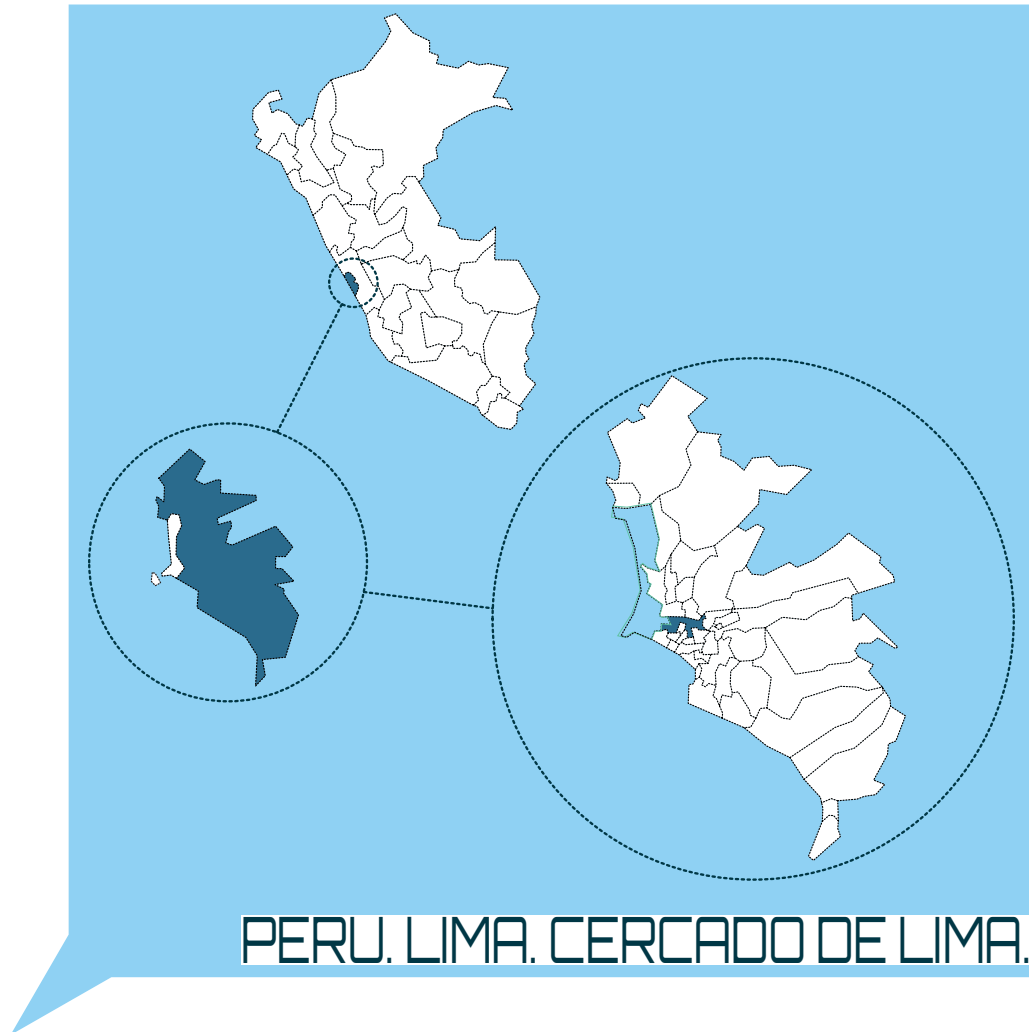
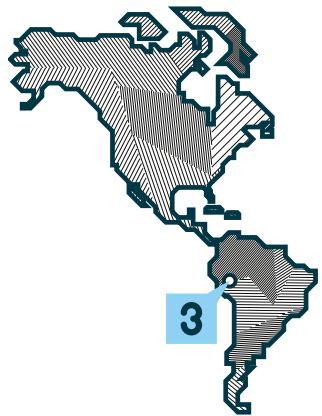


# CERCADO DE LIMA. PERU

HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS



PERU. LIMA. CERCADO DE LIMA.

# OPPTA DEBATE

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

The development of strategies for the regeneration and development of settlements which have emerged from inhabitant occupation and self-construction without urban planning or administration control.

Which interventions on public space can contribute towards the social and economic development of these communities.

How should the general basic systems, necessary to maintain adequate sanitary and hygienic conditions, be “implanted” in these urban fabrics.

Which house typologies would adapt to the inhabitants’ needs from a economic and social point of view.

