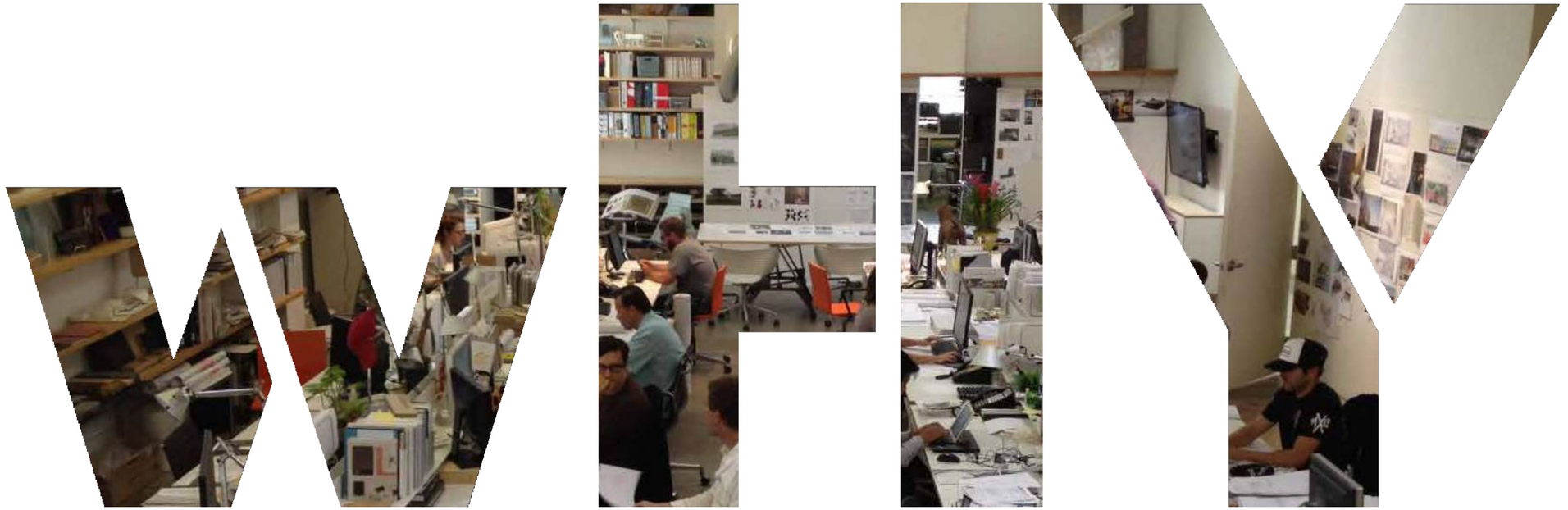


buildings objects grounds ideas

NEW YORK & LOS ANGELES

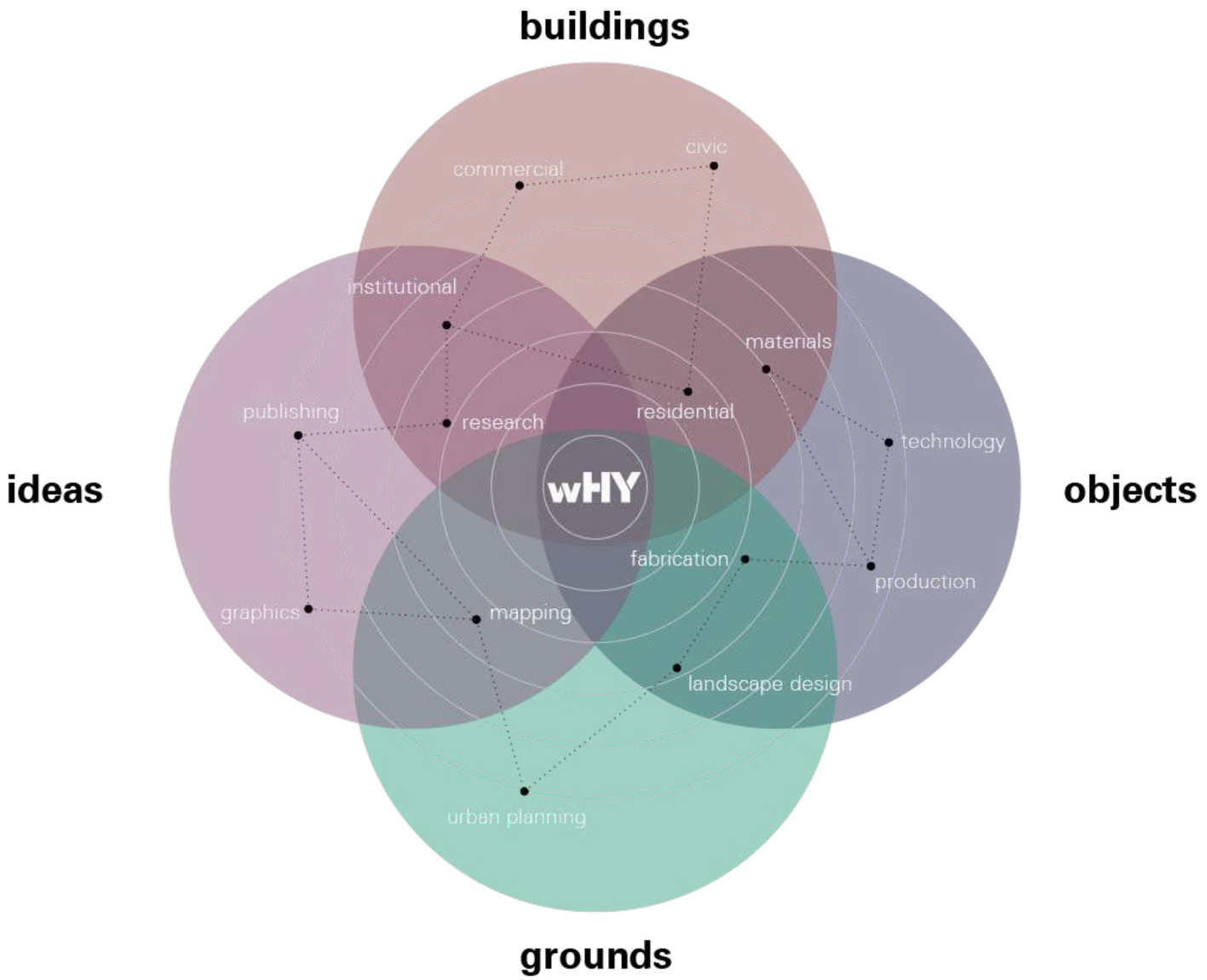
BUILDINGS

GROUNDS

OBJECTS

IDEAS

MUSEUMS


buildings
civic
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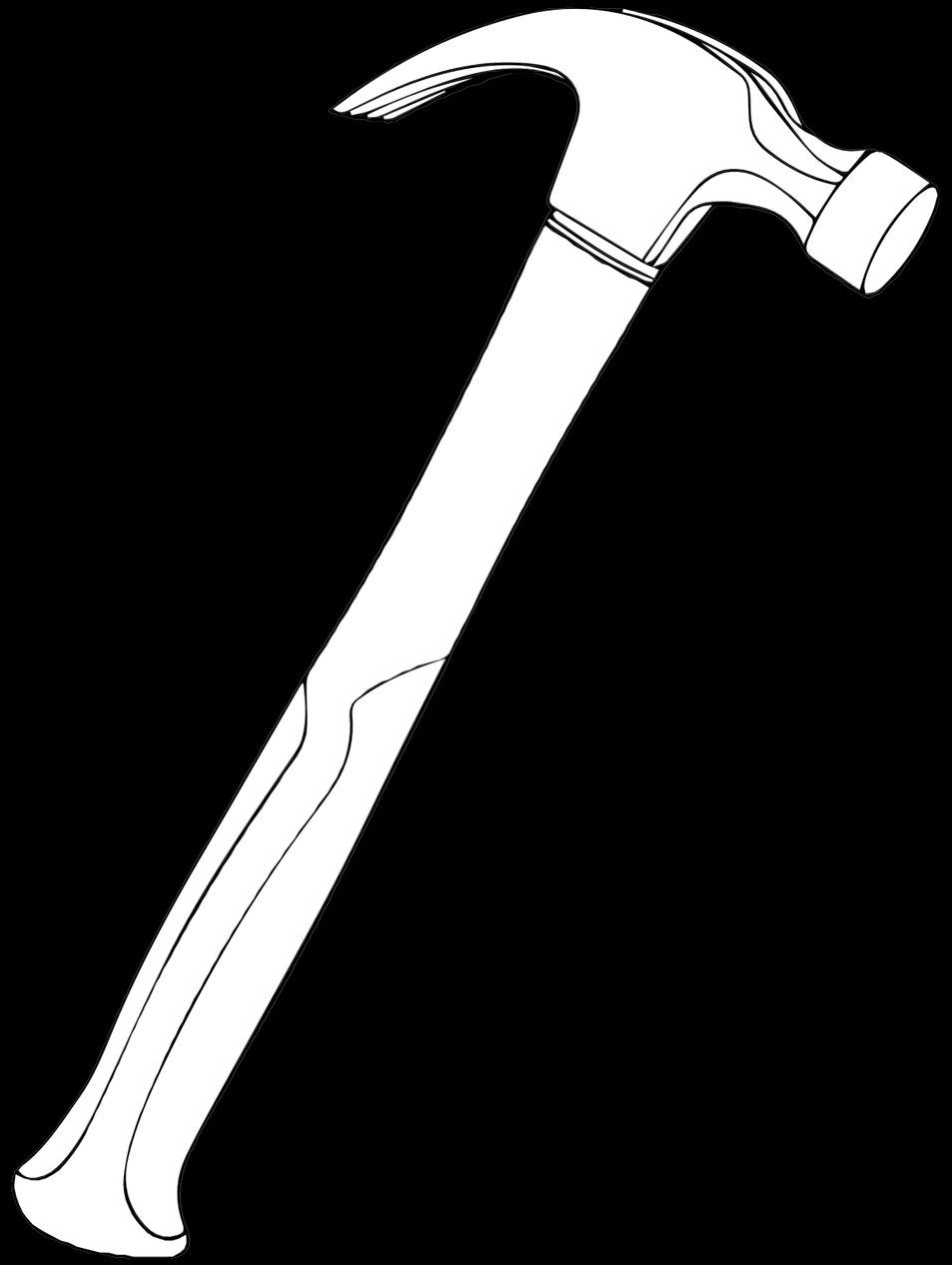
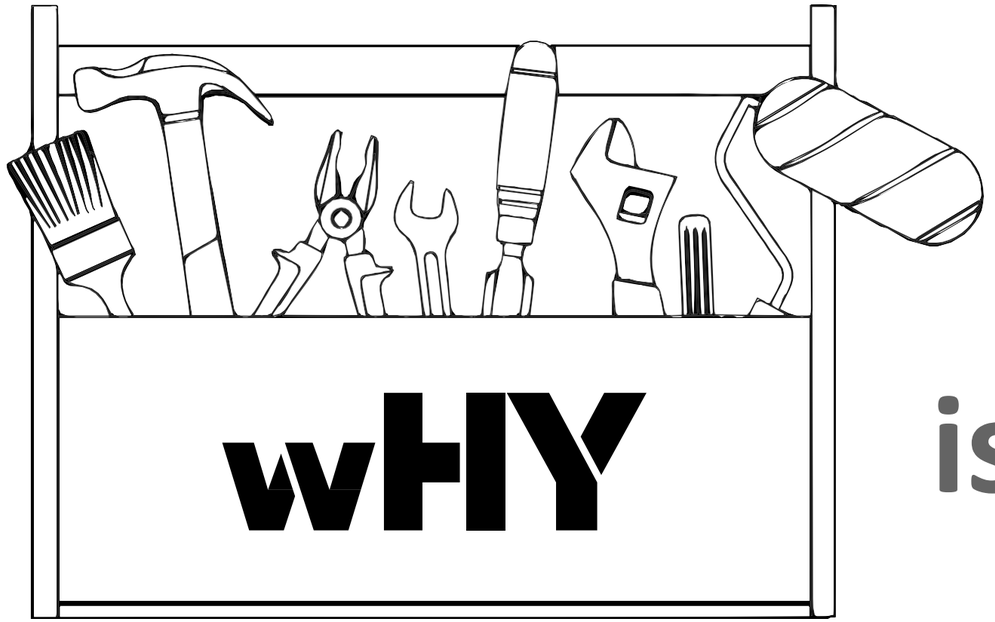
mapping
landscape design
urban planning
grounds





is

AN ECOLOGY OF DISCIPLINES

BUT WHAT IS
THE SECRET
INGREDIENT?

