INTERNAL REGENERATION SPECIAL PLAN (P.E.R.I.) ORDINANCES FOR "GREEN BLOCK [MANZANA VERDE]"

INDEX

1. GENERAL CONDITIONS

Article 1. Definition and objectives

These Ordinances are based on that set out in the Malaga general land-use plan (PGOU) for the different uses described for the scope of the Internal regeneration special plan (PERI) and, more specifically, for the typology of the open planning area (OA-2) with the necessary adjustments to incorporate the environmental considerations corresponding to section VIII of the "energy-saving and environmental quality measures" and adapting them to the specific scope of action.

The main objective of the Ordinance is to refocus the urban sector profile to achieve the dimensions for a suitable proportion of free spaces and public roads, resulting in a more organic ratio between them and housing.

Similarly, the ordinances have the following objectives:
- Reduction in energy consumption
- Reduction in water resources consumption
- Improvement of waste management

2. ORDINANCES FOR ZONES

2.1. OPEN PLANNING AREA (OA-MV)

Article 2. Planning and construction conditions for the sub-zone OA-MV ("Open planning - Green Block")

1. Zone Unit

   The PERI delimits and identifies, in the **zoning plans and documents**, through the zone boundary line, the various zone units under this ordinance OA-MV (BL-1.1 to BL-1.4 and BL-2.1 to BL-2.7)

2. Plot unit

   Initially, the plot unit is the same as the zone unit.

   To segregate plots within each zone, a **detailed study** will be required beforehand to analyse and solve the resulting volumes planning for the entire zone unit.

3. Building maximums

   The building maximums per zone unit, both total and divided by uses (residential and tertiary), are the ones set out in the **Zoning Table** for this internal regeneration special plan.

   The building maximum ceiling shall be freely provided within each zone unit without prejudice to the obligation to respect the remaining limitations set forth in these ordinances.

   Particularly, the building minimum ceiling established for the use of **housing subjected to any official protection regulation** must be respected at each block.

   The building ceiling for **tertiary use** is also a **minimum**, given that the aforesaid parameter guarantees compliance with the environmental sustainability indicators set out in the PERI.

The intended ceiling for tertiary use can be freely disaggregated into the corresponding detailed tertiary uses (commercial, offices, etc.) although if **commercial use is planned for the ground floor,** 25% of the planned building is designated for tertiary use to comply with the minimums established at the RPU for each commercial use.

4. Building minimum for social use.

   Similarly, the PERI sets the minimum ceiling that must be dedicated to social use in each zone unit.

   This will be arranged, in each building block, **regardless** of the net building maximum intended for lucrative uses (residential and tertiary).

5. Maximum occupancy, expansion, alignment.

   Maximum occupancy per floor

   The total built-up area for each floor (**including the constructed area for social use**) shall not exceed the maximum occupancy percentage set for each floor at the following table.

Building block	Total number of floors	Plot area	Maximum occupancy		Building	
			Floor	Perc.	Lucrative	Social
BL-1.1 (*)	GF+7	2,464.00	GF and GF+1 GF+2 to GF+7	80% 100%	14,664.72	532.00
BL-1.2	GF+12	1,120.00	GF and GF+1 GF+2 to GF+8 GF+9 to GF+12	90% 100% 60%	10,830.23	393.00
BL-1.3	GF+5	955.04	GF to GF+1 GF+2 GF+3 to GF+5	90% 100% 60%	3,792.59	138.00
BL-1.4	GF+5 (GF+12)	793.28	GF to GF+1 GF+2 GF+3 to GF+5 GF+6 to GF+12	90% 100% 60% 35%	4,522.22	164.00
BL-1.5	GF+5	645.76	GFto GF+1 GF+2 GF+3 to GF+5	90% 100% 60%	2,564.40	93.00
BL-2.1	GF+12 (GF+14)	3,246.00	GF and GF+1 GF+2 to GF+12 100% GF+13 to	85%	38,936.00	1,412.00
BL-2.2	GF+12	1,120.00	GF and GF+1 GF+2 to GF+8 GF+9 to GF+12	85% 100% 60%	10,830.23	393.00
BL-2.3	GF+5	840.32	GFto GF+1 GF+2 GF+3 to GF+5	90% 100% 60%	3,337.02	121.00
BL-2.4	GF+5	672.00	GFto GF+1 GF+2 GF+3 to GF+5	90% 100% 60%	2,668.60	97.00
BL-2.5	GF+5	717.76	GFto GF+1 GF+2 GF+3 to GF+5	90% 100% 60%	2,850.32	103.00
BL-2.6	GF+5 (GF+12)	863.04	GFto GF+1 GF+2 GF+3 to GF+5 GF+6 to GF+12	90% 100% 60% 35%	4,799.25	174.00
BL-2.7	GF+5	1,648.00	GF and GF+1 GF+2 GF+3 to GF+5	85% 100% 60%	6,404.43	232.00