Which constructive systems could be implanted for the improvement and reconditioning of existing houses.

What combination of new technologies and traditional techniques, therefore accessible and known, would be more efficient to propose effective and real solutions within the context of self-construction and citizen management processes.

Which home relocation models, whenever these are necessary, should be implemented allowing the families to maintain bond with their social, family and economic environment.

What kind of productive activities can stimulate these marginal areas providing an economic engine for their inhabitants.

How the design of these strategies can minimise the effects of natural disasters and guarantee quick and efficient evacuation protocols in the case of emergency.



# CERCADO DE LIMA, PERU

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS



### STRATEGIES FOR OPPTA DEBATE :

LOCATION:

POPULATION:

AREA OF REFLECTION:

INTERVENTION AREA:

OBSERVERS:

COLLABORATORS:

### HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

Margen Izquierda del Río Rímac (MIRR). LIMA CERCADO. LIMA, PERU.

80.301 hab.

480 ha.

2.8 ha.

PABLO MUÑOZ UNCETA

LIMA MUNICIPALITY

“INSTITUTO CATASTRAL DE LIMA”

“PROYECTO CIUDADES FOCALES”

ATALIR and ATIIARRES (local recyclers associations)



# SITE LOCATION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

### LEFT BANK OF THE RIVER RÍMAC. LIMA DISTRICT. LIMA. PERU

The metropolitan area of Lima, also known as Metropolitan Lima or Lima-Callao, is the metropolis formed of the large central region of the city of Lima and its extension towards the North, South and East, encompassing most of the Lima and Callao provinces.

The city is subdivided into forty three districts whose authority on a metropolitan scale is the Metropolitan Municipality of Lima.

Lima District is one of the 43 districts of Lima-Callao and is the only one managed directly by the Metropolitan District of Lima. The Left Bank of the River Rímac (Márgen Izquierdo del Río Rímac, MIRR) is an area of this district.

### SOCIOCULTURAL ENVIRONMENT

Since 1940 there was an explosive urbanisation process in Lima, basically due to the migration of a provincial population attracted to the apparent and/or real prospects of an emerging industrialisation.

The first marginal areas started to appear in the central areas of the city such as: Barrios Altos, La Victoria and the Rímac; areas near the MIRR. After this came the filling of the urban fabric in a continuous process of occupation of the agricultural areas near the main arterials, and which continued until the decade of the 60 with the

occupation of the area formed by the Callao-Lima-Miraflores triangle.

From the decade of the 80 onwards the migration process from the different Peruvian provinces towards Lima increased due to the internal armed conflict scourging the country for 20 years. This situation generated a large number of people displaced from areas particularly affected by the internal war. These were often people with no resources who joined the process of informal invasion of what became known as the city “cones” (extensions of the metropolis towards the North, South and East).

This informal urbanisation system, occurring in parallel to the formal occupation of Lima, came about when inhabitants lacking homes appropriating and invading hills, agricultural areas, municipality or private areas, despite legislation restricting urban invasions. Due to the administrations’ inability to control, foresee or manage these processes they continue, although their intensity has decreased over the last years. Lands are occupied so as to hold a site on which to build a house, many of them in areas of risk, and which in some cases the administration ends up sanctioning without assuming its role neither with regard to control and supervision nor to proposing safe and feasible alternatives for the population.

As previously mentioned, these processes also occurred in the MIRR when the bank fringes, small strips next to the watercourse, were occupied. Due to the fact that it is a limit area between two districts and their corres-



River Rímac going through the MIRR.

# SITE LOCATION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

ponding district administrations (Lima District and San Martín de Porres) and it has lacked particular attention and use for many years (owing to metropolitan municipality management abandonment), these fringes become areas vulnerable to occupation. In the same way, houses have been built on landfills or dumping grounds in disuse, originating populations extremely vulnerable to health and safety hazards deriving from the dumps. A living example of this phenomenon is “el Montón” (the Heap), an old landfill in the heart of the MIRR, with a height of over 10 metres of waste in different stages of decomposition. A large number of the houses extending around the dump grounds are also built on old landfills, which causes serious structural problems in the housing and also affects the basic service networks.

### CURRENT REGULATIONS

The last Urban Development Plan of Lima and Callao expired in 2010. Despite being completely out of touch with the reality of many areas of Lima, it has been extended and the next plan will not begin to be developed until 2012. This situation basically means that there is no Urban Plan and that there numerous situations are being resolved without any public control.

