



# Music Marvel

## Public Building Graduation Studio

MSc Architecture, Urbanism & Building Sciences

2021/2022

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### Tutors

Project Design: ir. Stefan Witteman

Building Technology: Piero Medici

Theory Research: Dr. Sang Lee, M.Arch. RA

### Delegate P4 + P5:

Dr.ir. Ad Straub

**Romeny Koreman**

4735633



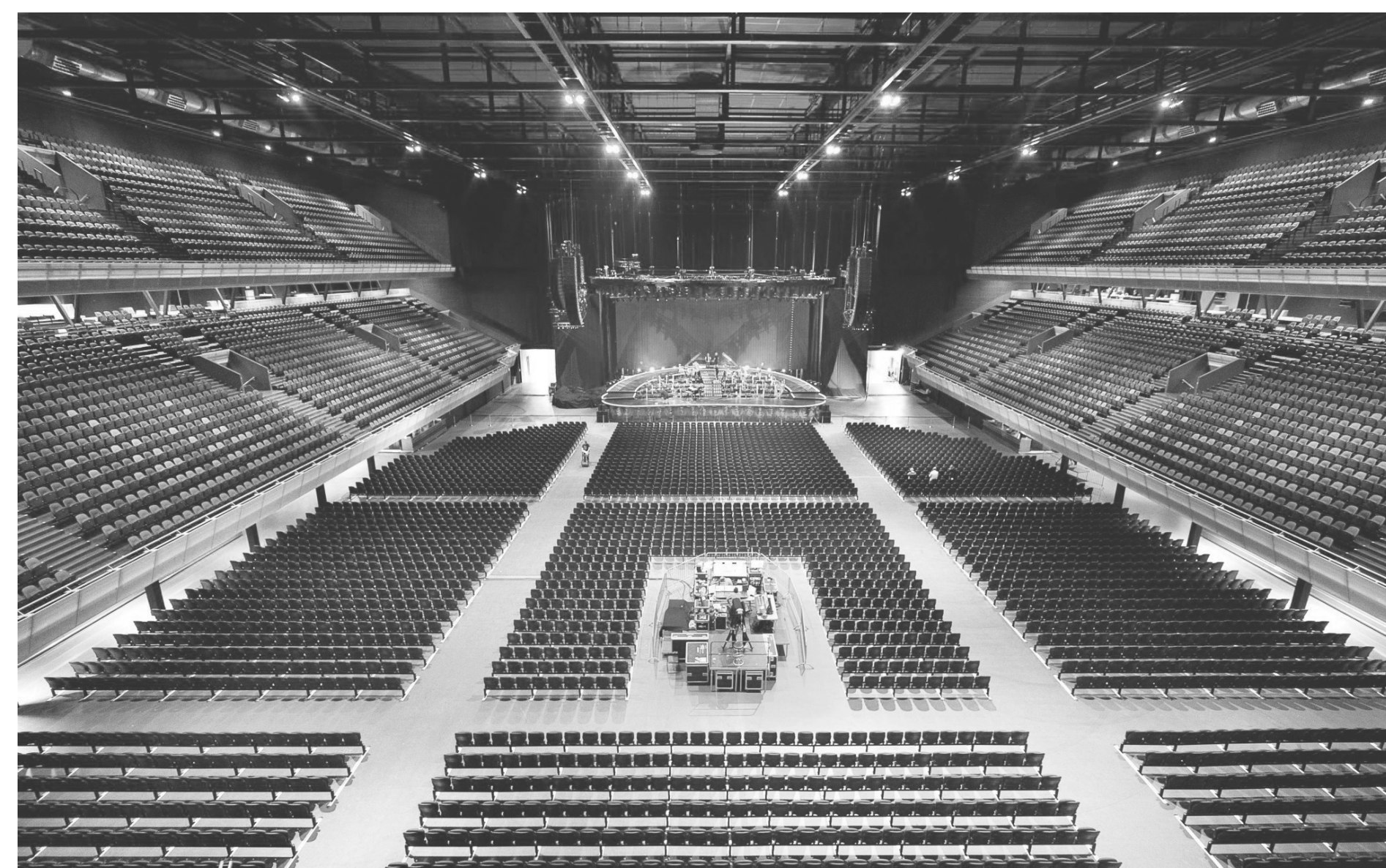
The background of the slide features a faded, light gray image of piano sheet music. The music is arranged in a grid of four systems, each containing a grand staff (treble and bass clef). The notes are mostly eighth and sixteenth notes, with some rests. A series of thin, light gray lines form a grid pattern over the music, with some lines intersecting at the word 'Research'.

# Research

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# Case Studies | Music Buildings

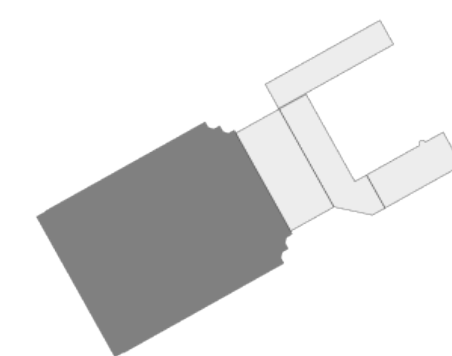


## Ziggo Dome

Capacity:

1.000 - 17.000 visitors

Floor 6.300 visitors



## AFAS Live

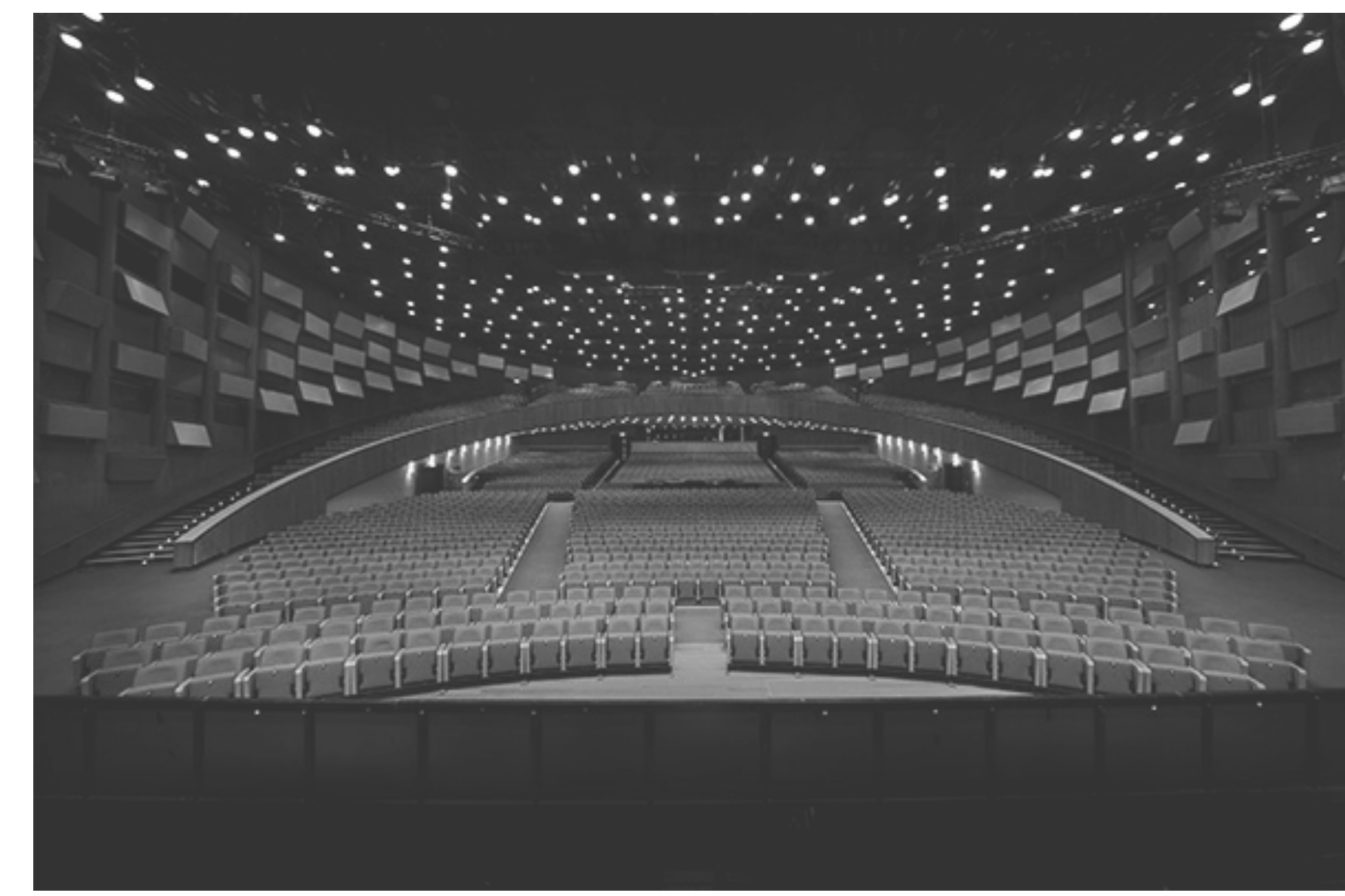
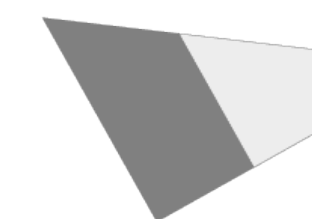
Capacity:

3.500 seats / 5.500 standing visitors

(Black Box)

487seats / 700 standing visitors

(Beat Box)



## De Doelen

Capacity:

1.755 seats (Grote zaal)

500 seats (Juriaanse zaal)

700 seats (Willem Burger zaal)

180 seats (Eduard Flipse Zaal)

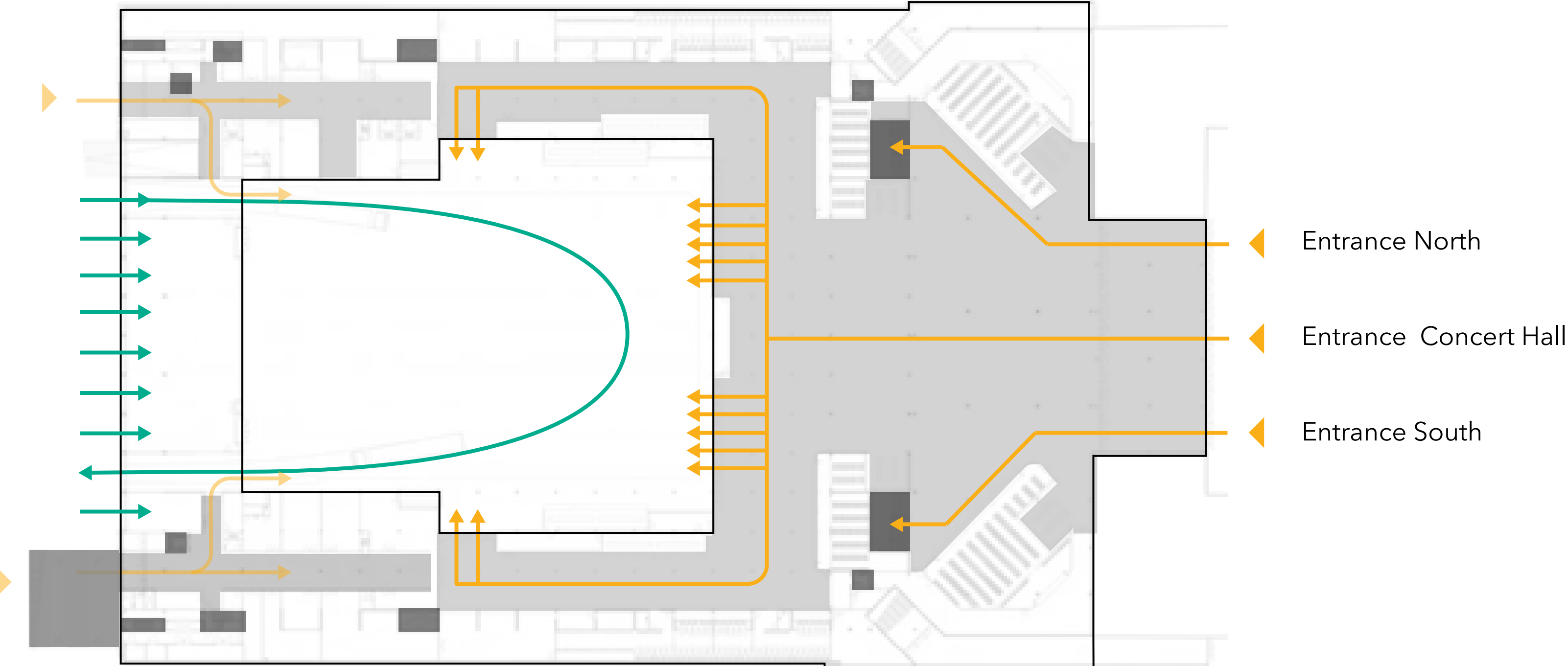
400 seats (Feestzaal)





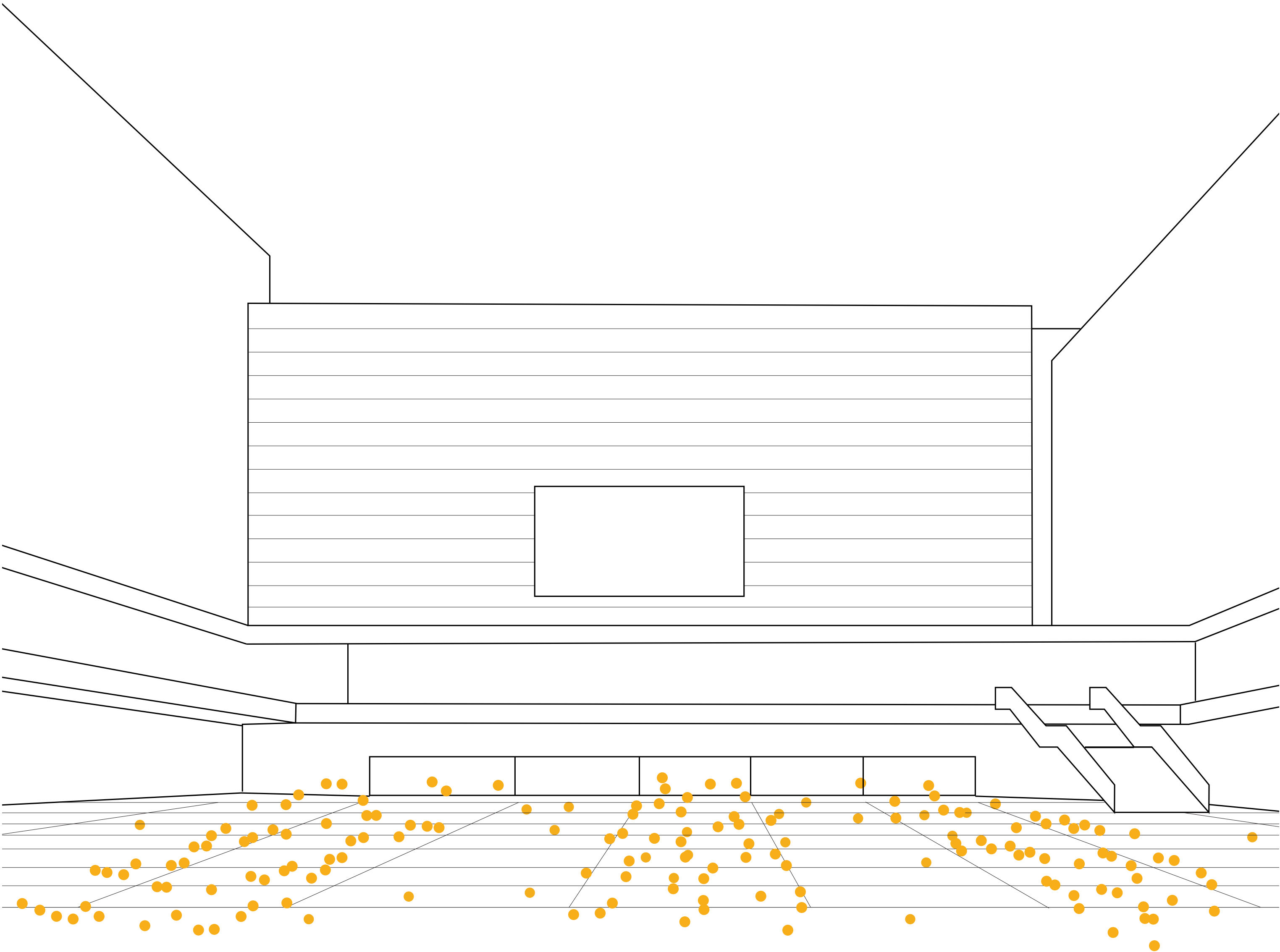
# Ziggo Dome

Entrances



Ground Floor

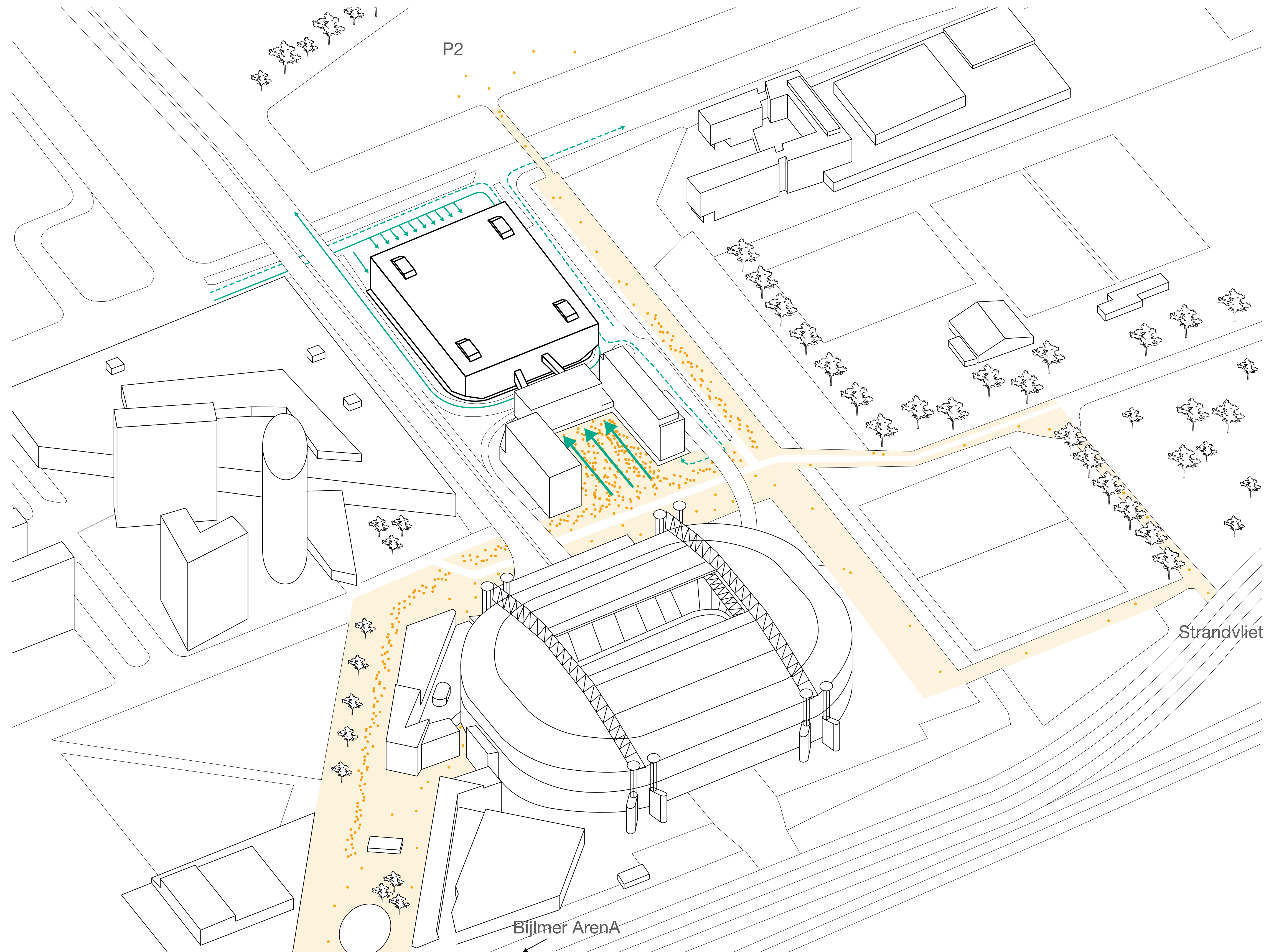
- Entrance
- Private Access (artists)
- Private Access (logistics)
- Public Access (visitors)
- Vertical Circulation
- Horizontal Circulation





# Ziggo Dome

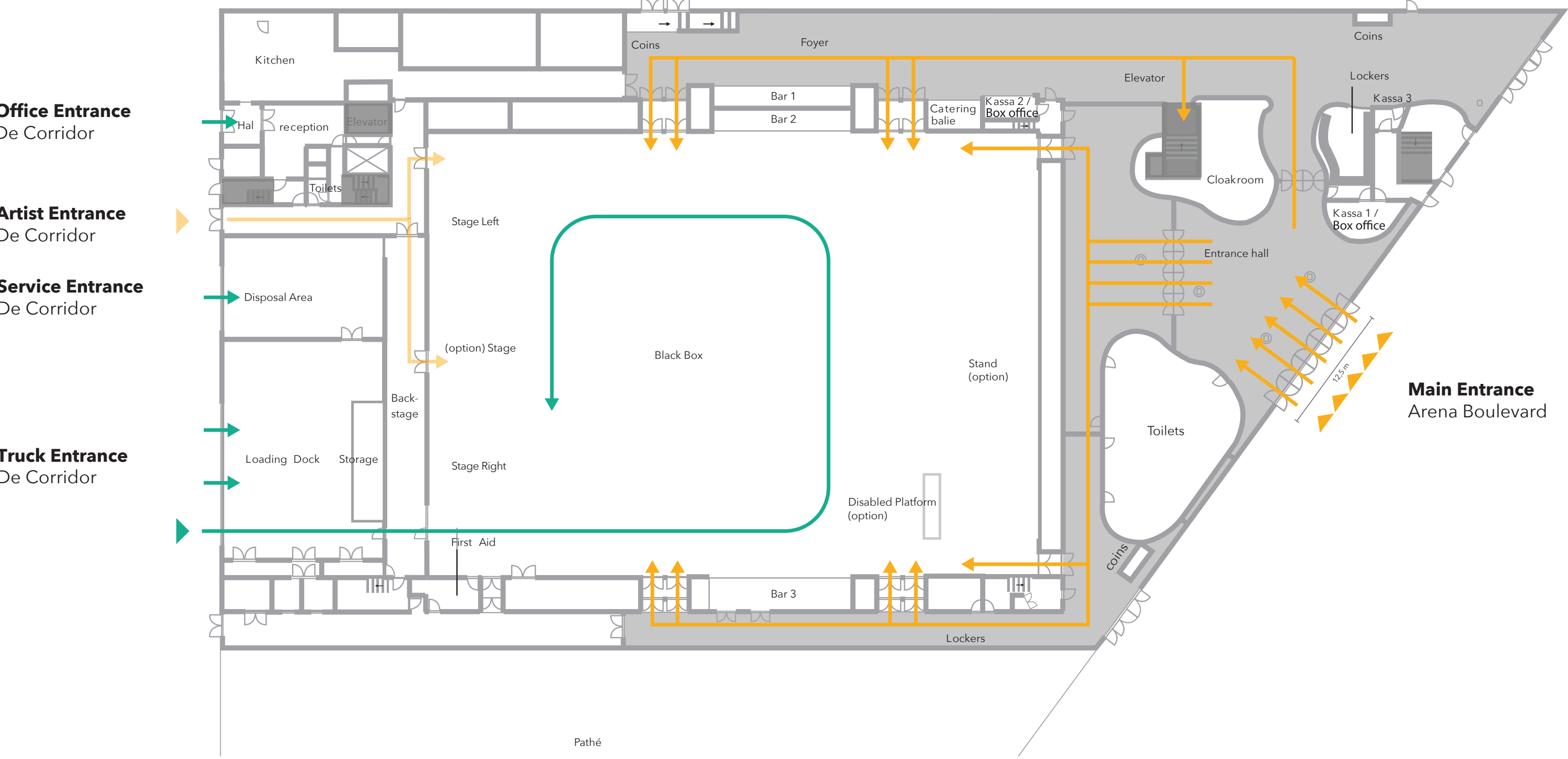
Waiting line



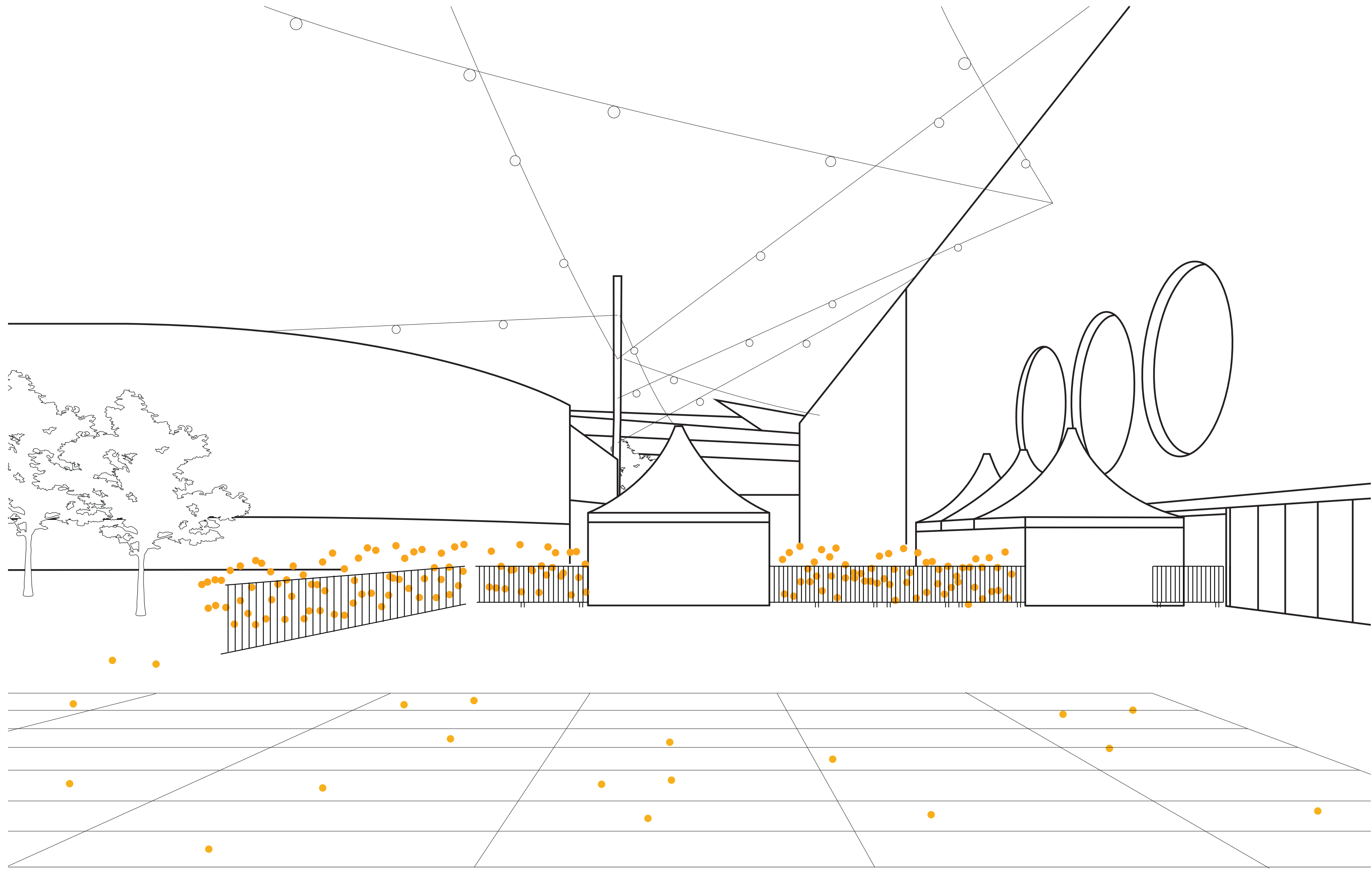


# AFAS Live

Entrances

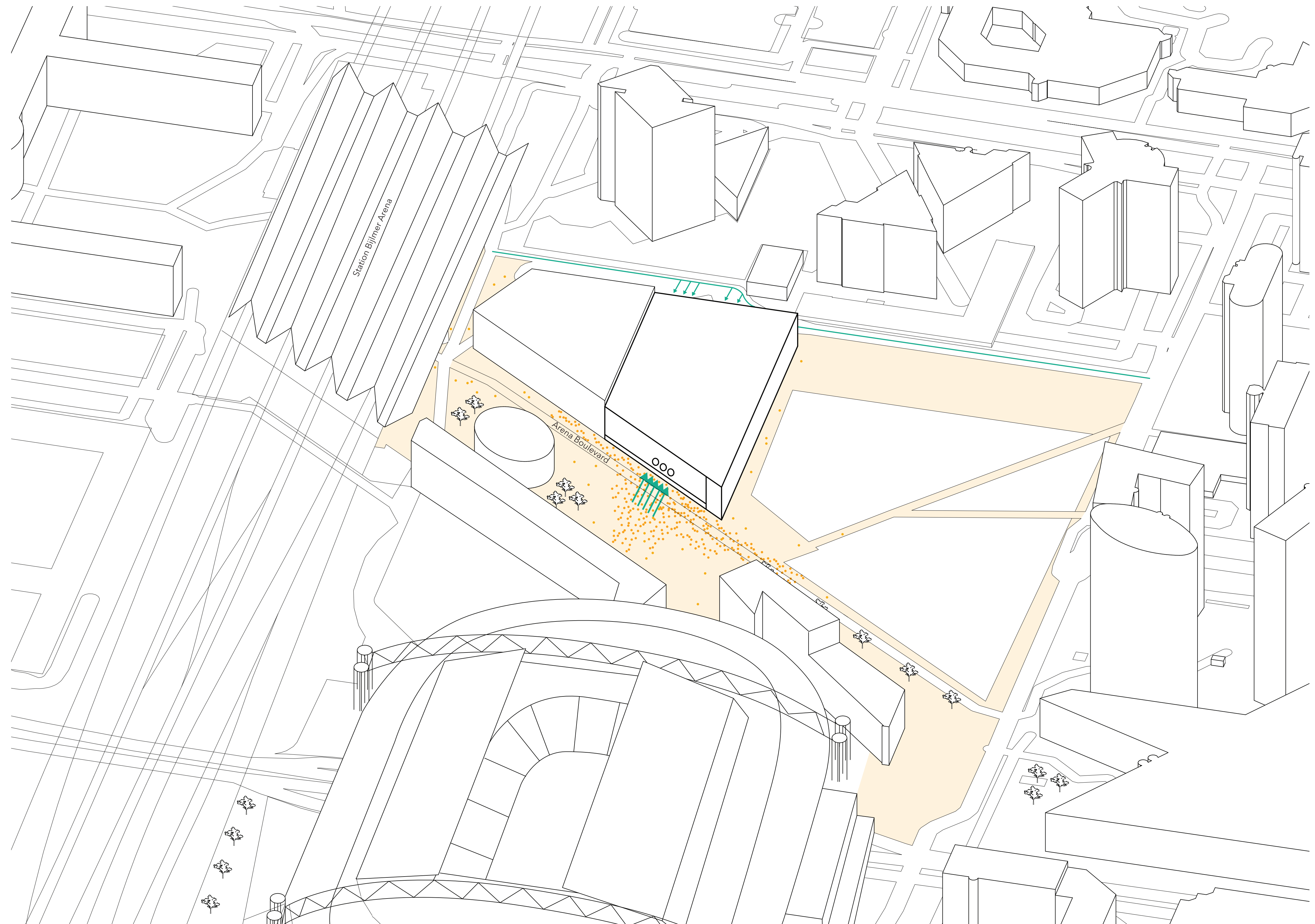


- Entrance
- Private Access (artists)
- Private Access (logistics)
- Public Access (visitors)
- Vertical Circulation
- Horizontal Circulation (visitors)





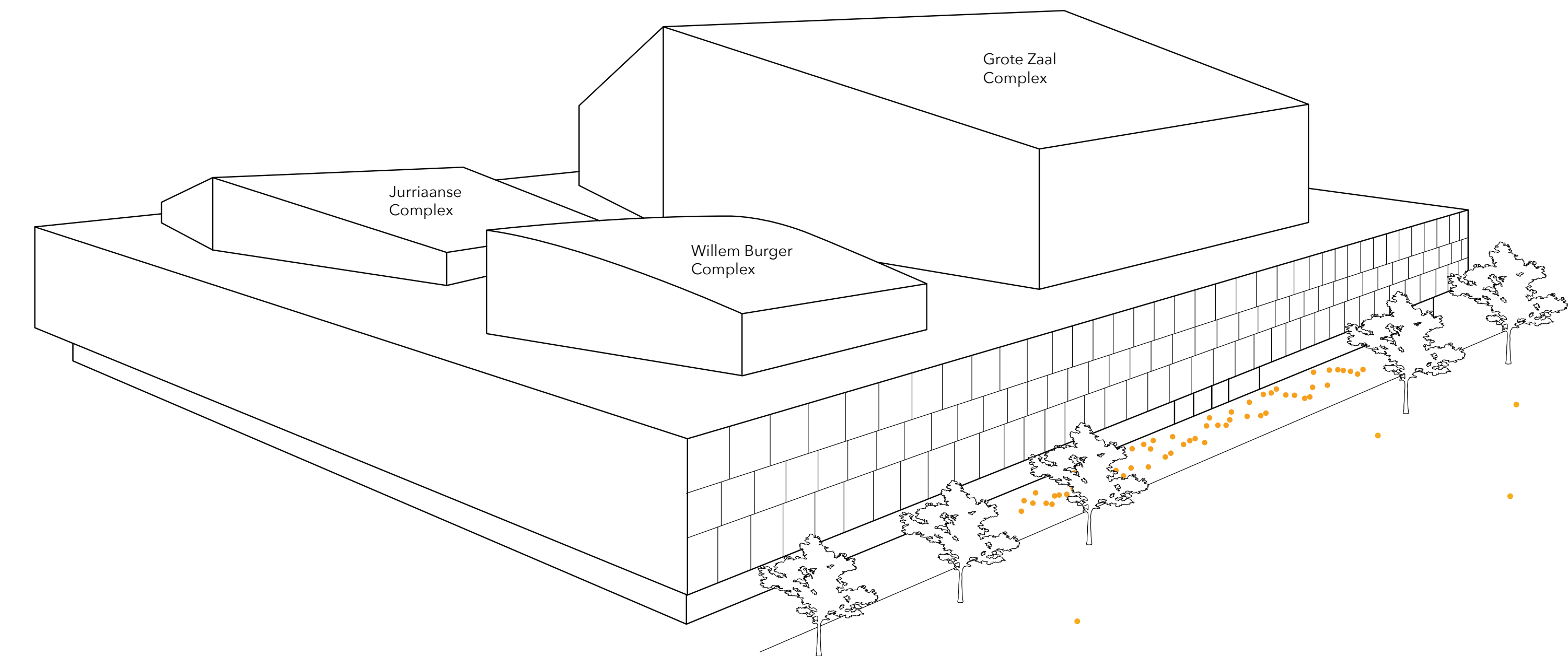
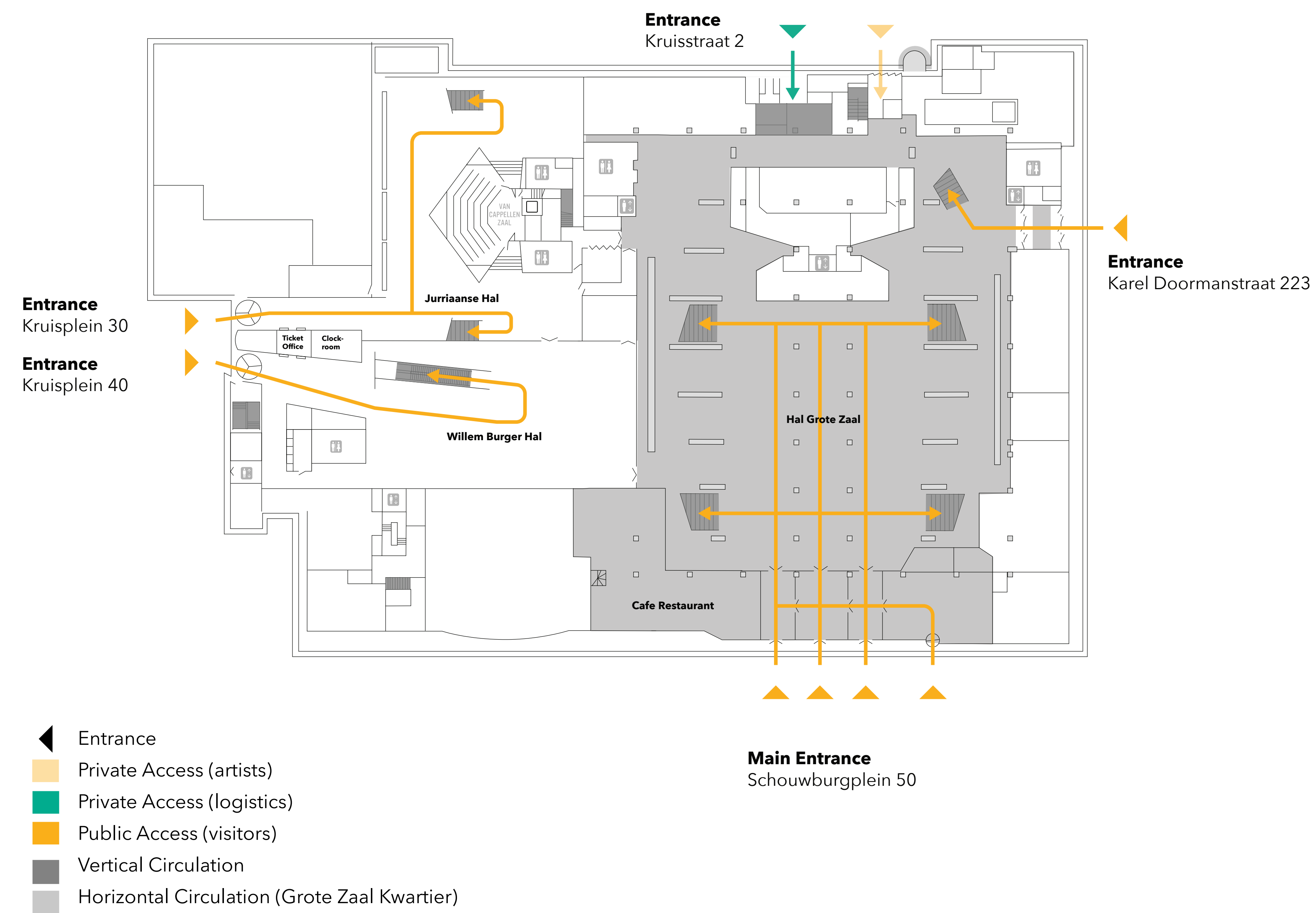
# AFAS Live | Waiting line





# De Doelen

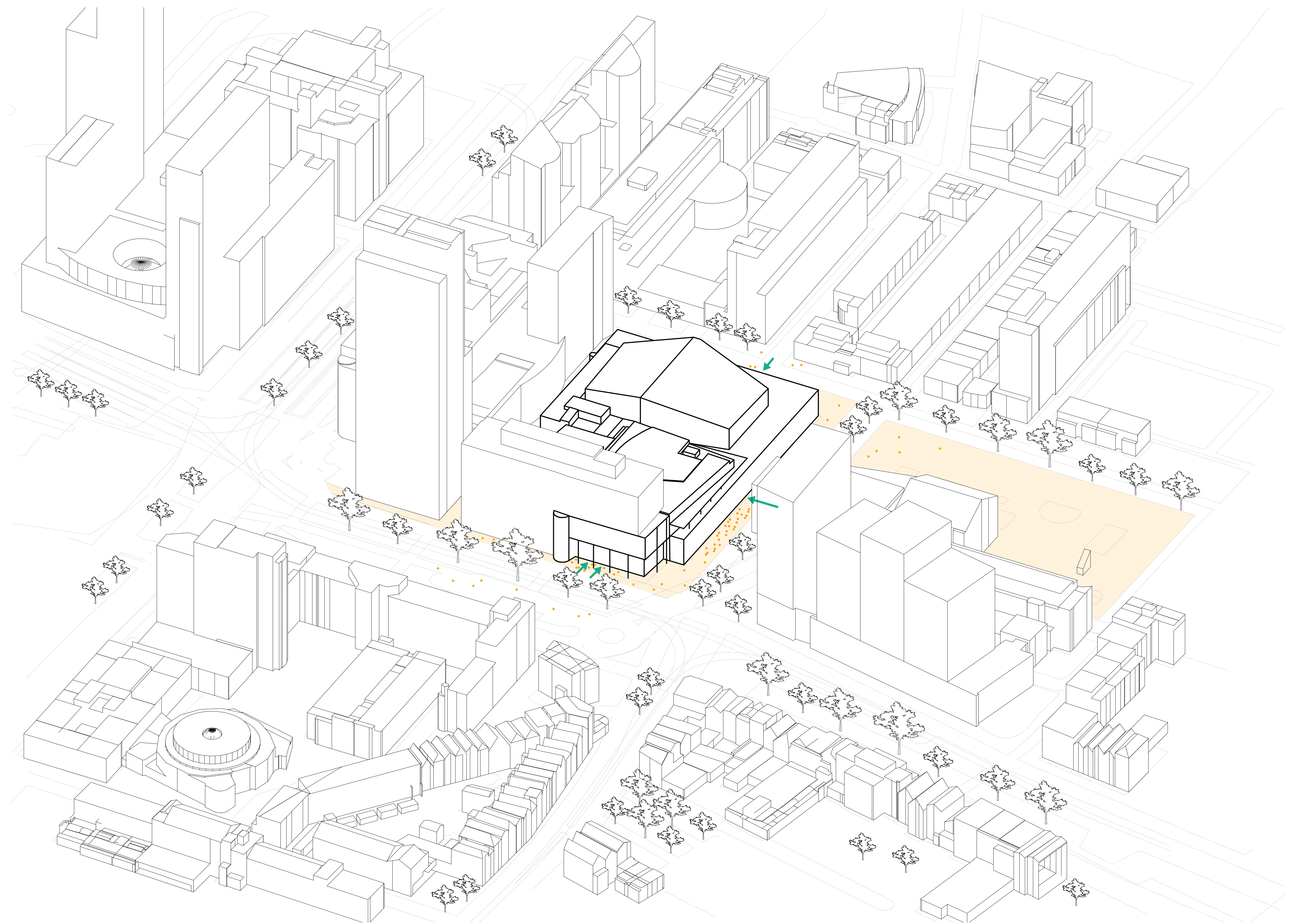
## Entrances





# De Doelen

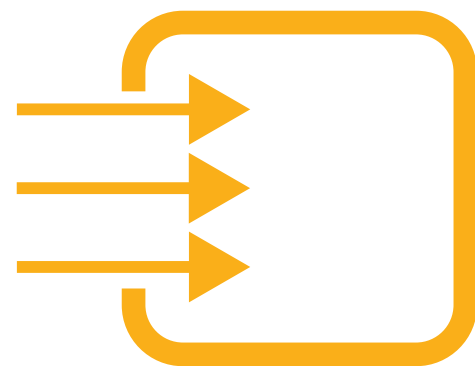
Waiting line



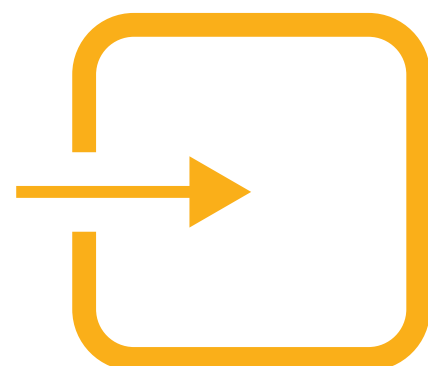
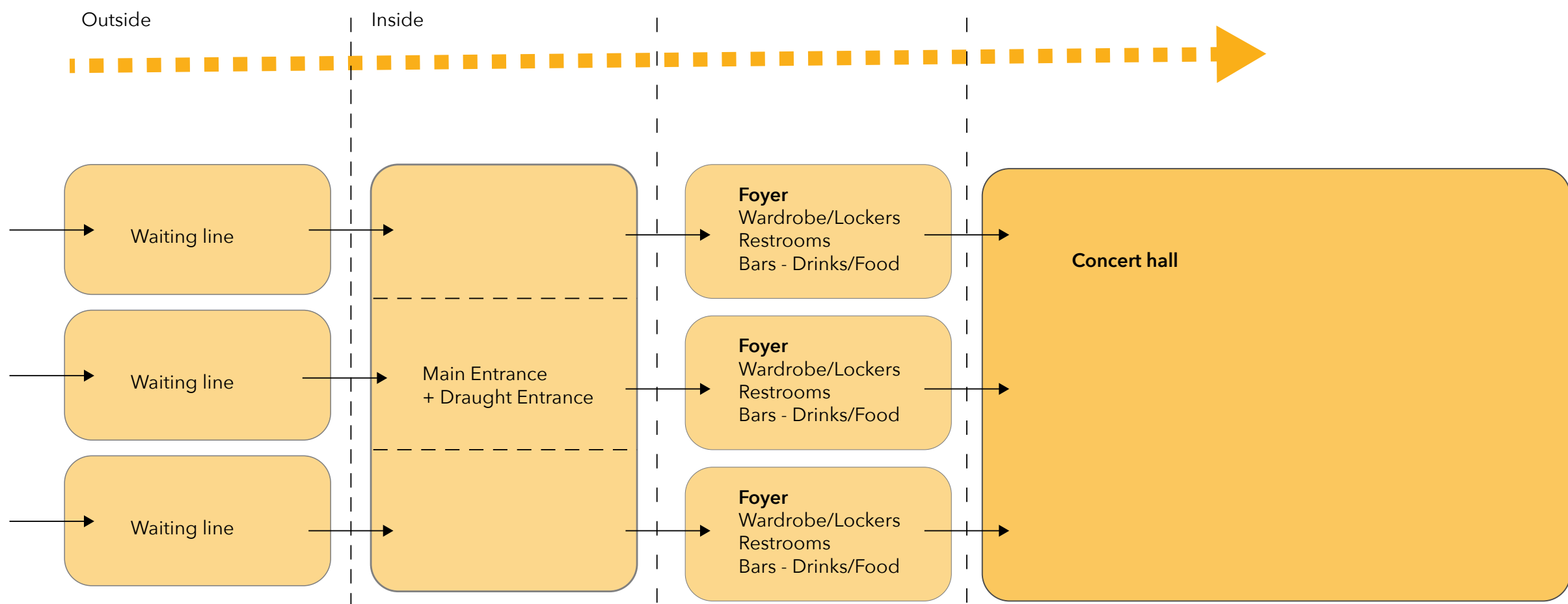


# Entrances

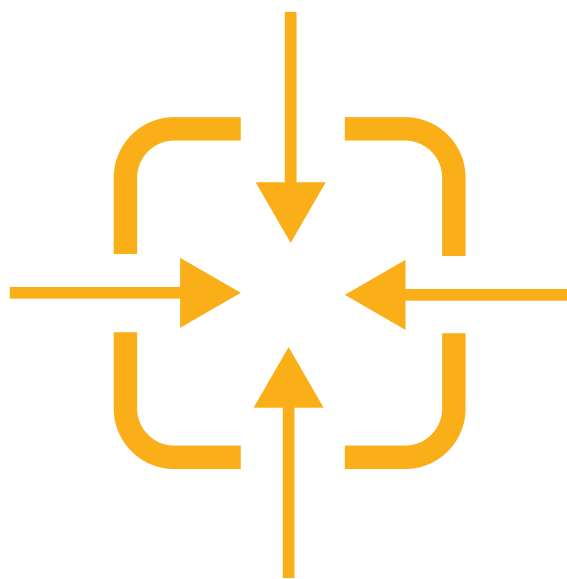
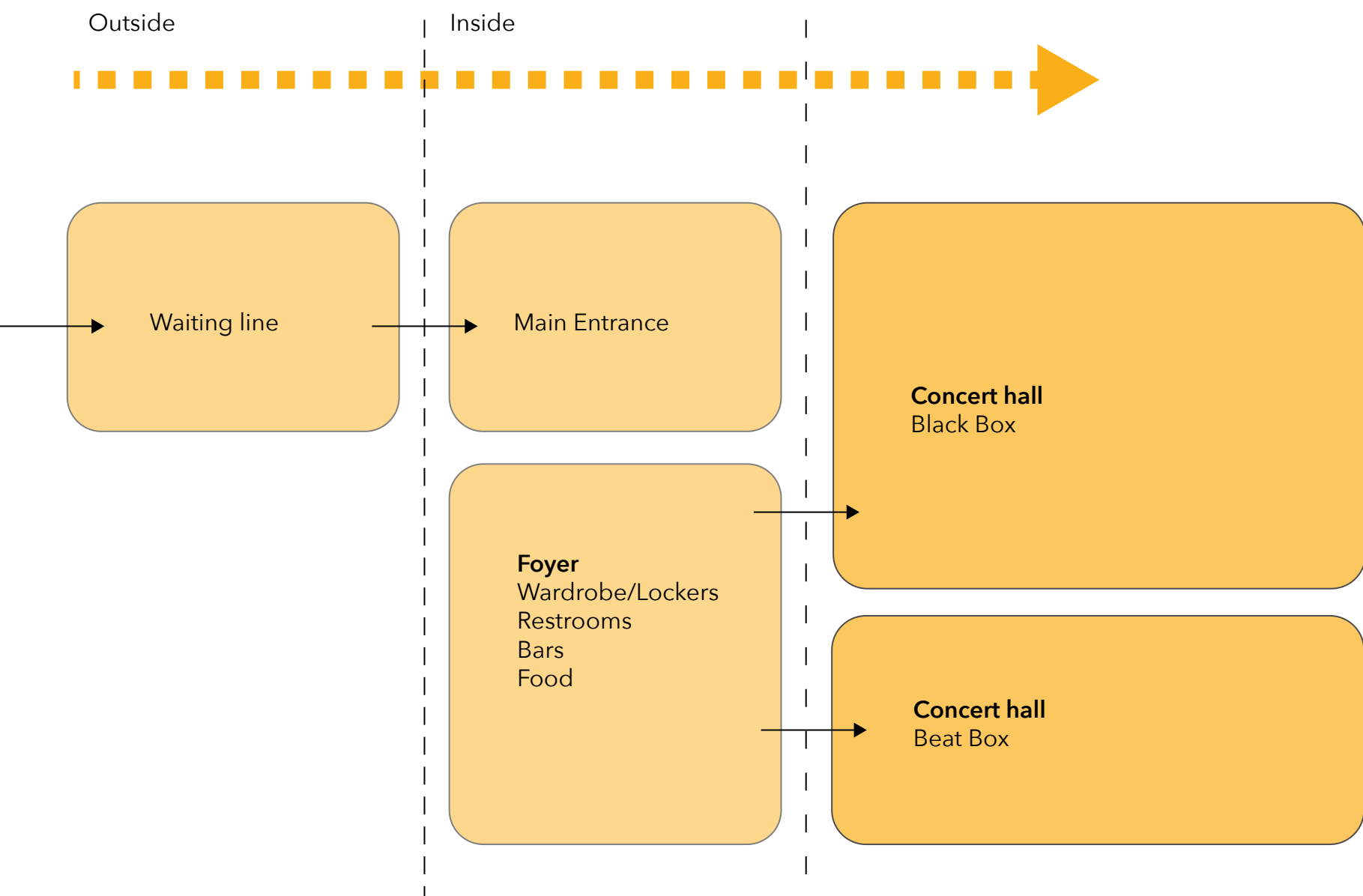
Access to a Music Building



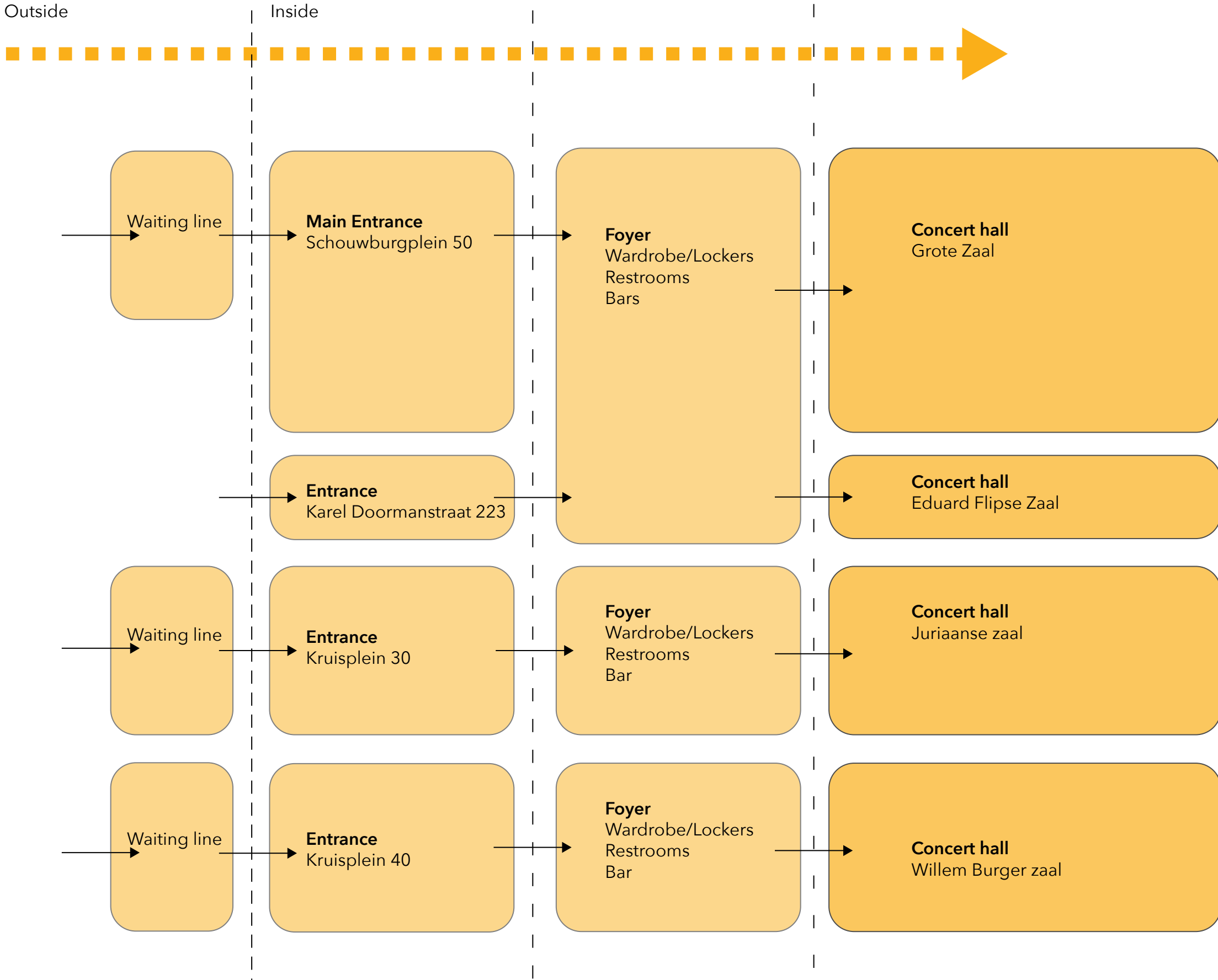
Ziggo Dome



AFAS Live



De Doelen





The background of the image is a light gray piano score. It features multiple systems of music, each with a treble and bass staff. The notation includes various musical symbols such as notes, rests, and dynamic markings. Overlaid on this background are several thin, dark gray diagonal lines that crisscross the entire page, creating a sense of movement and structure.

