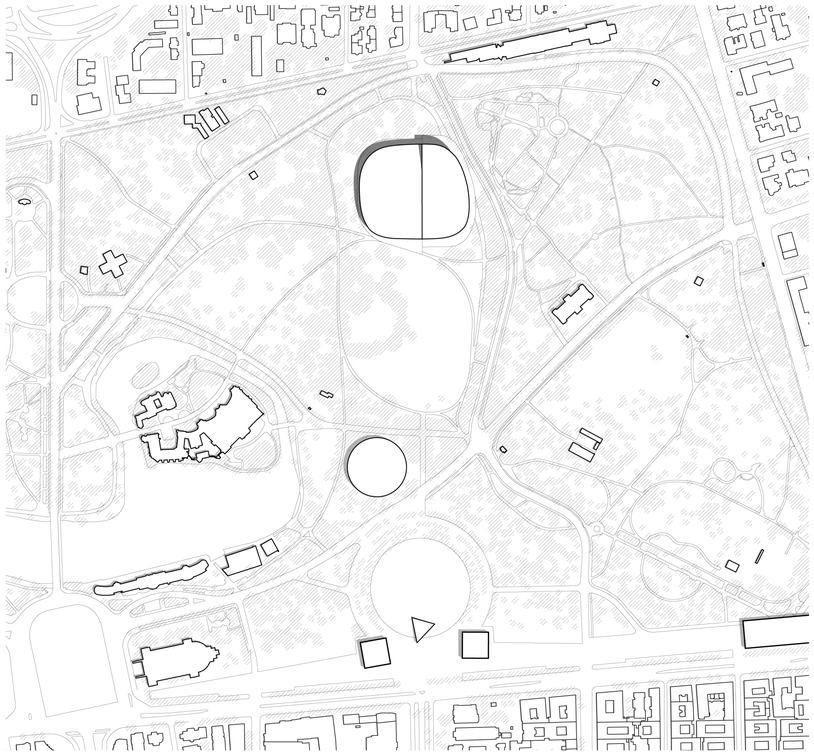


SITE PLAN 1:4000



THE ROUND SHAPED BUILDING HAS NO FRONT OR BACK. THE MUSEUMS EMBRACE THE PARK AS THE PARK EMBRACES THEM.

The House in Liget

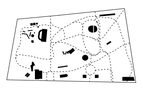
that connects the people with the Park

With the design of the New National Gallery and Ludwig Museum we want to give back to the city. We want to offer a sustainable, cost-effective house of the highest architectural quality. Our scheme unifies the two different institutions by embracing their individuality.

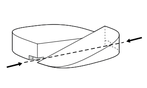
Városliget was the first public park in the world and has added great value to the city of Budapest and its residents for more than 200 years. The park establishes Budapest as a historic city that matches other great cities like Berlin, Paris, and London where unique green areas have become part of the cities' identity. It is our vision to support this unique place with a building that continually adds more value to the residents and visitors of Budapest for many years to come.

Today, the park remains as a layered recreational space with all sorts of programs and offers. The New National Gallery and Ludwig Museums will fit seamlessly into this self-grown park structure with respect to the historical environment. That is why we propose a round shaped building with no front or back. The museums embrace the park as the park embraces them.

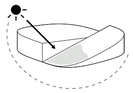
The two-winged house offers an open and transparent meeting point for the residents and visitors of Városliget. The shared programs, the café, and the rooftop with the stunning view of the surrounding park and city, reestablishes the visual connection between Buda and Pest along the historical axis. These spaces are all open to the public and encourage people to interact with the new building and experience the art inside.



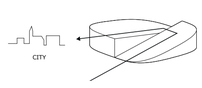
The museums act as the converging point. The House unifies the visitor experience of the ambitious Liget Museum Park project.



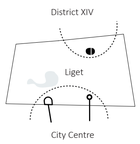
The two equally significant entrances connect through the intersecting spine of the building. The spine creates an arcade of open public programs.



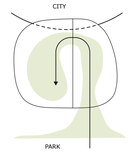
The unique building form provides a south facing public terrace that entices passive users to engage with the internal galleries.



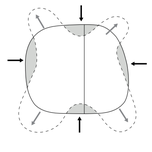
The building orientation emphasises the visual connection between Buda and Pest along the historical axis.



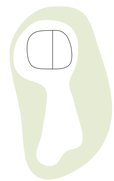
The museums not only relate to the historical axis but also strengthen the relationship between the park and the northern districts. Our building has no "back side".



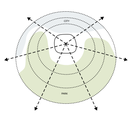
The building articulates and integrates the natural landscape into the built form.



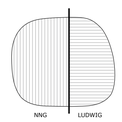
The shape of the building reacts and weaves to the varying programs with multiple entrances for different functions that can extend into the park.



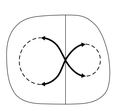
The house sits respectfully in the organic shaping of the park.



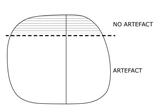
As the most prominent of the new park museums, the house offers an accessible roof with the highest viewpoint that provides an overview of all the different programs within the park.



The house is divided into two autonomous museum wings that have equal prominence yet differing and unique spatial qualities.



