

Memo

Report Name	SMP Modification for Landscape Changes – ESD Statement
Project	Sydney Modern Project
Date	30 th October 2020

This memo provides an ESD statement for the likely impact to the sustainability outcomes of the Sydney Modern project due to the proposed modification for landscape changes to the approved SSDA (SSD-6471). The proposed modification consists of landscape design changes that include the following:

- Addition of reflection pools either side to the front entry of the existing Gallery building;
- Reuse and reinterpretation of heritage walls in front of the existing Gallery to their original alignment;
- Enhanced pedestrian entry into The Domain from Art Gallery Road opposite the existing Gallery building;
- Changes to the Entry Plaza, including to tree layout and addition of a 'rain catcher' at ground level to capture rainwater from the glazed roof canopy of the Entry Plaza;
- The land bridge incorporates a 'gathering space' with a low wall for public seating that captures sightlines to the harbour and is bounded by a circular path system and sandstone channel capturing episodic water from the glazed roof canopy of the Entry Plaza and an elevated berm ('Crescent Hill') as the site for a major art commission to be delivered at the Sydney Modern Project building's opening, as well as providing an acoustic barrier to the motorway below;
- Extant paved area on land adjacent to the land bridge and adjoining the existing Gallery is proposed to be reinstated as a terrace area with trellis structure and planting over, accessed predominantly internally from the existing Gallery and bounded by a water feature;
- Security measures to Art Gallery Road frontage;
- Minor design changes including to planting areas, plant palette, tree numbers, path systems, retaining walls/seating, lighting, and landscape materials and finishes.

Water Efficiency

The project aims to minimise water consumption onsite. The addition of reflection pools to the existing Gallery would require a slight increase in potable water demand to offset evaporation. However, the onsite rainwater capture and reuse, efficient water fixtures and water metering provides a benefit to the overall water efficiency of the site that far out-weighs the expected potable water loss from the reflection pools.

Green Star Design and As-Built Rating

The proposed landscape design under the modification landscape changes will have an impact on the Green Star strategy for the project. However, the overall Green Star rating should not be adversely affected. The current number of points targeted is 79 points with 75 points as the minimum requirement for the intended 6 Star rating. The project boundary for the Green Star rating does not include the proposed modification of landscape works in front of the existing Art Gallery.

Credit 18A Potable Water:

Following Credit 18A Potable Water (Performance Pathway), seven (7) points have currently been achieved within the Potable Water Calculator. This is based on captured rainwater used to irrigate all vegetated landscaping within the Green Star project boundary.

30/10/2020

Sydney Modern Project

1/5

The landscape modification proposes increased impervious landscaping to The Gathering Space and Crescent Hill. This reduces the area of vegetated landscaping that requires irrigation. The demand on captured rainwater for irrigation will reduce and should not result in points lost for the credit. The addition of the rain catcher to the entry plaza will further aid this. The proposed plant species for vegetated landscape will need to be native species or have low watering requirements. This is to avoid the need for potable water to supplement rainwater capture which would lead to losing points under the Potable Water credit.

The reflection pools are outside of the Green Star project boundary and do not impact Credit 18A.

Credit 25 Heat Island Effect: The Heat Island Effect credit was awarded one (1) point under the project's Green Star Design Review rating. The credit was awarded under the condition that all hardscaping meets the Solar Reflective Index (SRI) targets outlined in the credit requirements. As the proposed landscape modification includes an increase in hardscape area, these elements will need to meet the same SRI requirements as the hardscaping located elsewhere.

Credit 26 Stormwater: The Stormwater credit was awarded two (2) points during the project's Green Star Design Review rating. The Stormwater Management Plan will need to be updated to reflect the changes from the landscape modification to confirm the two points targeted under the credit have been retained.

Innovation Credit 26.2 Stormwater Pollution Targets: The project's Green Star strategy has been slightly revised following the Green Star Design Review. The one (1) innovation point for Credit 26.2 was targeted to supplement lost points due to the removal of the Sea Water Heat exchange and other design changes.

A technical clarification approved by the Green Building Council of Australia (GBCA) awarded the innovation point on the basis that the project's Land Bridge area remains as landscaping. As the proposed landscape design includes an increase in hardscape elements, there may be difficulty meeting this requirement. However, the innovation point may still be awarded with further clarification with the GBCA.

Conclusion

The proposed landscape design changes should not adversely affect the Water Efficiency and Green Star aspirations for the project. Although the reflection pools will slightly increase onsite potable water demand, the overall water efficiency of the project will not be adversely affected. The 6 Star Green Star rating is still achievable and will require further input from an updated Stormwater Management Plan and consultation with the GBCA.

Yours faithfully,



James von Dinklage
Senior Sustainability Engineer

LCI Consultants

james.vondinklage@lciconsultants.com.au

M: +61 450 358 180