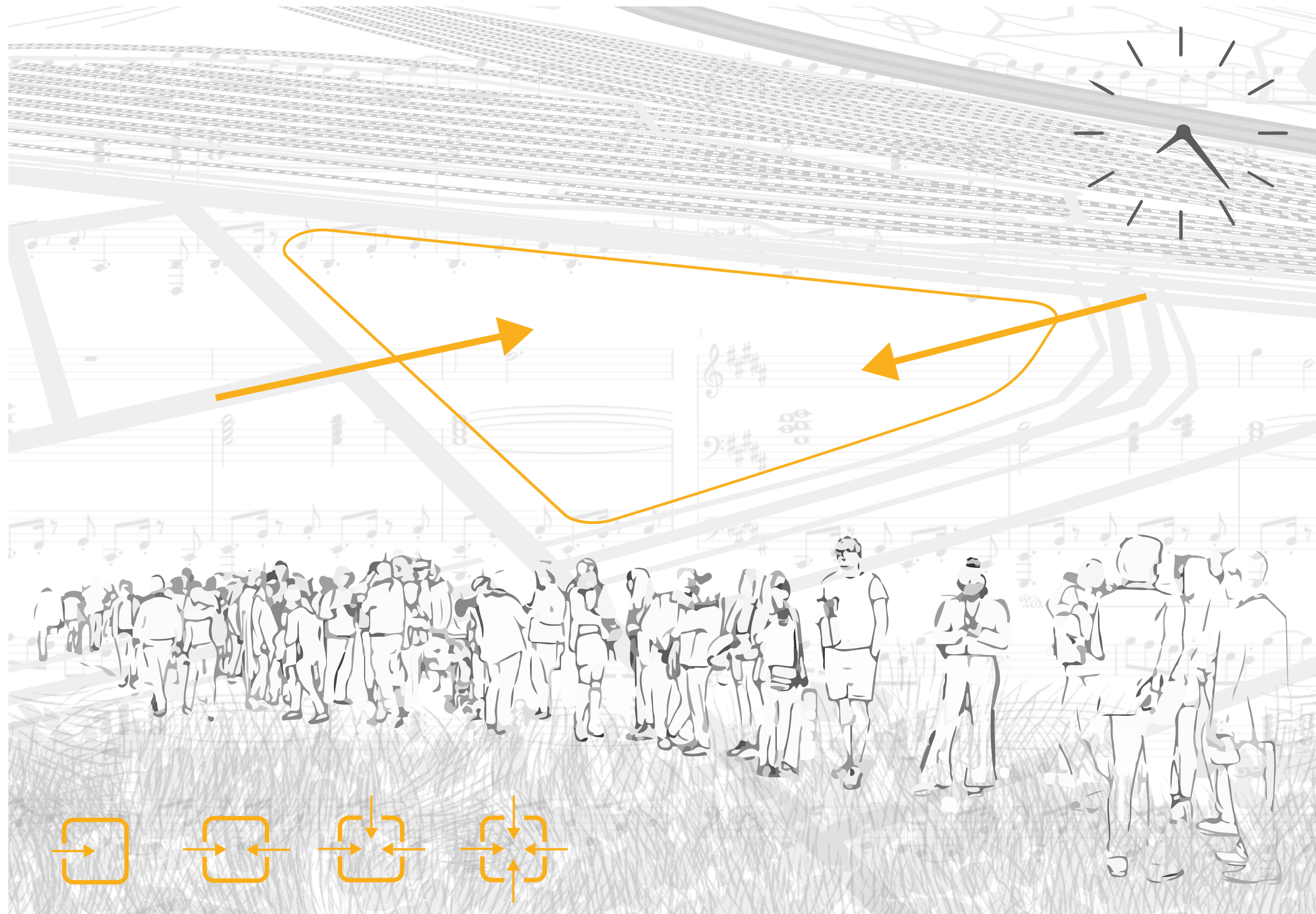
# Access to the Music Building

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# Design Manifesto

The queue in front of the music building



Key points:

- Access
- Entrances
- Crowd control
- Visitor flows
- Public space

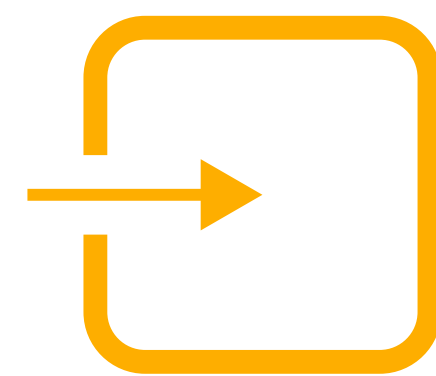


# Key points | Access to a Music Building

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**Music**  
Pop Podium



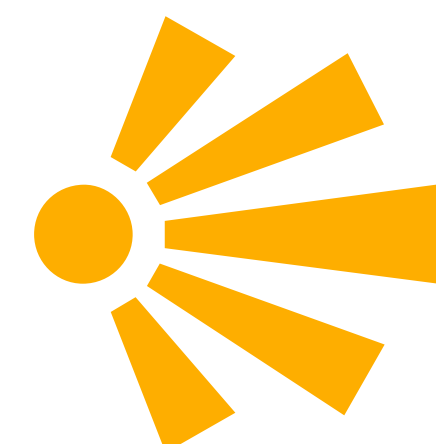
**Entrances**  
Artists  
Visitors  
Staff  
Materials/Service



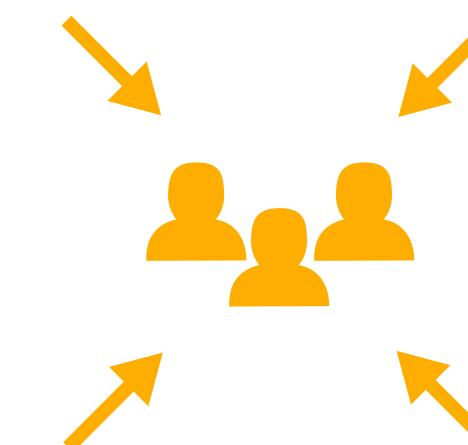
**Public Space / Foyer**  
Inside / Outside  
Public / Semi-Public / Private



**Users / Visitor Flows**  
Target Groups



**Views**  
Open / Closed  
Transparency



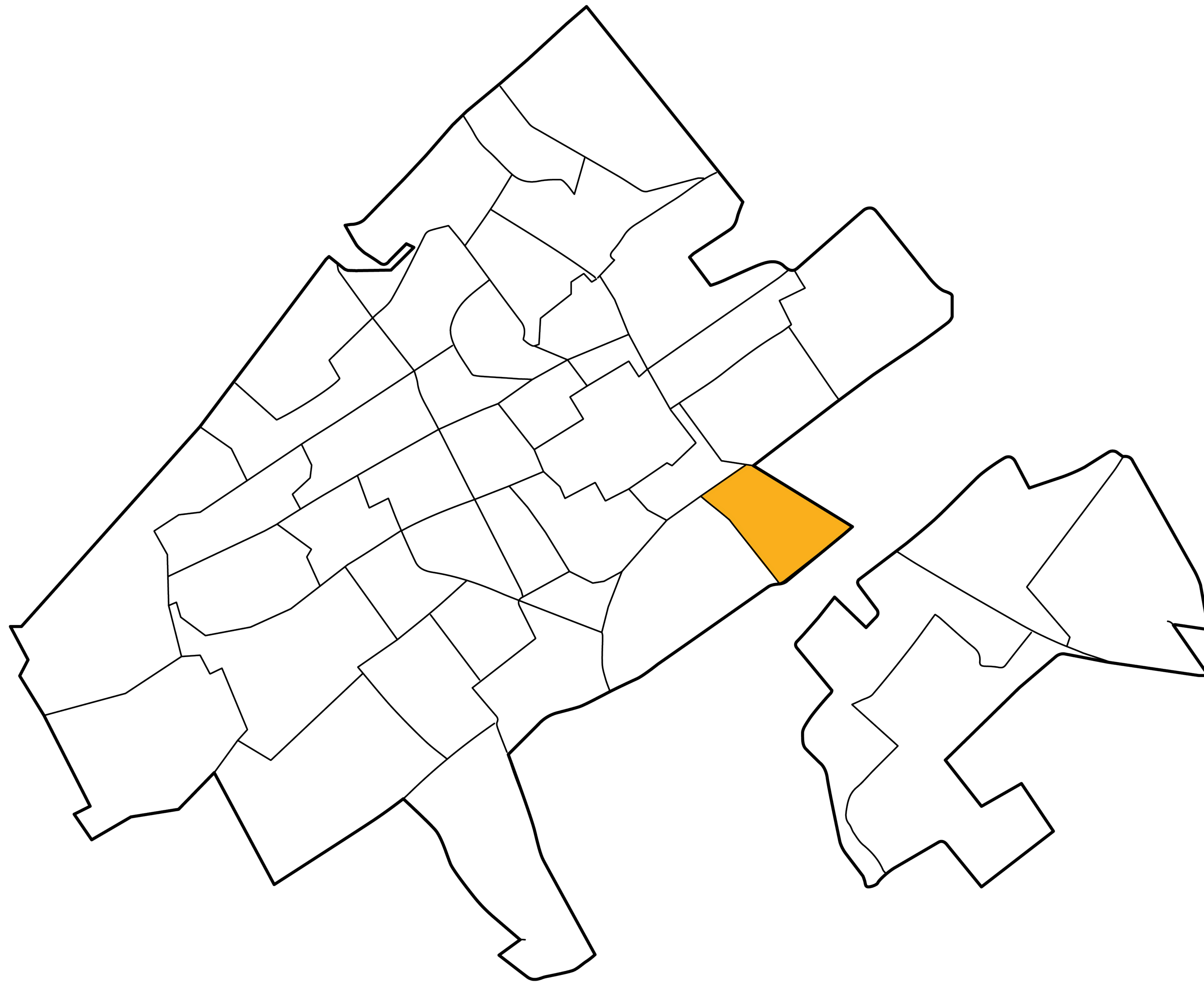
**Gather/Meeting**  
Activities



# Location

The Hague, Binckhorst

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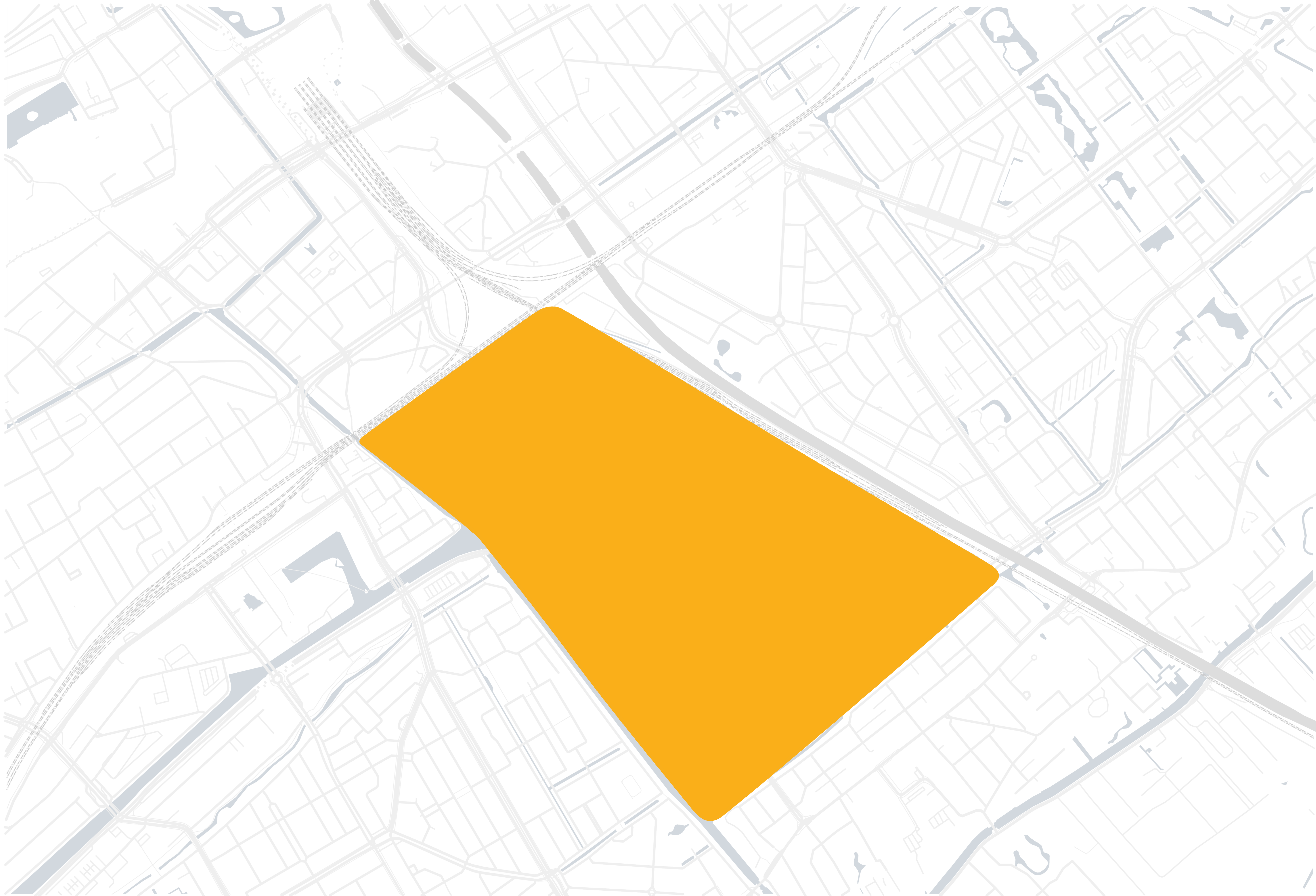


Binckhorst is a district in  
The Hague



# Location

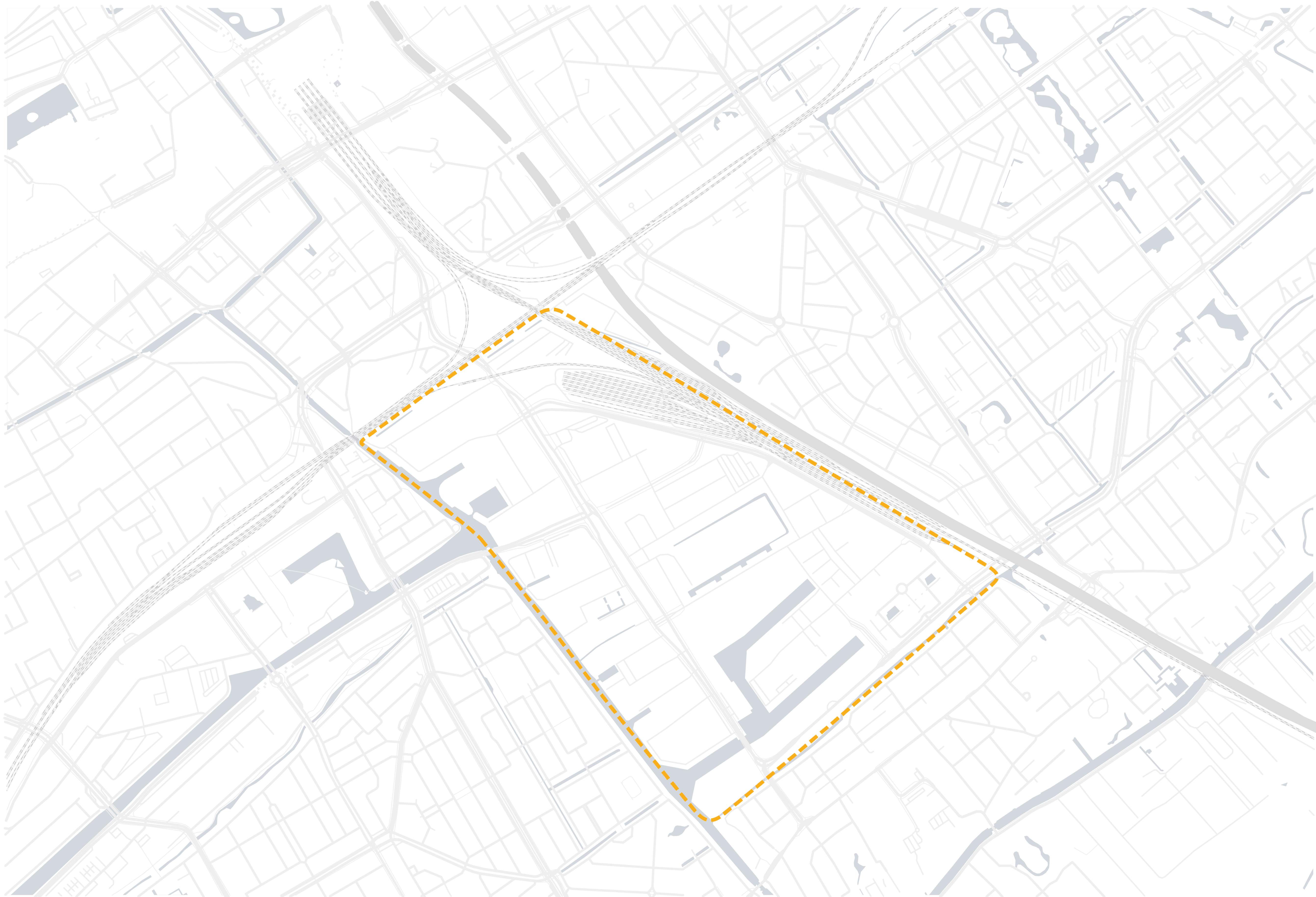
The Hague, Binckhorst





# Location | The Hague, Binckhorst

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# Location

The Hague, Binckhorst

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Binckhorst is mainly an industrial and business area



# Location

The Hague, Binckhorst

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Binckhorst is mainly an industrial and business area

Binckhorst will be transformed into a modern, creative and innovative living and working environment



# Location

The Hague, Binckhorst

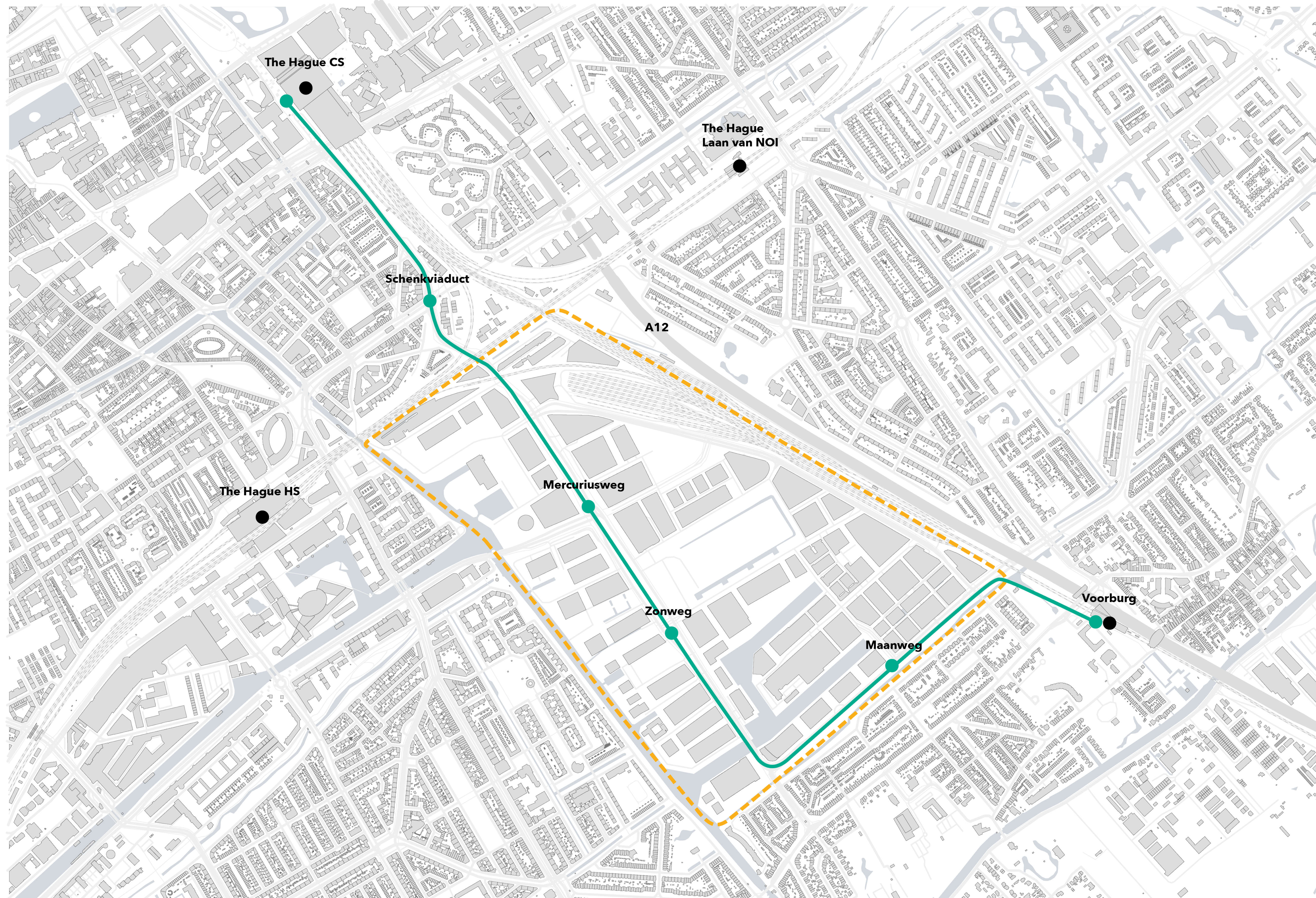
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# Location

The Hague, Binckhorst



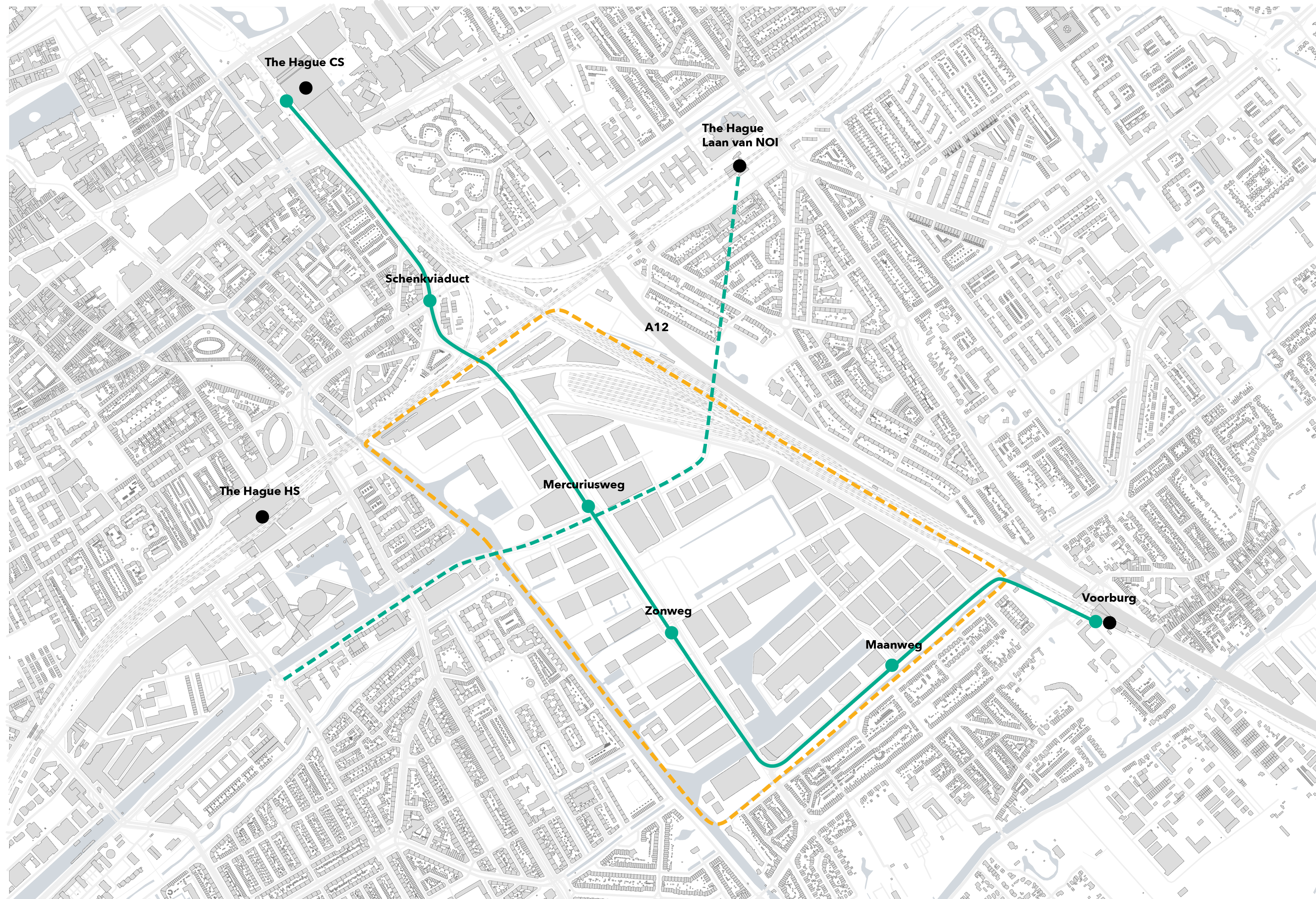
New connections:

- Tram connection through Binckhorst, making the area more accessible



# Location

The Hague, Binckhorst



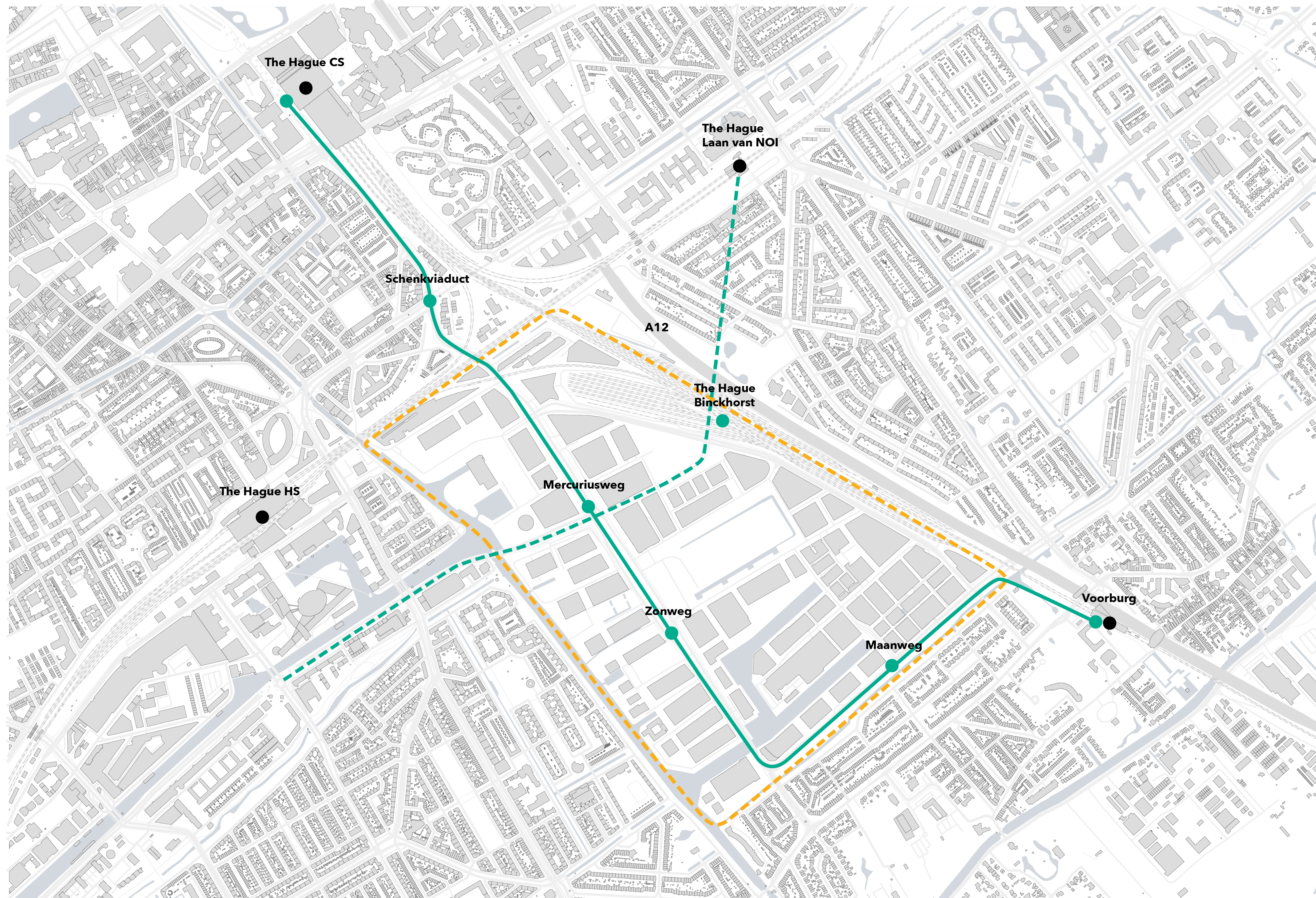
New connections:

- Tram connection through Binckhorst, making the area more accessible
- Bicycle connection over the railway, direction The Hague Laan van NOI



# Location

The Hague, Binckhorst



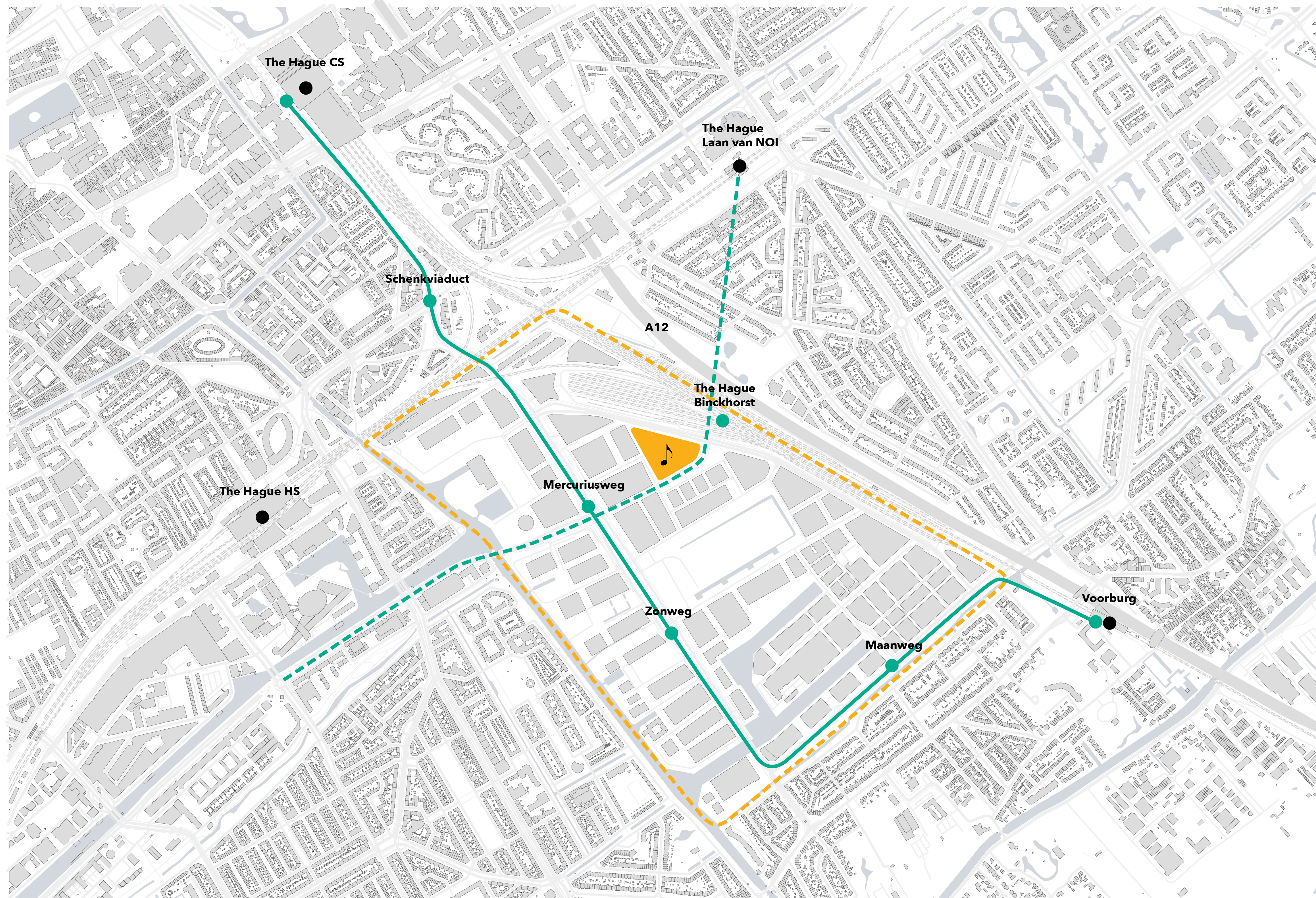
New connections:

- Tram connection through Binckhorst, making the area more accessible
- Bicycle connection over the railway, direction The Hague Laan van NOI
- Train stop, making the music building more accessible



# Location

The Hague, Binckhorst

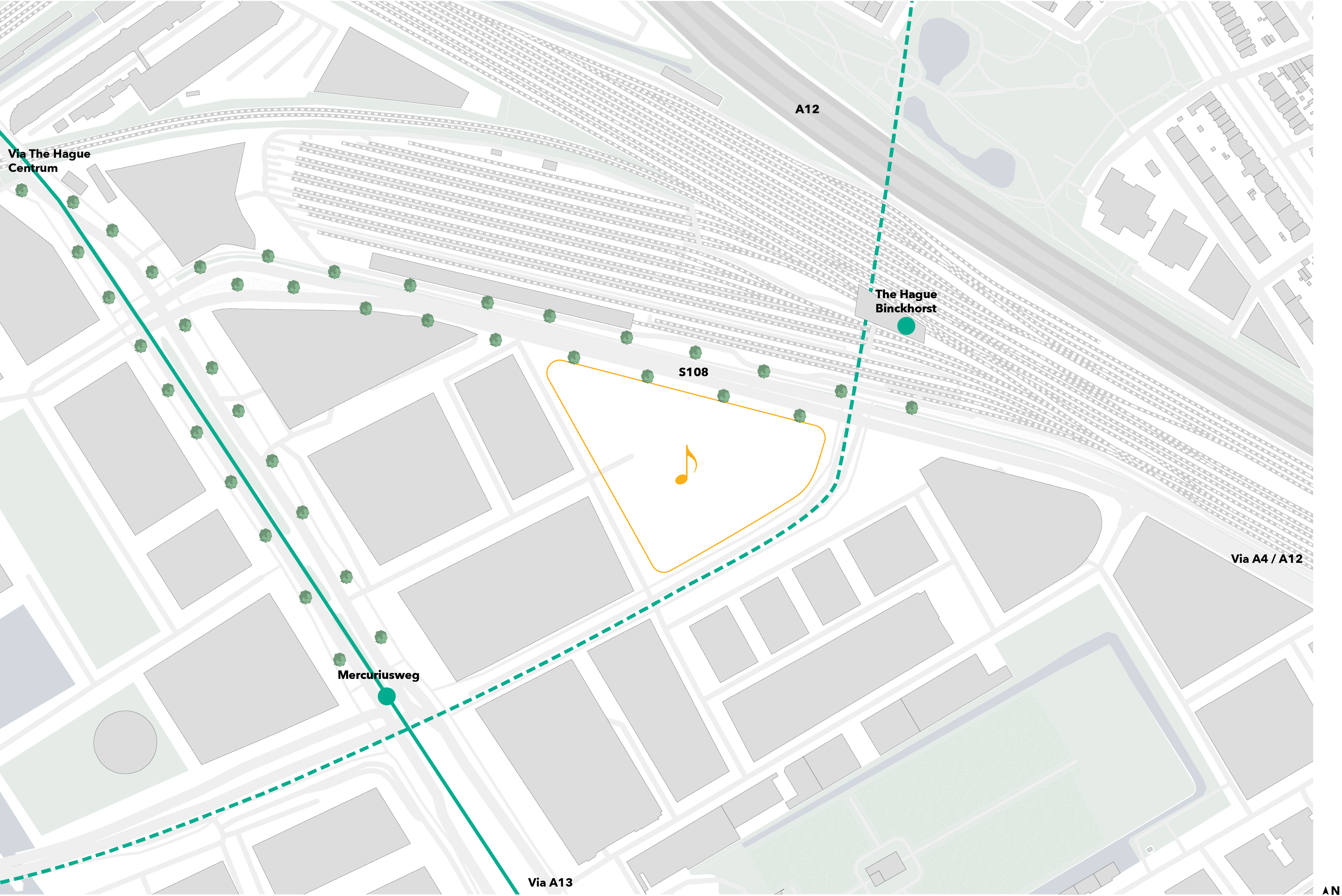


New connections:

- Tram connection through Binckhorst, making the area more accessible
- Bicycle connection over the railway, direction The Hague Laan van NOI
- Train stop, making the music building more accessible



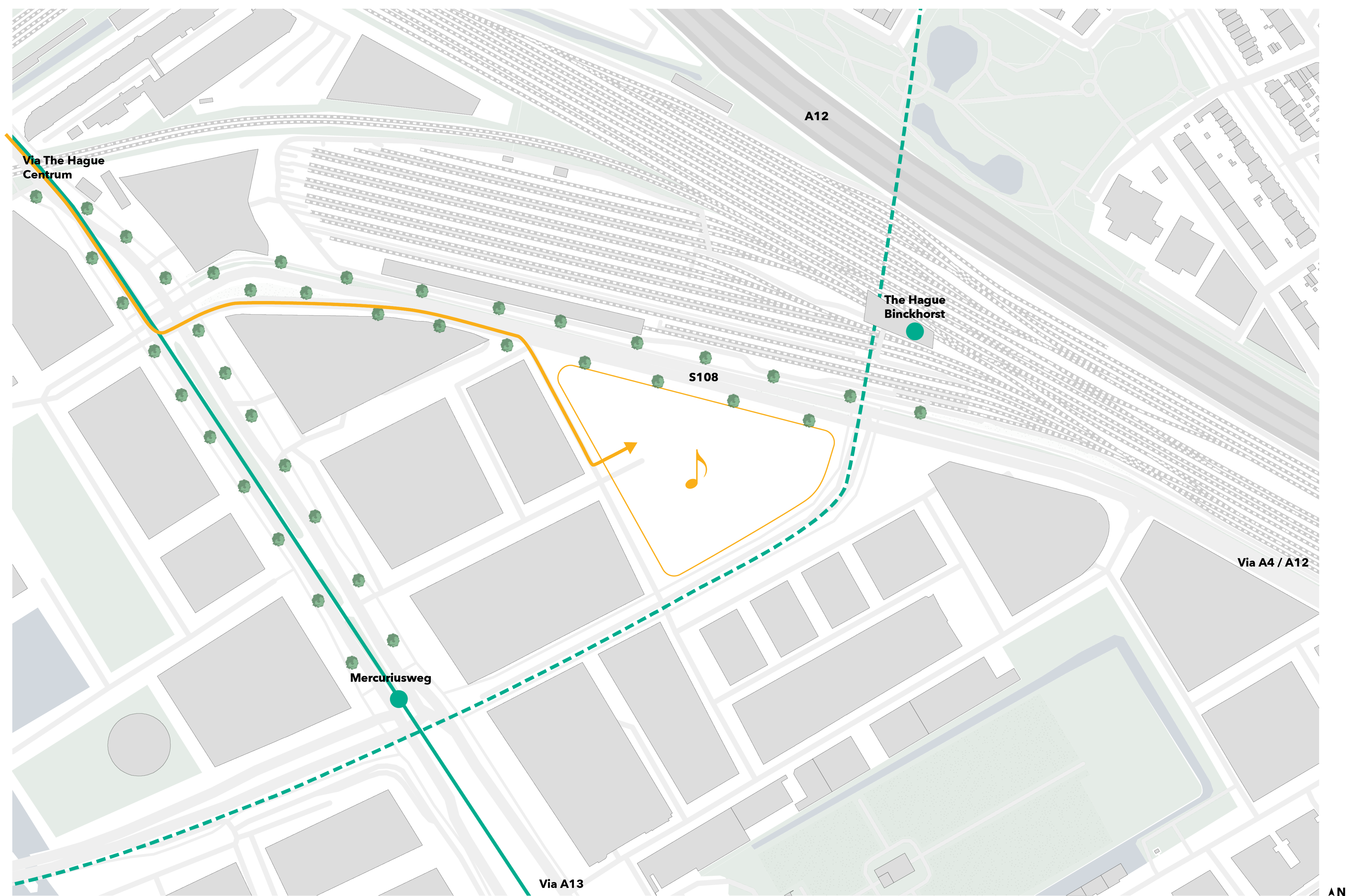
# Access | Music Building



- New Tram Connection
- - - New Bicycle Connection
- New Station



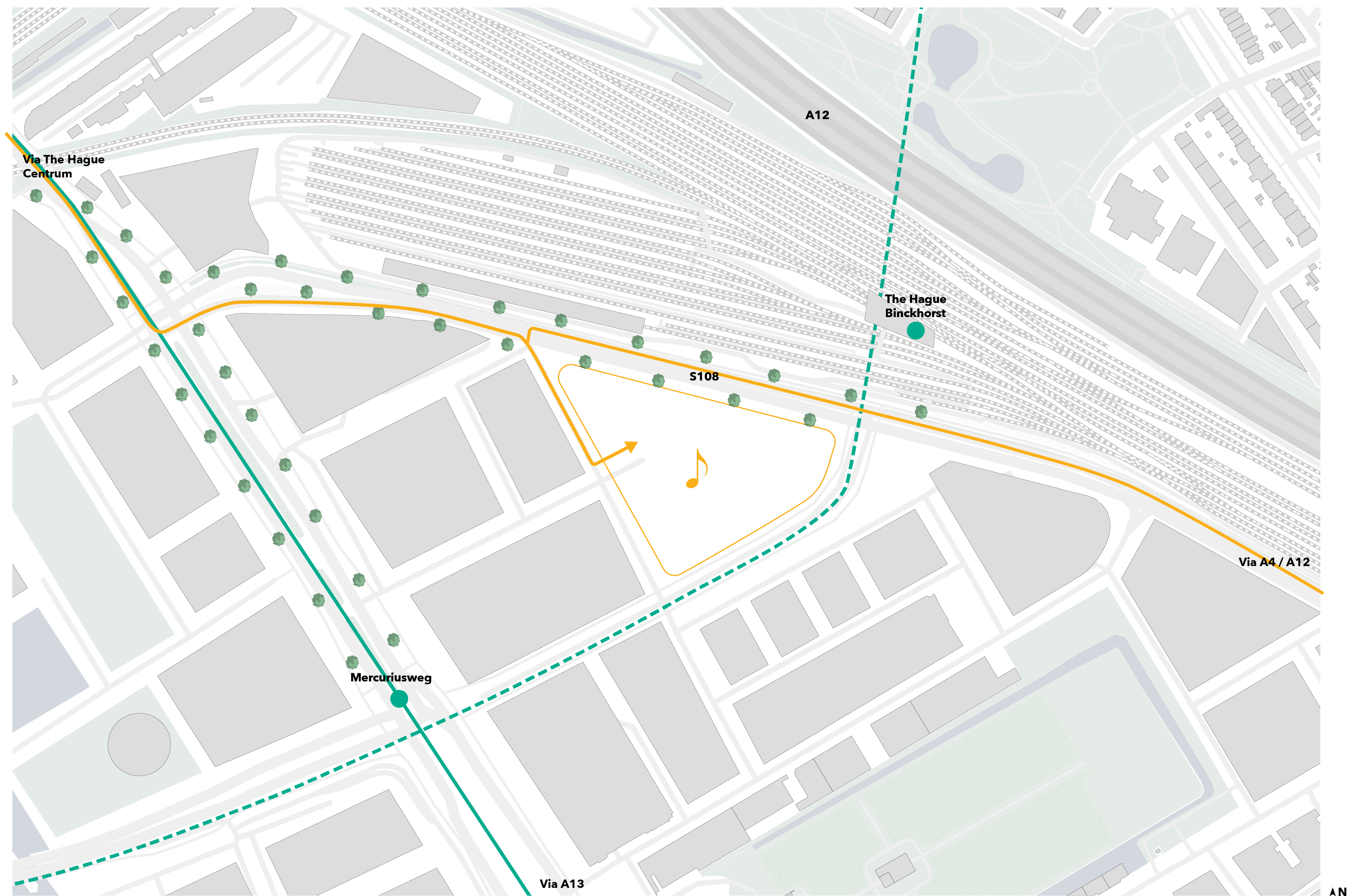
# Access | Music Building



- New Tram Connection
- - - New Bicycle Connection
- New Station
- Driving route, Cars/Trucks



