

Current situation

In Damascus

Harasta (northeast of Damascus) was severely damaged during the war that started in 2011.

School site is fully destroyed and not fit for renovation

Assad regime fell in 2024; rebuilding has begun, but security is still fragile.

Basic services limited: few hours of electricity, scarce clean water.

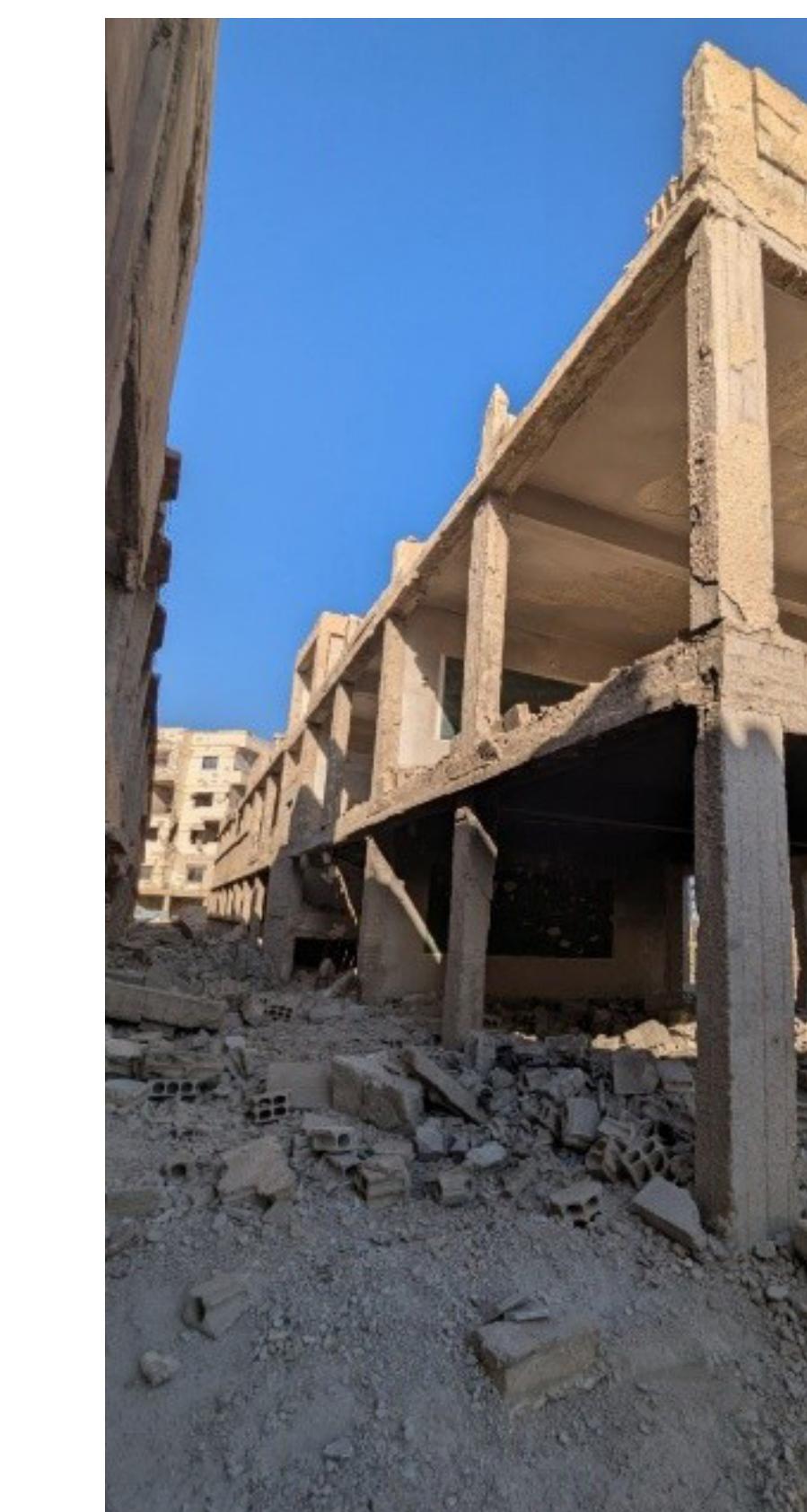
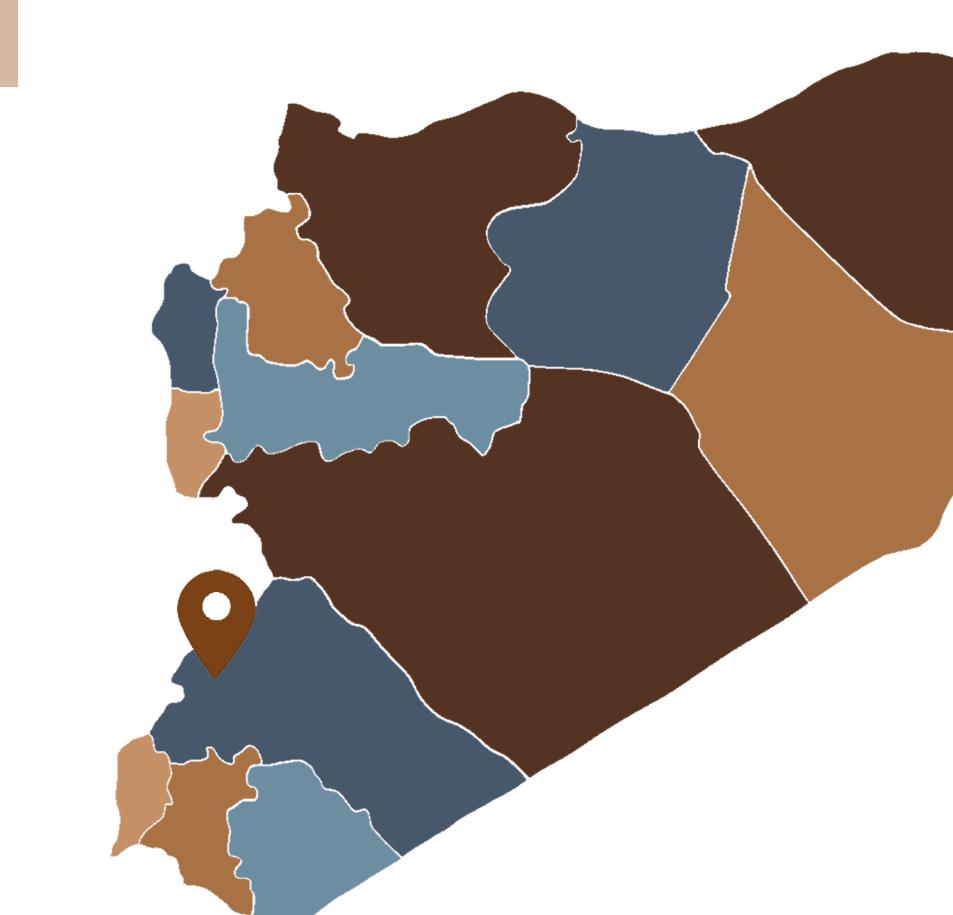
What is happening right now

Schools are rebuilt first, education is key to the future.

International aid supports reconstruction and learning.

Locals contribute, despite risks and limited resources.

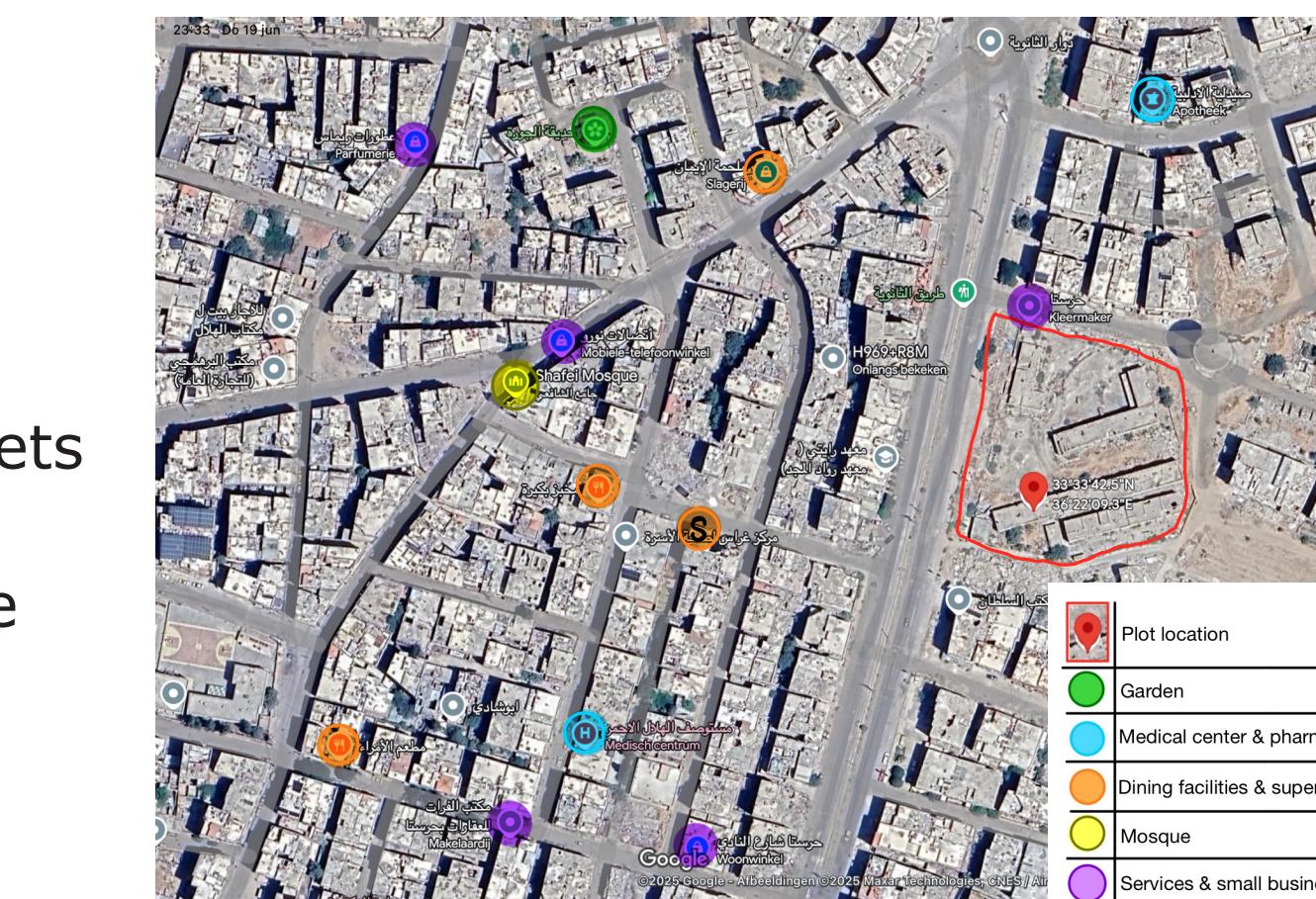
A new school can spark community, healing, and progress.