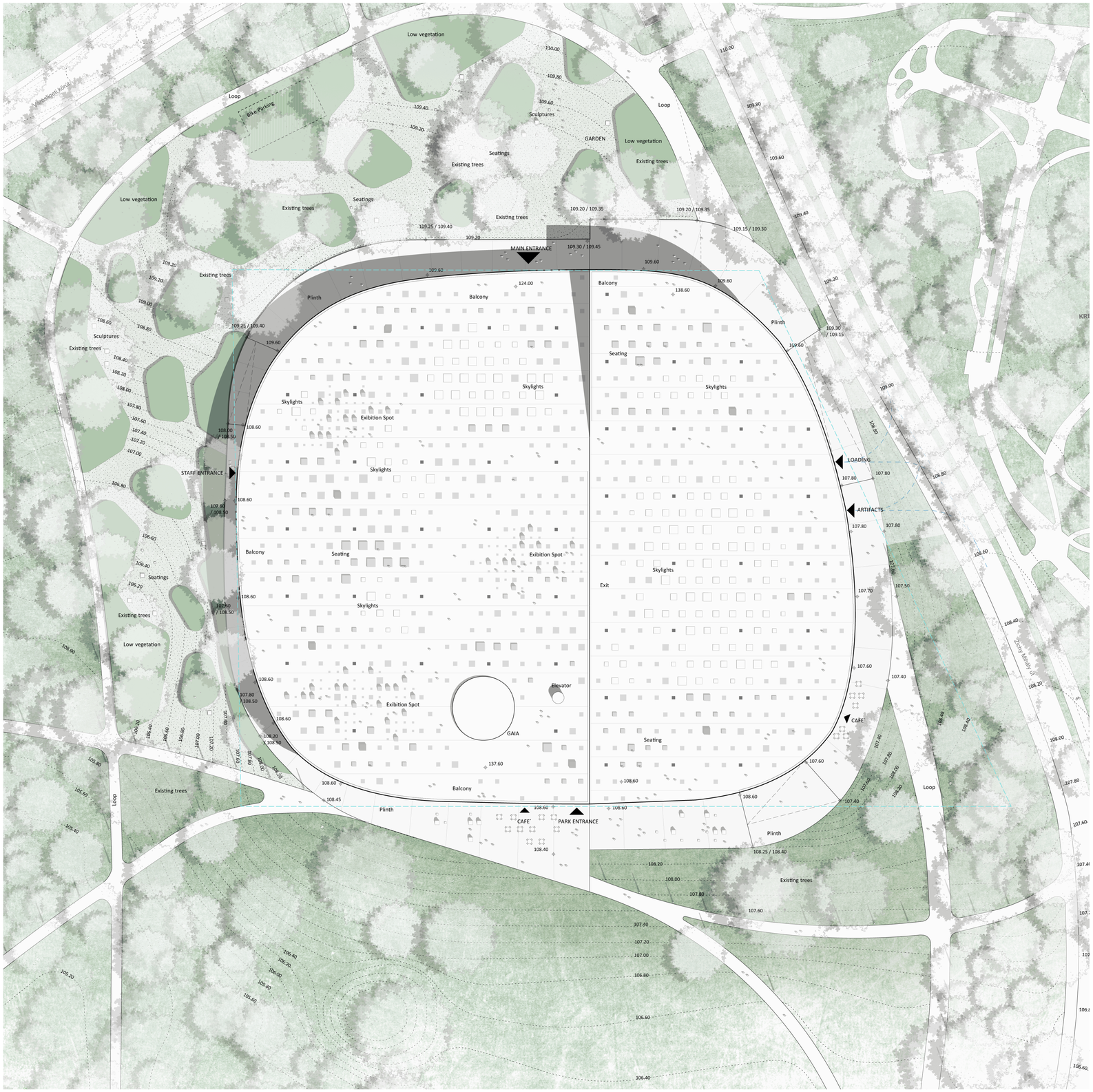
The building has a clear circulation path that is a rich and engaging experience that is easy to figure out.



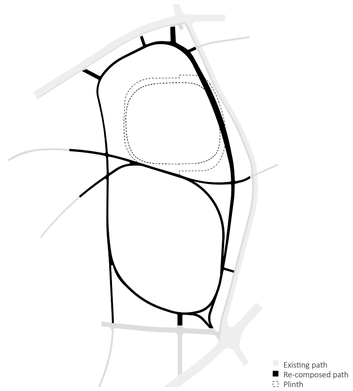
Clear security boundaries are established to provide maximum safety for artifacts.



THE BUILDING ACCENTUATES THE HISTORICAL AXIS, GENEROUSLY OPENING TOWARDS THE PARK

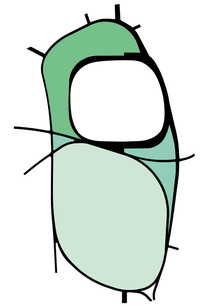


SITE PLAN 1:500



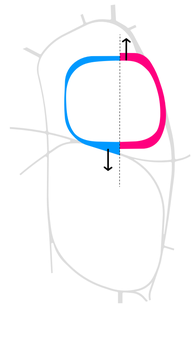
ORIENTATION SYSTEM

The clarification of the path system assembles the former and new traces to obtain clearer routes and looping promenades.



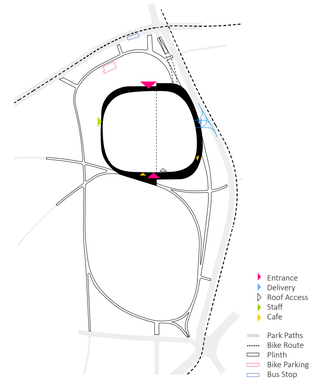
GREEN STRATEGY

The main access is through a tranquil garden which extends both the building's programs further into the park. The western edge is bordered with solitary trees and includes a café terrace that is set in the foreground of the great lawn.



THE PLINTH

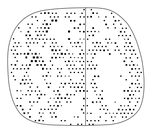
Both Museums are gathered on a common plinth that is symbolically split to demarcate each institution along the historic axis.



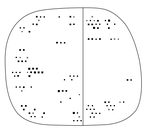
TRANSPORT AND ACCESSIBILITY

The plinth gathers the different pedestrian accesses, main entrance, park entrance, staff entrance and deliveries.

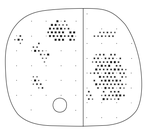
ROOF STRATEGIES



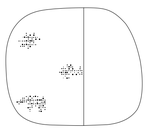
Coloured tile pattern



Seating



Skylights and lighting



Informal exhibition spaces

LANDSCAPE STRATEGY

The core of the landscape proposal consists of re-pairing, re-composing and re-assembling the existing path system with the ambition to set up the new building as a clear destination in the greater park. This clarification of the way-finding system must offer to the visitors a more intuitive promenade in the park and lead them naturally from one point of interest to the other.

The stand alone building is located in the heart of a great loop which opens up the city´s neighbourhood at the east, the large lawn at the west and provides a continuous and obstacle-free promenade.

Both Museums are gathered on a common plinth that is symbolically split to demarcate each institution along the historic axis. Café terraces and outdoor programmed events can be installed on this large podium which also encourages a fluidity of walkers through and around the building.