# Access | Music Building

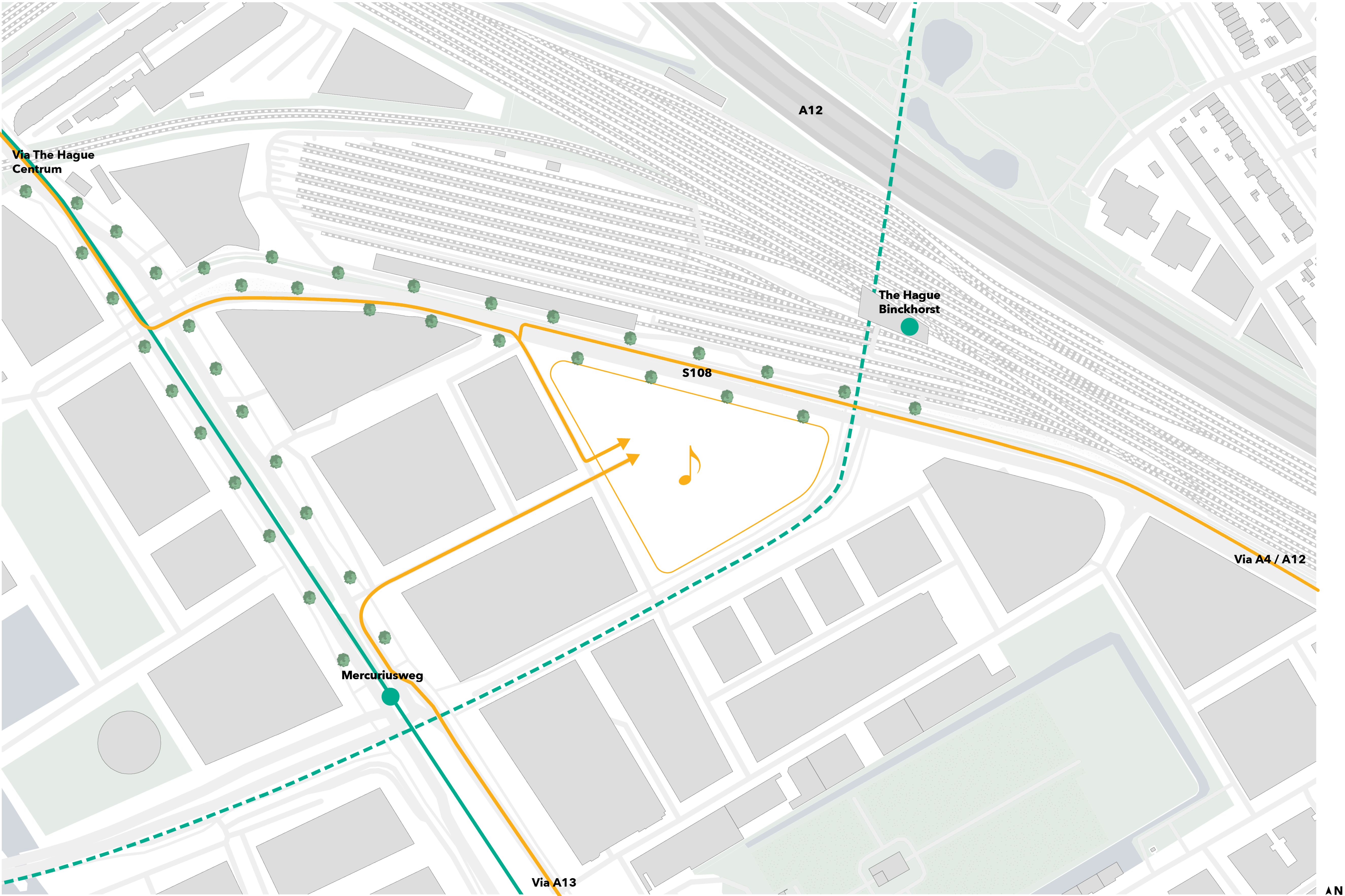


- New Tram Connection
- - - New Bicycle Connection
- New Station
- Driving route, Cars/Trucks



# Access

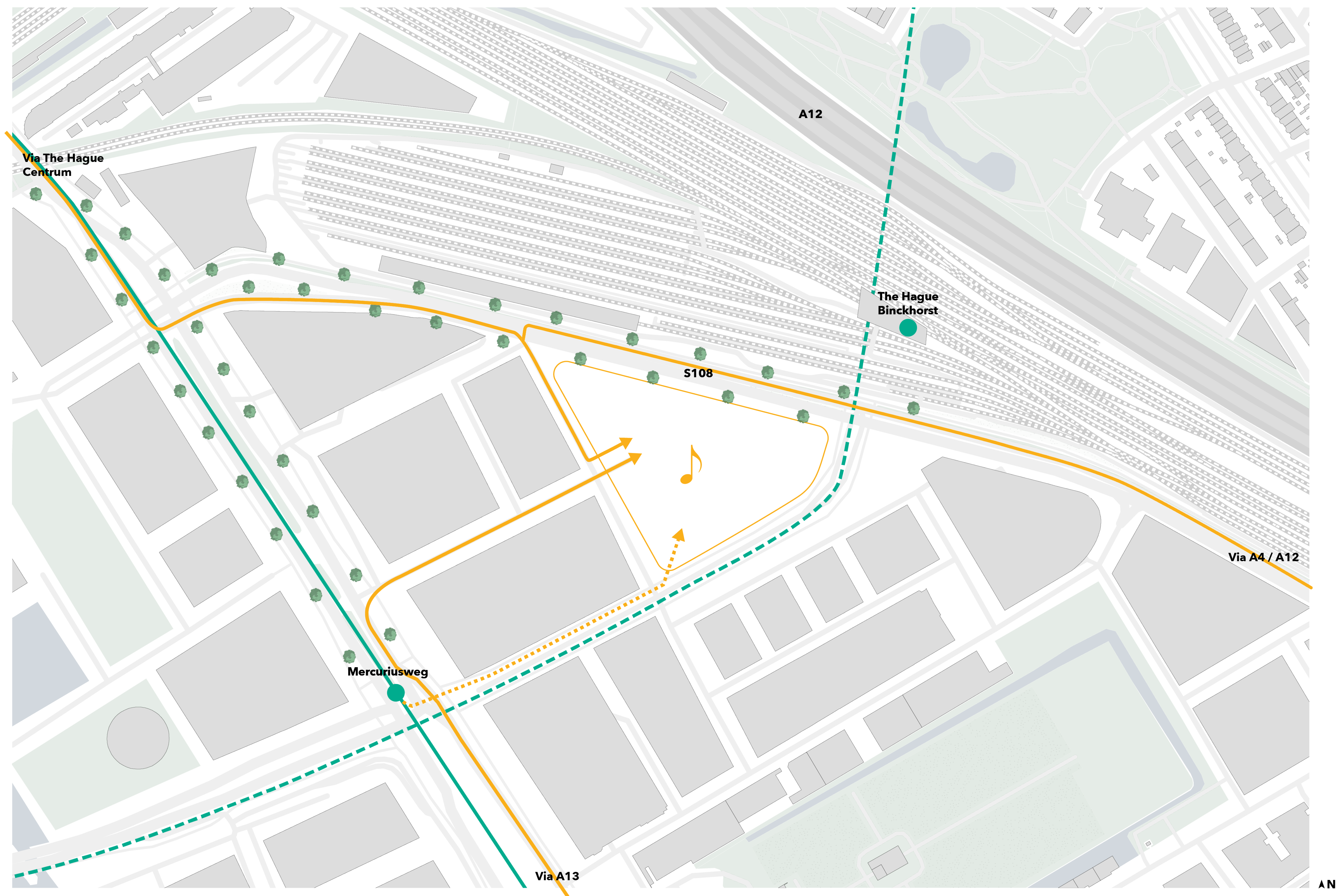
Music Building



- New Tram Connection
- - - New Bicycle Connection
- New Station
- Driving route, Cars/Trucks

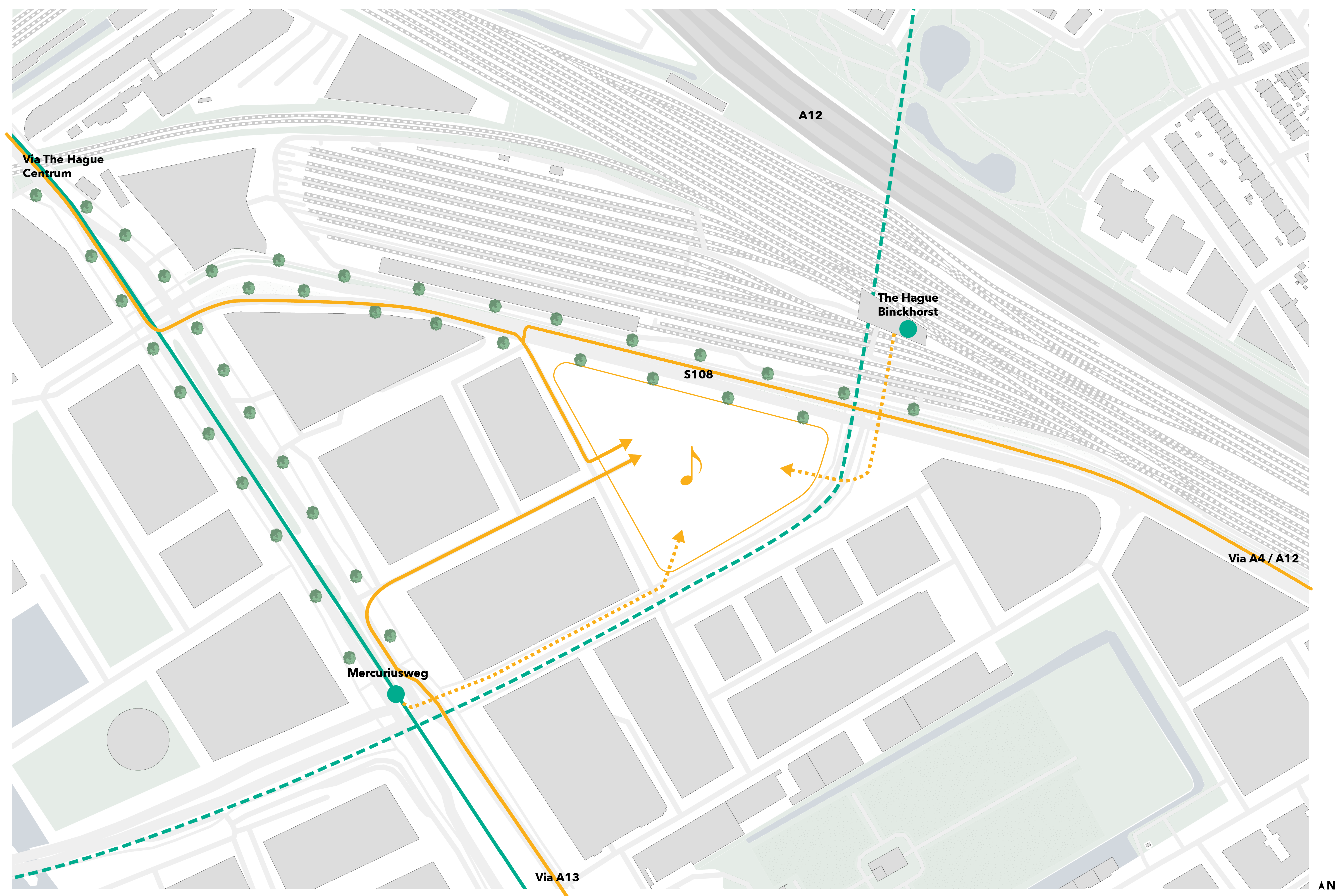


# Access | Music Building



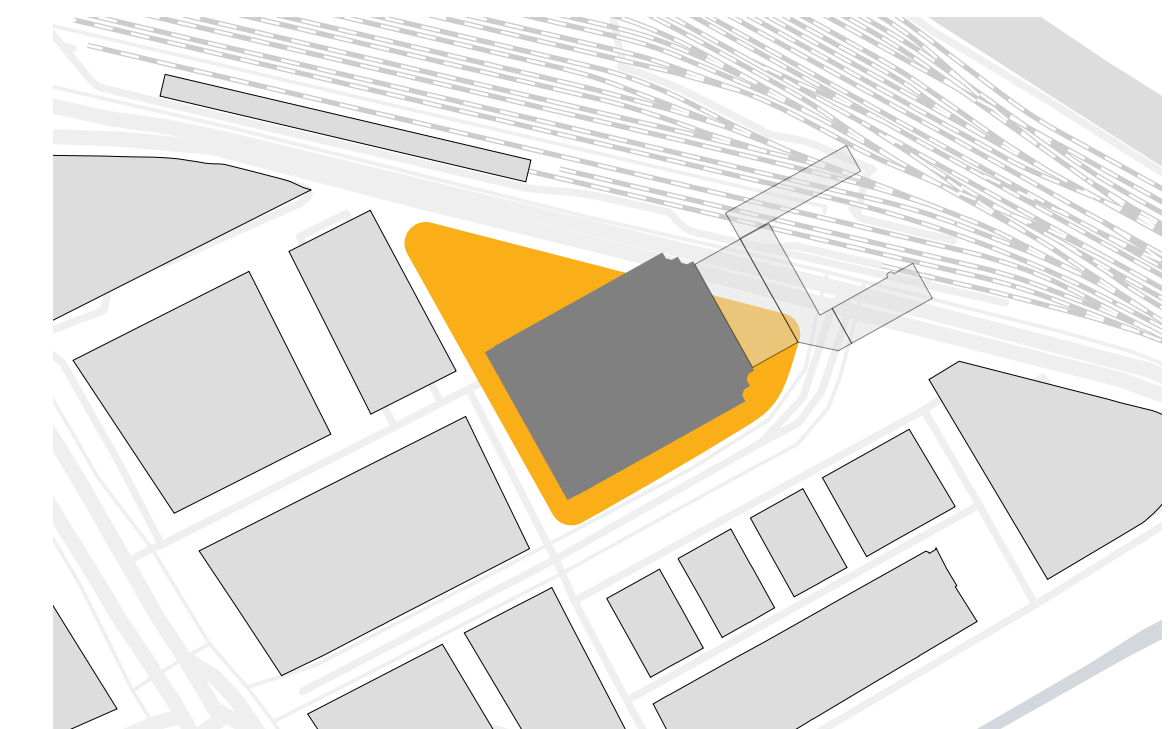
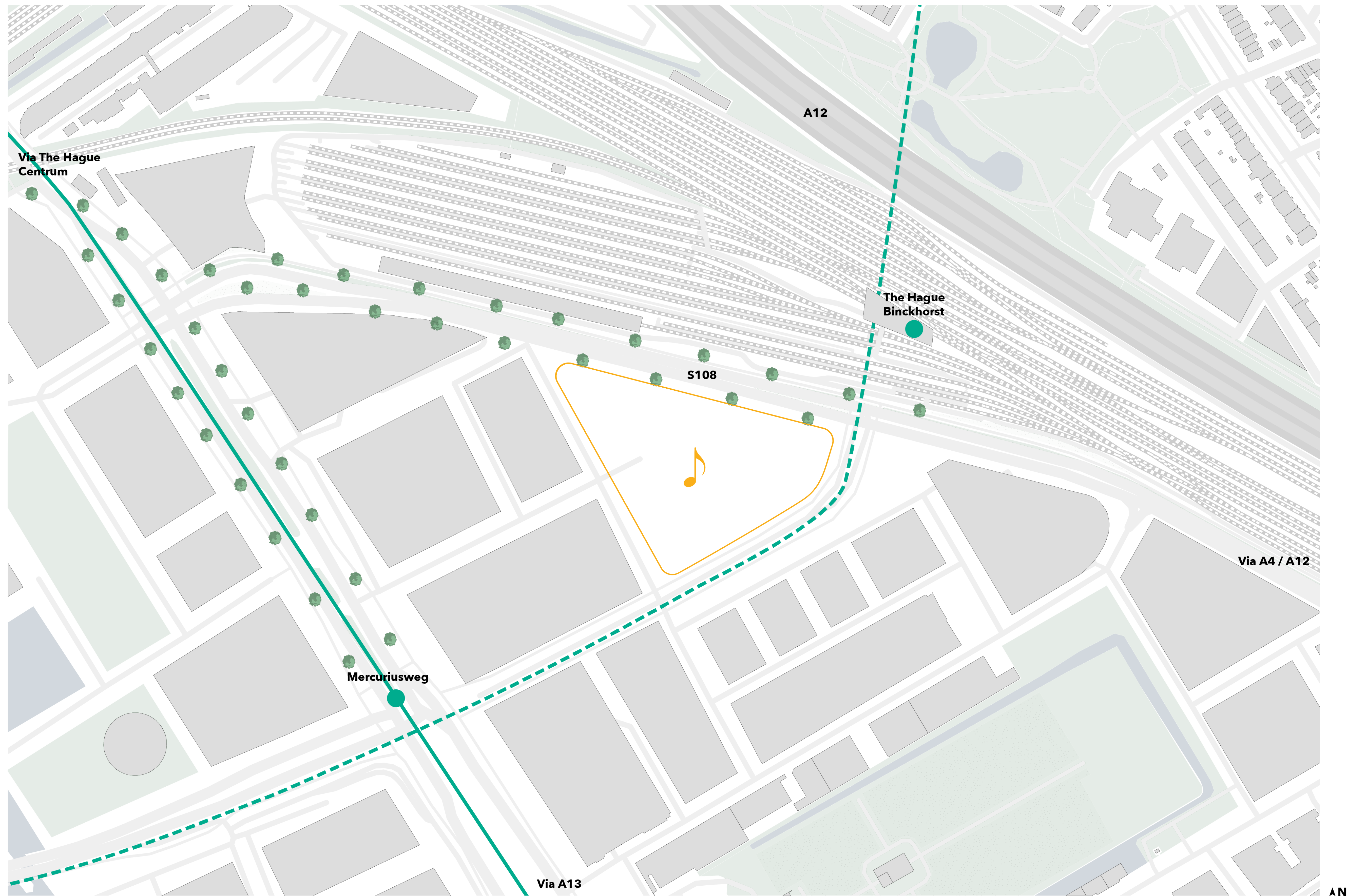


# Access | Music Building

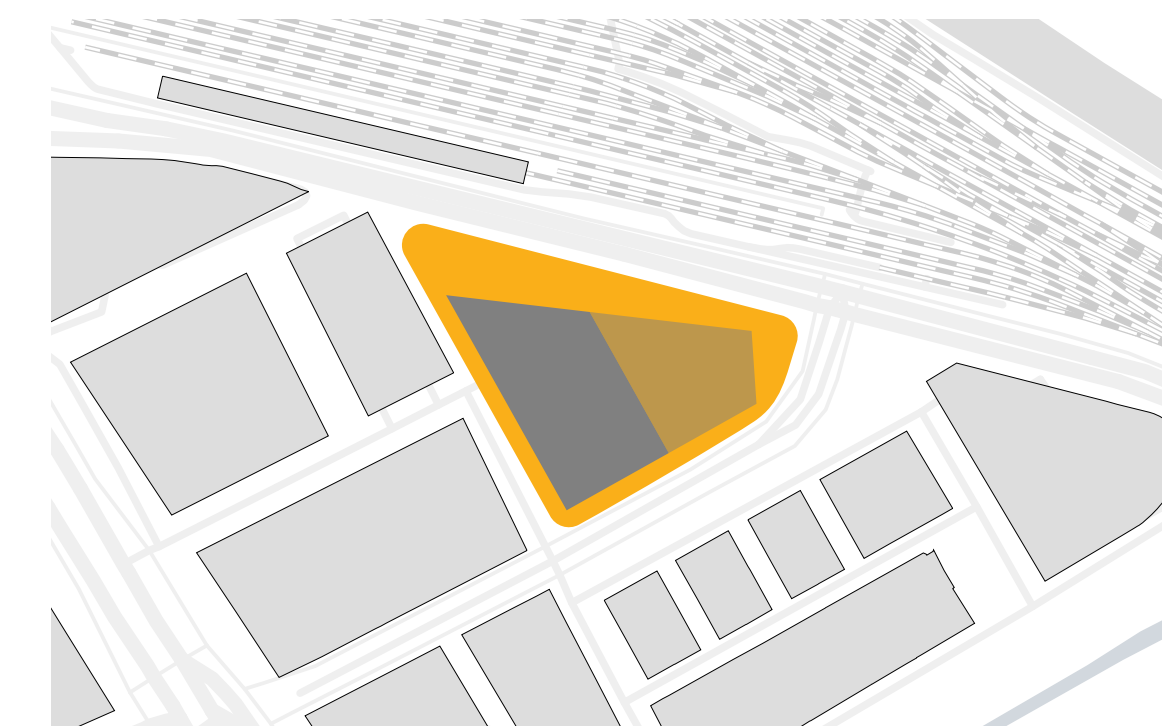




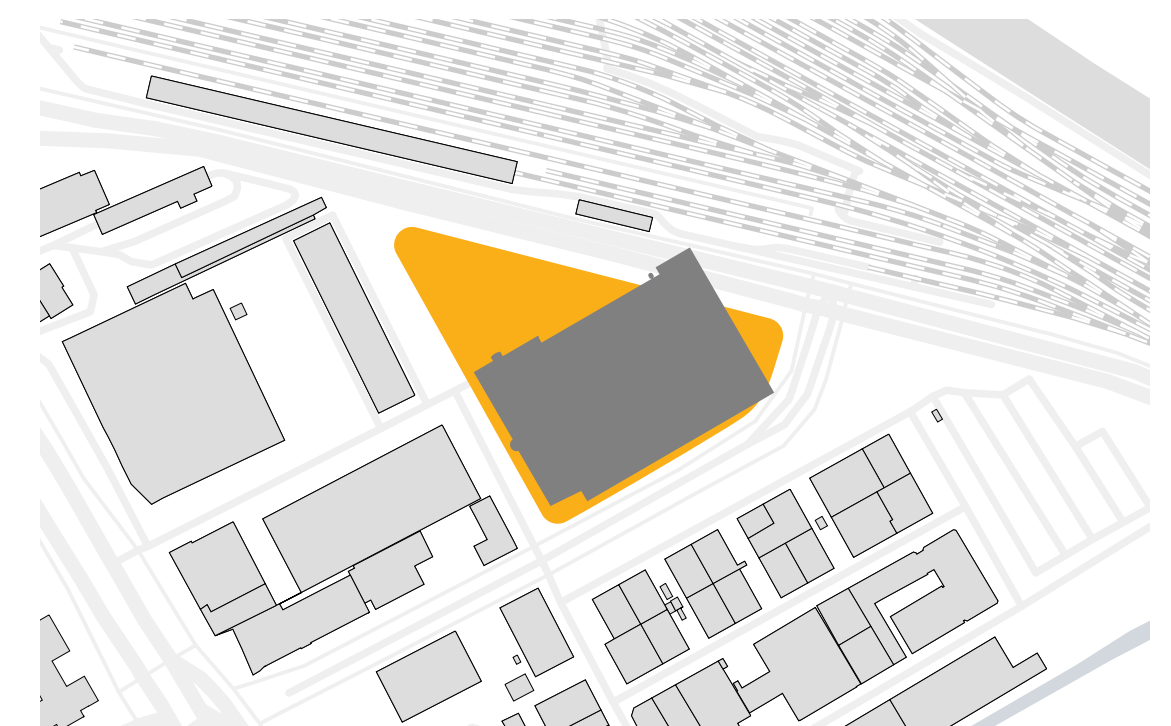
# Plot size | Music Building



Ziggo Dome



AFAS Live



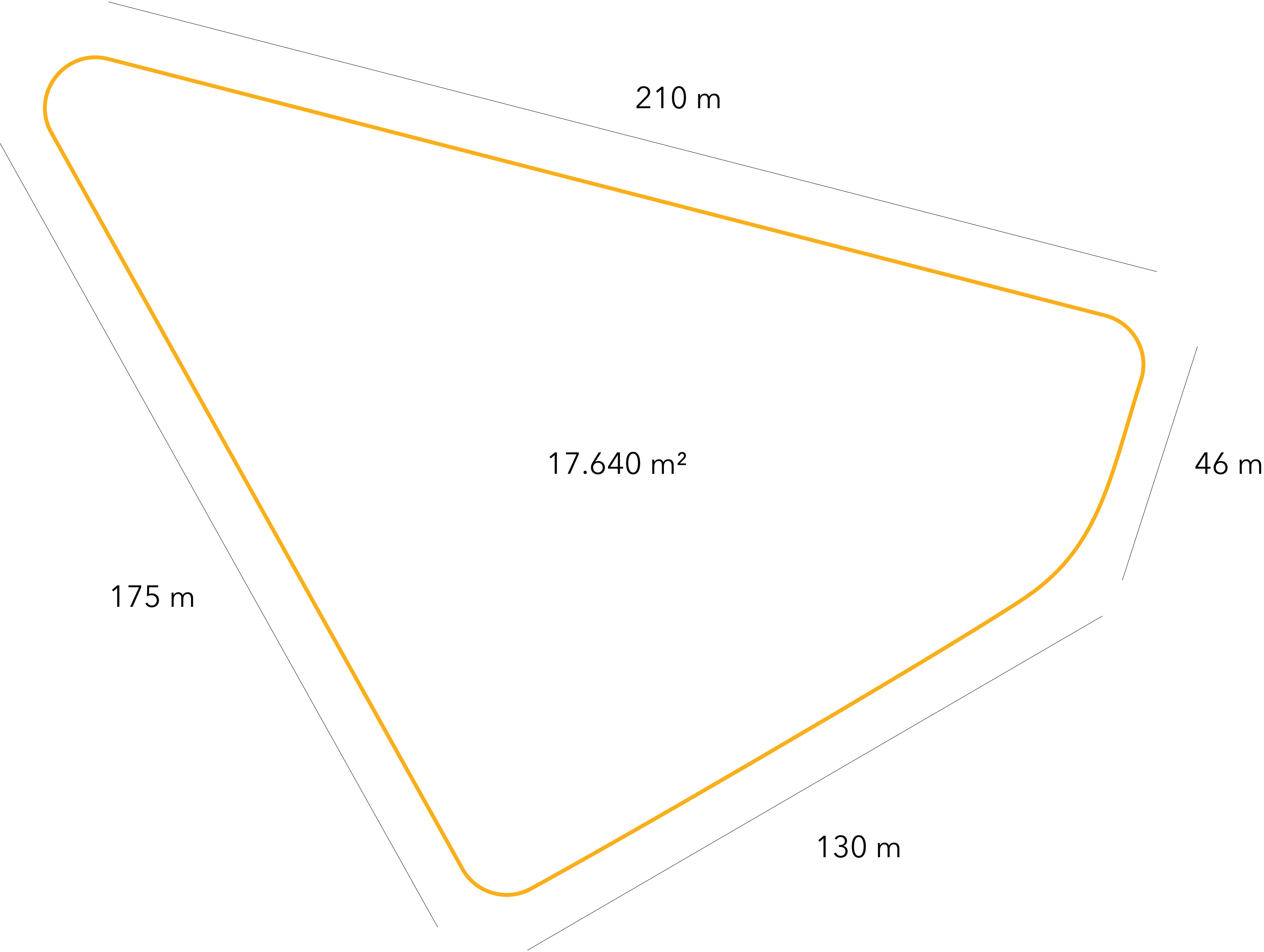
De Doelen



Plot size

Music Building

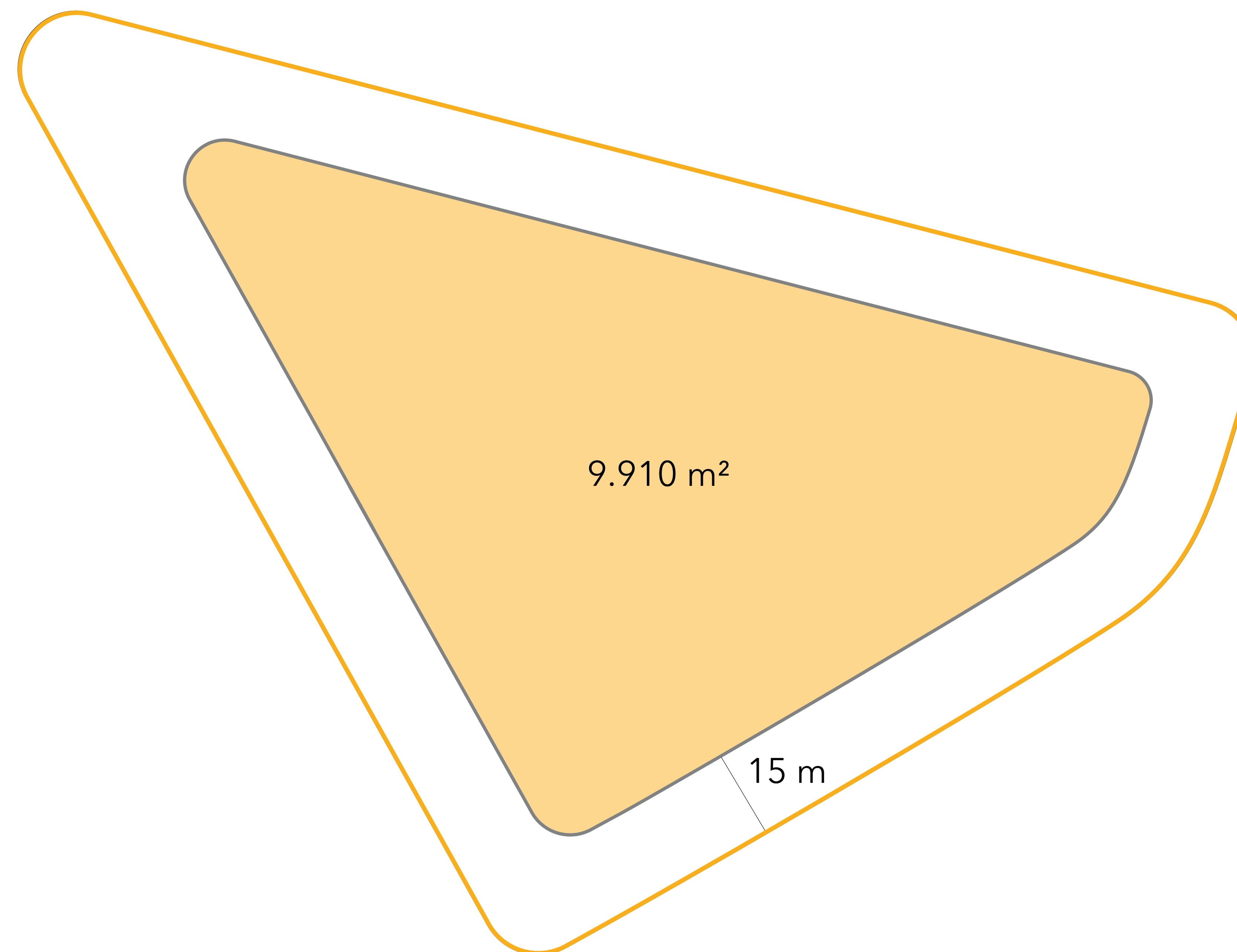
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# Plot size & Surface area

