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ABOUT ME

During architecture school i started my volunteering with the *eme3* Architecture Festival in which I participated for four editions. My experience there consisted on helping to develop the festival itself, prepare and install the stands, coordinate participant teams and help building the 1:1 prototypes. In the last edition I also worked in the coordination of the volunteer team members.

During the last years of school I started working with my teacher Claudi Aguiló at *dataAE* as an intern. In this studio my role consisted on preparing contest presentations and CAD drawing for contest and for building purposes. This position made me acquire the necessary knowledge to prepare contest strategies, and it provided me with a great insight of the workflows in a studio.

In *C.97* my job was mainly focused on developing private architecture, such as hotel refurbishments and housing projects. The tasks for which I was responsible of consisted on preparing tender drawings and construction details, master planning and supervision of urban regulations, always working under the directives of the senior architect.

During the latter, I had the chance to follow construction processes at site and supervision, meeting with clients and collaborators, coordinating small projects and establishing close relationships with contractors and suppliers.

I personally enjoy interacting with the diverse agents that participate in a given project and I especially appreciate the physical experience of architecture. I see on-site construction control as a powerful opportunity to learn and to enhance projects. My personal strengths are multiple project simultaneity, assertiveness and team work.

ACADEMIC

Architecture

ETSAV - Universitat Politècnica de Catalunya
Sant Cugat del Vallès, Barcelona, Spain

2009 - 2016

Constructive Wood Tehniques - Technical course

ETSAB - Universitat Politècnica de Catalunya
Barcelona, Spain

2020

Laboratory for Sustainable Architectural Production - Master course

Erasmus exchange program
Umeå Universitet - UMU
Umeå, Sweden

2015

Empatia workshop in Fiskars, Finland
Tampere University of Technology

2013

VOLUNTEERING

eme3_2011
eme3_2012
eme3_2013
eme3_2015

Architecture festival

Text editing for catalogues, web documentation, 1:1, information support during the festival, administrative tasks and drawing + building the main space pavilions.

PROFESSIONAL EXPERIENCE

C.97 Arquitectes i Associats

2015 - current job

Architect

Main responsible for several projects in all stages.
3D modelling and CAD drawing. Basic + Execution + Building process plans.
Contest renderings and visualizations. Field works control.

Corporate building in Plaça Europa, Barcelona. 9100m². Built.
5 star Hotel in el Maresme, Spain. Refurbishment + masterplan. 28000m². Built.
5 star Hotel in Côte d'Azur. Refurbishment
5 star Hotel in a golf resort in Spain. Basic project development.
4 storey housing building in Mataró, Spain. Basic + Execution project.
14 storey housing tower in Mataró, Spain. Basic project.

-

Help Snowboards

2019 - sporadic job

Board Shaper

CAD board outlines design and drawing for production

-

R3 Tècnics Rehabiteck

2014 - 2015

Internship

Refurbishment technical drawings and cost estimates.

-

DataAE

2013 - 2014

Internship

Drawing post-editing, diagrams and visualizations. Façade technical detailing. Contest rendering. Model making.

Parc Joan Oliver - 1st prize FAD contest
Caserna Guàrdia Urbana - 1st prize ProNouBarris contest
Vil·la Urània - 4th place, contest

SKILLS

LANGUAGES

Catalan - Native

Spanish - Native

English - Advanced

French - Basic

SOFTWARE

AutoCAD 2D & 3D

| |

SketchUp + Vray

| |

Adobe Photoshop

| |

Archicad BIM

| |

Autodesk Revit

| |

Adobe Indesign

| |



CONTACT

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01

SYMBIOSIS

Emergency dwelling for Refugees

The main goal uncovers a resolution for a local refugee problem in 2014 in Umeå, Sweden which evolved in complexity as a result of the European migrant crisis.

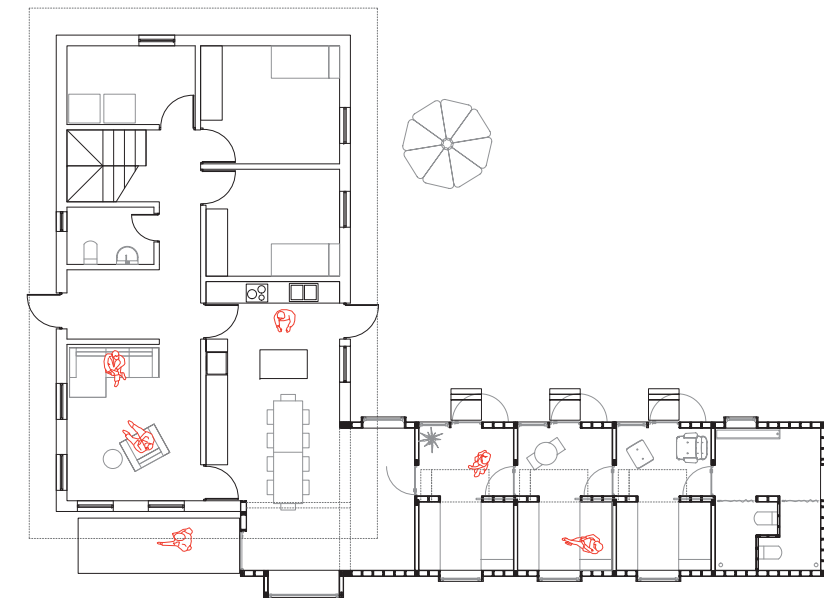
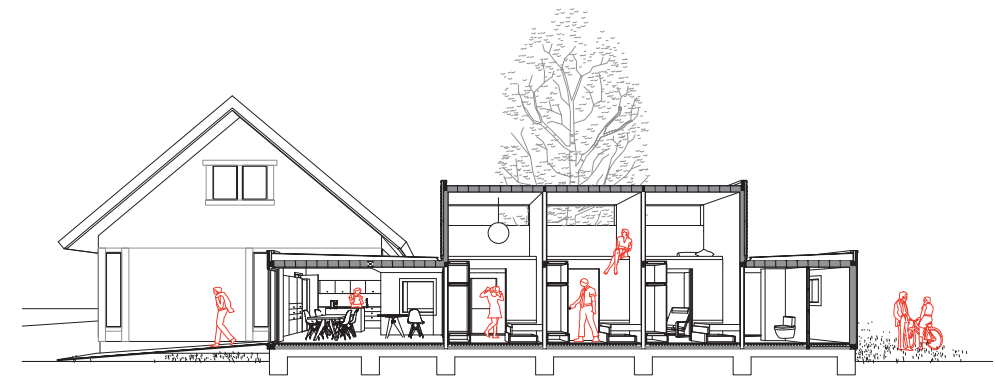
Using the existing **sprawl urbanism** as a starting point, the proposal aims to improve the neighborhood with the symbiosis that the new guests will provide. The isolation inherent in this housing typology is broken by this "**parasite**" that is attached to the kitchen of a single family house. By removing the kitchen the building budget of the new apparatus is reduced dramatically and as a result **new relations** between the old inhabitants and the new neighbors occur.

The socially disconnected lifestyle of the suburban outskirts areas become busy and vibrant through **the kitchen**.

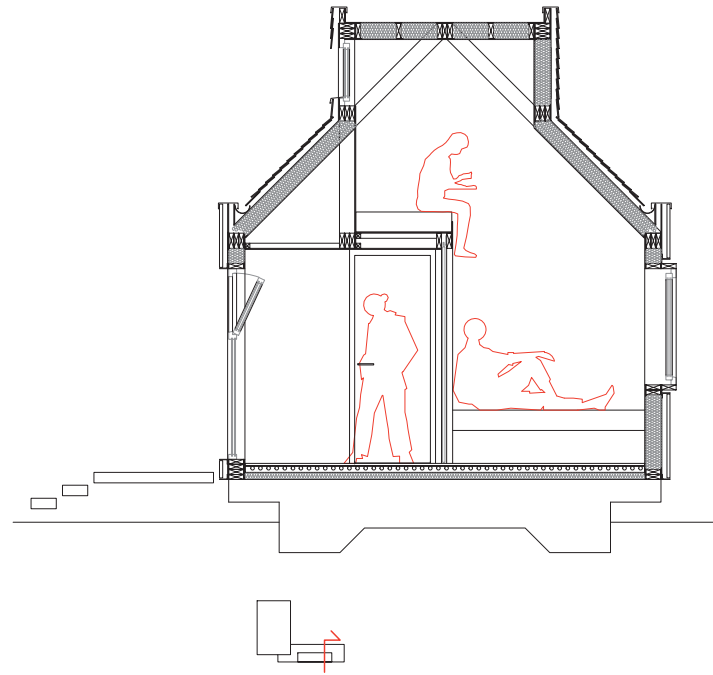




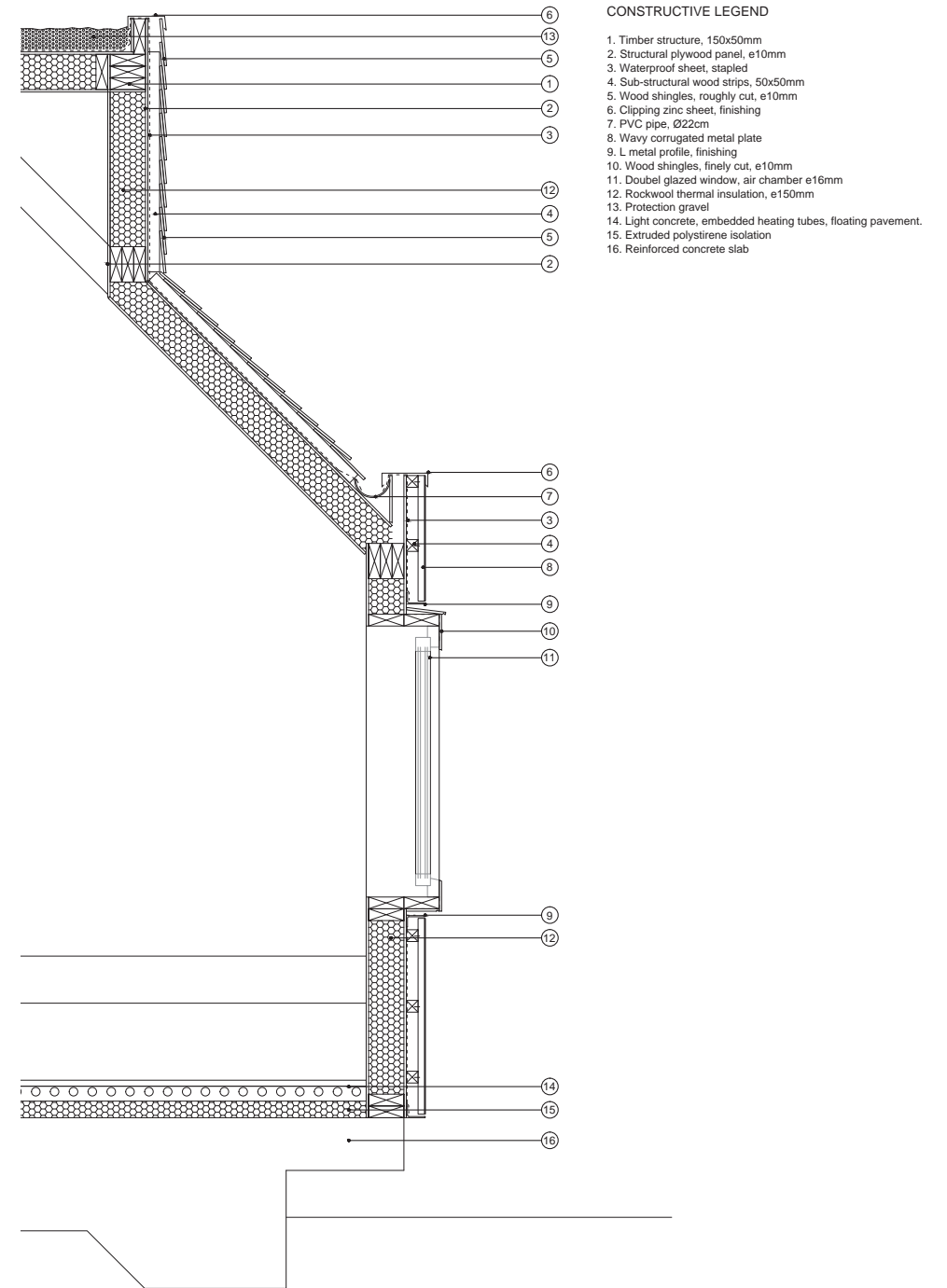
Situation plan. The main choice and starting point of the project was to choose the site and plot. There was an option to occupy a vacant plot in the southern margin. Instead the strategy was to force the relations with the local neighbours by attaching the volume to the existing buildings.



Section, plan and perspective. A "train" of rooms, with a common corridor is displayed perpendicular to the main house. The guests can live this intermediate spaces which can transform into studios, reading spots or small dining tables.



Transversal cut. The rooms are lit by the ceiling and a front window. to gain space, a bed lays over the corridor, making room for two people in a single room.

