

ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

- Distribution Main:** The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.
- Trunk Main:** A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.
- Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.
- Fire Main:** Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.
- Metered Pipe:** A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.
- Transmission Tunnel:** A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.
- Proposed Main:** A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

Thames Water Utilities Ltd, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13
T 0845 070 9148 E searches@thameswater.co.uk I www.thameswater-propertysearches.co.uk

Valves

- General Purpose Valve
- Air Valve
- Pressure Control Valve
- Customer Valve

Hydrants

- Single Hydrant

Meters

- Meter

End Items

Symbol indicating what happens at the end of a water main.

- Blank Flange
- Capped End
- Emptying Pit
- Undefined End
- Manifold
- Customer Supply
- Fire Supply

Operational Sites

- Booster Station
- Other
- Other (Proposed)
- Pumping Station
- Service Reservoir
- Shaft Inspection
- Treatment Works
- Unknown
- Water Tower

Other Symbols

- Data Logger

Other Water Pipes (Not Operated or Maintained by Thames Water)

- Other Water Company Main:** Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.
- Private Main:** Indicates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL's terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to him at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to Consumer Council for Water on 0121 345 1000 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

<p>Credit Card</p> <p>Call 0845 070 9148 quoting your invoice number starting CBA or ADS.</p>	<p>BACS Payment</p> <p>Account number 90478703 Sort code 60-00-01 A remittance advice must be sent to: Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW. or email ps.billing@thameswater.co.uk</p>	<p>Telephone Banking</p> <p>By calling your bank and quoting: Account number 90478703 Sort code 60-00-01 and your invoice number</p>	<p>Cheque</p> <p>Made payable to 'Thames Water Utilities Ltd' Write your Thames Water account number on the back. Send to: Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW or by DX to 151280 Slough 13</p>
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Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.

Andrew Peeke

O Connor Sutton Cronin
40
Bowling Green Lane
London
EC1R 0NE

Thames Water Utilities Ltd.
PO Box 3189
Slough
SL1 4WW



Customer Reference: N/A

Invoice No: ADS16391689
Our Ref: ALS/ALS
Standard/2016 3376728

Customer Number: ADS101630
Purchase Order No:

Posting Date: 21-07-2016
Due Date: 04-08-2016

Search Address Supplied: 97, Cromwell Road, Kensington, London, SW7 4DN

Description of Charges	Qty	Unit Price	VAT (20%)	Amount (Inc VAT)
Asset Location Search	1	£47.40	£9.48	£56.88





OUTSTANDING AMOUNT (Inc. VAT)	£56.88
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Please send any outstanding amount to Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW.

Your payment terms are within 14 days. Please see previous page for ways to pay.

For queries please contact the Property Searches Customer Support Team on Tel: 0845 070 9148.

VAT Reg. No GB 537456915

 <p>Girobank plc Bootle Merseyside GIR 0AA</p>		<h2 style="text-align: center;">Payment slip</h2>	<h2 style="text-align: center;">bank giro credit</h2> <div style="text-align: right;">  </div>
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">138</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">208</div> <div style="border: 1px solid black; padding: 5px;">70</div>	<p>Reference (customer account number)</p> <div style="border: 1px solid black; padding: 5px; min-height: 40px;">ADS101630 / ADS16391689</div>	<p>Credit account number</p> <div style="border: 1px solid black; padding: 5px; min-height: 40px;">257 1706</div>	<p>Amount due (40p fee payable at PO counter)</p> <p>£ 56.88</p> <div style="border: 1px solid black; width: 150px; height: 30px; margin-top: 5px;"></div> <p>Cheque NOT acceptable at Post Office</p>
<p>Cashiers stamp and initials</p> <div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 50%; height: 50%; border: 1px solid black;"></div> </div>		<p>Signature</p> <div style="border-bottom: 1px solid black; height: 40px; margin: 10px 0;"></div> <p>O Connor Sutton Cronin 40 Bowling Green Lane London EC1R 0NE</p>	
<p>Items</p> <div style="border: 1px solid black; width: 50px; height: 50px; margin: 5px;"></div>		<p>Date</p> <div style="border-bottom: 1px solid black; height: 40px; margin: 10px 0;"></div> <p> NatWest Collection Account Thames Water Utilities Ltd</p>	
<p>Fee</p> <div style="border: 1px solid black; width: 50px; height: 50px; margin: 5px;"></div>		<p>Cash</p> <div style="border: 1px solid black; width: 100px; height: 50px; margin: 5px;"></div> <p>Cheques</p> <div style="border: 1px solid black; width: 100px; height: 50px; margin: 5px;"></div> <p>£</p> <div style="border: 1px solid black; width: 100px; height: 50px; margin: 5px;"></div>	
<div style="border: 1px solid black; padding: 10px; display: inline-block;">57-17-06</div>			
<p>Please do not write or mark below this line and do not fold this counterfoil</p>			

010010003916895 V7702571706 000056880 74 X



Search Code

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- sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practise and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

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- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
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TPOs Contact Details

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk

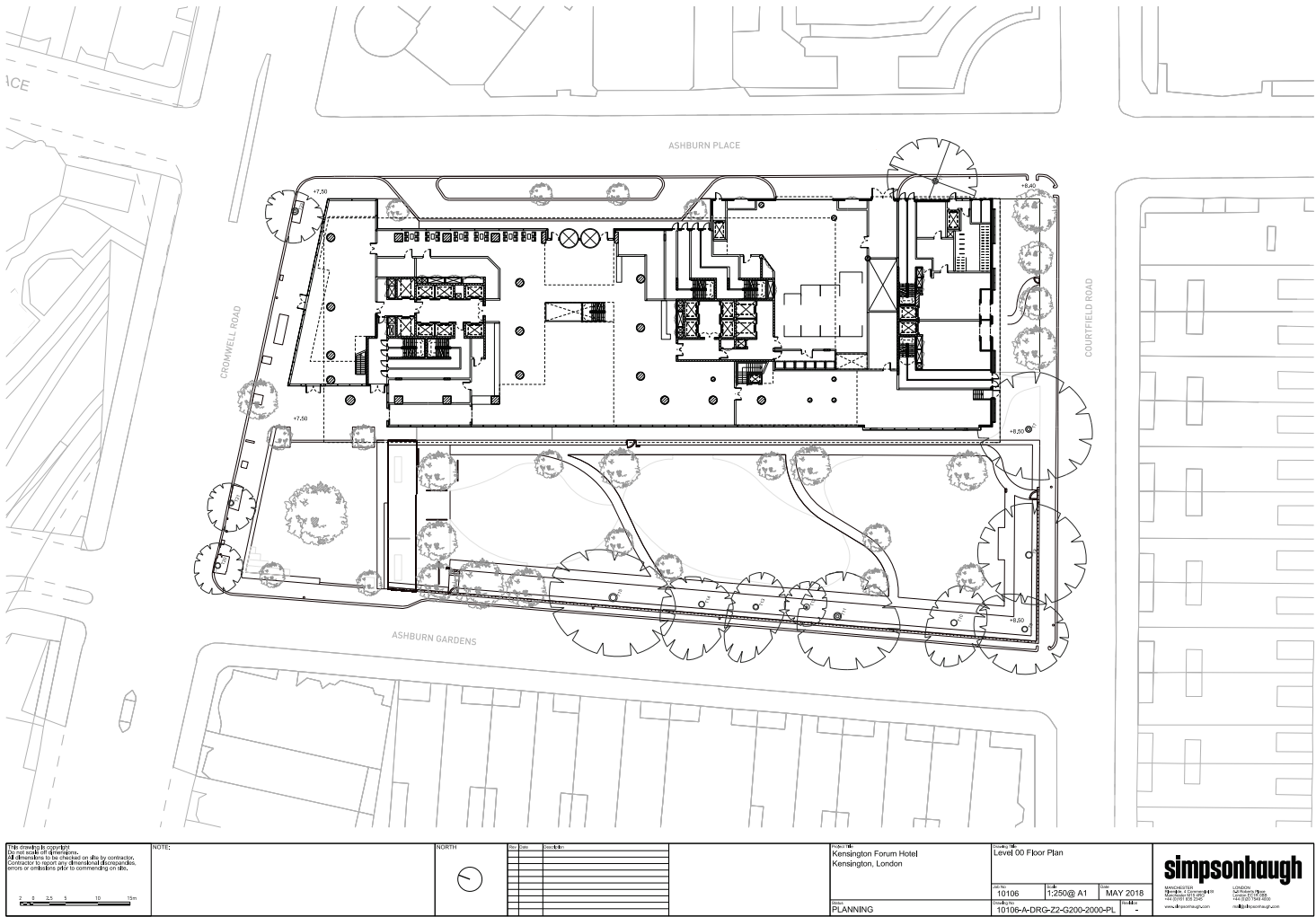
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APPENDIX C. PROPOSED DEVELOPMENT SITE PLAN

Appendix C

Proposed Development Site Plan





APPENDIX D. EXISTING SURFACE WATER RUN-OFF ESTIMATES

Client: Acumen PS

Project: Kensington Forum

Project No.: A529

Project Manager: RH

Comments: Existing Site Run-Off 1 year Return Period

FACTOR	VALUE	SOURCE	FACTOR	VALUE
Return Period (yrs):	1	Environment Agency, Water Authority, etc.	Additional Inflow (l/s):	0
Contributing Area (ha)	0.76	Environment Agency, Water Authority, etc.	Calculate/Specify PR:	Calculate
Impervious, PIMP (%):	60	Site plans	Specify PR:	100
M5-60min (mm)	20.6	Site plans		
Climate Change Factor %				
M5-60min (mm): Incl CC	20.6	FSR Volume V maps and site location		
SAAR (mm/yr):	600	FSR Volume V maps and site location		
Ratio, r:	0.4	FSR Volume V maps and site location		
Soil Type:	3	FSR Volume V maps and site location		
SOIL:	0.4	Soil Type and FSR Volume 1, Section 7.4		
UCWI:	52	SAAR and FSR Volume 1, Figure 9.7		
Calculated PR:	43.13			
Percentage Runoff =	43.13			
Duration, Z1:		FSR Volume 1, Figure 6.3 ('r' and duration)		
Return Period, Z2:		FSR Volume 1, Table 6.2 (M5-D and return period)		