The city of Lima has grown through the direct action of its inhabitants, and it is they who have spread urban development, settling wherever they could, despite the State and Administration who have not been able

to foresee or challenge the social urbanisation process. The legal voids owing to the lack of a Plan are also taken advantage of by private initiatives to act in their own interests and without public control.

*Current legislations and regulations in construction:*

*National Building Legislation (Reglamento Nacional de Edificaciones):*

<http://www.urbanistasperu.org/rne/reglamentonacionaldeedificaciones.htm>

*Anti-seismic Construction Investigations and Legislations (brick masonry and reinforced concrete) (Investigaciones y Normativas de Construcción antisísmica):*

<http://blog.pucp.edu.pe/blog/albanileria>

<http://blog.pucp.edu.pe/concretoarmado>

### CURRENT USES AND DEMANDS OF URBAN LAND

The Left Bank of the River Rímac (MIRR) was originally known as “Industrial Area of Lima” as it was directly connected to the industrial areas of the Lima-Puerto del Callao axis and the railway line carrying freights and raw materials passed through from different areas of Peru to the main port of the country.



View from “el Montón”.

# SITE LOCATION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

### HOUSING

The residential area of the MIRR is basically the result of a process of informal land occupation which originated in the second half of the 20th century. During these years the inhabitants have, at the same time as building their homes, have appealed to the State to regulate their legal situation. The result of this has been that much housing in the area has been legally regulated, thus obtaining the legal physical sanitation of their estates.

The most common constructive system is confined brick masonry, although the methods used often have problems in their execution, and the condition and maintenance of the house are either standard or poor. These problems do not normally affect the house structurally, but in a lot of cases could lead to collapse in the case of a seismic event.

The population density is high, most of the blocks or sites have a density higher than 300 inhabitants/ha, although in general the buildings have 1 or 2 floors. Even higher values are reached (> 800 inhabitants/ha) in the more consolidated areas, where there are houses from 2, 3 and up to 4 floors. The concentration of housing is very high and there are very few recreational spaces, partly explaining the high density. Overcrowding is one of the characteristics of the housing of the MIRR as one house sometimes houses various generations of a family in a very small space.

### PUBLIC SPACES

There is a critical shortage of quality public spaces. The often present accessibility problems, caused by the narrowness and low level consolidation of the roads (compacted but unpaved). In the areas near “el Montón”, many roads and public areas are also used as storage areas by Solid Waste separators/recyclers, impeding a quick evacuation in the case of emergency and causing problems by reducing the traffic flow.

As well as this, in many public spaces there is a trend of installing fences in internal streets (through agreements between street neighbours) so as to safeguard their security against theft or access of gangs. Over the last years this trend has become widespread throughout most of the neighbourhoods in Lima. As well as the urban segregation and exclusion it causes, it also limits the access of vehicles and quick evacuation in the case of emergency or seism.

With respect to maintenance, 65% of green areas are irrigated with water supplied by SEDAPAL, drinking water though taps in each green area. Another 25% of the parks are irrigated with water from tankers, generally with irrigation water and manually. In none of these cases is there in situ sewage water recycling. The municipality, in general, is in charge of the maintenance of green areas located in the most transited areas, such as the central berm of Morales Duárez Avenue, leaving the maintenance of internal areas in the hands of the locals. It is often the actual neighbours who manage and



Street next to “el Montón”.



Self-managed gardens at the railway tracks. Enrique Meiggs Street.



Facilities on Enrique Meiggs Street.