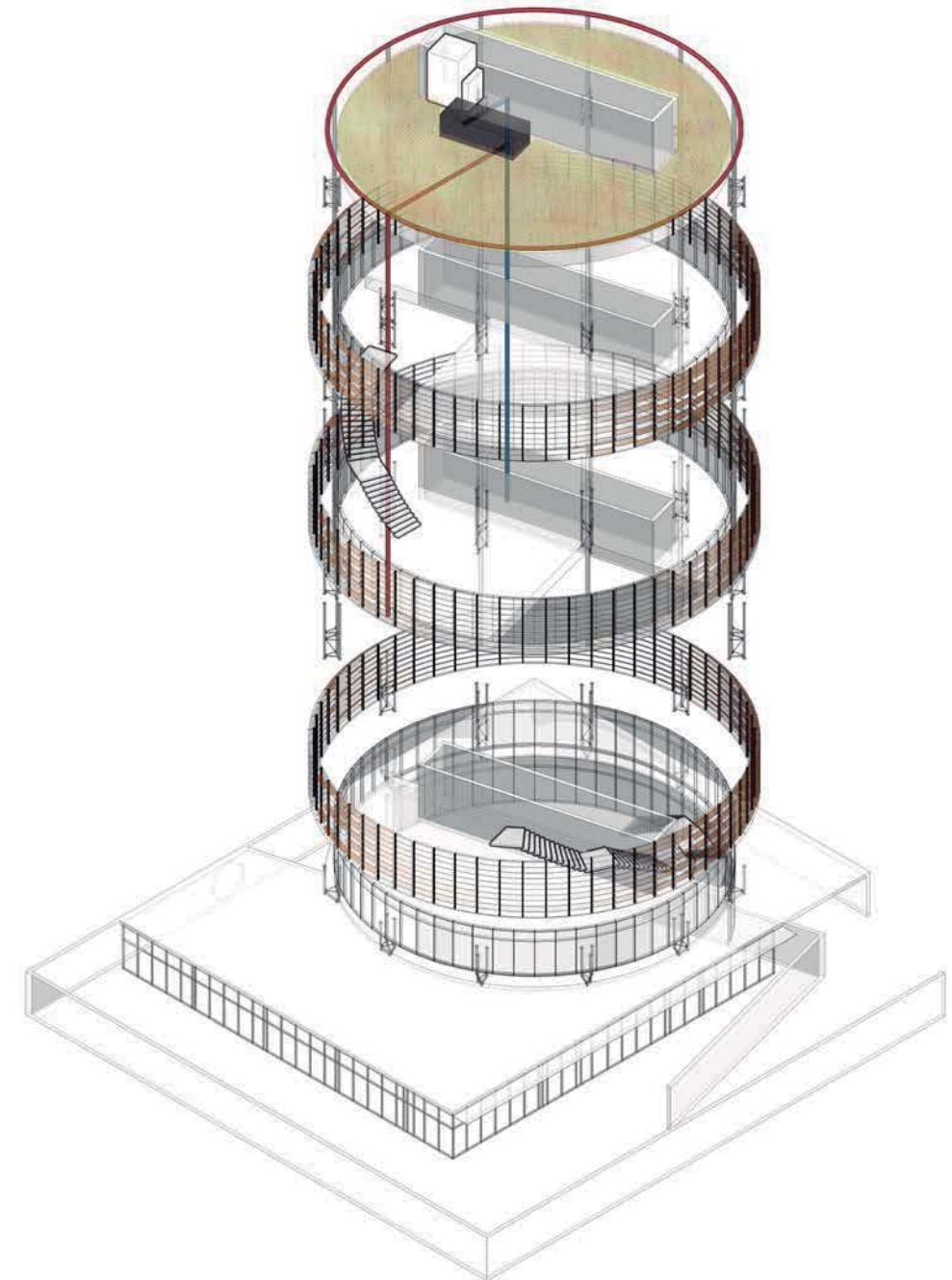


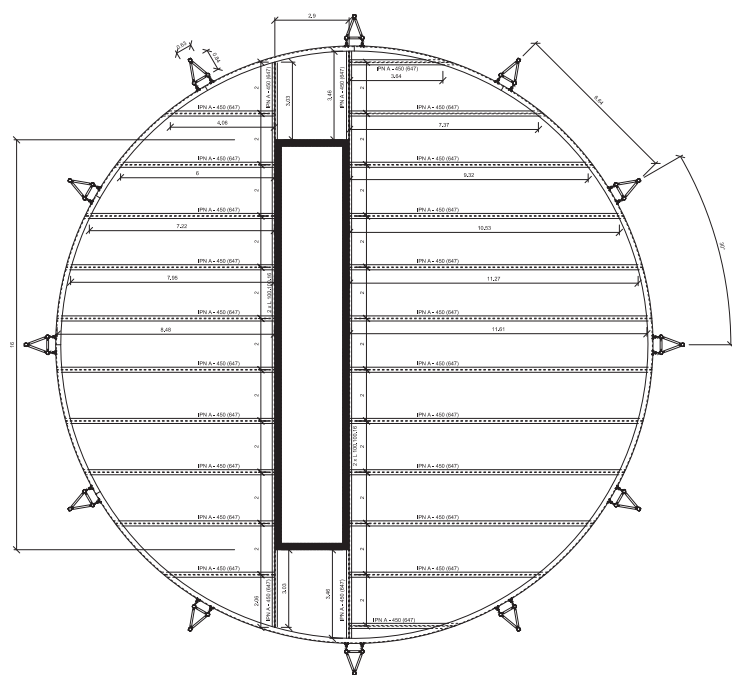
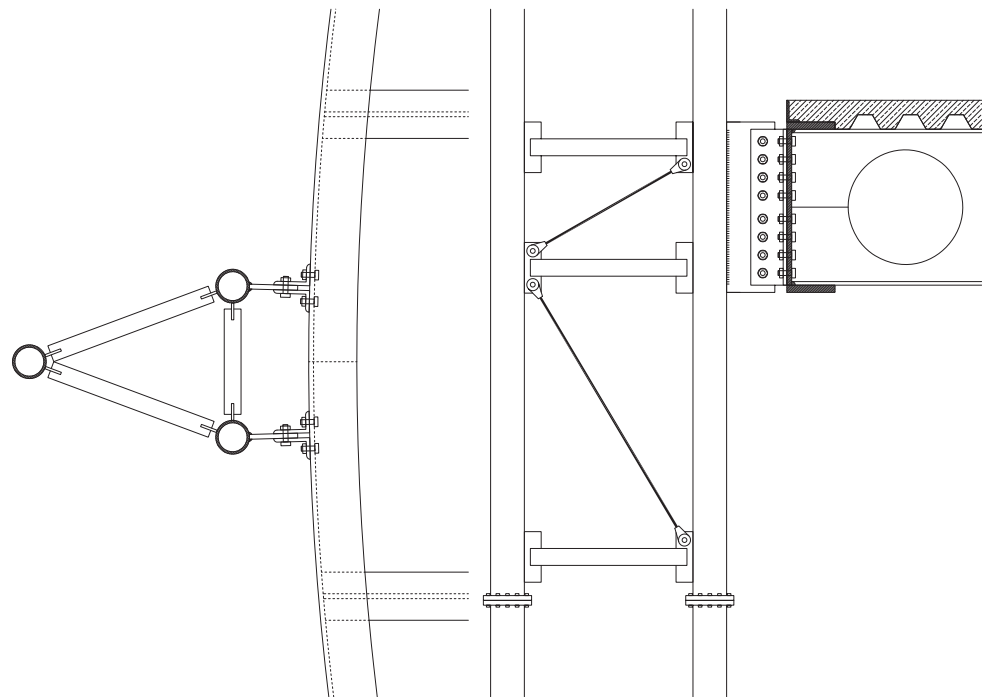
02 CANOPY

Historical Archive + Kindergarten + Library

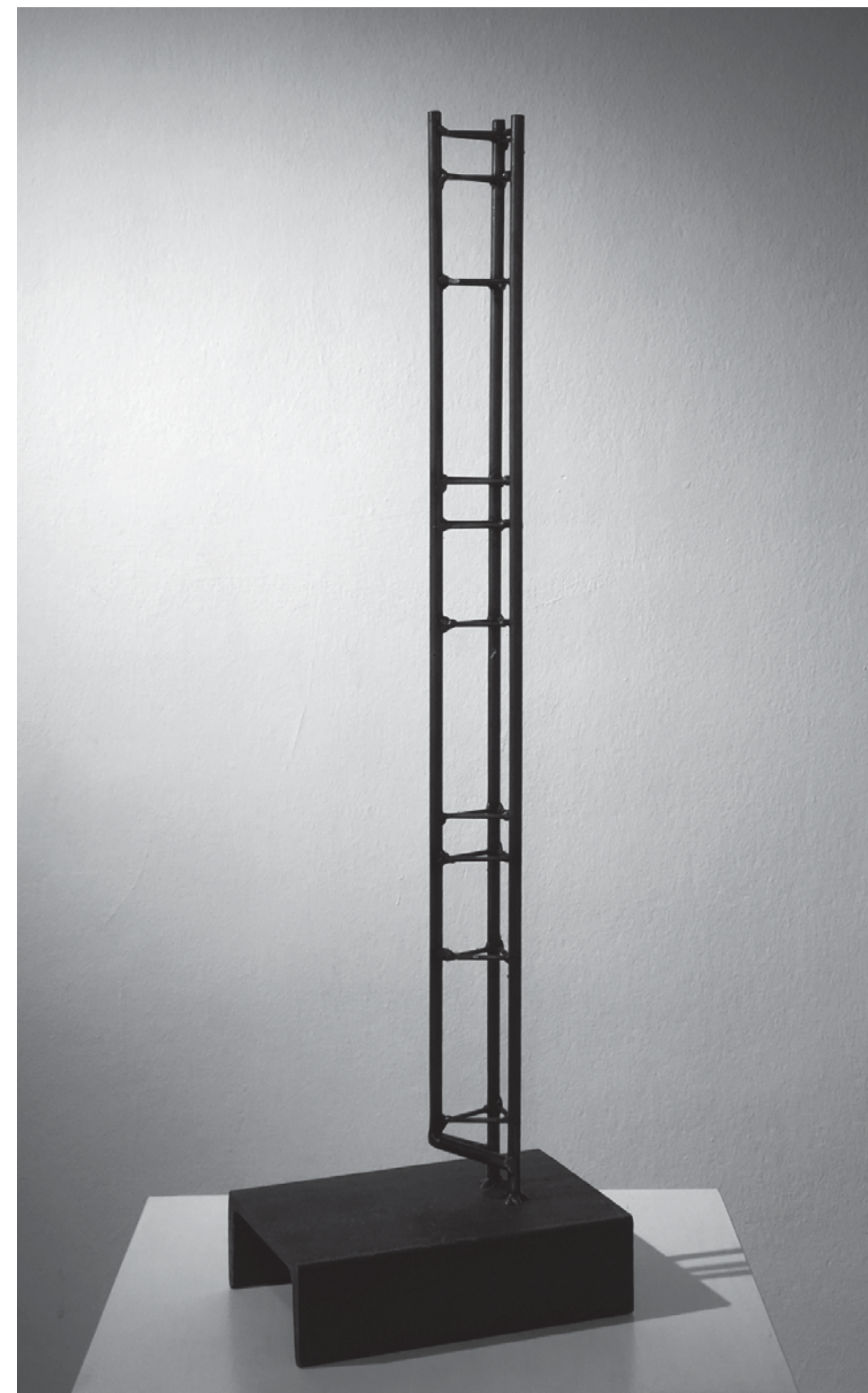
A **tree** as a metaphor helps to organize the programmatic layout of the building.

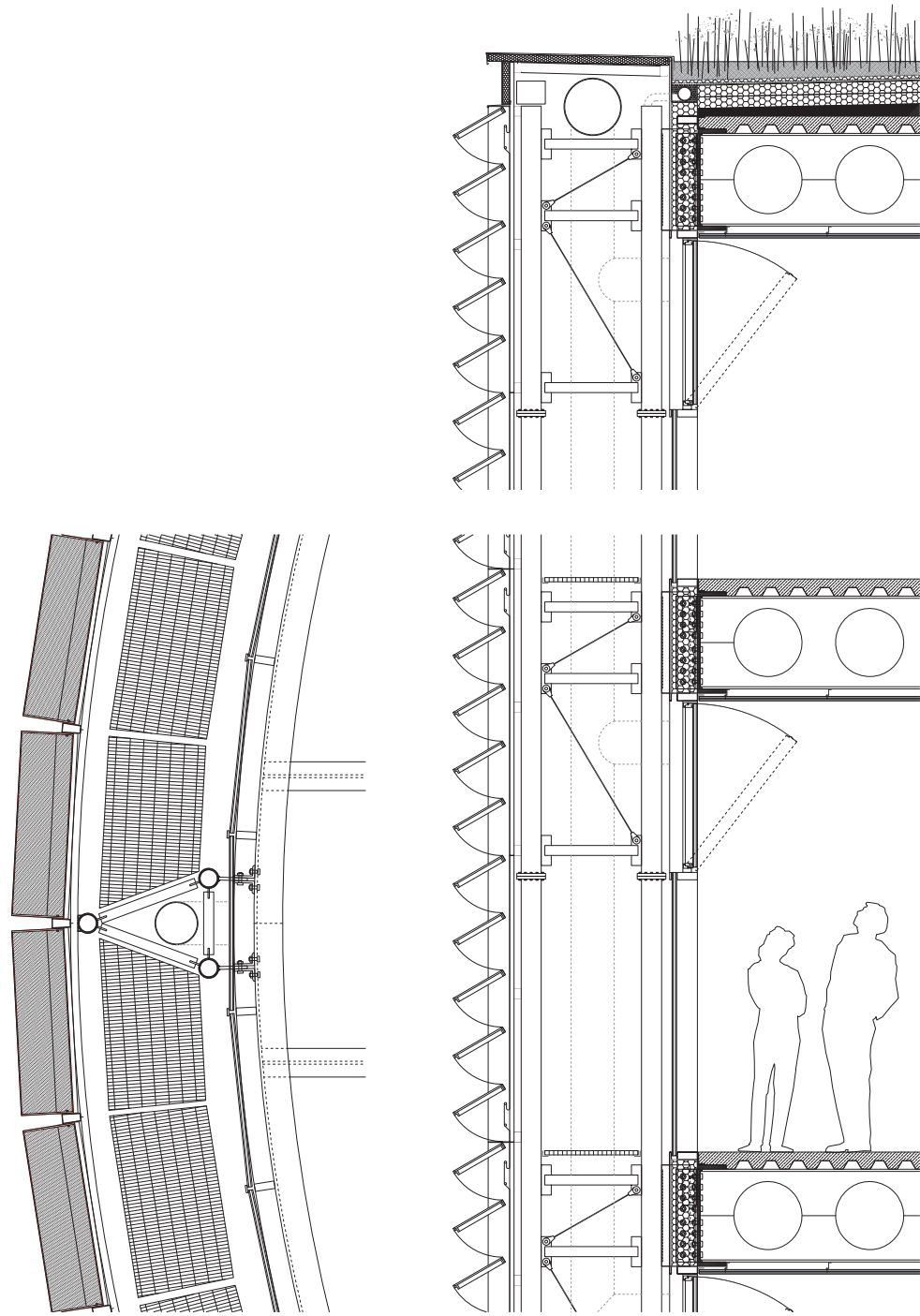
As a tree, the building grows vertically. The **roots** represent the external knowledge as well as the past. Consequently, the Archive is placed underground. From our past history, society grows and so does the building. The Kindergarten should be placed at ground level where the children can interact with nature. It also represents the **trunk** of the tree, as the kids become the foundation of our future. Finally, the library keeps growing up like the canopy of our tree. Covered by a translucent envelope and façade, a spiral staircase offers access to the **fruit**: the books.



