



URBAN DESIGN

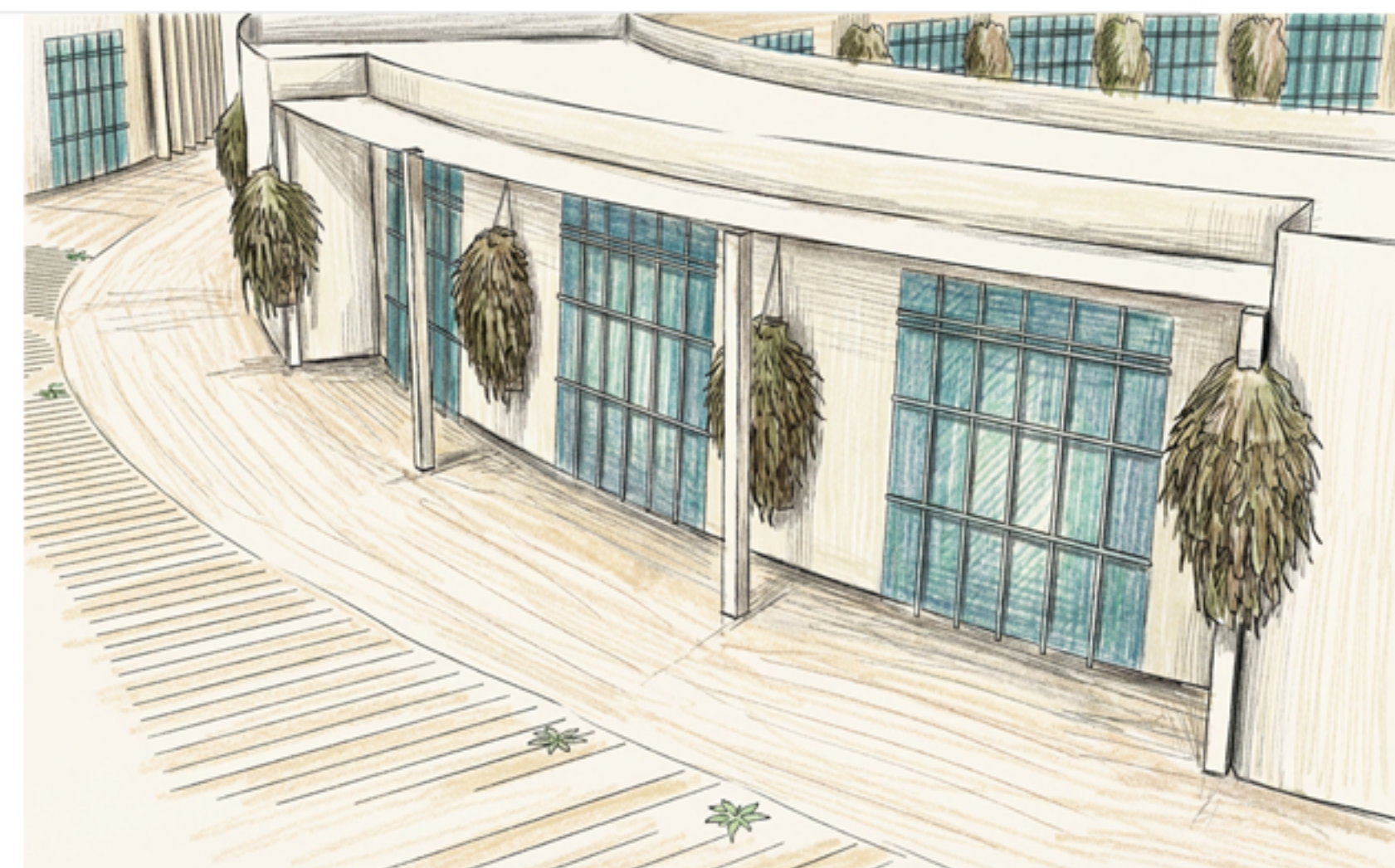
