

# GIVING A NEW WIND

LOUIS LE BRETTON, 8<sup>th</sup> SEMESTER

ATELIÉR TESAŘ–BARLA, ERASMUS

15127 ÚSTAV NAVRHOVÁNÍ I

LS 2023

## GIVING A NEW WIND

Taking benefits of the abandoned place left by a former fortress, the aim of this project is to restore a former cemetery which is no longer sufficient for Lyon's needs. Since it is too small, the cemetery cannot meet the increasing demand and sensitivity of the inhabitants for sustainability in every aspect of their everyday life, including death. Using **aquamation**, this new crematorium is giving a new wind to the Loyasse cemetery by introducing state-of-the-art technologies that are not producing CO<sub>2</sub> or any other kind of toxic wastes for the environment. Beyond this construction site, the project's wish is also to revitalize the link between the French metropole and its necropoles. More than two hundred years after the removal of the urban graveyards of the city, this project pretends to be a first step to a new consideration of death in our contemporary society.

# ESSAY

Inherent elements of its existence, the concepts of life and death have always led people to question themselves about their finiteness. Adopting various forms, their relationship with it constitutes an essential reference point for historians who consider it as a fundamental starting point for the study of a civilization, a people, an era. Creating a cemetery is therefore as much a question of space as it is a question of the era and its perception of death.

## **From an abandonment of death...**

Located on the Loyasse site in Lyon, this project deals with more than two hundred years of the history of French necropolises.

Created in 1807, the oldest cemetery still in use in Lyon is first and foremost a monument of funeral architecture. Indeed, it was built in accordance to the requirements of the decree-law of June 12<sup>th</sup> 1804, which organised the construction of new municipal cemeteries outside of the city borders for reasons of hygiene. Thus, this period corresponds to the first break between French cities and their dead, whom they reject on the outskirts. Driven out of the cities, death is no longer part of the daily life of a society that hides it.

From this moment on, the daily experience of death becomes fewer and is gradually limited to isolated commemorations, such as those organized on All Saints' Day. The slow decline of religious beliefs in the French society, notably marked in 1905 by the separation of Church and State, finally makes these moments of collective meditation increasingly rare until they almost disappear today. Nowadays, with the progress of medicine, death seems preventable. Formerly natural, death is now only the result of a homicide or a medical error. Unbearable and frightening, death is then confined in lifeless spaces more and more restricted because of the growing urban development. Cremation and columbaria finally appear out of necessity to save space in cities where death and life no longer seem able to cohabit.

## **...to a sustainable relationship of urban space...**

Even though the abandonment of death in urban space has been a paradigm for more than two centuries, the project for the creation of a new cemetery in Loyasse nevertheless proposes to consider the cohabitation of life and death in a modern city. As a support for remembrance, architecture remains where life ends and allows the living to relativize their disappearance through memory.

Shedding light on the historical cemetery of Loyasse, this new crematorium brings modernity and life in this dying space, and takes benefits of its proximity from touristic monuments to provide its restauration. Thus, it creates a master plan to combine a garden celebrating both life, through spaces dedicated to recreational and cultural activities, and death through the erection of dedicated cinerary monuments. It also provides a sustainable crematorium process due to the use of environmental-friendly aquamation technology.

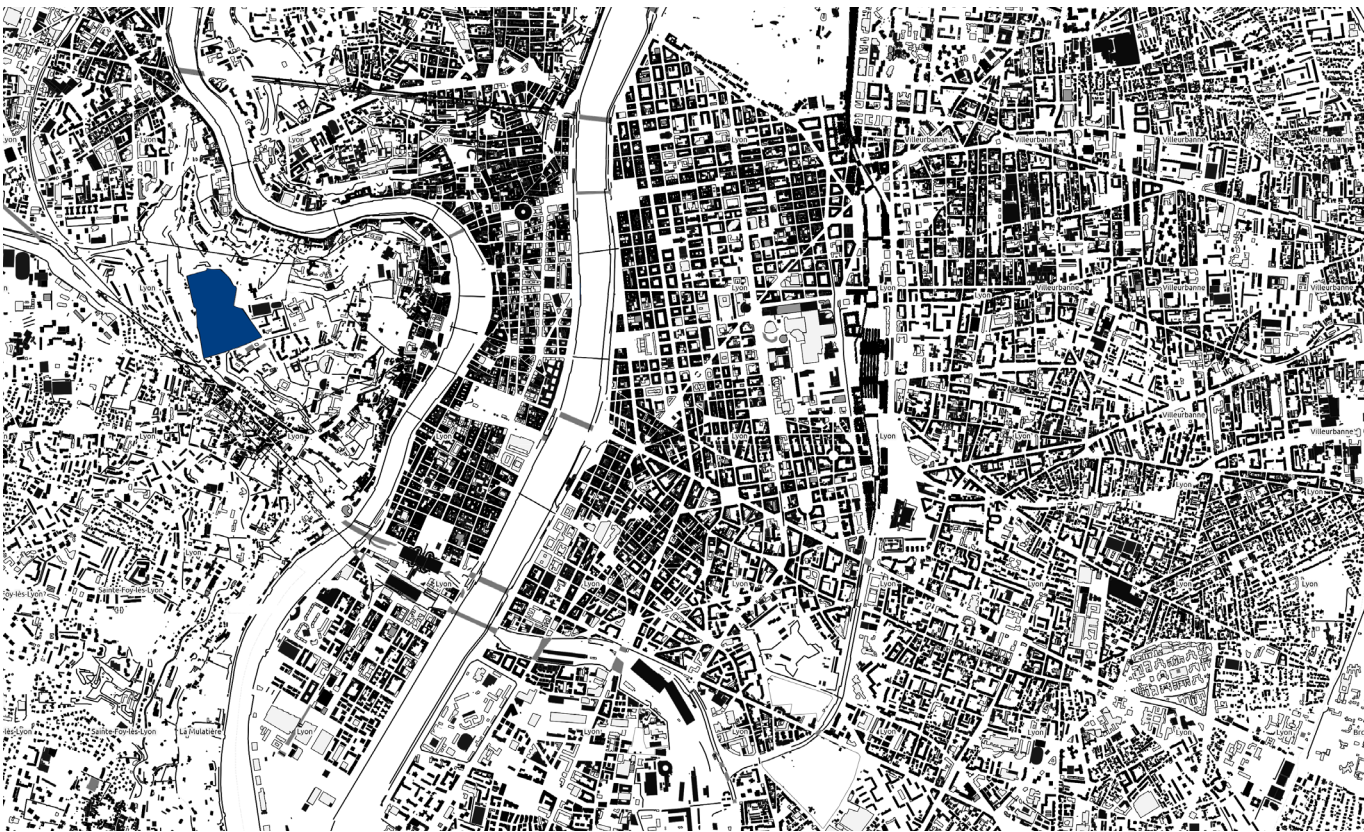
## **... to an architecture of acceptance.**

As concrete testimony of a restored vision on death, the architecture of the new Loyasse crematorium will be the one of death acceptance. In a society that rejects it, the project proposes to approach this difficult theme from a universal point of view. If „everything passes and nothing remains“, the future crematorium proposes to take up the image of Heraclitus' river in which one cannot bath twice in the same water, symbolizing the perpetuity of life envolving. Entering the crematorium, visitors will first be able to take a last breath before starting their mourning process, in an open space highlighted by the landscape it overhangs. Once they are ready, they will be invited to enter the monumental space of the staircase, which like a waterfall, gives rhythm to the flow of people who are beginning their mourning process.