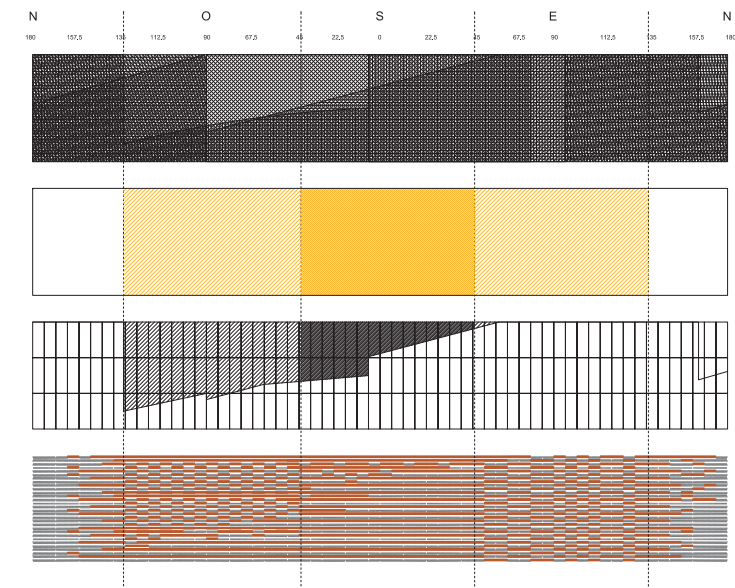


Structure. The full metallic structure is composed by 12 perimetral beams that act as columns and transmit the vertical and torsional loads.

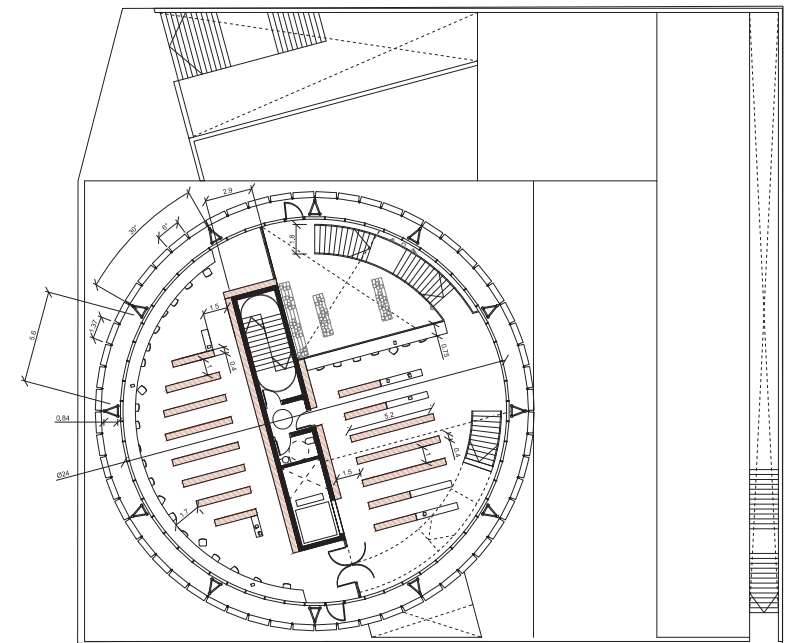
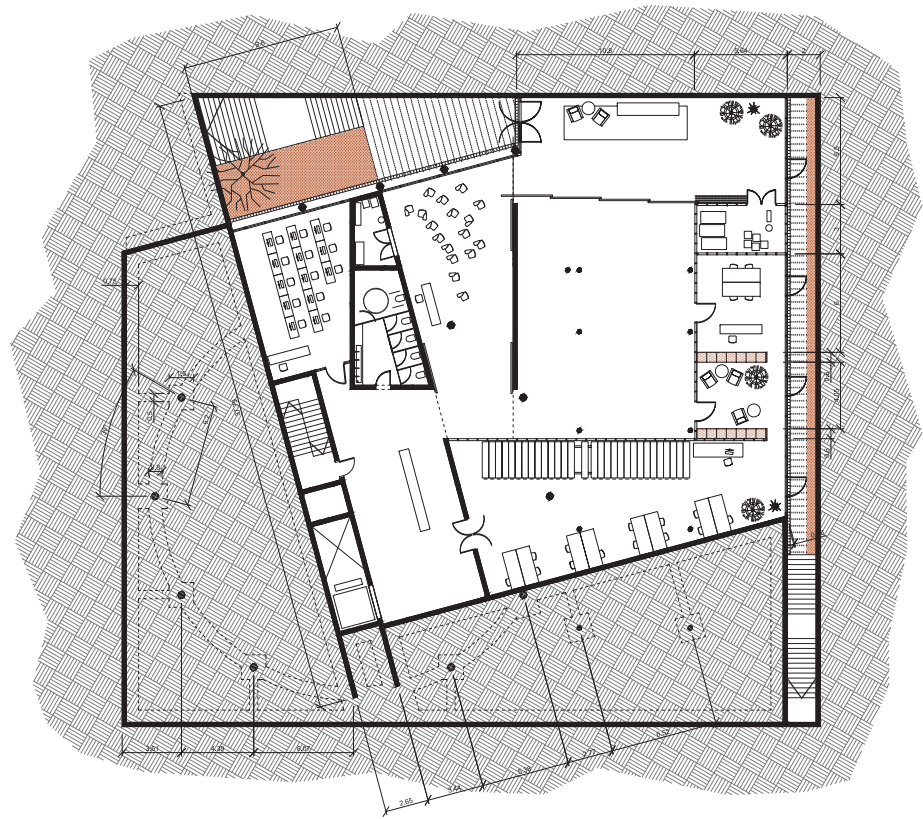
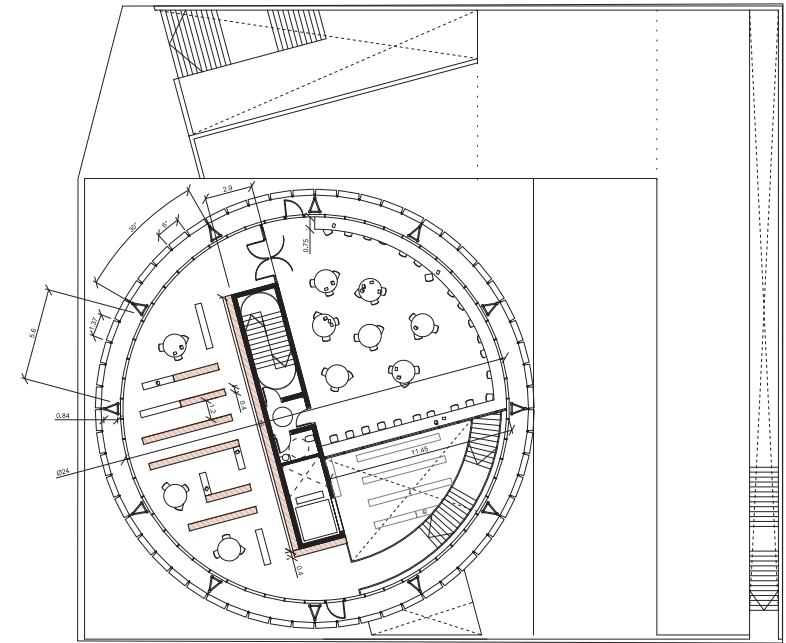
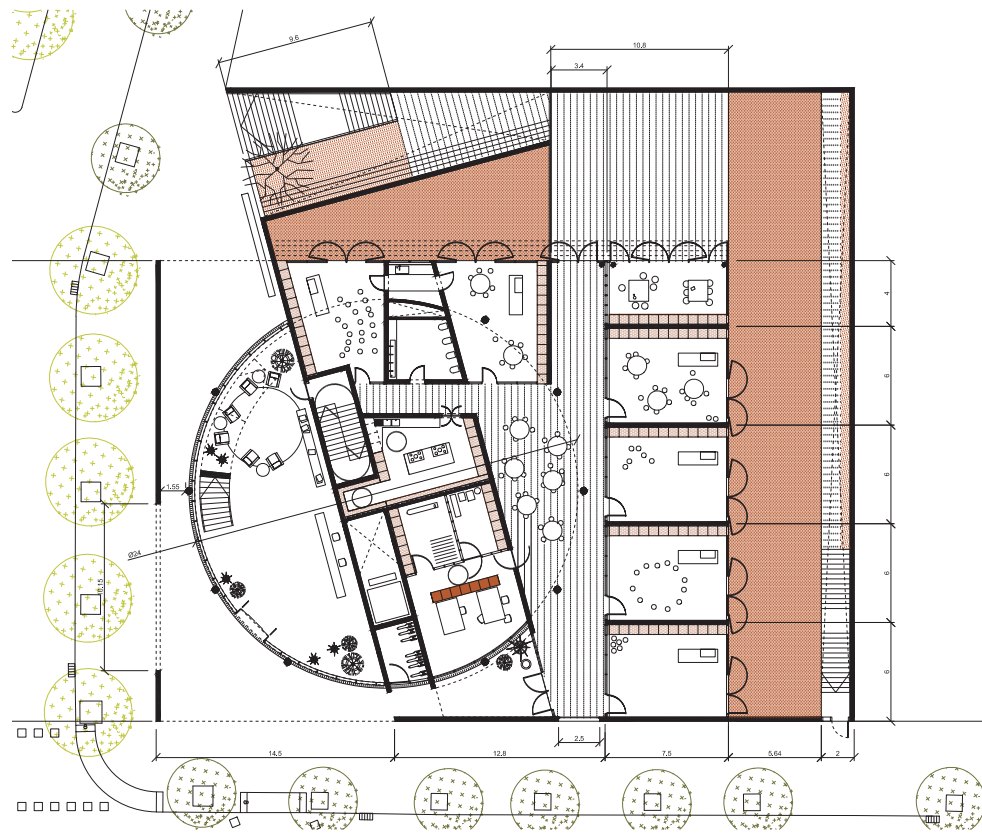


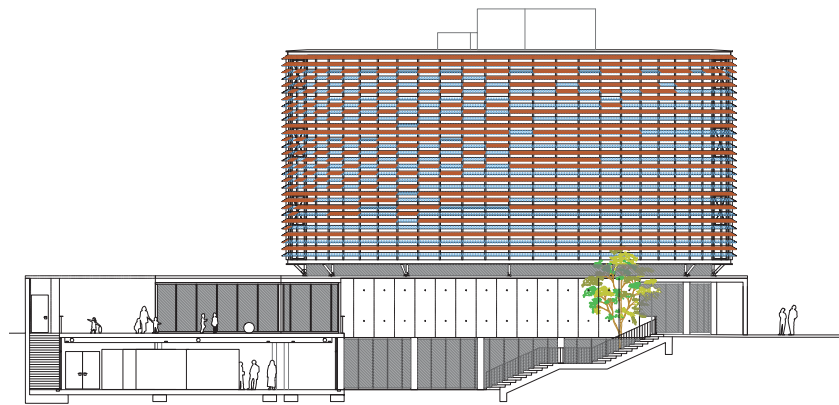
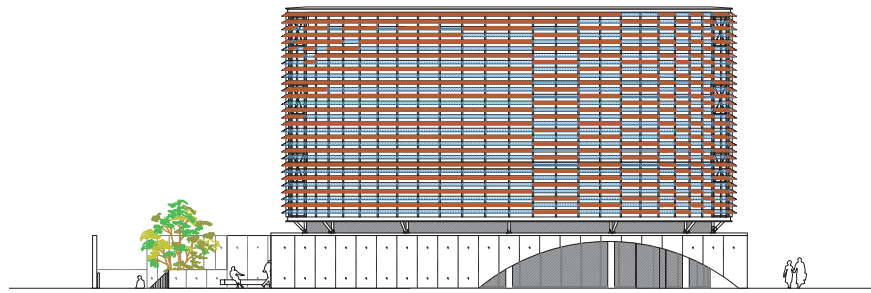
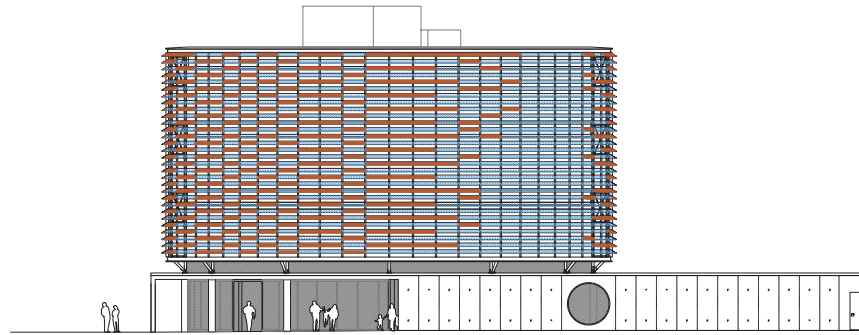


Skin. Double layered bioclimatic façade to better regulate the internal temperature and light demands. The external is made of polycarbonate foldable lamellas alternating with metal plates. The internal is a regular curtain wall. The air cushion in between the two façades enhances isolation performance.