Duration, D (min)	M5-60 (mm)	Z1 for r=0.40	M5-D (mm)	Z2 for M1	M1-D (mm)	Avg Intensity i _{avg} (mm/hr)	Cv	Cr	Area A (ha)	Peak Flow Q m ³ /s	
5	21	0.38	7.8	0.61	4.8	57.68	0.72	1.30	0.76	0.1138	
10	21	0.54	11.1	0.61	6.8	40.85	0.72	1.30	0.76	0.0806	
15	21	0.63	13.0	0.62	8.0	31.98	0.72	1.30	0.76	0.0631	l/s
30	21	0.80	16.5	0.62	10.3	20.57	0.72	1.30	0.76	0.0406	
60	21	1.00	20.6	0.64	13.3	13.27	0.72	1.30	0.76	0.0262	
120	21	1.20	24.7	0.66	16.3	8.16	0.72	1.30	0.76	0.0161	
240	21	1.46	30.1	0.68	20.5	5.11	0.72	1.30	0.76	0.0101	
360	21	1.60	33.0	0.69	22.6	3.77	0.72	1.30	0.76	0.0074	
480	21	1.70	35.0	0.69	24.2	3.02	0.72	1.30	0.76	0.0060	
600	21	1.83	37.7	0.70	26.2	2.62	0.72	1.30	0.76	0.0052	
720	21	1.85	38.1	0.70	26.5	2.21	0.72	1.30	0.76	0.0044	
840	21	1.90	39.1	0.70	27.3	1.95	0.72	1.30	0.76	0.0038	
1440	21	2.28	47.0	0.71	33.5	1.40	0.72	1.30	0.76	0.0028	
2880	21	2.70	55.6	0.73	40.6	0.85	0.72	1.30	0.76	0.0017	

Appendix D

Existing Surface Water Run-off Estimates

Client: Acumen PS
Project: Kensington Forum

Project No.: A529
Project Manager: RH

Comments: Existing Site Run-Off 5 year Return Period

FACTOR

Return Period (yrs):

Contributing Area (ha)

Impervious, PIMP (%):

M5-60min (mm)

Climate Change Factor %

M5-60min (mm): Incl CC

SAAR (mm/yr):

Ratio, r:

Soil Type:

SOIL:

UCWI:

Calculated PR:

Percentage Runoff =

Duration, Z1:

Return Period, Z2:

VALUE

5

0.76

60

20.6

20.6

600

0.4

3

0.4

52

43.13

43.13

FSR Volume 1, Figure 6.3 ('r' and duration)

FSR Volume 1, Table 6.2 (M5-D and return period)

SOURCE

Environment Agency, Water Authority, etc.

Environment Agency, Water Authority, etc.

Site plans

Site plans

FSR Volume V maps and site location

FSR Volume V maps and site location

FSR Volume V maps and site location

FSR Volume V maps and site location

Soil Type and FSR Volume 1, Section 7.4

SAAR and FSR Volume 1, Figure 9.7

Duration, D (min)	M5-60 (mm)	Z1 for r=0.40	M5-D (mm)	Z2 for M5	M5-D (mm)	Avg Intensity i _{avg} (mm/hr)	Cv	Cr	Area A (ha)	Peak Flow Q m ³ /s
5	21	0.38	7.8	1.03	8.0	96.38	0.72	1.30	0.76	0.1901
10	21	0.54	11.1	1.03	11.5	68.75	0.72	1.30	0.76	0.1356
15	21	0.63	13.0	1.03	13.4	53.47	0.72	1.30	0.76	0.1055
30	21	0.80	16.5	1.03	17.0	33.95	0.72	1.30	0.76	0.0670
60	21	1.00	20.6	1.03	21.2	21.22	0.72	1.30	0.76	0.0419
120	21	1.20	24.7	1.03	25.5	12.73	0.72	1.30	0.76	0.0251
240	21	1.46	30.1	1.03	31.0	7.74	0.72	1.30	0.76	0.0153
360	21	1.60	33.0	1.03	33.8	5.64	0.72	1.30	0.76	0.0111
480	21	1.70	35.0	1.03	35.9	4.49	0.72	1.30	0.76	0.0089
600	21	1.83	37.7	1.02	38.5	3.85	0.72	1.30	0.76	0.0076
720	21	1.85	38.1	1.02	38.9	3.25	0.72	1.30	0.76	0.0064
840	21	1.90	39.1	1.02	40.0	2.85	0.72	1.30	0.76	0.0056
1440	21	2.28	47.0	1.02	47.9	2.00	0.72	1.30	0.76	0.0039
2880	21	2.70	55.6	1.02	56.7	1.18	0.72	1.30	0.76	0.0023

Client: Acumen PS
Project: Kensington Forum

Project No.: A529
Project Manager: RH

Comments: Existing Site Run-Off 30 year Return Period

FACTOR

Return Period (yrs):

Contributing Area (ha)

Impervious, PIMP (%):

M5-60min (mm)

Climate Change Factor %

M5-60min (mm): Incl CC

SAAR (mm/yr):

Ratio, r:

Soil Type:

SOIL:

UCWI:

Calculated PR:

Percentage Runoff =

Duration, Z1:

Return Period, Z2:

VALUE

30

0.76

60

20.6

20.6

600

0.4

3

0.4

52

43.13

43.13

FSR Volume 1, Figure 6.3 ('r' and duration)

FSR Volume 1, Table 6.2 (M5-D and return period)

SOURCE

Environment Agency, Water Authority, etc.

Environment Agency, Water Authority, etc.

Site plans

Site plans

FSR Volume V maps and site location

FSR Volume V maps and site location

FSR Volume V maps and site location

FSR Volume V maps and site location

Soil Type and FSR Volume 1, Section 7.4

SAAR and FSR Volume 1, Figure 9.7

Duration, D (min)	M5-60 (mm)	Z1 for r=0.40	M5-D (mm)	Z2 for M30	M30-D (mm)	Avg Intensity i _{avg} (mm/hr)	Cv	Cr	Area A (ha)	Peak Flow Q m ³ /s
5	21	0.38	7.8	1.46	11.5	137.58	0.72	1.30	0.76	0.2714
10	21	0.54	11.1	1.50	16.7	99.94	0.72	1.30	0.76	0.1971
15	21	0.63	13.0	1.51	19.6	78.49	0.72	1.30	0.76	0.1548
30	21	0.80	16.5	1.53	25.2	50.43	0.72	1.30	0.76	0.0995
60	21	1.00	20.6	1.54	31.8	31.75	0.72	1.30	0.76	0.0626
120	21	1.20	24.7	1.53	37.9	18.95	0.72	1.30	0.76	0.0374
240	21	1.46	30.1	1.51	45.5	11.38	0.72	1.30	0.76	0.0224
360	21	1.60	33.0	1.50	49.4	8.24	0.72	1.30	0.76	0.0162
480	21	1.70	35.0	1.49	52.2	6.52	0.72	1.30	0.76	0.0129
600	21	1.83	37.7	1.48	55.6	5.56	0.72	1.30	0.76	0.0110
720	21	1.85	38.1	1.48	56.3	4.69	0.72	1.30	0.76	0.0092
840	21	1.90	39.1	1.47	57.6	4.11	0.72	1.30	0.76	0.0081
1440	21	2.28	47.0	1.43	67.4	2.81	0.72	1.30	0.76	0.0055
2880	21	2.70	55.6	1.40	78.0	1.62	0.72	1.30	0.76	0.0032

APPENDIX E. SURFACE WATER CALCULATIONS

Client: Acumen PS

Project: Kensington Forum


Project No.: A529


Project Manager: RH


Comments: Existing Site Run-Off 100 year Return Period


FACTOR	VALUE	SOURCE	FACTOR	VALUE
Return Period (yrs):	100	Environment Agency, Water Authority, etc.	Additional Inflow (l/s):	0
		Environment Agency, Water Authority, etc.	Calculate/Specify PR:	Calculate
Contributing Area (ha)	0.76	Site plans	Specify PR:	100
Impervious, PIMP (%):	60	Site plans		
M5-60min (mm)	20.6			
Climate Change Factor %				
M5-60min (mm): Incl CC	20.6	FSR Volume V maps and site location		
SAAR (mm/yr):	600	FSR Volume V maps and site location		
Ratio, r:	0.4	FSR Volume V maps and site location		
Soil Type:	3	FSR Volume V maps and site location		
SOIL:	0.4	Soil Type and FSR Volume 1, Section 7.4		
UCWI:	52	SAAR and FSR Volume 1, Figure 9.7		
Calculated PR:	43.13			
Percentage Runoff =	43.13			
Duration, Z1:		FSR Volume 1, Figure 6.3 ('r' and duration)		
Return Period, Z2:		FSR Volume 1, Table 6.2 (M5-D and return period)		