PEOPLE

OUR MAGIC IS FROM
PEOPLE

wHY

TCHAIKOVSKY ACADEMIC OPERA AND BALLET THEATRE

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A UNIQUE CITY: PERM AS AN INDUSTRIAL AND CULTURAL CITY

Perm is a unique city with dual identities that is known for being both an industrial and cultural city at the same time. As the industrial city and its transportation network are advancing, the cultural city is catching up to beautify and animate the city. Perm has an exciting vision of using art and mural to beautify the industrial city and elevating the vibrant cultural identity of the city as the best in both theaters and the arts. While Perm's success story of its industry contributes to its well developed transportation network to the rest of Russia geographically and economically, the city itself not very connected to the Kama River and its larger natural context. The Kama River is known to be more industrial than natural, with little riverfront activities along its riverbanks.

THE NEW PERM OPERA HOUSE:
A CULTURAL GATEWAY THAT RECONNECTS CITY AND NATURE

The new Perm Opera House extends existing efforts in highlighting Perm as an important cultural city of Russia. The strategic site location elevates the new Perm Opera House as not only the gateway from the city to the park and the Kama riverfront, but also the gateway from culture to nature. The new Opera House reunites the city and its nature. The circulation within the new Perm Opera House extends the city into its nature, and the nature back into the city. The front plaza literally extends the city into the building, reconnecting the city both visually and physically to its riverfront. The building also connects the city to the park and the riverfront along its North side.

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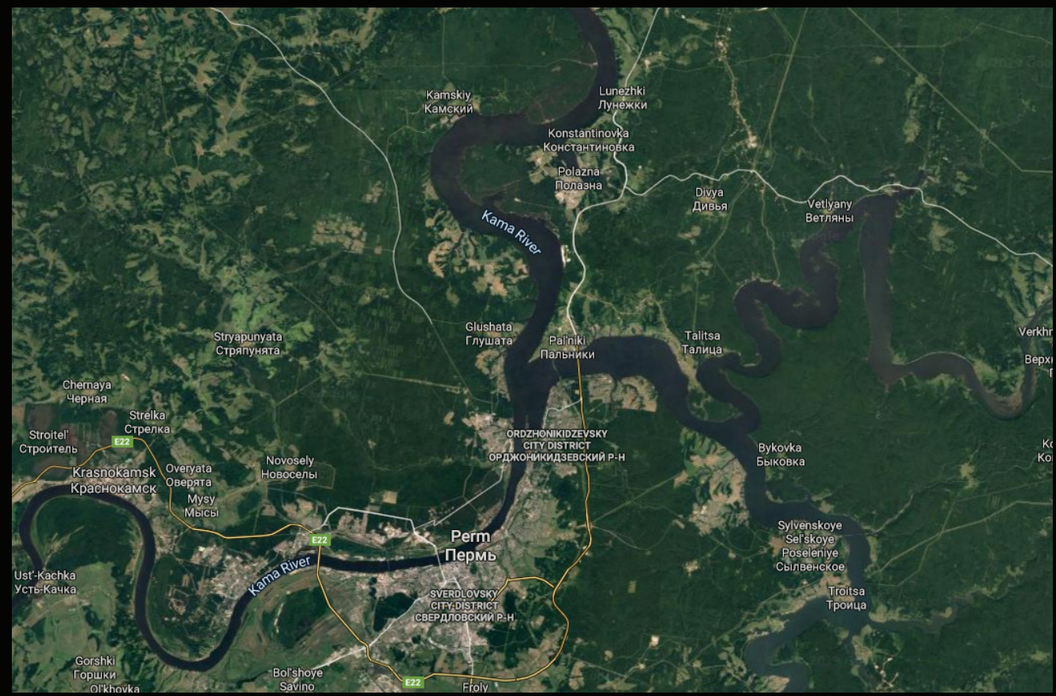
Permian rocks showing various layers of earth



The fluid shapes of the Kama River

A UNIQUE DESIGN INSPIRED BY PERM'S NATURAL CONTEXT

Perm is located by the bank of Kama River upon the Permian rocks near the Ural Mountains that defines the city. The design of the new Opera House is inspired by these unique features of Perm's geographical context. The Perm Opera House's building design is inspired by the Permian earth layers of the Ural Mountains and the fluid nature of the Kama River. These natural features are captured with the contour lines of its interior encased within the fluid lines of its circulation flowing around the building core. These contour lines could be found on Perm's earth layers and the fluid lines of the Kama River.

Ballet at thre Perm Opera House

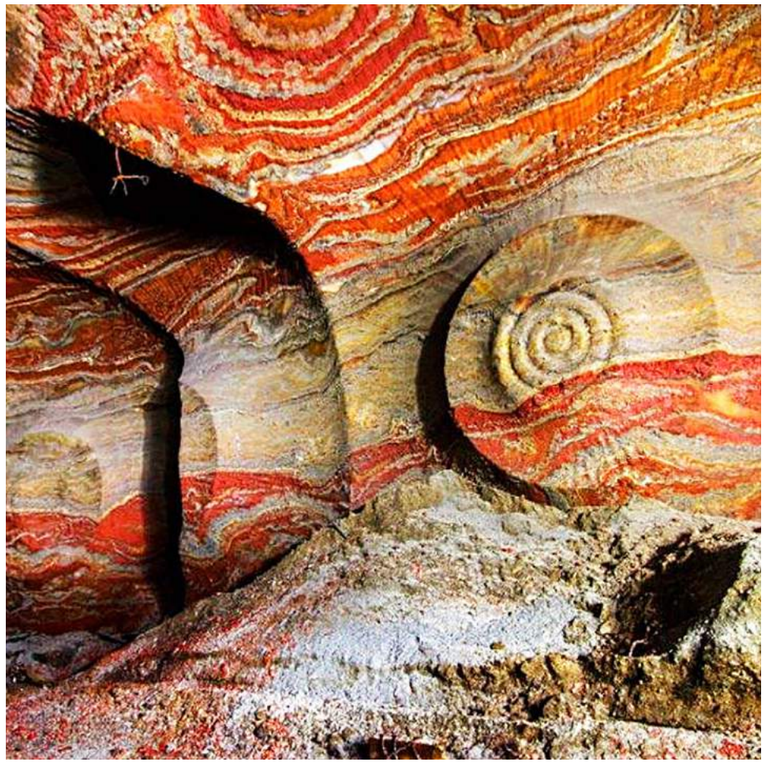
The legendary Teodor Currentzis of Perm Opera House

A DESIGN INSPIRED BY DANCE AND MUSIC

The Perm's Opera House Design is also inspired by the function of its building. The landscape design is inspired by the ballet while the interior design is inspired by the rhythm of the music. The plaza design features meandering ballet paths that dances around the building providing intimate gardens around an open public square that becomes the stage of everyday activities. This open plaza reminiscent of a forest clearing secures maximum visibility of the building as the Perm's new cultural icon. The building design features a building surface that transitions from smooth to jagged lines as you flow through the building. The experience through these spaces with various lines is akin to the expressions of various rhythms of music curated by the conductor- creating various spaces that varies from calm to dramatic.

CELEBRATION OF LOCAL MATERIAL

Copper Smelting



Potash Salt Mining

Wood Construction

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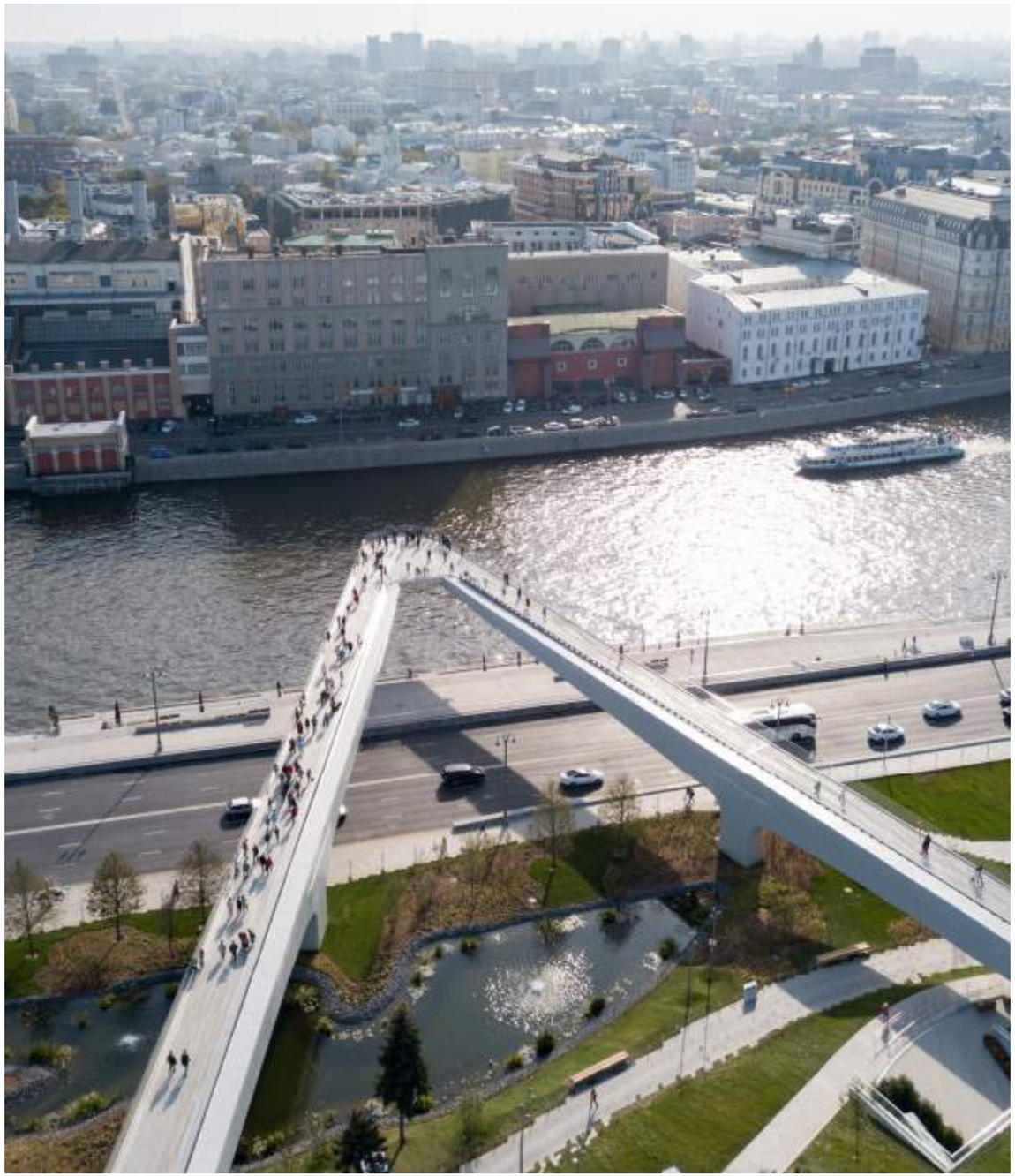
PLACE MAKING



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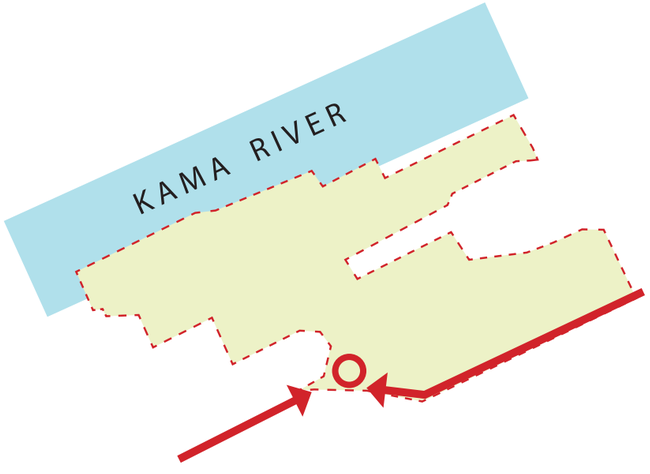
PROJECT GOALS

1. Producing a Cultural Landmark

As a cultural destination, the Perm Opera House has the opportunity of being an international landmark for ballet and opera.