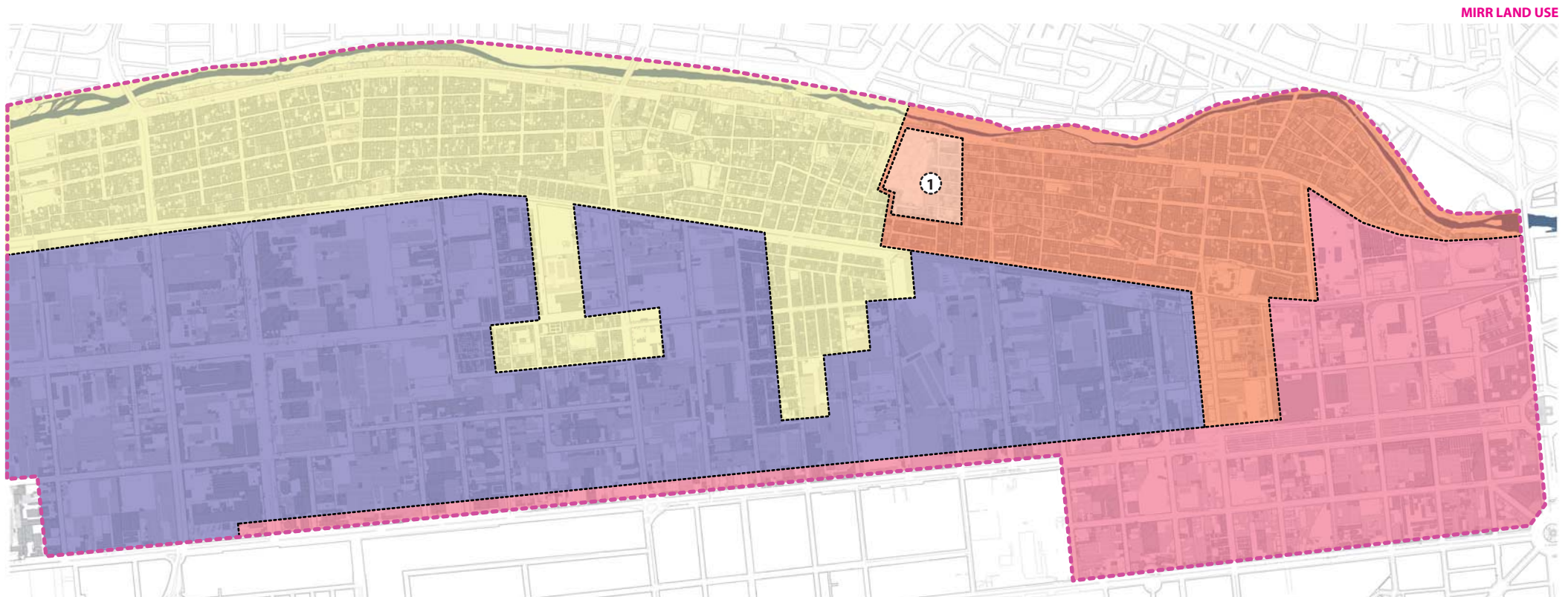
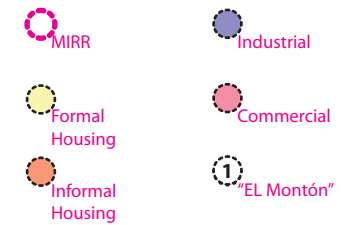
# SITE LOCATION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

maintain the green areas and public spaces (footpaths, courts) in their street or neighbourhood. This is the case for the self-managed gardens of Enrique Meiggs Avenue, a roadway through which the freight railway runs on its way to Callao port. The neighbours have created a small garden next to the railway line, separating their homes from the tracks. They are the ones in charge of its maintenance.

### BASIC SERVICES

57% of the population between the routes Enrique Meiggs, Nicolás Dueñas and the River Rímac (area including “el Montón”) do not have basic services for permanent drinking water and sanitation. The human settlements located on the fringe of the bank do not have drinking water or sanitation; sewage is channelled clandestinely



# SITE LOCATION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

and directly flushed into the river.

On the other hand, the sewage tubes installed in the first settlements in the MIRR, located on a landfill, have collapsed or broken due to the weight of the buildings pressing the ground and crushing the tubes; moreover, the instability of the ground increases with the leakage of sewage water filtering into the ground.

### PRODUCTIVE ACTIVITIES

#### INDUSTRIAL

The MIRR still partly conserves the industrial character of its origins. Between Enrique Meiggs Avenue and Argentina Avenue there are various small and medium size industries, as well as many storage warehouses. This area developed with two large focus points of influence, the port and the Callao airport, as points of arrival and departure of ship freights, and the railway line transporting raw materials coming from all over the country. There are two differentiated parts in this industrial area. One of them, around the parkway of “Las Malvinas”, is falling into disuse and is being reconverted to hold large centres for commerce or storage warehouses, parking areas, etc. They are also being used for new houses, aimed at the new inhabitants of the MIRR attracted by the economic bonanza of the area of “Las Malvinas”, which is slowly becoming a neighbourhood.

#### COMMERCIAL

The bankruptcy of some companies in the industrial area located around Argentina Avenue has led to the development of the commercial complex in “La Alameda de las Malvinas”, a municipality proposal, already executed, for the reconversion of an area which held extensive itinerant street trade. All the street traders were reinstalled in large commercial venues on both sides of the avenue and the central berm was left as a recreational and public space. It is currently the economic engine of the neighbourhood as it functions on a metropolitan scale as a large market for electronic goods and construction tools among other products.