Duration, D (min)	M5-60 (mm)	Z1 for r=0.40	M5-D (mm)	Z2 for M100	M100-D (mm)	Avg Intensity i _{avg} (mm/hr)	Cv	Cr	Area A (ha)	Peak Flow Q m ³ /s	
5	21	0.38	7.8	1.86	14.6	174.91	0.72	1.30	0.76	0.3450	I/s
10	21	0.54	11.1	1.93	21.4	128.55	0.72	1.30	0.76	0.2536	
15	21	0.63	13.0	1.96	25.4	101.64	0.72	1.30	0.76	0.2005	
30	21	0.80	16.5	2.00	32.9	65.85	0.72	1.30	0.76	0.1299	
60	21	1.00	20.6	2.03	41.7	41.74	0.72	1.30	0.76	0.0823	
120	21	1.20	24.7	2.01	49.7	24.84	0.72	1.30	0.76	0.0490	
240	21	1.46	30.1	1.97	59.2	14.81	0.72	1.30	0.76	0.0292	
360	21	1.60	33.0	1.95	64.1	10.69	0.72	1.30	0.76	0.0211	
480	21	1.70	35.0	1.93	67.6	8.45	0.72	1.30	0.76	0.0167	
600	21	1.83	37.7	1.91	71.9	7.19	0.72	1.30	0.76	0.0142	
720	21	1.85	38.1	1.91	72.6	6.05	0.72	1.30	0.76	0.0119	
840	21	1.90	39.1	1.90	74.3	5.31	0.72	1.30	0.76	0.0105	
1440	21	2.28	47.0	1.83	86.1	3.59	0.72	1.30	0.76	0.0071	
2880	21	2.70	55.6	1.77	98.4	2.05	0.72	1.30	0.76	0.0040	

O'Connor Sutton Cronin		Page 1
9 Prussia Street Dublin 7 Ireland	Kensington Forum Hotel (A529) Greenfield Runoff Calculations	
Date 24/08/2018 File	Designed by RH Checked by	
XP Solutions		
Source Control 2017.1.2		
<u>ICP SUDS Mean Annual Flood</u>		
Input		
Return Period (years)	1	Soil 0.300
Area (ha)	0.760	Urban 0.000
SAAR (mm)	600	Region Number Region 6
Results 1/s		
QBAR Rural 1.2		
QBAR Urban 1.2		
Q1 year 1.0		
Q1 year 1.0		
Q30 years 2.6		
Q100 years 3.7		
©1982-2017 XP Solutions		

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9 Prussia Street Dublin 7 Ireland		Kensington Forum (A529) Attenuation Estimate Impermeable Area (0.54 Ha)				
Date 28/08/2018 File Impermeable Area Attenu...		Designed by RH Checked by				
XP Solutions		Source Control 2017.1.2				
<u>Summary of Results for 100 year Return Period (+40%)</u>						
Storm Event		Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer		0.407	0.407	5.0	126.2	O K
30 min Summer		0.543	0.543	5.0	168.3	O K
60 min Summer		0.680	0.680	5.0	210.7	O K
120 min Summer		0.796	0.796	5.0	246.9	Flood Risk
180 min Summer		0.847	0.847	5.0	262.5	Flood Risk
240 min Summer		0.867	0.867	5.0	268.8	Flood Risk
360 min Summer		0.872	0.872	5.0	270.4	Flood Risk
480 min Summer		0.856	0.856	5.0	265.3	Flood Risk
600 min Summer		0.836	0.836	5.0	259.0	Flood Risk
720 min Summer		0.815	0.815	5.0	252.7	Flood Risk
960 min Summer		0.775	0.775	5.0	240.2	Flood Risk
1440 min Summer		0.697	0.697	5.0	215.9	O K
2160 min Summer		0.572	0.572	5.0	177.4	O K
2880 min Summer		0.466	0.466	5.0	144.4	O K
4320 min Summer		0.308	0.308	5.0	95.4	O K
5760 min Summer		0.210	0.210	4.9	65.2	O K
7200 min Summer		0.154	0.154	4.6	47.7	O K
8640 min Summer		0.124	0.124	4.4	38.4	O K
10080 min Summer		0.110	0.110	3.9	34.2	O K
15 min Winter		0.463	0.463	5.0	143.6	O K
30 min Winter		0.618	0.618	5.0	191.6	O K
Storm Event		Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)	
15 min Summer		148.070	0.0	147.3	73	
30 min Summer		95.640	0.0	190.6	87	
60 min Summer		58.745	0.0	236.6	110	
120 min Summer		34.854	0.0	280.9	152	
180 min Summer		25.354	0.0	306.6	200	
240 min Summer		20.120	0.0	324.4	252	
360 min Summer		14.497	0.0	350.6	364	
480 min Summer		11.487	0.0	370.4	464	
600 min Summer		9.583	0.0	386.3	518	
720 min Summer		8.261	0.0	399.5	582	
960 min Summer		6.531	0.0	421.0	712	
1440 min Summer		4.684	0.0	452.5	988	
2160 min Summer		3.354	0.0	488.3	1376	
2880 min Summer		2.645	0.0	513.3	1744	
4320 min Summer		1.890	0.0	549.4	2448	
5760 min Summer		1.488	0.0	577.9	3120	
7200 min Summer		1.235	0.0	599.7	3776	
8640 min Summer		1.061	0.0	617.7	4432	
10080 min Summer		0.932	0.0	632.8	5152	
15 min Winter		148.070	0.0	165.1	75	
30 min Winter		95.640	0.0	213.5	91	
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9 Prussia Street		Kensington Forum (A529)			
Dublin 7		Attenuation Estimate			
Ireland		Impermeable Area (0.54 Ha)			
Date 28/08/2018		Designed by RH			
File Impermeable Area Attenu...		Checked by			
XP Solutions		Source Control 2017.1.2			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	0.768	0.768	5.0	238.0	Flood Risk
120 min Winter	0.899	0.899	5.0	278.8	Flood Risk
180 min Winter	0.958	0.958	5.0	297.0	Flood Risk
240 min Winter	0.985	0.985	5.0	305.3	Flood Risk
360 min Winter	0.998	0.998	5.0	309.5	Flood Risk
480 min Winter	0.987	0.987	5.0	306.0	Flood Risk
600 min Winter	0.963	0.963	5.0	298.6	Flood Risk
720 min Winter	0.936	0.936	5.0	290.0	Flood Risk
960 min Winter	0.885	0.885	5.0	274.5	Flood Risk
1440 min Winter	0.780	0.780	5.0	241.7	Flood Risk
2160 min Winter	0.603	0.603	5.0	186.9	O K
2880 min Winter	0.438	0.438	5.0	135.7	O K
4320 min Winter	0.227	0.227	4.9	70.4	O K
5760 min Winter	0.134	0.134	4.5	41.6	O K
7200 min Winter	0.108	0.108	3.9	33.5	O K
8640 min Winter	0.094	0.094	3.3	29.2	O K
10080 min Winter	0.085	0.085	3.0	26.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)	
60 min Winter	58.745	0.0	265.1	112	
120 min Winter	34.854	0.0	314.7	154	
180 min Winter	25.354	0.0	343.5	200	
240 min Winter	20.120	0.0	363.4	252	
360 min Winter	14.497	0.0	392.8	360	
480 min Winter	11.487	0.0	414.9	470	
600 min Winter	9.583	0.0	432.6	570	
720 min Winter	8.261	0.0	447.5	614	
960 min Winter	6.531	0.0	471.5	756	
1440 min Winter	4.684	0.0	506.7	1066	
2160 min Winter	3.354	0.0	547.0	1500	
2880 min Winter	2.645	0.0	575.0	1856	
4320 min Winter	1.890	0.0	615.6	2508	
5760 min Winter	1.488	0.0	647.4	3088	
7200 min Winter	1.235	0.0	671.7	3744	
8640 min Winter	1.061	0.0	691.9	4432	
10080 min Winter	0.932	0.0	709.0	5152	
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O'Connor Sutton Cronin					Page 1
9 Prussia Street Dublin 7 Ireland		Kensington Forum (A529) Attenuation Estimate Roof Areas (0.4 Ha)			
Date 28/08/2018 File Roof Attenuation Estima...		Designed by RH Checked by			
XP Solutions		Source Control 2017.1.2			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	0.416	0.416	5.0	91.6	O K
30 min Summer	0.560	0.560	5.0	123.2	O K
60 min Summer	0.702	0.702	5.0	154.5	Flood Risk
120 min Summer	0.818	0.818	5.0	179.9	Flood Risk
180 min Summer	0.861	0.861	5.0	189.3	Flood Risk
240 min Summer	0.870	0.870	5.0	191.5	Flood Risk
360 min Summer	0.852	0.852	5.0	187.4	Flood Risk
480 min Summer	0.824	0.824	5.0	181.3	Flood Risk
600 min Summer	0.796	0.796	5.0	175.2	Flood Risk
720 min Summer	0.769	0.769	5.0	169.1	Flood Risk
960 min Summer	0.714	0.714	5.0	157.2	Flood Risk
1440 min Summer	0.600	0.600	5.0	132.1	O K
2160 min Summer	0.451	0.451	5.0	99.1	O K
2880 min Summer	0.337	0.337	5.0	74.2	O K
4320 min Summer	0.198	0.198	4.8	43.6	O K
5760 min Summer	0.134	0.134	4.5	29.5	O K
7200 min Summer	0.111	0.111	4.0	24.4	O K
8640 min Summer	0.097	0.097	3.5	21.4	O K
10080 min Summer	0.088	0.088	3.1	19.4	O K
15 min Winter	0.476	0.476	5.0	104.7	O K
30 min Winter	0.641	0.641	5.0	141.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)	
15 min Summer	148.070	0.0	112.6	67	
30 min Summer	95.640	0.0	145.7	82	
60 min Summer	58.745	0.0	180.1	104	
120 min Summer	34.854	0.0	213.7	146	
180 min Summer	25.354	0.0	233.2	194	
240 min Summer	20.120	0.0	246.8	246	
360 min Summer	14.497	0.0	266.8	346	
480 min Summer	11.487	0.0	281.8	406	
600 min Summer	9.583	0.0	293.9	470	
720 min Summer	8.261	0.0	304.0	536	
960 min Summer	6.531	0.0	320.4	674	
1440 min Summer	4.684	0.0	344.7	938	
2160 min Summer	3.354	0.0	371.0	1304	
2880 min Summer	2.645	0.0	389.9	1660	
4320 min Summer	1.890	0.0	417.5	2336	
5760 min Summer	1.488	0.0	438.9	3000	
7200 min Summer	1.235	0.0	455.4	3688	
8640 min Summer	1.061	0.0	469.2	4416	
10080 min Summer	0.932	0.0	480.8	5144	
15 min Winter	148.070	0.0	126.2	70	
30 min Winter	95.640	0.0	163.2	86	
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9 Prussia Street		Kensington Forum (A529)			
Dublin 7		Attenuation Estimate			
Ireland		Roof Areas (0.4 Ha)			
Date 28/08/2018		Designed by RH			
File Roof Attenuation Estima...		Checked by			
XP Solutions		Source Control 2017.1.2			
Summary of Results for 100 year Return Period (+40%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	0.795	0.795	5.0	174.9	Flood Risk
120 min Winter	0.926	0.926	5.0	203.6	Flood Risk
180 min Winter	0.977	0.977	5.0	215.0	Flood Risk
240 min Winter	0.993	0.993	5.0	218.6	Flood Risk
360 min Winter	0.982	0.982	5.0	216.1	Flood Risk
480 min Winter	0.948	0.948	5.0	208.6	Flood Risk
600 min Winter	0.913	0.913	5.0	200.8	Flood Risk
720 min Winter	0.877	0.877	5.0	193.0	Flood Risk
960 min Winter	0.804	0.804	5.0	176.9	Flood Risk
1440 min Winter	0.650	0.650	5.0	142.9	O K
2160 min Winter	0.414	0.414	5.0	91.1	O K
2880 min Winter	0.261	0.261	5.0	57.4	O K
4320 min Winter	0.126	0.126	4.4	27.7	O K
5760 min Winter	0.100	0.100	3.6	21.9	O K
7200 min Winter	0.086	0.086	3.0	18.8	O K
8640 min Winter	0.077	0.077	2.6	16.9	O K
10080 min Winter	0.071	0.071	2.2	15.6	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)	
60 min Winter	58.745	0.0	201.7	106	
120 min Winter	34.854	0.0	239.4	148	
180 min Winter	25.354	0.0	261.3	194	
240 min Winter	20.120	0.0	276.5	246	
360 min Winter	14.497	0.0	298.8	352	
480 min Winter	11.487	0.0	315.7	446	
600 min Winter	9.583	0.0	329.2	494	
720 min Winter	8.261	0.0	340.5	570	
960 min Winter	6.531	0.0	358.9	722	
1440 min Winter	4.684	0.0	386.0	1028	
2160 min Winter	3.354	0.0	415.5	1384	
2880 min Winter	2.645	0.0	436.8	1708	
4320 min Winter	1.890	0.0	467.8	2292	
5760 min Winter	1.488	0.0	491.6	2968	
7200 min Winter	1.235	0.0	510.1	3680	
8640 min Winter	1.061	0.0	525.6	4400	
10080 min Winter	0.932	0.0	538.6	5144	
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APPENDIX F. EXISTING & PROPOSED FOUL DISCHARGE ESTIMATES