Sun protection. As it is located in Barcelona, a generous amount of sun protection is required. Shades projection of the surroundings and insolation is studied to better locate the metal plates that block the sun rays.





Elevations. SE. SW. NW.



Views. External appearance of the building. Indoor double height spaces as seen from the library.

03

HEM HUB

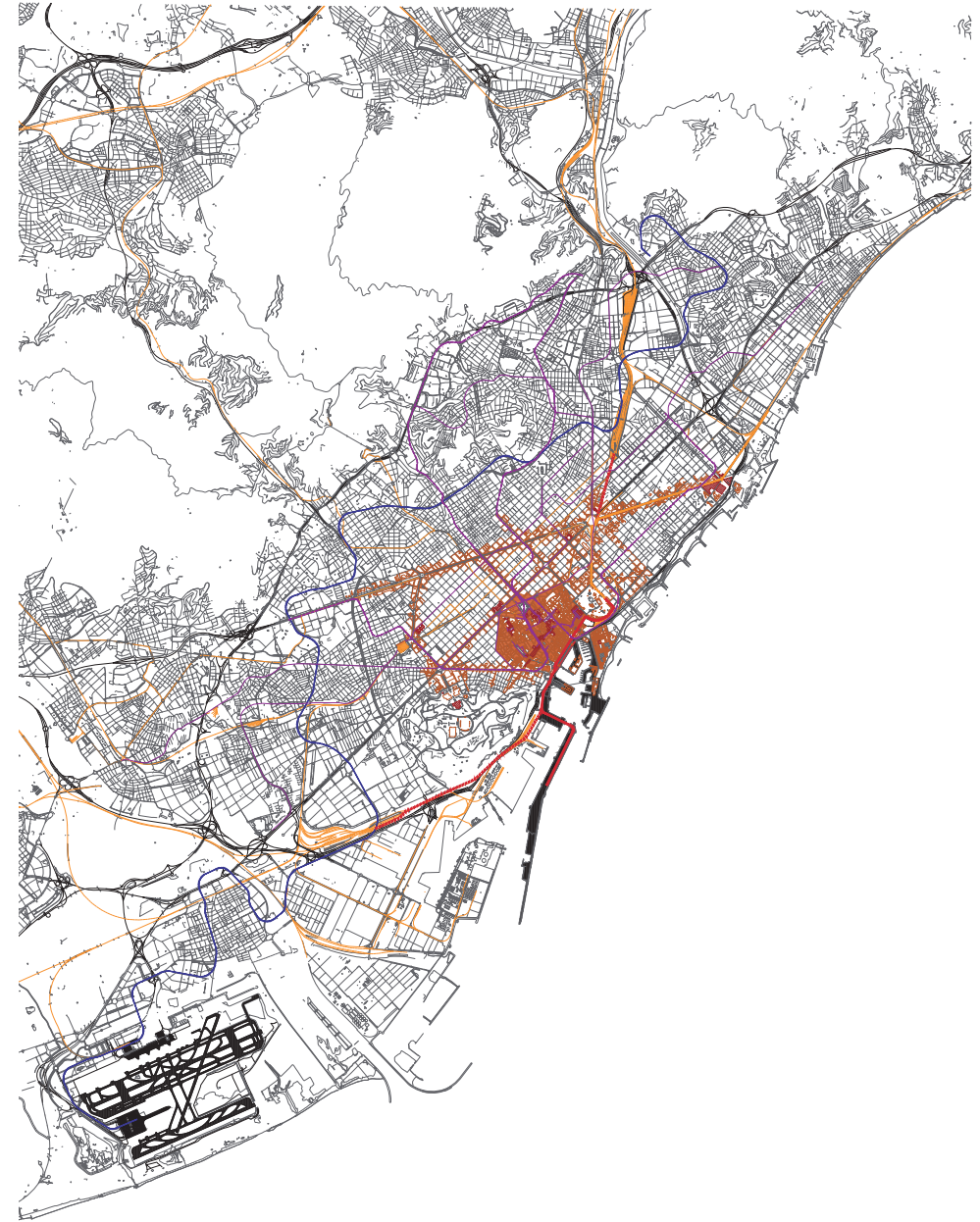
Reprogramming the waterfront of Barcelona.

From the medieval defensive wall, to a multi modal connection hub. A proposition to solve discontinuities on urban fabric.

This project is located on the waterfront of Barcelona, in the *Passeig Colón* Avenue. This site has suffered deep changes in its morphology during history, as it was the original location of the medieval wall. During the Barcelona '92 Olympic Games the city's orbital highway was built and embedded here through a key project by Manuel de Solà-Morales. In addition, the old railway station of *Estació de França* became an urban void, making pedestrian connections more difficult.

As years pass, Solà-Morales' main concept to open the city to the **sea** remains the focus. Tourism has grown dramatically since then, and new requirements come up to be able to absorb the people's **dynamics** and empower the main goal of the architect.

By reshaping the section to a **single platform** space and improving it with **shade** and trees, the new scenario works as an ethereal serving frame for the big multi-modal hub that occurs underneath. A new tramway line **links** this space with other city centralities.





01



DRASSANES

Davant d'aquest espai, en el passat, les drassanes connectaven amb el mar. Els vauells recent construïts sortien de l'edifici a través d'un canal. Avui en dia, no tan sols ha desaparegut aquesta connexió, sino que l'espai públic que la substituïx és de poca qualitat.

Barrera:
ESPAI DOMINAT PEL VEHICLE

02



PLAÇA COLÓN

Aquest espai és dels més representatius de la ciutat i per tant dels més visitats. Hauria de gaudir d'un espai dedicat al viarar de majors dimensions i connectivitat. Al voltant de l'estatut de Colón s'hi genera una rotonda que obliga a crear un pas de zebra només per a visitar el monument. La transició entre la Rambla i el Marçagnum passa inevitablement per aquest espai mal organitzat, on les jerarquies de pas no estan ben establertes.

Barrera:
ESPAI DOMINAT PEL VEHICLE

03



PASSEIG DE COLÓN

Finalment la ciutat ha aconseguit obrir-se al mar. Després d'anys d'inestabilitat política de Barcelona, el projecte de Solà-Morales vol reprogramar aquesta franja tant desitjada per a la ciutat. Tot i així, en la materialització hi ha certes problemàtiques per a la circulació peatonal superficial degut a les múltiples reformes posteriors.

Unes balustrades obliguen a l'usuari a fer llargs recorreguts per a creuar l'avinguda. Les voreres de la franja edificada són de dimensions molt reduïdes en alguns punts, impossibilitant el desenvolupament d'activitats al carrer.

Barrera:
BALAUSTRADES, MURS, ESCALES I DISCONTINUITATS

04



RONDA LITORAL, Moil de la fusta

Els punts de la ronda que no estan tapats, generen una diferència de cota que es salva amb l'ajut de 2 ponts helicoidals. Trobem insuficient el grau de connexió d'una plataforma amb l'altre. Aquesta realitat fa que accedir a la franja de mar sigui més complicat, i només siguin els turistes els que distribuïen d'aquest espai.

Barrera:
CALAIX DE LA RONDA, SALT TOPOGRÀFIC, MALA CONNEXIÓ

05



PLÀ DE PALAU

Tot i no tractar-se d'una barrera en sí, veïem que aquest volum edificat no segueix l'alineació del seu entorn. Constitueix una disconformitat en el front de façana de la plaça. Dividint l'espai en 2 àmbits i amagant la connexió directa amb la Barceloneta.

Barrera:
NO ALINEACIÓ DEL VOLUM EDIFICAT

06



MARQUÈS DE L'ARGENTERA

Aquesta via té una prioritat absoluta per al vehicle rodar. Els espais peatonals, les voreres, són de dimensions reduïda i baixa qualitat urbana. Tot i estar en una zona altament concorreguda, no s'hi restituen grans comerços ni terrasses. Via amb alt potencial comercial i d'eix civí.

Barrera:
ESPAI DOMINAT PEL VEHICLE

07



VIES DE TREN, ESTACIÓ DE FRANÇA

Al voltant de la zona del canvi d'agulles se situa un mur perimetral de seguretat, per evitar invasions peatonals a la zona de transit ferroviari. Aquesta àrea constitueix un buid urbà, un espai dedicat exclusivament a la infraestructura de mobilitat.

Barrera:
BUID URBÀ, MURS PERIMETRALS

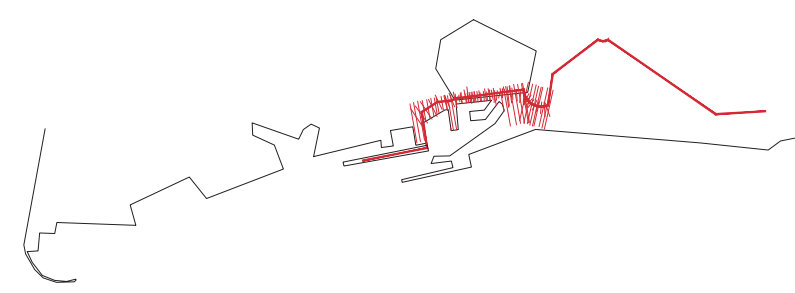
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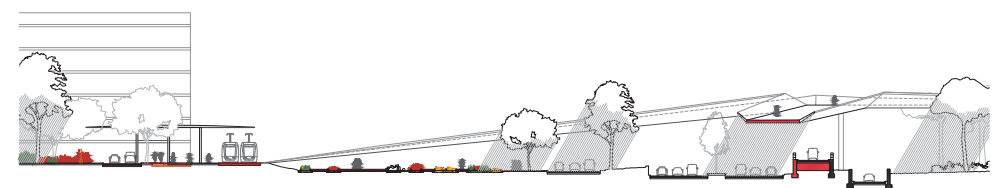
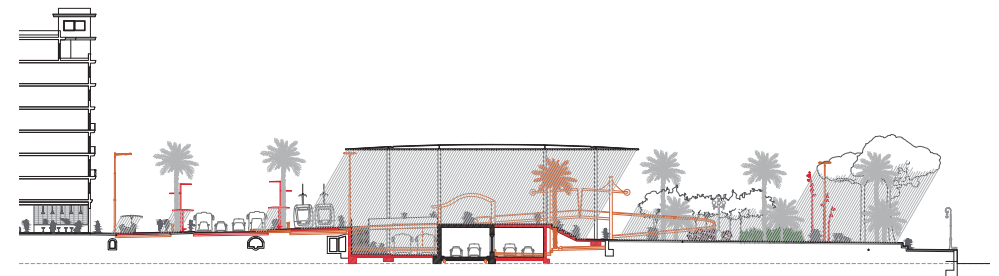
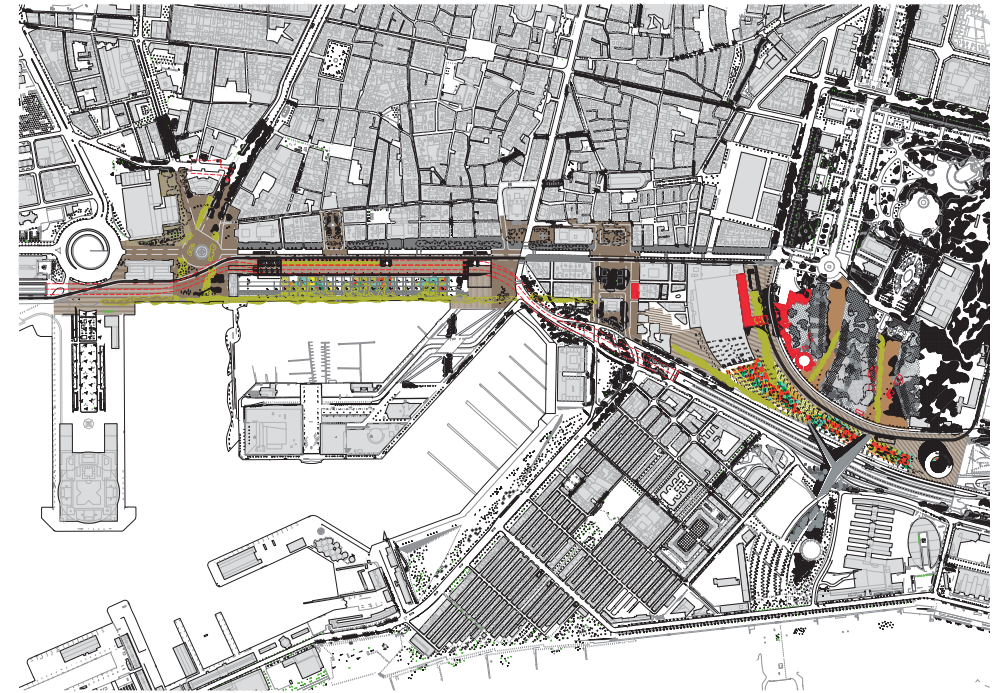
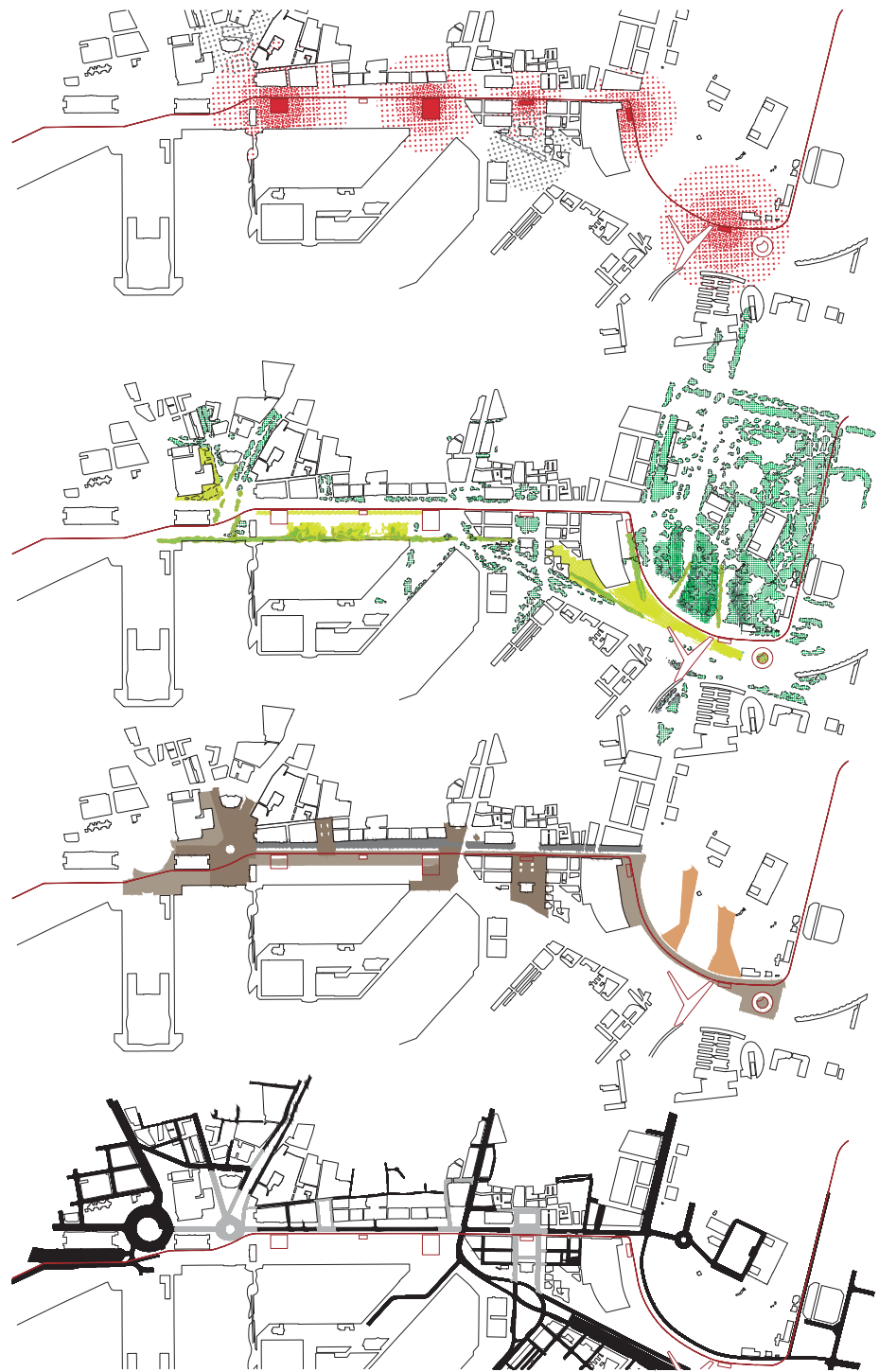
VIES DE TREN, ESTACIÓ DE FRANÇA

