MASAR

A Journey Through Time, Space, and Innovation

A Digital Innovation Hub — Amman, Jordan

Track: Green Building Technology

LOCATION
STREET: BAHJAT AL TALHOUNI STREET
(شارع بهجت التلهوني)
AREA: DABOUQ, AMMAN, JORDAN
COORDINATES: 31°59'22.8"N, 35°49'55.7"E
PLOT: 498
ROAD CLASSIFICATION:
MAJOR COLLECTOR
ROAD SERVING
A RESIDENTIAL
DISTRICT.

NTP
NATIONAL TECHNOLOGY PARADE 2026

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MASAR

MASAR is a sustainable digital innovation hub that explores sustainability as an interconnected journey through **space, people, and time**. Guided by a climate-responsive and human-centered design approach, the project transforms environmental responsibility, social inclusion, and long-term resilience into fundamental architectural principles. From concept development and passive design strategies to lifecycle performance and future adaptability, every element of MASAR is designed to create a building that not only responds to today's challenges but continues to evolve for generations to come.

Problem Statement

Despite the growing demand for sustainable architecture, many buildings continue to address environmental, social, and technological challenges as separate issues rather than as an integrated system. This fragmented approach often results in resource-intensive buildings, limited accessibility, inflexible spaces, and environments that struggle to adapt to future needs. There is a growing need for an architectural model that seamlessly combines environmental responsibility, social inclusion, innovation, and long-term resilience into one cohesive and future-ready design.

Global Challenges

1. Climate Change
Rising global temperatures and the increasing frequency of extreme weather events are creating an urgent need for climate-responsive and resilient buildings.

2. High Energy Consumption in Buildings
The building sector is one of the largest consumers of energy and a major contributor to greenhouse gas emissions, highlighting the need for more energy-efficient building design.

3. Resource Depletion & Water Scarcity
Growing pressure on natural resources, particularly freshwater, requires buildings to use resources more efficiently and reduce environmental impact.

Regional Challenges

1. Water scarcity and increasing pressure on water resources.
2. High energy demand and dependence on conventional energy for building operation.
3. Harsh climatic conditions requiring climate-responsive architecture.
4. Green building rating systems that are not fully adapted to local environmental, cultural, and social contexts.
5. Limited integration of social sustainability and universal accessibility within sustainable building practices.

Local Challenges

1. Limited Sustainable Innovation Spaces
Jordan has a growing innovation and entrepreneurship ecosystem, yet there is a shortage of integrated facilities that combine technology, sustainability, collaboration, and community engagement within one environment.

2. Limited Accessibility and Inclusive Public Spaces
Many public buildings and innovation facilities do not fully integrate universal accessibility into the architectural design, limiting equal participation for people with disabilities and other user groups.

3. Increasing Pressure on Urban Infrastructure and Natural Resources
Rapid urbanization, high energy demand, water scarcity, and environmental pressures require buildings that are resource-efficient, resilient, and capable of supporting future generations.

Design Response

🌿 Climate-Responsive Design
- Passive Design
- Natural Ventilation
- Daylighting

♿ Inclusive Innovation
- Universal Accessibility
- Innovation Hub

💧 Resource Efficiency
- Water Conservation
- Renewable Energy

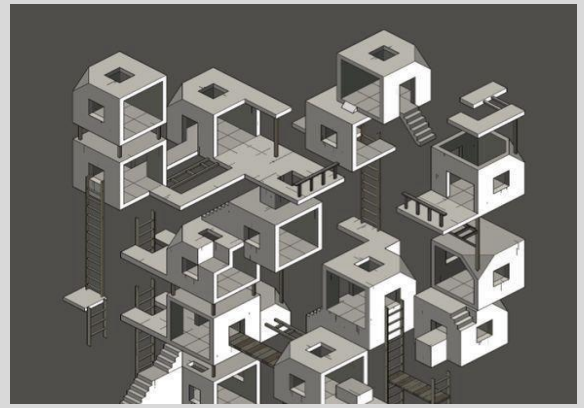
⏳ Future Resilience
- 100-Year Vision
- Adaptable Design

CONCEPT

Concept

MASAR — Arabic for *path* — is the premise of the architecture itself.
Inspired by the progressive stages of a dream (v1,v2,v3), the building refuses conventional floor-to-floor movement. Instead, three dream stages shape its form and circulation through voids, compressed thresholds, and a choreography of staircases, terraces, and platform elevators — a continuous unfolding rather than a series of destinations.
From this spatial logic emerge three journeys. Through Space, climate-responsive design makes sustainability structural, not cosmetic. Through People, universal accessibility dissolves into the architecture itself. Through Time, materials chosen to age — Corten steel, Meleke limestone — carry a 100-year vision.
One path. Three dimensions. A single, continuous narrative.



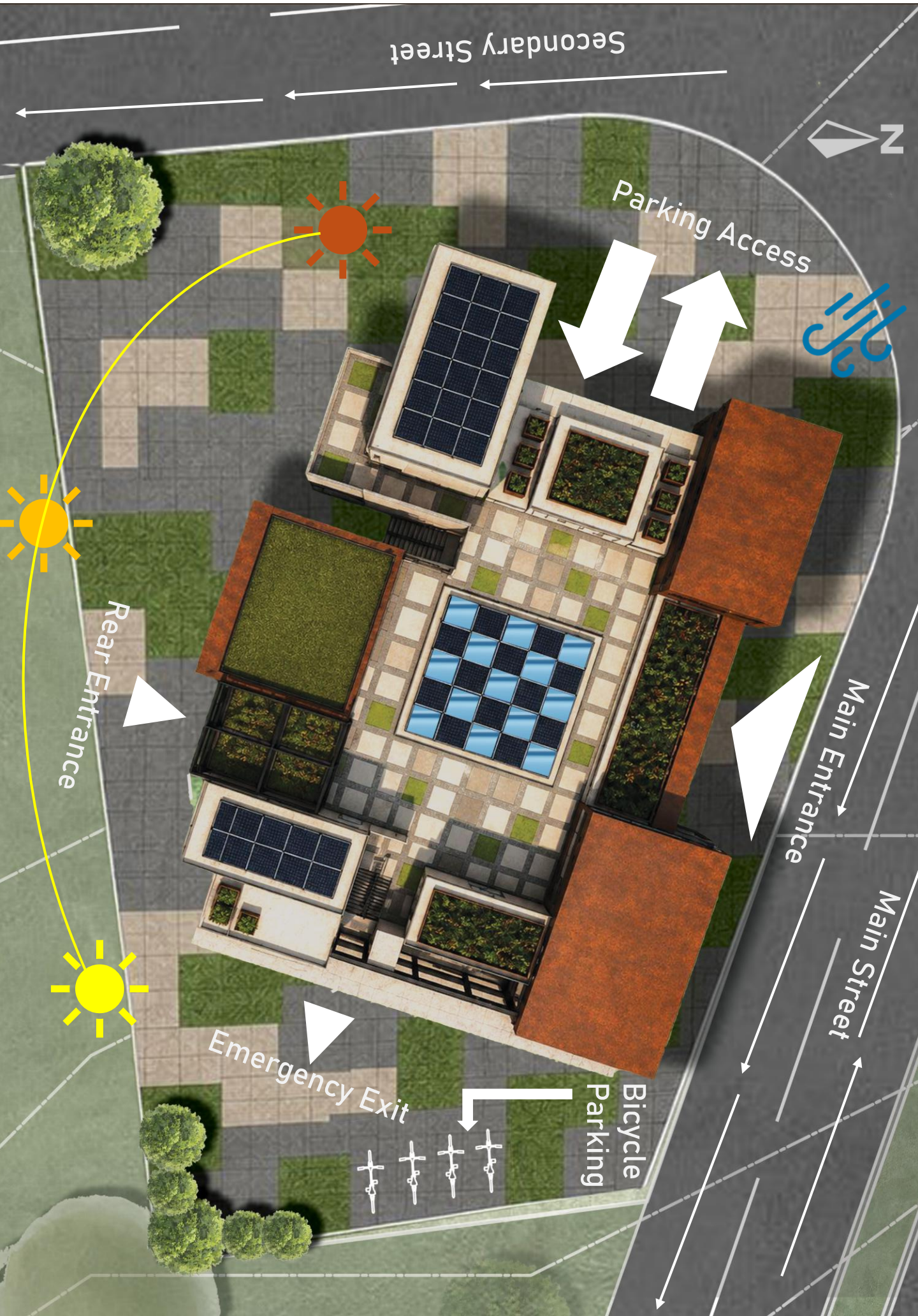




TRY OUR NEW DRINK
REFRESHING & NATURAL
EVENT IN
7 / 12
JOIN US!
SUSTAINABLE FUTURE TOGETHER
INNOVATE. CREATE. INSPIRE.
LEVEL UP
YOUR EXPERIENCE
TALK. SHARE. GROW.
CONNECT
COLLABORATE
CREATE IMPACT
BIG IDEAS START HERE
WORKSHOP
DESIGN THINKING
SIGN UP TODAY!
TAKE CARE OF YOUR MIND
THE FUTURE IS WHAT WE BUILD TODAY
FAB LAB
MAKE
BUILD
INNOVATE

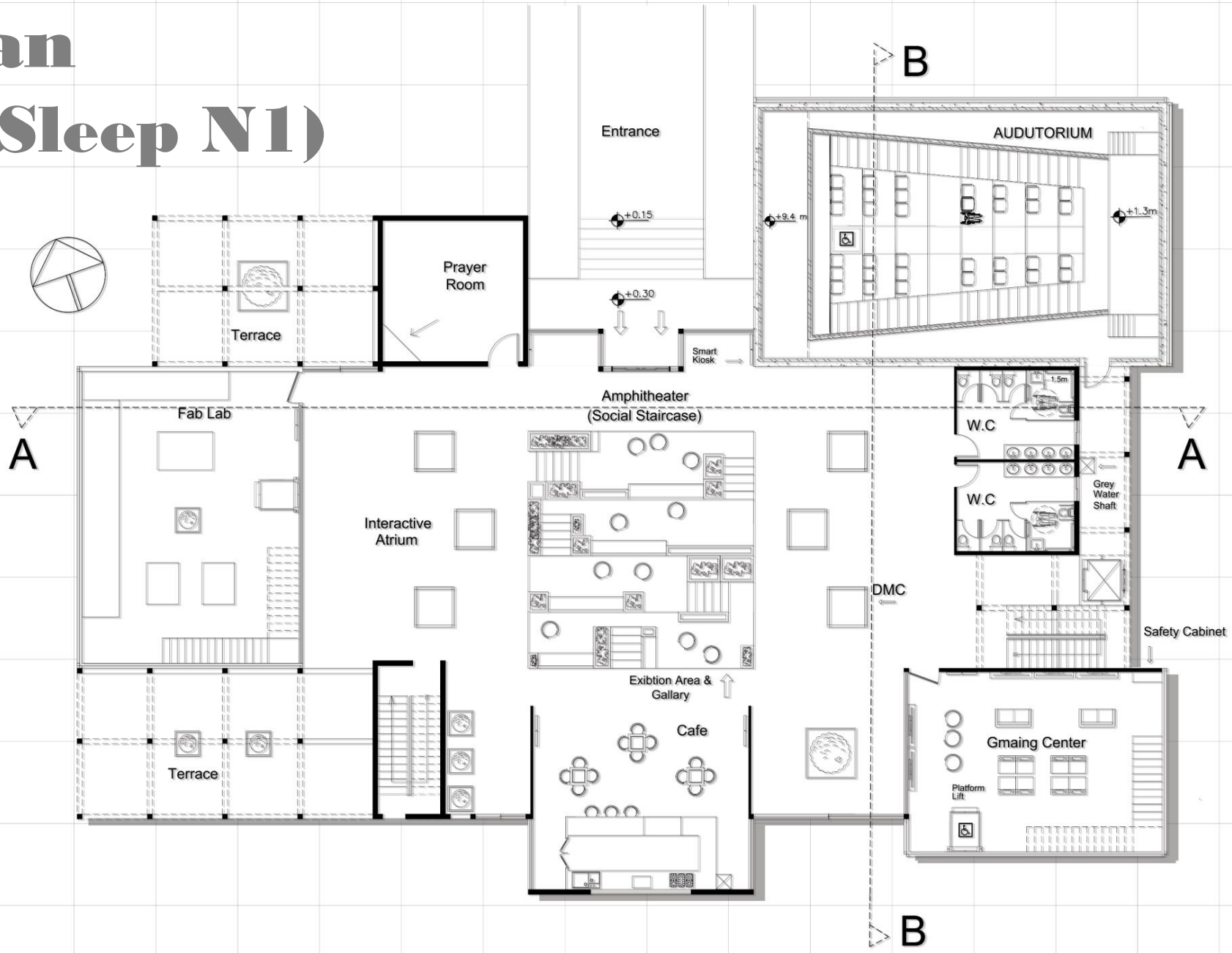
1st Path (Journey)

The first journey translates the progressive dream stages (V1, V2, and V3) into a continuous spatial experience that shapes the building's form, circulation, and environmental performance. Double-height and one-and-a-half-height spaces, interconnected staircases, visual connections, and open transitional areas encourage exploration beyond conventional circulation. At the same time, the spatial organization was carefully developed to maximize natural daylight, enhance stack and cross ventilation, and improve environmental comfort, ensuring that sustainability is embedded within the architectural experience from the very beginning.