Directly confronted to death during the ceremony, the relatives of the deceased will then be led the same stairs they took before, driving them now to the garden of remembrance where a path symbolizes different emotions they can pass through. The physical effort of climbing the stairs and walking around the building resonates with the general mourning process of visitors. Once the aquamation is done, the family members will be able to take the ashes to later spread them in a place of their choice.

Finally, the aim of the new Loyasse cemetery is to form a new model of necropolis, responding to the social, economic and environmental challenges of sustainable development in the city of Lyon. Evolving with its city, its context, and its time, the oldest cemetery still in operation in Lyon is entering a new era and invites its users to reconsider their view of death.

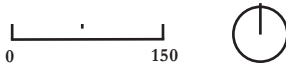
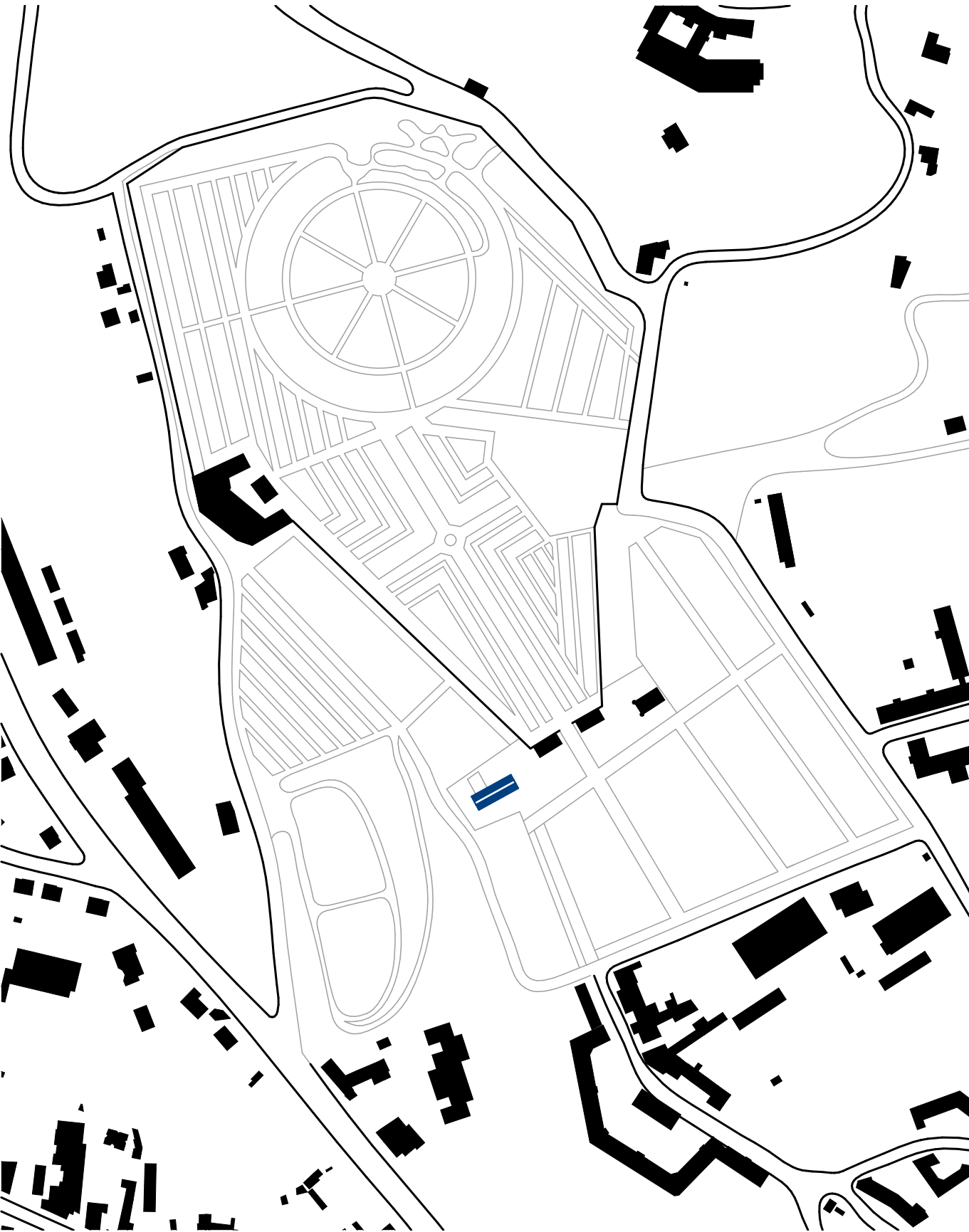




# LOYASSE CEMETERY

Located on the *Fourvière* hill, the Loyasse cemetery is part of the historical district of Lyon. Indeed, it is here that prestigious roman vestiges have been discovered, which are the relics of the glorious roman capital city of the Roman Gaul „*Lugdunum*“. The most iconic testimonies of this former glory are undoubtedly the Roman theater, the odeon and the **aqueduc** which are all situated in the eastern part of the hill. Catholic capital city of France, the hill gave its name to the basilica of Notre-Dame de Fourvière which overhangs the city and its surroundings. Built in the XIX<sup>th</sup> century, it is the main landmark of this „**praying hill**“ representing the great spirituality of this place covered by monastery and former religious institutions.

Settled in the eastern part of the hill, the Loyasse cemetery was built outside of **the former fortication of the city** in 1807, according to a new imperial decree on burial site constructions. Due to its prestigious location, it fastly became the cemetery of the wealthy who were able to afford the most decorated gravestones. Quickly saturated, new extension of the cemetery now covers the slopes of the hill and are now restricted by the housing all around the cemetery.





