



LIGHTING IMPACT ASSESSMENT

OF

EXISTING EXTERIOR LIGHTING INSTALLATIONS

AT

SANDOWN RACECOURSE

PORTSMOUTH ROAD, ESHER. KT10 9AJ

Issued by:-  
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## EXISTING EXTERIOR LIGHTING INSTALLATIONS SANDOWN RACECOURSE

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## 1.0 Introduction:

This document has been prepared, to assess the extent of the current exterior lighting installations within the Sandown Racecourse site. Further, it provides an assessment of the level of illuminance that can be anticipated as a result of the proposed development at the boundaries of development sites within the proposal, and existing residential properties surrounding the site, in order to assess the potential impact of the development in lighting terms.

This overview format has been scoped and agreed with the Senior EHO Officer at Elmbridge Borough Council.

A desk top exercise has been undertaken to produce this assessment supported by relevant data gathered from a dusk/dark survey carried out from 1530hrs on Tuesday 15<sup>th</sup> January 2019 in clear weather conditions.

## 2.0 Description of Proposed Development – Sandown

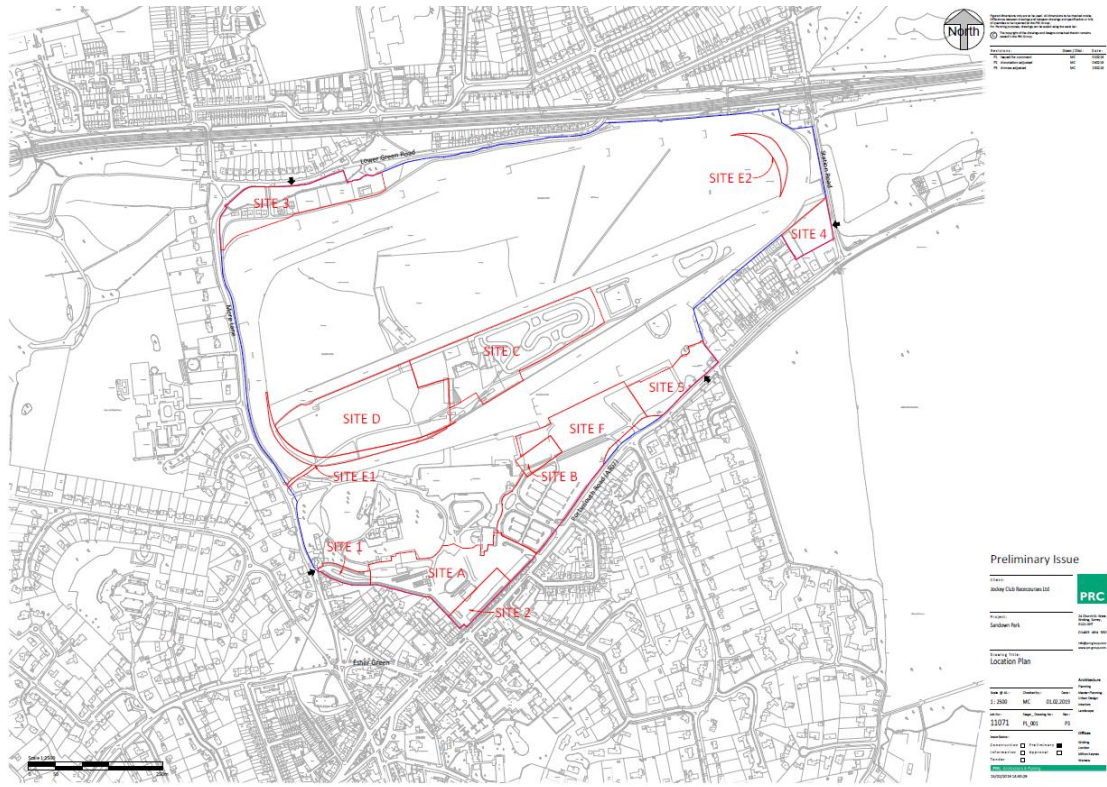
Outline planning permission (with all matters reserved except for access to the development) is sought for:

- Enhancement and rationalisation of existing racecourse facilities/infrastructure and car parking;
- Re-location of an upgraded children's nursery (Use Class D1);
- Development of a circa 150 room hotel (Use Class C1), and
- Demolition of existing buildings/structures and residential development of approximately 318 dwellings (Use Class C3).