2. Gateway to Park and River

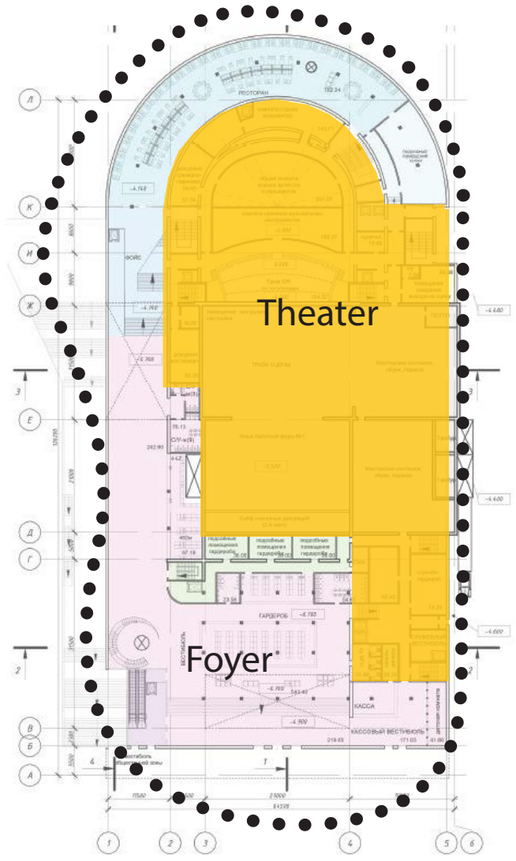
The site serves as a strategic gateway to access the larger masterplan park area and the Kama River.

3. Building Crafted from Local Material

Inspired by the region's rich geological history and timber industry, we designed a building that is born out of its environment.

4. An Architecture that is Inspired by its Function

The movement of dancing creates a dynamic energy that flows visitors through the building and across the site.



5. Complimenting Proposed Programs

We carefully work around existing Back-of-House functions that has been engineered to precision.

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NEW AND OLD OPERA HOUSE

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SITE LOCATION: TATISHCHEV SQUARE

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URBAN SITE PLAN

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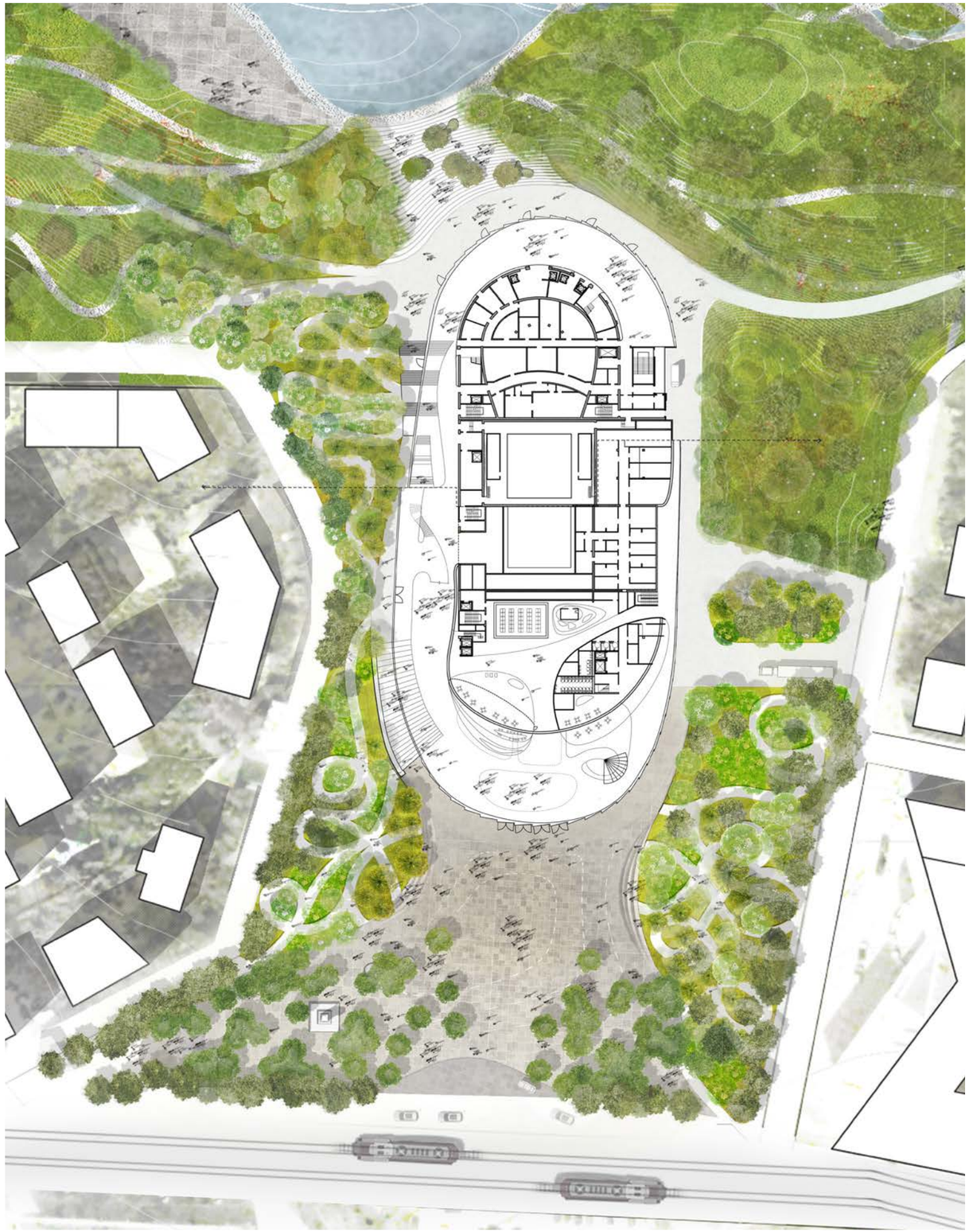
SITE PLAN



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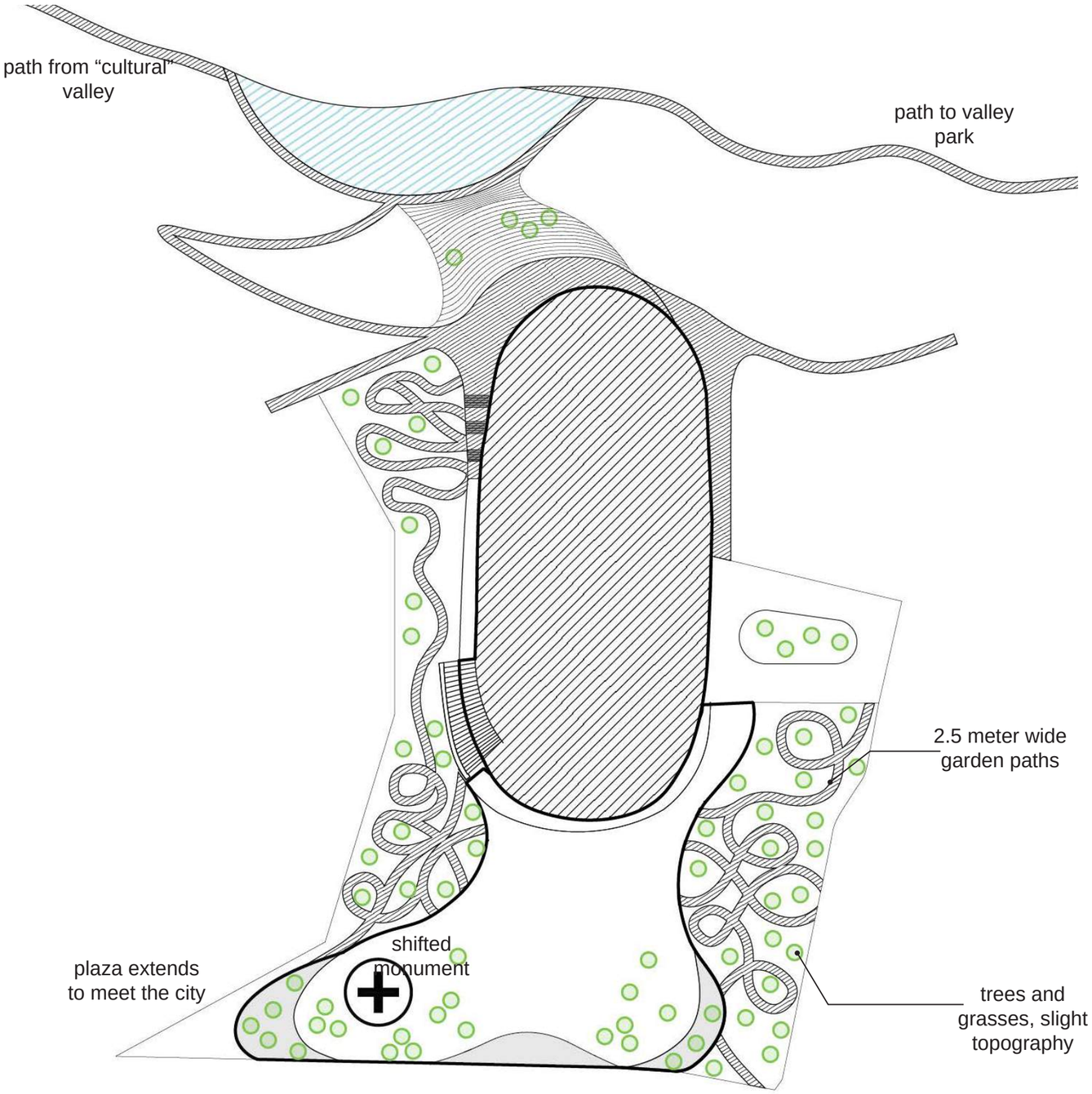
SITE STRATEGIES



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URBAN SITE PLAN

1 Tatishchev plaza
2 Entry Grove
3 Ballet Garden
4 Drop Off
5 Lookouts
6 Dog Run
7 Play Ground
8 Yoga Lawn
9 Boating Dock
10 Open Event Area
11 Amphitheater
12 Valley Amphitheater
13 Pond
14 Reservoir
15 Picnic Pavilion
16 Fishing
17 Winter Skating
18 Flower Garden
19 Tea House

