

5.2. Built Form

The Department considers the key issues for the proposed built form to be:

- building height and setback;
- design excellence; and
- calculation of FSR and site area.

Building Height and Setback

The proposed building envelope for the works above ground level raises two key issues for consideration. These issues relate to the proposed height, bulk and form of the western portion of the proposed building envelope as it presents to Carrington Street and Wynyard Park, namely:

- the height of the western portion of the tower; and
- the podium height and an appropriate setback for the tower above the podium.

First, the height controls for the site and issues raised in submissions are outlined below.

Height Controls for the Site

The site is subject to a number of maximum height controls under SLEP 2005 (**Figure 10**):

- the northern portion of the George Street frontage to the east allows for development up to a height of 235 metres;
- the southern portion of the George Street frontage to the east is controlled by a sun access plane to Martin Place; and
- the western side of the site along the Carrington Street frontage allows development up to a height of 55 metres.

Further to the above the Central Sydney DCP provides a maximum street frontage height limit of 45 metres on George Street and Carrington Street.

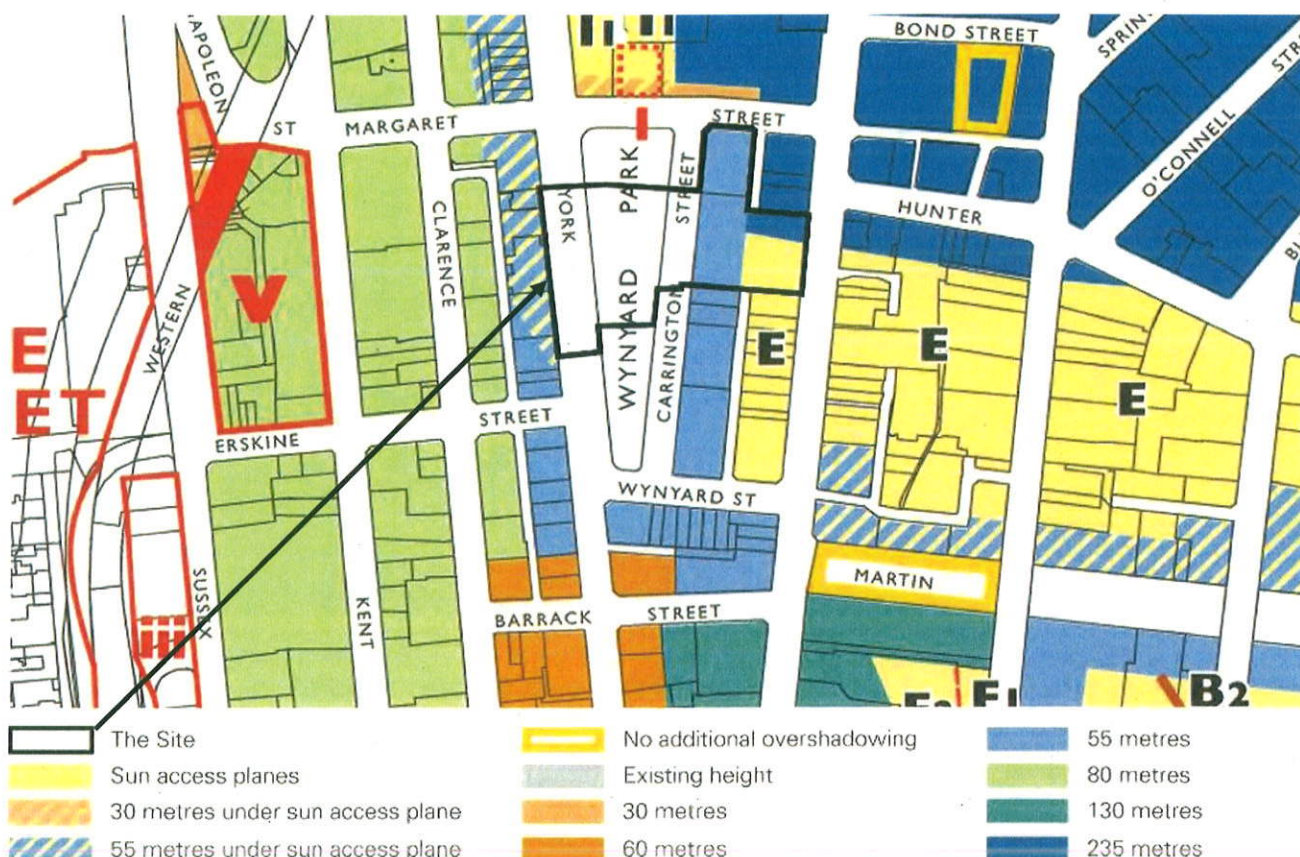


Figure 10: Sydney LEP 2005 height controls. The subject site is outlined in black.