Full planning permission is sought for:

- Racetrack widening to the southwest and east sections of the existing racecourse track, including associated ground levelling/earthworks to the southwest section, and re-positioning of fencing, and improvements to a section of the existing internal access road from More Lane, and
- New bell mouth accesses serving the development.

## Site Location Plan



### 3.0 Site Location:

The site is located adjacent to the Portsmouth Road (to the south east) and More Lane (to the south west) near Esher town centre. The main railway line to/from London Waterloo bounds the north of the site. Post Code: KT10 9AJ

### 4.0 Baseline Conditions

The Sandown Racecourse site incorporates a number of businesses providing recreational, exhibition and conference facilities for the local and wider communities.

The race track itself is a grass surface suitable for occasional use and is not used for night time meetings. The ancillary buildings and display areas required for

race meetings include the Grandstand (1), an adjacent multi storey building for corporate entertaining (Eclipse Building) (2), the stables (3) the mechanics workshop (4), the two storey media building (5), the two storey administration building (6) and two parade rings (7).

A two storey hostel (8) and carparks (9) are located along the frontage with the Portsmouth Road.

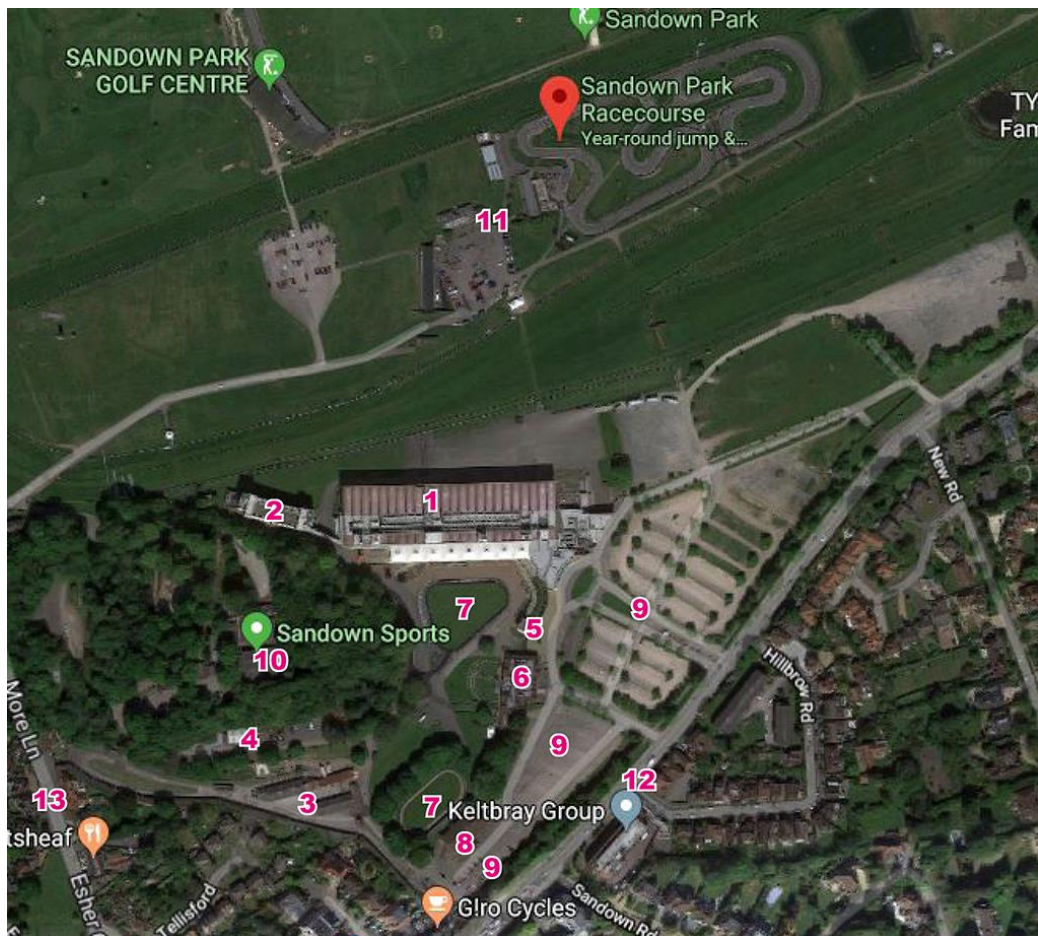
The Grandstand incorporates a number of exhibition and function rooms and along with the Eclipse Building is used for exhibition, conference and entertaining.