LOYASSE GRAVEYARD



ROMAN THEATER OF LYON



BASILICA OF NOTRE-DAME DE FOURVIÈRE

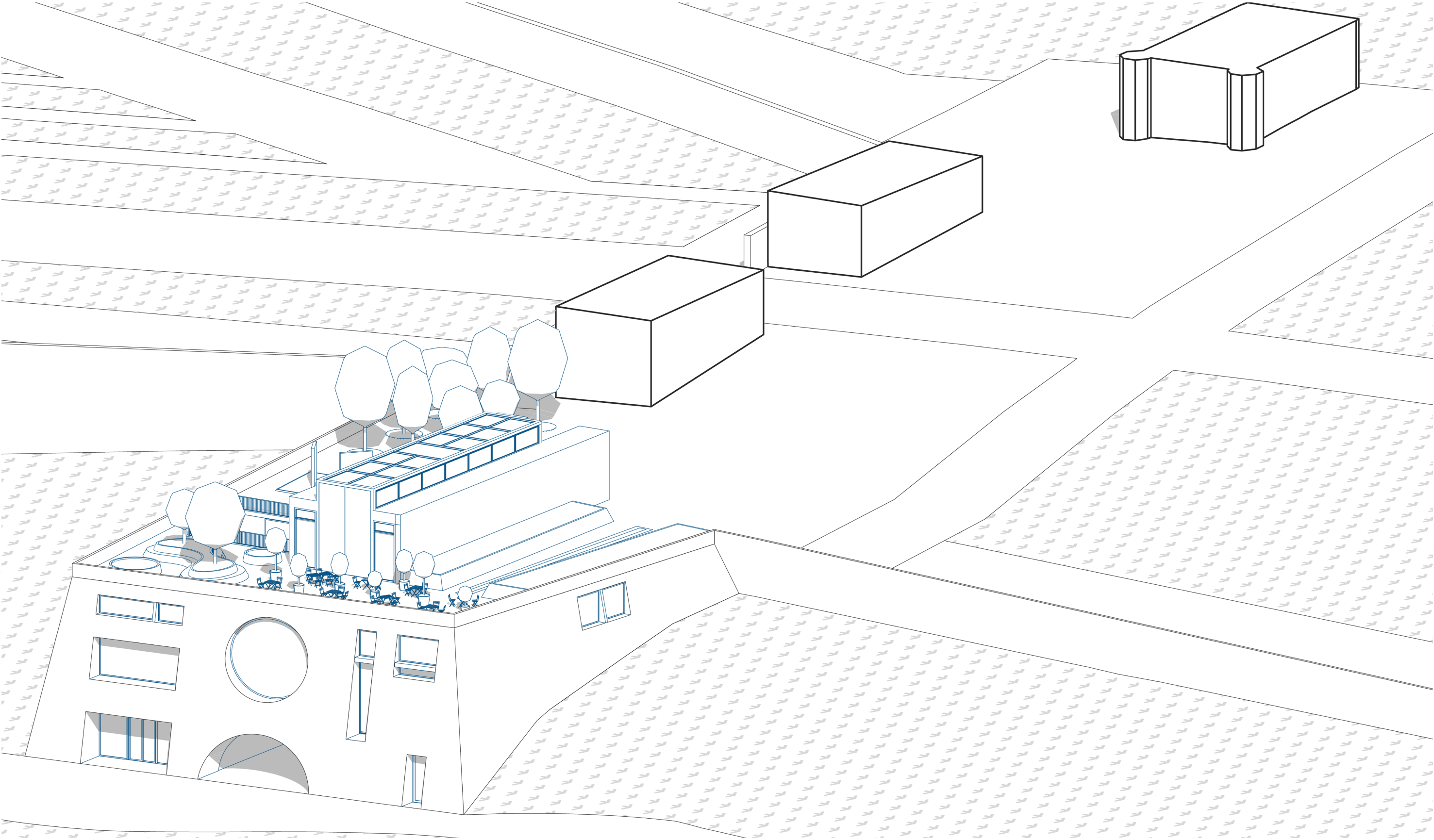


CATHEDRAL OF SAINT-JEAN

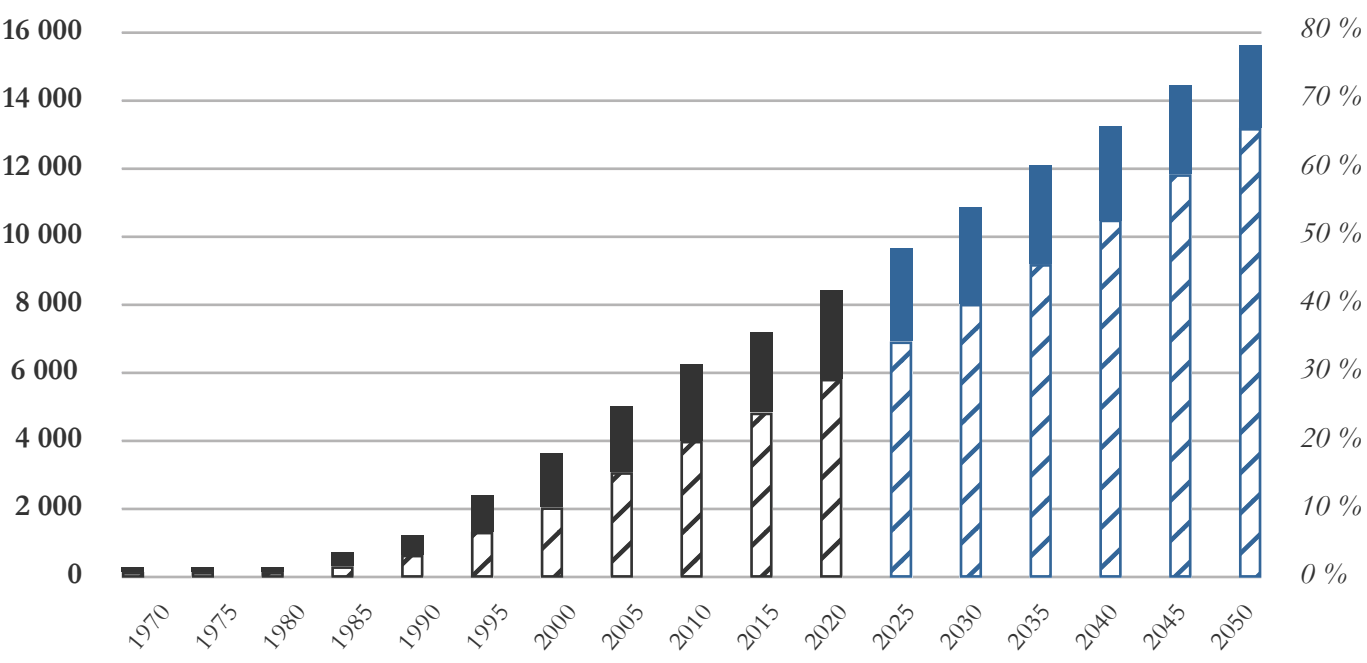




AXONOMETRY



CONCEPT



UPPER PART : Pourcentage of cremation in France.  
LOWER PART: Number of cremation per year in Lyon.