Around 6,000 direct and indirect jobs depend on this economic activity.

#### SOLID WASTE RECYCLING

The use of Solid Waste is an important activity in the Left Bank of the River Rimac. At the moment there are many recollection centres (most of them informal) that undertake the purchase of separated and recyclable solid waste from the recyclers and then sell it to recycling companies when they have enough quantities. Many have their own transport, others rent vehicles to transport their goods. There are legislations for the management of solid waste, but these are often infringed by the recollection centres (dimensions, recollection processes,



“Las Maldicas” Commercial Area.



Industrial Site.



Old Industrial site, today transformed into a market.



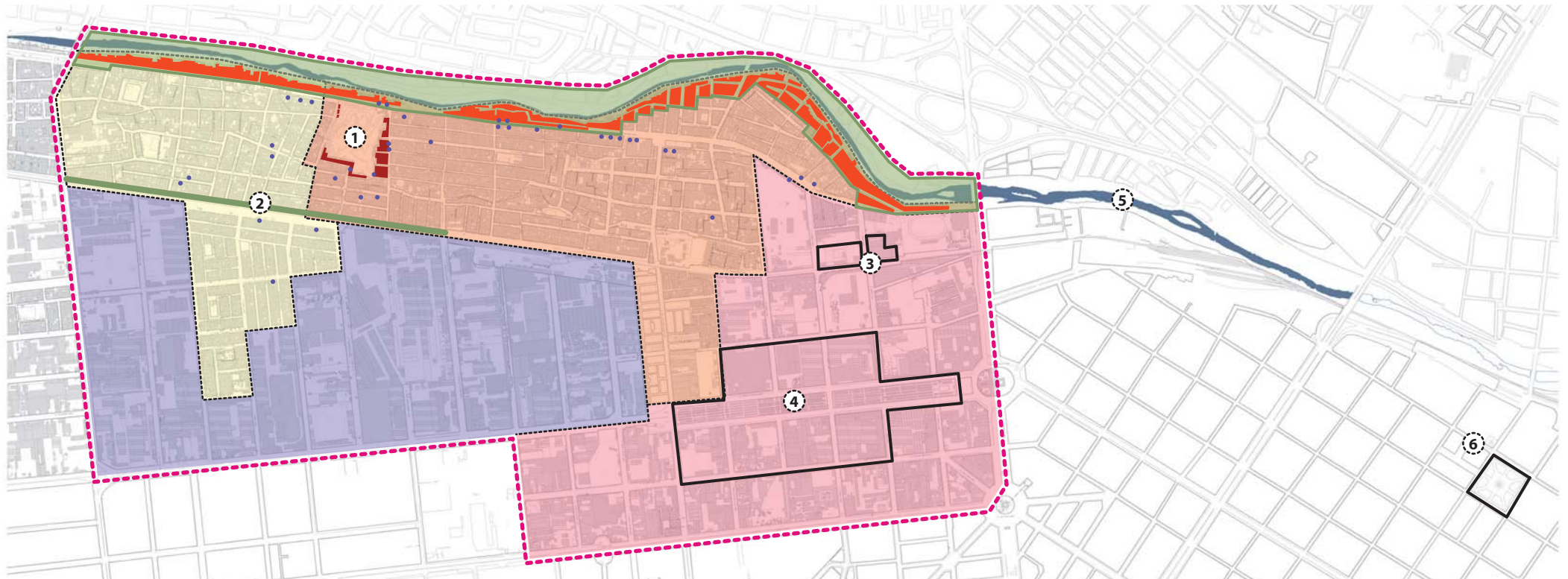
# SITE LOCATION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

accumulation, transport, etc.).

Approximately 2,000 people make a living, directly or indirectly, from this activity, carrying out the recollection and conditioning of the waste in their warehouses or homes (collectors) or participating in the collection and separation (recyclers/separators), often with the whole family (women, children and elderly) and in the few public spaces existing in the area.

- High risk houses in "el Montón".
- Area affected by the PVPR.
- Houses affected by the PVPR.
- Solid waste recollection centres.
- Formal Housing.
- Industrial.
- Informal Housing.
- Commercial.
- ① "EL Montón".
- ② Self-managed gardens.
- ③ Industrial sites being transformed.
- ④ "Las Maldicas" Commercial Area.
- ⑤ River Rímac.
- ⑥ Historic Center. Plaza de Armas.



