

Lighting Survey Report

Waterman Building Services – June 2025



Client Name: DfT, HMRC & Defra
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Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Revision	Status	Date	Prepared by	Checked by	Approved by
P01	S5	22/04/25			

Comments

P02	S5	28/04/25			
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Comments Comments incorporated.

P03	S5	16/06/25			
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Comments Comments incorporated

Revision		Status	
Pnn	Preliminary (shared; non-contractual)	S1	Coordination
Cnn	Contractual	S2	Information
		S3	Review & Comment
		S4	Review & Authorise
		S5	Review & Acceptance
		A0, A1, An	Authorised & Accepted (n=work stage if applicable)

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This report has been prepared by Waterman Building Services Ltd, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

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1. Introduction

This external lighting survey report has been prepared by Waterman Building Services following their recommendation that an external lighting survey be undertaken to record the actual lux levels at key locations at the site boundary and assess the visual impact of the existing external lighting installation.

This report shall support the External Lighting Assessment Report required as part of a full planning application for the continued use and operation of the Sevington Inland Border Facility (IBF), Ashford, TN25 6GE.

This document identifies the observations and lux level measurements recorded on the day of the survey and provides recommendations to address any issues identified.

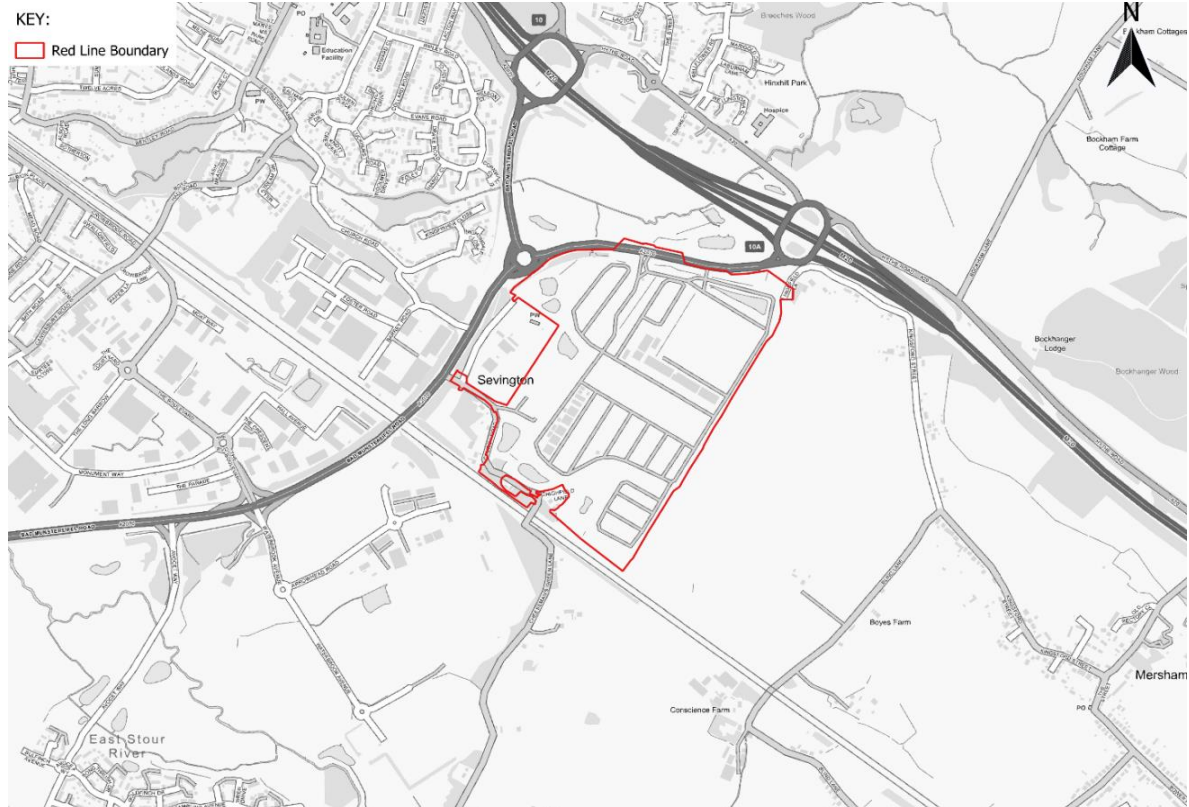
The survey was undertaken by Waterman Building Services on 2nd April 2025 during the hours of darkness at 20.00 in the evening.

Site Description

The Application Site is centred on National Grid Reference TR 03976 40758 and is located within the administrative boundary of Ashford Borough Council (ABC) and Kent County Council (KCC).