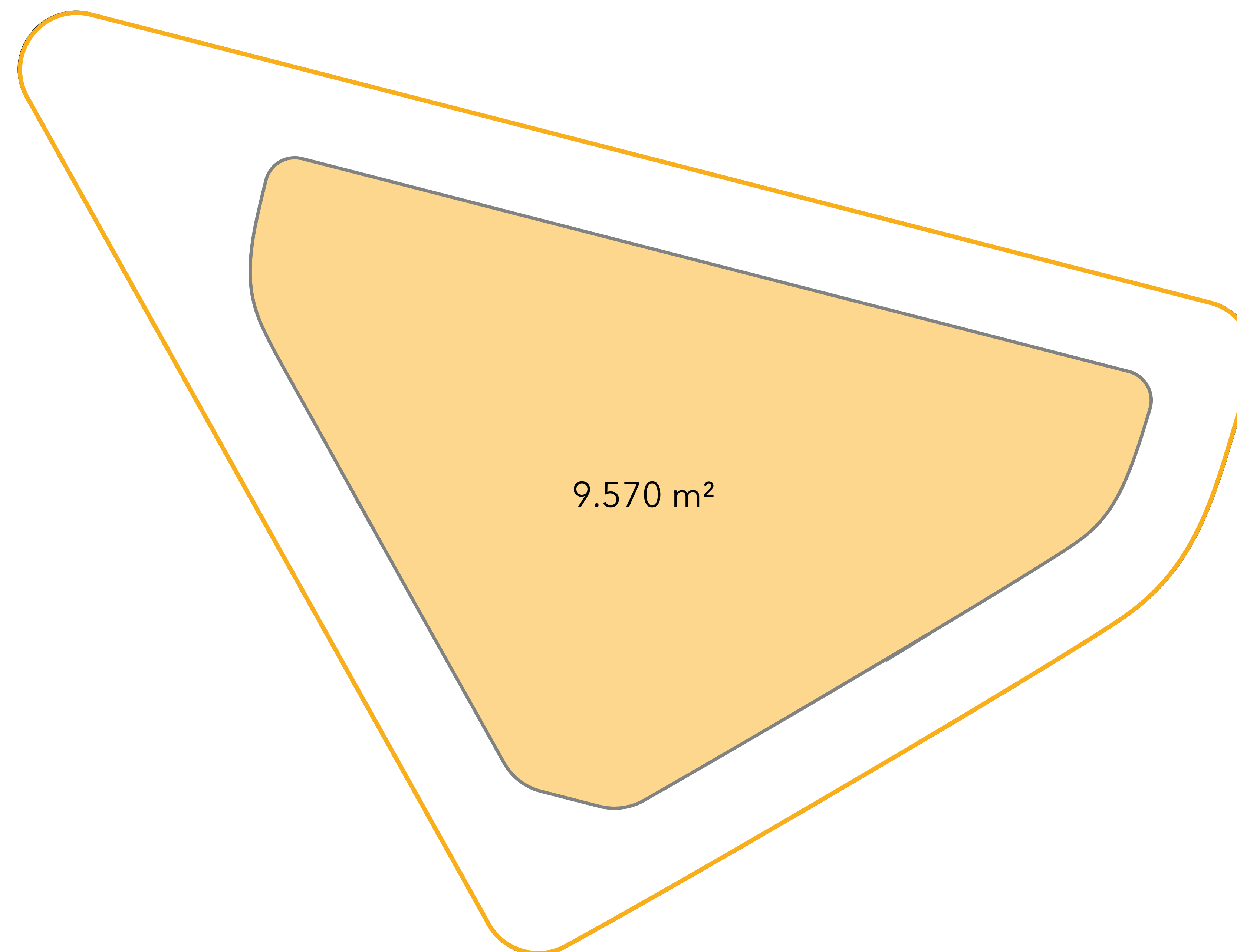
Music Building





# Plot size & Surface area

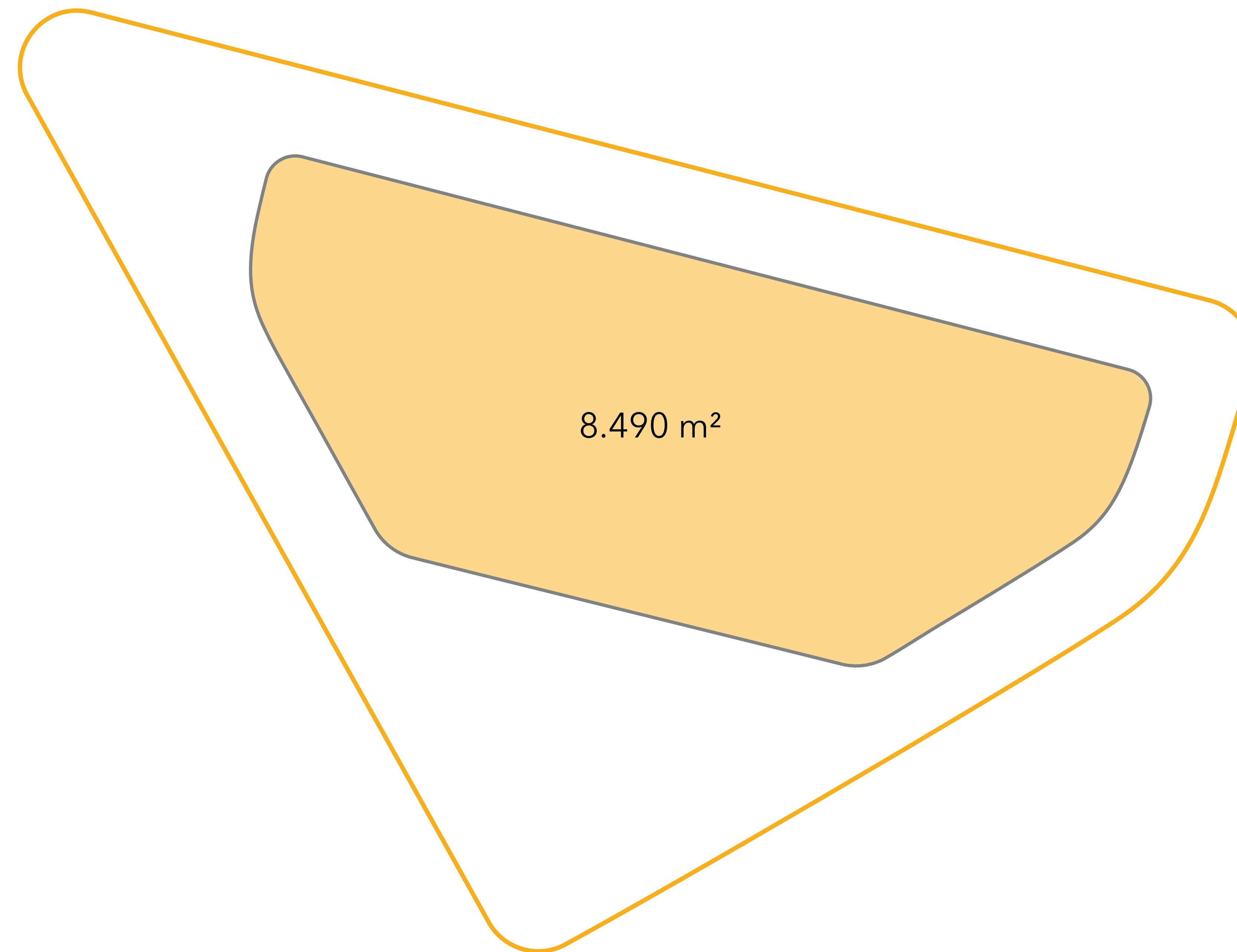
Music Building





# Plot size & Surface area

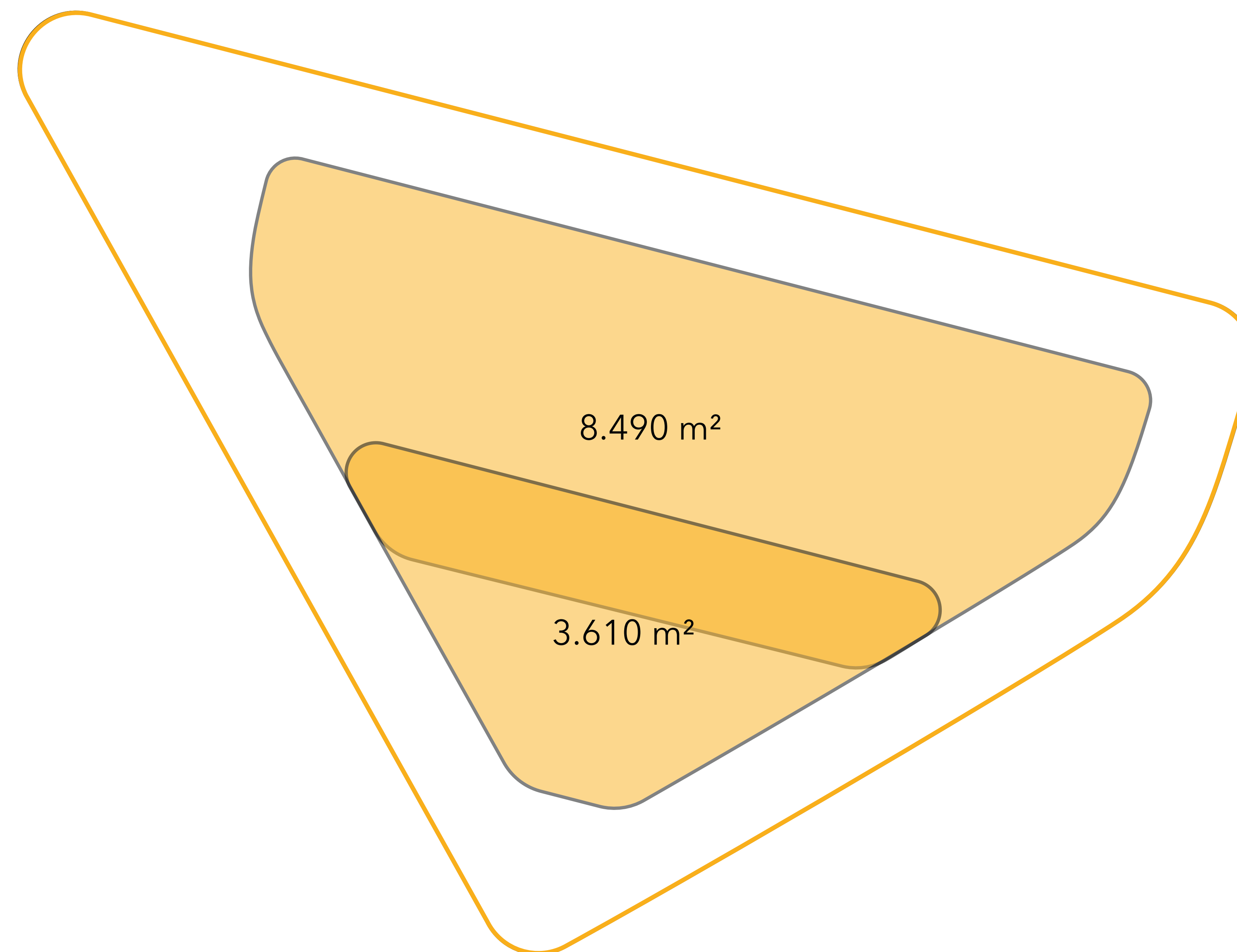
Music Building



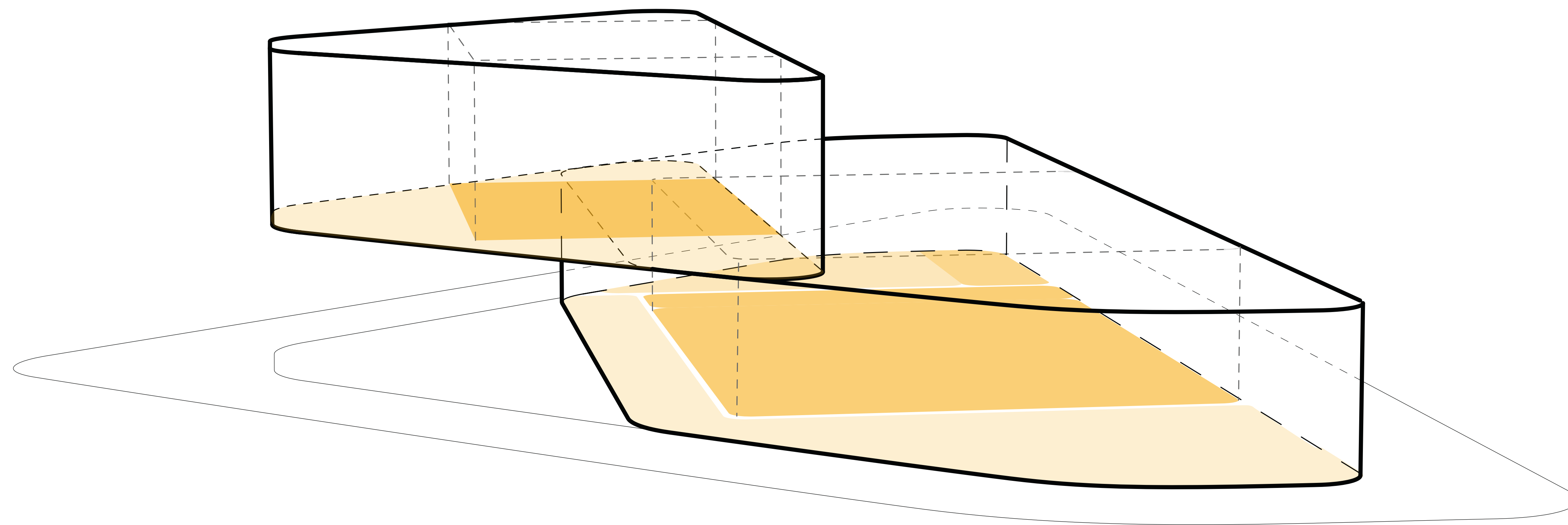


# Plot size & Surface area

Music Building

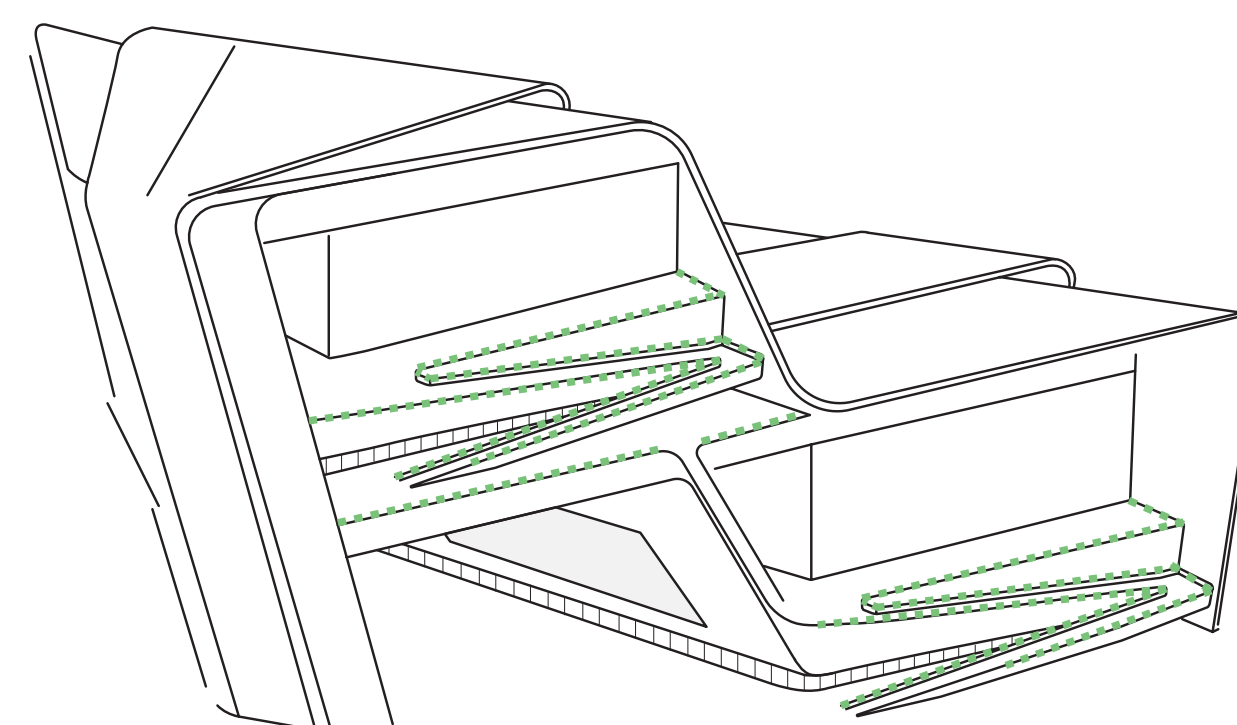
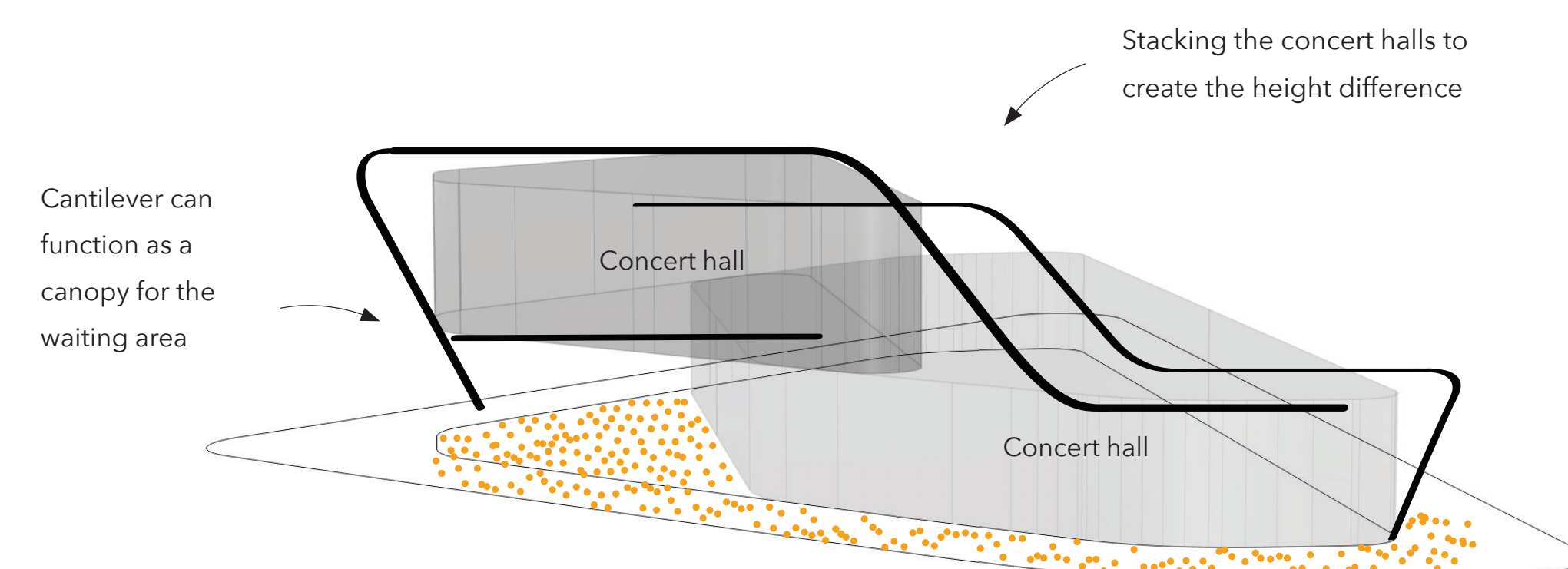
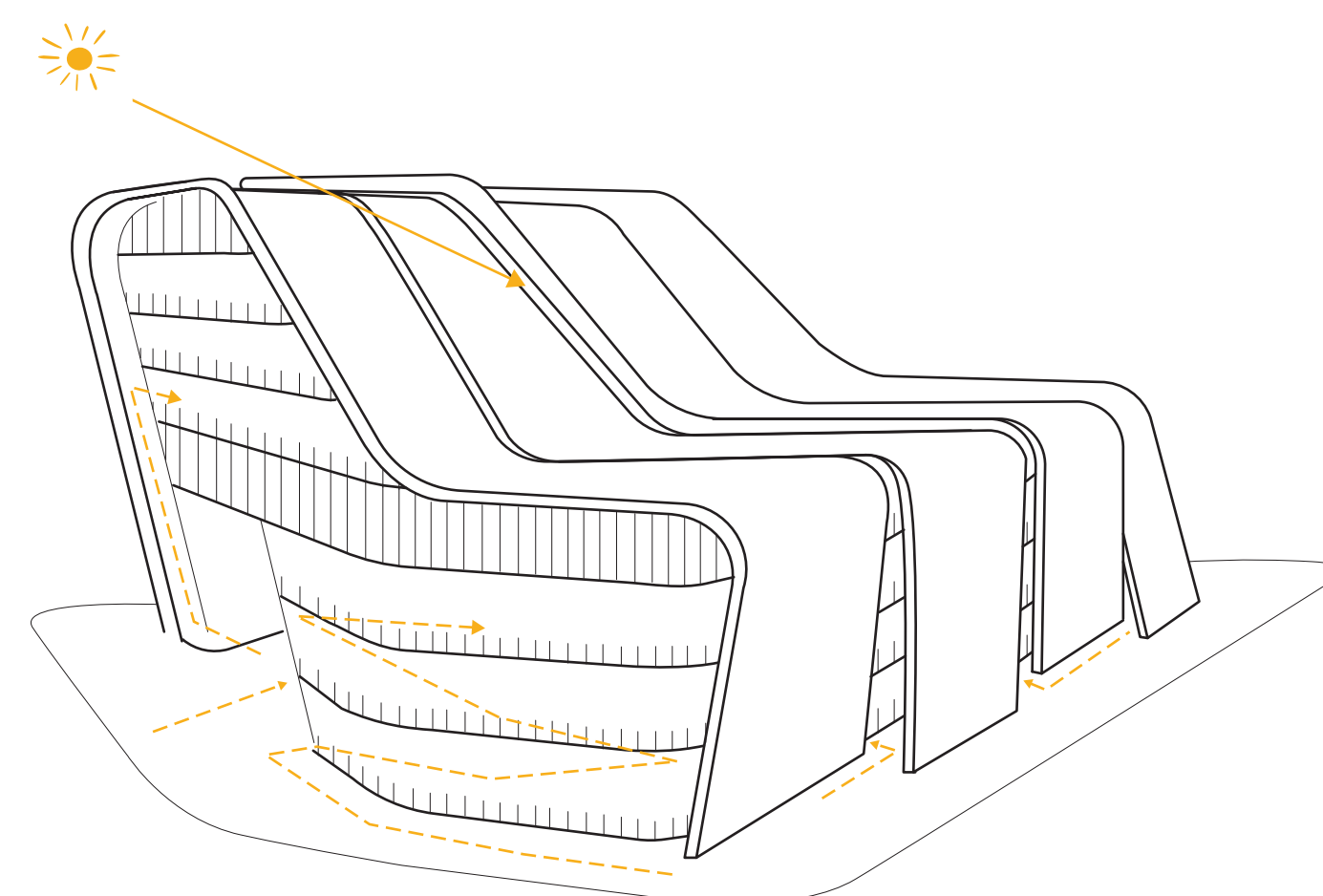
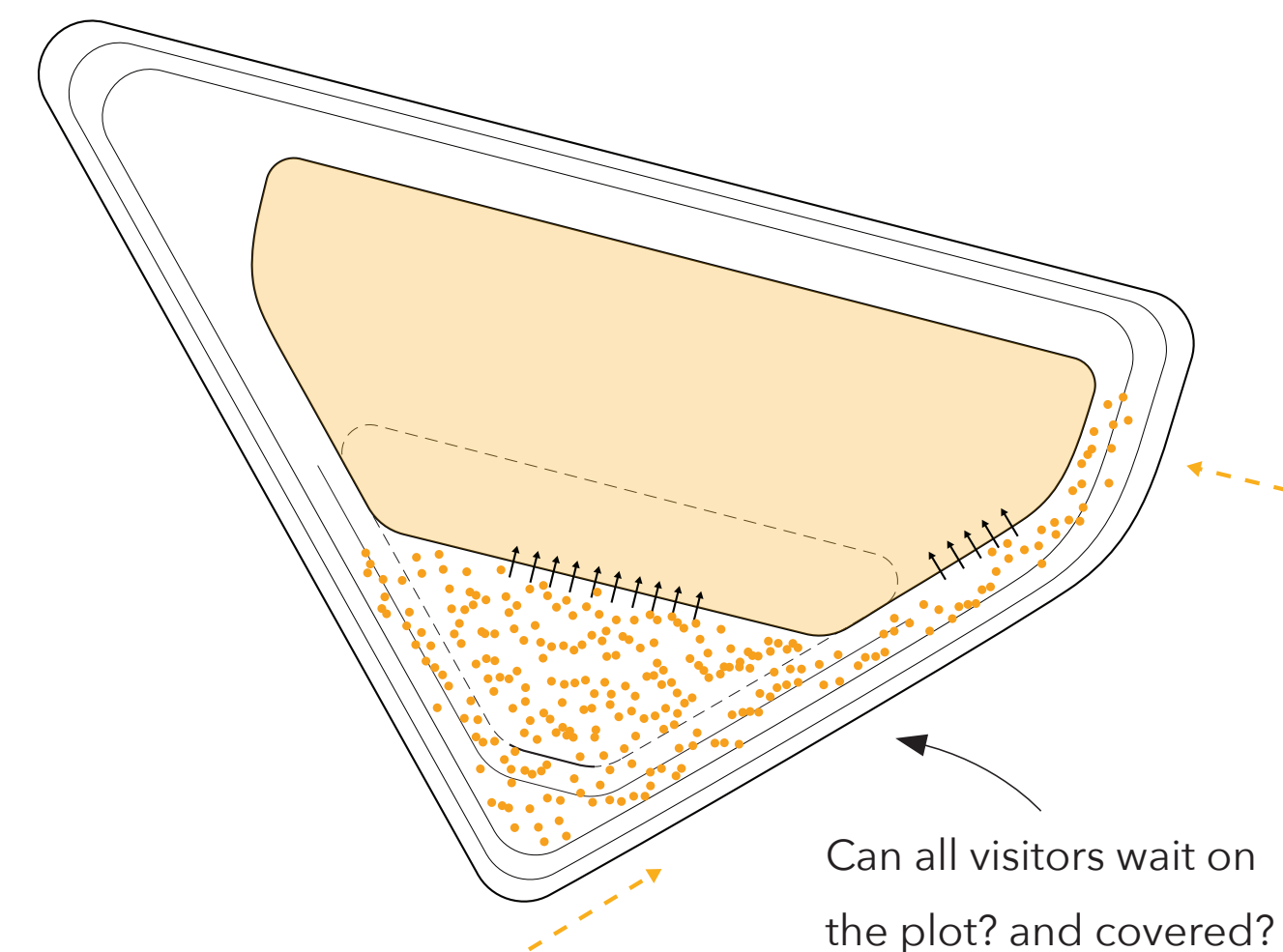
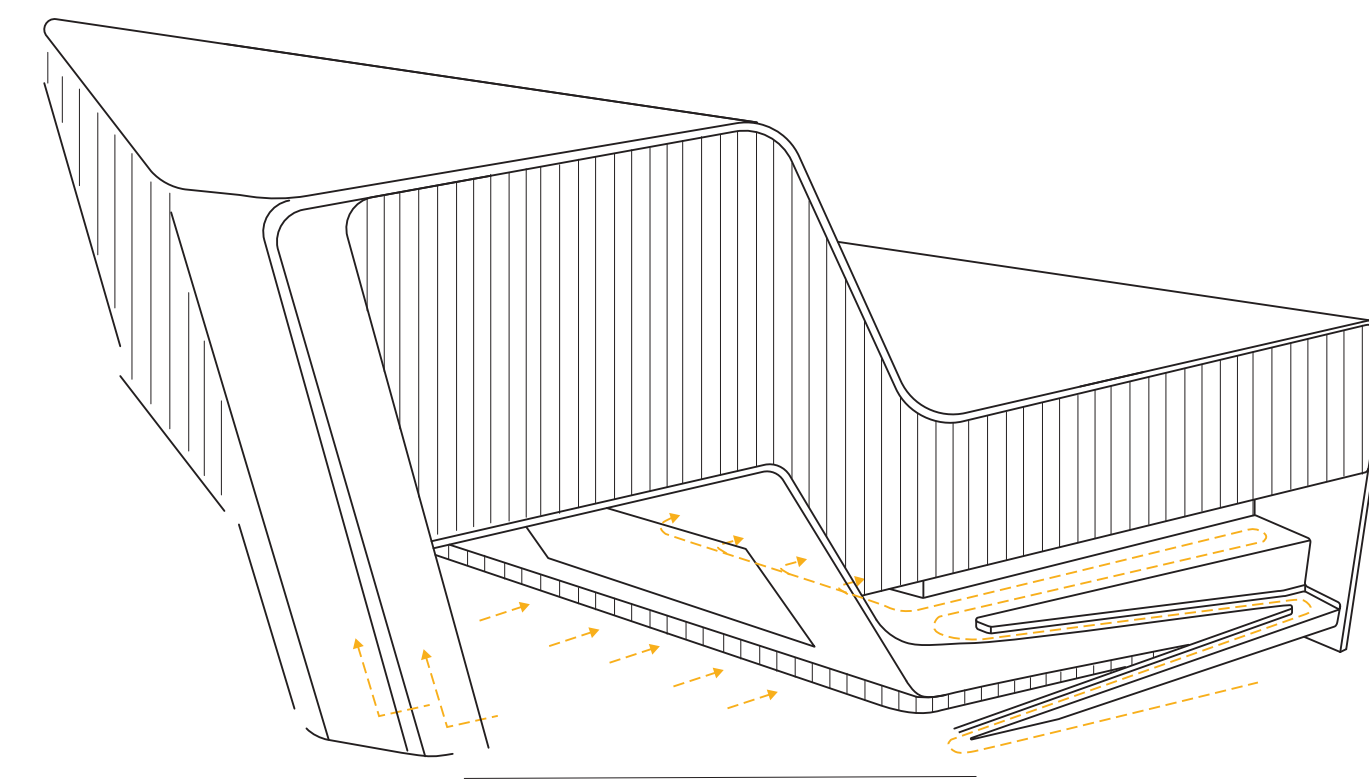
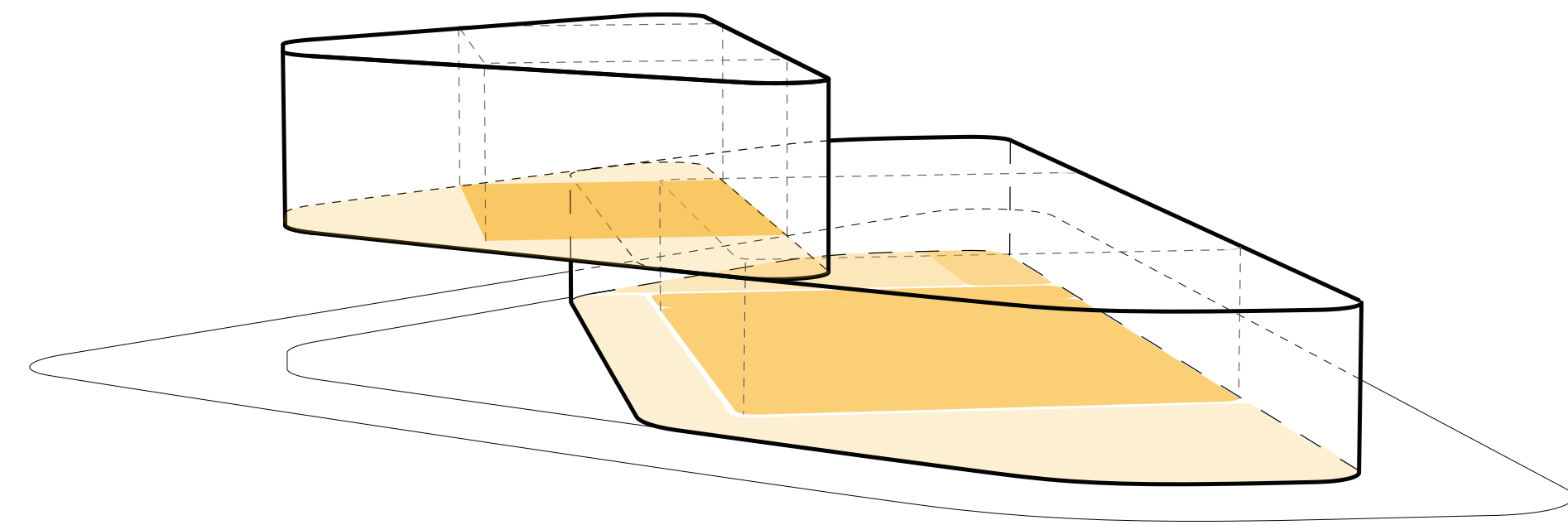








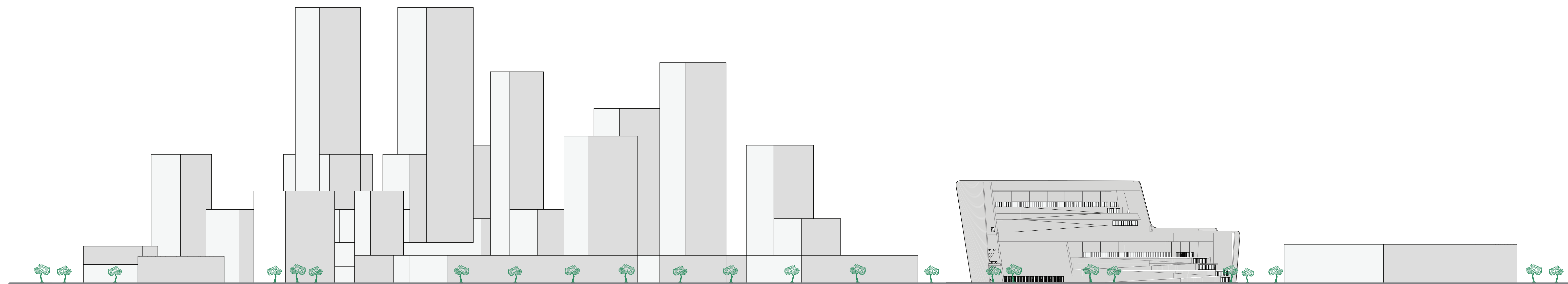
# Form | Music Building





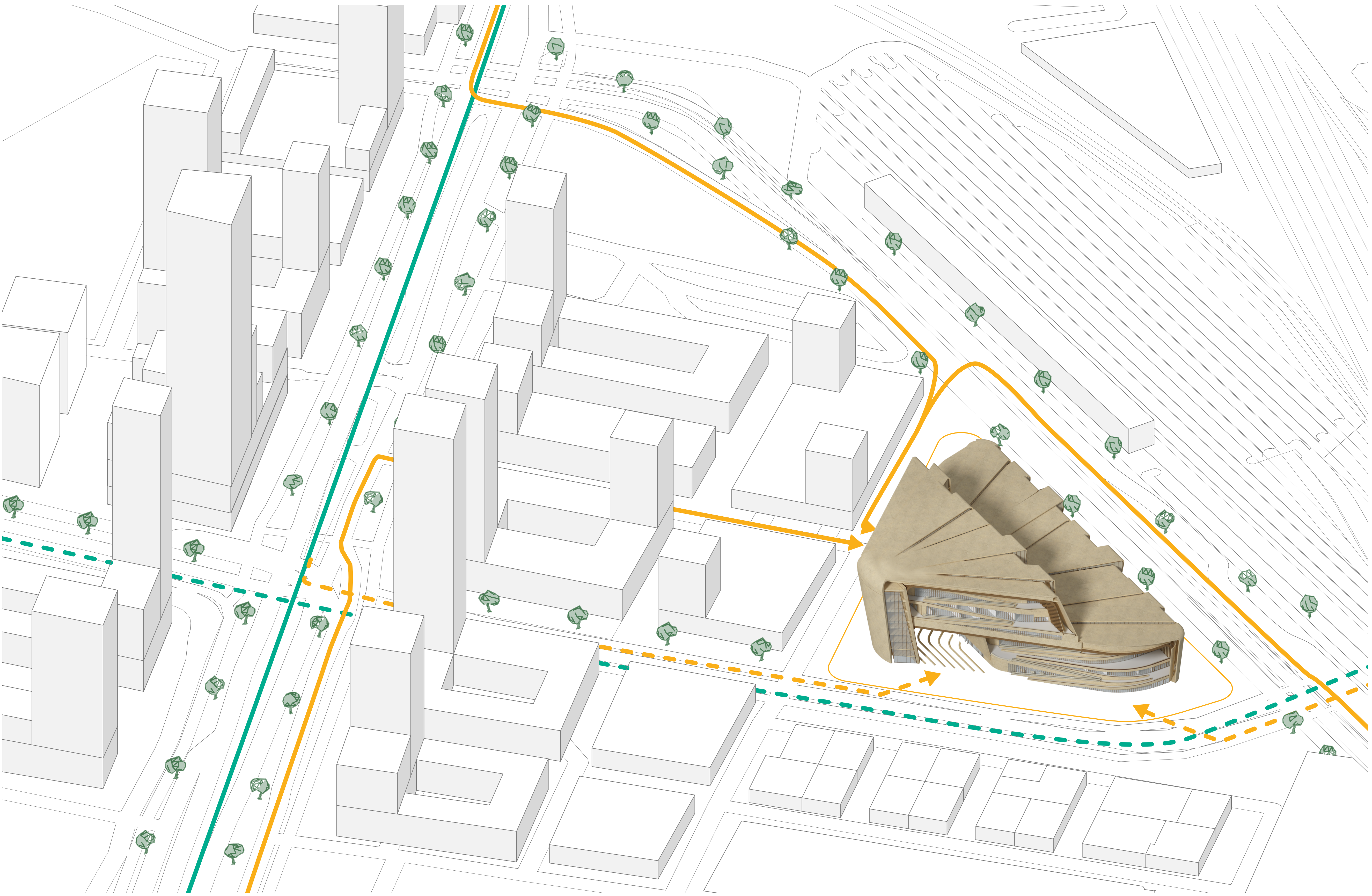
# Context | Music Building

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# Access | Music Building



- New Tram Connection
- - - New Bicycle Connection
- New Station
- Driving route, Cars/Trucks
- ... Walking route, Visitors



# Perception | Music Building

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# Perception | Music Building

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# Perception

Music Building





# Program

Music Building and Congress Center

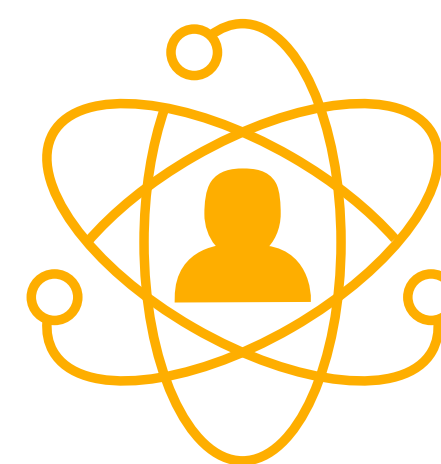
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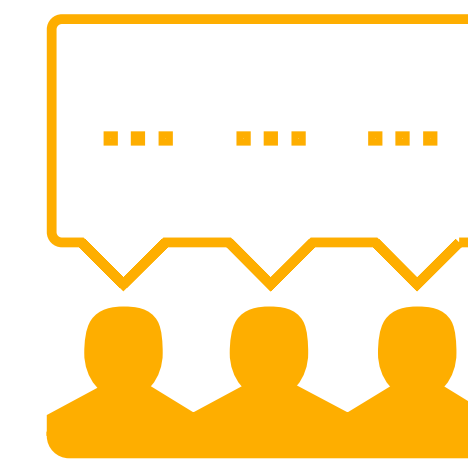
Concerts



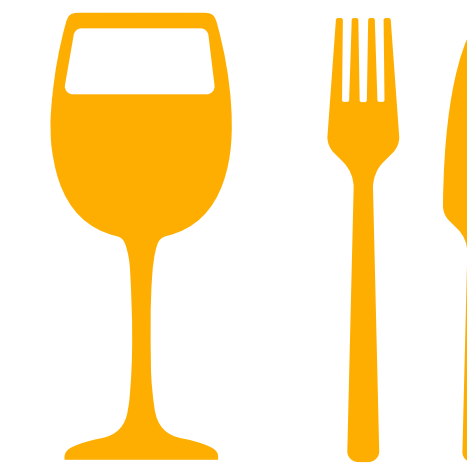
Congress



Networking  
Reception



Meetings



Café/Restaurant



Program

Music Building and Congress Center

Concert hall 1

Venue	Large
Audience	3.600 - 6.000
GFA (m²)	25.000 m²
Concert hall/space (prop. 1:2,5)	2.600 m² h = 18 m
<b>Concert space</b>	
- Stage	250 - 500 m²
- Back stage	+ 0,5 of stage
- Side stage	+ 0,2 of stage
- Stage director's area	40 m²
- Dressing rooms private (1 p) 15 m²	8x
- Dressing rooms medium (6-8p) 40 m²	8x
- Dressing rooms large (20-25p) 90m²	4x
- Crew area	65 m²
- Balcony	+
- VIP-area	+
- Bar	+
- Cafe	2x
- Merchandise	+
- Meeting rooms	+
<b>Audience access</b>	
- Waiting line	1.000 m² + 1.200 m²
- Entrance/Foyer	2.000 m²
- Wardrobe/Lockers	500 m²
- Restrooms	100 m + 200 f or 300 n, 136 u
<b>Dedicated access</b>	
- Artist entrance	+
- First aid room	40 m²
- Office space	820 m²
<b>Support</b>	
- Loading area	2 trucks
- Storage	100 m²
- Technical spaces	+ 10% of GFA

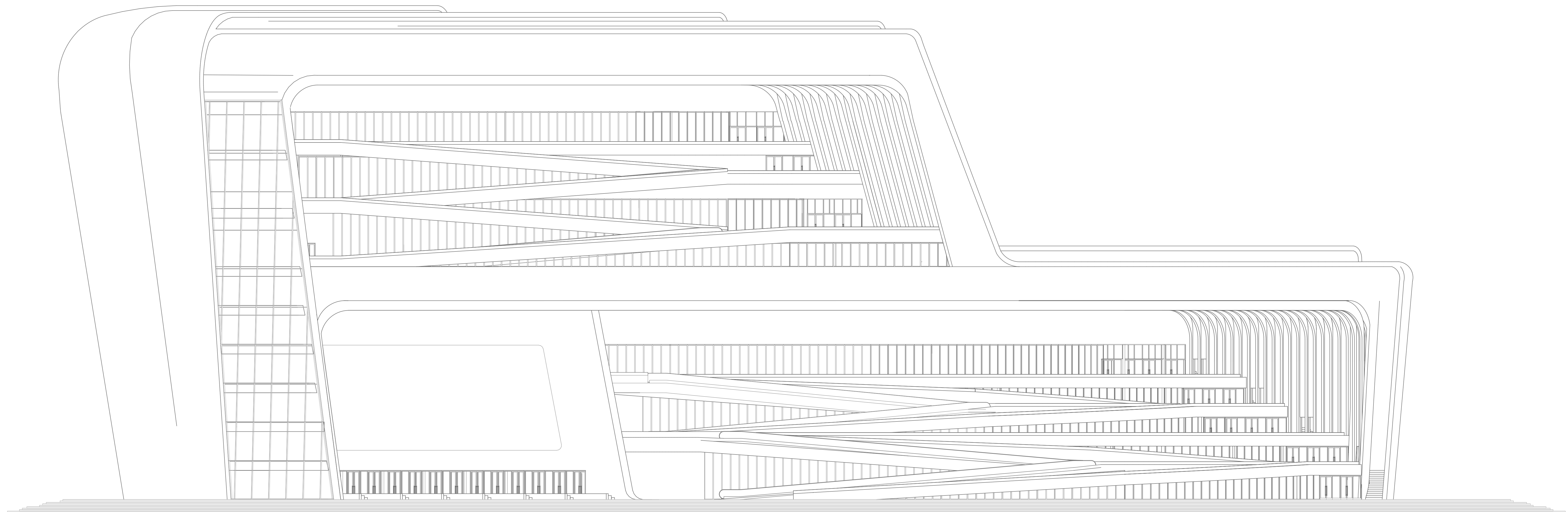
Concert Hall 2 (Congress)

Audience	1.250
Auditorium	600 m²
- Stage	+ 100 m²
- Reception area	+
- Foyers	+
- Conference rooms	up to 650 guests
- Meeting rooms	+
- Offices	+
- Modern audiovisual facilities	+
- Restrooms	+
- Technical spaces	+ 10% of GFA
<b>Restaurant</b>	
Area	185 m²
- Entrance area	+
- Dining area	+
- Kitchen	+
- Bar	+
- Restrooms	2+4 or 5n, 5u
- Storage	20 m²
- Loading / Garbage area	+
- Technical spaces	+ 10% of GFA



# Program | Music Building

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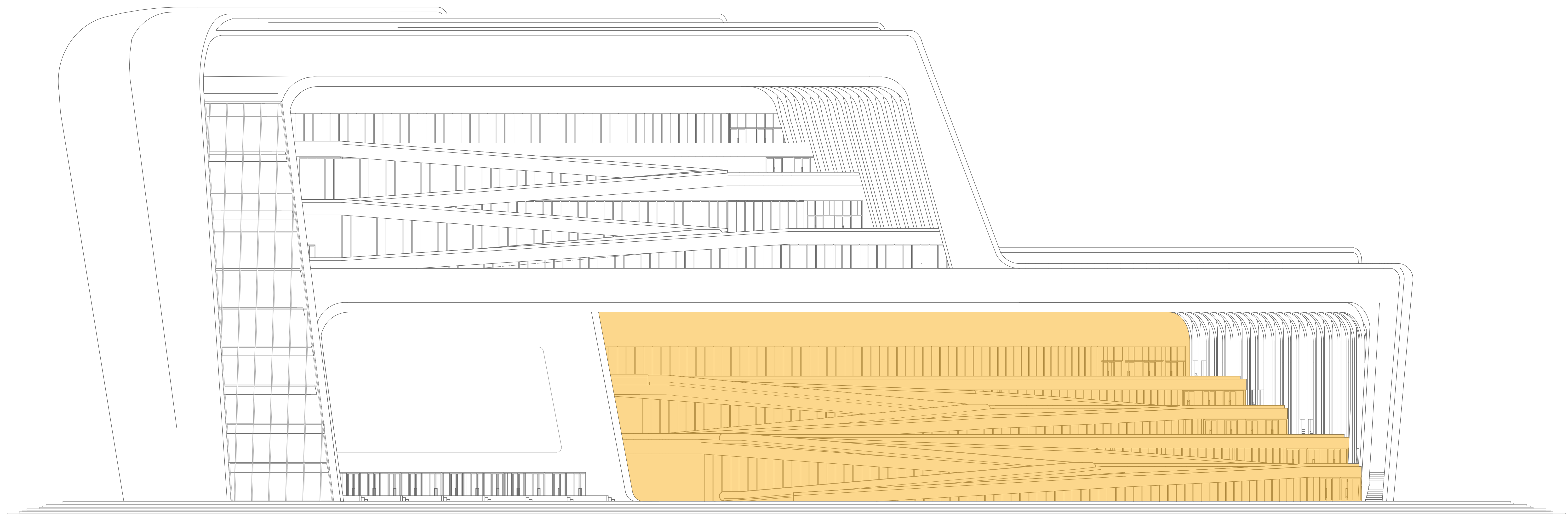




# Program

Music Building

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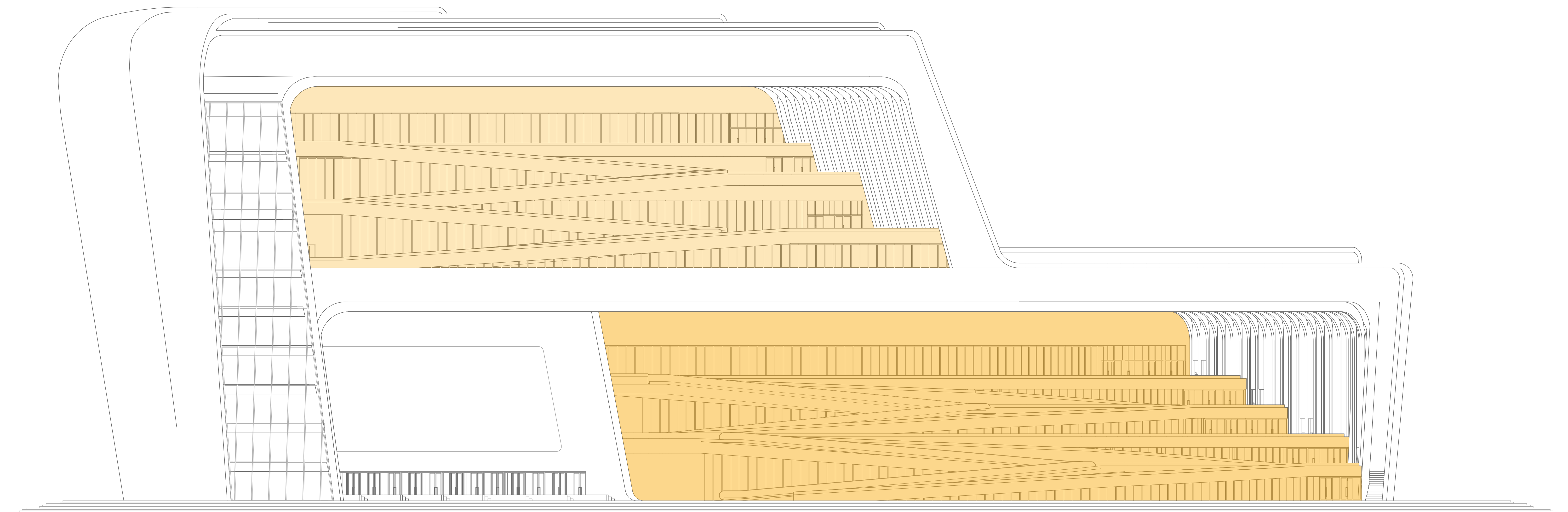
 Concert hall 1



# Program

Music Building

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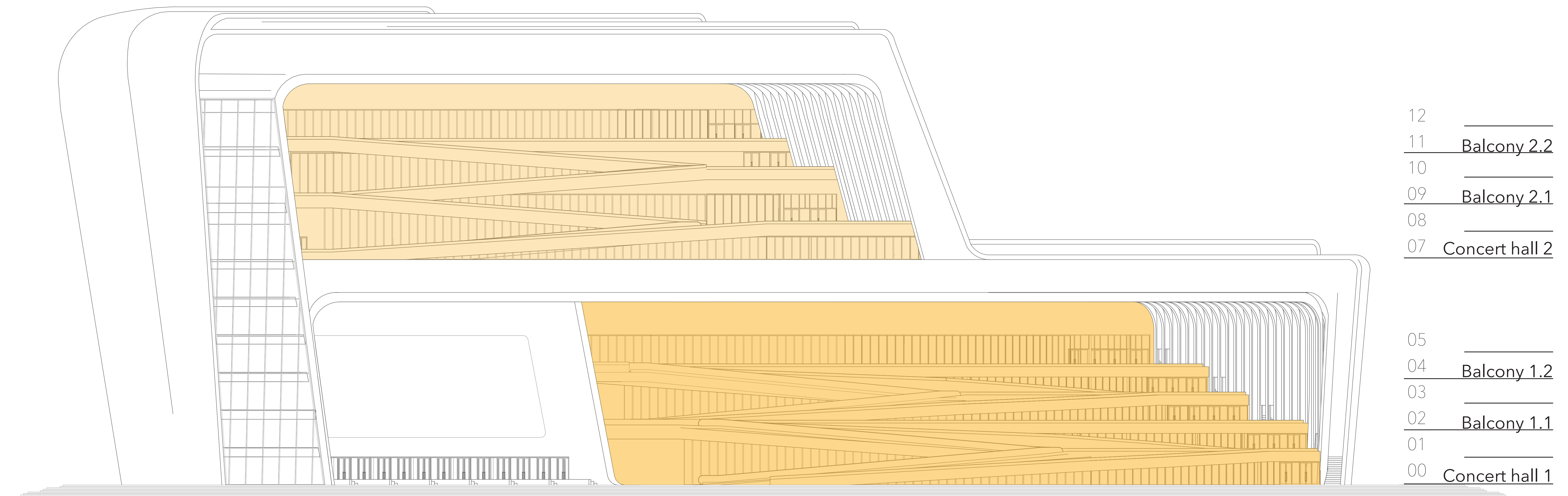


- Concert hall 1
- Concert hall 2



# Program

Music Building



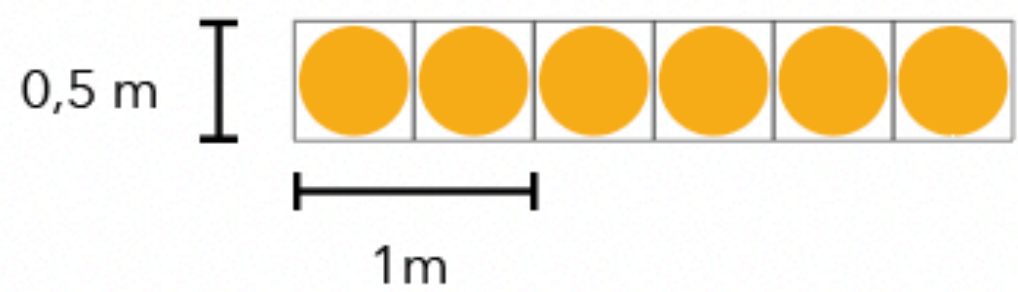
- Concert hall 1
- Concert hall 2



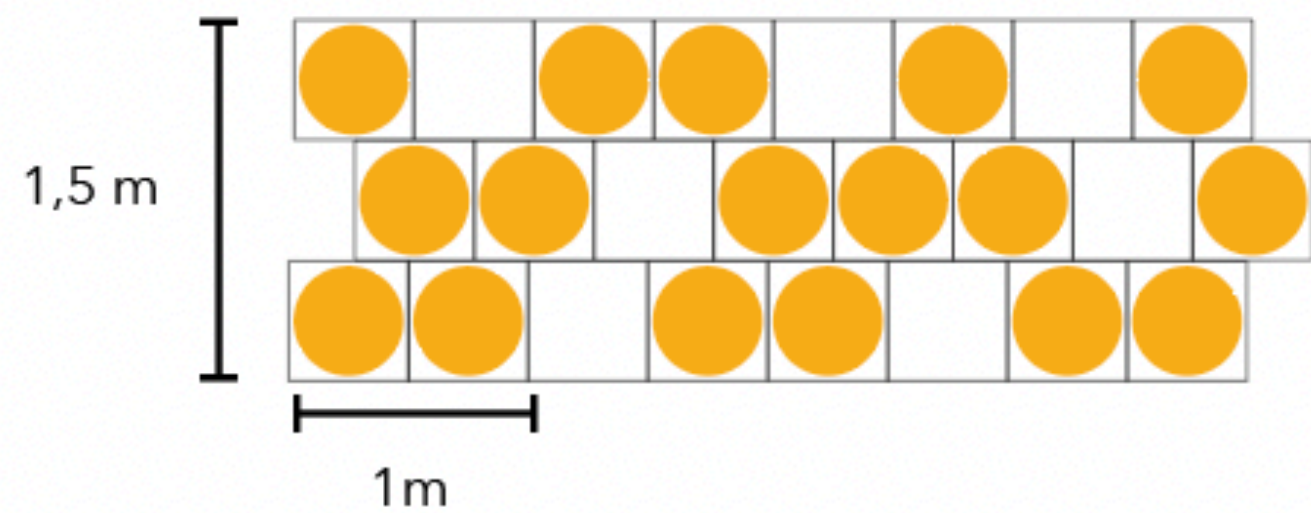
# Waiting line

Music Building

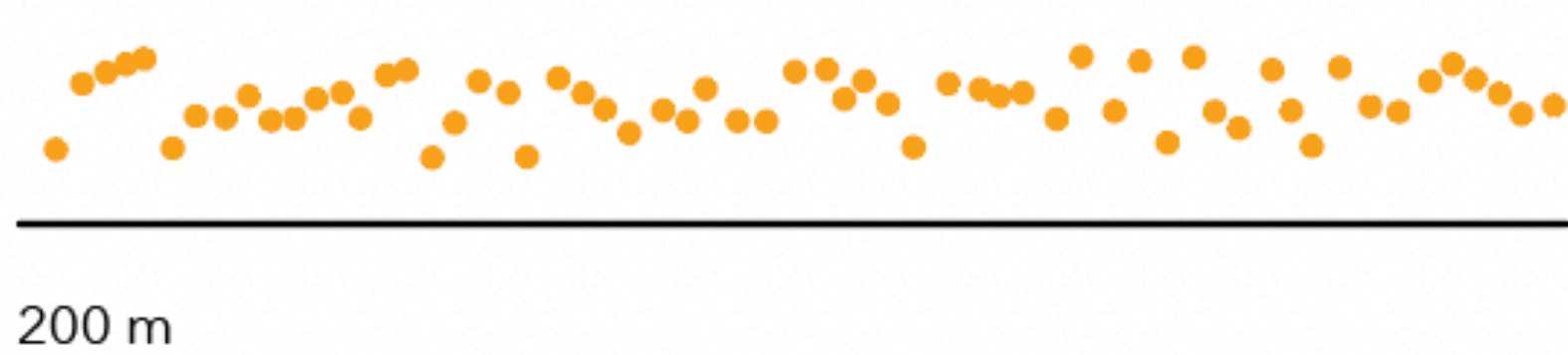
Single line



Multiple line



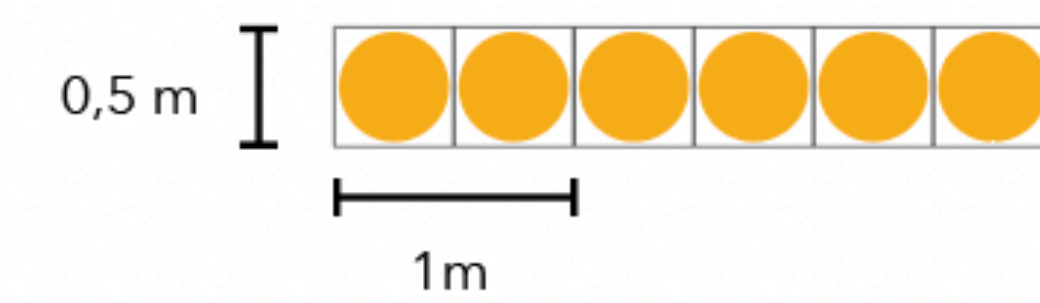
1.000 visitors



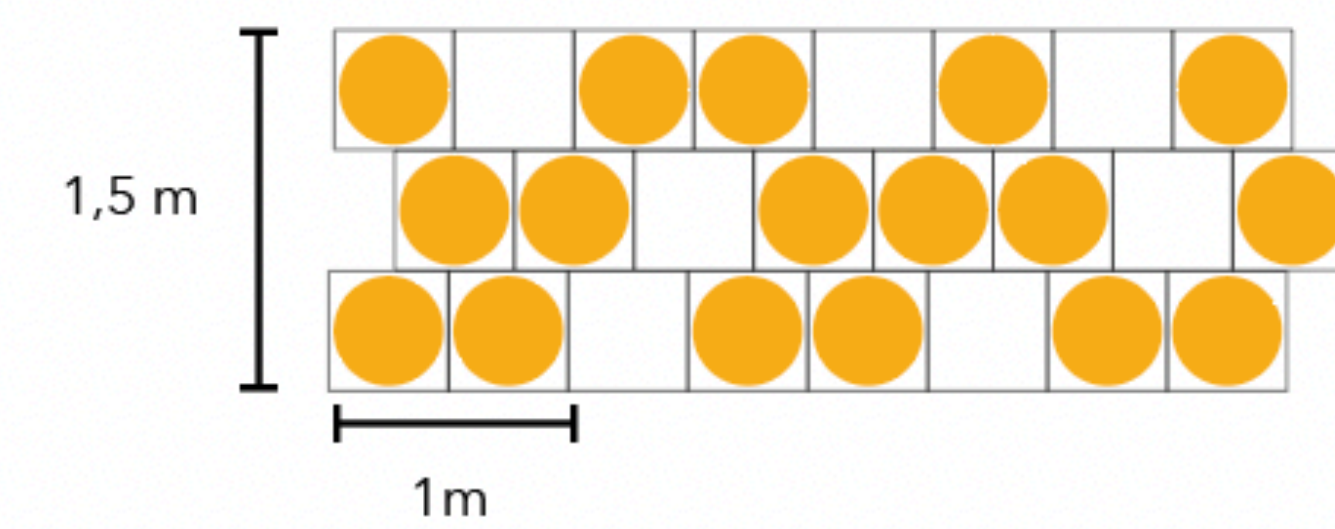


# Waiting line | Music Building

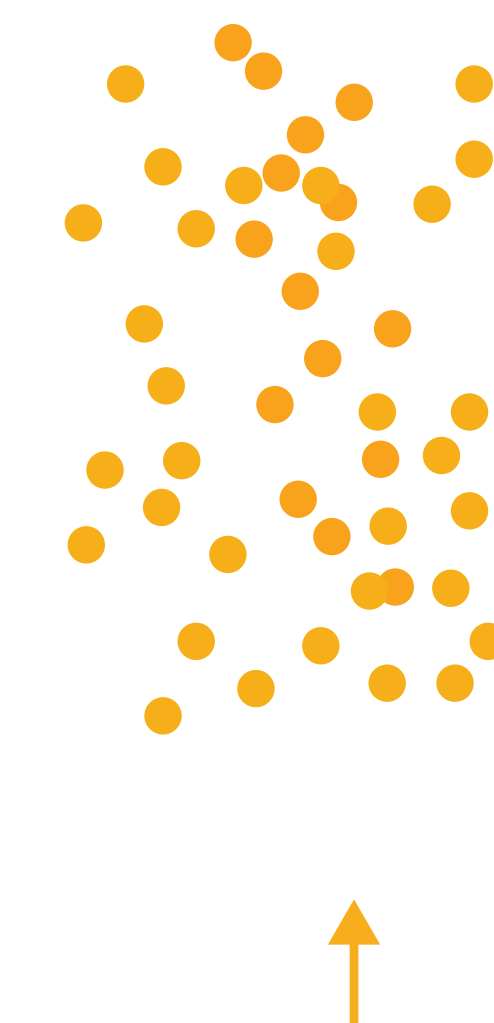
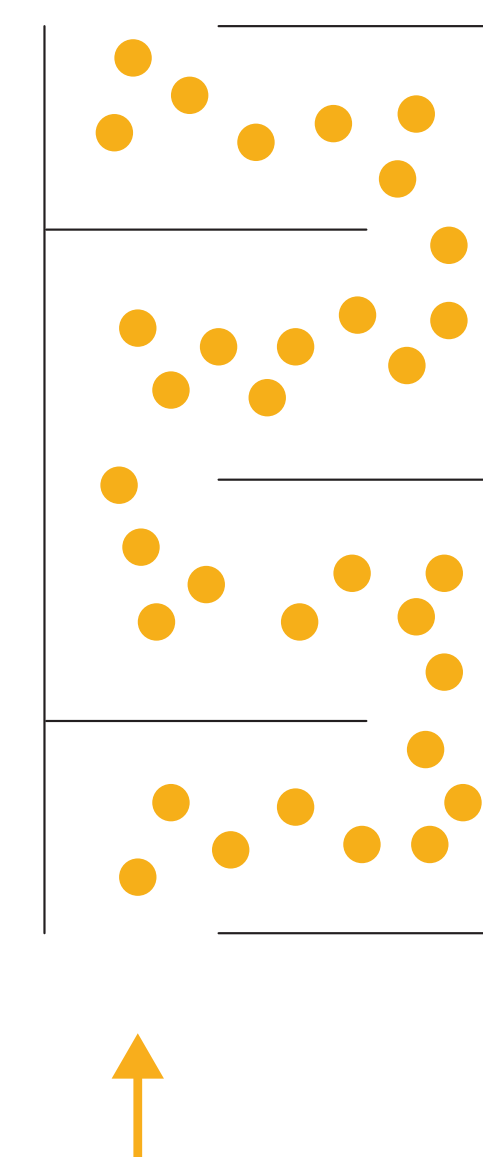
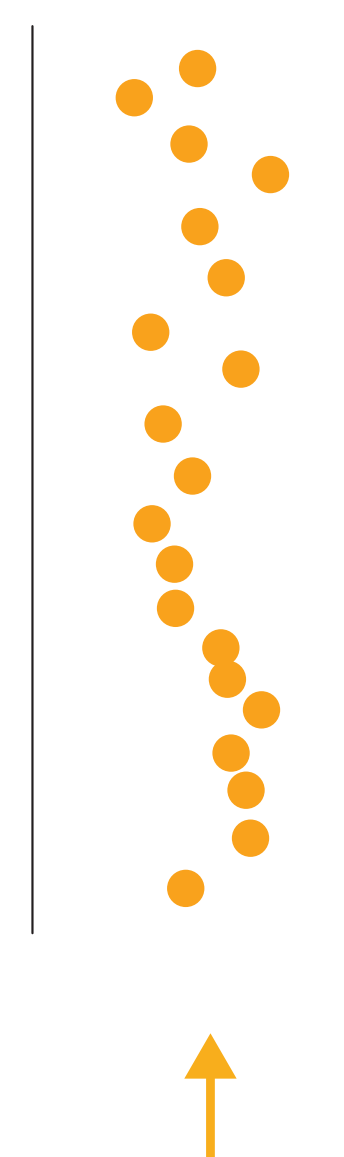
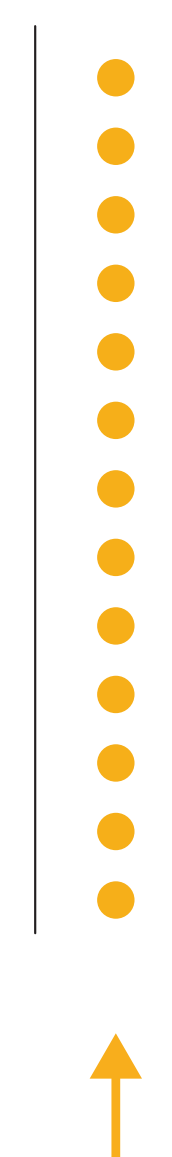
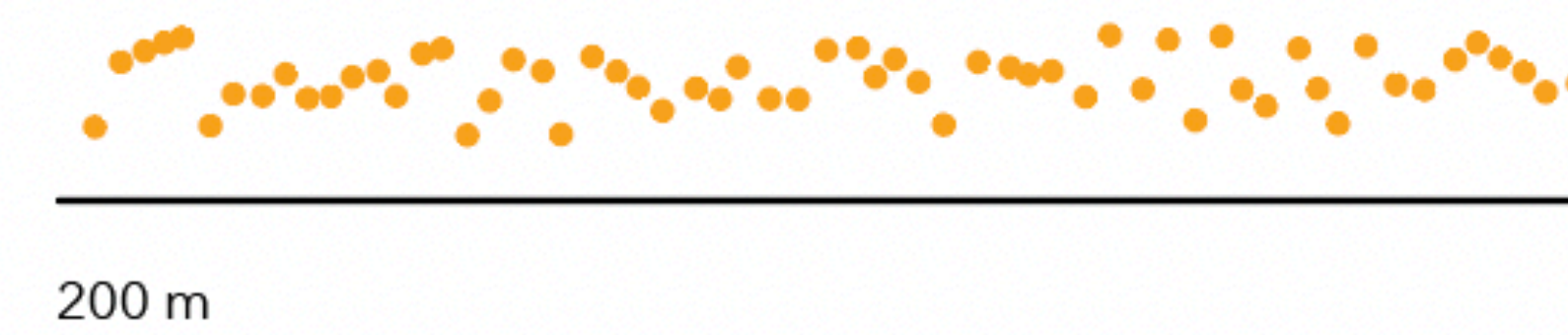
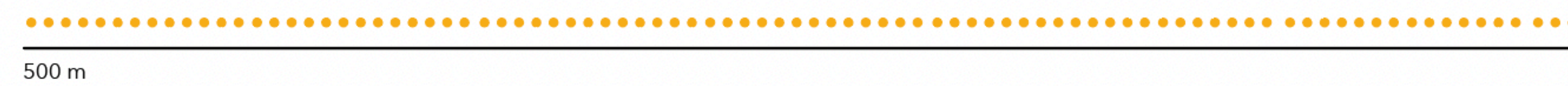
Single line