Appendix F
Existing & Proposed Foul Discharge Estimates

Project: Kensington Forum Hotel
 Job Ref: A529
 Section: Foul Water Discharge Estimates
 Calcs by: RH
 Checked by: BM
 Date: 30/05/18
 Sheet: 1 of 3



Ref	Calculations	Output
①	<u>Private Residential Apartments 8</u>	
	Existing = N/A	
	Proposed = 46 Units	
(SFA)	Flow Rate = 4000 l/unit/day	
	$\frac{4000(46)}{24(60)(60)} = 2.13 \text{ l/s}$	
②	<u>Serviced Apartments 8</u>	
	Existing = N/A	
	Proposed = 340 Units	
(SFA)	Flow Rate = 4000 l/unit/day	
	$\frac{4000(340)}{24(60)(60)} = 15.74 \text{ l/s}$	
③	<u>Gym 8</u>	
	Existing = N/A	
	Proposed = 828.8 m ²	
	Assumed 1 person per 10 m ²	
(British Water Flows & Loads)	Foul Flow = 50 l/person/day	
	$\frac{(828.8/10)(50)}{24(60)(60)} = 0.048 \text{ l/s}$	
	Peak = 6(0.048)	
	= 0.288 l/s	

QF32 - 4

Rev. 0

Project: Kensington Forum Hotel
 Job Ref: A529
 Section: Foul Water Discharge Estimates
 Calcs by: RH
 Checked by: BM
 Date: 30/05/18
 Sheet: 2 of 3



Ref	Calculations	Output
④	<u>Restaurants/Bars 8</u>	
	Existing = 350 ppl	
	Proposed = 1,783 m ² OR 1 person per 1 m ²	
(British Water Flows & Loads)	Foul Flow = 30 l/person/day	
	$\frac{(350)(30)}{24(60)(60)} = 0.122 \text{ l/s}$	
	Peak = 6(0.122)	
	= 0.732 l/s	
	$\frac{(1783)(30)}{24(60)(60)} = 0.619 \text{ l/s}$	
	Peak = 6(0.619)	
	= 3.714 l/s	
⑤	<u>Hotel 8</u>	
	Existing = 910 Rooms	
	Proposed = 749 Rooms	
	Assuming 2 ppl per Room	
(British Water Flows & Loads)	Foul Flow = 300 l/person/day	
	$\frac{2(300)(910)}{24(60)(60)} = 6.32 \text{ l/s}$	
	Peak = 6(6.32)	
	= 37.92 l/s	
	$\frac{2(300)(749)}{24(60)(60)} = 5.2 \text{ l/s}$	
	Peak = 6(5.2)	
	= 31.2 l/s	

QF32 - 4

Rev. 0

Project: Kensington Forum Hotel
Job Ref: A529
Section: Foul Water Discharge Estimate
Calcs by: RH
Checked by: BM
Date: 30/05/18
Sheet: 3 of 3



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Ref	Calculations	Output																					
⑥	<p><u>Conference / Function Rooms 8 (incl Syndicate)</u></p> <p>Existing = 1200 ppl Proposed = 4.64m² <u>OR</u> 2000 ppl approx. Foul Flow = 60 l/person/day</p> <p><i>(British Water Flows & Loads JGA Fire Report)</i></p> $\frac{1200(60)}{24(60)(60)} = 0.83 \text{ l/s}$ $\frac{2000(60)}{24(60)(60)} = 1.39 \text{ l/s}$ <p>Peak = 6(0.83) = <u>5.0 l/s</u></p> <p>Peak = 6(1.39) = <u>8.34 l/s</u></p>																						
⑦	<p><u>Foul Water Discharge Summary 8</u></p> <table><thead><tr><th>Usage Type</th><th>Existing (l/s)</th><th>Proposed (l/s)</th></tr></thead><tbody><tr><td>Apartments (Serviced & private)</td><td>N/A</td><td>17.87</td></tr><tr><td>Hotel</td><td>37.92</td><td>81.20</td></tr><tr><td>Conference</td><td>5.00</td><td>8.34</td></tr><tr><td>Restaurants</td><td>0.73</td><td>3.71</td></tr><tr><td>Gym</td><td>N/A</td><td>0.29</td></tr><tr><td>Total</td><td>43.65</td><td>61.41</td></tr></tbody></table> <p>Proposed Foul Discharge = <u>61.41 l/s</u></p>	Usage Type	Existing (l/s)	Proposed (l/s)	Apartments (Serviced & private)	N/A	17.87	Hotel	37.92	81.20	Conference	5.00	8.34	Restaurants	0.73	3.71	Gym	N/A	0.29	Total	43.65	61.41	
Usage Type	Existing (l/s)	Proposed (l/s)																					
Apartments (Serviced & private)	N/A	17.87																					
Hotel	37.92	81.20																					
Conference	5.00	8.34																					
Restaurants	0.73	3.71																					
Gym	N/A	0.29																					
Total	43.65	61.41																					



APPENDIX G. SuDS MAINTENAENCE STRATEGY

SuDS MANAGEMENT PLAN

This long-term Management Plan of the Sustainable Drainage System (SuDS) should be implemented at **The Kensington Forum Hotel Development, 97 Cromwell Road, Kensington SW7 4DN** to ensure that the drainage network functions as designed. This plan is intended to cover all on-site drainage structures. The Site Management Team should oversee and implement the SuDS Management Plan and designate a qualified person who will be responsible for the proper operation and maintenance of the foul and surface water structures.

Surface Water Runoff Quality

The surface water management system protects and enhances the surface water runoff water quality through the removal of sediment and pollutants, catchpit manholes and silt trapped gullies will reduce the amount of pollutants entering the system. Preventive maintenance of the system will include a comprehensive source reduction program of regular sweeping and litter removal, prohibitions on the use of pesticides, and maintenance of bin areas.

Drainage System

Maintenance and cleaning of gullies, surface water manholes, and SuDS components will assure adequate performance. This maintenance program is outlined below;

Maintenance Program

The Site Management Team will conduct the operation and maintenance plan set forth in this document. The Site Management will ensure that inspections and record keeping are timely and accurate. Inspection & Maintenance Log Forms (attached) should include the date and physical conditions of the structures, depth of sediment in structures, evidence of overtopping or debris blockage and maintenance required of each structure. Records of maintenance will be kept on file at the property and copies of Inspection & Maintenance Log sheets indicating all work and inspections will be available to the Council upon request.

Concurrent with inspection and cleaning, all litter shall be picked up and removed from the parking areas, external bin store, wetland areas, and soft landscaping.