The proposed envelope has a maximum building height of 146.33 metres (RL159.7) at the northern end of the George Street frontage reducing to 112.59 metres (RL125.96) in height toward the south. The height of the proposed building envelope slopes from north to south following the sun angle to maintain solar access to the GPO building (**Figure 11**).

The height of the proposed envelope complies with the LEP height controls, with the exception of the western portion of the proposal. The western portion of the proposed envelope (situated between Wynyard Lane and Carrington Street) exceeds the 55 metre height control along the Carrington Street frontage by between 58 to 91 metres. This non-compliance is illustrated in **Figure 11** below.

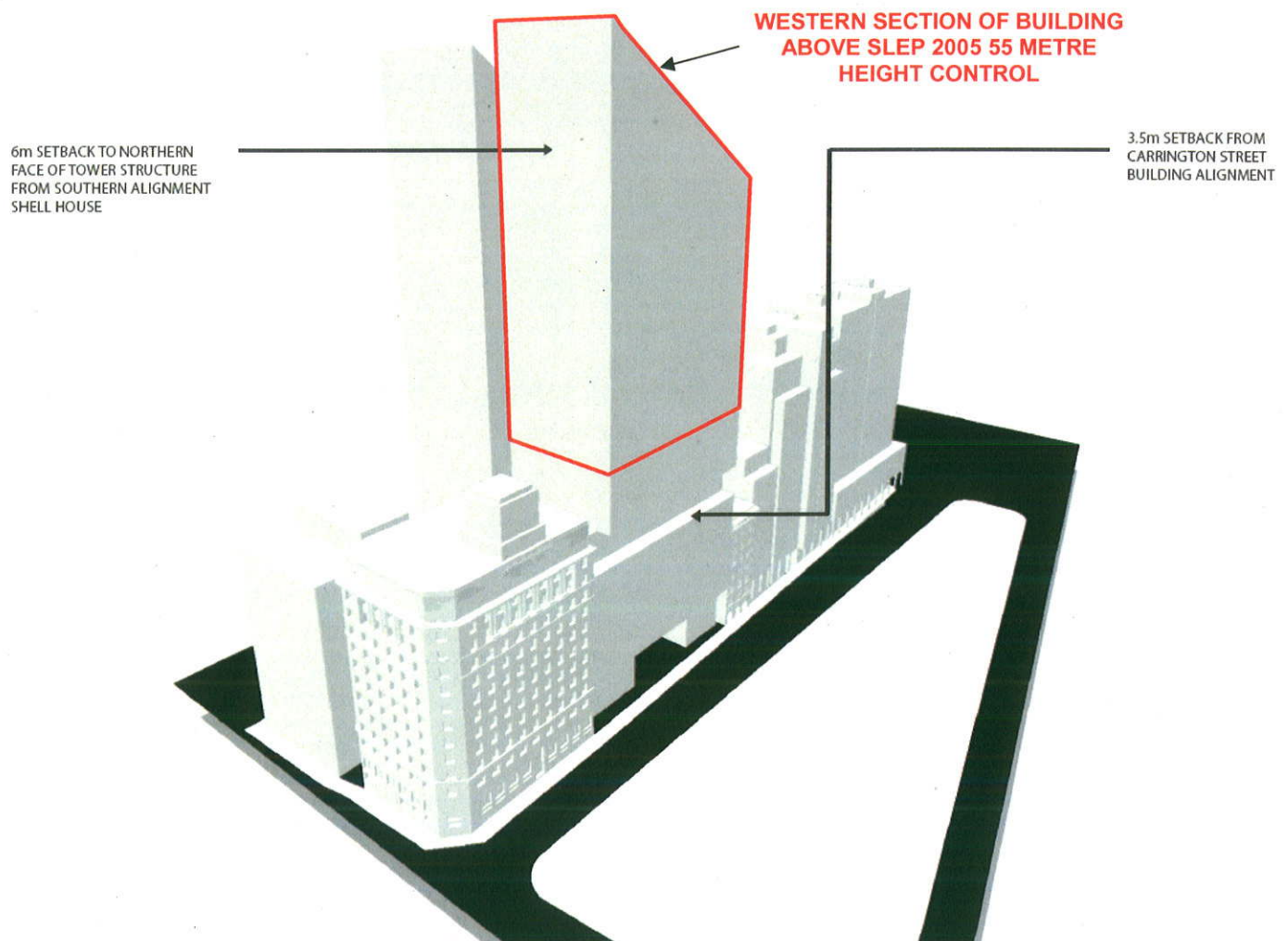


Figure 11: The proposed building envelope as viewed from the north-west as amended in the PPR. The section outlined in red is the part of the building envelope that does not comply with the 55 metre height control provided in the Sydney LEP 2005. Wynyard Park is the parcel of land directly across Carrington Street.

Issues Raised in Submissions

Council raised concern with the bulk and scale of the proposed building envelope and focused on the need to incorporate a podium form along the Carrington Street frontage with the tower element setback from the podium. Council recommended modifying the proposed building envelope to maintain an average 8 metre setback to Carrington Street above the height of the existing Shell House parapet level (with a minimum of 6 metres).

The NSW Heritage Council also raised concern with the proposed building envelope, stating that it is inconsistent with surrounding development east of Wynyard Park and will impact on surrounding heritage buildings.

Following exhibition of the proposal, the Department advised the Proponent to further consider the height and bulk presented by the proposal to Carrington Street and Wynyard Park to the west. The Department recommended that the revised scheme must reinforce the existing street wall and provide an appropriate setback for the proposed tower above the podium.

In response to the concerns raised, the Proponent has provided a slot setback of 3.5 metres at the Carrington Street frontage (to the west) between the heights RL56 (37m) and RL63.6 (45m) with a nil setback above this height; and has also provided a 6 metre setback from the portion of the northern site boundary (immediately adjacent to Shell House) between Carrington Street and Wynyard Lane (**Figures 11 & 12a**). The Proponent also argues that, notwithstanding the height non-compliance, the CityOne development is considered to comply with the LEP objectives for height as it will:

- not affect sunlight access to key areas of the public domain;
