local Plan Regulation 19 consultation and the conclusion of the Epping Forest District Council's review of its Local Plan Habitats Regulation Assessment (HRA).
23. The funding and administration of any Epping Forest SAC Mitigation Strategy Oversight Group (SAC Mitigation Oversight Group), which has now been set up and is to be chaired by Epping Forest District Council, is likely to require the local authorities to provide joint contributions. These are yet to be agreed and a further update will be provided to your Committee after the April meeting of the SAC Mitigation Oversight Group.
24. **Legal:** in liaison with the Comptroller & City Solicitor, advice has been sought from the legal counsel that represented the City Corporation, as Conservators, at the EFDC Local Plan Hearings this year. Counsel was involved in drafting the two letters sent in 28th November by the Chairman and to which the letters at Appendices 1 and 2 are the responses received to date. No further legal advice from Counsel has been sought in the preparation of the letters at Appendices 3 to 5.
25. **Property:** The local plans for the various local authorities set out how and where land and property will be used within their boundaries for the next 15 or more years. It is important to the City Corporation's stewardship of the Forest to ensure a balanced view is taken regarding both the protection of the Forest and opportunities to best utilise land and property either required for operational purposes or surplus to operational efficiency.
26. **Charity:** 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.

27. **Negotiations with the European Union:** The main influence of EU law on plan-making in the UK relates to the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulations') and the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna & Flora, which is incorporated into UK law as the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'). The application of the Habitat Regulations is guided by all existing case law and judgements from the Court of Justice of the European Union (CJEU) and will also be consequent on the terms reached with the EU as part of the continuing negotiations.
28. However, Epping Forest is also protected, as part of a network of sites, by the Bern Convention 1979 (The Convention on the Conservation of European Wildlife and Natural Habitats (1979) - Council of Europe), a binding international legal instrument to which the UK government is a signatory.

Conclusion

29. There has been some progress towards re-starting the development of the EFSAC Mitigation Strategy since the Chairman's letters of 28th November were sent to the competent local planning authorities. During this time meetings have been convened by the competent authorities, with your officers in attendance, and an outline governance structure has been agreed.
30. The recreational Zol has also been reviewed by a new Visitor Survey and this has demonstrated that the Zol should be made larger. Progress on other aspects of the EFSAC Mitigation Strategy is awaited and it is hoped the new governance approach will see new proposals put forward for the protection of the Forest. However, in the interim it is considered important for responses to be sent to the competent authorities by your Committee to encourage continued progress and sharper focus on the key elements of the Strategy.

Appendices

- **Appendix 1** – Letter of reply from Cllr Keith Brown, Cabinet Member for Planning & Regeneration, Broxbourne Borough Council
- **Appendix 2** – Letter of reply from Cllr John Philip, Planning Portfolio Holder, Epping Forest District Council
- **Appendix 3** – Draft letter to Epping Forest District Council in response to Planning Portfolio Holder
- **Appendix 4** – Draft letter to Broxbourne Borough Council in response to Cabinet Member for Planning & Regeneration
- **Appendix 5** – Draft letter to all relevant local planning authorities in relation to governance and costs undertakings for emerging Epping Forest SAC Mitigation Strategy

Background papers

- SEF47/19 Report to Epping Forest & Commons Committee (18th Nov 2019):
Epping Forest SAC Mitigation Strategy progress and governance
- SEF34/19 Report to Epping Forest & Commons Committee (9th Sept 2019):
Epping Forest District Council: Examination of the District Local Plan, 2011-2033
- SEF31/19 Report to Epping Forest & Commons Committee (9th Sept 2019):
City of London Corporation response to the London Borough of Waltham Forest 'Shaping the Borough Draft Local Plan 2020 – 2035 consultation document

Jeremy Dagley

Head of Conservation

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Planning and Development

Extension: 5770
Please ask for: Mr Martin Paine
Date: 18 December 2019

Graeme M. Smith
Chairman,
Epping Forest and Commons Committee

Dear Mr Smith,

Emerging Epping Forest SAC Mitigation Strategy

Thank you for your letter of 28 November regarding the above matter.

I note that your letter addresses two matters, in your own words:

"an offer that The Conservators convene and chair an SAC Mitigation Strategy Steering Group/Oversight Group of officers, to meet at agreed intervals to ensure governance of its development and implementation".

Secondly,

"In order for The Conservators to be able to continue to provide this level of expert advice and assistance in the preparation of the Mitigation Strategy, particularly in relation to SAMMs [Strategic Access and Management Measures], we request that you as competent authorities each provide a costs undertaking to help with the expenditure and resources required to develop these proposals and to examine options for sites within the Forest, as well as tackling SANGs and air quality issues around the Forest SAC."

In relation to your proposal to convene an officer steering/oversight group, I have spoken to Martin Paine, Planning Policy Manager at Broxbourne Council (copied), who has been leading work on the Broxbourne Habitats Regulations Assessment (HRA). He has confirmed that he is happy to attend such a meeting, insofar as the matters addressed relate to impacts on the SAC arising from the Borough of Broxbourne.

It is clear from your letter that the Conservators anticipate significant costs in relation to the mitigation strategy for the SAC. In relation to air quality, Natural England has stated that *"The air quality assessment, which included the Local Plan allocations within Broxbourne Borough, concluded that there would be negligible impacts from such development outside Epping Forest District alone and that Epping Forest Local Plan is the dominating contributor of pollutant emissions when considered in combination with surrounding authorities."* (letter from Aidan Lonergan, 6 November 2019, included within Appendix C to Broxbourne Main Modifications HRA). Therefore it is not anticipated that Broxbourne Council will contribute towards costs in relation to air quality matters, unless new evidence becomes available.

In relation to recreational impacts, Broxbourne Council will be happy to contribute funding towards the costs of preparing the mitigation strategy in proportion to the extent to which evidence indicates that such impacts arise from the Borough of Broxbourne, or some other appropriate formula which reflects the relatively small number of visitors to the SAC from the Borough of Broxbourne.

In relation to funding for the costs of the measures contained in the mitigation strategy itself, policy NEB2 of the Broxbourne Local Plan states that *"where necessary, financial contributions towards the measures set out in any Epping Forest mitigation strategy for recreational impacts will be sought from residential developments within the Epping Forest ZOI [Zone of Influence] in order to mitigate and avoid in-combination effects on the SAC."* It is understood that at present such contributions are sought only from the inner ZOI, which does not include Broxbourne, although this could change in future depending on the evidence.

Yours sincerely,



Councillor Keith Brown,

Cabinet Member for Planning and Regeneration

CC:

Martin Paine, Broxbourne Borough Council

Sarah Fraser, Natural England

Jamie Melvin, Natural England

Date: 5 February 2020

Planning Directorate
Civic Offices, 323 High Street,
Epping, Essex CM16 4BZ

Georgina Blakemore
Chief Executive

Planning Policy Team

Email: LDFConsult@eppingforestdc.gov.uk

Web: <http://www.efdclocalplan.org/>

Telephone: 01992 564517

Dear Mr Smith,

Re: Epping Forest District Local Plan and Epping Forest SAC

Thank you for your two letters dated 28 November 2019 and I apologise for the delay in replying.

We do recognise the ongoing engagement and assistance that the Conservators have given to us and my officers have continued to engage with your officers in relation to matters with regard to the Epping Forest SAC. This included a joint meeting with yourselves and Natural England to discuss an updated methodology on assessing the air pollution effects on the SAC held on 12 December 2019. We have also liaised with regard to the updated visitor survey (which was commissioned by this authority in order to facilitate procurement issues the Conservators were having). The draft report was circulated prior to the Christmas break and comments have been received from your officers.

A meeting on 24 February 2020 has now been arranged with all relevant parties to take forward and agree final comments before going back to the consultants, Footprint Ecology, to consider the implications of the updated survey in order to finalise the mitigation strategy for recreational pressure and to agree appropriate governance arrangements. In relation to the governance arrangements we had understood from the London Borough of Waltham Forest that they would like to take the lead in pursuing this matter but as no meeting has been set up by them we agreed at the Cooperation for Sustainable Development Officer meeting held on 28 January 2020 (to which your officers were invited) that we would now instigate this.

We note your position in relation to the mitigation strategy and will continue to work with your officers, as well as Natural England, on both the SAMMS and SANG Strategy. Please be assured that we fully recognise the importance of this work and the role that your officers have played, and I hope will continue to play, in helping to develop and refine our approaches. To this end, as well as the meeting to be held on 24 February a further technical meeting with your officers and Natural England has been arranged for 26 March 2020. The Council is also currently preparing a Green Infrastructure Strategy to support an integrated approach to the provision and enhancements to existing spaces which will be shared in draft and on a confidential basis ahead of taking a report to the Cabinet on 26 March 2020 prior to formal consultation. As part of the informal engagement a presentation will be made to the Cooperation for Sustainable Development Member Board on 24 February 2020.

We are very much aware of the matters raised by both yourselves and Natural England at the Hearing sessions and are using these to guide our work.

I thought that you might find it helpful to know that this Council has currently funded the costs of the updated visitor survey. We note your request for a costs undertaking to help with the expenditure and resources of the preparation of SAMMS proposals. We were not aware that LUC were being commissioned for this work, its scope or its cost and therefore suggest that this is discussed at the meeting on 24 February together with the cost of the visitor survey when all the relevant authorities are present.

I trust this answers the issues you raised and look forward to meeting you on 7 February 2020.

Yours sincerely



Cllr John Philip

Planning Portfolio Holder, Epping Forest District Council

cc Georgina Blakemore – Chief Executive, Epping Forest District Council

APPENDIX 3 – DRAFT LETTER TO EFDC (Cllr JOHN PHILIP)

CC Natural England

Cc EFDC Local Plan PINS Inspector

Dear Cllr Philip,

Epping Forest District Local Plan and Epping Forest SAC Mitigation Strategy

Thank you for your reply of 5th February about progress with Local Plan measures to protect Epping Forest SAC.

SAC Mitigation Strategy governance

Firstly, it is very welcome news that a second meeting of the SAC Mitigation Strategy Oversight Group was held on 24th February and chaired by your Council officers. Having made the offer to provide governance for such Strategy meetings, in my letter of 28th November to all the competent authorities, it is gratifying to see this re-engagement of most parties. There is now the promise of regular meetings of this latter group and I hope that this will now lead to progress with the essential avoidance and mitigation measures. I look forward to working with your Council and hearing more about the governance structure, terms of reference and timetable for this Group in due course.

However, not all parties are engaging with the same, or at least proportionate, level of commitment, and this presents a problem for achieving a comprehensive and full Mitigation Strategy. There also remains the need for coordination between London and Essex as regional entities in this endeavour. I hope that between us we can ensure proportionate, active and coordinated participation by all parties in the Group.

Zone of Influence

The proposals to be generated by the Strategy would need to enhance the protection of the habitats around any Forest visitor “hotspots” whilst providing alternative, intercepting destinations (SANGs) within the whole area encompassed by the enlarged 6.36km ZoI. This includes locations within 3km and east, west, north and south of the Forest SAC boundaries. As expressed in my previous letter of 28th November, The Conservators do not consider that the limitation of SANGs contributions from developers, as currently set out by the Local Plan, can be justified. I know this concern was also reiterated by us at the Oversight Group meeting of 24th February.

On this last point about SANGs, I am disappointed, therefore, that my 28th November letter on this matter has not yet been uploaded to the Local Plan website. Given the importance of this issue, and the forthcoming consultation on the GI and SANGs Strategies, I would hope that this will be uploaded soon so that any consultees can be made aware of The Conservators’ position on this matter.

Epping Forest Visitor Survey and future costs-undertakings for developing a robust Strategy

The additional data yielded by the Epping Forest Visitor Survey 2019 presented to the Oversight Group, and which your Council commissioned, are important and provide further evidence of the widespread pressures on the Forest. This new Visitor Survey also made obvious the need for, and the importance of, high quality alternative outdoor recreational destinations (SANGs) in the District, and it underscored the kind of characteristics that would be required for these additional SANGs sites to be effective.

I am pleased, therefore, to confirm that The Conservators have approved a financial contribution towards this survey and your costs in commissioning it.

Whilst welcoming this Visitor Survey, the fact that the timing and better weather of the September 2019 survey, compared with the 2017 survey, increased the Zone of Influence (Zol) indicates to me that a follow-up summer survey (May/June) would be important to consolidate the Zol evidence. Therefore, as part of the costs-undertakings for the evidence-gathering for the Strategy, we hope that your Council would be willing to contribute financially, alongside us and other parties, to this third survey. We would like it to include an overarching analysis that would bring together all the data from the three surveys and examine the predicted “uplift” in visitor pressure from different locations in more detail.