Regular maintenance should include;

1. Inspect channel and gully inlet grates and remove any debris every 6 months or as determined to be reasonable based on experience with the installed systems to ensure that the gullies are working in their intended fashion and that they are free of debris; quarterly, inspect gully sumps and bottom of drain manholes; if depth of sediment in sumps exceeds 50% capacity, sediment must be removed. Excessive sediment shall be removed and properly disposed by a licensed drainage cleaning company.
2. Inspection of external bin store for spillage and scattered litter must be performed on a regular basis to prevent the spread of pollutants into the surface water management system.
3. Attenuation tank inlets, outlet and vents and overflows should be checked annually and after large storms to ensure that they are in good condition and operating as designed. Regular maintenance includes inspection and identification of any areas that are not operating correctly monthly for the first 3 months and then every 6 months after.

Winter Maintenance Program

Ensure that drainage structures are not blocked by ice, snow, debris or rubbish during winter months.

Fertiliser Use

Only slow-release organic low-phosphorous fertilisers will be used in any landscaped areas in order to limit the amount of nutrients that could enter the surface water system.

Maintenance Task	Description	Frequency
<i>Regular Maintenance</i>		
Litter management	Pick up all litter in suds and landscape areas and remove from site	Monthly
Grass maintenance	Mow all grass verges, paths and amenity at 35-50mm with 75mm max. Leaving grass in situ	As required or monthly
Inlets and outlets	Inspect monthly, remove silt from slab aprons and debris. Strim 1m round for access	Monthly
Hard surfaces	Sweep all paving regularly. Sweep and suction brush permeable paving in autumn after leaf fall.	Annually
<i>Occasional tasks</i>		
Inspection and control chambers	Annual inspection, remove silt and check free flow	Annually
Silt management	Inspect swales, ponds, wetlands annually for silt accumulation	Annually
	Excavate silt, stack and dry within 10m of the SuDS feature, but outside the design profile where water flows, spread, rake and overseed.	As required
<i>Remedial work</i>		
	Inspect suds system regularly to check for damage or failure. Undertake remedial work as required.	As required

Drainage Operation and Maintenance Log

Site Maintenance Supervisor: _____ Date: _____
☐ Routine ☐ Response to rainfall event __ in ☐ Other: _____

BMP	Frequency	Date Performed	Comments
Gullies and Manholes	Monthly Inspections		
	Maintenance Quarterly and as necessary		
Pavement Areas (parking, driveways, service areas)	Monthly Sweeping		
	Rubbish & Litter Removal as Necessary		
Landscaped & Vegetated Areas	Maintenance as necessary		
Attenuation Tanks	Inspect and identify areas not operating properly every 3 months (for the first 3 months) and every 6 months after		
	Full bi-annual inspection		



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Annex 2 Ecological Appraisal (Replacement Assessment)

Kensington Forum

Preliminary Ecological Appraisal

Report for Trium Environmental Consulting
LLP on behalf of Queensgate Bow UK
Holdco Limited

Job Number	6002.3				
Author	Tom Elliott BSc (Hons) ACIEEM				
Version	Checked by	Approved by	Date	Job no.	Type
1.0	Demian Lyle BSc (Hons) MSc DiplC MCIEEM	Wendy McFarlane MA MSc MCIEEM	30/08/2017	6002	Final
2.0	Wendy McFarlane MA MSc MCIEEM		22/07/2020	6002.3	Revision

Contents

Summary of key issues	2
1 Introduction	3
2 Methodology	6
3 Results	10
4 Potential Impacts and Recommendations	16
References	21
Appendix 1: Habitat Map	23
Appendix 2: Photographs	25
Appendix 3: Plant Species List	28
Appendix 4: Legislation and Planning Policy	31

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Summary of key issues

The Ecology Consultancy was commissioned in July 2020 to update a Preliminary Ecological Appraisal (PEA) of land at Kensington Forum, London, originally carried out in August 2017. The PEA comprised a Phase 1 habitat survey, protected species assessment and ecological evaluation of the site. The main findings of the PEA are as follows:

- the site contained a high-rise hotel building with associated hard and soft landscaping. The main habitats present included amenity grassland, species-poor non-native hedgerows, introduced shrub and scattered trees/treelines. Habitats present are considered of value within the immediate vicinity of the site only (but may assume higher value where they support protected and/or notable species);
- the site is not subject to any statutory or non-statutory nature conservation designations. There are no statutory designated sites within a 1km radius. The nearest non-statutory designated site is Natural History Museum Gardens, a Site of Importance for Nature Conservation, located 0.43km to the east;
- habitats** – the site remained in a similar condition to that recorded in 2017, with the exception of Building 5 (now removed) and a small area of amenity grassland (now hardstanding paving);
- bats** – refer to the Bat Survey Report (The Ecology Consultancy, 2020) for full results and recommendations with regards to bats;
- breeding birds** – introduced shrub, species-poor hedgerows, scattered trees/treelines and Building 1 on site have potential to support breeding birds. If the removal of these habitats is unavoidable, to comply with current legislation, these habitats should be removed outside of the breeding season, which runs between March and August inclusive. Where this is not possible, a check for nesting birds immediately prior to clearance must be undertaken by an experienced ecologist; and
- in accordance with national and local planning policies, recommendations to enhance the site comprise wildlife planting and the provision of nesting bird habitat.

1 Introduction

BACKGROUND TO COMMISSION

- 1.1 The Ecology Consultancy was commissioned by Trium Environmental Consulting LLP ('Trium') on behalf of Queensgate Bow UK Holdco Limited ('The Applicant') on July 2017, to carry out a Preliminary Ecological Appraisal (PEA) of land at Kensington Forum, London. In addition, an update PEA was commissioned on July 2020 by Trium on behalf of The Applicant. The appraisal was carried out in order to provide ecological information to inform a full planning application for a proposed mixed hotel-led and residential development ('Proposed Development'). This appraisal considers land within the planning application site boundary (herein referred to as 'the site') as indicated on the plan provided by The Applicant (SimpsonHaugh & Partners, 2018, on behalf of Queensgate Bow UK Holdco Limited).

SCOPE OF THE REPORT

- 1.2 This aim of this appraisal is to provide baseline ecological information about the site. This will be used to identify any potential ecological constraints associated with the Proposed Development and/or to identify the need for additional survey work to further evaluate any impact that may risk contravention of legislation or policy relating to protected species and nature conservation. Where necessary, avoidance, mitigation/compensation and/or enhancement measures have been recommended to ensure compliance.
- 1.3 This appraisal is based on the following information sources:
- a desk study¹ of the site and land within a 1km surrounding radius;
 - a Phase 1 habitat survey (JNCC, 2010) of the site to identify and map the habitats present;
 - a protected species assessment of the site to identify features with potential to support legally protected species; and
 - an evaluation of the site's importance for nature conservation.
- 1.4 This appraisal has been prepared with reference to best practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM, 2017) and

as detailed in British Standard 42020:2013 *Biodiversity - Code of Practice for Biodiversity and Development* (BSI, 2013).

- 1.5 The survey, assessment and report were conducted by Tom Elliott BSc (Hons) ACIEEM. Tom is an ecologist with over four years' commercial experience, who is competent in carrying out Phase 1 habitat surveys and protected species assessments.

SITE CONTEXT AND STATUS

- 1.6 The site is 0.76 hectares (ha) in size and is centred on Ordnance Survey National Grid reference TQ 2610 7880. The site is situated in the centre of Kensington, London, within the Royal Borough of Kensington and Chelsea ('RBKC') and is not subject to any nature conservation designations. It is bordered by Cromwell Road to the north, Ashburn Gardens to the west, Ashburn Place to the east, and Courtfield Road to the south. Beyond the surrounding roads are residential properties to the west and south, hotels and commercial buildings to the east, and a railway/underground line to the north. The site is centred in a highly urbanised area and as such, is surrounded by busy and well-illuminated roads, particularly Cromwell Road (A4) to the north, which experiences high levels of traffic.

DEVELOPMENT PROPOSALS

- 1.7 The development proposals for the site, based on current plans provided by The Applicant are for a part 30, part 22 and part 9 storey building comprising hotel bedrooms and serviced apartments (Class C1) with ancillary bar, restaurants, conferencing and dining areas, leisure facilities and back of house areas; residential accommodation (Class C3); with associated basement, energy centre, plant, car parking, cycle parking, refuse stores, servicing areas; associated highway works and creation of new publicly accessible open space with associated hard and soft landscaping. The Proposed Development will require the removal of Building 1 on site, and clearance of vegetation including 9 out of 22 trees (41%).

RELEVANT LEGISLATION AND PLANNING POLICY

- 1.8 The following key pieces of nature conservation legislation are relevant to this appraisal. A more detailed description of legislation is provided in Appendix 4:
- The Conservation of Habitats and Species Regulations 2017 (as amended) (commonly referred to as the Habitats Regulations);
 - Wildlife and Countryside Act 1981 (as amended);
 - Natural Environment and Rural Communities Act 2006;

¹ Data from the Local Records Centre has not been updated for 2020 (see *Limitations* section).

- 1.9 The National Planning Policy Framework (Department of Communities and Local Government, 2019) requires local authorities to avoid and minimise impacts on biodiversity and to provide net gains in biodiversity when taking planning decisions.
- 1.10 The London Plan: The Spatial Strategy for Greater London (GLA, 2016) deals with matters of strategic importance for spatial development in London, including policies regarding protection, enhancement, creation, promotion and management of biodiversity and green infrastructure in support of the Mayor's Biodiversity Strategy (GLA, 2002), and urban greening to mitigate the effects of climate change.
- 1.11 The Draft New London Plan (GLA, 2019) places greater emphasis on green infrastructure and proposes that developments should incorporate green infrastructure. Policy G5 encourages Local Boroughs to develop their own 'Urban Greening Factor²' to identify the appropriate target for urban greening, based on the proportion of surface cover that contributes to ecosystem services. In the interim the target score is 0.4 for residential developments and 0.3 for commercial developments. Policy G6 states that 'development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain'.
- 1.12 Other planning policies at the local level which are of relevance to this Proposed Development include Policy CE4 – *Biodiversity*, within RBKC's Local Plan (2019). Further information is provided in Appendix 4.