Also, within the Racecourse site there is an adventure sports centre (10), a go kart circuit and golf driving range (11) A nursery is located adjacent to Portsmouth Road at the Toll House, in application Site 5

and a children`s nursery.

The Portsmouth Road (12) is identified as a route illuminated to urban trunk road standards (with speed limit enforcement). There are residential properties fronting this road.

More Lane (13) is identified as a residential road, predominantly illuminated to the appropriate standard. There is residential property fronting this road including the Esher C of E High School access. The site egress to More Lane is illuminated within the site by 2no small area floodlights.



## 5.0 Existing Lighting Requirement

The exterior lighting installations were all identified to be compatible with the required activity and were mainly provided for the safe conduct of the task during the hours of darkness.

### 1) The Grandstand

The dual function of this building means that on race days it provides covered standing and seated spectator viewing and on-course betting facilities and at other times it provides exhibition and conference facilities. The lighting installation to the rear of the Grandstand (facing the race track) is located above the pedestrian gang ways/entrance doors (6no). The illuminated area includes the external seating, pedestrian walkways and forecourt area. There is also a small area floodlight located at the vehicle access barrier to the north east corner of the forecourt.

To the front of the Grandstand (overlooking the main parade ring) the decorative canopy is illuminated with 6no up/down light systems providing functional illuminance over the seating area and immediate forecourt/terraces with a decorative effect resulting from the translucent canopy roof. To the south east corner of the Grandstand is the main entrance control building with small area floodlights (4no) fixed to the front façade and an additional floodlight fixed to the north facing flank wall - all provided for safety of pedestrians during the hours of darkness.

### 2) Eclipse Building

There is no external lighting provided except functional emergency exit “over door” lighting.

### 3) The Stables

There is no external lighting provided except functional emergency exit “over door” lighting.

### 4) The Mechanics Workshop

A wall mounted floodlight illuminates the workshop yard area.

### 5) The Two Storey Media Building

There are 2no small floodlights mounted to the fascia with beam direction vertically down. The underside of the first floor has approximately twelve fluorescent batten fittings located to illuminate the public entrance turnstiles below.



- 6) The Two Storey Administration Building  
There are bulkhead lights located around the building for pedestrian route safety and over emergency exit doors.
  
- 7) The Two Parade Rings  
They are not independently illuminated. The large parade ring does have a spot light directed to a statue in the centre
  
- 8) The Two Storey Hostel  
There are bulkhead lights located around the building for pedestrian route safety and over emergency exit doors.
  
- 9) The Car Parks  
There are in total 8no floodlights mounted on 10m columns located along the frontage with the Portsmouth Road and directed onto the car park areas.
  
- 10) Adventure Sports Centre  
There are a total of 12 floodlights mounted on 6m columns for access road and car park illumination. Good vegetation screening in this area restricts light trespass and glare risk.
  
