Buropan ES

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EUROPAN 16. LIVING CITIES

Brief

Almendralejo

Alzira

Barcelona

Beizama

Esparraguera/Colonia Sedó

Madrid

Roquetas de Mar

EUROPAN 16 SPAIN, "LIVING CITIES"

The aim of EUROPAN is to bring young professionals involved in planning, landscaping and architectural projects into this European debate forum, and encourage them to develop and publicising their ideas for a European and international audience.

EUROPAN also aims to help the public authorities and promoters that provide the sites to receive innovative architectural and urban planning solutions. EUROPAN is an anonymous, public, open design competition.

The Ministry of Transport, Mobility and Urban Agenda hosts this competition in Spain, and strives to facilitate commissions by the public bodies participating in EUROPAN Spain for the winning proposals. For this purpose, the terms defined in the tender conditions match the procedures for Project Competitions adjudicated by a Jury as defined in articles 183 et seq. of the Public Sector Contracts Act. Compliance with the conditions set out in the EUROPAN 16 Regulations and in the aforementioned law is therefore guaranteed.

For this reason, teams competing for a site in Spain should make themselves familiar with the EUROPAN 16 Regulations for Jury-supervised Project Competitions, published on the Spanish Contracting Platform at the following web address:

EUROPAN 16/SPAIN COMMITTEE

Chair

Ministry for Transport, Mobility and the Urban Agenda

Management

Directorate-General of the Urban Agenda and Architecture, Ministry for Transport, Mobility and the Urban Agenda / Higher Council of Architects' Guilds (CSCAE)

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EUROPAN- SPAIN SECRETARIAT

Carmen Imbernón, Secretary-General Begoña Fernández-Shaw, Management and implementation monitoring

EUROPAN SPAIN JURY

- 1. Iñaqui Carnicero, architect, EUROPAN Spain President. General Director of Urban Agenda and Architecture of the Ministry of Transports, Mobility and Urban Agenda.
- 2. Rocío Peña, architect, San Sebastian. <u>www.ganchegui.com</u>.
- 3. Eva Luque, architect, teacher. Almería. <u>www.elap.es</u>.
- 4. Enrique Krahe, architect. Former winner of Europan Spain. (Delft/Madrid) www.enriquekrahe.com.
- 5. Mariona Benedito, architect, teacher. Barcelona <u>www.mim-a.com</u>.
- 6. Eduard Bru, architect, urban planner, teacher. Barcelona
- 7. Niek Hazendonk. Landscaper. The Netherlands
- 8. Socrates Stratis. Architect, urban planner, teacher. Cyprus. Member of EUROPAN Europe Scientific Committee. <u>www.socratesstratis.com</u>
- 9. Tina Gregoric Slovenia/Austria. https://www.dekleva-gregoric.com/profile

Substitute: Arantza Ozaeta, architect, EUROPAN former winner. Madrid. www.tallerde2.com

PRIZES

EUROPAN/Spain envisages seven possible first prizes and 7 second prizes, plus any special mentions deemed advisable by the jury. First-prize teams will receive €12,000.00, second prizes €6,000.00.

In Spain, EUROPAN prizes are exempt from withholding tax under a RESOLUTION of 5 April 2006 by the Tax Administration Department of the National Tax Agency, an exemption envisaged in Article 7.1 of Royal Legislative Decree 3/2004 of 5 March.

SPECIFIC COMPETITION SITE DETAILS

Site Representative

Directorate-General Strategic Planning, Urban Development Area, Madrid City Council.

Agents involved

Madrid City Council and IFEMA Consortium (31% owned by Madrid City Council).

Profile of the team representative

Architect, urban planner, landscape architect. The inclusion of a member with a profile in agronomy and industrial design would be useful.

Competences of the team under the goals, features and programme of the site.

A multidisciplinary team is recommended in order to present a proposal involving visions from the both an architecture and an urban planning perspective, given that although this is a project for the city, it also involves urban landscape concepts. It is thus advisable to include members with knowledge about agriculture and urban agro-ecology, and also have industrial engineering tools and skills to permit an appropriate design of the aspects to be implemented at the sites.

Tender announcement

The EUROPAN 16/Spain invitation for proposals and results will be published on the State Procurement Platform, the Official Spanish Government Gazette and a major national newspaper. The results will also be publicised by the Spanish Architects' Guild and the specialist media.