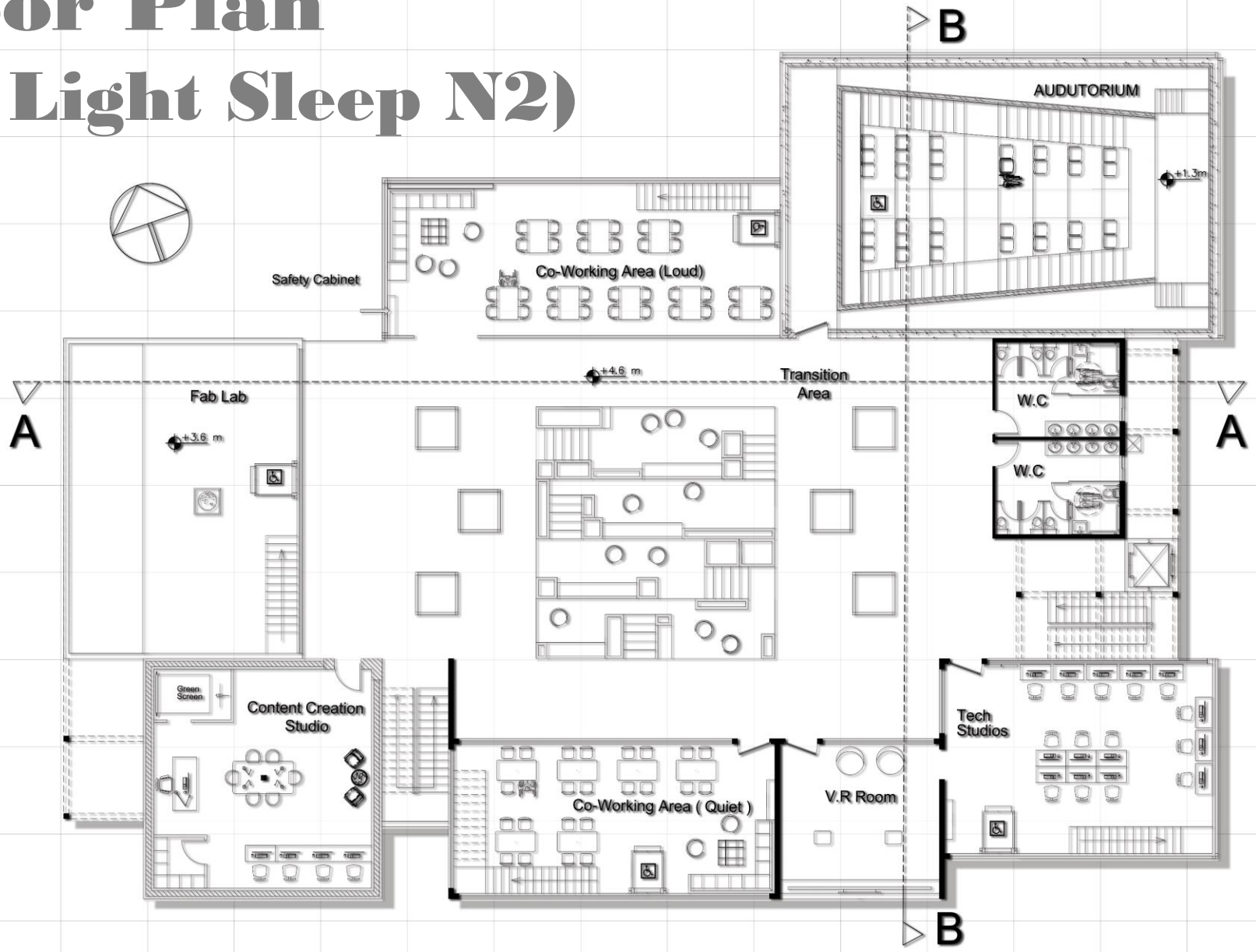
Site Plan


Secondary Street
N
Parking Access
Rear Entrance
Main Entrance
Main Street
Emergency Exit
Bicycle Parking

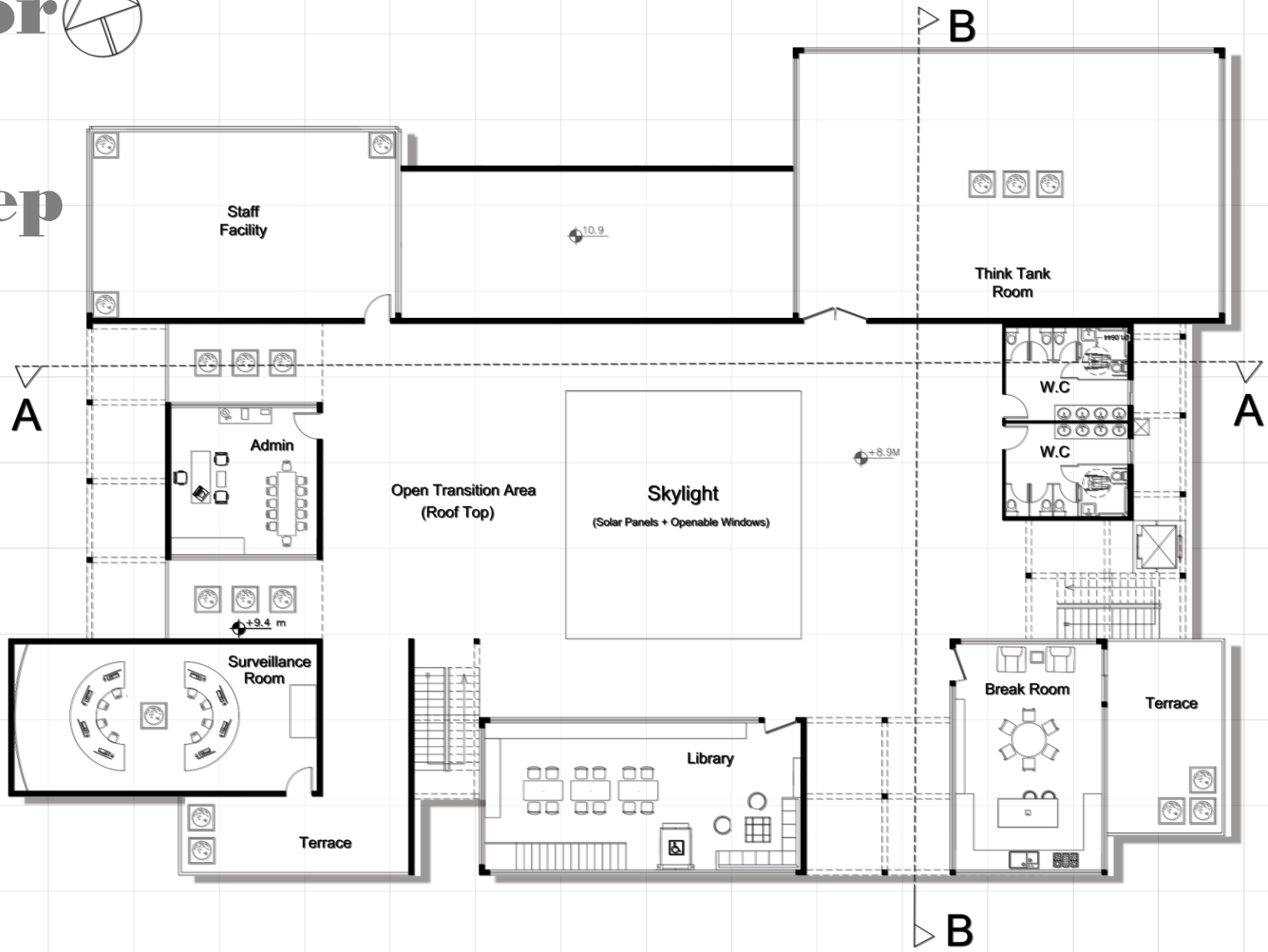
GF Plan
(Light Sleep N1)



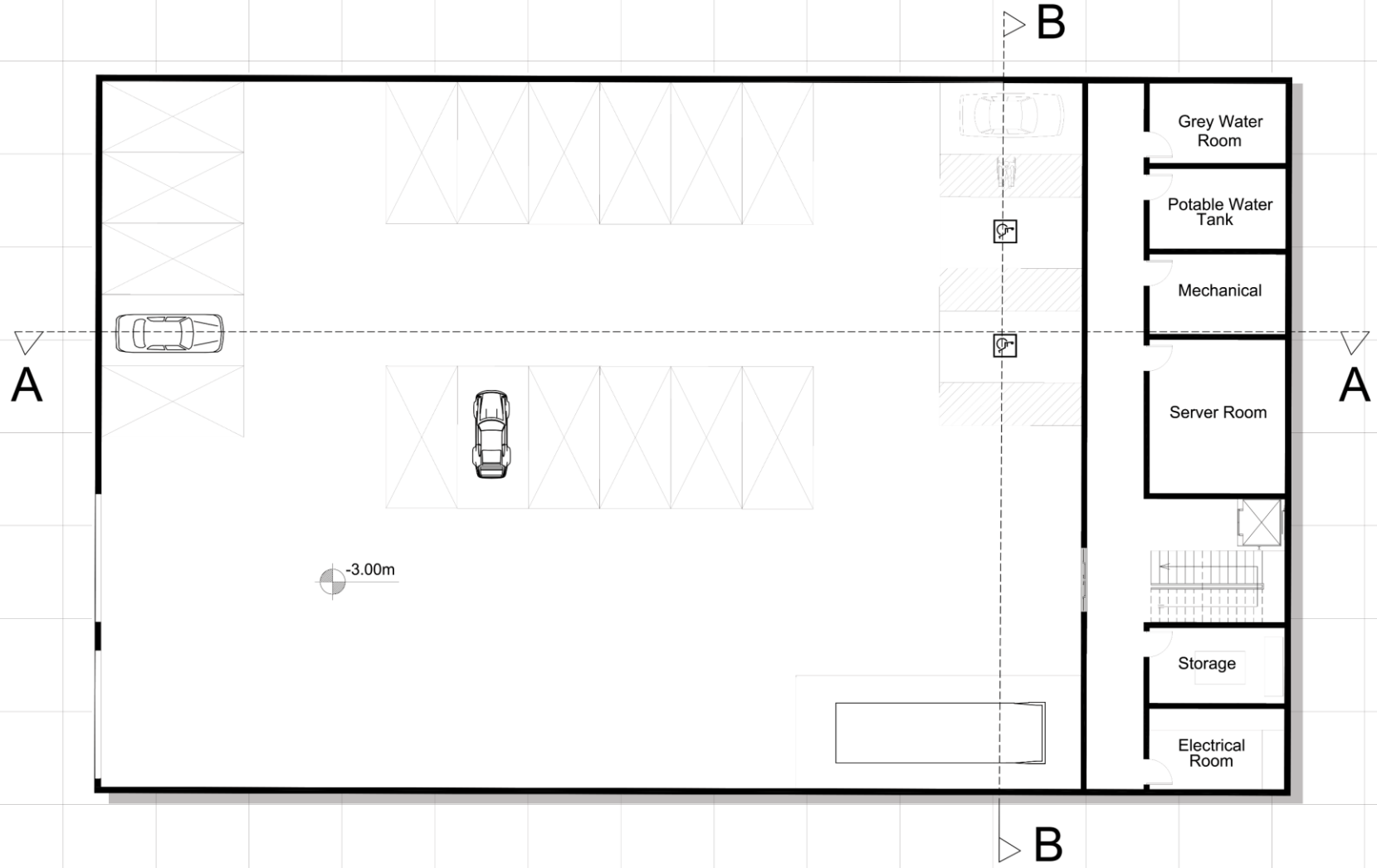
1ST Floor Plan
(Stable Light Sleep N2)