(+) Swell factor 13%

Expansion

This table also establishes the total building maximum disaggregated into lucrative use (residential and tertiary) and social use. Said total building rates are lower than those resulting from applying

the maximum occupancy parameter to each floor with the purpose of facilitating suitable **expansion** for the buildable volume.

Said expansion represents the smallest volume resulting from the application of the building rates compared with that resulting from clogging the maximum building envelope assuming the application of the maximum occupancy percentages.

The aim is to ensure that this "expansion" does not accumulate in one part of the building but is distributed over the total built volume propitiating the design of various "urban windows".

Compulsory access (GF + F1)

In certain blocks (Bl-1.1 and Bl-2.1 and BL-2.7), a non-built space is reserved on the ground floor and the first floor to provide access to the interior of the block.

It is compulsory to keep this central passage, as marked on the plans, free from any building both on the GF and on F1 in said blocks.

6. Maximum building depth

The maximum building depth is given as 14 m and there is a maximum building setback of 2 metres from the façade line for all the blocks.

The maximum setback line from the anterior and posterior façade of each block is marked on the plan. In some cases, and with the aim of guaranteeing adequate sunlight for the façades of the adjacent blocks, said lines are **compulsory** which is expressly indicated on the plans.

In the area resulting from these setbacks, the buildings plans must include a treatment given together with green spaces and free public spaces surrounding.

7. Building height.

The number of buildable floors will be that indicated in the Z**oning Table** and the Z**oning Plan**.

The maximum height in metres is determined by the table below and meets the criteria for limiting the shadow cast by the buildings on other buildings or on the surrounding space.

Nºof floors	**H max**
GF	**4.20**
GF+1	**7.50**
GF+2	**10.60**
GF+3	**13.70**
GF+4	**16.80**
GF+5	**19.90**
GF+6	**23.00**
GF+7	**26.10**
GF+8	**29.20**
GF+9	**32.30**
GF+10	**35.40**
GF+11	**38.50**
GF+12	**41.60**
GF+13	**44.70**

8. Separation from boundaries and between building units.

   The separation from boundaries and between building units will be adapted to the determinations set out graphically in the **Zoning plan**.

9. Overhangs of protruding bodies.

   Overhangs are only permitted on façades expressly noted for that in the organisation plan.

   In accordance with that set out in plans, overhangs may measure a maximum of 1.50 metres.

   Enclosed overhangs are NOT permitted.

   For building rates and maximum occupancy purposes, overhangs will be calculated according to the criteria set out in the land-use plan's urban legislation.

   Overhangs may not be determined as negotiable for the purposes of building maximum (except for maintenance and repair works). In addition, and in accordance with that set out in **law 8/2013 of 26th June on urban rehabilitation, regeneration and renovation,** the following may not be included in the calculation either: protection elements, facade exposure to sunlight, protective panels, overhangs between floors and, generally, any element with these characteristics aiming to guarantee the building's environmental sustainability.

10. Environmental parameters

    The construction projects shall expressly justify the compliance with environmental criteria and indicators set in this document's report and section VIII of "Energy-saving and environmental-quality measures" from the Malaga land-use plan which applies to this scope.

Article 3. Conditions of use.