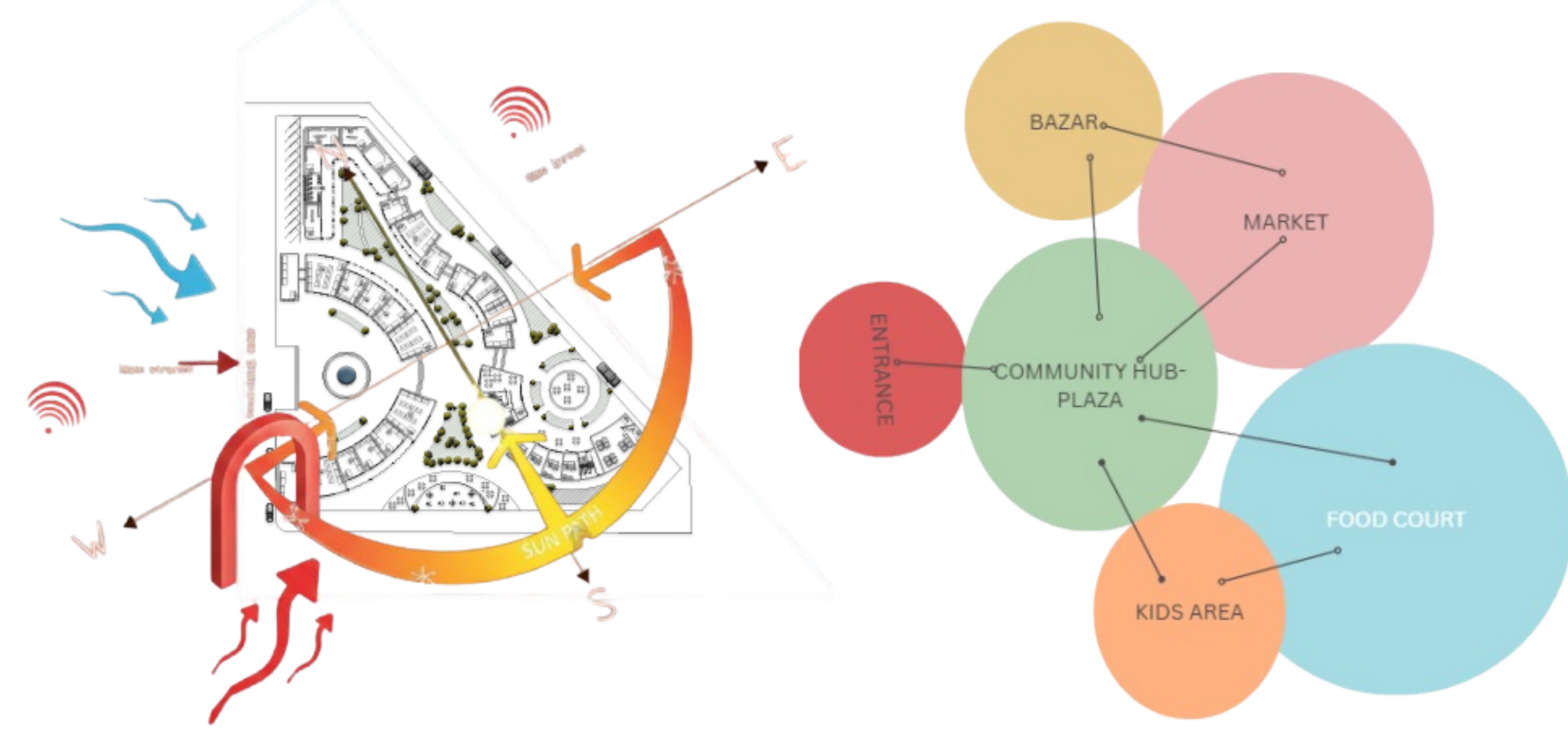