As illustrated in Image 1, the Application Site is located in Sevington, south-east of Ashford in Kent, Postcode: TN25 6GE. This is a semi-rural area on the outskirts of Ashford, with a mixture of residential and commercial land uses located to the north and west of the Application Site but with agricultural land use to the south and east.

Image 1: Site Location



Appendices

The Application Site occupies an area of approximately 48 hectares (ha) and is bound by:

- **The A2070 Link Road and M20 motorway (M20 Junction 10a), to the north.**
- **Highfield Lane and Kingsford Street to the east and north-east respectively.**
- **Highfield Lane and Church Road, to the south.**
- **Church Road, St Marys Church and A2070 to the west.**

Appendices

2. Lux Readings

The image below identifies the location of the existing neighbouring residential areas, high-lighted in light blue, with each area provided with a boundary reference.

2.1 Existing Residential Areas 1-6









Appendices

2.2 Lux Reading Locations

The image below identifies the location of where the lux levels were recorded on the evening of 2nd April 2025, which in turn should be read in conjunction with the Lux tables in section 2.3.



Key

	Lux Reading 1 to 5 Boundary Area 1 (right to left)
	Lux Reading 1 to 10 Location for Boundary Area 2 (right to left)
	Lux Reading 1 to 5 Location for Boundary Area 3 (bottom to top)
	Lux Reading 1 to 10 Location for Boundary Area 4 (bottom to top)
	Lux Reading 1 to 10 Location for Boundary Area 5 (bottom to top)
	Lux Reading 1 to 10 Location for Boundary Area 6 (from left to right then down)

Appendices

2.3 Boundary Area Readings

The following lux readings were recorded at floor level within each boundary area. We would be expecting close to zero lux beyond the site boundary.

With regards to lux levels within the facility we would expect the British Standard BS-EN 12464:2024 – Lighting of Outdoor Workspaces (e.g., logistics hubs, border facilities). Table 1 would apply. The below table is an extract from the British Standard defining the lighting requirements for similar facilities to Sevington Inland Border Facility (external area lorry parking areas).

Table 1: Lighting Design Criteria

Area	Required Average Lux Levels	Uniformity	Glare	Colour Temperature (K)
Industrial Sites	100	0.5	45	4000

We also note that the Ashford Local Plan Dark Skies (Policy ENV4) – Light Pollution & Promoting Dark Skies would apply. The environmental zoning in this document identifies the ‘What is acceptable’ between Zones E0 to E4. It is considered that the site falls within zone E04.

2.3.1 Boundary Area 1

Boundary Area 1	Lux Level
1	0.01
2	0.01
3	0.02
4	0.01
5	0.02

2.3.2 Boundary Area 2

Boundary Area 2	Lux Level
1	0.03
2	0.04
3	0.03
4	0.06
5	0.07
6	0.05
7	0.03
8	0.04
9	0.05
10	0.06

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2.3.3 Boundary Area 3

Boundary Area 3	Lux Level
1	0.01
2	0.02
3	0.01
4	0.01
5	0.01

2.3.4 Boundary Area 4

Boundary Area 4	Lux Level
1	0.07
2	0.04
3	0.08
4	0.04
5	0.06
6	0.07
7	0.05
8	0.04
9	0.03
10	0.06

2.3.5 Boundary Area 5

Boundary Area 5	Lux Level
1	0.9
2	0.88
3	0.76
4	0.97
5	0.67
6	0.88
7	0.69
8	0.87
9	0.77
10	0.72

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2.3.6 Boundary Area 6

Boundary Area 6	Lux Level
1	0.32
2	0.09
3	0.12
4	0.38
5	0.23
6	0.25
7	0.31
8	0.27
9	0.22
10	0.19

Appendices

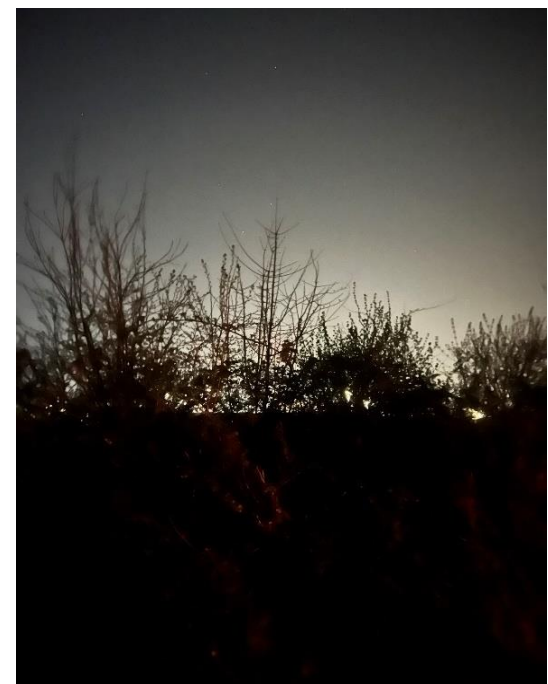
3. Site Photos

The following photographs were taken on the evening of 2nd April 2025 and demonstrates the direct lighting impact at each boundary area.

