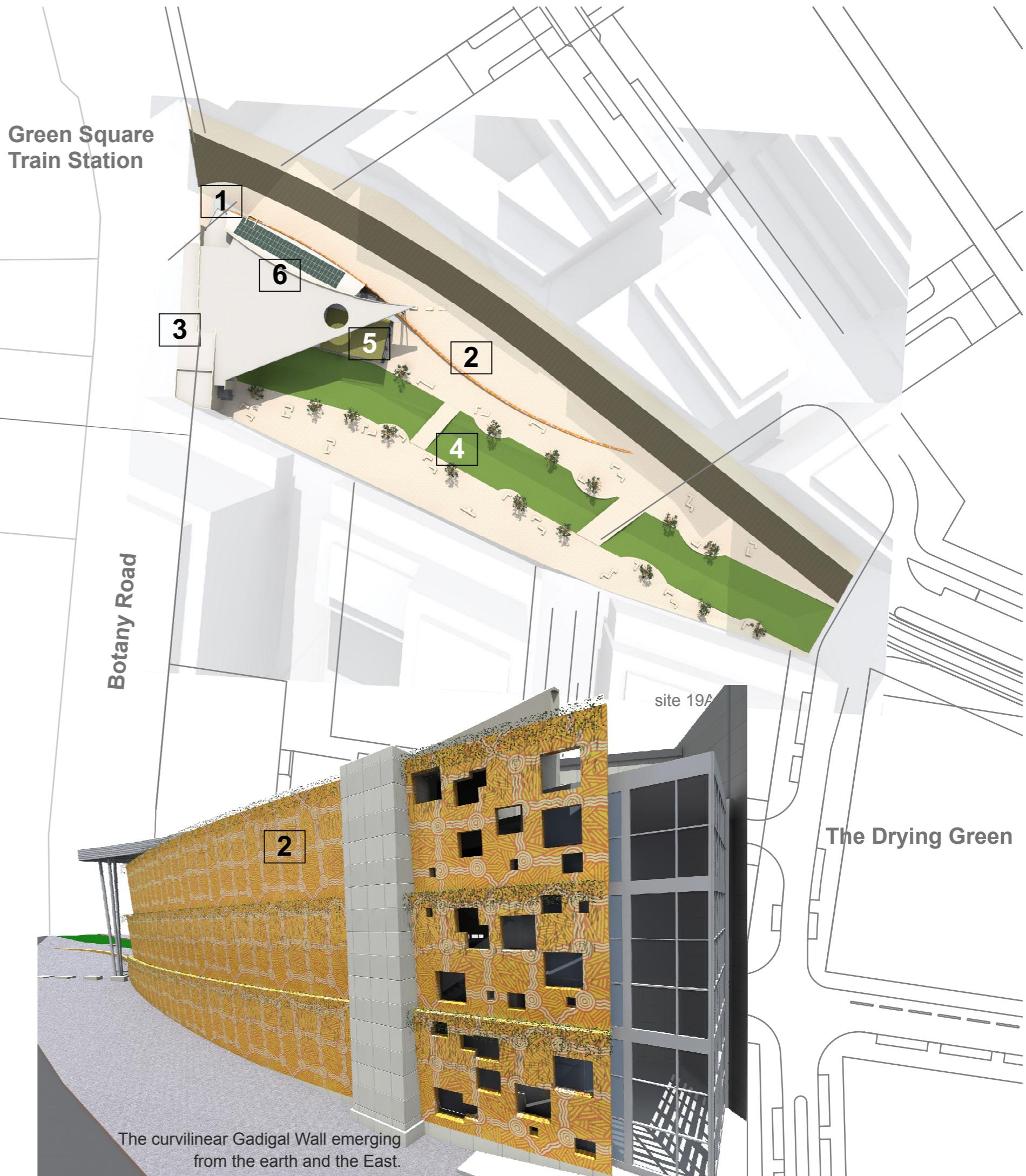


# GREEN SQUARE LIBRARY AND PLAZA

Rather than a civic monument anchoring a plaza, this building articulates two edges of a vibrant and connected space for people. The building is a gateway from the rail station at the northeast, an urban wall and sound buffer along Botany Road, a curvilinear "living wall" growing along the transit corridor, an axis termination from the Drying Green, and a transparent mate delivering vitality to the plaza.