The results of EUROPAN/Spain are exhibited and published in a catalogue of prize-winning projects and special mentions. This exhibition of the national results is itinerant.

The winning teams are invited to participate in events to present their proposals and debates at both the national and international level.

First Jury meeting

The site representatives participate in the first jury session with the right to speak and vote.

Procedure following the jury decision

Immediately after the jury's decision, the EUROPAN-Spain winning teams are invited to present their projects to the site authorities. This is followed by an initial round table discussion involving members of the jury.

Procedure for commissioning following the jury's decision:

The site promoters and associate members or their delegated representatives (local bodies, regional governments or legal public authorities) are recognised as contracting bodies with the power to award the service contract at each site under a non-advertised negotiated tender procedure for the competition winner or one of the prize-winners. In the latter case, all winning teams (prize winners and special mentions) must be invited to take part in the negotiations.

Commissioning envisaged as a result of the jury's decision:

Design of a project for one or more of the proposed sites and, if necessary, depending on the outcome of the competition, the production of a brand manual or design guide for the projects envisaged by the Producer Districts Strategy, which will cover every aspect, including a project for the implementation of the ones which can be standardised.

EUROPAN 16. LIVING CITIES



MADRID – PRODUCER DISTRICTS

March 2021

desarrollo MADRID

OBJECTIVES

The Producer Districts project by the City Council of Madrid is part of the *Isla de Color* (Colour Island) strategy implemented by the Directorate General of Strategic Planning, in response to a series of urban gaps created during the growth process of Madrid.

This involves the town planning design of green infrastructure in Madrid, acknowledging the service provided by open-air spaces in improving human health and the environment when they are interconnected.

The aim is to progress toward a model of work on the existing city based on the recovery and regeneration of unused or underused municipal plots of land, by enhancing dialogue and interaction between the city and nature for the benefit of the inhabitants.

Based on the Producer Districts project, these unused spaces become productive nodes where agricultural activity is integrated in the city, while making them cohabitational spaces within the immediate area.

Producer Districts is conceived as a complex programme of uses that can provide a response to all the dimensions the project aims to cover: social encounters, the educational aspect, experimental, local food production, their contribution to improving environmental conditions and biodiversity, water recycling and efficient use, reduction of the heat island effect, use and production of renewable energy, etc., without forgetting the landscaping component, also favouring social acceptance of the inhabited environment and, definitively, generating new ecosystems, halfway between nature and culture.

The selection of sites for the competition is aligned within this strategy and seeks, through analysis, to create a model of urban orchard or production space that covers the design of all its elements, that is scalable and can be integrated within the territorial diversity of the city, while being an expressive resource to unify the project and provide it with an identity-based image.



The aim is to integrate food production within the urban fabric, bringing about a double effect: regreening dense urban areas, and involving the neighbours in actions that collaborate in conservation of the public space, that improve their daily landscape and that may potentially provide sources of employment.

OBJECT OF THE PROPOSAL

The transversal public policy of regreening the city is an action to combat climate change and improve the urban environment that is being implemented by the Government Department for Urban Development. It changes the planning focus towards a green transformation. The *Producer District* project combines an innovative strategy to regenerate the districts with the enhancement of the value of the Municipal Land Assets and public spaces in order to hold land uses aimed at increasing green zones where urban primary production spaces will be a key factor

The object of this proposal for the EUROPAN 16 competition is to prototype a model of urban market garden or primary productive space that covers the design of each one of its components, its organisation and the spatial and functional relations between them, turning them into expressive resources of the project and an element to unify the complexity of the *Producer Districts* project that is adaptable and dialogues with the different environments and situations in the city, while providing it with an identity.

DESCRIPTION OF THE PRODUCER DISTRICT PROJECT

Through the General Strategic Planning Directorate, the Urban Development Government Department of the City Council of Madrid has the remit of driving regeneration and revitalisation of the existing city according to the commitments of the international urban agendas. Specifically, it proposes urban regeneration and renewal actions aimed at improving the existing city.

Urban regeneration actions aim to improve the town planning situation, clarify the registry status of the land, improve the planning of free spaces, refurbish buildings, while activating social and economic improvement actions, ensuring that the actions are comprehensive in their scope. The aim is to work on complementary approaches to guarantee successful regeneration.

