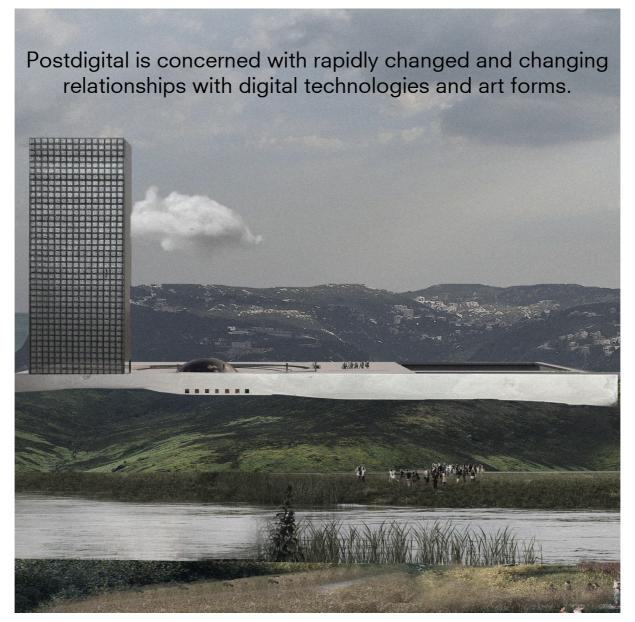


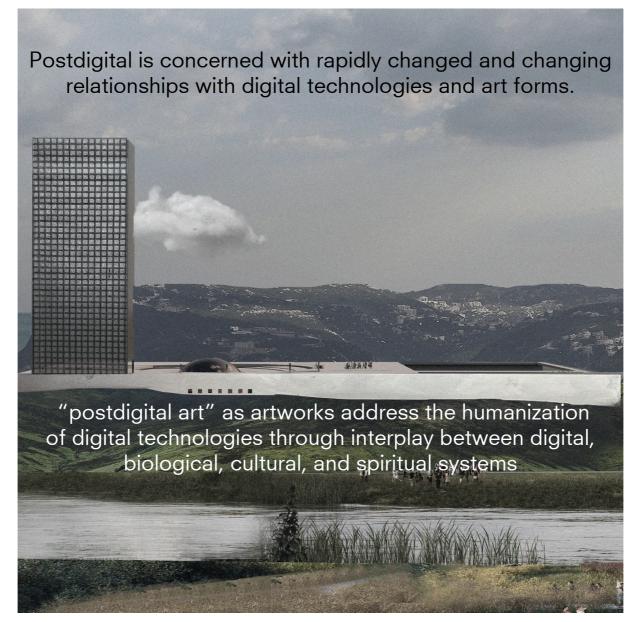


post digital depot



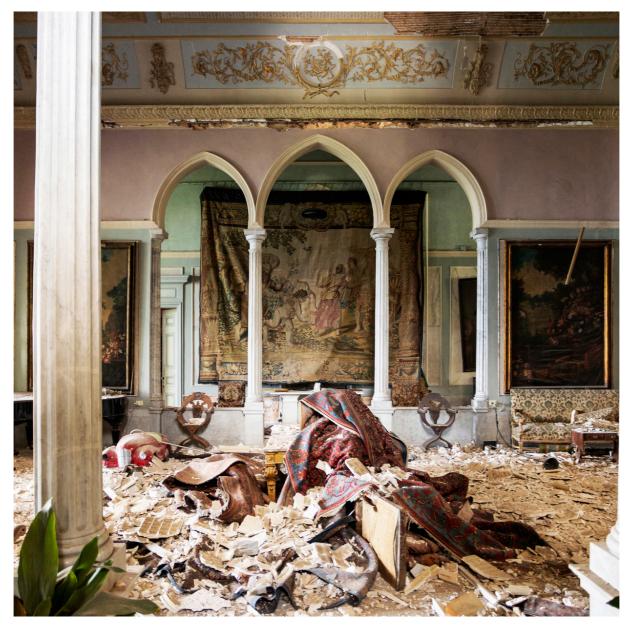


post digital depot



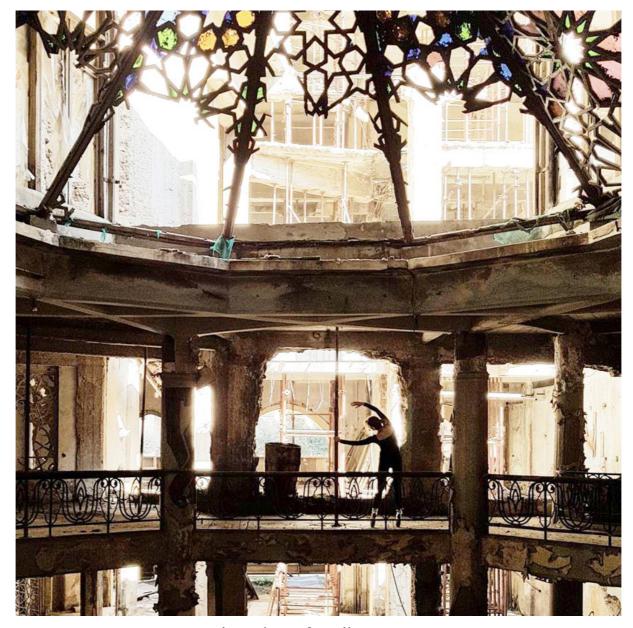
post digital depot





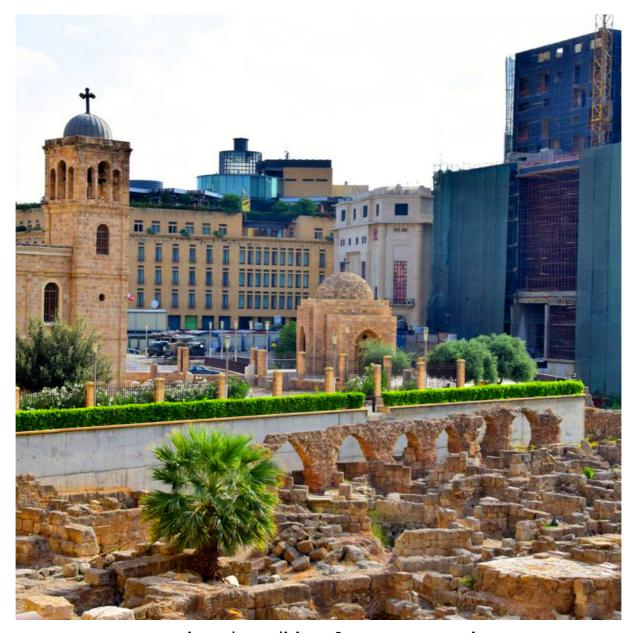
the city of ruins



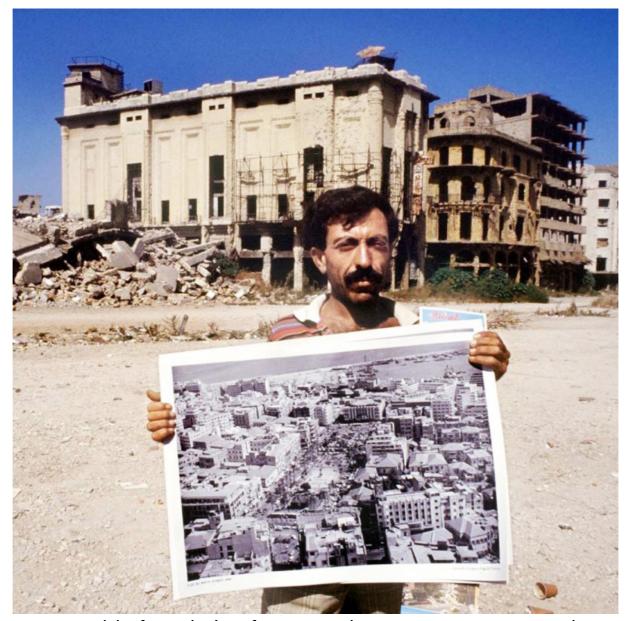


the city of palimpsest

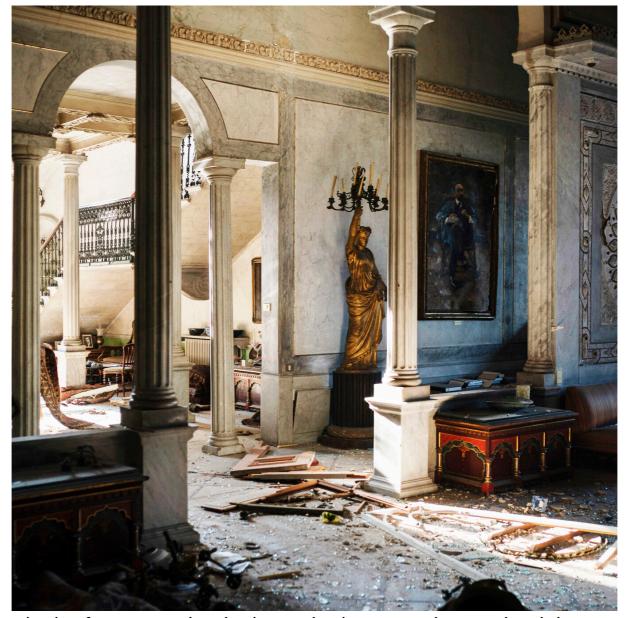




ongoing demolition & re-construction



a stable foundation for remembrance, awareness and recollection of cultural heritage is currently missing

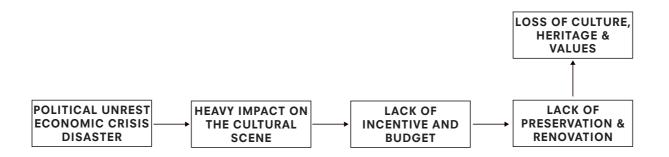


lack of preservation is the main threat against maintaining a shared heritage which unites the community



loop of ongoing ruin

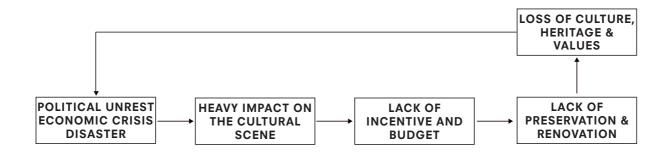






loop of ongoing ruin

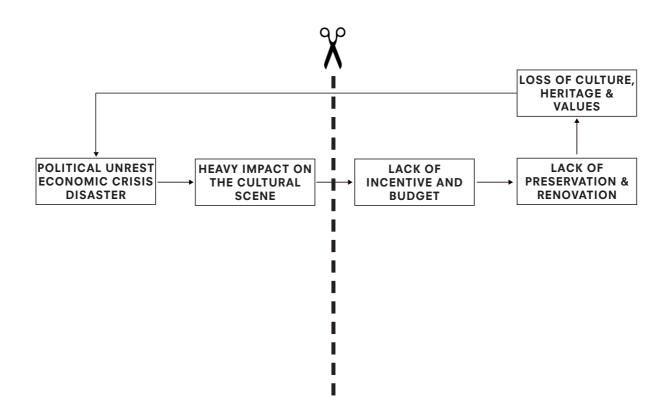




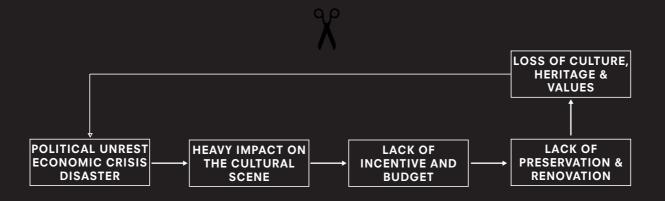


loop of ongoing ruin









# HOW CAN DIGITALIZATION BE UTILIZED FOR PRESERVATION AND ACCESSIBILITY OF CULTURAL HERITAGE OF BEIRUT?

research question











### RESEARCH



"Beirut, more than Lebanon, is a central place for the whole region. It represents a free culture that is being endangered today. The survival of Beirut means the survival of this plurality, diversity, tolerance, culture, and freedom of expression"

#### 1975-1990



THE CIVIL WAR



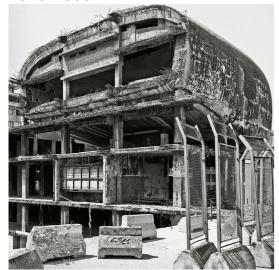
THE OCTOBER REVOLUTION

#### 2020



THE PORT BLAST

1975-1990



THE CIVIL WAR
POLITICAL UNREST

#### 2019



THE OCTOBER REVOLUTION ECONOMIC CRISIS

#### 2020



THE PORT BLAST

DISASTER



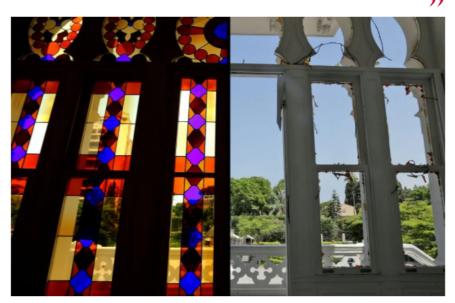
Photograph of damages in Marfa Gallery due to the August 4 explosion. Image courtesy of Marfa Gallery.



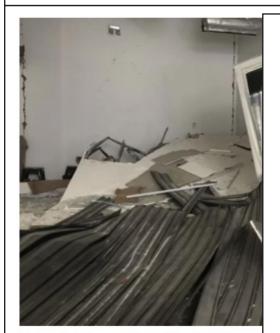
Photograph of damages in Marfa Gallery due to the Augus

"This is the strongest explosion I have ever witnessed. The museum is devastated. A lot of damage has been done to the structure of the building at a time when the dollar in Lebanon is so high that I don't know how we will afford to buy new glass for the skylights, the windows, and the exit doors. We don't have the means to buy new materials. It's horrible to see five years of work in utter destruction—even during the civil war it wasn't this bad."

- Zeina Arida, The Art Newspaper.



Beirut's art scene: before and after images of the stained glass windows at the Sursock Museum. Photos by Joseph Eid and Anwar Amro /AFP via Getty Images.



Photograph of damages in Marfa Gallery due to the August

"This is the strongest explosion I have ever

witnessed. The mus damage has been d building at a time w is so high that I don to buy new glass for windows, and the e the means to buy no to see five years of v even during the civi

- Zeina Arida, The Art Newspaper.



"Our resilience is a curse. I've been rebuilding all my life and I don't want to do it again! But the truth is that we will rebuild. We are here to stay. But we are rebuilding knowing that it will likely be destroyed again."

- Mohamed Maktabi, Artnet.



Rescue workers and security officers work at the scene of an explosion that hit the seaport of Beirut, Lebanon, Wednesday, Aug. 5, 2020. Photo courtesy of AP Photo/Hussein Malla.

Beirut's art scene: before and after images of the stained glass windows at the Sursock Museum. Photos by Joseph Eid and Anwar Amro /AFP via Getty Images.

Oyku Su Okkan Post- Digital depot \_\_\_\_\_

99



"This is the strongest explosion I have ever witnessed. The must damage has been damage has be

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hamed Maktabi, Artnet.