- provide a high quality urban form, while maintaining satisfactory sky exposure and daylight to public areas;
- confine ground level wind speeds to velocities which ensure pedestrian comfort and amenity to the public domain;
- is located on a site capable of providing appropriate urban form and amenity; and
- is an appropriate height transition between new buildings, heritage items and special areas.

Tower Height – Carrington Street

The Department acknowledges that the proposal provides an opportunity to deliver significant public benefits in the form of improvements to the Wynyard Station precinct. However this must not be at the expense of the public realm. It is considered that a careful consideration of the merit issues associated with the proposed built form is warranted rather than applying the current numerical standards to the site.

In assessing the appropriateness of the proposed building height, the Department has considered the relationship of the proposal to the built form character in the surrounding locality, the possible environmental and amenity impacts associated with the proposed building envelope, as well as the opportunity for the site to positively contribute to the design and function of the Wynyard Station precinct. On balance it is considered that the proposed height of the building on the western side of the site is acceptable for the following reasons:

- The proposed building envelope is within the height controls applying to the eastern portion of the site along the George Street frontage as well as the maximum height limit for the sites directly adjoining to the north and east;
- Whilst generally smaller in height than the proposal, the buildings along the eastern side of Carrington Street are characterised by a range of heights and forms;
- Whilst the proposed envelope is higher than the immediately adjoining buildings along Carrington Street it is in-keeping with the height and built form of the wider CBD (**Figure 4**);
- The presence of a taller landmark building on Carrington Street will provide a clearly identifiable entry for Wynyard Station;
- The building height has been set to maintain the solar access of identified special areas such as Martin Place and the GPO Building (as discussed under 'Overshadowing' below);
- It is commonplace in the CBD for heritage listed buildings to be adjoined by much taller and larger scale buildings. These larger buildings can achieve a positive relationship with the scale of the heritage items by attention to aspects such as architectural detailing and articulation rather than the limitation of overall height. The relationship to the immediately adjoining heritage items (Shell House, Lisgar House and Former Beneficial House) may be achieved through the same means (subject to setbacks as discussed below); and

