

An architectural sketch of a master plan for a residential development in Alfafar. The drawing uses a combination of dark red and light green colors. The red elements represent buildings and walls, while the green elements represent trees and landscaping. The layout shows a series of interconnected blocks and courtyards, with a central horizontal corridor. The style is a hand-drawn sketch with visible pencil or pen lines and shading.

Master Plan in Alfafar

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UNIVERSIDAD
POLITECNICA
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MASTER PLAN IN PARQUE DE ALCOSA

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01 URBAN PROGRAM PROPOSED STATEMENT

The purpose of this study is to identify the problems of Alcosa Park and propose a new master plan for the area. This will be done through a study on the concept of densification. The knowledge found, will be used to develop new types of housing and equipment in order to revive and complement the studied area.

The development should take in to consideration the current economical crises that the area is in. It's of great need to bring quality of life and wellbeing in to this area that currently is struggling with great recessions and social poverty. The project should also include parameters such as Recycle-Reuse-Reduce (3R).

The Alcosa Park is a district that has experienced the declines in many ways. The idea of this proposal is to solve all of these problems, or at least as many as possible, mainly through urban intervention, but also through architectural solutions.

The following will explain the structure of the project.

1 Inception..... How to start?

The first step in carrying out a proposal is to analyze the project area. In this project, we start with some facts and information about the place, leaving us with the idea of where to start the intervention.

Not only will an sociological analysis of the place be required, but also physical analysis will be carried out. It will be necessary to analyze various parameters that make a place work, such as layout of the buildings, their height and their use.

The previous mentioned parameters will also be used for similar analysis of the existing green areas, though identifying the surface and use. Last but not least, there should be an analysis of existing roads, and the communication to and from this district to other surrounding areas, like the city of Valencia. Communication within the project area is also important, and knowledge of the road hierarchy as well as knowledge about one-way driven streets is needed. Traffic flow in busy areas is also of interest, as well as areas that struggle with queuing and those who have less traffic.

Parking will also be of interest. Questions such as where the parking is located, the current number of spaces available, as well as the approximately needed number of spaces, will be important to answer.

Besides these named parameters, which are the most important and generally will help to begin defining a proposal, sociological factors mentioned above will also be of importance. The needs of the residents in this area will highlight the shortcomings of the place.

2 Analysis done..... What goes after?

When collecting the data from the analysis, the place has been studied thoroughly. For most of the parameters, the best way of collecting the data is through site visits. Once the data is collected, we will differentiate between "good and bad", in those that could be used in diagnosis, as opportunities for action or as detrimental to the program data. So, if we analyze the main parameters (green areas, traffic, construction, use, parking) we draw from these the qualities that we intend to keep in the projects. Therefore some features are kept intact, others are modified and others again eliminated entirely. This second part is the one that give us the option to intervene in a given way.

3 Intervention..... Step by Step

The intervention phase is the time of the Master Plan, in which we will move from the general way into a particular one.

So far what has been done has been done in a general way, in order to see the shortcomings, the needs and the strengths for the project area as a whole. Once at this point, with analysis's done and knowing where, why and how it can improve the area, it is time to act in the "particular" way.

For this it is needed to understand which goals that need to be treated, how the intervention will be done, and what consequences it will cause in this scale.

The idea of intervening at this level is to design smaller parts of the project area in greater detail. One knows that these smaller impacts will also impact the larger scale; small parts harmonize together, to make this work over again.

4 Presentation..... Final Goal

The intervention in the project area will consist of modification of some existing parts and creating new urban design and architecture in other parts. This will be the final step in the preparation of the Master Plan.

A new solution to the area will be designed and proposed, given from the analysis done in the beginning.

The aim is to have successfully covered all existing needs and solved the shortcomings found in the area. And not only have solved the existing, but the new proposal is expected to accommodate no more conflicts or problems, that can be solved by an urban and architectural solution.

02 PRESENTATION OF THE PROJECT AREA

The project area is located in the *South Huerta* region of Spain, in the municipality of Alfafar, part of the Valencian Community.

Alfafar is a town of about 10 km². The city mainly consists of flat, fertile agriculture land, where rice production is predominant, due to irrigation. The built up urban space occupies approximately 13% of the total land area, leaving much of the remaining land to be a part of the Albufera Natural Park.

In the municipality of Alfafar is located, including the capital city, the hamlet of El Tremolar, east of the term.

In turn, Alfafar core is divided into two different areas: the oldest part of Alfafar is located near the railway line. The Neighborhood Orba or "El parque de Alcosa" (Alcosa Park), is located southwest of the term, physically wedged between *Benetúser* terms and *Masanasa* and urban conurbation with their old towns so much narrower than the historic core Alfafar.

Agriculture, never too developed, has been drastically reduced in recent decades. Currently occupied only 2% of the population in 2003, and devoted solely to rice cultivation (751 ha) and citrus (31 ha).

The sector of industry and construction, occupied 43.5% of the working population in 2003. The industrial sector is predominant in the furniture industry, which over time has evolved from the woodwork, to become the main source of income for the town and much of the entire region of South Huerta. Alfafar, along with other towns in the region, as Sedaví and Benetúser are the pioneers in the design, manufacture and marketing of furniture of all styles. They also focus, though much less economic importance of feeding branches, metal products, non-metallic mineral products, machinery and chemistry.

The service sector is the main economic engine, with 54.4% of the employed. Commercial activity is centered mainly in the vicinity of the V-31 (one of the most important traffic routes that bypasses the city of Valencia), since in 1976 there was installed a hypermarket of almost 21,000 m², which led to the later occurrence and concentration of other businesses, also in the neighboring town Sedaví.

After presenting the Municipality of Alfafar, we focus now on one of the neighborhoods that compose it, is the neighborhood of Orba, also known "Parque de Alcosa".

In this district is where the master plan is focused, due to its characteristics and needs.



Fig. 1. Badge of Alfafar



Fig. 2. Map of Spain. Alfafar situation



Fig. 3. Map of the Valencian Community. Alfafar situation

Here is presented some data information about "El parque de Alcosa":

- CURRENT POPULATION: 10.112 people
 - Spanish population: 8.090 people
- DENSITY: 68 housing / Ha (10.000m²)
- WORKERS: 6.977 people
- UNEMPLOYED: 3.135 people
- HOUSING: 1.700
 - Property: 1.503
 - On sale: 43
 - For rent: 197
- DENSITY OF POPULATION: 40.448 people / km²
- UNEMPLOYMENT RATE: 31%
- UNEDUCATED POPULATION: 19%
- IMMIGRANT POPULATION: 20%
- POPULATION SERVICE SECTOR: 58%
- AREA: 161.103 m²
 - Footprint: 39.60%
 - Parking: 7.10%
 - Traffic: 14.50%
 - Pedestrian Landscaping: 38.80%
 - Free surface: 80.40%

It's a very punished and marginalized district. It is a dormitory suburb located 8 km south of the city of Valencia. It is formed from waves of immigrants coming from Andalusia, Castile and Extremadura leaving the countryside. After overcoming many of the shortcomings that characterized these neighborhoods.

The Alcosa park has disturbing sociological indicators: unemployment rates ranging between 30 and 40%, over 70% of the population below the poverty line, and the first position of the region (l'Horta) in people served both in mental health centers for drug addicts. The same applies to truancy and illiteracy rates.

02 PRESENTATION OF THE PROJECT AREA

Presentation describing the place by some images:



Pic 4. Image of "Iglesia Virgen del Dolor". Main church in the town.



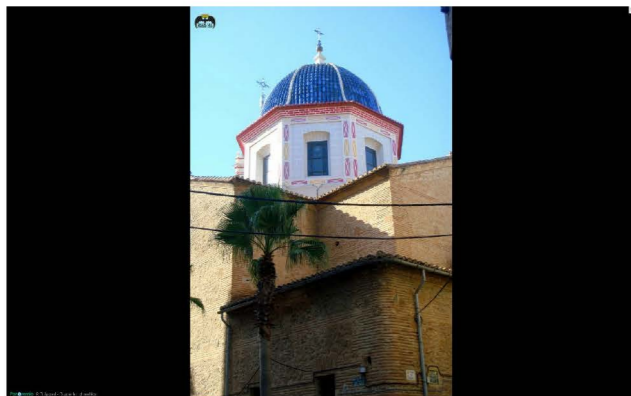
Pic 5. Town square perspective



Pic 6. View from a random street in the town



Pic 7. View from a random street in the town



Pic 8. View of the transept of the church



Pic 9. Town hall and central square



Pic 10. View from a random street in the town



Pic 11. View from a random street in the town



Pic 12. View from a random street in the town



Pic 13. View from a random street in the town



Pic 14. View from a random street in the town



Pic 15. View from a random street in the town

03 ANALYSIS OF THE " PARQUE DE ALCOSA"

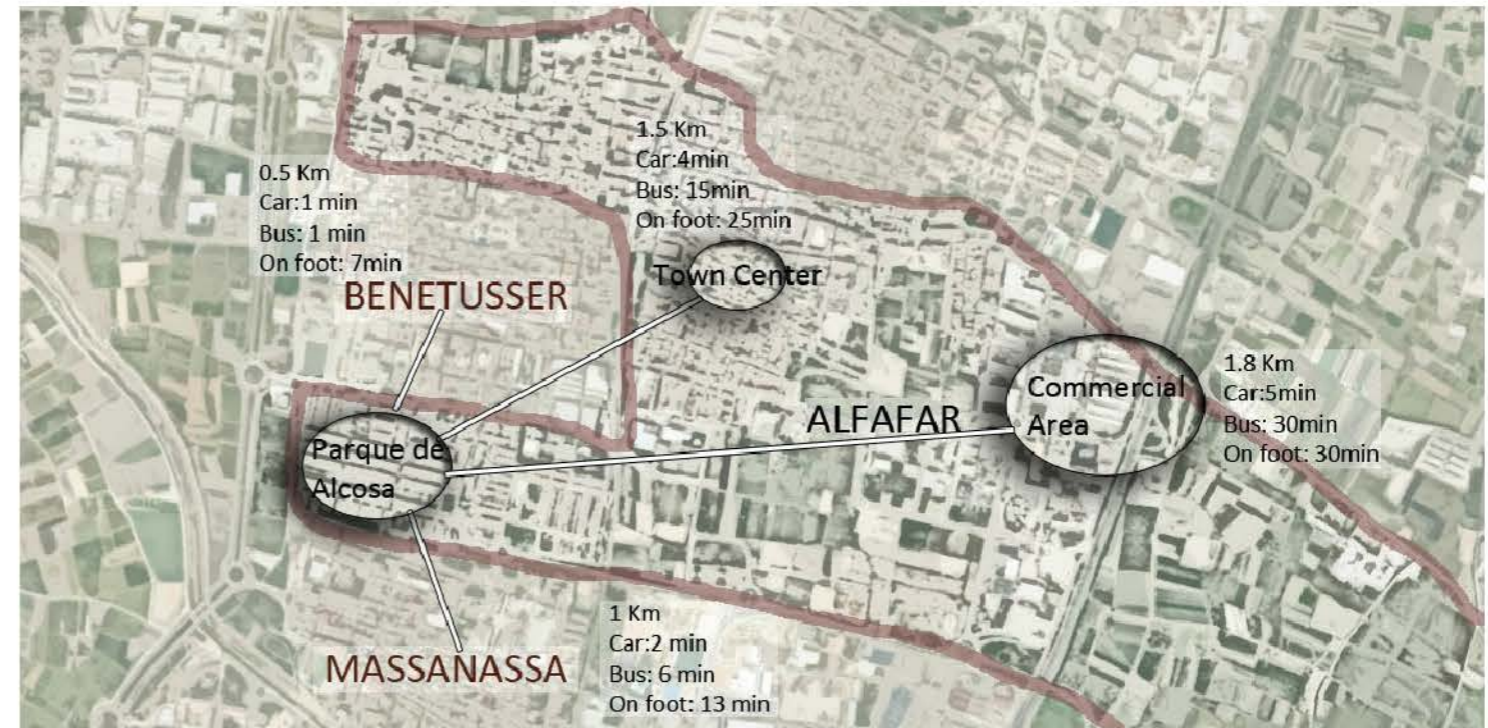


Pic.16 shows the different ways of transport: car or bus, and the duration of the course.