SAMMs development

In relation to managing visitor pressure, we provided some background to our more detailed SAMMs-focused work at the Oversight Group on 24th February. The scope of this work is limited at the moment, by time and resources, to a focus on three visitor “hotspots” within the Forest SAC. Therefore, we would welcome a dialogue with your Council and other competent authorities, including Lee Valley Park Authority, as soon as possible, about financial and other support in broadening and deepening this work to inform a more comprehensive access strategy.

We think that it is vital for this access strategy to be developed alongside your emerging Green Infrastructure Strategy (to which we provided our “high-level” response to your deadline of 2nd March), as well as the GI strategies of the London Plan and other neighbouring authorities and a reinvigorated Green Arc Project.

Your GI Strategy has yet to be consulted upon more widely and elements of it, in particular its appendices and the detailed SANGs proposals, remain to be unveiled. You have set yourselves and us a tight timeframe for consultation after the Council elections. This is of concern to me. The Conservators consider it most important that this timetable should not prevent a productive dialogue between us and other competent authorities to ensure the development of the necessary detail for, and, crucially, links between, the access, SAMMs and SANGs Strategies. I hope that the governance proposals and the future frequency of meetings of the Oversight Group will take this consultation timetable into account.

Quality of management and funding of alternative sites

As well as new sites within the Zol, the interception destinations I refer to above may include non-SAC parts of the Forest and its Buffer Lands. Throughout all the Mitigation Strategy development work, there needs to be clear evidence offered as to how the alternative destinations would be funded and managed long-term by qualified land managers. There also needs to be evidence and monitoring in place to demonstrate how these sites function to both attract and retain potential Forest visitors for the all-important repeat visits, whilst enhancing biodiversity in the District. We look forward to the discussions with you on the management of these sites across the Zol and how we may be involved in their design.

Air Quality

In relation to this aspect of the Mitigation Strategy, The Conservators reiterate their earlier request that the current SAC Position Statement (ED101, 21st October 2019) is replaced with a jointly agreed one that more fairly reflects the situation in relation to competent authority and other roles in Epping Forest SAC protection. We would be happy to work on a joint statement with you and Natural England and look forward to hearing more from you on this.

Finally, I welcome the invitation to our officers for the meeting on 26th April, which is to examine further the critical air quality and traffic management issues of the SAC Mitigation Strategy. I hope that this work will provide the much-needed, effective and robust solutions within an amended Local Plan that will ensure the enhanced protection of the Forest and improvements in the condition of the SAC habitats.

Yours sincerely,

Graeme M. Doshi-Smith BSc (Hons), CISSP, CISM, CRISC, CAPM, CC
Chairman, Epping Forest and Commons Committee

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APPENDIX 4 – DRAFT LETTER TO BROXBOURNE BOROUGH COUNCIL

Councillor Keith Brown
Cabinet Member for Planning & Regeneration
Borough of Broxbourne

Cc Natural England

Dear Cllr Brown,

Epping Forest SAC Mitigation Strategy governance and costs

Thank you for your response of 18th December to my letter of 28th November 2019 on governance and costs for the SAC Mitigation Strategy. Apologies for the delay in replying but I wished to seek our Trustees' views on these issues ahead of my response to you.

I have written, in a similar vein, to other local authorities in London and Harlow with competent authority responsibilities towards Epping Forest SAC. I am also writing to Epping Forest District Council separately because of the need to address a number of more detailed issues relating to their current Local Plan examination stage.

SAC Mitigation Strategy governance

Firstly, thank you for confirming that Martin Paine would be able and willing to attend the SAC Mitigation governance meetings. Indeed, having made the offer on behalf of the Conservators to provide governance, it is gratifying to see re-engagement by most parties since then. In particular, I am grateful to the London Borough of Waltham Forest (LBWF) for bringing together a number of London boroughs and, importantly, the Greater London Authority (GLA) on 18th February 2020 to discuss the mitigation work and how to progress it in London. It is also very welcome that a second meeting of the SAC Mitigation Strategy Oversight Group was held on 24th February chaired by Epping Forest District Council. I am pleased that Martin Paine was able to participate in that meeting. There is now the promise of regular meetings of this latter group and I hope that this will now lead to progress with the essential avoidance and mitigation measures.

However, there are two issues of continuing concern to the Conservators. Firstly, there remains the need for coordination between London, Essex and Hertfordshire as regional entities in this endeavour. I hope that between all of us we can ensure proportionate, active and coordinated participation by each authority and I look forward to your support in achieving this result.

Secondly, not all parties are engaging with the same, or at least proportionate, level of commitment at present. This is partly influenced by the various stages of local plans but this presents a significant problem for achieving a comprehensive and full Mitigation Strategy.

I look forward to working with your Council on the above issues over the coming months and to hearing more from the other competent authorities about the governance structure and terms of engagement for a coordinated approach. **The Conservators' offer to convene meetings remains should this be seen by other parties as a helpful option in ensuring coordination and consensus across borders.**

Epping Forest Visitor Survey and future costs-undertakings for developing a robust Strategy

The additional data yielded by the Epping Forest Visitor Survey 2019, presented to the Oversight Group on 24th February, are important and provide further evidence of the widespread pressures on

the Forest. This new Visitor Survey also revealed the need for, and the importance of, high quality alternative outdoor recreational destinations in the enlarged Zol. It makes clear the kind of characteristics that would be required for these additional sites to be effective.

Although the survey suggests that visitors from Broxbourne are relatively limited in number at present, nonetheless I consider that the second Epping Forest Visitor Survey's extension to the Zone of Influence demonstrates the need to address the impact of increased housing and the limited alternative greenspaces across at least 6.36km around Epping Forest's SAC boundaries. Working together there is the opportunity to achieve an outcome much better designed than the sum of individual parts by providing new greenspace options that are large and attractive enough to protect Epping Forest and meet the health and well-being needs of the larger resident population.

However, whilst welcoming this Visitor Survey, the fact that the timing and better weather of the September 2019 survey, compared with the 2017 survey, increased the Zone of Influence (Zol) indicates to me that a follow-up summer survey (May/June) would be important to consolidate the Zol evidence. As part of the costs-undertakings for the evidence-gathering for the Strategy, to which I referred in my previous letter, we hope that your Council would be willing to contribute to or participate in, alongside us and other parties, this further survey which seems likely in our view to show a further increase in the Zol.

Also, we would like this further work to include an overarching analysis that would bring together all the data from the three visitor surveys and examine the predicted "uplift" in visitor pressure from different locations in more detail.

In relation to the avoidance of increasing visitor impacts, we would welcome a dialogue with your Council, EFDC and the Lee Valley Park Authority, in the near future, about broadening and deepening this work to inform a more comprehensive access strategy and the supply of SANGs in and around the Lea Valley and the western flank of the Forest. We think that it is vital for this access strategy to be developed alongside the emerging Green Infrastructure (GI) Strategies of the London Plan and other Local Plans and a reinvigorated Green Arc Project. I look forward to ways in which we can work together on GI to achieve such coordination in our recreational access work and the protection of Epping Forest SAC.

Yours sincerely,

Graeme M. Doshi-Smith BSc (Hons), CISSP, CISM, CRISC, CAPM, CC
Chairman, Epping Forest and Commons Committee

APPENDIX 5 – DRAFT LETTER TO OTHER COMPETENT AUTHORITIES

To include: GLA, ECC, Harlow District, LBWF, LBR, London Borough of Enfield, London Borough of Haringey, London Borough of Newham

Cc Natural England

Cc EFDC Local Plan PINS Inspector

Emerging Epping Forest SAC Mitigation Strategy update

Following my previous letter of 28th November to you and members of other local authorities, on governance for the SAC Mitigation Strategy, I wanted to provide an update on The Conservators of Epping Forest's view of the current situation. I also wish to reinforce our previous request for renewed momentum in this process. I have written separately, but in a similar vein, to Epping Forest District Council because of the need to address a number of more detailed issues relating to their current Local Plan examination stage. I have also written to the Borough of Broxbourne with a specific response to the issues its Cabinet member for Planning had raised with me directly.

SAC Mitigation Strategy governance

Having made the offer to provide governance for the SAC Mitigation Strategy Oversight Group, in my letter of 28th November, it is gratifying to see re-engagement by most parties since then. I am grateful to the London Borough of Waltham Forest (LBWF) for bringing together a number of London boroughs and, importantly, the Greater London Authority (GLA) on 18th February 2020 to discuss the mitigation work and how to progress it in London. It is also very welcome that a second meeting of the SAC Mitigation Strategy Oversight Group was held on 24th February chaired by Epping Forest District Council. There is now the promise of regular meetings of this latter group and I hope that this will now lead to progress with the essential avoidance and mitigation measures.

However, there are two issues of continuing concern to the Conservators. Firstly, there remains the need for coordination between London and Essex as regional entities in this endeavour. I hope that between all of us we can ensure proportionate, active and coordinated participation by each authority. I look forward to your support in achieving this result.

Secondly, not all parties are engaging with the same, or at least a proportionate, level of commitment at present. This is partly influenced by the various stages of local plans but this presents a significant problem for achieving a comprehensive and full Mitigation Strategy.

I look forward to working with your authority on the above issues over the coming months and to hearing more about the governance structure and terms of engagement for a coordinated approach to the above problems. **The Conservators' offer to convene meetings remains should this be seen by other parties as a helpful option in ensuring coordination and consensus.**

Epping Forest Visitor Survey and future costs-undertakings for developing a robust Strategy

The additional data yielded by the Epping Forest Visitor Survey 2019, presented to the Oversight Group on 24th February, are important and provide further evidence of the widespread pressures on the Forest. This new Visitor Survey also revealed the need for, and the importance of, high quality alternative outdoor recreational destinations (SANGs) in the enlarged 6.36km ZoI. It makes clear the kind of characteristics that would be required for these additional SANGs sites to be effective.

I consider that the second Epping Forest Visitor Survey's enlarged Zone of Influence demonstrates the urgent need to address the impact of increased housing and the limited alternative greenspaces around Epping Forest's SAC boundaries. Working together there is the opportunity to achieve an outcome much better designed than the sum of individual parts, by providing new greenspace options that are large and attractive enough to protect Epping Forest and meet the health and well-being needs of the larger resident populations.

However, whilst welcoming this Visitor Survey, the fact that the timing and better weather of the September 2019 survey, compared with the 2017 survey, increased the Zone of Influence (Zol) indicates to me that a follow-up summer survey (May/June) would be important to consolidate the Zol evidence. As part of the costs-undertakings for the evidence-gathering for the Strategy, to which I referred in my previous letter, we hope that your Council would be willing to contribute financially, alongside us and other parties, to this third survey. We would like it to include an overarching analysis that would bring together all the data from the three surveys and examine the predicted "uplift" in visitor pressure from different locations in more detail.

SAMMs development

In relation to managing visitor pressure, we provided some background to our more detailed SAMMs-focused work at the Oversight Group on 24th February. The scope of this work is limited at the moment, by time and resources, to a focus on three visitor "hotspots" within the Forest SAC. Therefore, we would welcome a dialogue with your Council and the other competent authorities, including Lee Valley Park Authority, as soon as possible, about financial and other support in broadening and deepening this work to inform a more comprehensive access strategy.

We think that it is vital for this access strategy to be developed alongside the emerging Green Infrastructure Strategies of the London Plan and other Local Plans, as well as a reinvigorated Green Arc Project. I look forward to ways in which we can work together to achieve such coordination in our recreational access work and the protection of Epping Forest SAC.

Quality of management and funding of alternative sites (SANGs)

As well as new sites within the Zol, the interception destinations I refer to above may include non-SAC parts of the Forest and its Buffer Lands. Throughout all the Mitigation Strategy development work, there needs to be clear evidence offered as to how the alternative destinations would be funded and managed long-term by qualified land managers. There also needs to be evidence and monitoring in place to demonstrate how these sites function to both attract and retain potential Forest visitors for the all-important repeat visits, whilst enhancing biodiversity. We look forward to the discussions with you on the management of these sites across the enlarged Zol and how we may be involved in their design.