Location research



- Harasta is located on the eastern edge of Damascus, near the M5 highway.
- The 6,214 m² plot lies along a main road, easily accessible by car, bike, and public transport.
- Pre-war: well-connected; since 2018, access via M5 restored.
- Connectivity remains limited due to damaged roads, checkpoints, and irregular transport.
- Mobility issues slow down reconstruction and economic recovery.
- Flat terrain with remnants of a former school building (to be cleared).



Local Facilities

- Medical center & pharmacy
- Shafei Mosque
- Dining options and supermarkets
- Services & small businesses
- Open space & construction site

Architecture history

In Damascus

Timeline

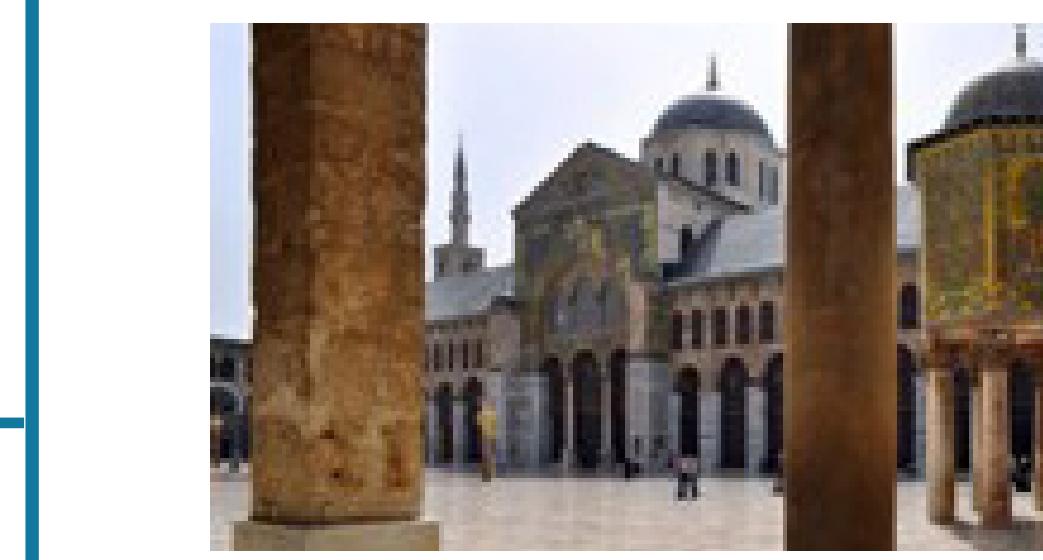
200-600



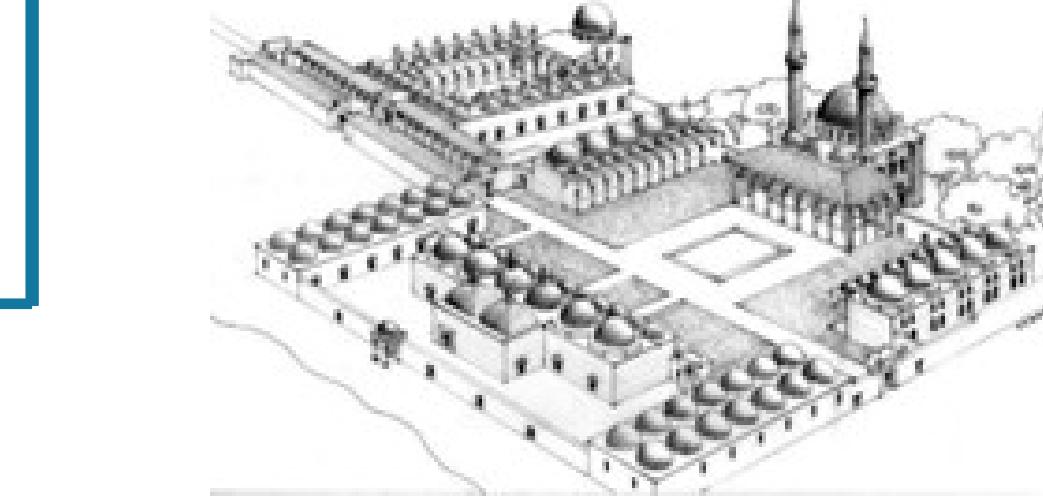
7e eeuw



661-750



1516-1918



Roman-Byzantine Influences

Features: Columns, arches, domes

Islamic Architecture

Features: Iwan, mashrabiya, muqarnas, Calligraphy and decorative details

Umayyad Architecture

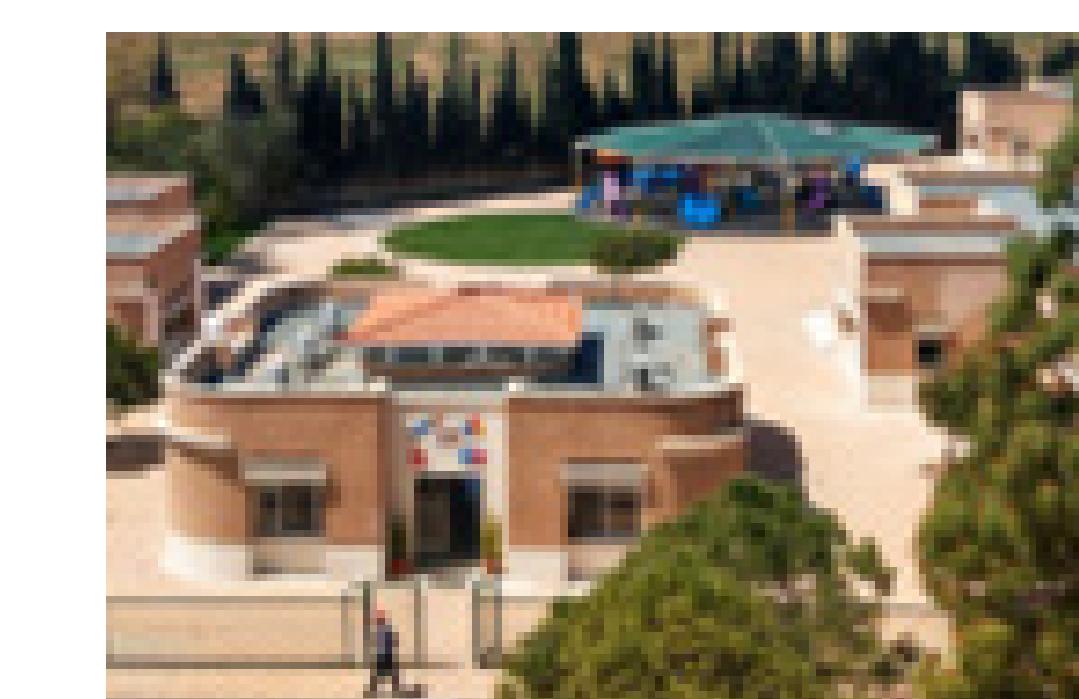
Features: Large courtyards, Geometric patterns and mosaics, Decorative elements as unifying features

Ottoman Architecture

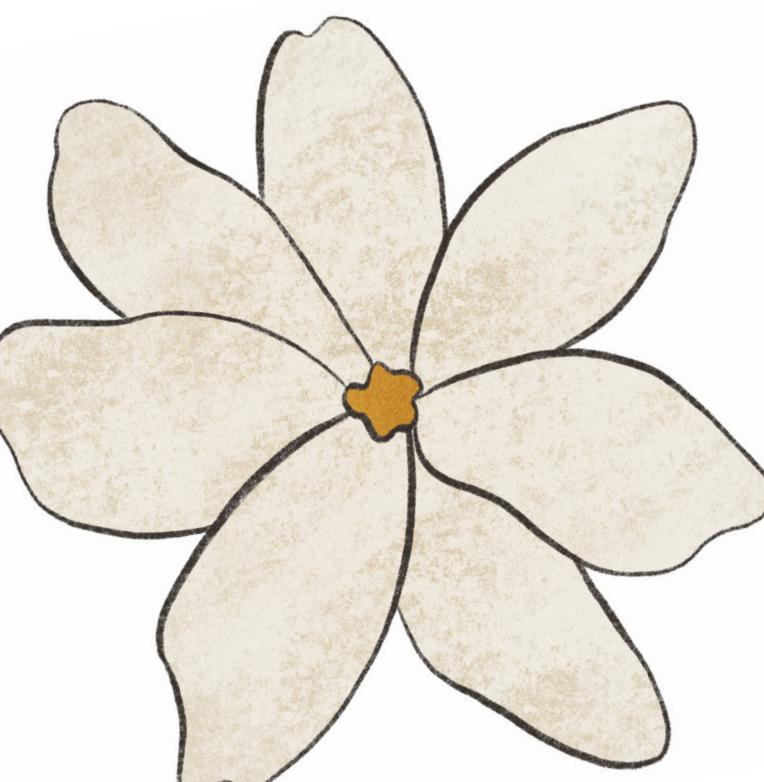
Features: Symmetry and courtyards, Fountains, Ablaq masonry (alternating light and dark stone)

Traditional Syrian Architecture

Features: Closed façades with open inner courtyards, Local materials: limestone and rubble stone



Schools in Syria



- Simple, minimal school buildings
- 2-3 stories, often multiple units
- Design should feel familiar
- Focus on safety and comfort

Historical and Cultural Research

History: From farming village to modern suburb connected to Damascus

Population: Predominantly Sunni Muslim

Culture: Syrian traditions, strong family ties, Islamic customs

Urban Life: Residential areas, markets, public services (pre-war)