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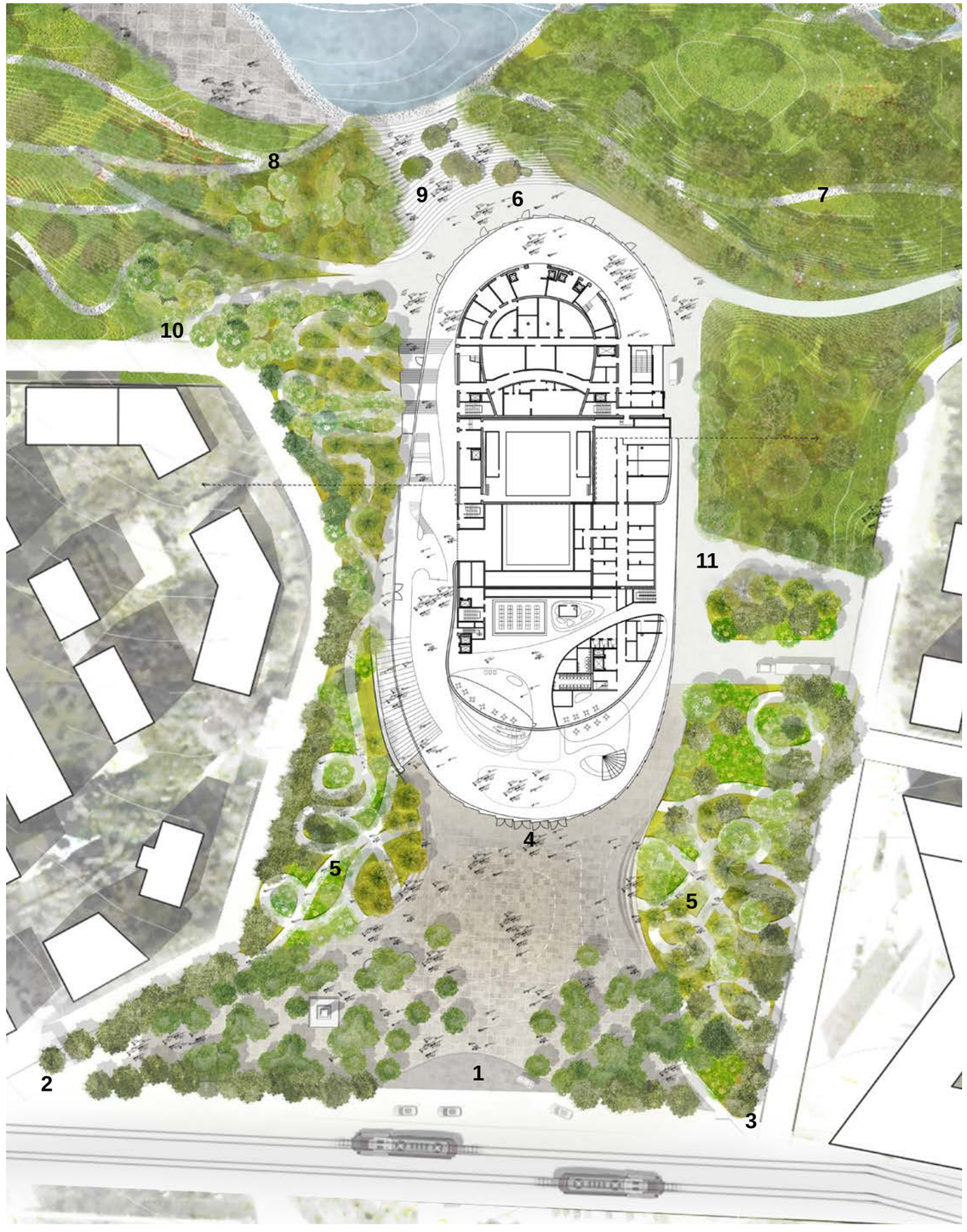
SITE PLAN



1 Drop-Off Area
2 Main Entrance Grove
3 Secondary Entrance Grove
4 Plaza Entrance
5 Ballet Gardens
6 Terraces
7 Connection To Reservoir Park
8 Connection To Cultural Valley
9 Valley Amphitheater
10 Access Road
11 Loading Dock

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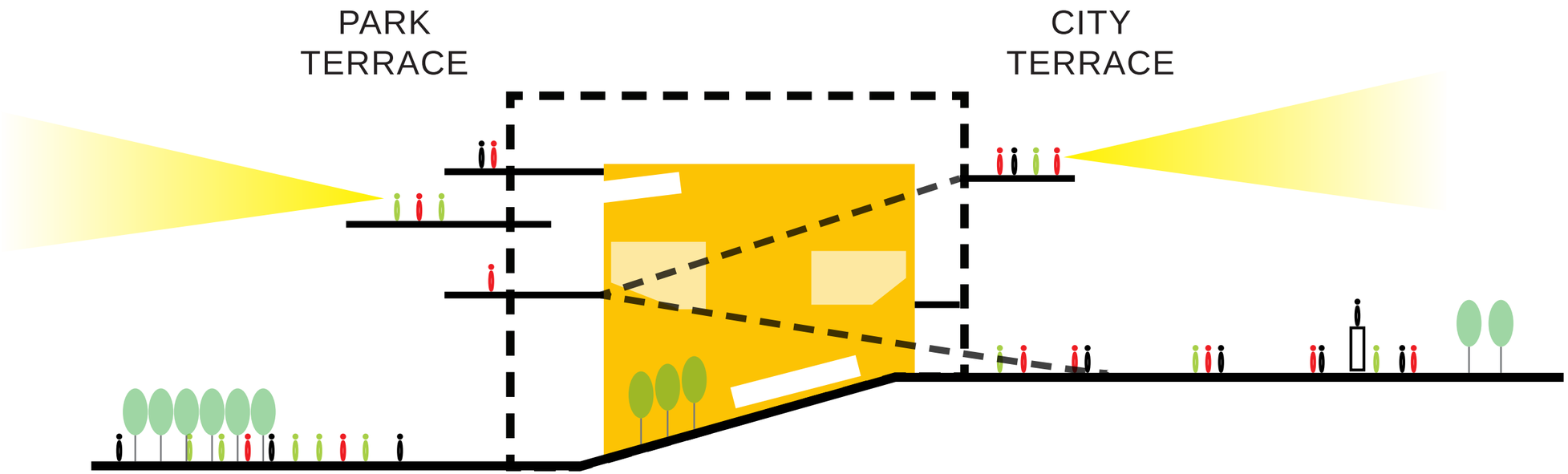
AN INVITING BUILDING FOR EVERYONE



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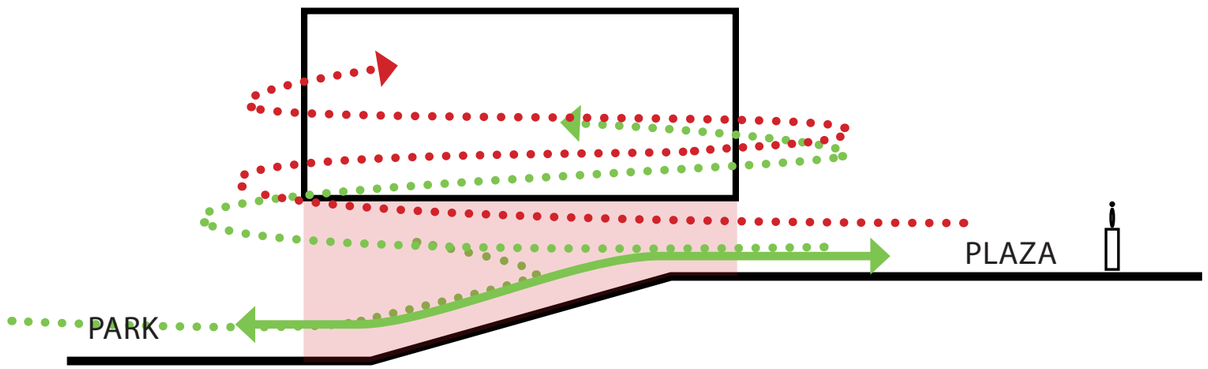
DANCING RAMP



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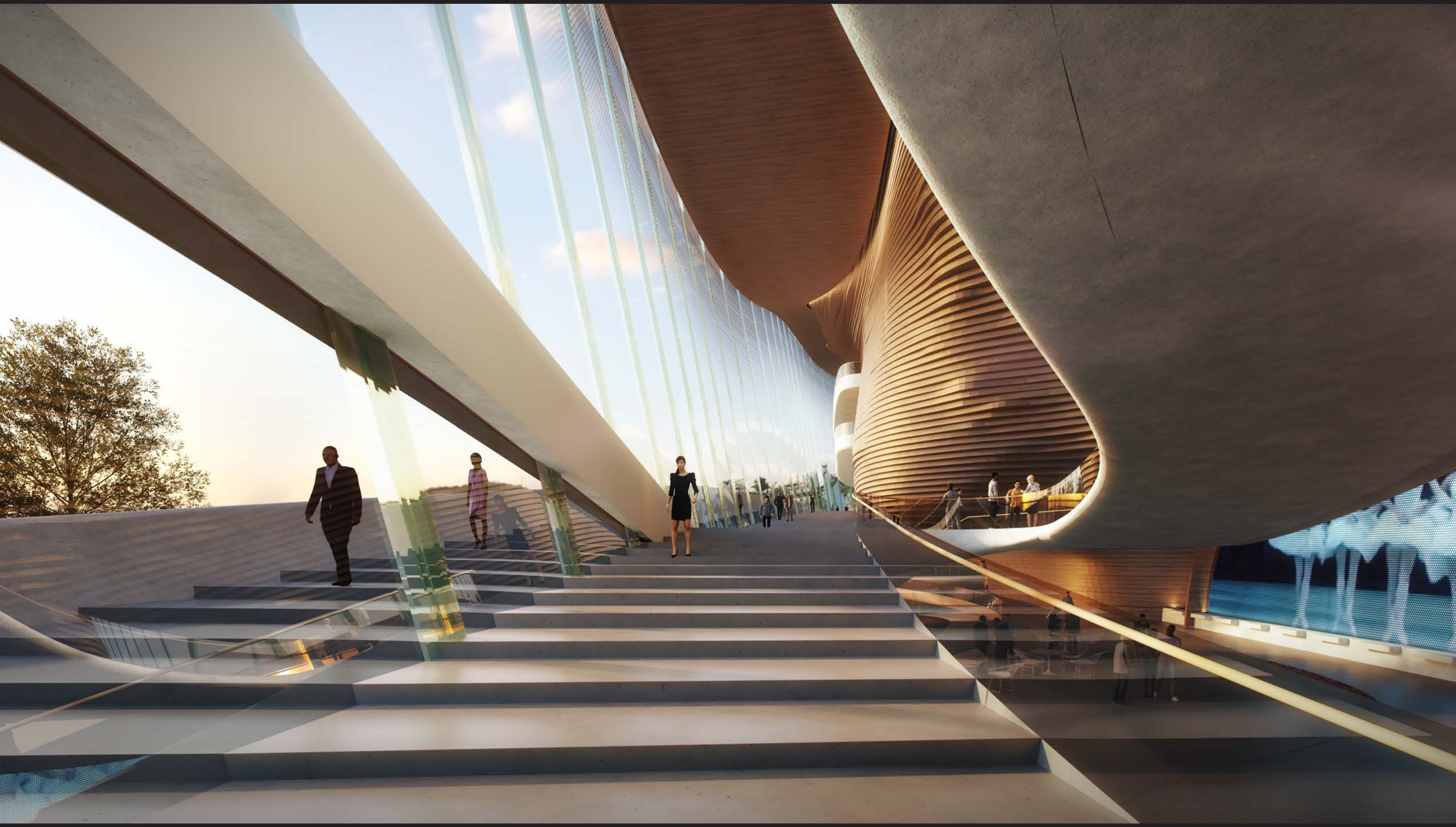
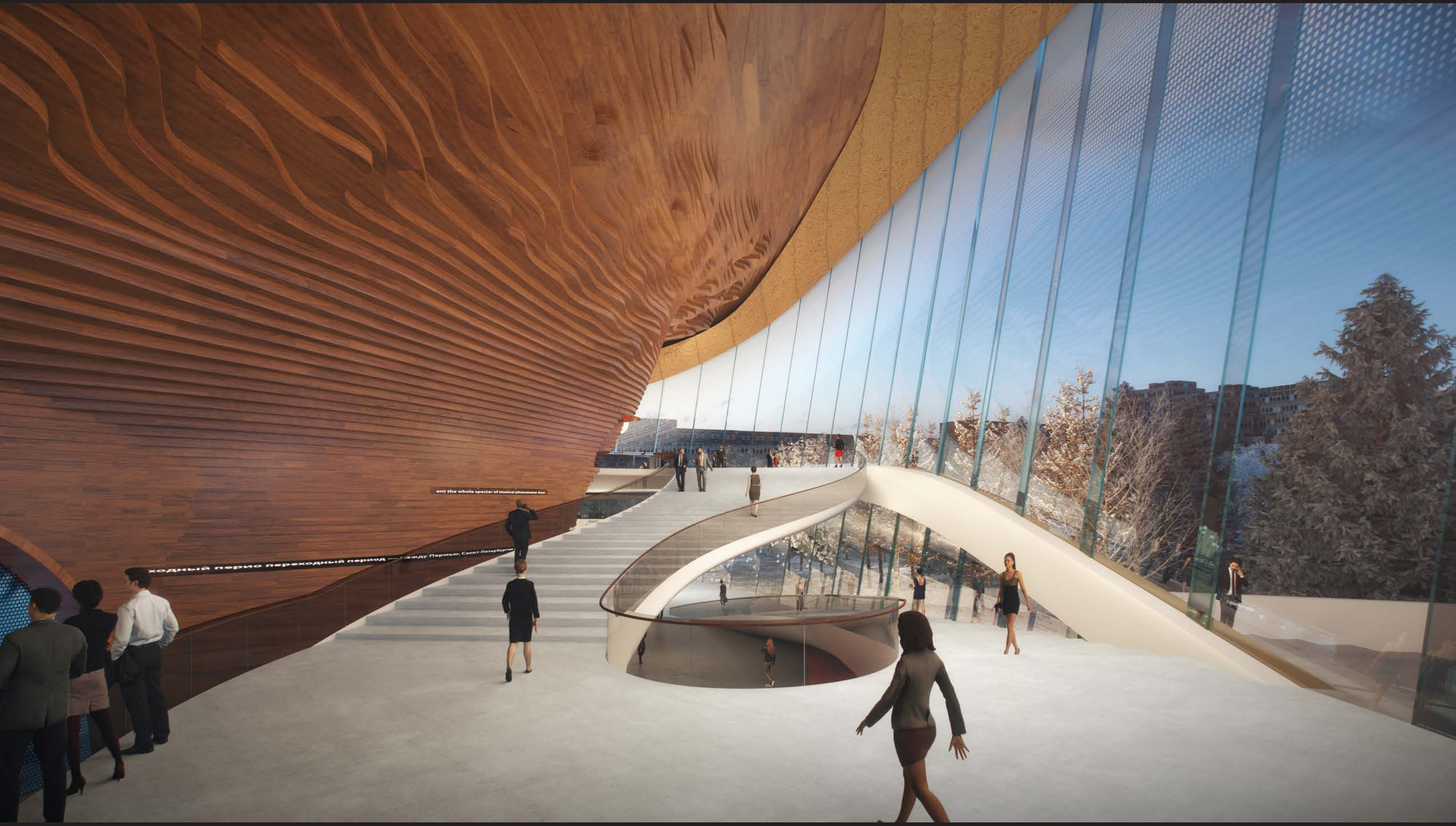
OPERA GRAND ENTRANCE