# PROBLEMATICS OF THE SITE

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

### LANDFILLS

The Left Bank of the River Rímac was built, along certain stretches, over old landfills.

The place known as “el Montón” is the last surface landfill left, practically untouched, of the MIRR, despite having been closed down a few years ago. It is an accumulation of stratified waste classified as public space by the Municipality and which, in some areas land invasions still occur. The settlers, when digging to gain a piece of land to inhabit, often face the emerging of gases caused by waste decomposition. In addition, the ground is absolutely heterogeneous in its composition and often unstable, which should exclude or limit residential planning, or in the case of being inevitable, makes necessary the use of specific and adequate constructive methods to avoid structural problems. Due to its zoning as public space the Municipality built three basketball courts in the upper part four years ago. Despite this it is still an unused space in the city and often linked with criminal activities.

The presence of landfills, besides constituting a problem because of the ground where buildings sit, generates certain health problems which have an serious effect on the surrounding population. This forces the relocation of these landfills to areas where there are no inhabitants. Because this is impossible in the case of “el Montón”, a feasible alternative must be found to eliminate and sanitise the landfill. It is necessary to reflect on a

short, medium and long term basis as the sanitation of any landfill involves, among other things, constant dissipation (or use, if possible) of the gases produced by the decomposition of waste. This and other necessary jobs must be made compatible with any activity developed to provided land use and recover the space on a physical level. In the same way, it is also necessary to reflect on the possibility of making the most of the current ground, or the necessity of earthworks, or the implications of “dismantling” “el Montón”.

### RELOCATION OF HOUSES

The houses located on the bank and those sitting in the immediate surroundings of “el Montón” are extremely vulnerable to many kinds of dangers, specially to seismic events and emergency situations. The population living in these places need to be urgently relocated yet, in many cases they have chosen to stay in their current sites despite alternatives proposed by several administrations. These were, in broad terms, the handover of lands on the outskirts of Lima, in some of the areas known as the “cones”, at a considerable distance from their current location.

For many of these families (often on extremely low incomes or belonging to groups considered “survival groups”) the move to areas far away from their current location would be unsustainable. Firstly, due to being far away from their social, work and economic network-



Basketball courts on “el Montón”.



Housing with settlements.



# PROBLEMATICS OF THE SITE

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

ks; and secondly because they lack the capacity to pay for the daily transport needed to maintain their current jobs or means of subsistence.

It is also important to recognise the value which this population, even if often unsafely or inadequately, has given over decades to the modelling and conditioning of the ground for urban habitability. Despite being currently settled in a vulnerable and detrimental manner (both for them and for other inhabitants), it is this population who has dismantled year after year the landfills of the MIRR, exposing themselves to danger due to the lack of alternatives offered by the public administrations to carry out this essential job for the development of the city. It was they who have often built their own footpaths, public spaces, etc. and who have invested in their neighbourhood. It was probably not the most suitable in terms of urban or technical planning, but this investment will not be returned to them if they are relocated in a distant and foreign area.

### SOLID WASTE RECYCLING

In all Latin-American and Caribbean countries there exists a group of people, not part of the municipality administration and often not part of the formal economic sector, but who make a daily living by extracting valuable materials from what other people throw away. This activity, sometimes very poorly regarded and linked to

marginal sectors, represents, within social dynamics, an essential element in the management of solid waste needed in every urban centre. These people are known as solid waste separators or recyclers (“segregadores o recicladores de residuos sólidos”, RRSS).

As mentioned previously, in the MIRR roughly 2.000 people make a living directly or indirectly from this activity, connected with the chain of usage of the RRSS at one point or another. Many of them belong to the first link in the chain and are known as recyclers; those who select and recollect the rubbish to then sell it to the collectors. These will be those who commercialise the separated waste and sell it to recycling companies.

The activity of the recyclers is currently legislated under the Law 29419 (MINAM 14 October 2009) and its corresponding regulation. The two associations with most presence and of most influence in the MIRR are ATUARRES, the first association of recyclers of Peru, and ATALIR which belongs to FENAREP, The National Federation of Recyclers of Peru. Both associations have made efforts to formalise their business partners and regulate their situation and work activity. They have received permissions from several institutions and carried out their work under the hygiene, safety and order measures imposed by the legislation and regulation. Besides those belonging to these two associations, there are also other recyclers who work informally and who often do not comply with the legal framework, sometimes causing public hygiene and safety problems.