- The key agency submissions (particularly the City of Sydney) did not raise concern with the overall height of the tower, focusing more on the resolution of a podium height, upper level setback and materials.

Overall, the Department considers that the height of the proposal is acceptable as it is consistent with the existing character of the Sydney CBD and does not create any unreasonable amenity impacts. In addition to this, the Department considers that the proposed building form is further justified when balanced against the significant upgrade to the Wynyard station precinct and the public domain that will also be delivered as part of the overall proposal.

Podium Height and Upper Level Setbacks

As illustrated in Figure 13, the buildings surrounding Wynyard Park provide a street wall to maintain a sense of enclosure around Wynyard Park. Given the overall height of the proposed building envelope and the 55 metre height limit in SLEP 2005, the Department considers that the composition of the western façade and its presentation to Carrington Street and Wynyard Park is a critical design issue.

The Department notes that the amendments to the proposed western façade design (**Figure 12a**) are different from those sought by Council (**Figure 12b**).



Figure 12a: The proposed building envelope as viewed from the ground level at the northern end of Carrington Street. This image presents the Proponent's preferred option with the setback section between 37-45 metres above ground level.



Figure 12b: An alternative building envelope as viewed from the ground level at the northern end of Carrington Street taking into account Council's recommended 8 metre setback above the street wall

The Department has analysed the proposed western façade design and does not support the Proponent's proposal (**Figure 12a**) as it presents an excessive amount of visual bulk and will visually dominate Carrington Street and Wynyard Park above the street wall height. It also does

not provide a continuation of the existing street wall when considered in conjunction with Shell House to the north.

The Department considers that an upper level setback of a minimum 3 metres above a podium height consistent with the profile of Shell House (**Figure 12b**) is a more appropriate solution for the following reasons:

- The podium form provides a more sympathetic visual relationship with the form of the immediately adjoining heritage listed Shell House building and the scale of buildings further to the south along Carrington Street;
- The upper level setback will allow the proposed tower to better relate with the immediately adjoining buildings along Carrington Street whilst enabling a tower form that is consistent with the character of the wider CBD;
- The upper level setback will maintain the visual primacy of the lower level podium element / street wall as viewed from street level which is of a scale more consistent with the immediately adjoining buildings; and
- This solution is more consistent with the objectives for the Wynyard Park Special Area which seeks that new buildings be built to the street alignment, and by requiring street frontage heights and setbacks above them to be compatible with the prevailing form of existing buildings surrounding Wynyard Park.