Among its objectives, the Producer Districts project encourages the green economy with actions that use the district as a productive resource, regreening its open-air spaces and underused roof space, in addition to activating empty commercial premises, aimed at favouring fruit and vegetable-based nutritional ventures and the sale of ecological products and hospitality.



objective of the The "Producer District" project is to activate regreening of poorly conserved urban voids, as well as create green roofs in the most vulnerable districts of the Madrid suburbs as an instrument to improve employability and training for the population in sectors such as agriculture and gardening, nutrition, health and food, and to favour entrepreneurial ventures based on the new opportunities arising from digitization of the economy. This will help to improve the environment through adaptation and resistance to climate change, reducing the urban heat island effect and recover natural assets. The essential aim is to fully regenerate the districts by combining physical actions with others of a more social and economic nature.

The project is based on the experience of community urban allotments in Madrid that has been in operation for more than 10 years, which began with a strikingly social objective, to improve community life. By boosting production districts and the new focus, the aim is to extend the area and objectives, taking another step towards a "Productive urban vegetable gardens", with the financial objective of generating employment and entrepreneurial ventures.

Production of fruit, vegetables and flowers may be complemented by energy production and hospitality production to commercialise the plant produce, thus contributing to the feasibility and profitability of the private initiative projects it is aimed to implement, with a strong drive, advice and support for entrepreneurs to be provided by the authorities.

The instruments used by the project to work on renaturalising the city are the different spaces with opportunities that can be found in every district: urban voids that are generally badly conserved and lack adequate use, unoccupied plots of land, underused roofs, unused subterranean spaces, vacant commercial premises, etc., that may be used as a resource to promote activities in districts identified as vulnerable in the Urban Regeneration Strategy of Madrid. The population will become involved in the active training process to transform empty spaces into gardens and orchards that produce food, floors and plants, that are managed by the communities themselves for their supply and consumption, making the city more fertile and providing it greater resilience.



The *Producer Districts* project thus provides Madrid with a major opportunity, as it combines two of its main urban challenges at present, **climate change mitigation and adaptation**, **and the regeneration of the most vulnerable districts**, thus collaborating to combat **urban inequality**.

Madrid has a large pool of land for municipal facilities listed on the register of municipal land assets. Many such plots having been empty for more than 50 years. Thus, this project streamlines with this innovative strategy to regenerate districts **by making use of the Municipal Land Assets and public space** for land use aimed at increasing urban green areas, in which urban primary production spaces shall be a key factor. The Land Pool the municipality makes available to the project has more than 280 plots that add up to nearly 250 Ha.

This project is also driven by its ability to increase awareness of the need to reduce greenhouse gases linked to transporting food, which has increased 42% bv worldwide in the last 10 years, the ratified **European commitments** healthier, to more sustainable food policies and the profusion of relevant urban



initiatives related to agroecology in cities, both internationally as well as in Spain, with successful experiences in different agricultural formulas, from agroecology on terraces to more technological agriculture such as hydroponics, aquaponics and food forests.

In that sense, it is considered fully aligned with the Europan 16 "Living Cities" competition, matching its emphasis on the dimensions of its focus: environmental, biological, social, economic, cultural and political factors, establishing synergies in a strategic project to regenerate districts and creation of a city superstructure that can bring together metabolic and inclusive dynamics.



THE SITES:



Location of the proposed sites in the municipal district of Madrid

The proposed land is fundamentally located in the peripheral districts of the city where there are a large diversity of urban landscapes. Five sites are proposed for the Europan 16 competition, all with different typologies and sizes, to be used as analytical examples:

1. PLOT G IN GRAN SAN BLAS

Land in a dense open block district, in the central position between the housing blocks. It is located in the district of San Blas – Canillejas, in the south-east of Madrid. Area: 6,478.20 m²

The Gran San Blas project was developed in several stages based on the Social Emergency Plan drafted in 1958, part of an ambitious development operation directed by the Ministry of Housing of Spain to solve the housing problem for the large number of people who arrived in Madrid from the countryside. It is an example of residential urban development with fully public promotion.

The socio-economic profile of the population is low, with a high percentage of foreign inhabitants, low educational standards and a high unemployment rate. A high percentage of people over the age of 65 live alone and the per capita income in the district is below the average in Madrid.