PARK VIEW

VIEW FROM LENIN STREET

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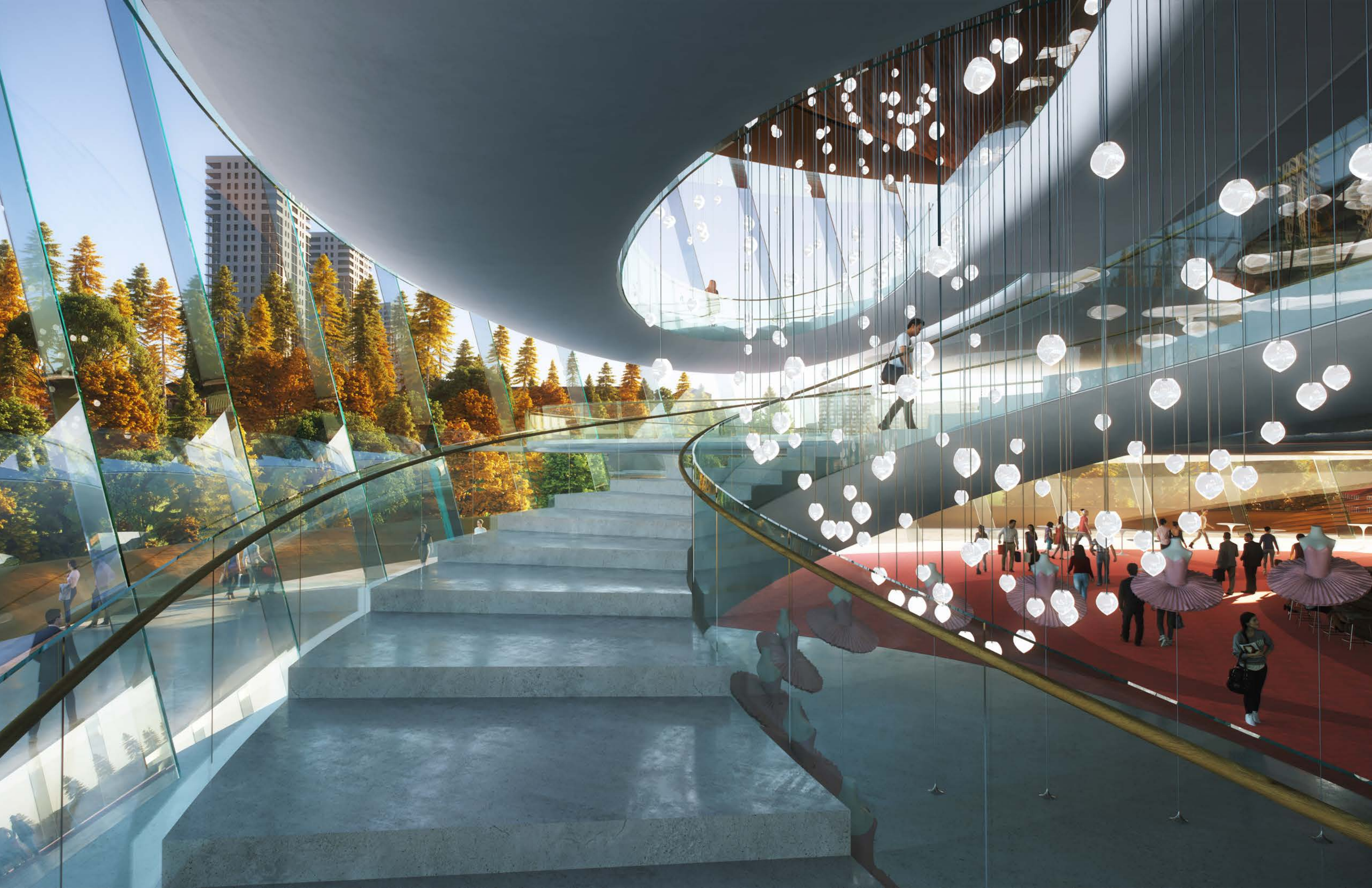
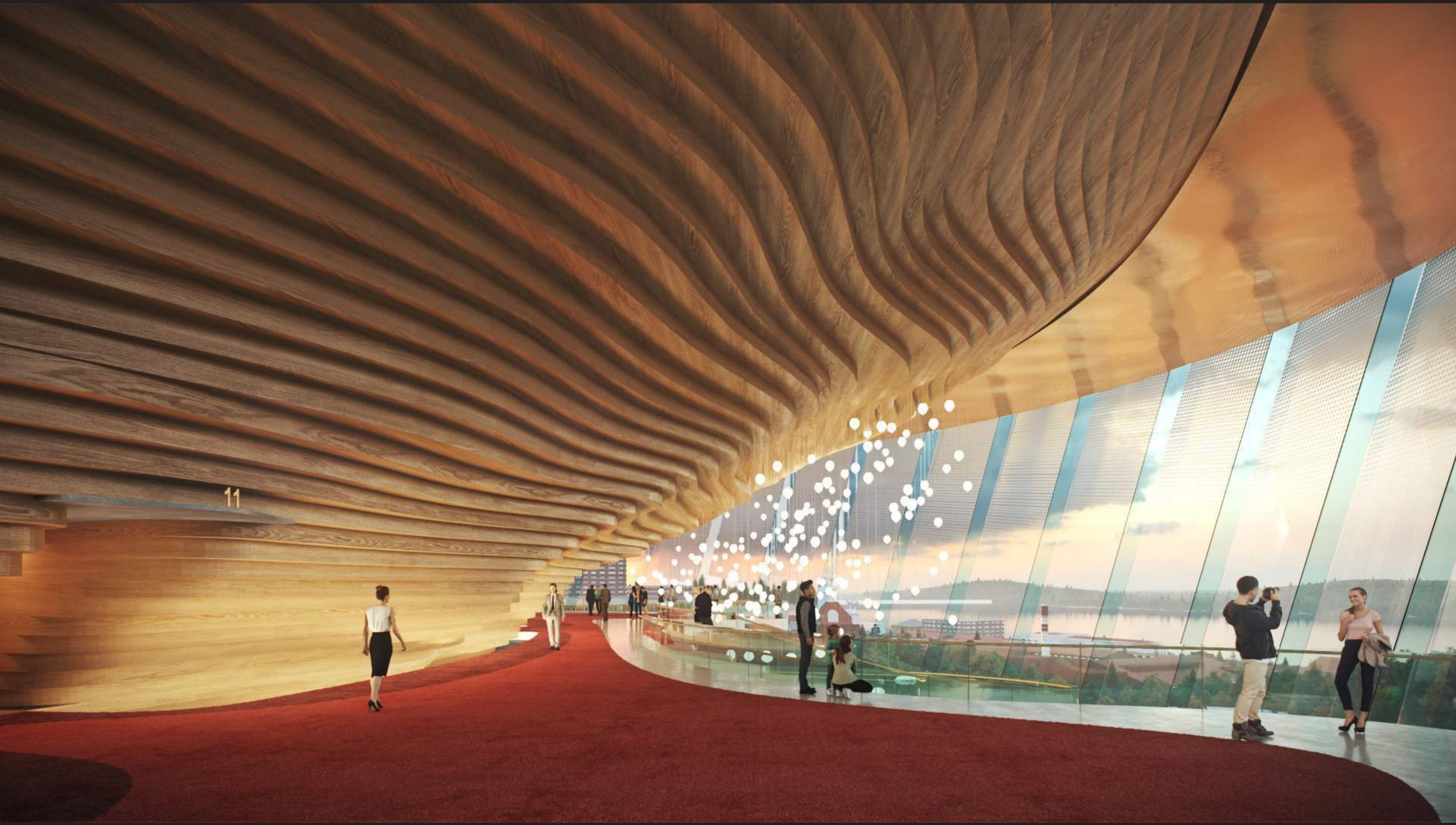
ходный перио переходный период — между Пермью, Санкт-Петербургом