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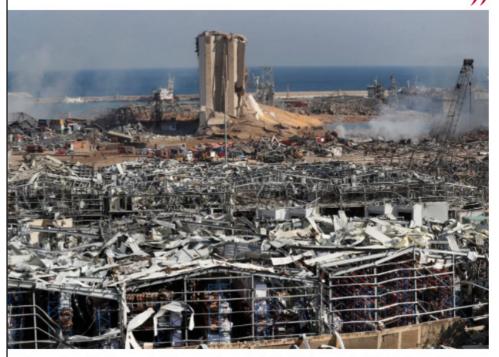
4

"The banks have confiscated our funds," she said. "I don't how we're going to do it. It will take years to restore the museum."

- Zeina Arida, Hyperallergic.



A protestor carries the Lebanese flag through downwtown Beirut. Image via Joseph Eid, AFP, Getty Images



e workers and security officers work at the scene of an explosion that hit the seaport of Beirut, Lebanon, Wednesday, 2020. Photo courtesy of AP Photo/Hussein Malla.

Beirut's art scene: before and after images of the stained glass windows at the Sursock Museum. Photos by Joseph Eid and Anwar Amro /AFP via Getty Images.



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6

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- Zeina Arida, Hyperallergic.



A protestor carries the Lebanese flag through downwtown Beirut. Image via Joseph Eid, AFP, Getty Im

Beirut's art scene: before and after imag Anwar Amro /AFP via Getty Images. FEATURE · Arts

# Beirut's once-thriving cultural community was already at breaking point. Then the blast hit

Already strained by a popular uprising, economic collapse and the global pandemic, Lebanon's cultural sector was blown apart by the devastating explosion last week. Can it be rebuilt?



"This is th witnessed damage h If you believe that suffering forges better art, then Beirut must have one of the world's best artistic communities.

"The banks have confiscated our funds," she said. "I don't how we're going to do it. It will take years to restore the museum."

- Zeina Arida, Hyperallergic.

y. But we are rebuilding knowing that it ll likely be destroyed again."

hamed Maktabi, Artnet.

carries the Lebanese flag through downwtown Beirut. Image via Joseph Eid, AFF

FEATURE · Arts

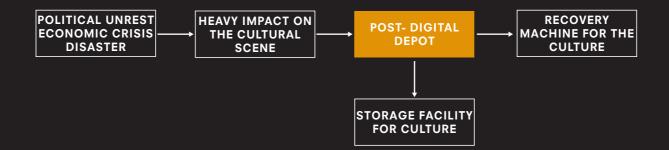
### Beirut's once-thriving cultural community was already at breaking point. Then the blast hit

Already strained by a popular uprising, economic collapse and the global pandemic, Lebanon's cultural sector was blown apart by the devastating explosion last week. Can it be rebuilt?

Beirut's art scene: before and after i Anwar Amro /AFP via Getty Image

"At the Sursock Museum, the director has gathered the shattered pieces of two ceramic sculptures by Lebanese artist Simone Fattal, part of the permanent collection, in case the artist wants to use them to **create something new**. She has also offered use of the museum's **storage spaces** to other institutions and artists."

<sup>\*</sup> Beirut's once-thriving cultural community was already at breaking point. Then the blast hit, CNN, 2020



### HOW?



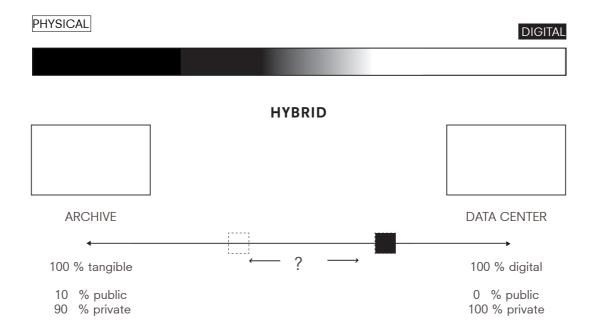
## DIGITAL

#### PHYSICAL

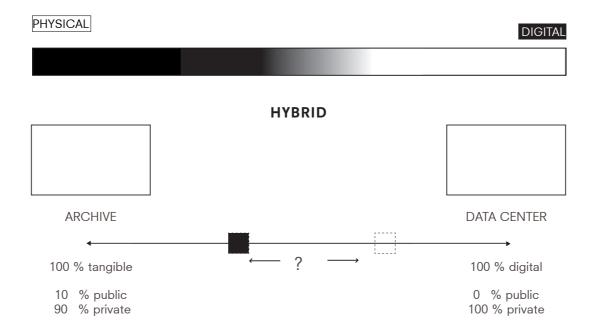
a storage facility for culture through physical and digital means

# INTERACTIVE PHYSICAL

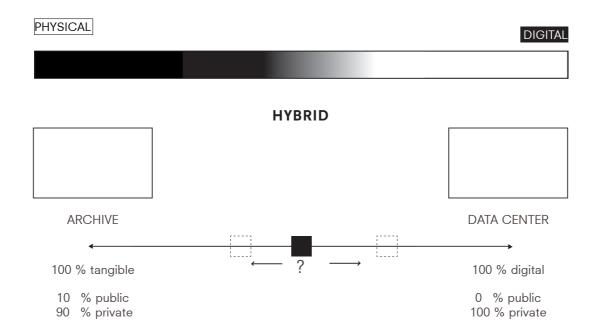
an interactive space of experimentation & learning



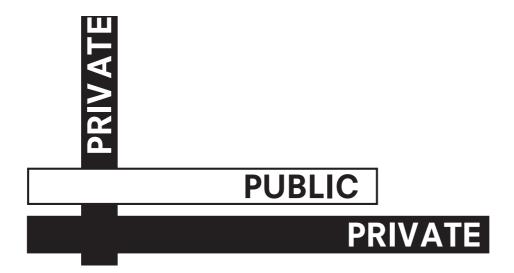
the layer of interaction is hybrid in its nature



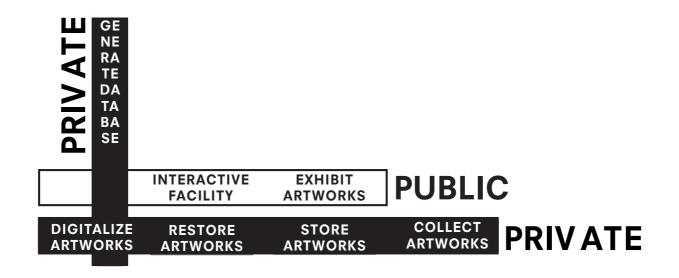
the layer of interaction is hybrid in its nature