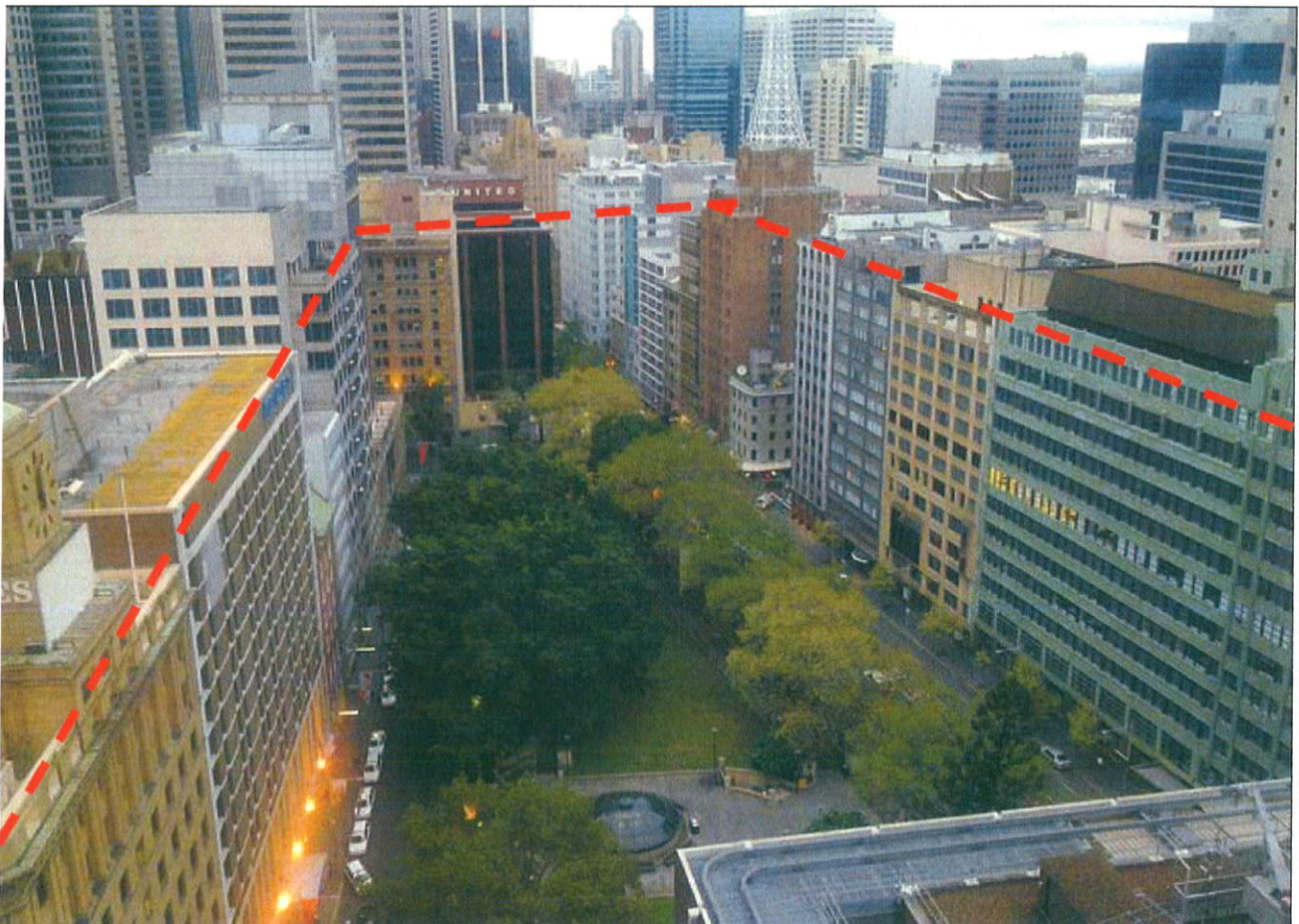


Figure 13: Aerial view looking from the north of Wynyard Park toward the south. The red broken line follows the defined street wall height surrounding Wynyard Park.

The Department considers that a lesser setback than the minimum 6 metres recommended by Council is appropriate. Subject to distinct materials and finishes being used between the podium and upper levels, the Department considers that a setback above the podium/street wall along Carrington Street of a minimum of 3 metres would maintain the visual street wall effect as seen from the ground level with the tower form above the podium remaining consistent with taller buildings in the locality.

The Department therefore recommends a podium form having a height matching the existing Shell House parapet along the Carrington Street frontage with a minimum 3 metre upper level setback provided for the tower form above this height (this includes the additional level above Shell House).

The Department notes that this will potentially reduce the overall GFA within the tower by approximately 1,775m² (2.1% of the proposed GFA by the Concept Plan, or 3% of GFA within the tower). The Department considers that it is possible for the floor plate planning to be reviewed as part of the future application process in order to retain the proposed GFA yields (through the rationalisation of service cores and entry arrangements) therefore retain the public benefits in full.

As discussed below, this will be subject to a competitive design competition process in accordance with the provisions of Sydney LEP 2005.

Design Excellence

The Proponent has requested that the competitive design competition process, as normally required by the Sydney LEP 2005 and Central Sydney DCP 1996 be waived as the detailed investigations that have been undertaken to develop the concept to date cannot be further developed. Further, such a process could propose a design proposition that may not be technically feasible, fundamentally possible or intrusive in detail from a station functionality perspective.