Plot G is one of the super-blocks that form Gran San Blas and fully constitutes the study area.

In town planning terms, it is organised around a central spine formed by four aligned blocks with seven floors. Parallel strips of stepped blocks of a different lengths and lower height are distributed around them, extending to enclose visual precincts. The volume is broken up with successively setbacks, minimising the monotony of a super-block containing 2,074 housing units.



There is no underground parking space, so parking is assigned to the perimeter of the study area, on both sides of the roadway that crosses it from east to south. All the open spaces are urbanised, with different gardenscaped areas, but the majority of the space is paved, which makes it a hard environment with little greenery.

The project land is located at the south-east end of Plot G. It is an area with usable spaces between blocks, flat topography and without natural soil. It is located in a residential setting, south-east of and faces towards the Ramón del Valle Inclán School.



Solar radiation map

The project area has three entrances from the public road. The most convenient of the three is located to the east of the corner between calle Alberique and calle Alconera, with a wide, accessible ramp that invites one to enter the residential complex, unhindered by any architectural barriers. The other two entrances are also accessible and allow small vehicles to enter the area to collecting product and unloading materials.

The perimeter is formed by the façades of the housing block that overlook the site and Ramón del Valle Inclán school on the north-east angle. One of the housing blocks, located further to the east, falls fully within the perimeter to be considered. All this must be noted in the project in order to allow access to the buildings, as well as to consider the their effect on the solar aspect.



The ground is fully paved at present and occupied by some masonry planters that contain average sized trees, which are used as benches in the space by the neighbours. In some cases, these are in a bad state of conservation.

The proposal must establish actions that take into account present use of the area and the opportunity provided by its proximity to the aforementioned school, where an emblematic naturalisation operation has recently been implemented in its yard, with ample participation by neighbours, with whom synergies may be established.

The advisability of including enclosures must be studied carefully, as well as their types, if required, considering the need for the intervention to be permeable for resident transit.

Proposals shall also assess the fact that the ground is completely paved over with a view to designing initiatives and



production systems that allow crops using elements placed on the present paving, at least selectively, in order to minimise demolitions.

2. PLOT F, GRAN SAN BLAS.

Land in a dense open block district on an edge. It is located in the district of San Blas – Canillejas, in the south-east of Madrid. Area: 11,137.24 m².

The urban and socio-economic features of this site are the same as those of Gran San Blas, described above.

Plot F is another of the super-blocks that form Gran San Blas.

It is laid out with prevailing parallel formations of double bay blocks, including some rows of single family blocks connected in a saw-tooth alignment. The green areas and facilities are located in the heart of the district.

The project area is located on the south-east edge, beside the calle Arcos de Jalón thoroughfare. Two adjacent blocks built afterwards have been included in the study area. They share the same road and spatial dialogue. One of them, to the south, is eminently residential, and the other, entirely a service area, contains a fair number of facilities, some outstanding, such as the Complutence University of Madrid's School of



such as the Complutense University of Madrid's School of Optics and Optometry.



The land on this site runs successively along calle Arcos del Jalón for approximately 750 m. Its shape responds to the concatenation of triangular-shaped free spaces generated by the party walls of the housing blocks located in the north-south direction, and diagonally to the main road axis from where the local access roads are connected.

These are underused spaces at present, often used for informal parking, occupied by manholes for installations or small playgrounds in some cases.

Along calle Arcos del Jalón, with a medium traffic intensity, there are lines of trees that must be taken into account for the purposes of possible interaction with future crops.



Solar radiation map

The fact that the land adjoins the street shall be taken into account to assess possible pollution effects (particles and noise) on the crops and people who work or spend their leisure time there,



justifying the proposed type of production and the elements to support the crops and/or protective elements to be provided if appropriate.

Teams must carefully study whether it is appropriate to install enclosures or not, and their type and layout, if required, taking the discontinuous environment into account.



The party walls of the adjoining buildings are blind and provide a opportunity for competitors' projects.

The succession of spaces is conceived as a clear, open area that is accessible from the main road of the super-block, as well as the two blocks facing each other Due to their linear configuration, they may be conceived as a green corridor / food forest.