The new building sits respectfully in the landscape on a remodelled hillock that recasts the former plateau into a softened topography and provides easy access to the plinth. Particular attention is paid to integrate existing trees of exceptional quality.

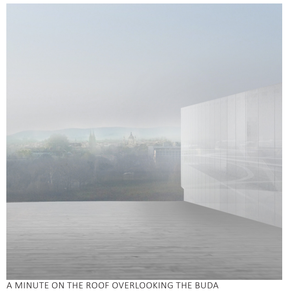
The museums' main entrance is reached through a tranquil and shaded garden on the northeast side of the building. The garden incorporates existing trees and introduces low-lying, dense islands of vegetation. This garden sets up a gate between Városliget Road and the Museum. It offers a calm and relaxing atmosphere, seating facilities for walkers and visitors and expands both institutions reach further into the park.

The bike garage for visitors is concealed under a camouflaged green island of the entrance garden. Close to the museum entrance is a bus stop for temporary arrivals of groups arriving along Városligeti road. Truck access for deliveries and handling of artefacts is located on the southeast with access from Zichy Mihály Street.

Regarding the present sporting facilities to the northwest of the site, they should be moved to activate park´s spots with program deficit. The Entrance fronting Stefánia Street at the extreme south of the park provides nice and large spaces opening up along Városligeti ring road, a great offer of outdoor sport and activities can be realised there. The newly created free space should develop in a more organic dialogue between the new cultural facilities and the emblematic Vajdahunyad Castle and Széchenyi Bath.



PLAN 01 1:250



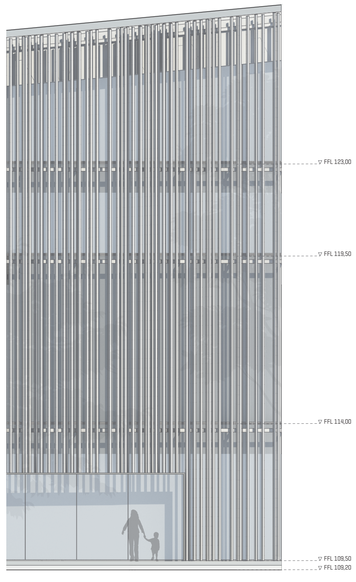
A MINUTE ON THE ROOF OVERLOOKING THE BUDA



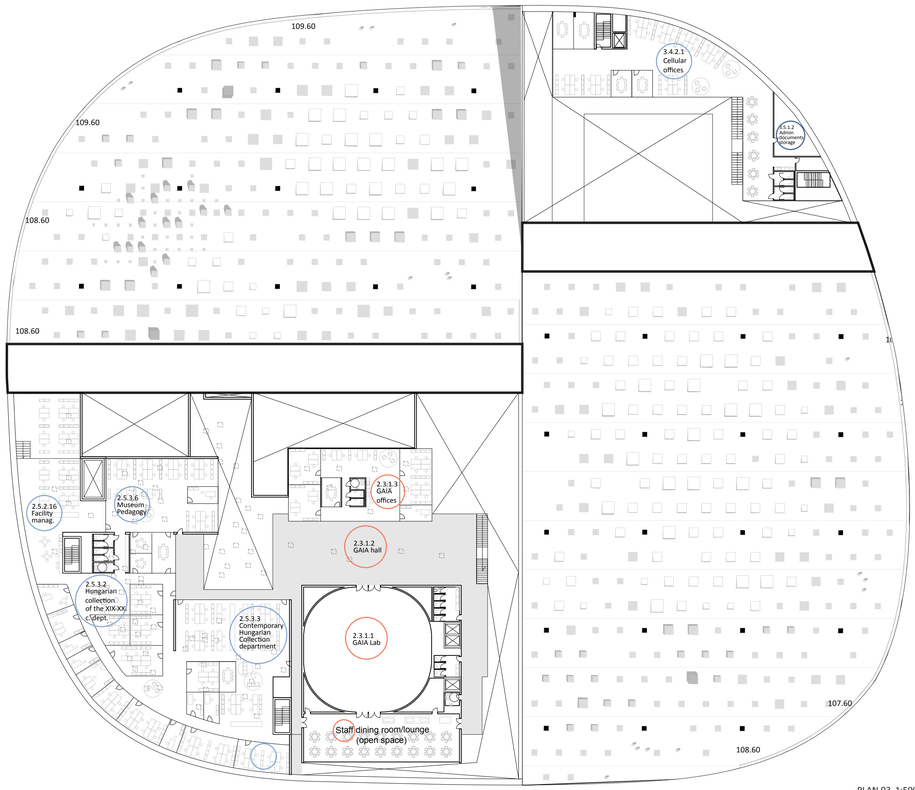
A MINUTE IN THE EVENT ROOM ENJOYING THE PRESENCE OF THE PARK