A la banda nord de la franja de vies també succeeix el mateix. En aquesta vialitat és especialment patent el problema, on caldrà una regeneració urbana. El fet de tenir vies de tren a un costat i el zoo en l'altre fa d'aquest caner una via infrautilitzada per al ciutadà, convertint-se en aparcament i via de connexió puntual per als cotxes. Carrer amb un gran potencial.

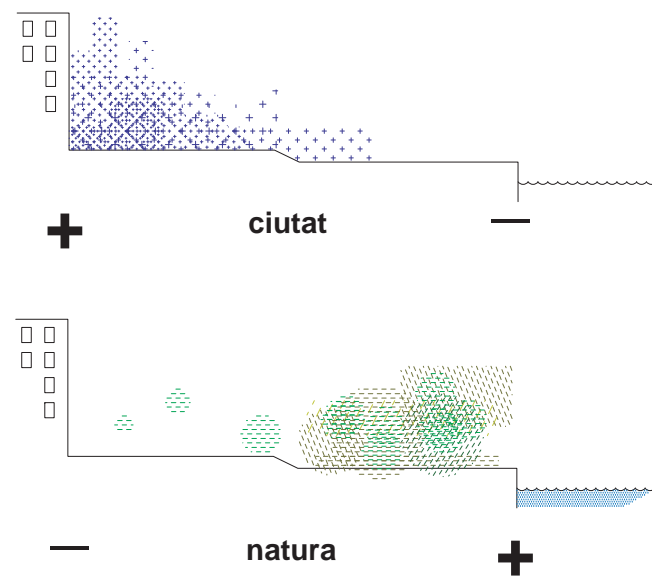
Barrera:
MANCA DE PROGRAMA, VIA AÏLLADA PER L'ÚS COLINDANT



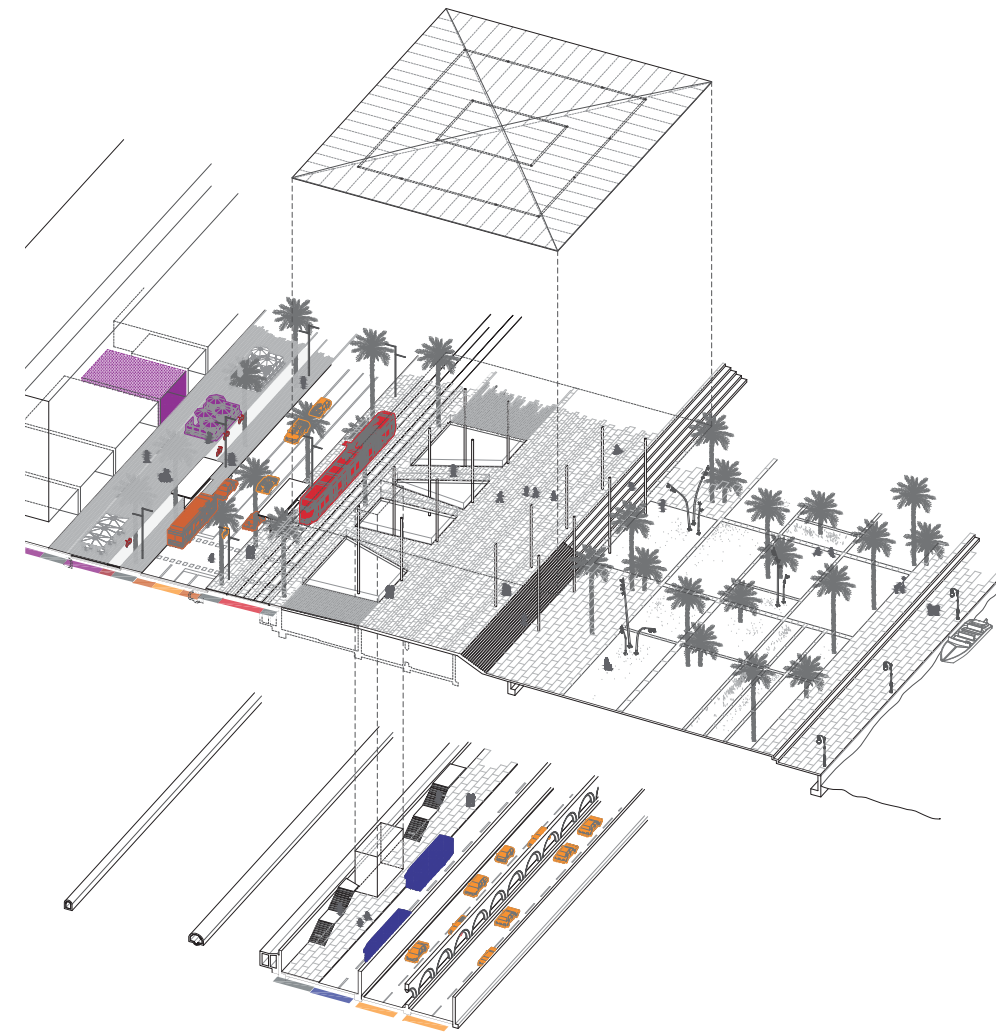
Fluxes plan and conceptual scheme. The new tramway is a key element to "sew" the fractures in the public space. At left the identification of local problematics.



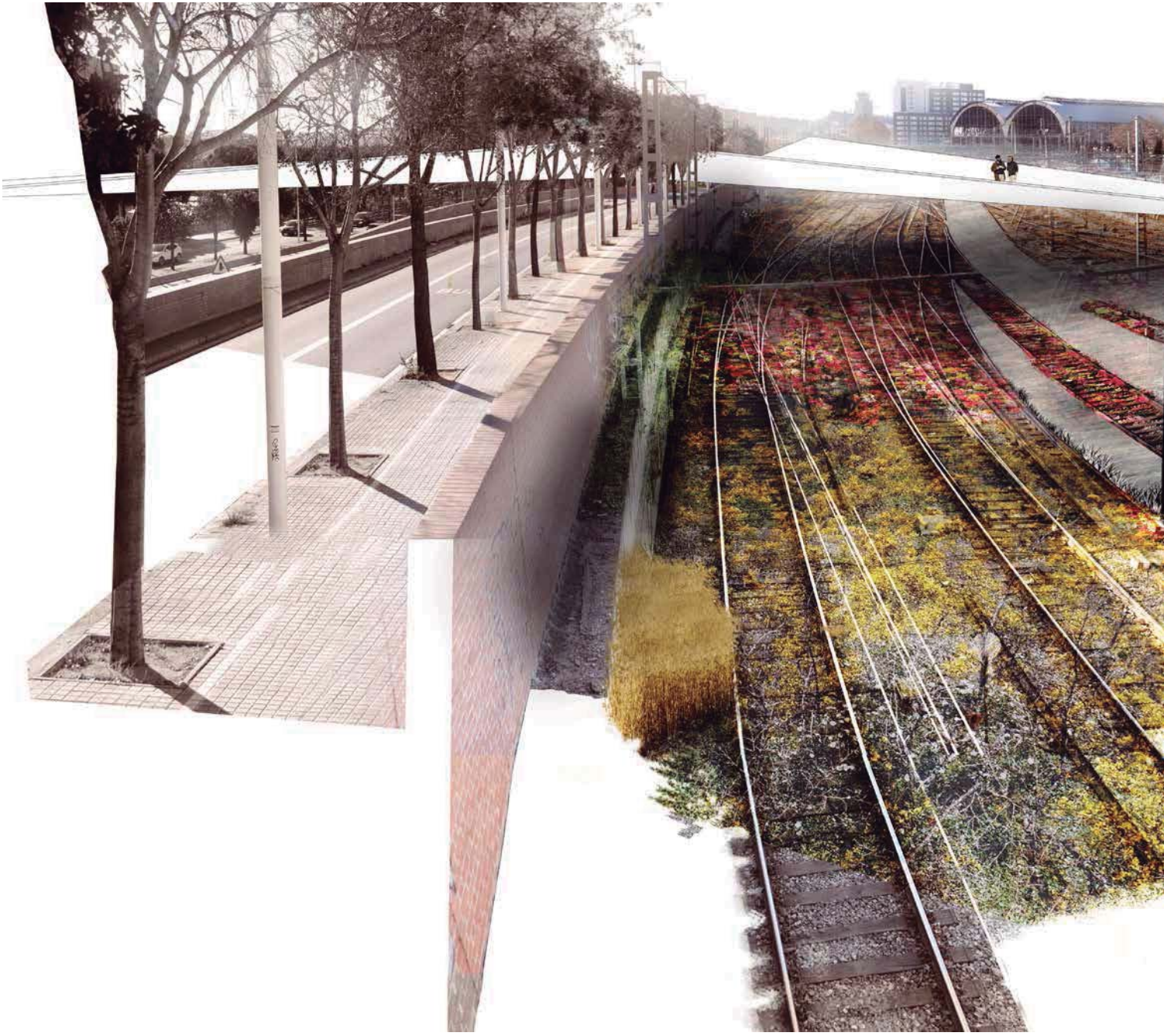
Masterplan and section cuts. Passeig Colón (middle) and Estació de França railways (bottom).



Small scale strategy. The main goal is to arrange the intensity of uses as a gradient, coming from the most "intense" uses of the city, to the serenity of nature, the sea.



Layers axonometric. Three strata are identified and used as project tools: *underground*, *ground* and *above ground*. In the underground the new interurban bus station is connected with the traffic belt. The ground level is transformed into a single platform surface, eliminating the accessibility barriers. The *above ground* layer is a new ceiling provided to the public space, a light metallic pergola.