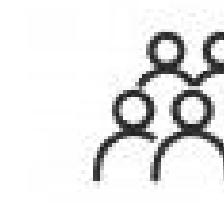
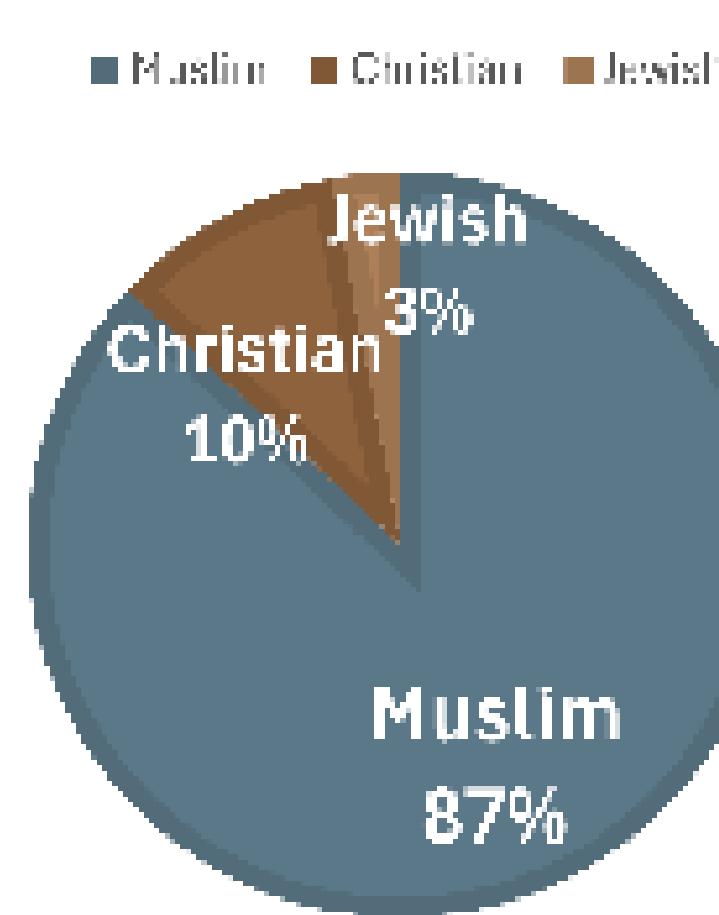
Arts & Traditions: Syrian music, Dabke dance, Islamic holidays, local crafts & cuisine

The Jasmine Flower (Yasmin)
Symbol of Damascus: Known as the "Flower of Damascus"

Cultural Meaning: Beauty, purity, hospitality
Emotional Symbol: Evokes memories of peace, home and daily life

Population survey

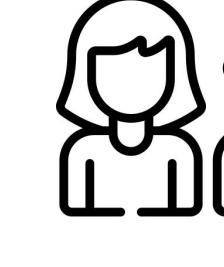
RELIGION DIVISION



Population
The total population of Syria is 23.9 million.

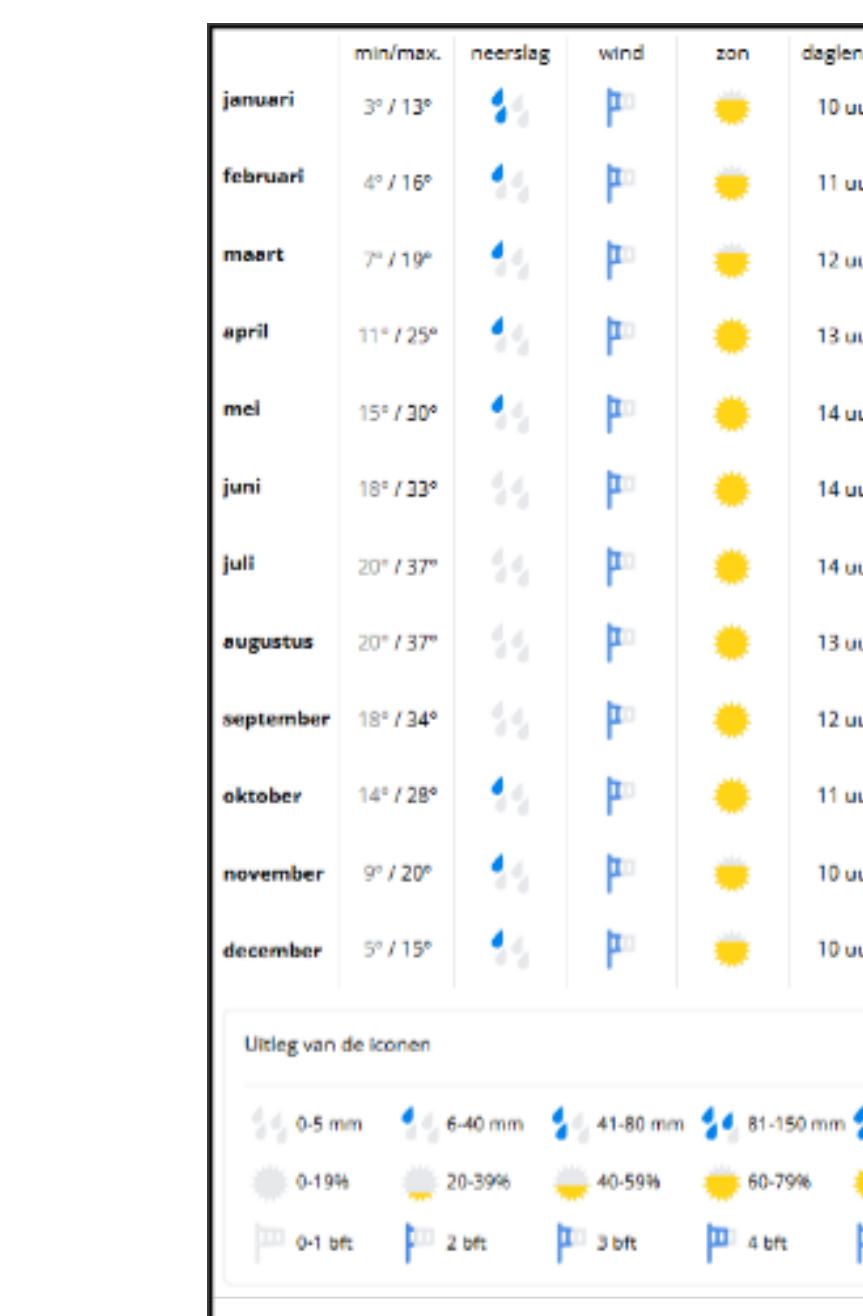


Inhabitants
Damascus has 1.85 million.

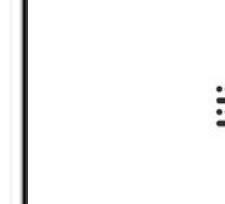


School
2.4 million children not attending school.

Climate



Climate: Mediterranean – mild, wet winters and hot, dry summers



Wind: Consistent year-round, ~3 Beaufort (12-19 km/h)



Precipitation: Mainly from November to April; summers are very dry



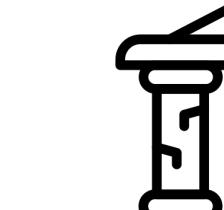
Sunshine: Abundant year-round; intense in summer



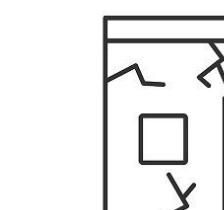
Temperatures:

- Winter: ~13 °C (day), ~3 °C (night)
- Summer: up to 37 °C (day), ~20 °C (night)

MEN AND WOMEN AGE DIVISION



Damage
8,000 schools in Syria have been damaged.



Extreme poverty
Poverty in Syria is expected to rise from 33.1% in 2024 to 37.4% in 2025.

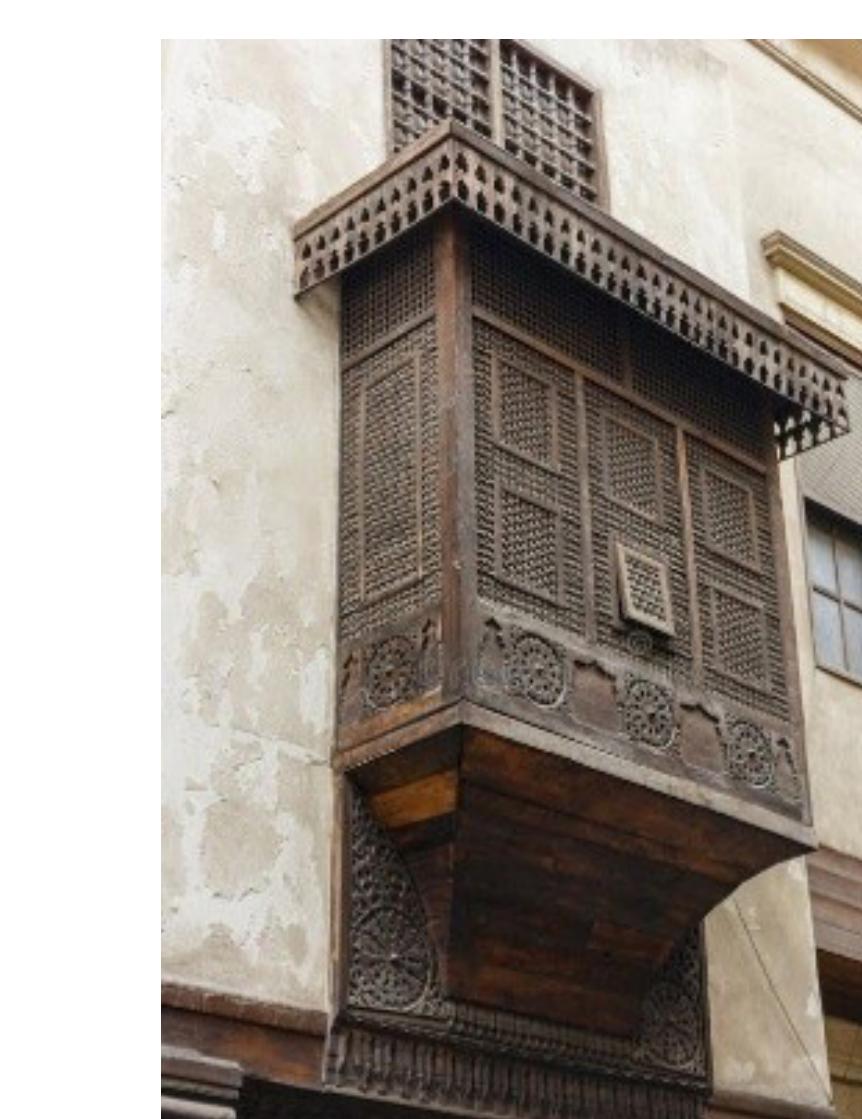
Functions:

Air Circulation
Sun Protection
Privacy



Mashrabiya

Traditional Syrian architectural element, a projecting balcony with wooden latticework