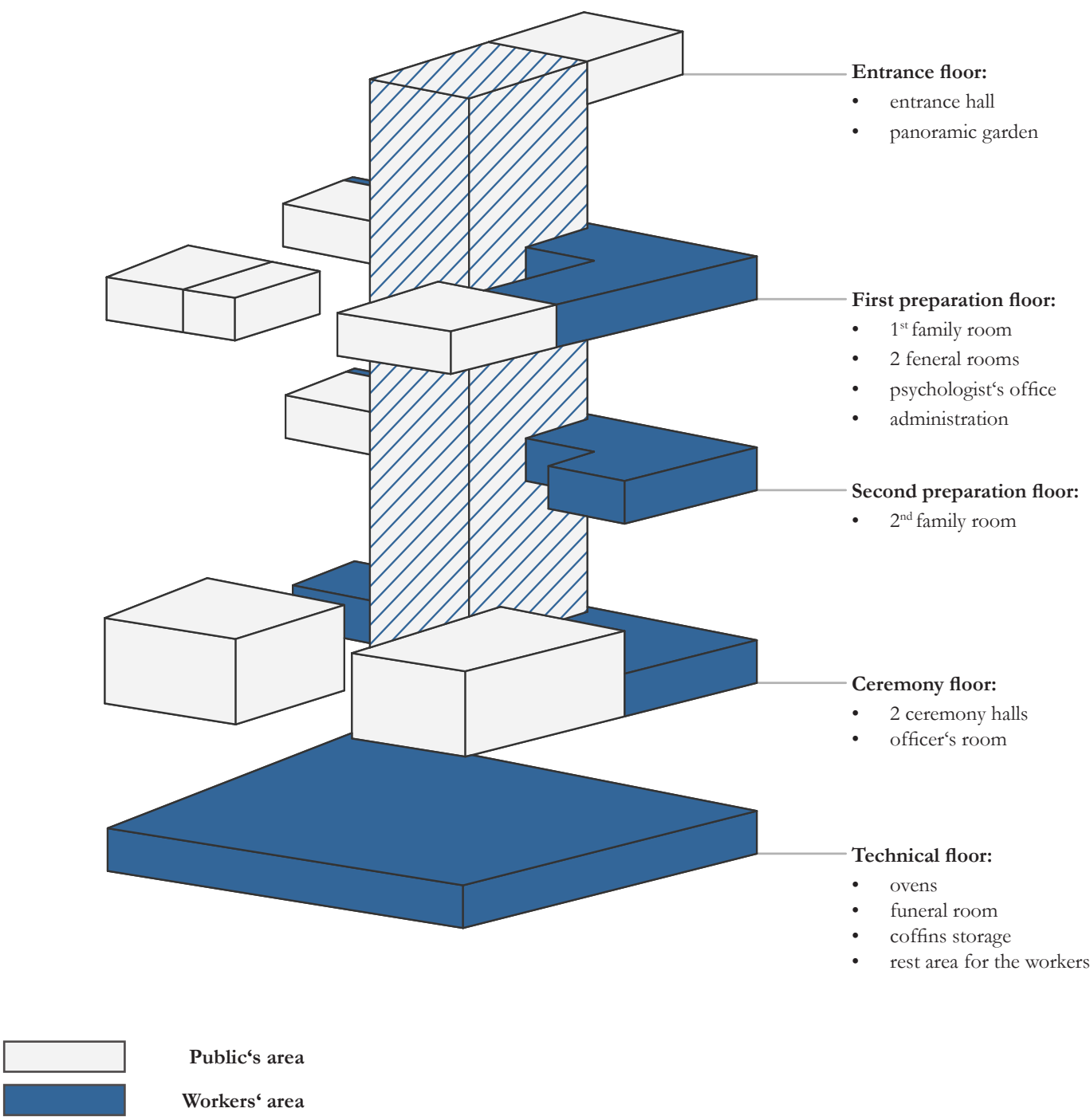
AQUAMATORIUMS ?

The objective of this project is not only the restoration of a historical cemetery, but also to offer a funeral service in accordance to the evolution of French society. Actually, cremation is on its way to become the main funeral technique in 2030.

With two crematoria already in operation, the Lyon metropolitan area currently performs approximately 6,000 cremations per year. As this figure is likely to double in the next 20 years, the city must now face up to this issue while taking into account the environmental concerns of the population. This project therefore proposes the construction of a new type of crematorium using ecological process.

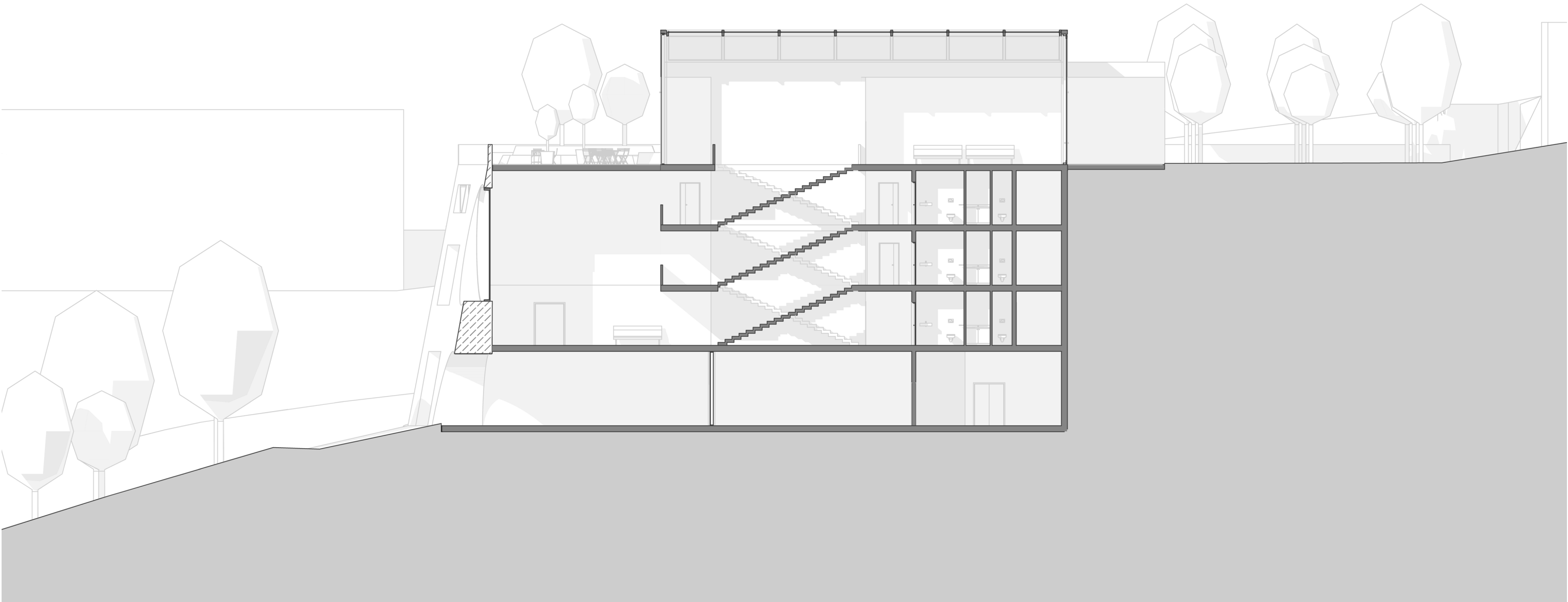
Aquamation consists of chemical reactions used to decompose bodies in hot water. This technology does not create any waste, since the water obtained is loaded with organic matter good for fertilization, and the bones are reduced to a calcium powder which could be assimilated to ashes as a memorial material. Nevertheless, this technology takes three times longer than a conventional cremation and therefore requires special sizing. This project therefore develops a crematorium with six aquamation „ovens“.