Yours sincerely,

Graeme M. Doshi-Smith BSc (Hons), CISSP, CISM, CRISC, CAPM, CC

Chairman, Epping Forest and Commons Committee

Committee(s)	Dated:
Epping Forest Consultative – For Consultation Epping Forest and Commons – For Decision	29 01 2020 10 03 2020
Subject: Vegetation against Property: Policy Development Note SEF 02/20b	Public
Report of: Colin Buttery, Director of Open Spaces	For Decision
Report author: Geoff Sinclair, Head of Operations, Epping Forest	

Summary

A Strategy and Management Plan for Epping Forest for the period of 2020-30 was approved by your Committee on 18 November 2019. Arising from this a 2020-23 Business Plan is being developed.

This report outlines the Policy Development note (PDN)) that has been prepared on our management of Vegetation Against Property (VAP) where substantial subsidence compensation claims can arise from the impact of our trees on neighbours' buildings. The legal and statutory context and significant management considerations described in the PDN have been outlined along with the management strategy.

Recommendation(s)

Members are asked to:

- i. Approve the Vegetation against Property Policy Development Note

Main Report

Background

1. On the 18 November 2019 your committee approved a Strategy and Management Plan for Epping Forest for the period of 2020-29. As part of the ongoing development process, existing operational activity in key geographical locations and for key activities is being reviewed.
2. The review process comprises an audit of the City Corporation's (CoL) property management issues alongside other significant management considerations, to provide an overview of current practice and an outline of longer-term aspirations.
3. This report outlines the Vegetation Against Property (PDN) that has been prepared as part of the review.

Current Position

4. Most of Epping Forest has an underlying geology of London clay and/or sand / gravels. The London clay is particularly prone to seasonal shrinkage and expansion, which can lead to problems of subsidence and heave in buildings. Any recovery action against the City of London is likely to be brought either as a private nuisance or a negligence claim. In either case it is necessary to establish causation and foreseeability of damage.
5. Following the receipt of a subsidence claim at Epping Forest the City of London's subsidence procedure for handling claims is carried out and described in the PDN. Alongside meeting the requirements of the COL subsidence process there are four key outcomes that we seek to achieve at Epping Forest when managing subsidence claims:
 - a. The value of the trees as environmental assets is assessed and factored into deliberations;
 - b. The liability of the Forest for any building damage is robustly challenged;
 - c. COL Epping Forest record management is durable and accessible over long periods; and,
 - d. Ongoing COL Epping Forest management responsibilities are identified and built into work programs.
6. As far as practical in managing the claims process the COL Epping Forest seeks to work to the Joint Mitigation Protocol (JMP) standard. The JMP is an industry agreed method of subsidence claims management where trees are implicated as being the cause of building movement. It seeks to establish best practice in the processing and investigation of tree root induced building damage, benchmarking time scales for responses and standards of evidence.
7. Since 1994 48% of subsidence claims to the City Corporation of London have resulted in a payment. Claims have been made in 27 of the 52 compartments that make up the Forest and Buffer Lands, with three compartments (29, 30 and 33) accounting for 46% of claims, reflecting both the proximity of these areas to buildings and their underlying soil type.

Proposals

8. The VAP PDN outlines the legal and statutory context and significant management considerations impacting on this operational area before presenting a management strategy and outline management program.

Management Strategy

9. The overall objectives for managing vegetation against property in Epping Forest are:
 - a. To ensure the COL Subsidence Claims management procedure is met to agreed timeframes;
 - b. To provide a local VAP management procedure to meet record keeping and ongoing management responsibilities;
 - c. To reduce our long-term liability and maintenance costs for managing vegetation against property, including integrating subsidence related works with habitat and access management works.

Management Considerations

10. There are a wide range of management considerations given in the report and these have been summarised below:
 - a. Ecological: Epping Forest's veteran trees have been and will continue to be impacted by subsidence claims. There is also an opportunity to integrate conservation management, such as wood pasture creation, with work to reduce tree cover in 'high risk' areas and thereby liability for subsidence.
 - b. Heritage and community: There is an opportunity to integrate management action for heritage and landscape with those to mitigate subsidence concerns, especially in areas identified as more prone to claims.
 - c. Access: Removal of tree(s) on the land boundary frequently leads to increased unauthorised access onto Forest land, e.g. through garden extensions and dumping. In some locations the reduction in tree cover could complement improved access provision.
 - d. Community Liaison / Consultation: Trees linked to subsidence concerns almost by definition are close to residential areas and likely to be visually prominent. Work to a tree(s) may require prior community liaison and consultation if the tree is particularly valued
 - e. Local Plans: Change of neighbouring land use from open field to residential use will increase risk management liabilities for root nuisance (and tree safety) in areas with shrinkable clay soils.

Property Management Context

11. The main property management issues impacting upon work to manage VAP concerns area:
 - a. Tree Safety: Areas of subsidence concern typically overlap with Tree Safety management zones and there is the potential to integrate management actions for tree safety and subsidence.

- b. Statutory Designations: Many areas affected by VAP issues are within SSSI, SAC and/or Conservation Area designated locations or have Tree Preservation Orders applying.
- c. Invasive / Alien Species: Oak Processionary Moth (*Thaumetopoea processionea*) is increasingly prevalent on the many open grown oaks across the site and poses a risk to human health;
- d. Boundaries: There is an opportunity to integrate management actions for vegetation trespass and wayleave management with those to mitigate subsidence concerns

Outline Management Program and Operations Plan spreadsheet

- 12. The PDN presents an outline management program which is in essence a continuation of the current practice as described above. An improvement action has been identified where it is proposed that for 2022 a review be completed on the potential to reduce third party liabilities, including root nuisance, through integrated land management actions. Examples of the sort of possibilities are given Appendix 6 of the PDN.

Corporate & Strategic Implications

- 13. City of London Corporate Plan 2018 - 2023: the restoration and maintenance of the internationally and nationally important habitats of Epping Forest directly underscore the *third pillar* of the Corporate Plan, which is to “*shape outstanding environments*”. The development of ISP’s and PDN form part of the operational planning to achieve this aim of the Corporate Plan.
- 14. Open Spaces Department Business Plan 2016-19: The Strategic Vision of this plan is to ‘Preserve and protect our world class green spaces for the benefit of our local communities and the environment.’ and one of the Department Objectives is to ‘Protect and conserve the ecology, biodiversity and heritage of our sites.’ The preparation of the Epping Forest Management Strategy and Management Plan for 2019-29 is a key action in the Departmental Business Plan.
- 15. No negative equality impacts were identified for this proposal.

Financial Implications

- 16. The outline management program has been framed to fit within existing levels of local risk spend.
- 17. Good practice in managing subsidence should reduce our financial liability arising from claims against the COL.

Charity

- 18. 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

19. A PDN has been prepared on Vegetation Against Property management. This identifies the legal and statutory context and other significant management considerations that should be considered.
20. A management strategy is presented along with an outline management programme with an improvement action to reduce our liabilities recommended. The proposals can be achieved through existing Local Risk resources and are likely to reduce the COL's long-term financial liabilities arising from subsidence claims.

Appendices

- Appendix 1 – Vegetation Against Property: Policy Development note (2019)

Geoff Sinclair

Head of Operations, Epping Forest, Open Spaces Department

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Management of Vegetation Against Property (VAP)

Forest Operations Planning and Development Note

<i>Date</i>	<i>09/01/2020</i>
<i>Version Number</i>	<i>v1.9 Public</i>
<i>Review Date</i>	
<i>Authors</i>	<i>Richard Edmonds, Fiona Martin, Geoff Sinclair</i>

FOREST OPERATIONS PLANNING AND DEVELOPMENT NOTE

VEGETATION AGAINST PROPERTY

INTRODUCTION

Forest Operations Planning and Development Notes (PDN) aim to audit and collate the City of London (CoL)'s organisational and health and safety risk management issues for key activities, alongside other management considerations, to give an overview of current practice and outline longer term plans. The information gathered in each report will be used by CoL to prioritise work and spending, in order to ensure firstly that the CoL's legal obligations are met, and secondly that remaining resources are used in an efficient manner.

The PDNs have been developed based on the current resource allocation to each activity. An important part of each PDN is the identification of any potential enhancement projects that require additional support. The information gathered in each report will be used by the CoL to prioritise spending as part of the development of the 2019-29 Management Strategy and associated Business Plans for Epping Forest.

Each PDN will aim to follow the same structure, outlined below though sometimes not all sections will be relevant:

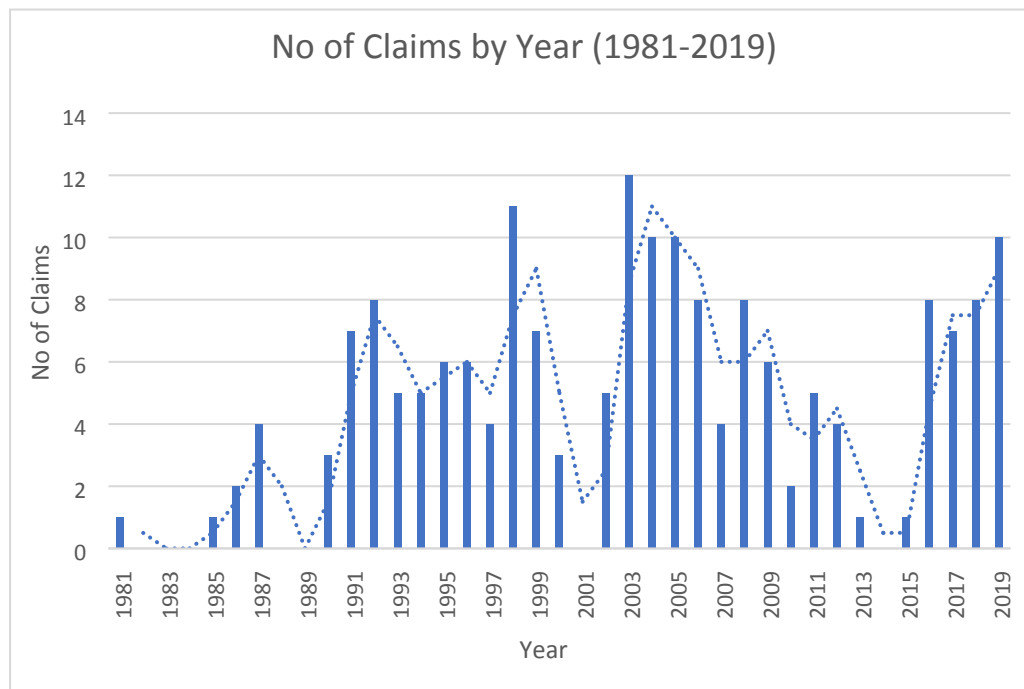
- **Background** – a brief description of the activity being covered;
- **Existing Management Protocol** – A summary of the existing protocol for the activity;
- **Property Management Context** – a list of property management constraints for the activity such as legal and statutory obligations directly relevant to the activity or location;
- **Management Considerations** – a list of identified management considerations for the activity;
- **Management Strategy** – a summary of the key operational objectives for the activity;
- **Outline Management Program** – a summary of the key management actions identified with anticipated timelines for completion;
- **Potential Enhancement Projects Requiring Additional Support** – a list of projects for which additional support would be required;
- **External Operational Stakeholders** – a list of external stakeholders who have an operational input to the activity (if any), who have been consulted as part of the compilation of the Planning and Development Note;
- **Bibliography** – a list of existing reports (if available) that have formed part of the audit for the PDN; and
- **Appendices.**

BACKGROUND

Epping Forest stretches from Manor Park, London at its southern most point to Epping, Essex at its northern most point, a total distance of 19 km (12 miles). The external boundary of the Forest is approximately 200km with the southern half of the Forest largely surrounded by urban settlement.