3.1 Boundary Area 1



3.2 Boundary Area 2



Appendices

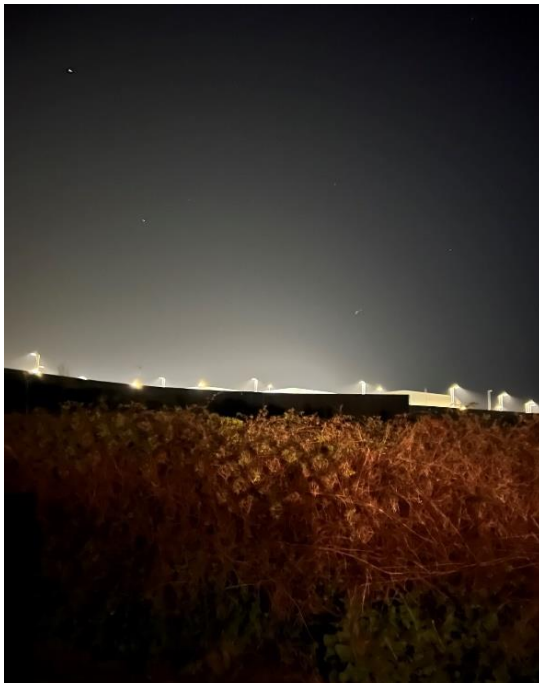


3.3 Boundary Area 3

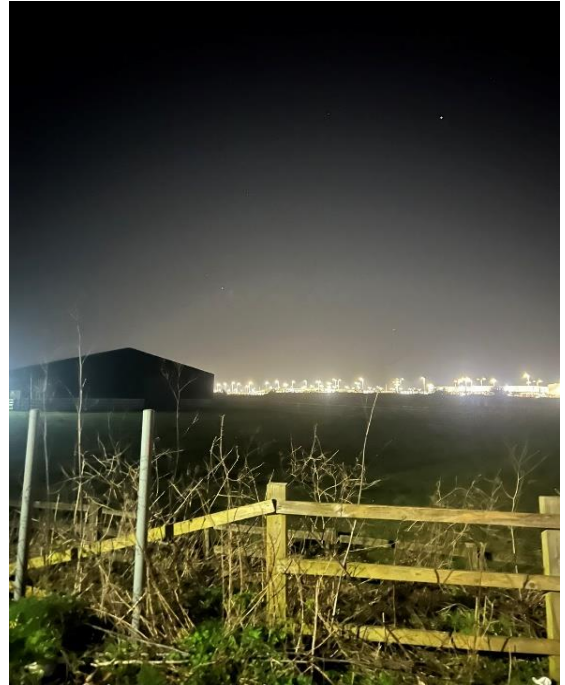




3.4 Boundary Area 4



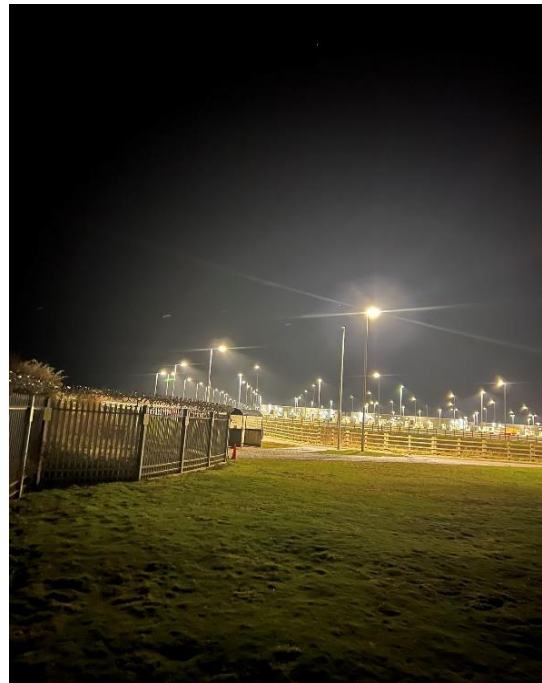
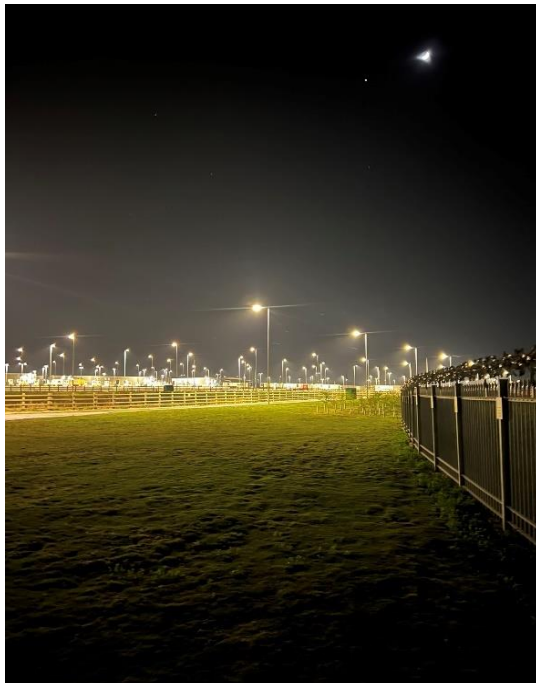
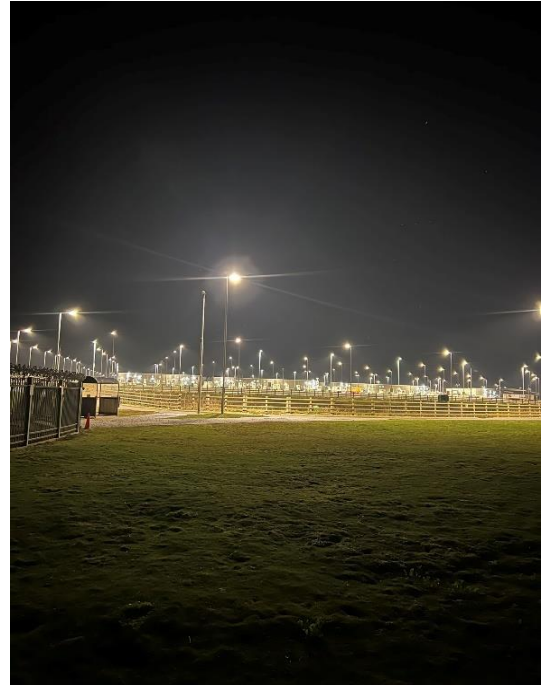
3.5 Boundary Area 5



Appendices

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3.6 Boundary Area 6



4. Conclusion

Based upon the external lighting site survey it is noted that although the lux levels recorded at the relevant site boundaries are of acceptable levels, the main issue is the direct glare from the site luminaires and the percentage of upward light which is noticeable from the site photographs.

The photographs at each boundary area are looking inwards to the site and demonstrate the extent of glare being experienced at the given locations. The photographs also identify upward light which could be considered as contravening the Ashford Local Plan Dark Skies (Policy ENV4).

From our inspection the lighting on shed 4 and 5 were switched on apart from 2No luminaires which were broke, lights to the rear of the respective sheds and lights to the side of shed 5. The FM team advised that the permanent switching off of the lights to the rear of sheds 4 and 5 and removal of the lights to the side of shed 5, has been implemented to reduce lighting impacts for residential properties.

Tango area was switched off as previously advised by the FM team as part of the previous efforts to reduce the lighting impact. Lux level measurements were taken in the centre of this location to provide evidence, which were recorded as 0.03, 0.04, 0.03, 0.02, 0.03 Lux at floor level.