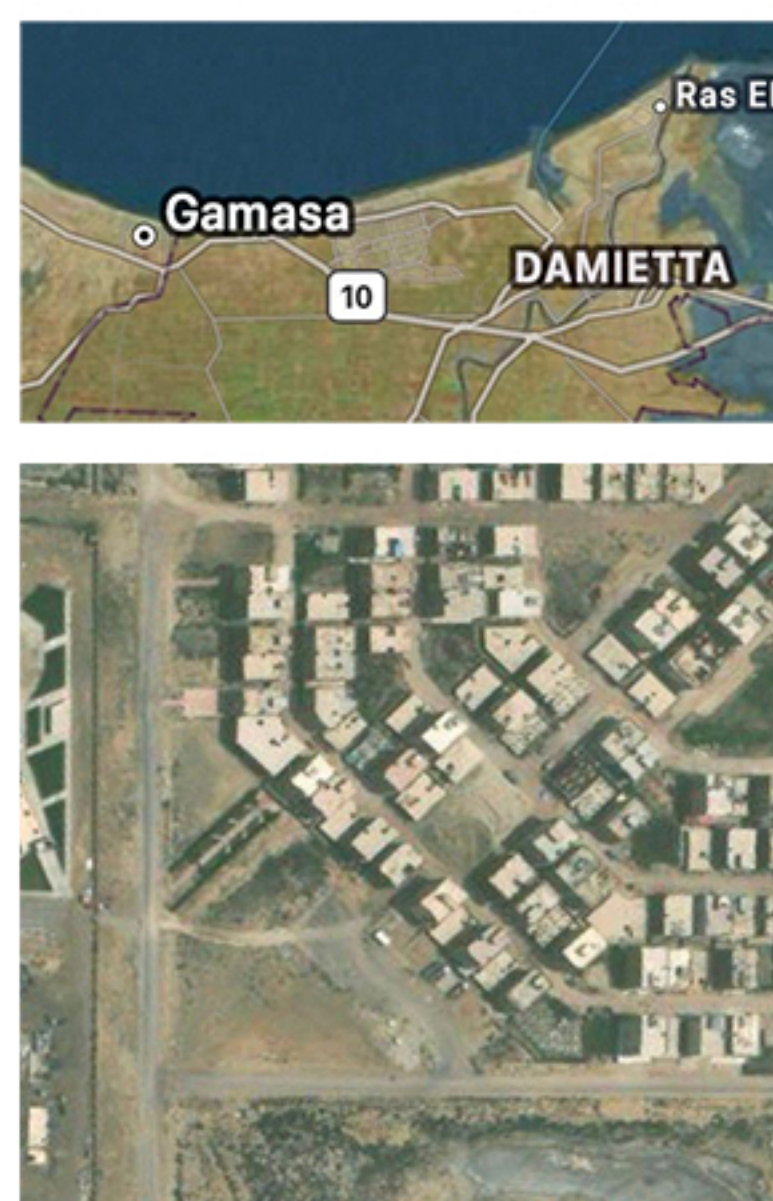
Dr. Amani Ragheb
Eng. Yasser Khattab