## KEY CONCEPTS

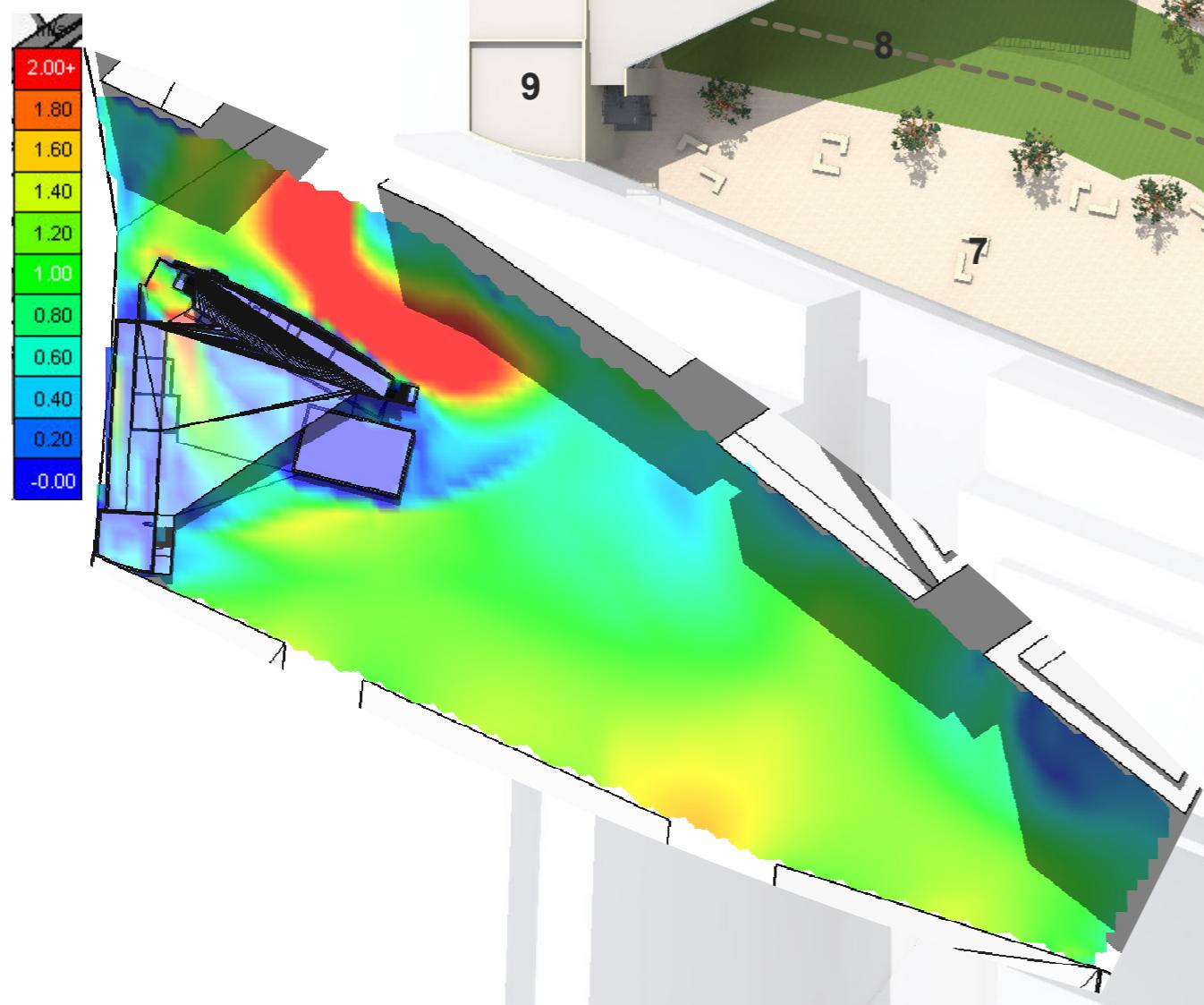
- 1 **Siting** The building and entrance on the northeast corner establishes a gateway for southbound travelers on Botany Road, is closest to public transportation hubs, and terminates the axis from Drying Green. The ground floor is elevated to 15m, providing an elegant rise from the sidewalk as well as flood protection. The basement area is minimized along the northern edge and requires only an approximately 3m cut.
- 2 **Culture** Emerging from the earth and the east, the curvilinear Gadigal Wall along the transportation corridor recognizes Sydney's indigenous heritage. Fully formed and sheathed with aboriginal motifs, it is interrupted by the elevator shaft representing European settlement. It remerges intact but porous to the west, representing the Sydney's present and future diversity.
- 3 **City** Meeting rooms with insulated glazing are organized along Botany Road to complete the street wall. The rooms provide light and activity to the street after hours and a sound buffer for the open library functions beyond. The café is convenient for both library visitors and all passers-by, giving life to the street and assuring a more commercially viable rental space. The glazed entry atrium + signage marks the intersection of the transport corridor and Botany Road and signals this is an unabashedly urban building.
- 4 **Water** The detention pipe easement is articulated as a bio-swale containing natural grasses that absorbs excess rainwater, reduces impervious surfaces, provides added flood protection and a soft public connection from road to park. This easement also provides a "through site public passage" as requested in the competition brief that can be easily closed for private functions and served by the café.
- 5 **Youth** The youth functions are acoustically isolated in their own bright pavilion, but easily accessible to and from the plaza with a grass roofed and partially covered terrace above. Both the functions on the building's eastern edge and its architectural expression will help add life to the plaza.
- 6 **Sustainability**
  - a. The 3 story entry atrium contains operable glazing to control cross ventilation.
  - b. The Gadigal Wall is topped with 90 solar panels accessible to the sun more than 7 months per year and producing about 15,000 KwH annually..
  - c. The large gently sloped roof over the flexible seating area is capable of collecting 600,000 litres of rainwater to be stored for irrigation or grey water in two 150m long x 1.6m pipes stacked next to the diversion pipe in the easement.
  - d. Ample glazing on the south and west, carefully screened from direct sun, reduces electrical lighting loads and associated heat.



