Baugruppe K-01

Self-build community that became
its own developer.

Design Statement
August 2024

AB965 Design Studies
Year 5
Semester II
Konrad Kolodziej

Content:

1.0 Introduction

Manifesto

Self-Made City

BAUGRUPPE

R50

Frizz23

1.1 Manifesto

Design Studies 5A highlights the problem of poor-quality housing through the stories of selected families. The history of Glasgow also reveals the rush to erect housing in response to the growing demand for living spaces for workers in the past.

Many housing developments are profit-oriented and focus on short-term gains, resulting in a high quantity of poorly built houses. This approach forces each family to fit within standardized spaces, with little regard for their individual needs.

We are all different—we do different things, have different tastes, expectations, and behaviors, and we perceive and use spaces differently. The author chose to move away from the „standard" budget and profit-oriented approach in favor of addressing the individual needs of future homeowners.

To ensure independence from negative factors that could influence this housing development, future tenants decided to adopt an innovative approach by forming a BAUGRUPPE (building group), allowing them to take on the role of needs-oriented self-developers and funders.

1.2 Self Made City - Inspiration

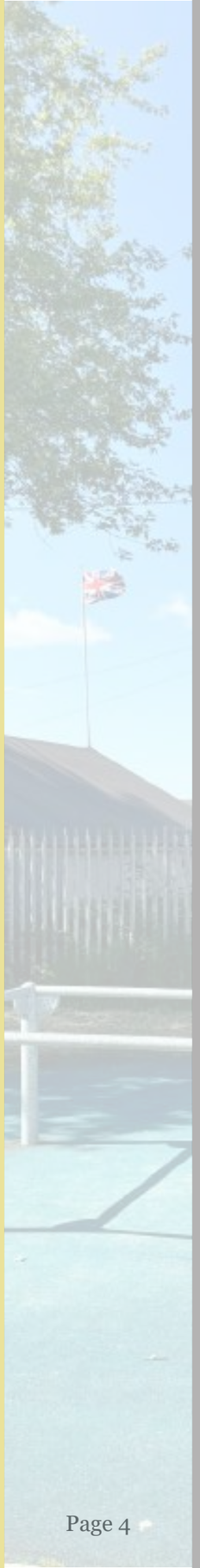
The book analyses over 100 different buildings initiated by community groups or by professionals, such as architects, for community groups.

Aspects of BAUGRUPPE:
- Developed and planned collaboratively by future residents
- Custom-fitted to meet particular needs
- Maintains good communication with the neighbourhood
- Prioritises sustainability (ecological, financial, social)
- Return on investment is not the primary focus

This needs-based approach to urban development. driven by different communities, also presents an alternative or counter-model to profit-oriented developments. [1]

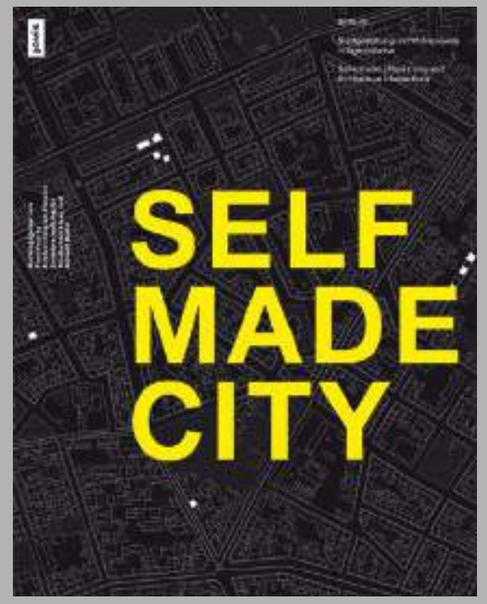
1.3 „A Building Site" for Fraud and Corruption

The UK construction sector is described as „a building site" for fraud and corruption, according to an article from the University of Portsmouth. Research from the university reveals how fraud and corruption in the construction sector is destroying profitability and public trust in infrastructure projects. The report identifies several factors that make the sector particularly vulnerable to these issues:
Project management - **Inadequate supervision**
Difficult to scrutinise - **Quality of work can be concealed**
Construction culture - Higher prevalence of **corruption, bribes, and cartel behaviour** compared to other sectors
Complex supply chains - **Numerous players** and moving parts
Large costs - Opportunities to obscure **fraud** and **waste**
Bid structuring - Awarding contracts to **the lowest bidder** can lead to profit being sought elsewhere [2]



„The innovative energy of co-housing projects is reflected in the quality of their architecture and in how groups take on an important role within their urban quarters, while also being dedicated to ecological building"

Prof. Kristien Ring - Principal of AA Projects, Assistant Professor at the University of South Florida, author and editor of „SELF MADE CITY"



„Construction has become a building site for fraud and corruption. Without solid foundations being put in place to counter this threat, taxpayer money risks being wasted and public trust in government spending will crumble"

Jim Gee, Head of Forensic and Counter Fraud Services at Crowe

„Our research shows that the procurement of major construction projects is fraught with fraud and corruption risks."

Professor Mark Button, Director of the Centre for Cybercrime and Economic Crime

„At a time when the UK government is investing heavily in infrastructure projects, the risk of public funds being misused is high."

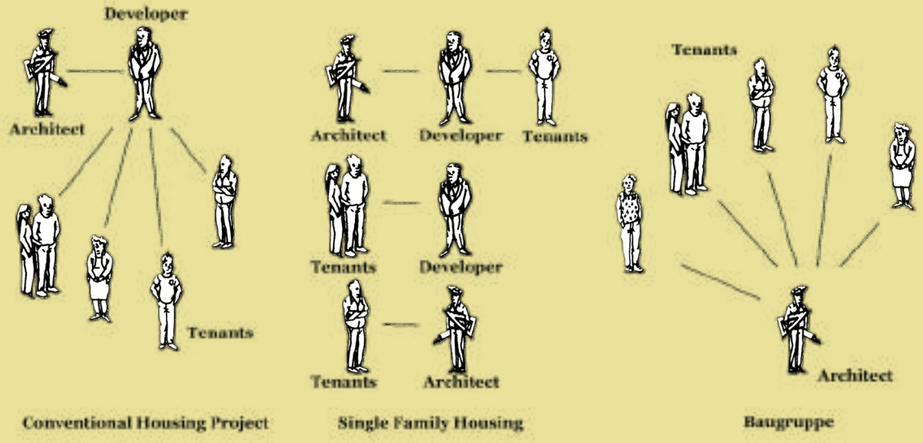
Jim Gee, Head of Forensic and Counter Fraud Services at Crowe

If something what is meant to work doesn't work through decades despite money invested, then we may be sure that somebody doesn't want it to work or is making money out of it.

1.4 What is a Baugruppe?

The term „BAUGRUPPEN” in German means „building groups”.

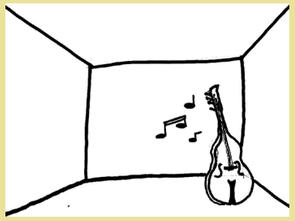
A BAUGRUPPE is a group of people who pool their financial resources and personal efforts to construct a building that accommodates all its members. The division of property, duties, and costs is determined by an agreement prepared by their lawyer.



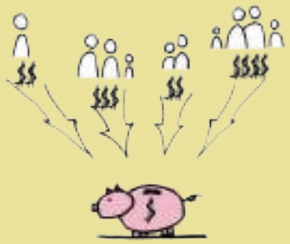
Different models of housing developments
*Based on Baugruppe Guide [3]

Joining **BAUGRUPPE** can often help reduce construction costs or provide opportunities for individuals to share their dream spaces. For example, tenants connected by a passion for music can have a shared rehearsal room, making the space more affordable for everyone involved.

BAUGRUPPE
starts from common thought



Shared rooms may be used more often by a larger group of people which can positively impact the affordability of the specific spaces, e.g. a music studio or a rehearsal room



Shared finances create better possibilities

1.5 Scale of BAUGRUPPE

Different **BAUGRUPPEN** operate on various scales, with the smallest accommodating three or four households, and the largest shared by up to 200 homeowners. These shared buildings offer opportunities previously reserved for those who could afford them, such as prime locations, high quality, unique personalised features, and an individual design approach.

To illustrate the range of different scales, here are some examples of recent housing developments in Germany.

StadtGrün Berlin Köpenick
[4]

Location: **Köpenick**
Stage: **Planning**
Tenancy: **4**

Baugruppe Max 31
[5]

Location: **Weißensee**
Stage: **Planning**
Tenancy: **11**

Baugemeinschaft Resi134
[6]

Location: **Reinickendorf**
Stage: **Planning**
Tenancy: **26**

Lichtenrader Revier
[7]

Location: **Tempelhof**
Stage: **Construction**
Tenancy: **200**

1.6 R50 Baugruppen - Radical Cohousing Project

Details
Architects: **Heide & von Beckerath, ifau und Jesko Fezer**
Area: **2037 m²**
Year: **2013**
Households: **19**
Photographs: **Andrew Alberts**
Architect In Charge: **Verena von Beckerath, Jesko Fezer, Tim Heide, Christoph Heinemann, Susanne Heiss, Christoph Schmidt**
Building Owner: **Ritterstraße 50 GbR**
City: **Berlin**
Country: **Germany**

The architect-led, collectively funded R50 Baugruppen project in Berlin as a new model for housing.

The project demonstrates how people can act as developers of their own homes. It was created to respond to complex issues in the city, one of them was an overall deficit of 10.000 housing units in Berlin. [8,9]

Members of R50 Baugruppen using public street space and balcony as socialising area

R50 Baugruppen Building

Jesko Frazer - one of the building's architects watering plants in his apartment

1.7 Frizz23

Details
Architects: **Deadline**
Area: **9324 m²**
Year: **2018**
Minilofts short-stay appartments: **14**
Apartments: **3**
Live/Work units: **4**
Workspaces: **46**
Photographs: **Jan Bitter, Ana Santl**
Lead Architects: **Britta Jürgens, Matthew Griffin**
City: **Berlin**
Country: **Germany**

The building is presenting how successful it can be when the lead role is taken by citizens and local actors.

The building group consisted of 42 members who wanted a space suitable for non-profit education provider - FORUM Berufsbildung, a small guest house, a large variety of artists, musicians, authors, illustrators, editorial staff, agents, bicycle repair workshops, up-cycling studios and a collective gallery.

The building is a great example of how many different people of different proffesions can unite with each other to create and develop their individual spaces together. [10,11]

„Frizz23 is an attempt to counteract the impending gentrification of this area and project an image of another Berlin."

„The innovative energy of co-housing projects is reflected in the quality of their architecture and in how groups take on an important role within their urban quarters, while also being dedicated to ecological building"

Frizz23 Building

Long-section

Partial Elevation corresponding to the above building section

Minimalist interior with visible concrete columns that allows for maximum flexibility

2.0 Context

Site

Location

History

Saracen Foundry

Demographics

Future Household Profile

2.1 Possilpark Location

Possilpark is a district in the city of Glasgow, located north of the River Clyde and centered around Saracen Street. The map highlights the location of Saracen Street within the Possilpark district.

Possilpark Location

2.2 Possil House

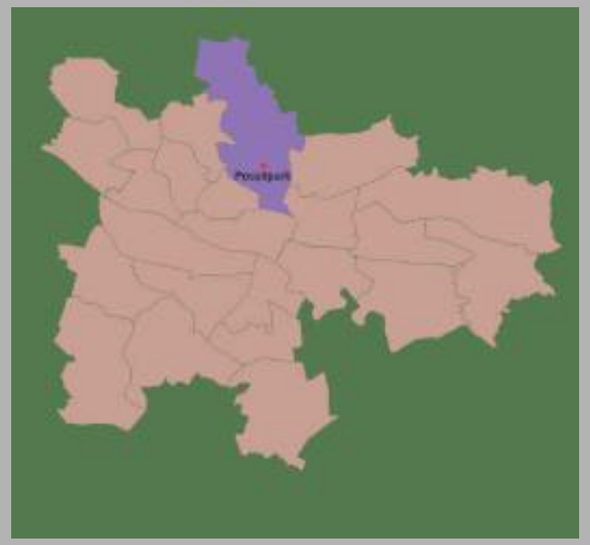
Possil House was one of the earliest residences in what is now Possilpark. Constructed by Edinburgh lawyer John Forbes before 1710, the mansion stood as a prominent estate in the area. In the early 1870s, Walter MacFarlane & Co purchased the 100-acre property and renamed the area Possilpark. They established the Saracen Foundry on the site, alongside new tenements to accommodate the growing workforce of Possilpark. [12]

Possil House in 1870. [12]

2.3 Saracen Foundry and Possilpark Density

Saracen Street emerged around the Saracen Foundry, established by Walter MacFarlane & Co. In the 1850s, MacFarlane took over a disused brass foundry on Saracen Lane. By 1872, he had moved the operation to Saracen Street, where it fueled rapid growth in the area, with Possilpark's population skyrocketing from 10 to 10,000 in just two decades. MacFarlane's company became renowned for its decorative ironwork, much of which is still admired worldwide. However, like many regions in the UK, Possilpark faced a downturn in the 1960s due to deindustrialization, which significantly impacted its prosperity. [13]

Location of Glasgow in Scotland



Location of Possilpark in Glasgow

Saracen Foundry, Ironworks, MacFarlane's Catalogue 1890 extract. [14]

2.4 Possilpark Bands tand

Bandstands, typically circular or polygonal in shape, were designed for musical bands to perform concerts. By the late 19th century, bandstands had become popular and were deemed essential in parks. They held significant value for the community, serving as important spaces for meetings and cultural activities. One such bandstand in Possilpark was situated in the centre of the considered site. Although its history is not well-documented, maps show it appeared around 1910 and vanished by 1950. These structures emerged in response to the Industrial Revolution, as the city recognised the deteriorating conditions in urban areas.

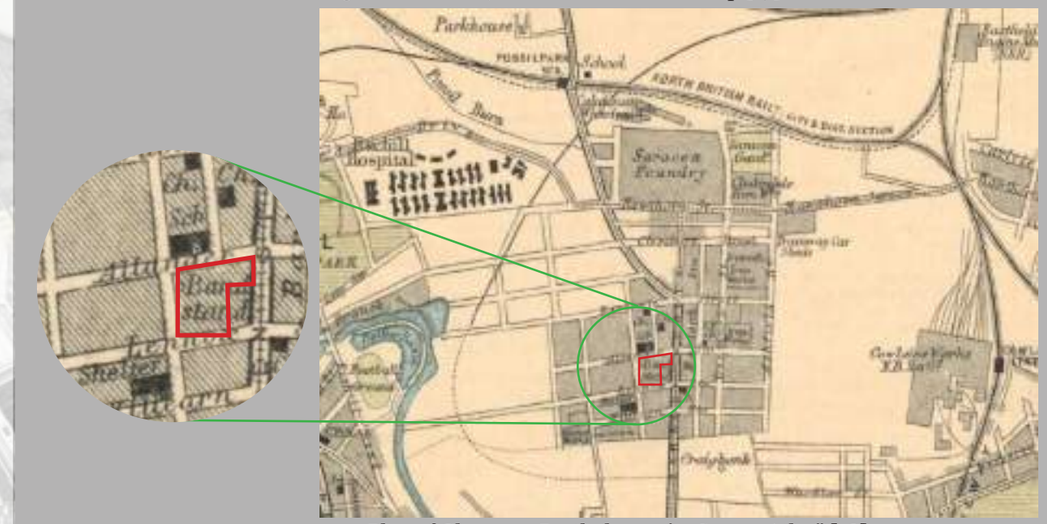
MacFarlane's Castings Bandstand No. 224 - very common bandstand pattern, with high likelyhood of being located on the site in the past. [15]

Example of a bandstand made in Saracen Foundry. [16]

2.5 Why Possilpark?

This neighborhood was chosen based on research conducted in my fourth year for the dissertation titled „Can the life expectancy of the more vulnerable part of Glasgow communities be higher by introducing better design solutions?" (see annexes). This area experiences the shortest life expectancy in Glasgow and faces high levels of poverty and deprivation.
Choosen site is one of the Vacant and Derelict sites included in Land Survey prepared by Glasgow City Council. Site is located behind the Possilpark library and its bounded by Stonyhurst St, Carbeth St and Allander St.
Implementing solutions like Baugruppe aims to demonstrate the potential and benefits of non-profit-oriented designs to communities, councils, and architects. Such approaches could positively impact our city in the future.