3. PLOT IN LAS ROSAS.

Land on the urban edge of a recently developed suburb. It is located in the San Blas – Canillejas district in the east of Madrid. Area: 36,329.38 m²

Recently built expansion of the San Blas district, called Las Rosas, mainly formed by closed rectangular blocks, mainly for apartments, with moderate density. Social housing amounts to approximately half the total, thus enabling the social diversity in a considerable part of the district.

It is located between two residential blocks in the Las Rosas development and the *Nueva Centralidad del Este* (New Central East), building land that is not yet developed.

It is part of the environment that was previously planned for the Olympic park, with actions intended to encourage base sports in a green, sustainable environment, with the future Olympic stadium, now the Wanda Metropolitano stadium, as its centre of attraction.

The socio-demographic profile in the reference area is somewhat different to the municipal average, with

more young people. The percentage of foreign-born residents is lower and the educational level is similar, although there is significantly less population with no studies. The employment rate is below the average.

The plot shape is elongated, running in the north-south direction for about 480 m parallel to the existing line of buildings on the west side. It runs down toward the eastern side where it wraps round the Green Ring cycle path that encircles Madrid. One of the urban motorways, the M-40 ring road, lies beyond, running between embankments in the form of an urban perimeter for the city. Its maximum width is roughly 115 m.



Green and sports environment project

The first line of buildings adjoining the plot on the west side has been included in the study area due to it being a point of contact between the plot and the built city. These are single family homes in a row, with three floors and a pool. There is a medium sized shopping centre on the residential street.

The clearest access points in contact with the built-up city are located at the north and south ends. The north is completely accessible and allows vehicles to enter to transport goods and machinery. The south entrance has a steep slope.





The plot hardly has any sizeable vegetation and it has a optimum solar aspect. The ground has mounds of earth left over from construction of the M-40 motorway.

The design for this plot must achieve a double objective: to attenuate the environmental impact of the ring road, while humanising the visual perception of the urban landscaping in the area.

At present, the position of the homes adjoining the plot start at a lower level from the level of the project plot and its contact area. Although a lowering of the present level of the plot is



Solar radiation map

envisaged, the height difference between both areas must be taken into account with regard to the privacy of the homes.



Competitors must also consider the presence of the medium-sized shopping centre as a synergy factor in the proposal, which may act as a possible resource to commercialise produce.

Lastly, competitors must consider the presence of the Green Ring cycle track on the edge of the area as an opportunity, a transit area for cyclists and pedestrians that gives the site great visibility for citizens.

4. PLOT IN THE HISTORIC CENTRE OF FUENCARRAL.

Located in the historic centre of peripheral Fuencarral, a former municipal district located to the north of Madrid that was annexed to the capital in 1951. It now belongs to the district of Fuencarral. It is known as "Fuencarral pueblo" (Fuencarral village) by the neighbours.

Area: 1,085.85 m²

The size, height and volumetrics, the urban fabric and its buildings have essentially maintained the characteristics of the former municipal district, although there have been building renewals of varying quality. Some characteristic urban elements such as the old town hall or church have been preserved.

The proposed study area is the whole of the historic centre as, due to the above-mentioned characteristics and its streetscape, one part cannot be understood without reference to the whole.

The population in this area is approximately 15,000 inhabitants. The socio-demographic profile in the area has a high ageing index, as well as a significant percentage of foreign-born population. The unemployment rate is also higher than the municipal and district average. Income levels are under the municipal average.



Within the area, vehicles travel ular traffic at low speed due to the current configuration of the urban fabric. Journeys are mainly on foot and local stores are used.

The plot for the project is located between calle Sandalio López and calle Islas Antípodas, with a steep slope rising from the former to the latter. At the top, there is a notably horizontal platform. Its shape is irregular.



This is in fact an urban void that provides a façade and views to some of the nearby buildings. In the case of the homes on the south-east side, they even have their access from the plot itself, which must be taken into account. In other cases, on the south-east and north-east side, the buildings adjoin through the party walls. Signs of renovation are noted on the edges.

At present, it has no vegetation and shows the effects of runoff erosion down the slope.

It is used as an informal pedestrian connection in the north-south direction, connecting the southern housing zone to the town centre. This must be appraised in proposals with a view to its maintenance.

On the north side, it is important to consider the nearby presence of a public square and the church as a

central pole of the town centre.