A MINUTE IN THE BREAK OUT SPACE OF THE GALLERY



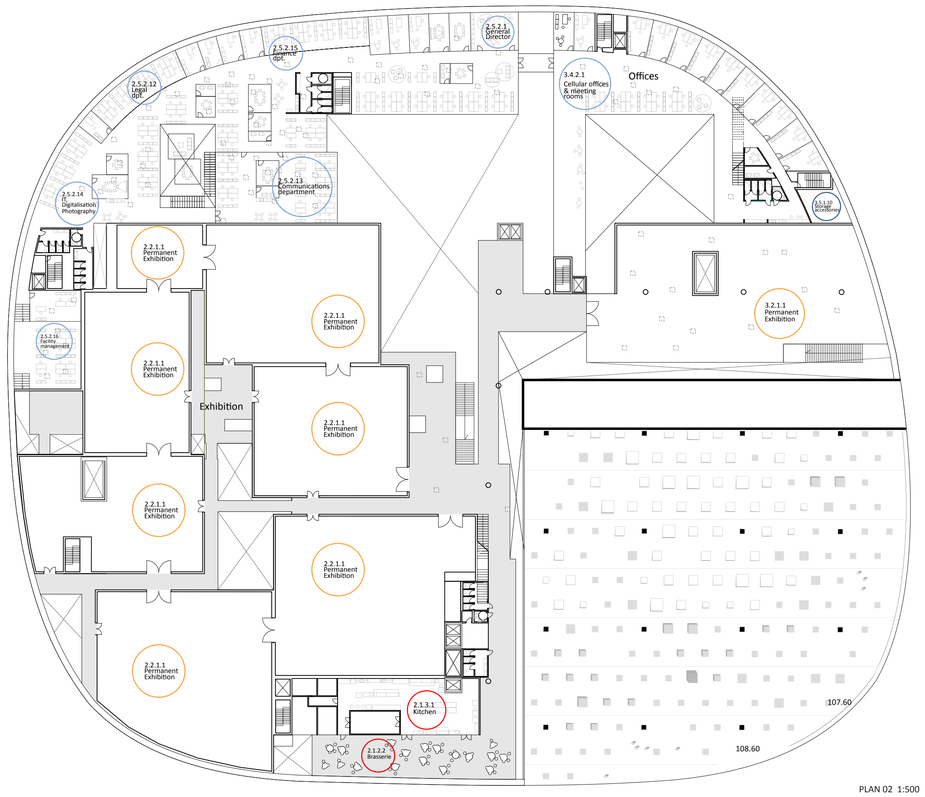
PARTIAL ELEVATION 1:100



PLAN 03 1:500



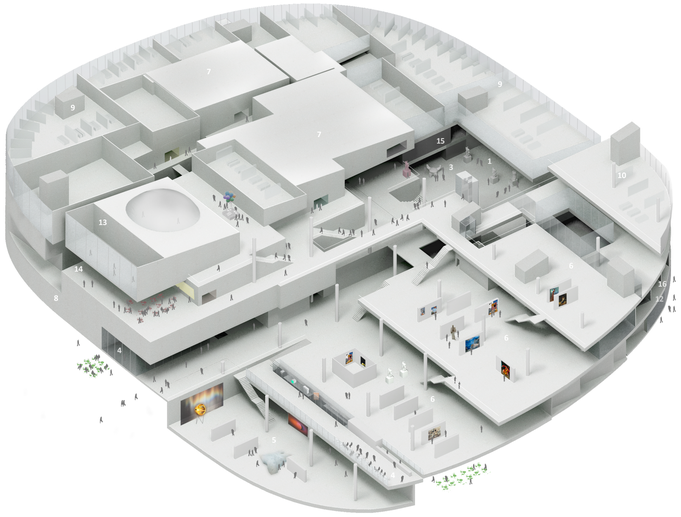
THE MAIN ENTRANCE HALL IS OPEN AND RELAXED. THE TRANSPARENT FACADE DRAWS THE SURROUNDING GARDEN INTO THE FOYER SPACE .



PLAN 02 1:500

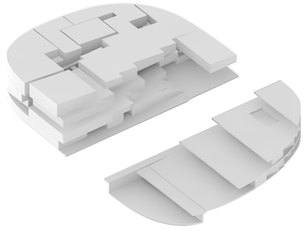


THE PERMANENT EXHIBITIONS OF THE GALLERY AND LUDWIG MERGE ON THE 1ST FLOOR. THIS MEETING POINT OPENS UP THE BUILDING AND CREATES A NEW PERSPECTIVE.



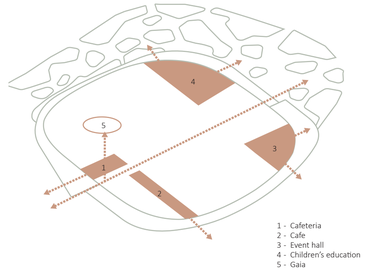
THE MODEL OF THE MUSEUM INTERIOR SPACES

1 - Main entrance Hall
2 - Park Entrance
3 - Sculpture atrium space
4 - Cafeteria, Cafe
5 - Ludwig Temporary Exhibition
6 - Ludwig Permanent Exhibition
7 - National Gallery Permanent Exh.
8 - National Gallery Temporary Exh.
9 - National Gallery Offices
10 - Ludwig Offices
11 - National Gallery Event Space
12 - Ludwig Event Space
13 - Gaia
14 - Braserie
15 - National Gallery Learning
16 - Ludwig Learning



SPLIT: BOX & VINEYARD

The independence of the two institutions is physically formalised through the clear distinction between their exhibition experiences. The two distinct typologies were derived from the specific requirements for each institution. The NNG box configuration provides enclosed environments suitable for their collection while the vineyard terracing of the LM allows audiences to experience contemporary art in a dynamic multi- faceted way.

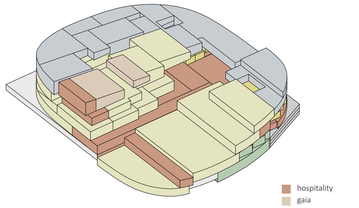


1 - Cafeteria
2 - Cafe
3 - Event hall
4 - Children's education
5 - Gaia

ENTRANCES - PUBLIC ACCESS

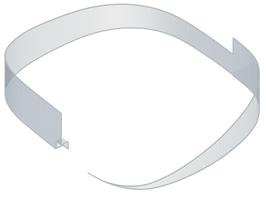
The organic shape of the building reacts to its park surroundings and provides an open, transparent meeting point for the residents and visitors of Városliget. With multiple entrances and public programs such as cafes and children's education, the house extends its influence into the park.

The spine that runs through the centre of the building creates an arcade of public spaces that encourage passers-by to enter the building. The galleries on either side of the spine can create teaser exhibitions to entice patrons to visit. These teasers break down the traditional barriers between the public and art and invite visitors to become part of the conversation.