Multiple line



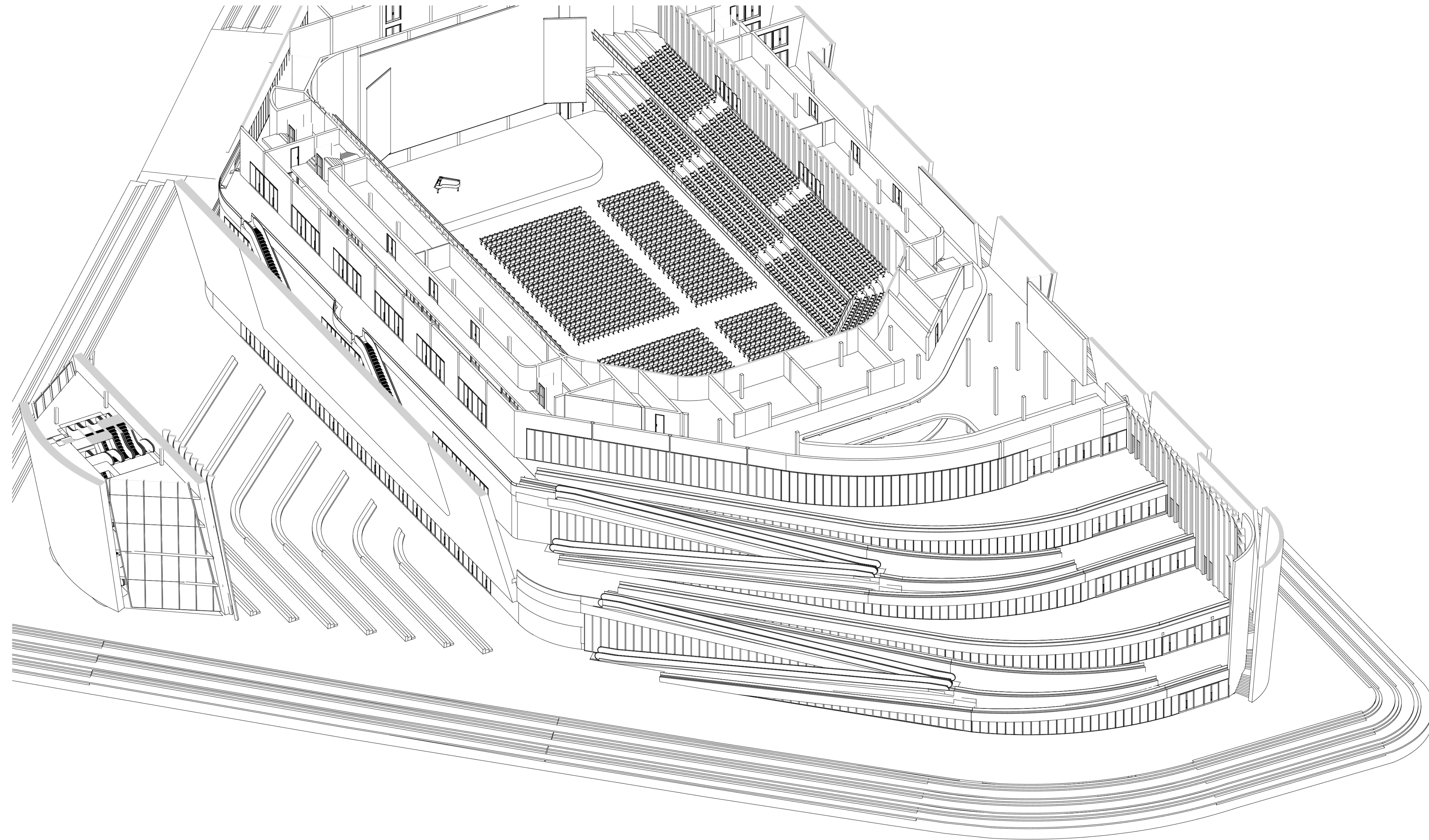
1.000 visitors





# Waiting line

Music Building

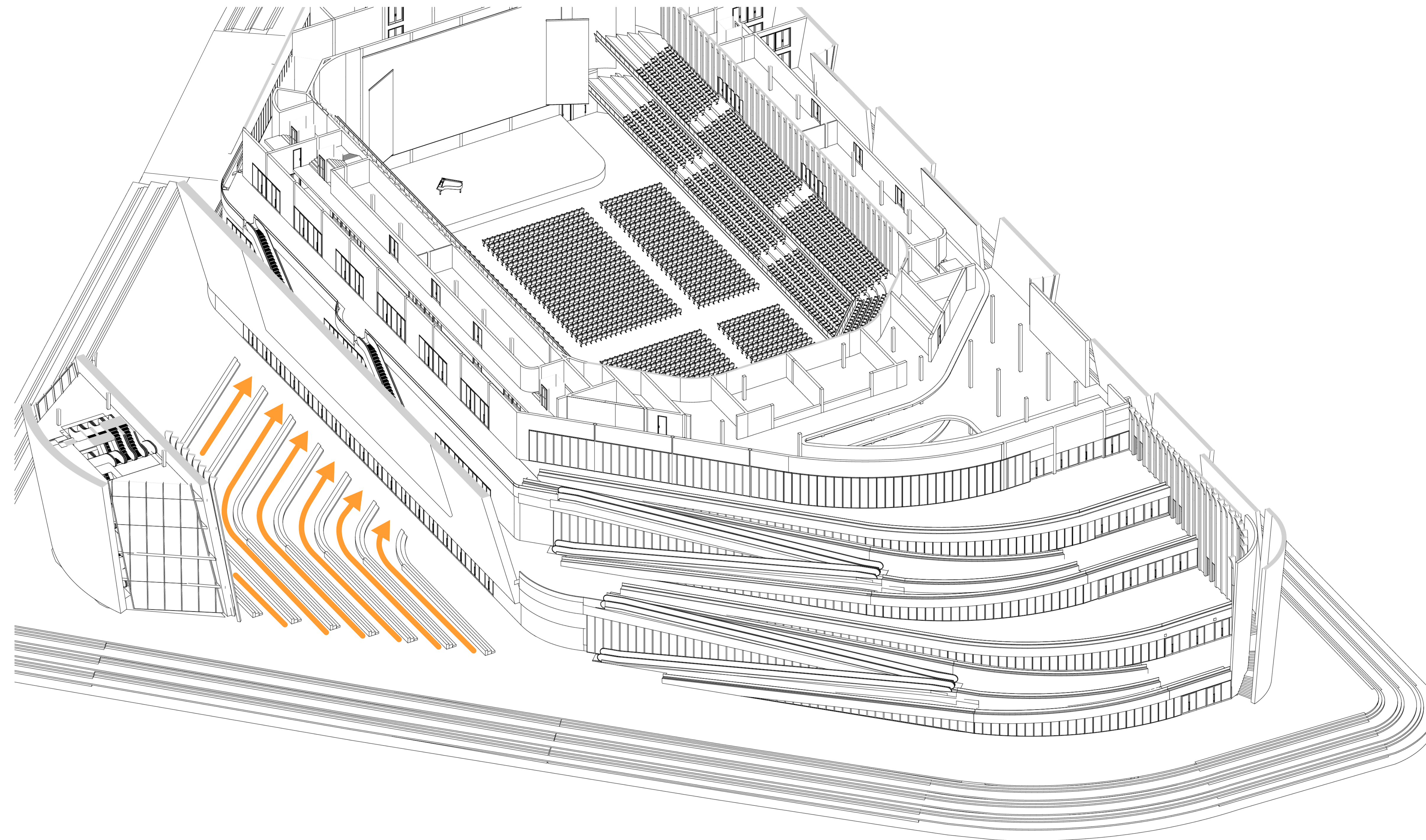




# Waiting line

Music Building

→ Main Entrance

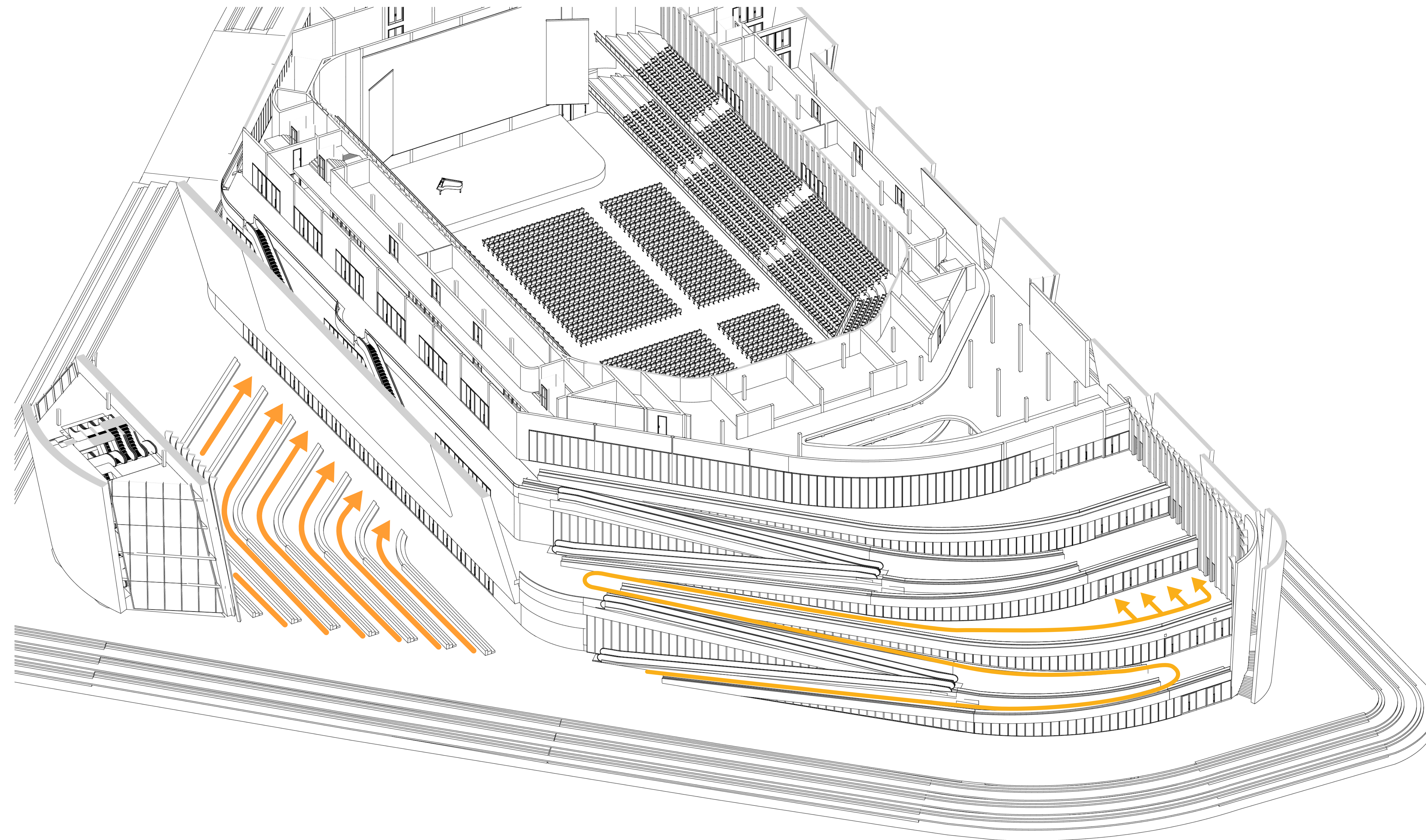




# Waiting line

Music Building

- Main Entrance
- Entrance Balcony 1

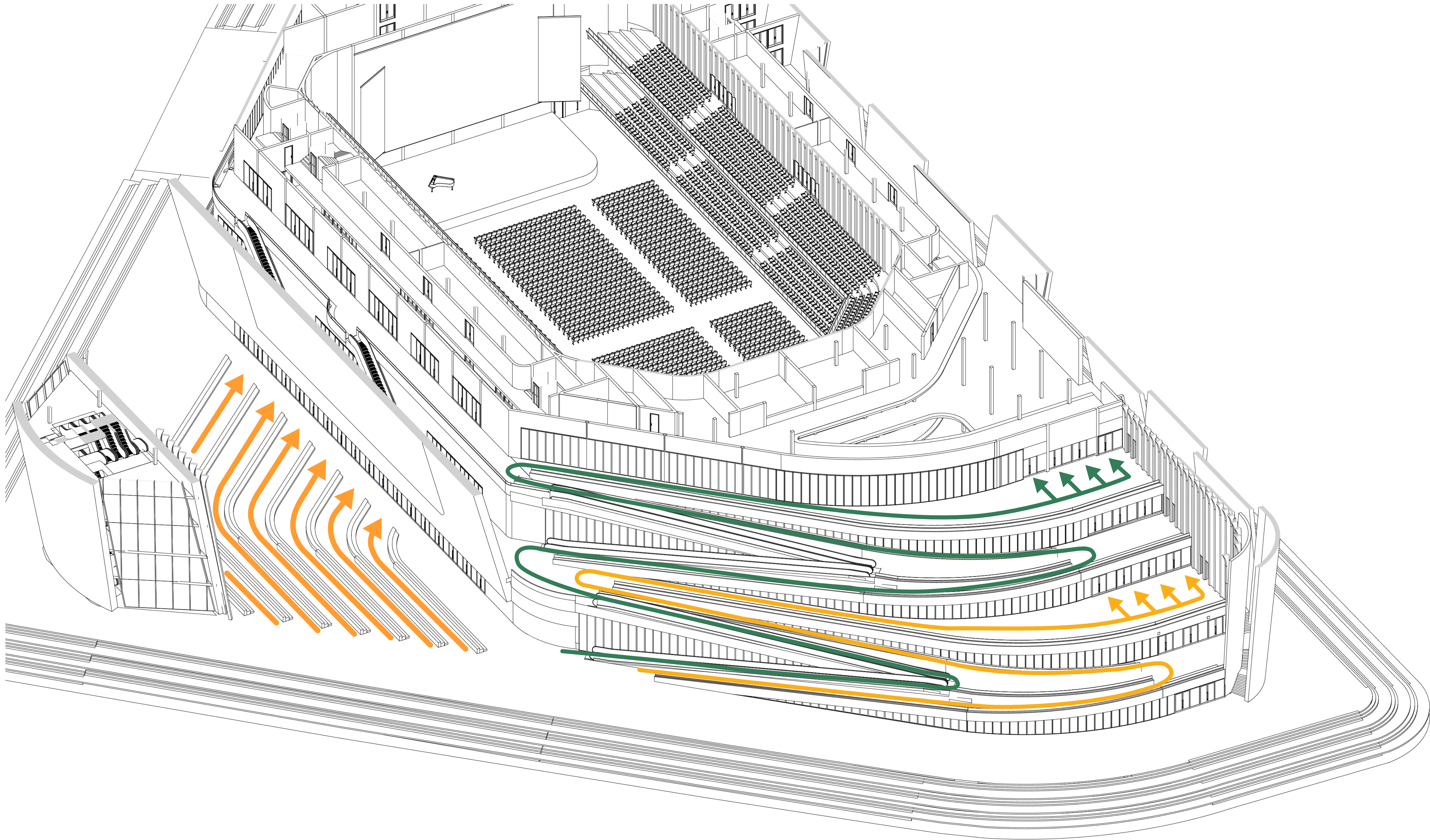




# Waiting line

Music Building

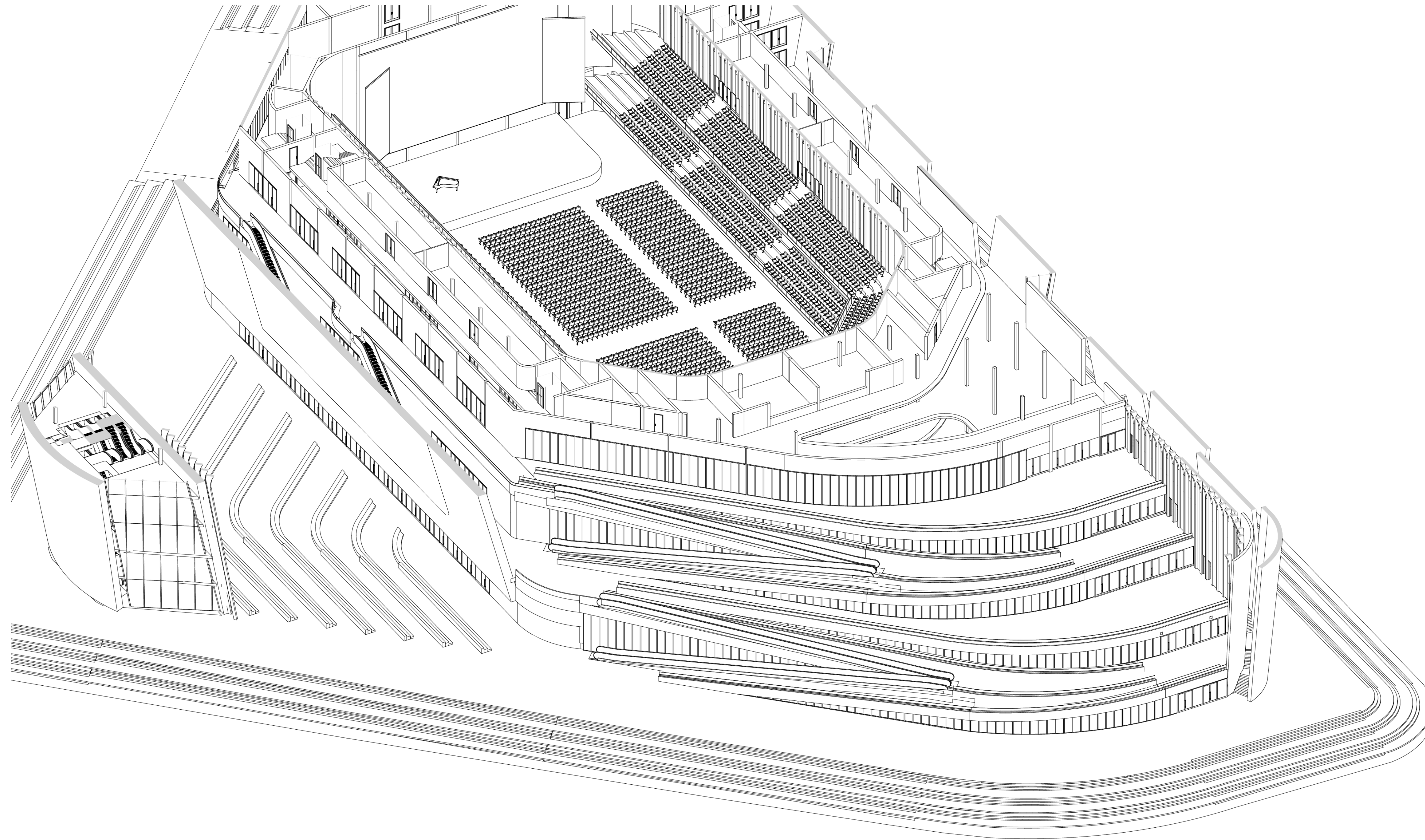
- Main Entrance
- Entrance Balcony 1
- Entrance Balcony 2





# Multiplicity

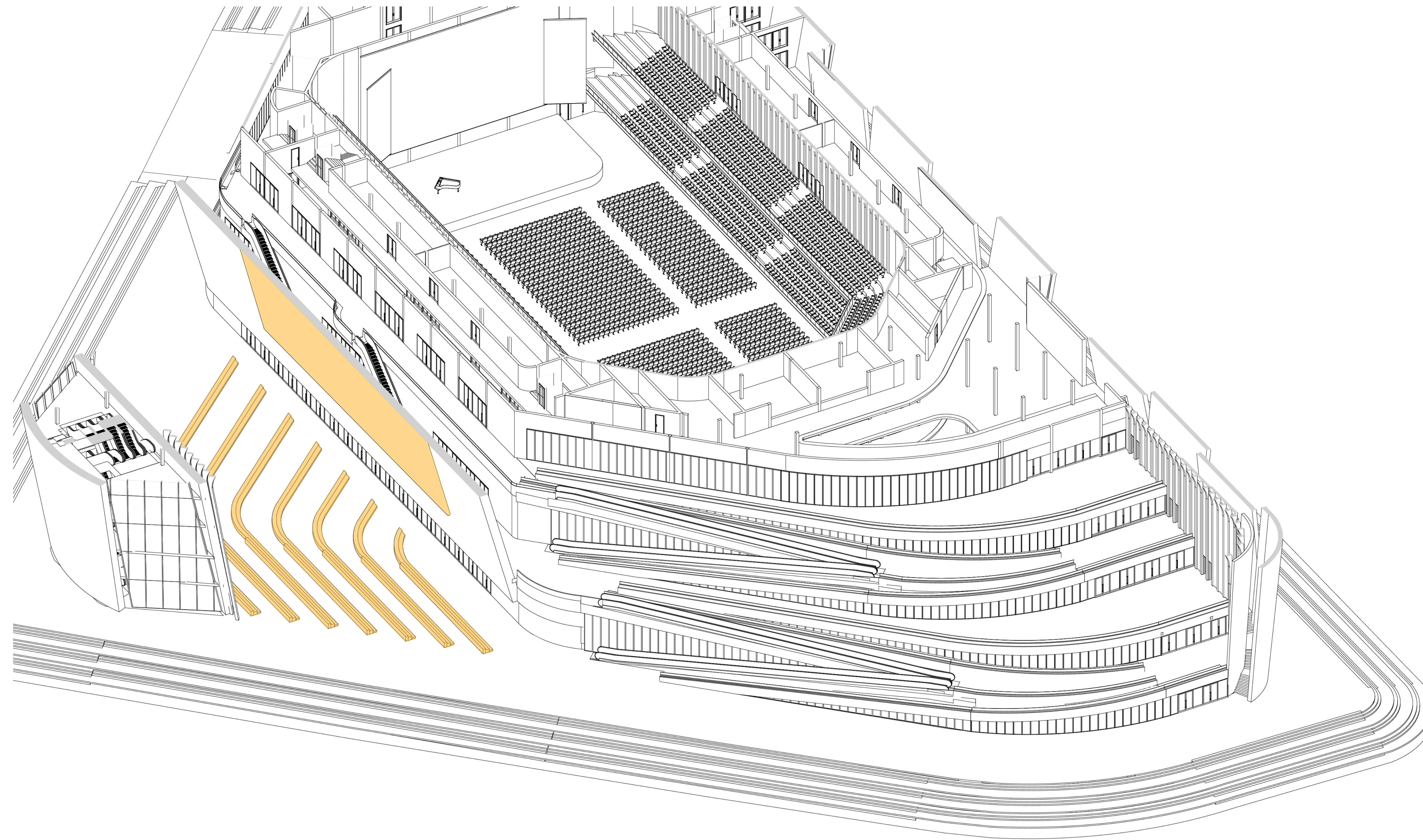
Waiting area





# Multiplicity

Waiting area

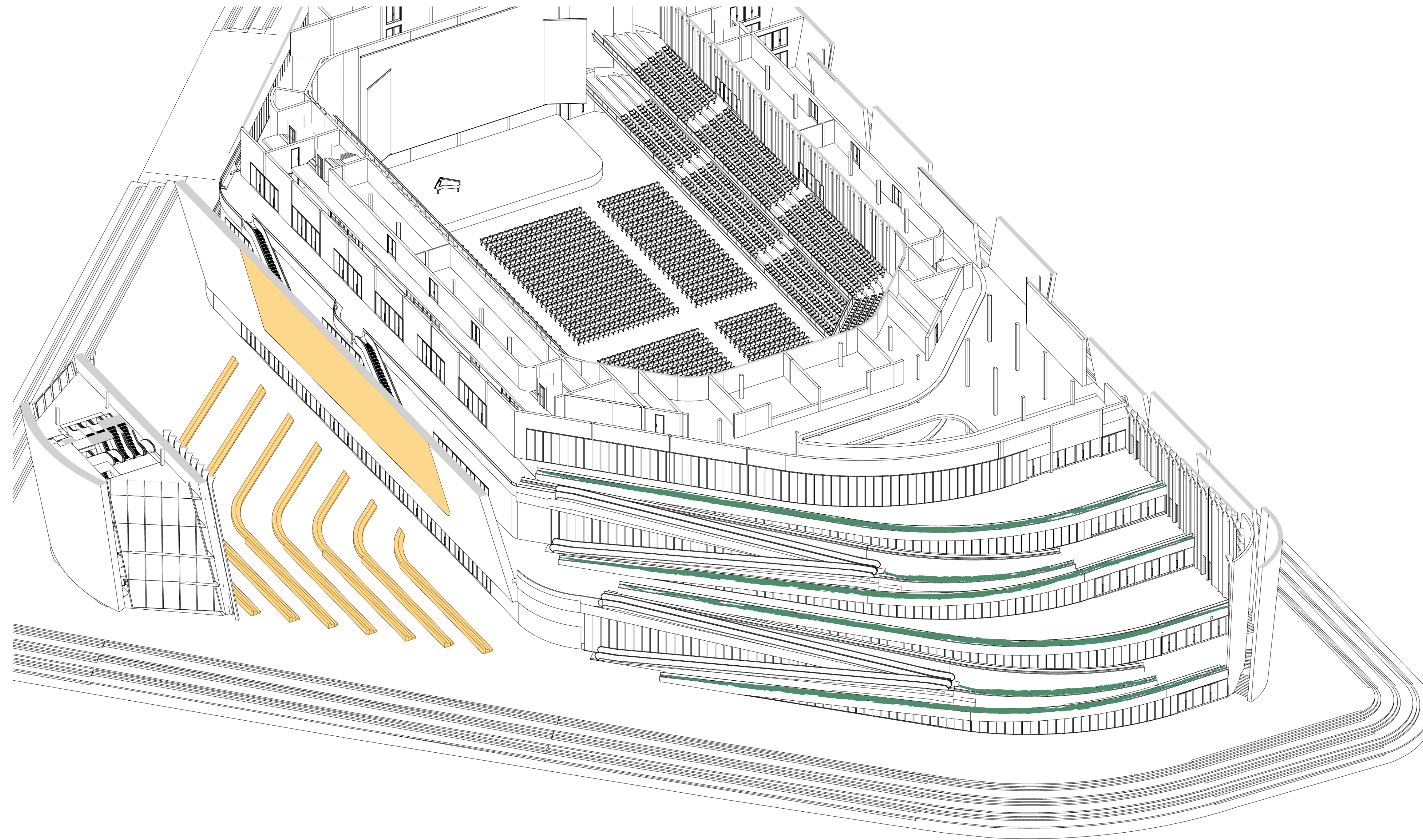


Pre-program  
music video projections



# Multiplicity

Waiting area



Pre-program  
music video projections

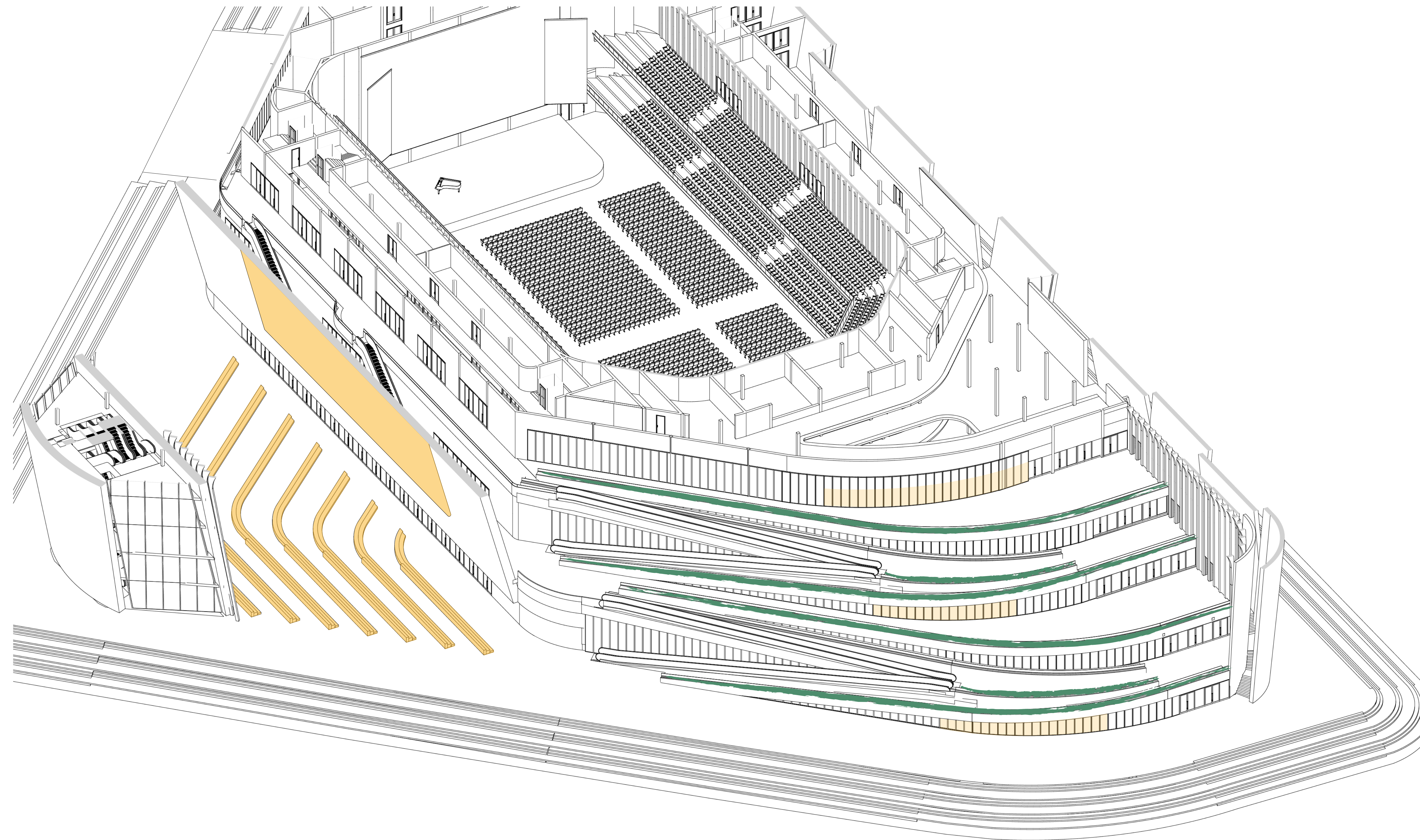


Greenery



# Multiplicity

Waiting area



Pre-program  
music video projections



Greenery

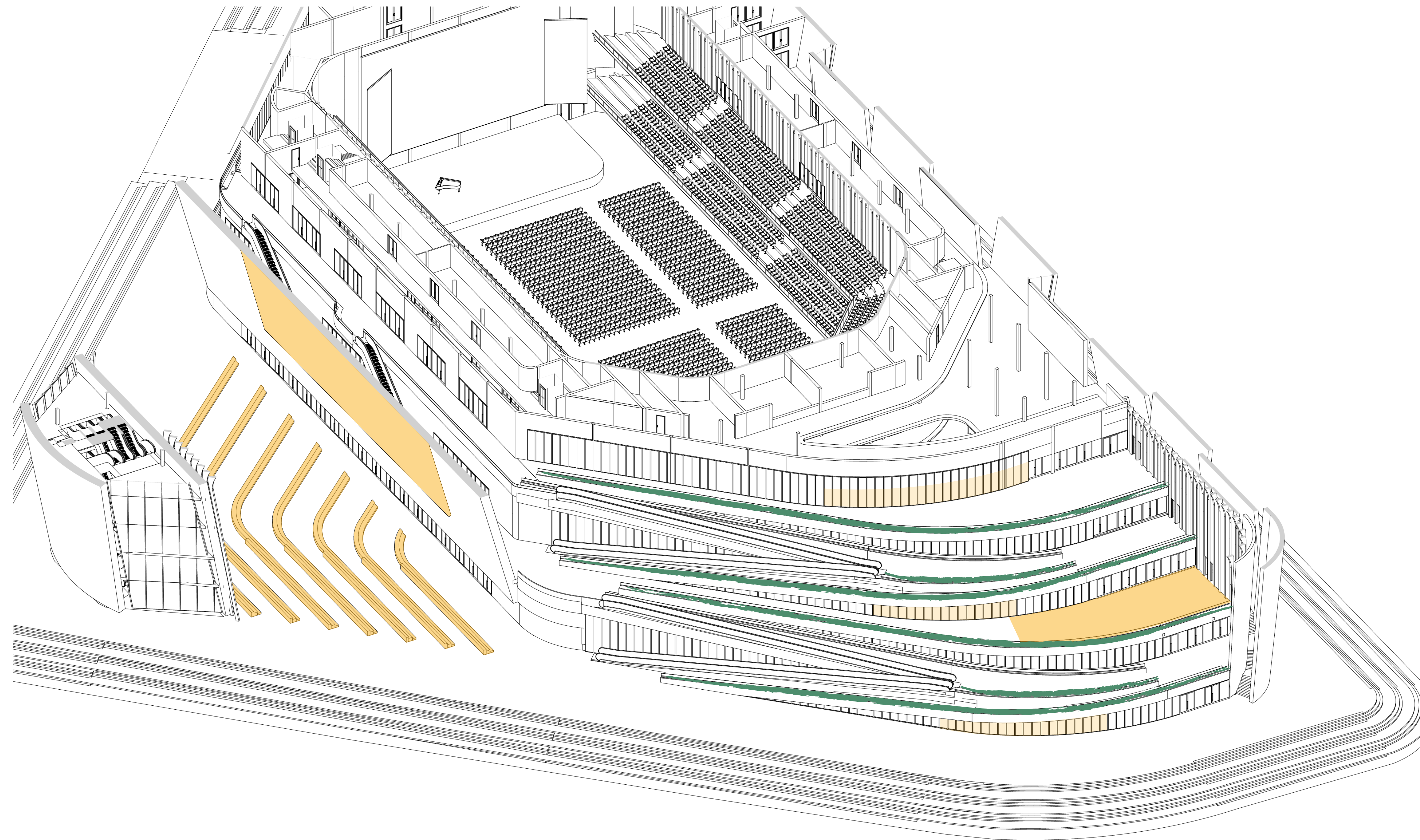


Displayed  
Merchandise



# Multiplicity

Waiting area



Pre-program  
music video projections



Greenery



Displayed  
Merchandise

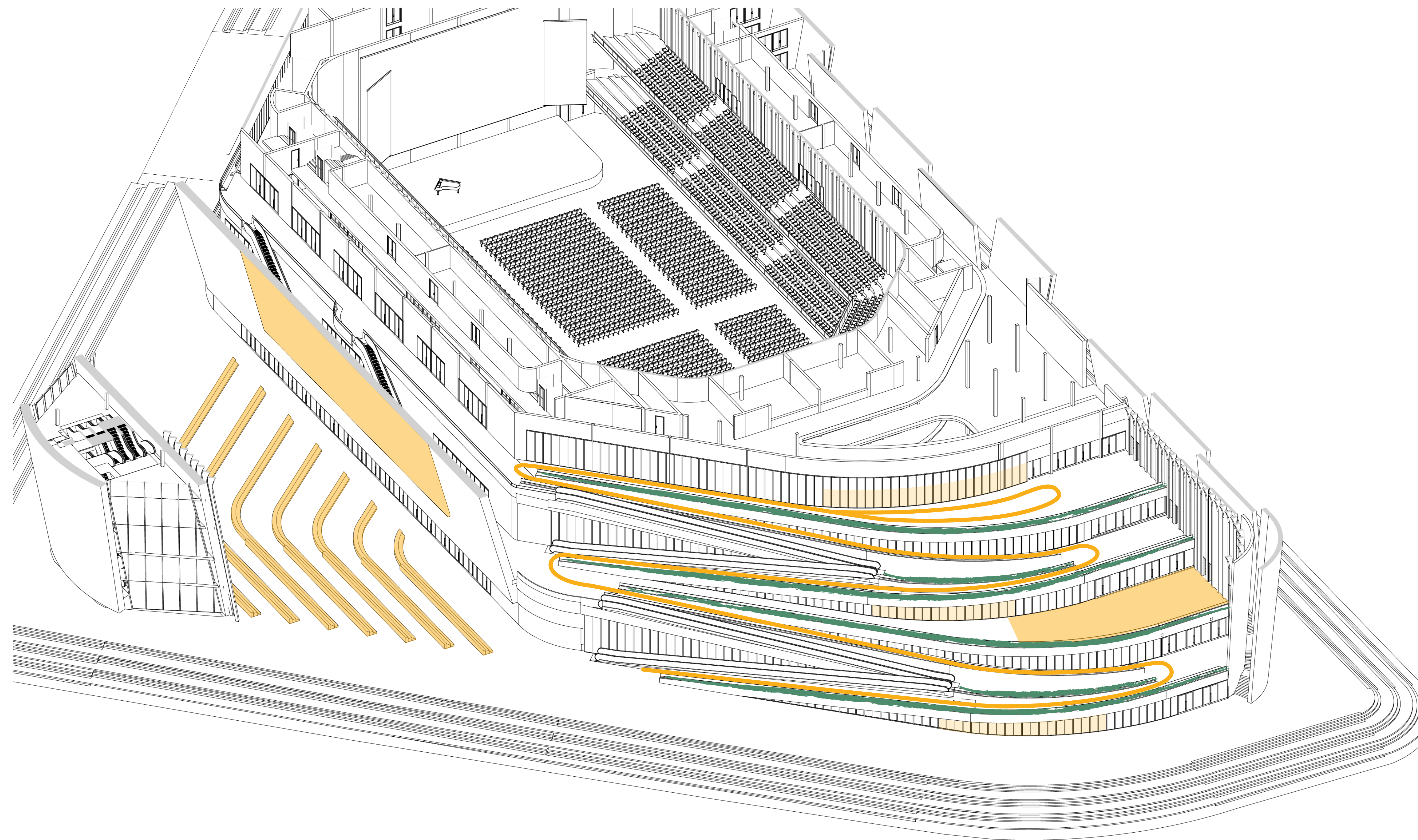


Café + Terrace  
(if there is no concert)



# Multiplicity

Waiting area



Pre-program  
music video projections



Greenery



Displayed  
Merchandise



Café + Terrace  
(if there is no concert)

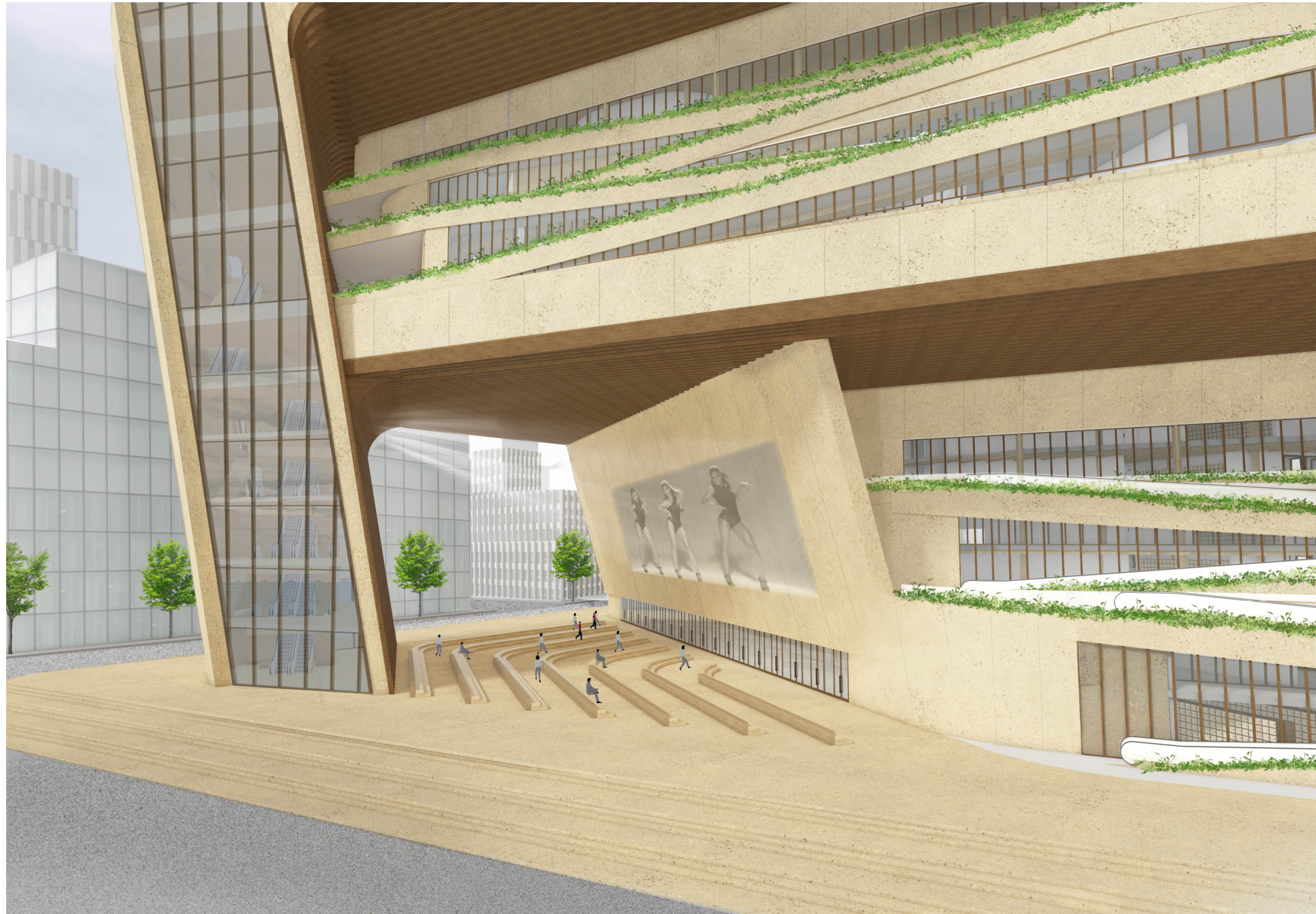


Sport ramp



# Waiting line

Pre-program music video projections



Pre-program  
music video projections



Greenery



# Waiting line | Greenery

---

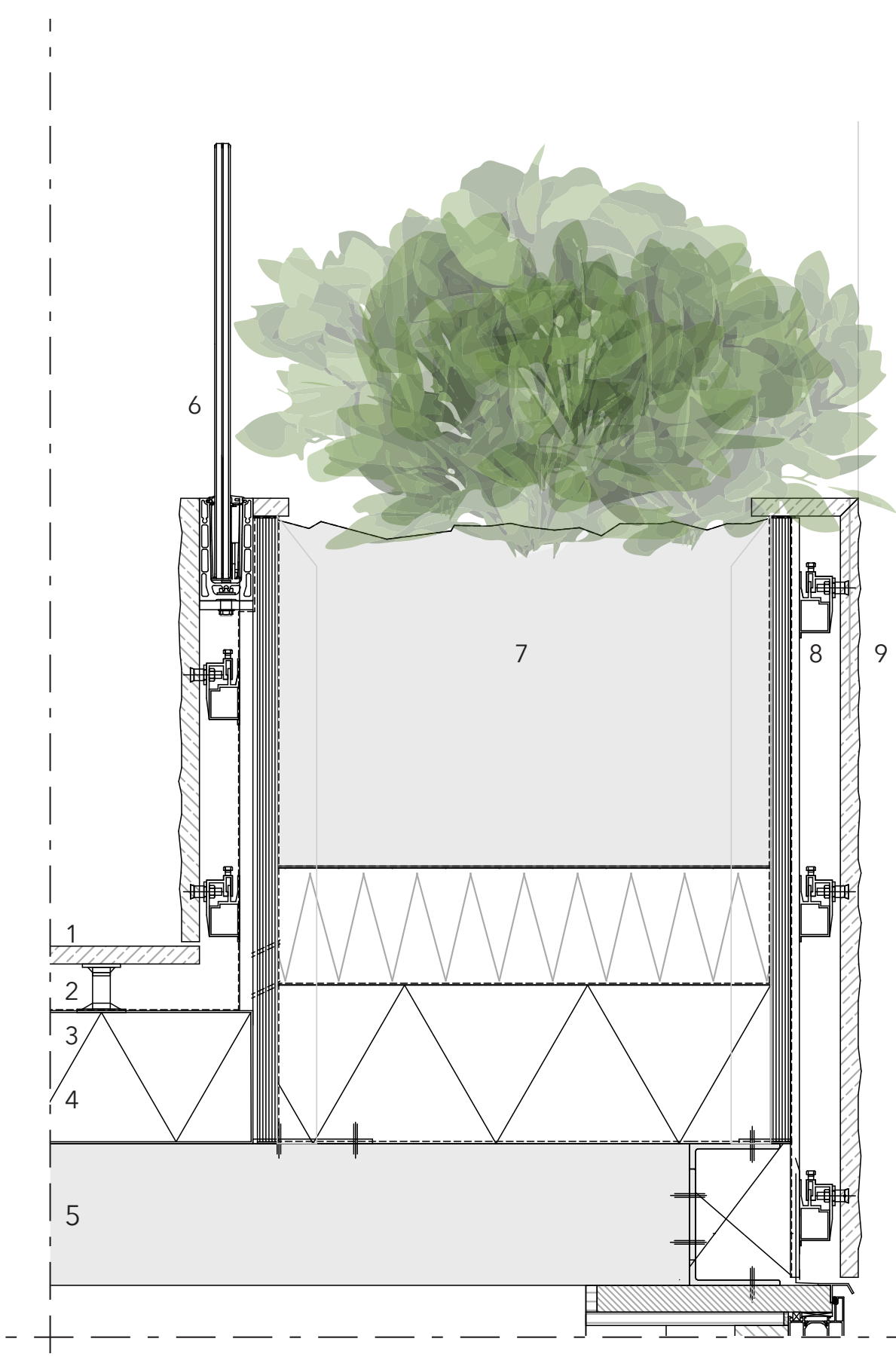
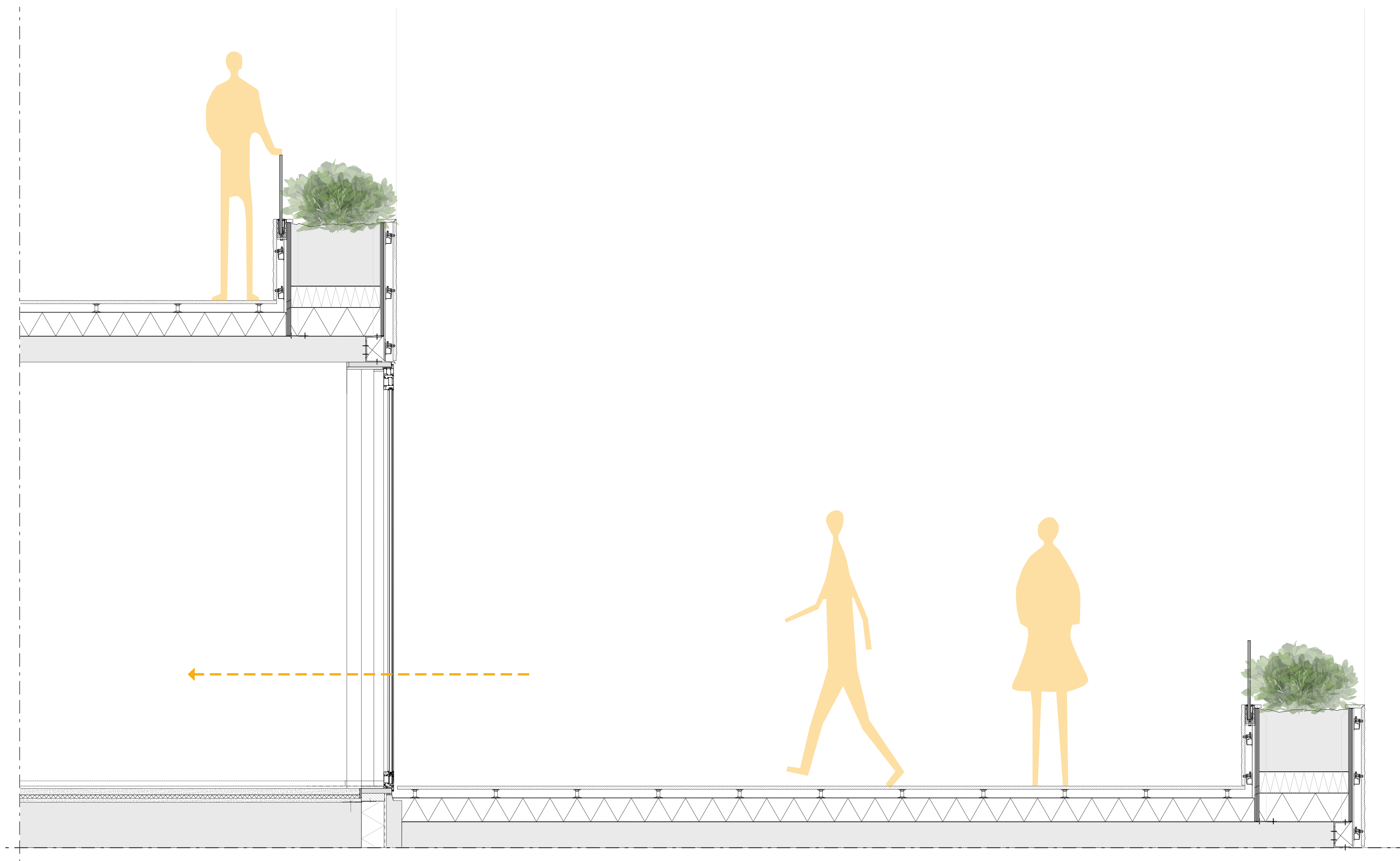


Greenery



# Waiting line

Greenery



Detail [1:10]

- 1. Natural Stone / Limestone Floor
- 2. Terrace pedestals
- 3. Waterproof layer
- 4. Thermal insulation with inclination
- 5. Reinforced concrete floor slab
- 6. Glass balustrade
- 7. Planting soil
- Filter fabric
- Drainage deck
- Waterproof layer
- Thermal insulation
- 8. Fixing Elements
- 9. Natural Stone / Limestone Facade



# Waiting line | Displayed Merchandise



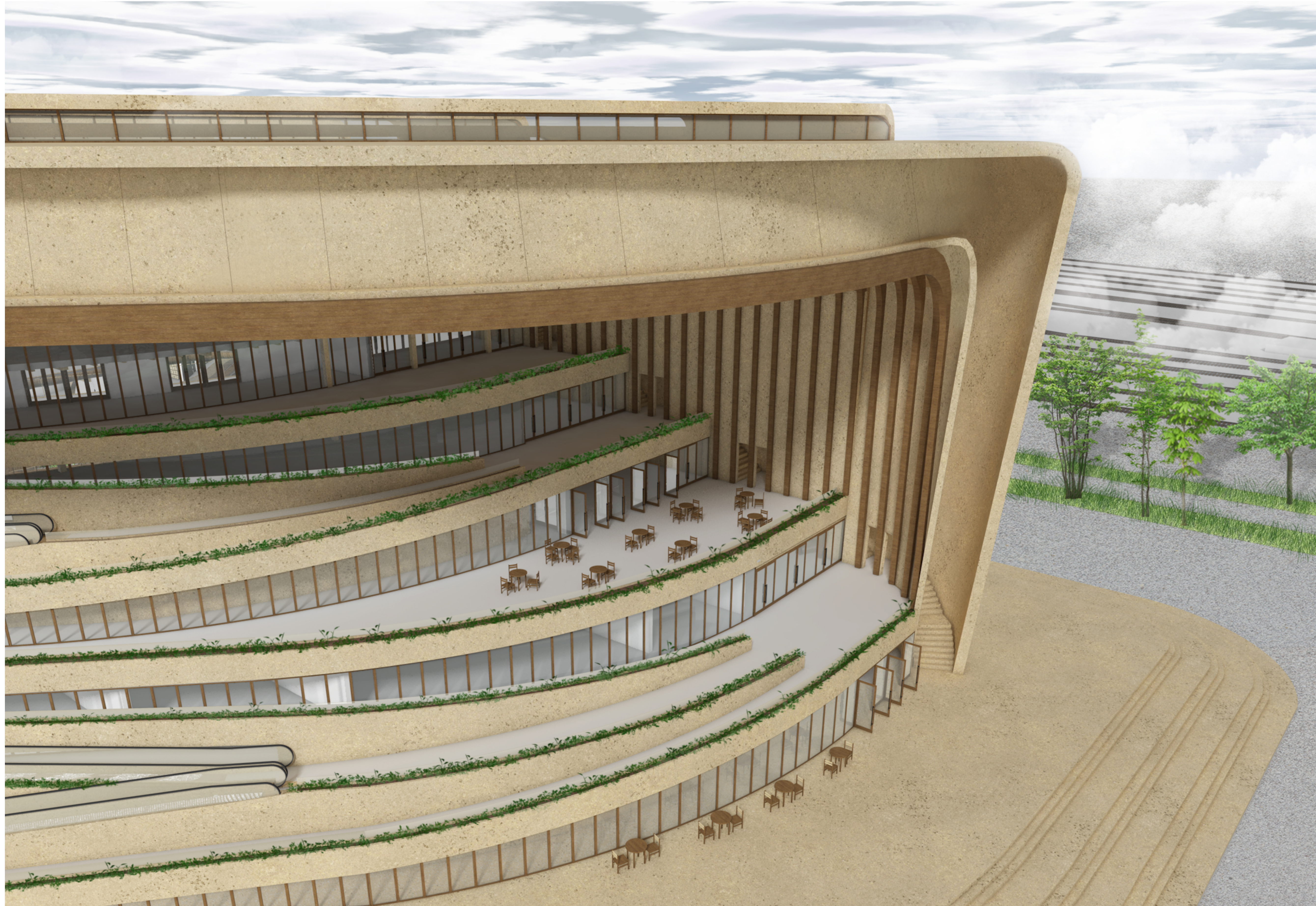
Greenery



Displayed  
Merchandise



# Waiting line | Terrace



Greenery

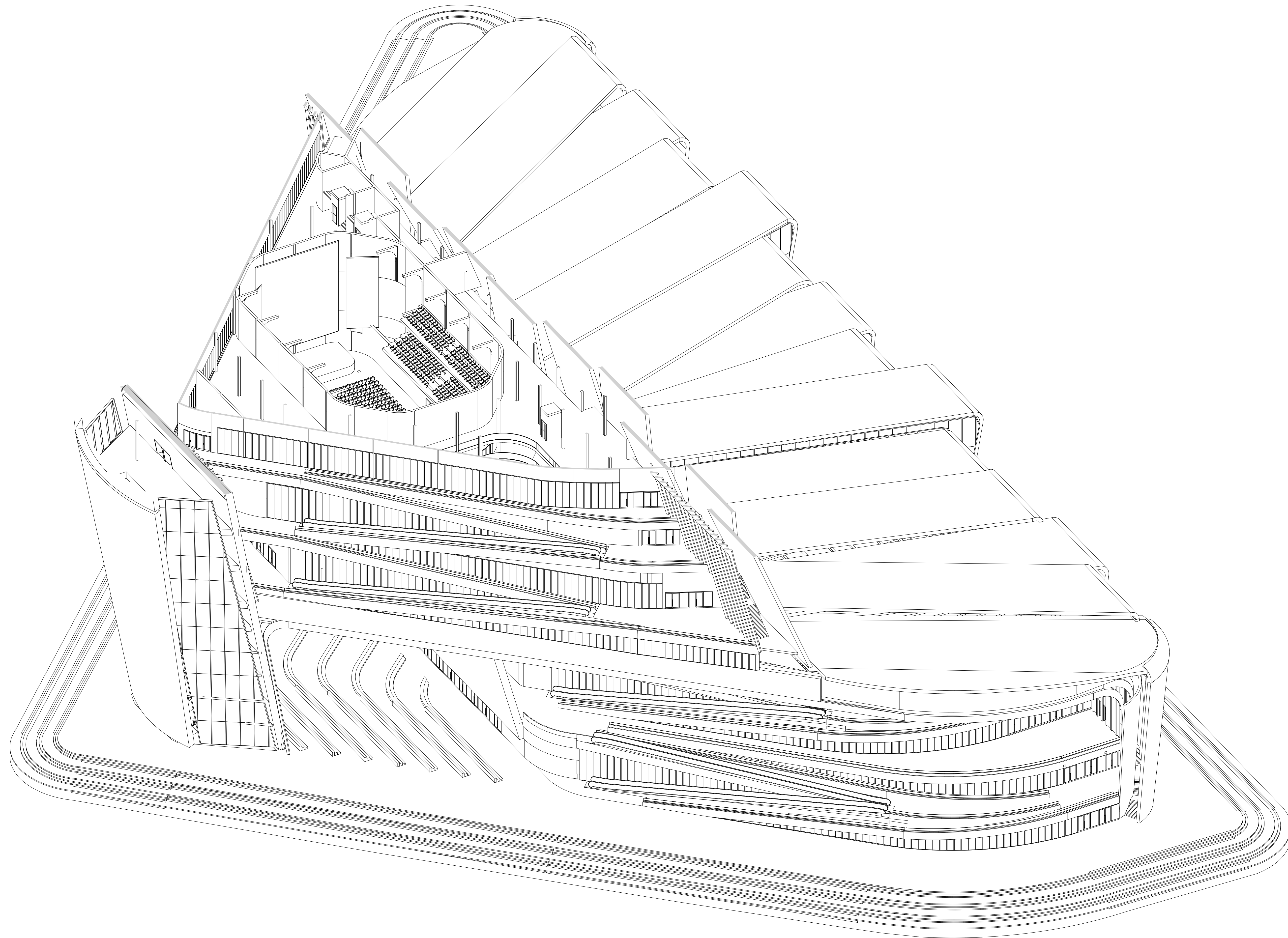


Café + Terrace  
(if there is no concert)