It is shown the communication between:
 Alfafa - Valencia City Center
 Alfafa - Valencia's Harbour
 and Alfafa - Albufera.

Even though the course by bus takes longer than car, it exists in every way, giving the possibility to use public transport.

Pic 16. Connection between the project area and Valencia & Valencia Harbour



Pic.17 Connection between the project area and Alfafa & Neighbour Towns

Pictures 17-18 are focused now in the project area, more than the municipality in general, Alfafa.

Pic.17 one shows the closeness between el Parque de Alcosa and different areas surround:

Parque de Alcosa - Alfafa (town center)

Parque de Alcosa - Commercial Area

Parque de Alcosa - Benetusser.

In all of them are shown the distance between them and the time it takes to go from one place to the other, depending on which way of transport you use.

In this scale is now included the course on foot, as the distances are much shorter.

The picture below (pic.18) shows now the bus route among the project area and the district surrounding it. Also the nearness of the train station and where the train stop is. (the distance and time is masked as well)

In different colours it is possible to locate the public equipments and the educational buildings.



Pic. 18 Connection inside the project area. Main services.

03 ANALYSIS OF THE " PARQUE DE ALCOSA"

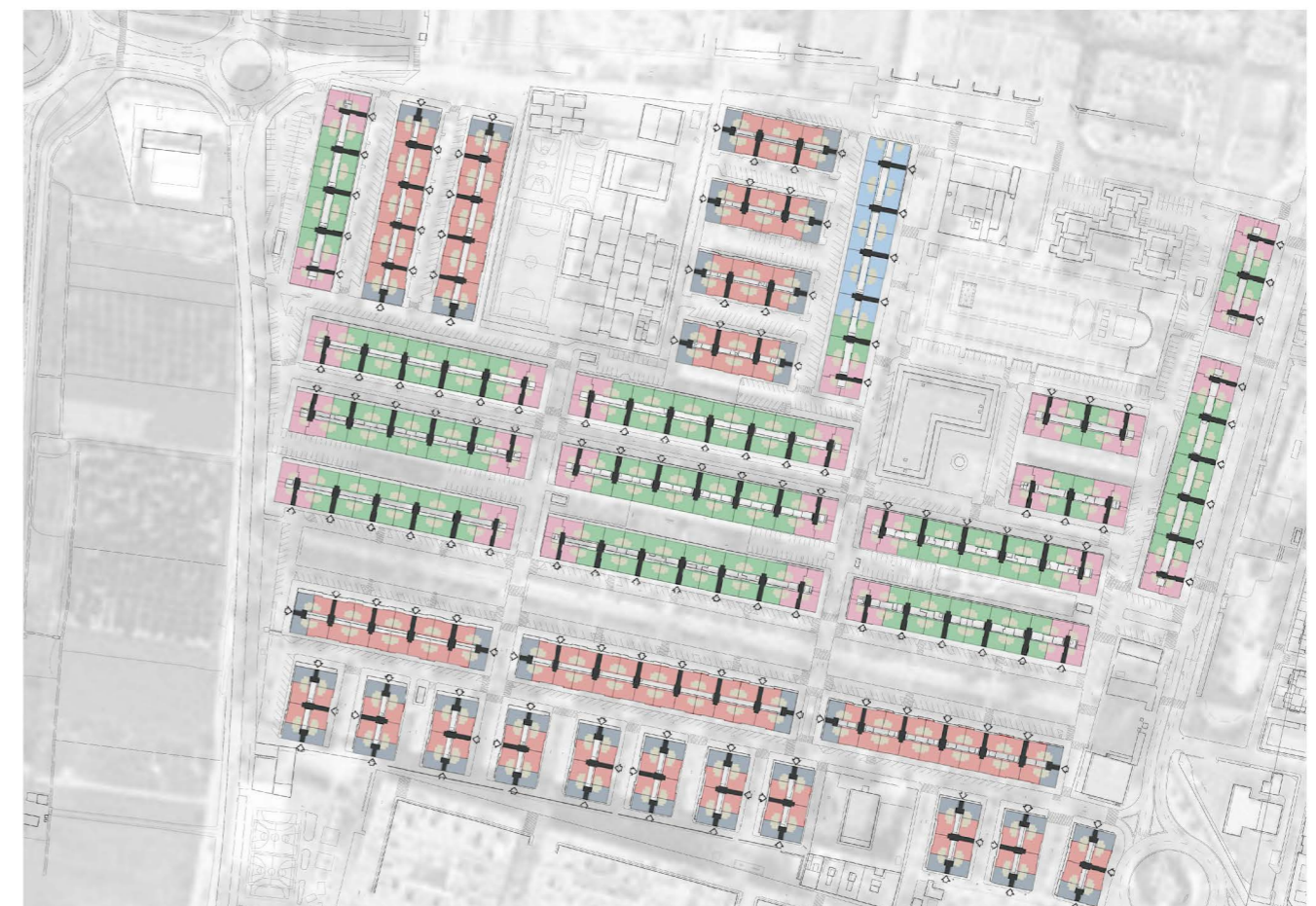
Pic.19 shows in a closer scale the main roads of the area. The different access coming from the neighbour towns, or from Valencia City.

It is also marked the bus course, which has two bus stops. The idea is to keep this route but also making the bus coming through the district, as the changes proposed allow the bus to drive through it.

The train way is also shown, so in this scale it is appreciated it is not so far from the district.



Pic.19 Main routes inside the project area: train, bus & car.



Pic.20 Edification at the project area. Different typologies and access to them

Pic.20 show the different typologies and their access. Due to this, it is known now where the pedestrian circulation could be, the hierarchy of the roads and the way it is wanted to redirect it.

03 ANALYSIS OF THE " PARQUE DE ALCOSA"

Here it is shown the first hand-drawing analysis done in the project area.

- Traffic
- Public Buildings
- Opportunity areas
- Existing green areas

Traffic

The way and direction of the traffic is marked to show how the movement works.

It is clearly contemplated a rectangular structured net, where the traffic encircles easily the building's net.

Also due to the parallel and perpendicular structure of the buildings, the traffic acquires a simple scheme, prepared to be transformed and adapted to new changes.

Public buildings

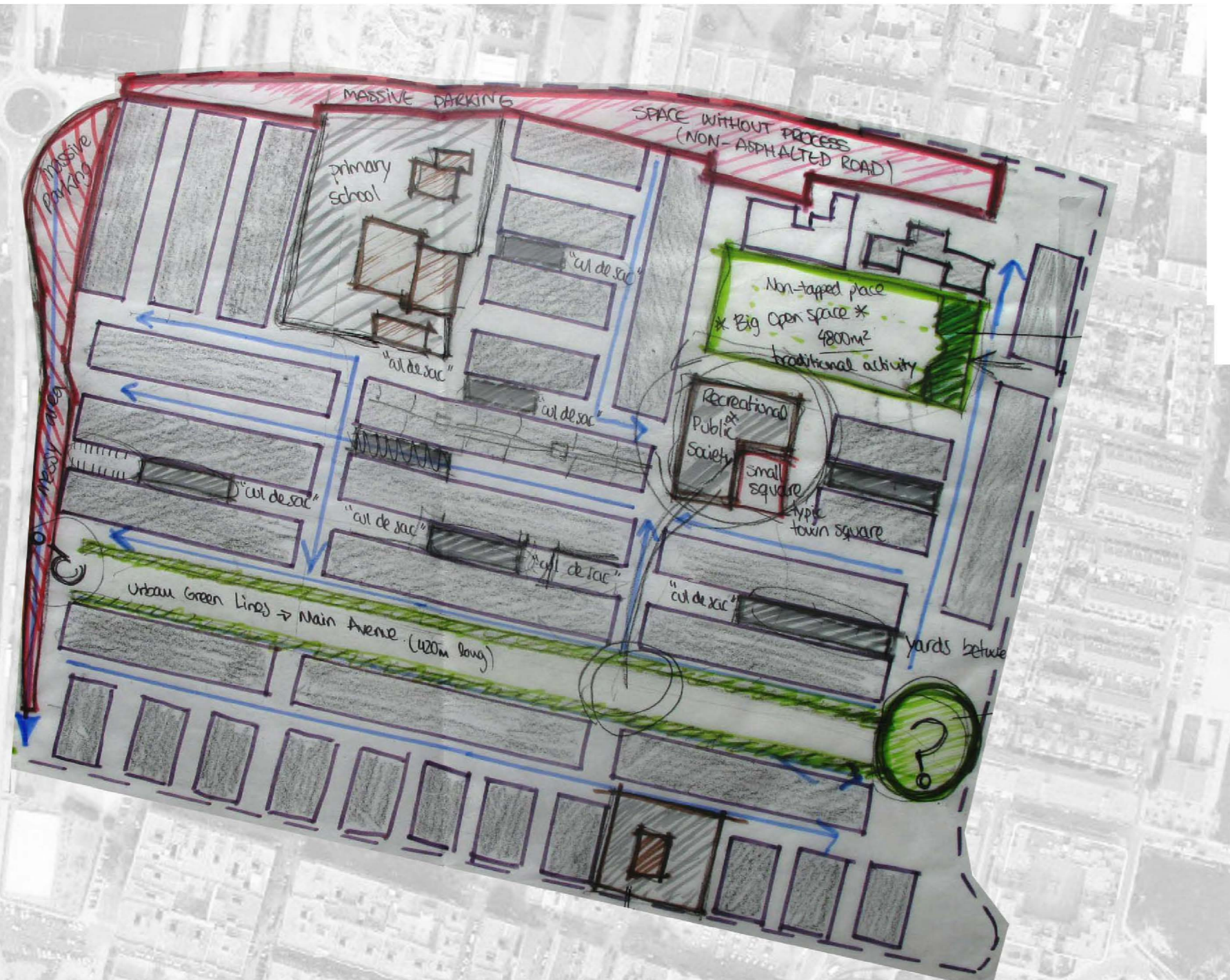
The purpose of marking these buildings is to know how many there are and where they are situated.

Then, we can see in this project there are no so many public buildings:

- Infant & Primary School
- Recreational & Public Society
- KinderGarten

It is simply needed to preserve these public buildings, as they are understood as buildings for the needs of the residents, or the society in general.

In addition, it would be interesting to give them more importance, to lead people to them, or even to complement them with new ones.



Opportunity areas

The fact of marking these spaces is to present the areas we can intervene on.

These areas are different typology: some of them don't need to be opened spaces, they could just be old and restoring buildings.

In this case, this project is full of big areas, which are not well exploited even used.

They take much of the surface at the periphery of the district, just being used as parking lots not structured.

This space must be exploited for many reasons: is within the limits of our project and presents big surface to be used in many different ways.

Existing green areas

They are marked to show a very important part of the project.

Even though there are green areas all over the district, here it is just marked wide spaces which have leafy areas.

Both green parts will be kept as different cores of the area, and they will mean the starting point of the proposal.