the layer of interaction is hybrid in its nature

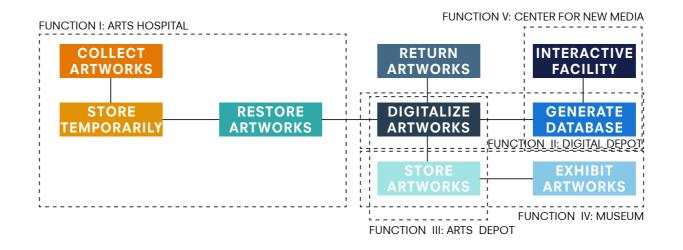


50% public and 50% private



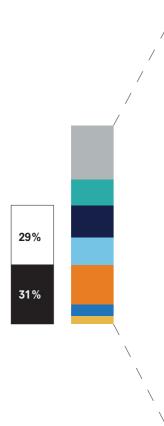
50% public and 50% private

POST- DIGITAL DEPOT

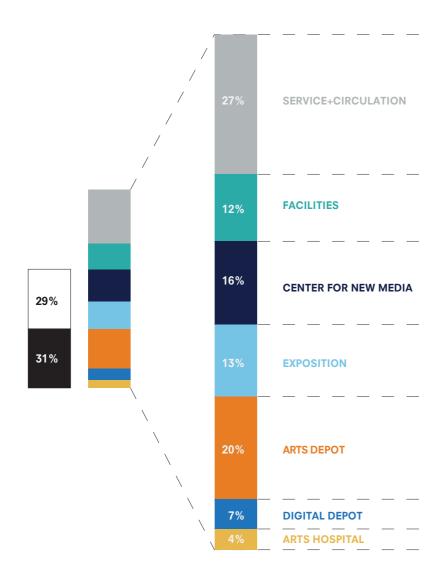


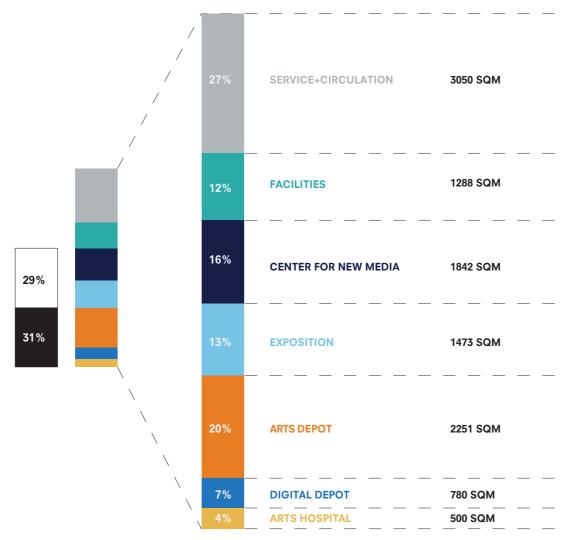
29%

31%



program





POST DIGITAL DEPOT NETTO 8,485 SQM BRUTTO 11,530 SQM Program

B/N 1.4 92,750 ARTWORKS
TOTAL PERMANENT COLLECTION OF

**MUSEUMS IN BEIRUT** 

150,000 ARTWORKS TANGIBLE DEPOT

25,000 ARTWORKS

TOTAL TEMPORARY EXHIBITIONS IN GALLERIES & ART SPACES

2,000,000 ENTITIES\*

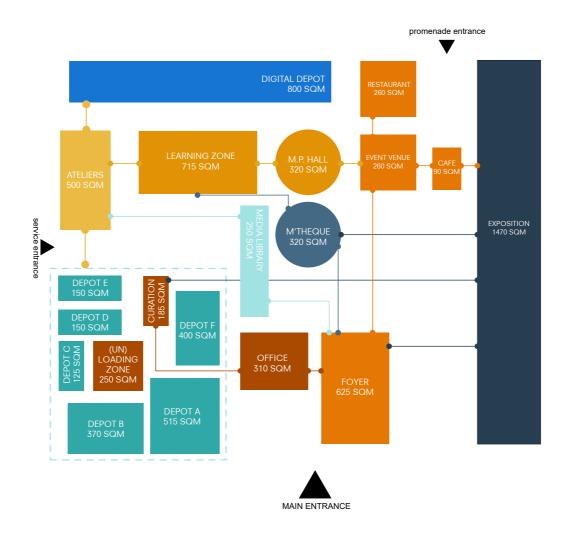
DIGITAL DEPOT 2,000 TB (1 GB/ENTITY)\*

20,000 ARTWORKS

LOST IN THE AUGUST EXPLOSION

demand & capacity



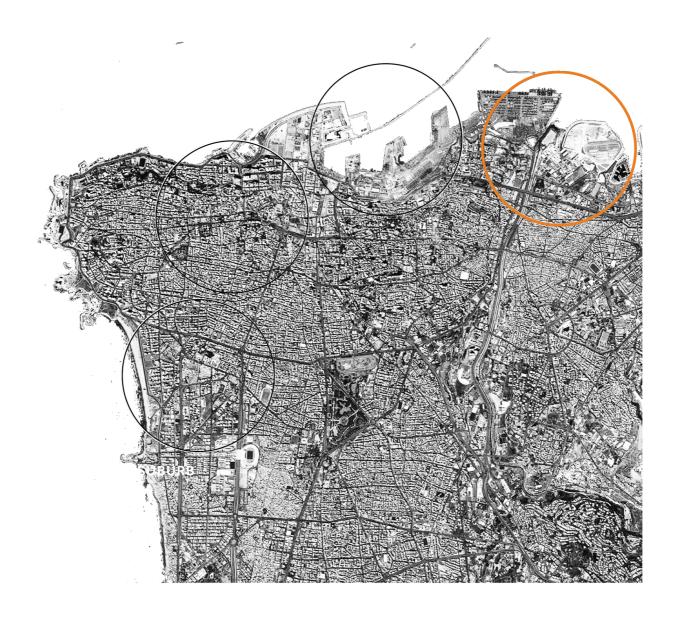


# programmatic relations



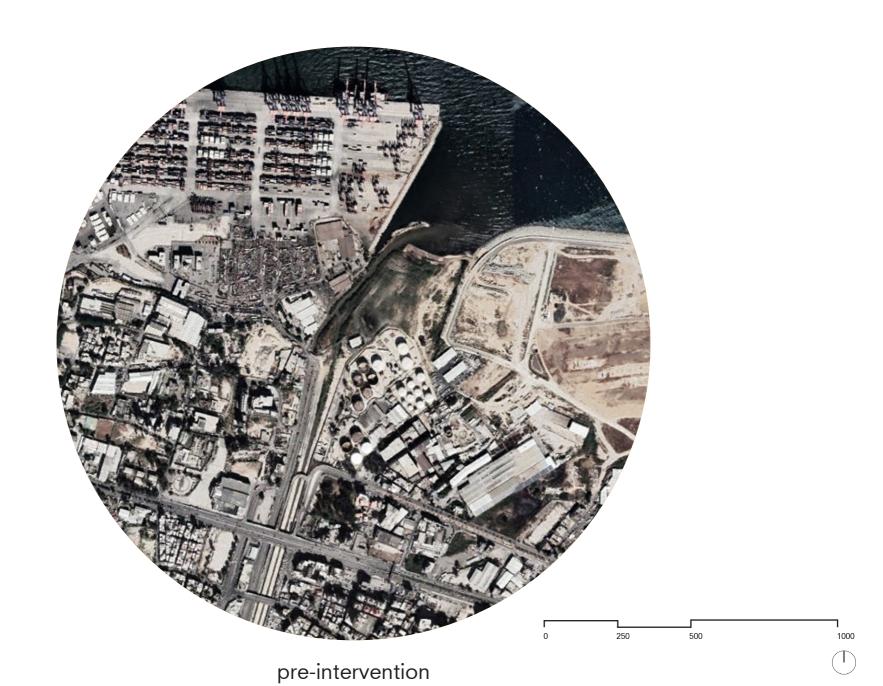
# SITE

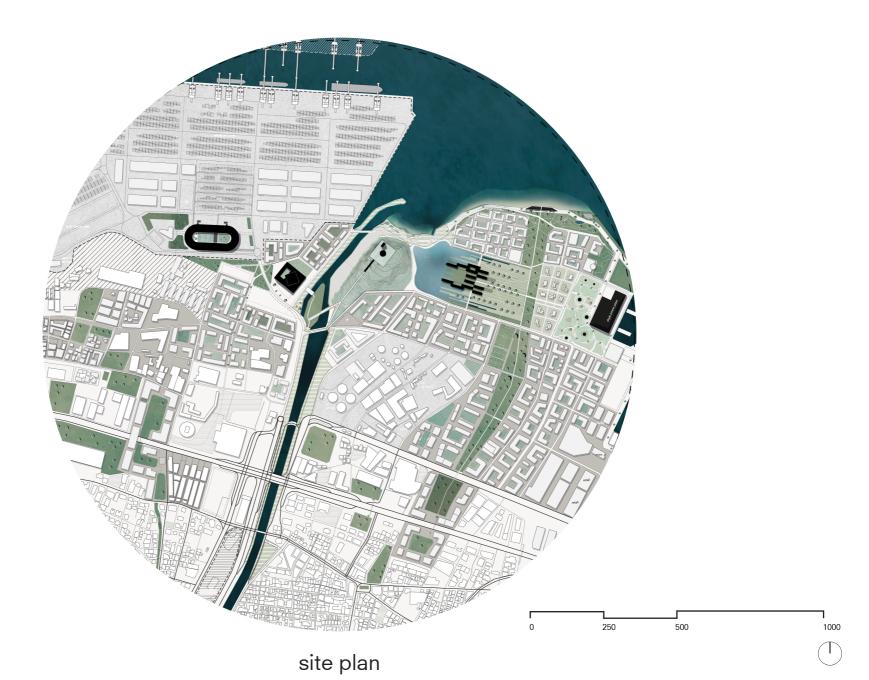




studio approach









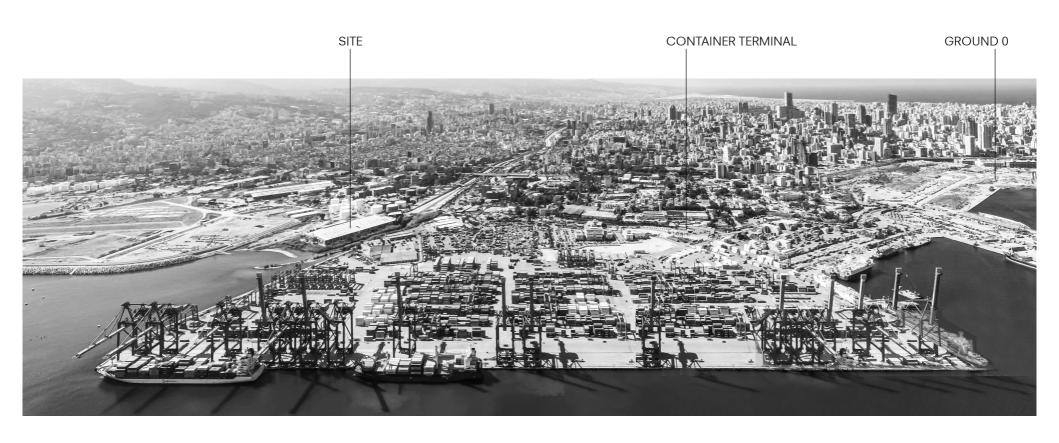


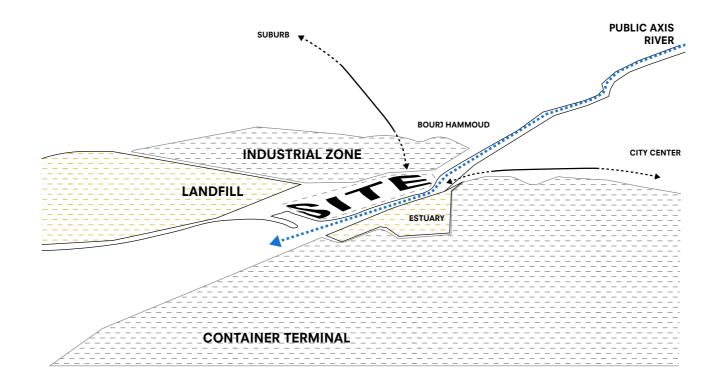
connection to the world through port & city through the highway

## SITE



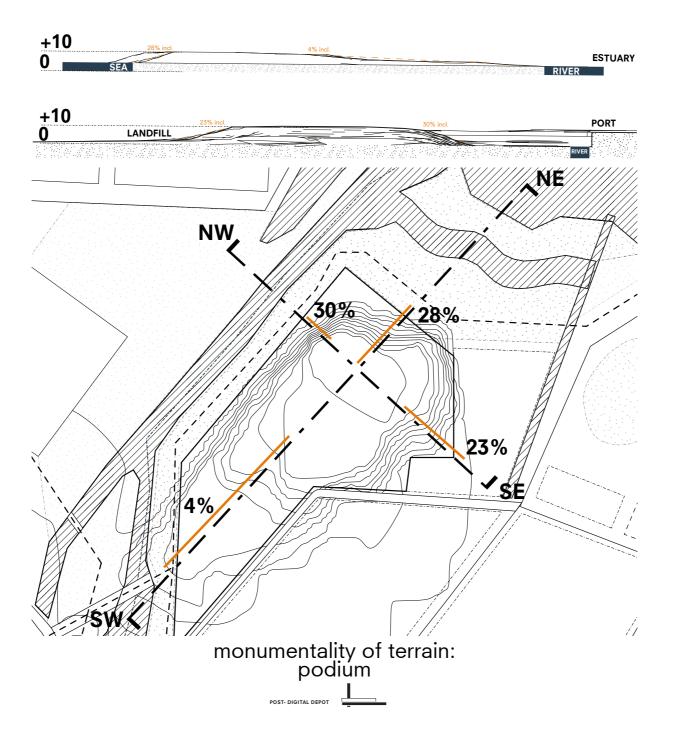
industrial & natural character



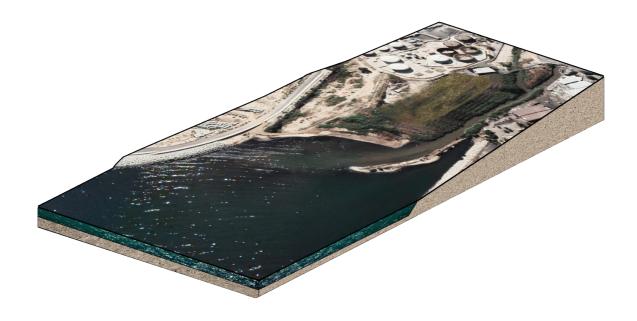


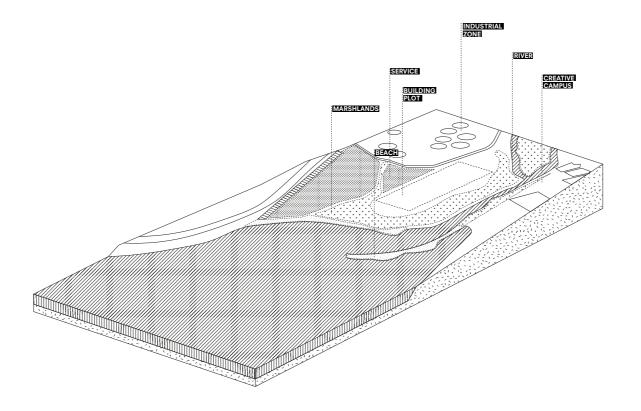


monumentality of terrain: the river as a superforce playing with land



### SITE

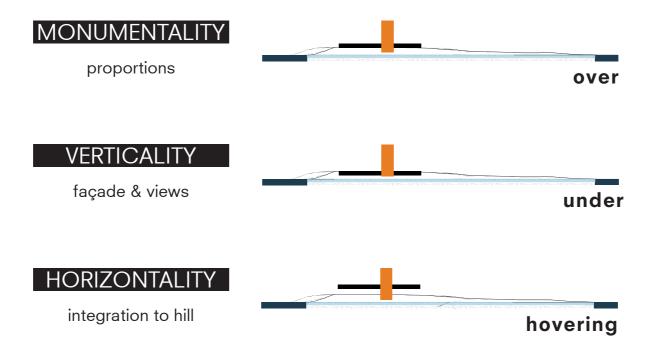




# CONCEPT

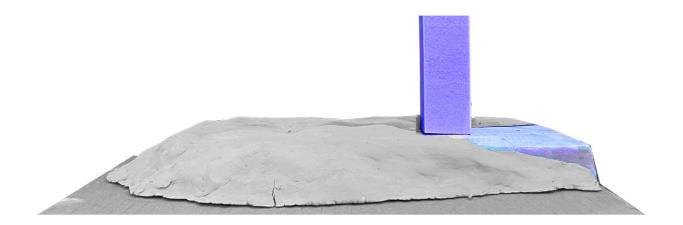


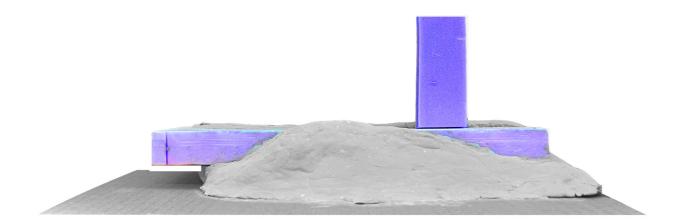


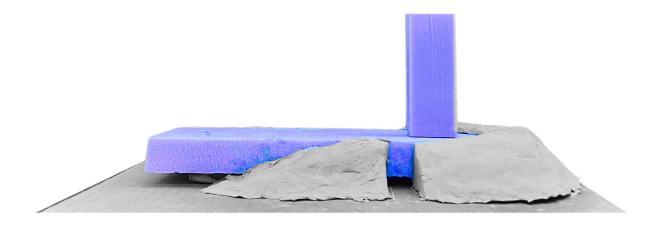


expression | relation to the topography

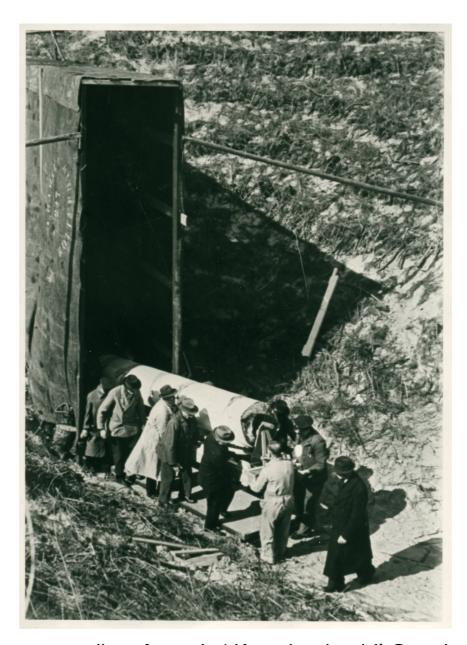








#### **KUNSTBUNKER**



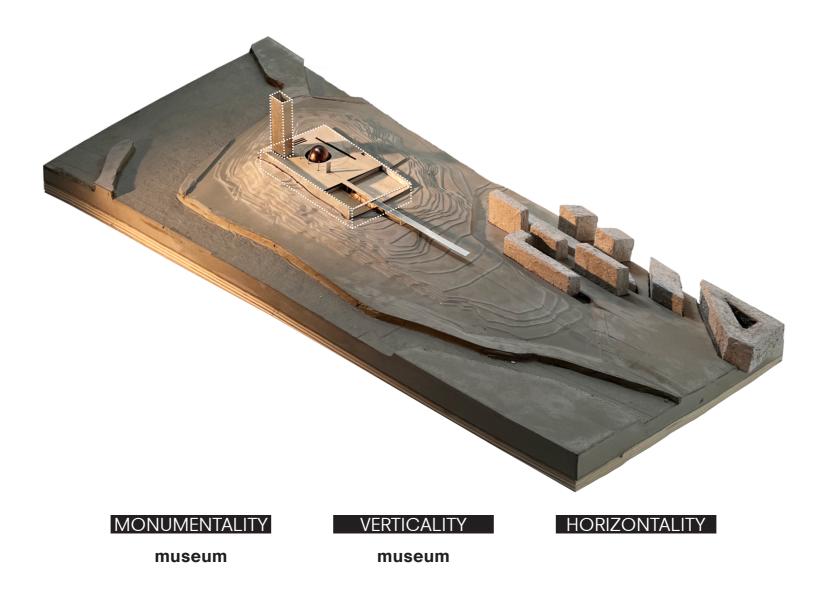
monumentality of terrain | Kunstbunker bij Castricum