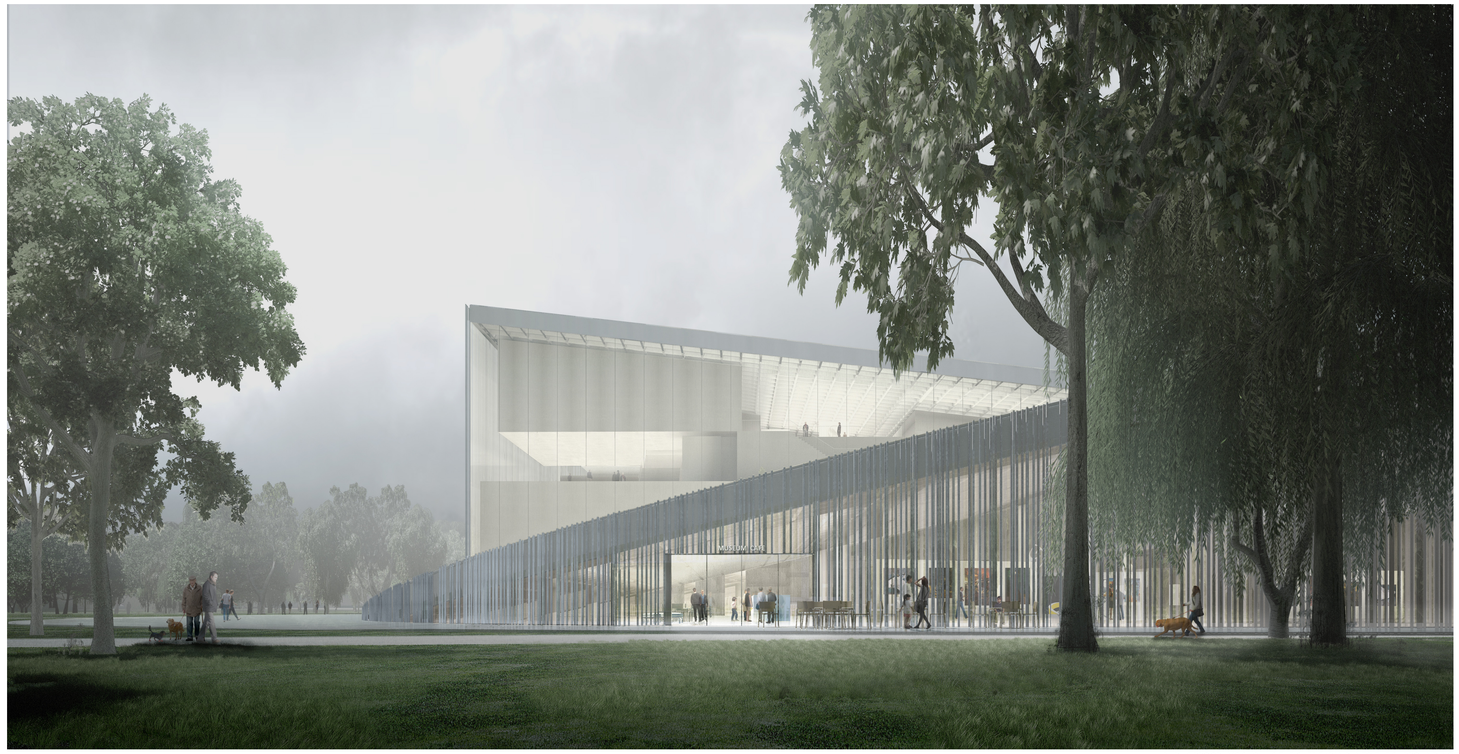
PROGRAM

The independent operation of both museums is ensured through a physical disconnection of programs. Connection between the museums is established through the ground floor that bridges between the two institutions with a variety of shared programs such as hospitality, retail and a public circulation arcade.

