



Doc Ref: WB400-04F03(rev2)- SR Memo

Date: May 1, 2018

To: Scentre Group

Address: 85 Castlereagh St Sydney NSW 2000

**RE: SECTION 75W MODIFICATION (MOD1) TO THE APPROVED  
COMMERCIAL TOWER BUILDING ENVELOPE CONCEPT APPROVAL  
MAJOR PROJECT MP10\_0068 WESTFIELD SHOPPING CENTRE  
PARRAMATTA  
  
SOLAR LIGHT REFLECTIVITY**

This technical memo is in relation to possible adverse reflected solar glare from the proposed Section 75W Modification (MOD1) to the Approved Commercial Tower Building Envelope Concept Approval Major Project MP10\_0068 Westfield Shopping Centre Parramatta. The conclusions of this assessment are drawn from our extensive experience in this field and are based on an examination of the latest architectural drawings of the development.

The proposed Section 75W modification proposes relocation of the commercial tower further to the west, above the existing retail podium, providing a larger floor plate and taller building, extending to a height of approximately 210 metres above ground. At this stage the architectural design of the office tower has not yet been finalised. The concept plans include potential for future provision of a landscaped rooftop terrace on the Level 6 carpark, below the tower, with space for cafes, outdoor dining and the like, and at ground floor level, potential for a commercial tower lobby and reconfigured retail tenancies to Argyle Street. The proposal also includes upgrades to the external façade along Argyle Street and Church Street.

The Parramatta City Centre DCP 2011 requires that the design of buildings and façades should not result in undesirable glare that causes discomfort or threatens safety of pedestrians or motorists. With regards to reflected glare to pedestrians or occupants of neighbouring buildings, our past experience tends to indicate that the glazing used on buildings that tend to cause discomfort have a normal specular reflectance of visible light greater than 20%. This seems to justify the suggested limit of 20% reflectivity by many local government authorities and state planning bodies. However, this does not address the impact onto the sightline of motorists in the surrounding area, which is a safety concern. Some building facades can cause adverse glare for motorists even if the glazing has a reflectivity value less than 20%. Hence it is recommended that a detailed investigation be undertaken at a more detailed design phase

(ie: once the architectural design of the tower has been confirmed) to determine the potential for adverse glare from the façade of the office tower. Nonetheless, it should be noted that the tower is located atop the shopping mall, and this will assist in keeping the view of the tower outside the direct line of sight of motorists at many of the locations in the surrounding area.

Regarding the upgrades to the external façade of the shopping mall along Argyle Street and Church Street, it is noted that only limited additional glazing will be used. Furthermore, the upgraded façade will be well outside the direct sightline of motorists in the surrounding area, especially considering the line of large existing trees alongside Argyle Street. Hence, if the selected glazing for the upgraded façade of the shopping mall along Argyle Street and Church Street has a maximum normal specular reflectance of visible light of 20%, it is not expected that any adverse solar glare effects will be created. This can be verified as part of the more detailed assessment of solar glare effects from the tower façade.

## DOCUMENT CONTROL

Date	Revision History	Issued Revision	Prepared By (initials)	Instructed By (initials)	Reviewed & Authorised By (initials)
April 20, 2018	Update of previous report (ref: WB400-01F04(rev3), dated August 16, 2016) due to new design scheme.	0	AH	AB	AB
May 1, 2018	Revise description of the development.	1	AB	AB	AB
May 1, 2018	Revise description of the development.	2	AB	AB	AB

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