Council does not accept the Proponent's argument to waive the design competition requirements and has recommended that the applicant be required to undertake a design competition. This is recommended on the basis that:

- the site has a high level of impact on the public domain, as it involves an important entry to Wynyard Station and forms the eastern edge of Wynyard Park; and
- the project proposes to break several of the height and setback controls contained in the LEP and seeks substantial additional FSR.

The Department considers that the proposed envelope will form a unique building in the immediate context that is an easily identifiable point within the Sydney CBD and as such should be subject to a competitive design process.

The previous design iterations referred to in the EA are considered to be concept level design exercises which did not investigate or provide a sufficient level of detail to demonstrate design excellence. The Department also notes that comments provided by Architectus (who were engaged by the Department to provide a peer review and urban design commentary on an earlier scheme in 2006), foreshadowed the need for a competitive design competition to resolve the visual appearance of the building given the potential visual impacts arising from the relaxation of the height controls for the western portion of the site.

Further, the Department does not agree with the Proponent's argument in relation to technical liabilities from a station functionality perspective as:

- this part of the Concept Plan relates only to the envelope of a tower, retail arcade and public lobby area rather than Wynyard Station itself; and
- a design competition may be informed by the CityOne Concept Plan Design Criteria (provided in the PPR) which sets the framework for the design of the public domain spaces and building envelope.

It is therefore recommended that future application/s for the construction of the proposed tower form on the portion of the site to the east of Carrington Street be subject to a competitive design competition in accordance with the provisions of the SLEP 2005. Notwithstanding this requirement, the Director General may waive the design competition process in the future if design excellence can be demonstrated through the submission of more detailed drawings demonstrating design excellence by an architect with a reputation for delivering buildings of the highest quality.

Calculation of Site Area and FSR

The SLEP 2005 sets out that the maximum allowable FSR for the site is 8:1, with the potential to increase this to a maximum of 12.5:1 for commercial uses subject to satisfying the required height, design excellence, heritage floorspace, ecologically sustainable development and other development provisions.

The Proponent sets out that the total site has an area of 11,124m². However in applying the relevant definition of 'site area' for the purpose of calculating the FSR, the figure is reduced to 8,828m² (as this excludes the area underneath Wynyard Park).

Council does not support this interpretation of the site area. It argues that that it is appropriate to adopt a reduced site area of 4033m² (being the portion of the site east of Carrington Street) as the inclusion of the portion of the site to the west of Carrington Street is inconsistent with the definition of site area as outlined in the SLEP 2005, and also that the Proponent has failed to outline any scope or development options for the site west of Carrington Street. Also it is concerned that this approach would set a precedent for the redevelopment of other sites. Accordingly an FSR of 20.9:1 (based on a GFA of 84,478 m²) should be adopted as the proposed FSR. Council however does not specify an appropriate reduction in floor space for the proposal (however seeks upper level setbacks as detailed under heading 'Podium Height and Upper Level Setbacks' above).

In consideration of this issue, the Department notes the following:

- The subject site identified by the Proponent encompasses land across a number of levels and parcels. However, in practical terms it is bound into a continuous site that is used as part of the single Wynyard Station complex; and
- Whilst the proposal does not set out details for the development to the west of Carrington Street, it does provide a clear plan of the area within which approval is sought for the use (detailed in Section 3.2) and 5,926m² of GFA for this part of the site (as part of the overall 85,300m² of GFA proposed).

Having regard to the above, the Department considers that the figure of 8,828m² is the appropriate site area for the assessment of the proposal as it is consistent with the SLEP 2005 definition. Further, the proposal seeks approval for land use and GFA for this part of the site as part of the Concept Plan. The FSR is therefore calculated for the overall development at 9.66:1 (85,300m² / 8,828m²) which complies with the maximum allowable FSR of 12.5:1.

Notwithstanding the above, the Department notes that the circumstances of the site and the proposed Concept Plan including the range of public benefits provide a unique situation. As such the Department does not agree with Council's concerns that this will set a precedent for future development. Instead, it is considered that an assessment of the merits of the proposed design (within the context of a key station precinct) is a more appropriate assessment rather than the application of specific floor space development standards to the proposal.