Program of Requirements

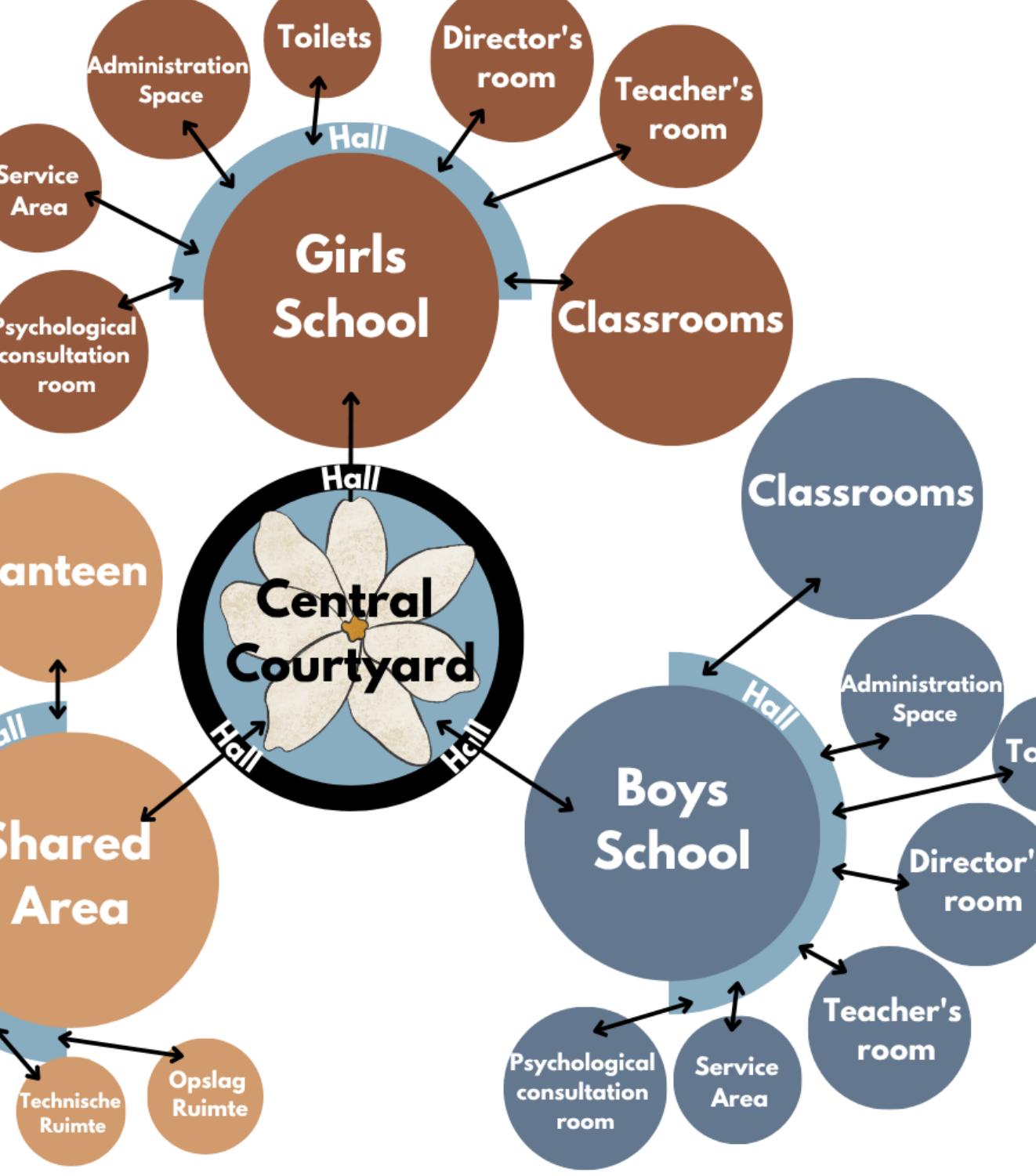
Quantitative Program of Requirements

<u>School Facilities:</u>		
Classrooms:	48 units	32 m ² each
Teacher rooms:	2 units	32 m ² each
Principal's office:	1 unit	20 m ²
Administration offices:	2 units	15 m ² each
Psychologist's room:	1 unit	9 m ²
Service room:	1 unit	20 m ²
Toilets:	on each floor, variable in size	
Indoor and outdoor terraces:	quantity and size variable	
<u>Shared/Common Areas:</u>		
Laboratories:	2 units	60 m ² each
Central library:	1 unit	120 m ²
Multipurpose hall:	1 unit	150 m ²
Prayer room:	1 unit	30 m ²
Canteen:	1 unit	variable in size
Storage room:	1 unit	variable in size
Technical rooms:	1 unit	variable in size
Toilets:	on each floor, variable in size	
Playgrounds:	variable in size	

Qualitative Program of Requirements

- Designing a safe and child-friendly school environment.
- The school will educate 1,440 students per day in two shifts.
- Include the trauma of the children in the school schedule.
- Giving space for out-of-school activities.
- Classrooms will be for 25 to 35 students each, giving flexibility and comfort.
- The building has cross-ventilation to improve airflow
- Staircases at the end of each classroom wing and the beginning.
- The prayer room will be Faced to Mekka
- The laboratory will be faced to the North for the best lighting.
- Include the Jasmin flower in the design for recognition with Syria
- Making a central garden for the children to get together.

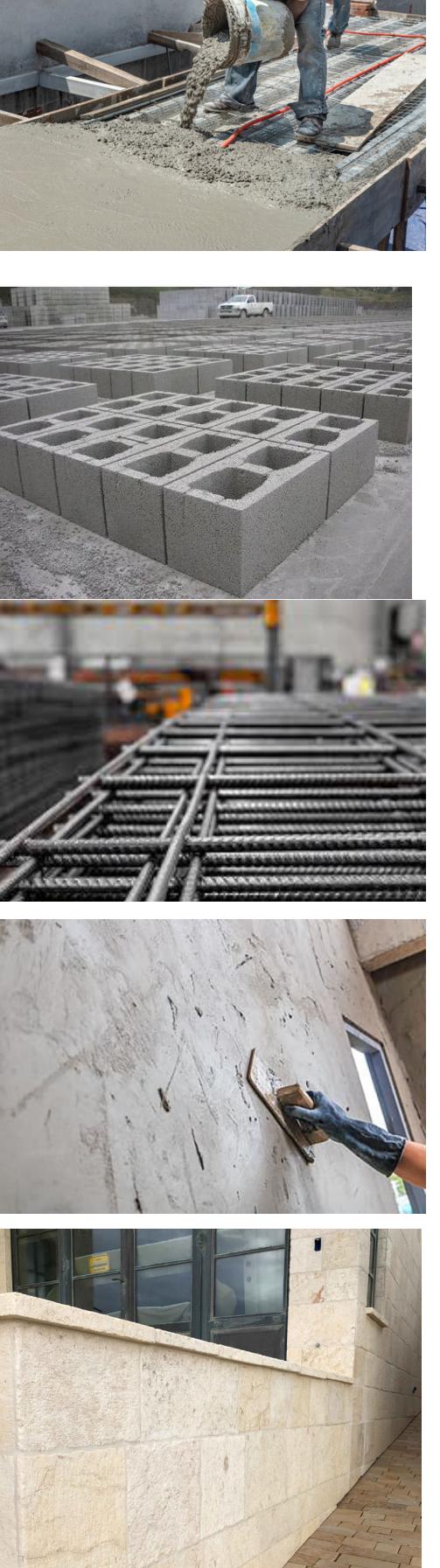
Conceptual site plan



Materials

Materials Used for Construction

- Concrete (cast in place)
- Aerated concrete block
- Steel reinforcement bars



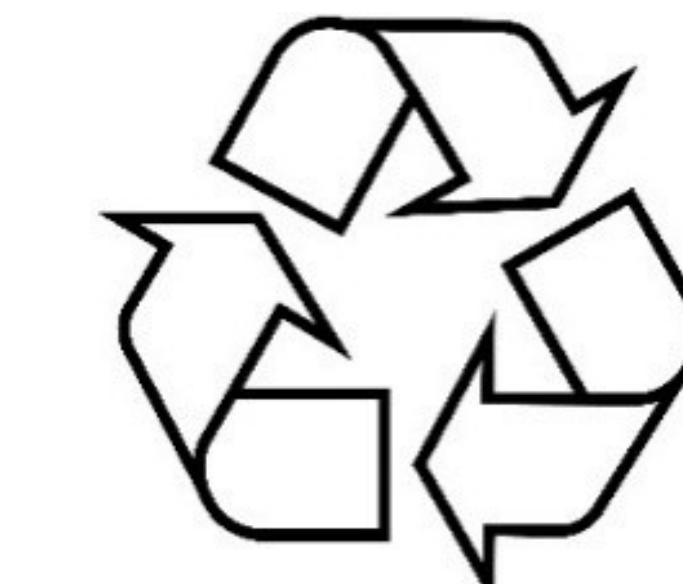
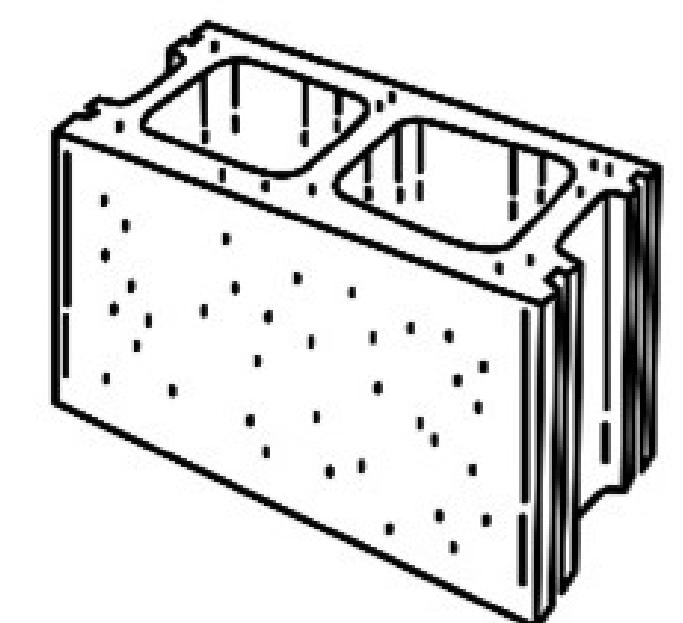
Materials used for finishing

