Bayside Netball Centre

WGE Specialist Lighting Preliminary Concept Report

Date: 26.06.2019 | Revision 001-D
Lighting Concept:
- Netball Courts
- Car Park & Landscaping
Netball Courts

Bayside Netball Centre
Pole locations shown are indicative, subject to finalised court layout & structural column details. Poles will be located to suit recommended run-off clearances.
New sports lighting to be designed to suit Australian Standard 2560.2.4 & Netball Australia National Facilities Policy Manual. Recommended layout is for individual control for single and dual court as illustrated. This is to ensure pole heights are lower and courts zones can be controlled separately for energy efficiency for courts not being used.
Bayside Netball Centre

LUMINAIRE OPTIONS
- Philips Lighting - Optivision LED Gen 2 525
- Thorn Champion Pro 264L 2666818
- Gerard Lighting - Sylvalia Briteline Raptor

The outdoor courts will be lit to suit low level competition/ training and mid-level competition.
Low level: 100 lux
Mid level: 200 lux

All lighting will be LED, for energy efficiency.
Recommend 4000K LED with CRI (Colour Rendering Index) of 65+.

The design will ensure glare does not exceed value of 50.

Nominal pole heights will be 12-15M using tapered hexagonal type poles. Poles to be supplied with lightning protection.
Car Parks & Landscaping

Bayside Netball Centre
Lighting Control will be used for energy management for the external precinct lighting.
Car Parks will be lit to Australian Standards 1158.3.1, category P11a, 14 lux average horizontal illuminance whilst the facility is in operation during peak times.
For after hours, luminaires will be dimmed to P11c category, 3.5 lux average horizontal illuminance.
DDA parking spaces to be lit to Australian Standards 1158.3.1, category P12 at all times.
Lighting for the car parks to provide uniform levels of light throughout the lot. Lighting levels to comply with Australian Standards as well as allow visitors to walk comfortably and drive safely.

The luminaires suggested have a simple, minimal design which doesn’t interfere - yet contrasts - with the organic shapes created by the landscaping.

3000k colour temperature, full cut-off luminaires for "dark sky" light spill control.

Nominal pole heights will be 8m for car park, and 6m for pedestrian pathways.
Obtrusive Light Compliance Report

Bayside Netball Centre
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PRE-CURFEW OBTRUSIVE LIGHT - COMPLIANCE REPORT
- Pre-Curfew, Residential - Light Surrounds, & Commercial

WANGARA ROAD:
- PROPERTY BOUNDARY ILLUMINANCE MAXIMUM ALLOWABLE VALUE: 10 LUX
- CALCULATED MAXIMUM ILLUMINANCE VALUE: 1.3 LUX
- TEST RESULTS: PASS

GEORGE STREET:
- PROPERTY BOUNDARY ILLUMINANCE MAXIMUM ALLOWABLE VALUE: 10 LUX
- CALCULATED MAXIMUM ILLUMINANCE VALUE: 4.2 LUX
- TEST RESULTS: PASS

TALINGA ROAD:
- PROPERTY BOUNDARY ILLUMINANCE MAXIMUM ALLOWABLE VALUE: 10 LUX
- CALCULATED MAXIMUM ILLUMINANCE VALUE: 1.3 LUX
- TEST RESULTS: PASS

NEW CHELTENHAM CEMETERY BOUNDARY:
- PROPERTY BOUNDARY ILLUMINANCE MAXIMUM ALLOWABLE VALUE: 25 LUX
- CALCULATED MAXIMUM ILLUMINANCE VALUE: 8.1 LUX
- TEST RESULTS: PASS
POST-CURFEW OBSTRUSIVE LIGHT - COMPLIANCE REPORT
- Post-Curfew, Residential - Light Surrounds, & Commercial

WANGARA ROAD:
- PROPERTY BOUNDARY ILLUMINANCE MAXIMUM ALLOWABLE VALUE: 2.0 LUX
- CALCULATED MAXIMUM ILLUMINANCE VALUE: 1.2 LUX
- TEST RESULTS: PASS

GEORGE STREET:
- PROPERTY BOUNDARY ILLUMINANCE MAXIMUM ALLOWABLE VALUE: 2.0 LUX
- CALCULATED MAXIMUM ILLUMINANCE VALUE: 0.2 LUX
- TEST RESULTS: PASS

TALINGA ROAD:
- PROPERTY BOUNDARY ILLUMINANCE MAXIMUM ALLOWABLE VALUE: 2.0 LUX
- CALCULATED MAXIMUM ILLUMINANCE VALUE: 0.1 LUX
- TEST RESULTS: PASS

NEW CHELTENHAM CEMETERY BOUNDARY:
- CEMETERY IS CONSIDERED TO BE COMMERCIAL LIGHTING ZONE.
- PROPERTY BOUNDARY ILLUMINANCE MAXIMUM ALLOWABLE VALUE: 4.0 LUX
- CALCULATED MAXIMUM ILLUMINANCE VALUE: 1.6 LUX
- TEST RESULTS: PASS
* DIMMING OF THE CAR PARK LIGHTING WILL BE APPLIED FOR ENERGY MANAGEMENT AND SPILL LIGHT CONTROL.