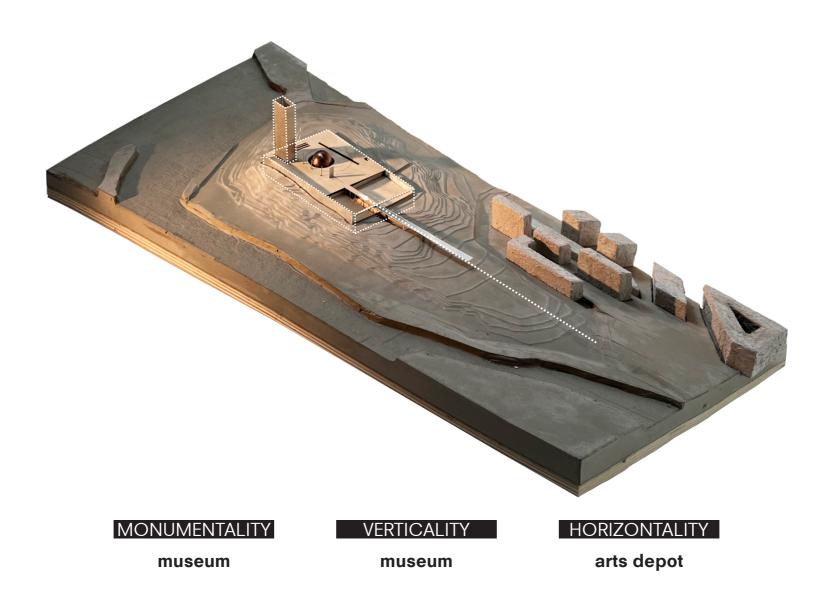




### MONUMENTALITY

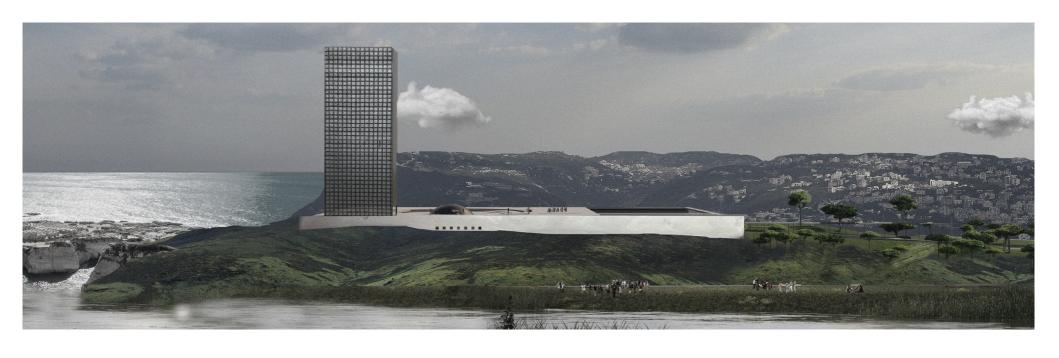
museum



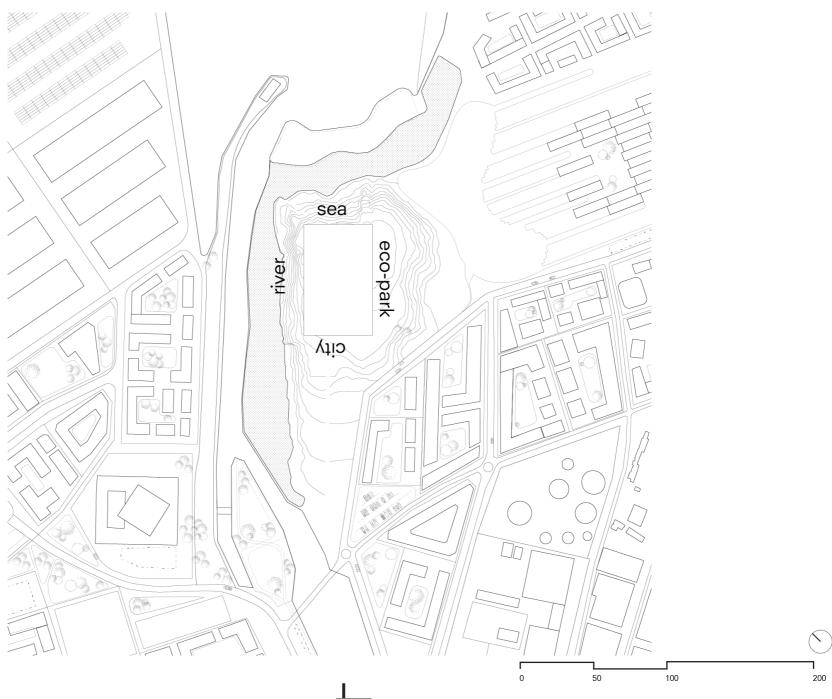


# IMPLEMENTATION





### context



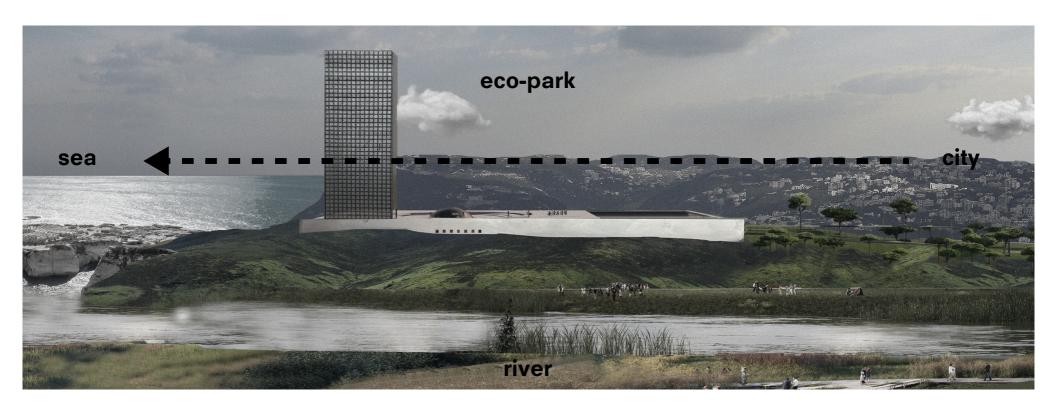


## creative digital campus



land - sea axis final destination of the promenade along the river





## public space extends on the waterfront, connecting the island and fashion office





## main axis I river promenade





## public access I estuary





## public access | promenade





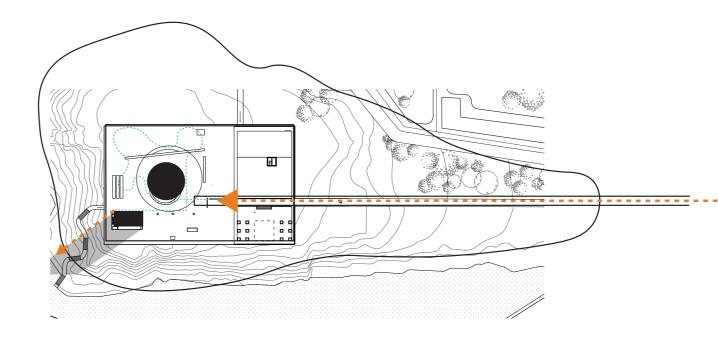
## access with vehicle















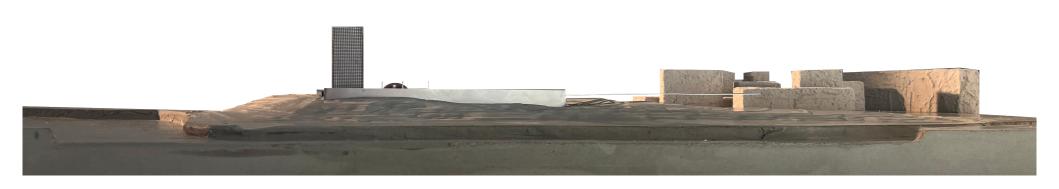
## linearity + seamless transition

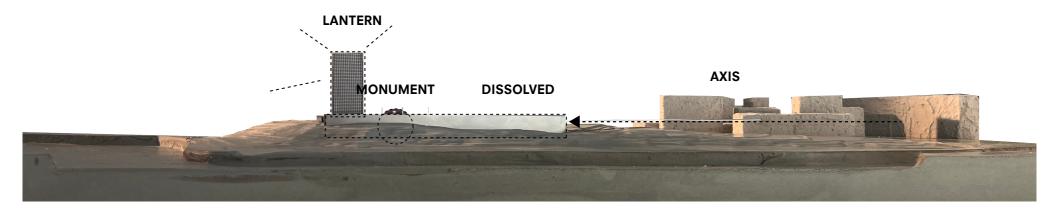


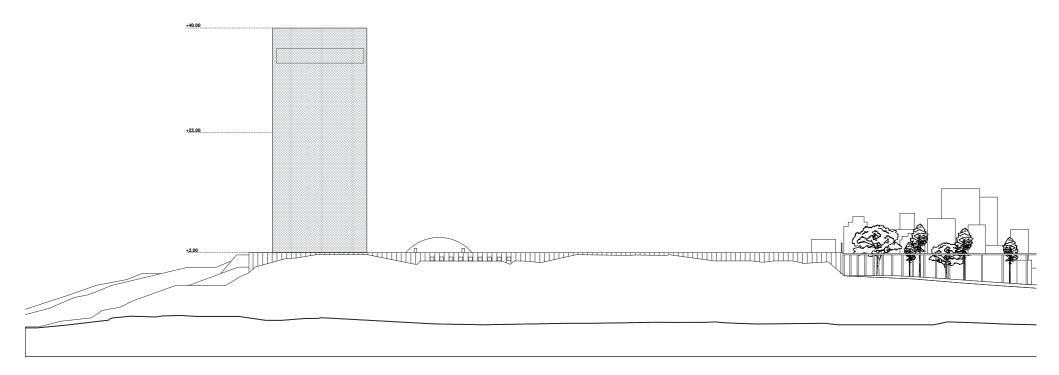
# **CHARACTER**

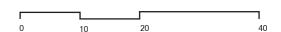


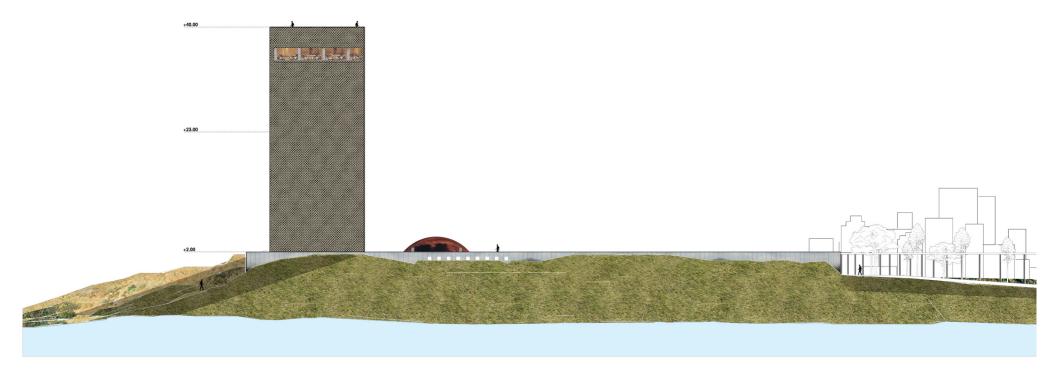


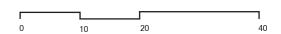


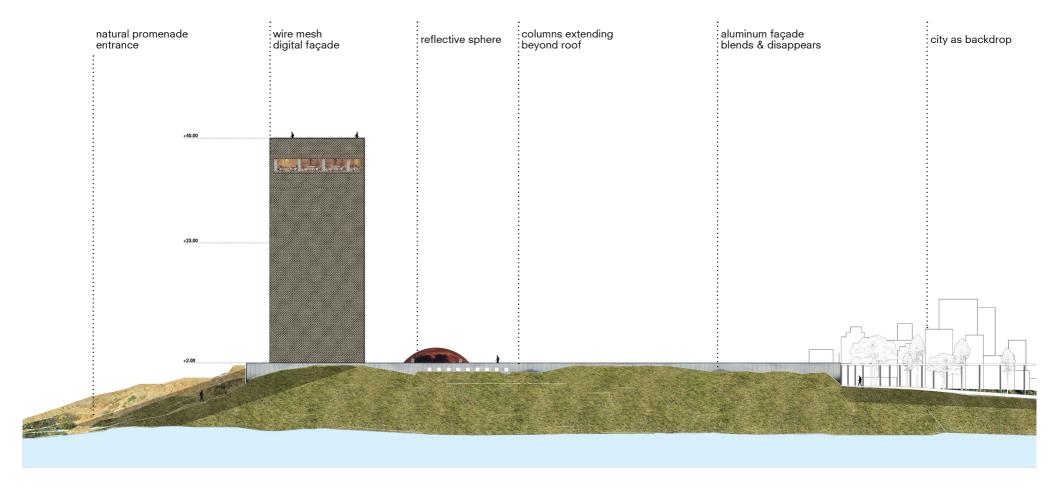


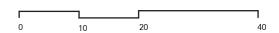




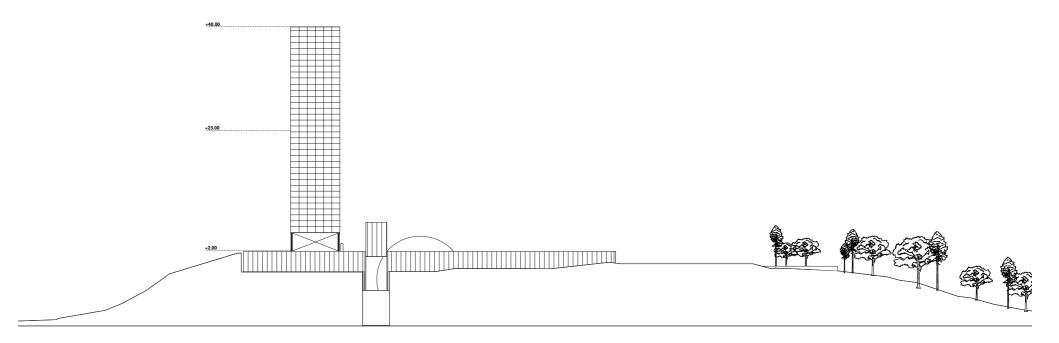


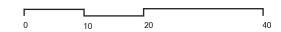






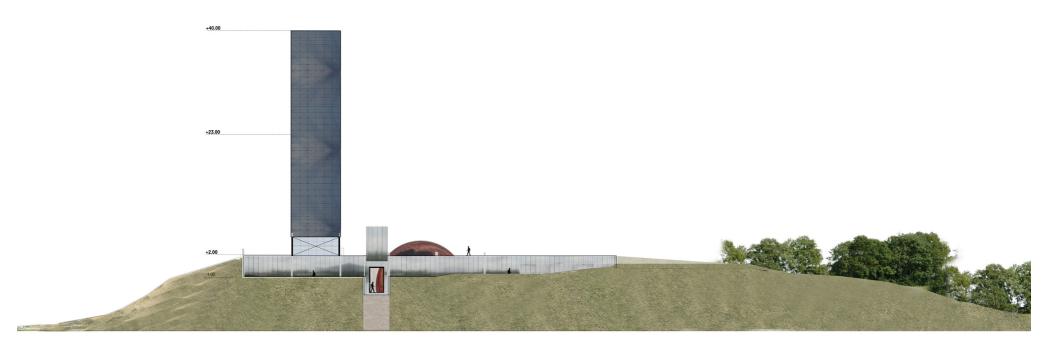
#### south elevation

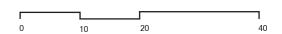




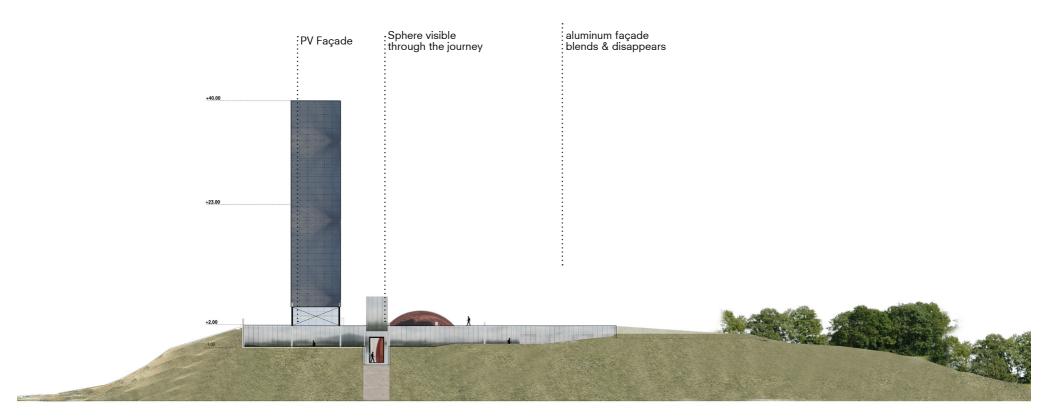