Only the following uses are permitted:

1. Detailed use:
   Residential, with the building minimum intended for **housing subject to any official protection regime** for each block, as being set out in the corresponding Tables of this internal regeneration special plan - PERI.

2. Compatible uses:

   Tertiary with the exception of hotels and restaurants hosting musical activities according to article 6.4.4 of land-use plan regulation, fulfilling the conditions of chapters 3 and 4 of section VI thereof with such use being allocated at the building minimum indicated in the zoning table for said use in the concerned blocks in order to facilitate the right mixture of uses to ensure environmental sustainability of the proposal (indicator of urban complexity).

   Similarly, allocated for **commercial use on the ground floor** there will be 25% of the total area intended for tertiary use in the blocks planned for tertiary use with the aim of guaranteeing the minimum established for said commercial use in the Urban Planning Regulation.

   In any case, the internal regeneration special plan **expressly forbids** the use of a **Large commercial area** as said use is defined in decree 1/2012 of 20th March with the consolidated text of the Andalusia Domestic Trade Law.

   Community facilities (with the exception of cemeteries, mortuaries and crematoriums).

Parking.

Productive uses at lower floors according to the regulations specified in article 6.3.3 of the land-use plan - PGOU.

Technical services and urban infrastructure.

3. Alternative uses.

   Tertiary (with the exceptions set out in the previous point).

   Community facilities (with the exception of cemeteries, mortuaries and crematoriums) and

   Parking.

2.2. FACILITY ZONES (EQ)

Article 4. Definition and objectives

This qualification includes zones with a detailed use by public community facilities.

The basic objective of the regulation for this zone is to achieve the essential plots' development for facility functions, achieving a morphological outcome in accordance with the environment.

Article 5. Planning and construction conditions

1. The plots qualified for public community facilities detailed use, within the scope of this internal regeneration special plan, will have the construction conditions set out in the **zoning tables** and in these ordinances.

   For reasons of public interest, any of these parameters may be modified in accordance with a specific Detailed Study.

2. The fences for areas comprising educational and sports facilities shall be adapted to the functional needs of said facility.

3. Any action intended for the plots classified as public community facilities shall comply with current regulations and fulfil all those determinations that are required by the Local, Regional or State with Government with sectoral competence in the matter.

4. Sunlight conditions.

   The construction projects planned for these facility plots shall expressly justify compliance with the environmental criteria and indicators set out in this document's report and section VIII of "Energy-saving and environmental-quality measures" in the Malaga land-use plan which applies to this scope. Specifically, sunlight conditions shall be justified based on the orientation of the building and the intended use of the different units.

5. Unbuilt site situation.

   If facility plots do not have their particular purpose planned or were not scheduled for construction in the short term at the time of preparation and processing of the urbanisation projects, they will be subject to management and design with other public open spaces while ensuring that the cost of such construction works suits the foreseeable period during which said areas will be without an effective use.

Article 6. Conditions of use.

1. Detailed use.

   The public facility zones (EQ-1: EQ-2 and EQ-3) are assigned for an **educational** use.

2. Compatible uses.

   All community facilities (excluding cemeteries, mortuaries and crematoriums in different plots from those existing), parks and public gardens, car parks.

3. Alternative uses.

   Community facilities complying with the conditions of article 6.5.1 of section VI (excluding cemeteries, mortuaries and crematoriums).

4. Consideration should be given to for the effective implementation conditions for the public use regulation in this general plan (article 6.8.4).

5. A change from the detailed to an alternative use will require justification of the lack of need for the established use, with the competent administration being informed of this change in advance, in accordance with that set out in article 36 a) 2 of the LOUA.

2.3. FREE SPACES AND GREEN AREAS.

Article 7. Scope.

1. The determinations included in this section shall be applied to green areas and free spaces within the scope of the internal regeneration special plan -PERI.

   The free spaces and green zones within this PERI plan shall be adapted to the regulation of uses established in the Malaga land-use plan - PGOU.

2. Any project for these zones must justify compliance with the environmental indicators set out in this internal regeneration special plan.