Two small strips on the sides of the plot are pending

Solar radiation map

the inclusion in the municipal land assets. This plot therefore has more uncertain possibilities in the short to medium term.





A) View from Sandalio López street



B) View from Islas Antípodas street



5. ROOFS ON THE BUILDINGS OF THE IFEMA FAIR PRECINCT

Roofs of public utility buildings located in the Campo de las Naciones town planning complex, forming a citadel.

Located in the Barajas District, north-east of the city. Area: 187,138.02 m²



This site falls within a planning zone that is mainly for tertiary uses, developed at the end of the 20th Century as part of a 432 Ha town planning action between the northeast stretch of the M-40 ring road, now called the M-11, and the city ring railway, in order to

decentralise and modernise the Madrid trade fair precinct. This planning layout includes the actual fair precinct, an adjoining tertiary and business area, a small linear technological park along the railway line and a large park area called Parque Juan Carlos I.



What is proposed for this a study area is the urban environment including part of the fair precinct formed by tertiary buildings for offices and auxiliary services, a hotel and the Municipal Congress Hall. There are no buildings for residential use within it, so no socio-demographic data on the population may be provided. The main users are occasional visitors and people who work there, in a discontinuous night/day flow into and out of the area.

IFEMA is the acronym of *Institución Ferial de Madrid*. Its legal status is a consortium in which the shareholders are the City Council of Madrid (31%), the Autonomous Community of Madrid (31%), the Chamber of Commerce (31%) and *Fundación Montemadrid* (7%). Its main purpose is to organise trade fairs, exhibitions, national and international shows and congresses.

The fair precinct has approximately 200,000 m² of area assigned to exhibitions, distributed in twelve pavilions, a convention centre of more than 10,000 m², as well as the necessary spaces and facilities for complementary activities such as meetings, an auditorium for 600 attendees, restaurant and auxiliary service areas, and 14,000 parking spaces. This project proposes the use of a maximum of 187,138.02 m² corresponding to the roofs of the ten buildings that are aligned around the central axis of the complex.



Lengthwise section of the project in its first phase

The first phase of the precinct was designed for a competition called in 1985, won by architects Perez Pita and Jerónimo Junquera, in which the main idea was a layout of paired pavilions facing

each other around a central axis for communications and the main entrances to each exhibition pavilion, with two distinct pavilions for access to the complex located at the north and south ends of the axis. Eight exhibition pavilions were built in the initial phase, plus the two entrance ones at the ends. The complex was later expanded north with two new pavilions (9 and 10) that are larger that the previous ones, following the same layout, with the north entrance moved nearer to the M-11 motorway.



Detail of one of the roofs

The pavilion roofs are designed as non-accessible areas. Their entrance is by auxiliary stairs located in the service areas of the pavilions, only used for maintenance and conservation tasks. They are dimensioned to cover the major free spans required for ideal use of the pavilions.



The loads and overburdens calculated for the project are considered the usual ones for such building typology. In order to develop these roofs as part of the *Producer Districts* projects, it will be necessary to take into account the new loads arising from their repurposing as a green roof, and if appropriate, after appraisal of the existing structure, the construction of the necessary reinforcements and modifications, not part of the competition scope except at a general conceptual level. In this regard, the facility pavilion to the west of the complex would be less difficult to operate because of less free spans. What shall be considered is to ensure that the waterproofing and all earth containment and support elements, or any other growing system considered, match the requirements of productive



Solar radiation map

market garden usage on these roofs, including all the necessary elements.

There is a major restaurant area in the complex that serves the visitors to the fair. This constitutes an opportunity to stock the restaurants with high-quality ecological products as synergies may be established.

Competitors must also consider the pedagogical and publicity function of this new use of the roofs in a precinct that hosts numerous healthy and sustainable food fairs.

It is important to consider the access to the roofs to serve the market gardens and also for their contemplation and enjoyment, bearing in mind that the new use should not interfere with the main buildings. The facilities pavilion, due to its position to the west of the complex, away from the exhibition grounds and closer to the city, is presented in this aspect as a more favorable option.

The site ownership, as stated, is not entirely municipal, so the proposals in this case have more uncertain development possibilities, perhaps constituting the most theoretical exercise of the whole competition, even though there is doubtless interest in a typological test case with important international precedents such as the roof terrace of Pavilion 6 of Expo Porte de Versailles in France. Whatever the case, these can be considered scalable solutions for other roofs in the city.