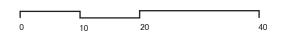
### south elevation



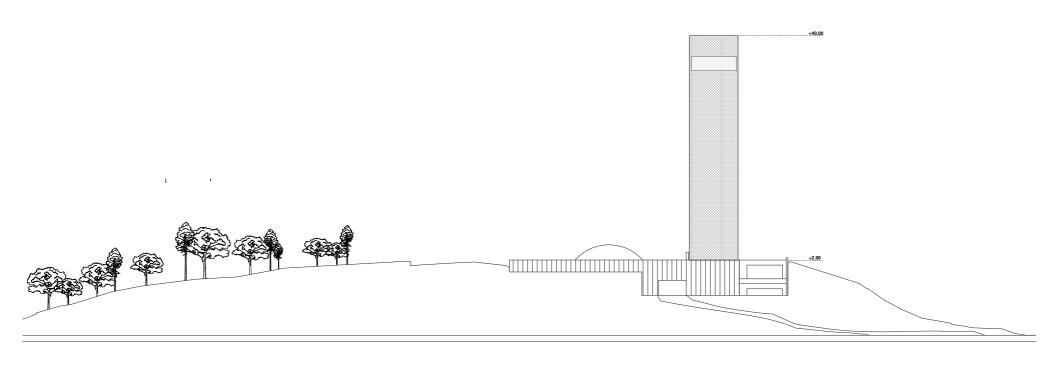


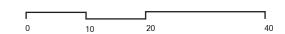
#### south elevation





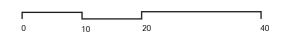
#### north elevation

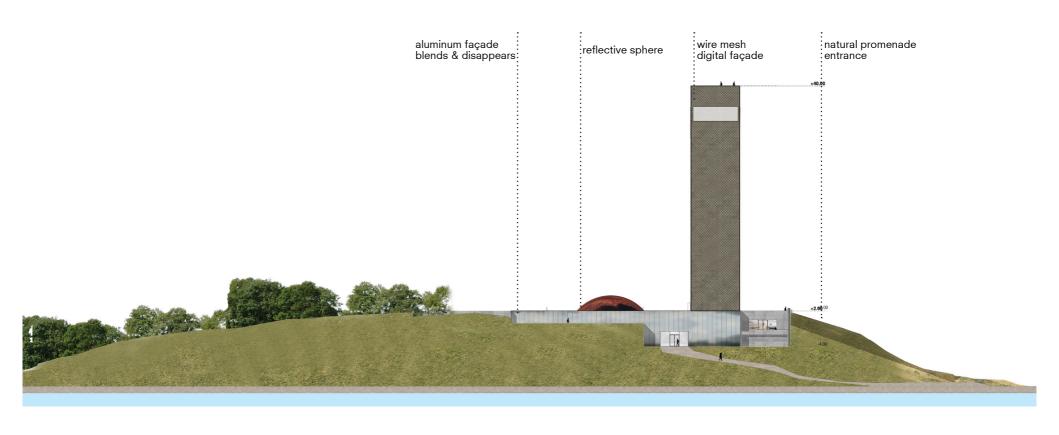




### north elevation





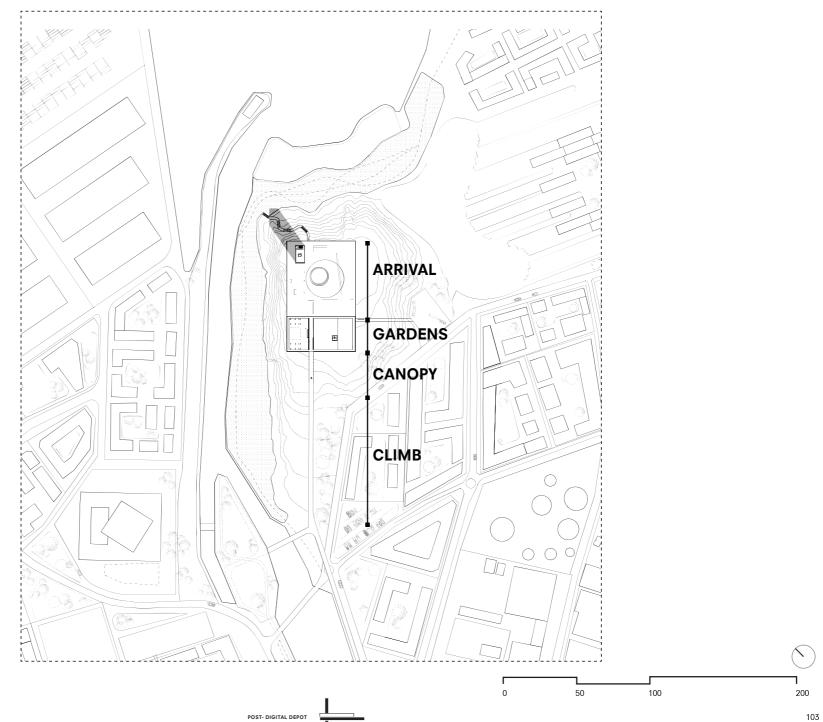


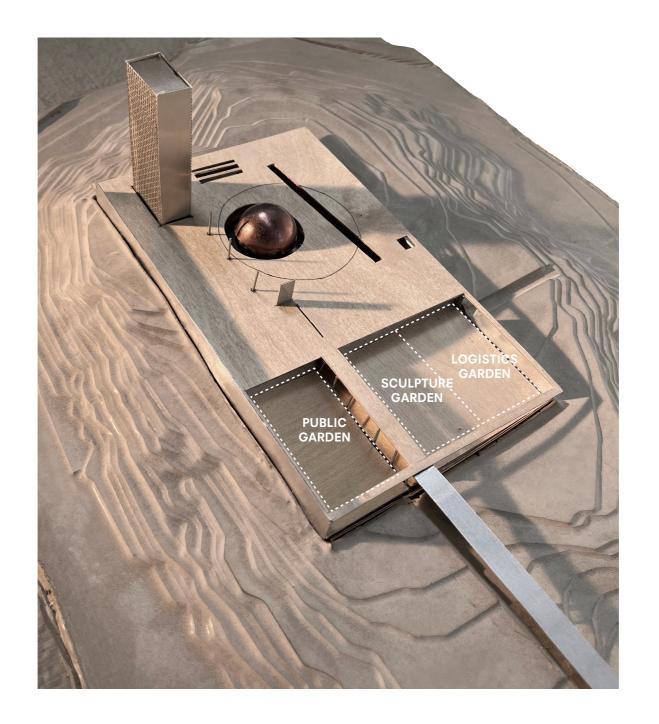




# **EXPERIENCE**

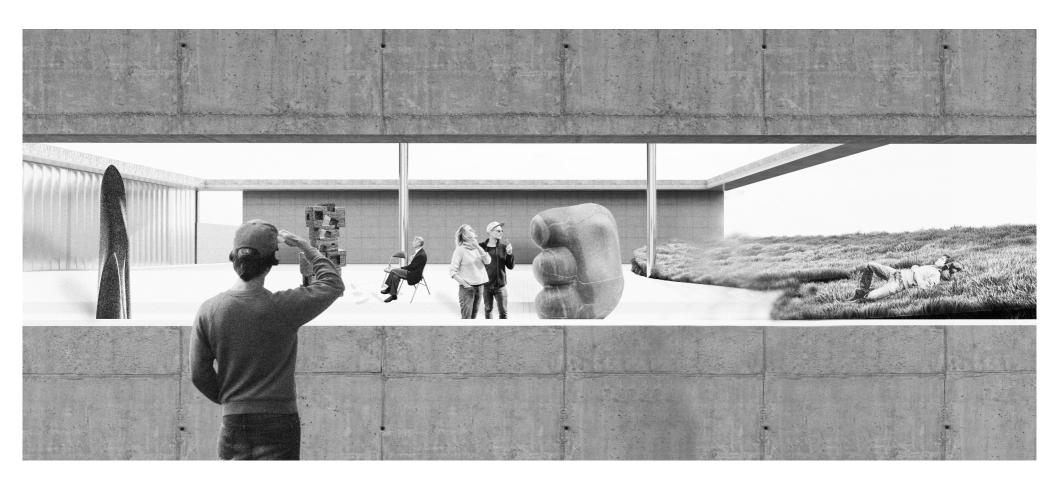








PUBLIC GARDEN

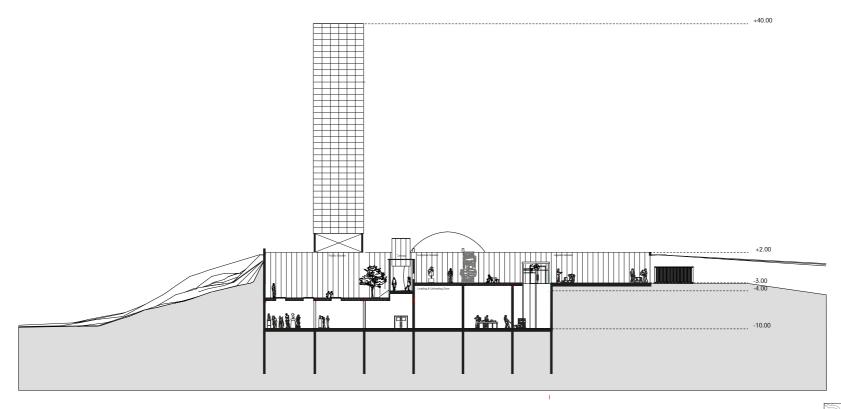


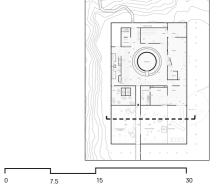
SCULPTURE GARDEN



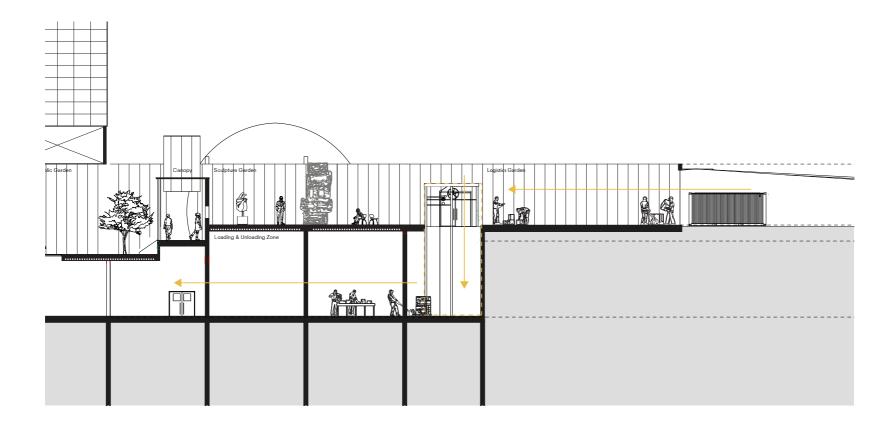
ENTRANCE

## section | gardens | levels of interaction

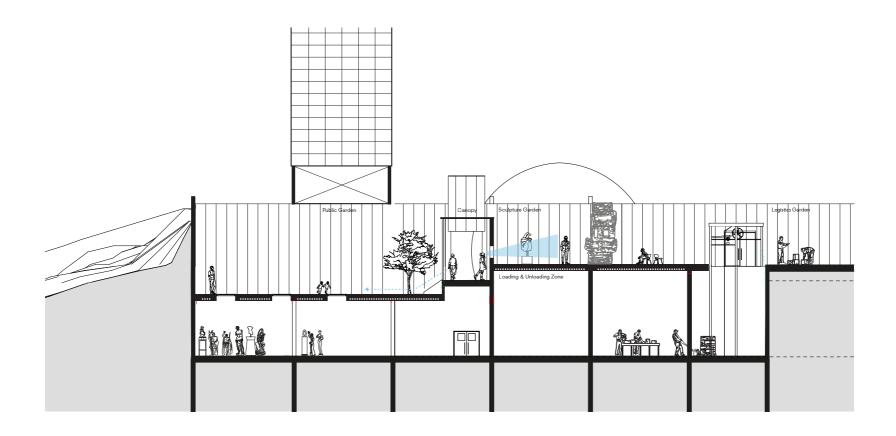




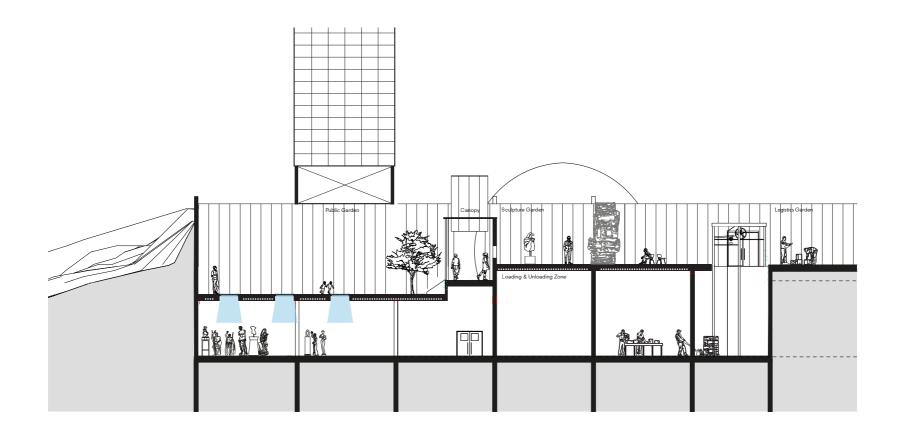
#### artwork entrance



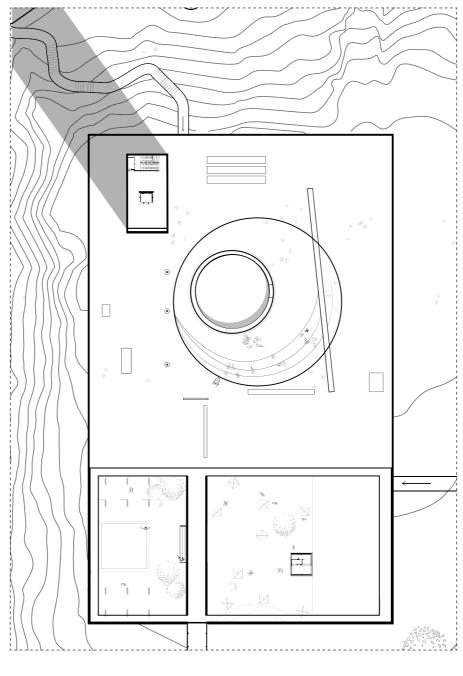
#### artwork entrance



#### looking into the arts depot



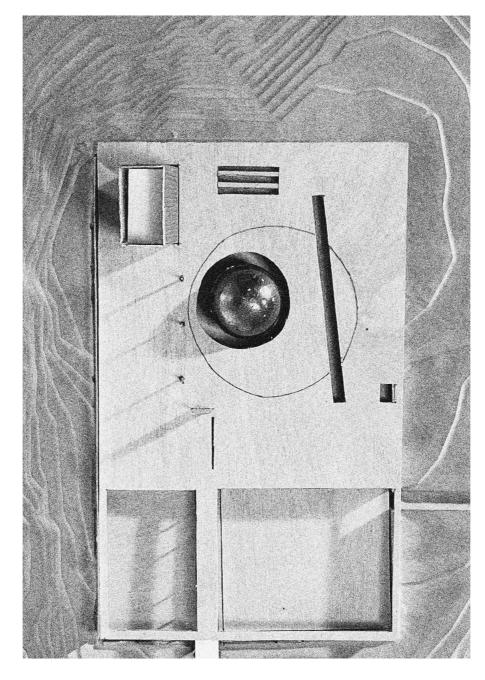
#### ROOF IS THE MAIN FACADE







#### ROOF IS THE MAIN FACADE







ROOF IS THE MAIN FACADE



DIGITAL FACADE

115



INCLINATION

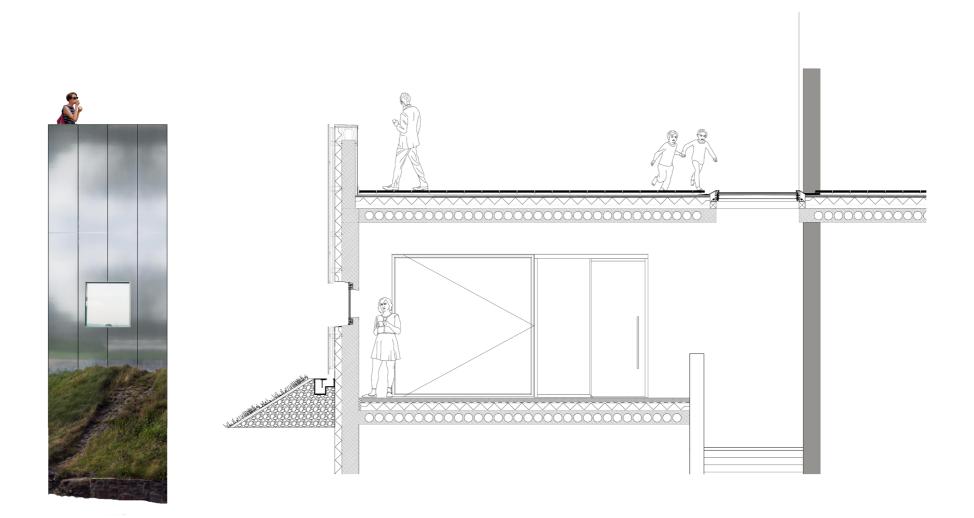


STAGE



EXPOSITION PEEK-A-BOO

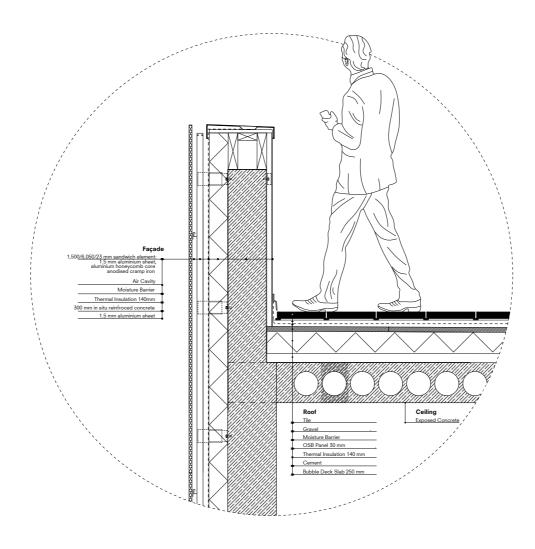