04

AQUAMORPHOSIS

Converting an old quarry to a natural water-cleaning lake and wetland.

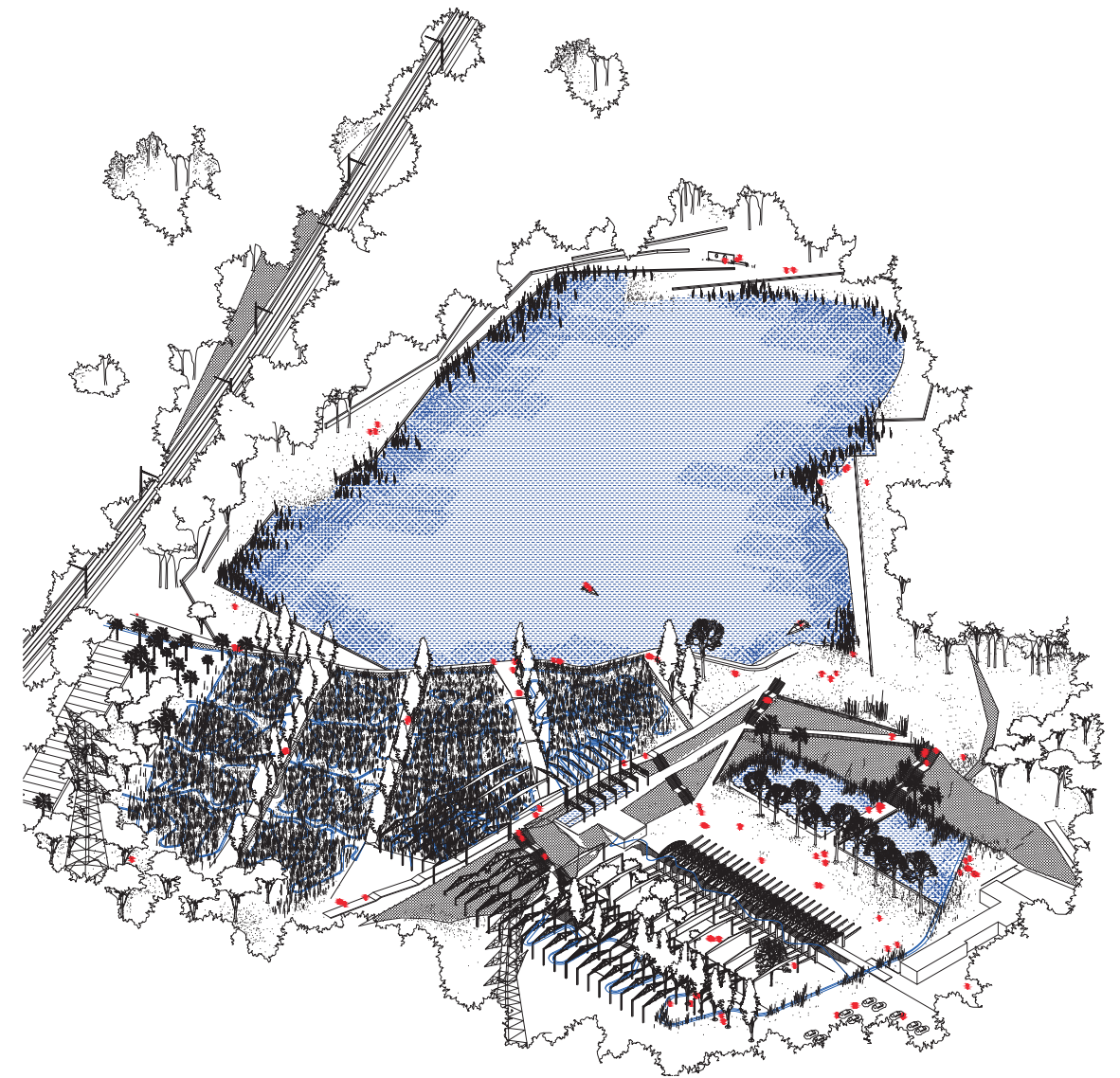
Problematic of a Post-Industrial Landscape.

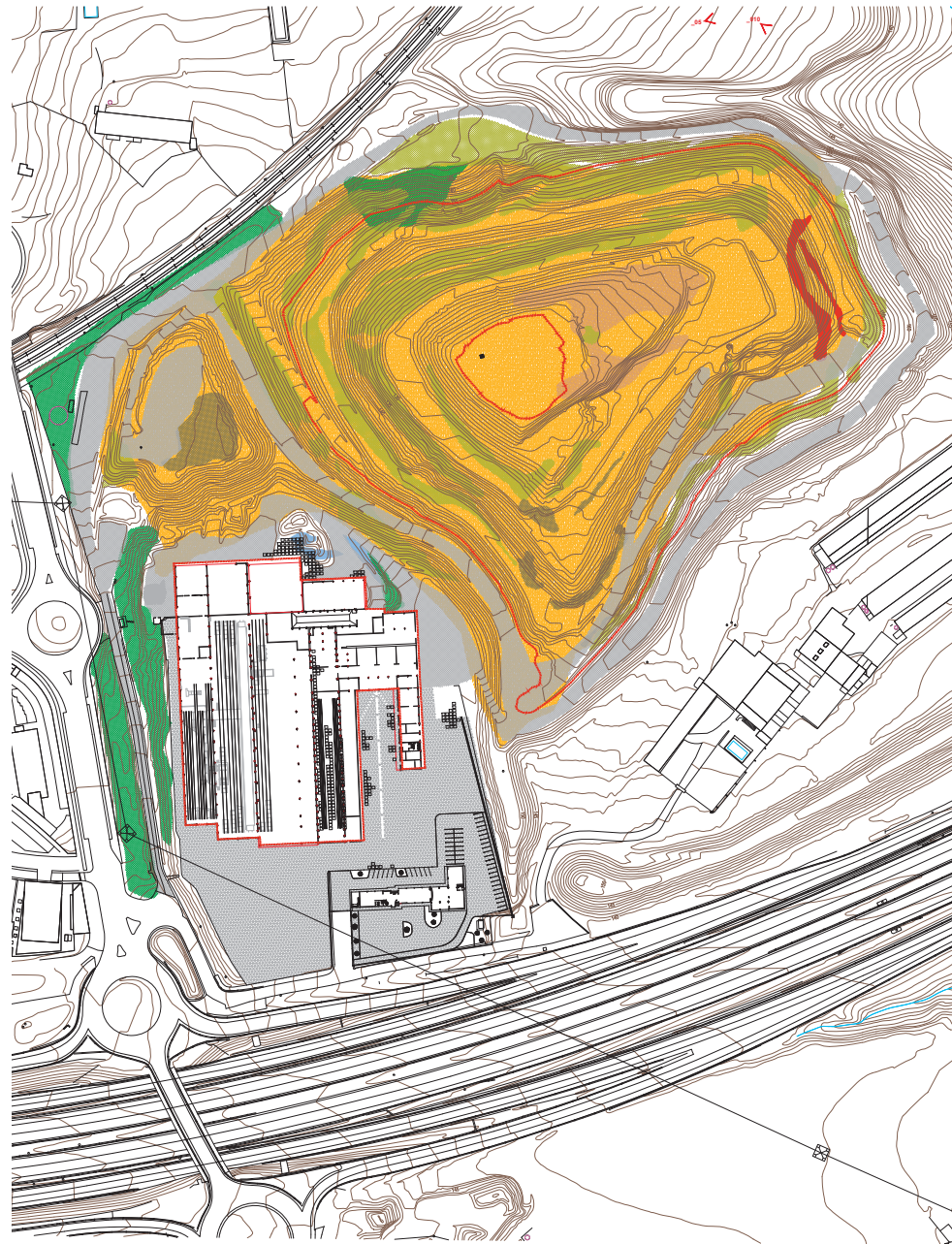
The project aims to transform an old clay quarry and the **industrial** buildings associated to it. The huge scar produced on the landscape - a profound damage on the biological frame - makes it almost impossible to recover. The main goal is the **naturalization** of the environment.

The concept is to fill the large hole with **water**. Clay is completely waterproof, so water retention is granted just by mechanical compression of the terrain. The source of water is the surrounding sub-urban neighborhood. By adding a series of natural water-cleaning ponds based on **phytodepuration** the dirty waters of the urban fabric are cleansed. To do so, a little intervention is mandatory to collect the water in a way that the public space of those areas is benefited by the refurbished space arrangement.

Dismantling the built structures, drilling the big concrete slab and making it permeable set base for the autochthonous **vegetation** to grow, which take over the buildings. The ruins of the industrial past are the substrate for the new landscape.

The amount of intervention is very little. The guillotine stopcocks, a few concrete ramps, stairways and a small maintenance building are the only new man-made structures. Water makes the rest.

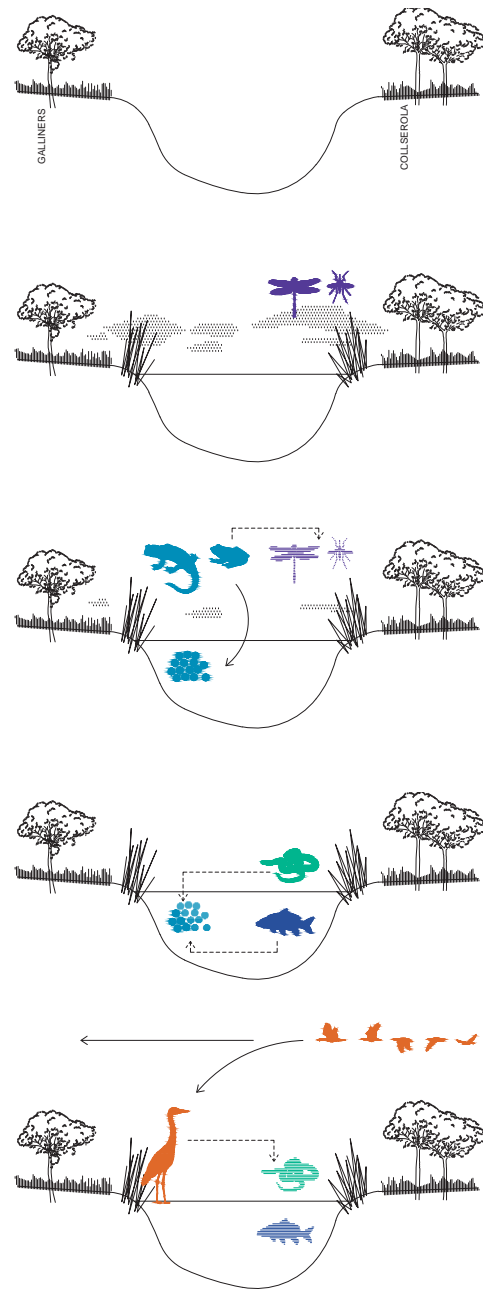




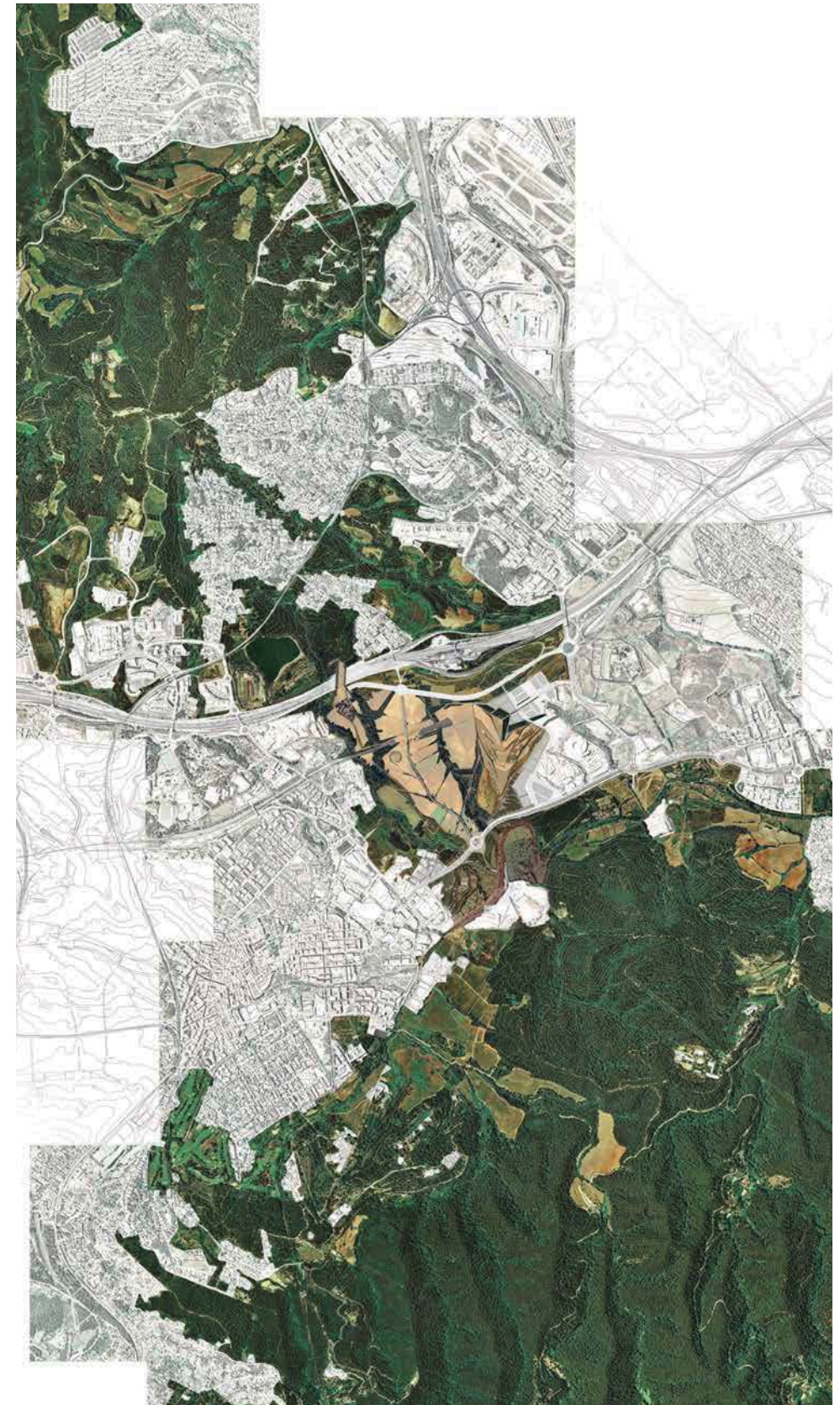
Current status. A clay extraction quarry. The huge extraction area is located North-East of the plot and is 38 m deep. The waste non profitable earth is stored in the north area, creating a small hill. South of the buildings lays the quite big concrete slab, made for truck traffic.