1858 Lanarkshire, Sheet VI - OS 6 Inch map [17]



1912 Plan of Glasgow - Bartholomew's „Survey Atlas" [18]

1938 NS56 - OS 1-25,000 Provisional Series Map [19]

2.6 Possilpark & Ruchill - Demographics

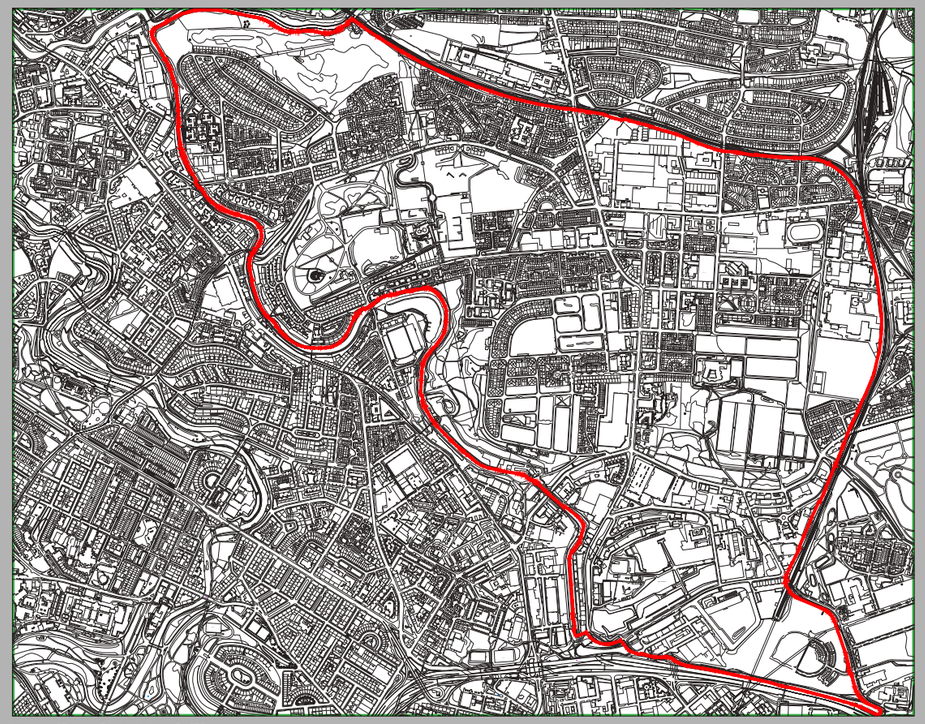
Population:	10737
People Aged 0-15:	18.9%
People Aged 16-64:	66.6%
Single Parent Households:	52.9%
(*26.4% more than avg. in Glasgow*)	
People walking/cycling/using public transport to work:	51.0%
Overcrowded Households:	19.7%
Children in Poverty:	46.9%
Young people not in education/employment/training:	24.5%

[20]

2.7 Possilpark & Ruchill - Identified Issues

- Poverty
- Low educational attainment
- Crime
- Poor health and low life expectancy
- Drug problems
- Gap sites

Possilpark faces a range of serious issues that impact its community. Poverty is widespread, leading to low educational attainment and limited opportunities for residents. High crime rates and severe drug problems add to the area's challenges, creating an unsafe environment. Poor health outcomes and low life expectancy further strain the community, while numerous gap sites, or vacant lots, contribute to urban decay and slow economic development. These interconnected problems create a cycle of disadvantage that is difficult to break.

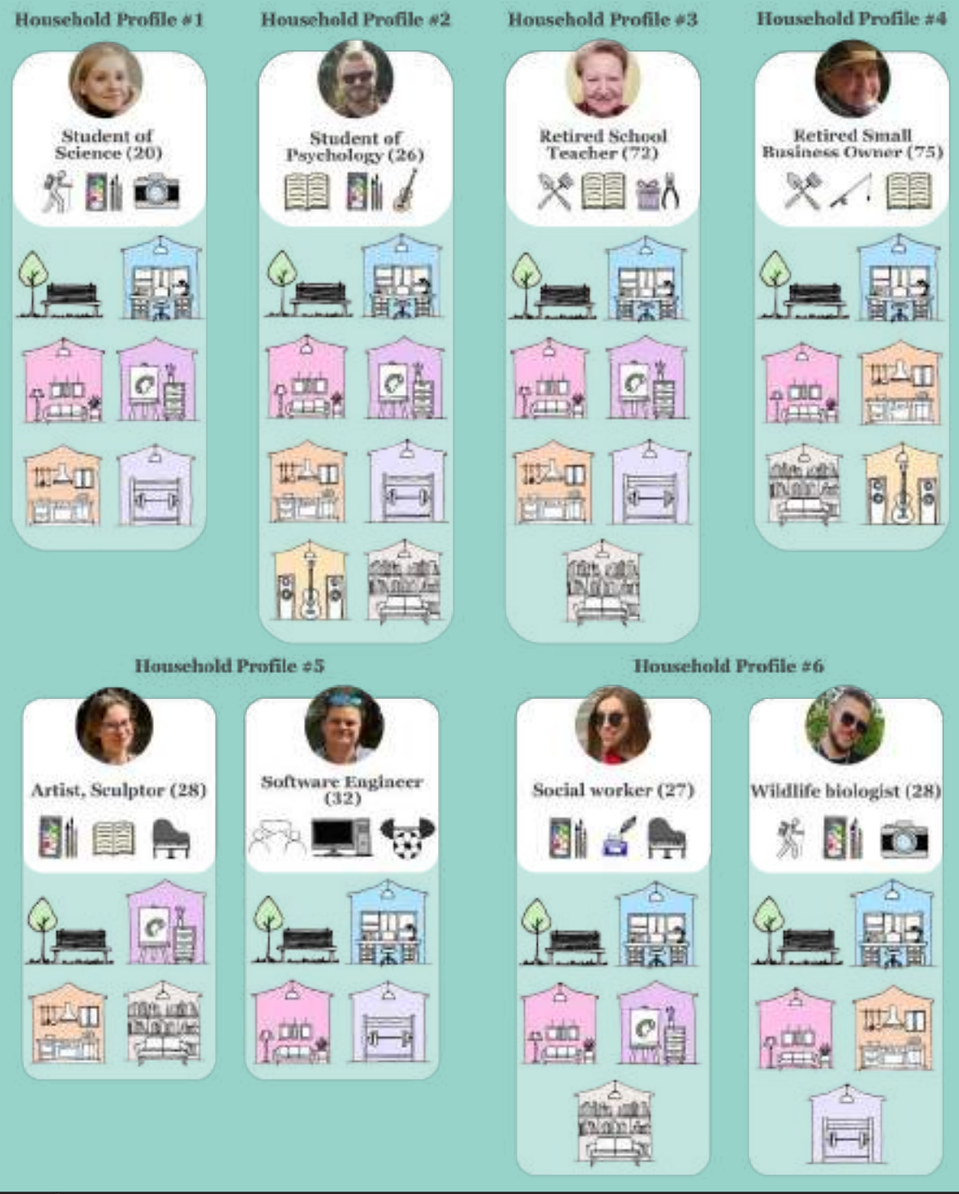


Possilpark & Ruchill Area

Photographs from Site Visit

2.8 Household Profiles

To exclude personal bias a group of ten households was created with the help of AI. AI generated tenants' age, profession and hobbies, and suggested their desired spaces. Further design development will investigate commonalities to offer the best design response.



3.0 Development Process

Site Visit

Contextual Site Model

Preserving History

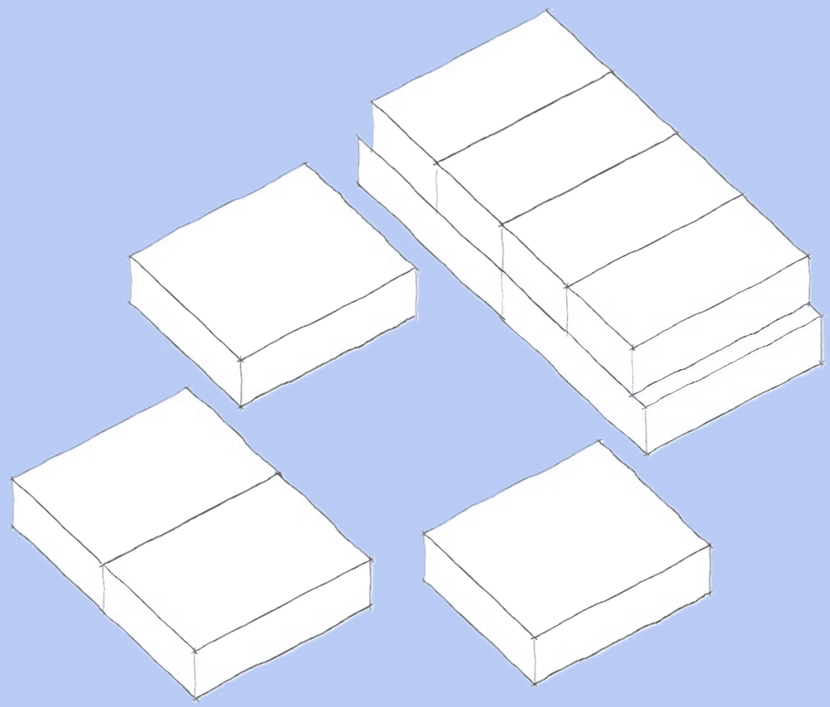
Programme

Initial Structure

Massing

Private/Shared

Commonalities



3.1 Neighbourhood

The site visit commenced on 28.07.24 and 01.06.24.



Site


Possilpark Library




Neighbourhood

Refurbished Bandstand [21]


Green Spaces

3.2 Object - Contextual Site Model

Possilpark & Ruchill Area

Possilpark Library

Possilpark Library corner

To better understand the scale, proportions, and materiality of the surrounding area, a contextual model was prepared. This model helps visualise the site's constraints and guides the development of an appropriate design response. [22,23]

Red Sandstone Tenement

Plan View of Model

Elevations of Saracen Street

3.3 Masterplan Development

Site Analysis and Development of Masterplan

3.4 Local Wealth Investigation

Possilpark's products were distributed worldwide. Their ornamental ironwork was featured in numerous architectural projects throughout the United Kingdom and extended to countries such as South Africa, India, Singapore, Australia, Canada, Brazil, and many more.

3.5 Local Wealth Saved!

Fortunately, the catalogue of Macfarlane's Castings, published in the 1890s, has survived to this day. It has been digitised, providing an incredible resource of patterns available online.

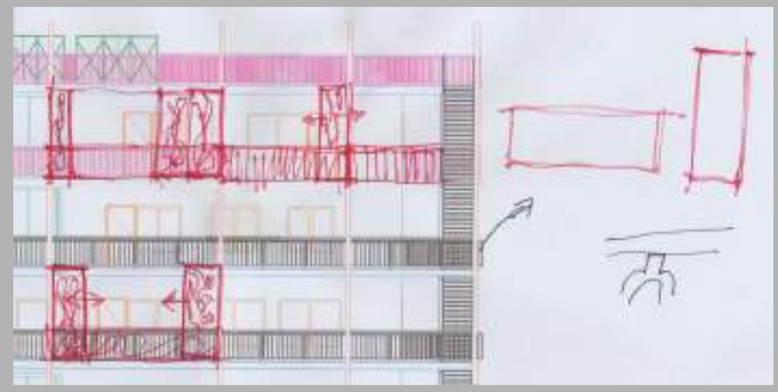
3.6 Ballustrade Needed Now

Today, iron casting is challenging due to high carbon emissions. As an alternative, steel sheets will be used, and patterns will be applied with a CNC cutter to achieve a similar result.

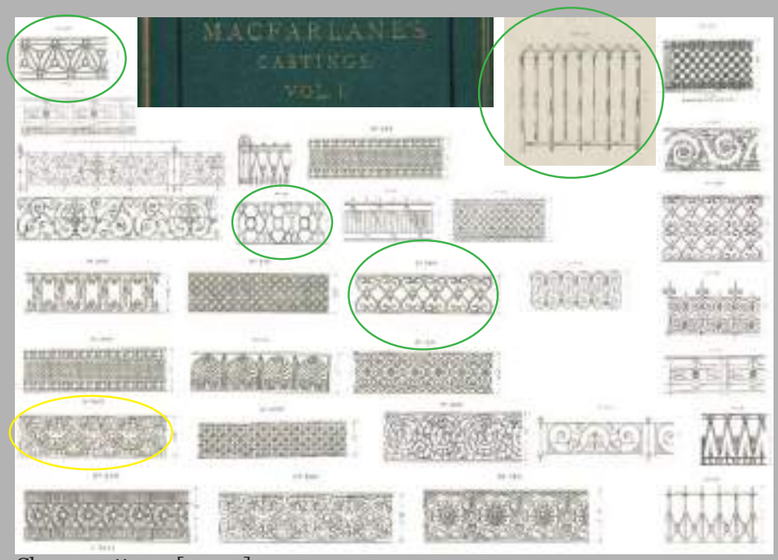
3.7 Pattern Selection and Creation of Objects

The catalogue offers hundreds of patterns specifically for railings. The most interesting ones were chosen and compiled on a single page. From these, a few were selected to test how the patterns integrate with different thicknesses, as this is a crucial difference between cast iron and sheet steel.

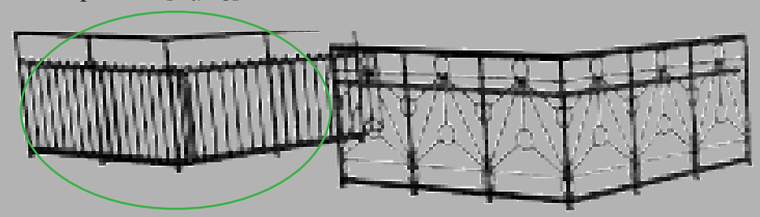
Patterns No. 408, No. 319, and No. 140 appeared to be among the best for CNC cutting. However, pattern No. 866, one of the more complicated designs, was also tested. Patterns No. 408 and No. 140, when brought to a certain thickness, became very subtle, while pattern No. 866 stood out and proved most suitable for representing its historical significance. Pattern No. 319 was chosen for use on external staircases. [24, 25]



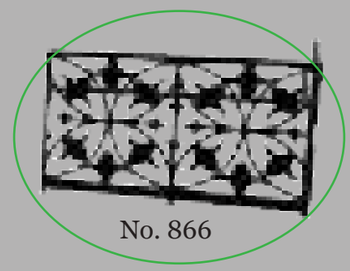
Sliding pannels to provide privacy and flexibility



Chosen patterns [24, 25]



No. 319 No. 408



No. 140 No. 866

Object - Ballustrades

3.8 Programme - Private Living Spatial Requirements

To establish space requirements the „*Technical housing standards - nationally described space standard*" for new homes was used with some allowance for EXTRA space. [26, 27]

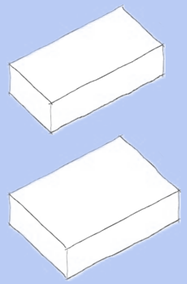
Type of dwelling		Minimum gross internal floor areas and storage (sqm)			BAUGRUPPE K-01
Number of bedrooms	Number of bedspaces	1-storey dwelling	Built-in storage	Total:	(m²)
1 bedroom	1 person	39/37	1	40	40+10 EXTRA
2 bedroom	3 people	61	2	63	63+7 EXTRA
3 bedroom	4 people	74	2.5	76,5	76,5+8 EXTRA
4 bedroom	5 people	90	3	93	93+17 EXTRA