# Waiting line

Music Building

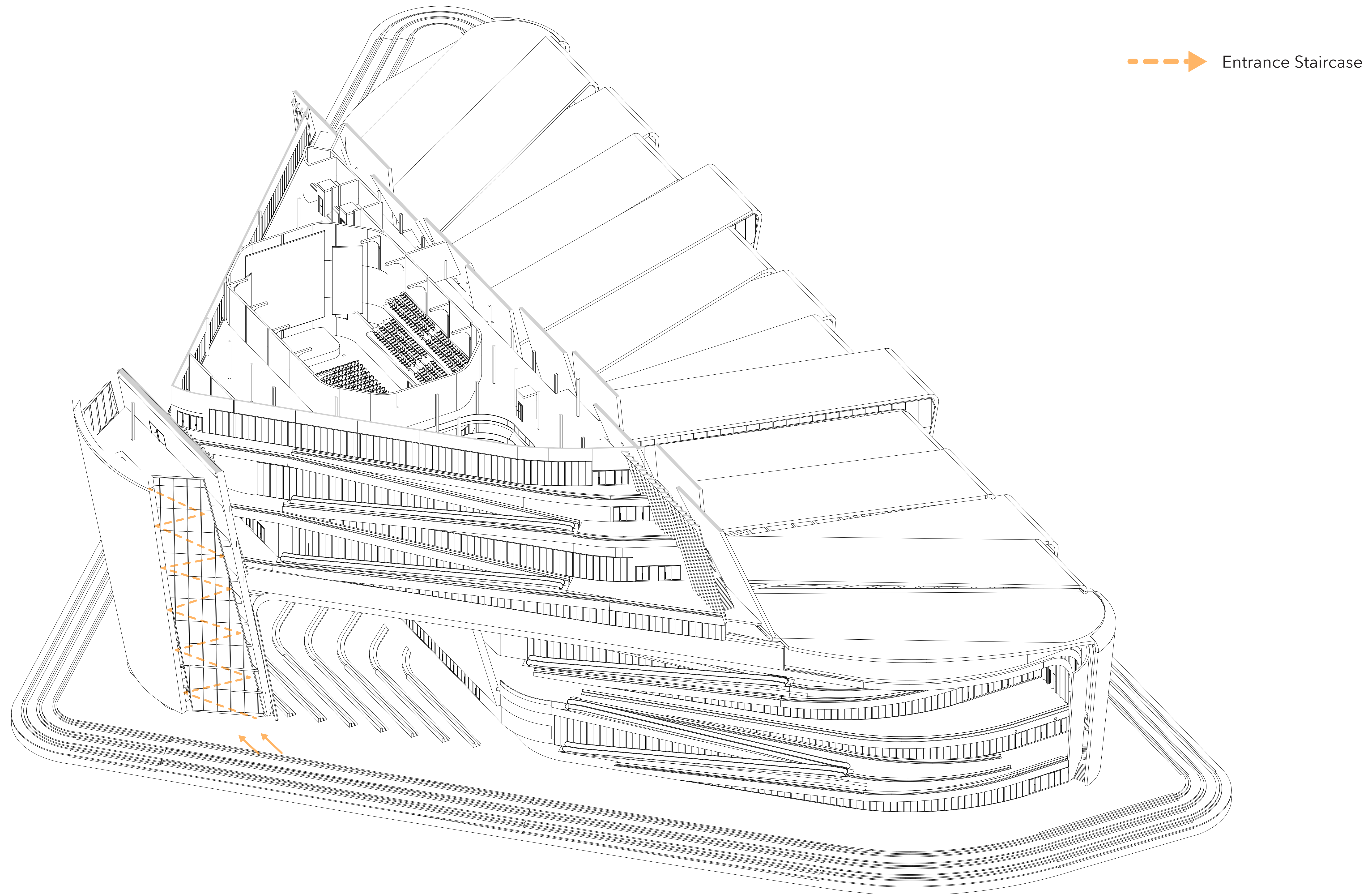




# Waiting line

Music Building

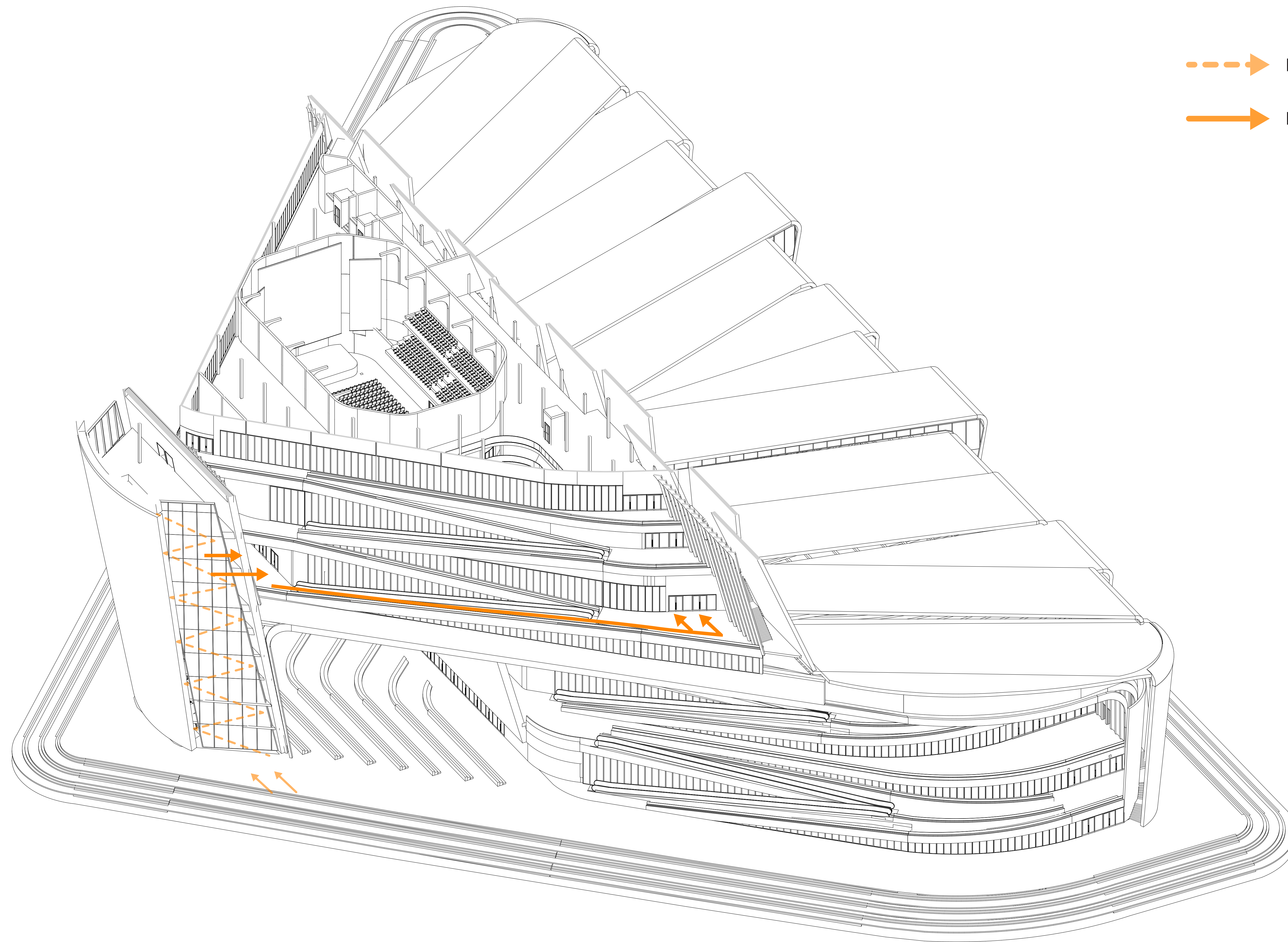
---





# Waiting line

Music Building



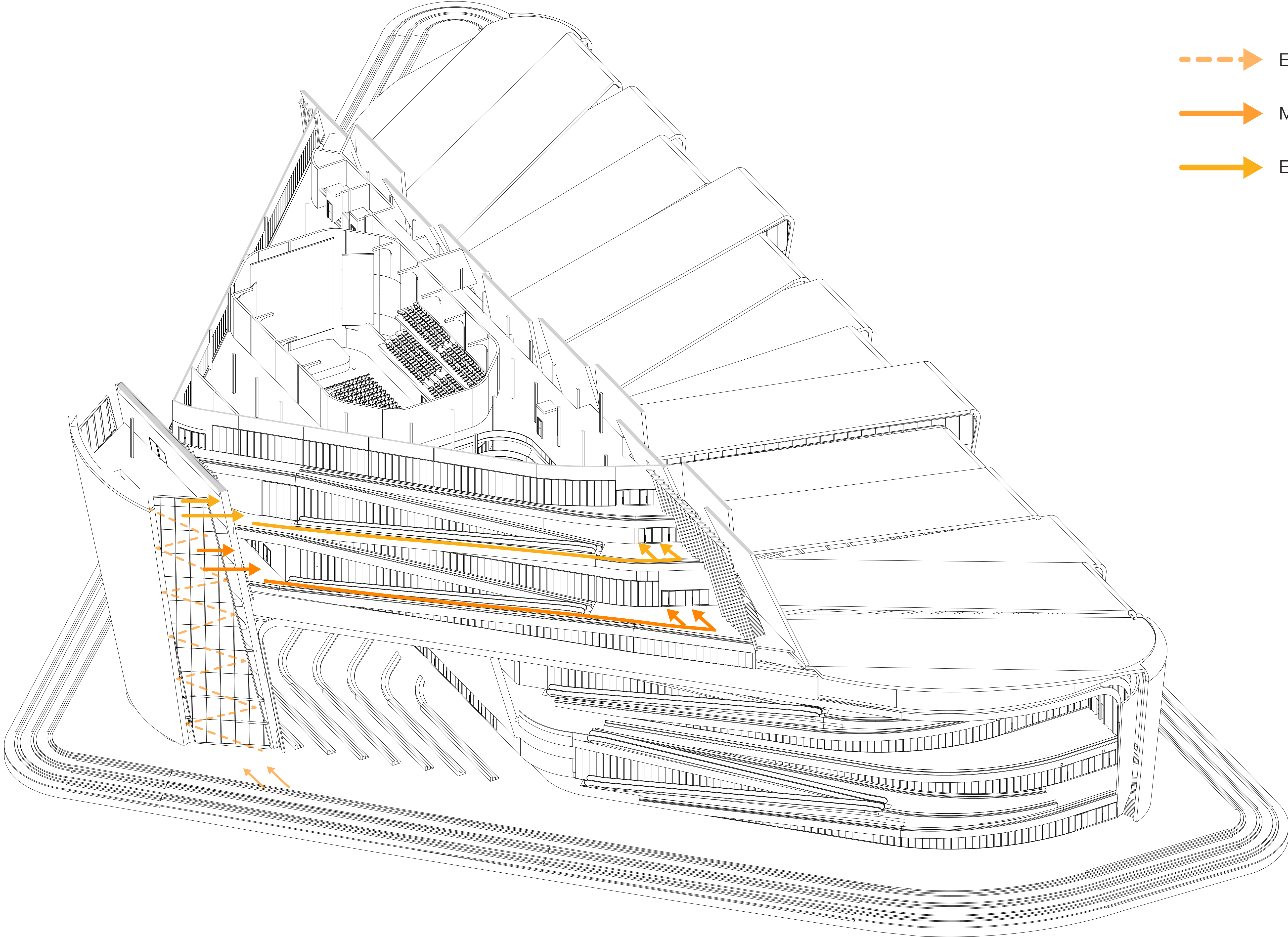
--- Entrance Staircase

→ Main Entrance



# Waiting line

Music Building



--- Entrance Staircase

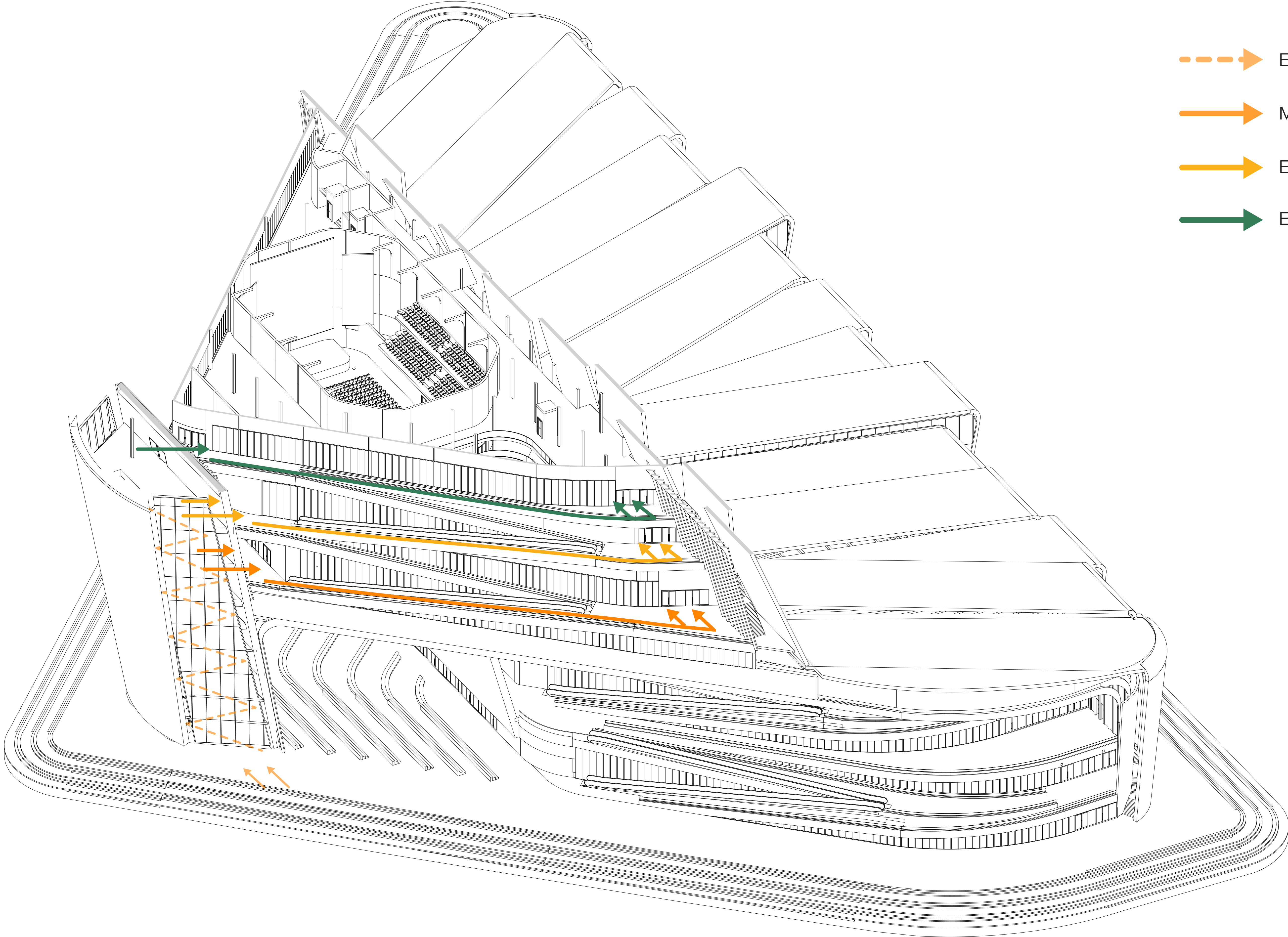
— Main Entrance

— Entrance Balcony 1



# Waiting line

Music Building



--- Entrance Staircase

— Main Entrance

— Entrance Balcony 1

— Entrance Balcony 2



# Waiting line | View

---

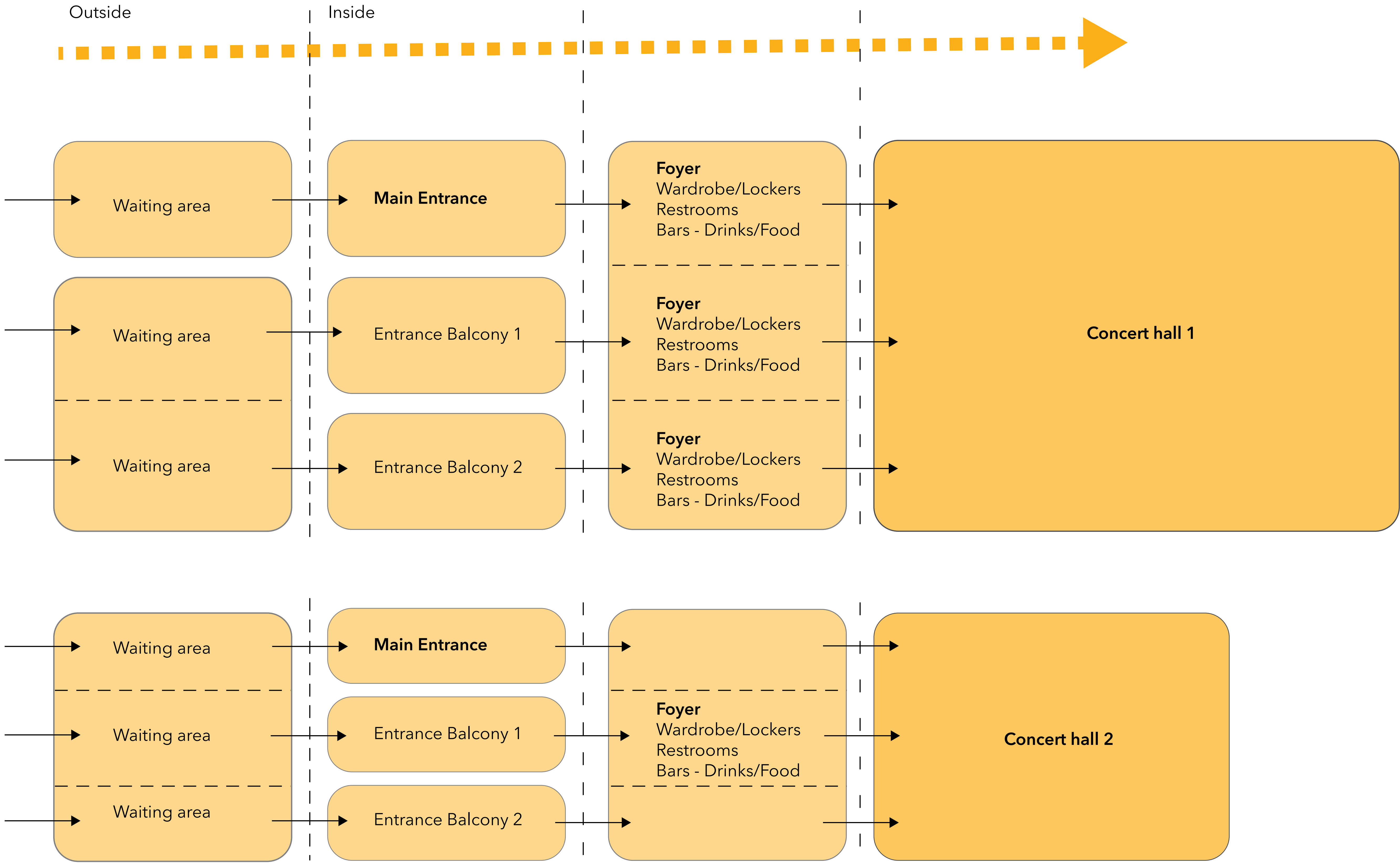


Greenery



Routing

Music Building

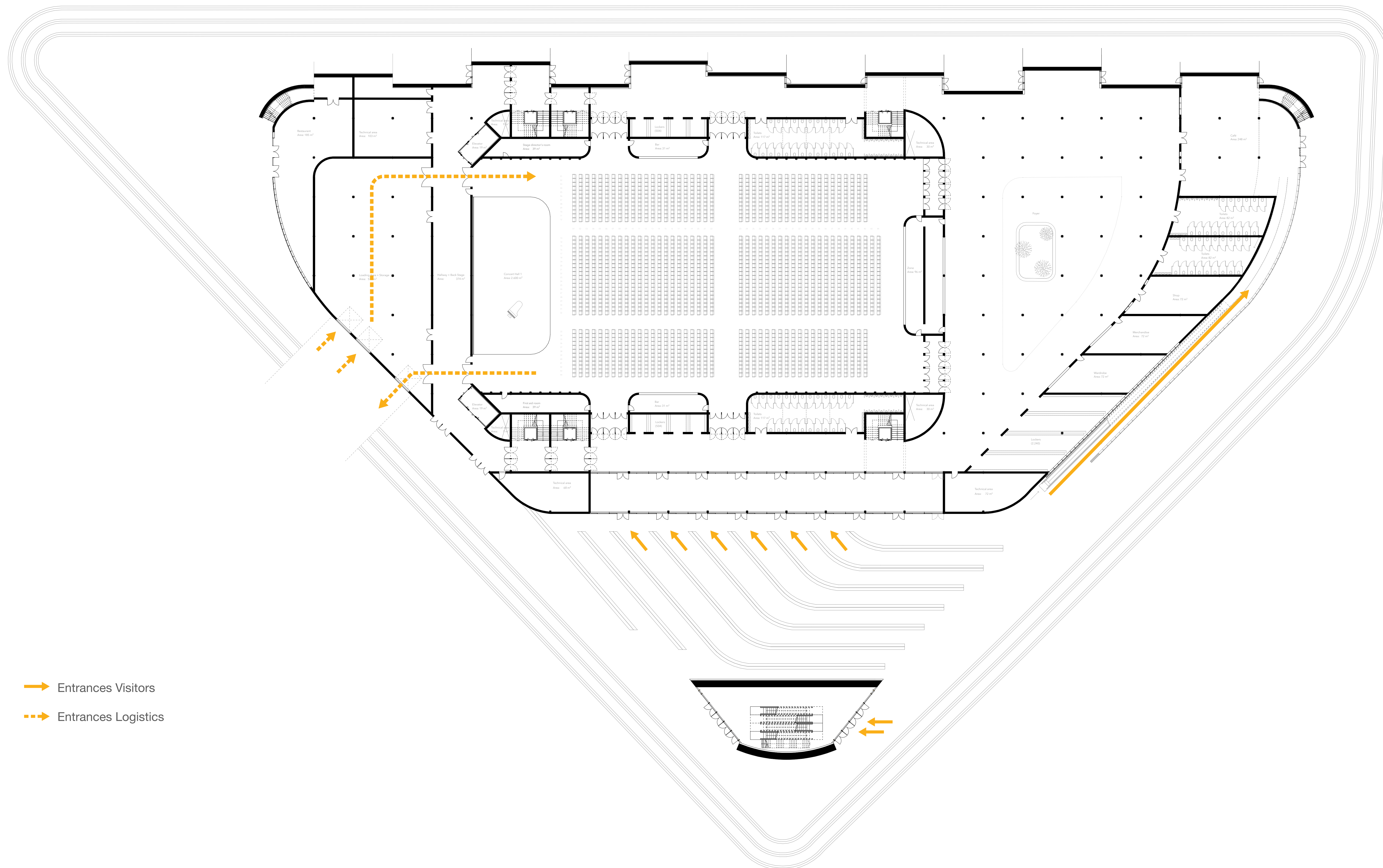




## 00 Ground floor | Music Building

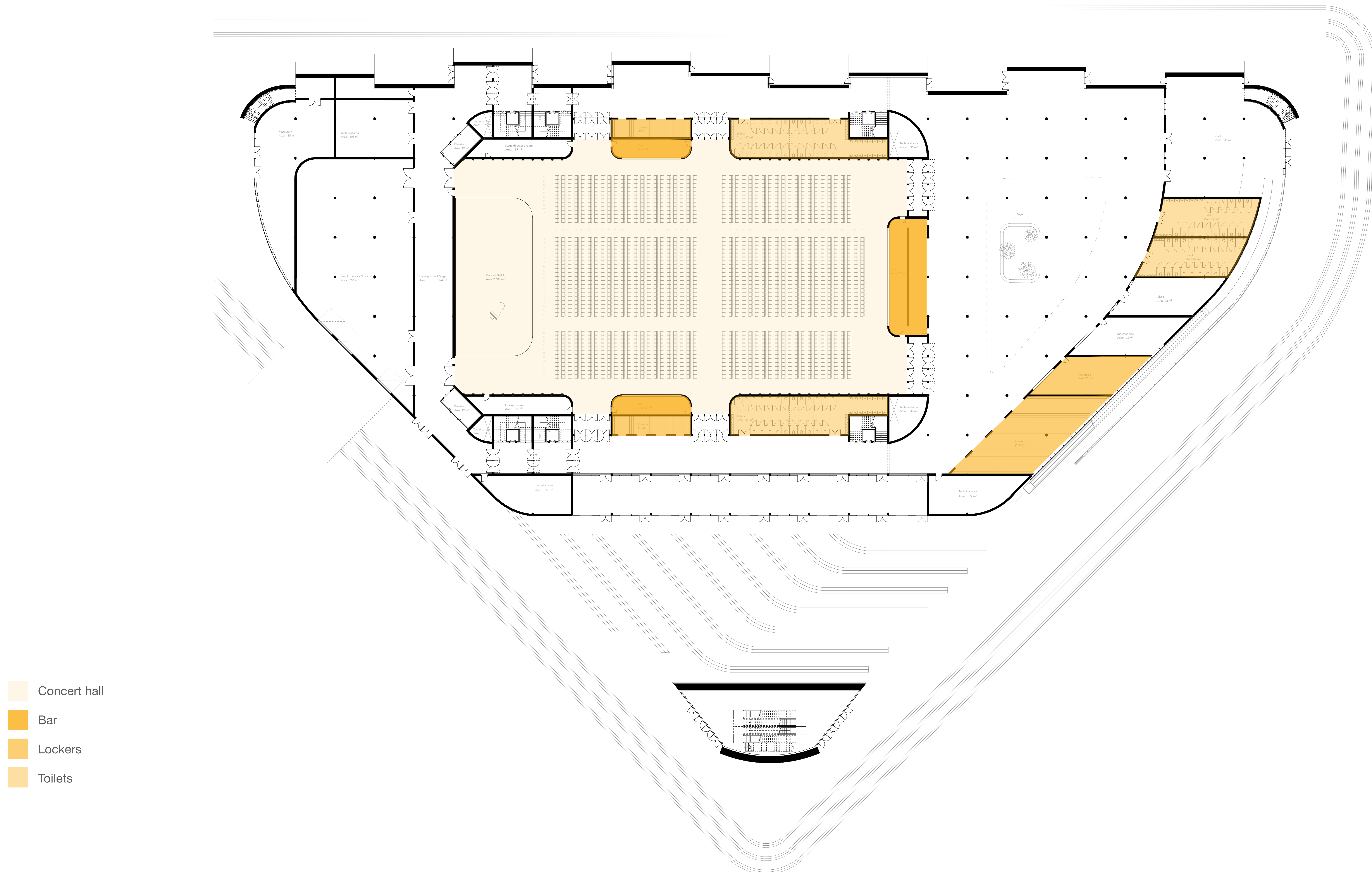


## 00 Ground floor | Entrances



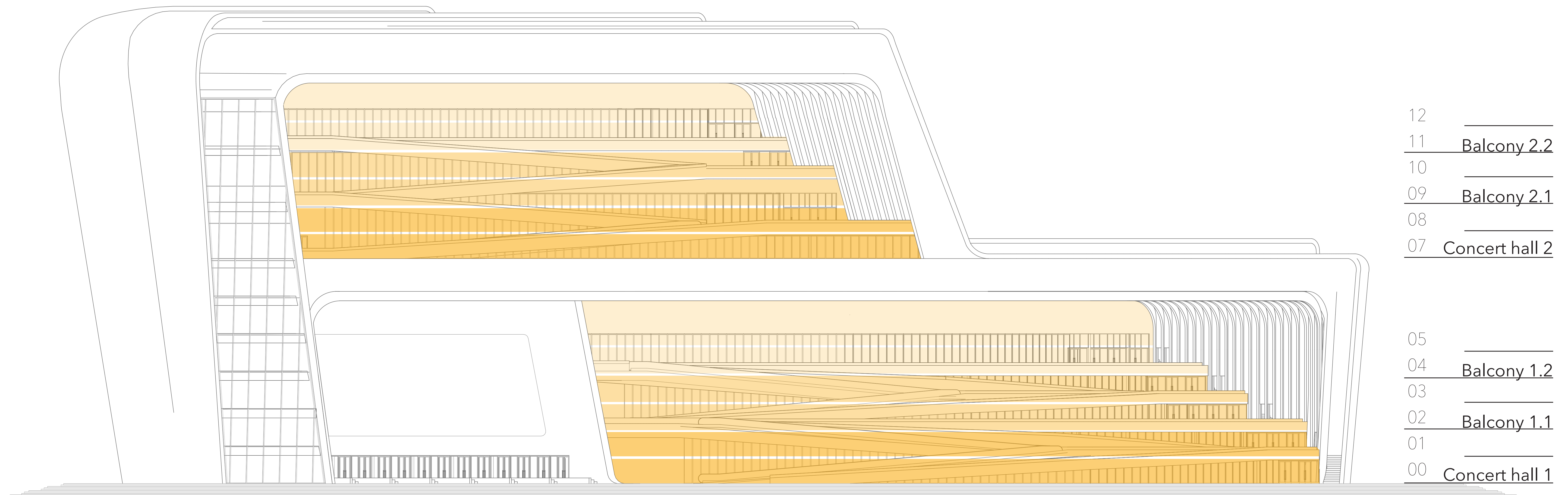


## 00 Ground floor | Program





# Program | Music Building

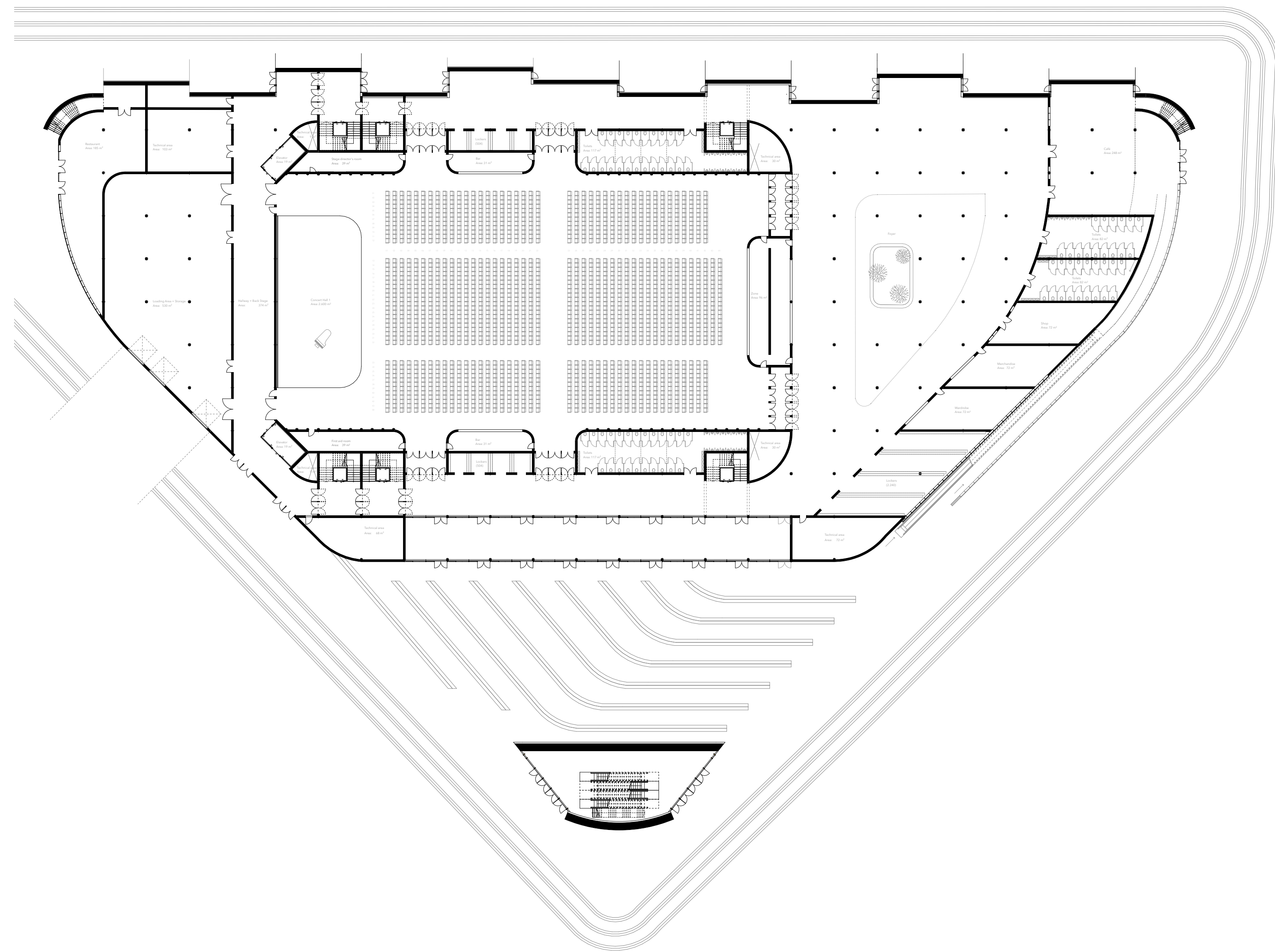


- Facilities Balcony 2 (cloakroom/lockers, toilets, bars, etc. )
- Facilities Balcony 1 (cloakroom/lockers, toilets, bars, etc. )
- Facilities Concert hall (cloakroom/lockers, toilets, bars, etc. )



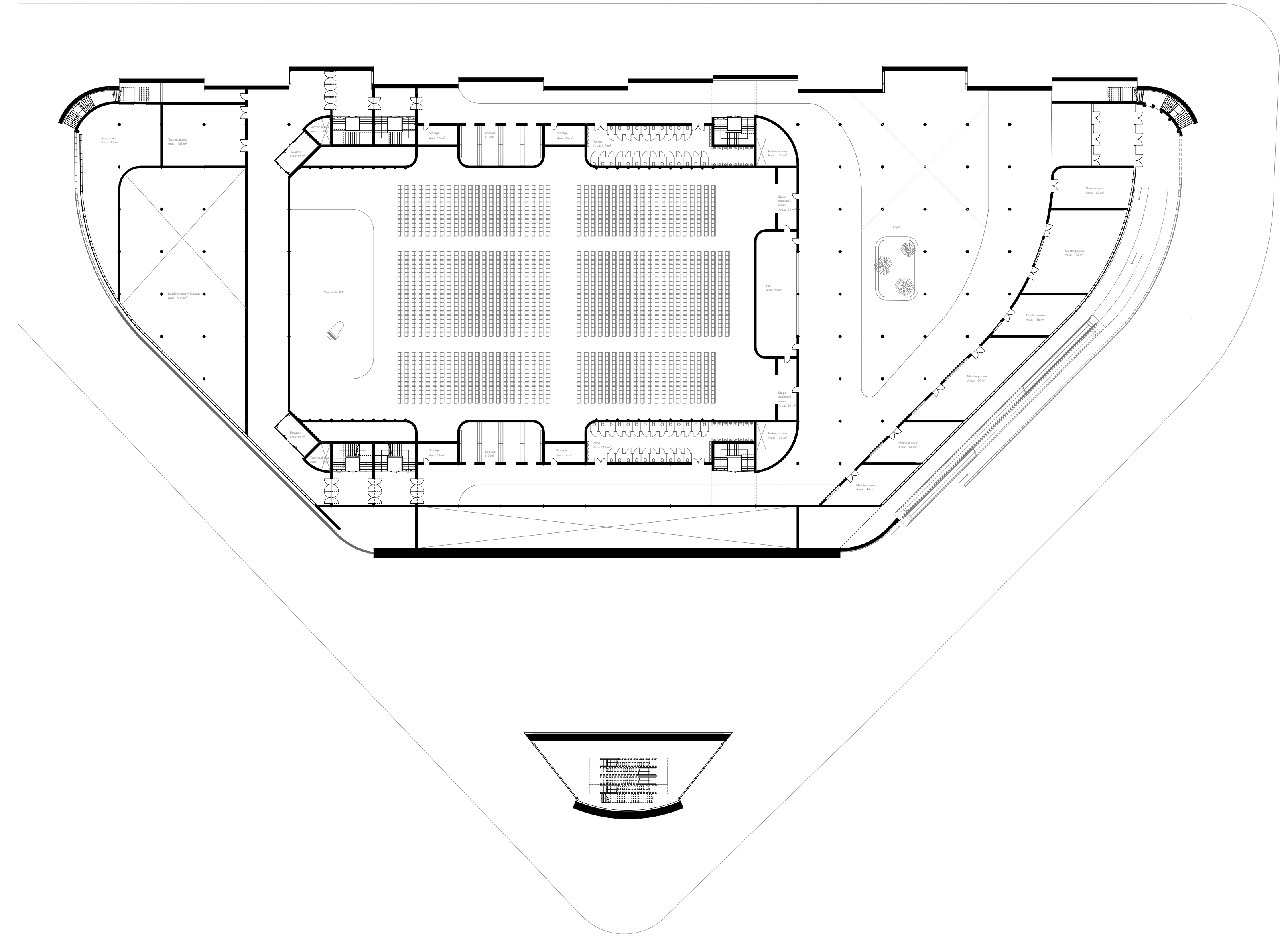
# 00 Ground floor

Music Building



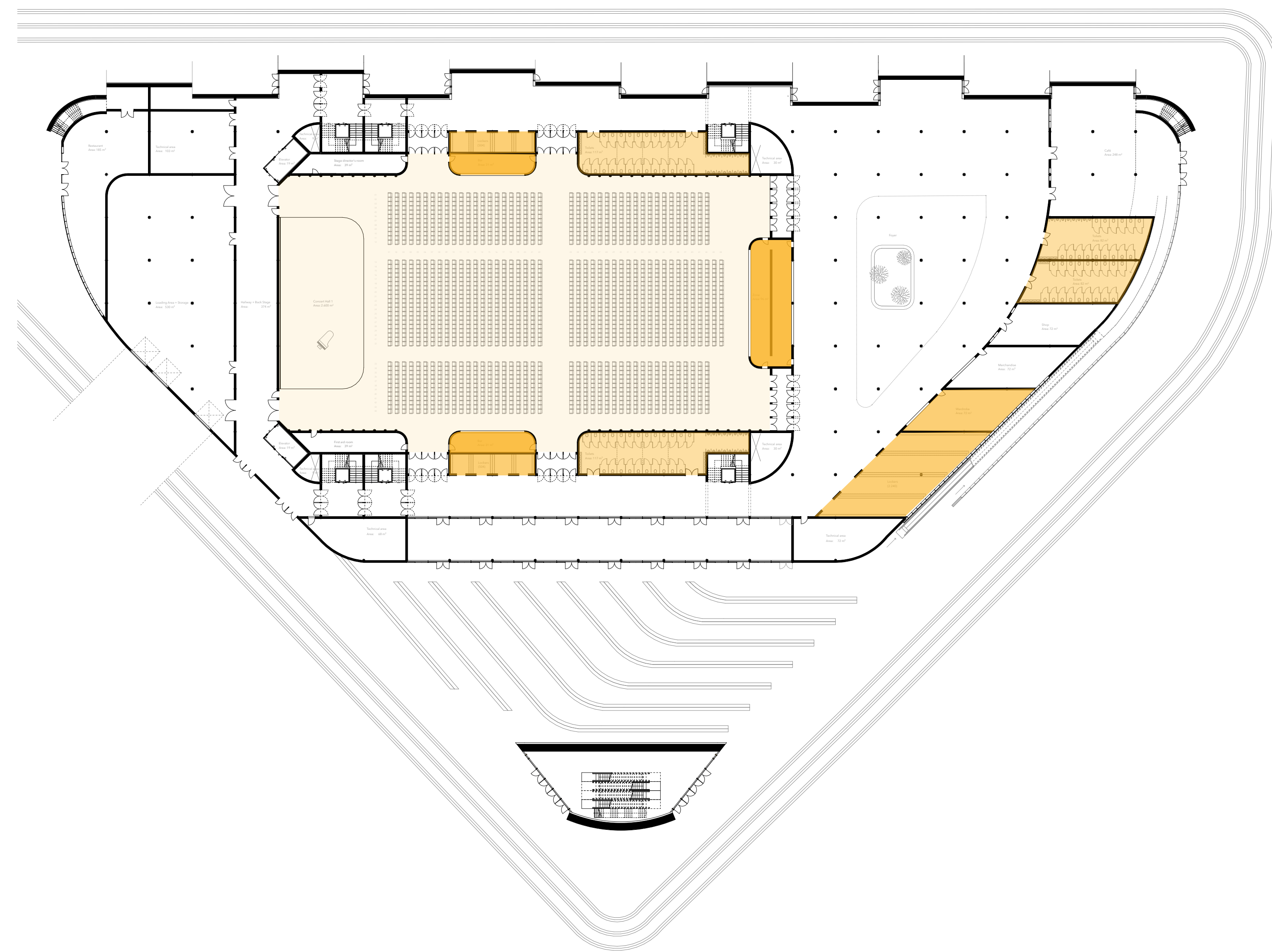
# 01 First floor

Music Building



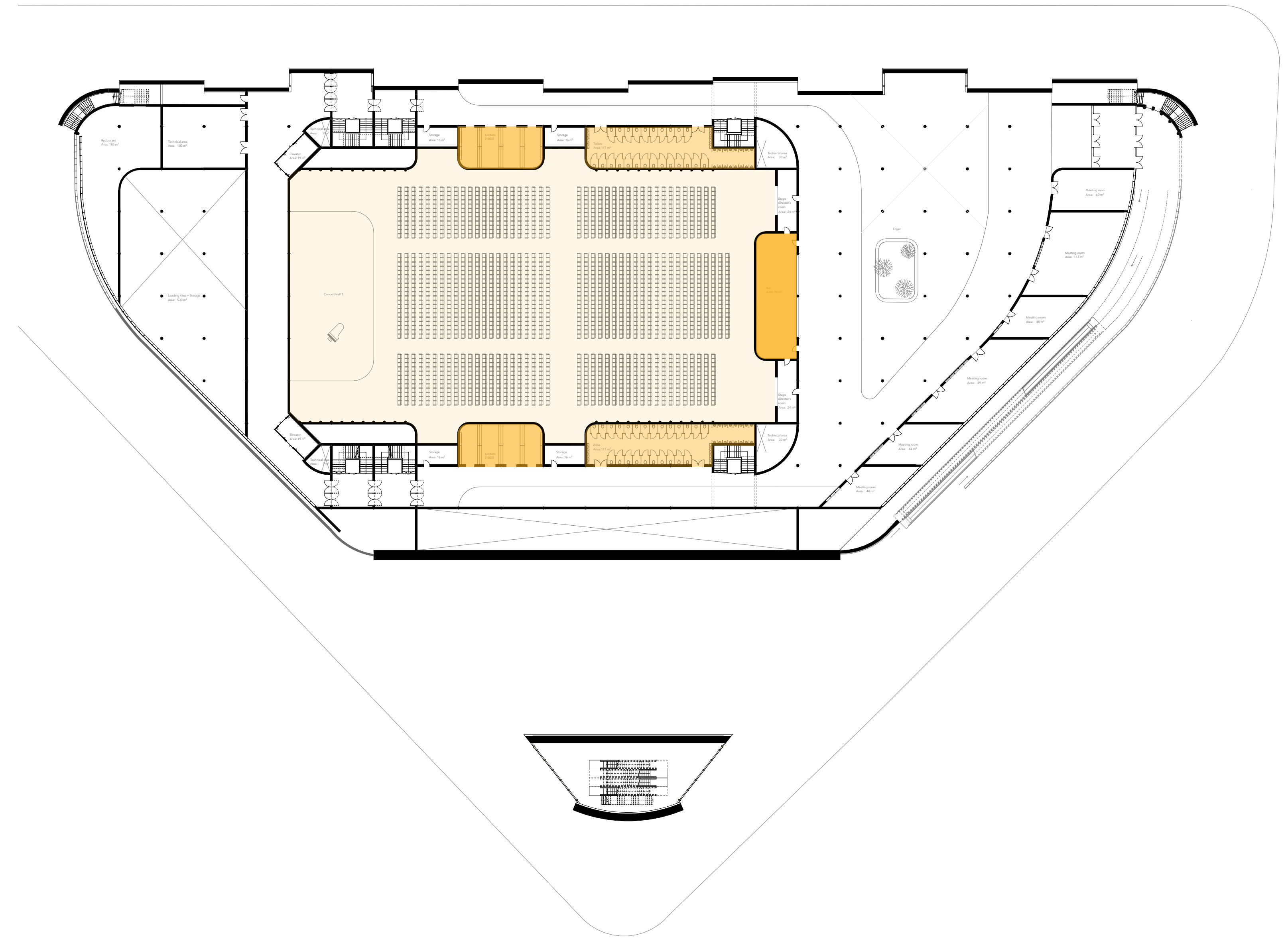


# 00 Ground floor | Program



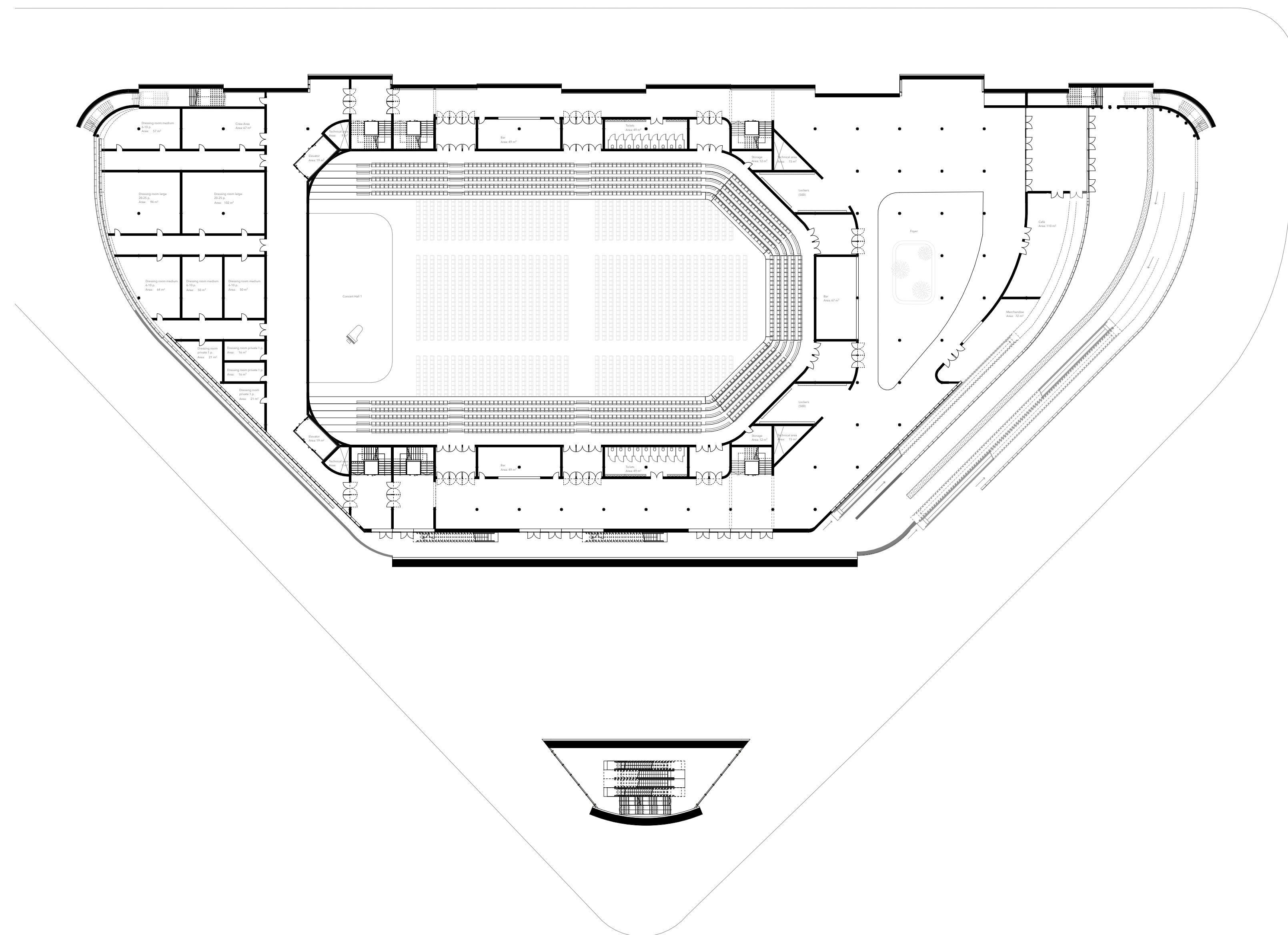
- Concert hall
- Bar
- Lockers
- Toilets