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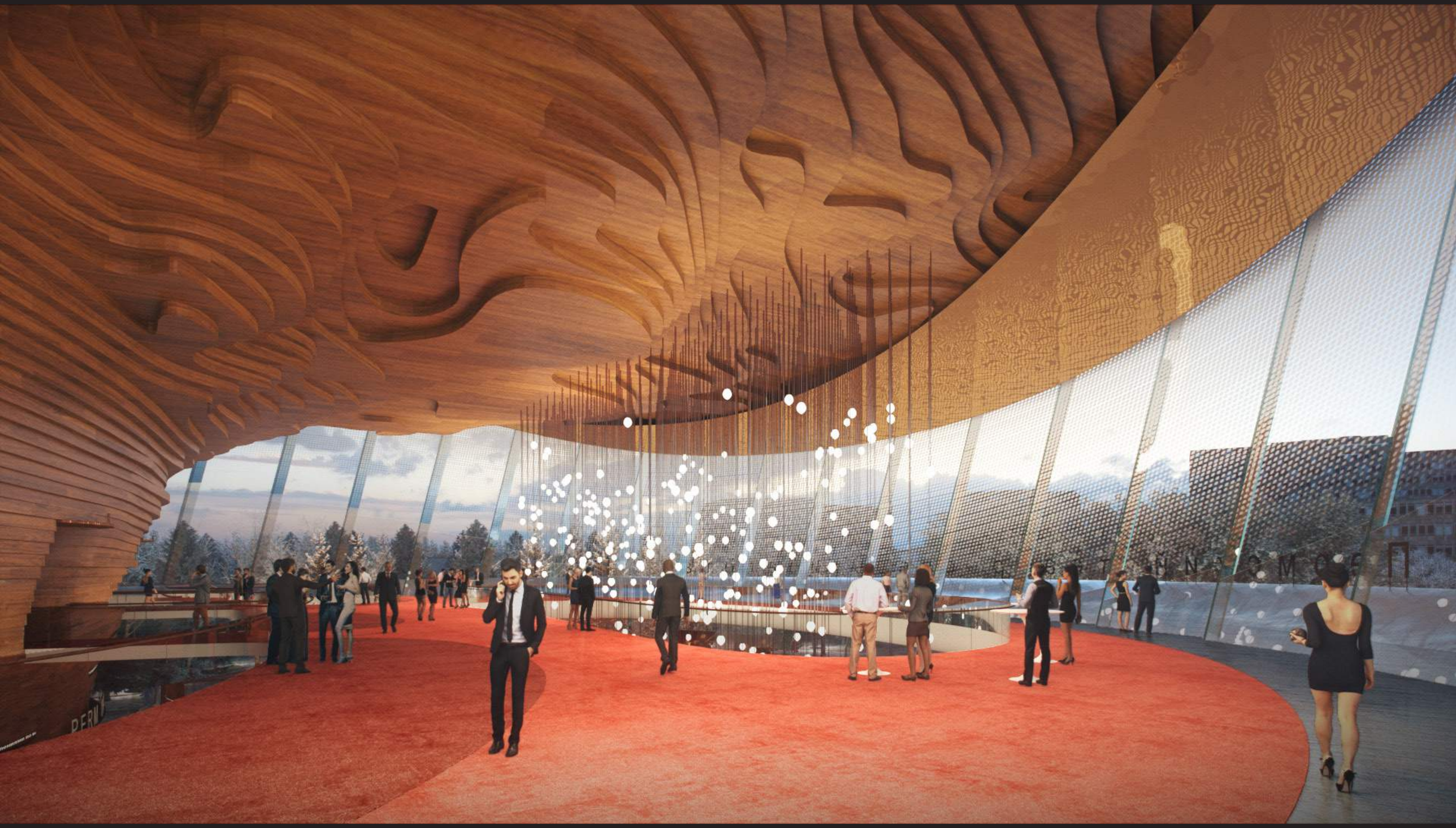
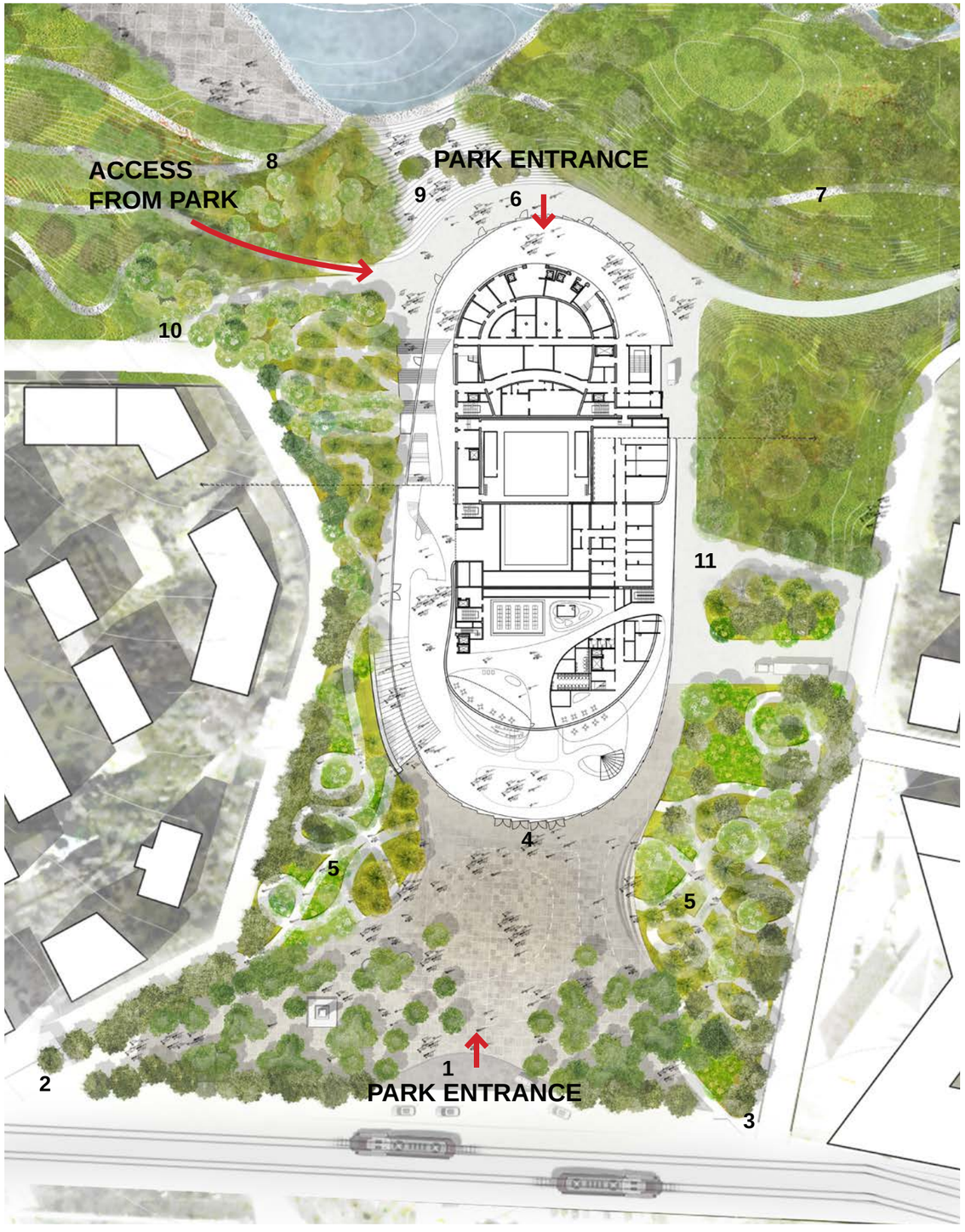
URAL POTASH SALT MINE

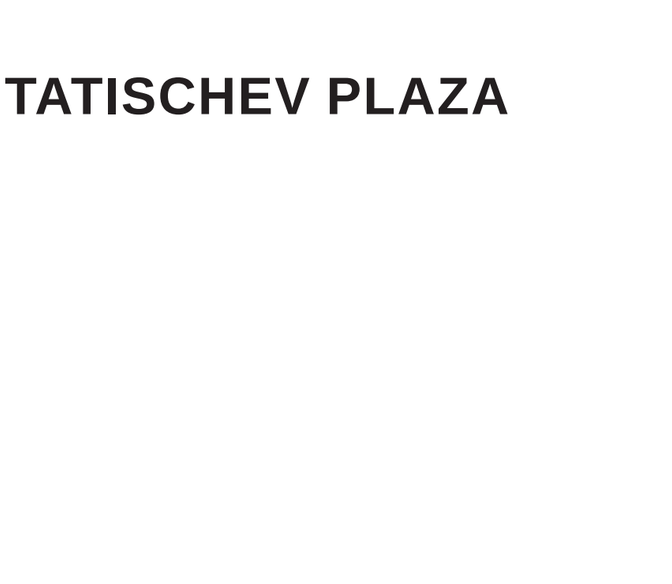


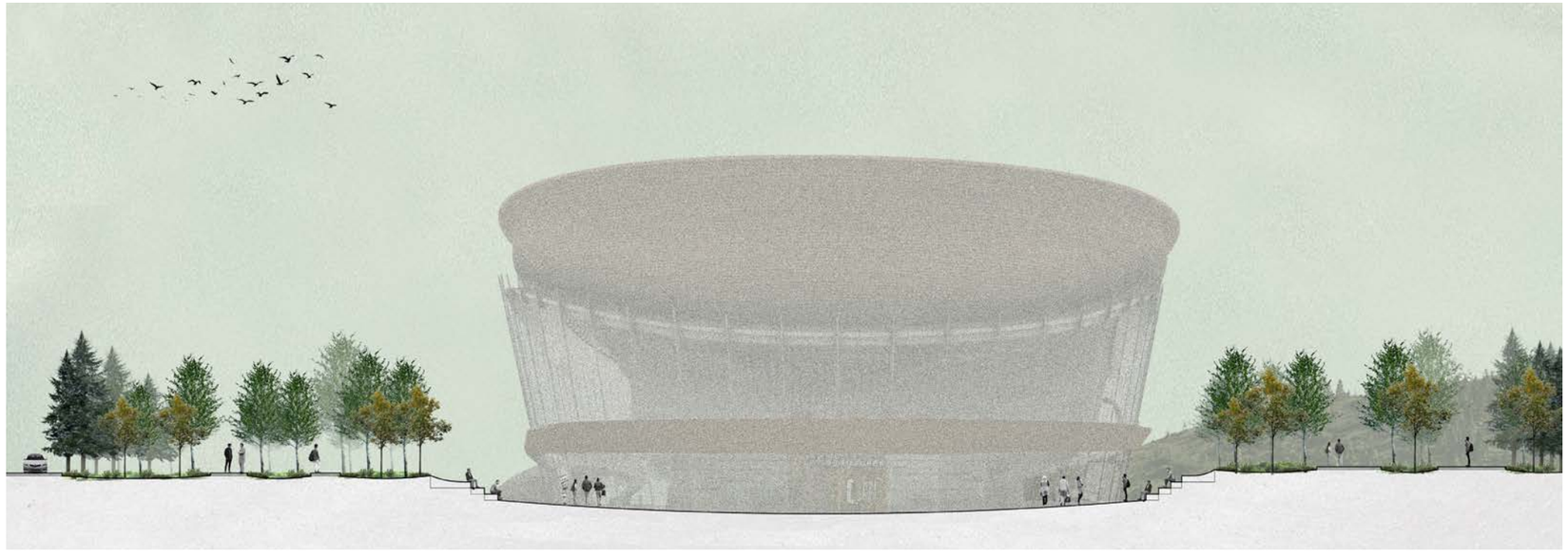
CIRCULATION



1 Drop-off area
2 Main pedestrian access
3 Secondary pedestrian access
4 Plaza entrance
5 Ballet gardens
6 Terraces
7 Connection to reservoir park
8 Connection to cultural valley
9 Valley Amphitheater
10 Access road
11 Loading Dock