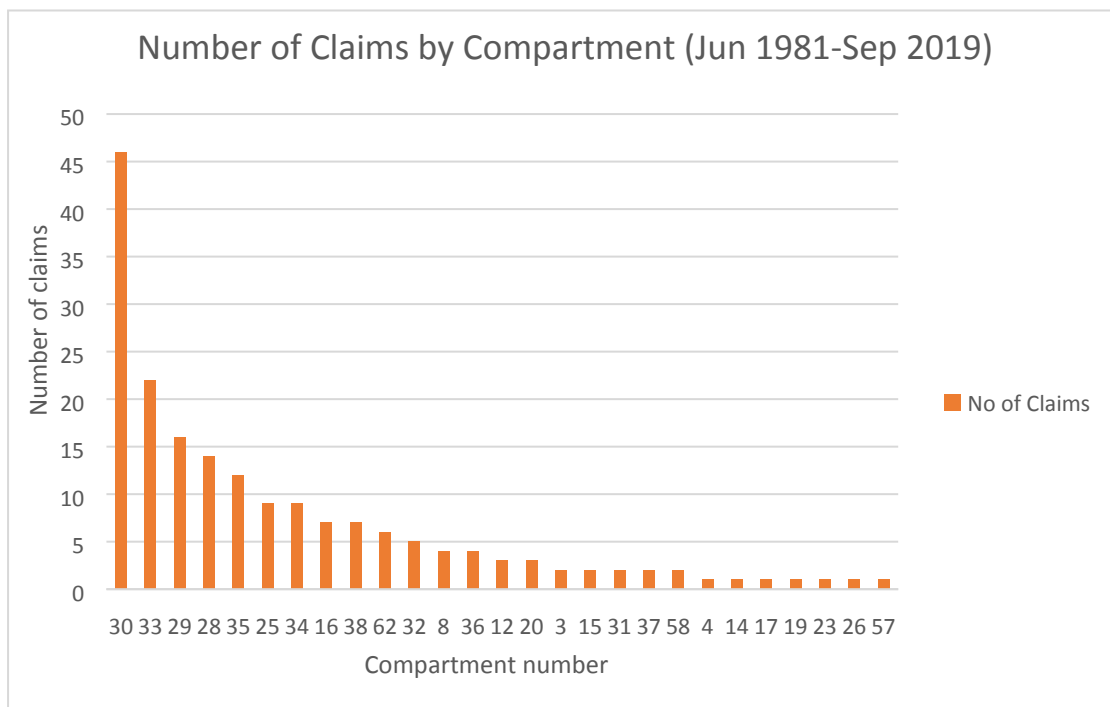
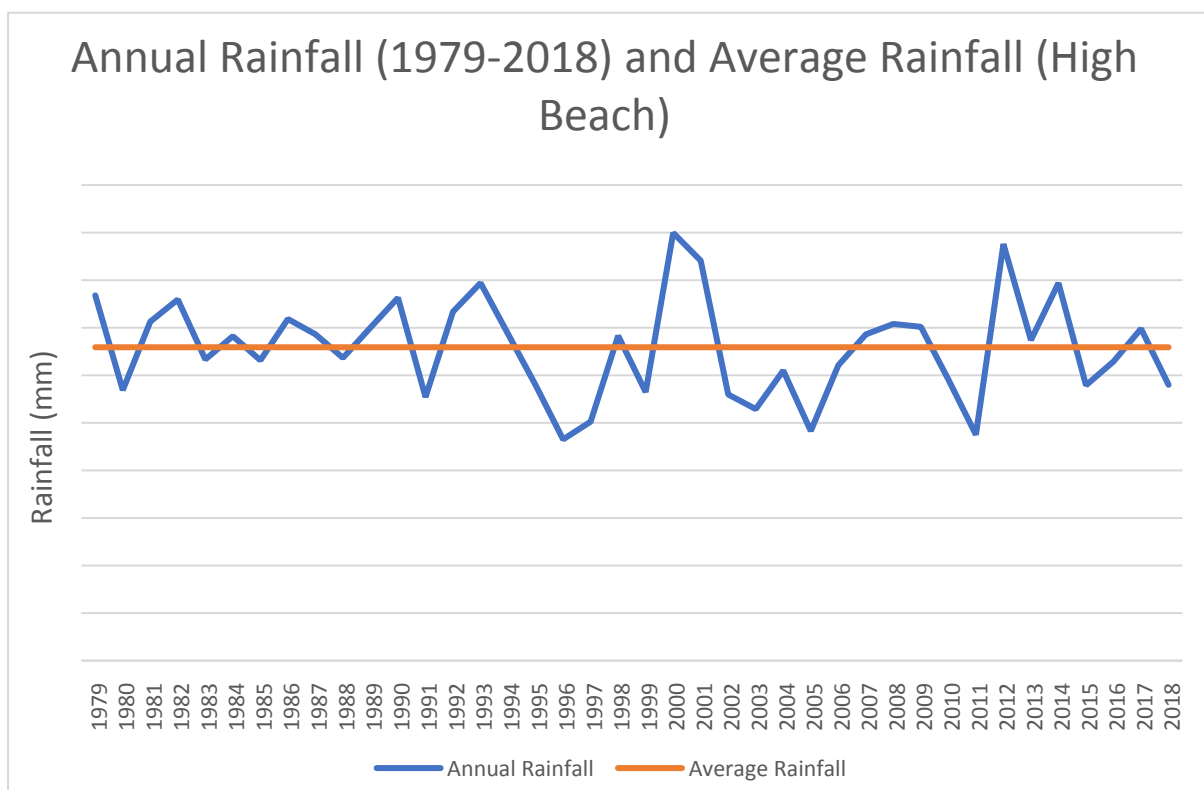
Most of Epping Forest has an underlying geology of London clay and/or sand / gravels. The London clay is particularly prone to seasonal shrinkage and expansion, which can lead to problems of subsidence and heave in buildings. Where properties are founded on shrinkable clay soils, up to 80% of subsidence claims are related to trees which cause damage by drawing significant quantities of water from shrinkable clay soils leading to ‘differential movement’ within the property concerned.¹ When a neighbour identifies a differential movement concern in their building, it is standard practice for building surveyors to consider the tree growth in the surrounding area. Inevitably this often implicates trees owned by the City of London as the cause of the differential movement. Between June 1981 and September 2019, 184 subsidence notifications have been made to Epping Forest (Figure 1).

Figure 1: Subsidence Claims by year



Since 1994 48% of subsidence claims to the City Corporation of London have resulted in a payment. Claims have been made in 27 of the 52 compartments that make up the Forest and Buffer Lands, with three compartments (29, 30 and 33) accounting for 46% of claims, reflecting both the close proximity of these areas to buildings and their underlying soil type. As well as proximity to buildings and soil type, comparison of the annual rainfall figures (Figure 3) with the subsidence claims by year (Figure 1) indicates that the weather also appears to affect the number of claims received; these increase following dry years and decline in normal and wet years.

¹ Royal & Sun Alliance (2013), The Subsidence Handbook, page 66

Figure 2: Subsidence Claims by Compartment**Figure 3: Annual Rainfall at High Beach (1979-2018)**

Legal Context

The owner of a tree has a responsibility to ensure that it does not damage his neighbours' property. Where it is established that a tree is causing damage, the neighbour may be able to compel the owner to prune, maintain or remove the offending tree to prevent further damage, and may also recover the costs of repairs². Appendix 3, which has been taken from the Subsidence Handbook, outlines the key court cases covering subsidence claims.

Any recovery action against the City of London is likely to be brought either as a private nuisance or a negligence claim. In either case it is necessary to establish causation and foreseeability of damage. In deciding causation, the Complainant needs to provide evidence of the presence of the tree roots, the nature of the soil, soil desiccation and seasonal and progressive movement of the damaged building. A Claimant only has to persuade a judge that it is more likely than not that the tree(s) in question caused the damage.

Damage is foreseeable if the tree owner knew or ought to have known that there was a real risk of damage if they did not take available preventative measures. It has generally been accepted that local authorities have been aware in principle since the mid-1970s that certain trees in dry conditions cause damage to adjacent properties if they are not properly managed. The reality is that the City of London will have difficulty in establishing a defence that vegetation related subsidence damage was not foreseeable.

Joint Mitigation Protocol

The Joint Mitigation Protocol (JMP) is an industry agreed method of subsidence claims management where trees are implicated as being the cause of building movement. It seeks to establish best practice in the processing and investigation of tree root induced building damage, benchmarking time scales for responses and standards of evidence. With regard to Local Authority owned trees, the protocol identifies evidential requirements (Appendix 3) for both the Complainant and the Local Authority based on the value of the tree and gives a timetable for this evidence to be forthcoming. The overall aims of the protocol are to "speed up the process of claims handling, decision making and mitigation implementation leading to resolution, while at the same time recognising the value of trees in the built environment and providing local authorities with all the investigative evidence required at the beginning of the process".³

Not all stakeholders in the subsidence claims management process are signed up to the protocol; however, as far as practical, the COL Epping Forest seeks to work to the JMP standard. Being seen to manage effectively our tree root nuisance responsibilities towards our neighbours is considered essential for reducing potential liabilities and for helping our neighbours find timely resolution to any subsidence problem. This report outlines the process and practice for managing the City of London's tree root nuisance responsibilities at Epping Forest.

CAVAT

Capital Asset Value for Amenity Trees (CAVAT) is a tool for valuing amenity trees and is widely adopted across the UK within local authority tree departments. It is also incorporated into the Joint Mitigation Protocol for use in the assessment of subsidence cases and is the tree valuation method adopted into the COL Epping Forest subsidence management process, supplemented with additional narrative detailing the importance of the tree(s) concerned. The

² Royal & Sun Alliance (2013), The Subsidence Handbook, page 120

³ <https://www.ltoa.org.uk/resources/joint-mitigation-protocol>

CAVAT system includes two methods: the Full Method, which is used by staff at Epping Forest to provide a compensation replacement value for single trees; and the Quick Method, which is used to determine the value of a population of trees as an asset, for asset management purposes. An example of a completed CAVAT valuation is given Appendix 5.

EXISTING MANAGEMENT PROTOCOL

Following the receipt of a subsidence claim, the City of London's subsidence procedure for handling claims is given in Appendices 1 & 2 and is the process that is followed at Epping Forest. Alongside meeting the requirements of the COL subsidence process at Epping Forest, there are four key outcomes that we seek to achieve when managing subsidence claims:

1. The value of the trees as environmental assets is assessed and factored into deliberations;
2. The liability of the Forest for any building damage is robustly challenged;
3. COL Epping Forest record management is durable and accessible over long periods; and,
4. Ongoing COL Epping Forest management responsibilities are identified and built into work programs.

In outline, the procedure followed on receipt of a claim at Epping Forest concerning subsidence is as follows:

- Claims are mapped on to the COL GIS system and electronically filed on the COL subsidence database;
- At the request of the Col Insurance Department, a CAVAT assessment is undertaken;
- All historic tree inspection data and statutory designations for the area/tree(s) in question is collected;
- A site report on the management history and value of the tree(s) is prepared and submitted to the COL Insurance team;
- *(The liability assessment is undertaken by the COL insurance team);*
- At the request of the COL Insurance Department, works are carried out as required and recorded in the COL database;
- Ongoing maintenance works are recorded and added to the Vegetation against Property (VAP) work program; and,
- All works are currently carried out by the COL in-house Arboriculturist Teams, and can include tree removal, tree reduction, stump poisoning, stump grinding, and vegetation clearance as required.

PROPERTY MANAGEMENT CONTEXT

The following property management issues have been identified in relation to the management of Forest vegetation in response to subsidence concerns.

Tree Safety

- Areas of subsidence concern typically overlap with Tree Safety management zones. There is the potential to integrate management actions for tree safety with those to mitigate subsidence concerns, especially in areas more prone to claims.

Statutory Designations

- Many areas affected by VAP issues are within SSSI and/or SAC designated areas. Permission from Natural England may be required for work to be undertaken in these areas.
- Tree Preservation Orders (TPO) may apply to trees and permission from the Local Authority is required before work to these trees can be carried out.
- Conservation Area designations may apply and permission from the Local Authority is required before work to these trees can be carried out.
- All British bat species are protected by law and any works to trees hosting bats requires a license from Natural England prior to works beginning. A Bat assessment is undertaken on each tree identified as a subsidence concern and, as required, a method statement to reduce / eliminate the potential impact of the works on the protected species will be given as part of the COL assessment of the tree(s).

Invasive / Alien Species

- Oak Processionary Moth is present in Epping Forest. Should it be present in a tree requiring work, safe working protocols need to be followed to ensure the health and safety of the arborists working on the tree and to prevent further spread of the moth.
- The presence of any other invasive species at the site will be noted and protocols followed accordingly, e.g. for Russian Vine.

Boundaries / Property

- Vegetation trespass: There is an opportunity to integrate management actions for vegetation trespass with those to mitigate subsidence concerns, especially in areas identified as more prone to claims.
- Wayleaves: There is an opportunity to integrate management actions for wayleaves with those to mitigate subsidence concerns, especially in areas identified as more prone to claims.
- Illegal encroachment onto Epping Forest: Works to mitigate subsidence damage can leave a boundary open to encroachment and safeguarding against this and/or ongoing monitoring may be required.

Highway Verges

- If a claim is adjacent to the public highway, reference should be made to the COL Highways Vegetation Management PDN in managing the outcomes of any claim and the opportunity to integrate management actions.