A VERTICAL MOURNING PROCESS

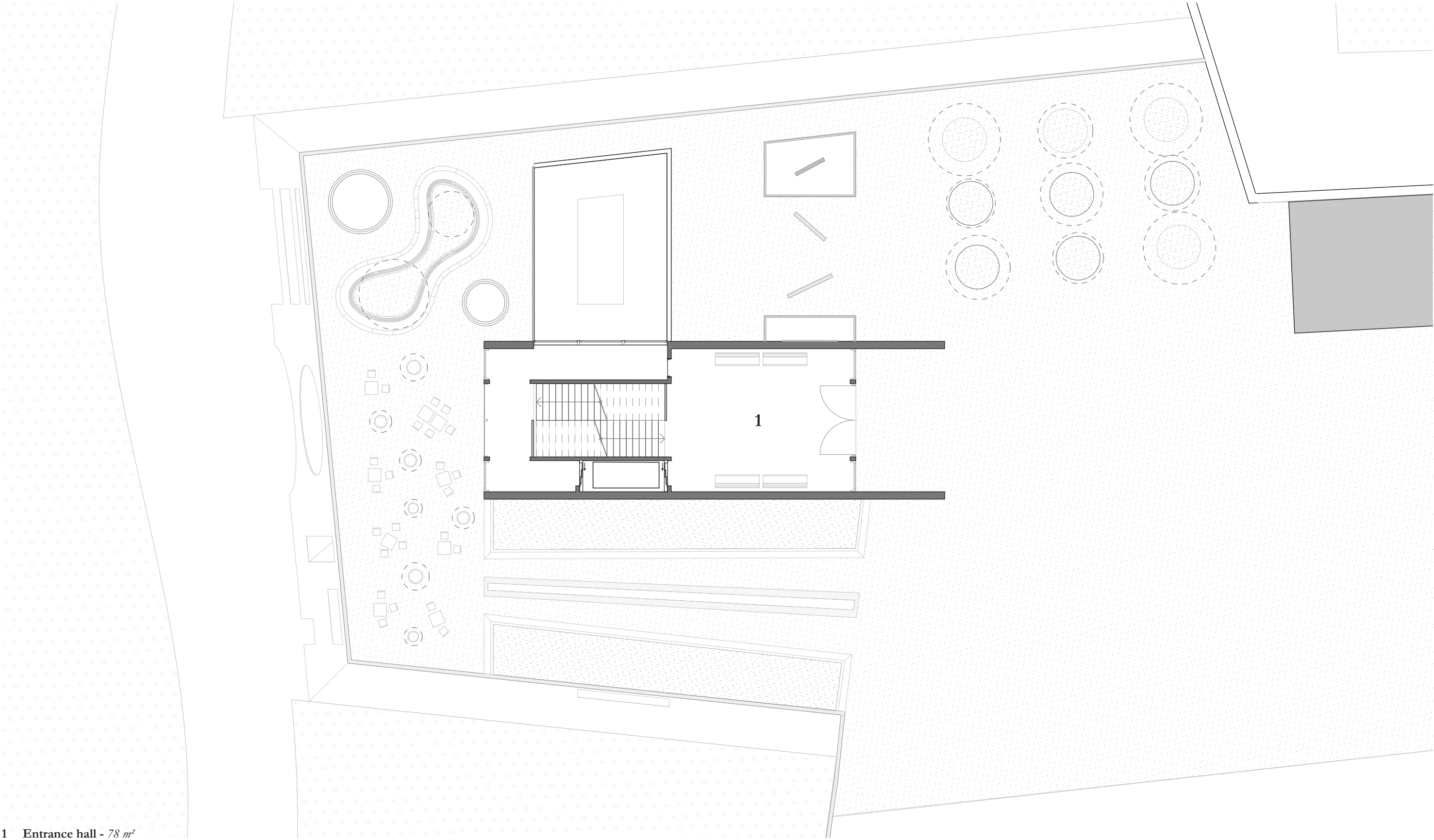




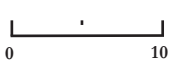






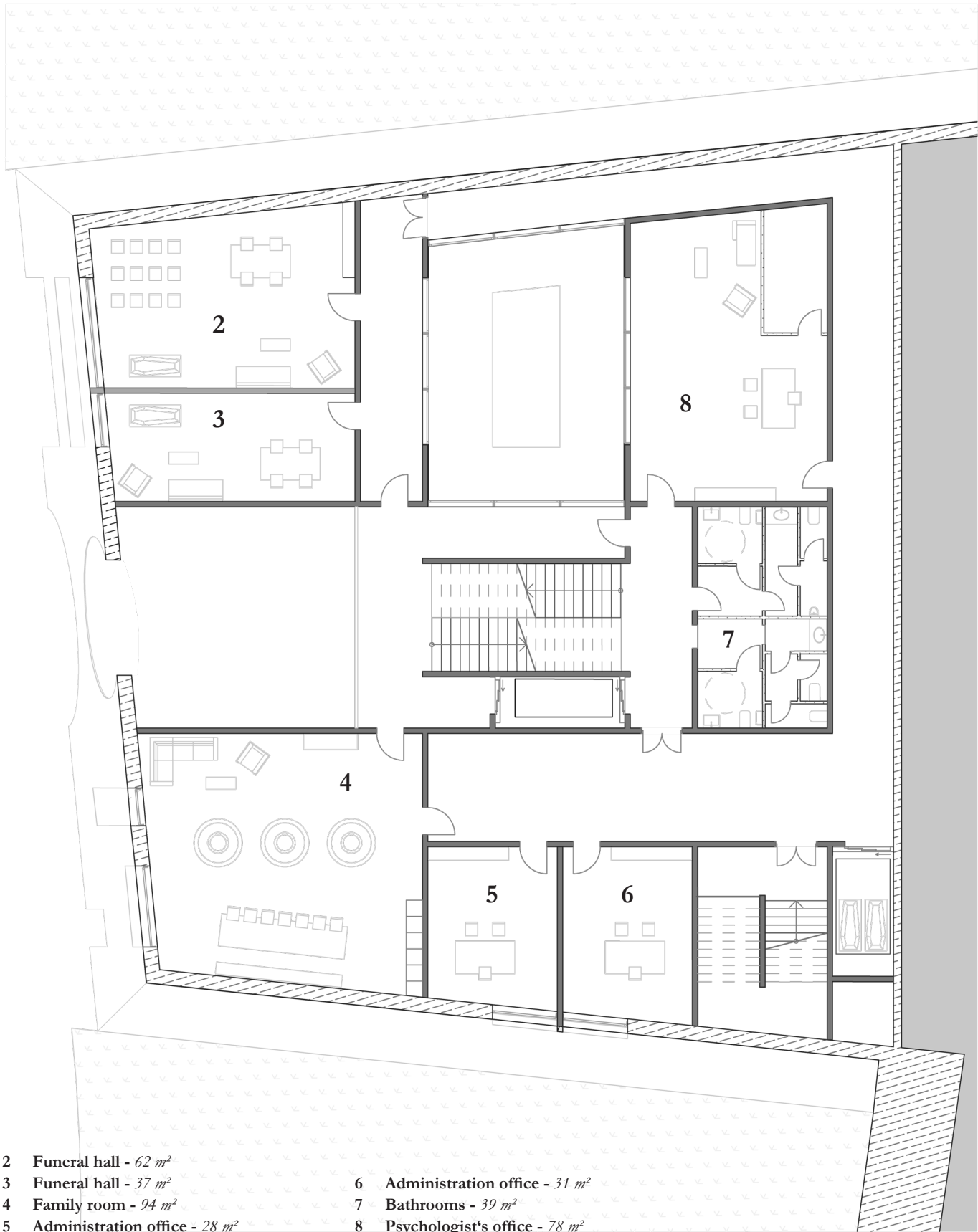


