



APPENDIX D PART 4

Visual Impact Assessment

» **Summer Solstice – West Elevation** (refer Figure 3.5.5):

Note: Times shown are Daylight Saving Time (DST), therefore hours shown are one hour ahead of Eastern Standard Time (EST)

- **11.00am DST** - No shadow is cast on the proposed 136 - 140 Walker Street development
- **12.00pm DST** - Shadow is cast to the wall of the proposed development up to Level 2 of the commercial podium

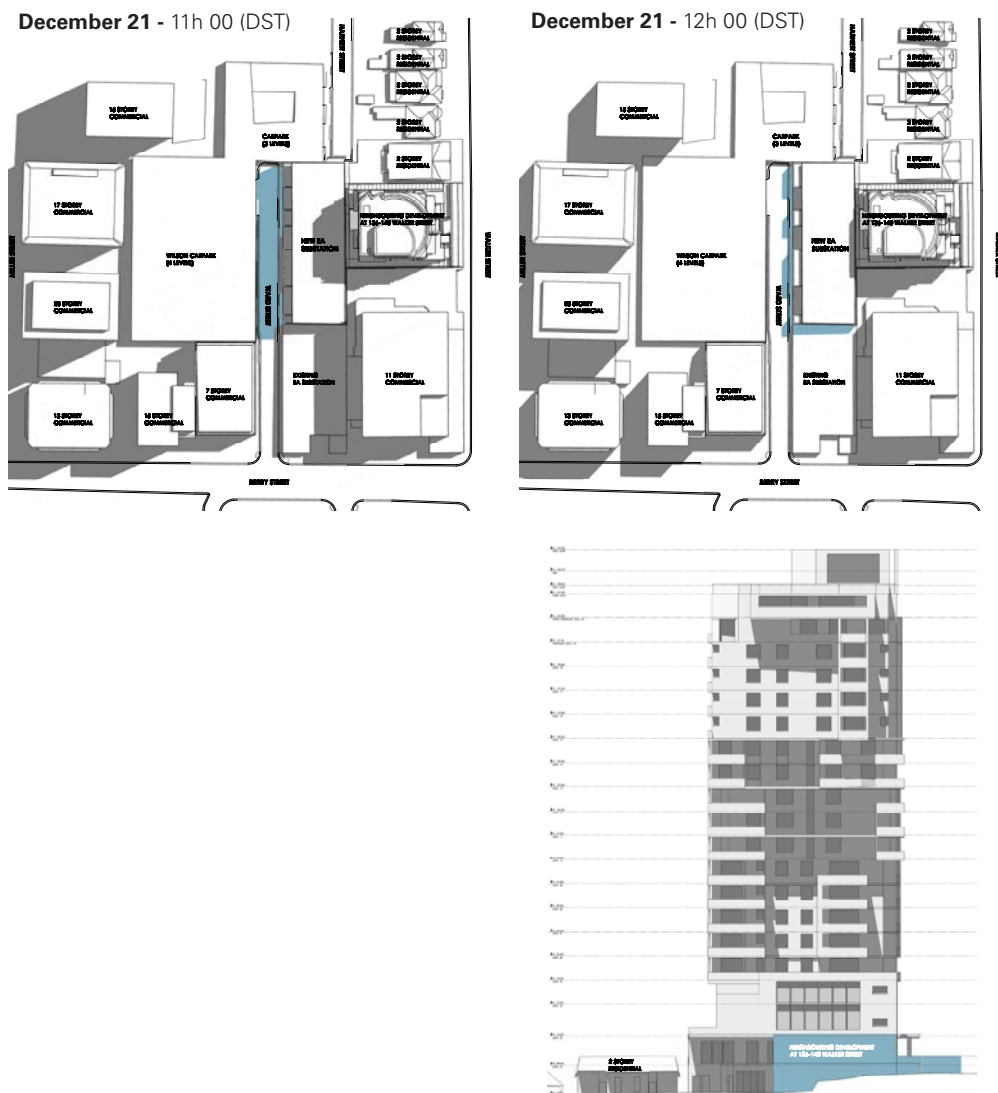


Figure 3.5.5: Shadow diagrams for the Summer Solstice on the western elevation of the proposed development at

- **1.00pm DST** - The wall of the development is in shadow up to Level 4, including glazing to Levels 3 and 4 and the indoor pool.
- **2.00pm DST** - The balconies of Levels 5 and 6 are in full shadow by 2.00pm.