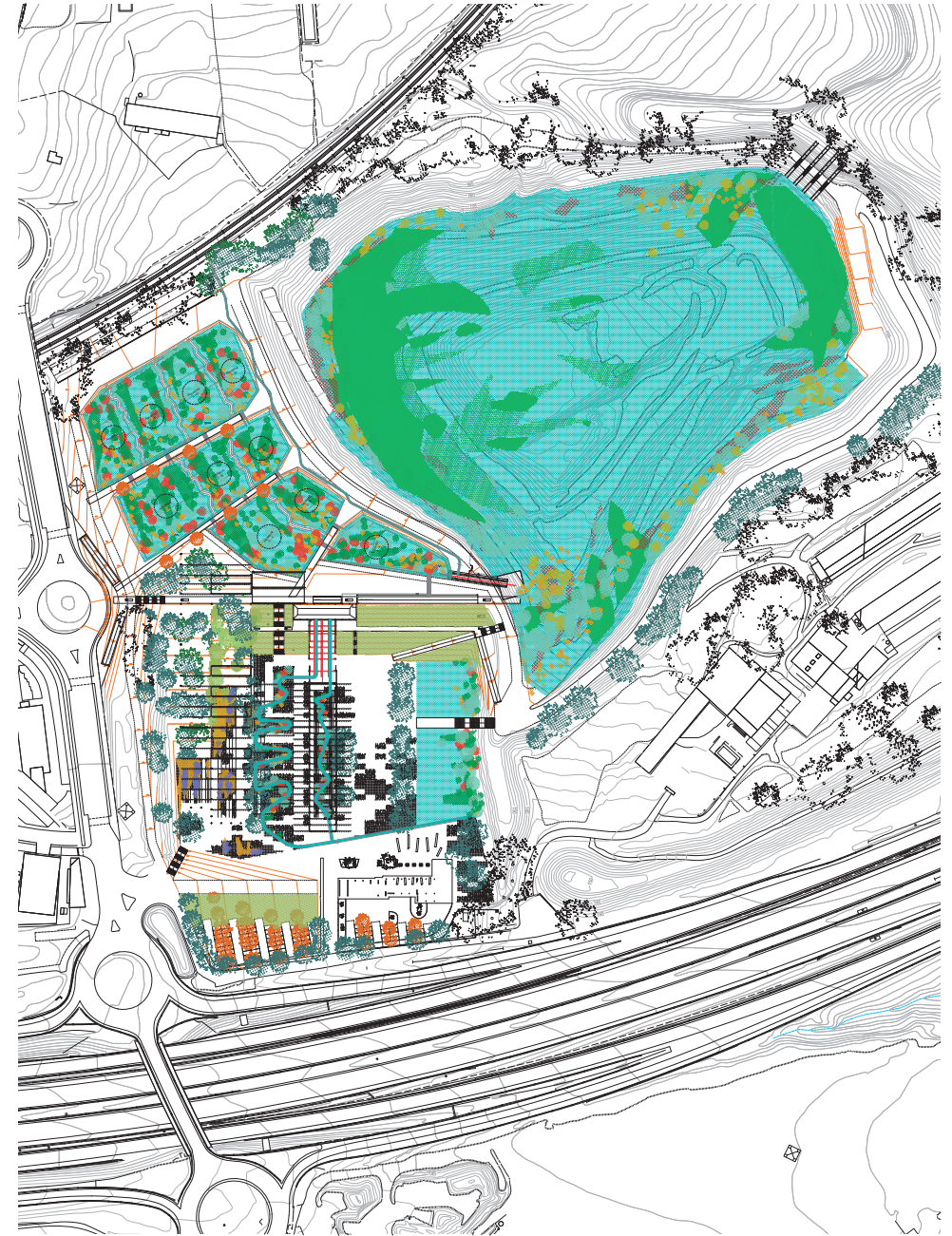
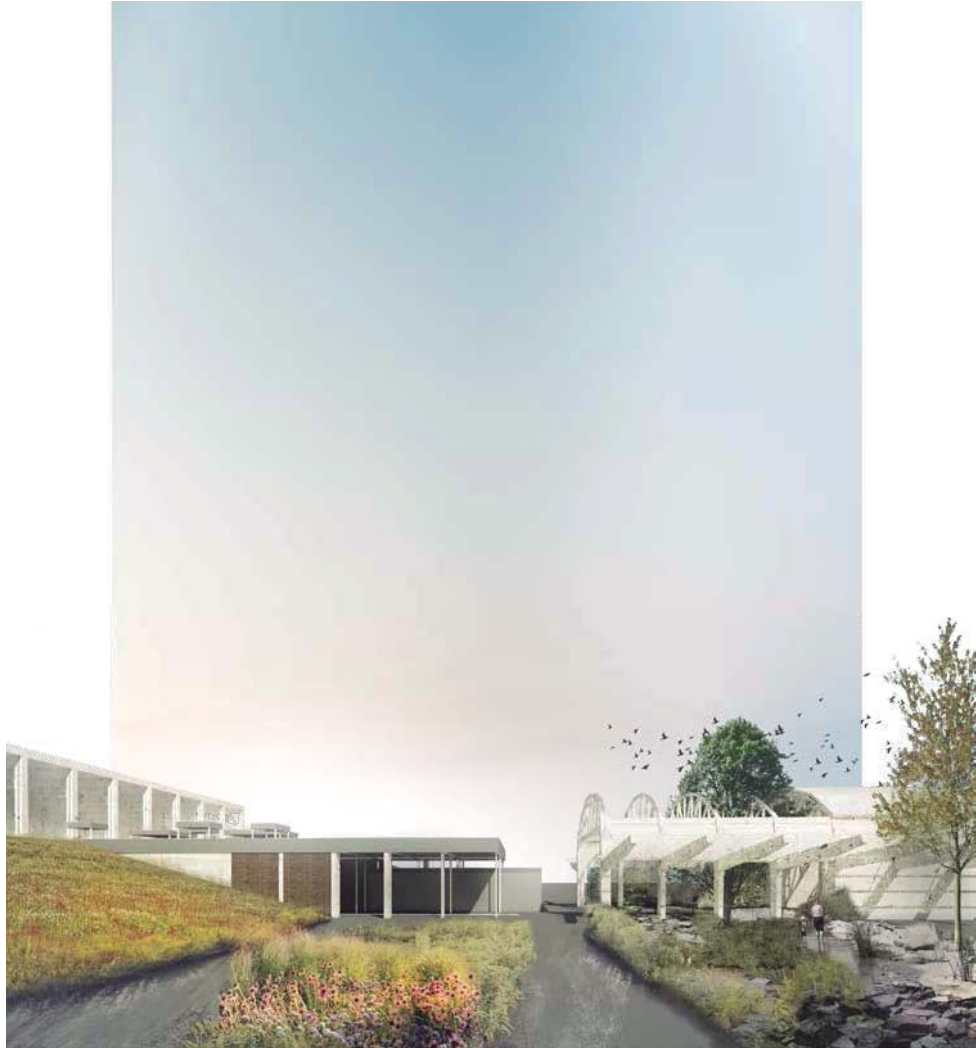


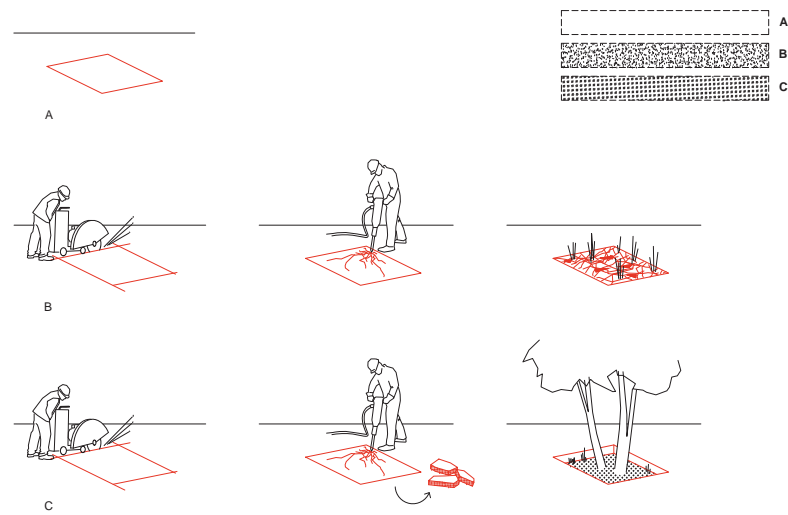
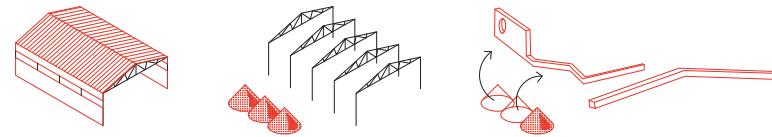




Fauna as a project tool. When the quarry is filled with the clean water, spontaneous wildlife start to appear, such as mosquitoes and insects. To prevent the overpopulation, local amphibians are introduced. Those are also a big risk for the biotope, so the introduction of the carp equals the balance. This new interactions attract more wildlife, enriching the biodiversity.