3. Compatible uses.

   In addition to the uses established at the land-use plan, the use of underground public parking is declared to be expressly compatible with the use of the free space.

   The need to locate car parks under the green areas is derived from the legal obligation to comply with the standards for this use established by the Malaga land-use plan by reference to the applicable zoning laws and the impossibility of placing such use in other locations (surface area, low road or under equipment zone) due to the complexity or limitations that would entail).

   No maximum occupancy is set for the use of car parks. However, in these areas or at any case, under the ground there must be a surface area of at least 10% of the total surface to stay as a free zone, which corresponds to the minimum set out for green zones and free spaces in land-use legislation.

2.4. ROAD NETWORK

Article 8. Scope of application.

The road network in the sector can be structural, primary or secondary as defined in this internal regeneration special plan and considering the conditions set out therein.

Article 9. Road design conditions

1. Design of the public road.

   However, this document sets out the overall design of structural, perimeter and distribution roads and access to buildings; the developing project justifiably and based on municipal strategies for roads and environmental criteria may propose changes in traffic routes set out in the internal regeneration special plan and must guarantee, in any case, compliance with the provision of public parking spaces in the area covered herein.

   The detailed road design will be established, in any case, according to its relative position within the internal regeneration special plan depending on the uses which it should serve; different solutions may be proposed for the organisation of traffic flows (with special attention given to the coordination of movement on cycle paths) from the position of trees and street furniture, treatment and surface ratio of pavements to roads, parking for vehicles, etc. In the internal roads exclusively for residential use, the design will address coexistence samples.

2. Design of trees for roads.

   The design of trees for roads shall consider both landscape aspects and general hygro-thermal behaviour, with particular attention at any shadow effects. The provision of no trees along the roads shall be justified in the urbanisation project.

3. Design of pavements.

   The design of pavements, in case of modification to those provided for in the internal regeneration special plan, should be designed taking into consideration pedestrian use and the position of the planned trees; asymmetric solutions may be proposed regarding the road sections and the position of trees based on the above criteria.

   In this case, the percentages can be adjusted according to the total width of the road to allow the development of bioclimatic strategies such as the incorporation of suitable plant **species** as hygro-thermal regulators within solar gain guidelines.

4. Parking for bicycles, motorbikes and electric cars.

   The urbanisation project shall establish, within the scope of the internal regeneration special plan, an area for parking electric vehicles with at least one rapid charging point.

   The urbanisation project shall provide zones intended for the parking of bicycles and motorbikes in a quantity that will be justified in the document itself.

3. ZONING ORDINANCES

Article 10. Design and execution conditions for free spaces and green areas in urbanisation projects.

1. As a general criterion, the configuration of free space and green areas will be adapted to the original conditions of the land as far as possible.

2. The design of these spaces will be intended to reduce the urban "heat island" effect which occurs in summer.

   With this aim, projects will include solutions that contribute both improving the **hygro-thermal conditions** of the area itself as well as the creation of **microclimatic conditions** in the area: identification and treatment of shaded and sunny areas and type of vegetation, pavements and urban fittings suitable for seasonal and functional conditions. The selection of climate control elements must be compatible with their function as **wind** protection and conduit and as a **traffic noise** pollution controller.

3. Design of pedestrian areas

   The design of these areas shall guarantee their use for as much of the year as possible, allowing or restricting solar accessibility adequately and establishing wind and acoustic control elements.

4. Compatibility with cycle lanes.

   In these areas, a specific study will be carried out on cyclists using cycle lanes for leisure purposes.