Dr. Rasha Ali
Eng. Nada Ibrahim



DISTRICT WAVE

LOCATION



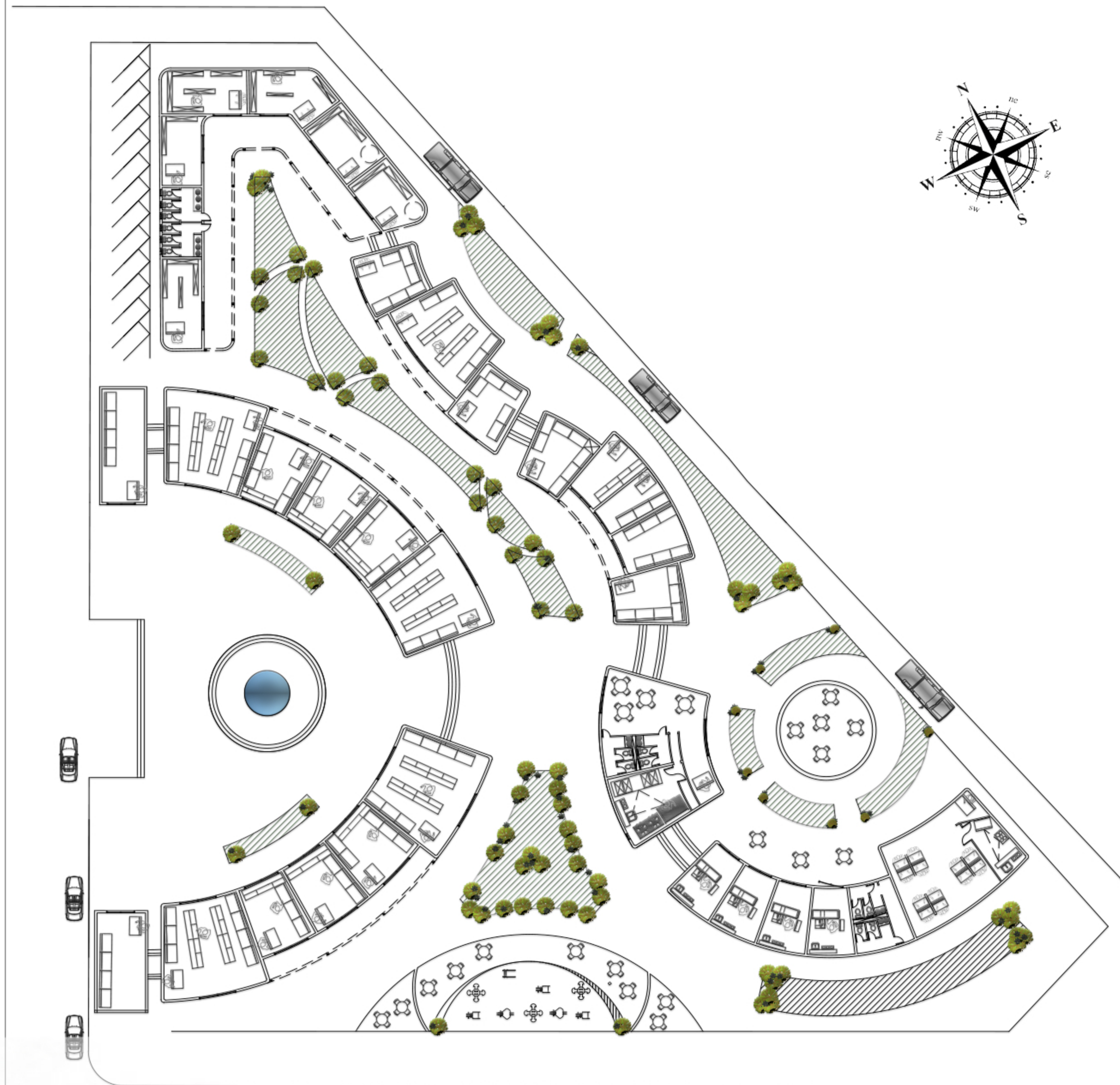
Key Sustainability & Resilience Features:

Environmental & Passive Design:
Local Stone Architecture: Utilizes durable, low-embodied carbon material, promoting longevity and minimizing environmental impact.