- Lime plaster, inside
- Limestone, outside

Construction method

Masonry with aerated concrete blocks

- Easy to build with local labor
- Affordable, available materials

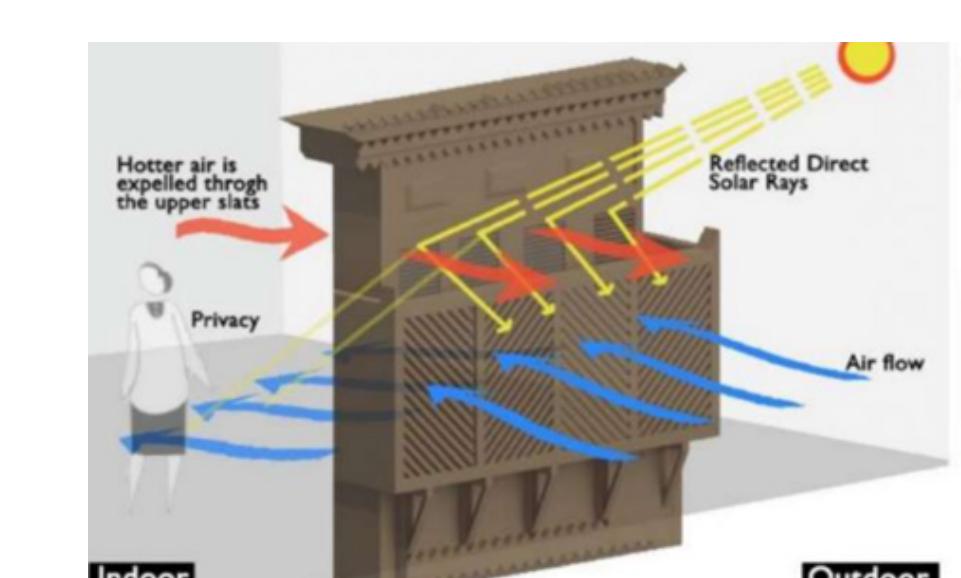


Old rubble used for non-load-bearing walls and foundations

- Cuts waste and costs
- Gives materials a second life

Installations

Cooling Mashrabiya



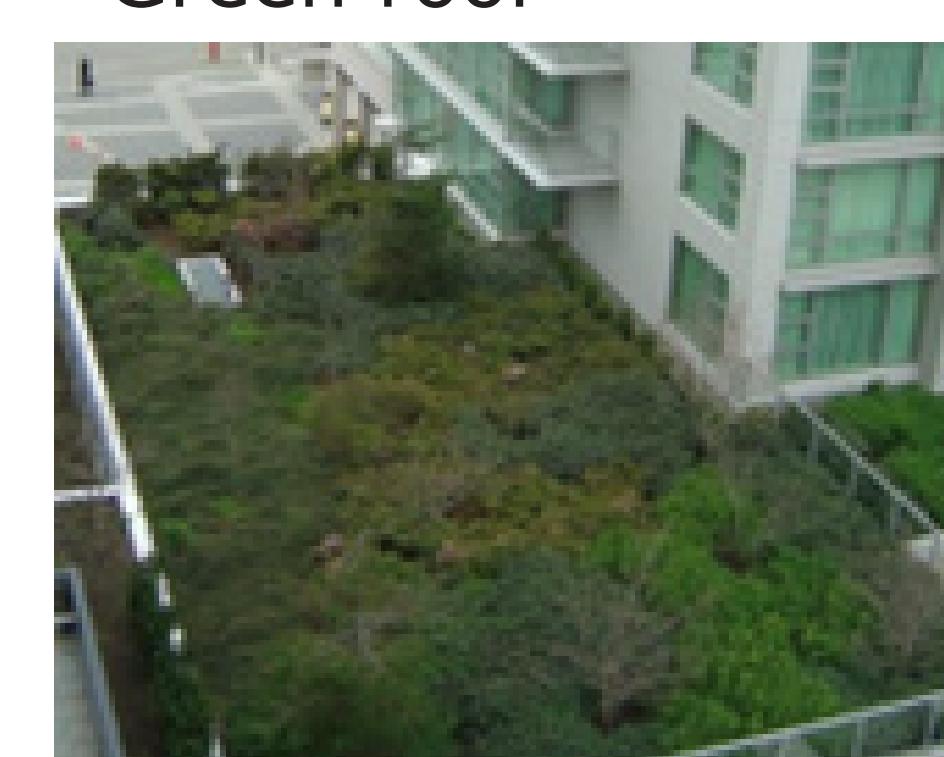
Solar panels



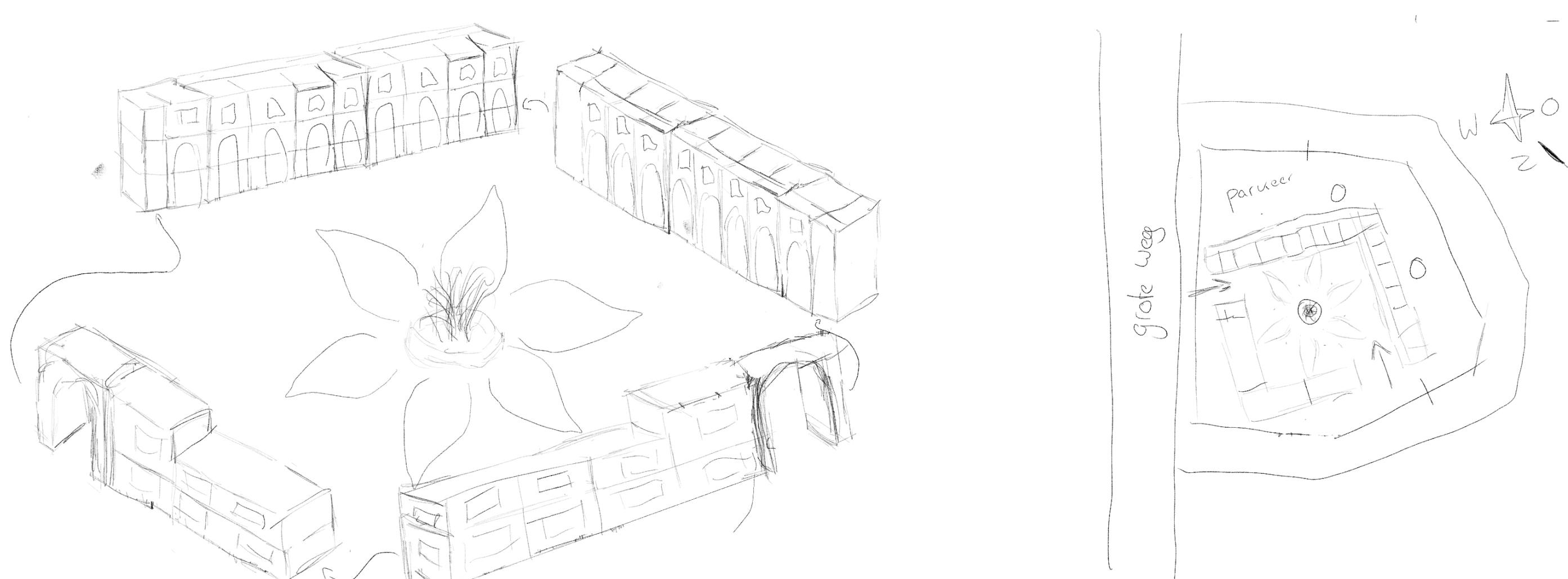
Water tank



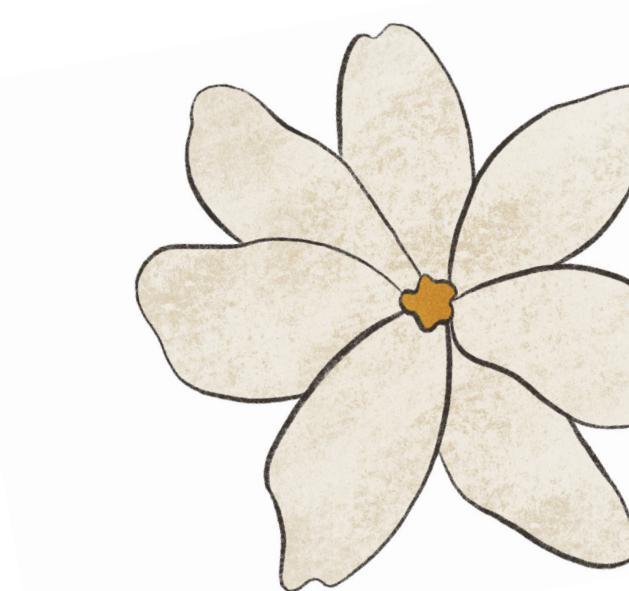
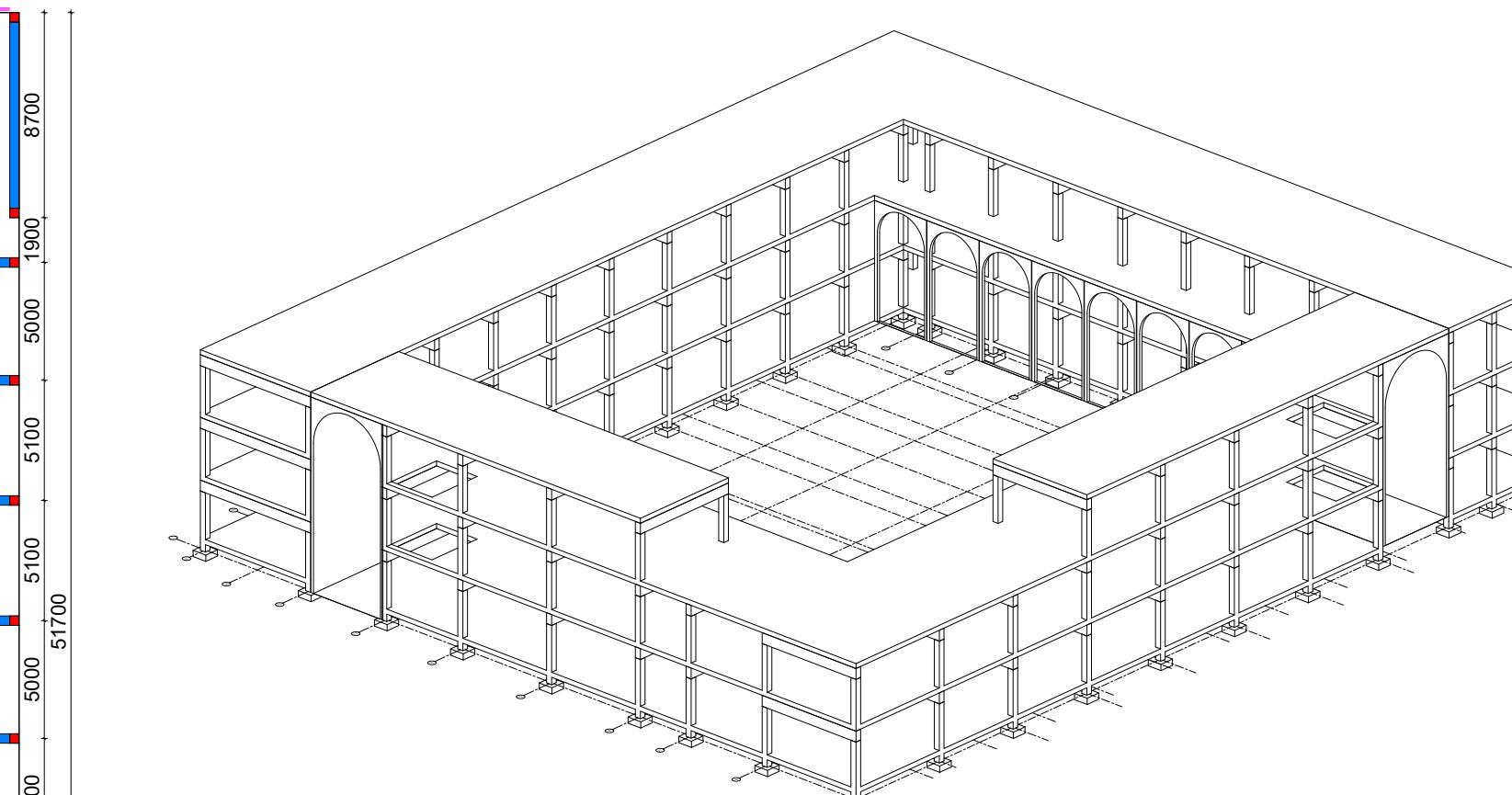
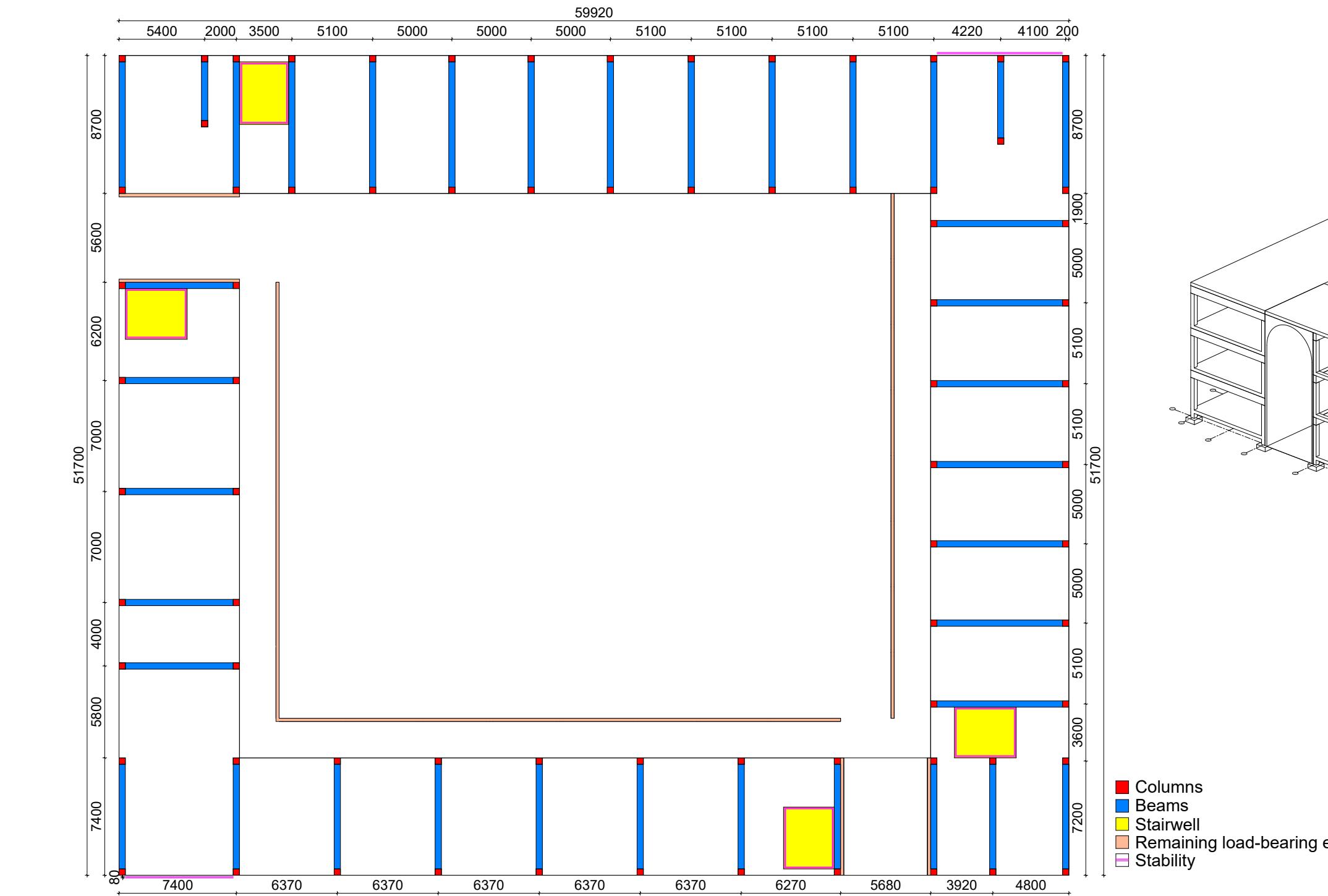
Green roof



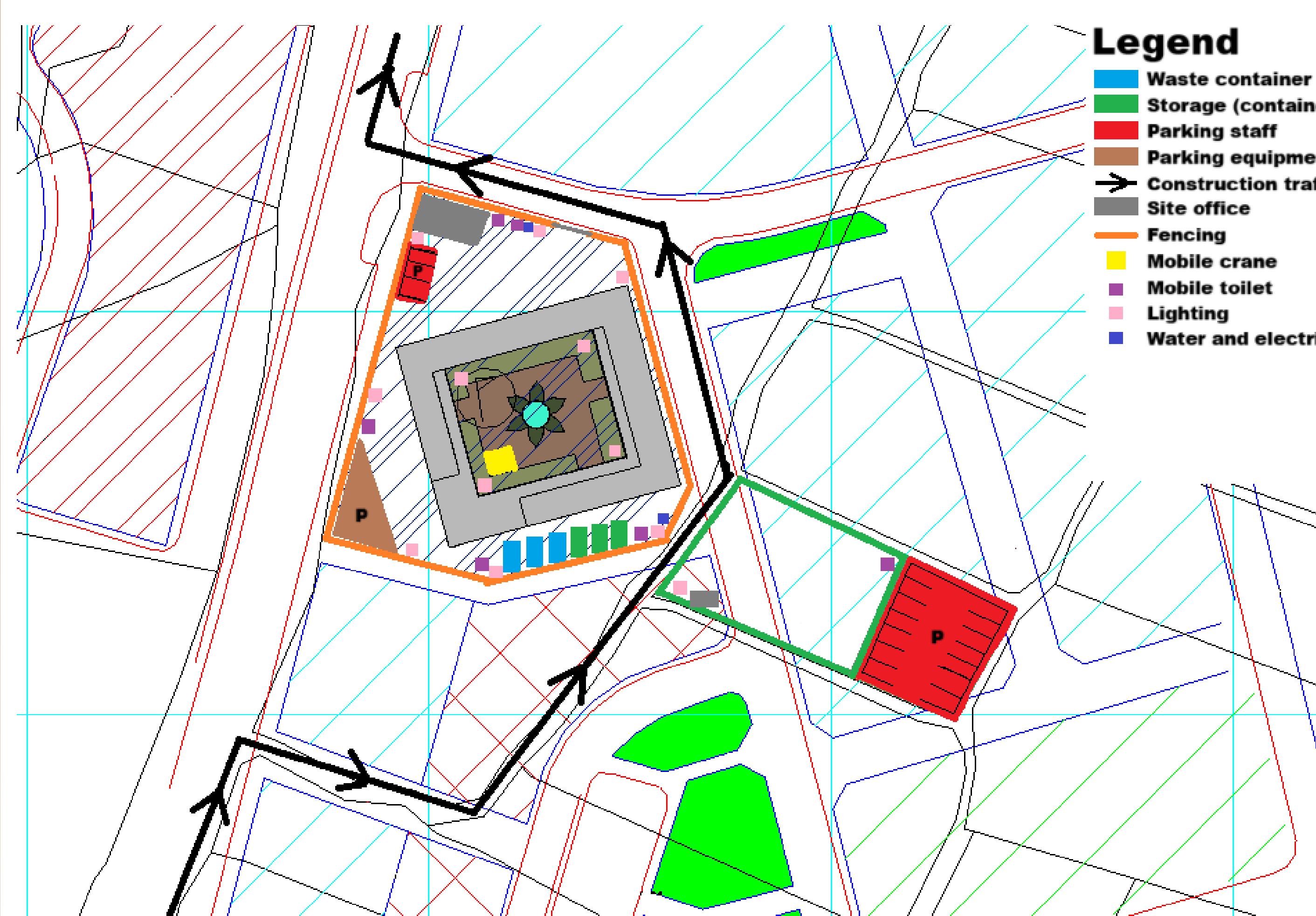
Concept sketches



Construction



Construction site



Planning and phasing

		Project in Syrie Schoolgebouw												
		Oktober	November	December	Januari	Februari	Maart	April	Mei					
Voorbereiding		43	44	45	46	47	48	49	50	51	52	1	2	3
Sloopwerkzaamheden		26	27	3	10	17	24	1	6	16	22	25	8	12
Fundatiewerkzaamheden														
Ruwbouwwerkzaamheden														
Gevelwerkzaamheden en dakwerkzaamheden														
Afbouwwerkzaamheden														
Buiterruimte en tuin														
Oplevering														

- Rough construction split into phases per building section
- Parallel work
- Less focus on insulation, unlike in the Netherlands
- More available manpower working at lower cost
- Faster and more efficient (total ~32 weeks)