Most of the recollection warehouses, where the reco-



Solid waste recollection centre next to “el Montón”.



# PROBLEMATICS OF THE SITE

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

Illected waste is unloaded and conditioned to be sold at a later date, are characterised by their operation within housing areas, and the sharing of very reduced spaces for this activity. Many of the sites are smaller than 1,000 square metres, the minimum stipulated by the municipality regulations. In this sense, spaces of down to 2 square metres can be found being used for this activity. One of the main avenues for the recollection and commercialisation of separated waste is Morales Duárez Avenue. Many of the recollection centres on this avenue operate outdoors and use the public thoroughfares as an extension of their workspace, especially for parking transport trucks to load or unload, interrupting pedestrian traffic and restricting road traffic. None of the recollection centres plan their formalisation, obviously lacking license. Due to their way of operating, they are permanent sources of environmental and sanitary contamination.



Solid waste recollection centre invading a public thoroughfare.



Solid waste recollection centre next to "el Montón".

# MUNICIPALITY EXPECTATIONS

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

### RÍMAC PARK-ROUTE PROJECT

In the words of LAMSAC, the company in charge of the project implementation, “The Rímac Park-Route Project (PVPR) is a project of integral development of the city and its urban development, which as well as modernising traffic management, will improve the environmental conditions of the River Rímac.”

The construction consists in building a series of roadways, mainly for private transport, linking these with some urban renovation works, particularly in the immediate surroundings of the River Rímac, with the intention of recovering it mainly for, chiefly, recreational and commercial use

“El Montón” is located next to Morales Duárez Avenue, one of the roadways planned to be improved by the PVPR. The project intends to implement facilities for sport, parks, public and commercial infrastructures along the new course of the river. The Metropolitan Municipality of Lima sees incorporating sanitation to “el Montón” as an opportunity within this urban renovation of the River Rímac.

*More information on the PVPR at:*  
<http://lamsac.com.pe/en/>

### RELOCATION OF “IN SITU” HOUSES

The houses in the surrounding areas of “el Montón” or on the banks of the River Rímac are sitting on unsuitable grounds for construction and often show serious constructive faults which make them vulnerable to any incident. Their construction methods are not adequate to the ground they sit on. This makes the permanence of these 110 families in the surrounding areas of “el Montón” unfeasible.

The MIRR (Left Bank of the River Rímac) is an area directly affected by the implementation of this project, especially the 600 plus families who live on the bank in conditions of high vulnerability and who will be evicted from their current homes. Due to this, the PVPR envisions the construction of some houses for these people and is currently planning relocation programmes in more or less proximate locations.

Whatever the relocation model may be, it should be remembered that previous proposals for the relocation of these families to available but outlying areas did not work out as expected and that it is necessary to evaluate other alternatives which do not break the relationship (often essential for their survival) of these families with their social, family and economic environment.

*More information on home relocation at:*  
<http://lamsac.com.pe/en/programa-de-vivienda.php>



Houses on the bank of the River Rímac.



House in “el Montón”.

# MUNICIPALITY EXPECTATIONS

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

### RECYCLERS AND RECOLLECTION CENTRE

Over the past years the recycler associations of the MIRR (mainly ATALIR and ATARRES) have been working, sometimes in coordination with the Metropolitan Municipality, to organise and regulate their activity, with the aim of being formally included in the waste management of Lima.

In this respect, the main aspiration of this economic group is to have a Solid Waste Collection Centre in which to carry out their activities with hygiene and sanitary measures, as at the moment they separate solid waste in the street or in their own homes, generating risk to other family members. Due to their position in the chain

of solid waste management, they are conditioned by the higher levels: solid waste re-collectors, who often carry out their work informally and in places with no legal license.

The creation of an regulated Industrial Recycling Centre, acting as a transfer point for all the material recollected before being transported to the recycling industries would have two main influences. On the one hand, a step further towards the regulation of Solid Waste management in the area and decreasing the dangers derived, and on the other, the possibility for the recycling associations to work cooperatively and develop collectively business-wise.

