

Consultant Advice Notice

Project:	Waterloo Metro Quarter Development – Basement	Project No.	1024873
Subject:	Response to Submission CoS 67	Doc No.	RPT-002
Author:	David Collins	Date:	11/02/2021
Attention:	Mirvac Development	Revision:	A

This Consultants Advice Notice has been prepared to provide a response to the City of Sydney’s Response to Submission item 67 (as follows).

The City supports the “capability to expand the electric vehicle charging to 100% of spaces in the car park” (page 27 of ESD Report) however further information is to be provided accordingly. How will this be achieved?

Energy efficiency initiatives regarding lighting and mechanical ventilation, including technology and performance targets, are anticipated to be now known and should be committed up front.

Electric Vehicle Charging

The electrical infrastructure to the basement car parking has made allowance for future electric vehicle charging to 100% of spaces based on trickle charging. Trickle charging is a suitable application for when the vehicles can be stationary for long periods of time, such as across a workday for commercial tenants or overnight for residential type tenants. The car parking is fitted with sufficient overhead cable trays which will be used to support the electrical distribution, with charging stations to be fitted to structural columns.

Energy Efficiency

The basement is being designed in line with the 5.5 star NABERS Energy target for Building 1. This will result in a high level of energy efficiency. At this stage the systems have not been fully resolved, particularly the ventilation strategy however the nominal solutions will be:

- LED lighting design to a low power density
- Suitable controls to the light to ensure they are switched off when not required, with a balance of safety and security
- Carbon monoxide control of all ventilation
- Variable speed control to the supply and exhaust ventilation based on the pollutant levels

This car park design represents best practice for a below ground car park which cannot utilise and daylight or ventilation.