ISMAIL AL-RAYES CHILDREN SCHOOL

HARASTA, DAMASCUS



Elevations



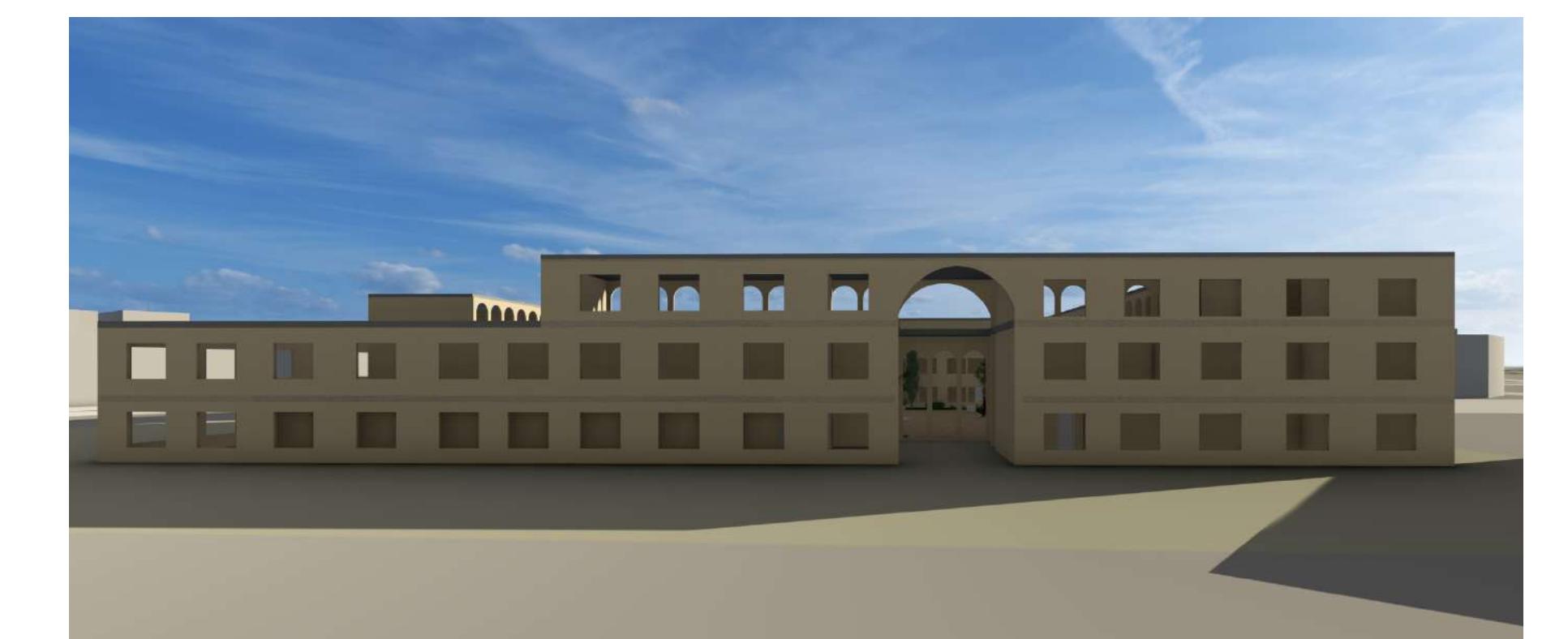
North facade



East facade

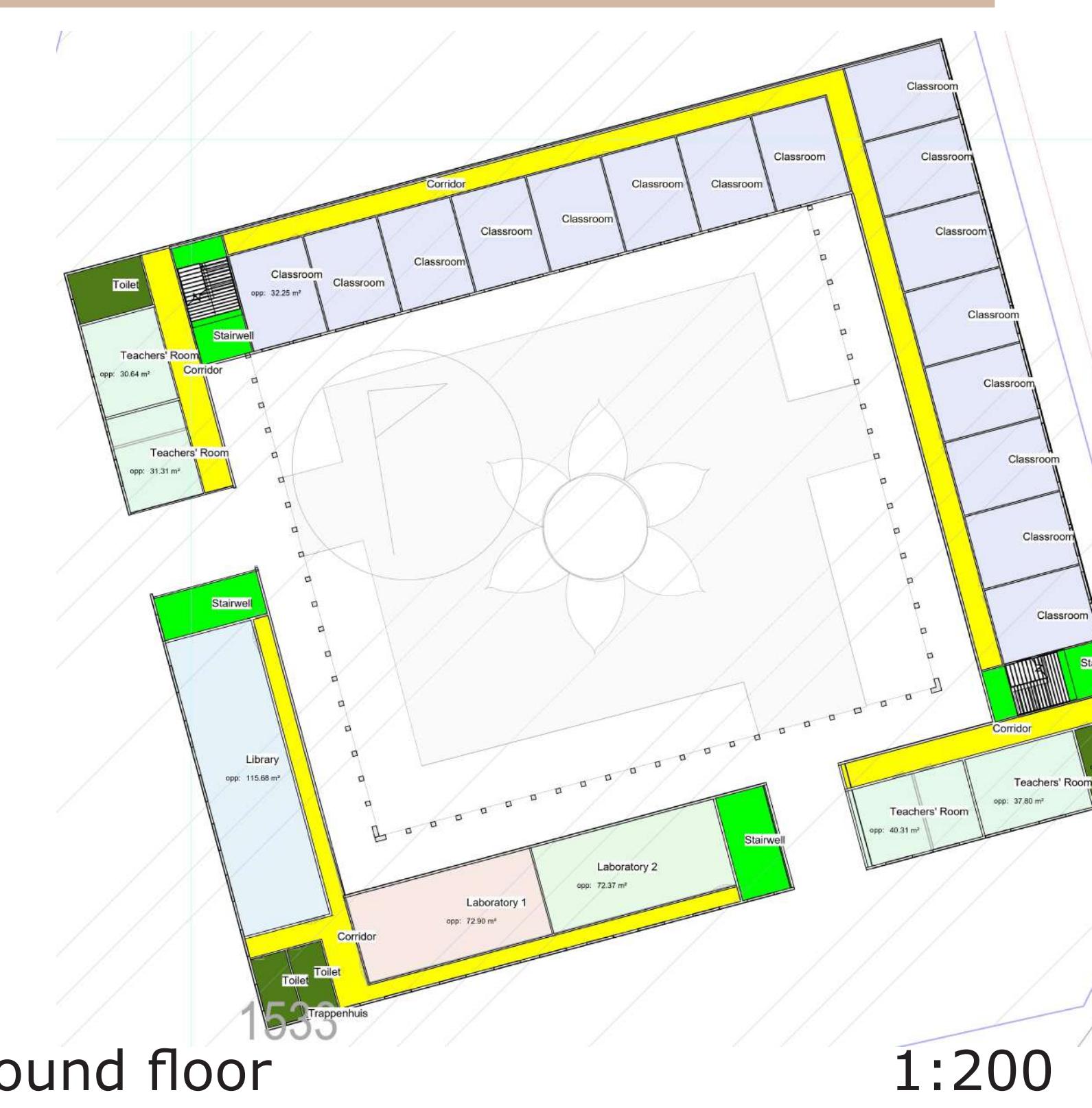


West facade

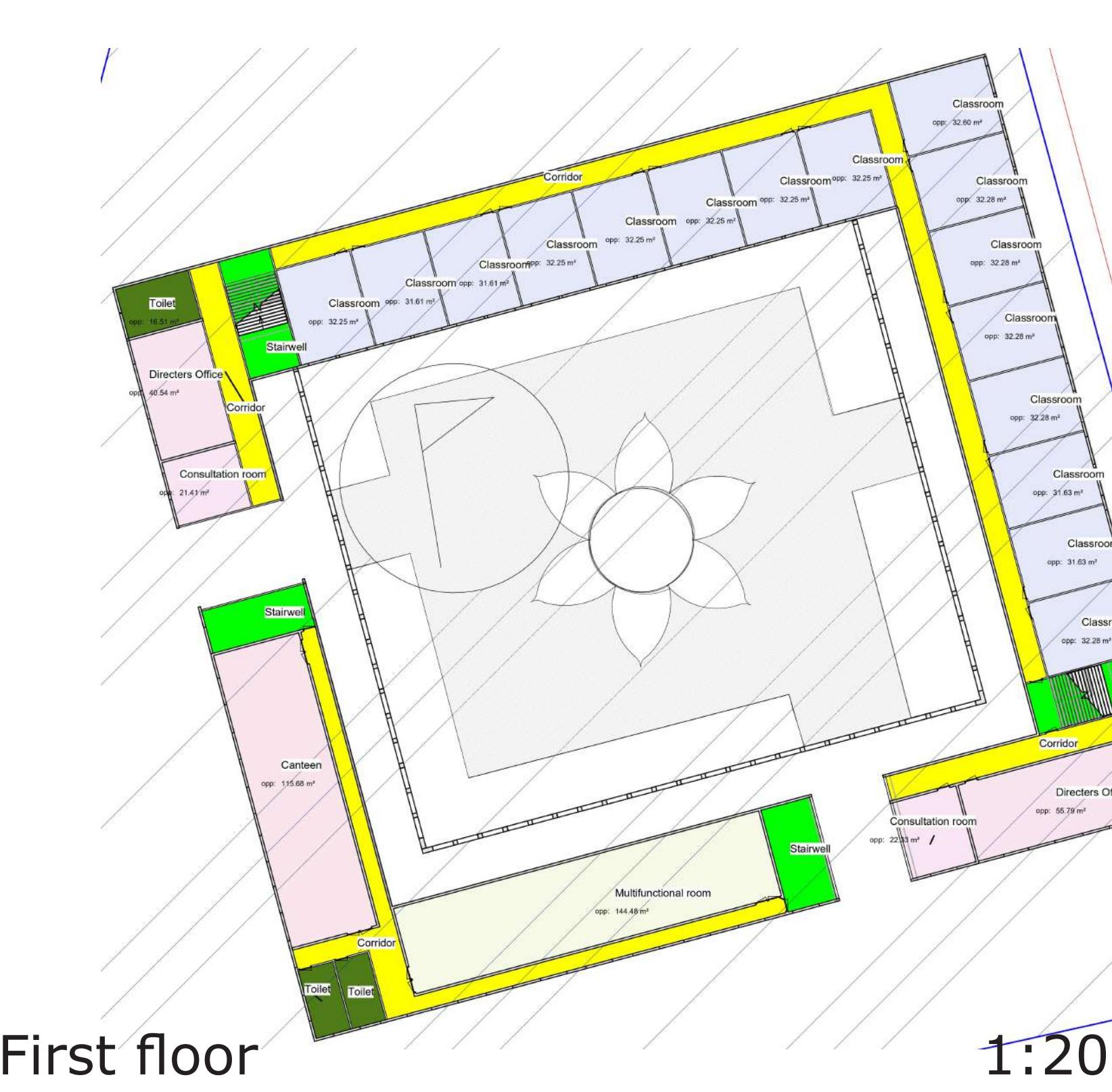


South facade

Floor plans



Ground floor

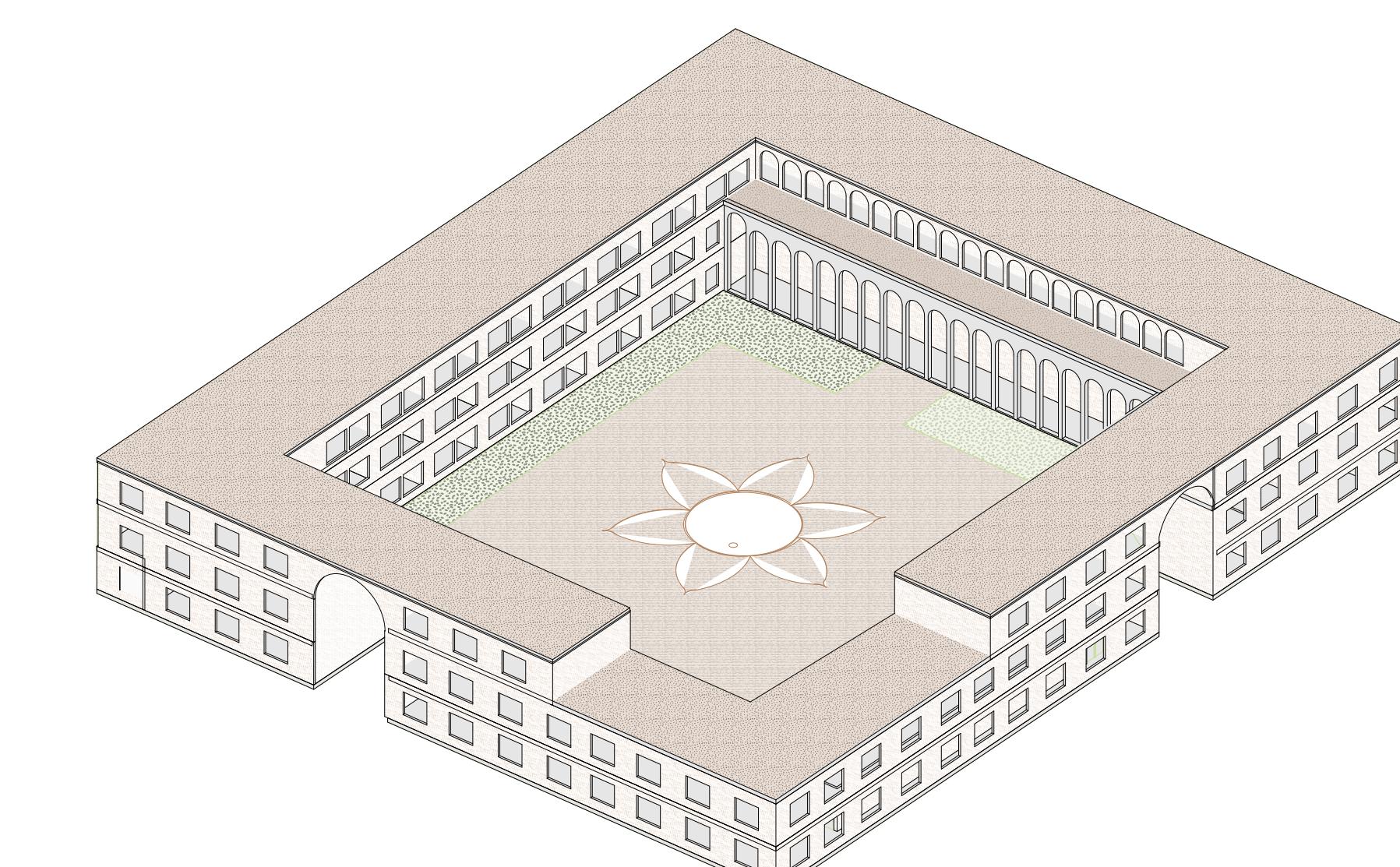