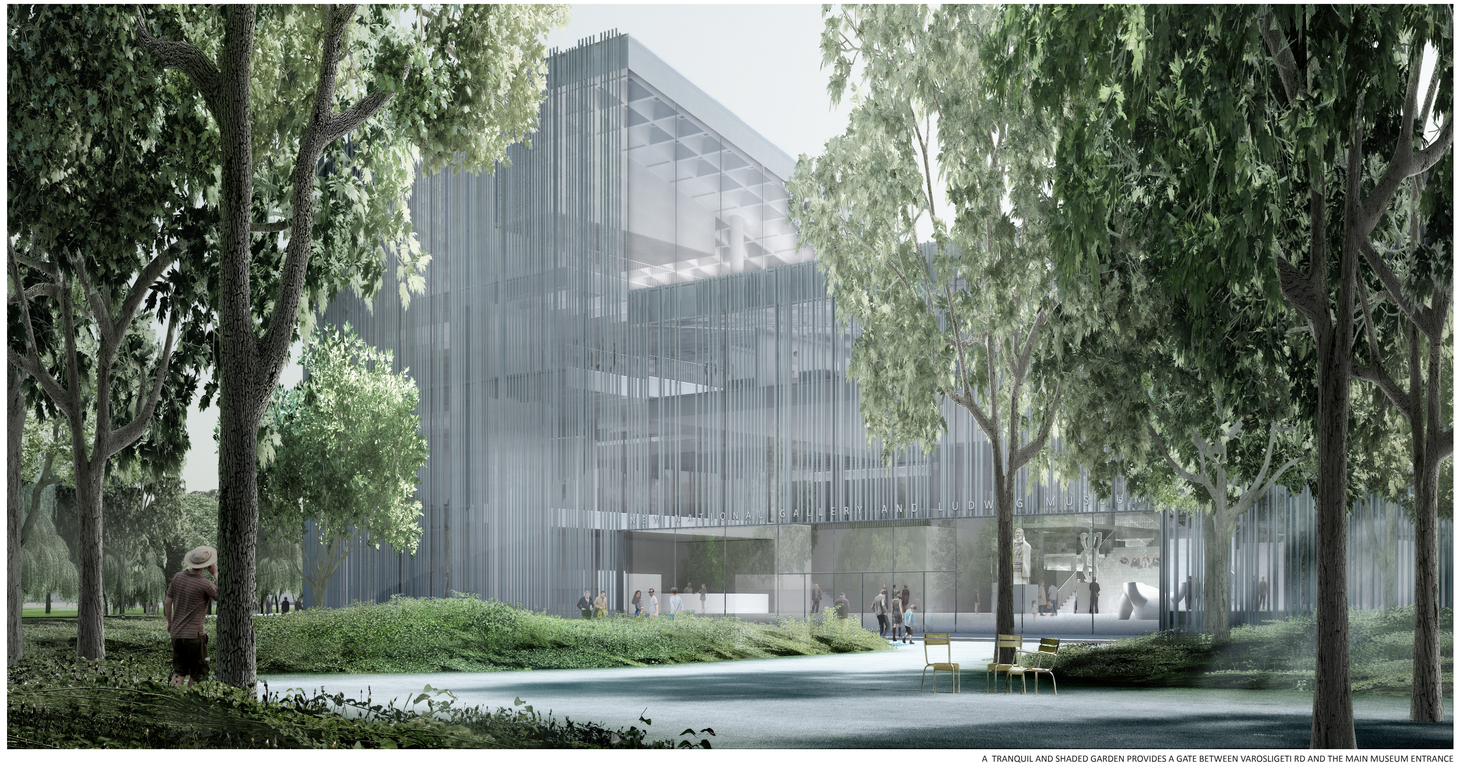


FACADE

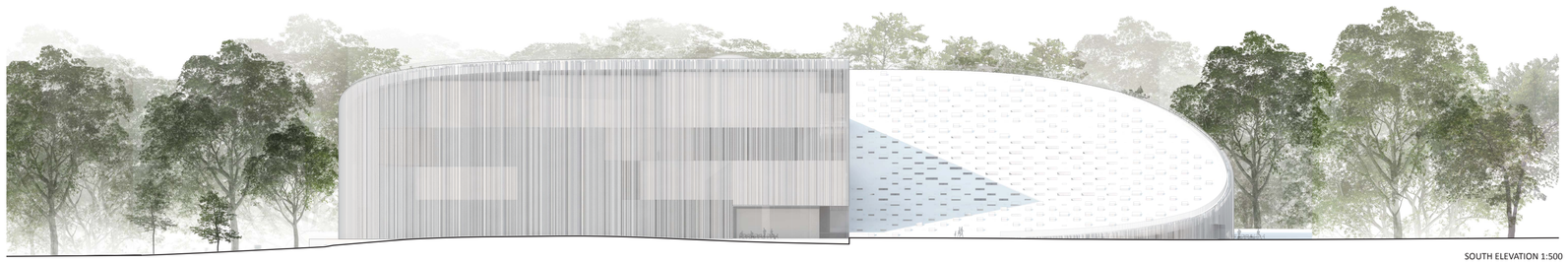
The envelope that combines the NNG and the LM establishes two architectural marks of equal importance facing both the north and south edges of the park. Passers-by will experience a rhythm and ever-shifting silhouette through a spiralling movement of the facade as the building blends into and erupts from the landscape.



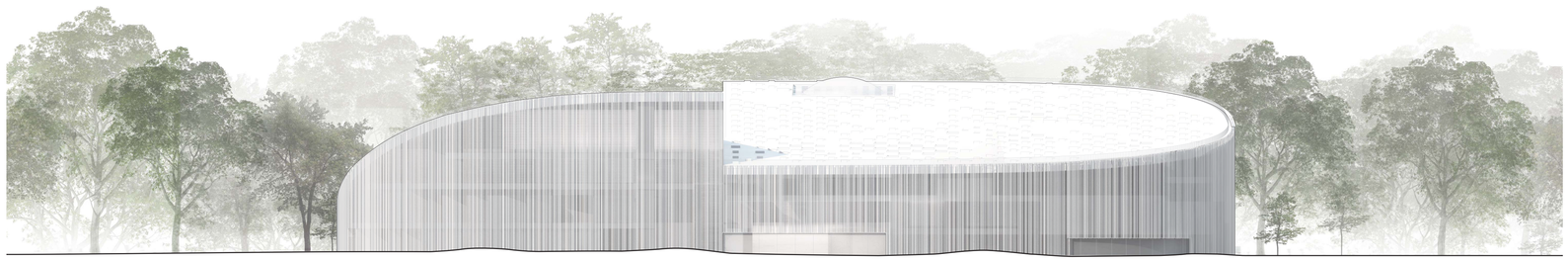
PUBLIC PROGRAMS SUCH AS THE CAFE EXPAND INTO THE SURROUNDING
PARK AND ENCOURAGE PASSERS-BY INTO THE BUILDING