Programme Flats

4 Single Bedroom
50m²x4=200m²

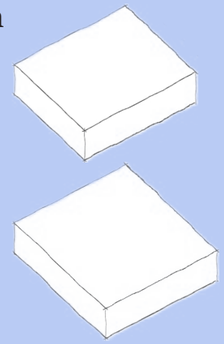
2 Double Bedroom
70m²x2=140m²

Total flats area
730m²

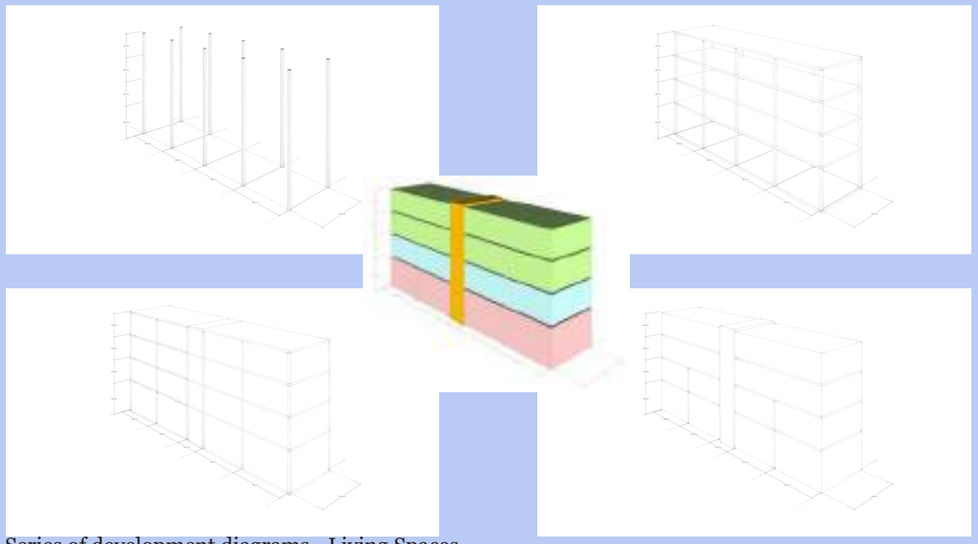


2 Three-Bedroom
85m²x2=170m²

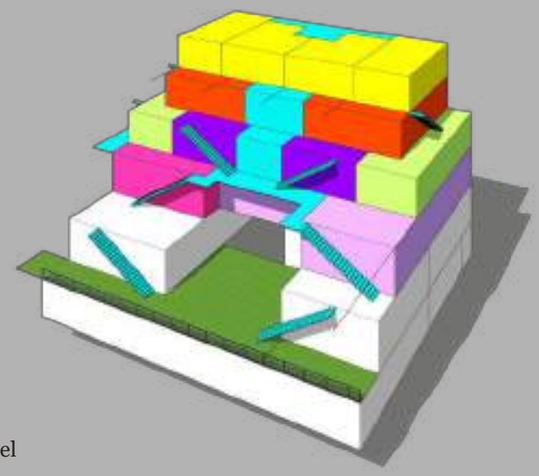
2 Four-Bedroom
110m²x2=220m²



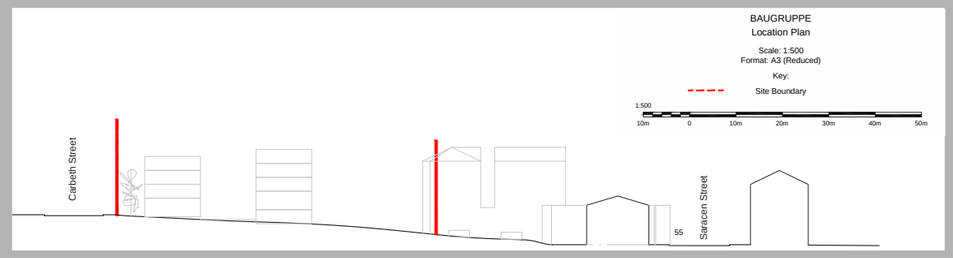
Initial Structure & Massing



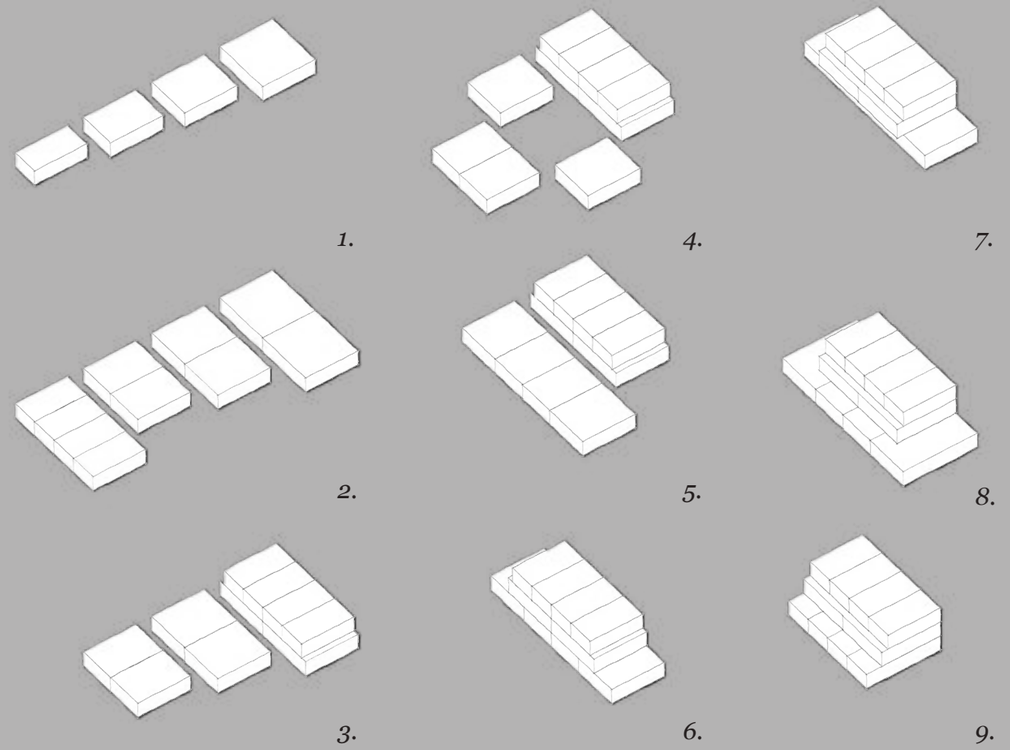
Series of development diagrams - Living Spaces



Initial massing model



First Site Section - Investigation of nearby buildings sizes and site pitch



Series of development diagrams - Living Spaces

3.9 Programme - Shared Spaces

Each member of the BAUGRUPPE was given a chance to propose their desired spaces. These proposals were collected, grouped and counted to establish how many people would be interested in using each space, i.e. how many users will be using each space.

Previously presented information collected in Household Profiles was compared in a table on the right.

External Green Space 16 p.
Office **126m2** - 9m2/person 14 p.
Social Lounge **90m2** - 8.2m2/person 11 p.
Art Studio/Workshop **100m2** - 10m2/person 10 p.
Kitchen **54m2** - 6m2/person 16 dining spaces 9 p.
Open to public Gym/Yoga 8 p.
- Boutique Gym [28] **110m2**
- Yoga Room [29] **30m2** - 3m2/person (10 Users)

Open to public Music Room 4 p.
- Recording room **9m2**
- Piano room **11m2**
- Practice room **47m2**

Library **45m2** - 6.5m2/person 7 p.
Kids Area **25m2** - 3.5m2/person 6 p.
Garage/Workshop **90m2** 4 spaces - car sharing 5 p.

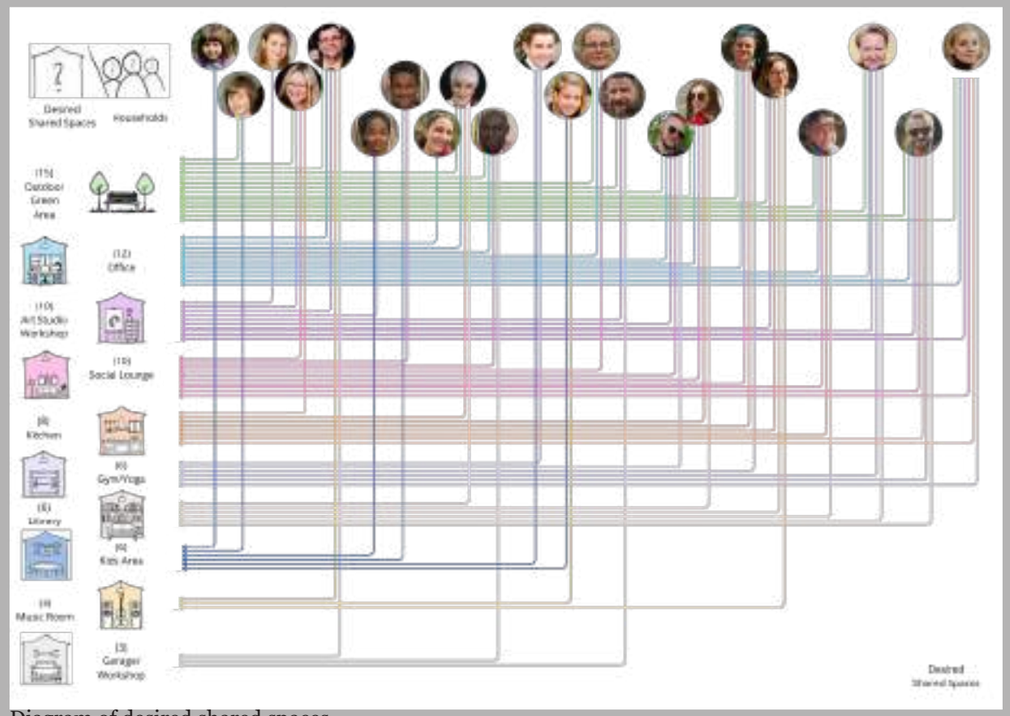


Diagram of desired shared spaces

Finding common language Rooms/Households	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Ext. Green Space	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Office	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Social Lounge	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
Art Studio	✓	✓	✓	✗	✓	✓	✓	✗	✓	✓
Kitchen	✓	✓	✗	✓	✓	✓	✗	✓	✓	✓
Gym/Yoga	✓	✓	✓	✗	✓	✓	✓	✓	✗	✗
Library	✗	✓	✓	✓	✓	✓	✗	✓	✓	✗
Kids Area	✗	✗	✗	✗	✗	✗	✓	✓	✗	✓
Garage/Workshop	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓
Music Room	✗	✗	✗	✗	✓	✗	✓	✓	✗	✓

Table showing demand for shared spaces

4.0 Materiality & Sustainability

Structure Appraisal

Hempcrete and Aluminium-clad Materials

Green Roof

Air Source Heat Pump

Photovoltaic Panels

4.1 Structure Materiality

Selecting the right structural system is a critical decision in the design process and should be made early, as it greatly influences later choices. The building's structure serves as its skeleton, supporting the entire building and affecting several factors, such as:

- Cost
- Build speed
- Internal layout
- Energy Efficiency
- Sustainability

4.2 Structural Solution in Similiar Projects

The previously discussed precedents and similar projects often utilise concrete structures. However, due to the high embodied energy in structural concrete, I opted for a steel structure instead. Steel offers similar flexibility to concrete but with the added advantage of being far easier to recycle than reinforced concrete.

4.3 Steel Structure

Steel structures are known for their strength and durability due to the use of steel as the primary material. Steel is non-combustible and has high fire resistance; however, it can lose its load-bearing capacity and become more flexible when exposed to intense heat, such as during a building fire, potentially leading to structural failure.

Steel's resistance to moisture, pests, and decay makes it an ideal choice for buildings in harsh environments, such as areas with high humidity near rivers. Another key advantage of steel is its design flexibility, allowing it to be easily molded and shaped into unique architectural forms.

Steel components are typically prefabricated off-site, which allows for quick assembly on-site, significantly reducing construction time. Moreover, steel is highly recyclable, contributing to its sustainability credentials. However, due to the high demand for recycled steel, availability can be limited, making it difficult to use recycled steel exclusively for an entire structure. It's also important to note that steel production has a significant environmental impact, emitting 1.83 tons of CO_2 per ton of steel produced.

Concrete structure commonly used in housing projects [30]

Steel structure - material choosen for Baugruppe K-01 project [31]

Pros:	Cons:
Strength and durability	Cost
Fire resistance	Corrosion
Design flexibility	Thermal conductivity
Speed of construction	Environmental Impact
Sustainable (widely recycled)	
Industrial appeal	

4.4 Hempcrete Walls

Hempcrete, made from hemp shiv (the plant's woody core) and a lime-based binder, is a sustainable building material. Hemp is a renewable and fast-growing plant, reaching heights of up to 15 feet in a single season. It absorbs carbon dioxide as it grows and requires minimal energy to produce. Unlike concrete, which relies on high-emission Portland cement, hempcrete uses lime-based binders with a lower environmental impact.

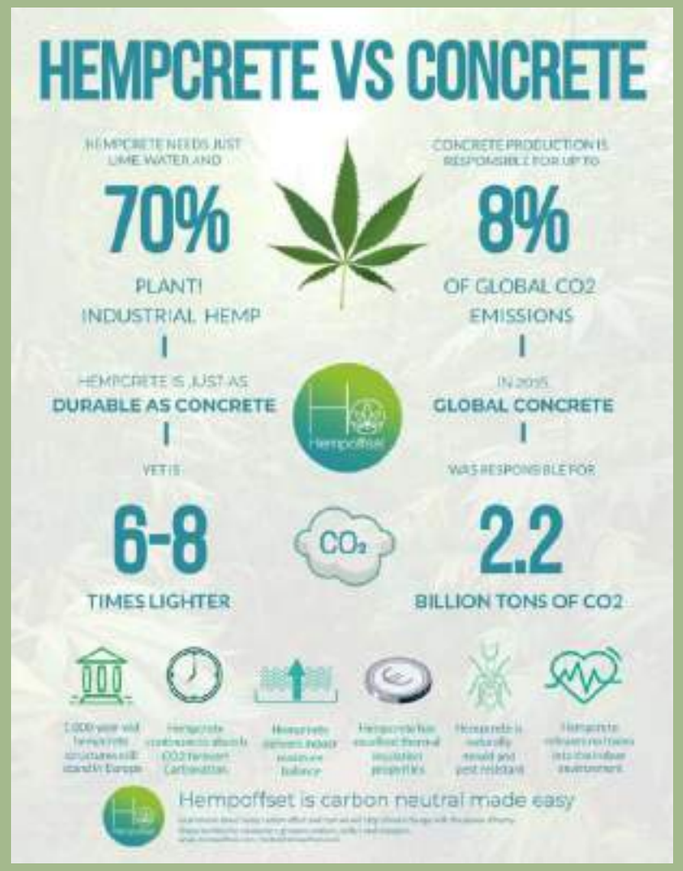
Hempcrete walls offer excellent thermal performance, providing high insulation and acting as thermal mass. They are also free from volatile organic compounds (VOCs), resistant to fire, insects, and rot, and breathable to water vapor. With its eco-friendly properties and increasing demand, the hempcrete industry is growing rapidly in the UK, making it a promising choice for reducing energy use and environmental impact in construction. [32] [33]
Extremly fire-resistant hempcreteblocks that are offering up to 2+ hours of fire resistance[34] can be used to wrap and secure steel structure balancing its vulnerability to fire extending time to escape or minimazing possible losses in case of fire.

4.5 Hempcrete Floors

Hempcrete blocks are highly effective for floor insulation, offering excellent compressive strength (15 T/m²) and supporting screeds. They allow for quick installation and are flexible enough for underfloor heating and duct integration. Blocks are laid in staggered rows and topped with a reinforced screed (at least 6 cm thick), ensuring stable, long-lasting insulation. Easy to cut and install, hempcrete blocks enable fast completion of floor insulation for an entire building. [35]

4.6 Aluminium-clad Doors and Windows

For this project, aluminium-claded timber cored doors and windows were chosen for their durability and low maintenance. Aluminium is resistant to rust and discolouration, combined with timber can lasts over 60 years and is highly recyclable. Aluminium-clad timber doors combine the insulation of timber, both thermal and acoustic, with a durable, low-maintenance aluminium exterior, offering excellent protection and a range of color options. In contrast, high quality uPVC windows average life expectancy of 20 years [36], degrade with heat, and are harder to recycle, making alu-clad option a more sustainable and long-lasting choice. [37]



Comparison of hempcrete and concrete [38]

Advantages of Hempcrete [39]

4.7 Green Roof

The green roofs used in this project offer numerous benefits to tenants. Green roofs purify the air by filtering particulates and converting CO_2 into oxygen. They also lower ambient temperatures, improving energy efficiency by reducing the need for air conditioning and enhancing solar panel performance.

Additionally, green roofs act as sound barriers, extend the lifespan of roofing materials, and boost property value. They support biodiversity by creating habitats for birds and insects, improve well-being by offering a calming environment, and foster social interaction. With low maintenance needs and protection against erosion, green roofs are a sustainable and valuable addition to urban architecture. [40]

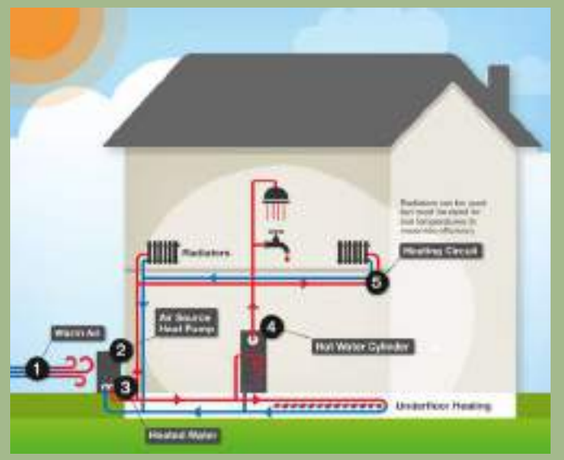
4.8 Air Source Heat Pump

An air source heat pump (ASHP) extracts heat from the outside air and transfers it to water, which is then used to heat rooms through radiators or underfloor systems and to provide hot water for taps and showers. ASHPs can reduce energy bills and lower energy consumption compared to traditional fossil fuel boilers, as they produce more heat energy than the electrical energy they use. They also cut carbon emissions, offering a low-carbon alternative to gas or oil heating systems. This means tenants benefit from lower energy costs, reduced environmental impact, and a more comfortable home. [41]

4.9 Photovoltaic Panels

Photovoltaic cells mounted on the roof generate electricity, making the building nearly self-sufficient. A well-designed system can produce enough energy to power the entire building, with any excess generated during the day sold to the national grid for use elsewhere in the town. At night, the building can purchase back energy from the grid to ensure it has sufficient electricity for heating and ventilation systems.