Article 11. General accessibility conditions

The design of outdoor public spaces must meet the following criteria applied to buildings, where appropriate:

a) Accessibility barriers are not only physical (stairs, slopes, obstacles) but also sensory (visual, auditory, language, mental, etc.) which must also be able to be removed and given due attention.

b) Efforts will be made where possible to design roads and public spaces with single sections in order to allow accessibility for all citizens.

c) The pavements of the basic network must have at least one useful width of 2.00 metres to allow the passing of wheelchairs or pushchairs. This section must not contain vegetation, traffic signage, urban fittings or any other element affecting its functionality.

d) When other fixed elements exist occupying the public space, the minimum ideal width must be reconsidered. For example, the width of the streets with café terraces must be 6m, or 4m for commercial streets with storefronts and streets with bus stops or taxi ranks.

e) In free spaces such as squares and green areas, there must be a clear distinction between zones intended for pedestrians and recreation, with the perimeter being marked by appropriate elements (fences, hedges, etc) to prevent people with visual impairment leaving the area without realising.

f) In areas with difficult transit or misunderstanding of the environment, such as large squares and even wide pedestrian streets where there are no elements to guide pedestrians, guide strips are provided to help people to cross them or simply to go around safely.

g) Zones with different uses must include distinct floor pavements which distinguish these uses by means of texture and colour. Special consideration must be given to the design of the ground level and water harvesting.

h) Access to urban fittings such as bus stops, benches, rubbish bins, kiosks, vending machines, etc must be provided through an adapted itinerary with their location always allowing a route clear of obstacles and their design must facilitate their use.

i) Braille floors must always be used on pavements as directional indicators, for the identification of items such as furniture, transport stops, changes in level, pedestrian ways or vehicular traffic crossway, crossings, ramps, stairs, to link building lines and circulation steering.

j) Any signage, information or communication must be visual and tactile. Use ICT and pictographic communication systems (SPC).

k) The planning of free spaces in the urbanisation projects must guarantee temporary access for emergency vehicles or private vehicles to any housing or building with other uses.

Article 12. Urban fittings

The following criteria must be respected for the placement of urban fittings.

1. Special attention will be given to the placement, so that this implies no obstacle to the approach of emergency and fire vehicles to the buildings.

2. There must be a bench every 50ml in pedestrian areas. In parks and recreation areas, the optimal ratio are at least 1 bench every 5 ml or 25 m2.

   However, alternative resting solutions may be allowed.

3. For the other elements, phones, expression columns, kiosks are considered as acceptable values if there are any elements at a pedestrian distance of < 200 m.

4. Rubbish bins must be practical and functional as well as being aesthetically pleasing.

   They are placed on pavements and in pedestrian areas, plazas, along with benches, etc., generally in places where footfall increases in the summer.

   They should be placed every 50 ml on a post or lamppost, one or the other.

Article 13. Lighting in public areas.

A specific lighting study to public areas will be carried out to guarantee the lighting levels legally required.

Article 14. Treatment of surfaces and pavements.

1. Pavements must be selected based on the **functions** they will support (play area, vehicle passage, parking areas) and they must also allow the improvement of **hygro-thermal** conditions in open spaces:

a) The percentage of landscape areas will be set out depending on use, maintenance of natural drainage of the soil and water runoff control, so it is advisable that at least 30% of these pavements maintain a high permeability index.

b) The criteria for pavements finishing will be related to their degree of **sunlight exposure**. Therefore, the use of light colours will be sought in the project to take advantage of natural lighting and reduce heating of outdoor spaces, and surfaces will be adapted to the degree of shading and the foreseen period under project.

c) Tread material for streets and driveways.

4.1 Roads

Roads intended for traffic passing at speeds up to 50 km/h must be implemented with continuous pavements, asphalt macadam or bituminous concrete for their resistance and absorption of the noise and impact of the vehicles.

On secondary roads with traffic travelling at up to 30 km/h, a discontinuous pavement is permitted with a more comfortable step and suitable for low speeds without losing its resistance allowing showier designs and marking footpaths and stripes for pedestrian safety. The cheapest stone or concrete cobbles are ideal for these roads provided that the minimum thicknesses are 10-13cm.

The concrete's appearance and texturing should also give good resistance results but it is important to consider its difficult maintenance and cleaning, as well as the impairment or loss of colour over time.

4.2 Pavements and pedestrian areas

The pavement must be hard, non-slip in both dry and wet conditions, without cracks or projections. At the joints, projections should not exceed more than 4 mm vertically or 5 mm for horizontal separations.

If hydraulic pavements are adopted, they must have certain porosity so the surface maintains a good grip in case of rain. Both paving stones and slabs are allowed.