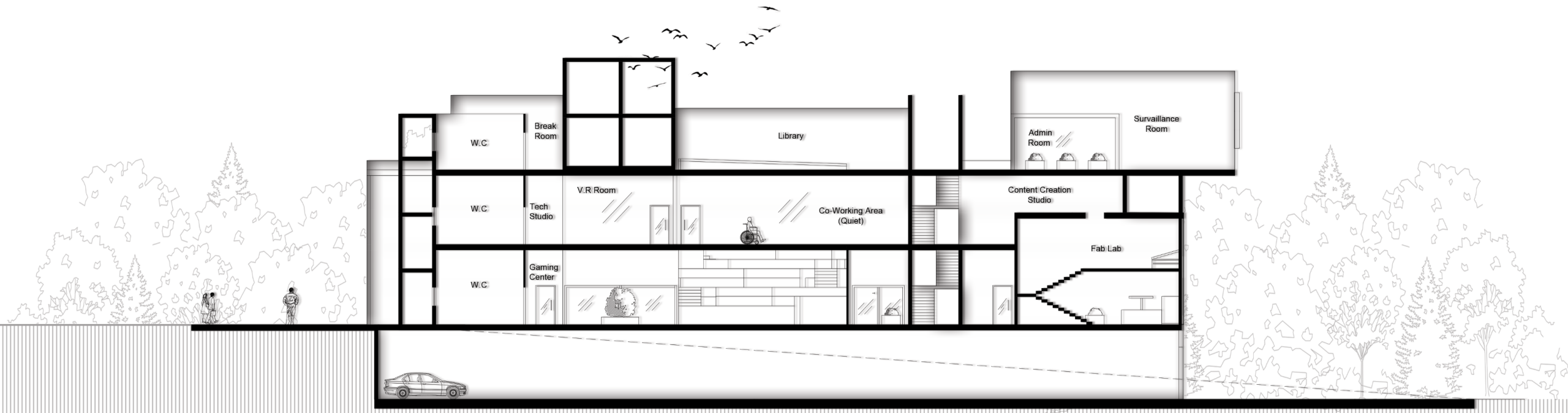


2nd Floor Plan DeepSleep (N3)

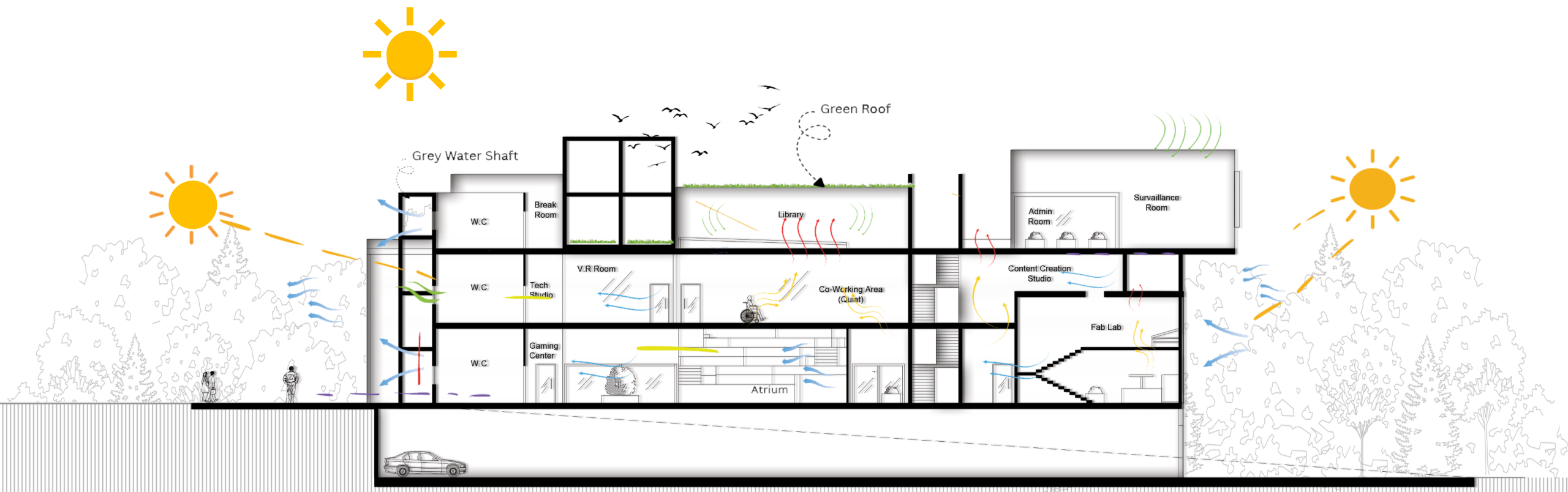


Parking


B
A
A
B
Grey Water Room
Potable Water Tank
Mechanical
Server Room
Storage
Electrical Room
-3.00m


W.C
Break Room
Library
Survaillance Room
Admin Room
W.C
Tech Studio
V.R Room
Co-Working Area (Quiet)
Content Creation Studio
Fab Lab
W.C
Gaming Center

A-A



A-A

1- SOLAR ENERGY GENERATION

Integrated photovolatic skylight panels generate renewable energy while allowing controlled daylight penetration into the atrium.

Re-newable Energy

2-STACK VENTILATION

The central atrium acts as a thermal chimney, promoting natural stack ventilation and reducing mechanical cooling demand.

Warm Air (Exhaust)

Rising Warm Air

3-DAYLIGHTING STRATEGY

Daylight is distributed through the central atrium and filtered facade, reducing dependence on artificial lighting.

Skylight Daylight

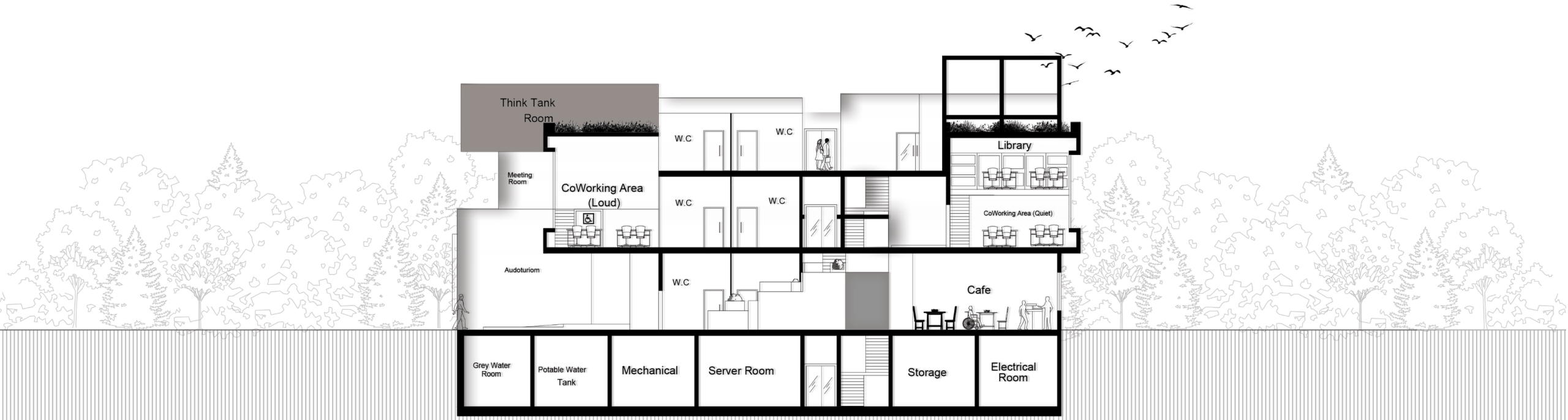
Filtered Daylight

4-PERFORATED FACADE SHADING --

The perforated envelope reduces direct solar gain while maintaining visual permeability and daylight access.

Lower Heat Gain

Reduced Cooling Loads


Think Tank Room
W.C
W.C
Library
Meeting Room
CoWorking Area (Loud)
W.C
W.C
CoWorking Area (Quiet)
Audoturiom
W.C
Cafe
Grey Water Room
Potable Water Tank
Mechanical
Server Room
Storage
Electrical Room

B-B

2nd Path | Journey Through Time

The second journey extends beyond the present, envisioning MASAR as a building that continues to perform, adapt, and remain relevant for generations. Guided by a 100-year vision, every design decision—from material selection and building envelope to flexibility and environmental performance—was made to maximize durability, adaptability, and lifecycle efficiency. Through resilient materials, climate-responsive systems, and validated environmental performance, MASAR is designed not only to meet today's needs but to evolve with the changing demands of tomorrow.

Design 1

- Climate-responsive design
- Universal accessibility
- Passive design strategies
- 100-year lifespan vision

Materials 2

- Local Jordanian limestone
- Corten steel
- Low-impact materials
- Durable construction

Construction 3

- Efficient construction methods
- Reduced material waste
- Sustainable detailing

Operation 4

- Solar PV generation
- Rainwater harvesting
- Greywater recycling
- Natural daylight
- Stack ventilation
- High-performance envelope

Renovation 5

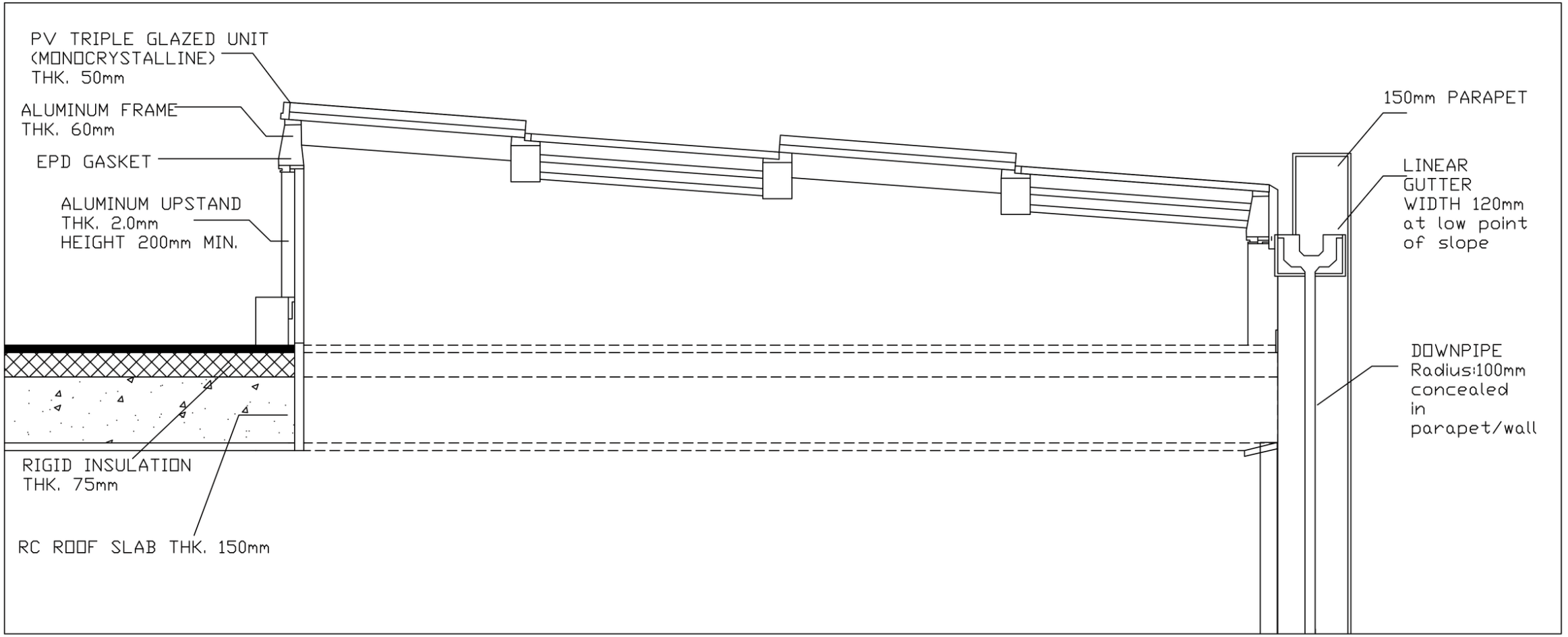
- Flexible interior spaces
- Future technology upgrades
- Low-maintenance materials
- Long-term resilience