1 Entrance hall - 78 m<sup>2</sup>



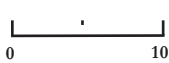
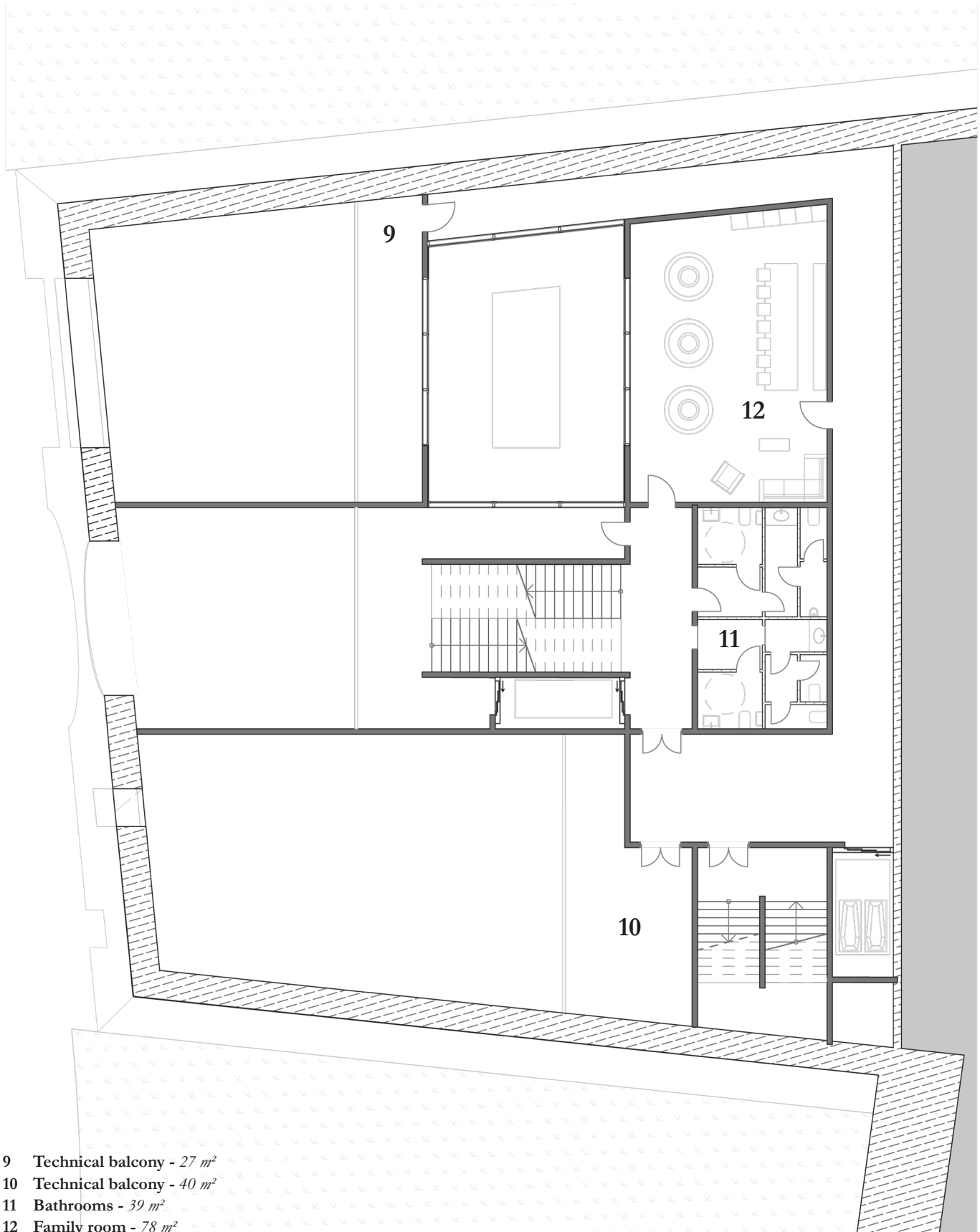