5.3. Overshadowing

Overshadowing created by the proposed development has been carefully considered in the following three particular areas;

- Martin Place;
- GPO Building steps and façade; and
- Wynyard Park.

Martin Place

The proposed envelope has been designed to comply with the Martin Place sun access plane control provided in the LEP. Notwithstanding, the shadow modelling prepared by Whelans Insites

demonstrates that the proposed envelope results in additional overshadowing of a small triangular portion (ranging between approximately 10-45m²) of Martin Place adjacent to George Street for the period between 12:15-1:15pm at the winter solstice (**Figure 14**). The SLEP 2005 prohibits development which results in a building that causes additional overshadowing to Martin Place between 12noon-2pm between 14 April and 31 August.

Council has submitted their own shadow modelling undertaken for the proposal at mid-winter indicating that at 12:30pm a narrow triangle of sun on Martin Place is removed, however by 1:00pm the additional overshadowing is so minor it would be imperceptible. This is a slightly lesser impact than indicated by the EA. The Council describes this as minimal additional overshadowing and has placed more importance on the issue of any additional overshadowing to the GPO steps and façade, which are not overshadowed by the Proponent.

The Department considers that the overshadowing impact to Martin Place is minimal and will not have any significant solar access impact to Martin Place. The Proponent's surveyor has confirmed that it would be necessary to lower the overall height of the proposed building envelope by approximately 19 metres (approximately 5 storeys) in order to eliminate this overshadowing. The absence of any significant impact is considered not to warrant further modification of the proposed building envelope.