136-140 Walker Street (Source: Kann Finch Group, Drawing numbers SD20 to SD24 and SD25 to SD28) Not to scale



» **Summer Solstice – North Elevation** (refer Figure 3.5.6):

- **11.00am** - No shadow is cast on the proposed 136 - 140 Walker Street development
- **12.00pm** - No shadow is cast on the proposed 136 - 140 Walker Street development
- **1.00pm** - Minor shadow to the northern elevation of the podium
- **2.00pm** - Moderate overshadowing to the northern elevation of the podium and minor overshadowing to the north facing windows of the units on Levels 5 and 6.

LEGEND

SHADOWS CAST BY EXISTING CONDITIONS AND PROPOSED DEVELOPMENT AT 136-140 WALKER STREET

ADDITIONAL SHADOWS CAST BY PROPOSED NORTH SYDNEY SUBSTATION DEVELOPMENT

NOT TO SCALE

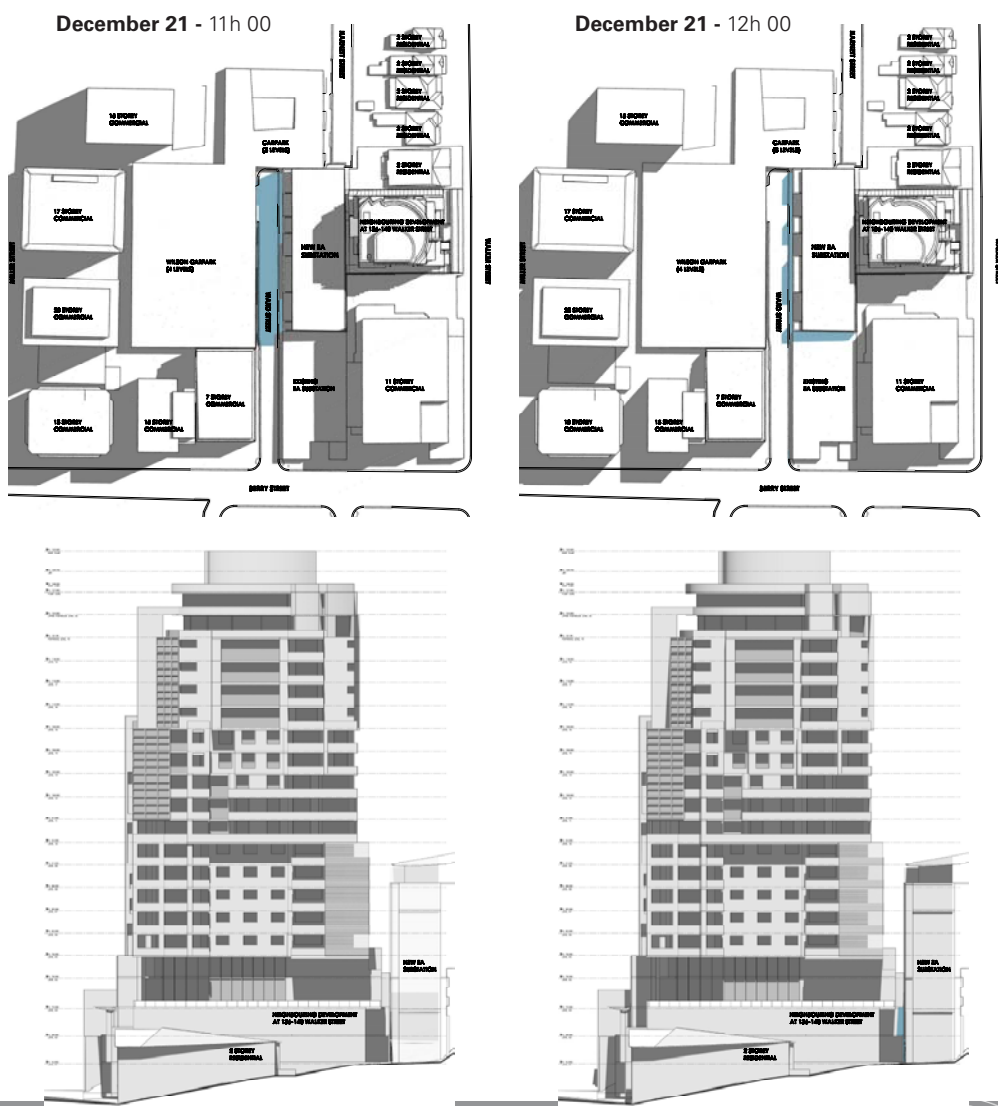
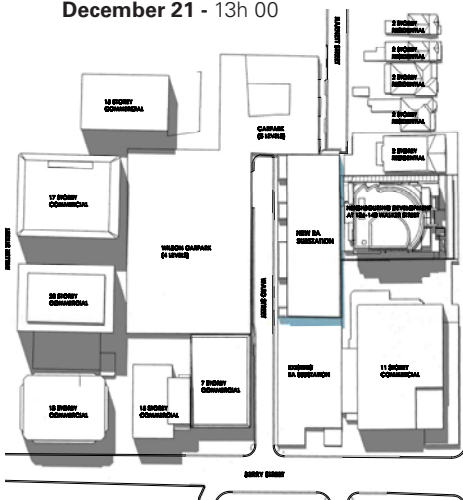