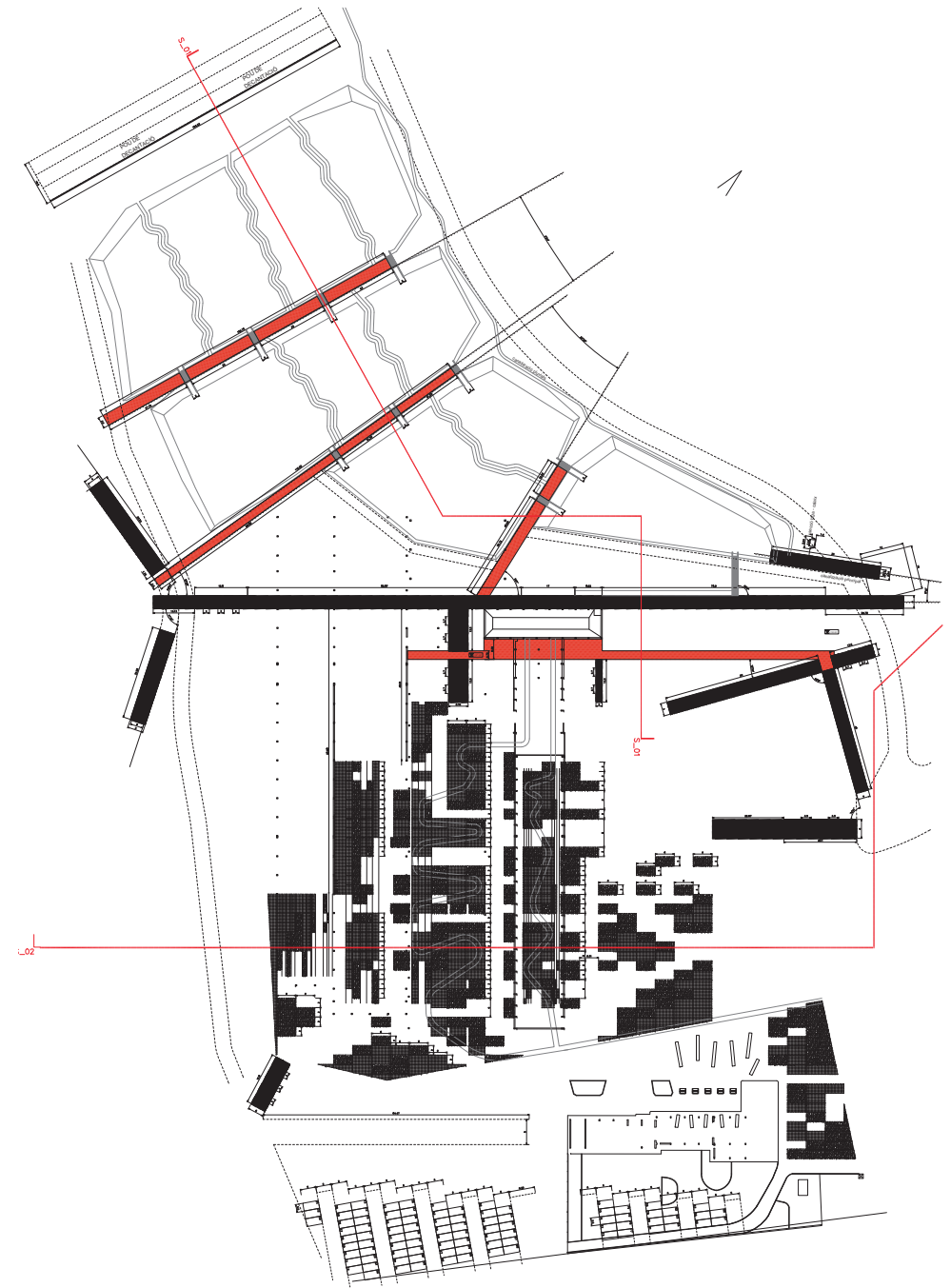


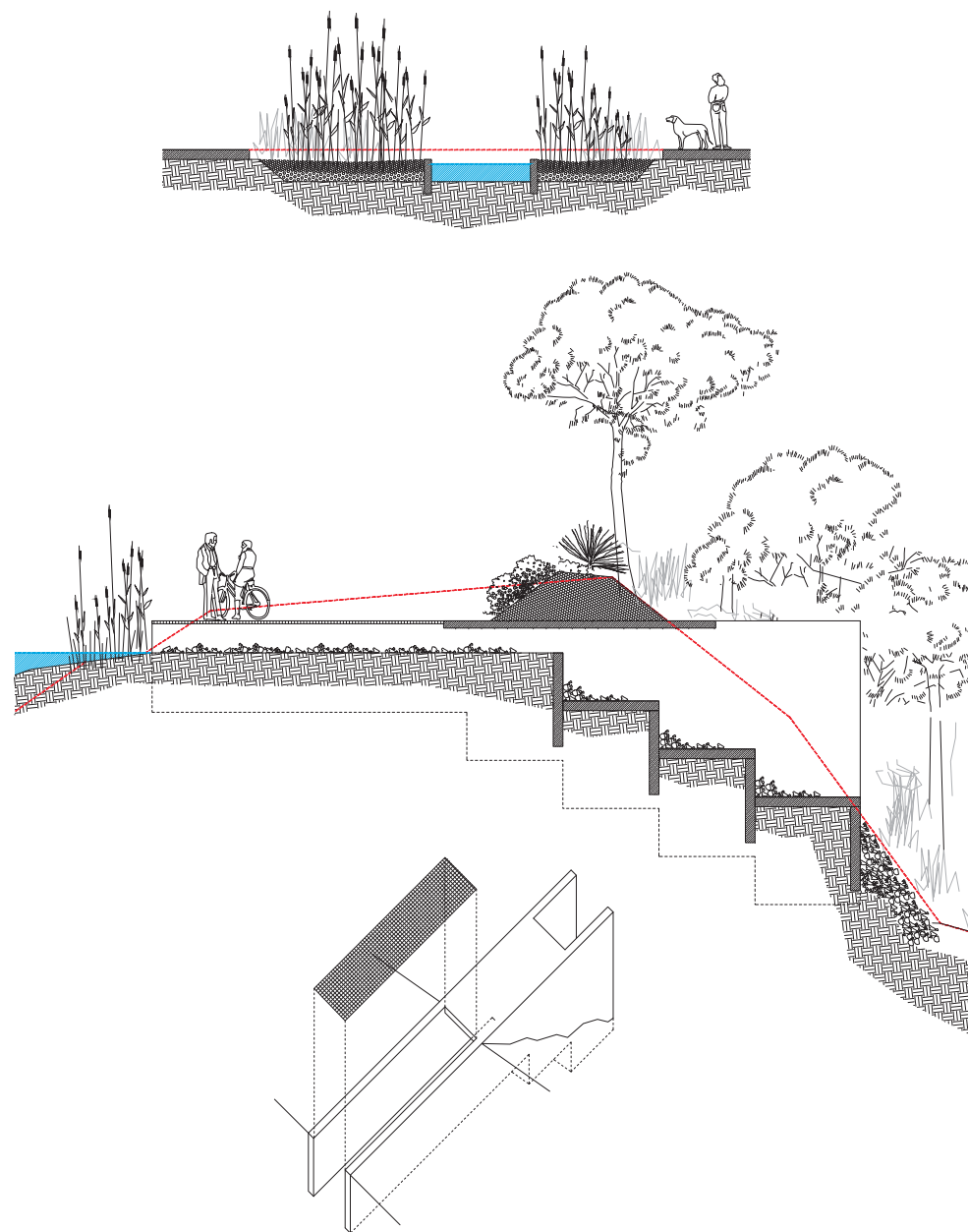




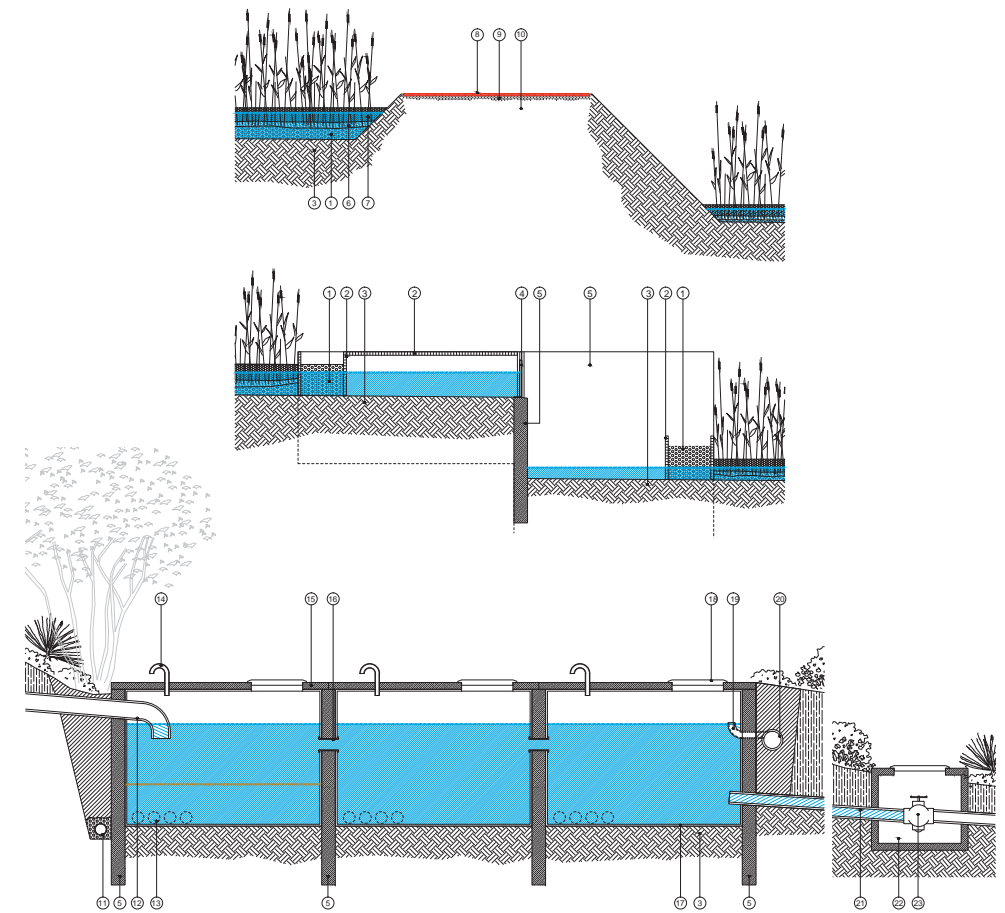
Material recycling and concrete slab treatment. To minimize the economic and environmental impact, the remains of the demolition such as bricks, are re-used to build the walls and limits of the park. Only some of the structures are kept.

To make the concrete slab permeable to water some areas are perforated to make the water run through the cracks. In some cases, the full slab is retired to expose the natural terrain.





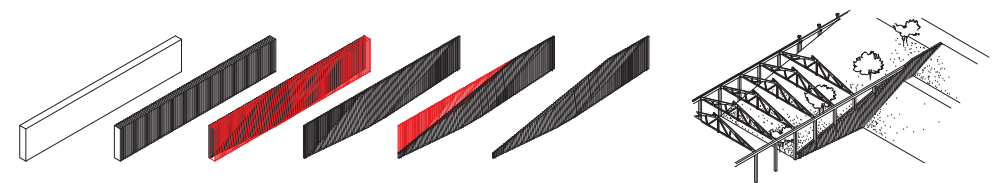
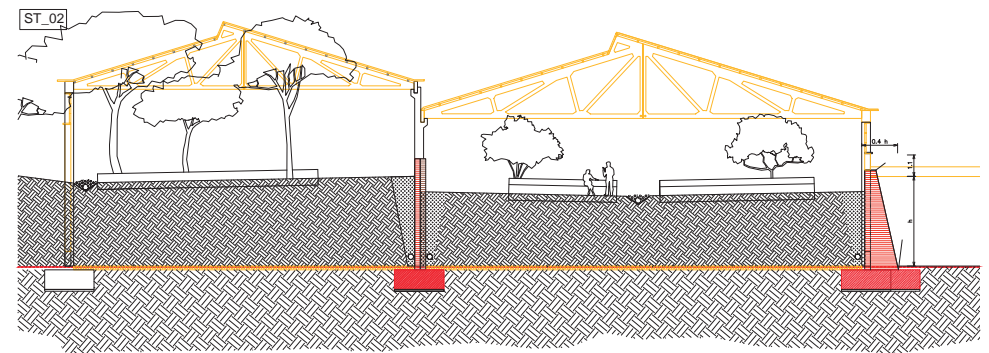
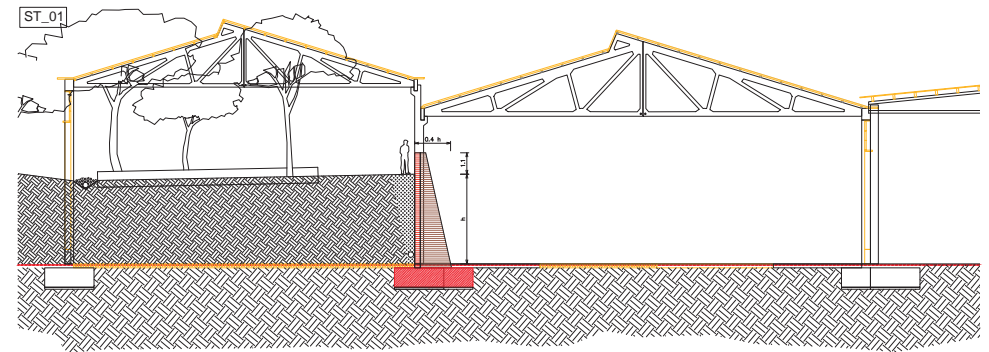
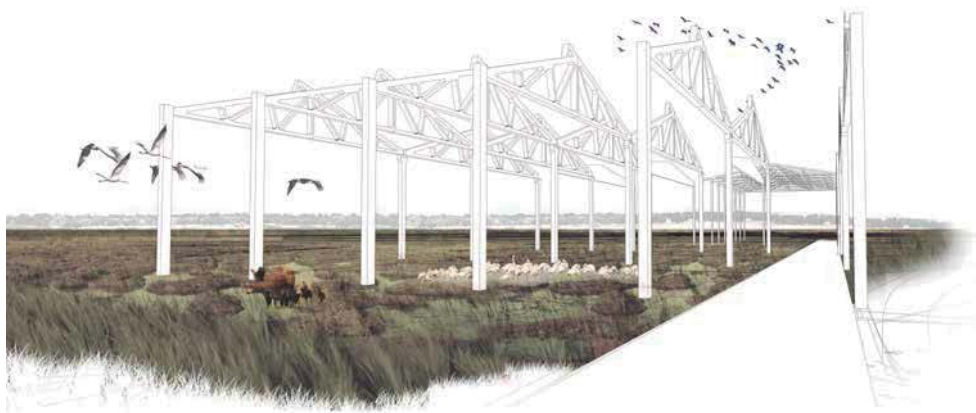
Details. (1) Typical irrigation channel through the existing slab. (2) Overflow system with axonometric. Recycled concrete and steel grid.



LLEGENDA CONSTRUCTIVA

- | | |
|---|--|
| 1. Grava drenant Ø25-30mm. | 13. Registre de neteja de fots. |
| 2. Reixa de contenció, acer galvanitzat, 20x20mm. | 14. Aisllador. |
| 3. Argila compactada. | 15. Placa prefabricada de formigó armat, e=14cm. |
| 4. Valsó de pas fons gal·lès, acer galvanitzat. | 16. Tub PVC Ø22cm, connexió entre dipòsits. |
| 5. Mur de contenció de formigó armat. | 17. Acabat de protecció a la calç. |
| 6. And separator Ø4-8mm. | 18. Tapa de registre. |
| 7. Substrat vegetal per a plantes macrofites. | 19. Tub PVC Ø20cm, subreeixidor. |
| 8. Paviment de gesa vist, semienterrat, Segora Stock. | 20. Tub PVC Ø45cm, desajugie. |
| 9. Serres nivelladores. | 21. Tub PVC Ø40cm, canalització a aigua molla. |
| 10. Tèrmen original. | 22. Pericó prefabricat, formigó. |
| 11. Tub PVC Ø22cm. | 23. Clau de pas d'acer galvanitzat, pintat anticorrosió. |
| 12. Tub PVC Ø45cm, connexió a clavagem. | 24. Ferra de roques de su tanany gran a 100mm. |

Details. (3) Separation slope and maintenance pass between water cleaning wetland levels. Recycled brick pavement over compressed earth. (4) Stopcock guillotine dam, water regulation system. Galvanized steel and concrete. (5) Solid separation tank. Concrete and clay with PVC pipes.



Retaining walls. Brick is used to retain the new land movements, to evoke the past of this brick factory. Also to prevent the use of concrete when it is possible. The only remaining elements of the naves are the beams, closer than before.





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