Demolition 6

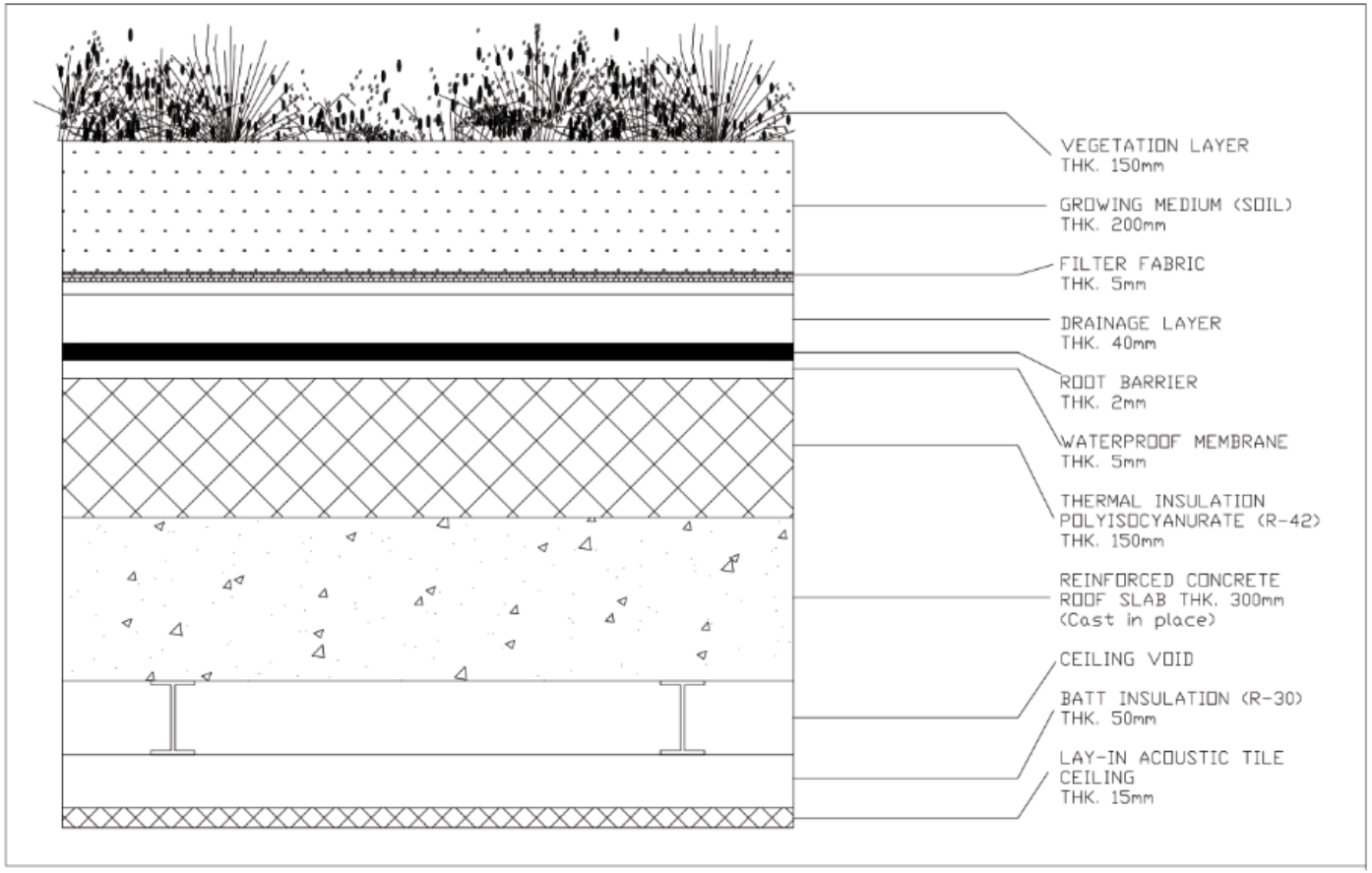
- Steel recycling
- Material recovery
- Limestone reuse
- Reduced construction waste