- 11) Go Kart Circuit and Golf Driving Range  
Floodlighting is provided on these sites when the facilities are used after dark. It is understood that this is occasional use and screening is provided by tall evergreen shrubs.

## 6.0 Assessment Summary and Conclusion

The information gathered in compiling this assessment as part of the desk top exercise and the site survey visit, has confirmed, that the subject site existing external lighting installations are compliant with guidance advice (CIBSE LG6 Outdoor Lighting Guide, ILE Guidance Note GN01.2011 Reduction of Obtrusive Light).

The Environmental Health Officers have raised some specific points which have been responded to and agreed as follows:

- 1) Photographs taken at the time of the lighting survey visit on 15/1/19 have been forwarded to the EHO for record purposes.
- 2) An illuminance drawing for the existing site lighting was not included within the agreed scope of this document. However, there was no existing or potential boundary light spillage identified onto existing or proposed development areas.

- 3) Any mitigation measures required to remove the risk of light trespass from Sites C and D to the boundaries of existing and proposed new residential sites will be reviewed at reserved matters stage. The existing tree/shrub screening to the Golf Complex will remain and fully mitigates any light trespass risk to proposed and existing developments.
  
- 4) Would the additional lighting within the new development create a cause for light pollution at the nearest residential properties? An appropriate design for any new lighting will mitigate this potential and will be submitted at reserved matters stage.
- 5) Where the new dwellings are likely to be sited, would the existing lighting potentially cause light pollution issues? Currently the assessment is that there is no threat of light pollution issues.
- 6) Is there any light emanating from the railway which is likely to have an impact on the new development? Currently there is no light emanating.
- 7) Majestic Wine, Café Rouge and other commercial operators adjoin the site on the Portsmouth Road. Is there any impact from lighting at this location on the new development?  
There is minimal lighting to the respective car parks and currently there is no potential impact on proposed site4.
- 8) There is no existing street lighting which would impact on the proposed residential development.
- 9) The existing flood lighting at the kart track will be removed as part of the proposed Site C Family/Community Zone. The proposal is being sought in outline, and as such, any necessary lighting for this area will be submitted for consideration at the reserved matters stage.

Mitigation of impact to the existing and proposed new settlements is currently supported by the masking of light sources from on-site structures, terrain undulation and established evergreen vegetation screening. Additional mitigation techniques within the proposed new development could be luminaire concealment and masking, the maximum mounting height of luminaires to be 3m and lighting controls with occupancy detection.

The potential nuisance of carpark illumination to residential property is mitigated by the illuminated corridor provided by the Portsmouth Road highway lighting and in addition, residential garden screening. The EHO did draw attention to the fact that certain luminaires within the front car park area were creating risk of light pollution. Any lighting equipment specified for the new development will be fully compliant to remove this risk.



I am satisfied that at the time of my survey visit, the resulting illuminance from the Sandown Racecourse site does not add significantly to existing ambient illuminance external to the site. Furthermore, the projected illuminance levels at the boundary of proposed future development sites will not exceed the recommendations of ILE Guidance Note GN01.2011 - Environmental Zone E2 (Table2).

In this context, there are no in principle reasons why the development cannot be supported in the context of an outline planning permission in terms of lighting. However, evidently further work relative to lighting will be required through the detailed design/reserved matters process to ensure that any matters arising can be properly mitigated.

## 7.0 Glossary of Terms and Reference

Floodlight – Wall mounted or column mounted lantern with light source.

Bulkhead Light – Wall mounted enclosure with light source.

Illuminance (lux) - Illuminance is a measurement of the light intensity at any point. The light intensity drops exponentially the further away you get from the source (distance).

Glare – Unwanted light, uncomfortable to the human eye.

CIBSE LG6 Outdoor Lighting Guide

ILE Guidance Note GN01.2011 Reduction of Obtrusive Light

GWLC 19/2/19