Utilities

- The presence of and possible impact on any utilities present needs to be noted. There is an opportunity to integrate management actions for services with those to mitigate subsidence concerns, especially in areas identified as more prone to claims.

MANAGEMENT CONSIDERATIONS

Ecological

- Veteran Tree(s) have been and will continue to be implicated in subsidence claims. The high number of subsidence claims within Compartment 29 is of particular concern for COL Epping Forest, as the compartment includes an assemblage of veteran Oak pollards of international significance (at Barn Hoppit). Oak trees are one of the trees most commonly associated with subsidence. Protection of veteran trees is of the utmost importance due to their unique biodiversity and this will be reflected in the CAVAT assessment undertaken.
- Plant species of conservation interest may also be present on or around the trees requiring work, for example Bluebells (*Hyacinthoides non-scripta*) and Moschatel (*Adoxa moschatellina*). Works to mitigate subsidence may have an adverse impact on these important ground flora species unless particular care is taken to avoid impact whilst undertaking works.
- There is an opportunity to integrate management actions for conservation with those to mitigate subsidence concerns, especially in areas identified as more prone to claims. For example, the risk of subsidence claims can be reduced through creating and maintaining open ground in sensitive subsidence areas, which also fulfills conservation targets of opening glades within the Forest.

Heritage and Landscape

- Parts of Epping Forest are historic designed landscapes, for example Highams Park and Wanstead Park, where some potentially desirable management actions may also contribute towards reducing subsidence concerns. There is an opportunity to integrate management actions for heritage and landscape with those to mitigate subsidence concerns, especially in areas identified as more prone to claims.

Access

- The provision of access routes for the public or under wayleave agreements provides an opportunity to integrate management actions for access with those to mitigate subsidence concerns, especially in areas identified as more prone to claims.
- Removal of tree(s) on the land boundary might facilitate unauthorized access onto Forest land, e.g. through garden extensions and dumping.

Community Liaison / Consultation

- Typically trees of subsidence concern are located close to residential areas and potentially prominently located. The CAVAT valuation provides an assessment of the amenity value which will influence the management outcomes; however, work to a tree(s) may require prior community liaison and consultation if the tree is particularly valued.

Local Plans

- Change of neighbouring land use from open field to residential use will increase risk management liabilities for root nuisance (and tree safety) in areas with shrinkable clay soils.
- In known problem subsidence areas (e.g. Compartments 29, 30 and 33), adopting a proactive approach to challenging development where VAP issues many impact high value trees could help to reduce future harmful impacts to tree(s) of high importance for conservation.

MANAGEMENT STRATEGY

Overall objectives for managing vegetation against property in Epping Forest:

1. To ensure the COL Subsidence Claims management procedure is met to agreed timeframes;
2. To provide a local VAP management procedure to meet record keeping and ongoing management responsibilities;
3. To reduce our long-term liability and maintenance costs for managing vegetation against property, including integrating subsidence related works with habitat and access management works.

OUTLINE MANAGEMENT PROGRAM

Objective	Action	Timing (Years)
1/2	Maintain a database of all claims, including GIS plotting, reports and correspondence.	Ongoing
1/2/3	Maintain a work programme for all ongoing mitigation works for existing and new claims.	Ongoing
3	Review the potential to reduce third part liabilities, including root nuisance, through integrated land management actions (e.g. see Appendix 6 for an example of indicative proposals).	2022
1/2/3	Subsidence mitigation works program implemented as required.	Annual

APPENDICES

1. Third Party Subsidence - Claims Handling Procedure
2. Flow chart TRN claims procedure
3. Joint Mitigation Protocol Evidential Requirements for Council Owned Trees
4. Legal context, key case
5. Example CAVAT assessment
6. Compartment 30 Indicative integrated management proposals for specific areas

APPENDIX 1: COL THIRD PARTY SUBSIDENCE - CLAIMS HANDLING PROCEDURE



Third Party Subsidence - Claims Handling Procedure Notes

Introduction

Subsidence claims can be technical, complex and often take a long time to settle. These claims can also be very costly, and the aim of these procedure notes is to agree a process that manages subsidence claims efficiently with an aim to mitigate costs to the City.

What is subsidence?

Subsidence is caused when the ground beneath a building moves. There can be several causes, but the most frequent causes are tree root nuisance and defective drainage.

Certain species of tree require a lot of water and will take water from the surrounding soil through their roots. If the surrounding soil is composed of clay, the ground can become very dry, and the soil compacts. If the building above is not adequately supported by good foundations, or the foundations cannot cope with the compaction of soil, the building sinks and cracking occurs.

Subsidence can be identified by diagonal tapering cracks, often emanating from the corner of a door or window.

Defective drains can cause subsidence, as the water leaking from the drains washes away the small particles at the top of the soil, causing the ground to move downwards.

How can subsidence be managed?

If tree roots are proven to be the cause, there are several options for mitigation, including crown reduction and regular pruning. Third parties will always push for trees to be removed, but unless we have concerns regarding the safety of the tree, or there is no amenity value, tree removal should be the last resort.

Other ways of managing subsidence include rehydration systems, tree root barriers and underpinning of the property. Again, underpinning should really be a last resort, as it is extremely costly.

When is movement not caused by subsidence?

There are many cases of movement that are not caused by subsidence, including:

- Landslip
- Natural settlement of the building
- Defective workmanship/design
- Heave (upwards movement of the soil due to rehydration)

First notification of subsidence claims

The first notification of a claim will usually be sent to the Open Spaces department by the claimant's representatives. The purpose of this is so that Open Spaces can identify if the trees are the City's responsibility. If the trees are not the City's responsibility the claim can be immediately redirected.

If the trees are the responsibility of the City, the claimant's representative should submit a pack of evidence including:

- Area of damage
- Site plan
- Photographs of the damage, general area, vegetation
- Arboricultural report
- Details of the City's vegetation, and third party vegetation
- Root analysis
- Drainage report
- Trial pit and borehole data
- Level and crack monitoring (at least 12 months' data if possible)
- A mitigation request per tree identified (e.g. crown reduction, removal, no action)

The pack of evidence is sent to the Insurance and Risk Management (IRM) team, to forward to the City's insurers for a claim to be set up. The insurers will acknowledge the claimant's representatives.

CAVAT report

Once the claimant's representatives have confirmed which of the City's trees they believe are implicated, and have provided us with their request for mitigation, Open Spaces should provide the Insurance Team with a CAVAT report. This report should include the following information for each tree:

- CAVAT value
- The condition (e.g. signs of disease or impact damage)
- The age
- The inspection and maintenance records
- A copy of the tree safety policy

Previous claims

The IRM team will check the City's claims handling system (LACHS) for records of any previous claims at the risk address, and within the surrounding area.

Loss adjusters

Once the CAVAT report and supporting documentation (including details of previous claims) is available, the claim will be referred to a loss adjuster to act on the City's behalf. The loss adjuster will visit the site, review the evidence and report back to the City and the City's insurers with advice on liability and recommendations for next steps.

The City's preferred adjusters are The Graham High Group Ltd (GHG). If GHG are acting for the claimant and a conflict of interests would occur, McLarens can be instructed.

If the claimant's representatives refuse to provide evidence, the City's loss adjuster can be instructed to carry out site investigations on behalf of the City. The cost of these investigations can be passed back to the claimant if the City's adjuster finds that the City's trees are not the cause of movement.

Liability

If the evidence suggests that the City's trees are causing the movement, GHG will work with the City to agree the most suitable mitigation measures. Mitigation measures will be carried out in agreement with the City's insurers and the claimant's representatives.

Once the claimant has submitted a full pack of evidence that proves the City's trees are to blame, mitigation measures must be carried out within a reasonable period of time.

Timescales

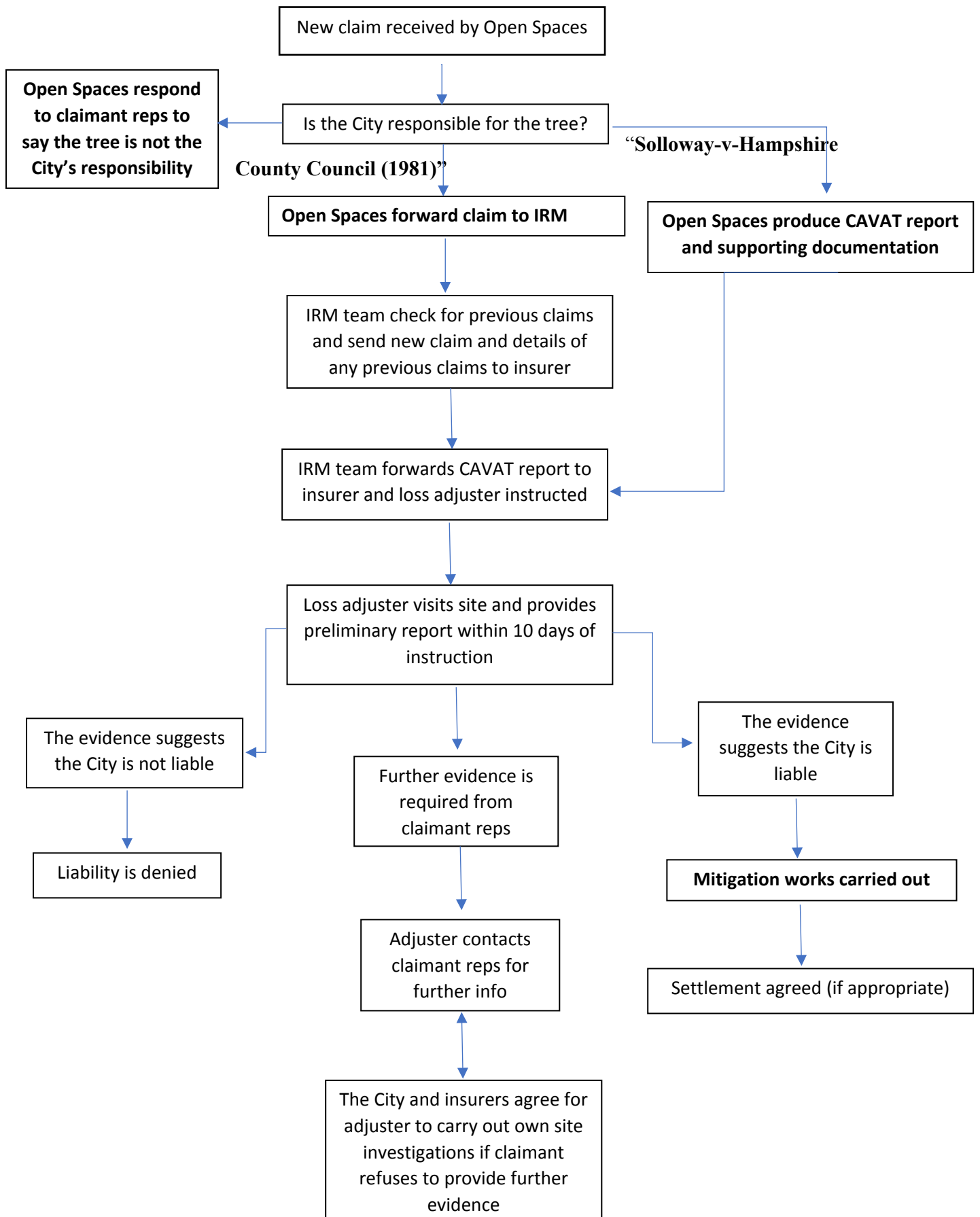
The claimant has six years from the date of loss to bring a claim, however with subsidence claims each new day that damage occurs constitutes a new date of loss. Therefore, limitation runs from the date that the property has stabilised.

Record keeping

The Open Spaces department will maintain a record of all mitigation works agreed, to ensure that agreed pruning cycles are adhered to.

The IRM team will maintain a record of all claims on the City's claims handling database (LACHS). The reason for denying or accepting liability will be recorded within the notes section of the claim record, and all relevant emails, documents and decisions will be saved within the Diary/Notes function.