It is not expected any change on them, but to integrate the rest of the new ones according to them.

Pic.21 Hand- drawing analysis

S.W.O.T

Strenght

Weakness

- Traffic net readble**: easy structure, parallel and perpendicular
- Same building structure**: almost every building follows the same dimensions, orientation and intern & extern structure. Even more, except the tower on the northeast, the rest of the buildings folloe the same heigh.
- Considerable area to act**: due to the huge wasted and disable areas, there are presented many m² to act on.
- Opportunities for green & opened areas**: for the same reason than before, big opened spaces will offer space for any proposal to be done.
- Intern courtyards**: these semi-private areas are dedicated to the residents of the adjacent buildings, offering them a private space into the public one.

- Massive parking areas (messy)**: there are many big, opened spaces just dedicated to parking lots. These are not structured at all, so the aesthetics given are not the best at all.
- Inappropriate aesthetic (Buildings)**: the external image formed by the facades of the buildings, does not represent a well maintained and preserved aesthetics.
- Not equipments at all**: there is a huge lack of equipments in this area. There is need of service buildings dedicated to the residents of the district.
- Existing equipments (old)**: the ones that exist need a reform or rehabilitation, for a proper self-image and as a overall .
- Lots of urban green areas**: even though it is necessary and satisfactory the existence of this, it is requested more leafy areas.

Opportunities

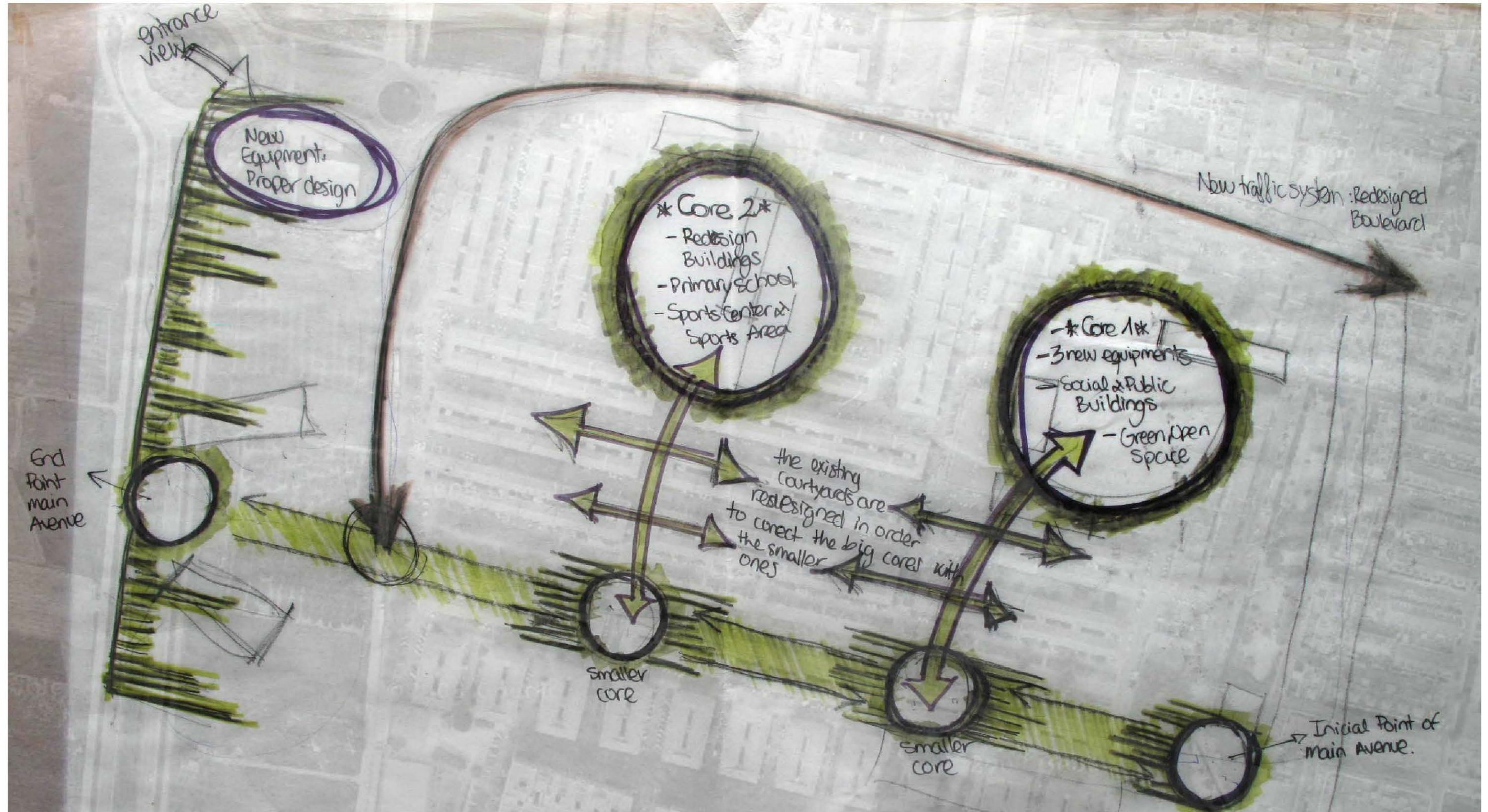
Threatens

- Huge area free to act**: due to the big dimensions.
- Some green & opened spaces**:this is also one of the starting points for the proposal. It is necessary in any project the existence of these green areas. They will connect different parts of the project as well as offer third places for the residents of the district, and the society in general.
- Wide traffic net-easy redesign**: in case new traffic structure is proposed, the simple existing one will allow easily changes.
- Wide rang of society needs**: it is demanded different needs by different kind of population:different country, different ages, different interests. It is important to try the best and solve each of them.

- **Non-integration of new parts**: the idea of an intervention proposal in an existing place, presents always a threatens attending to the inclusion of the new parts proposed. It is necessary to give them the same pattern as the rest of the district is using, so it would fit in it as any other.
- **Close & excluded future areas**: related to the previous exposure, the intention of the new proposed areas is to create them as similar architecturally as possible. It does not mean the same materiality, shape, or heigh, but there are always connectors, something common that shows you are in the same area.

04 IDEAS TO DEVELOP

First general scale proposal, based on the previous analysis.



Pic.22 Hand- drawing proposal

IDEAS TO DEVELOP

Two cores will be the starting point of the proposal. Each one has different character, with different activities to offer. These cores will be connected to the Mediterranean Avenue, which is the other important point of this proposal. The way to connect them will be by two different ways, each one from each core. The way used to unify both parts, will be the existing courtyards situated between the buildings.

It is necessary to create the same pattern all over the area, to show there is a continuity within it. The existing green areas will be kept as they are, but some changes will be adapted to make them better.

Apart from the cores and the green areas, the parking lots and the underground parking will be also an important part of this project. As it is an existing problem nowadays, there must be different ways to solve the problem but being adapted to the new structure.

- CORE 1: CENTRAL PLAZA

Nowadays this square is the core of "Parque de Alcosa".

Wide, easy geometry, big dimensions and without any element interrupting its visual, this area is used any time of the day.

This easy geometry, the rectangular base and the large area, make this area appropriate to be designed for daily use, continuous profit, for everyone, for all activities at any time of the day and in any season.

- CORE 2: PRIMARY SCHOOL & SPORT AREA

The second core is nowadays a primary school. The idea is to keep the use of it, but redesign it, as the aesthetics do not give the expected external image.

Apart from this change, it will be added some more uses, which will create the sports area.

With this idea I try to complement a space with some new activities that will contribute to the participation of activities now forgotten.

-NEXUS BETWEEN CORE AND AVENUE

The nexus designed for the connection are the courtyards situated between the buildings. These courtyards exist nowadays, but the current condition, the image and use, are not much less adequate. Moreover some of them are used as parking area which does not give the image of public space done for the people living there.

- MEDITERRANEAN AVENUE

Today is a very busy avenue two-way divided by a pedestrian area. It is pretended to keep the main goal of it, but with some changes to increase the third spaces.



05 DETAILED PROPOSAL, CENTRAL PLAZA

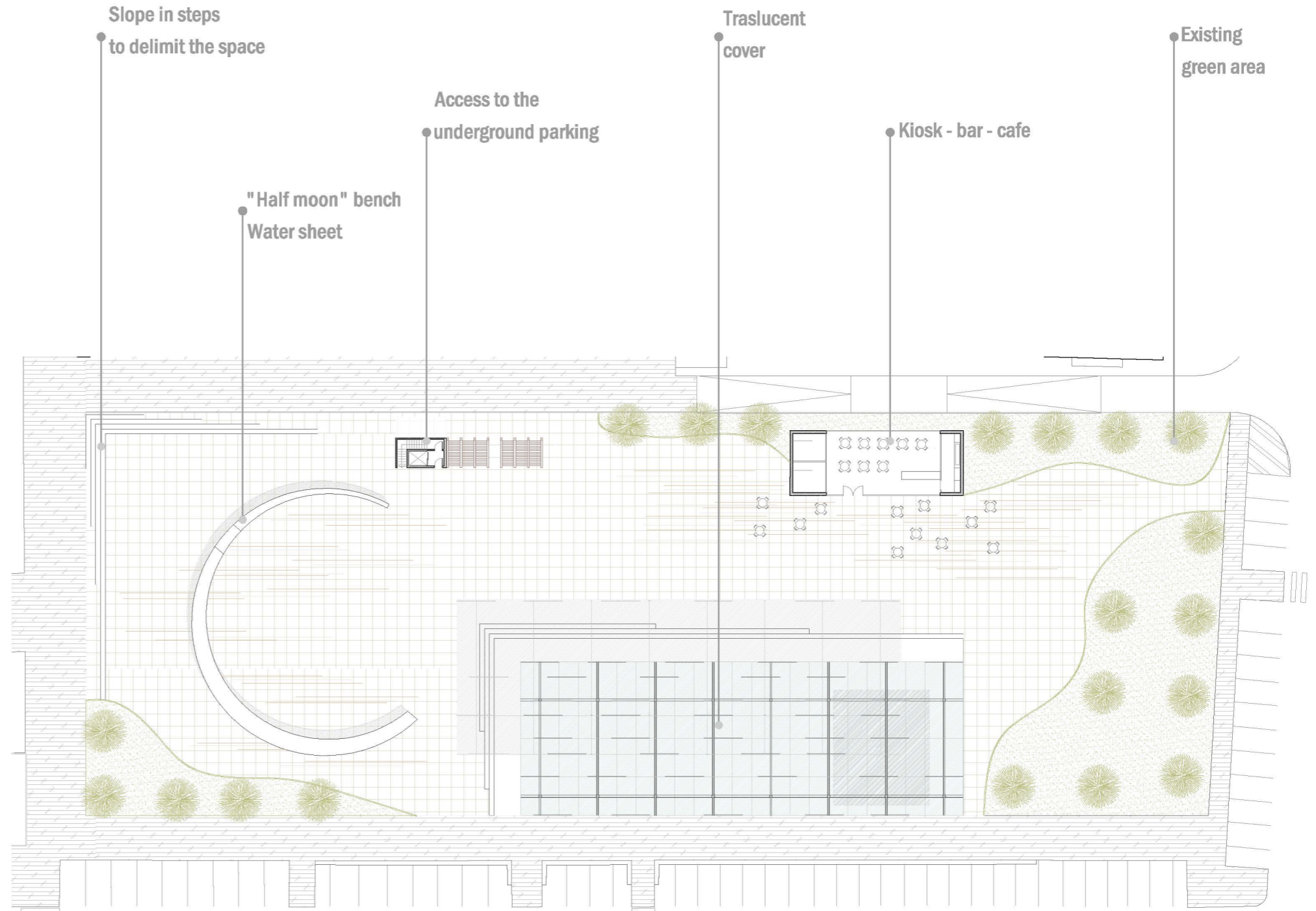
- CORE 1: CENTRAL PLAZA

Nowadays this square is the core of "Parque de Alcosa". Wide, easy geometry, big dimensions and without any element interrupting its visual, this area is used any time of the day. This easy geometry, the rectangular base and the large area, make this place appropriate to be designed for daily use, continuous profit, for everyone, for all activities at any time of the day and in any season. The main quality it has and which is remaining, is the "open space" that has in itself, so all that is implanted is an element that breaks with the geometry of the neighborhood: a half moon concret element.