First floor

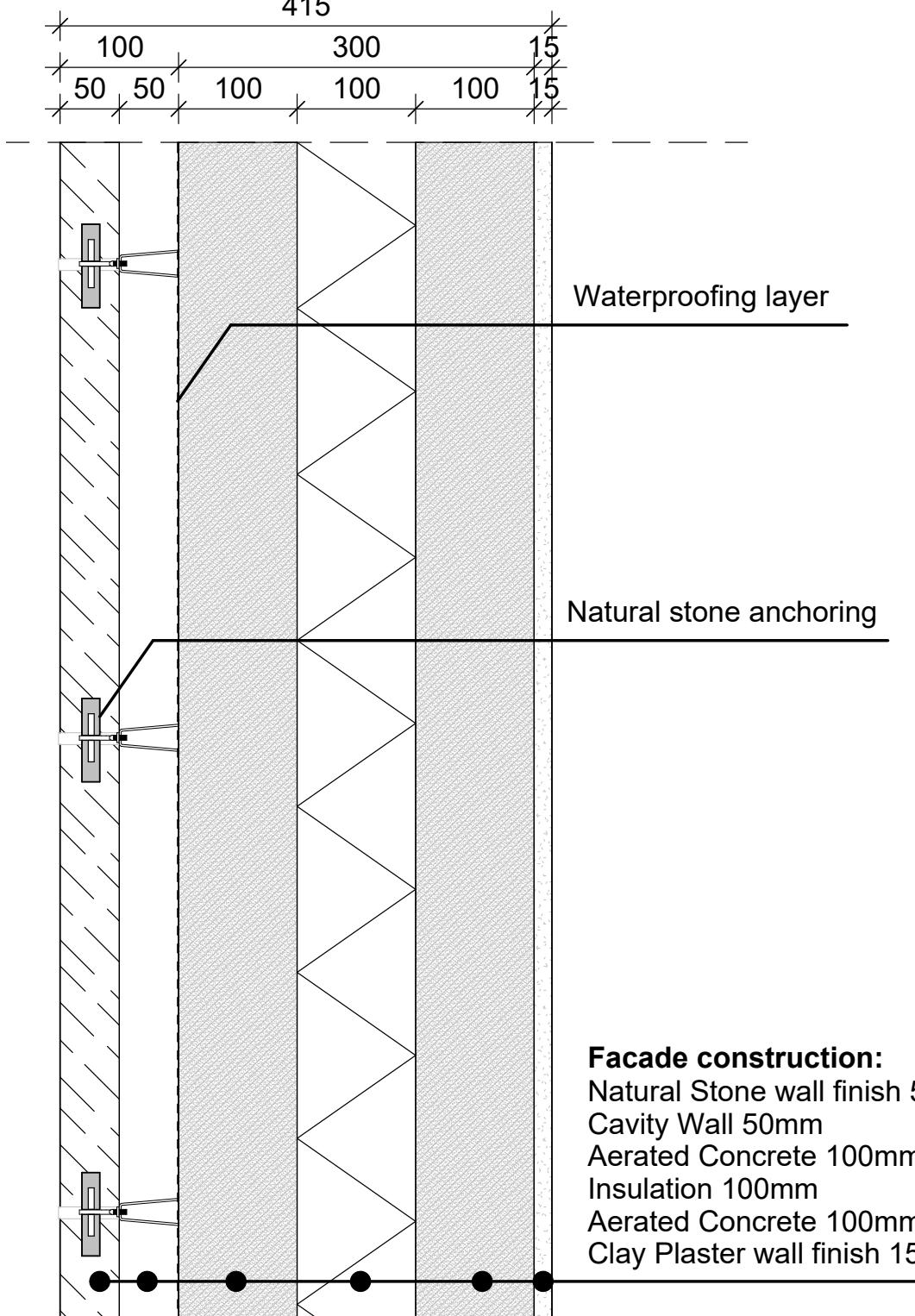


Second floor

Isometric drawing

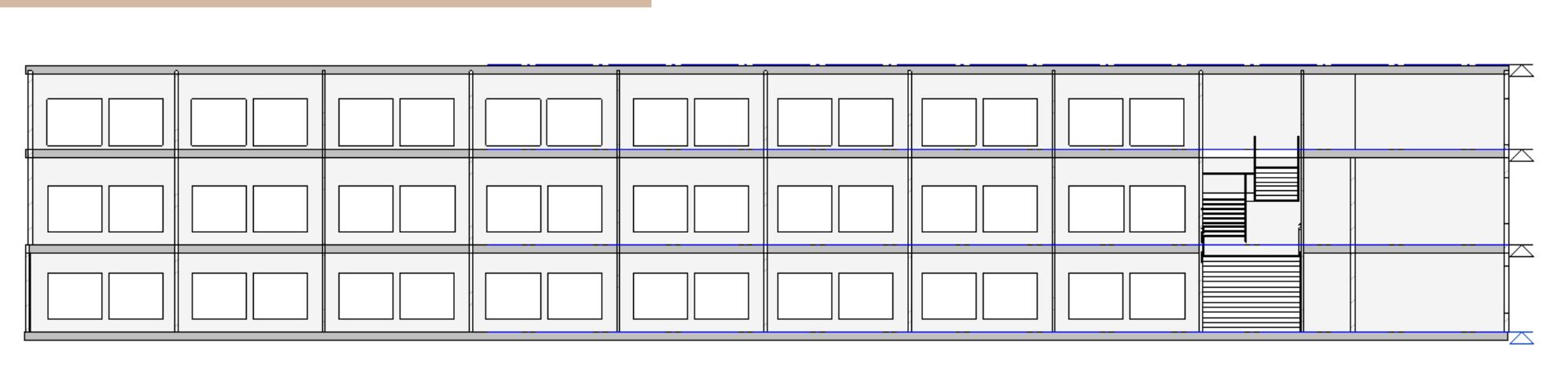


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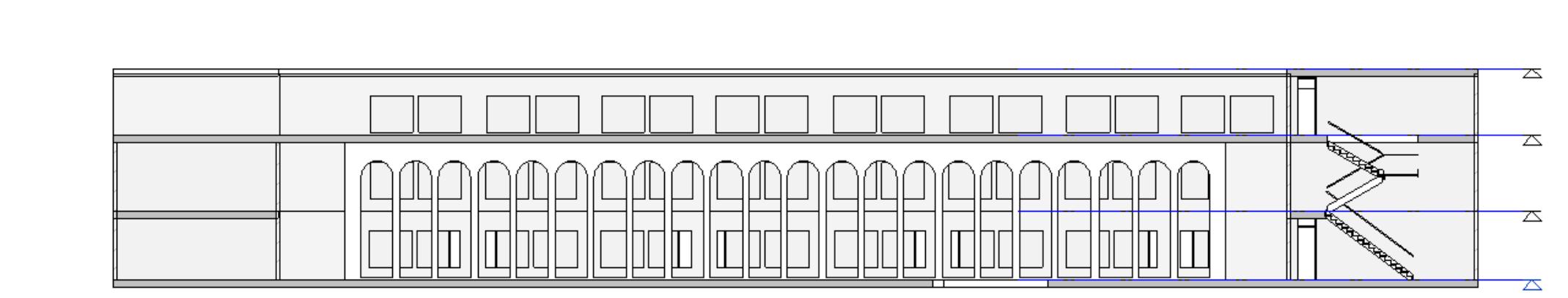


1:10

Sections



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