APPENDIX 2: FLOW CHART TRN CLAIMS PROCEDURE (Open Spaces responsibility in bold)



APPENDIX 3:

Joint Mitigation Protocol Evidential Requirements for Council Owned Trees

Maximum Timeline in	Building Insurer (or their representative) visits the property & assesses if cause of damage is subsidence and if council tree or other factors are likely to be implicated. If the tree, then the Tree Controller/Risk Manager is identified.
7 days	Building Insurer (or their rep.) writes to Tree Controller within 7 calendar days of identifying Tree Controller seeking: 1. Contact details of the individual/department responsible for control of the tree, along with any reference, to assist communication regarding tree management and liability. 2. Contact details of their liability Insurer if appropriate. 3. The value of the tree (low, medium or high) as determined by the Tree Officer.
21 days	Within 14 calendar days of receiving the correspondence referred to above, the Tree Controller/Tree Officer will respond to the Building Insurer (or their rep.) giving responses to questions 1, 2 & 3 above.
81 days	Within 60 calendar days of receiving the value of the council tree, the Building Insurer (or their rep.) will submit either: a) A letter confirming withdrawal of the case, on the basis that the site investigation has not implicated the council tree in the damage, and that the file should be closed. b) A " Submission of Evidence " based on the tree's CAVAT value with the requested mitigation (pruning/felling). Low Value Trees - may be removed & replaced. Medium Value Trees - make an important contribution to the area. High Value Trees - make an extremely important contribution to the area. Low Value Trees: 1. Report on damage to building. 2. Plan & profile of foundations. 3. Plan of site showing location of building in relation to all trees and significant vegetation in vicinity of site. 4. Trial pit cross section to underside of foundation depth plus borehole through base of trial pit to a minimum depth of 3m (explanation to be provided if borehole unable to reach 3m depth). Borehole log to be provided. 5. Root ID from beneath underside of foundation. Medium Value Trees: All of the above plus: 6. Soil moisture content readings at 0.5m centres, starting at the underside of the foundation, down to 3m depth of B/H. 7. Liquid limit test results at underside of foundation and approx 2m depth 8. Plastic limit test results at underside of foundation and approx 2m depth. 9. Soil plasticity calculated from LL – PL. 10. Control borehole to 3m depth with log, with same tests as above, if it is possible to locate such a borehole on the site and remote from the influence of any vegetation. If impossible then explanation needed. 11. Oedometer or suction test results at underside of foundation & 1.0m centres down depth of 3m borehole ONLY when there is NO control borehole. If there is a control borehole then other tests listed are sufficient. 12. Shear vane test results at 0.5m centres, starting at the underside of the foundation, down to 3m depth of borehole(s). 13. CCTV & hydraulic testing to drains (excluding Water Board owned) located within 3m distance of area of subsidence damage. If unable to water test due to no access/blind entries/etc then give reason. 14. Crack monitoring is required on a maximum of 2 month frequency and is to be set up ideally at time of first visit by building insurer representative or within 7 days of 1 st visit. Send all available readings with Submission of Evidence. High Value Trees: All of the above EXCEPT crack width monitoring, plus: 15. Control borehole (if possible) & point of subsidence borehole, each to 5m depth (not 3m as for medium value). 16. Level monitoring commencing at outset of claim for a relevant period (max. 12 months) using a deep datum (if possible) to 8m depth, otherwise use deep manhole. 17. Particle Size Distribution Analysis to BS 1377 Part 2 test 9.0 on a single soil sample taken from a 1m zone below the underside of foundation (Only if drains are present within 3m of the site of damage).

	Joint Mitigation Protocol Evidential Requirements For Council Owned Trees (Continued)
109 days	A. Unless mutually agreed to the contrary, if the requested mitigation scope is not accepted within 28 calendar days of submission of the "Evidence" then the case falls outside this Joint Mitigation Protocol.
172 days	B. Mitigation is to be completed within a maximum of 13 weeks of the date of the Submission of Evidence. If tree removal cannot be agreed without longer term, crack or level monitoring evidence, then the Tree Controller will arrange for pruning to be completed as soon as is practicable but no later than 13 weeks from date of Submission of Evidence.
1 year	C. In cases other than single trees owned by the local authority, e.g. where there are multiple trees/vegetation and/or multiple ownerships an arboricultural report may be required at the discretion and expense of the building insurer. This report should identify & detail the physical attributes of ALL trees & significant woody vegetation in the area of damage. It should also state proposed mitigation which should include the option of pruning/on going maintenance if thought to stand a reasonable chance of bringing about stability. D. The Building Insurer will want to proceed with repairs within 1 year from outset of claim. E. By mutual agreement all the above timescales may be varied. F. Protocol to be reviewed after 12 months in operation.

APPENDIX 4: LEGAL CONTEXT, KEY CASES

The details below are based on the Subsidence Handbook (2013) pages 125 -129 and from professional reports and are only given by way of background to highlight the main context in which the City of London is currently liable for Root Nuisance. Further legislation and case law applies and the list below is not exhaustive.

The Leading decision on liability and causation

Paterson v Humberside County Council (1995): To succeed in a recover action a Claimant must establish that his neighbour's tree(s) were the "effective and substantial" cause of damage to his property.

Rupert St John Loftus- Brigham v London Borough of Ealing (2003): The Court of Appeal reaffirmed that the correct test was whether the Defendants' tree roots were an effective cause of damage.

Local authorities: foreseeability of damage

Solloway v Hampshire County Council (1981) confirmed that foreseeability of damage needed to be established. There must be a real risk of damage that is not less than the action or steps that would need to be taken to reduce or remove the risk. Knowledge of the defendant is also important.

Berent v Family Mosaic Housing and the London Borough of Islington (2012): The Court of Appeal confirmed the position that there must be a 'real risk' of damage before deemed foreseeable knowledge is inferred.

Russell v London borough of Barnet (1984): It has generally been accepted that by virtue of their experience and financial resources, local authorities have been aware in principle since the mid 1970's that certain trees in dry conditions cause damage to adjacent properties if they are not properly managed.

Inadequate Foundations

Bunclark v Hertford County Council (1977): Established that it is no defence to say that the property was particularly vulnerable because of the poor construction. "Tree roots take their victim as they find them". See also *Paterson v Humberside County Council*.

What if the tree predates the house?

McCombe v Read (1955): Established that it is no defence for a tree owner to argue that the trees were present before the property that has suffered damage.

APPENDIX 5: EXAMPLE CAVAT ASSESSMENT

Capital Asset Valuation of Amenity Trees (CAVAT) Assessment

Erehwon

22nd October 2018



<p>Prepared for: Naomi Stefanie, Insurance and Risk Management Officer</p> <p>Prepared by: Richard Edmonds, Senior Conservation Officer</p> <p>Checked by: Geoff Sinclair, Head of Operations</p>	<p>Epping Forest, City of London, The Warren, Loughton, IG10 4AE</p> <p>Tel 0208 532 1010</p>
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Introduction

1. The City of London was advised that the property, Erehwon, has suffered differential movement and damage that they consider has been caused by trees growing opposite to the property and influencing the soils beneath its foundations.
2. In response to being informed of the possible property issue a Capital Asset Valuation for Amenity Trees (CAVAT) was undertaken on the 22nd October 2018 on two of the trees identified by the insurer's Arboricultural Assessment for felling. This note describes the finding of this assessment.
3. We report below on the trees using the same numbering system as OCA Insurance Services in the Arboricultural assessment

Tree 1

4. T1 is an English Oak (*Quercus robur*)
5. T1 is a young semi-mature tree that makes up part of a short section of woodland edge.
6. The CAVAT assessment for this tree gave a valuation of £2,531 (Appendix 1)
7. T1 has developed a one-sided crown due to competition and shading of other trees. It is growing adjacent to the public footpath and has a slight lean towards the highway
8. The tree is located adjacent to a Site of Special Scientific Interest (SSSI) and Special Area of conservation.
9. T1 is in a good healthy condition however due to its proximity to the public highway and leaning habit it will require remedial work in the future as its growth will eventually impact on the highway and a nearby street lamp. Therefore, I expect it to have a life expectancy of 20 to 40 years as a consequence of the need for intervention at a future point.

Tree 2

10. T2 is an English Oak (*Quercus robur*)
11. T2 is a semi-mature tree that makes up part of a short section of woodland edge. It is growing adjacent to the public footpath and has heavy branching developing towards the highway
12. The CAVAT assessment for this tree gave a valuation of £31,910 (Appendix 2)
13. The tree is located either immediately adjacent or partially inside a Site of Special Scientific Interest (SSSI) and Special Area of conservation.
14. T2 is in a good healthy condition with its stem covered in Ivy and is a potential bat roosting site. T2 has developed from a scrubland oak to an open crowned tree and is becoming a prominent individual tree on the edge of an urban location.

Conclusion

15. The CAVAT assessment for T1 and T2 was cumulatively £34, 441
16. Due to the foreseeable work that will be required to Tree T1 it could be felled, without prejudice, as part of the highway vegetation and tree safety management in this area.
17. T2 is becoming a distinctive and significant part of the Woodland edge without which the edge would be predominantly low scrub and bramble. We have no reason to undertake significant works on it and would wish to retain it in as natural a condition as possible.

Appendix One: T1 CAVAT Assessment

CAVAT

SPREADSHEET TO CALCULATE VALUE OF INDIVIDUAL TREE STOCK (FULL METHOD)

Only enter data in the pale-green boxes

© Christopher Neilan

Created by Alexandra Sleet and Phillip Handley

CAVAT	Quantities you measure / look up	Calculated Values
Step 1: Basic Value		
Measured Trunk Diameter	31.00	
Unit Value Factor	15.88	
Basic Value		£11,985.71
Step 2: CTI Value		
Community Tree Index (CTI) Factor	150	
Community Tree Index (CTI) Value		£17,978.57
Step 3: Location Value		
Location Factor	100	
Location Value		£17,978.57
Step 4: Functional Crown Value part 1		
Structural Factor	40	
Structural Value		£7,191.43
Step 5: Functional Crown Value part 2		
Functional Crown Factor	40	
Functional Crown Value		£2,876.57
Step 6: Amenity Value		
Positive Attributes Factor	30	
Negative Attributes Factor	-20	
Amenity Value	110	£3,164.23
Step 7: Full Value		
Life Expectancy Factor	20 - <40	
FINAL VALUE		£2,531

Appendix Two: T2 CAVAT Assessment

CAVAT

SPREADSHEET TO CALCULATE VALUE OF INDIVIDUAL TREE STOCK (FULL METHOD)

Only enter data in the pale-green boxes

© Christopher Neilan

Created by Alexandra Sleet and Phillip Handley

CAVAT	Quantities you measure / look up	Calculated Values
Step 1: Basic Value		
Measured Trunk Diameter	59.00	
Unit Value Factor	15.88	
Basic Value		£43,415.46
Step 2: CTI Value		
Community Tree Index (CTI) Factor	150	
Community Tree Index (CTI) Value		£65,123.19
Step 3: Location Value		
Location Factor	100	
Location Value		£65,123.19
Step 4: Functional Crown Value part 1		
Structural Factor	50	
Structural Value		£32,561.59
Step 5: Functional Crown Value part 2		
Functional Crown Factor	70	
Functional Crown Value		£22,793.12
Step 6: Amenity Value		
Positive Attributes Factor	50	
Negative Attributes Factor	-10	
Amenity Value	140	£31,910.36
Step 7: Full Value		
Life Expectancy Factor	>80	
FINAL VALUE		£31,910

APPENDIX 6: Compartment 30 Indicative integrated management proposals for specific areas