TATISCHEV PLAZA





SECTION A-A

SECTION B-B

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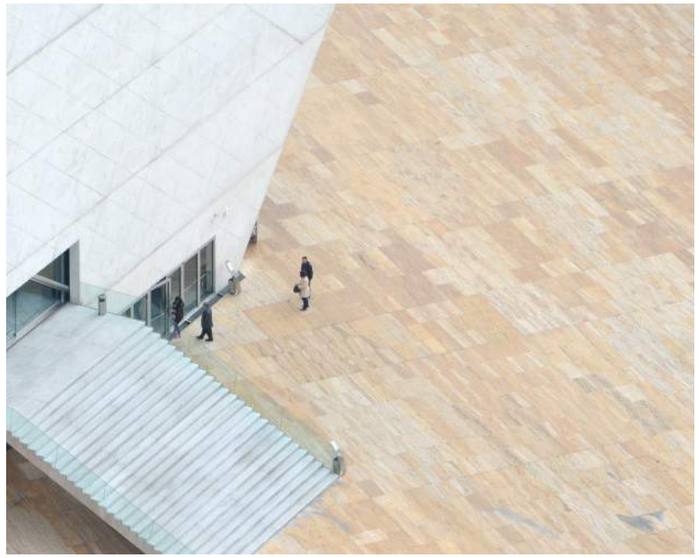
TATISCHEV PLAZA - MATERIALITY

OMA Casa da Música - Large Stone Slabs



Snohetta Oslo Opera House - Large Stone & Marble Slabs

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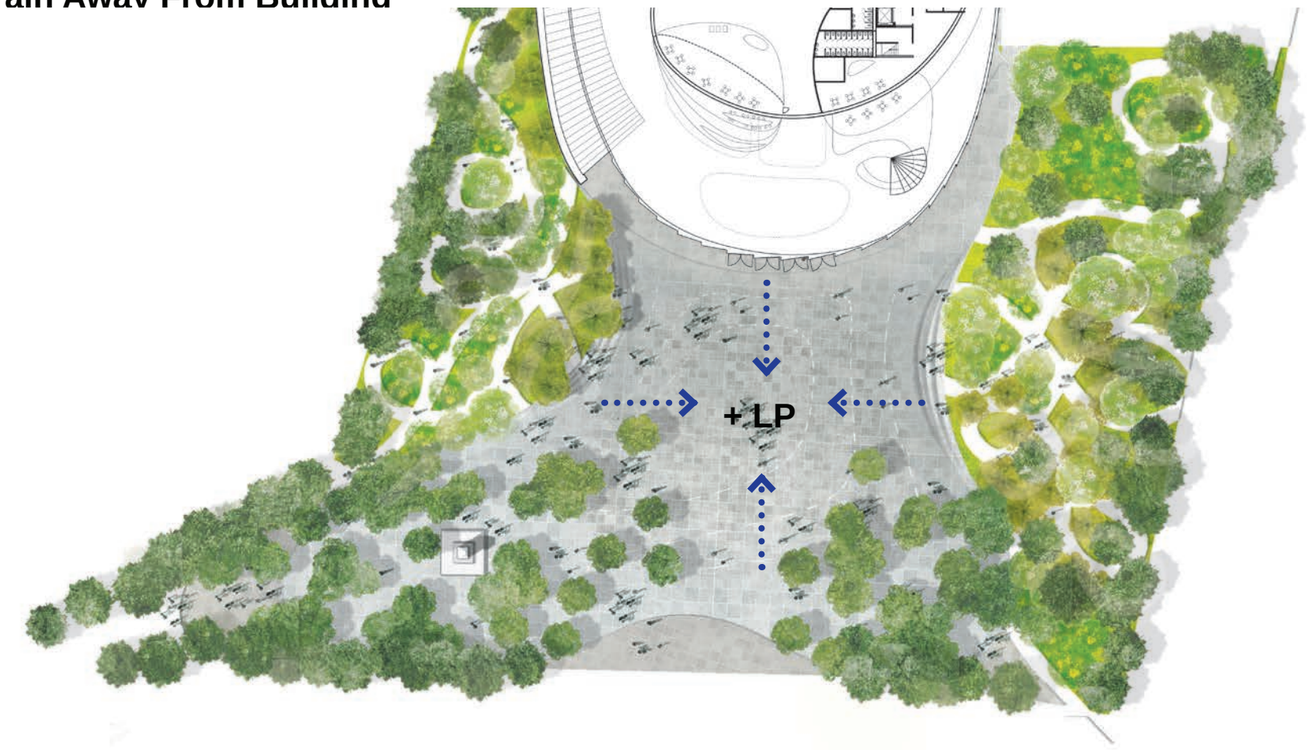
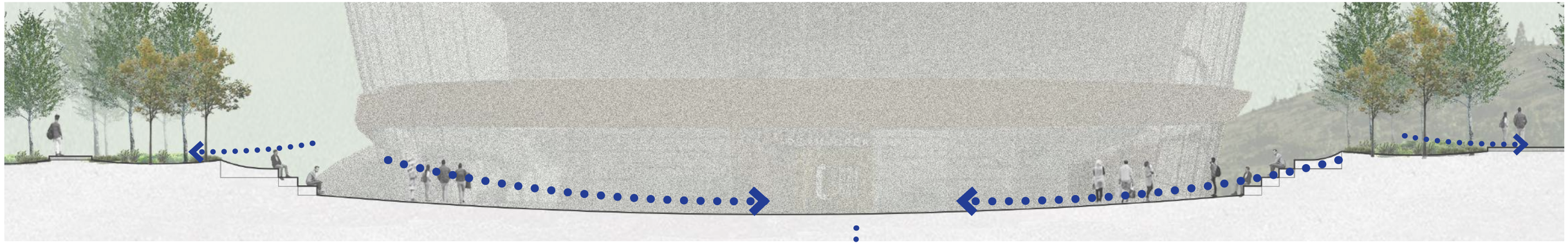
TATISCHEV PLAZA - DRAINAGE

Drain Away From Building





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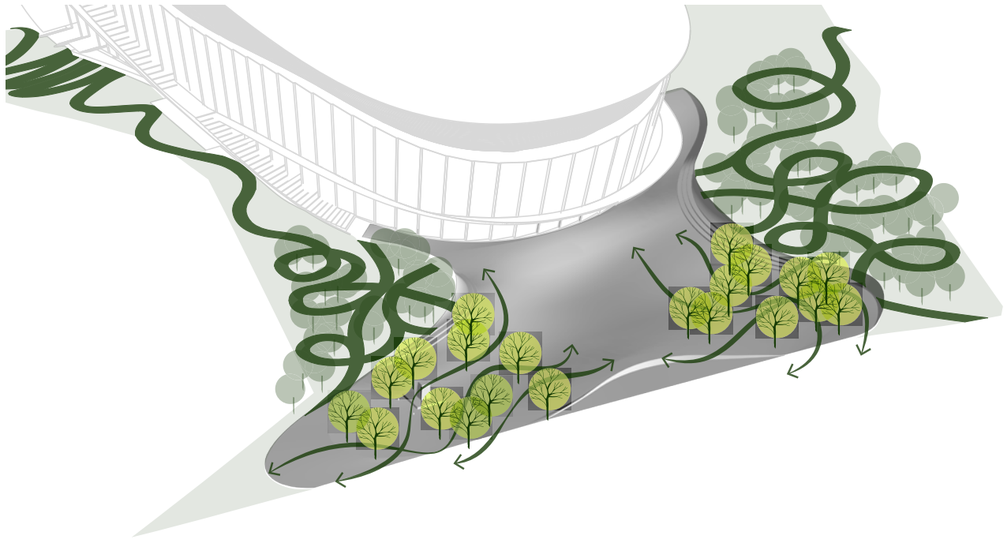
BALLET GARDENS



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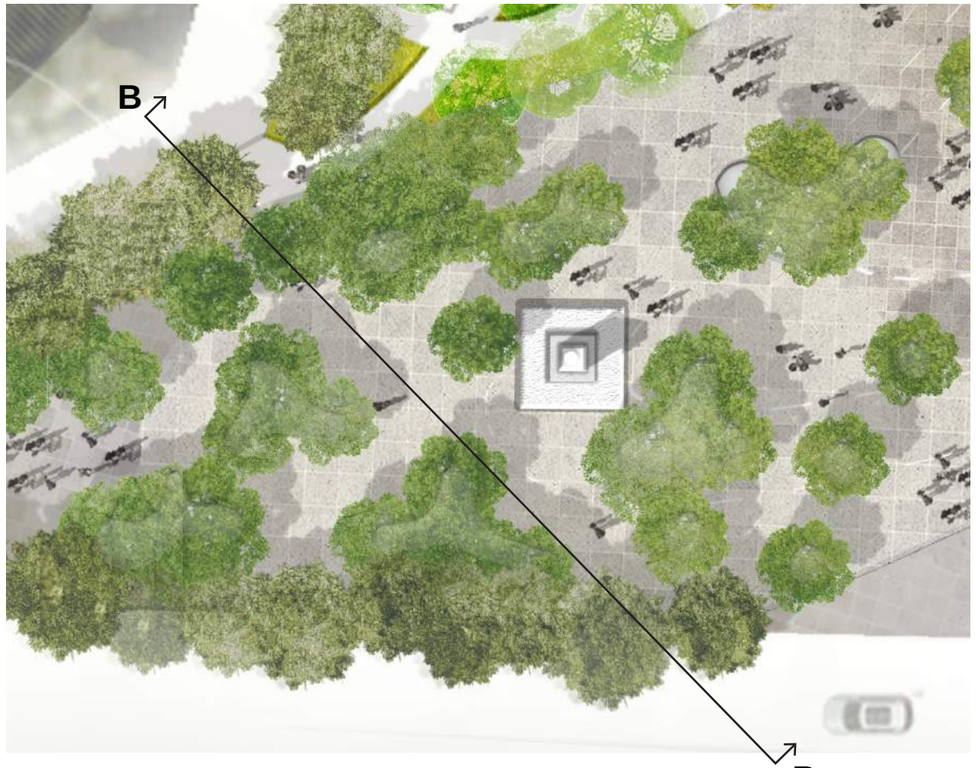
PLANTING CONCEPT

Tree Groves “Eroded” Into Plaza



SECTION B-B

PERM

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SNOW MELT

Three-step process:

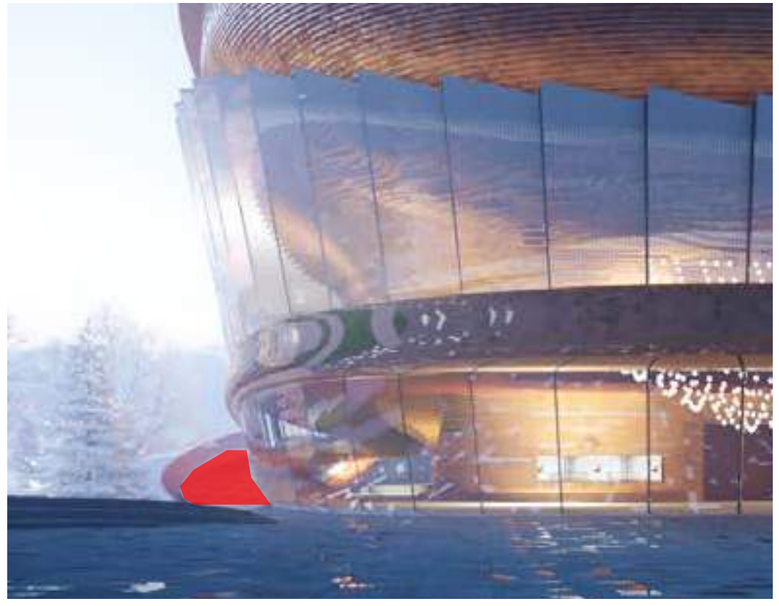
1. Warm the snow or ice to the melting temprature