PROGRAMME

There is a widespread consensus that the best contribution by urban agriculture projects is their potential to create ecosystem and social value. In that sense, their contribution is highly significant to improve the community, to provide educational services, psychological value and to improve the local environmental conditions, as well as to provide new values in confirming a new urban landscape supported by encouraging biodiversity.

In this light, urban market gardens are conceived with a complex programme of uses able to provide a response to all the dimensions that the project is intended to cover: social encounters, the educational, experimental and productive factors, their contribution to improving the environmental conditions, even as a renewable energy producer, and the landscaping component, which fits within the concept of garden-orchard that favours social acceptance of the inhabited environment, in such a way that they may be considered as ecosystems, halfway between nature and culture.

Teams must bear in mind that one of the objectives of the project is the integration of productive urban agriculture in the city, understood as agriculture operated in order to market the products obtained using agri-environmental techniques and KM 0 distribution channels. However, the environmental and social aspects of the proposals should not be ignored, as these may determine the type of orchard considered most in keeping with the urban diagnosis to be undertaken.

As it is public land, in order to allow it to be enjoyed by all citizens, the agricultural spaces must allow public access to all or part thereof, with varying degrees of restriction.

The proposals must coordinate both aspects when defining their sectorial organisation, as well as the design elements, in the context of the urban setting of each one and optimising the functionality of the spaces.

In any event, a programme indicating uses is presented below. It may be enhanced and/or adapted to the specific sites according to their typology, size, physical features, urban setting, etc.

PROGRAMME OF INDICATED USES:

- Parking area, considering the need to use vehicles for earth and fertiliser stockpiling, tool and machinery transportation, crop distribution, etc... In certain cases, this may be avoided by setting aside a loading/unloading area for growers.
- Public meeting square for different types of uses: open air cultural, sitting and eating areas, playgrounds for children and/or for the elderly to exercise, areas to display and sell crops, educational activities, etc.
- Landscaped paths for access, strolls and leisure time for all citizens, whether they are growers or not.
- Production area for all kinds of land and spaces readied for planting and growth of different strains of fruit and vegetables.
- Huts for auxiliary services, storage, toilets, workshop classrooms, etc.

Each of the uses shall house and in turn be defined by a series of elements or components that will contribute to their operation, adding qualities as expressive, unifying resources of the project.

A programme must be proposed for each urban typology, adapted to the recommended production and physical features of the site and environs. This will condition the series of elements to be included in the project to ensure an adequate response.

The following non-exhaustive list of design elements is suggested for study in the competition. It may be extended, amended and, in all cases, enhanced if the competitors so decide.

DESIGN GUIDELINE ELEMENTS:

- "Green" parking areas. Vegetation or naturalised elements to minimise the impact of service vehicles, shading, layout, pavements, etc.
- Public meeting square, designed to act as a centrepiece and a meeting place, able to host different activities.
- Equipped pergola. This is considered to be a unique element that will create a landmark in the production space. It will provide shelter from rain, shade in summer, support solar panels. Around it there will be bicycle parking modules, bins for organic waste from the neighbourhood if so decided, acting as a structure for climbing plants, etc... The pergola may be considered as an illumination element for the entire project, for night signage and in general, as an overhead visual reference to identify the vegetable garden. It should preferably be modular to permit different combinations and house the services with versatile, economic criteria.
- Landscaped paths, accompanied by shrub compositions in which colour, flowering and fruit play a role, to attract pollinating insects, laid with drainage pavements and suitable street furniture to sit and contemplate the vegetable gardens.
- Service huts. Designed to store gardening tools and small sized machinery, to house changing rooms and toilets, a small room for meetings and training workshops, store crops and collect seeds. Their location, size, volume, number and characteristics must be considered.
- Production zone vegetable gardens. Two modes are considered, depending on the soil quality: planting in the ground and planting in raised beds. The elements to be designed will include curbs for perimeter partitions and allotments for growers. Their organisation, layout, materials, colours, etc. Should be proposed. The design and layout of the raised beds shall be considered to ensure access for disabled persons, with a service path network (main and secondary). Signage elements for the allotments and/or crops. Frames for composting pads, topsoil stockpiles, community seedbeds.
- **Signage:** identifying the *Producer Districts* project and the vegetable garden identification code, with the necessary signage elements at each facility.
- Fences. Different proposals, depending on the characteristics of each place and population, including layout, heights, materials, entrances. Criteria for the use of each one.
- Street furniture. To be installed in the meeting square, on the freely accessible landscaped paths of the project, in the spaces for rest and contemplation of the vegetable gardens.