# 01 First floor | Program

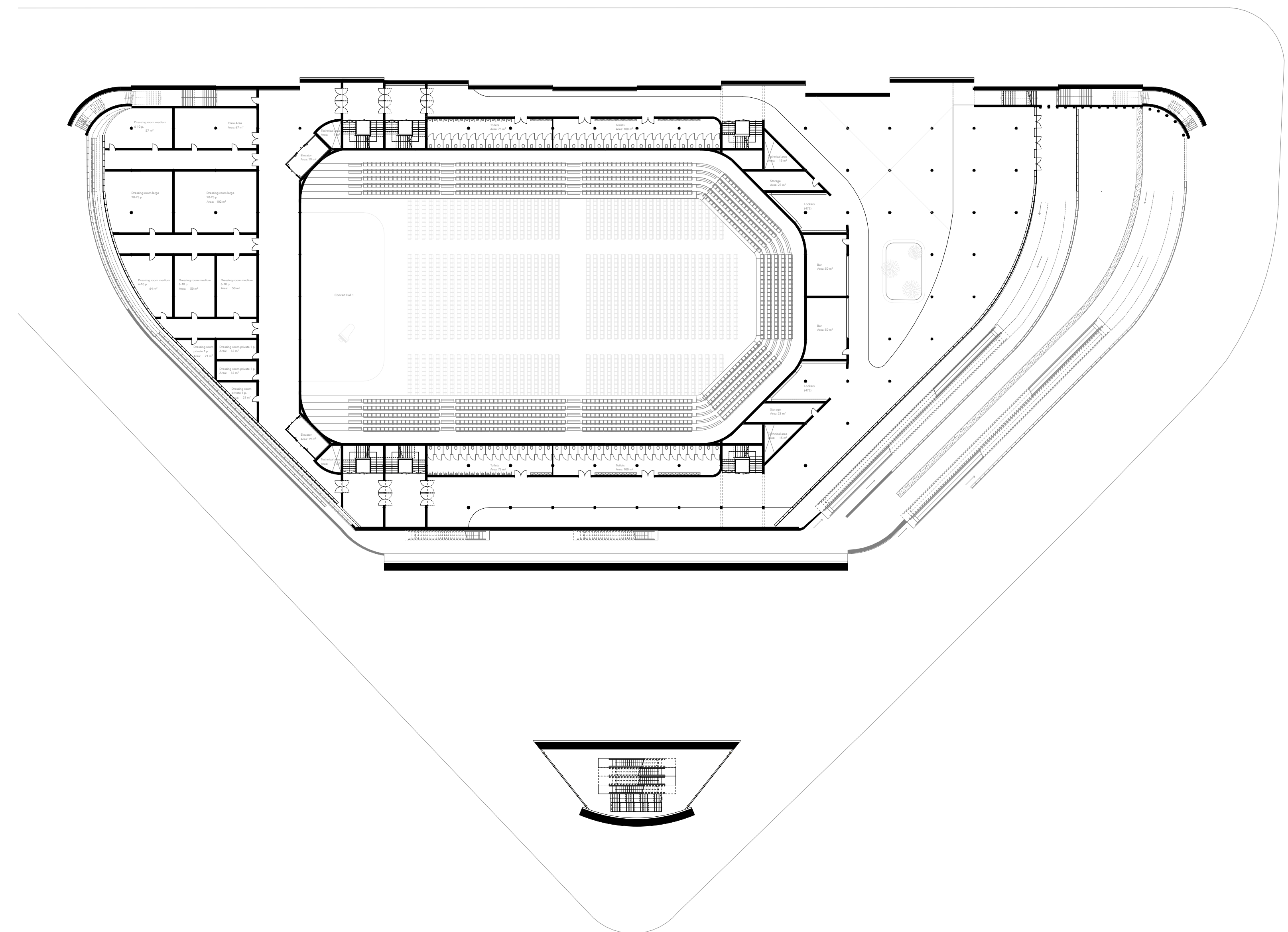




## 02 Second floor | Music Building

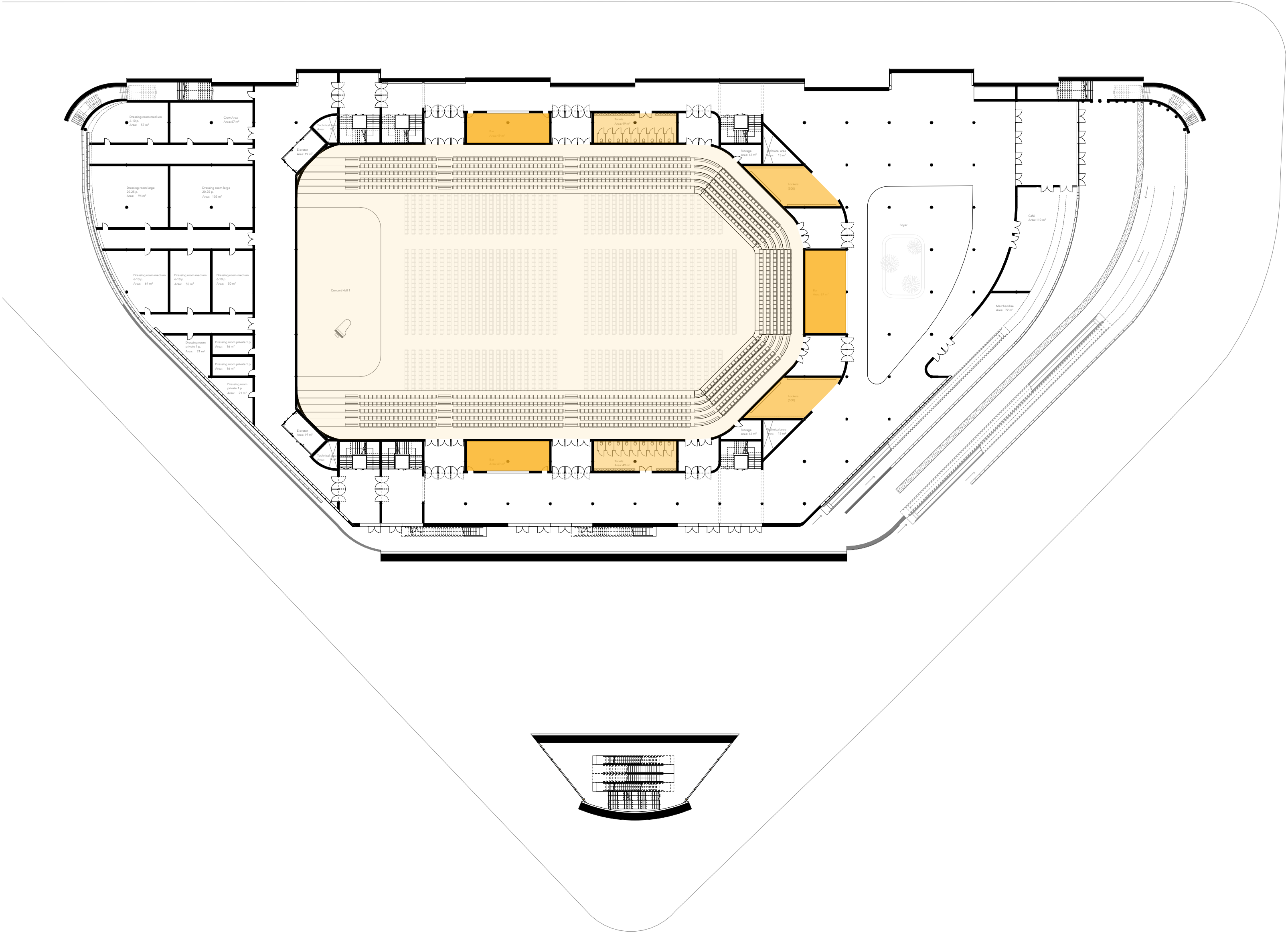


## 03 Third floor | Music Building



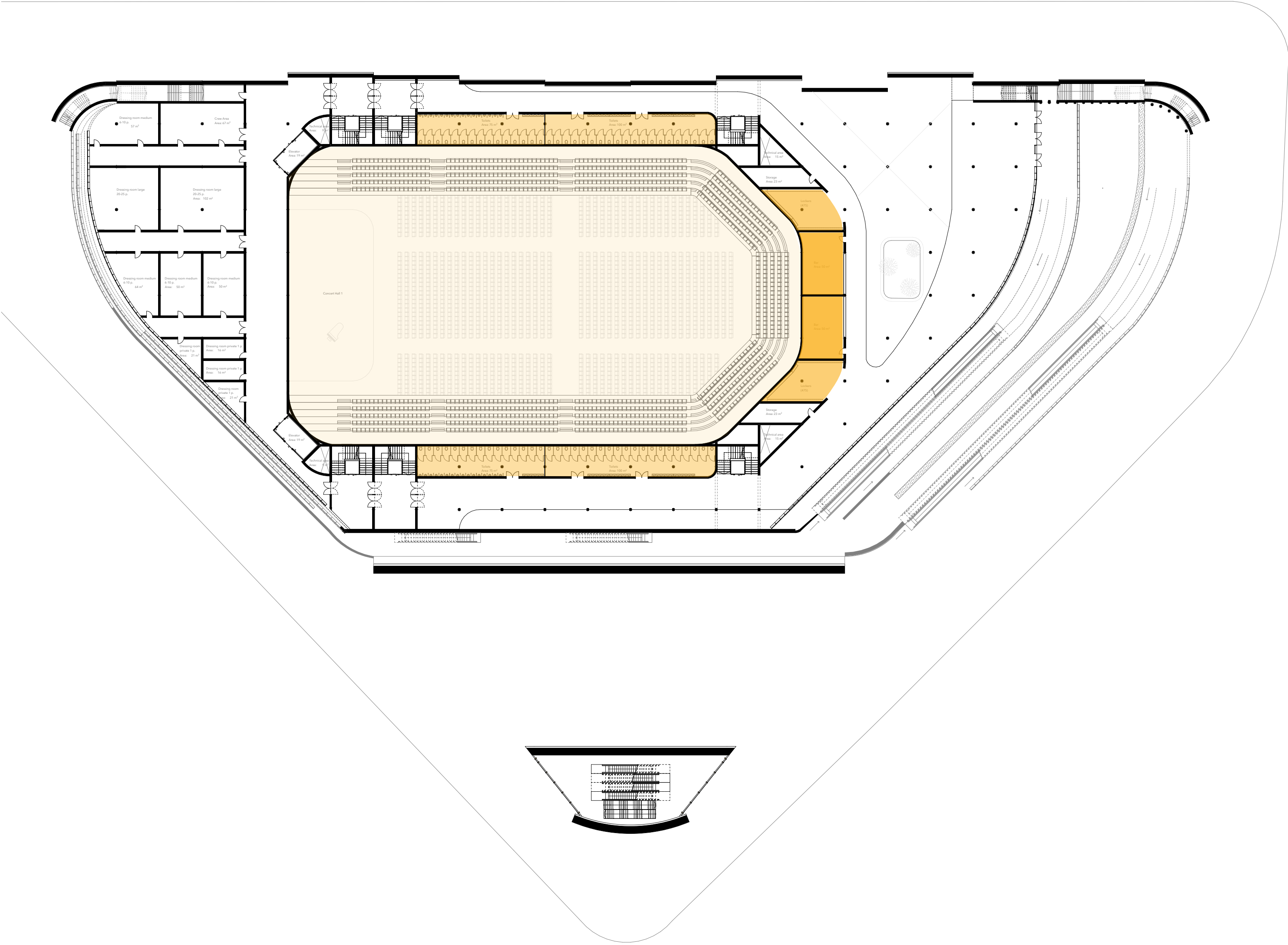


# 02 Second floor | Program



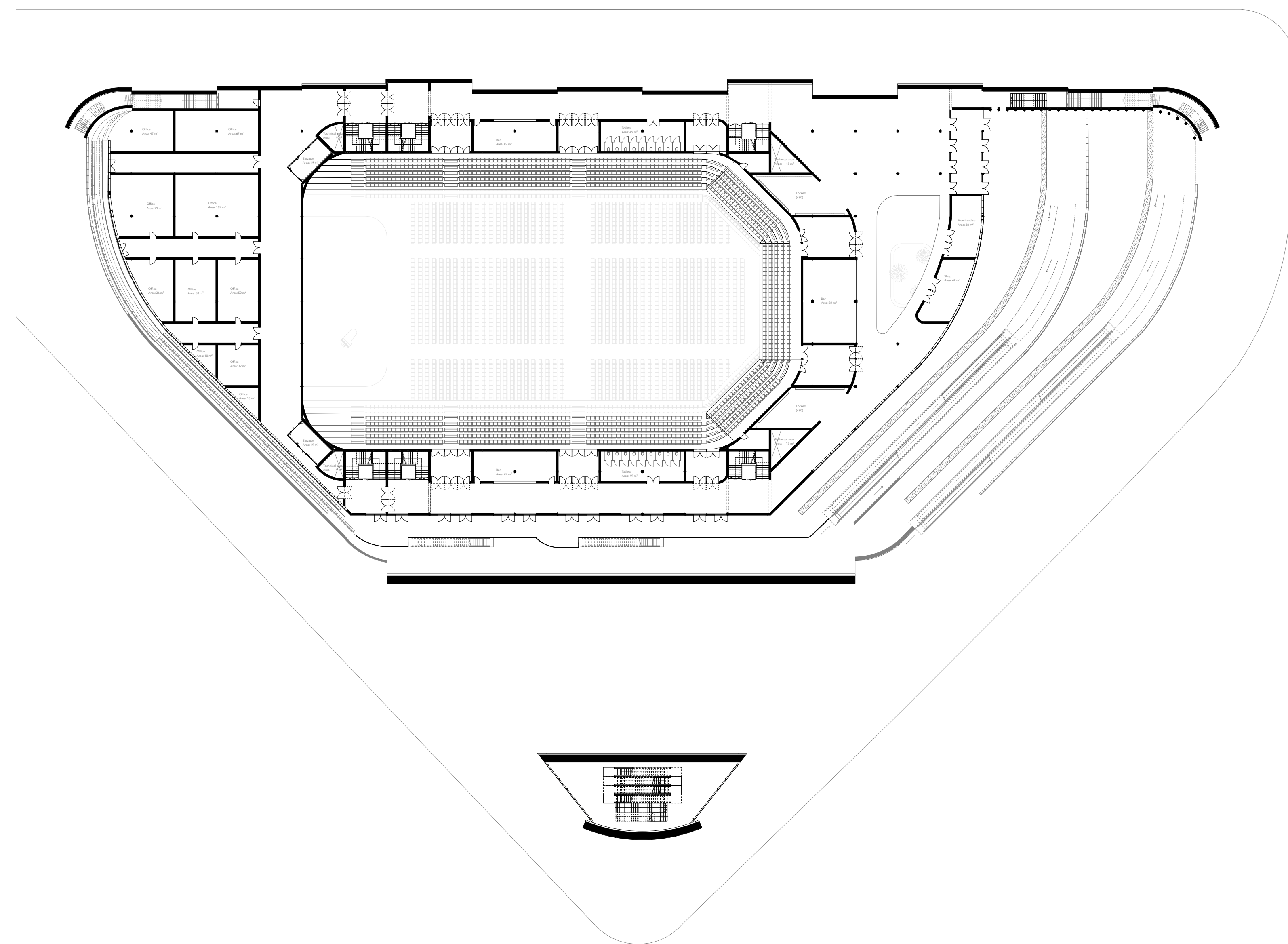
- Concert hall
- Bar
- Lockers
- Toilets

# 03 Third floor | Program

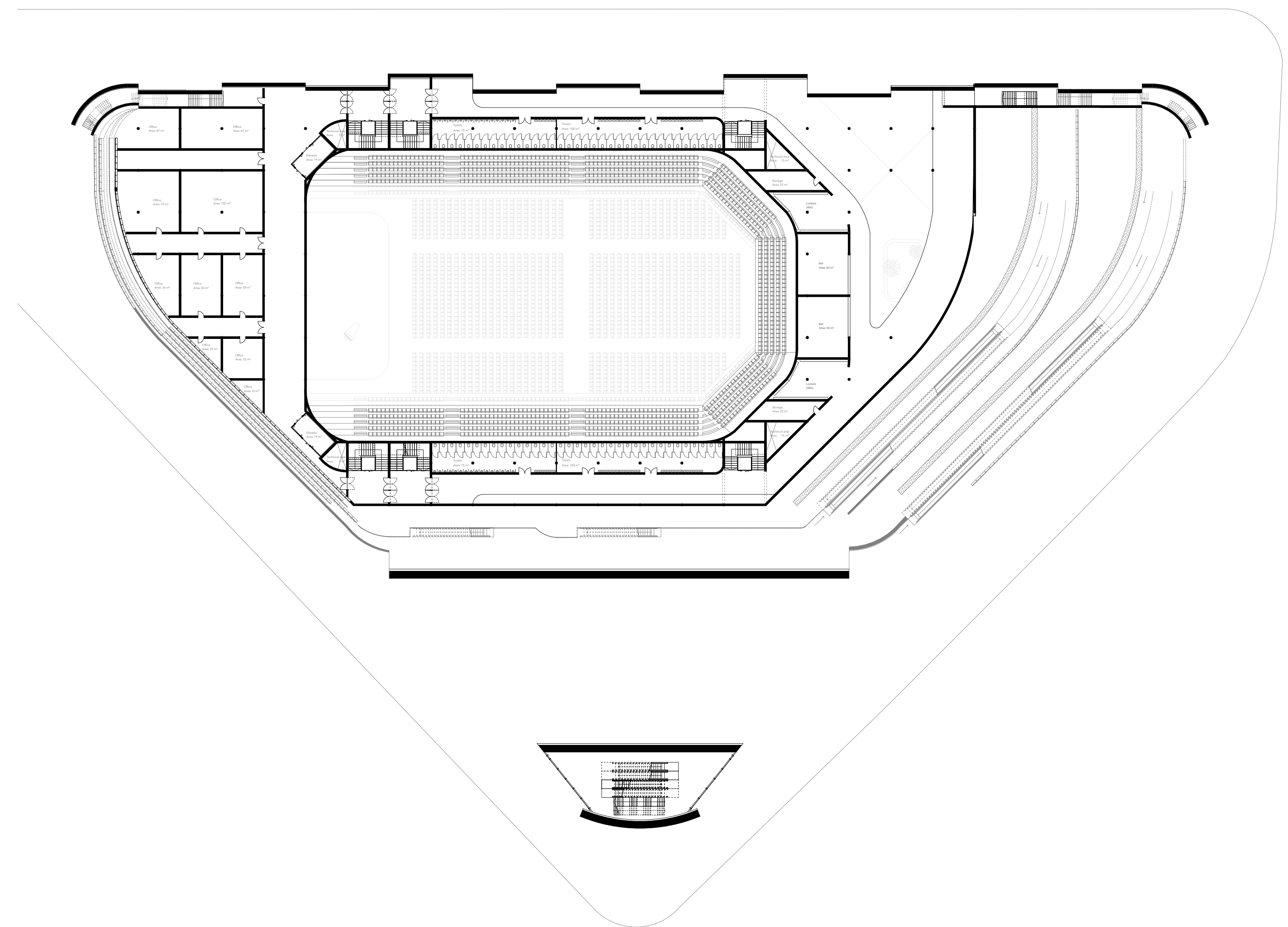




## 04 Fourth floor | Music Building

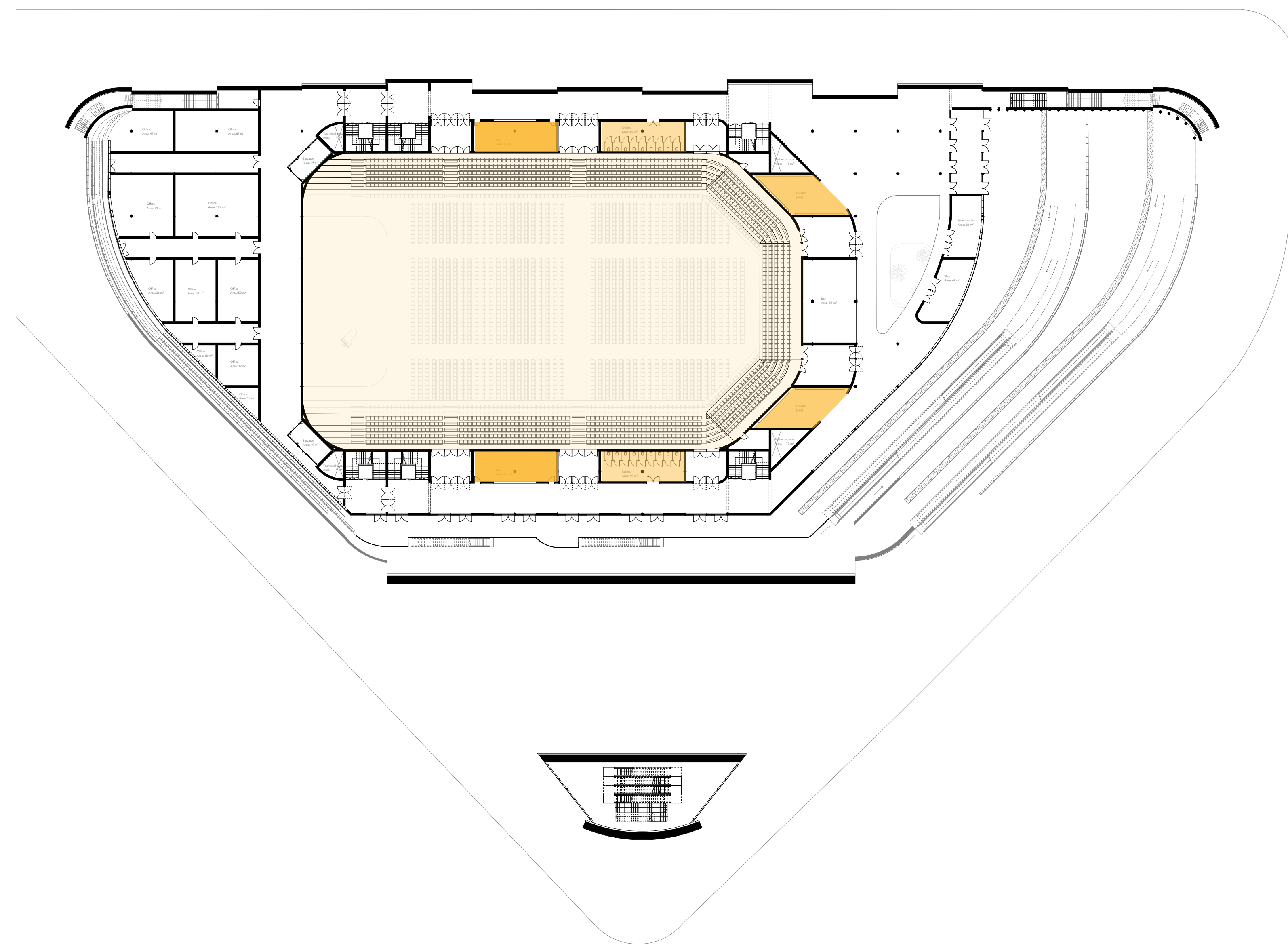


## 05 Fifth floor | Music Building



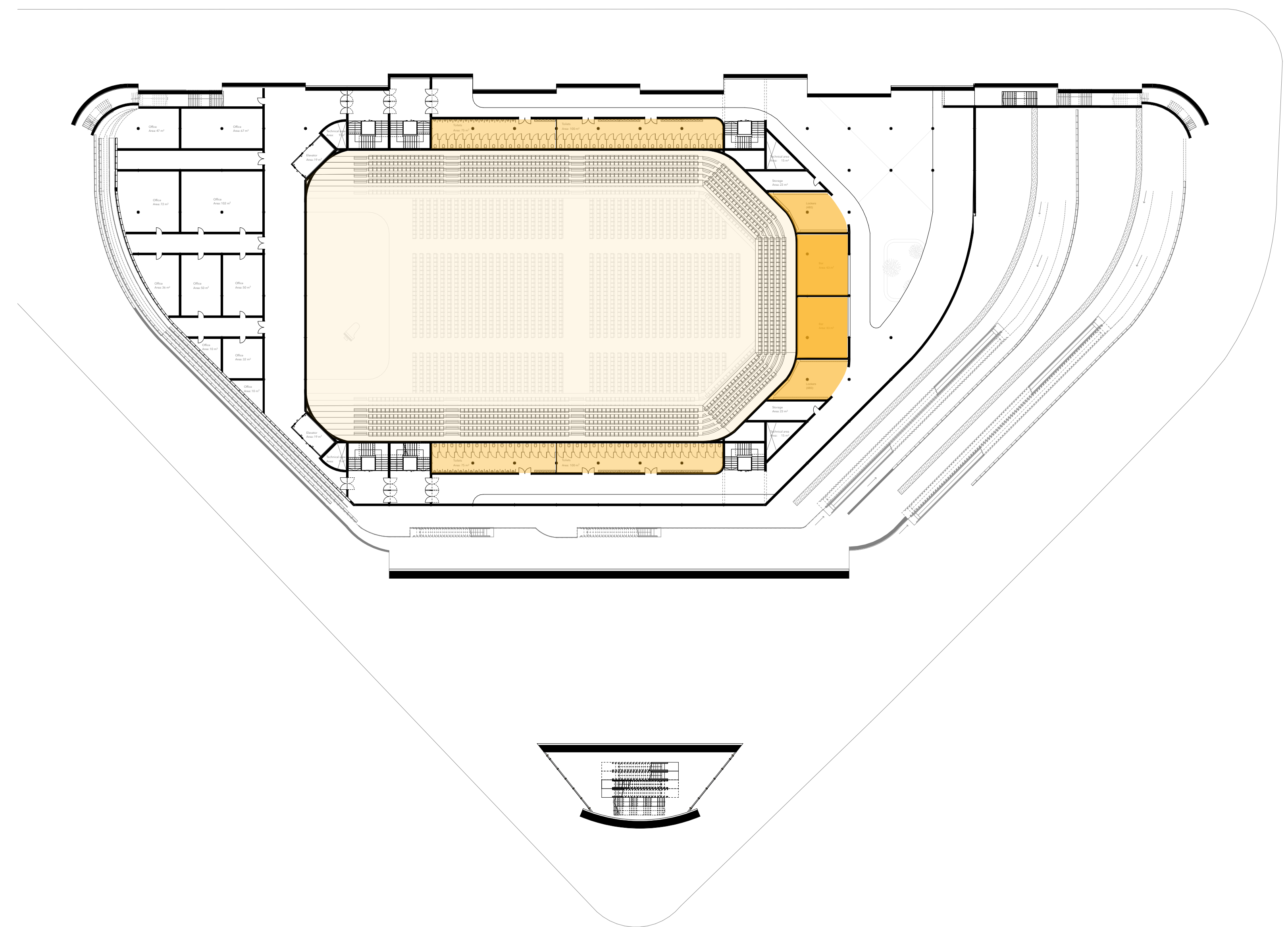


# 04 Fourth floor | Program



- Concert hall
- Bar
- Lockers
- Toilets

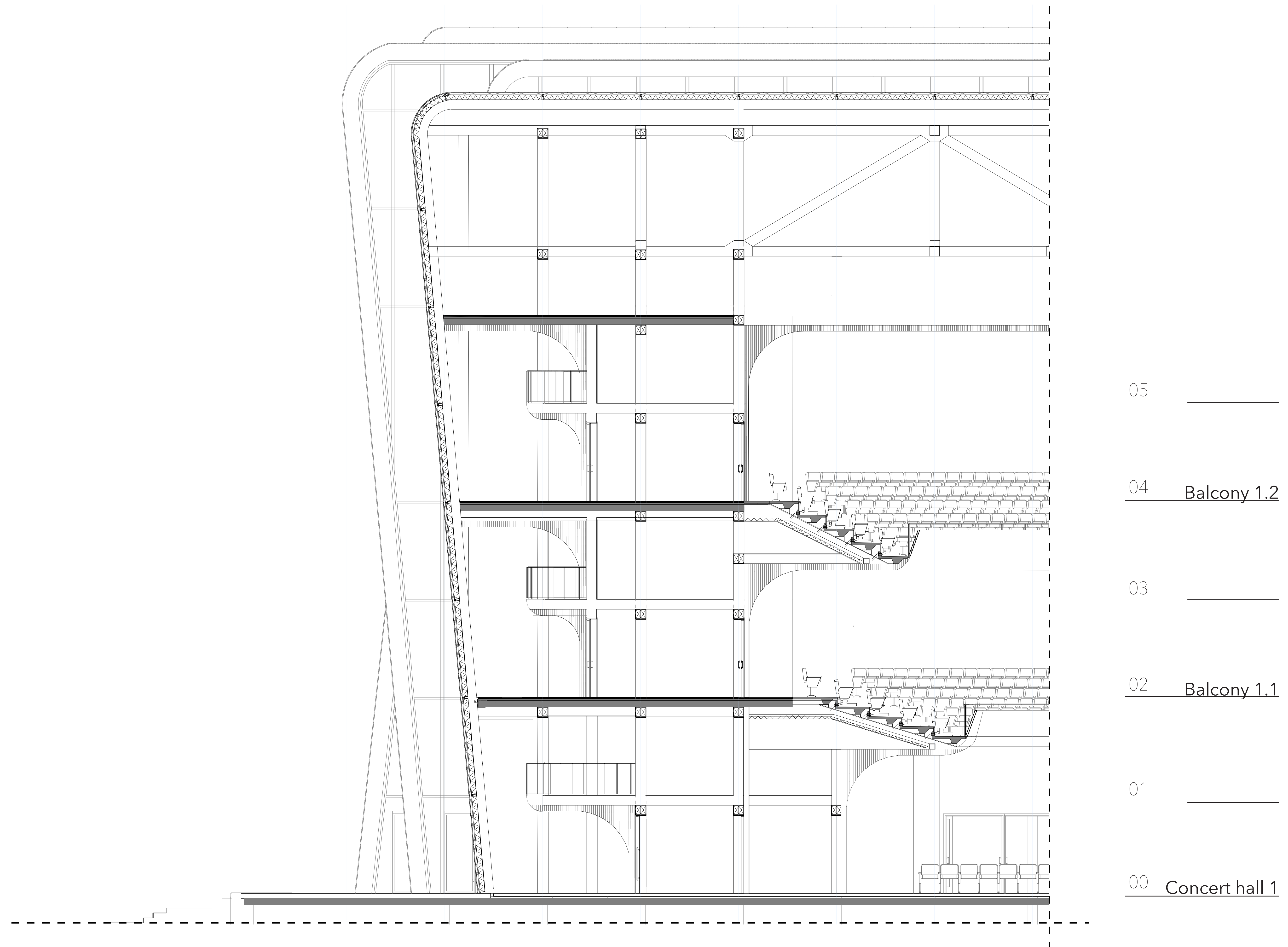
# 05 Fifth floor | Program





# Program

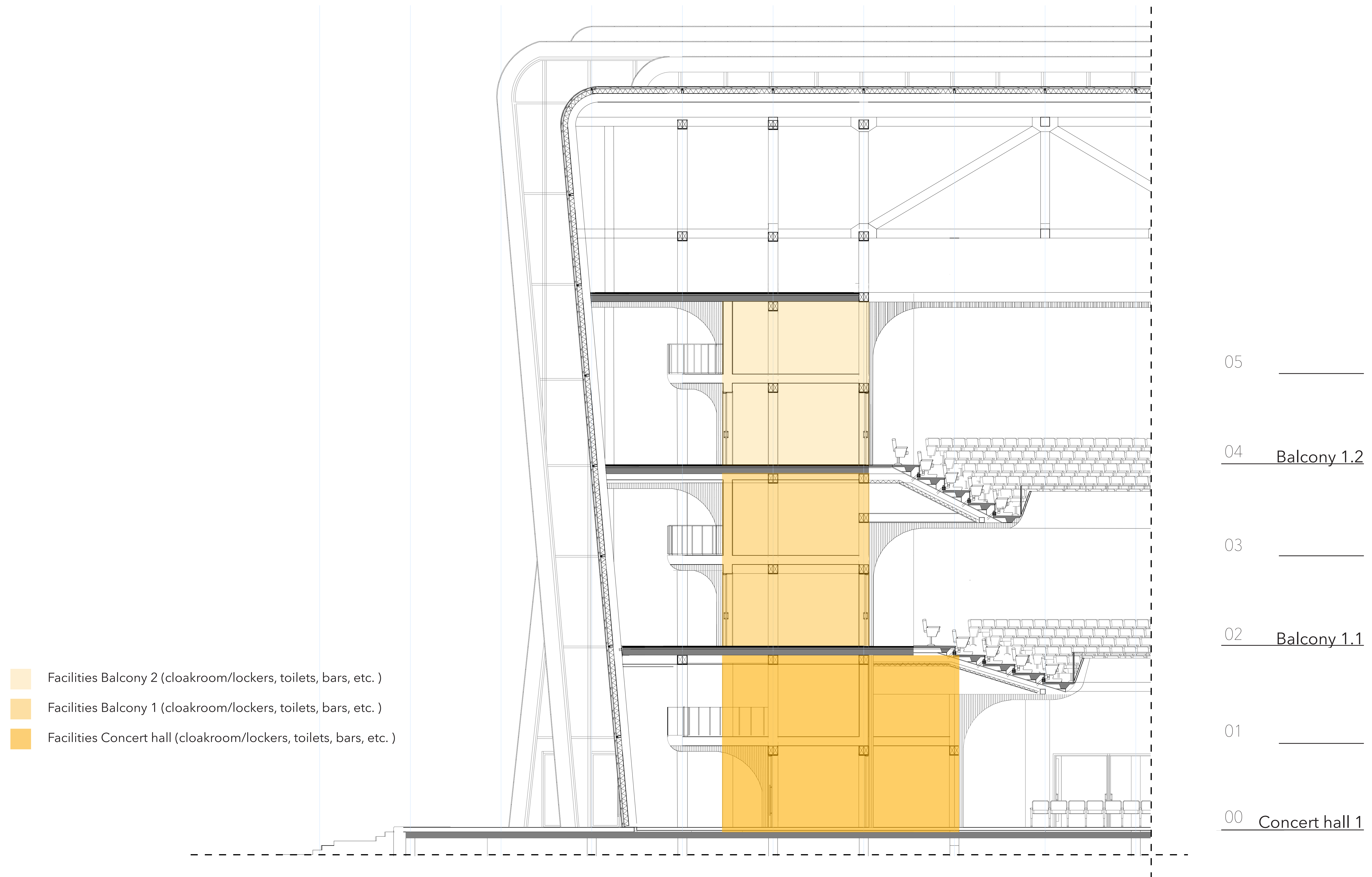
Music Building





# Program

Music Building

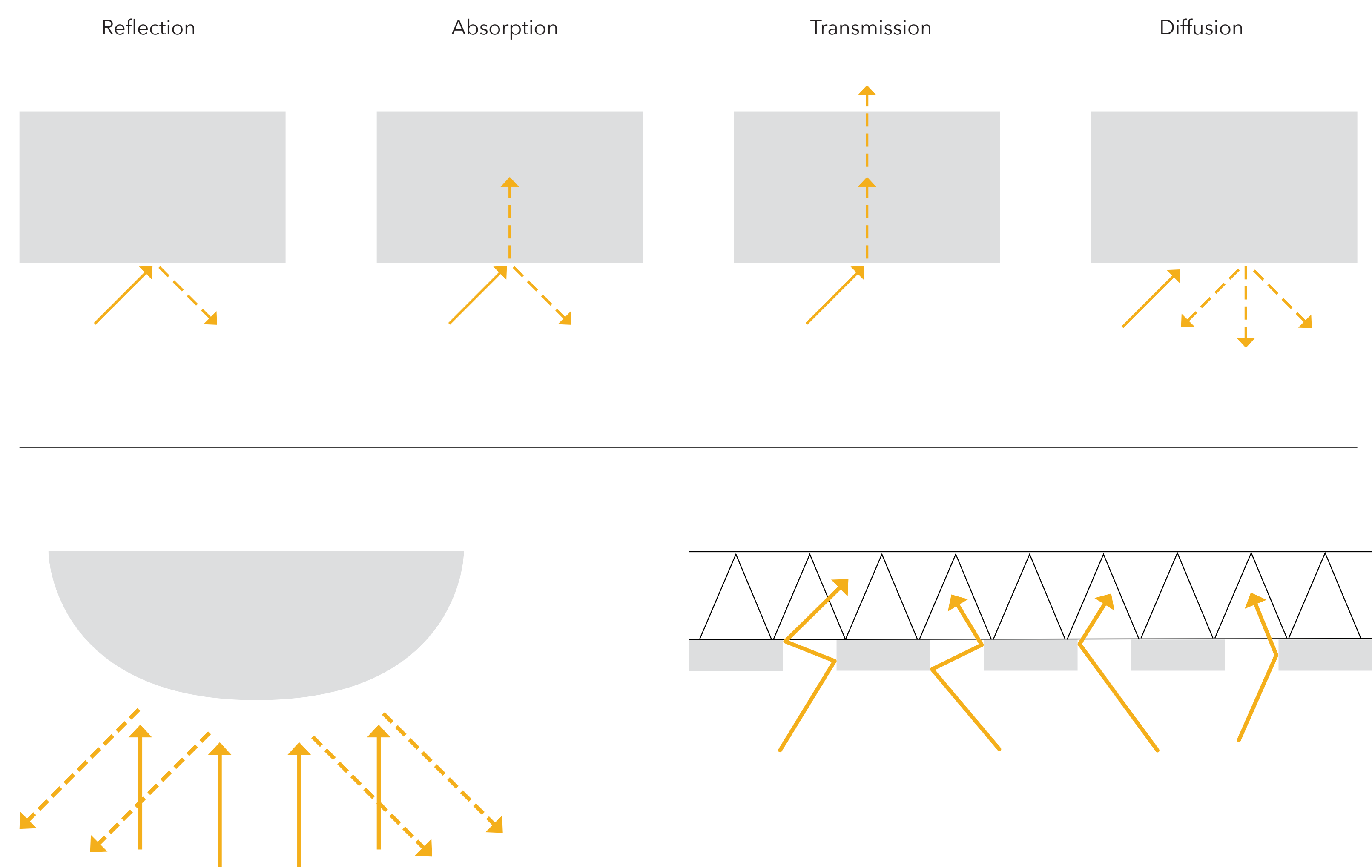




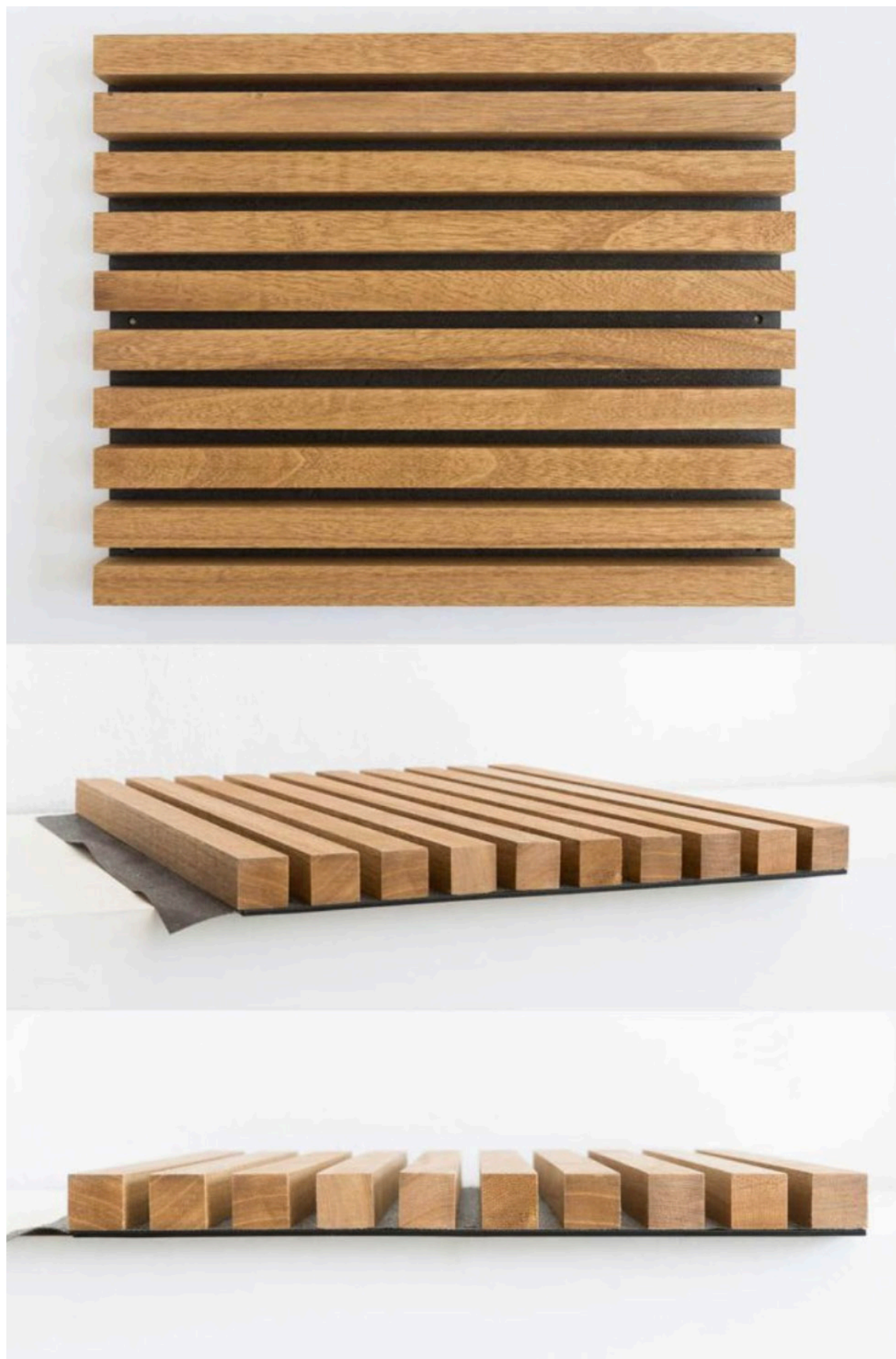
# Interior Foyer | Music Building



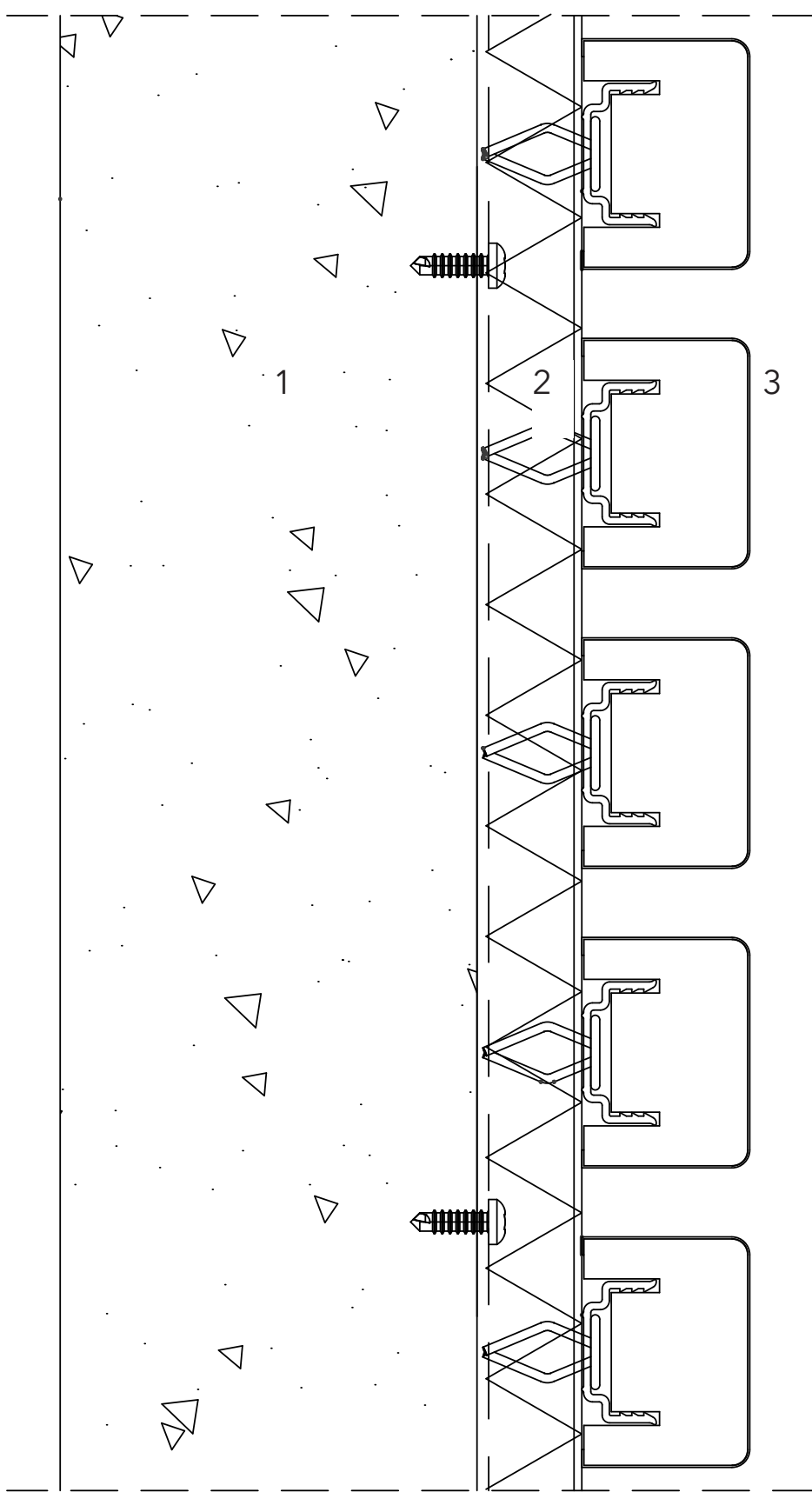




Acoustics Diagram



Slatted timber panels, Gustafs Linear Rib



Detail -Acoustics timber panel

1. Concrete wall

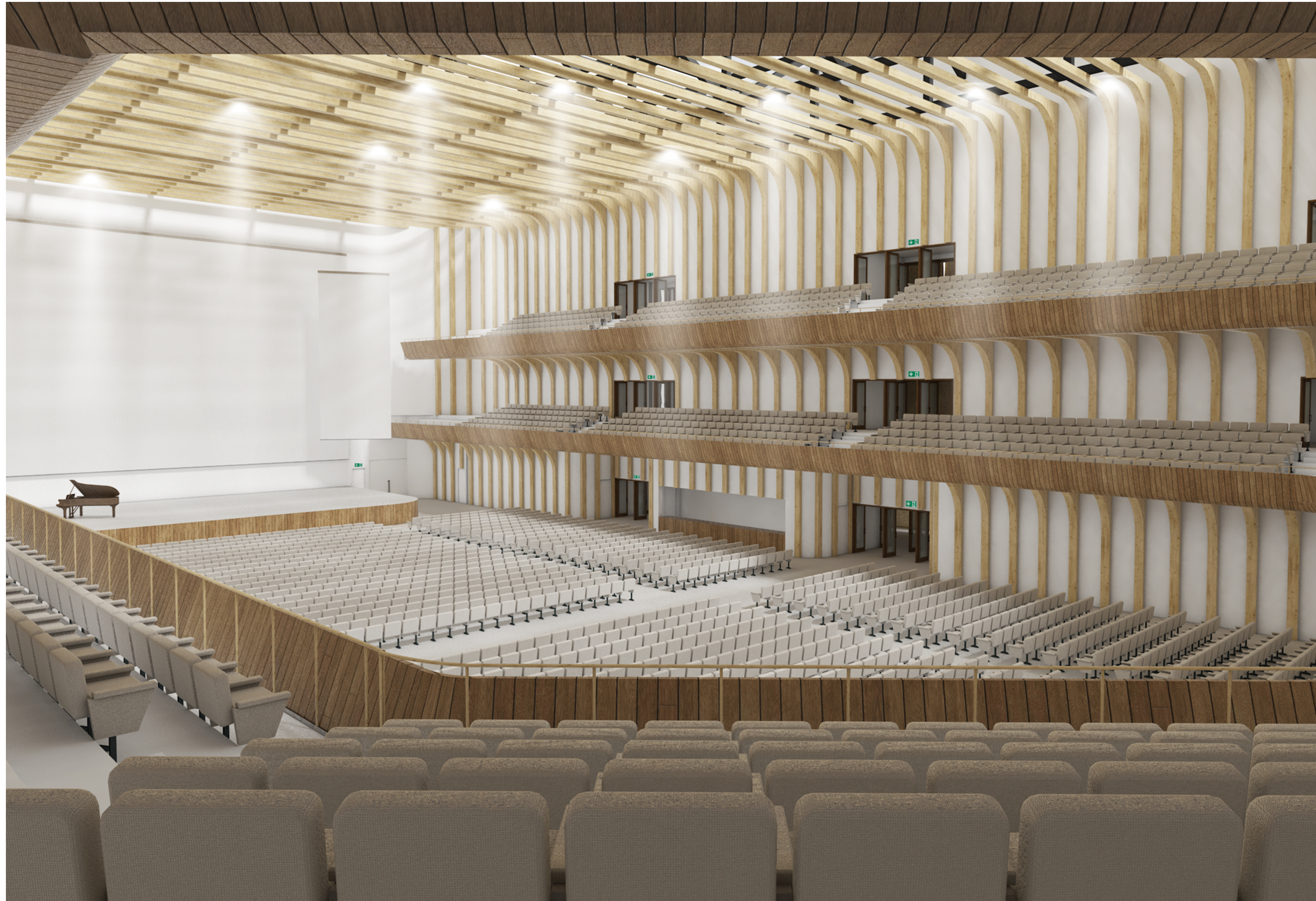
2. Insulation

3. Acoustic panel / Wood



# Interior Concert Hall

Music Building





# Fire Safety and Crowd Control | Music Building

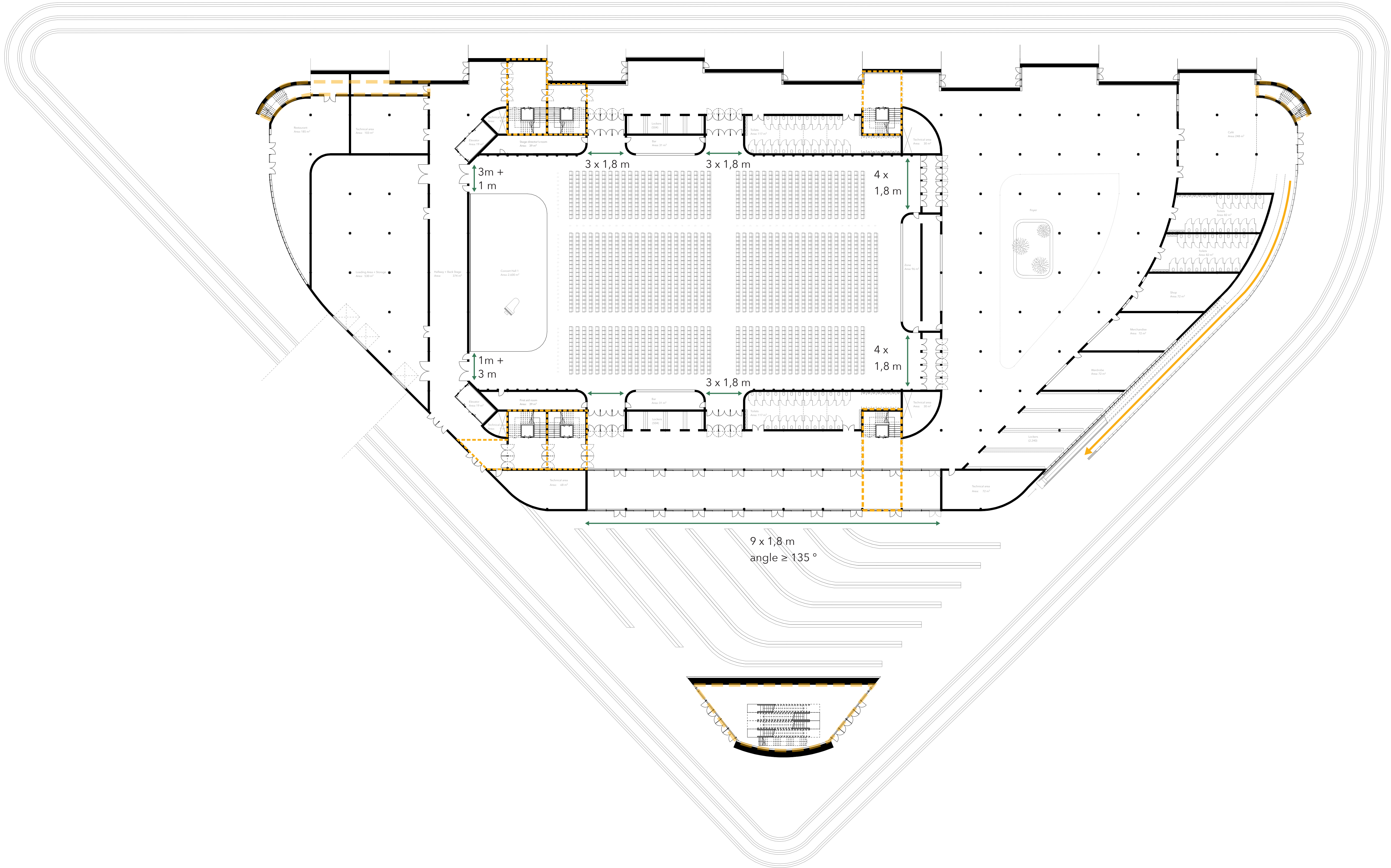
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- left a burning sub-fire compartment within 1 minute
- reached the public area within 15 minutes
- evacuation within 3,5 minutes