Site Plan



Exemplary diagram of Air-sourced heat pump[42]

PV panels used for electricity production[43]

5.0 Project Delivery

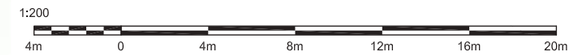
Plans

Elevations

Long Section


Balmore Road
Saracen Street
Barloch Street
Denmark Street
Football Ground
Ashfield Street
Bardowie Street
Auckland Street
Ellesmere Street
Tannock Street
Allander Street
Denmark Close
Stonyhurst Street
Killearn Street
Salmona Street
Dalvarie Street
Hamiltonhill Road
HAMILTONHILL
Caldarvan Street
Hamiltonhill Gardens
Cleghorn Street
Dartford Street
Appleby Street
Bonhill Street
Denham Street
BAUGRUPPE
Location Plan
Scale: 1:1250
Format: A1
Key:
Site Boundary
Under Construction
N
1:1250
25m 0 25m 50m 75m 100m 125m

Baugruppe
Site Plan
Scale: 1:200
Format: A2 (Reduced)



Shared Spaces

1. Entrance
2. Lobby
3. Staircase
4. Social Lounge(s)
5. Kids Area
6. Kitchen/Dining

Public Spaces

7. Gym Controlled Entrance
8. Yoga Room
9. Gym
10. Controlled Entrance
11. Music Practice Room
12. Piano Room
13. Record Room

Ext. SharedSpaces

14. Garden

Baugruppe
Ground Floor
Axonometry
Scale: 1:200
Format: A2 (Reduced)

1:100
2m 0 2m 4m 6m 8m 10m

Shared Spaces

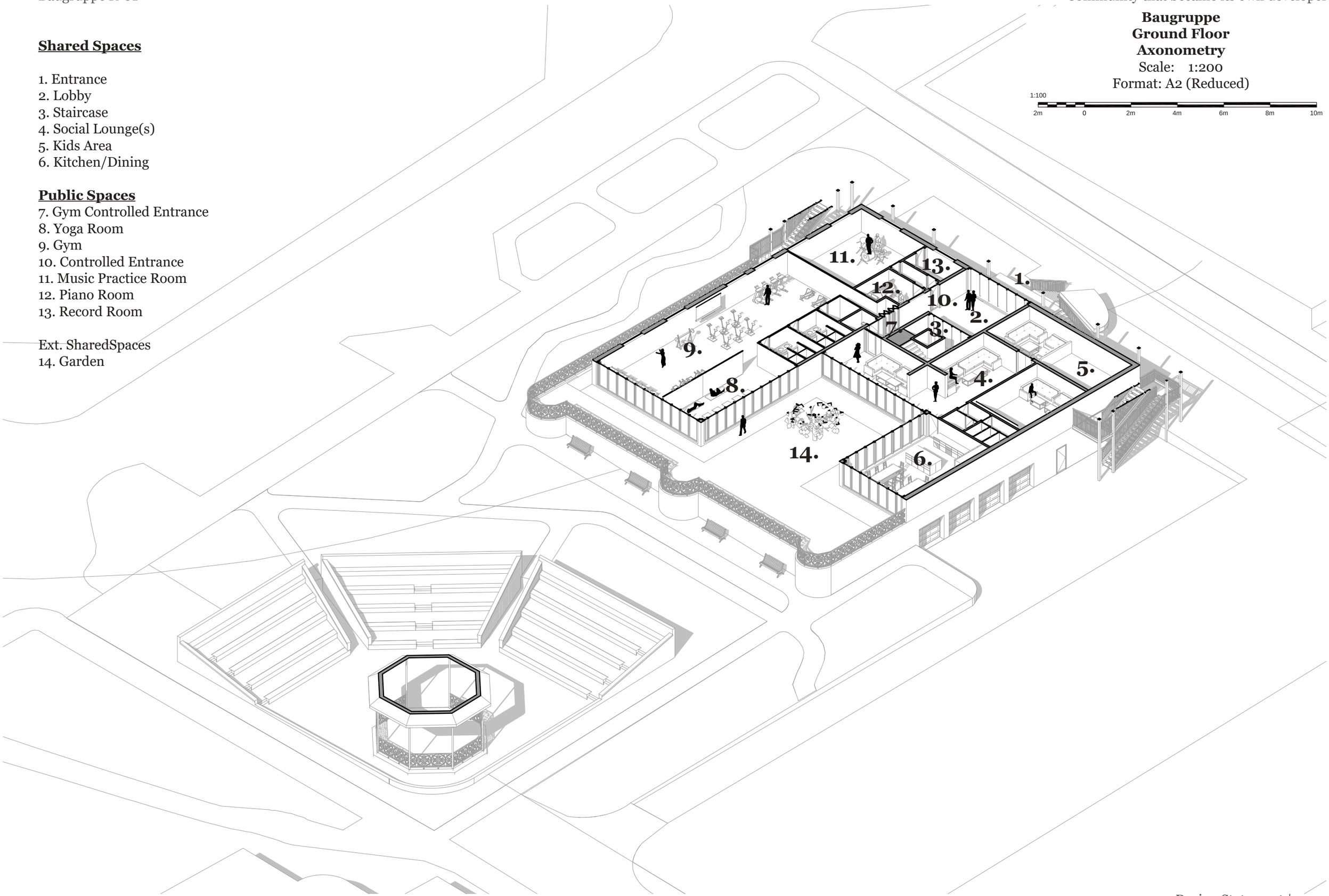
1. Entrance
2. Lobby
3. Staircase
4. Social Lounge(s)
5. Kids Area
6. Kitchen/Dining

Public Spaces

7. Gym Controlled Entrance
8. Yoga Room
9. Gym
10. Controlled Entrance
11. Music Practice Room
12. Piano Room
13. Record Room

Ext. SharedSpaces

14. Garden



Baugruppe
Ground Floor Plan
Scale: 1:100
Format: A2 (Reduced)

Shared Spaces

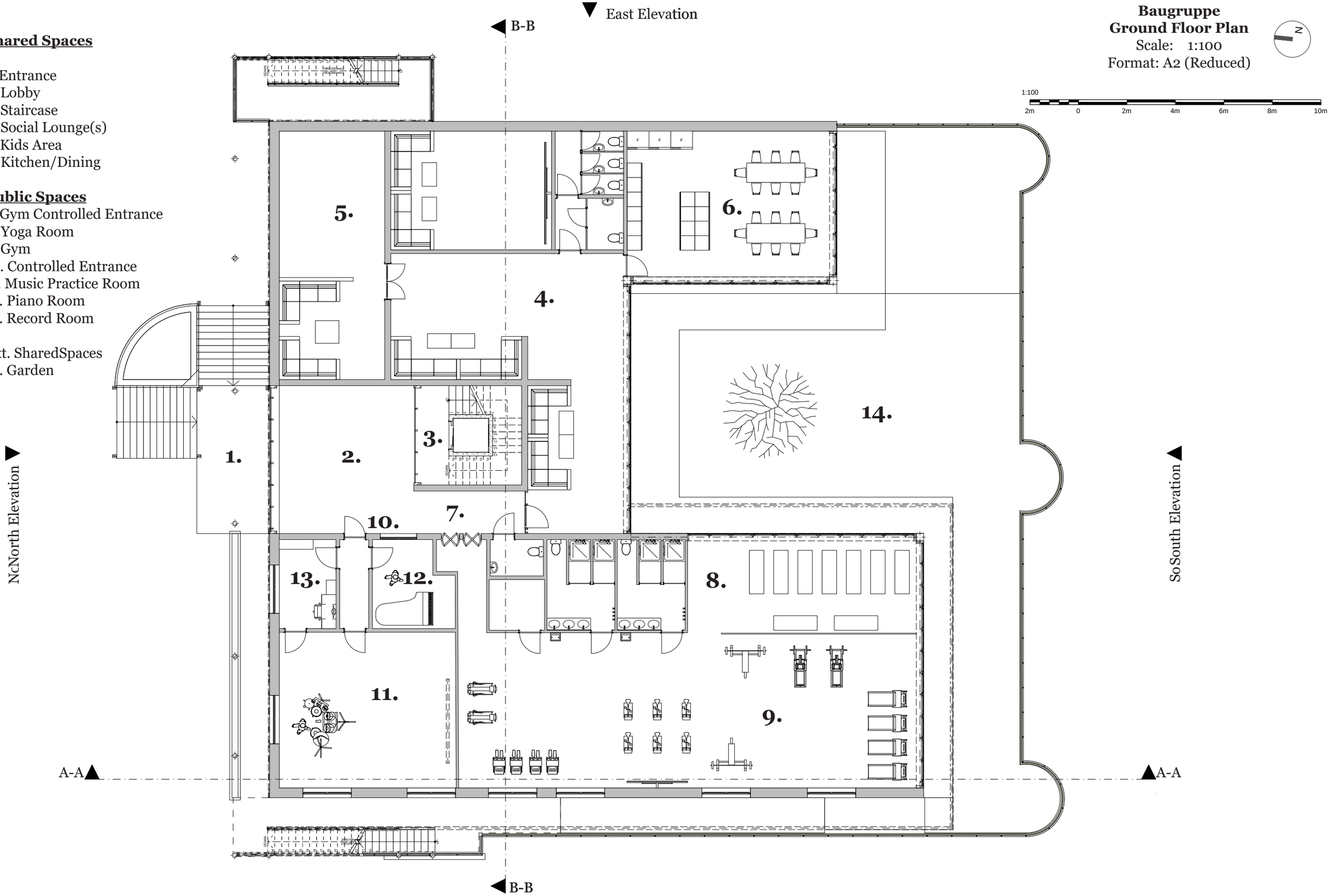
1. Entrance
2. Lobby
3. Staircase
4. Social Lounge(s)
5. Kids Area
6. Kitchen/Dining

Public Spaces

7. Gym Controlled Entrance
8. Yoga Room
9. Gym
10. Controlled Entrance
11. Music Practice Room
12. Piano Room
13. Record Room

Ext. SharedSpaces

14. Garden

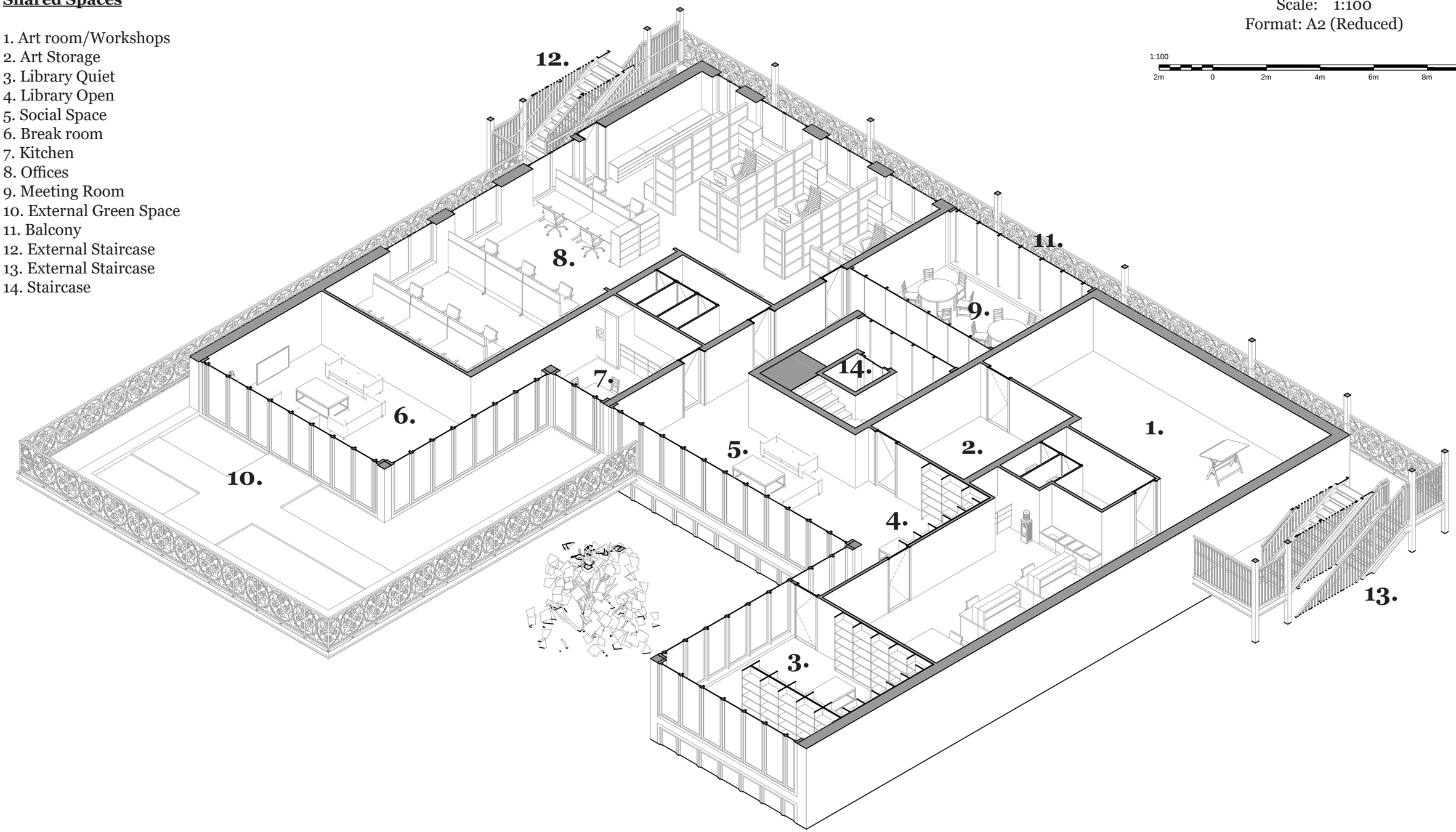


Baugruppe
I Floor Axonometry
Scale: 1:100
Format: A2 (Reduced)

1:100
2m 0 2m 4m 6m 8m 10m

Shared Spaces

1. Art room/Workshops
2. Art Storage
3. Library Quiet
4. Library Open
5. Social Space
6. Break room
7. Kitchen
8. Offices
9. Meeting Room
10. External Green Space
11. Balcony
12. External Staircase
13. External Staircase
14. Staircase

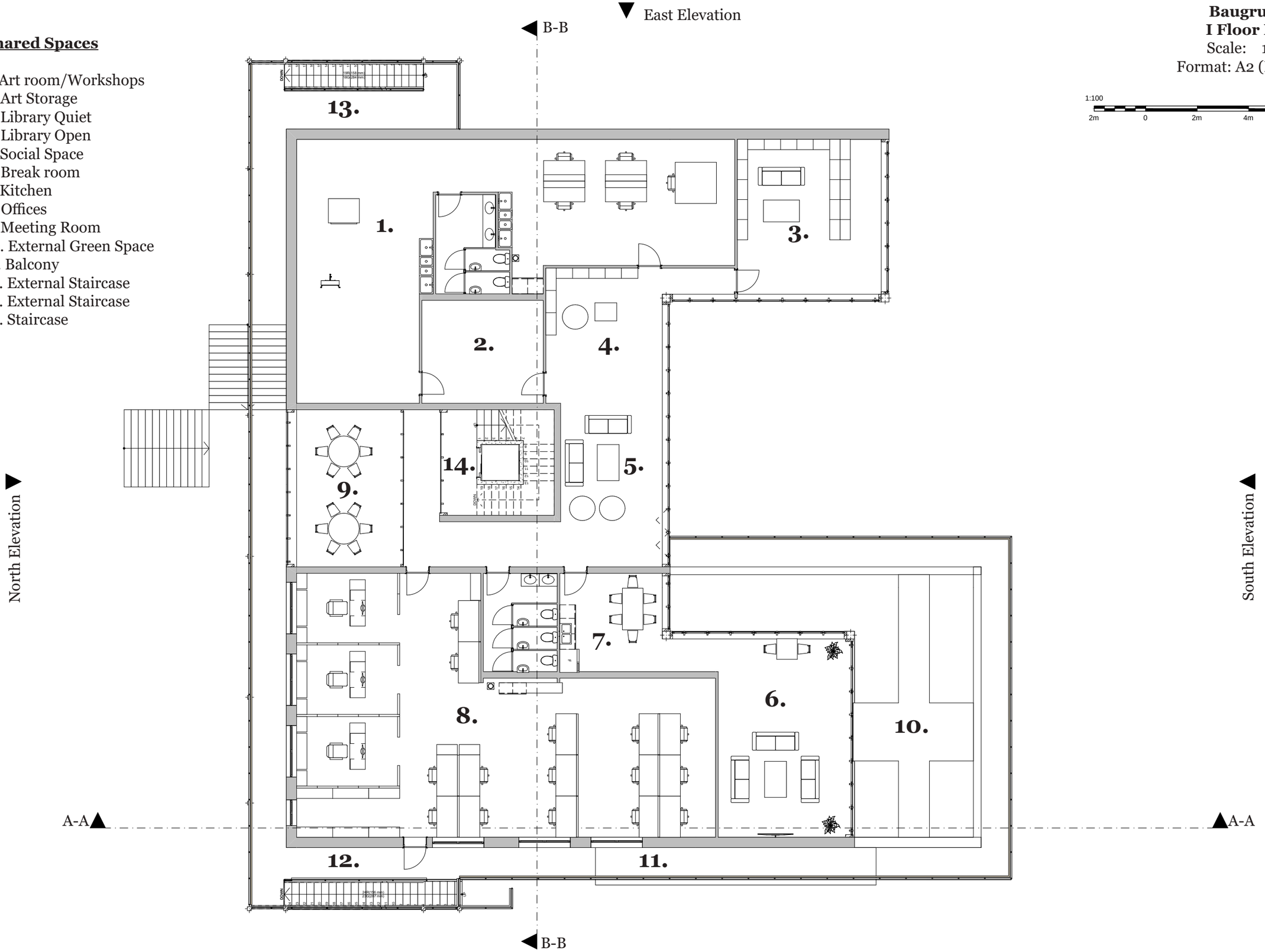


Baugruppe
I Floor Plan
Scale: 1:100
Format: A2 (Reduced)