- **Greenhouses.** Types, structure and enclosure materials, layout and interior organisation.
- Pavements: For both the public square and the network of landscaped and main paths, ensuring overall unity. Their appearance must be natural and drained, allowing management of rainwater and irrigation runoff.
- Accompanying plant species: Trees for wind shelter, insulation from noise and pollution; ornamental trees, fruit trees, shrubs, legumes, herbaceous species to drive pests away, species of ornamental interest for composition, points of emphasis in the garden; trees or hedges for enclosures, aromatic plants on beds or on slopes. Adapted to the Madrid climate, non- allergenic, leafy with consideration of their colour, using composition and landscaping criteria in all cases. The non-use of protected trees such as centuries-old olive trees will be borne in mind.
- Elements that allow **digitization** to assist production using precision agriculture criteria and parameters and data sharing with other market gardens, or for commercial purposes.

DESIGN CRITERIA:

Each element in this project must be conceived and designed with the general objectives of the project in mind. They must be in keeping with the Europan 16 Competition.

However, a series of recommendations and criteria are set out below, to be taken into account in designing and defining the elements. They will be evaluated in the competition, notwithstanding any others that may inspire the competitors:

- Versatility and adaptability to different types of site plots according to their size, shape and orientation.
- Conceptual modularity, facilitating optimisation of manufacture, transport and assembly, multi-purpose, with simple changes of organisation between parts or by addition of elements.
- Respect for the water cycle, flows of matter and energy, and biodiversity.
- Consideration of the daily cycles (day/night) and seasonal ones (winter/summer)
- Capacity for **recycling** and/or **reuse** for other purposes.
- Energy saving throughout the whole life cycle and adaptation to climate change.
- Accessibility and inclusive design for all.
- **Possibility of customisation** for each operation to allow co-design by the users where appropriate, conserving the characteristic image of the system.
- **Economy.** The use of low-cost materials will be appreciated, along with the reuse of elements of available items, stating their origin.
- Durability, resistance to outdoor and environmental conditions in the city, vandalproofing and, preferably, with no or minimum need for maintenance, so they may remain in a good state of conservation at all times.

The designs and proposals must be conceived as prototypes with the **potential to be adapted to the uses programme** of each garden, and they must be **scalable** to diverse situations in the city and its districts.



EUROPAN 16 URBAN CHALLENGE - LIVING CITIES.

KEYS TO CREATING AN IMPLEMENTATION MODEL FOR PRODUCTIVE URBAN NODES

Aligned with the Europan 16 objectives, the *Producer Districts* project puts the focus on living territories and considers the design of creative processes/projects to regenerate inhabited milieus. It proposes a focus on a polyhedral view of the environmental, biological, social, economic, cultural and political aspects, establishing synergies in a strategic project of district regeneration and creation of a city superstructure with the ability to merge metabolic and inclusive dynamics.

Some of the strategic transformations being pursued are climate change mitigation and adaptation, vulnerable district regeneration. It thus collaborates in the work to combat urban inequality, to improve the urban landscape, to revitalise local commerce, to enhance the value of Municipal Land Assets and public spaces and to improve nutritional habits among the population.

Competitors must employ a creative process and analysis to explore aspects such as making safe production compatible with participation in the spaces by neighbours in visual and/or physical terms; landscape integration of the proposed enclosures, if appropriate; energy self-sufficiency of the spaces; respect for the water cycle; integration with the built environment; revitalisation of local commerce, encouraging social inclusion and favouring digitization of the prosumer system.

This multiple-site proposal pursues precisely the objective of being able to analyse a diverse range of urban situations and production proposals, with a view to enriching the global vision. This vision will determine the proposed elements and their relations, and how they can serve the different spaces involved.

The competition requires a complete design for one or several of the proposed sites, providing an urban planning response to it and considering the scalability of the solutions for the different plots. A full definition of all the elements comprising the project will therefore be necessary for at least one of the plots.



