

Sydney Olympic Park new high school

SSDA Structural Report

Prepared for: NSW Department of Education

By: **enstruct** group pty ltd

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ISSUE AUTHORISATION

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<p>enstruct group pty ltd www.enstruct.com.au</p>	<p>Sydney 61 2 8904 1444 Level 4, 2 Glen Street, Milsons Point NSW 2061</p>	<p>Melbourne 61 3 9108 1100 Ground Floor, 555 Bourke Street, Melbourne VIC 3000</p>	<p>Brisbane 61 7 3726 6000 Level 34, 1 Eagle Street Brisbane QLD 4000</p>
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Executive Summary

This report has been prepared to support the SSDA for the proposed new Sydney Olympic Park High School at Wentworth Point. It responds to the Planning Secretary's Environmental Assessment Requirements (SEARS) (SSD-11802230) which outlines the requirements for a Structural report describing the project.

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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 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 1 Site Aerial Map – Mecone

3 **Structural Design**

enstruct group has been involved in the structural concept design and preparation of the State Significant Development Application documentation for all permanent structural elements for this project.

We confirm that the buildings structural design can be completed without significant impact on the proposed building envelopes.

3.1 **Design Criteria**

The Design shall comply with:

- The BCA;
- The Project Brief
- Relevant Australian Standards, including:
 - AS3600 Concrete Structures Code
 - AS4100 Steel structures Code
 - AS3700 Masonry Structures
 - AS1720 Timber Structures
 - AS/NZS 1170.0 Structural Design Action Effects
 - AS/NZS 1170.1 Loading Code
 - AS/NZS 1170.2 Wind Loads
 - AS1170.4 Earthquake Loads
 - AS2159 Piling Code
- Local Authority development controls & design codes;
- Major Development SEPP;
- The requirements of the DA conditions;
- Disability Discrimination Act (DDA) and Access to Premises Standards;

The design will also meet the following additional criteria;

- Project Sustainability targets; and
- Existing easements, covenants and restrictions that both burden and benefit the land.

4 **Conclusion**

This report demonstrates that the structural design will comply with relevant codes, Australian Standards and the Building Code of Australia.