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Allen Jack + Cottier 79 Myrtle Street Chippendale NSW 2008

Attention: Stephen O'Hora

Dear Stephen

## 90-102 Regent Street, Redfern Preliminary Technical Advice statements

Preliminary technical Wind, Reflectivity and Light Spill advice has been provided for the proposed student housing development located at 90-102 Regent Street, Redfern. Expected key impact and mitigation measures would include:

## 1 Wind

- The tower could cause increased downwash but the podium should help to mitigate this.
- There are a number of buildings of a similar height to the north and south at various stages of planning. Together these could increase the amount of channelling of winds along Regent Street.
- Awnings should be used to mitigate downwash. More generally landscaping and vegetation should be used in high wind area like corners and outdoor seating areas.
- Screens may be needed for upper balconies.
- There are already similar buildings in the area and community concerns regarding wind impacts are likely to be low.
- A quantitative wind tunnel testing study will be conducted and exact mitigation will be provided based on localised quantitative wind tunnel testing results.
- Taking into account all of the above, it is anticipated that the proposed development will comply with the local wind acceptability criteria at all pedestrian and public access locations within and around the development and will have a minimal impact on surrounding buildings.

## 2 Reflectivity

- Large developments can potentially cause disability glare for motorists and discomfort glare for pedestrians. The highest risk is for motorists travelling north on Regent Street.
- There should not be a cumulative effect as most of the façades for nearby buildings are parallel to Regent Street.
- To mitigate the potential for adverse glare, glazed are should be broken up with materials with low specular reflectivity. Setback and recesses in the façade can also help to reduce glare.

- There could be some potential for community concerns if there have been any glare issues for the nearby completed buildings.
- A quantitative glare and reflectivity assessment will be conducted to specify glazing and reflectivity coefficient to minimise impact on motorists and surrounding buildings.

## 3 Light Spill

- Light spill can impact residents with a view of the development and road uses. The main risks will be from area that may be used at night like the student common area and podium areas.
- Outdoor lighting should be designed with AS 4282 in mind. All lighting should be kept of the site as much as possible; this could involve simple fixes like curtains or shielding around outdoor podium areas.
- Lighting can be quite noticeable at times and could cause community concerns.
- A light survey and a "Future Planned" light spill assessment including recommendations will be provided to ensure that the proposed development will comply with relevant Australian standard and have no or a minimal light spill impact on surrounding buildings.

Yours sincerely

DR NEIHAD AL-KHALIDY Technical Director - CFD, Wind & Energy