Compartment 30, The Pines / Newlands Road

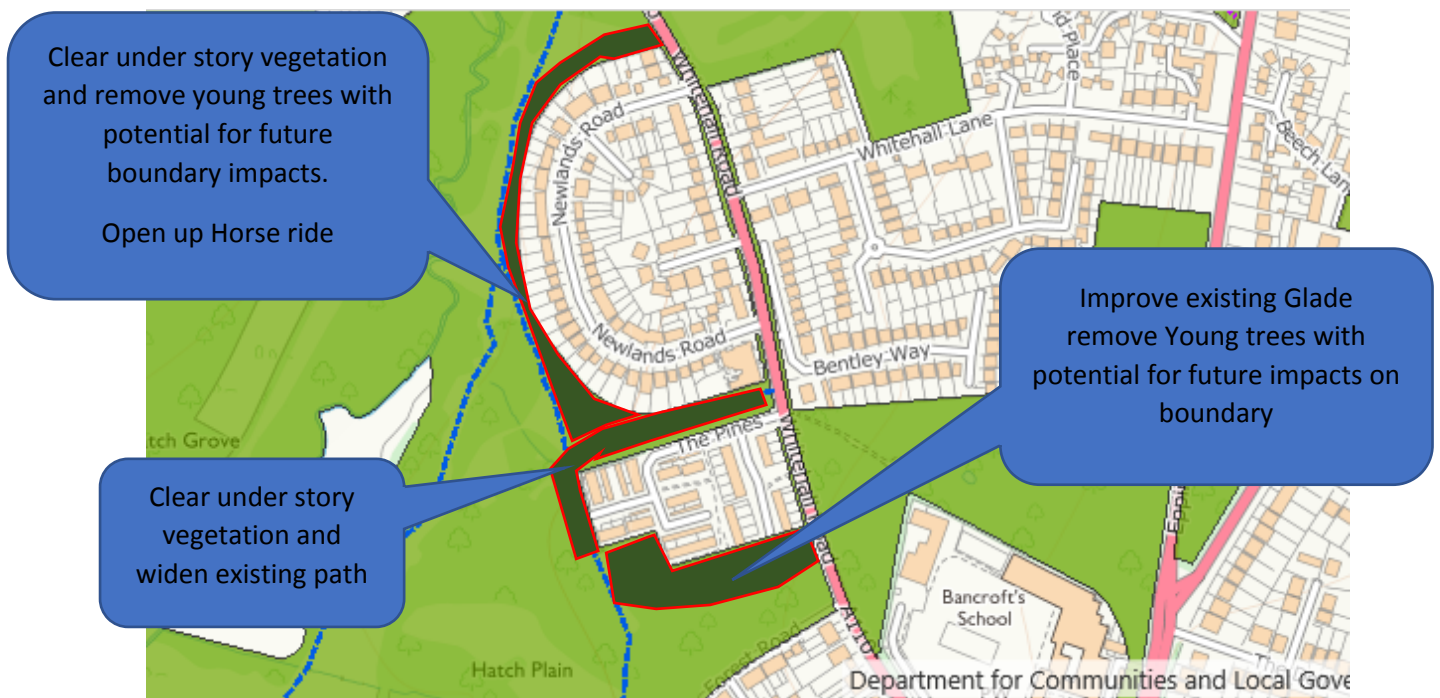
Background

Compartment 30 which has the highest number of subsidence issues by compartment that we have on the Forest.

Some work has been carried out around the boundary over the years and one small area is subject to on-going maintenance after initial felling and clearance.

There are the beginnings of a natural Glade at the rear of the Pines which can be extended and improved, it also borders the Woodford Golf course and a Horse ride which would benefit from opening up.

The Pine's roadside boundary would also be improved with thinning of the understory behind the road side hedge.



Benefits

- Improved access to horse ride and paths;
- Improved ground condition of rides and paths;
- Glade creation (biodiversity);
- Reduced illegal rubbish dumping on Forest boundary;
- Improved monitoring and prosecution of illegal dumping; and,
- Improved access for tree safety inspection.

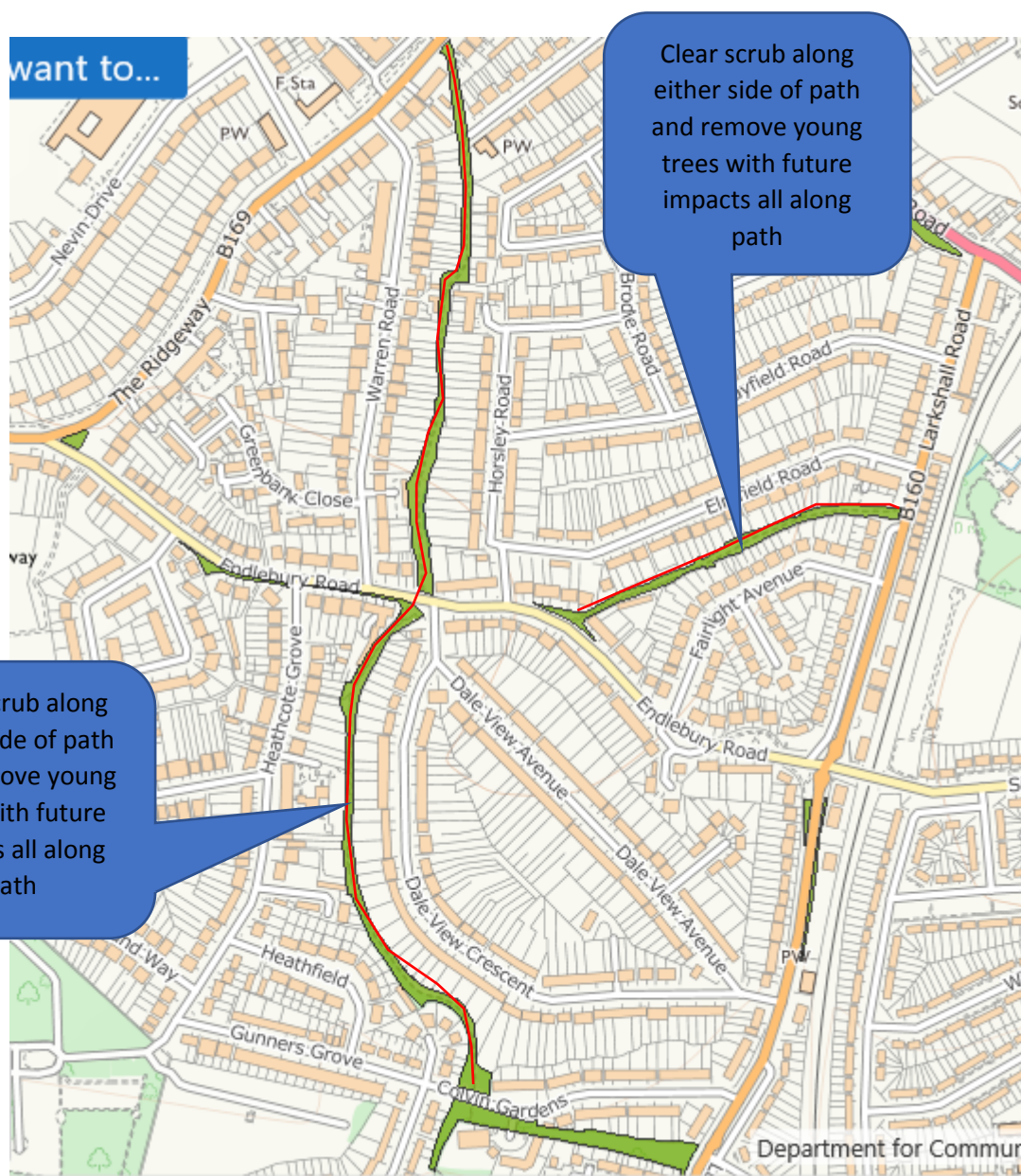
Constraints

- Area is within a designated SSSI and SAC, therefore any proposed works will need approval from Natural England.
- Works will need to be undertaken outside of the bird breeding season.

Compartment 30 Endelbury Road Indicative integrated management proposals

Background

Management of the green lanes north and south of Endelbury Road of Epping Forest has lapsed in recent years. The green lanes have been cleared in the past, but ongoing maintenance work has been sporadic, leading to the lanes becoming blocked in places, with illegal dump rubbish from properties that back on to the lanes.



Benefits

A works programme for the green lanes would:

- Improve safety for local residence;
- Improve the aesthetics and appearance of the green lanes;
- Reduce illegal rubbish dumping;
- Improve monitoring by Forest Keeper team;
- Improve public access along the green lanes; and,
- Improve access for tree safety inspections.

Constraints

- Works will need to be undertaken outside of the bird breeding season.

BURNHAM BEECHES AND STOKE COMMON CONSULTATION GROUP

Tuesday, 14 January 2020

Minutes of the meeting of the Burnham Beeches and Stoke Common Consultation Group held at the Burnham Beeches Estate Office at 7.00 pm

Present

Members:

Chairman Graeme Doshi-Smith- City of London Corporation
Martin Albertini- Bucks Invertebrate Group Representative
Les Davis- Scouts association
Barry Malki- BP Council
Penny Cullington- Bucks Fungus Group
Andy Booth- Friends of Stoke Common
Mark Frater- Local Business Representative
Joy Winyard - Local Bird Representative
Peter Harding- Farnham and Hedgerley Community Church
Judy Tipping- Parish Council
Tim Crauford- The National Trust
Adrian Sutton- Nightingale Park Residents Association
Sharon Owen- Scouting representative
Mary Kohlase- The Avenue Residents Association
Sarah Daughy- Beeches eco Café
Vivian Ely- Joggers & Wheelers Society
Stephen Knight- Chiltern Nordic Walkers Group
Caroline Spicer- Nightingale Park Residents Association

Officers:

Richard Holt	- Town Clerk's Department
Andy Barnard	- Superintendent of The Commons
Deborah Harris	- Support Services Officer, The Commons
Debbie Bennet	- Asst Support Services Officer, The Commons
Martin Hartup	- Head Ranger, The Commons
Dr Helen Read	- Conservation Officer, The Commons

1. APOLOGIES

Apologies were received from Deputy Phillip Woodhouse, Sylvia Moys, Alderman Robert Hughes-Penney, Doug Wallace, Mark Franklin, Simon Meecham, Andy McVeigh, Jenny Jebson, Keith Greensborough, Katie Ayers and Martin Woolner.

2. MINUTES OF THE PREVIOUS MEETING

The Group considered the minutes of the previous meeting of the Burnham Beeches and Stoke Common Consultative Group.

RESOLVED- That the minutes be approved.

3. **SUPERINTENDENT'S UPDATE**

The Superintendent provided an update on the City of London's Fundamental Review including the process, governance timeline and the possible impact on the budgets of the Open Spaces Departmental budgets. In addition, the Superintendent commented that, although the impact of the Fundamental Review is not yet fully understood, it will likely have an effect on the working model of the Department.

Replying to a query from a Member of the Consultative Group the Superintendent clarified that the Governance Review being conducted by the City of London Corporation would likely delegate greater levels of authority to Officers. Further to this it was confirmed that a new operational model could include a number of opportunities for the management of Burnham Beeches.

The Consultation Group members discussed the possibilities of working with local parish council's and other partner organisations to support Burnham Beeches given the value it adds to the local community.

RESOLVED- That the Superintendent's update be noted.

- That the Superintendent contact local Parish Council Chairmen to explore what, if any, financial support there might be to deliver management objectives at Burnham Beeches

4. **THE BURNHAM BEECHES MANAGEMENT PLAN**

The Conservation Officer provided a summary of the key details and progress of the Management Plan explaining that it had received the approval of the Epping Forest and Commons Committee on the 13th of January 2020. In addition, it was noted that an extensive public consultation had taken place regarding the Management Plan with an over ninety percent positive response.

Following a comment made by a member of the Group the Superintendent clarified that the public consultation had been targeted toward those who regularly visit Burnham Beeches as the primary stakeholders. In addition, it was noted that a balance between receiving an unmanageable number of visitors and informing a large number of people on the benefits of the Beeches needed to be maintained. Similarly, it was noted that a balance between visitors seeing all areas of the Beeches and minimising the impact of visitors was also important.

RESOLVED- That the Burnham Beeches Management Plan be noted.

5. **2019 UPDATE MAJOR HABITAT WORKS AND COUNTRYSIDE STEWARDSHIP WORK**

The Conservation Officer and Head Ranger provided a summary of the major projects undertaken in 2019 including the Department's engagement with the Countryside Stewardship Scheme.

RESOLVED- That the summary be noted.

6. **PROJECTS FOR 2020 BURNHAM BEECHES CAR PARKING INFRASTRUCTURE PROJECT – BURNHAM BEECHES THE COMMON UPDATE & CSS CAPITAL PROJECTS REMAINING AT BURNHAM BEECHES SC**

The Committee received an update from the Superintendent and Head Ranger on the projects scheduled for 2020 with particular importance on the capital projects, PSPO Review and the new car parking infrastructure system due to be introduced at the Burnham Beeches car parks. The Head Ranger explained that the intention was that the new car park charging system would be as flexible as possible to allow features including free stay period.

Replying to a comment from a member of the Consultation Group the Superintendent confirmed that the City of London Corporation was in regular contact with the operator of the Burnham Beeches Café in order that no adverse impact on the commercial viability of the Café is experienced.

In response to a query from a member of the Consultation Group the Superintendent explained while offences were decreasing complete compliance with the PSO regarding dogs would be unlikely and that enforcement was, as with all laws, the key element.

RESOLVED- That the update be noted.

7. **PLANNING ISSUES UPDATE**

The Conservation Officer updated the Burnham Beeches and Stoke Common Consultation Group on the South Bucks District Council noting the pressure that the increased houses would have on Burnham Beeches. In addition, it was noted that an information ranger could be required, and the Buckinghamshire unitary council merger could have an impact on the Local Plan submission and inspection process. A member of the Consultation Group noted that a local community group would be putting forward their representation on the Local Plan. The Chairman noted the extensive work that had taken place at many of the open spaces managed by the City of London Corporation with relation to the relevant local authorities' local plans.

