

Appendix 6-2 – Lighting Design Ecological Considerations



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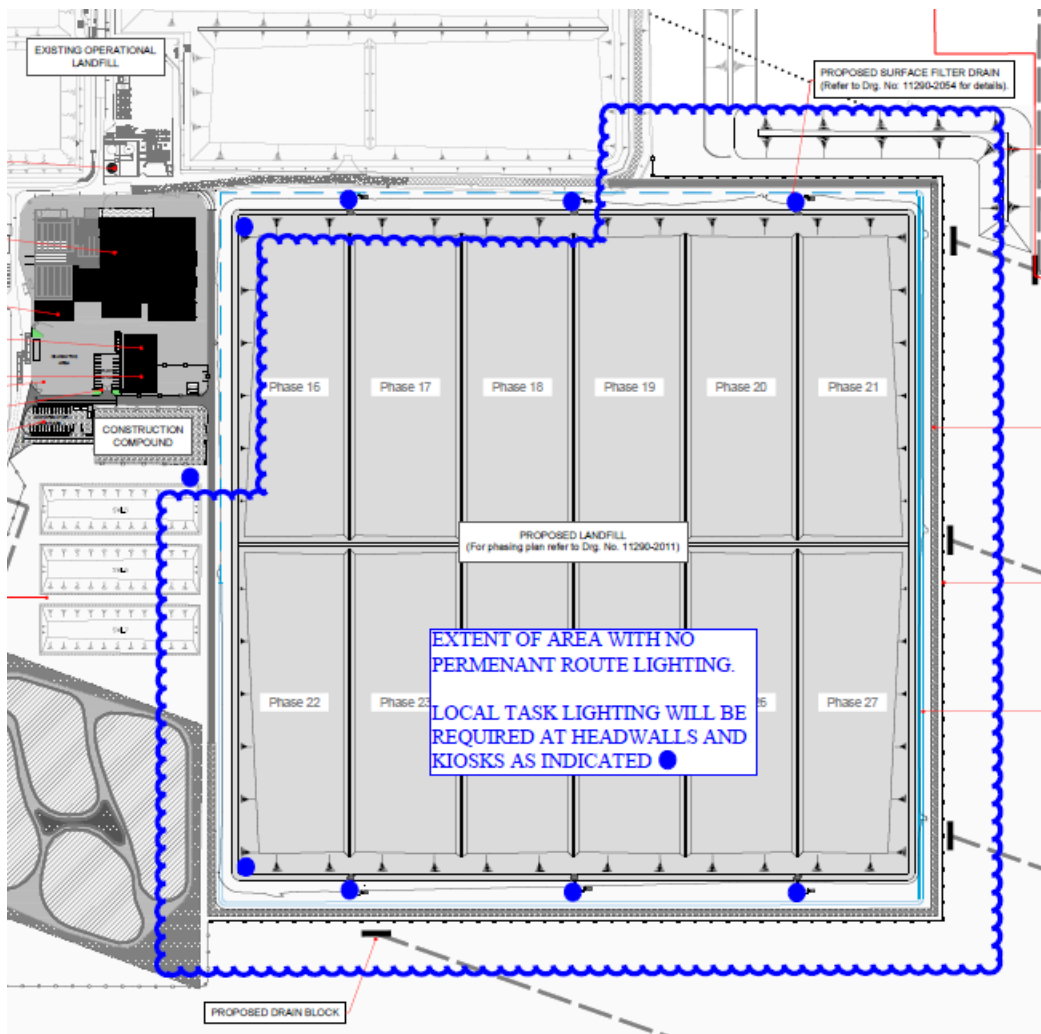
1 Introduction

Bat species, protected by the 1976 Wildlife Act and 2000 Amendment, have been witnessed across the Drehid bog and landfill site and have therefore been considered during lighting design for the Drehid Landfill Extension project.

Site lighting, while providing a minimum ground illumination for operation of the landfill site, will be minimised to reduce any impact to local fauna.

1.1 Local Commuting & Foraging Routes

Lighting and light spill onto foraging routes are of concern around the new landfill. Therefore, lighting will not be installed in non-critical areas. The below plan indicates the extent of area where no permanent route lighting will be installed which should minimise the local impact. Task lighting will however be provided at critical locations where electrical control panels are located. These are indicated below.



2 Lighting Design

For bats and other light sensitive species, a lower colour temperature LED will be provided. The luminaires used in the design are LED 3000K colour temperature (warm white) in line with recommendations for reducing the impact of lighting on wildlife & bats (ILP GN08).

2.1 Luminaires

All the luminaires used are full cut off/flat glass type, all with no tilt (0% uplight) so they are very good at minimising glare and light spill and also have excellent directional control through the use of quality optics.



Further mitigation of horizontal glare will be achieved using deflector plates.

2.2 Lighting Control

Site lighting at the landfill will be controlled to ensure operating time is kept to a very minimum. There will be two distinct strategies employed:

1. Lighting at control panels will be fitted for daylight and motion sensors and therefore should not be on in hours of darkness unless necessary.
2. Lighting in car parks, yards and other circulation routes will be fitted for daylight and motion sensors ensuring that lighting operates only in hours of darkness and only when the area is occupied.

This strategy will minimise further any effect on local light sensitive species.