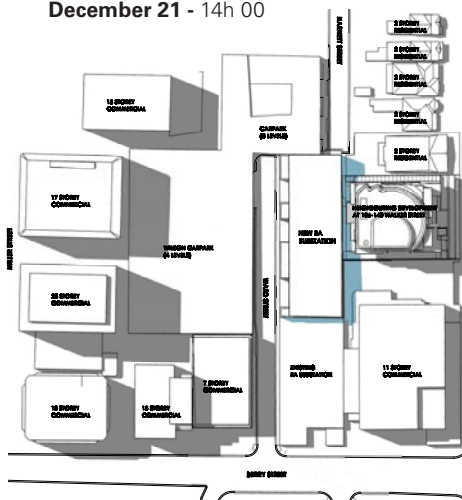
Figure 3.5.6: Shadow diagrams for the Summer Solstice, northern elevation of the proposed development at 136-



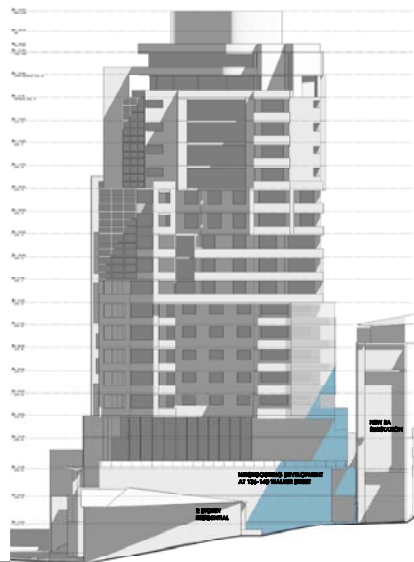
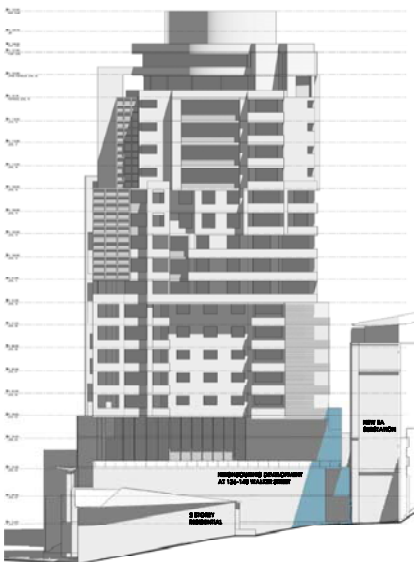
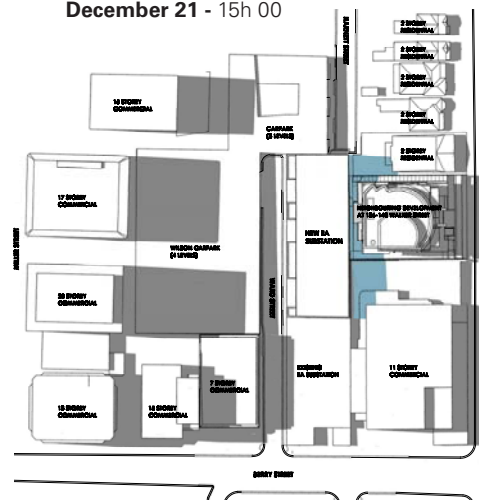
December 21 - 13h 00