² <https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/draft-new-london-plan/chapter-8-green-infrastructure-and-natural-environment/policy-g5-urban>

2 Methodology

DESK STUDY

- 2.1 The following data sources were reviewed to provide information on the location of statutory designated sites³, non-statutory designated sites⁴, legally protected species⁵, Species and Habitats of Principal Importance⁶ and other notable species⁷ and notable habitats⁸ that have been recorded within a 1km radius of the site:
- Greenspace Information for Greater London (GiGL)⁹, the local Biological Records Centre, principally for species records and information on non-statutory sites;
 - A search for publicly accessible local wildlife sites through GiGL's discover-London online mapping tool (<https://www.gigl.org.uk/discover-london/>);
 - MAGIC (<http://www.magic.gov.uk/>) - the Government's on-line mapping service; and
 - Ordnance Survey mapping and publicly available aerial photography.

HABITAT SURVEY

- 2.2 Habitat surveys of the site were carried out on 4 August 2017 and 20 July 2020 in warm, and dry conditions. They covered the entire site including boundary features. Habitats were described and mapped following standard Phase 1 habitat survey methodology (JNCC, 2010). Habitats were marked on a paper base map and subsequently digitised using ESRI ArcGIS software, with the Habitat Survey Map detailed in Appendix 1.

³ Statutory designations include Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI) and Local Nature Reserves (LNR).

⁴ Non-statutory sites are designated by local authorities (e.g. Sites of Importance for Nature Conservation or Local Wildlife Sites).

⁵ **Legally protected species** include those listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981; Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); or in the Protection of Badgers Act 1992 (as amended).

⁶ **Species of Principal Importance** are those listed on Section 41 of the Natural Environment and Rural Communities Act, 2006.

⁷ **Notable species** include Species of Principal Importance under the Natural Environment and Rural Communities Act 2006; Local Biodiversity Action Plan (LBAP) species; Birds of Conservation Concern (Eaton *et al.*, 2015); and/or Red Data Book/nationally notable species (JNCC, undated).

⁸ **Notable habitats** include Habitats of Principal Importance under the Natural Environment and Rural Communities Act, 2006; those included in an LBAP; Ancient Woodland Inventory sites; and Important Hedgerows as defined by the Hedgerow Regulations 1997.

⁹ The GiGL data search was obtained in August 2017, and as such is 3 years old (see *Limitations* section).

Habitats were also assessed against descriptions of Habitat of Principal Importance as set-out by the JNCC (BRIG, 2008)¹⁰.

- 2.3 Records for dominant and notable plants are provided, as are incidental records of birds and other fauna noted during the course of the habitat survey. Unless specified, all recorded species within habitat descriptions are based upon the most recent site visit in July 2020.
- 2.4 Common names are used where widely accepted – for amphibians, birds, fish, mammals, reptiles and vascular plants. Scientific names are provided for other groups but at first mention only if there is also an accepted common name.
- 2.5 The site was also surveyed for the presence of invasive plant species as defined by Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, detailed mapping of such species is beyond the scope of this commission and the location on habitat plan are indicative only.
- 2.6 Target notes are used to provide information on specific features of ecological interest (e.g. a badger sett) or habitat features that were too small to be mapped.

PROTECTED AND NOTABLE SPECIES ASSESSMENT

- 2.7 The suitability of the site for legally protected species was assessed on the basis of relevant desk study records¹¹ combined with field observations from the habitat survey. The likely value of habitat for protected species occurrence was ranked on a scale from 'negligible' to 'present' as described in Table 2.1.
- 2.8 The assessment of habitat suitability for protected or notable species was based on professional judgement drawing on experience of carrying out surveys of a large number of urban and rural sites and best practice survey guidance on identifying field signs which includes that for the following species: badger (e.g. Roper, 2010); bats (Collins (ed.), 2016); hazel dormouse (English Nature, 2006); great crested newt (Langton *et al.* 2001); otter (Chanin, 2003); reptiles (Gent and Gibson, 2003); and water vole (Dean *et al.* 2016).

¹⁰ Data required to confirm that certain habitats (including rivers and ponds) meet criteria for Habitats of Principle Importance is beyond that obtained during a Phase 1 habitat survey. In these cases the potential for such habitats to meet relevant criteria is noted but further surveys to confirm this assessment may be recommended.

¹¹ Primarily dependent on the age of the records, distance from the site and types of habitats at the site.

Table 2.1: Protected species assessment categories

Category	Description
Present	Presence confirmed from the current survey or by recent, confirmed records.
High	Habitat present provides all of the known key requirements for a given species/species group. Local records are provided by desk study. The site is within or close to a national or regional stronghold for a particular species. Good quality surrounding habitat and good connectivity.
Moderate	Habitat present provides all of the known key requirements for a given species/species group. Several desk study records and/or site within national distribution and with suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, barriers to movement and disturbance.
Low	Habitat present is of relatively poor quality for a given species/species group. Few or no desk study records. However, presence cannot be discounted on the basis of national distribution, nature of surrounding habitats or habitat fragmentation.
Negligible	Habitat is either absent or of very poor quality for a particular species or species group. There were no desk study records. Surrounding habitat unlikely to support wider populations of a species/species group. The site may also be outside or peripheral to known national range for a species.

- 2.9 The findings of this assessment establish the need for protected species surveys that are required to achieve compliance with relevant legislation. Surveys are commonly required for widespread species such as bats, great crested newt, reptiles and badger; but may be necessary for other species if suitable habitat is present.
- 2.10 Surveys may be required where a site is judged to be of low suitability for a particular species/species group. However, in some cases there may be opportunities to comply with legislation, without further survey, through precautionary measures prior to and during construction.

SITE EVALUATION

- 2.11 The site's ecological value has been evaluated broadly following guidance issued by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2019a) which ranks the nature conservation value of a site according to a geographic scale of reference: international, national, regional, county/metropolitan, district/borough, local/parish or of value at the site scale. In evaluating the nature conservation value of the site the following factors were considered: nature conservation designations; species/habitat rarity; naturalness; fragility and connectivity to other habitats.

DATA VALIDITY AND LIMITATIONS

2.12 Every effort has been made to provide a comprehensive description of the site; however, the following limitations apply to this assessment:

- the GiGL data search was obtained in August 2017, and following CIEEM's Advice Note (CIEEM, 2019b), this data search is out of date. In practice, any changes to any existing or completely new noteworthy designations, habitats, and species records within 1km of the Proposed Development will be outside the scope of this report. Given that the site is centred in urban landscape, it is unlikely that any significant assemblages of noteworthy ecological receptors are now present within 1km of the site;
- the protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. It should not be taken as providing a full and definitive survey of any protected species group. Additional surveys may be recommended if on the basis of the preliminary assessment or during subsequent surveys it is considered reasonably likely that protected species may be present;
- the ecological evaluation is preliminary and may change subject to the findings of further ecological surveys (should these be required);
- even where data for a particular species group is provided in the desk study, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest, the area may simply be under-recorded;
- where only four figure grid references are provided for protected species by third parties, the precise location of species records can be difficult to determine and they could potentially be present anywhere within the given 1km x 1km square. Equally six figure grid references may be accurate to the nearest 100m only;
- the Phase 1 habitat survey does not constitute a full botanical survey or provide accurate mapping of invasive plant species; and
- ecological survey data is typically valid for two years unless otherwise specified.

2.13 Despite these limitations, it is considered that this report accurately reflects the habitats present, their biodiversity values and the potential of the site to support protected and notable species.

3 Results

DESIGNATED SITES

Statutory designated nature conservation sites

3.1 The site is not subject to any statutory nature conservation designations. There are no European or national statutory sites within a 1km radius of the site.

Non-statutory designated nature conservation sites

3.2 The proposed development site is not subject to any non-statutory nature conservation designations. Three non-statutory sites designated as Sites of Importance for Nature Conservation (SINC) are present within 1km of the site (see Table 3.1). According to GiGL's discover-London online mapping tool, no further publicly accessible local wildlife sites exist within 1km of the site.

Table 3.1: Non-Statutory Designated Sites

Site Name	Distance from site and orientation	Reason for designation
Natural History Museum Gardens	0.43km to the east	The site features chalk and acid grassland, ponds, meadows, oak woodland, reedbed, and wet meadow/fen. The site is particularly important for invertebrate, mammal and bird populations.
Brompton Cemetery	0.78km south-west	The site features a rough division between neutral grassland over former arable land, and acid grassland over former meadow, with wildflowers including trailing St John's-wort, which is rare in London. Scattered trees are present throughout, and species recorded covering the tombstones include blue fleabane and dark mullein, both of which are scarce in London. A range of butterflies and moths are supported, as are common and soprano pipistrelle bats and wood mouse.
Hyde Park and Kensington Gardens	0.78km to the north	The site features the Serpentine and bird sanctuary on Long Water, which supports locally significant breeding populations of common waterfowl and numerous winter visitors. Mature trees including sweet chestnut, which are of value to a range of breeding woodland birds and invertebrates including two nationally rare beetles. Relict acid-rich chalk grassland supports locally uncommon plants such as harebell, and recently developed wildflower meadow areas support the nationally rare great pignut.

Habitat inventories and landscape-scale conservation initiatives

Habitats of Principal Importance

3.3 Although no Habitats of Principal Importance are located on the site, Deciduous Woodland (Priority Habitat Inventory) and Woodpasture & Parkland Biodiversity Action Plan (BAP) Priority Habitat is located within 1km of the site.