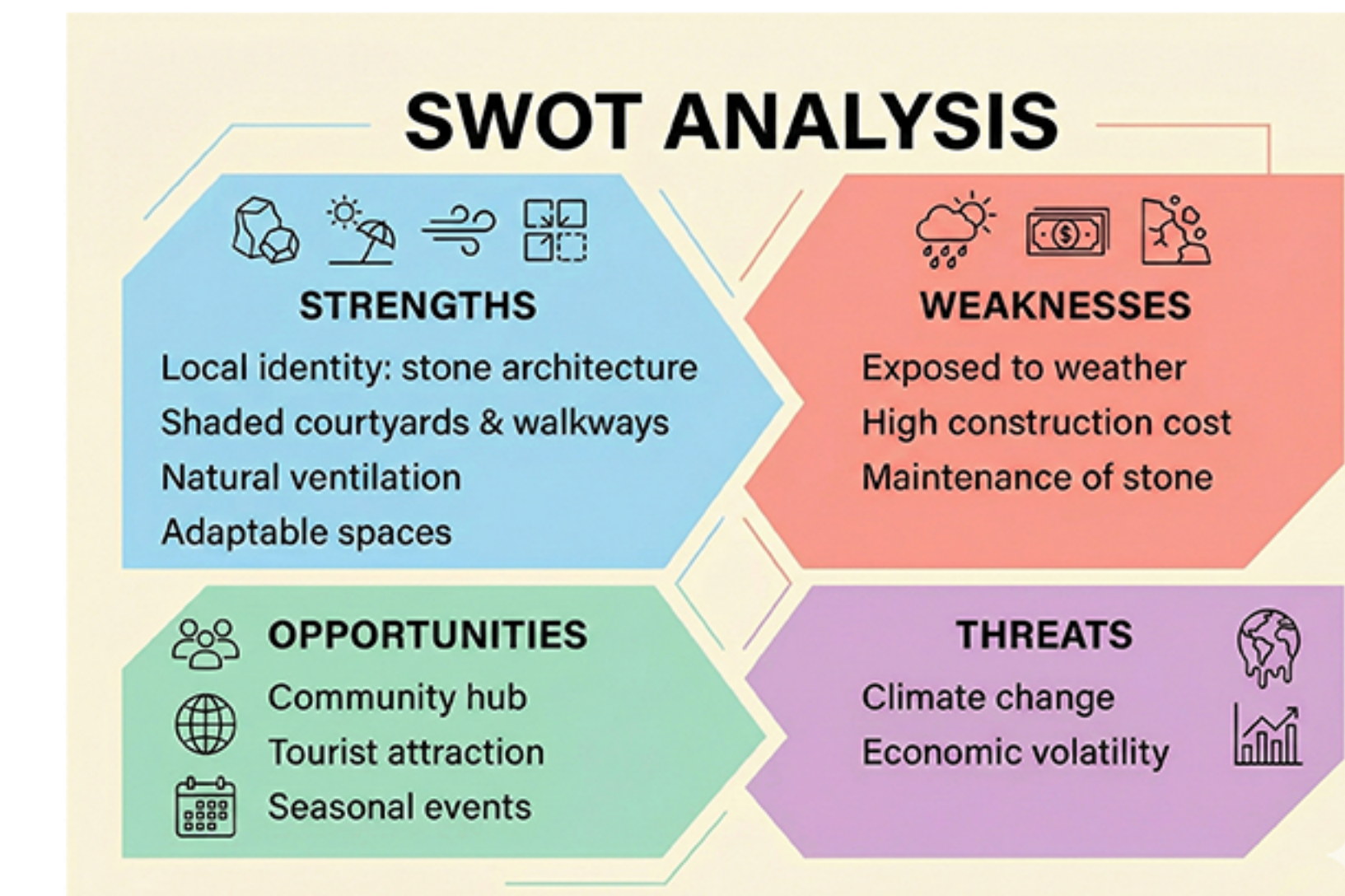
Passive Cooling:
Achieved through Natural Ventilation (via the Open Slice) and Shaded Courtyards, drastically reducing the need for mechanical cooling systems.

Thermal Regulation: The inherent thermal mass of the stone structure helps stabilize internal temperatures, resulting in significant energy savings.

Health & Circularity:
Stone is recyclable and non-toxic (Low VOC), supporting healthier indoor air quality.
Social & Economic Resilience



MAIN PLAN SCALE 1:200



SWOT ANALYSIS

STRENGTHS

Local identity: stone architecture
Shaded courtyards & walkways
Natural ventilation
Adaptable spaces

WEAKNESSES

Exposed to weather
High construction cost
Maintenance of stone

OPPORTUNITIES

Community hub
Tourist attraction
Seasonal events

THREATS

Climate change
Economic volatility

Market Studies

Location & Climate:
Coastal Gamasá site with strong sea breezes, high humidity, and intense sun.

Design Response:
Open layout with courtyards, shaded walkways, wind-oriented circulation, and minimal reliance on mechanical cooling.

Urban Role:
Community marketplace, social gathering space, and tourist destination centered on a public plaza.