This "half moon" will be seen as the square icon, but also as an element to collect all that open space that invites you out. Also structurally will contain a water sheet to be used in warm periods of the year, as a fountain and recreational element. There are proposed different equipments, as kiosks and cafes, for producing activities and interaction in the plaza.

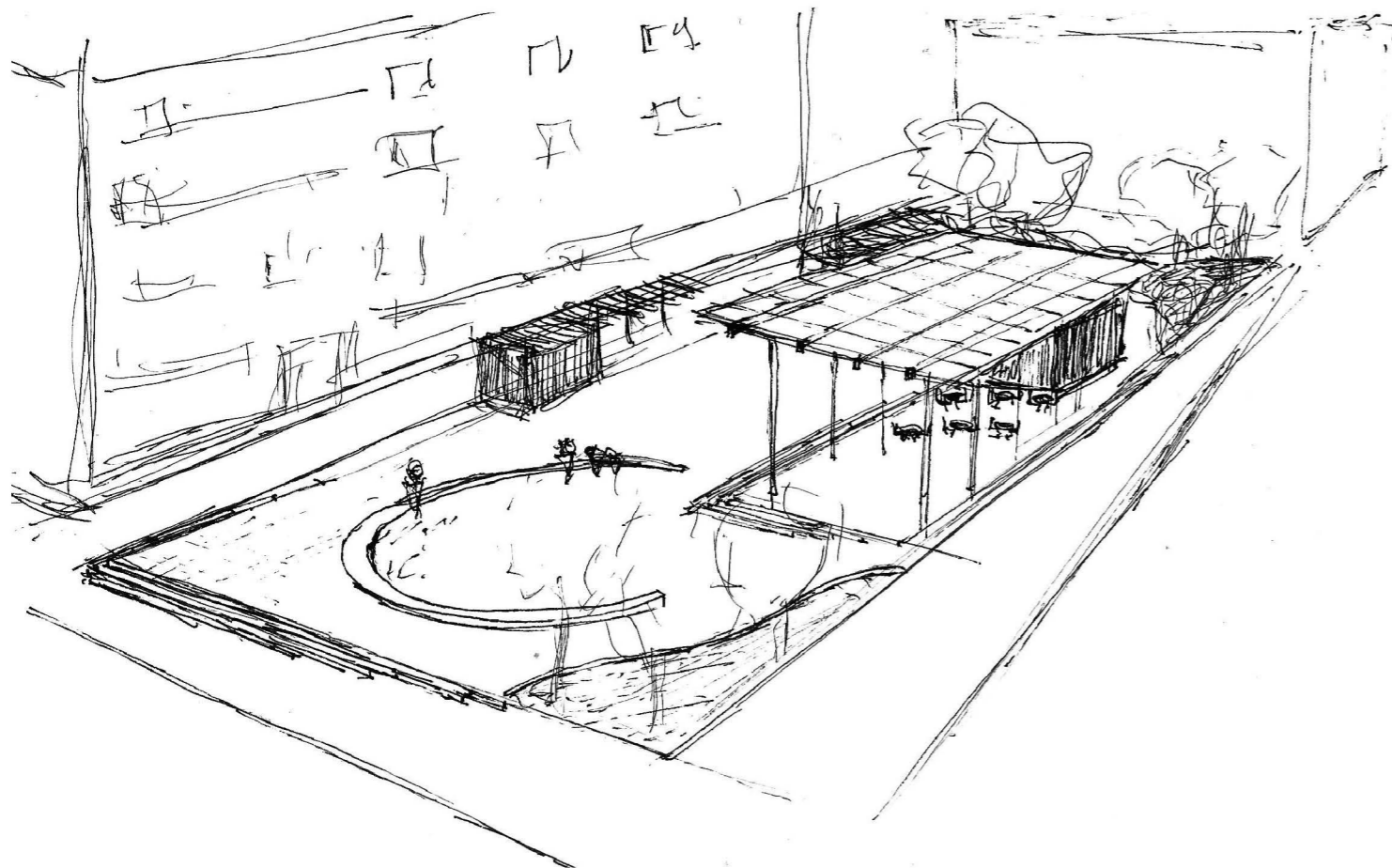
A translucent cover with simple structure will be responsible to indicate the greatness of the site, and the importance of it, as well as producing shadow to the area.

Pic. 23 - 24 Images of a multifunctional square. Idea of cover based on this one.



Plan- Central Plaza 1:500  N

05 DETAILED PROPOSAL, CENTRAL PLAZA



Pic.25 Hand drawing of the plaza

Knowing the activities that take place in this square, they will be kept, but leaving their activity may also propose new ones, such as concerts or summer cinema, very popular in this area. As tried to show on the pic.25, the idea is to keep the same surface as it has nowadays, but including some new changes in order to make this area interesting.

Due to the central location of the square, was necessary to create new parking spaces, so this square has an underground parking, access to it from its surface.

This underground parking, together with the one proposed underground the boulevard, will try to be a solution for the massive parking spaces seen in the district. In this case, the surroundings of the square were full of parking spaces, so the idea is to keep the same number but adding some more.

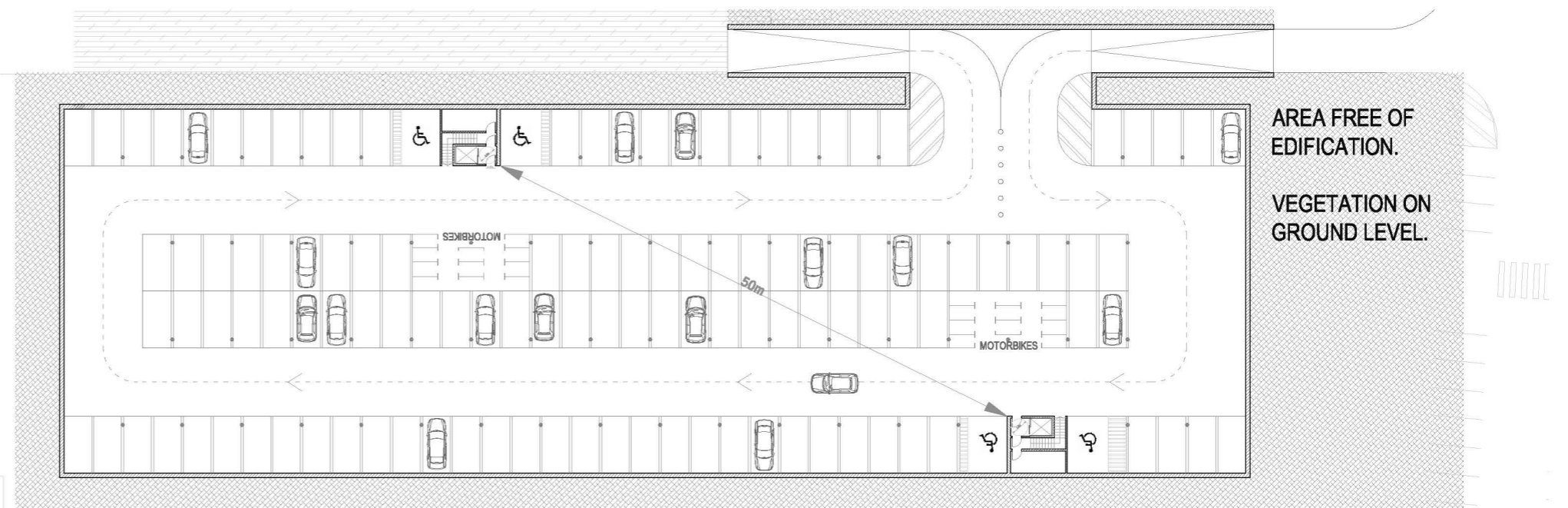
The access to the parking is from the north of the same. For pedestrians there are two boxes, situated 50m far from each other, as a maximum distance, where you can access.

Data about the number of parking spaces:

- 2 external boxes as access to the parking
- 4 disable parking spaces
- 120 parking spaces for cars
- 22 parking spaces for motorbikes



Pic.26 Hand drawing of the Plaza



Underground Parking 1:500  N

05 DETAILED PROPOSAL, COURTYARDS

- NEXUS BETWEEN CORES AND AVENUE

Since this area is in a rather narrow zone between buildings, is designated as a private space for the residents. For these courtyards it is proposed a green area with the possibility of cultivation by the residents, and a specific structural elements, which material is corten steel, to be used as elements of rest and shadow.

These elements are repeated throughout the street, creating a sequence that connects all the space. It is a pedestrian zone aimed at those who live in adjacent buildings. This will difference the three situations you could find: public spaces, which are designed for everyone, the private ones, or the semi-privat. These spaces would be part of the last one, as they are created for the residents although is an opened space available to everyone being there.

The existing parking is solved with the creation of a new underground parking located in the parallel avenue.

There are some concepts on this intervention to highlight:

- There are existing electricity sheds that break with the aesthetics proposed. For this reason, they will be kept as they are, but covered by corten steel slats to unify the rest of the elements on the courtyards.



Plan - Courtyards 1:500 

Pic. 27 - 28 Examples of corten steel coating



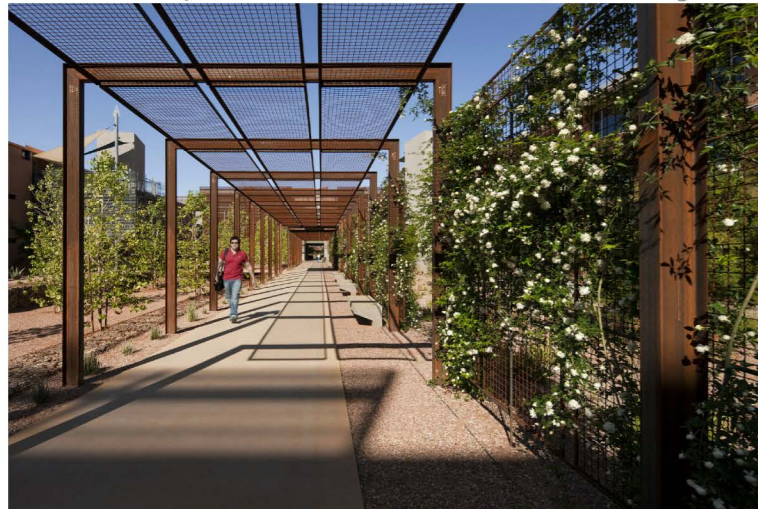
Courtyards Section A-A' 1:200 

05 DETAILED PROPOSAL, COURTYARDS

- There are proposed some structures to provide light / shadow, depending on the interest or day time. These elements will be constructed with the same materiality as the cover on the main square, so it will mean a continuity on the project.

The elements will use corten steel and metal mesh, corten steel also related with the previous element explained before. The metal mesh is used not to interrupt the sunlight as well as a proposal to flowers awning. The residents themselves could be even the ones creating these, so there is also a way to involve people with the environment of their place.

