

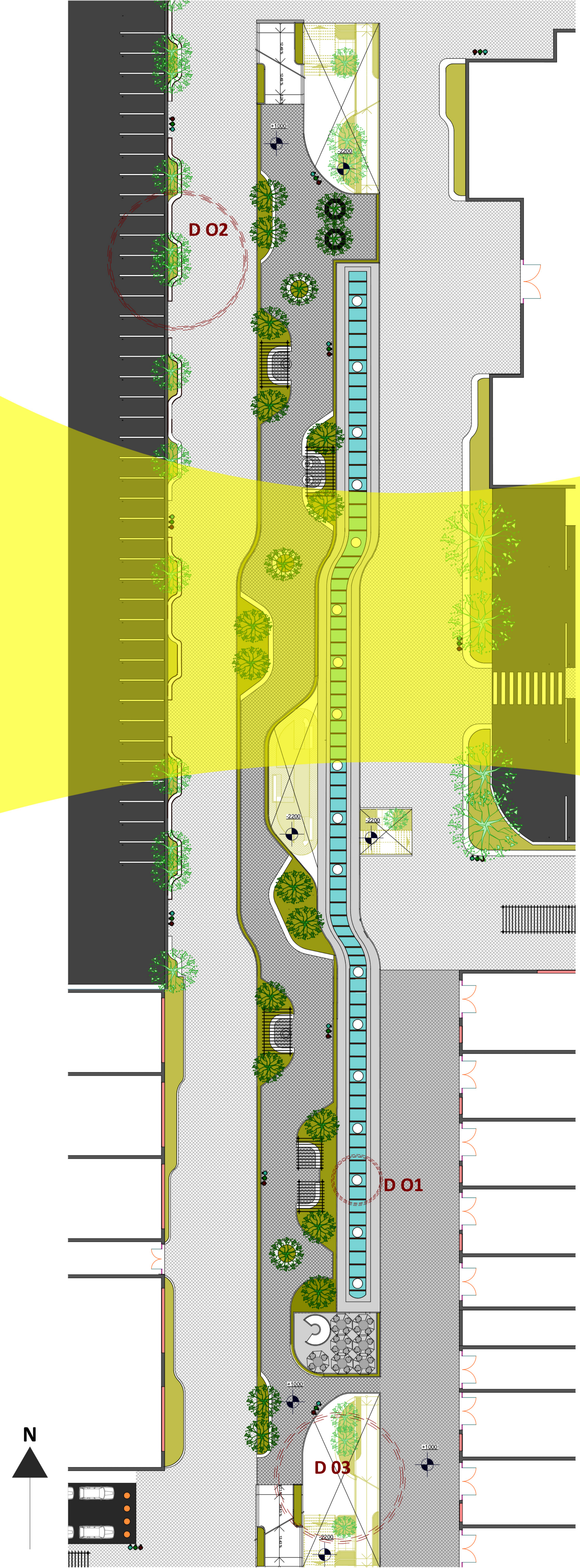
# AGA KHAN WALK REVITALIZATION PROJECT ENVIRONMENTAL DESIGN

## SUSTAINABLE DESIGN STRATEGIES EMPLOYED

1. **Natural lighting:** high level windows, open to sky spaces
2. **Natural ventilation and cooling:** high level windows, open to sky spaces
3. **Shading of East and West facing sides:** trees
4. **Rain water harvesting:** Underground water tank
5. **Waste management:** recycling dustbins
6. **Use of locally available materials:** Njiru bluestone, concrete and timber