A TRANQUIL AND SHADED GARDEN PROVIDES A GATE BETWEEN VAROSLIGETI RD AND THE MAIN MUSEUM ENTRANCE

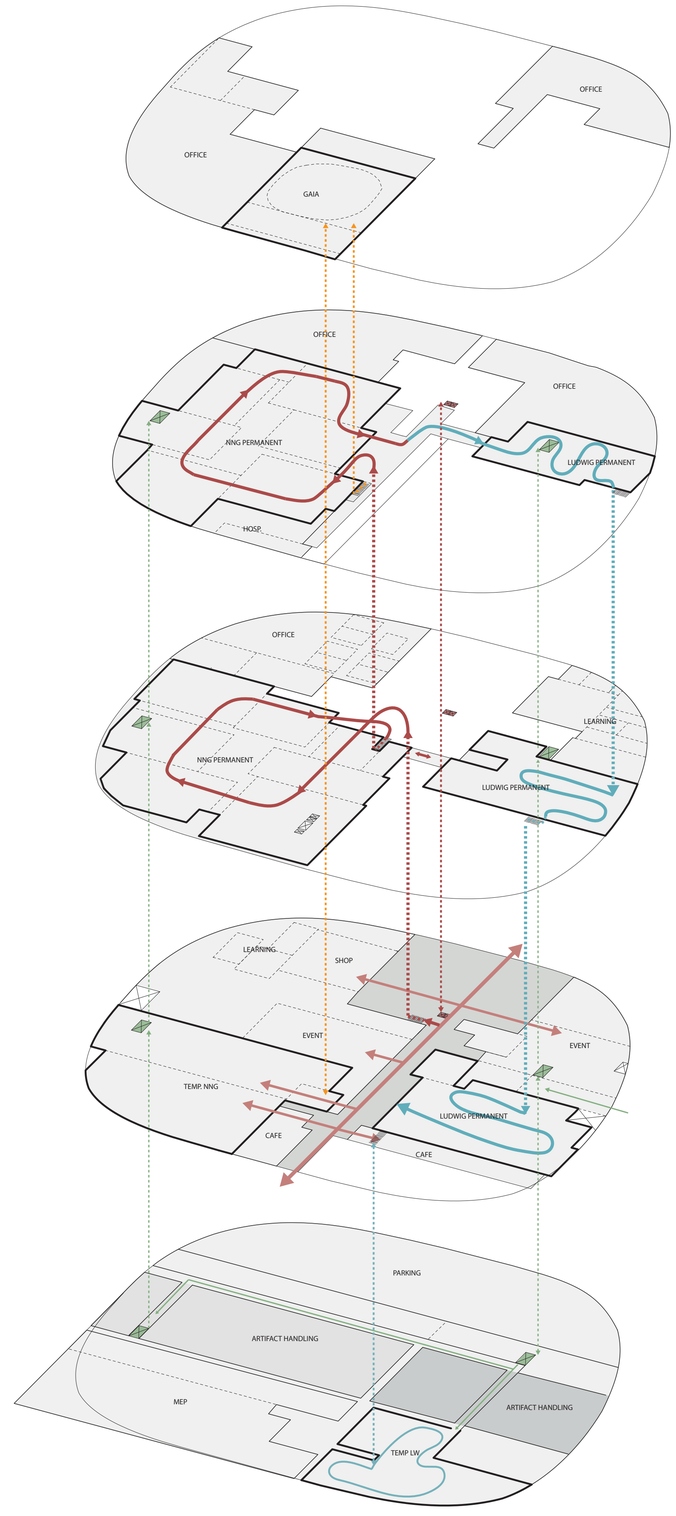


SOUTH ELEVATION 1:500



NORTH ELEVATION 1:500

PLAN - 01 1:500



VISITOR AND ARTIFACTS FLOW DIAGRAM IN THE NATIONAL GALLERY AND LUDWIG MUSEUM

Main entrance

Staff entrance

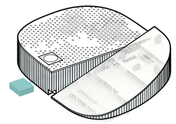
Staff entrance

Artifact delivery entrance

Park entrance

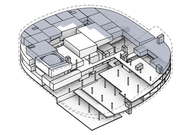
1.1.1.1 Entrance Hall
1.1.1.2 Info Ticketing
1.1.1.3 Audioguide
1.1.2.1 Other shops to let
2.1.2.3 Museum shop
2.2.1.1 Glass roof atrium for statues
3.2.4.1 Event Hall
3.2.5.1 Cloakroom event hall
1.3.2.1 Toilets events
3.1.1.3 VIP Lounge
1.2.2 MEP
3.2.5.5 Event hall Storage
3.2.5.2 IT Storage
3.1.3.2 Shop Storage
3.1.2.2 Museum shop
open to below
1.2.2.10 Waste management
1.5.3.1 Goods deliver
2.2.4.1 Cloakroom event hall
1.3.1.3 First aid room
1.3.1.2 Baby care
1.3.2.1 Toilets events
1.3.1.1 Toilets for staff
1.3.3.2 First aid room
2.2.4.2 IT Storage
3.2.5.3 Catering
1.1.1.5 Volunteers room
1.1.1.6 Disabled Aid
2.2.2.1 IT & Multimedia
2.2.2.4 Children's classroom 3
2.2.2.5 Children's classroom 4
2.2.2.3 Children's classroom 2
2.2.2.2 Children's classroom 1
2.2.2.6 Dining room
Firegate
1.2.2.2 Security system control
1.2.2.1 Building system control
1.2.1.5 Tea kitchen
1.2.1.2 Armory
1.2.1.3 Meeting room
1.2.1.4 Lounge
1.2.1.1 Armed guards
2.2.4.5 Instrument storage
2.2.4.9 Event storage
2.2.4.7 Artist changing room 1
2.2.4.8 Artist changing room 2
2.2.1.2 Research exhibition space
open to below
2.2.3.1 Event Hall
3.2.2.2 Cinemateque
Artifact arriving / handling
2.1.1.3 Press room
3.1.1.2 Press room
2.2.1.2 Temproary Exhibition
3.2.1.1 Permanent Exhibition
2.2.1.2 Shrine
Visual store for sculptures
Visual store for sculptures
2.1.1.2 VIP Lounge
1.3.1.2 WC
1.3.1.2 Baby care
3.1.2.1 Café
2.2.1.2 Temproary Exhibition
2.1.2.1 Cafe

PLAN 00 1:250



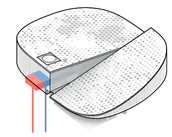
REDUCE

- Compact volume and high performance envelope
- Daylight optimization
- Placement of functions based on solar exposure
- Utilization of thermal mass and natural ventilation
- Rainwater collection system



OPTIMIZE

- Energy efficient lighting with daylight control
- On demand displacement ventilation system
- Low velocity ductwork and energy recovery
- Thermal stratification for large air volumes
- Radient heating and cooling via thermo active slabs
- Low-e surface finish with heat mirror effect



PRODUCE

- ATES system for heating and cooling
- Integrated PV-panels on south facing roof

SUSTAINABILITY

The integrated design method takes its starting point in the holistic way of thinking sustainability. It focuses on minimizing the energy consumption while maintaining all the qualities of a contemporary building created to adjust to the future. The integrated design method comprises three steps:

1 REDUCE through a well-planned design
2 OPTIMIZE through technical solutions
3 PRODUCE through building integrated energy w of renewable energy

The main focus has been to minimize the energy consumption through implementation and optimization of passive design strategies. By following the three steps of the integrated design method, it is possible to achieve an actual zero energy museum.

REDUCE

- Daylight optimization

For museums, electricity usage from artificial light accounts for a large part of the overall energy consumption. Daylight is therefore utilized as broadly as possible.
Workspaces are placed near the perimeter of the facade with low solar exposure, in order to obtain a full benefit from the natural daylight
The roofscape contains a highly insulated roof system with pixelated skylights that have clear insulated glazings with solar coatings and an interior movable cone system to block direct sunlight, convert incoming daylight to diffuse radiation and be able to control the amount of incoming light and thus the daylight levels automatically.