# Fire Safety and Crowd Control | Music Building

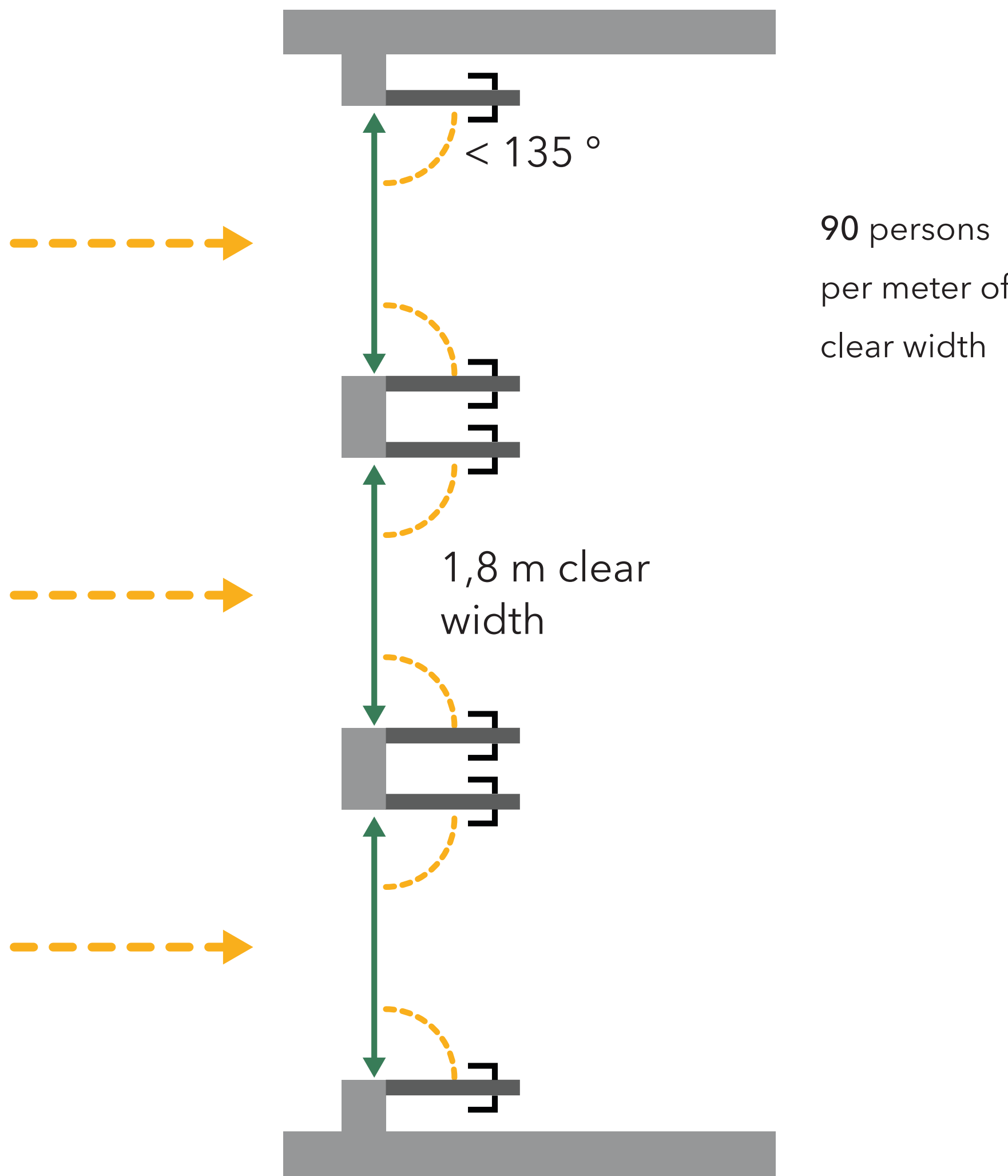




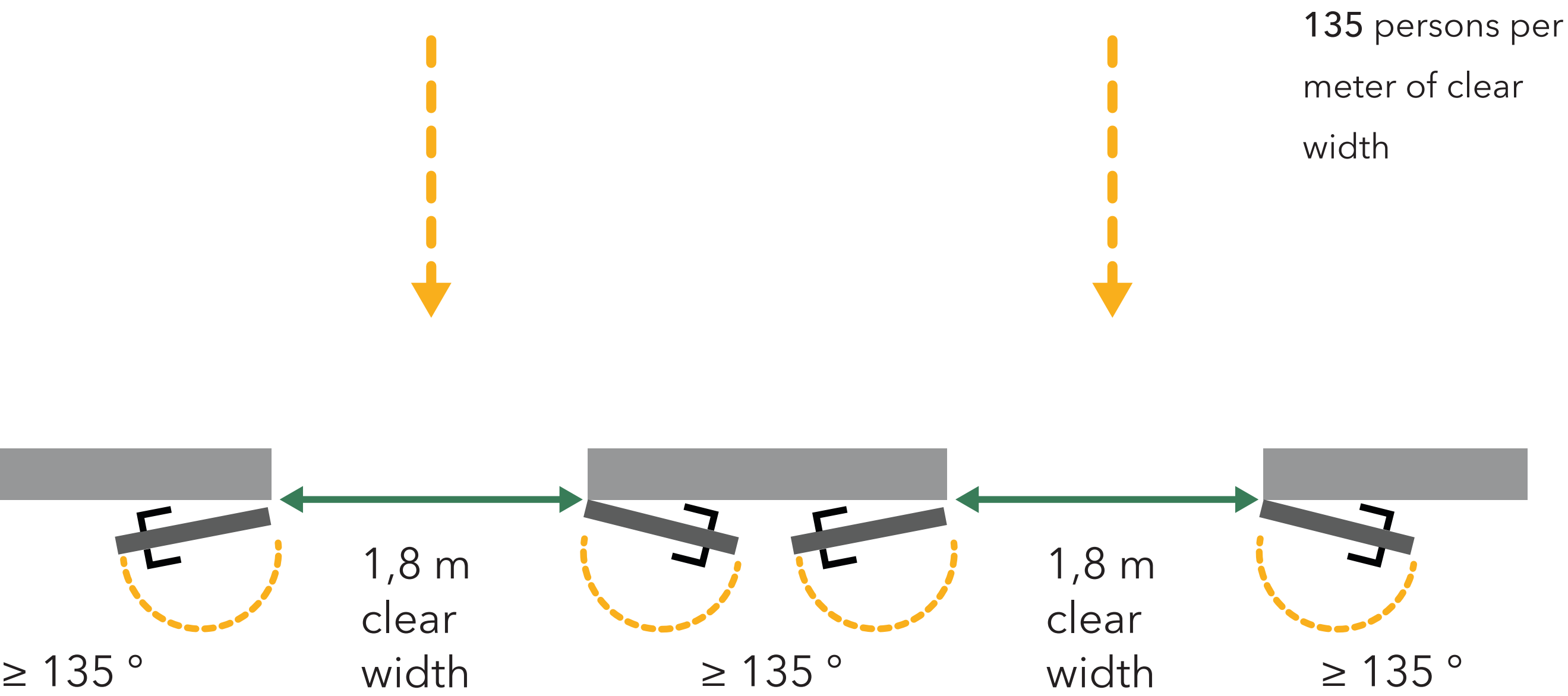
# Fire Safety and Crowd Control

Music Building

Doors



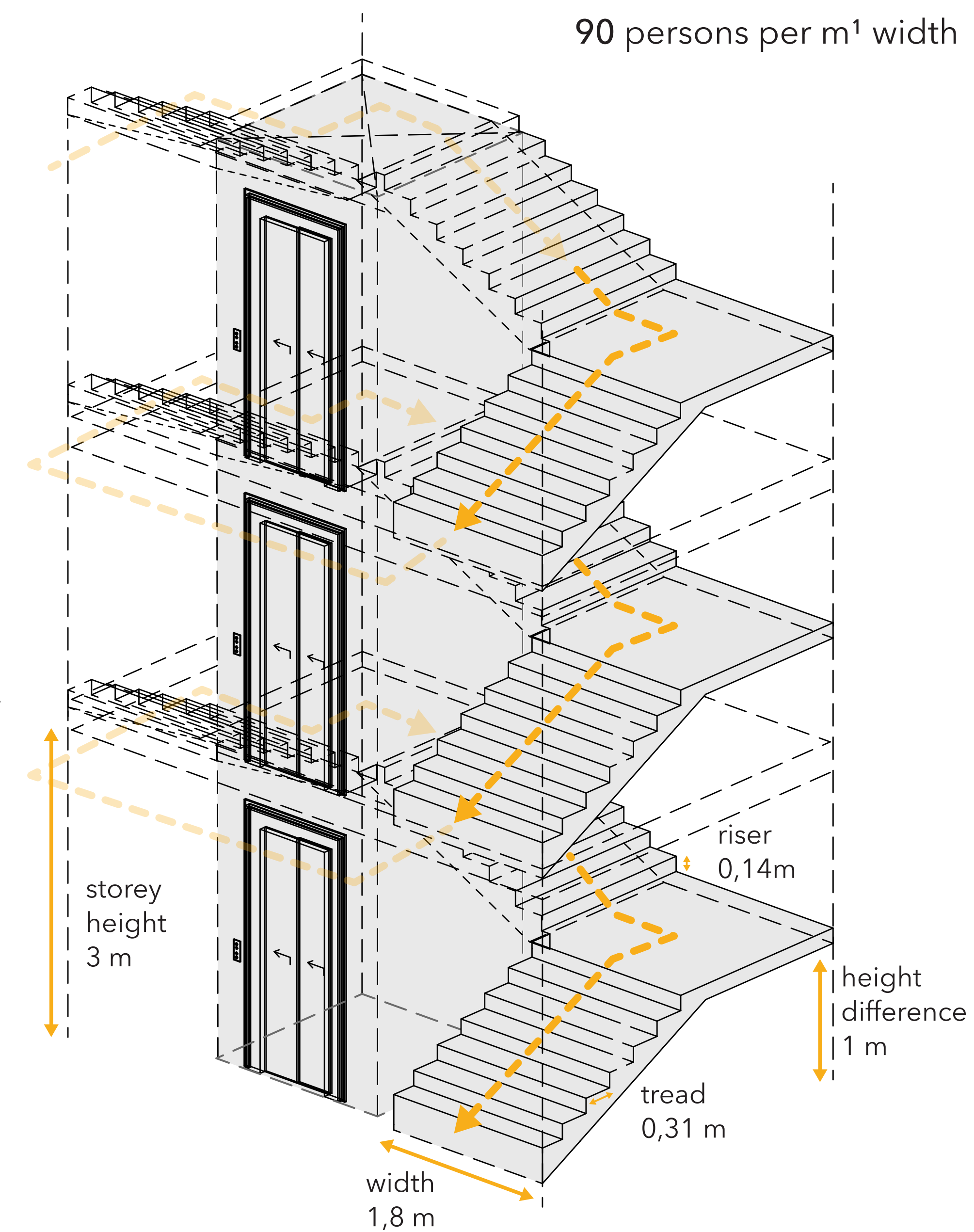
Doors Main Entrance





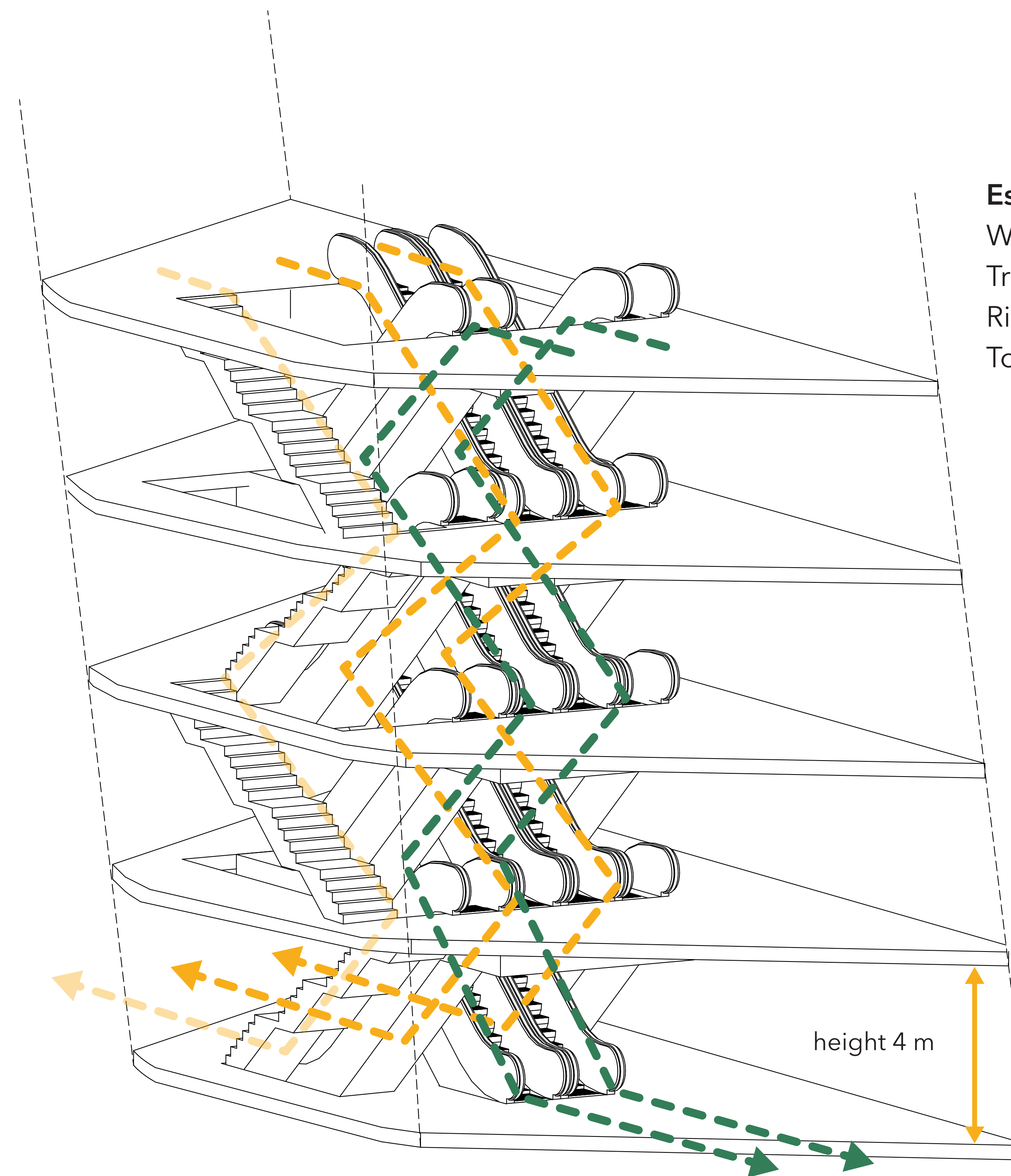
# Fire Safety and Crowd Control | Music Building

## Staircases



## Escalators

Width 0,58 -1,10 m  
Tread  $\geq 0,38$ m  
Riser  $\leq 0,24$ m  
Total Height  $\leq 4$  m





# Music Building





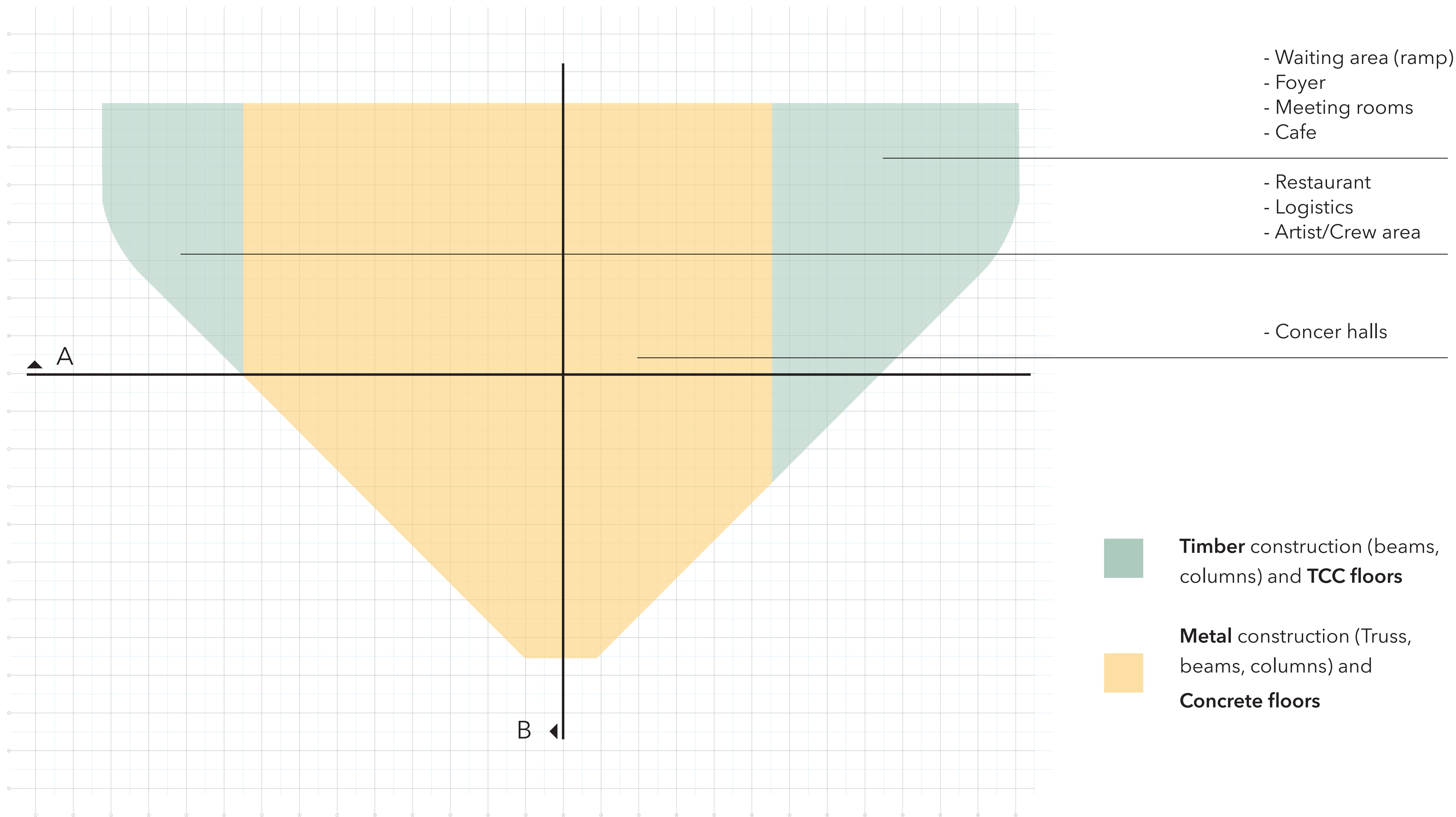
# Music Building





# Spatial Structure

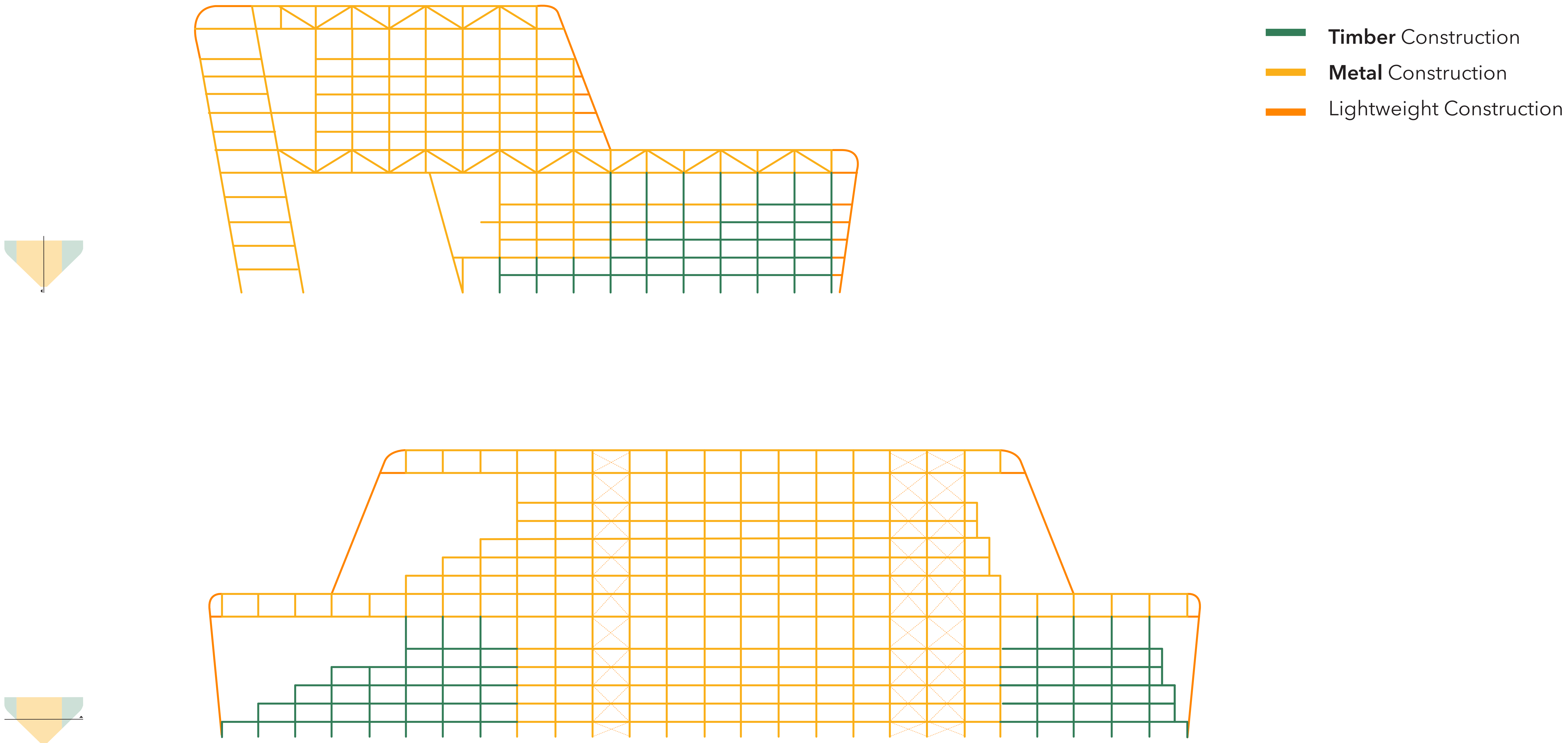
Building Technology





Spatial Structure

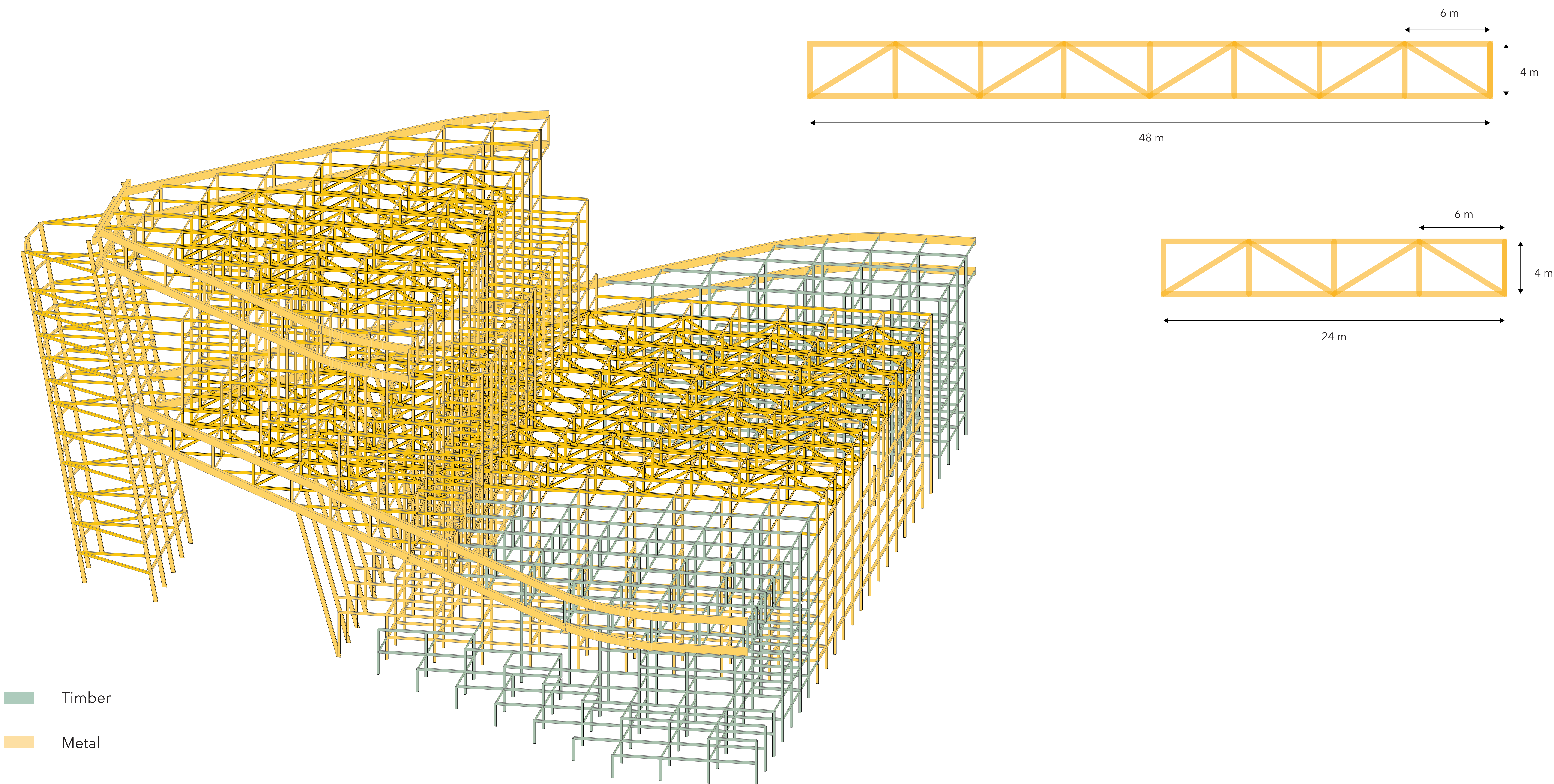
Building Technology





# Spatial Structure

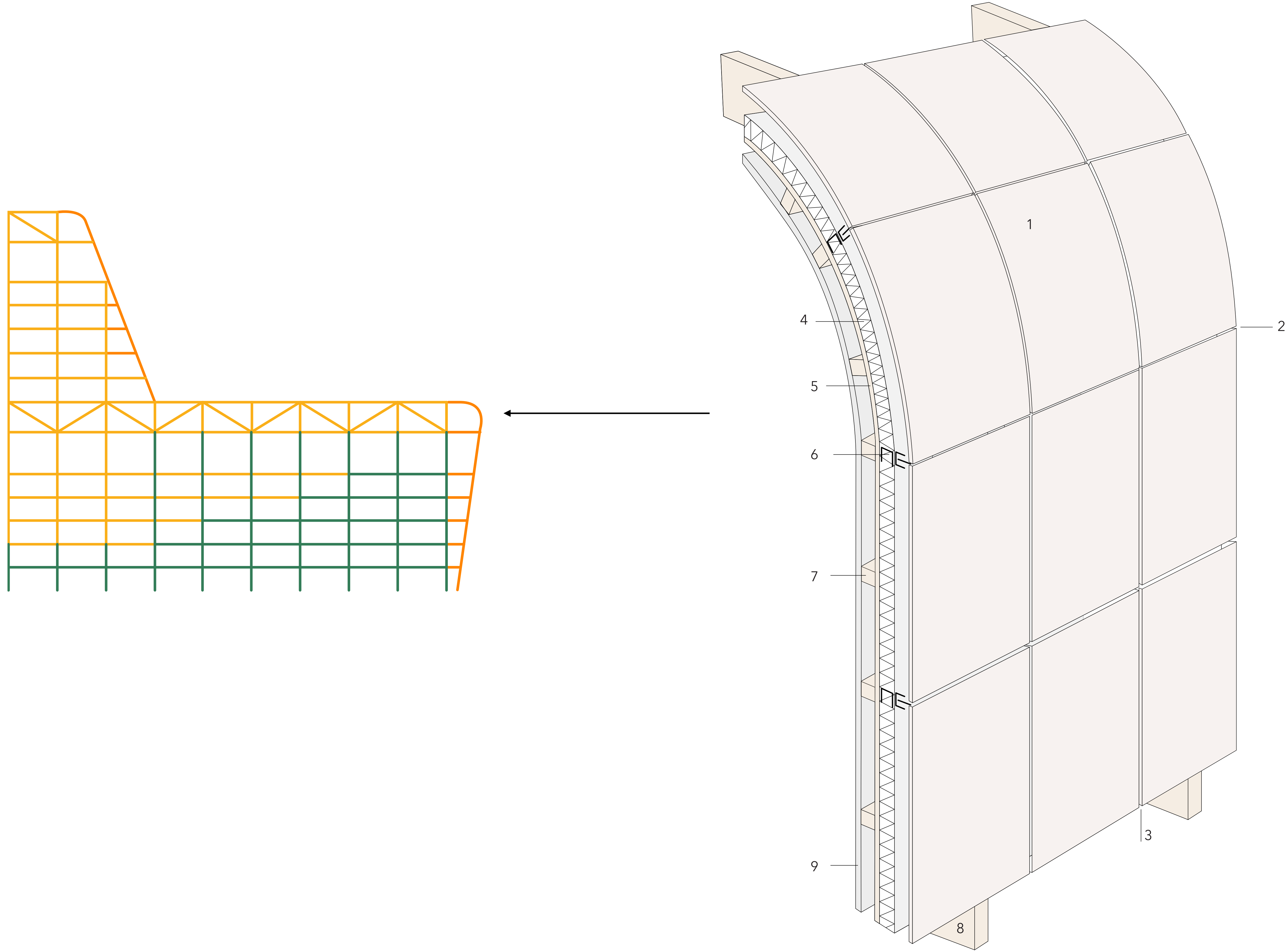
Building Technology





# Spatial Structure - Facade

Building Technology



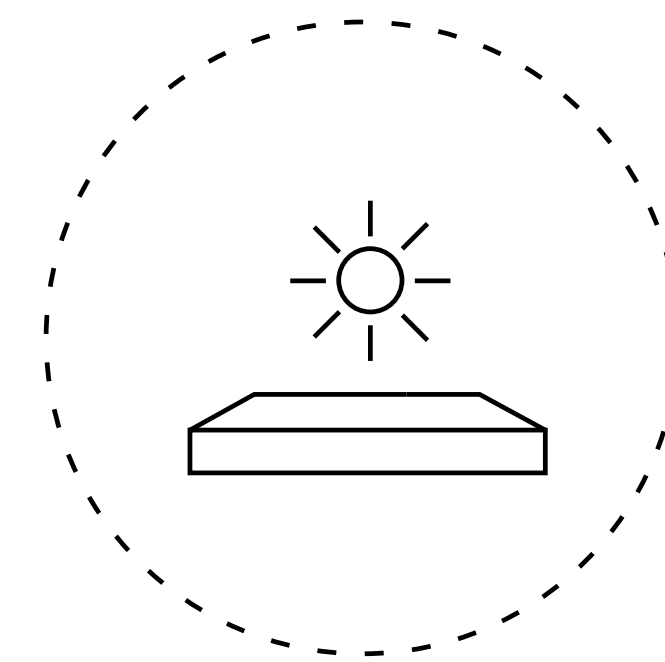
Limestone Facade Detail / Diagram

- 1. Limestone Panel (60mm)
- 2. Hairline joint between panels
- 3. Open joint between panels
- 4. Insulation
- 5. Plywood Boars fixed to timber joists to support insulation
- 6. Bracket and hanger
- 7. Timber joists
- 8. Timber beam
- 9. Inside wall

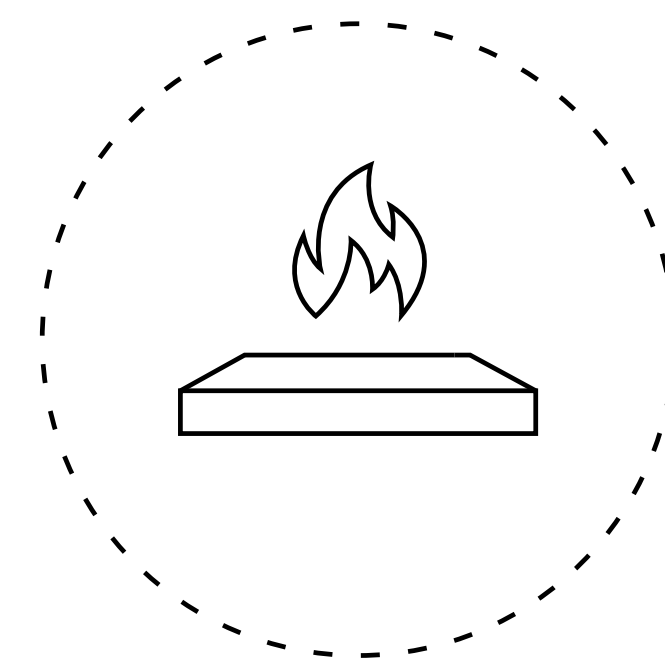


# Limestone Facade

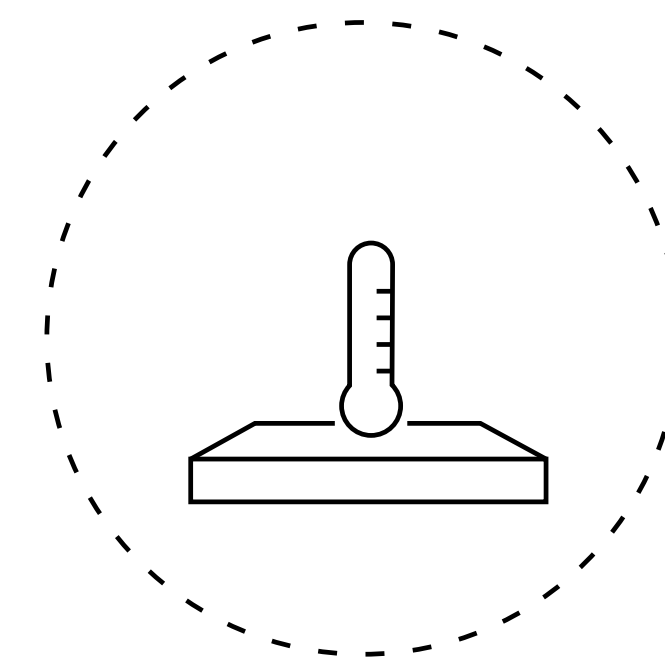
Building Technology



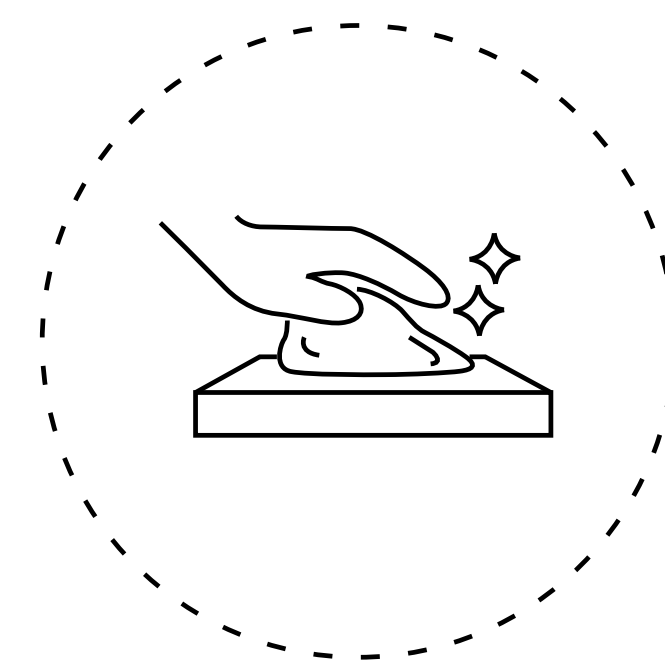
INALTERABLE COLOURS THAT LAST OVER TIME



RESISTANT TO FIRE AND HEAT



LOW THERMAL CONDUCTIVITY

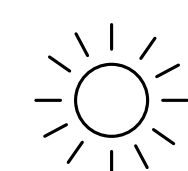


EASY CARE AND MAINTENANCE

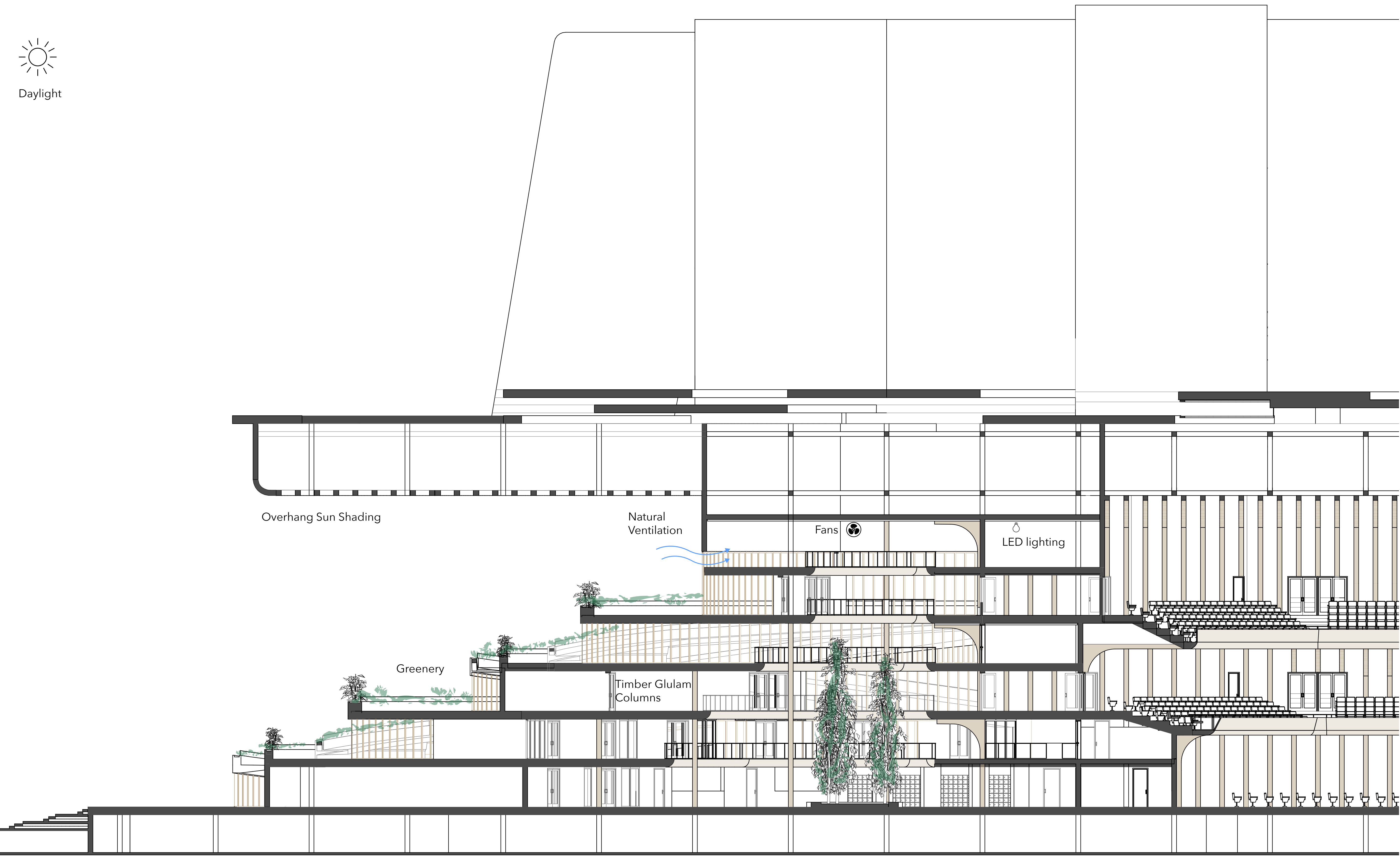


# Climate Principles

Music Building

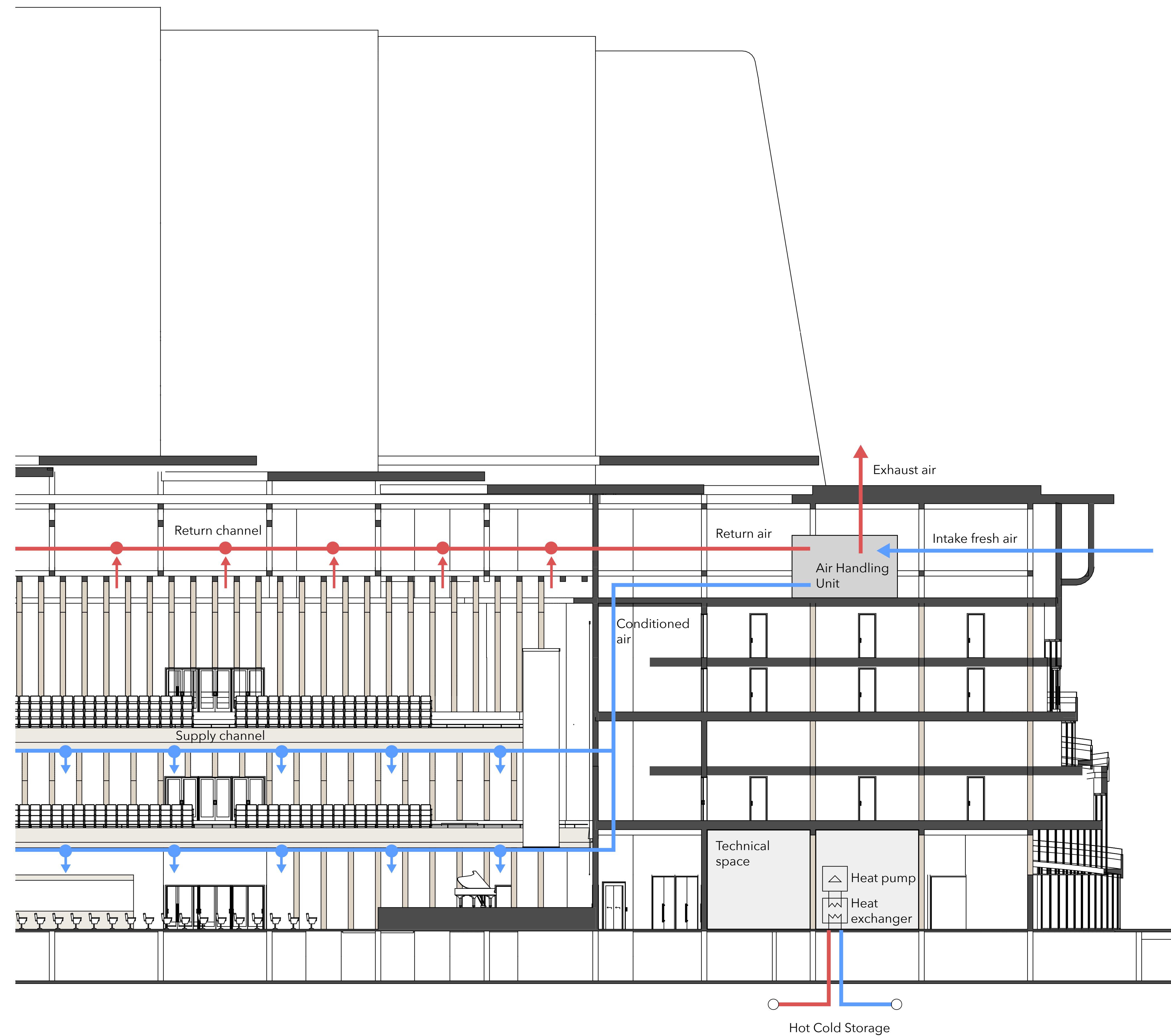


Daylight





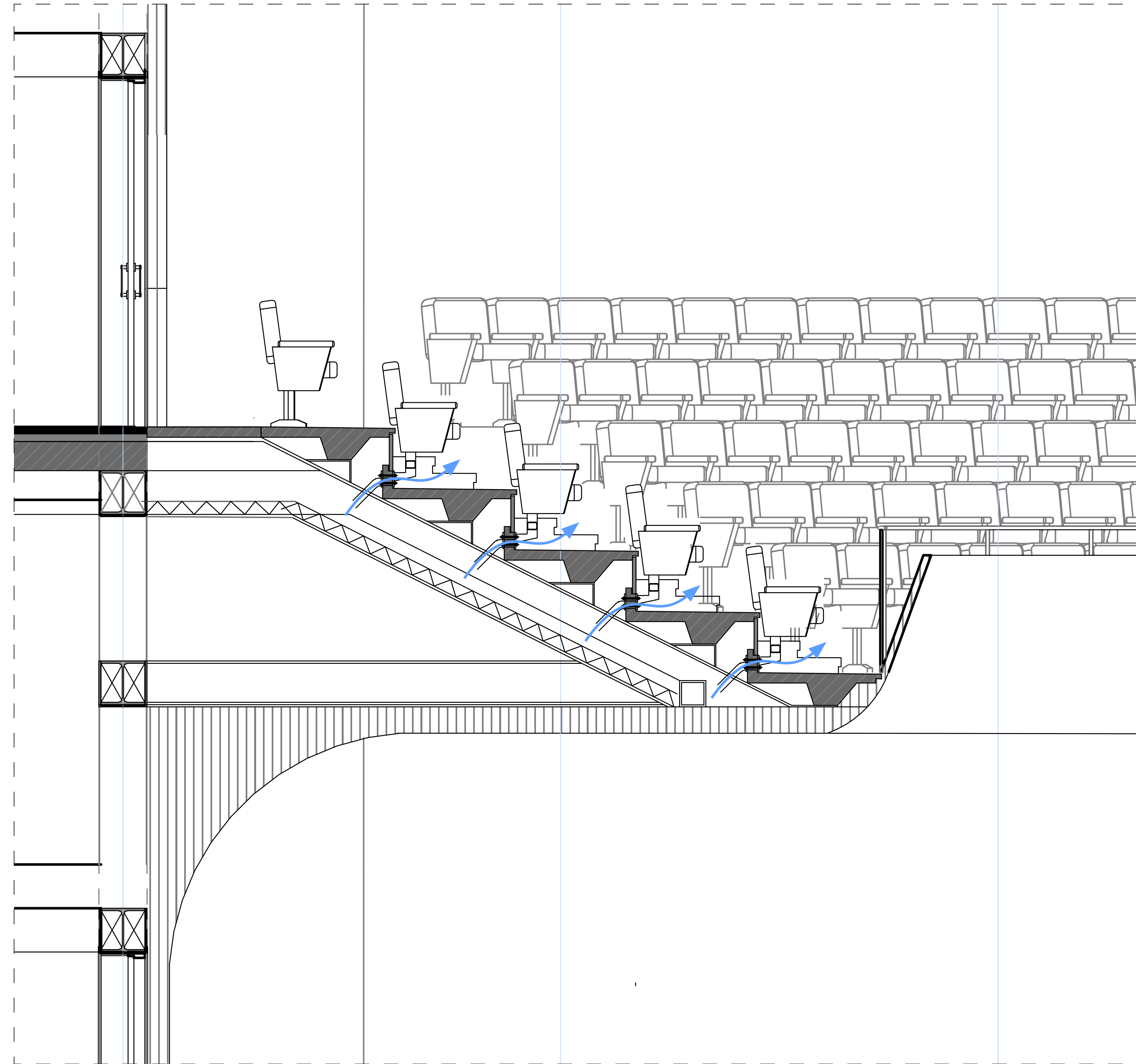
# Climate Principles | Music Building





# Climate Principles | Music Building

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# Music Building | Design

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The background of the entire page is a faded, light gray image of piano sheet music. It features multiple staves with musical notes, clefs, and key signatures. Overlaid on this music are several thin, dark gray diagonal lines that crisscross the page, creating a complex geometric pattern.

# Music Marvel

## Public Building Graduation Studio

MSc Architecture, Urbanism & Building Sciences

2021/2022

**Romeny Koreman**