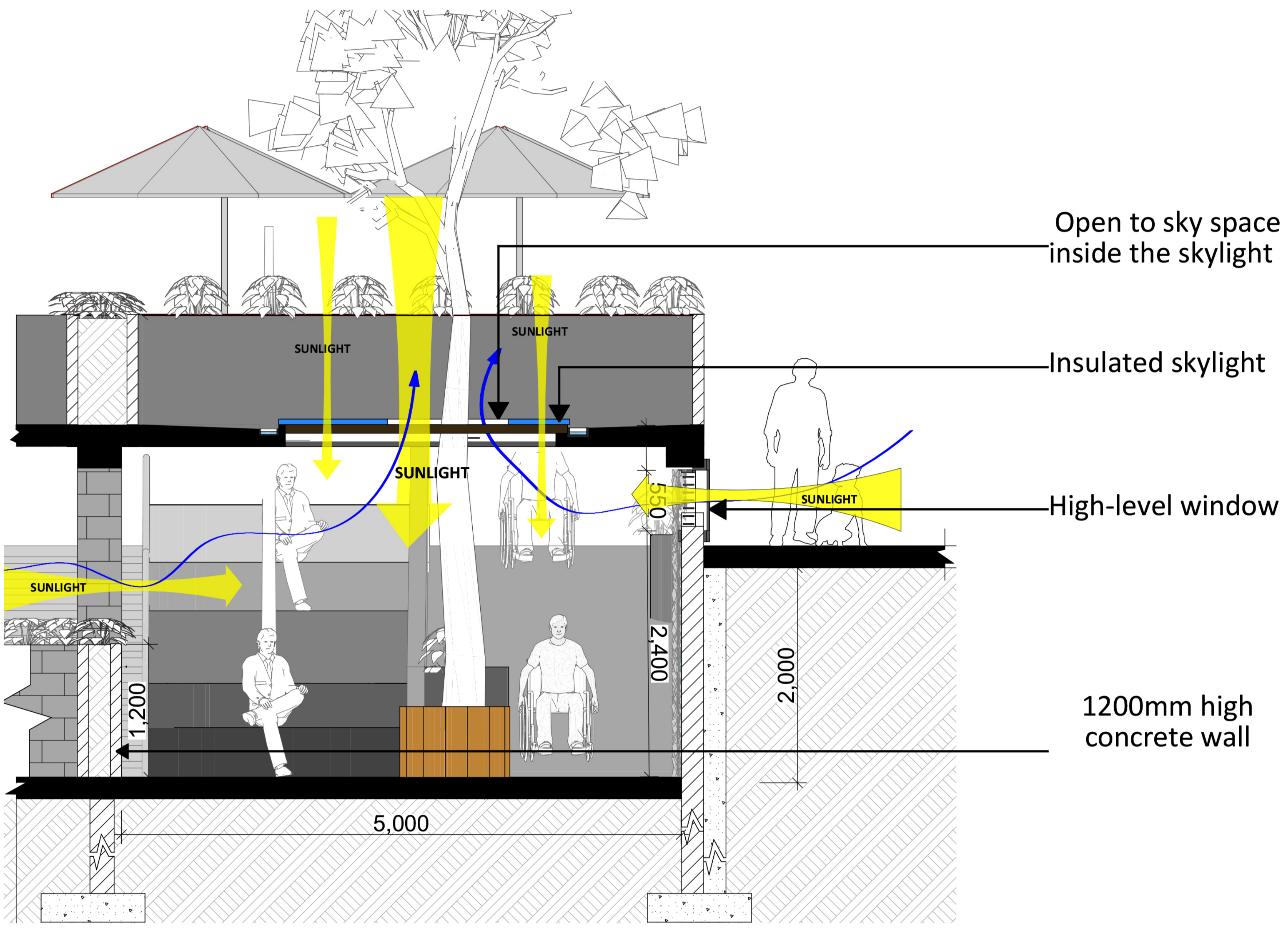


3D PERSPECTIVE OF THE INTERIOR CIRCULATION SPACE



## NATURAL LIGHTING THROUGH USE OF SKYLIGHT, HIGH LEVEL WINDOWS AND OPEN TO SKY SPACES

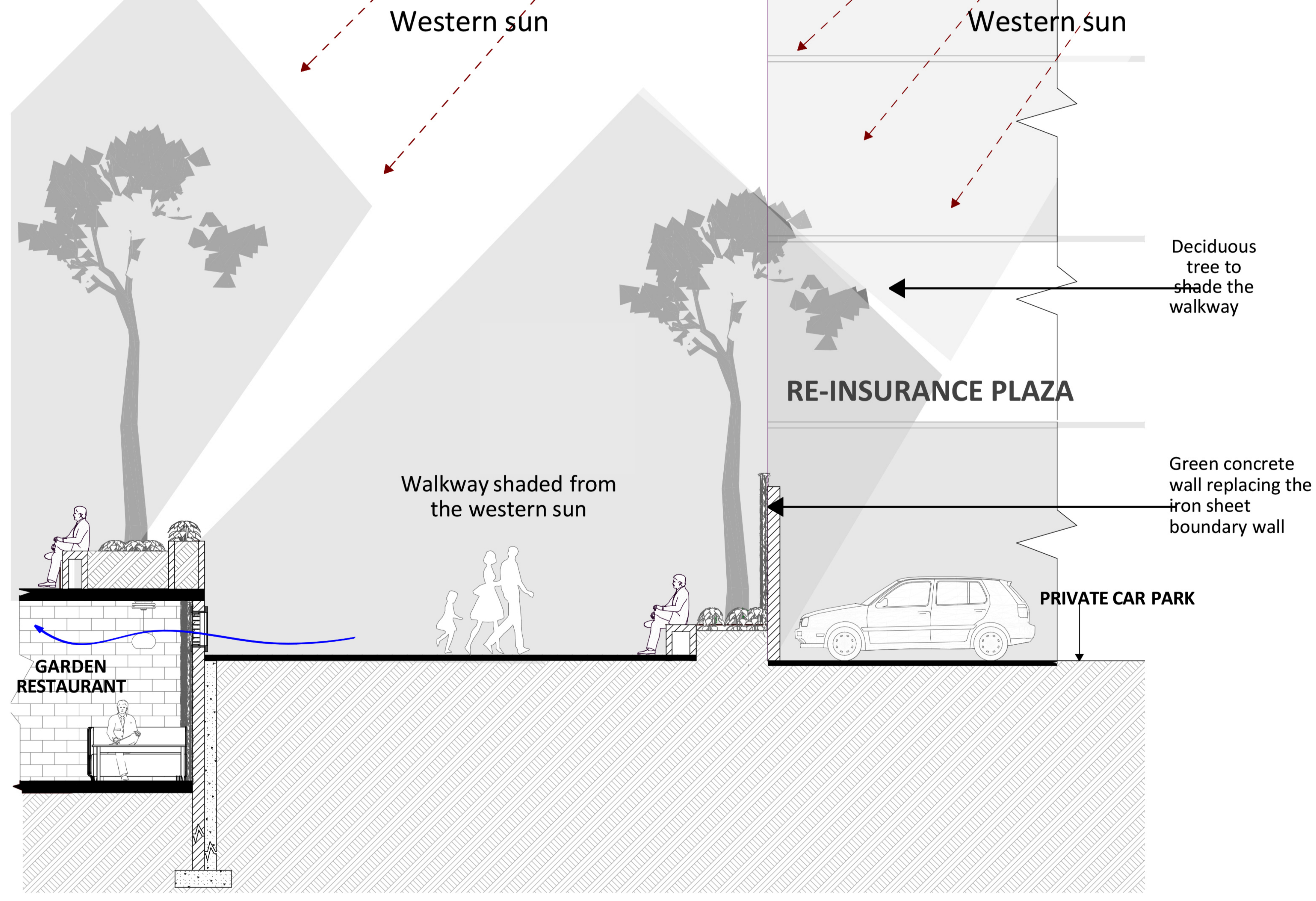
The basement is provided with a direct link to the dynamic and perpetually evolving patterns of outdoor illumination. Day lighting will help create a visually stimulating and productive environment for building occupants, while reducing as much as one-third of total building energy costs.



DETAIL 01 SCALE 1:50

## USE OF SHADE TREES- NATURE'S SUNSCREEN TO SHADE THE WALK FROM WESTERN SUN

The street is exposed to western sun where we have the two parking spaces: sunken car park and Koinange Family's Car Park. This points are uncomfortable for pedestrians during the hot afternoons. To eradicate this, I have introduced thick vegetation of deciduous trees and sitting area under the trees.



DETAIL 02 SCALE 1:50

## NATURAL VENTILATION AND COOLING THROUGH CROSS VENTILATION

The system relies on wind to force cool exterior air into the building through an inlet (the high level windows) while outlet forces warm interior air outside (through the open to sky spaces or higher window opening). This will create a natural ventilation system to help increase the flow of cool air coming in and assist the hot air going out. This will increase building air flow naturally.