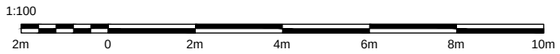
1:100
2m 0 2m 4m 6m 8m 10m

Shared Spaces

1. Art room/Workshops
2. Art Storage
3. Library Quiet
4. Library Open
5. Social Space
6. Break room
7. Kitchen
8. Offices
9. Meeting Room
10. External Green Space
11. Balcony
12. External Staircase
13. External Staircase
14. Staircase



Baugruppe
II Floor Axonometry
Scale: 1:100
Format: A2 (Reduced)

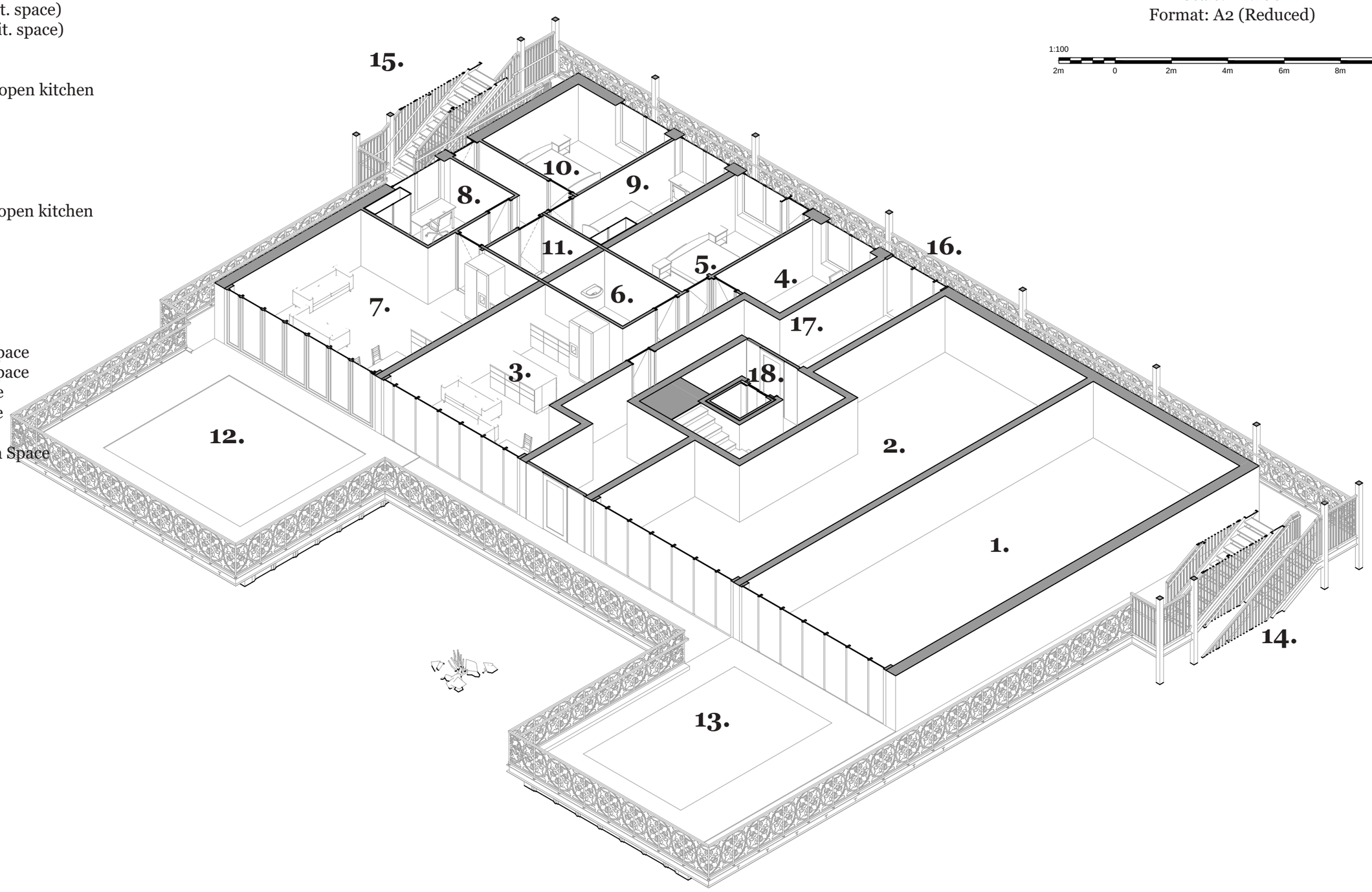


Private Flats
1. 3 Bedroom flat (init. space)
2. 2 Bedroom flat (init. space)

2 Bedroom flat
3. Living Room with open kitchen
4. Single Bedroom
5. Master bedroom
6. Bathroom

3 Bedroom flat
7. Living Room with open kitchen
8. Single Bedroom
9. Single Bedroom
10. Master Bedroom
11. Bathroom

Shared Spaces
12. External Green Space
13. External Green Space
14. External Staircase
15. External Staircase
16. Balcony
17. Circulation+Extra Space
18. Staircase

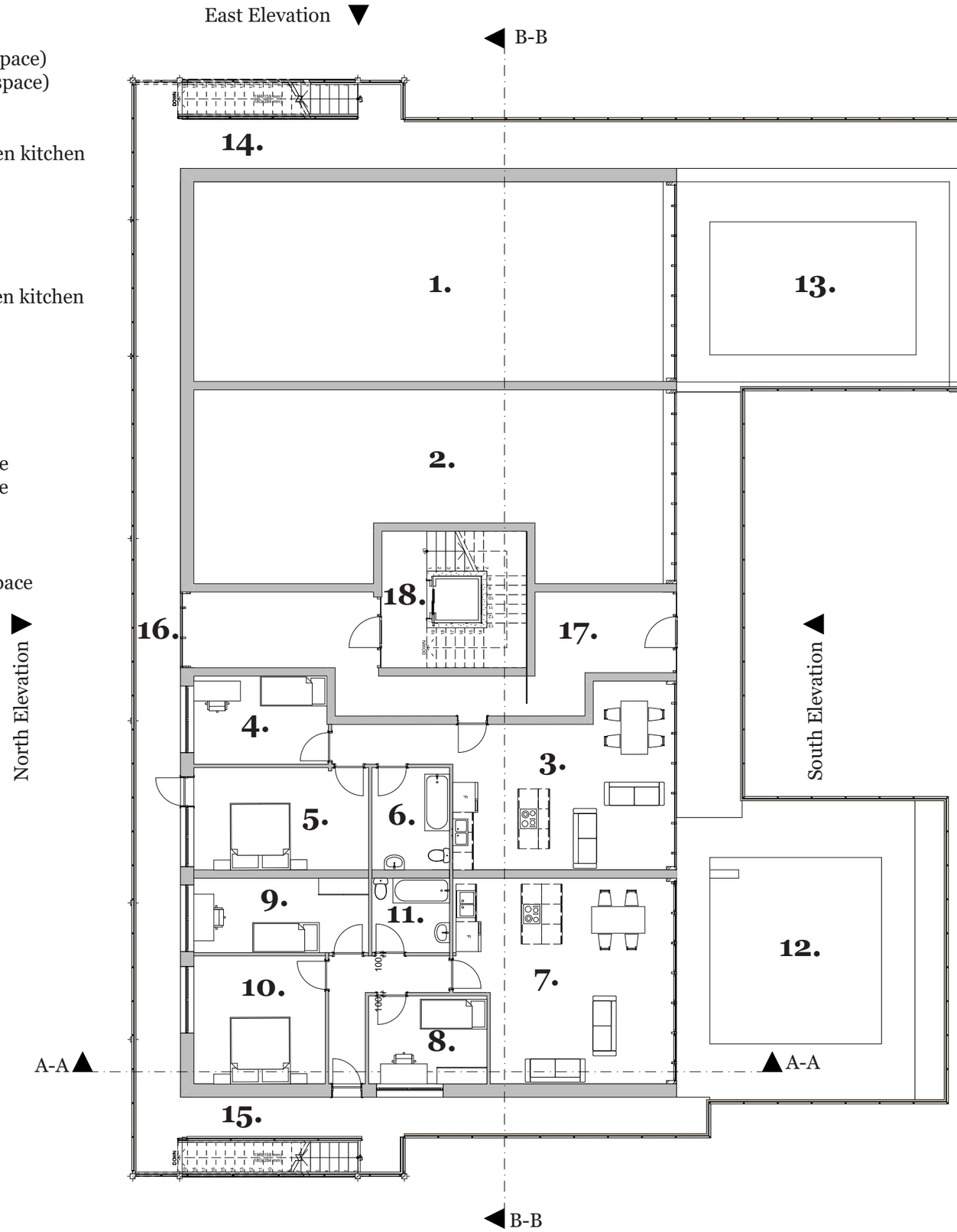


Private Flats
1. 3 Bedroom flat (init. space)
2. 2 Bedroom flat (init. space)

2 Bedroom flat
3. Living Room with open kitchen
4. Single Bedroom
5. Master bedroom
6. Bathroom

3 Bedroom flat
7. Living Room with open kitchen
8. Single Bedroom
9. Single Bedroom
10. Master Bedroom
11. Bathroom

Shared Spaces
12. External Green Space
13. External Green Space
14. External Staircase
15. External Staircase
16. Balcony
17. Circulation+Extra Space
18. Staircase



Baugruppe
II Floor Plan
Scale: 1:100
Format: A2 (Reduced)

1:100
2m 0 2m 4m 6m 8m 10m

Baugruppe
III Floor Axonometry
Scale: 1:100
Format: A2 (Reduced)

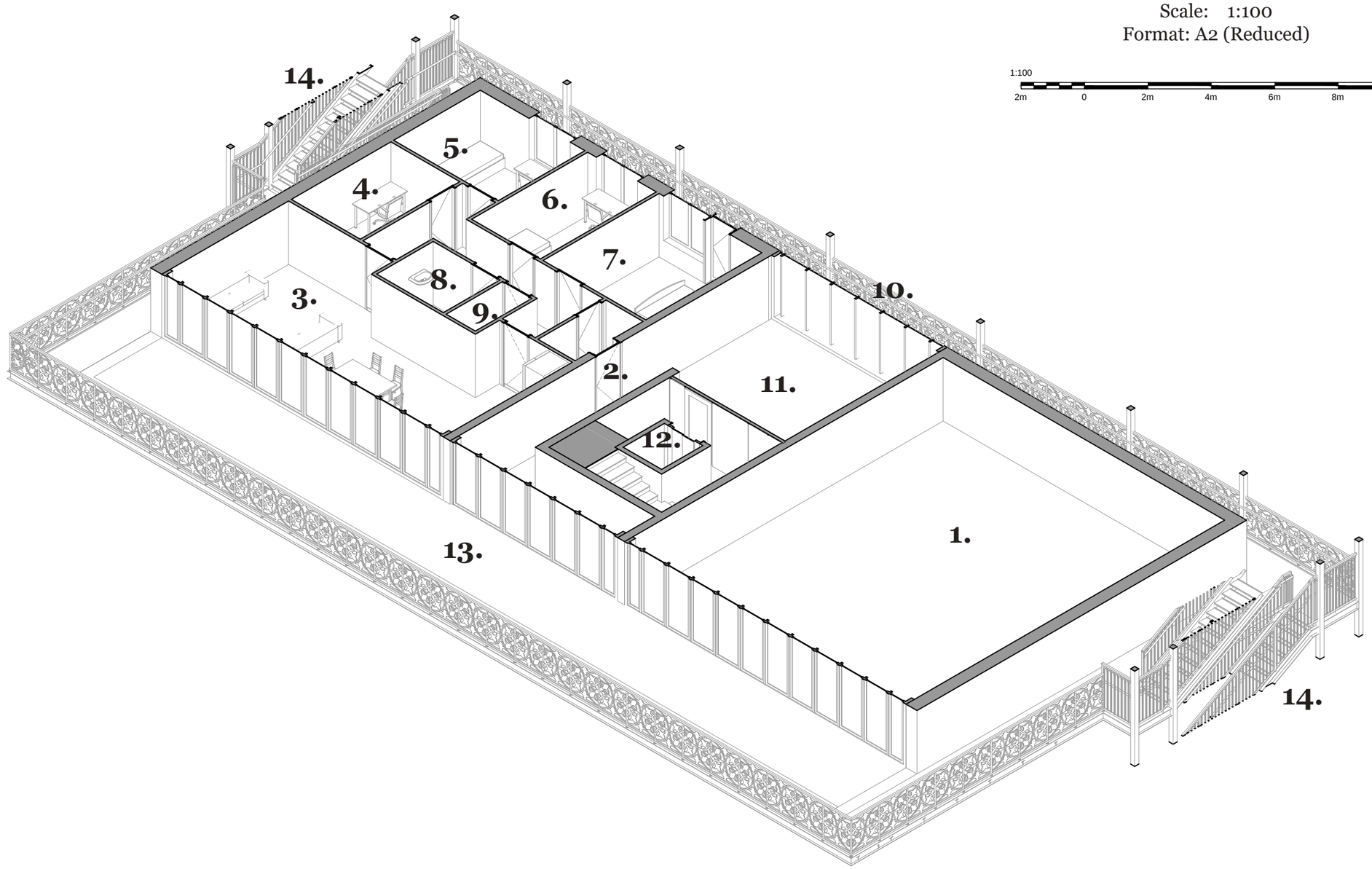
1:100
2m 0 2m 4m 6m 8m 10m

Private Flats

1. 4 Bedroom flat (init. space)

4 Bedroom flat
2. Entrance
3. Living R. with open kitchen
4. Single Bedroom
5. Single Bedroom
6. Single Bedroom
7. Master Bedroom
8. Bathroom
9. WC

Shared Spaces
10. Balcony
11. Extra Space
12. Staircase
13. Extended Balcony
14. External Staircase

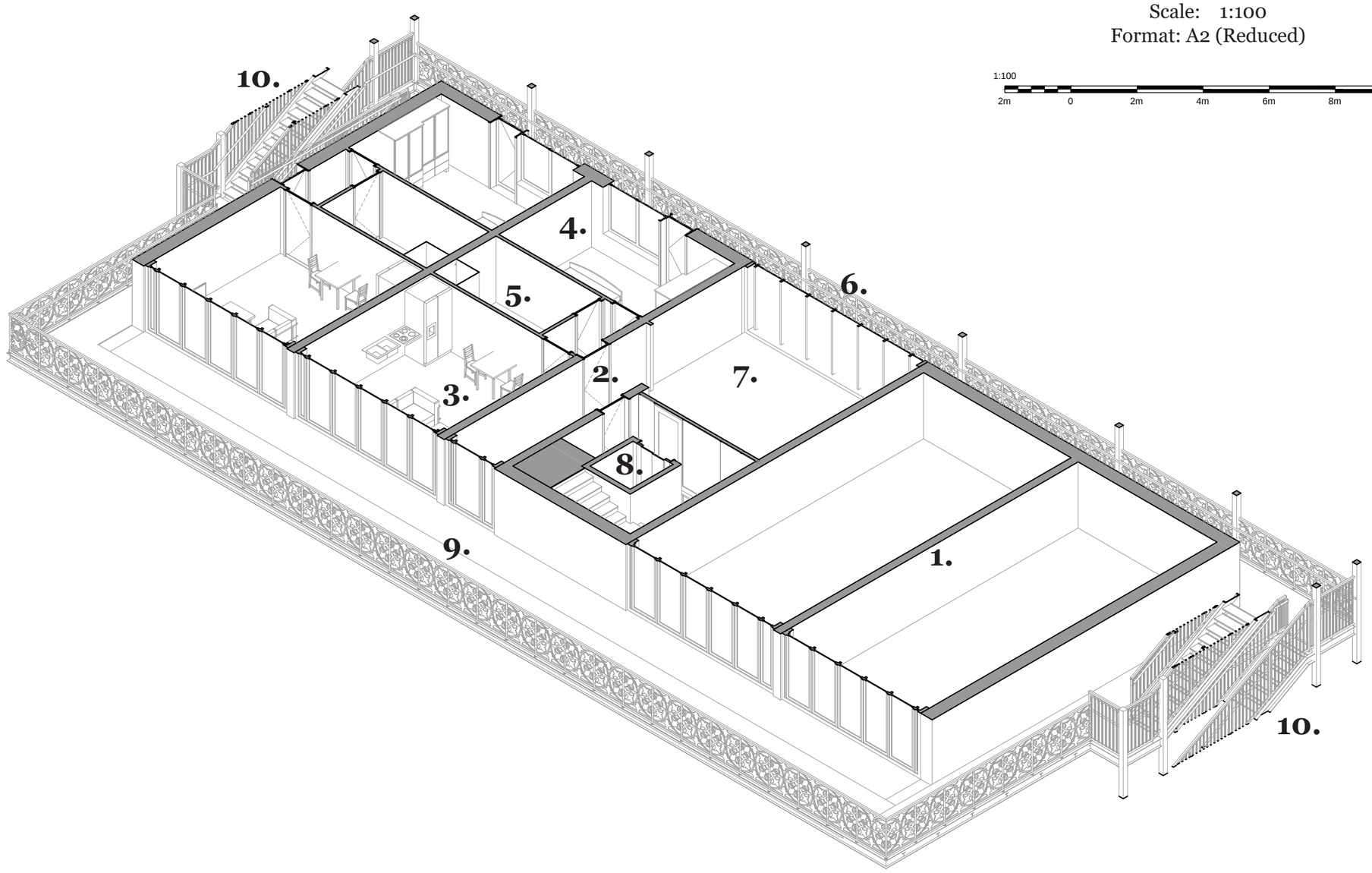


Baugruppe
IV Floor Axonometry
Scale: 1:100
Format: A2 (Reduced)