Plc. 29 - 30 Examples of corten steel structures: shadow, flowers awning...



- These open spaces are used for several activities during the year, and the idea is to keep this area opened as it is nowadays in order to continue with the traditional activities.

One of the most famous ones that happens here, it is called "Fallas." It is very important to offer them the same space than before, to be able to keep this as a tradition but why not improving it in relation to those activities.

- As it is supposed to give in this area more social activity, there are designed some outdoor furniture, constructed also with the same material than the rest of the elements (corten steel). This furniture will be composed by large "tables", horizontal slats, supported by a vertical simple structure complemented by large benches done by the same materiality. It will mean then spaces for sitting, resting, namely, third spaces in between buildings that will make possible some activities as eating some snacks with the neighbours or friends, meeting during summer night, or simply resting outside home.

- The courtyards present a lineal geometry, with a prolonged visual that should not be interrupted with any closed element. That is also why all the outdoor furniture proposed is not closed at all, so it is kept the idea of the narrow semi-private area designed for the residents living there.

Specific activities are not desired in this space, since it is usual to have unwanted acts when space permits.

More over, the main avenue is situated parallel to this one, and is there where are expected almost all the new activities and the social interaction.

The courtyards are just a trail in between the cores and the avenue, it is not expected to acquire any importance rather than an access for the residents living in the adjacent buildings and a semi-private area for them.



Courtyards Section B-B' 1:200

-Mediterranean Avenue : Boulevard

The third intervention takes place in the existing Mediterranean Avenue.

Today is a very busy Avenue two-way divided by a wide pedestrian area with vegetation on both sides.

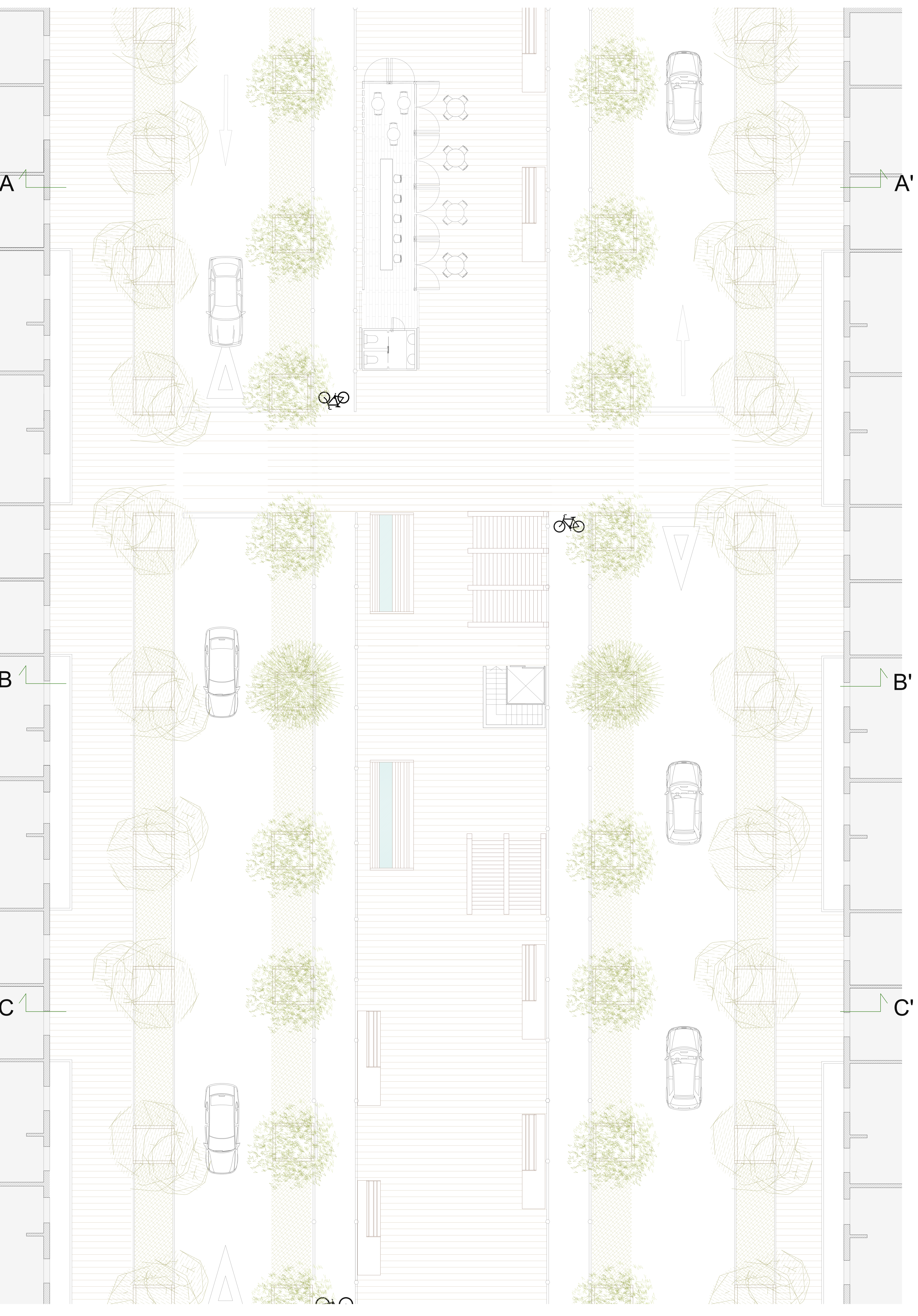
It is pretended to keep the main goal of the Avenue, since it is observed is a very crowded place where both cars and pedestrian have their own space, but it is going to be given much more importance to this Avenue, as it crosses from side to side the work area.

The new proposal will keep the traffic in both directions and the center dividing area, but in this case, the traffic will have a secondary character, because the pedestrian is the main one.

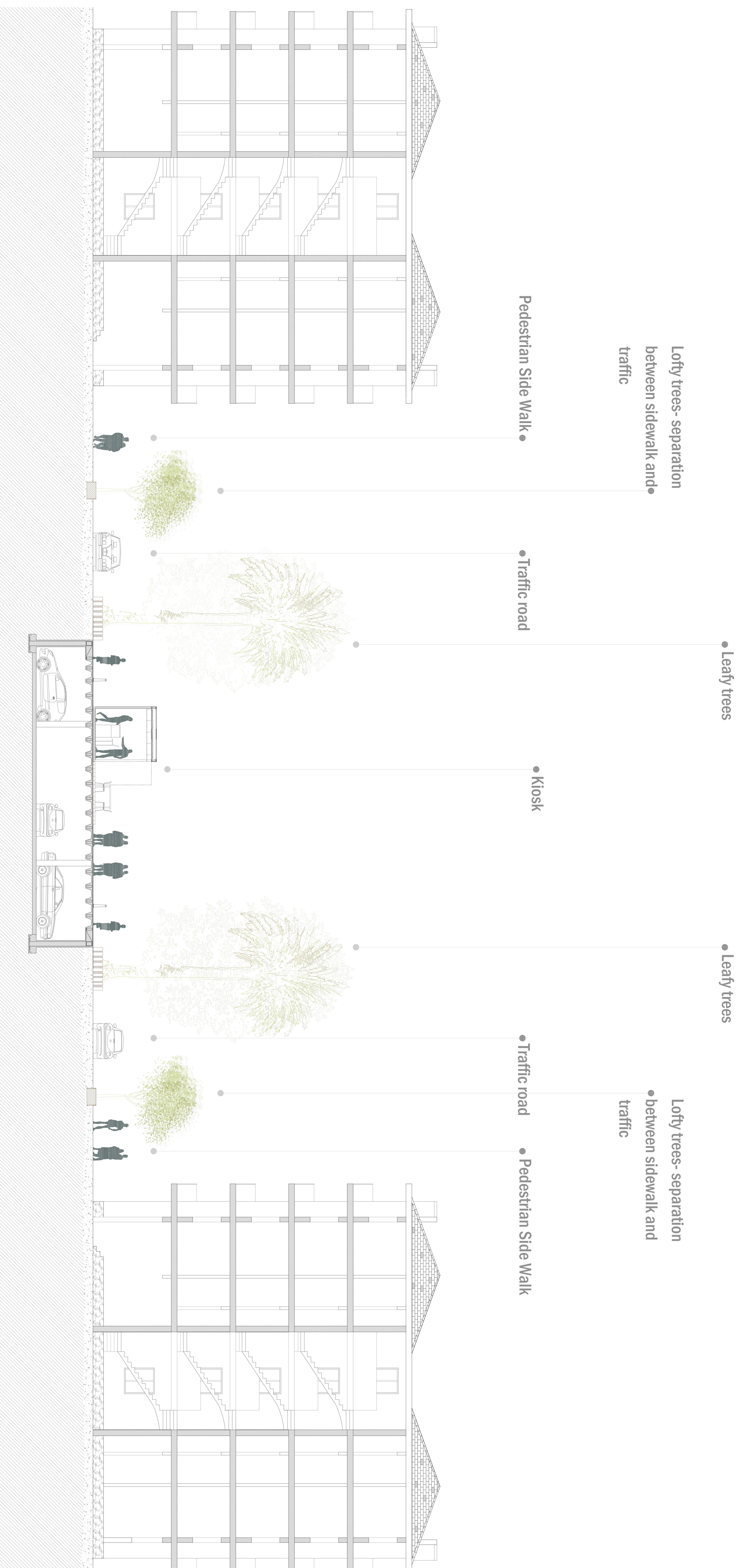
Therefore it has been involved in this dividing, giving a distinct character, use and dialogue with the rest of the neighborhood.

Equipments are proposed along the avenue, such as kiosks or cafes. There will be also different elements such as water fountains and benches, which will allow recreational and rest areas for residents.