December 21 - 14h 00



December 21 - 15h 00



140 Walker Street (Source: Kann Finch Group, Drawing numbers SD 20 to SD24 and SD25 to SD28) Not to scale



Visual Impact Assessment

Levels 5 to 7:

The units on Levels 5 to 7 of the proposed 136-140 Walker Street development are highly impacted by the combined effect of views directly into the rear wall of the proposed substation, and overshadowing from it. A distinction needs to be made between:

- » the units in the north-west corner of the proposed building (Unit 3), which would receive direct sunlight for more than half the day, and
- » the units in the south-west corner (Unit 4), that have highly restricted periods of direct solar access, receiving direct sunlight at the winter solstice of between 1 and 1.5 hours (worst case), and between 1 and 1.5 hours at the summer solstice (best case).

We would assess the visual impacts associated with outlook and overshadowing for the three units on the north-western corner of the proposed 136-140 Walker Street development, Levels 5 to 7, to be Moderate to High. Even though these units are north facing, and therefore receive direct sunlight for more than half the day, and furnishings within the dining / living area can be orientated to north views, at least 50% of the windows within the unit and the balcony are all orientated to the rear wall of the proposed substation, and subjected to very high levels of overshadowing.

We would assess the visual impacts associated with outlook and overshadowing for the three units on the south-western corner of the 136-140 Walker Street development, Levels 5 to 7, to be **Very High**. The views from these units comprise of the rear wall of the proposed substation to the west and the People Telecom commercial building to the south, with the units receiving between 1 and 1.5 hours of direct sun at the winter solstice only and between 1 and 1.5 hours of direct sun at the summer solstice.

Levels 8 to 9:

Although also impacted, the units on Levels 8 and 9 are subject to considerably less of a visual impact than those on Levels 5-7 for the following reasons:

- » **Level 8:** The units on Level 8 would be impacted by viewing directly into the setback, louvre-clad roof level wall of the proposed substation, which is set further back from the windows than that of the lower levels (6.4m setback off the windows in lieu of 4.8m), with the minor exception of the lift well which sits flush with the rear wall of the proposed substation. Unlike the units on Levels 5-7, these units would not be as seriously impacted by overshadowing from the proposed substation as the two lower levels.
- » **Level 9:** Although the units on Level 9 look onto the low sloping roof of the proposed substation, they would not be impacted by overshadowing, and would gain views beyond the roof to the North Sydney skyline.

We would assess the visual impact of the proposed substation building from the north-western corner (Unit 4) as being **Moderate**, and for the south-western corner as being **Moderate to High**.

Overall, we would assess the visual impact of the proposed substation as having a **high** visual impact on the lower levels of the proposed 136 - 140 Walker Street development.

Alternative Development Scenario:

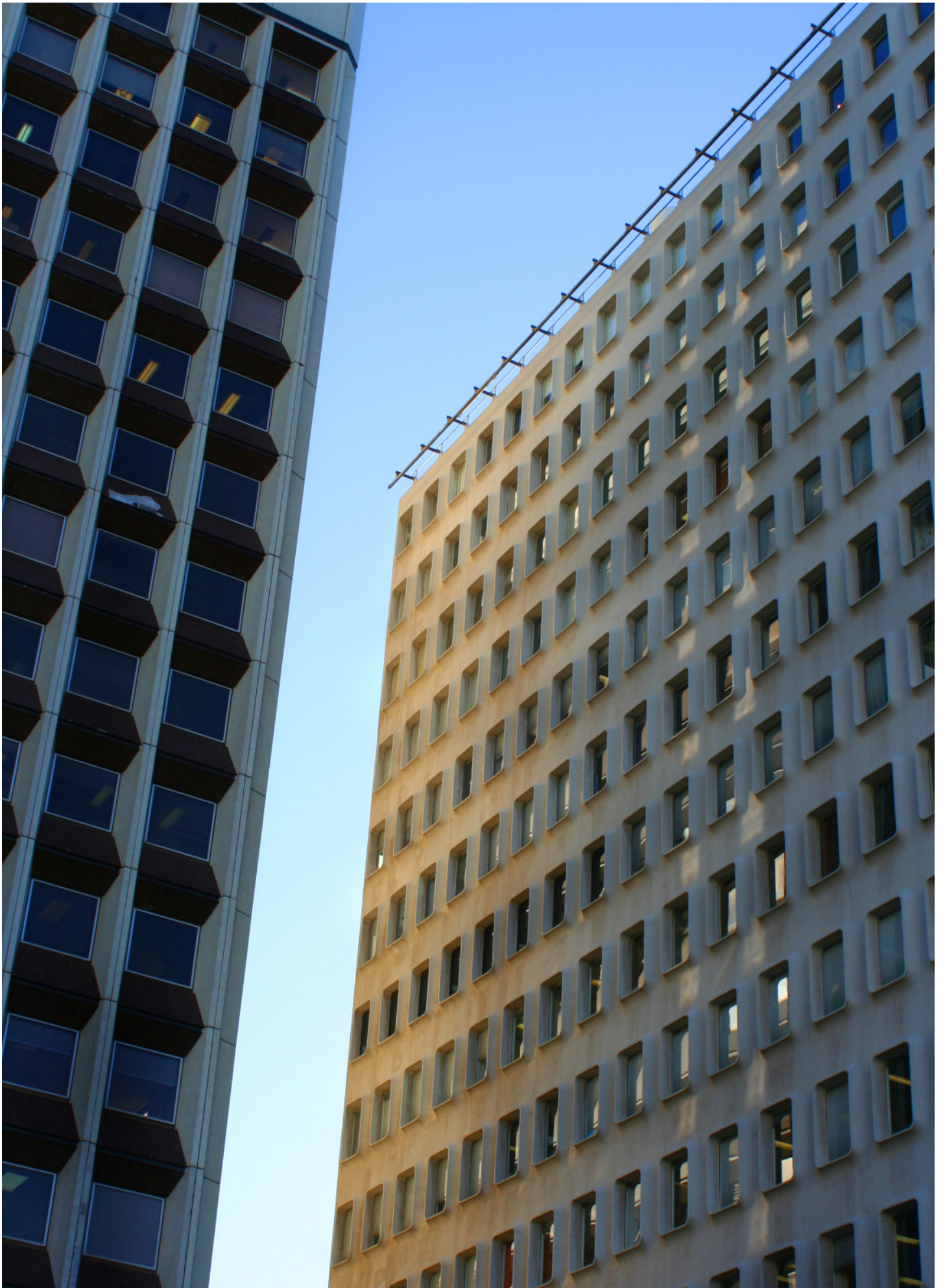
If EnergyAustralia chose to exercise their full development rights over the site, the resulting 125m tower development would significantly impact a larger number of units on the western side of the proposed 136-140 Walker Street residential development. Impacts from this theoretical development at 3-11 Ward Street would include increased loss of views, overshadowing and privacy.



Mitigation Measures

The Energy2U Alliance has vested a very significant level of effort into the design of the building, in order to minimise impacts on adjoining developments, and specifically with regard to the proposed adjoining 136-140 Walker Street development. This process has included numerous design iterations, a series of detailed negotiations with the adjoining property owner, and design input from North Sydney Council's Design Excellence Panel. As a result of this process, the current form, materials selection and colour patterning on the proposed substation building as it adjoins the proposed 136-140 Walker Street development incorporates the full extent of mitigation measures that can be applied in this instance.







4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusion

The proposed substation has been architecturally well considered, and comprises a visually well articulated form, utilising an interesting palette of colours and materials. The proposed development would provide a significantly increased level of architectural amenity over that currently existing, when viewed from Berry and Ward Streets, and when looking down Harnett Street. The substation building is not anticipated to be visually prominent from the areas of high pedestrian usage on Berry Street and the associated plaza, except during the interim period between demolition and redevelopment of the Site.

The bulk and scale of the development, and overshadowing where it adjoins the rear garden spaces of No.'s 136 to 142 Walker Street is substantially problematic for the relatively limited number of residents that live there. However, we anticipate that a well considered planting approach would substantially mitigate this impact.

The key visual impact that it has not been possible to mitigate any further, is that affecting the residential units on Levels 5 to 9 of the proposed 136-140 Walker Street development, particularly for Levels 5 to 7.

Overall, and assuming implementation of the mitigation measures proposed in this report, we would rate the visual impact of the proposed substation development as being **Low**, with the exception of the visual impact upon the proposed 136-140 Walker Street development, which we would assess to be **High**, particularly with regard to Levels 5-7.

Opposite photograph: Typical building facades viewed from the roof of the Wilson Car Park.