Detailed Drawings

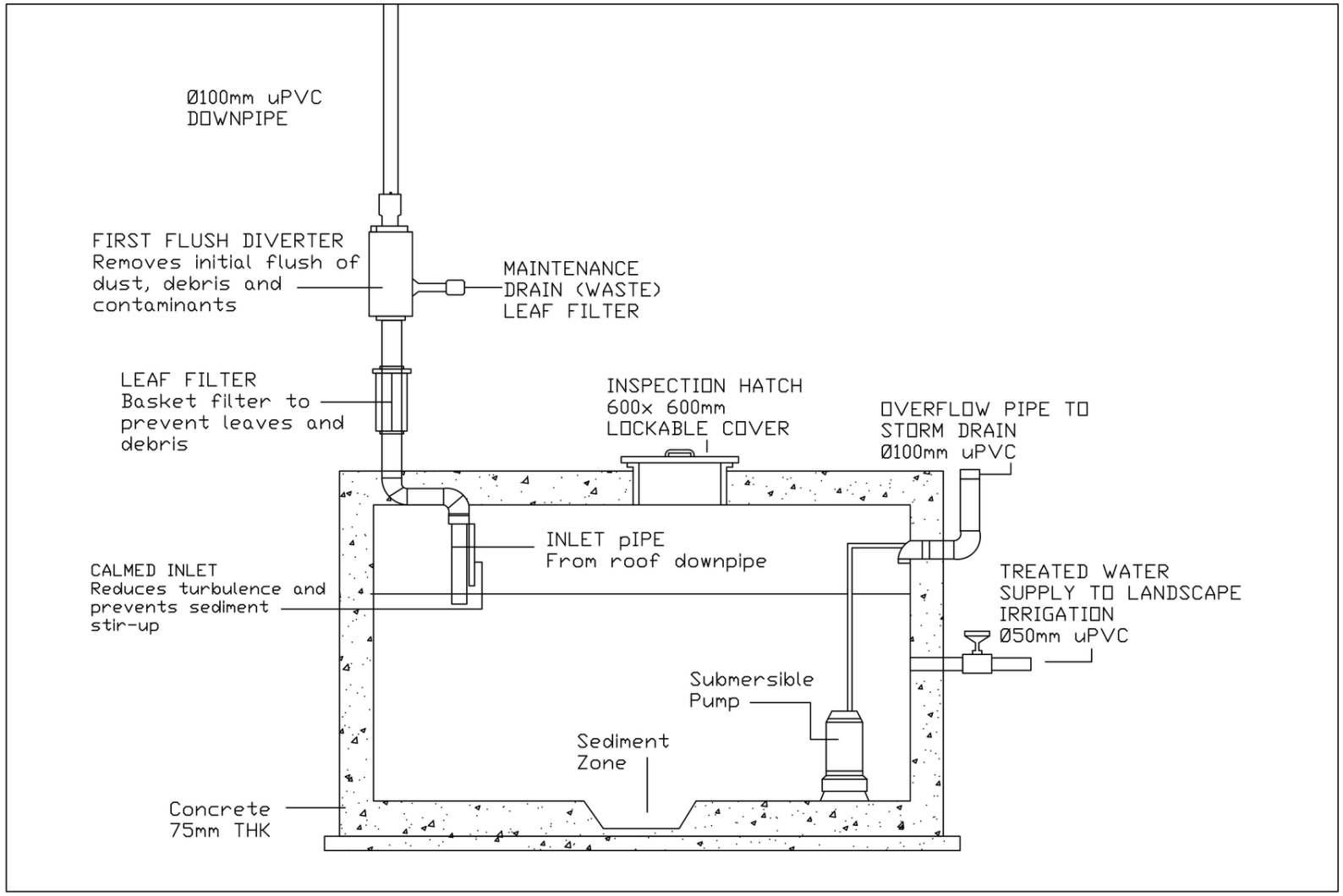
Skylight Detail



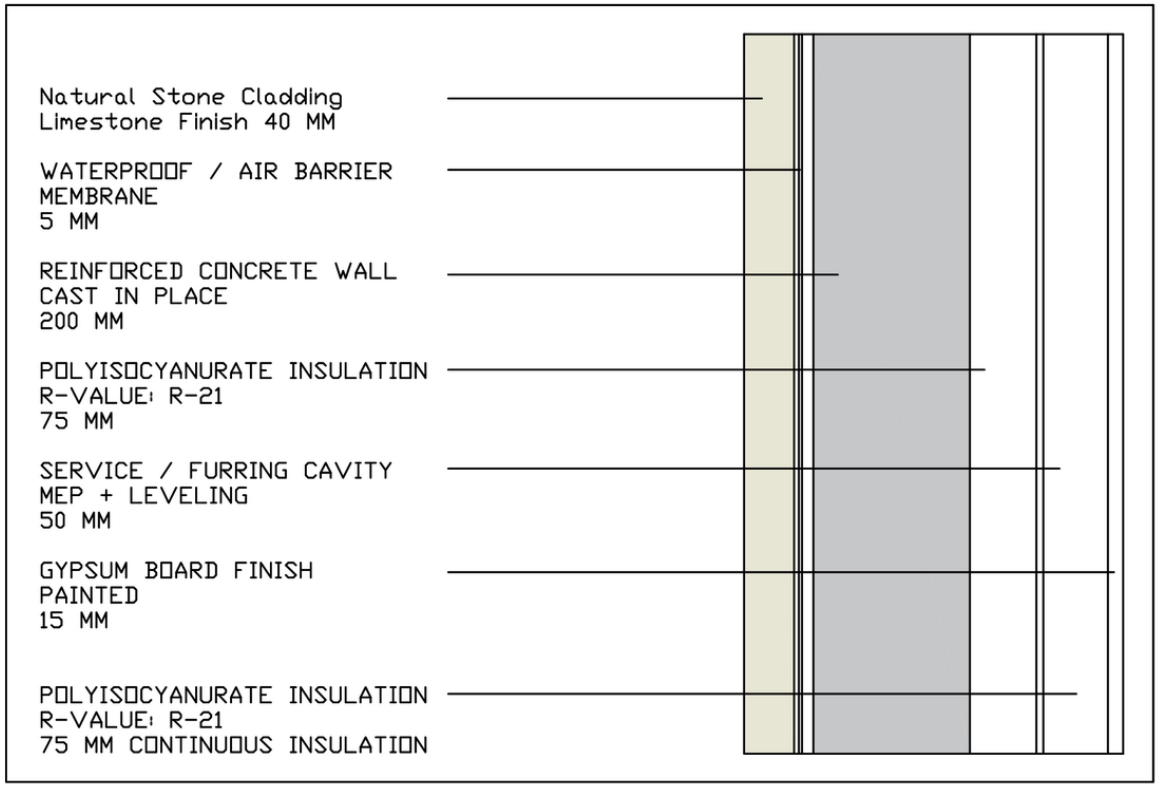
GREEN ROOF DETAIL

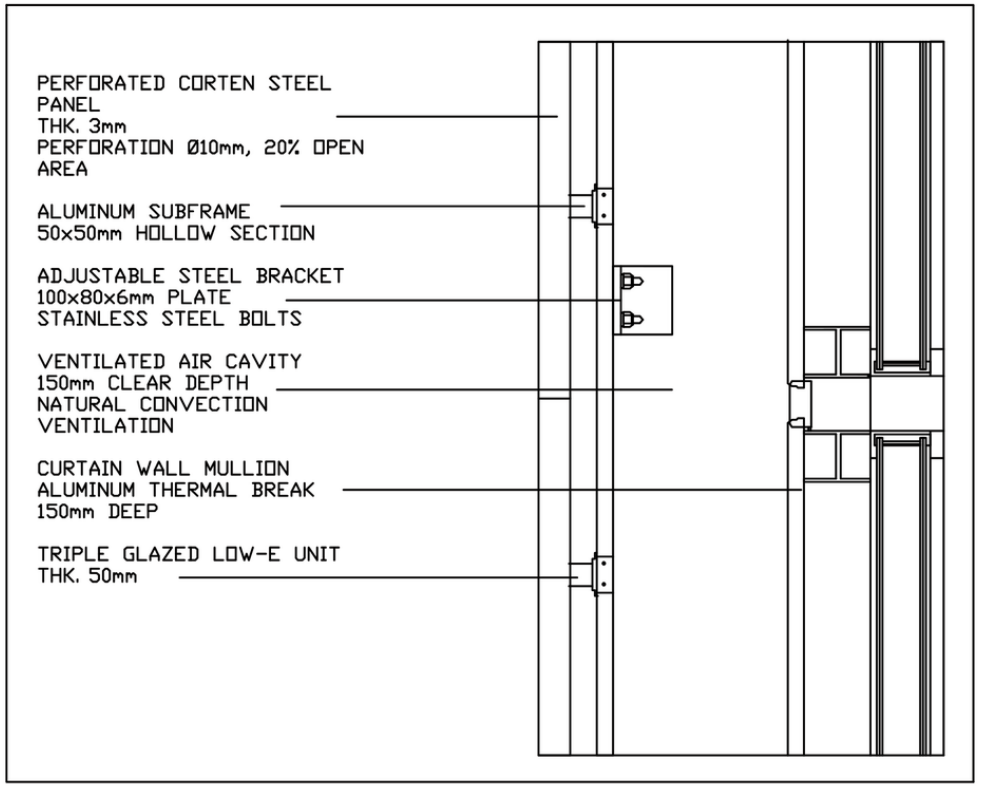


HARVESTING SYSTEM DETAIL



WALL & PERFORATED CLADDING DETAIL





ELEVATIONS

North Elevation

North Elevations

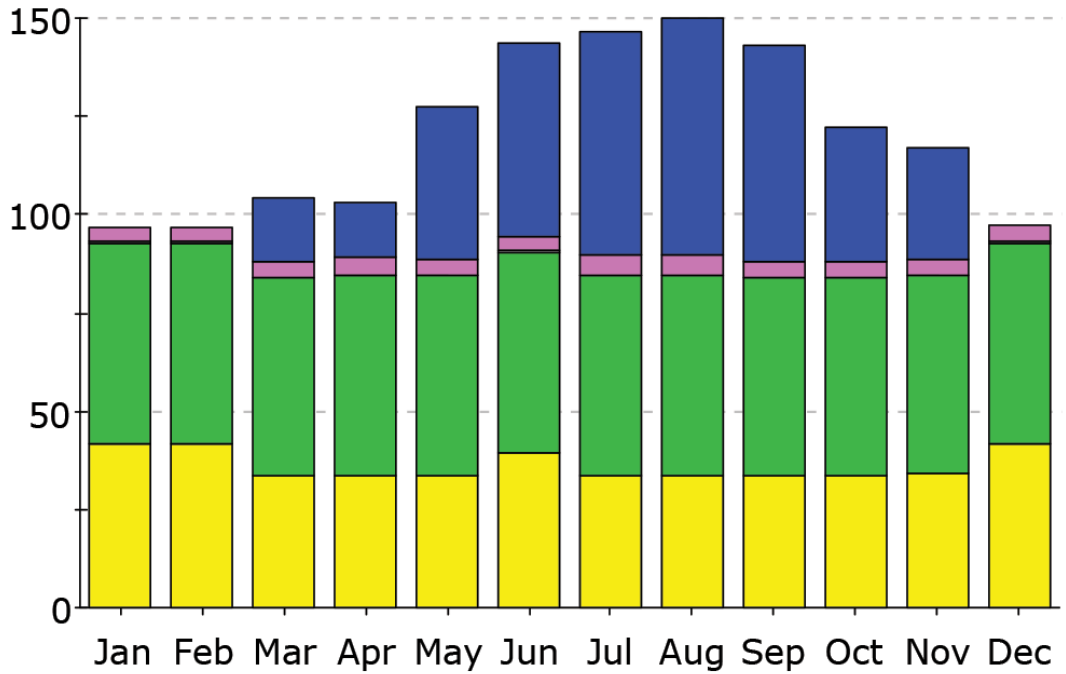
East Elevations

South Elevations

West Elevations

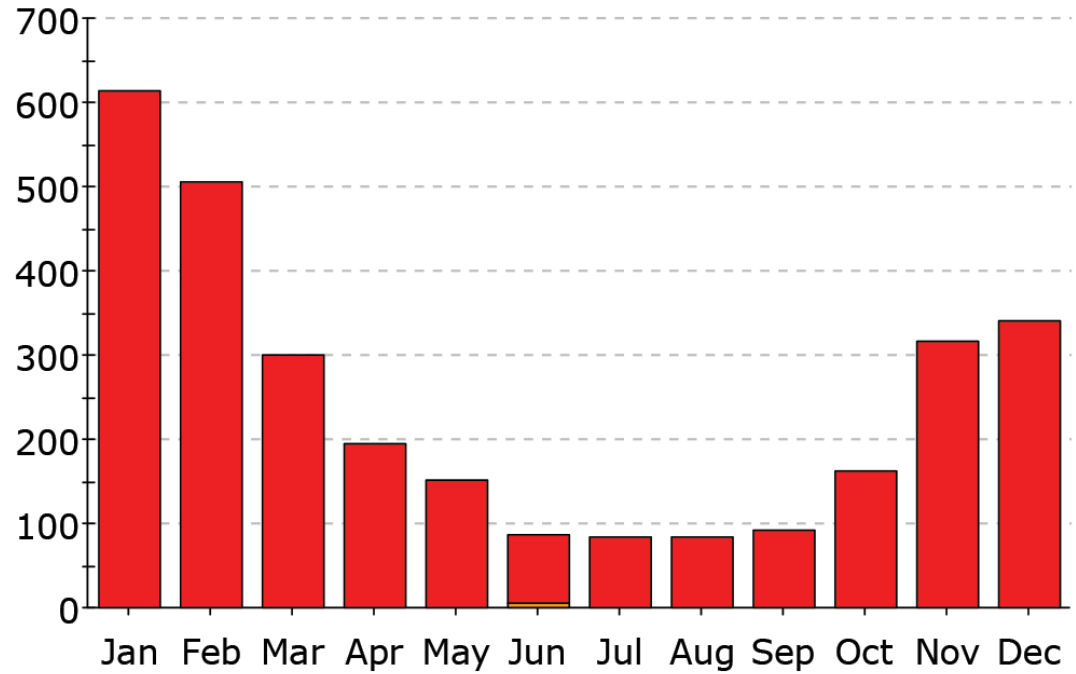
ENVIRONMENTAL PERFORMANCE

Electric Demand (kW)



(x000)

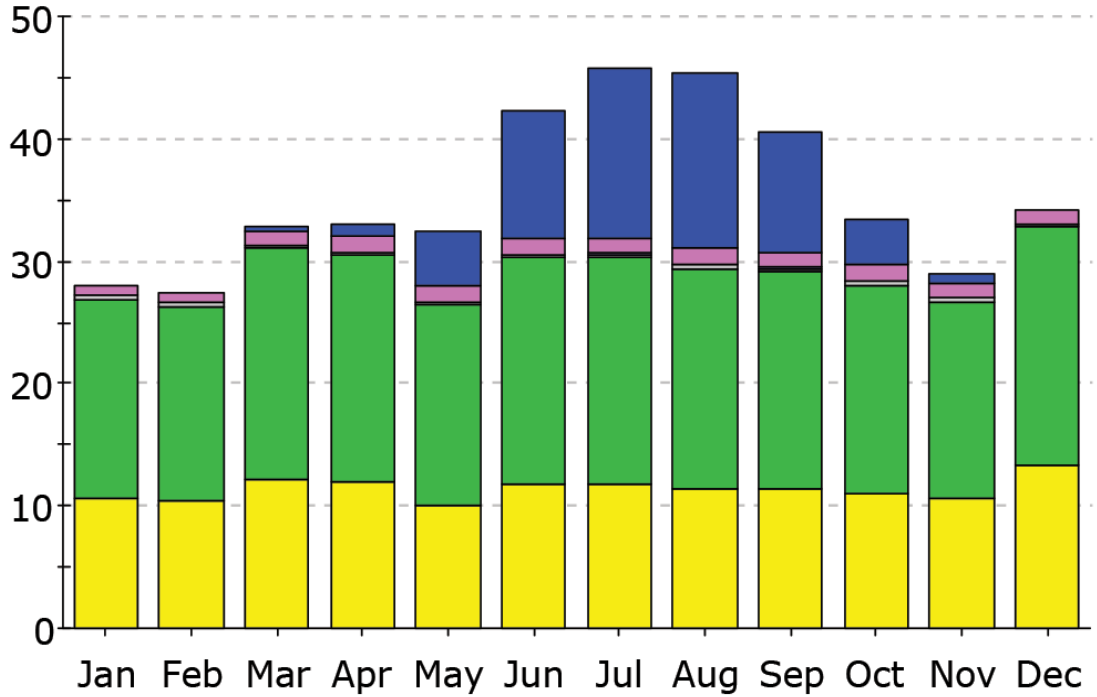
Gas Demand (Btu/h)



Area Lighting Misc. Equipment Space Cooling Ventilation Fans

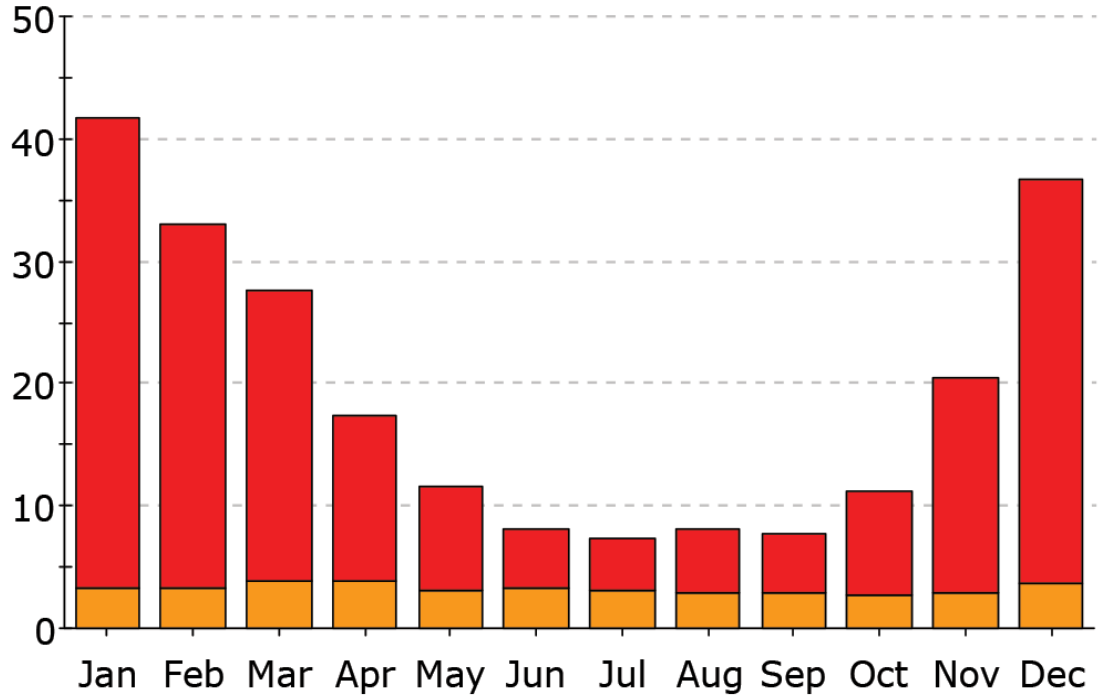
(x000)

Electric Consumption (kWh)



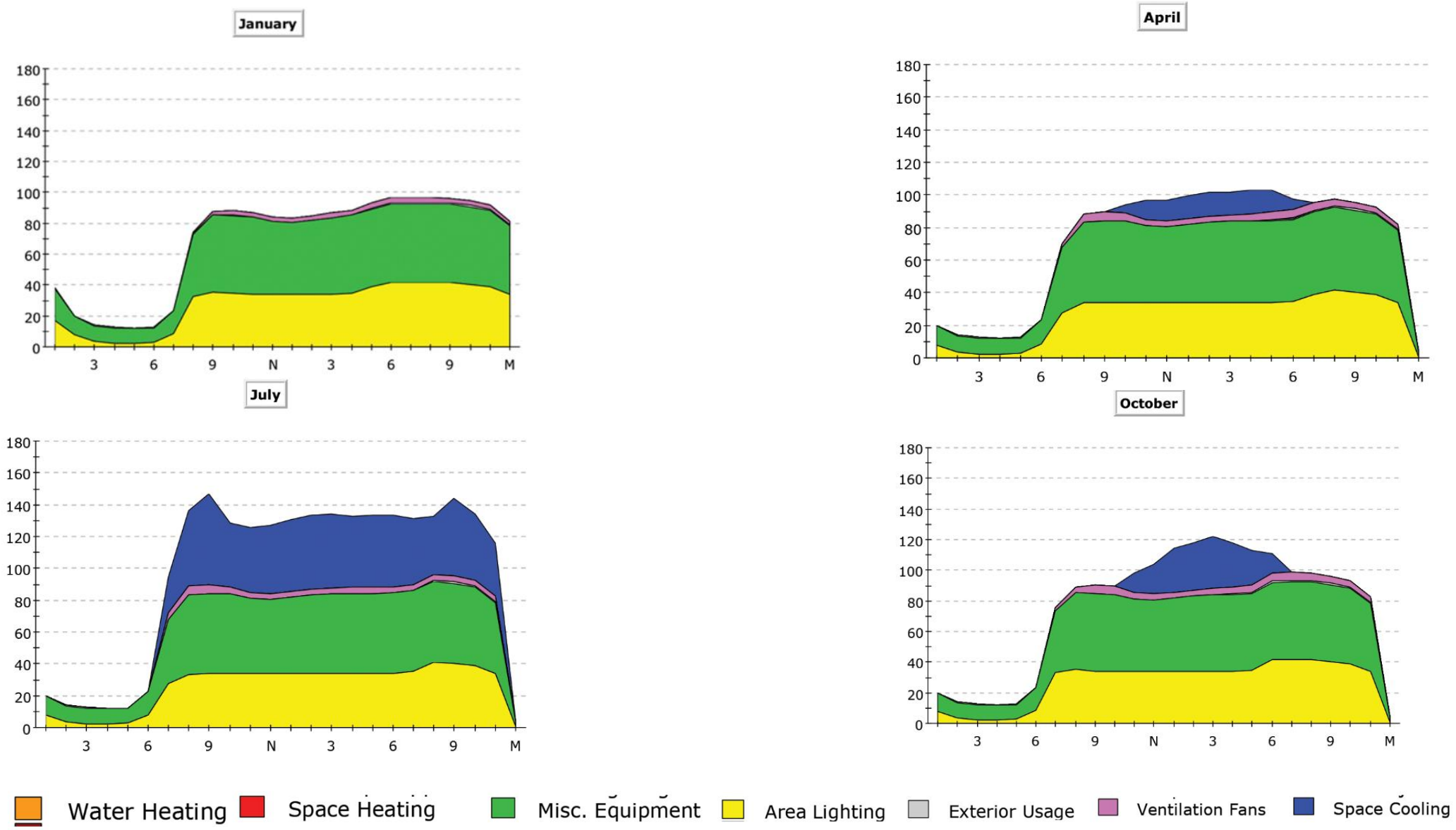
(x000,000)