For stone pavements (limestone, granite, marble) which have better qualities, a thorough and careful study of systems for collecting surface water with slopes and scuppers should be carried out given the disadvantage of its waterproofing degree compared with certain porous hydraulic pavements. Similarly, and to guarantee non-slip properties in wet conditions, a surface finish presenting enough roughness will be used.

In the case of limestone, hammered finished shall be adopted with sawed finished not being allowed.

Use of polished granite and marble will only be allowed in areas that collect very little rain.

Unless specific justification is provided, polished terrazzo tiles are not allowed due to the risk of slipping and the discomfort of their joints for drainage; this also applies to traditional hydraulic tiles due to their dirt and poor image.

In appropriate areas, braille paving will be adopted to guide, warn and direct people. Indispensable for pedestrian crossings, crossings, access to public transport for people with reduced mobility, as well as their placement for safety strips and circulation steering.

4.3 Gardens, squares and recreation areas.

In these areas, when necessary to pave them, it is considered most suitable to use permeable, natural and ecological pavements, which allow the passage of rainwater and help mitigating the heat island effect in the city.

Pavements made of compacted soils are allowed but must take into account any negative effects (dust produced by prolonged drought and erosion by rainwater). In this regard, the convenience of using "green flooring" mixed with resins that do not present these disadvantages due to being more compact is assessed.

In children's playgrounds, rubber flooring made of recycled particles or the like is adopted (in tiles or continuous) having a flexible base for absorbing shock and falls; this must be permeable to rainwater.

The use of artificial turf is also allowed but only for low traffic areas as maintenance of this is complicated.

Article 15. Selection of trees and plant species.

1. The urbanisation project will include a gardening chapter discussing the species selected, the methodology of implementation and the maintenance of said species. In addition, justification will be provided for the suitability of the vegetation according to their bioclimatic characteristics and hygro-thermal quality criteria and concerning the following points:
   a) Climatic suitability
   b) Suitability for soil conditions
   c) Suitability for urban pollution
   d) Suitability for the marine environment
   e) Suitability for irrigation water quality
   f) Characterisation of their water needs
   g) Sunlight requirements
   h) Lifespan and type of growth
   i) Shape and size of the adult tree (both in height and surface area)
   j) Maintenance requirements
   k) Scenic interest
   l) Problems with root interaction due to the proximity to the buildings

2. The selected species are arranged in the proposed development in terms of:

   a) The solar arch
   b) The distance from buildings' facade
   c) The topography and wind direction
   d) Seasonal degree of wind exposure
   e) For roadside trees, the width of the road

3. In accordance with the aforementioned criteria, species will be selected to best suite the environment and climatic needs and to require scarce water resources. Trees will preferably provide shade and be resistant to the urban environment and be slow developing thus avoiding damage by rapid growth in the pavement. Native species are preferred. However, the negative effects of some species must be considered (such as olive trees, holmoak or aspen trees) such as little shade, reduced $C0_2$ absorption capacity and maintenance (such as the excessive consumption of water). The aim of the urbanisation project is to have 1 tree per inhabitant. With the number of inhabitants being:

   Inhabitants = nº of housing x 2.4 inhabitants /housing = 2,311 inhabitants →**2,311 trees**

   However, alternative solutions will be justified in the project when these ratios cannot be achieved.

4. For trees located in the road and for shadow production purposes, the number of trees needed will be the number required to allow 30% of the public space to be obstructed from sunlight (high building density), and that achieves at least 50% useful comfort hours each day and in any case a minimum of 20 trees per 100 ml, unless the failure to meet these ratios is justified or efficient alternative solutions are proposed.

5. Trees as a hygro-thermal regulator for parking by the road.

   When there are parking spaces at the roadside, regardless of existing trees on the pavements if roads are large, trees will be placed between parking places with a maximum distance that will

depend on the diameter of the tree apex when it is mature, being sufficient to guarantee shade for these areas during summer. An approximate ratio of 1 tree every 100 ml is estimated. Alternative solutions provided will be expressly considered if their effectiveness is justified.