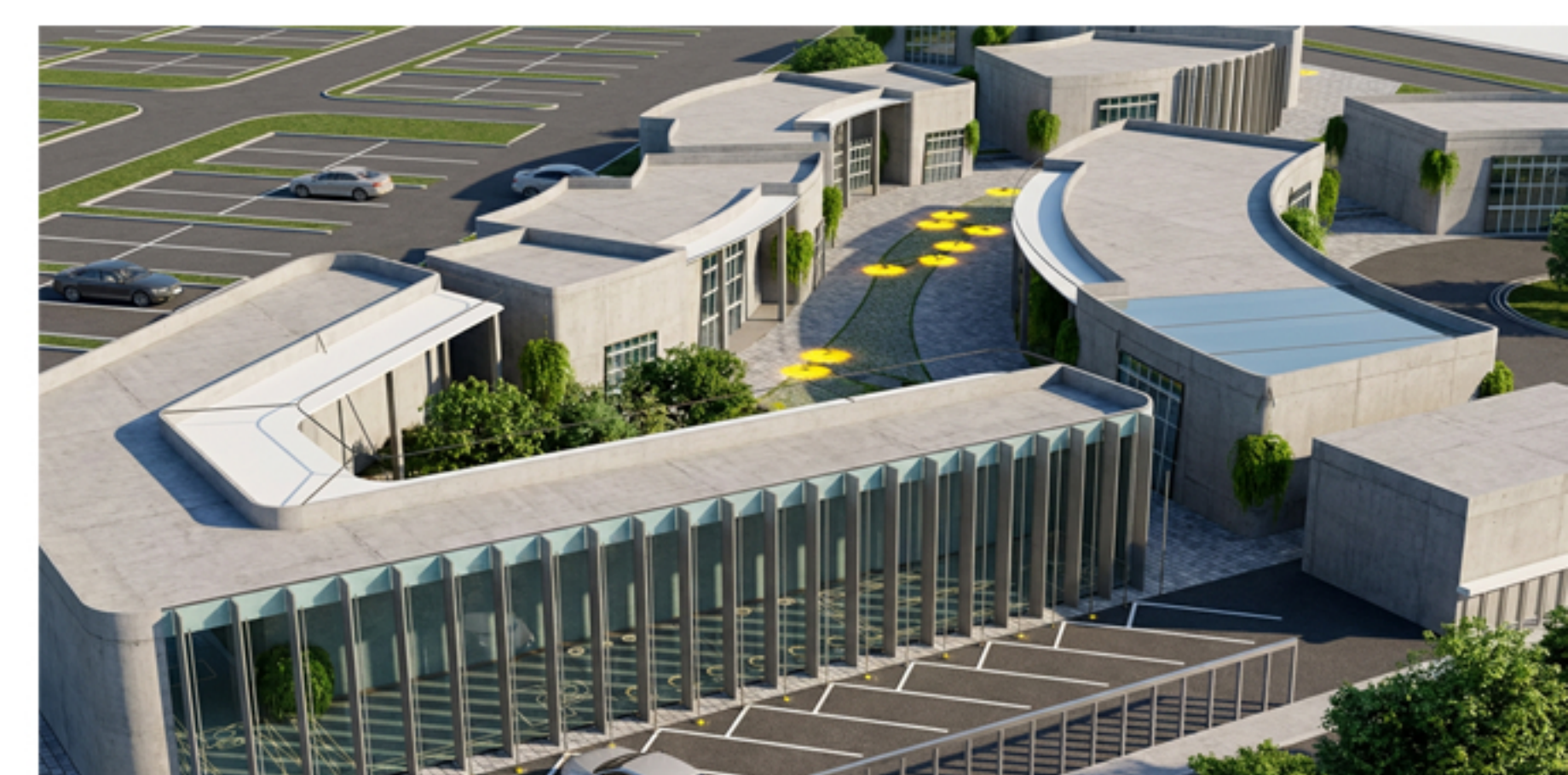
Zoning:
Wet market & Dry goods & Crafts kiosks & Food court & Administration & Service spine & Central plaza & Parking/loading

Circulation:
Continuous pedestrian loop around the plaza with separated service routes for hygiene.

Environmental Strategy:
Natural cross-ventilation, pergolas for shading, passive cooling, daylight-driven design.

Materials:
Stone walls & columns • Timber roof/pergolas
• Curtain wall shopfronts for transparency and daylight.

Sustainability:
Passive cooling, solar panels, rainwater reuse, composting and recycling.
Safety & Hygiene: Non-slip stone floors, wet-zone drainage separation, open courts as fire breaks, organized waste routes.



SECTION SCALE 1:200

WEST ELEVATION SCALE 1:200