

Built Form & Urban Design Report

Waitara Public School

New & Upgrade Works Schools in North and North-West Sydney DoEAMD-16-71

August 2017 | 2126108-WA-SD-RP02 | Revision A



Education



GHDWOODHEAD

Revisions & Authorization

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Description of development

The proposed development increases the capacity of current school population. The new proposed spaces include new teaching spaces, core facilities such as a new hall, more library spaces, sanitary facilities and new administration and staff areas.

The building embraces a modern innovative teaching philosophy, which is research-driven, active and student centred. Learning spaces - both formal and informal in character, are proposed, promoting creativity and flexibility, and allowing for multiple uses concurrently, so that students may undertake a range of activities as individuals or groups. Break out, informal, flexible learning spaces provide an extension to the formal teaching areas whilst encouraging informal peer-to-peer learning. The use of operable door/walls allow the school to customise spaces to suit the teaching program and class size. The learning levels are organised with both flexible models. The circulation zones that can be arranged into different learning node configuration through use of sliding and folding doors and movable furniture. Top two floor plates are connected with an internal atrium as an amphitheatre. The South façade overlooks the playing fields. The facade takes advantage of these existing views at the upper levels.

The predominant axis of the building is east – west. The building's largest surface area has a northerly orientation. The facade is designed to reduce heat gain on the west and east faces through shading that limits solar gain and responds to the low angle of the sun late in the day. The northern faces of the building is designed to reduce solar heat gain during the heat of the day in warmer months while allowing the winter sun to enter. The proportion of glazing and openable area is modelled to optimise the internal comfort levels.

Building height and scale

The proposed building has been kept to four levels to reduce its footprint to allow for more open spaces for the school users. This allows for more play, sports and recreation. The courtyard form is compact and consolidated on the site. The roof is kept to a minimal pitch to further reduce the massing. The maximum height of public domain exposed building height is 16.7 metres. Within internal roof areas the building has a max height of 19 metres from natural ground level.

Building setbacks

Below are the two setbacks from public roads:

1. Edgeworth David Ave: 9.5 metres
2. Myra St: 9 metres

Design Quality, Streetscape, facade and building articulation

Our aesthetic approach has been to reduce the overall building mass. This is done by dividing the total mass into three blocks in plan. Further to this, we also propose to divide the mass vertically by articulating single and double height levels as separate boxes. The durable material choices incorporate standard product dimensions and connections and the structural grid allows easy reconfiguration.

The expressed structure of the façade provides shading and depth to create visual interest and variation in the play of light and shade across the building.

Materials and colours

A mixed palette has been proposed for the building, composed of dark, light to create smaller contrasting masses overall and also school brand colour.