# GREEN SQUARE LIBRARY AND PLAZA

## GREEN SQUARE PLAZA

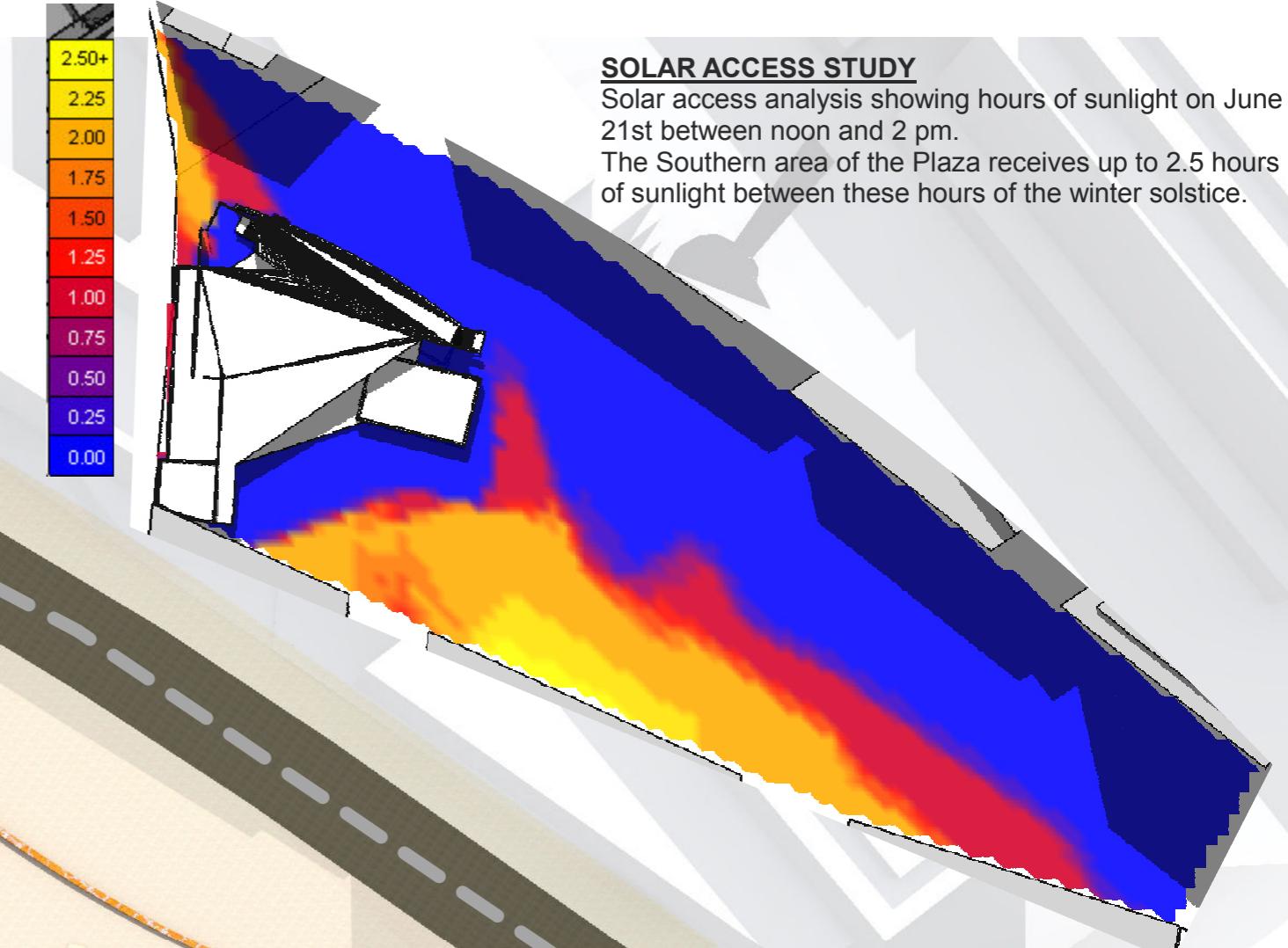
- 01 Green Square Library
- 02 Photovoltaic Roof
- 03 Gadigal Wall
- 04 Bioswale
- 05 Pedestrian Bridge over Swale
- 06 Green Roof Over Children Library
- 07 Benches and Rest Areas
- 08 Drainage Piping System under Bioswale
- 09 Cafe
- 10 Transportation Corridor