Gas Consumption (Btu)



Area Lighting Misc. Equipment Space Cooling Ventilation Fans

Seasonal Performance



ASHRAE 90.1 & LEED Benchmark

Parameter	Masar Design	ASHRAE / LEED	Assessment
Roof Insulation	R-42 Polyisocyanurate	ASHRAE 90.1 Climate Zone 4A ≈ R-20 to R-30	Exceeds Standard
Ext Wall Insulation	R-21	ASHRAE 90.1 ≈ R-13 to R-16	Exceeds Standard
Ceiling Insulation	R-30	ASHRAE Minimum ≈ R-20	Exceeds Standard
Floor Insulation	R-12	ASHRAE Minimum ≈ R-10	Exceeds Standard
Triple Low-E Glazing	South Façade	Façade High-Performance LEED Envelope	Meets/Exceeds
Double Low-E	North/East/West	ASHRAE 90.1 Glazing Requirement	Meets
Window-to-Wall Ratio	29.1% Gross	ASHRAE Maximum 40%	Better
Boiler Efficiency	92%	ASHRAE Minimum ≈ 80–85%	Exceeds Standard
Water Heater Energy Factor	0.95	High-Efficiency Benchmark >0.90	Exceeds Standard
Variable Speed Drive (VSD) Fans	Implemented	LEED Energy Optimization Strategy	Meets


Year 0


Year 20


Year 50


Year 100


KlingAI 3.0


WELCOMING
NASAR

3rd Path| Journey Through People

The third journey places people at the heart of sustainability by creating an environment where every user experiences the building equally. Rather than treating accessibility as an additional requirement, MASAR integrates universal design into the architectural experience itself through inclusive circulation, accessible connections, and flexible public spaces. By promoting equal participation, social interaction, and community engagement, the project demonstrates that social sustainability is achieved when architecture empowers every individual to learn, collaborate, and innovate without barriers.

UNIVERSAL DESIGN

Physical / Mobility

- Accessible ramp at entrance: 1:12 gradient, separated from stairs — dignified independent access (ADA 2010)
- Panoramic glazed elevator: 1500×1500mm — 36% above ISO 21542:2021 minimum All doors: 1000mm clear minimum (exceeds ADA 900mm)
- Evacuation refuge: 1500×1500mm at every floor with two-way intercom Accessible WC per floor:
- 1500mm turning circle, grab rails, outward-swinging door

Blind / Low Vision

- Tactile TGSI guiding strips: ISO 23599:2012 — continuous from accessible parking to every destination
- Tactile warning dome pads at all hazard points Braille + raised-letter signage at 1400–1700mm AFF Audible elevator announcements + audio kiosk output (3.5mm headphone jack)
- High luminance contrast (LRV ≥30%) on all stair nosings, door frames, counter edges

Deaf / Hard of Hearing

- Induction hearing loop: IEC 60118-4:2014 — field strength −16dBm in auditorium and café
- Visual strobe alarms: NFPA 72:2022 — 75 candela, 1–3Hz, in every room
- Real-time captioning screen (CART) in auditorium All emergency messages on digital screens simultaneously — no audio-only announcements
- Hyperacusis / Sensory Sensitivity Acoustic zoning: Silent ≤35dB → Quiet ≤45dB → Ambient ≤55dB → Active ≤70dB RT60 ≤0.8s in auditorium (IEC 60268-16) — fabric panels on 35% of wall surface Rising-tone alarms — no sudden loud signals
- Quiet room: 9m², ≤35dB(A) ambient — WELL v2 Sound Feature S02

Neurodiversity / Autism

- Spectrum Biophilic green shafts through floors — nature as sensory regulation Dimmable lighting in quiet zones — no fluorescent flicker
- Sensory map available at entrance — users navigate their own comfort zone

ACCESSIBILITY FOR PERSONS WITH DISABILITIES

ACCORDING TO UNIVERSAL DESIGN STANDARDS

1 ACCESSIBLE ENTRANCES & PATHWAYS

- Step-free access
- Level thresholds
- Clear width min. 900 mm
- Non-slip surfaces

2 RAMPS

- Maximum slope 1:12
- Handrails on both sides
- Handrail height 865–965 mm
- Non-slip surface
- Level landings every 9 m

3 DOORS

- Clear opening min. 900 mm
- Easy to operate
- Lever handles
- Low force required

ACCESSIBLE FOR ALL

Equal access • Dignity • Independence

4 ELEVATORS

- Clear size min. 1100 x 1400 mm
- Braille & raised buttons
- Audible floor announcements
- Handrail
- Mirror (recommended)

5 ACCESSIBLE TOILETS

- Turning space min. 1500 mm
- Grab bars
- Toilet height 450–480 mm
- Clear space beside toilet min. 900 mm
- Accessible basin

6 SEATING & SPACES

- Wheelchair spaces min. 900 x 1200 mm
- Integrated with general seating
- Clear circulation paths
- Good visibility and proximity

BENEFITS

EQUAL ACCESS
Everyone can access spaces, services and opportunities.

INDEPENDENT MOVEMENT
Enables autonomous and confident navigation.

SAFETY & COMFORT
Reduces barriers and risks, improves overall experience.

INCLUSION & DIGNITY
Promotes participation, respect and a sense of belonging.

COMPLIES WITH STANDARDS

- UN Convention on the Rights of Persons with Disabilities (CRPD)
- ADA Americans with Disabilities Act
- ISO 21542 Building construction – Accessibility & usability
- Universal Design Principles

Accessibility is not a feature, it is a right.

ACCESSIBILITY FOR
DEAF AND HARD-OF-HEARING USERS

Inclusive Communication • Visual Information • Equal Participation

1 VISUAL WAYFINDING

- Clear signage with high contrast and simple language
- Color-coded zones and paths
- Digital navigation screens and maps

2 VISUAL EMERGENCY SYSTEMS

- Flashing alarm lights
- Visual evacuation instructions
- Emergency message displays and strobes

3 DIGITAL ACCESSIBILITY

- Captioned videos and presentations
- Interactive information screens
- Real-time text alerts and notifications

INCLUSIVE COMMUNICATION

Creating an environment where deaf and hard-of-hearing users can navigate, communicate, learn and participate independently.

4 COMMUNICATION SUPPORT

- Sign language support services
- Text-based communication options
- Information kiosks with text and visuals

5 LEARNING & COLLABORATION SPACES

- Good sightlines and well-lit spaces
- Flexible seating for face-to-face interaction
- Inclusive layout for participation and engagement

6 ACOUSTIC DESIGN

- Sound-absorbing materials
- Reduced background noise
- Improved speech clarity and visual communication

PROJECT IMPACT

SOCIAL INCLUSION
Encourages equal participation and a sense of belonging for all.

BETTER COMMUNICATION
Visual and text-based systems ensure clear, effective and independent communication.

EQUAL LEARNING OPPORTUNITIES
Accessible information and inclusive spaces support learning, innovation and personal growth.

INDEPENDENT BUILDING USE
Clear wayfinding and accessible systems enable confident and autonomous navigation.

MASAR promotes equal participation by integrating visual communication systems, accessible technology, inclusive learning spaces, and clear wayfinding strategies—ensuring that deaf and hard-of-hearing users can navigate, learn, collaborate, and engage independently.

MASAR
A PATH FOR ALL

TWSI – TACTILE WALKING SURFACE INDICATORS

Universal Guidance • Safety • Independence

TWSIs are designed to provide essential information to people who are blind or visually impaired through touch underfoot, helping them navigate safely and confidently.

TWO MAIN PATTERNS

ATTENTION PATTERN

Warns of hazards and decision points

Stairs · Ramps · Platform Edges · Pedestrian Crossings

GUIDING PATTERN

Indicates the direction of travel and key destinations

Direction of Travel · Route Guidance · Landmarks · Decision Points

TWSI TYPES

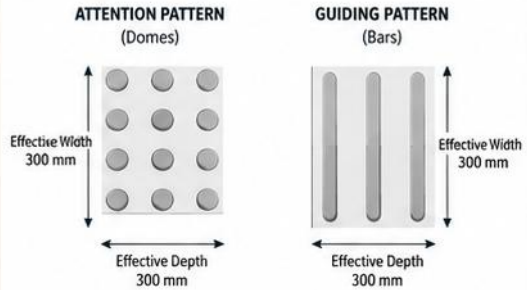
DISCRETE UNITS

Individual domes, cones or elongated bars embedded into the surface

INTEGRATED UNITS

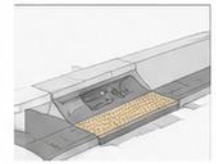
Domes, cones or elongated bars on a base surface incorporated as a single unit

DIMENSIONS (EXAMPLE)

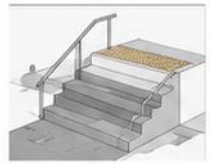


- **Effective width:** distance between detectable edges measured perpendicular to the direction of travel.
- **Effective depth:** distance between detectable edges measured in the direction of travel.

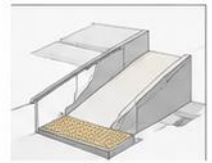
INSTALLATION LOCATIONS (EXAMPLES)



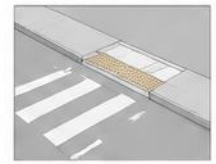
At-Grade Kerb



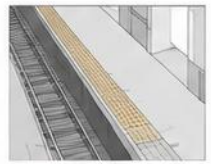
Stairs



Ramps



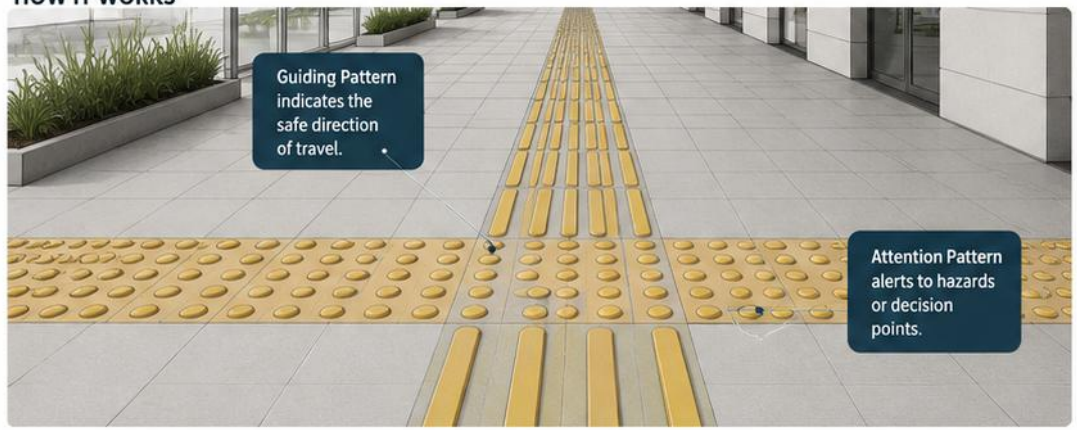
Pedestrian Crossings



Railway Platforms

Elevators

HOW IT WORKS



BENEFITS

SAFETY
Reduces risk of accidents by alerting users to hazards.

INCLUSIVITY
Ensures equal access for all, regardless of visual ability.

INDEPENDENCE
Empowers users to navigate confidently and make informed decisions.

BETTER ENVIRONMENTS
Creates welcoming, accessible, and human-centered spaces for everyone.

KEY TECHNICAL CONSIDERATIONS

VISUAL CONTRAST
Luminance contrast (LRV) ≥ 30 points recommended.

ILLUMINATION
Adequate illuminance recommended (≥ 200 lx).

SURFACE
Durable, slip-resistant and stable underfoot.

MAINTENANCE
Regular inspection and cleaning to maintain detectability.

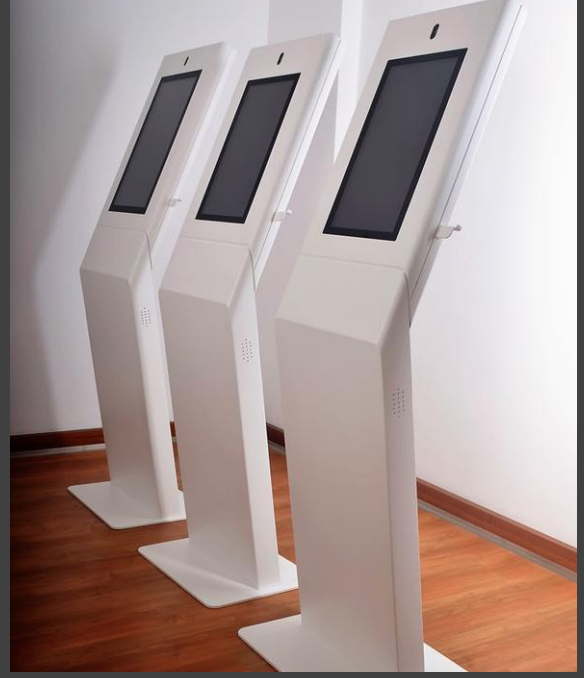
TWSIs should comply with relevant standards and regulations to ensure consistency, accessibility, and safety for all users.