2. Melt the snow into cold water; the latent heat of fusion for melting is 144 btu/lb

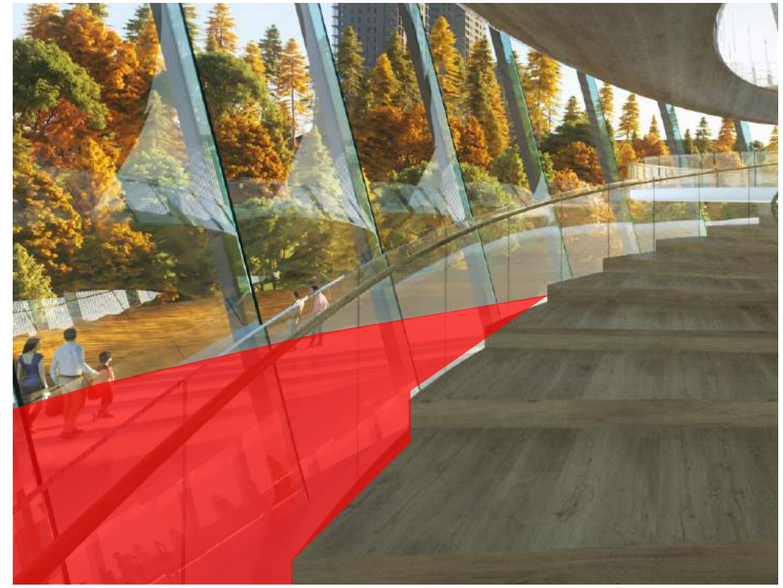
3. Evapourate the water (or let it drain off)

RAMP AREA

RAMP AREA



ROAD AREA



PLAZA AREA

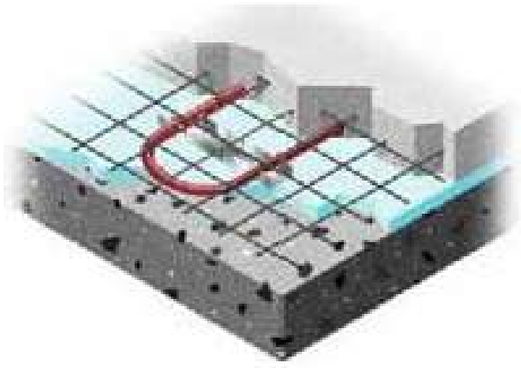
SNOW MELT

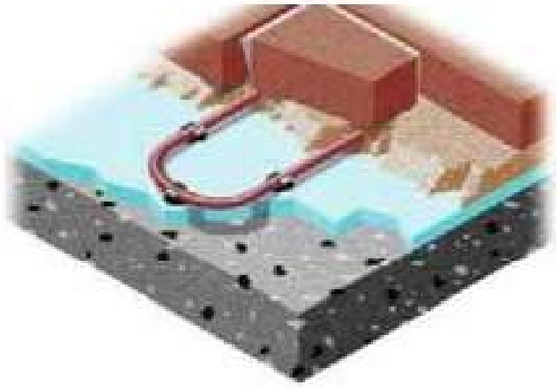
SIM INSTALATION TECHNIQUES

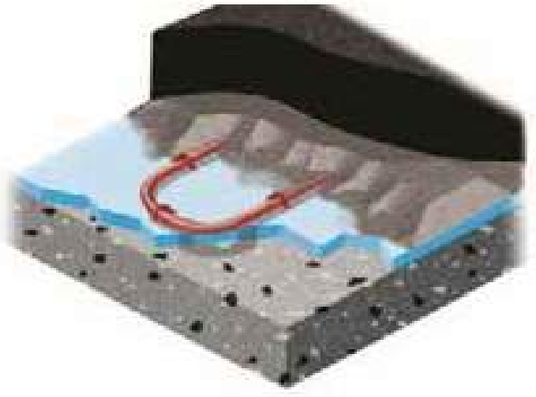
This section describes three common installation types for outdoor surfaces

1. Poured concrete
2. Interlocking pavers
3. Asphalt

Hydronic snow and ice melting system can be succesfully installed in pratically all types of external surfaces







SNOW MELT

Ramps
Pedestrian and vehicle ramps

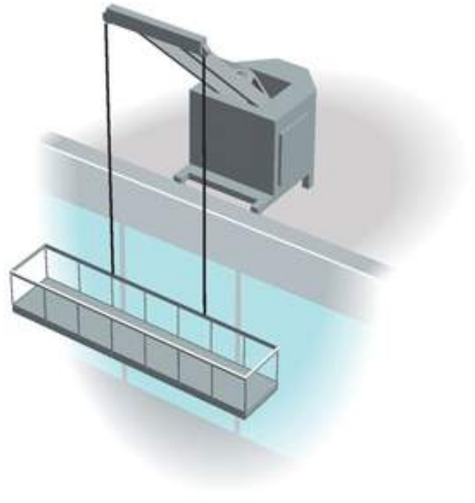
SNOW MELT EXAMPLE - OSLO OPERA HOUSE

BUILDING WINDOW CLEANING MACHANISM

WINDOW CLEANING WORKER

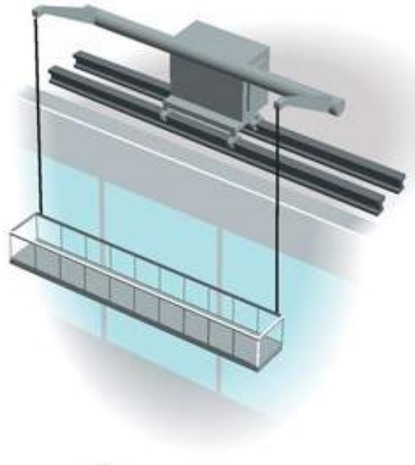
KITE ROBOTICS ENGINEERS AND MANUFACTURES WINDOW CLEANING ROBOTS

BUILDING WINDOW CLEANING MACHANISM



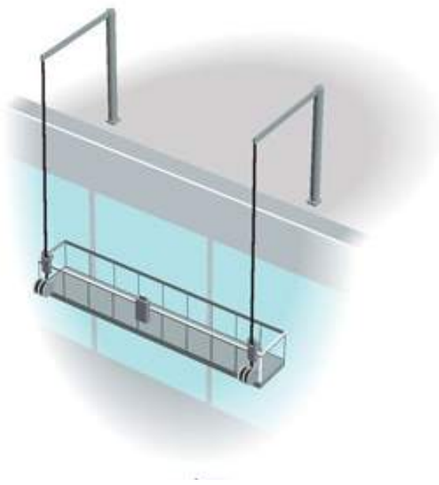
BOOM

Designed for high-rise buildings, a boom system can allow complete façade maintenance access with nothing to assemble or disassemble at the roof level.



CARRIAGES

Powered davit carriage units save the labor-intensive operation of moving portable davits. Like typical davit systems, the mast can be lowered out of view.



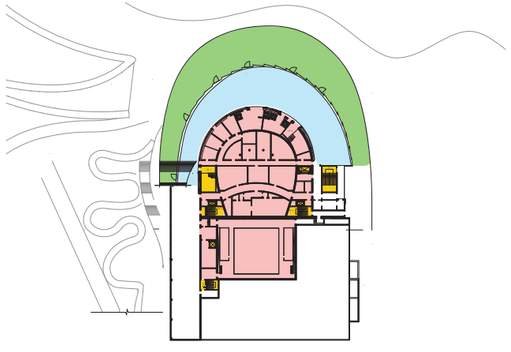
PORTABLE DAVITS

One of the most economical solutions for façade access, portable davit masts move between fixed davit bases and can be lowered out of sight when not in use.

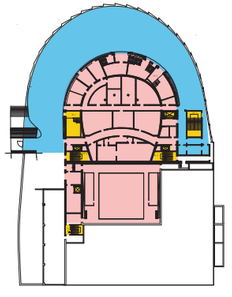
BOSUN CHAIR

A powered bosun chair is designed for a single cleaner and can be operated from the chair itself.

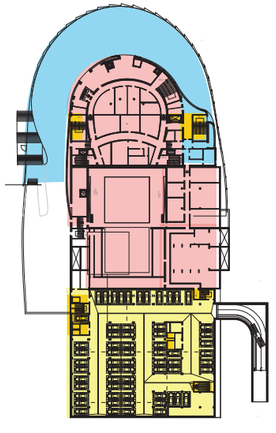
PROPOSED FLOOR PLANS



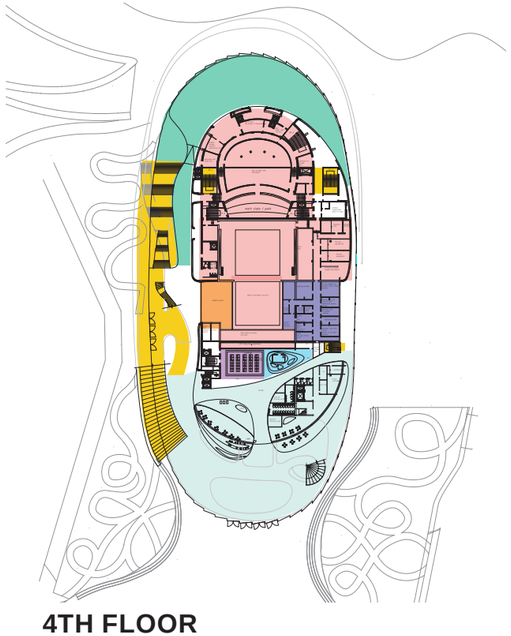
1ST FLOOR



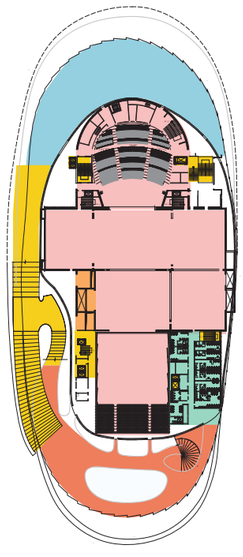
2ND FLOOR



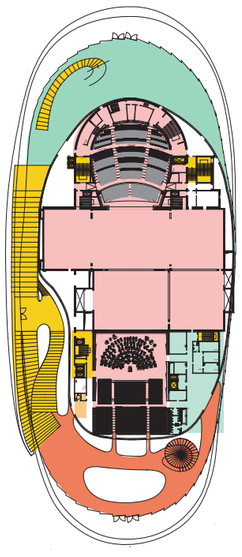
3RD FLOOR



4TH FLOOR



5TH FLOOR



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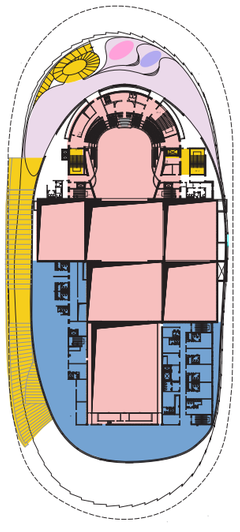

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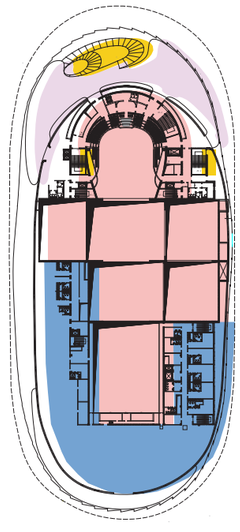

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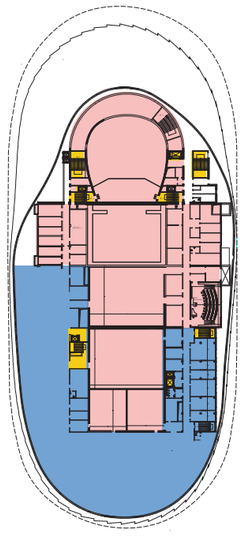

9TH FLOOR

PERM

100% Concept Design

Perm, Russia

DEC 2019

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