Private Flats
1. 1 Bedroom flat (init. space)

1 Bedroom flat
2. Entrance
3. Living Room
4. Double Bedroom
5. Bathroom

Shared Spaces
6. Balcony
7. Extra Space
8. Staircase
9. Extended Balcony
10. External Staircase



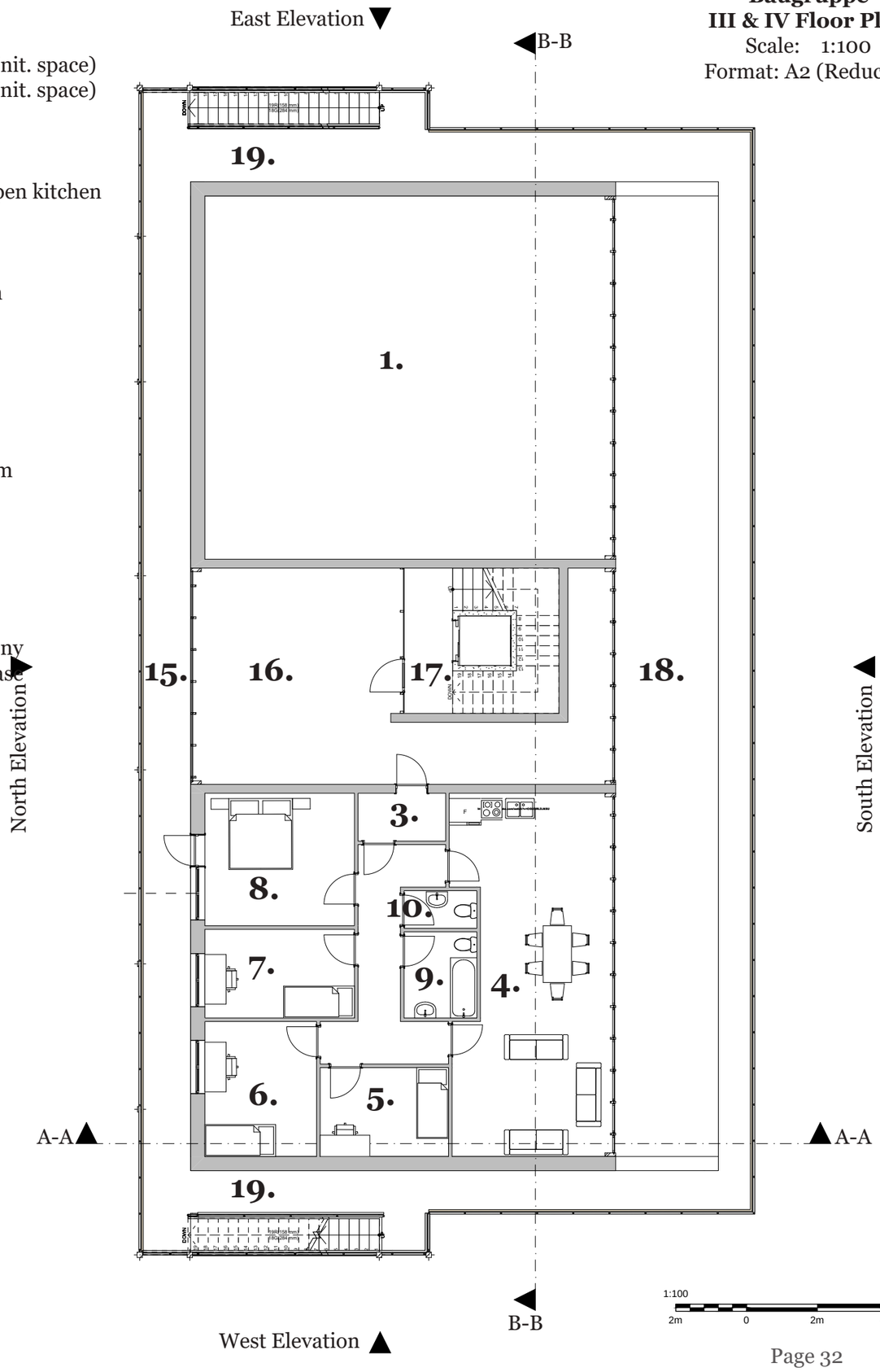
Baugruppe
III & IV Floor Plan
Scale: 1:100
Format: A2 (Reduced)

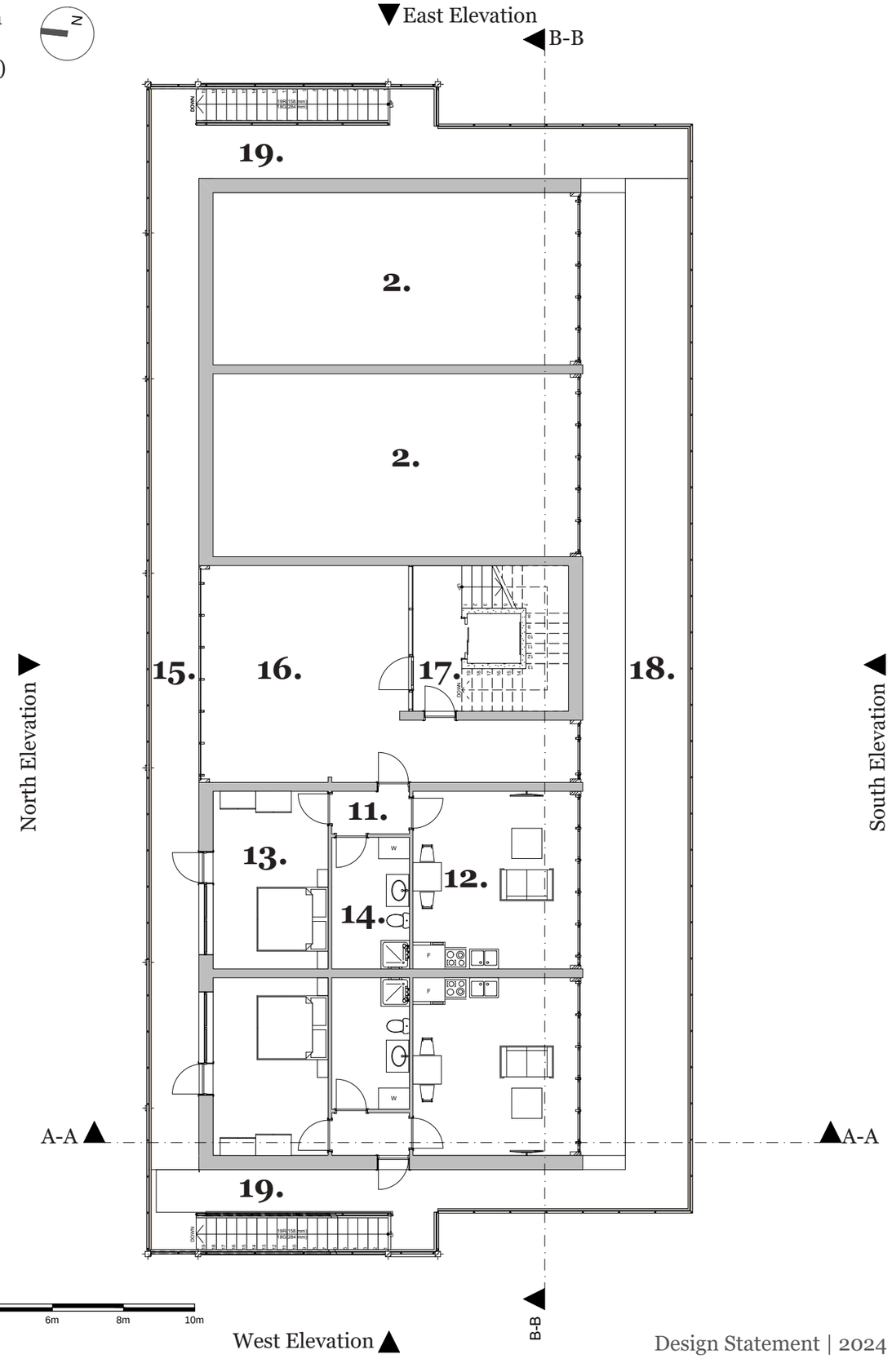
Private Flats
1. 4 Bedroom flat (init. space)
2. 1 Bedroom flat (init. space)

4 Bedroom flat
3. Entrance
4. Living R. with open kitchen
5. Single Bedroom
6. Single Bedroom
7. Single Bedroom
8. Master Bedroom
9. Bathroom
10. WC

1 Bedroom flat
11. Entrance
12. Living Room
13. Double Bedroom
14. Bathroom

Shared Spaces
15. Balcony
16. Extra Space
17. Staircase
18. Extended Balcony
19. External Staircase

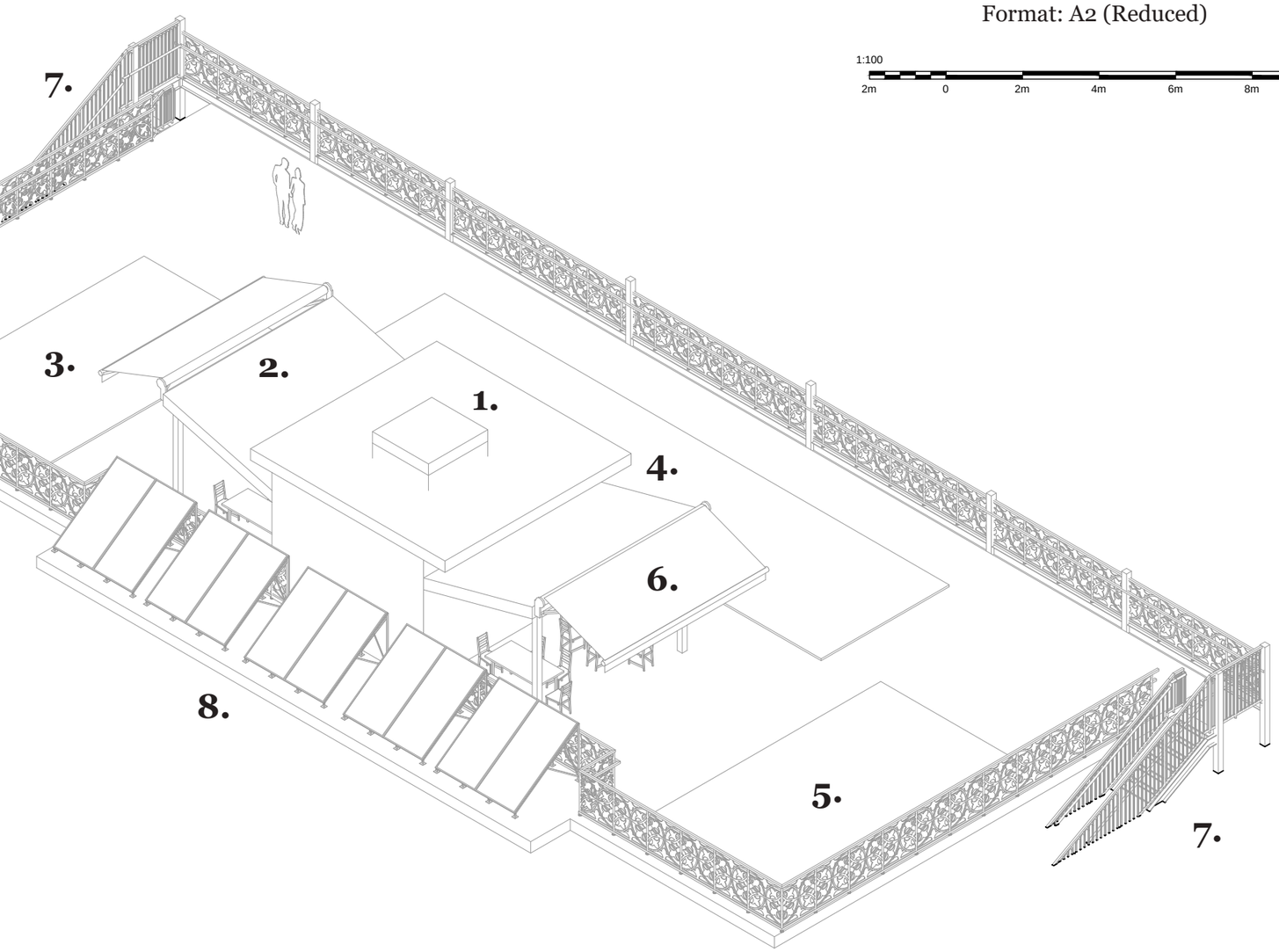




1:100
2m 0 2m 4m 6m 8m 10m

Baugruppe
Roof Axonometry
Scale: 1:100
Format: A2 (Reduced)

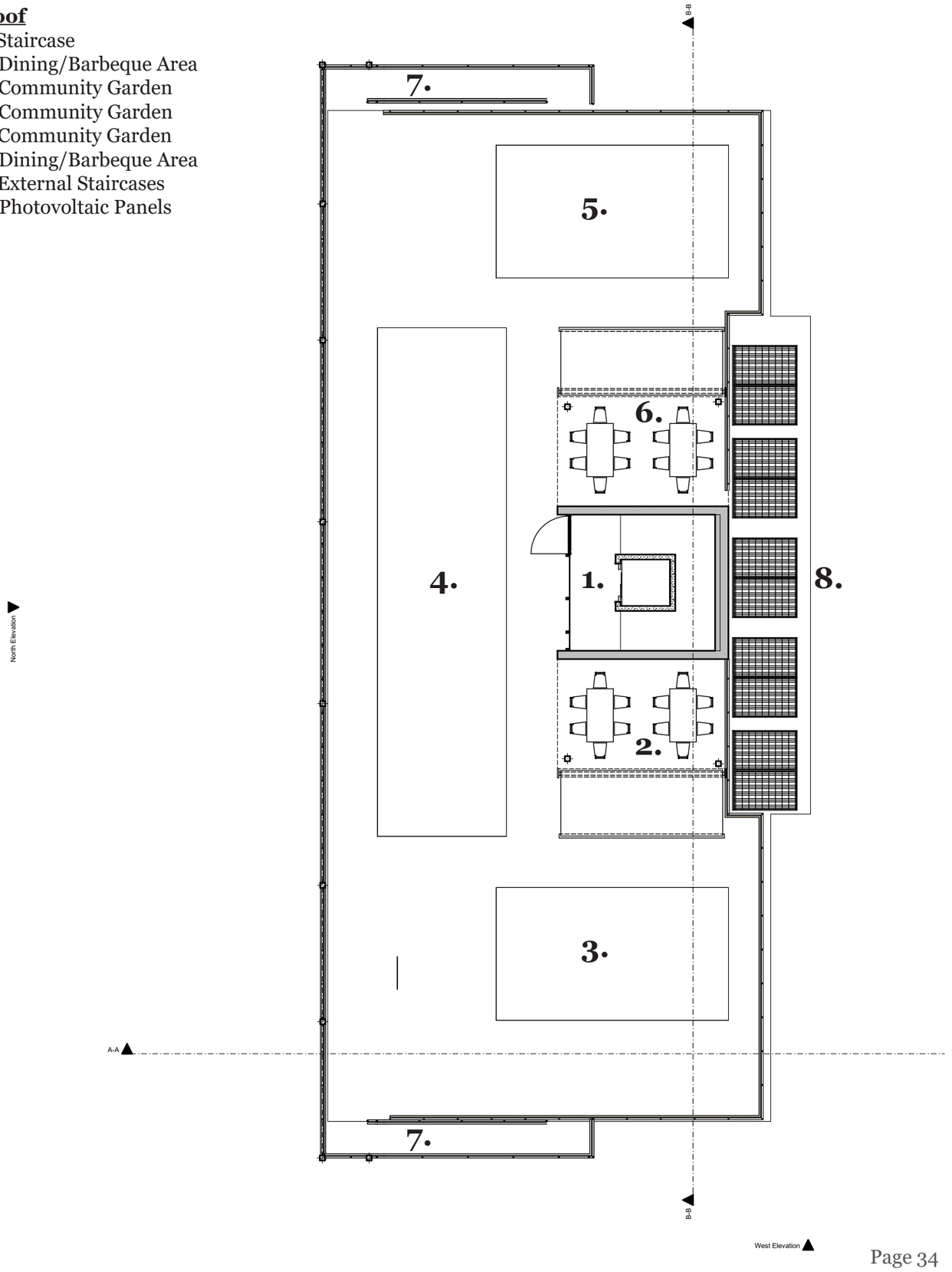
Roof
1. Staircase
2. Dining/Barbeque Area
3. Community Garden
4. Community Garden
5. Community Garden
6. Dining/Barbeque Area
7. External Staircases
8. Photovoltaic Panels