#### envelope fragment

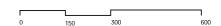




POST- DIGITAL DEPOT

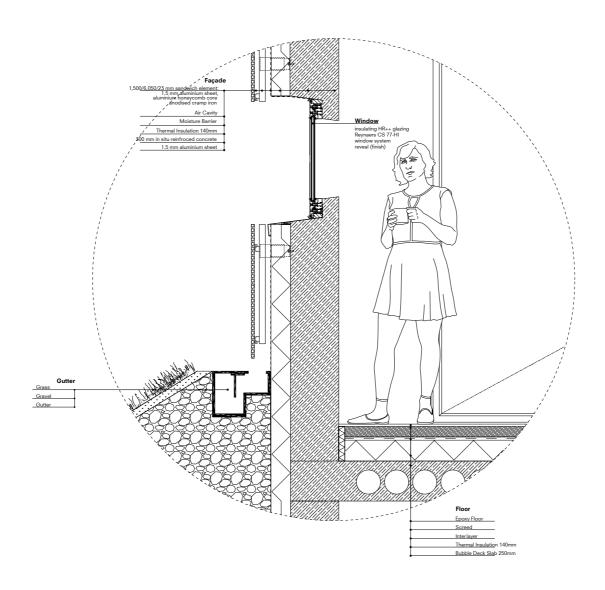
#### ballustrade + roof detail







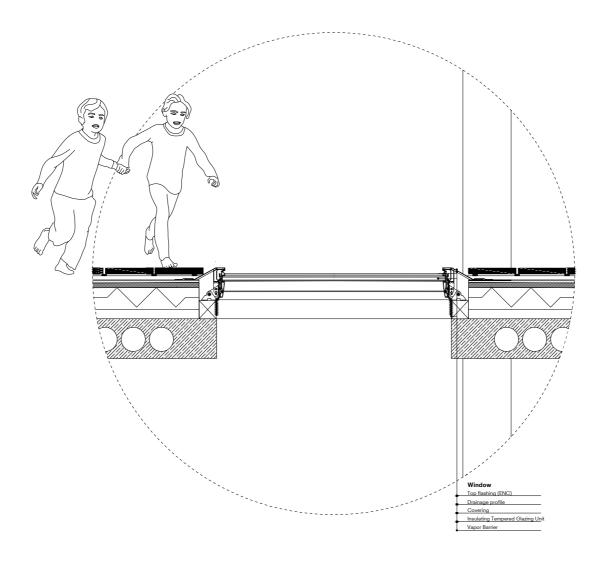
## cladding + window detail







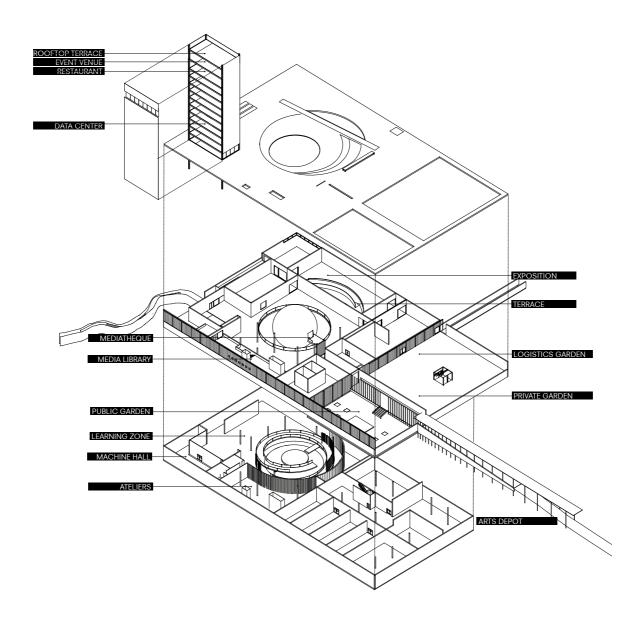
## skylight detail



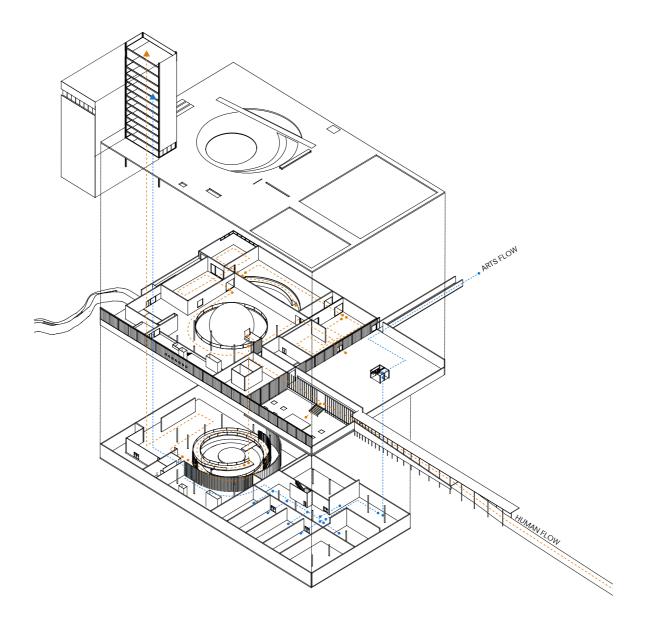




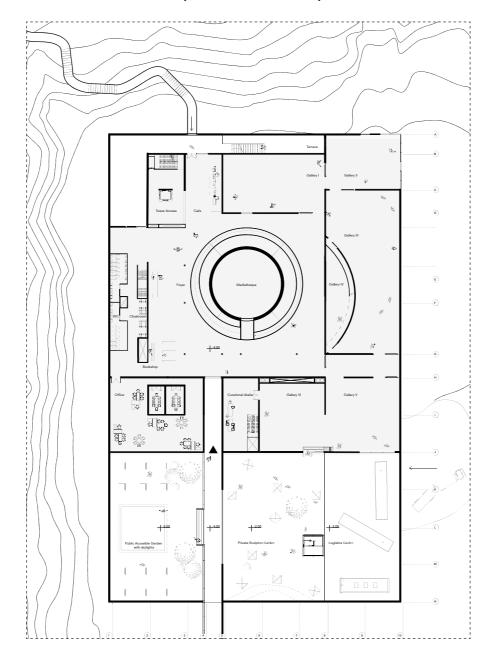
#### **PROGRAM**



#### **FLOWS**



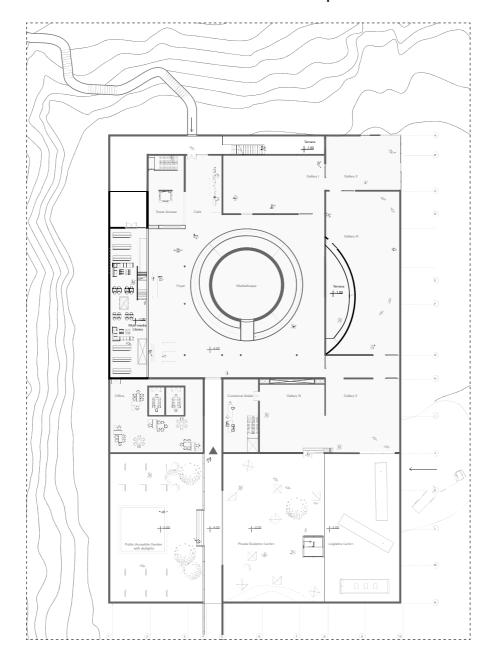
## -1 | exposition level plan







## -0.5 | mezzanine level plan







## light typologies

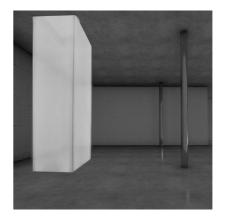




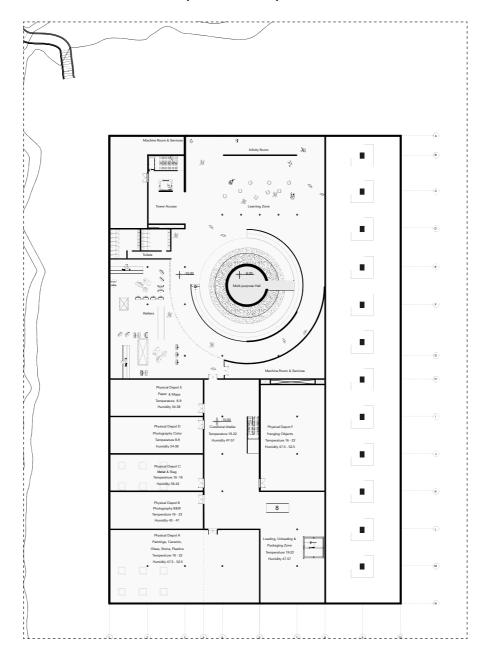






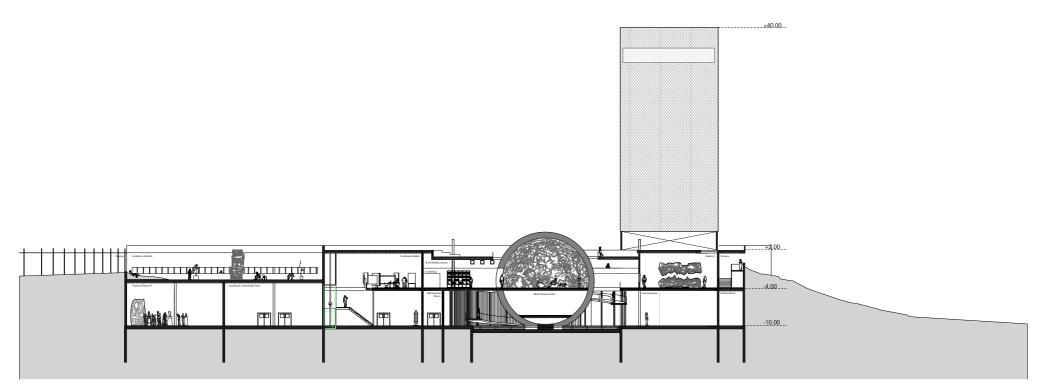


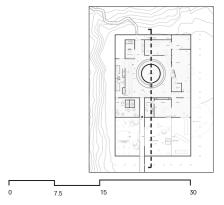
## depot level plan





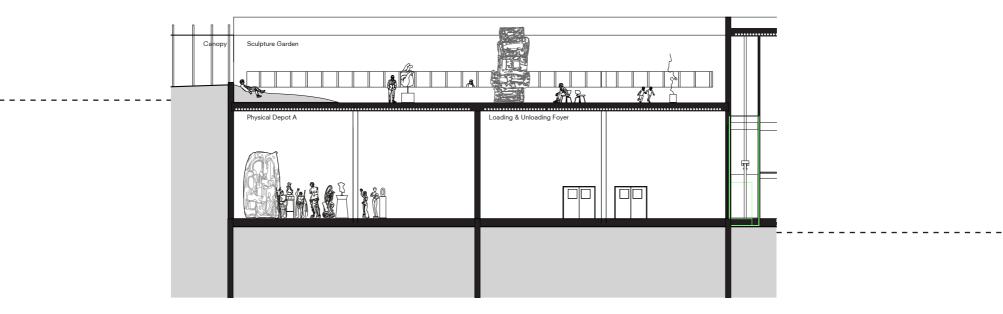
#### section | axial

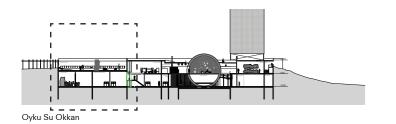






## gallery | depot

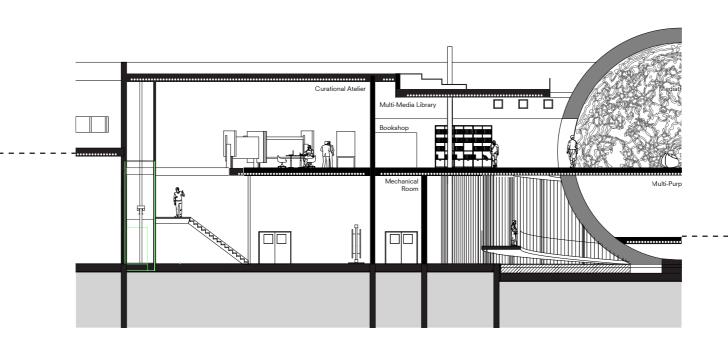


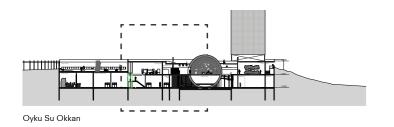


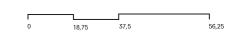
0 18,75 37,5 56,25

POST- DIGITAL DEPOT

#### curational atelier | foyer | mediatheque





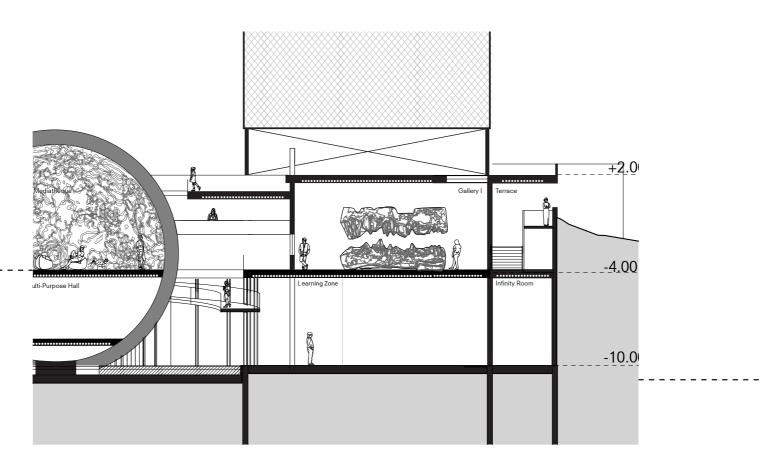


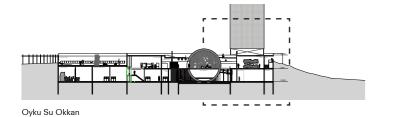
OST- DIGITAL DEPOT



FOYER