Article 16. Water resources optimisation

The projects must also justify the criteria used for the optimisation of **water resources** which sustain vegetation, water elements and urban cleaning based on their uses and relative geographic position.
It is recommended that the delivery of the rainwater network to the municipal network's tanks has a minimum angle of 45º.

Article 17. Urban waste collection

This must comply with that set out in the land-use plan in section VIII Urbanisation Standards Art, 7.4.21 **Solid urban waste**; as well as the criteria and standards from the service provider.

Article 18. Aeronautical easements

According to the available mapping, the contours of the land in the area are approximately below 20 m and the dimensions of the aeronautical easements are approximately over 75 m, both over sea level, since the maximum height of the buildings proposed (GB + 14 floors) is 47.80 metres, there is, in principle, sufficient space so that the boundary surface of the conical surface is not exceeded by such constructions.

However, all elements attached or linked to such buildings such as antennas, installations etc., including construction cranes and similar elements, there all must be below said surface.

Given that the entirety of the area is included in zones and spaces affected by aeronautical easements, the execution of any construction (posts, antennas, self-generators including blades), measures necessary for construction (including construction cranes or similar) or planting, will require prior approval from the State Air Security Agency in accordance with articles 30 and 31 or decree 584/72 modified by royal decree 297/2013.

Article 19. Archaeological easements.

Although new findings are still not included in the land-use plan's archaeological protection catalogue, protection is relative to other sites in the suburban area constituting a set of villas or other buildings.

Sheet 043: Scattered enclaves dotted along exit routes. Point 1
Sheet 050: Former Camino de Cártama (Avda. José Ortega y Gasset). Point 1

Proposals.

a) It seems appropriate to carry out a precautionary diagnosis of the Green Block [Manzana Verde] through mechanical digging of the area in order to detect any localised remains at a depth of between 1 and 2m.

b) This may be carried out at any time (subject to budget availability) and in an area free from construction or after demolition, examining "appearances" during the urbanisation and building works.

c) Administrative procedure.- A three-phase survey plan is required so as to avoid delays:
1st diagnosis phase: Mechanical digging at the plot's free areas.
2nd phase (based on the positive results from the first phase): Excavation of any remains.
3rd phase (based on the positive results from the previous phases): Action plan for the intervention at surfaces to be built.

Article 20. Railway easements

1. For the execution of all actions concerning infrastructure services (water supply, sanitation, natural gas, etc) located in the public domain or protected areas, it be required a mandatory prior authorisation from ADIF High Speed.

   Given the foregoing, with the exception of some works already authorised through authorisation nº 2010-1-7-11 dated 27th December 2010, ADIF gave Malaga municipal council permission to execute the boulevard works over railway land.

2. The building projects for all construction contained within the areas adjacent to the General Railway Network in which some part of the same is at least 50 metres from the closest outer edge of the railway platform, as defined in law 39/2003, or in covered areas, from the internal surface of the structure supporting the covering slab, will include a separate study of the noise and vibrations caused by the railway and the measures adopted in this case so that noise and vibration levels are within levels admissible by the current sector legislation. This requirement will be enforceable prior to the obtainment of the corresponding building permits.

Article 20. Telecommunications network

This will comply with the current relevant legislation.

Article 21. Urbanisation conservation

Mandatory constitution of the relevant Collaborating Urban Conservation Entity is established from the moment of the reception of the urbanisation works by Malaga City Council and for the term at that time established.

4. BUILDING ORDINANCES

Article 22. Content

The conditions related to the size of the buildings and their position within the blocks are described in the section concerning the zoning ordinances. This chapter sets out the conditions concerning the envelope and the internal organisation of the buildings directly linked to energy saving measures.

Article 23. Building envelope design conditions.

1. Façade finishing.

   The optical characteristics of the façade covering materials shall be adjusted to the bioclimatic strategies proposed for the elements in the building envelope and the planned external uses.

   For the facades located on SOLAR ARCHES I AND II, the reflectivity will be equal to or greater than 50%. Although other justified solutions will be permitted.