PLAN LOWER GROUND FLOOR -1

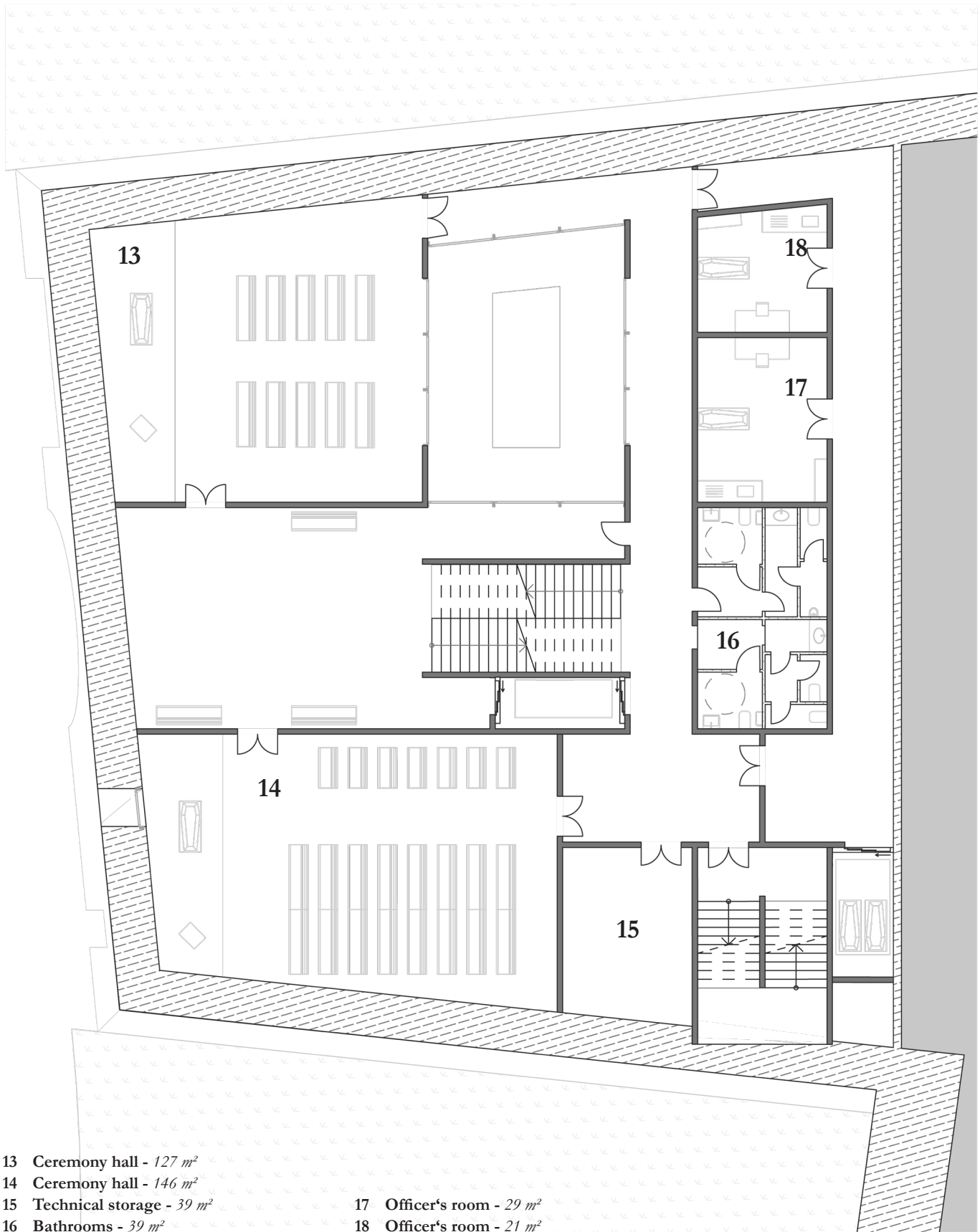


PLAN LOWER GROUND FLOOR -2

M 1:200

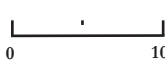
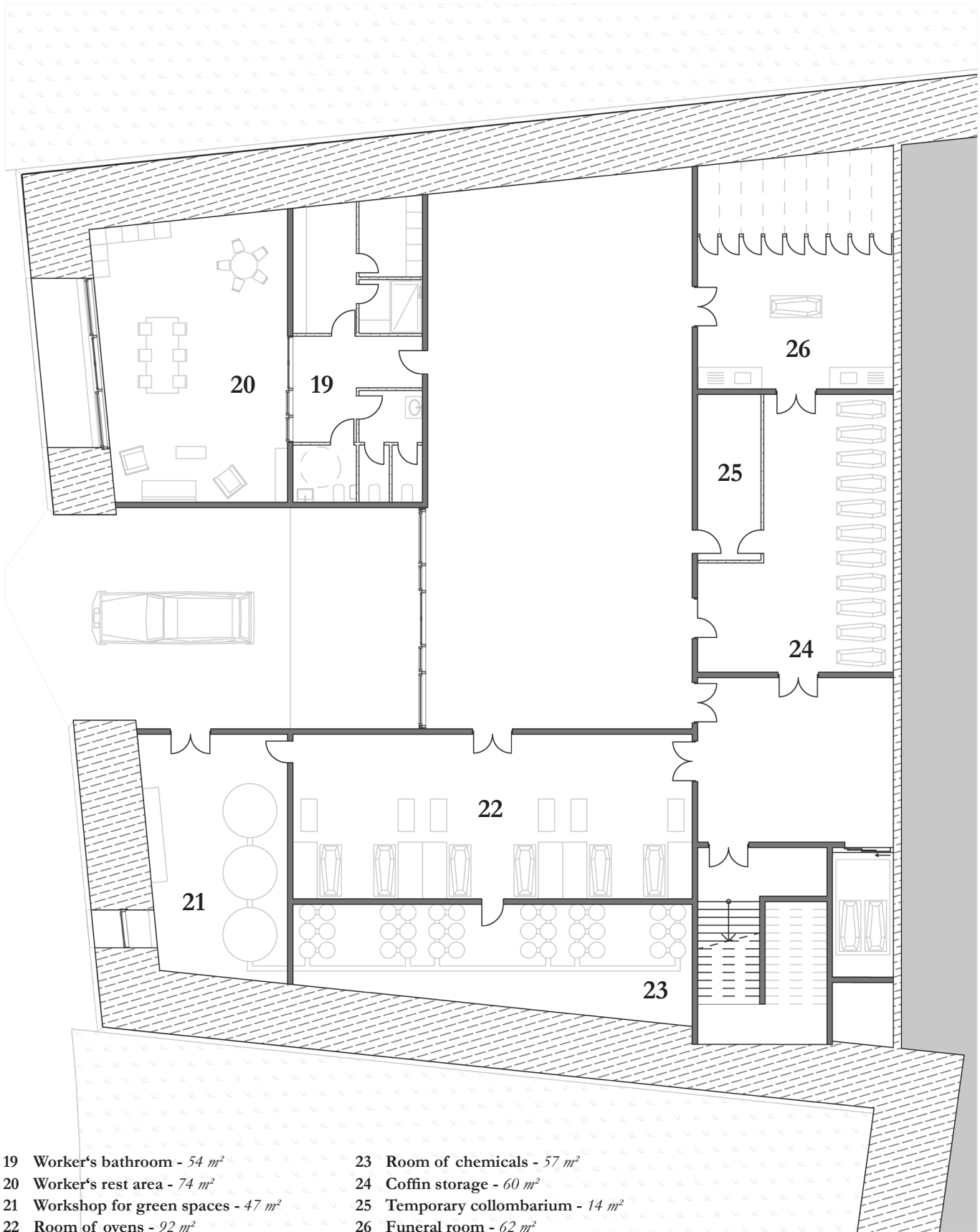