## AIR FLOW STUDY

Computational Fluid Dynamic study of air flow showing a pleasant 1 m/s air flow speed throughout most of the plaza. Southbound breezes running down Botany Rd are funneled through the Library entrance and diffused throughout the building.  
Assumed 5 m/s winds from Northwest.

Botany Rd



## SOLAR ACCESS STUDY

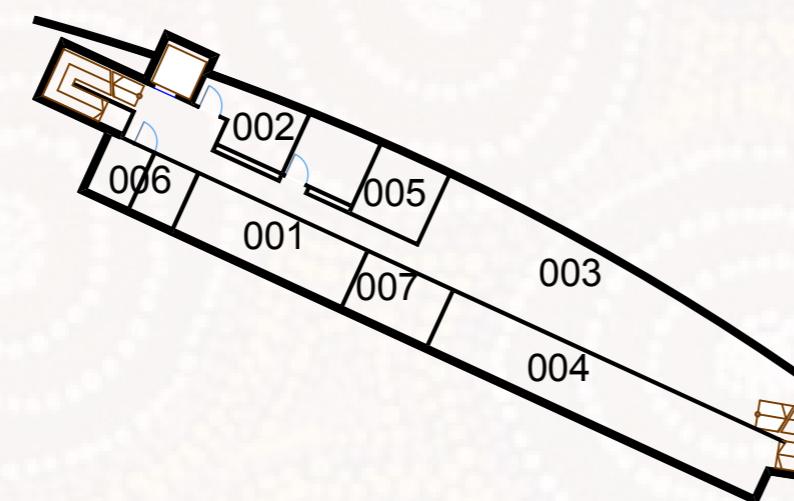
Solar access analysis showing hours of sunlight on June 21st between noon and 2 pm. The Southern area of the Plaza receives up to 2.5 hours of sunlight between these hours of the winter solstice.