Romeo area was switched on as the overflow area was in operation. Lux level measurements were taken in this area which were recorded as 12.17, 15.67, 16.48, 14.65, 17.97, 19.09, 18.99, 19.65 Lux at floor level.

Baffles/shields did not appear to be installed on any of the luminaires, with the exception of the luminaires closet to the perimeter. The FM team advised this has been previously implemented in order to mitigate some lighting impacts for the most affected neighbouring properties.

The FM team advised they are in the process of preparing an implementation plan to reduce lighting at night by switching off a selection of the lighting circuits and dimming other lighting circuits, where operationally feasible. We suggest this plan is obtained and reviewed and that a programme of monitoring and recording is implemented.

We would recommend that the following course of action is considered to address the issues identified:

1. All column luminaires to fitted with baffles to remove the impact of direct glare.
2. Consideration of dimming of the luminaires in different areas of the site to a lower wattage to create a lower average lux level and minimise the indirect light spillage which appears to be impacting on the dark sky issue due to potential reflection from the finished road surfaces.
3. Review the capability of the lighting control system to assess the flexibility of switching off certain circuits at night.
4. Assess the actual operation of the site to determine areas which are not always needed to be operational on a daily basis and control those areas accordingly, using the lighting control system to switch off certain circuits at night.

Appendices

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