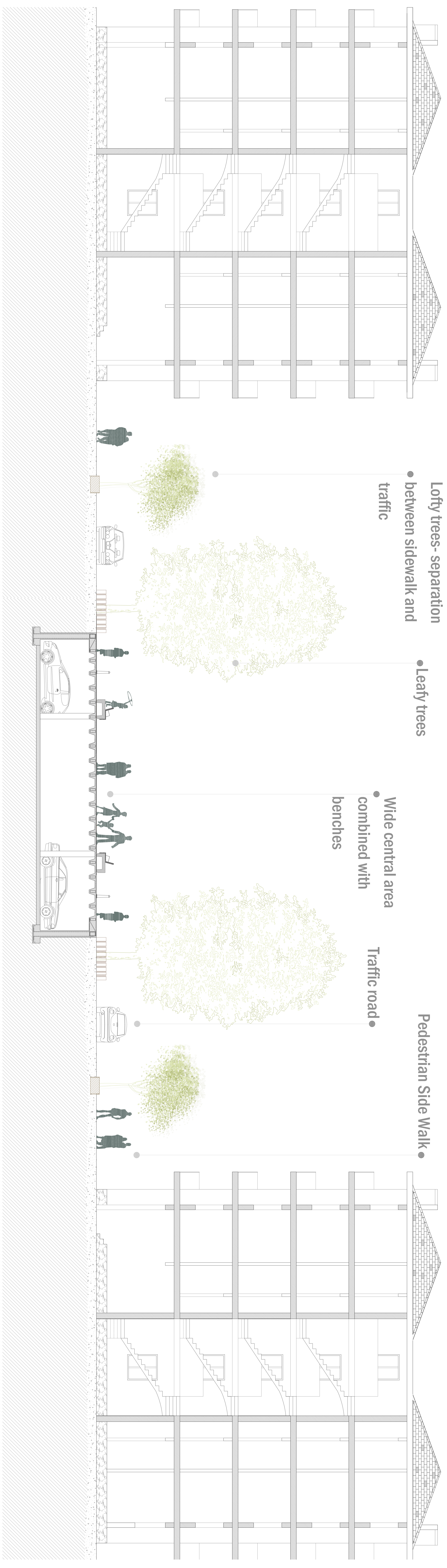
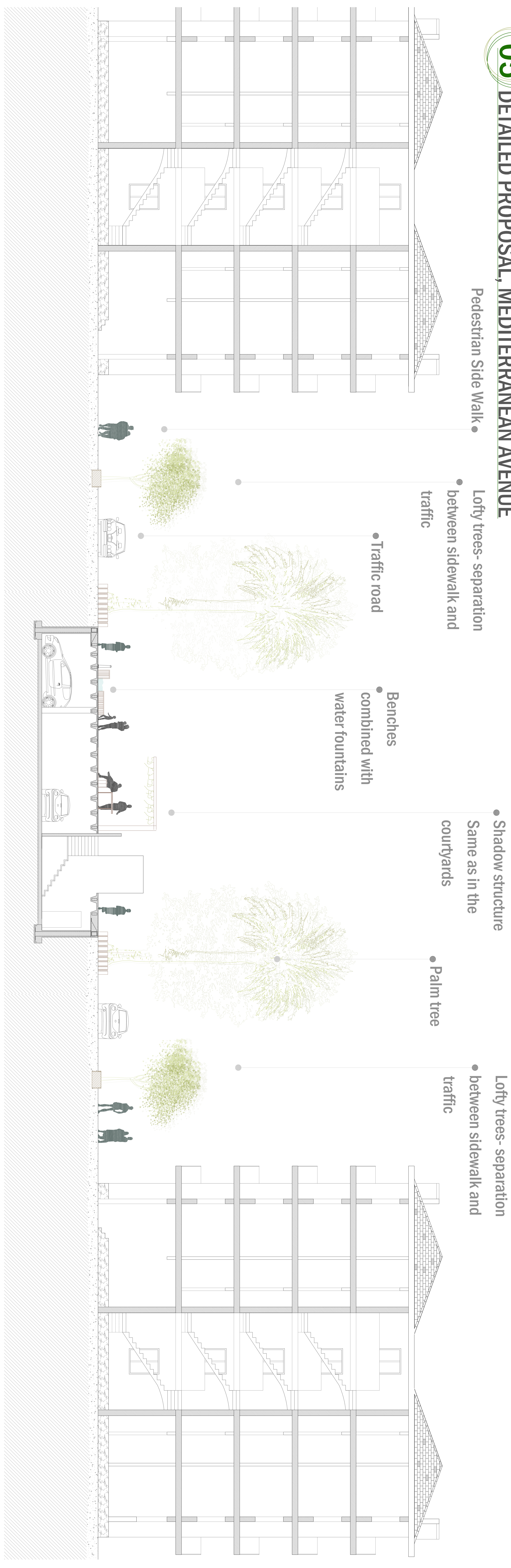
It will be a shady area full of vegetation, where we also find repeated elements from the courtyards, so that will mean a continuation of the project spread throughout the area.



The proposed section of the Avenue has a Zone-30 for sidewalk and road traffic, giving priority to pedestrians. Also a bike path in both directions, protected by a green urban line. A dividing repeated with various elements along the same, and assuming a sequence. Each party will always be separated by vegetation, which will vary depending on the intention. Palm trees are used to point the access to underground parking as well as the different services found along the boulevard. Less lofty trees for sidewalk and traffic separation and leafy trees along the avenue to create shade.



Boulevard Section A-A' 1:200



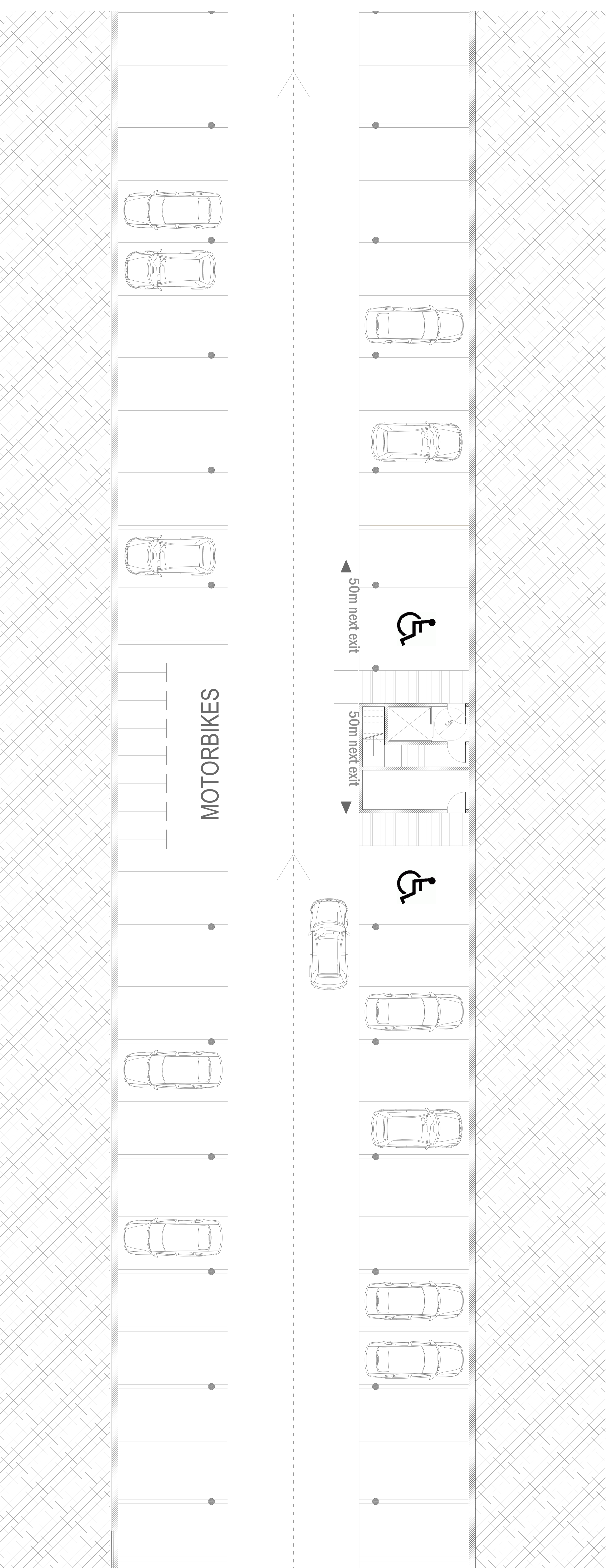
Throughout the entire Avenue, there is an underground parking with access from the west side of it. Since currently the Avenue has a high number of parking places, was necessary to preserve them, and if possible, add some more.

So the underground parking is implanted through a forced ventilation from the inside helped with open ventilation from outside, in decisive points.

Access to the garage is given by communication boxes arranged every 50m, maximum distance, which are found on the surface.

Here is the data about the number of parking spaces, once the underground parking is established:

- 3 External boxes as access to the parking
- 6 Disabled parking spaces
- 143 Parking Spaces for cars
- 24 Parking Spaces for motorbikes



- Core 2: Primary School and Sport Area

At this point we come to one of the strongest proposals of the program.

This proposal will be explained in more detail, since it has architectural features, where I stopped in a greater way, for a particular study.

*The primary school as a learning environment designed,
supposed to think about the spaces and materials as the third
educator (Loris Malaguzzi)*

Architecture and early childhood

Early childhood individual history is evoke the necessary basis for the balance and personal development. Few years are so critical and few relationships as influential as those occurring in that period.

If the educational concepts considered ideas like "the child-centered learning", "learning community made up of families, teachers and children", "autonomy and creativity" ... The design and implementation of architectural designs should also respond. Few things influence both the experience and the place in which they occur.

Education is a solidarity of the whole school community so well as an educational dimension also has a political and social dimension. So the quality of the spaces of education services for early childhood are strategic in the future of the community.

These materials come to fill the current void of references who faces precise drafting of an architectural project to house an educational center for the first three years of life.

Consider the requirements and conditions of a primary school requires opening practically the same issues as the writing and education project: what goals we set, what service should be provided and what are the needs of its users.

And the answers involve positions in many dimensions: from general issues such as the location of the center and its role as a civic space as concrete as other locations of diaper changing tables.



Pic 31. Children and creativity

1. INTRODUCTION

1.1 The children with their rights as a citizen and their education

Humans are not only educable since they were born but we need to be taught from the first day. Structured care processes and attachment links from where you can access culturally humanization processes. Everything is done at birth and yet the essentials and is structured at three years.

The evolution of the early years of life can not be considered only as learning acquisition but are the creation and development of basic structures of the human psyche. Structures and psychic abilities are being created and developed through educational processes.

Three years before establishing communication skills and language: the small finds that language exists and acquires the ability to understand and produce. Also acquired psychic ability to love and be loved, the ability to link to a community. Who does not live Sick affection wrapped in these ages. But if not ill have the opportunity to be the subject of affect, not the subject.

This includes the nursery should be an environment to support it. And it also now that acquires the capacity to question, the ability to discover their physical environment, the ability to understand, to do so under their experiments and to test explanations, the ability to ask and ask. Ultimately it enables them to build a relationship with the world smarter.

No one doubts that if this did not start within three years will be difficult to get it later. This training has only one name: education. Therefore education in the first years of life is one of the conditions to ensure greater equality of opportunity.

Primary schools are already an essential service for second families for the education of their children and their own orientation to the difficulties they encounter.

"The education of children is a joint mission of the whole community ... hence the school has not only an educational dimension and technical but also political and cultural" and therefore the quality of spaces of education services for the first childhood are key strategy not only for the welfare of its members but also has implications for the future of the community.

1.2 The play of children as a necessity

We know that children play not only because they love but also because they need to. The game is not a type of activity performed by the children, it is the basic way of acting of the child.

They play because they want to but they play also an internal motivation that pushes them to rehearse actions and interpretations of himself and his environment.

The game is for them a life experience that enables them to transform, create other worlds, to live other lives, pretend to be others without ceasing to be themselves, think like the others and especially to discover that there are other ways of thinking and feeling.