# GREEN SQUARE LIBRARY AND PLAZA

DRAWING SCALE: 1:325

## BASEMENT

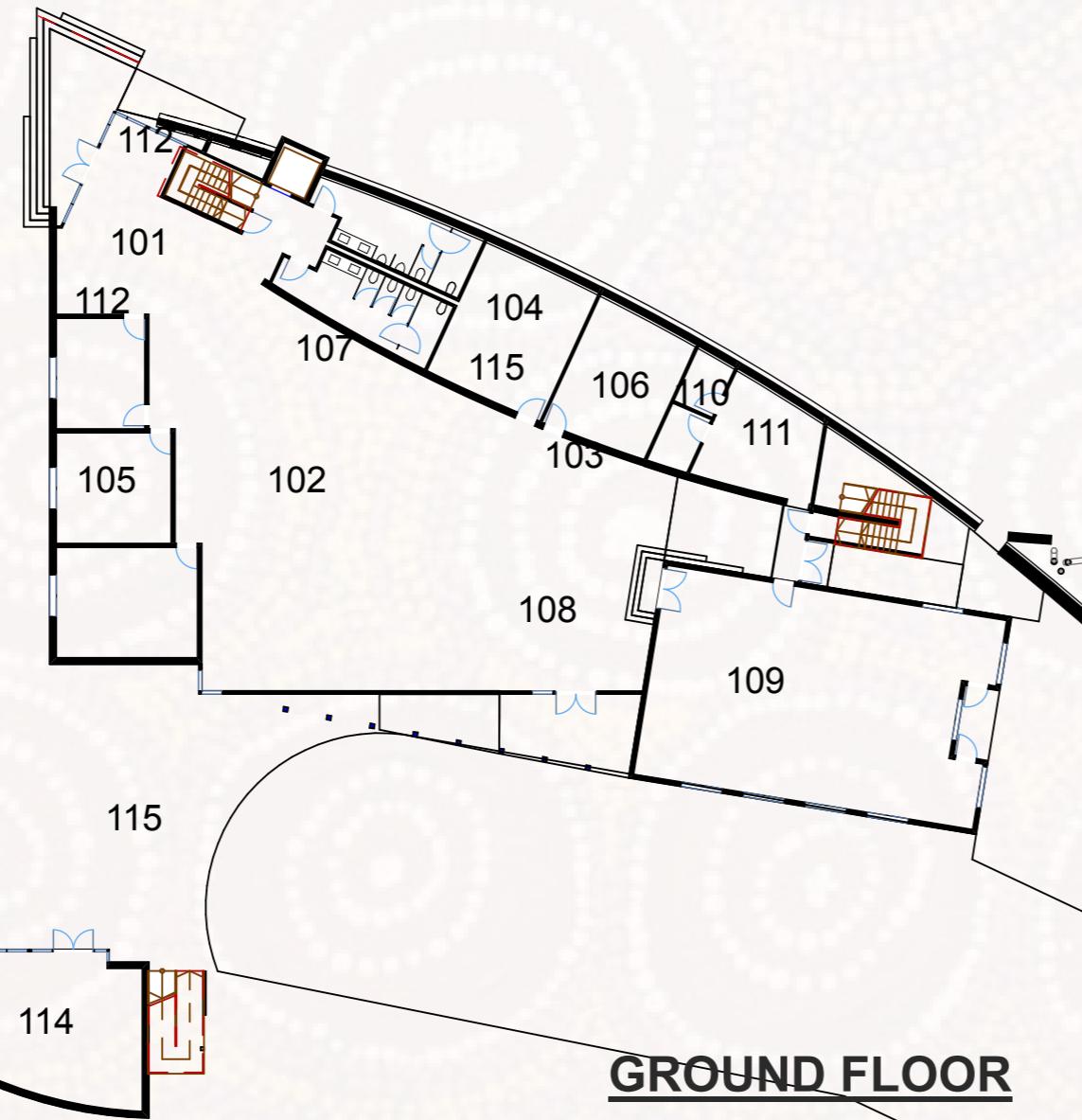
- 001 Staff bicycle parking
- 002 Staff shower and changing
- 003 Stack Storage and catalogue functions
- 004 Services - Heat Exchange
- 005 Services - Green Infrastructure
- 006 Services - Garbage
- 007 Services - Recycled Water Plumbing