Safety & Accessibility Features

Each floor is equipped with essential safety and accessibility elements strategically located near staircases and circulation cores, including fire hose cabinets, first-aid kits, and evacuation chairs to ensure emergency preparedness and inclusive access throughout the building.

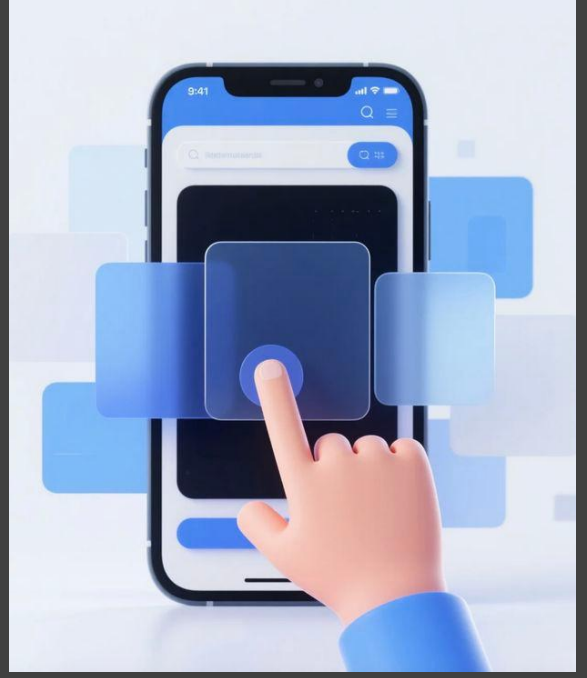
Smart Access & App

As part of MASAR's commitment to equal and independent access for all, a fully automated kiosk system and a dedicated mobile application eliminate every barrier between the user and the building — digitally, physically, and sensorially.



RFID Kiosk System

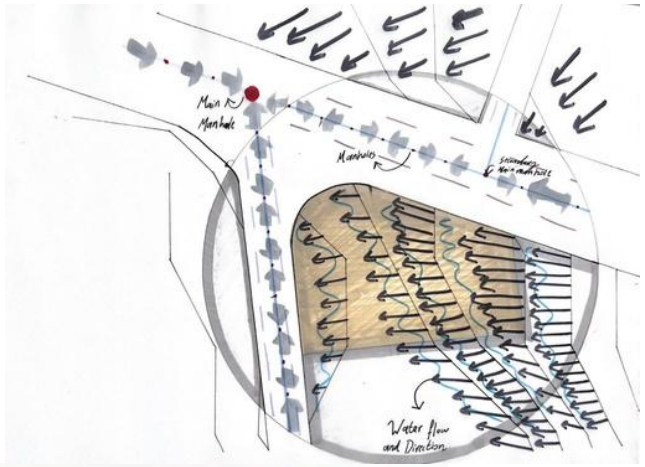
- Cashless, staff-free entry for all users at any hour
- Scans RFID card or mobile app → assigns space → confirms accessible route
- Audio output for blind users + visual display for deaf users + tactile confirmation
- Automated billing — no human interaction required
- Powered by building's own solar PV system — independent of grid failure



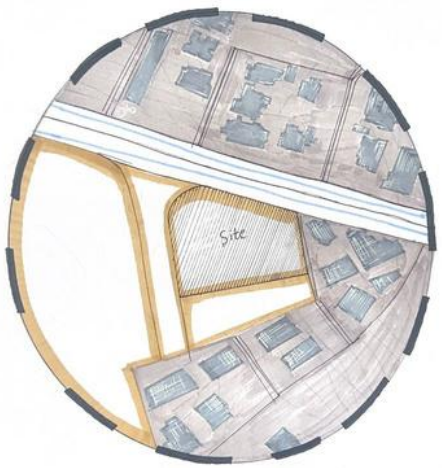
MASAR App

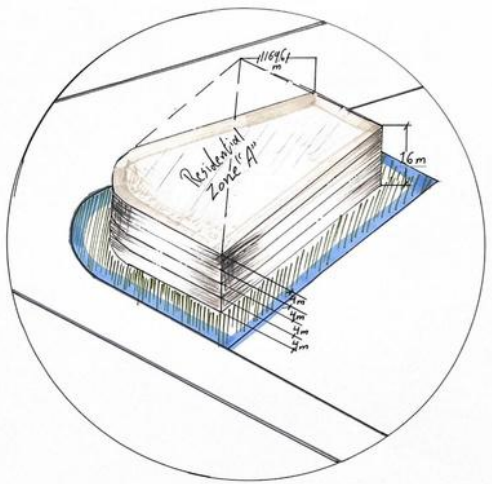
- Real-time indoor navigation with audio guidance — for blind and low vision users
- Live noise level mapping by zone — allows hyperacusis users to find safe spaces
- Space booking — accessible workstations, quiet zones, and meeting rooms reserved in advance
- Silent vibration emergency alerts — for deaf and hyperacusis users
- RFID card management — top up, balance, usage history
- Sign language video relay connection at reception kiosk

PROJECT WORKFLOW

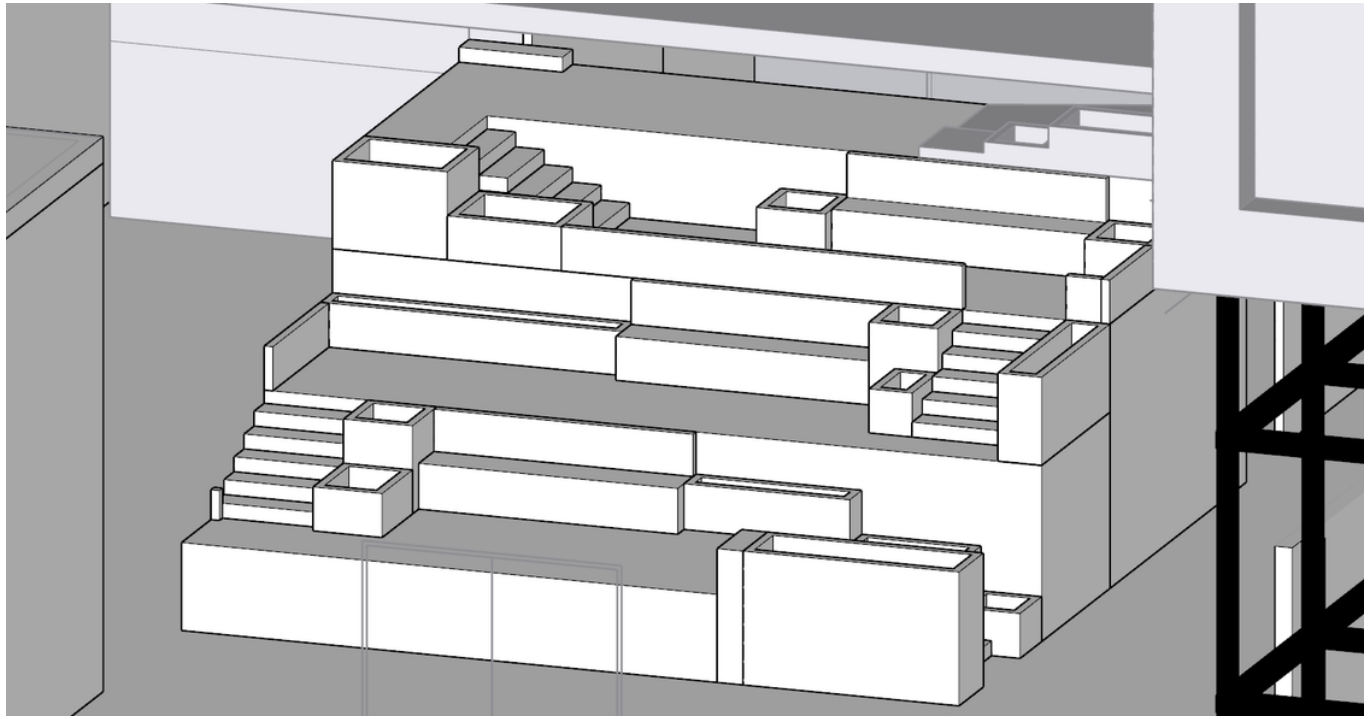

Main Manhole
Manhole
Water flow and Direction

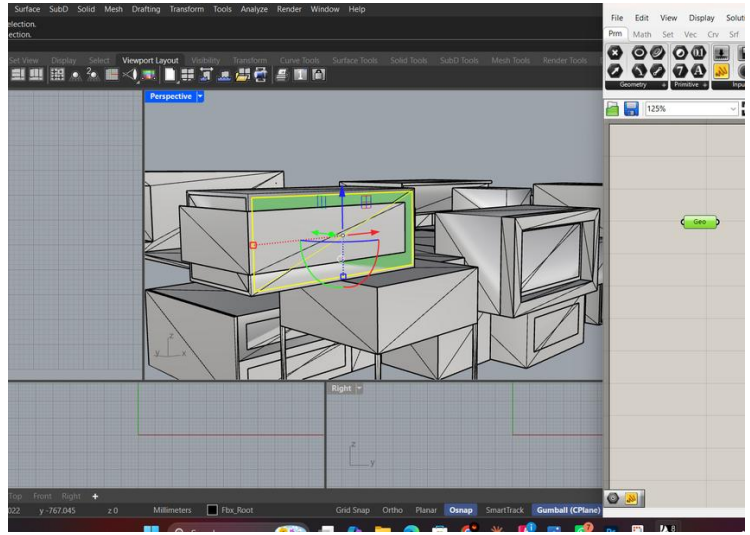

Bahjat Al-Talhouni St.
Kafr Al-Akhdari
DESIGN 2 Digital Hub
LEGEND

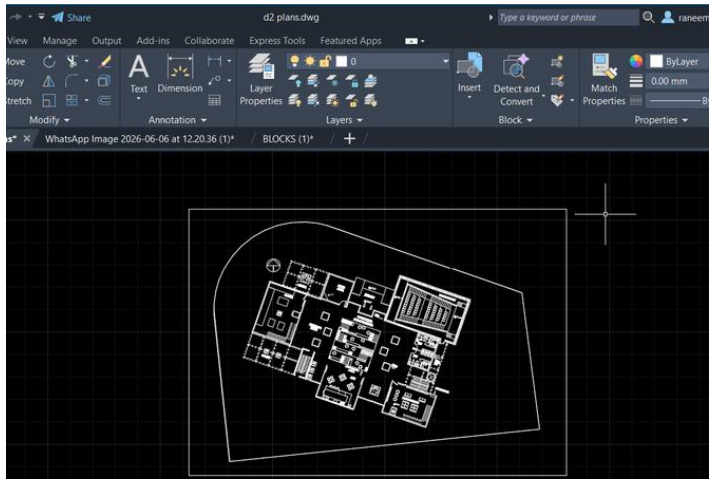

Site

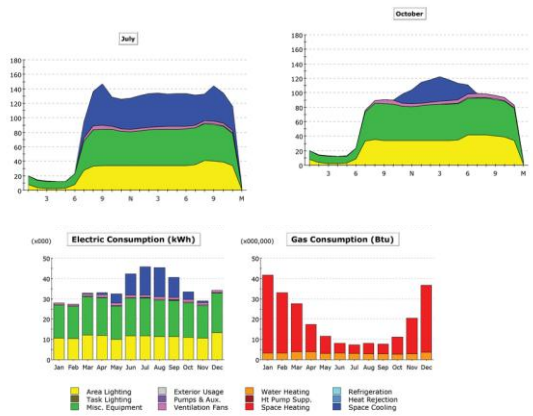

Residential Zone "A"
16m

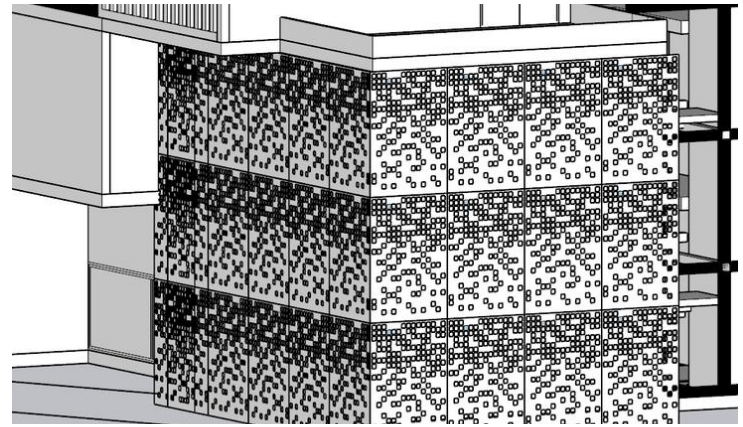

التنظيم
الاستعمال التنظيمي: 6
رقم القرية: 121
رقم الحوض: 1
رقم الحي: 0
رقم القطعة: 498
مفتاح القطعة: 012100100000498
Zoom to