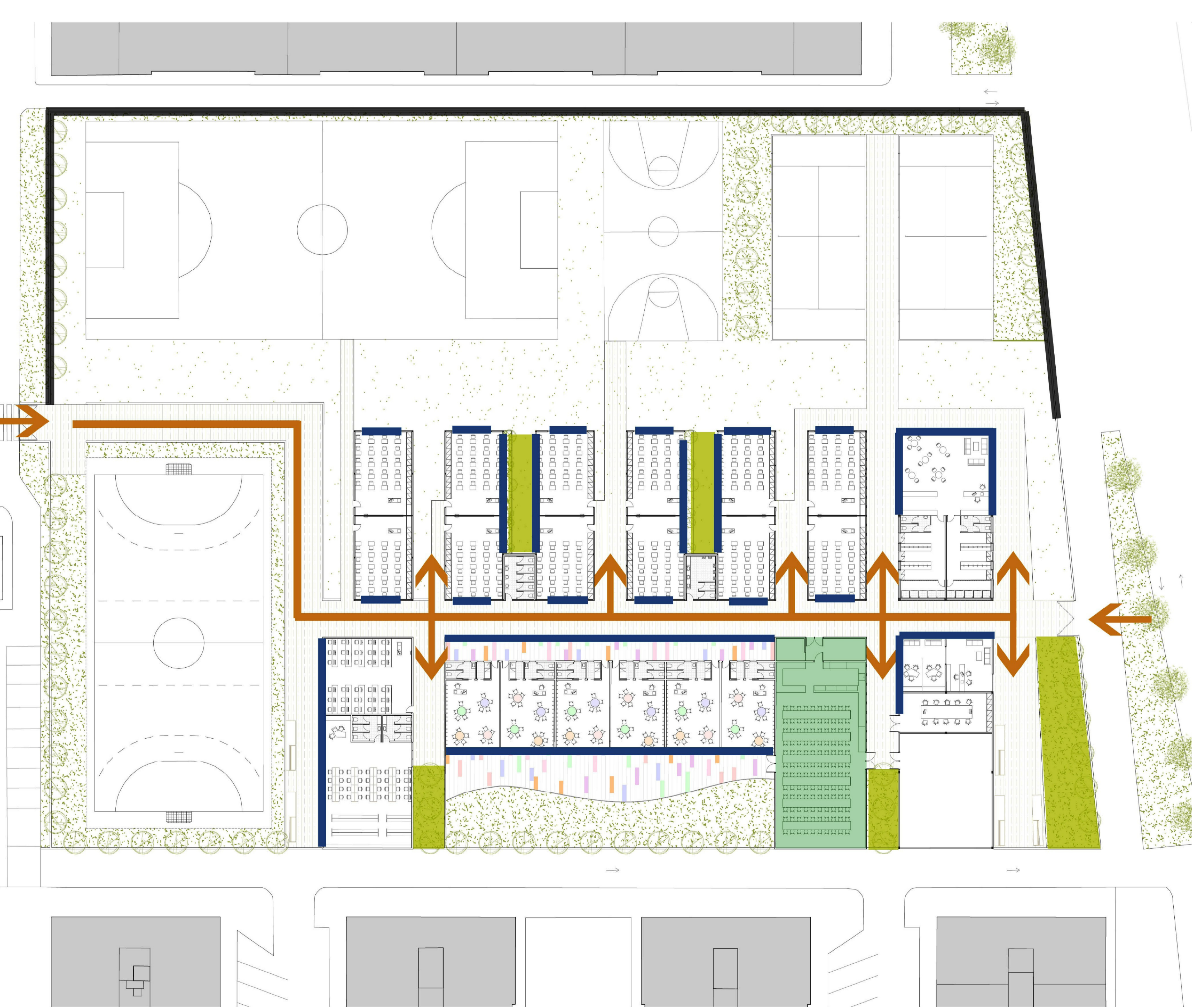
2. REGGIANA PRIMARY SCHOOL

Whenever we talk about children's schools at one time or another arises *Reggio Emilia* and *Loris Malaguzzi* as one of the leaders of transformation and achievement of quality recognition in this first stage.

Loris when he spoke of kindergartens spaces and materials identified as the third educator and in 1975 proposed some characteristics peculiar to education centers for early childhood:

- Must be governed by **transparency** so that large windows allow children to **observe** what happens around the center.
- Malaguzzi wanted the buildings have a unitary structure, **family and welcoming** to allow children to explore all remaining spaces oriented and facilitating a **global perception** of the whole. The dimensions of the center have to let everyone know.
- Small schools foster informal relationships, facilitate operational flexibility **prevent anonymity** and invite the **participation** of the entire school community.
- Malaguzzi always spoke of the necessary **connection between "inside" and "outside"** spaces, classrooms and playgrounds as well as easy connection and **visibility** of what is happening within the school and its social and cultural environment.
- Stresses the necessary **conception of spaces** and environments in a way that promotes **emotional security** in a climate of calm and serenity, where noises are avoided, it is possible the meeting in small groups, in pairs or isolation when the child needs it.
- A peculiarity in the reggiana school is the **kitchen** which occupies an **important role** in the school and in relation to which there are activities and integrated into the daily lives of children, in addition to providing an important recognition of non-teaching staff such as cooks, assistants, ...

Pic 32. Loris in a class of Reggio



Pic 33. Reggiana characteristics scheme

- Transparency: large windows on the facades of the different buildings
- Easy orientation. Facility of perception.
- Conception of the space
- Remote spaces
- Kitchen

3. Key concepts in the design of the spaces and environments

Reggio Emilia and *Loris Malaguzzi* propose some key concepts in the design of the spaces and service environments for early childhood:

A-Flexibility

The design of architectural spaces serving early childhood groups involve one characteristic: flexibility, easy processing by rapid continuous change of its people and the richness and plurality of educational concepts in continuous improvement, innovation and transformation.

B-Osmosis

Osmosis school with the city. The school can not be an isolated context but permeable and transparent.

An integrated school in the territory, inserted in its context and culture as cultural and social level in the area where it is located.

The school serves the cultural and other areas of the city and the neighborhood to use as educational spaces. The permeability of the "inside-out" facilitates social cohesion and coherence.

C-Habitability

There is talk of a school friendly and livable. A friendly school is a place that everyone - children, staff and families - we are known by name.

Therefore it is necessary that schools are small.

A school is able to accommodate small and larger providing a sense of security and wellbeing. A school understood as a comfortable and aesthetic sensibility aroused.

D-Relational

Spaces are needed for small and large groups, for trade with other groups to the relationship between children and adults, family and school.

Another quality in the project is the search space of horizontal space, understanding that all are equally educational spaces and that everything that happens at school should be educational without hierarchical divisions, from the kitchen to the bathroom.

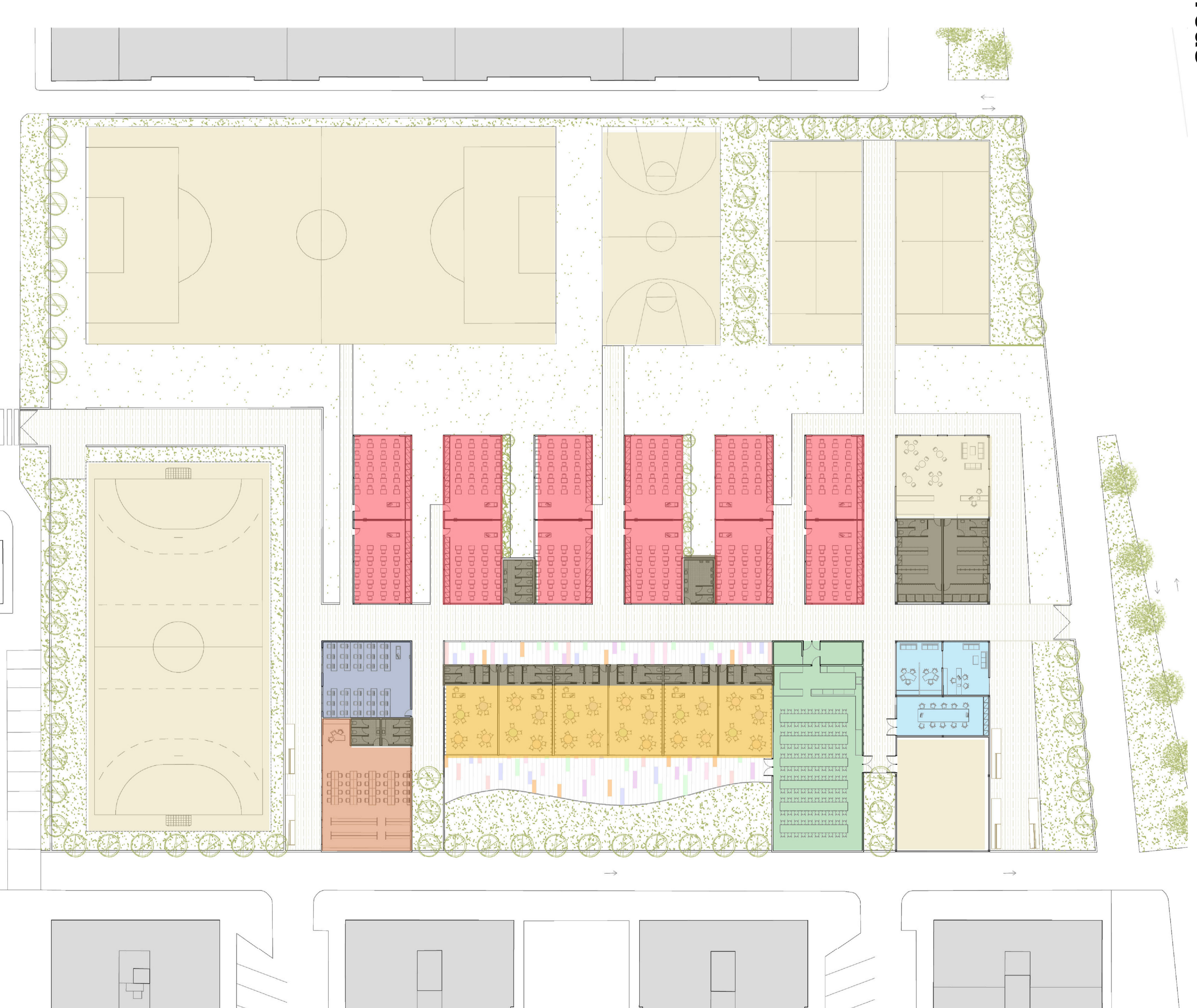
E-Changes

The school understood as a dynamic and changing and becomes coupled to the needs of the group.

F-Other

The inside-outside, easy access, orientation, the surrounding buildings and their shadows, as both the courtyard and classrooms should have sunshine most of the day.

4. Different areas



5. Plan. Organization of the space



A. Restroom

Basic requirements:

- Surface recommended: 5 m².
- Natural or forced ventilation.
- The door shall have a minimum clear step width of 0.80 m

B. Management

Basic requirements:

- Recommended Surface: 15 m².
- Lighting and natural ventilation.
- Forecast telephone line.
- Fixed Equipment

C. Educators room

Basic requirements:

- Recommended Surface: 20 m².
- Lighting and natural ventilation.
- Provision of telephone line.
- Fixed Equipment

D. Kitchen

- Recommended Surface: 35 m²
- Located on ground floor
- Exterior Ventilation
- Watertight lighting fixtures
- Direct connection with pantry
- Good connection with dining
- Connection to the outside for the supply
- Cabinet freezer
- Refrigerating cabinet
- Preparation area
- Wash zone
- Cooking zone
- Dining



E. Changing Rooms

Basic requirements:

- Recommended Surface: 20 m²
- Lighting and natural ventilation
- Watertight lighting fixtures
- Walls tiled up to the ceiling
- Translucent glass windows
- Provision of earrings and sinks
- Non-slip paving

F. Infant Classrooms

- Recommended Surface: 40 m².
- Communication with outdoor
- Lighting and natural ventilation.
- Height 1.40 m electrical mechanisms.
- Protection against sun space.
- Protected doors with finger-catching system.
- Playground soft floor paved.
- Pavement playground wooden platform.
- PVC Floor Classroom, parquet or similar.

F. Primary Classrooms

- Recommended Surface: 55 m².
- Communication with outdoor
- Lighting and natural ventilation.
- Protection against sun space.
- Protected doors with finger-catching system.
- Playground soft floor paved.
- Pavement playground wooden platform.
- PVC Floor Classroom, parquet or similar.

6. Indoor / outdoor. Different activities.

Cafe and changing rooms linked to the outside

The proposal for this school and sports area, is that not only work during the school day, but once closed, is carrying out activities for all ages.

It is proposed, for example, paddle courts (very common sport in Spain), where they could teach, or even play between friends.

The idea of having the cafeteria here, is that families could have a place where to rest or drink while the kids enjoy the activities. This cafe is also third space.