Baugruppe
Roof Plan
Scale: 1:100
Format: A2 (Reduced)

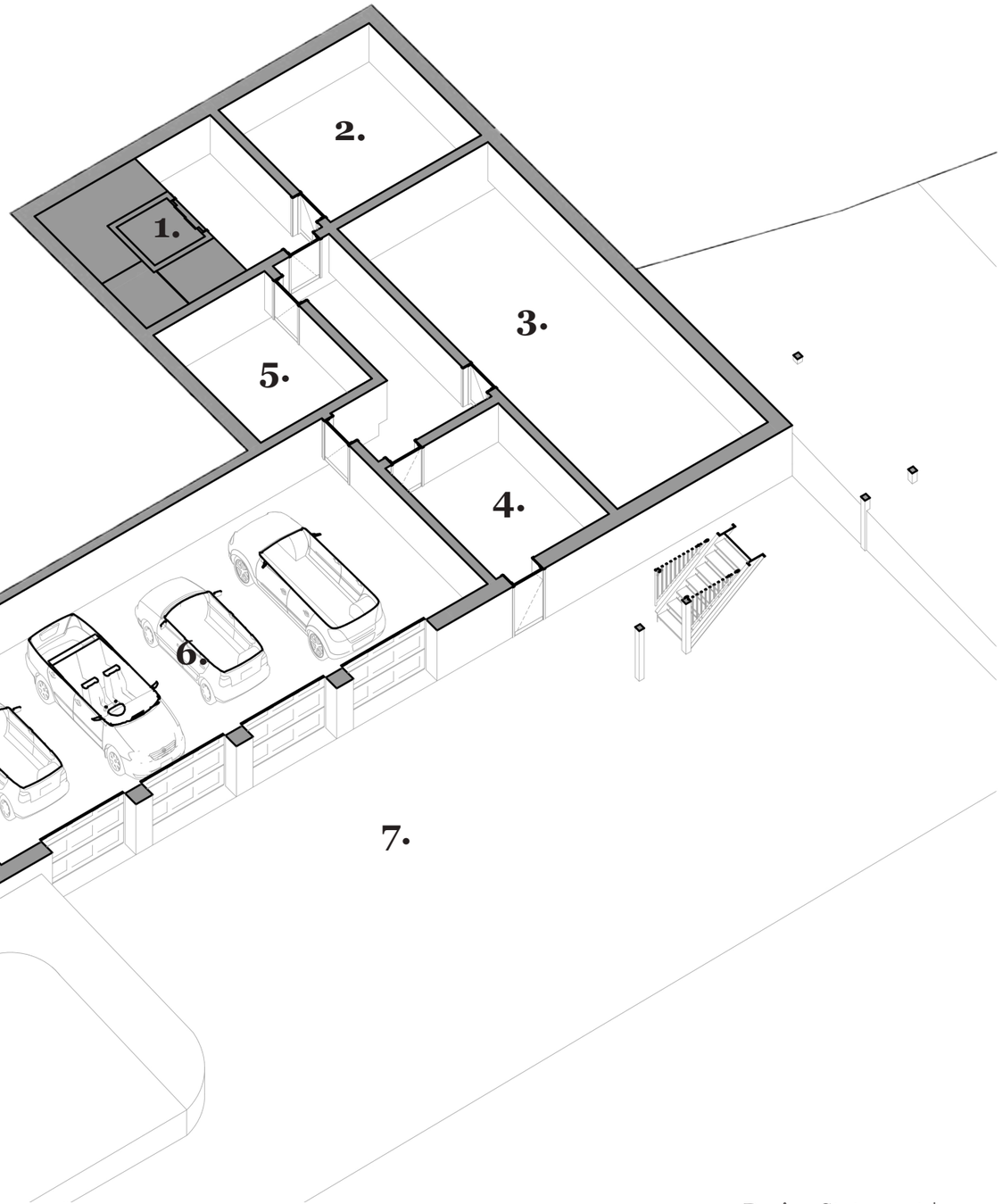
1:100
2m 0 2m 4m 6m 8m 10m

Roof
1. Staircase
2. Dining/Barbeque Area
3. Community Garden
4. Community Garden
5. Community Garden
6. Dining/Barbeque Area
7. External Staircases
8. Photovoltaic Panels



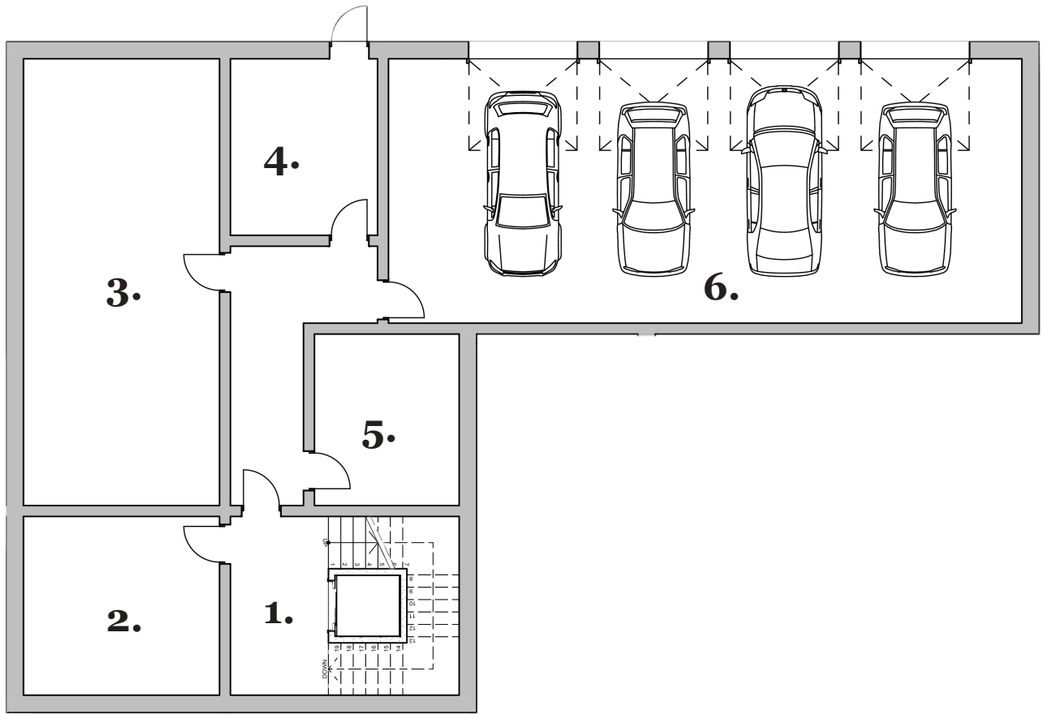
Baugruppe
Basement Axonometry
Scale: 1:100
Format: A2 (Reduced)

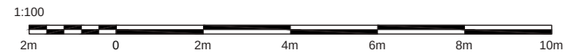
Basement
1. Staircase
2. Storage
3. Plantroom
4. Waste bin store
5. Plantroom (Lift)
6. Garage - Car Share
7. Driveway



Baugruppe
Basement Plan
Scale: 1:100
Format: A2 (Reduced)

Basement
1. Staircase
2. Storage
3. Plantroom
4. Waste bin store
5. Plantroom (Lift)
6. Garage - Car Share





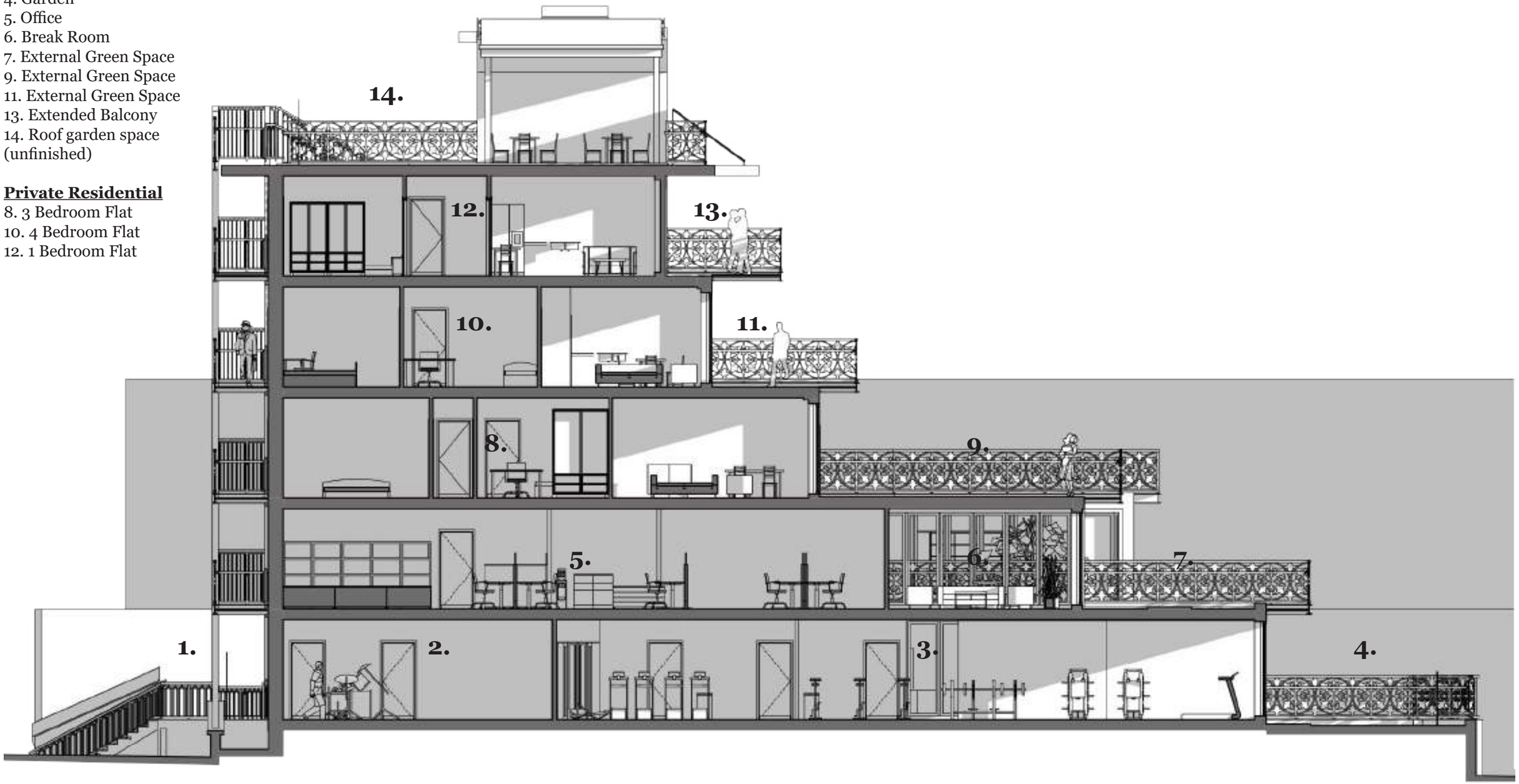
Baugruppe
Section A-A
Scale: 1:100
Format: A3

1:100
2m 0 2m 4m 6m

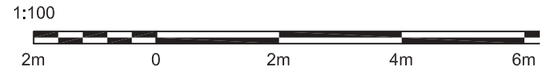
Public/Shared Spaces
1.Entrance
2. Music Practice Room
3. Gym/Yoga

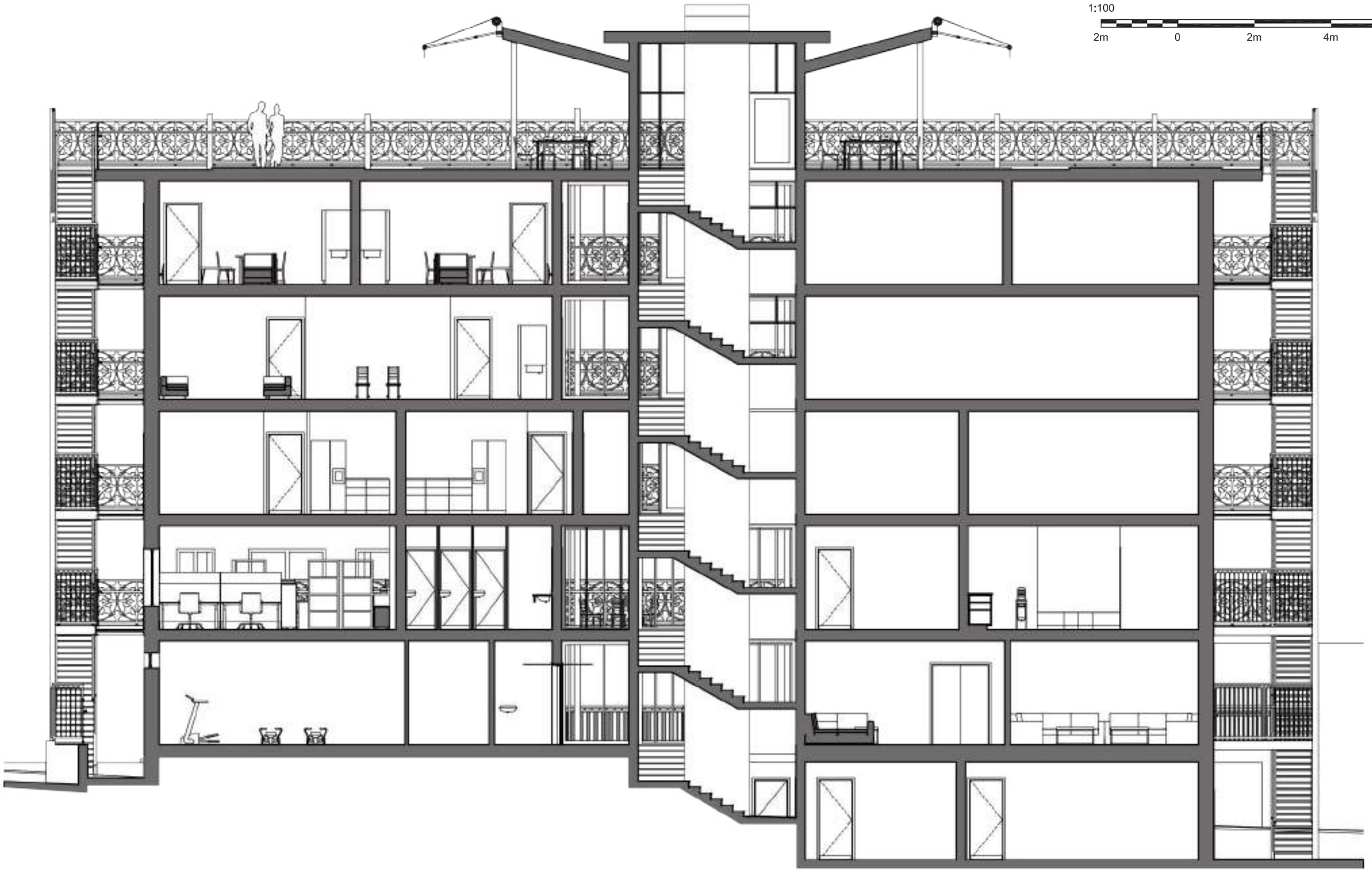
Shared Spaces
4. Garden
5. Office
6. Break Room
7. External Green Space
9. External Green Space
11. External Green Space
13. Extended Balcony
14. Roof garden space (unfinished)