PHASE 1 HABITAT SURVEY

Overview

- 3.4 The site comprises the main hotel, Kensington Forum (Building 1) along with eight other associated buildings/structures, surrounded by hardstanding and soft landscaping including amenity grassland, introduced shrub, scattered trees/tree lines, and species-poor hedgerows. The condition of the habitats remained largely unchanged between August 2017 and July 2020 (unless specified below).
- 3.5 Phase 1 habitats types are mapped in Appendix 1, Figure 1, areas are given in Table 3.2. A description of dominant and notable species and the composition of each habitat is provided below.

Table 3.2: Phase 1 Habitat Areas

Phase 1 Habitat	Extent	%
Buildings and hardstanding	0.56ha	73.7
Amenity grassland and scattered trees	0.13ha	17.1
Introduced shrub	0.07ha	9.2
Species-poor non-native hedgerow	119m	N/A
Total	0.76ha	100

Habitat description

Buildings and hardstanding

- 3.6 Nine structures were situated across the site during both surveys¹². A general description is provided as follows:
- Building 1 (Kensington Forum) was a concrete-built high-rise hotel, approximately 80m high, with complex elevations forming an ‘X’ shape (Appendix 2, Photographs 1 and 2). The roof sections were a mixture of flat and corrugated pitch sheeting. There was a heavy goods access area to the east and the main entrance to the south-east. Glass windows and pebble-dash concrete blocks were present from ground level to the highest storey. Access to the basement car park was available to the south-east and north-west of the building. Most elevations were illuminated

by either security lighting or street/room lighting. Sizeable gaps were present around various air ducts and there were crevices/holes between louvered vents and under pebble-dashed blocks;

- Buildings 2 and 3 were masonry structures housing ventilation/air duct units, approximately 1.5m high with flat roofs covered in bitumen-based roofing felt (see Photograph 3). Louvered vents were present, revealing a concrete ceiling internally. The felt lining and brickwork on both buildings were in good condition;
- Building 4 was another masonry structure housing a ventilation unit, approximately 3.5m high with a metal-capped louvered roof. The louvered vents were reinforced with metal grills behind. Overall the building was in a good state of repair and was open to the elements;
- Building 5 was a timber shed, approximately 2m high, with a bitumen-based felt-lined pitched roof. There were gaps around the door frame and one of the windows and appeared to be in regular use for storage. Building 5 had been removed by July 2020;
- Building 6 was a metal louvered electrical substation, approximately 1.5m high. Some of the gaps between the louvered vents were reinforced with metal grills;
- Buildings 7 and 8 were concrete-capped, flat roof structures approximately 1m high;
- Building 9 was a metal louvered structure housing a ventilation unit with a flat roof, less than 1.5m high; and
- Building 10 was a brick-built 1m high parapet wall-type structure with a metal grill (rather than ceiling) leading toward the basement.

- 3.7 There were adjacent areas of hardstanding, including a car park to the south-east, road access along the eastern elevation and to the north-west, and concrete footpaths around the western and southern boundary. During the survey in July 2020, an additional area of hardstanding paving was present to the south-east of Building 1, replacing an area of amenity grassland and Building 5 (which has since been removed).

Amenity grassland

- 3.8 Amenity grassland was present across the site, and species included abundant perennial rye-grass and rough meadow-grass, locally abundant wall barley, occasional daisy and rare creeping cinquefoil. The sward appeared to be regularly mown and was patchy in parts under the cover of the canopy (Appendix 2, Photograph 4).

¹² Note that Building 5, present only in August 2017, had been removed by July 2020.

Introduced shrub

3.9 Various planted and occasional potted introduced shrubs were present throughout the site (Appendix 2, Photograph 5). Species included abundant Persian ivy, occasional cherry laurel and sumac, and rare cotoneaster ‘Rothschildianus’. Ground flora included occasional young self-seeded ash saplings, bramble, and creeping cinquefoil.

Species-poor non-native hedgerow

3.10 Sections of hedgerow were present around the site, rarely exceeding 1.5m in height, and generally lacking any diversity. Species recorded comprised Mexican orange, Wilson’s honeysuckle and Portugal laurel. Ground flora included locally abundant spreading yellow-sorrel and rare petty spurge.

Treelines and Scattered trees

3.11 Lines of mature trees were present around the boundary of the site, particularly to the south and west, as well as scattered trees to the south-west, which were mostly non-native. Species recorded were dominated by London plane, with occasional Norway maple, and rare holly, pedunculate oak and western red-cedar. Most of the trees were mature or semi-mature, though a number of young specimens were also present.

PROTECTED AND INVASIVE SPECIES ASSESSMENT

3.12 The potential for the site to support protected species has been assessed using criteria provided in Table 3.3, based on the results of the desk study and observations made during the site survey of habitats at the site. Other legally protected species are not referred to as it is considered that the site does not contain habitats that would be suitable to support them. The following species/species groups are potentially present at the site:

- bats;
- breeding birds; and
- invasive species.

3.13 The table also summarises relevant legislation and policies relating to protected and invasive species. Key pieces of statute are summarised in Section 1 and set-out in greater detail in Appendix 4.

Table 3.3: Protected and Invasive Species Assessment

Habitat/species	Status ^{13, 14}	Likelihood of occurrence
Bats	HR WCA S5 London BAP	There are desk study records of four known species of bat including common pipistrelle, soprano pipistrelle, Nathusius’ pipistrelle, noctule, and an unknown <i>Vespertilionidae</i> species. The most recent of these records are from 2011 and the nearest are 0.47km to the west. LOW: Building 1 (Kensington Forum) was assessed as providing low suitability to support roosting bats. All other structures were assessed as providing negligible suitability for roosting bats. Full details are provided within the Bat Survey Report (The Ecology Consultancy, 2020). MODERATE: Two trees were assessed as providing moderate suitability to roosting bats, and another eight were assessed as providing low suitability to roosting bats. All other trees provided negligible suitability to roosting bats. Full details are provided within the Bat Survey Report (The Ecology Consultancy, 2020). As there are features of suitability to roosting bats, roosting bats are considered further in Section 4 of this report.
Breeding birds	Birds Dir Anx 1 WCA S1 WCA S5 London BAP	PRESENT: The treelines/scattered trees, introduced shrub, species-poor non-native hedgerows, and Building 1 provided suitable nesting habitat for common breeding bird species. Blackbird, robin and carrion crow were recorded on the site. Corvid nests were also recorded in the canopies of the mature London plane trees in the west and east of the site. The desk study provided records for a number of bird species recorded within 1km of the site, including redwing (WCA S1 and BoCC Red List), house sparrow (SPI and BoCC Red List), starling, song thrush and herring gull (all BoCC Red List). An old and confidential record for peregrine has also been provided. As evidence of breeding birds was recorded on the site, they are considered further in Section 4 of this report.
Invasive species	WCA S9	ABSENT: No invasive species listed under WCA S9 were recorded on the site despite a thorough search. As no invasive species listed under WCA S9 were recorded on the site, they are not considered further in this report.

¹³ The following abbreviations have been used to signify the legislation regarding different species: HR = Conservation of Habitats and Species Regulations 2017 (as amended); WCA S1 = Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); WCA S5 = Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); WCA S9 = Schedule 9 of the Wildlife and Countryside Act 1981 (as amended); PBA = Protection of Badgers Act, 1992.
¹⁴ The following abbreviations have been used to signify the policy of conservation assessments applying to notable species: SPI = Species of Principal Importance under the NERC Act 2006; LBAP = Local Biodiversity Action Plan species; BoCC = Birds of Conservation Concern - amber list / red list (Eaton *et al.*, 2015); and/or RD/NN = red data book/nationally notable species (JNCC, undated).

NATURE CONSERVATION EVALUATION

- 3.14 The site is not subject to any nature conservation designations. It contains small areas of common and widespread habitats, none of which are Habitats of Principal Importance or London BAP priority habitats. It is centred within an urban landscape and surrounded by busy roads, residential and commercial properties, and is isolated from any sites or habitats of nature conservation importance.
- 3.15 The habitats on site were suitable for a range of note-worthy species, including Species of Principal Importance and London BAP species, as reported in the desk study or recorded during the survey, as follows:
- house sparrow and other Species of Principal Importance¹⁵;
 - invertebrates associated with widespread habitats such as small heath butterfly *Coenonympha pamphilus* and cinnabar moth *Tyria jacobaeae*.
- 3.16 Although relatively common and small in area, the habitats on site are of significant value to wildlife given that similar opportunities in the area are rare, particularly the treelines, scattered trees and introduced shrub. Habitat patches like those recorded on site act as stepping-stones between larger green areas. These habitats also provide important ecosystem services including reducing urban heat island effect and flood alleviation, as well as a therapeutic benefit to the public that use the area. Given the limited number of other street trees and urban parks and gardens in the local area, the habitats on site are considered to be of local importance.
- 3.17 The site is known to support protected species, as low numbers of common pipistrelle, soprano pipistrelle and noctule bats¹⁶ were recorded commuting across the site in August 2017, as detailed in the Bat Survey Report (The Ecology Consultancy, 2020). In addition, evidence of nesting bird activity was recorded in July 2020. Despite this, it is unlikely that the site would support large populations of any uncommon or protected species, due in part because of the highly urbanised nature of the site, and the scarcity of habitat of ecological value within the near vicinity. As a result, the species that are likely to use the site will be of value at site level only. Recommendations for further survey are provided in Section 4.

¹⁵ Natural Environment & Rural Communities (NERC) Act 2006. Section 41: Species of Principal Importance in England.

¹⁶ Soprano pipistrelle and noctule bats are Species of Principal Importance.

4 Potential Impacts and Recommendations

- 4.1 This section summarises the potential impacts on habitats and notable species that may be present at this site.
- 4.2 The following key ecological issues have been identified:
- habitat of suitability for roosting bats present – recommendations provided in detail in the Bat Survey Report (The Ecology Consultancy, 2020);
 - habitat suitable for breeding birds is present – measures must be taken to avoid killing birds or destroying their nests; and
 - a range of measures should be undertaken to satisfy the requirement for ecological enhancement included in planning policy.