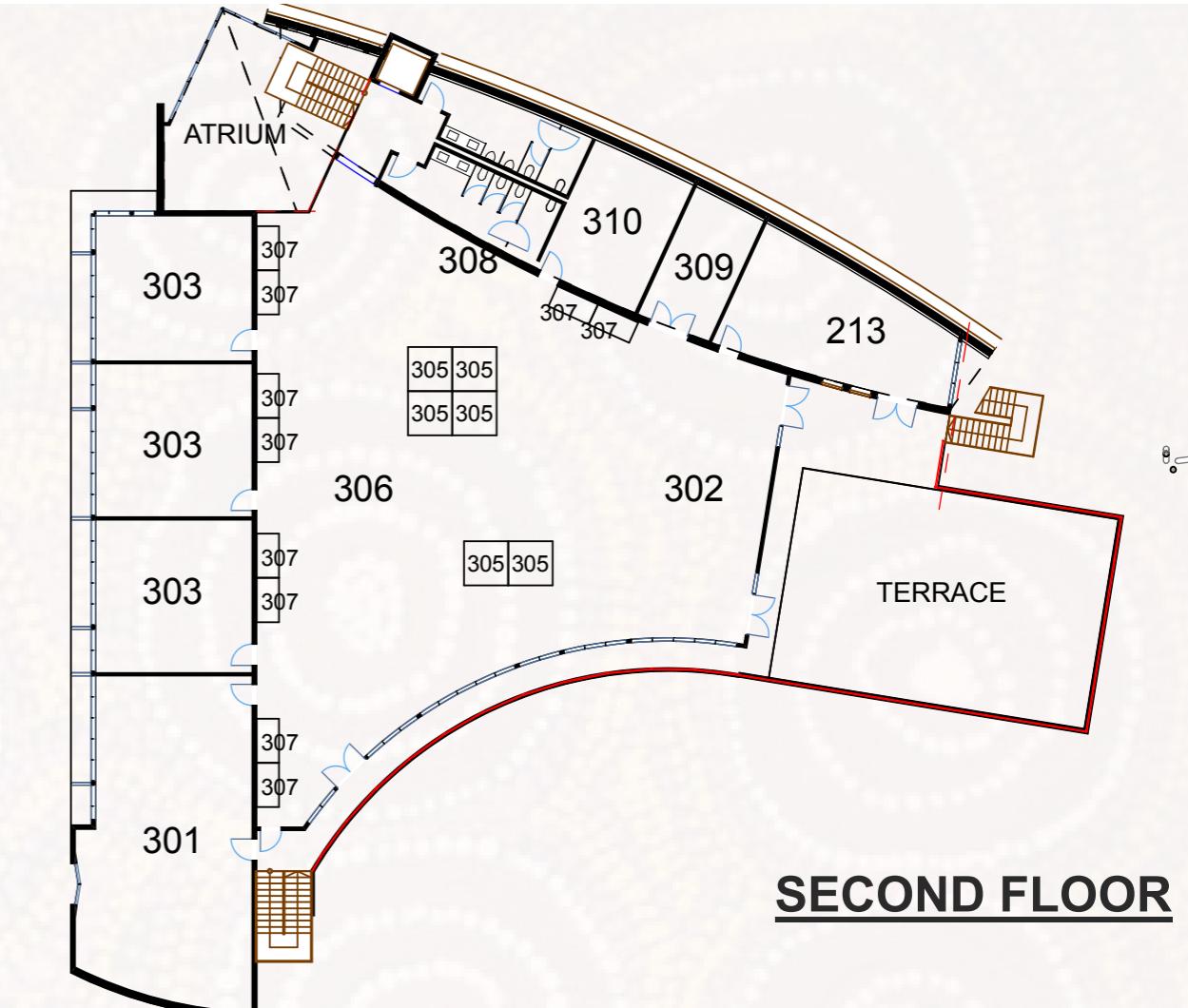
**BASEMENT**

## GROUND FLOOR

- 101 Entrance
- 102 Lobby and Gallery
- 103 Service Desk Area
- 104 Kitchenette and catering bar
- 105 Multipurpose rooms (3)
- 106 Returns room
- 107 Self check-out kiosk
- 108 Newspaper and magazine
- 109 Children's program area
- 110 Children's toilet
- 111 Parent's room
- 112 Display area
- 113 Loading parking space
- 114 Café
- 115 Commercial retail space 15
- 116 Through-site public passage