PLAN LOWER GROUND FLOOR -3



PLAN LOWER GROUND FLOOR -4

M 1:200





ELEVATION



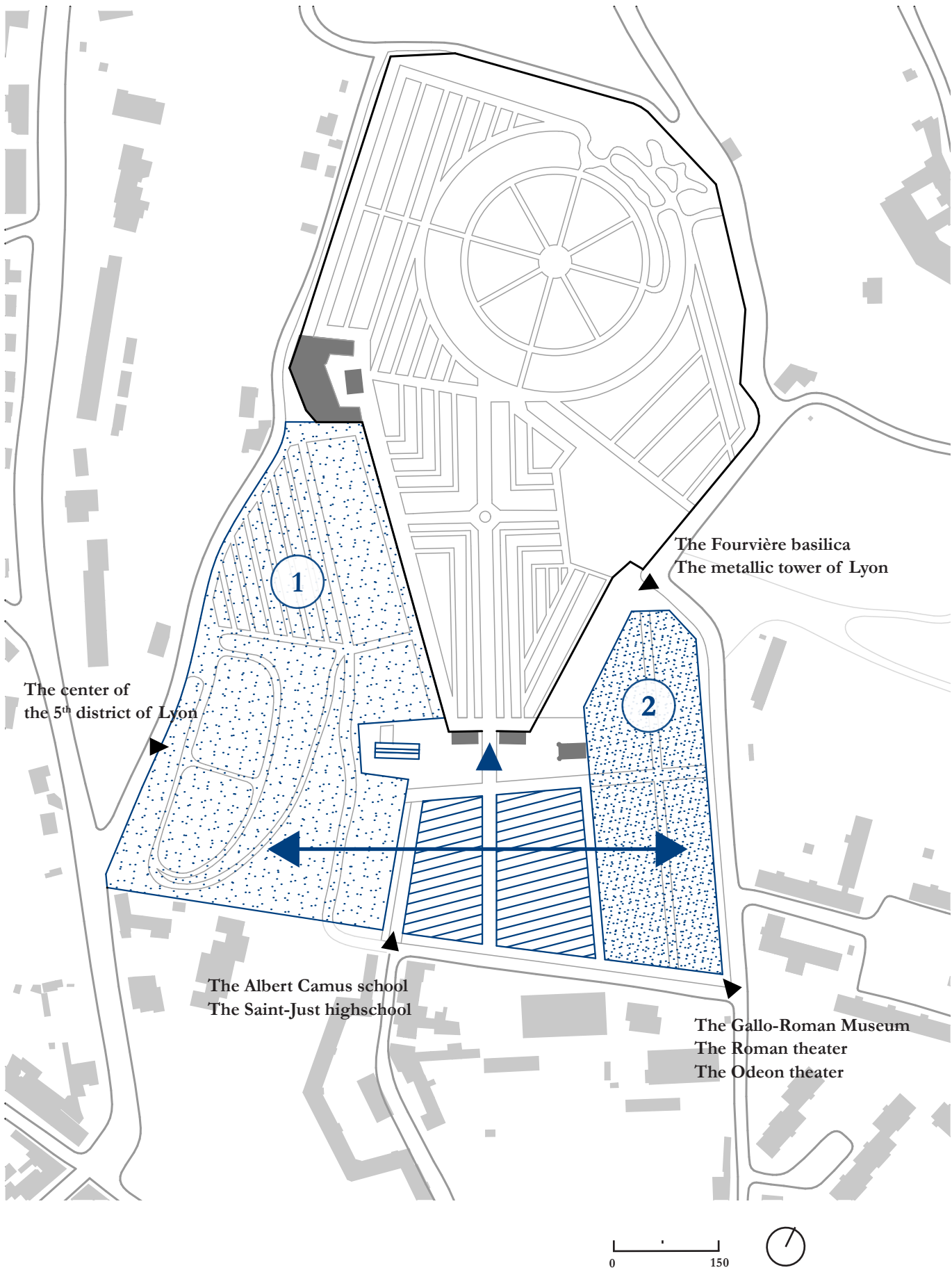




# AN NEW CEMETERY

As already mentioned, this project’s major concern is to find a new balance between life and death in contemporary society. Indeed, the construction of the Loyasse cemetery is the direct consequence of the society point of view on death at that time. Perceived as unclean, death was then synonymous with disease and was therefore pushed out of the city centers by the construction of new cemeteries outside the urban boundaries.

Today, surrounded by the city that has developed around it, the cemetery is accidentally found in the city that did not foresee its integration in itself. Thus, in order to rehabilitate this precious space within the tourist district of La Fourvière, the construction of this crematorium could allow the densification of the historic Loyasse cemetery and the elimination of its extensions, which could be then used as **a panoramic public garden (1)** and **a public park linking the emblematic monuments of the historic district (2)**. As a connection between these two lively public spaces, a garden of memories would finally be dedicated the commemoration of the deceased and death would become an everyday step, an everyday subject that no one would be afraid of.





# AUTHOR’S REPORT

Located in an extraordinary panoramic site, the crematorium offers through its windows several views of the city of Lyon in full effervescence. The progression of visitors in the building makes them adopt different visions of life to bring them to take a step back on death. Thus, by feeling part of a group, the loneliness linked to the loss of a loved one would be minimized. Contemplation of the city would thus be a therapy for mourning and a proposal to better accept death in our contemporary society. To lead to this contempwwlation, the materiality of the crematorium would so be as neutral as possible. Underground, this hidden architecture fades away to let the landscape fully express itself.

Responding to the different dimensions of the openings, the various heights of the rooms will create a progression in the mourning process of visitors. Thus, visitors, first led to a triple-height waiting room, will then enter in double-height ceremony halls. Afterwards, all their circulation would be carried out in single-height spaces driving them outside of the crematorium. From the heaving atmosphere of the first space they entered, the visitors will then reach smaller and warmer place through the ceremony. From uncomfortables feelings, grieving leads you finally to the interior peace.

**REFERENCES:**

- (2020) HEALTH COUNCIL OF THE NETHERLANDS. *The admissibility of new techniques of disposing of the dead.*
- (2020) MINISTÈRE DE LA COHÉSION DES TERRITOIRES ET DES RELATIONS AVEC LES COLLECTIVITÉS TERRITORIALES. *Guide de recommandations relatif aux techniques des chambres funéraires et mortuaires.*
- (2019) CREDOC. *Funéroscope 2019.*
- (2007) CREDOC. *Etudes des pratiques funéraires en France*
- (2017) REYNAUD F. *Projet de fin d'études. Projet de reconversion du Fort de Loyasse.*
- (2017) MARIET J. *Mémoire de fin d'études. Cimetières contemporains, vers une nouvelle sacralité ?*



## GIVING A NEW WIND

### **Vedoucí práce**

doc. Ing. arch. Jan Jakub Tesař, Ph.D.

Ing. arch. Matěj Barla

### **Konzultanti**

Provoz funerálních staveb: Mgr. Tomáš Kotrlý (MMR ČR)

Esej: Mgr. Vladan Klement, Ph.D.

Krajinářský architekt: Ing. arch. Vojtěch Hybler

BIM: Ing. arch. Martin Rosa

Host ateliéru: Ing. arch. Radek Šíma

### ***Ateliér Tesař–Barla***

*15127 Ústav navrhování I*

*Vedoucí ústavu: prof. Ing. arch. Ján Stempel*

*Fakulty architektury*

*České vysoké učení technické v Praze*

*letní semestr 2023*