2. Roofs.

   The project should justify and ensure thermal protection and dissipation of the heat stored on roofs depending on their use without prejudice to the different uses that can be assigned to it and that are expressly allowed (recreation, groundcover, etc.).

3. Openings

   Openings must comply with criteria of freedom in design, incorporating the following elements with appropriate justification at the technical project:

a) The sizing and positioning of openings takes place according to the conditions of orientation and uses.

The use of sunlight-blocking mechanisms in openings according to the characteristics of the solar geometry for the different orientations guaranteeing a modified solar factor of 0.50 is mandatory. For openings located in SOLAR ARCH II, the technical project must justify the sunlight blocking during summer by means of organisation criteria or solar control elements incorporated into the building design.

The incorporation of adjustable mechanisms is required to limit the heat transfer through openings according to daily and seasonal needs such as thermal blinds, shutters or other similar elements.

b) Given the priority use of ventilation and the passive cooling strategy, openings will need to be incorporated, within criteria of freedom in the design of systems that allow cross ventilation in hygro-thermal comfort conditions (tilting-turning windows, vertical struts, etc) with appropriate justification in the technical project.

4. Renewal of the air and ventilation (application to continuous use: day cycle + night cycle).

4.1 General conditions

Within freedom of design criteria, it is necessary to include in the technical project strategies facilitating the **renewal of air and ventilation** as a passive cooling strategy during very hot periods.

The arrangement of the interior spaces of buildings (basic application to residential use, with indications for other uses) will be adjusted to different percentages based on orientations depending on seasonal and daily variations and energy needs.

Housing that do not incorporate duly-justified passive cooling strategies will not be permitted.

All rooms will have direct ventilation to the outside.

4.2 Special conditions

a) In exposed wind situations, the filter elements or baffles will be specified in the project to ensure air flows providing suitable comfort for humans (speeds of 0.2m/s to 1 m/s) must also be stated in the project.

b) In buildings with more than one centreline, passive air distribution mechanisms are also identified through internal divisions that allow cross ventilation.

c) In corner expansions and premises where there is no possibility of ensuring cross ventilation, induced passive cooling strategies will be required to ensure air renewal.

d) In spaces taller than 4 metres, the technical project justifies the inclusion of mechanisms to ensure the homogenisation of air temperatures and passive strategies proposed for removing hot air bags at the top of these spaces.

4.3 Stairways

Stairways will be provided with chimney-effect ventilation systems (from above) to comply with the rest of the related regulations.

Stairways **to the basement** will be provided with chimney-effect ventilation systems (from above) to comply with the rest of the related regulations. On the other floors, stairways will be provided with ventilation direct to the façade.

Article 24. Design of facilities related to water management.

1. Meters.

   In the case of a centralised hot water installation, the installation will have an individual telemetric counter for every housing or office.

2. Mechanisms to reduce flow and consumption.

   All buildings must be equipped with water consumption reduction systems at the supply points (taps and toilets) except when this reduction is clearly dysfunctional.

   In public buildings, automatic sensors will be installed to reduce water consumption to limit discharges to 1 litre.

3. Any measures deemed to be viable for reducing water consumption may be incorporated, this includes:

   a) Meshed network without tanks, pressure devices if necessary and inline pumps.

   b) Rainwater irrigation and street-cleaning tanks in order to guarantee a better standard of cleanliness (very high quality). A tank measuring at least 1 cubic metre will be required as well as a water well for the extraction of groundwater or, alternatively, the ability to collect the water using pumps provided in car parks. This water may be used for the irrigation of green areas.

   c) Rainwater recovery systems.

   d) Sustainable urban drainage systems.

   e) Reuse of grey water.

   f) And, generally, any other justified water management system.

4. General conditions for the application of hot water for sanitary use and heating systems.

   In residential applications, the use of centralised solutions for domestic hot water and heating is preferred so that a percentage amount of energy and emissions are saved in comparison with the same for individual installations where common usage patterns and schedules prevail. The corresponding legislation sets out minimum criteria, conditions and parameters (number of units, density, type, etc) for the application.