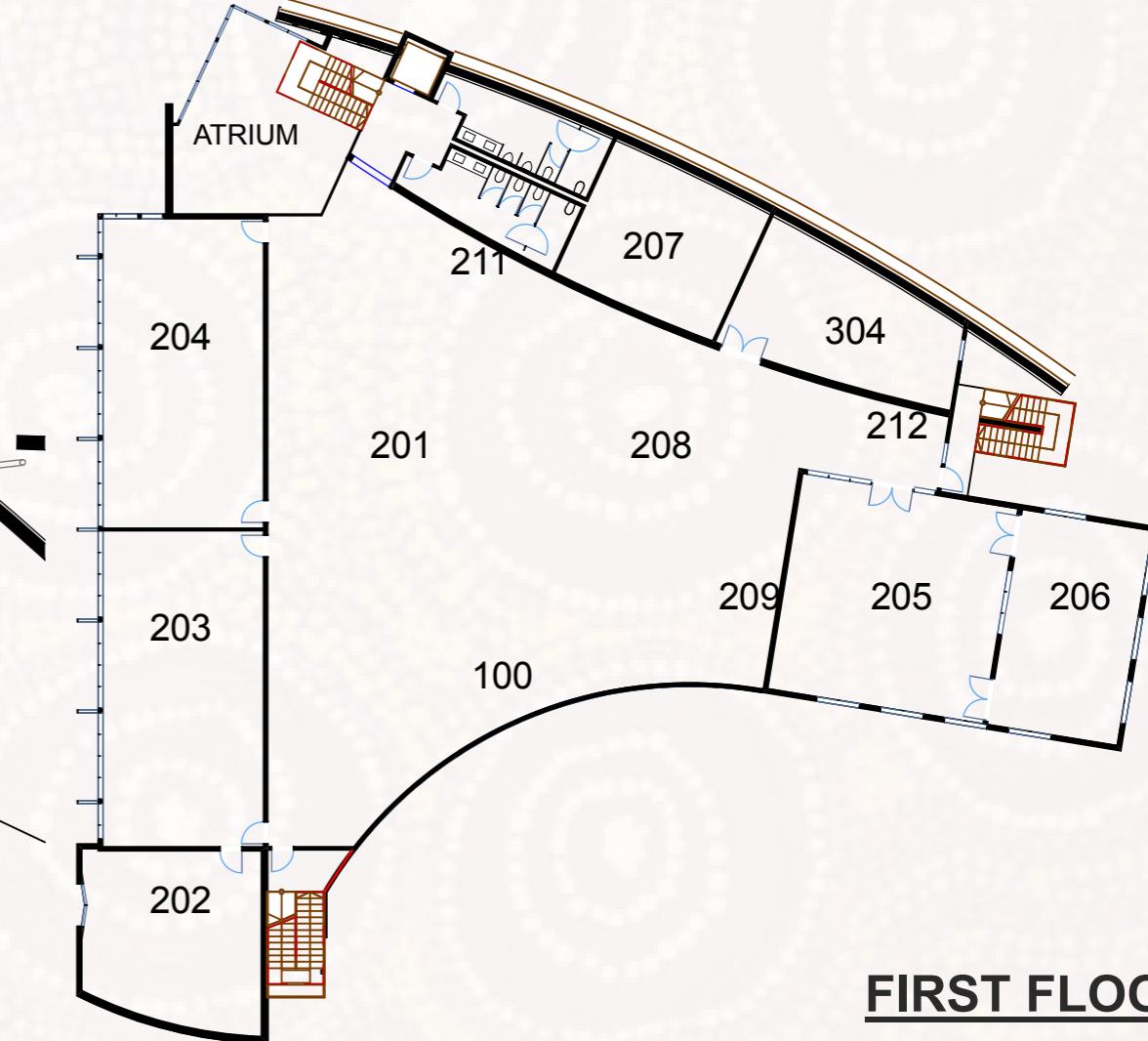
**GROUND FLOOR**



**SECOND FLOOR**

## FIRST FLOOR

- 201 Open technology
- 202 Closed Technology area
- 203 Multi function technology room
- 204 Languages other than English
- 205 Youth area
- 206 Youth technology area
- 207 Book sorting staff area
- 208 Fiction collection
- 209 Graphic Novel collection
- 210 Associated seating and reading
- 211 Service desk area
- 212 Commercial retail space
- 304 A/V collection



**FIRST FLOOR**

## SECOND FLOOR

- 213 Staff lunch room + meeting area
- 301 Quiet technology area
- 302 Non-Fiction collection/ audio
- 303 Flexible multipurpose rooms
- 305 Quiet listening spaces - pods x 6
- 306 Seating areas with variety of seating
- 307 Download stations x 10
- 308 Service desk area
- 309 Commercial retail space
- 310 Server room

## **GREEN SQUARE LIBRARY AND PLAZA**