Pic 35. Example outdoor Cafe

Pic 36. Children in paddle lessons

The idea of having the cafeteria here, is that families could have a place where to rest or drink while the kids enjoy the activities. This cafe is also third space.

Extracurricular classes

Another idea is to use some of the classrooms, to provide extra classes for both children (support and help), and adults. It could be as a request by them: teaching Spanish, English, music...



Pic 37. English lessons

Extracurricular activities: varied sports

Something very common in children and young people is to practice sport once classes are finished. The center gives the opportunity to do it there. Also parents and children could practice together, conference organized by the school itself.

Or even, parents made a different activity, while children play sports, but always in the same area.

This would always be a rapprochement between children and parents, as well as getting to the center.



Pic 38. Outdoor activity



Pic 39. Outdoor activity



Pic 46. Activities scheme

Multifunctional classroom

Apart from sports such as football, basketball, handball .. There are other activities that occur on the indoor, and often practice by children, such as ballet or judo.

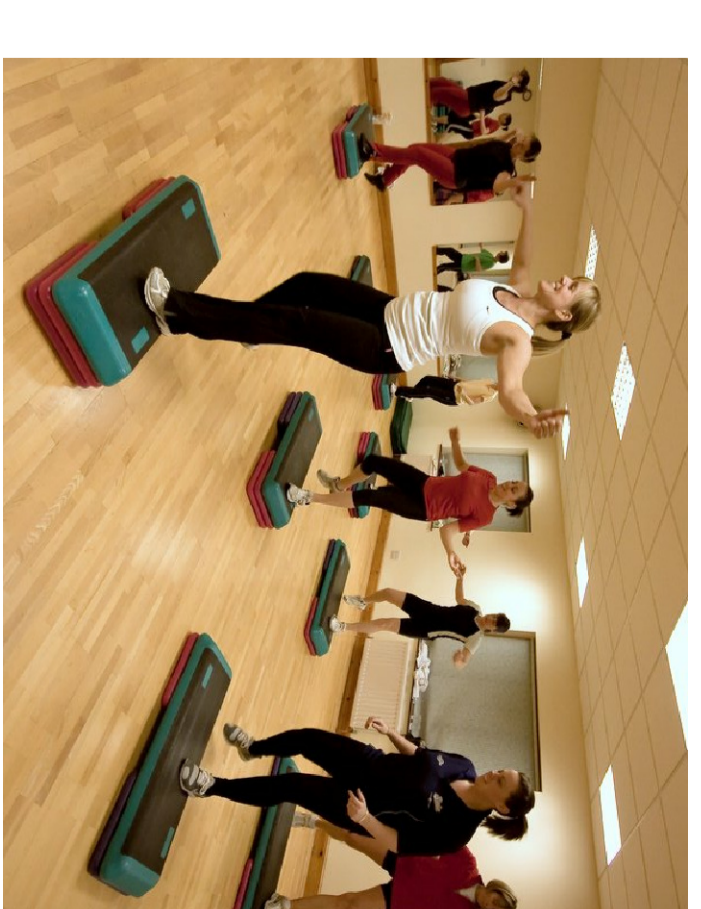
In the center there is a large classroom adaptable to any type of activity.

This class may also propose activities for adults, such as aerobics, fitness, yoga ..

The idea is to combine schedules provided for both children and parents can enjoy free time besides being together. Moreover, these activities are available to everyone who wants to, not just those who belong to the center.



Pic 40. Ballet



Pic 41. Aerobic class



Pic 42. Judo

Computer activities classroom

The same goes for the computer lab at school. It remains open upon completion of classes to teach computer classes for both children, and adults and older. However always mixed classes can be made, since social networks today are fashionable, and technology advances very quickly. It is necessary to become familiar with it.



Pic 43. Computer class - adults



Pic 44. Computer class - children

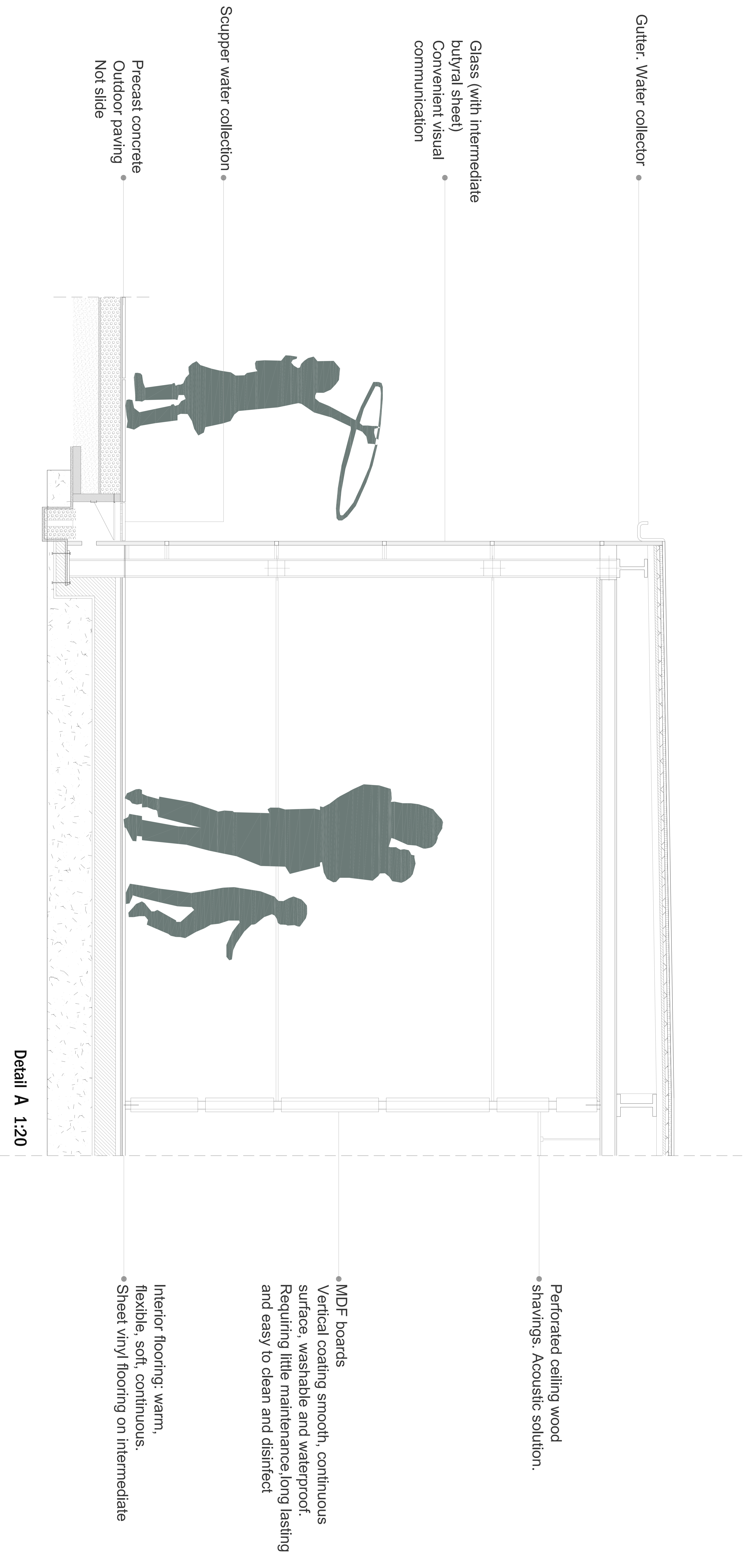
School Library

The school library will be also open after classes, since it is possible that children do not have a suitable and appropriate place to study, they are given the option to study there.

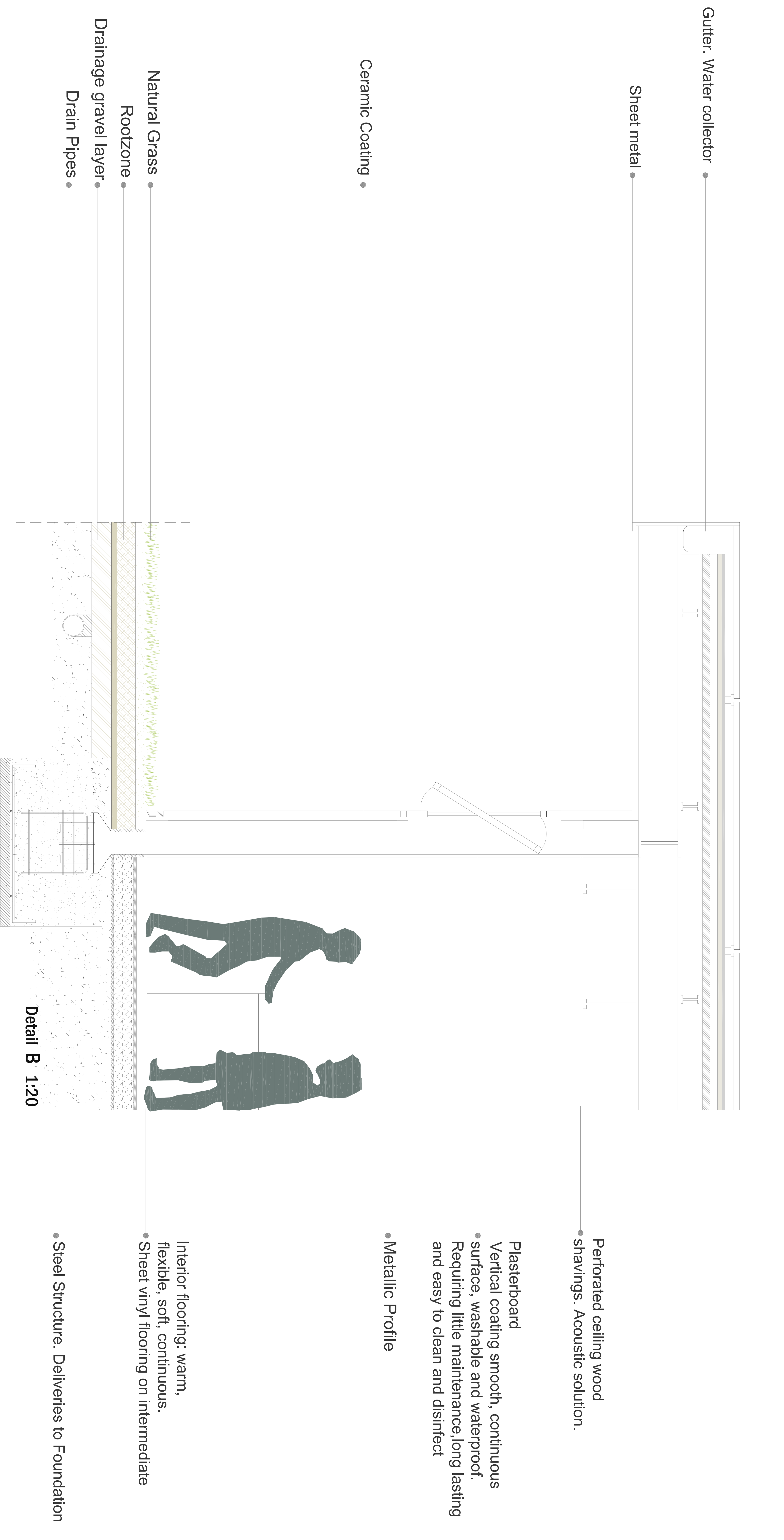


Pic 45. Example of school library

7. Recommended construction materials and systems



7. Recommended construction materials and systems



CENTRAL PLAZA

COURTYARDS

BOULEVARD

PRIMARY SCHOOL & SPORT AREA

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