CONSTRAINTS AND MITIGATION/COMPENSATION

Designated Nature Conservation Sites

- 4.3 As no designated ecological site of international or national importance is located within 5km or 2km of the site respectively, the Proposed Development is unlikely to have an impact on any designated site of international or national importance.

Habitats

- 4.4 Approximately 0.13ha of amenity grassland and approximately 700m² of introduced shrub will be removed for construction. The Proposed Development is also expected to remove nine trees (41%) (none of which are mature), nine existing buildings/structures and 119m of species-poor non-native hedgerow. These habitats are common and widespread in London and are of local importance. Although there are no particular constraints were identified in relation to the intrinsic value of the habitats present, best environmental practice measures should be implemented to protect the retained trees.
- 4.5 Working under the principle of 'net-gain' as supported by planning policy, any habitats to be removed should be compensated for through soft landscaping proposals including green roofs and planting schemes of recognised value to wildlife.

Environmental best practice

- 4.6 Best environmental practice measures which should be implemented include:
- adherence to best construction practice including CIRIA guidance (Connolly and Charles, 2005);

- the protection of retained trees in accordance with BS 5837:2012 trees in relation to design, demolition and construction– recommendations; and
- the storage of all materials and vehicles and the installation of a compound area would be confined to existing areas of hardstanding.

Bats

- 4.7 All bats and their roosts are protected under The Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Some species of bat are also Species of Principal Importance and subject to a London Species Action Plan (London BAP species).
- 4.8 Suitable bat roosting habitat has been recorded on the site. A number of surveys have been carried out on site to date, including Preliminary Roost Assessment (PRA) and Ground Level Roost Assessment (GLRA) in August 2017, a dusk emergence survey in August 2017, and an update PRA and GLRA in July 2020. Full details of survey results and recommendations are provided within the Bat Survey Report for the site (The Ecology Consultancy, 2020).

Breeding birds

- 4.9 All breeding birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended). Although no active nests were recorded on the site, the site provides suitable habitat for breeding birds.
- 4.10 Where the proposed works require the removal of buildings, introduced shrub, trees and hedgerows with potential to support breeding birds, this should be carried out September to February inclusive, to avoid any potential offences relating to breeding birds during their main bird breeding season (Newton *et al.*, 2011).
- 4.11 Where this is not possible, a check for nesting birds up to 48 hours prior to habitat clearance must be undertaken by an experienced ecologist and if any nests are found, the nests must be protected until such time as the young have left the nest, as confirmed by an ecologist. If any nesting birds are found at any time during clearance works, works within the immediate surroundings of the nests must stop immediately and an ecologist consulted.

Other protected species

- 4.12 Works must stop immediately and advice sought from a suitably qualified ecologist in the unlikely event that any protected species are found during site clearance or construction.

FURTHER SURVEY REQUIREMENTS

- 4.13 Table 4.1 lists further survey requirements as recommended in the constraints section.

Table 4.1: Further survey requirements

Species/ Habitat	Survey Requirement	Number of surveys and seasonal considerations
Bats	Refer to the Bat Survey Report (The Ecology Consultancy, 2020).	Refer to the Bat Survey Report (The Ecology Consultancy, 2020).
Breeding birds	Nesting bird check on treelines, scattered trees, introduced shrub and Building 1.	If vegetation clearance is carried out between September and the end of February, no survey is required. Otherwise, individual surveys are required up to 48 hours prior to vegetation clearance works (Newton et al., 2011).

OPPORTUNITIES FOR ECOLOGICAL ENHANCEMENT

- 4.14 Planning policy at the national and local level and strategic biodiversity partnerships encourage inclusion of ecological enhancements in development projects. Implementation of all enhancement recommendations is not mandatory, but some degree of implementation is required to negate any impacts as detailed in this section. Ecological enhancements can also contribute to green infrastructure and ecosystem services such as storm water attenuation and reducing the urban heat island effect. The following measures would be suitable for integration into the site's design, and would provide ecological enhancement for the Proposed Development.

Wildlife planting

- 4.15 Trees should be retained and protected wherever possible. Where tree removal is unavoidable, each tree should be replaced on site with at least two comparable trees to take account of the time taken to grow to a similar size.
- 4.16 Wildlife planting should be integral to the soft landscape plans and should include native species and/or species of recognised wildlife value¹⁷. The use of nectar-rich and berry producing plants will attract a wider range of insects, birds and mammals and continue to accommodate those already recorded at the site. Consideration should also be given to creation of species-rich native hedgerows.
- 4.17 Good horticultural practice should be utilised, including the use of peat-free composts, mulches and soil conditioners, native plants with local provenance and avoidance of the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

Biodiverse / Biosolar Roof

- 4.18 It is recommended that the development be enhanced through the incorporation of areas of biodiverse / biosolar roof. To demonstrate the highest feasible and viable sustainability standards in line with London Plan Policies (GLA 2016) it is recommended that a specification for a biodiverse / biosolar roof be drawn up by a company with a proven track record in delivering these features in London. Any biodiverse green roof should support at least 25 plant species.

¹⁷ For example The Royal Horticultural Society (RHS) Perfect for Pollinators Scheme <https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators>

- 4.19 A biodiverse green roof would provide additional benefits such as protecting and prolonging the life of the roof membrane, reducing building energy use by insulating the building in winter and keeping it cooler in summer, providing a SuDS function by reducing storm water run-off from the roof, reducing the urban heat island effect and local air/noise pollution. Combining a biodiverse roof with PV panels (biosolar roof) would also provide further benefits, such as the cooling effect the vegetation has on the PV cells, increasing their productivity in hot weather, as well as resulting in a more efficient use of roof space.
- 4.20 The green roof should follow UK standards (GRO, 2014) and include additional habitat features such as deadwood and varying substrate depths. This will provide good habitat for a range of insects and birds including London Biodiversity Action Plan (BAP) species.

Provision of bird nesting opportunities

- 4.21 The provision of bird boxes would be appropriate at this site to enhance bird nesting opportunities. Many different designs are available including boxes to support colonial species such as house sparrow. Woodcrete boxes such as Schwegler products, are recommended as they are long lasting compared to wooden boxes, insulate occupants from extremes of temperature and condensation and are available in a broad range of designs.

References

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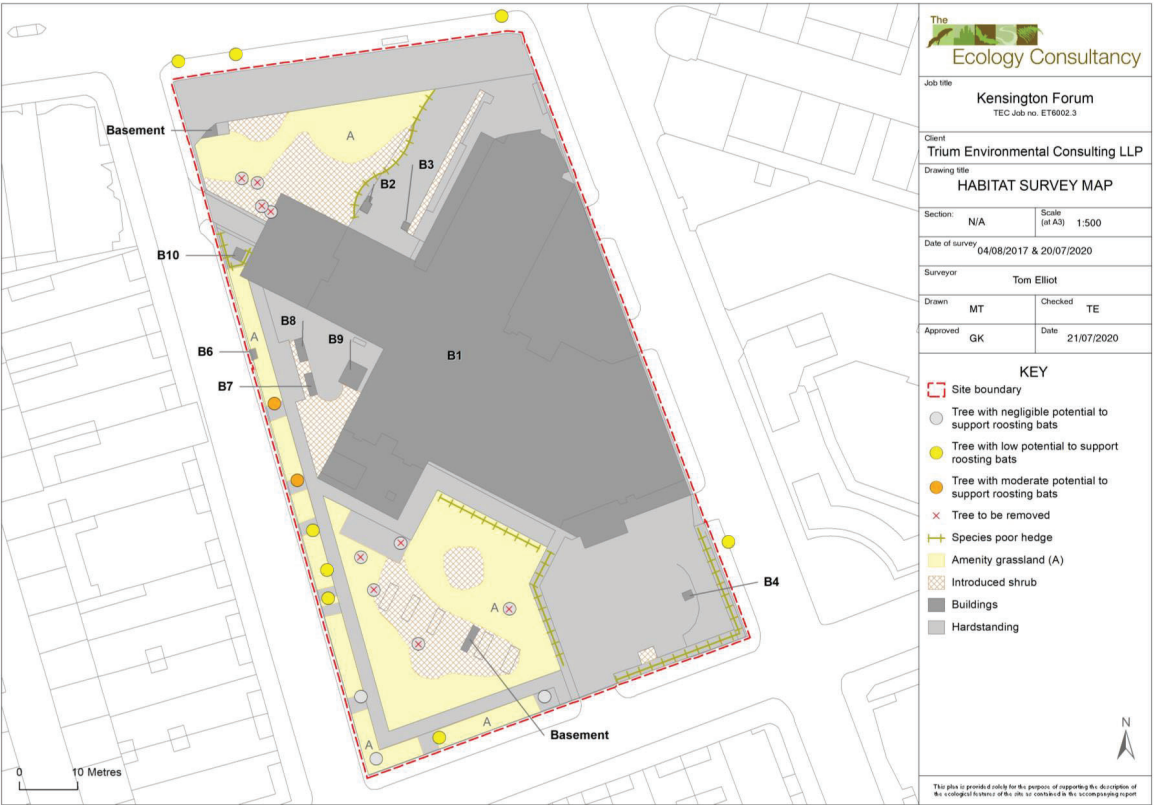
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Appendix 1: Habitat Map

Figure 1: Habitat Survey Map



Appendix 2: Photographs

Photograph 1

Building 1 (Kensington Forum)
scheduled to be demolished.
View looking north.



Photograph 2

Eastern elevation of Building 1
(Kensington Forum). View
looking south-east.



Photograph 3

Building 2 surrounded by
hardstanding. View looking
north-west.