RESOLVED- That the update be noted.

8. **ANY OTHER BUSINESS**

A Member of the committee queried the level of fire risk at Burnham Beeches. The Conversation Officer confirmed that the fire risk was primarily located at Stoke Common but that extensive mitigation measures were in position minimise the risk of fire at the site.

9. **SUMMER MEETING DATE**

The Town Clerk explained that the summer meeting of the Group would be confirmed and circulated to members in due course.

RESOLVED- That the report be noted.

The meeting closed at 8.55 pm

Chairman

Contact Officer: Richard Holt
Richard.Holt@cityoflondon.gov.uk

1. Committee(s):	Date(s):
Epping Forest & Commons Committee	10 March 2020
Subject: Superintendent's Update	Public
Report of: Superintendent of 'The Commons'	For Information
<p style="text-align: center;">Summary</p> <p>This report provides a general update on issues across the nine sites within 'The Commons' division that may be of interest to members and is supplementary to the monthly email updates.</p> <p>Recommendation Members are asked to note the contents of this report.</p>	

Burnham Beeches and Stoke Common

1. Regular meetings and discussions have continued with officers from South Bucks District Council (SBDC), Natural England and SBDC, Lepus (the consultancy conducting the Habitats Regulations Assessment for the Council) regarding the Local Plan. Further traffic modelling has indicated that the increase in numbers of vehicles using the roads through the Beeches expected as a result of the local plan is insufficient to trigger further modelling of air quality. The recreation mitigation strategy has become much clearer but there are minor issues to resolve, revolving around the scale of developer payments for new dwellings in the zone between 500m and 5.6km from the Beeches. Agreement on the detail is now close between all partners. Mitigation payment levels will ensure key benefits to the Beeches as well as being proportionate to the level of development planned. The first part of the Examination in Public (EIP) will be held in the week of 16 March. The deadline for notifying a desire to speak at the EIP was prior to complete finalisation of the mitigation strategy therefore Officers have given notification that they may wish to speak. This option does not need to be taken up if the results are agreed satisfactorily prior to the EIP.
2. A positive meeting was held with Planning Officers from Slough Borough Council to discuss the impacts of a large development in relation to the Habitats Regulations Assessment which is required to carry out some mitigation for the impact of recreation. Options were discussed and will be further explored at an additional meeting with the developer and Natural England. There is now appears to be a timetable to produce the Slough Local plan and a willingness to engage with the City

of London Corporation over impacts on the SAC. This process is likely to continue until the adoption of their plan in 2022.

3. The Memorandum of Understanding with Heathrow Airport is close to being finalised and a meeting is planned for a review and to plan the next steps with the potential partners.
4. Following approval of the draft 10-year Burnham Beeches Management Plan by this Committee the document has been finalised and sent to Natural England (NE) to grant consent. A Habitats Regulations Assessment needs to be carried out, but it is hoped that this will be a relatively simple process that will be carried out by NE.
5. The old pollard work was reduced this year because the impact of two dry summers was visibly stressing some of the trees. The work on 10 trees was sufficiently urgent to continue with and this was done by Burnham Beeches staff using the access platform and arborists from Hampstead Heath who look forward to their visits to work on the old trees each year.
6. Because of the reduced old pollard work programme, the programme for the young pollards was increased. Over 120 young pollards have been cut in rotation as part of the Countryside Stewardship grant funding and around 50 more created in areas of wood pasture restoration around the Beeches. A mobile access platform was hired to do some of the work on the larger/taller trees.
7. During their visit, the Hampstead Heath arborists carried out some small-scale clearance of trees to let light to an area where transplants of the rare lichen *Pyrenula nitida* had been carried out by 'Plantlife' earlier in the winter. This was done using some techniques to make the area look like a storm had passed through.
8. Wood pasture restoration close to Victory Cross has been carried out using contractors and regular volunteers. Scrub cover has been cleared, some larger trees removed, some new pollards created, and the restoration is making good progress. This work is funded by the Countryside Stewardship grant.
9. Volunteers have also been busy at Stoke Common continuing with birch clearance. A replacement All Terrain Vehicle has been purchased with multiple seats which will be used to transport volunteers to and from tasks.
10. A re-survey and review of all the young pollards is underway with help from the ecology volunteers who are also continuing with dust monitoring and sorting of invertebrate samples.
11. The Beeches was shut for short periods during Storm Ciara and Storm Dennis. Several trees were blown over or lost large branches. Unfortunately, both storms

were at weekends, which had an impact on car park revenue and café trade. The February half term week was also dominated by very poor weather

12. A small group of travellers arrived during storm Ciara and gained access to a car park by cutting the lock on the gate. They initially proved difficult to evict due to lack of police support and remained on site for four days finally being moved on the 13th February when bailiffs were well supported by police.

PARTNERSHIPS

Kenley Revival update

13. The City Funded Legacy Officer has delivered several events during this period, including two mini-museum exhibitions displaying archaeological finds (25 January and family activities including a historic re-enactment (22 February).
14. The City's legal advisors Beale & Co wrote to Clyde & Co who represent the project's Principal Designer reaffirming that we are pursuing a resolution to the conservation works issue. This followed receipt of a report from the Buildings Research Establishment that gives reassurance on the City's position that the Principal Designer is responsible for the failure of the works. In a letter dated February 20 Clyde & Co refuted this assertion. Beale & Co Wrote back on February 21 pressing for a more satisfactory response by March 6.
15. The Superintendent and Head Ranger visited the factory of 'Allsigns' on February 3 to view progress of the on-site signage. Near complete examples of each type of sign were seen, and the company confirmed that they will be ready for installation in early March. Consequently, two applications have been submitted to Croydon Planners: one to discharge a condition to provide samples and the other to inform them of a non-material change relating to construction materials.

The West Wickham and Coulsdon Commons

16. Following the two successive winter storms, Rangers carried out checks on all medium and high-risk routes for tree damage and remedial work to remove fallen or damaged trees. Several large trees came down including a large Oak over a residential road at Spring Park, which was dealt with by rangers outside of working hours.
17. The Assistant Ranger commenced her role on 15 January 2020. This is a twelve-month fixed term contract, during which they will assist the team across all sites.
18. An egg search for Brown Hairstreak Butterfly, (*Thecla betulae*), at Spring Park produced encouraging results. A total of 67 eggs were identified within a series of Blackthorn compartments, managed for Brown Hairstreak butterflies. This is now the

highest number of surveyed individuals, within Kent. This has been a concerted effort to manage Blackthorn growth in sections to provide continuity of valuable habitat for egg laying. This is very positive news considering the substantial national decline in this species.

19. Most of the cows have now calved; a total of 16 is expected. The Livestock Ranger has been checking cows around the clock with assistance from the Ranger team. A 'Meet the Calves' event is planned for 28 March 2020 and, with its popularity from previous years, should provide a good opportunity to engage the local community before the cattle are back grazing the Commons in late Spring.
20. Contractors have been on site carrying out remedial works from tree felling on Famet, Riddlesdown to extend and improve chalk grassland habitat. Poor weather in December and January prevented access and movement of machinery, temporarily delaying the work.
21. There has been liaison with Surrey Wildlife Trust (SWT) including a site visit to Norbury Park to see how Ash dieback disease is being managed. It is expected that the disease will kill up to 95% of Ash trees across the UK. The Coulsdon and West Wickham Commons have several locations where the extent of the disease on native ash is evident and progressing. The SWT visit included management examples, experience of contractors and how they inform members of the public was informative in advance of preparing woodland management plans for the Commons.
22. A letter of thanks on behalf of this committee, was sent to the Principal of the Riddlesdown Collegiate for the continuing programme of student participation in support of the management of the Common

Ashtead Common

23. Rangers have conducted site inspections on several occasions in recent weeks because of the recent storms. Fortunately, there has been very little damage to trees on the Common. The Ashtead Residents Association again expressed their appreciation for the flow control structure on the Rye Brook, which has held back peak flows during recent periods of heavy rain. They are sure that properties downstream would have flooded without it.
24. The winter programme of habitat management work was completed by February 14 and tree safety work by February 21. Approximately 90 veteran trees were worked on this year, slightly fewer than planned mainly because of delays caused by OPM.
25. Scrub/grassland and ride management works were largely completed by Christmas. A project to remove willow from the ditch around Woodfield using an excavator received several compliments from residents.

26. Work is currently underway on the first draft of the 2021-2031 management plan. The team has been consulting the local community on the vision for the Common for some time now and will shortly be presenting the aims and targets for the next 10 years to the Ashtead Common Consultative Group.

Support Services Team

27. The team is busy with end of year processes, procurement initiatives and protocol to ensure a timely and successful financial year end and forecasts predict that all is on track.
28. The new Administration Assistant for the Merlewood and Ashtead Estate Offices begin her role on 24 February and will be a very welcome addition to this small team who have been covering these duties for several months.
29. Recent bad weather has increased the work of the team with increased reporting of fallen trees from members of the public and rapid response to arrange emergency tree contractors for the Ranger team.

Grant Funding - Enjoying Green Spaces and the Natural Environment

30. The Open Spaces Department's "Enjoying Green Spaces and the Natural Environment" grant is managed by the Central Grants Unit. Awards are made annually upon submission of satisfactory submissions. Awards range from between £2k and £15k and are given to community, charity and voluntary groups under 4 sub themes:
1. Connecting communities with their green spaces
 2. Improving the conservation value of the green spaces
 3. Improving our knowledge of the biodiversity of the green spaces
 4. Improving mental health through the use of green spaces
31. Eighteen grant submissions were received this year across all the Open Spaces totalling £225,000.
32. A budget of up to £132,000 was available to award. Eleven applications across all divisions have been awarded a total of £120k. Five projects were funded across The Commons as outlined below.

Organisation Name	Purpose of the Grant	Funding Awarded £
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Downlands Trust	Practical volunteer task days and the grazing of 9 goats at Riddlesdown Quarry throughout the year, both of which will improve the sites' biodiversity.	14,988
Friends of Farthing Downs & Happy Valley	Renew and extend the Nature Trail which connects the varied iconic landscape with the surrounding urban community in Farthing Downs and Happy Valley.	6,200
Friends of Stoke Common	Replacement of tools and equipment to enable continued work on the Stoke Common Management Plan 2019/28	6,945
Lower Mole Countryside Trust	Implementation of the Rye Brook Restoration Project (stream improvements, vegetation management and public access improvements) on Ashted Common over a 3-year period.	15,000
Plantlife International	Increase knowledge and plan for habitat restoration for vascular plant, lichen and bryophyte interest in the wider Burnham Beeches landscape. The information will help place the plant and fungi interest of Burnham Beeches within a wider context and provide both information and guidance on the management and restoration of habitats within this wider landscape.	12,374

One application from Farnham Commons Middle School unsuccessful.

Incidents

Burnham Beeches & Stoke Common

33. Incidents in the period included: traveller incursion, a roe deer injured by a dog at Stoke Common and 4 PSPO warning letters being issued for dogs being off a lead in the on-lead area.

Ashted Common

34. None

The West Wickham and Coulsdon Commons

35. Five separate occurrences of fly tipping have taken place across the WW&CCs - the most significant was a large volume of asbestos on Ditches Lane. Rangers worked with the Police and London Borough of Croydon (LBC) officers to clear the site which involved closing the road for most of the day. There has subsequently been a meeting with, LBC, Tandridge and City of London looking at the introduction of high

definition cameras on the section of road that crosses Farthing Downs. There is also a joint operation taking place with Police and Enforcement Officers stopping suspicious vehicles using the downs and checking their waste transfer licences. The City will support this by making a section of our land available along the roadside for the duration of the operation.

36. There have been two separate incidents of sheep worrying, fortunately no fatal attacks have occurred. Rangers are sharing information with the local police, and Croydon Enforcement. One individual is known to us and is due to be visited by Croydon Enforcement early in the new year following further intelligence coming to light recently.

Filming, major events and other activities

Burnham Beeches

37. The Beeches organised several events including Woodland Explorers at half term, bird box making and meet the Ranger focussing on filming.
38. The Beeches also hosted some Simply Walks.
39. A talk was given to the Stoke Poges Society about the Beeches and Stoke Common with over 60 people attending.

Andy Barnard. Superintendent of The Commons
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