Private Residential
8. 3 Bedroom Flat
10. 4 Bedroom Flat
12. 1 Bedroom Flat

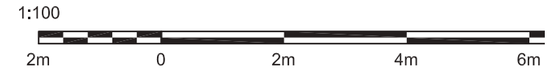


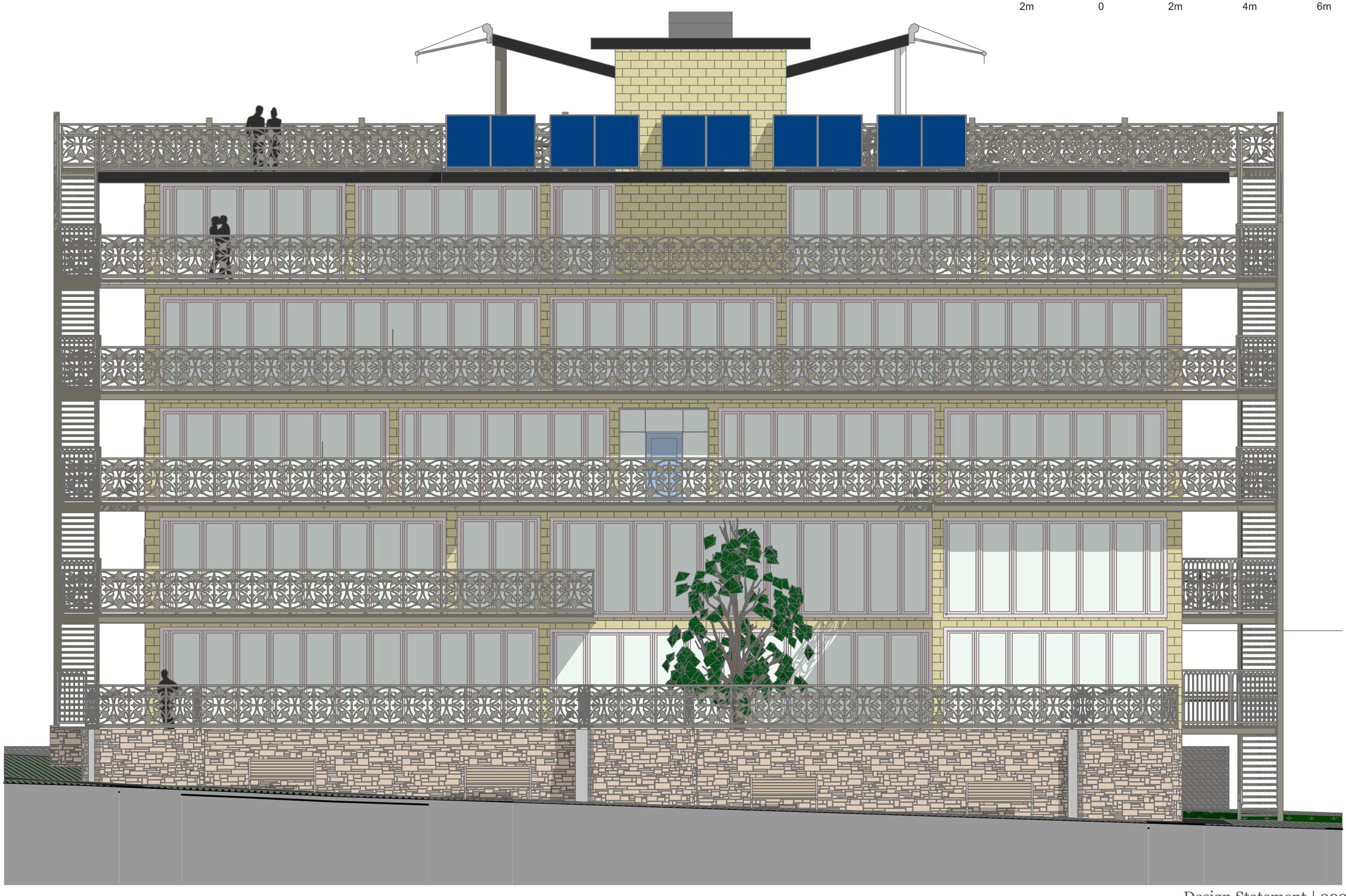
Baugruppe
Section B-B
Scale: 1:100
Format: A3



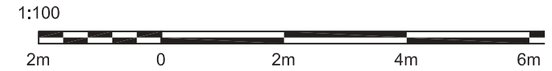


Baugruppe
South Elevation
Scale: 1:100
Format: A3

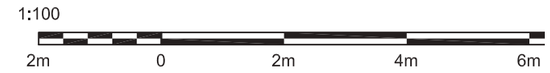


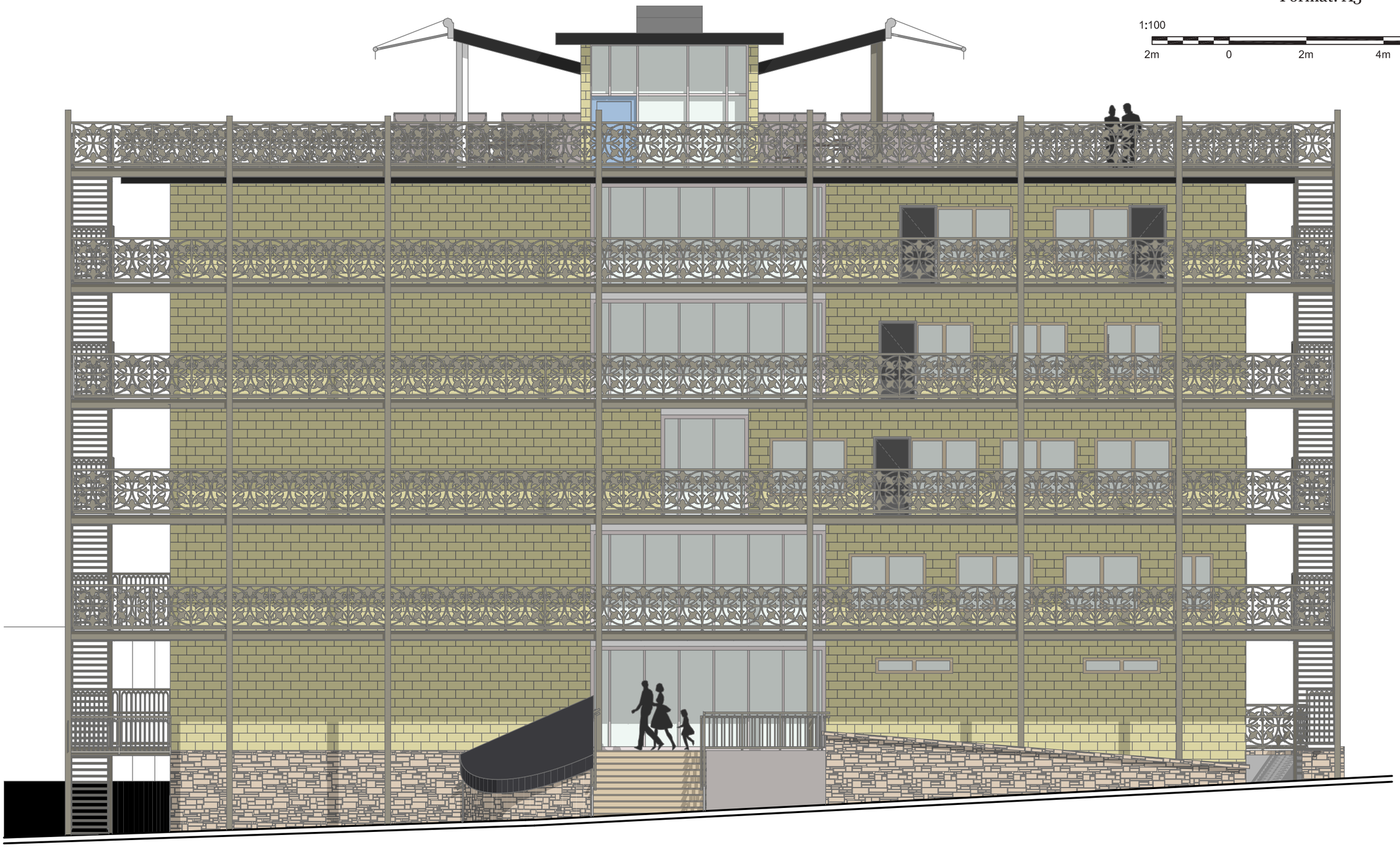


Baugruppe
West Elevation
Scale: 1:100
Format: A3



Baugruppe
North Elevation
Scale: 1:100
Format: A3

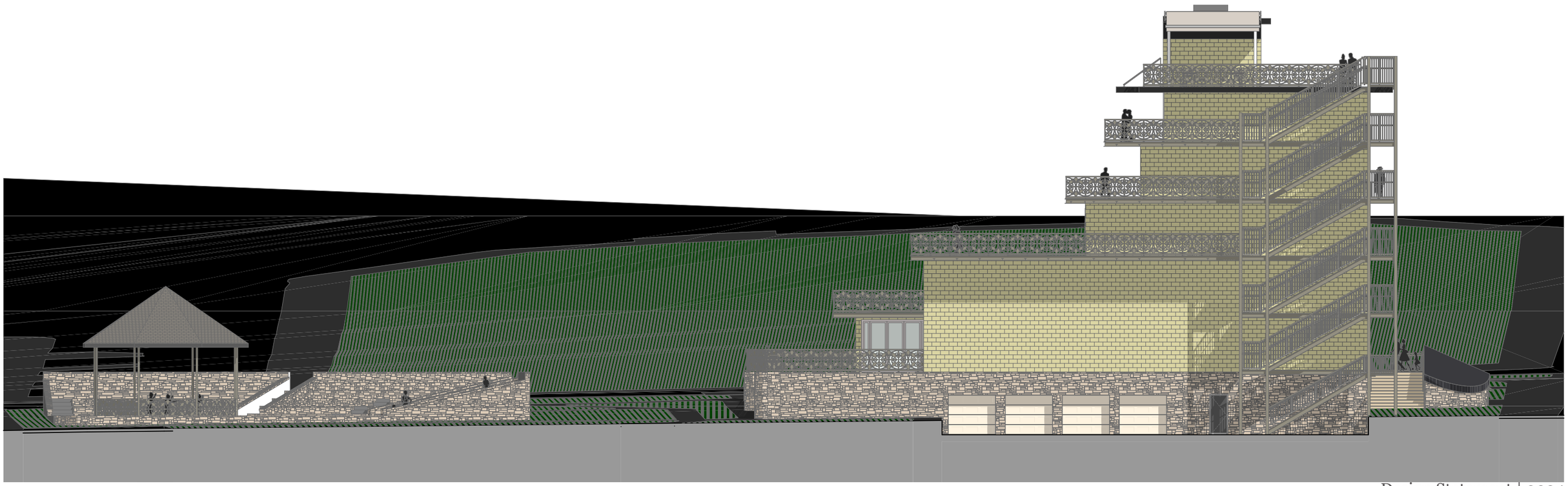




A public bandstand will not only restore the site's historical significance but also become a vital part of community life, benefiting both the residents of Baugruppe and the wider Possilpark area.

With modern technology and the effective use of cameras, artistic events can be streamed, promoting the local area and providing access to cultural activities for those unable to attend in person.

Baugruppe
East Elevation
Scale: 1:100
Format: A1 (Reduced)



Overall Artist's Impression 1

Overall Artist's Impression 2

Roof Garden Artist's Impression

Bandstand Artist's Impression

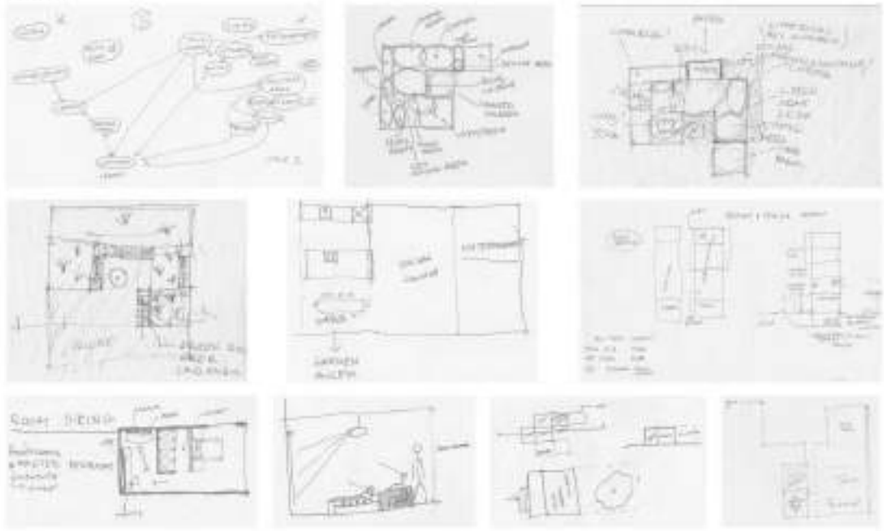
South Elevation Artist's Impression

Sketches

ISSUES/CONTEXT

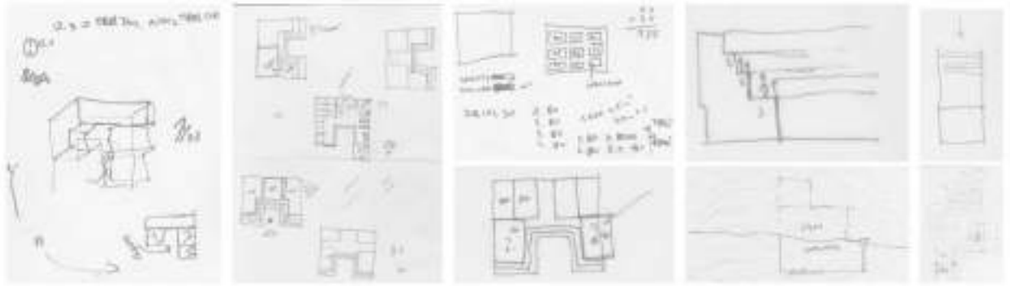
PEOPLE

ROOMS

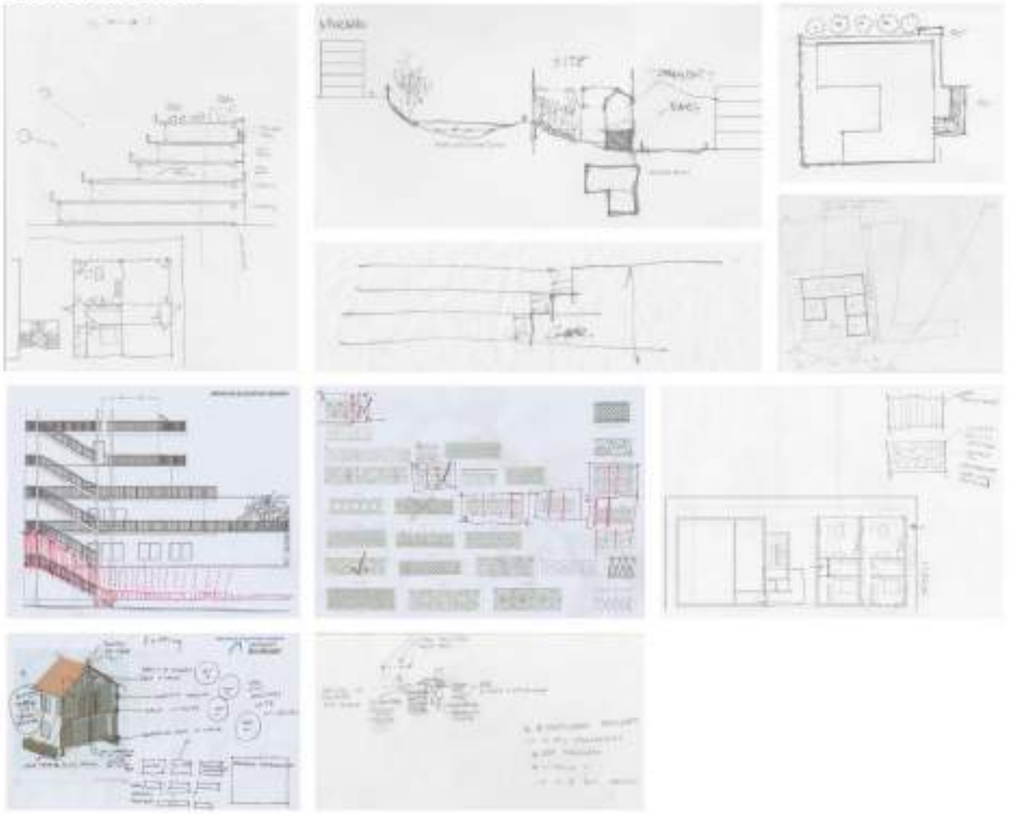


ROOMS POSITIONING

BUILDING & ROOMS



BUILDING & SITE



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[1] Kristien Ring (2013). Selfmade City : Berlin : Stadtgestaltung und Wohnprojekte in Eigeninitiative = Self-initiated urban living and architectural interventions. Berlin: Jovis.
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[5] Cohousing-berlin.de. (2023). Baugruppe Max 31 | Cohousing Berlin. [online] Available at: https://www.cohousing-berlin.de/projekte/baugruppe-max-31 [Accessed 9 Aug. 2024].
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[7] Cohousing-berlin.de. (2018). Lichtenrader Revier | Cohousing Berlin. [online] Available at: https://www.cohousing-berlin.de/projekte/lichtenrader-revier [Accessed 9 Aug. 2024].
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Appendixes:

Appendix 1
Good and Bad Retrofit approaches Year 5, Semester 1 Design Thesis

Appendix 2
Building Technologies Year 5, Semester 1 Cultural Studies

Appendix 3
Examplar 2019-build Snug Report - own research

Appendix 4
Can the life expectancy of the more vulnerable part of Glasgow communities be higher by introducing better design solutions? - Year 4 Dissertation

DEPARTMENT OF ARCHITECTURE

University of Strathclyde Engineering

Declaration

AB 965 Design Studies 5B 2023/24
MArch/Pg Dip Advanced Architectural Design
MArch Architectural Design International

Declaration

"I hereby declare that this submission is **my own work** and **has been composed by myself**. It contains **no unacknowledged text or images** and has not been submitted in any previous context. All quotations have been distinguished by quotation marks and all sources of information, text, illustration, tables, images etc. have been specifically acknowledged.

I accept that if having signed this Declaration my work should be found at Examination to show **evidence of academic dishonesty the work will fail** and I will be **liable to face the University Senate Discipline Committee.**"

Name: KONRAD KOŁODZIEJ

Signed: K.Kołodziej

Date: 12.08.2024

Department of Architecture
Level 3, James Weir Building
75 Montrose Street
Glasgow G1 1XJ

t: + 44 (0) 141 548 3023/3097/4219

e: architecture@strath.ac.uk

Head of Department:
Professor Tim Sharpe