## mediatheque | exposition | learning zone





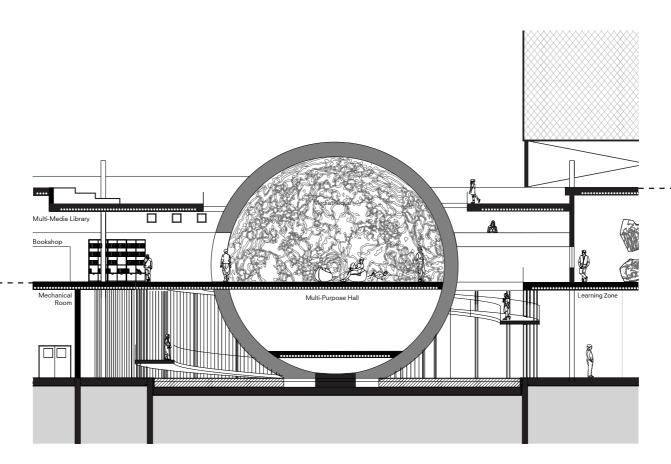


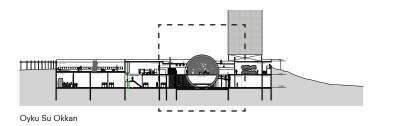
POST- DIGITAL DEPOT



LEARNING ZONE

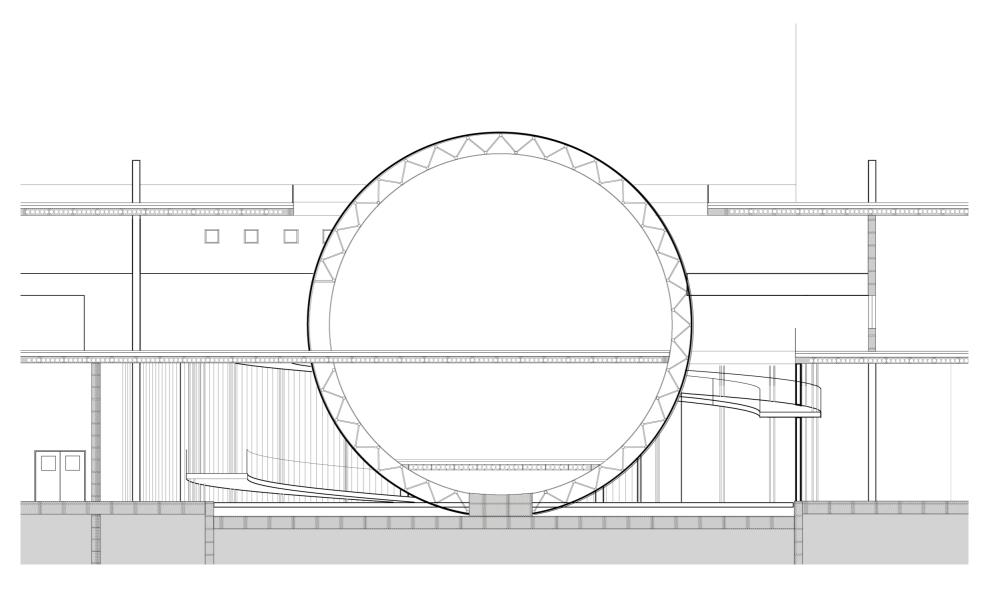
## the sphere & the grid

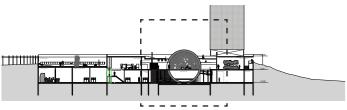






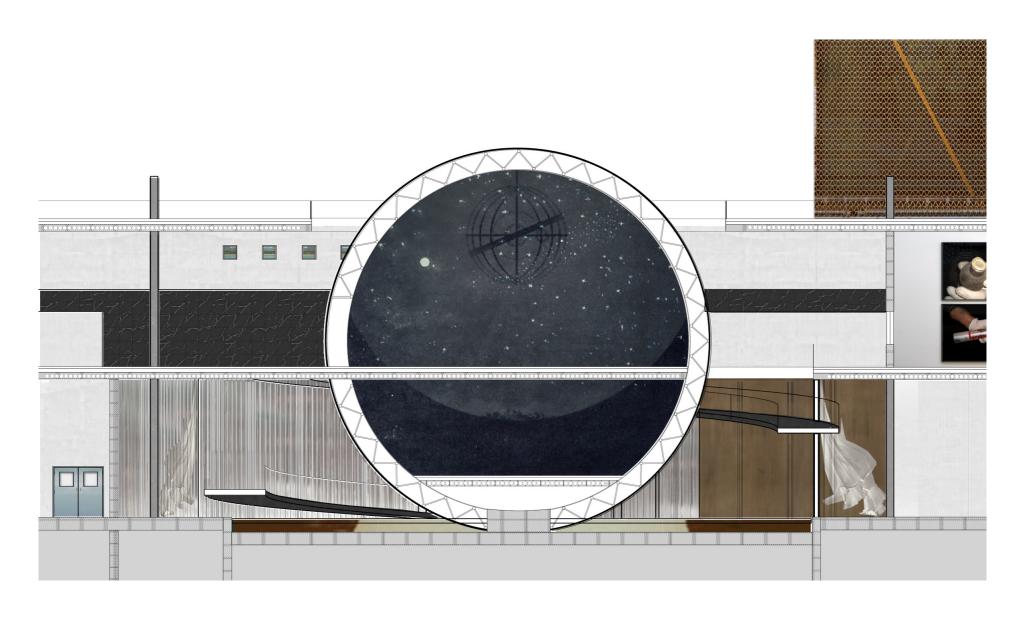
OST- DIGITAL DEPOT

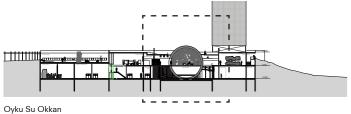




0 2,8 5,6 8,4

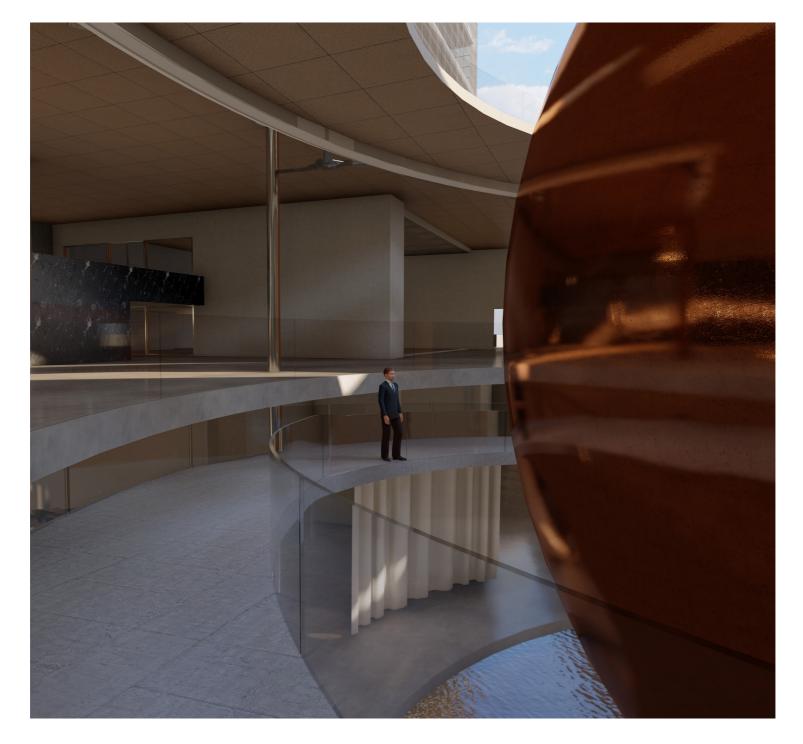
POST- DIGITAL DEPOT





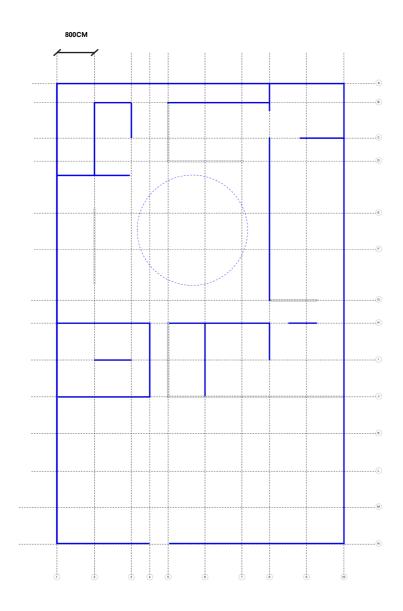
2,8

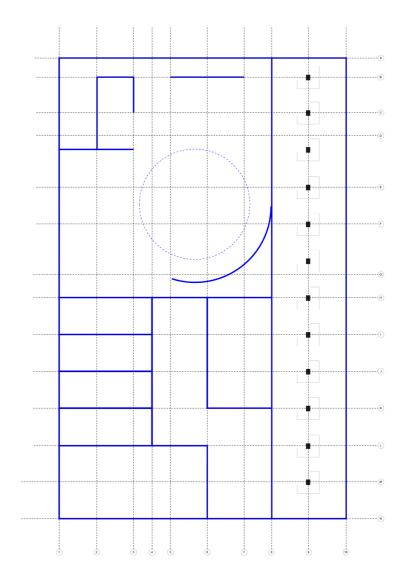
POST- DIGITAL DEPOT

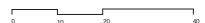


# **FEASIBILITY**



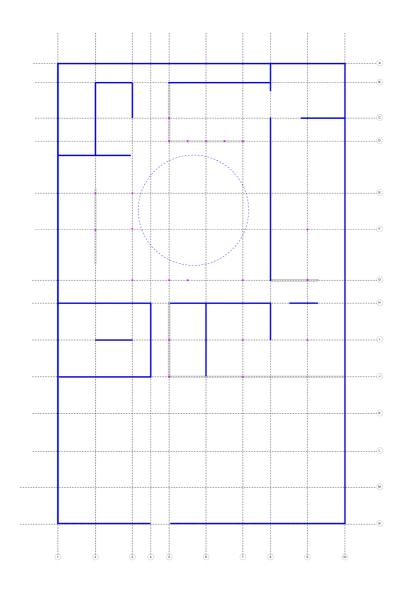


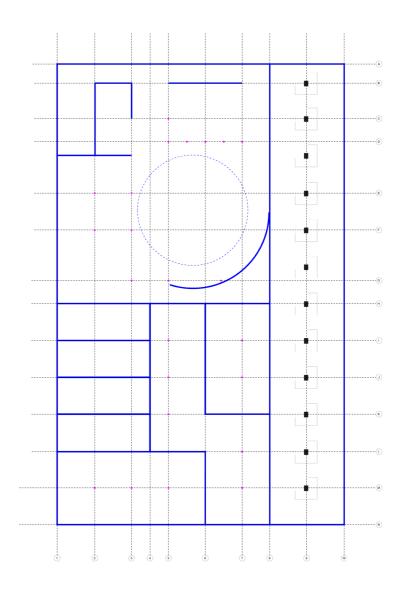






#### shear walls + columns

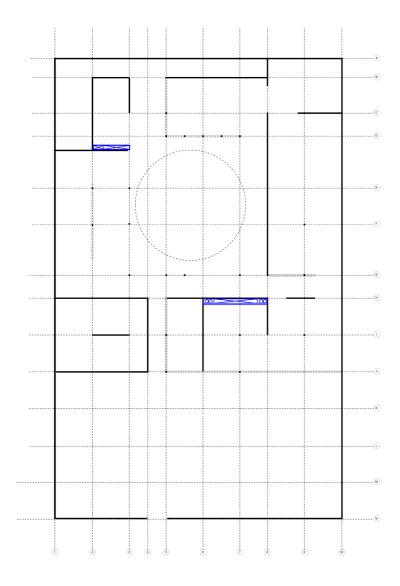


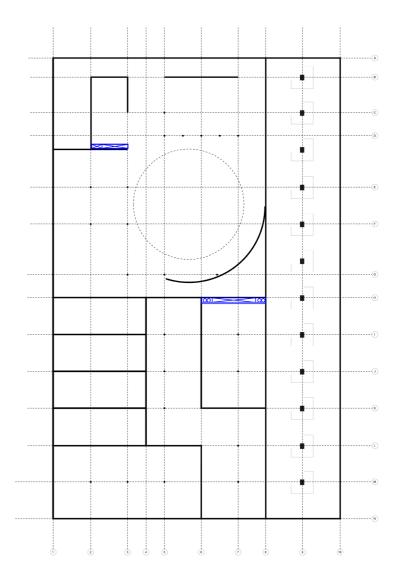


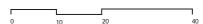




#### shafts

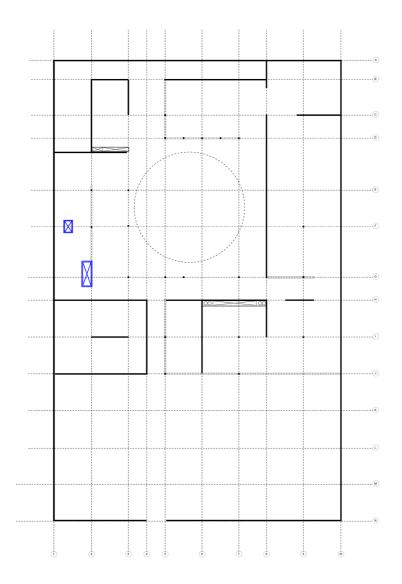


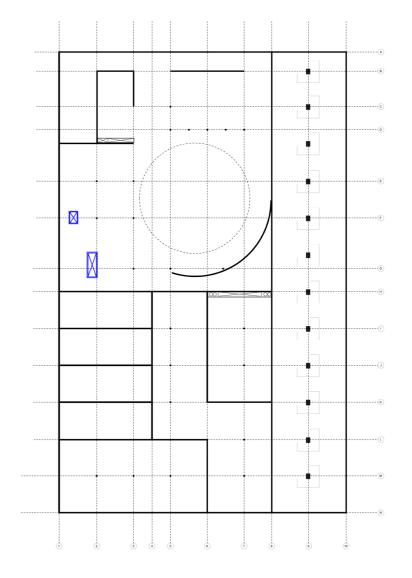


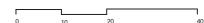




## light wells

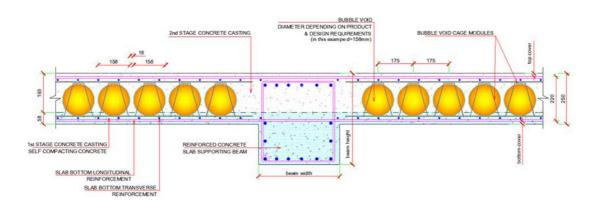








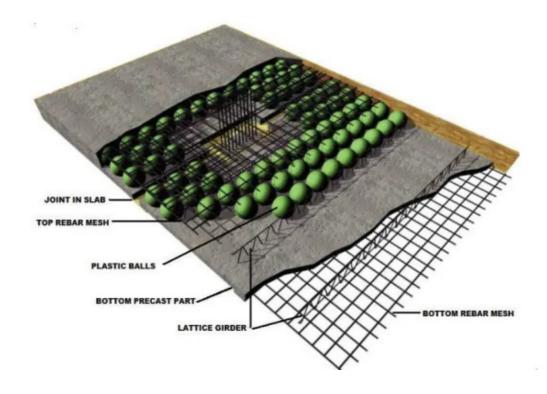
#### bubble slab



#### **BUBBLE SLAB CROSS SECTION DETAIL**

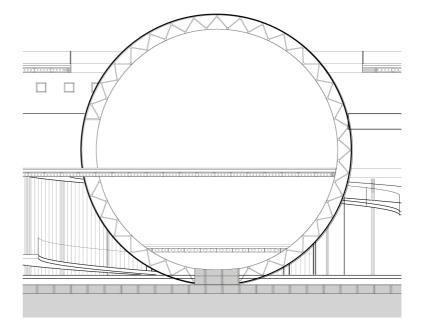