OPTIMIZE

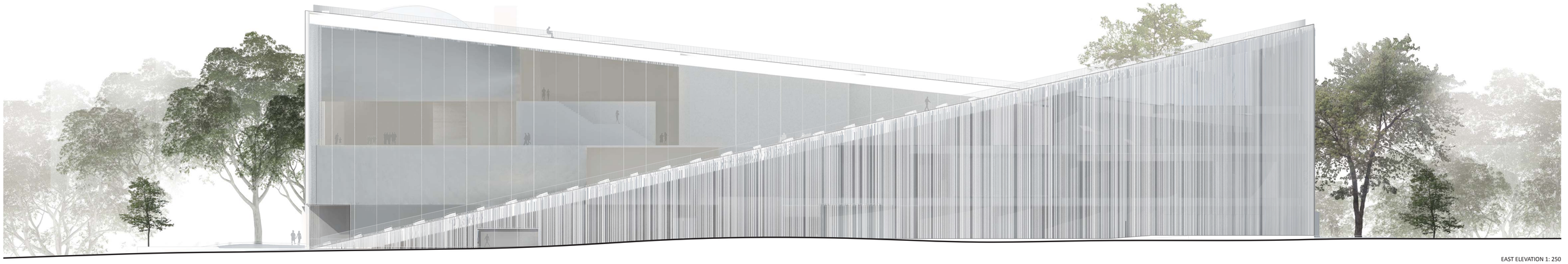
- On demand displacement ventilation system

The main ventilation system consists of displacement ventilation with low velocity ductwork, whereas the offices are solely ventilated by on-demand based natural ventilation, regulated by CO2 levels.
The air in the displacement ventilation is supplied slightly below room temperature, creating a sea of fresh air in the occupied zones of all levels. Above these cool zones the air volume is allowed to stratify in summer periods, drastically reducing the need of cooling.
Comfortable supply air temperatures are guaranteed in summer periods by an indirect evaporative cooling system, evaporating water in the return air stream and efficiently transferring the achieved low temperature without humidifying the supply air stream. Using these systems comfortable supply air temperatures are achieved with very little supplemental heating and almost no additional cooling.
Return air of the ventilation system is taken at ceiling level in the single height spaces and at high or intermediate levels within the large volumes and ducted to the mechanical rooms in the basement for highly efficient recovery of sensible and latent heat into the supply air stream.

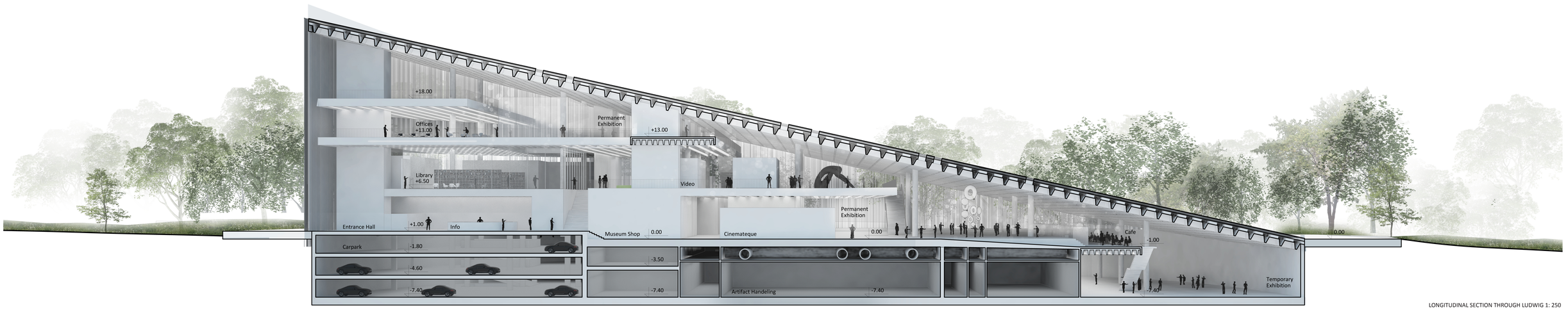
PRODUCE

- ATES system for heating and cooling

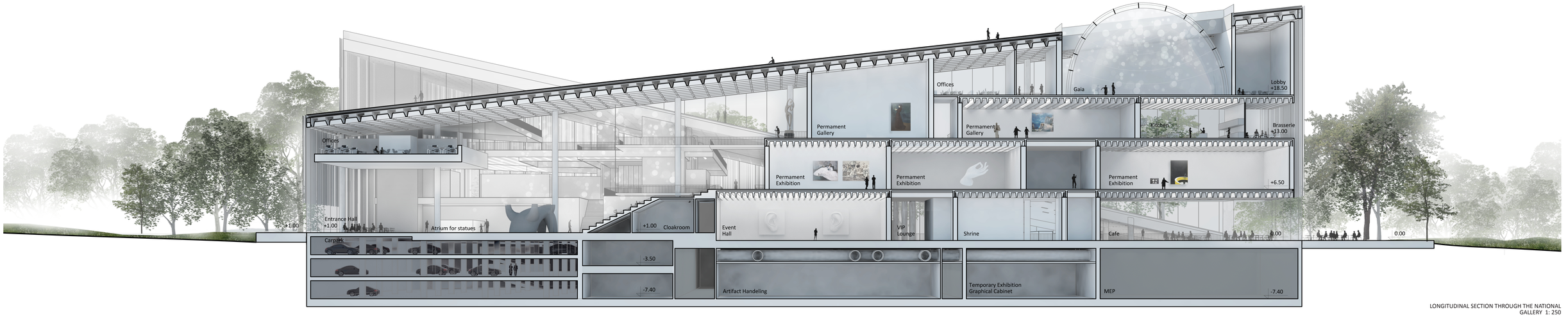
The building will be connected to a geothermal borehole heat exchanger system under the basement of the building. This Aquifer Thermal Energy Storage (ATES) system will provide free geothermal cooling power to supply the radiant and the air systems in intermediate seasons. In winter mode the borehole system is providing low temperature heat to a high performance heat pump unit, that will also be used in peak summer periods to provide chilled water for dehumidification of fresh air and the radiant systems.



EAST ELEVATION 1: 250



LONGITUDINAL SECTION THROUGH LUDWIG 1: 250



LONGITUDINAL SECTION THROUGH THE NATIONAL GALLERY 1: 250