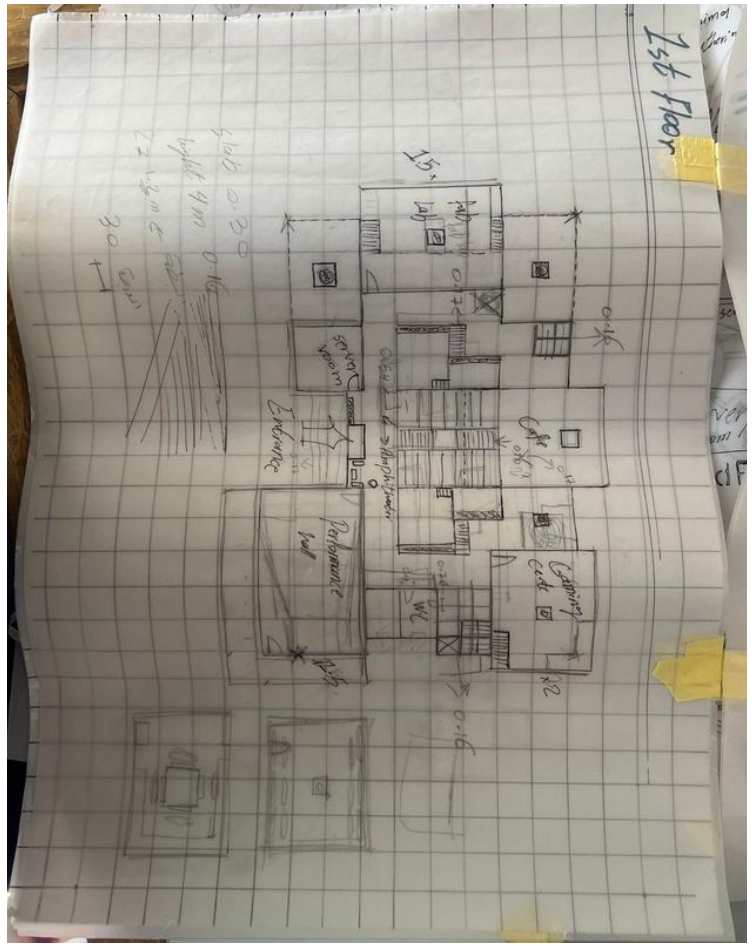


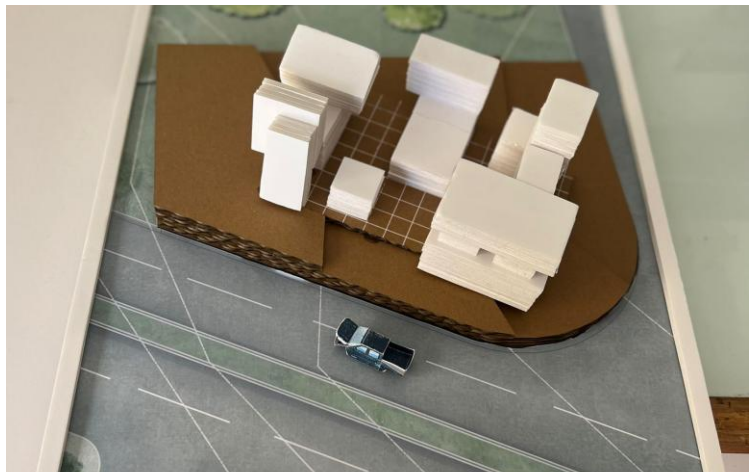

Surface SubD Solid Mesh Drafting Transform Tools Analyze Render Window Help
Viewport Layout
Perspective
Right
Millimeters
Grid Snap Ortho Planar Osnap SmartTrack Gumball (CPlane)

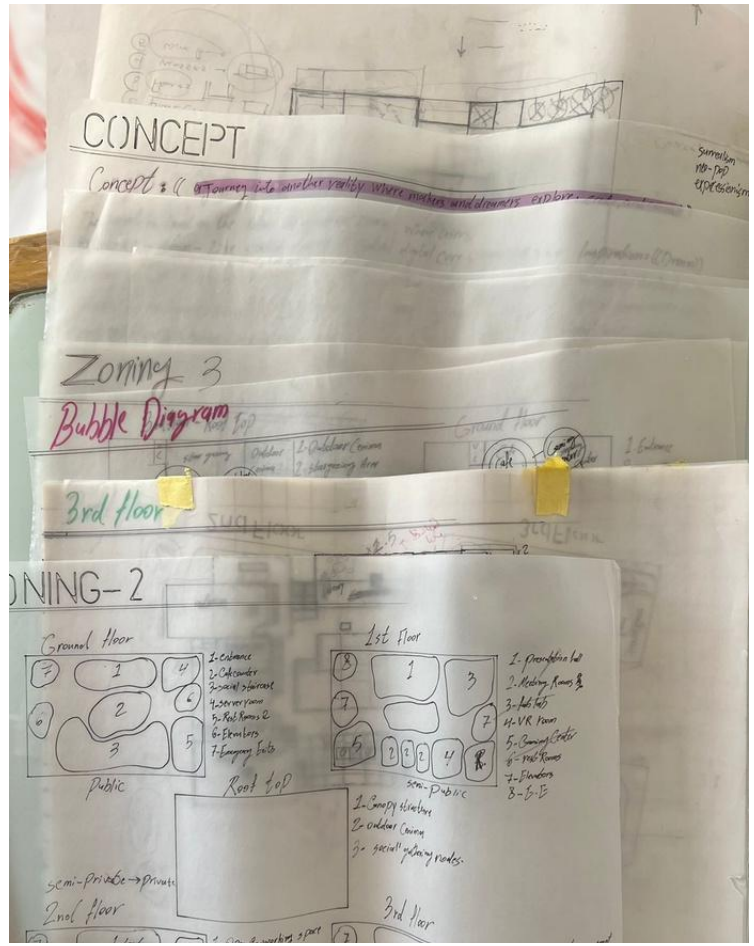

Share
d2 plans.dwg
View Manage Output Add-ins Collaborate Express Tools Featured Apps
Text Dimension Layer Properties Insert Detect and Convert Match Properties
Modify Annotation Layers Block Properties
WhatsApp Image 2026-06-06 at 12.20.36 (1)*
BLOCKS (1)*


July
October
Electric Consumption (kWh)
Gas Consumption (Btu)
Area Lighting
Task Lighting
Misc. Equipment
Exterior Usage
Pumps & Aux.
Ventilation Fans
Water Heating
Ht Pump Supp.
Space Heating
Refrigeration
Heat Rejection
Space Cooling




1st floor
Entrance
Performance Hall
Gaming Cafe
Cafe




CONCEPT
Zoning 3
Bubble Diagram
3rd floor
Ground Floor
1st Floor
Public
semi-Public
Root top
2nd floor
3rd Floor

مسار – A Journey Through Time, space, And Innovation (New Age Digital Hub)

Site Area : 2,998 m2 Buildable Area : 1,169 m2
Total Built Up Area : 3,600 m Setbacks : 5m,5m,5m,5m
Zoning : Resedential A – Special Regulations

Concept

MASAR is conceived as a layered architectural journey composed of three interconnected paths that shape the visitor's experience of the building.

The first path is the Experiential Path, inspired by the progressive stages of a dream. Through double-volume spaces, visual connections, and transitional zones, visitors move seamlessly through three experiential phases (V1, V2, and V3). The gradual transition between these phases creates a sense of immersion, where spatial boundaries become less defined and the experience unfolds continuously, much like a dream.

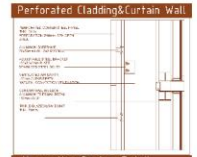
The second path is the Path of Time, which reflects the project's vision of observing change across a period of one hundred years. As visitors move through the building, they encounter different layers of time, allowing them to understand how the site, environment, and human interventions evolve across generations. This path transforms time from an abstract concept into a tangible architectural experience.

The third path is the Physical Accessibility Path, designed to ensure that the journey is accessible to all users regardless of physical ability. Ramps, elevators, tactile guidance systems, sensory considerations, and inclusive circulation routes are integrated into the architecture, allowing people with different abilities to experience the project equally. Rather than functioning as separate elements, these accessible routes are fully embedded within the architectural narrative. Together, these three paths—Experience, Time, and Accessibility—form the foundation of MASAR, creating a building that is immersive, inclusive, and continuously evolving.

Location
Street: Bahjat Al Talhouni Street
(شارع بهجت التلهوني)
Area: Dabouq, Amman, Jordan
Coordinates: 22.8'59"31"N,
55.7'49"35"E
Plot: 498
Road Classification:
Major collector road serving A residential district

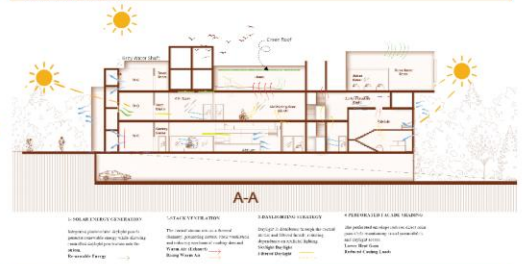
Wall Detail

Perforated Cladding&Curtain Wall

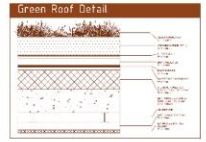


Harvesting System Detail

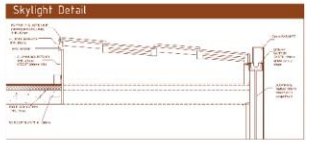
Environmental Section



Green Roof Detail



Skylight Detail



South Elevation

East Elevation

West Elevation

North Elevation

Site Plan

Floor Plans

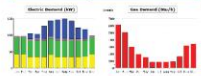
Building Lifecycle

Building Performance Assessment

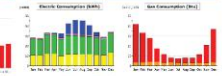
Parameter	Masar Design	ASHRAE / LEED	Assessment
Roof Insulation	R-42 Polyisocyanurate	ASHRAE 90.1 Climate Zone 4A = R-20 to R-30	Exceeds Standard
Ext Wall Insulation	R-21	ASHRAE 90.1 = R-13 to R-16	Exceeds Standard
Ceiling Insulation	R-30	ASHRAE Minimum = R-20	Exceeds Standard
Floor Insulation	R-12	ASHRAE Minimum = R-10	Exceeds Standard
Triple Low-E Glazing	South Façade	Façade High-Performance LEED Envelope	Meets/Exceeds
Double Low-E	North Fast/West	ASHRAE 90.1 Glazing Requirement	Meets
Window-to-Wall Ratio	29.1% Glass	ASHRAE Minimum 40%	Better
Boiler Efficiency	95%	ASHRAE Minimum = 80–85%	Exceeds Standard
Water Heater Energy Factor	0.95	High-Efficiency Benchmark >0.90	Exceeds Standard
Variable Speed Drive (VSD) Fans	Implemented	LEED Energy Optimization Strategy	Meets

100 Year Building Evolution

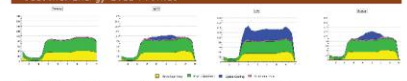
Annual Energy Demand Analysis



Annual Energy Consumption Analysis



Seasonal Energy Load Profiles



MASAR – Environmental Sustainability & Green Systems

Responding to Jordan's climate reality and the global environmental challenge, MASAR integrates eight passive and active green strategies – validated through environmental simulation – as a direct expression of community responsibility toward current and future generations.

Interior Shot

Exterior Shot

Sections

Accessible Design

Emergency & Safety

Each floor is equipped with essential safety and accessibility elements strategically located near staircases and circulation cores, including fire hose cabinets, first-aid kits, and evacuation chairs to ensure emergency preparedness and inclusive access throughout the building.

Smart System

WATCH ME !

RFID Kiosk System
- Cashless, staff-free entry for all users at any hour
- Scans RFID card or mobile app
- assigns space
- confirms accessible route
- Audio output for blind users + visual display for deaf users + tactile confirmation
- Automated billing – no human interaction required

App
- Real-time indoor navigation with audio guidance – for blind and low vision users.
- Live noise level mapping by zone – allows hypersensitive users to find safe spaces
- Space booking – accessible workstations, quiet zones, and meeting rooms reserved in advance.
- Silent vibration emergency alerts – for deaf and hypersensitive users.
- RFID card management – top up, balance, usage history
- Sign language video relay connection at kiosk

Name: Raneem Al-Wohoush
Student ID: 202320767

Superviser: Dr.Safa' Alkfouf
Sub: Architectural Design 2

MASAR Is Not a Design. It Is a Commitment. “I did not design a building that accepts people with disabilities. I designed a building where disability is not a limitation. I did not design a sustainable building. I designed a building that earns its place on this earth, decade by decade. I did not design a cultural landmark. I designed a path — for every human, at every age, in every condition.”