Version	Slab Thickness	Bubbles	Span (Multiple bays)	Cantilever Maximum Length	Span (Single bays)	Completed Slab Mass	Site Concrete Quantity
	mm	mm	metres	metres	metres	Kg/m²	m³/m²
BD230	230	Ø 180	5 – 8.1	≤ 2.2	5 - 6.3	370	0.11
BD280	280	Ø 225	7 - 10.1	≤ 2.7	6 - 7.8	460	0.14
BD340	340	Ø 270	9-12.5	≤ 3.3	7 - 9.6	550	0.18
BD390	390	Ø 315	10 - 14.4	≤ 3.8	9 – 11.1	640	0.21
BD450	450	Ø 360	11 - 16.7	≤ 4.5	10 - 12.5	730	0.25

#### bubble slab



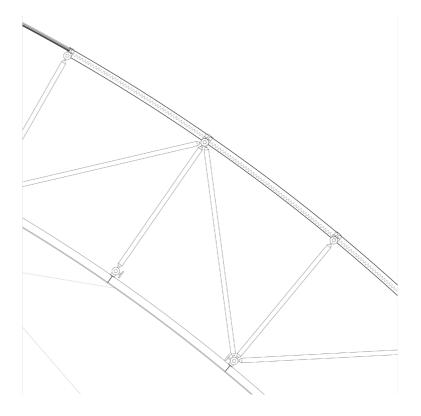
### sphere | structure



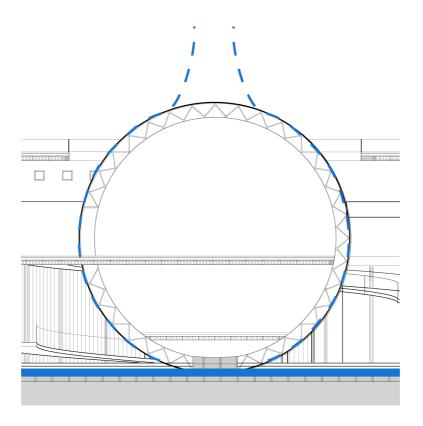


### sphere | structure





## sphere I rain water collection



adhesion + cohesion + collection + reflection

### sphere | cladding



steel panels: weld + polish + grind

### sphere | cladding

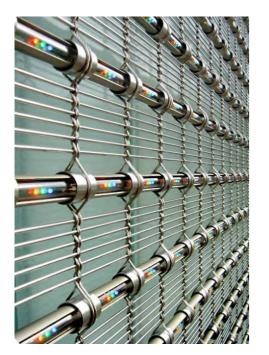


steel panels: weld + polish + grind

### sphere | cladding

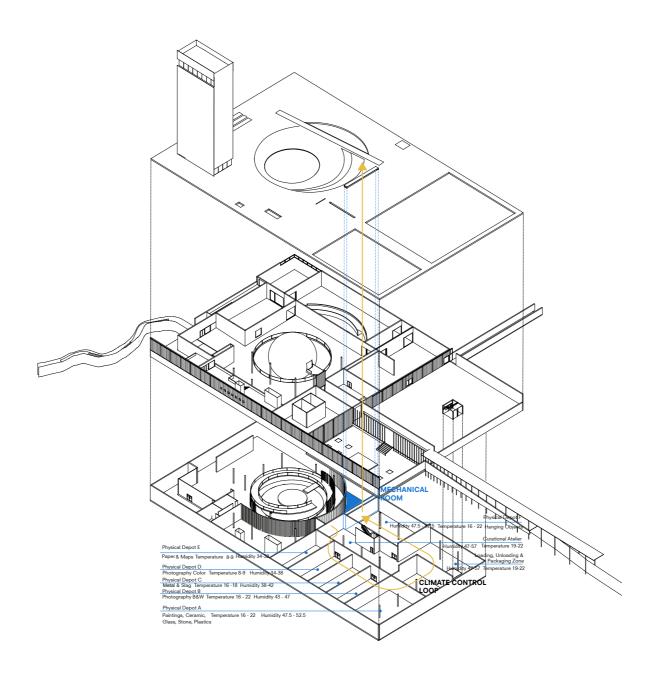


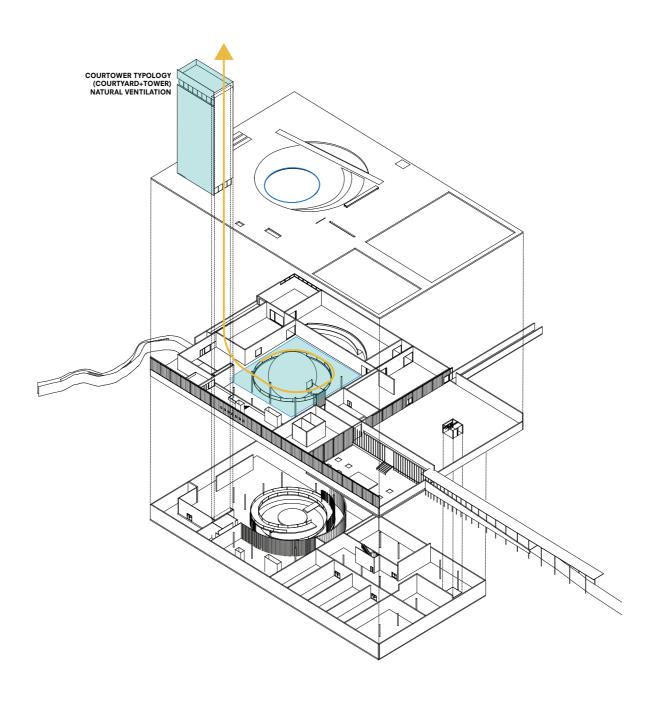
color scheme: colorization through heating

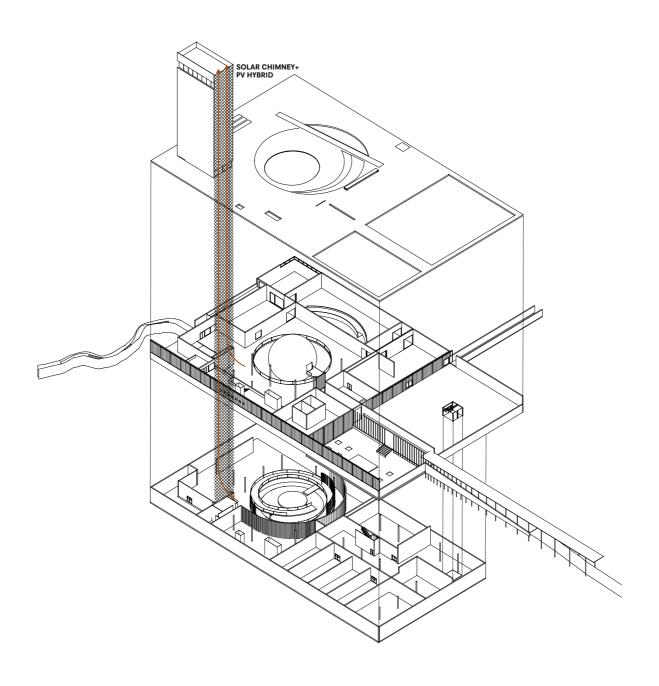


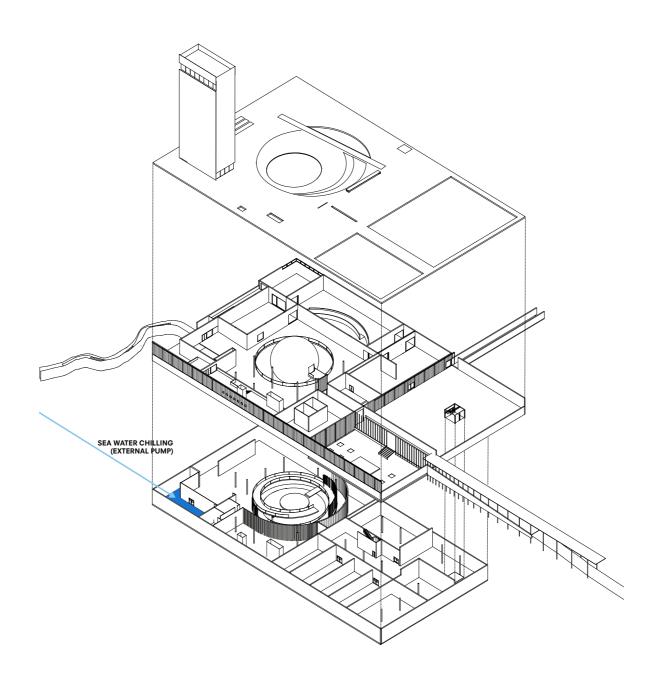


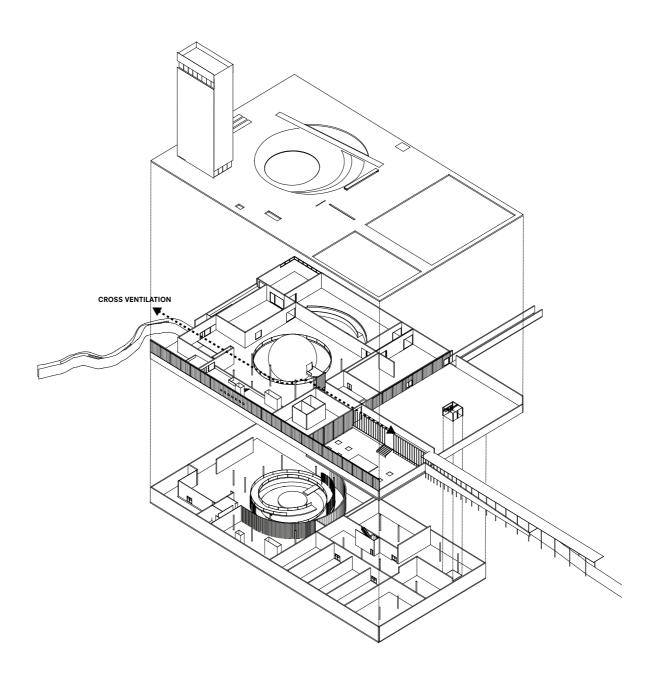
media-mesh façade

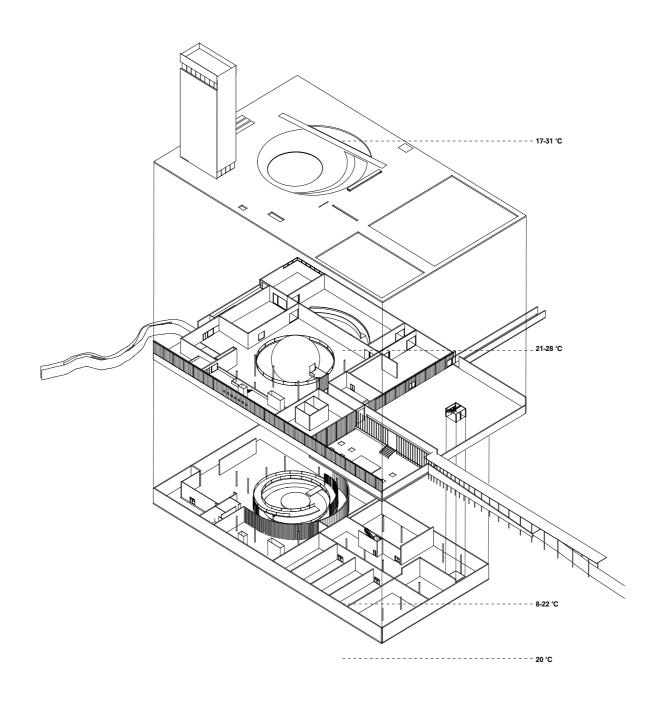














# **POST- DIGITAL DEPOT**



the hybrid cultural depot of Beirut