DEPARTMENT OF EDUCATION (NSW)

SYDNEY OLYMPIC PARK NEW HIGH SCHOOL LIGHTING IMPACT ASSESSMENT REPORT

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Sydney Olympic Park new high school Lighting Impact Assessment Report

Department of Education (NSW)

WSP Level 27, 680 George Street Sydney NSW 2000 GPO Box 5394 Sydney NSW 2001

Tel: +61 2 9272 5100 Fax: +61 2 9272 5101 wsp.com

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Prepared by:	Andrew Kargodorian	27/08/2021	Andrew Kargodorian
Reviewed by:	Keelan Cuthill	27/08/2021	Keelan Cuthill
Approved by:	Damien Kenny	27/08/2021	Damien Keuny

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1 REPORT PURPOSE

WSP has been engaged by the Department of Education NSW to undertake the Concept design of the mechanical and electrical services design of the 'Sydney Olympic Park new high school' project.

This report aims to provide a desktop overview of the external lighting concept and highlight mitigation strategies that will be used to limit the impact on surrounding sensitive receivers. The following sources of information have been used for this Consultant Advice:

- \rightarrow Proposed Group GSA concept architectural layouts dated 16/08/2021.
- \rightarrow No visual inspections have been completed

The advice provided in this document is based on preliminary planning solutions and layouts and is subject to change during the projects detailed design stage.

2 INTRODUCTION AND BACKGROUND

2.1 Proposal

The proposed development is for the construction of a school whereby the project is known as Sydney Olympic Park new high school. The school is to be developed in two stages. The SSD application will seek consent for both Stage One and Stage Two. While Stage Two is submitted as part of this proposal, construction is subject to approval of additional funding.

Stage One will provide for a Stream 5 high school, catering for up to 850 students. Stage Two will bring the school up to a stream 9 school capability catering up to 1,530 students.

The design features a six storey building. To the north of the site, a hall building (for sports and performance) is proposed.

The play space required to meet the need of students for Stage One can be generally accommodated onsite, within the 9,511sqm available. Additional play space may be required to accommodate the increased student numbers anticipated during Stage 2. The proposed adjoining play space comprises an area of around 8,800sqm, and will be subject to a Joint Use Arrangement and available for public use outside school hours. The future Wentworth Point Peninsula Park will result in an open space area of approximately 4 ha.

The remainder of the peninsula (TfNSW land) is under review and will be subject to a separate approval process. Redevelopment of this land will include the new access road proposed off Burroway Road along the eastern boundary of the subject site and is proposed to include car parking, drop-off zones and delivery zones.

2.2 Site Description

The proposed development is located within the peninsula of Wentworth Point at 7-11 Burroway Road, Wentworth Park across parts of three lots; Lot 202 DP1216628, Lot 203 DP1216628 and Lot 204 DP1216628. The site forms part of the Wentworth Point Planned Precinct, which was rezoned in 2014 for the purposes of high density residential, public recreation, school and business purposes.

The site is approximately 9,511sqm in area, with a frontage of approximately 91m to Burroway Road. It currently contains vacant land, which is cleared of all past development, and almost entirely cleared of native vegetation.

The surrounding area is generally characterised by high rise residential and mixed-use developments. The site is directly adjacent to the Wentworth Point Peninsula Park and immediately east of Wentworth Point Public School.



Figure 2 Site Aerial Map

3 EXTERNAL LIGHTING DESIGN CONCEPT

The external lighting design for the new High School will include:

- Pole mounted luminaires for the carpark / road area
- Pole mounted luminaires for the external play area (requirements to be confirmed)
- Pole mounted luminaires for the external courts / pitch area (requirements to be confirmed)
- Wall mounted / ceiling mounted luminaires along undercover pathways between buildings
- Bollard mounted luminaires for external pathways
- Wall mounted luminaires along the general building perimeters

The lighting design, luminaire selection and lighting calculations will be completed during the detailed design stage of the project. The lighting design will be completed in consultation with the architect and DoE stakeholders to ensure that the aesthetic and performance requirements of each area are met.

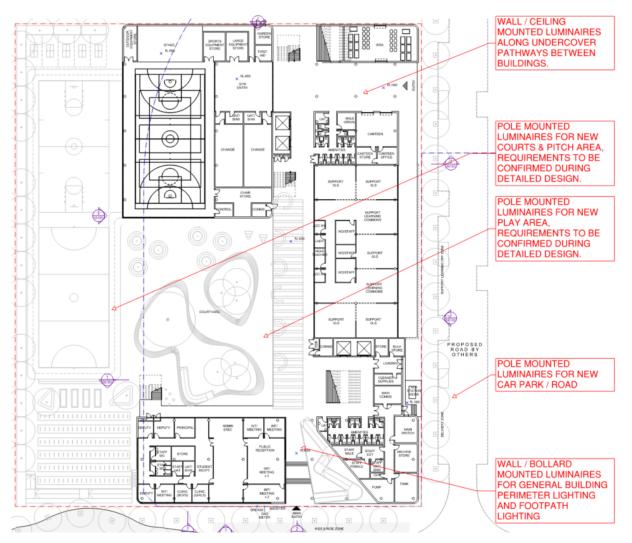


Figure 1 External Lighting Design Concept

4 NEIGHBOURING SITES

The proposed High School development is surrounded by the following major areas:

- Public school
- Residential buildings
- Warehouse
- Unknown development (currently under construction)
- Roadways
- Parramatta river

The external luminaire types proposed for the new High School are in line with the existing lighting systems installed in the surrounding areas. The new High School lighting design will be completed in accordance with the below standards to ensure that neighbouring properties are not adversely affected by the new High School external lighting design:

- AS1158 Lighting for roads and public spaces
- AS4282 Control of the Obtrusive Effects of Outdoor Lighting



Figure 2 Neighbouring Sites