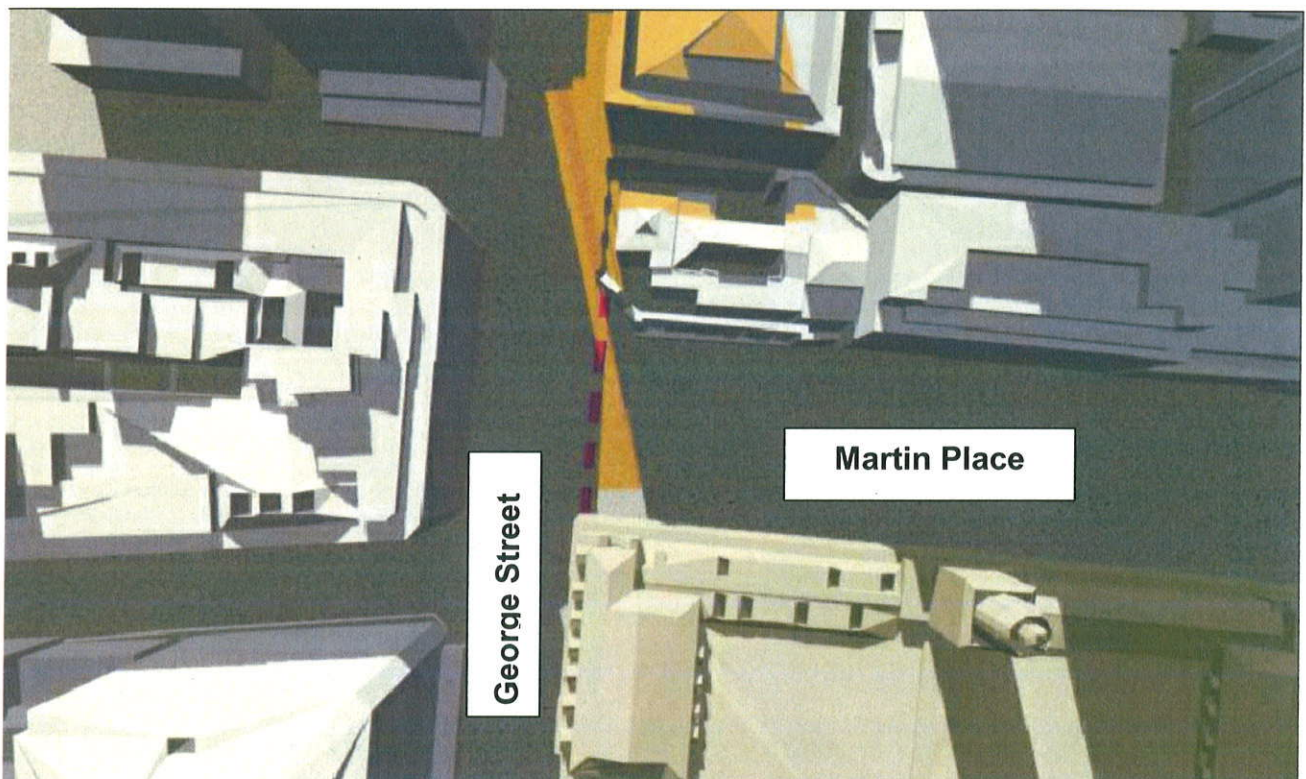


Figure 14: The additional shadowing to the western end of Martin Place created by the proposed building envelope at 12:45 at mid-winter is shown in yellow and the existing shadow is shown in dark grey.

GPO Building

The EA states that based on the previous independent urban design advice provided to the Department by Architectus (who were engaged by the Department to provide a peer review and urban design commentary on an earlier scheme in 2006), the proposed sloping roof line of the building envelope has been designed so that there is no additional overshadowing of the GPO steps or its sandstone façade at any time of the day throughout the year. The shadow modelling submitted with the EA indicates that this is achieved.

Council's submission recommended more detailed sun shadow modelling of affected buildings in Martin Place (in elevation) occur to ensure that there is no overshadowing of the GPO building façade or steps as part of any future application.

In response to Council's comments, the PPR stated that the EA had already provided shadow diagrams which shows that no additional overshadowing of the GPO sandstone façade or steps is to occur. To confirm this point, the PPR was provided with certification from Whelans Insites which states that *"there is no additional overshadowing of the GPO steps or the sandstone façade as a result of the proposed development"*. The Department considers this certification from Whelans Insites to be adequate in confirming a nil impact to the GPO at the concept stage. However, this will need to be confirmed in further detail as a future assessment requirement of any future application for the commercial tower.

Wynyard Park

Several submissions, including the submission from Council, raised concern about additional overshadowing to Wynyard Park. The PPR provides further analysis of the overshadowing to Wynyard Park undertaken by Whelans Insites that demonstrates throughout the year the proposal will have at worst a minimal impact to the ground level at Wynyard Park between 10:30 – 11:00am as the park is already overshadowed by other structures. The greatest impact will occur at the summer solstice when there will be some minor shadowing on a small paved section of the park through the mid morning period, however this is not considered to be a critical issue during the summer months. Most critically, the proposed building envelope does not cause any overshadowing of the park during the key 12:00-2:00pm lunchtime period at any time of year, including in mid-winter, as required by the SLEP 2005.

Conclusion

The Department has examined the overshadowing impacts resulting from the proposed building envelope at key locations within the Sydney CBD, namely Martin Place, the GPO Building steps and sandstone façade and also Wynyard Park. It is considered that these impacts are either non-existent or will not significantly impact the amenity of these areas and is therefore acceptable.

5.4. Transit Hall Between Carrington Street and George Street

The proposed transit hall will provide improved east-west access between George Street, Carrington Street and Wynyard Station. The Department has identified the following key urban design issues:

- pedestrian access and circulation; and
- the scale of the transit hall.

Pedestrian Access and Circulation

Central to the improvements to the Wynyard Station complex is the reconstruction of the eastern concourse and access ways to Wynyard Station between George and Carrington Streets. This section forms part of the pedestrian link between Wynyard Station and the eastern entry and exit points on George and Hunter Streets (**Figure 15**). This proposal intends to accommodate anticipated pedestrian circulation requirements to 2060 in accordance with the requirements of Transport for NSW.

Transport for NSW has clarified that a design specification for this eastern concourse area is to provide a minimum of 20 metres total combined pedestrian unobstructed entry / exit width and had originally raised a concern that it was not clear how this width would be achieved. This is however a provisional width only and is inclusive of the Hunter Connection exit (which is 4 metres wide). Further, a minimum unimpeded 16 metre width to George Street must be provided and pedestrian modelling must be carried out to test the performance of the proposed access ways and vertical transport (i.e. escalators, stairs and lifts).