### RRSS SMALL INDUSTRIES AND COMMERCE

PAPER  
printers, photocopiers  
and businesses

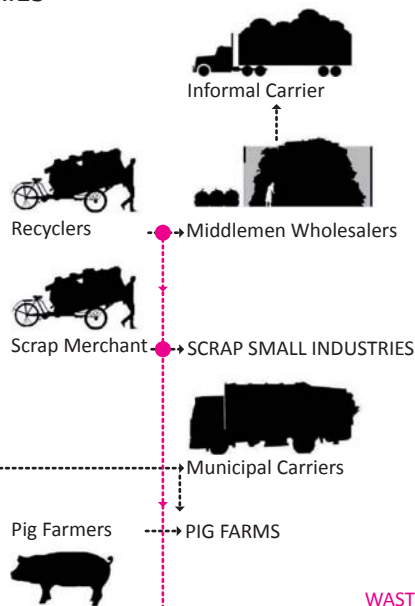
GLASS, PAPER AND  
PAPERBOARD

PLASTIC  
bottles, pet, PVC,...

SCRAP

DEBRIS

ORGANIC



### RECYCLING BUSINESS



LANDFILL  
(50% RRSS)

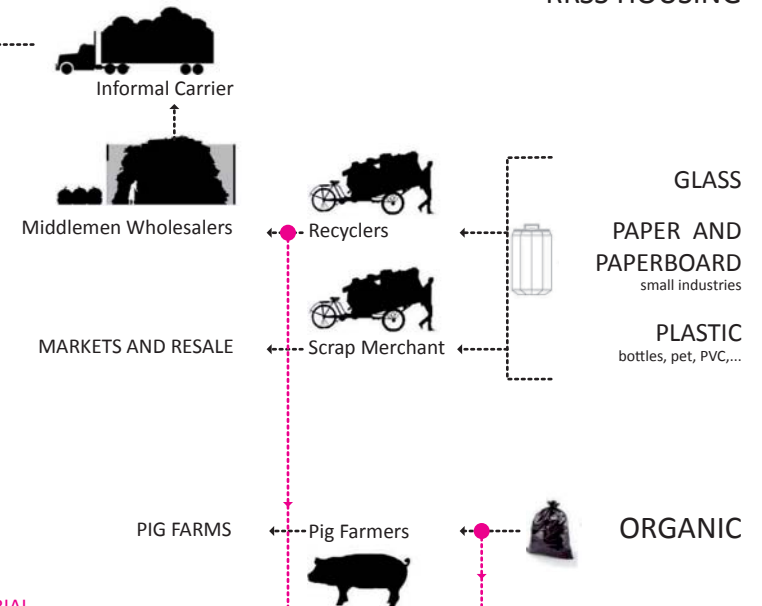
INFORMAL DUMPS  
(38% RRSS)

STREETS AND RIVERS



WASTE MATERIAL

### RRSS HOUSING





# OPPTA COMPETITION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

The juncture of the “Rímac Park-Route project” (PVPR) will be used with regard to interventions and proposals developed in the Lima District site. The PVPR will be implemented from the end of 2011 and developed over 4 years under the management of the companies LAMSAC (Peru) and OAS (Brazil) and coordinated by the Metropolitan Municipality of Lima.

### 1. METROPOLITAN SCALE

The PVPR plans to improve road development and connectivity between different districts of Metropolitan

Lima, as well as the development of a park, “a green lung”, and facilities on a metropolitan scale (sport, recreational and commercial) on the banks of the River Rímac.

On this scale, we propose the development of strategies defining the green areas and facilities mentioned, taking into account both their metropolitan scale and the capacity of the intervention in hand to regenerate the MIRR. On this scale we propose the development of general strategies working around two fundamental issues.

1. The development of **GREEN AREAS ON A METROPOLITAN SCALE ON THE BANK**. The planning of the PVPR



1. METROPOLITAN SCALE INTERVENTION



# OPPTA COMPETITION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

makes this a great challenge: the plan is to develop a green axis between a fast traffic roadway (the future “yellow line”) and the river, with distances from 30 to 70m wide over more than 4km, for the implementation of sport, recreational and commercial facilities.

2. The study of **ROAD AND PEDESTRIAN TRAFFIC CONNECTIVITY** with regard to the two limits constituted by the fast roadway and the River Rímac throughout the route, studying the accesses and connections in relation to the districts of Lima District, San Martín de Porres, Rímac, San Juan de Lurigancho and El Agustino.

**AMBIT OF REFLECTION:** MIRR and Area of influence of the River Rímac Park-Route Project (PVPR).

**AMBIT OF INTERVENTION:** The green areas planned in the River Rímac Park-Route Project (PVPR) belonging to the MIRR.

*On this scale, Panel 1 will include outlined plans, graphs and general diagrams, with relation to the development of ideas and strategies for the implementation of the green areas and facilities which might act as a reference for the rest of the interventions of the PVPR, thus defining an urban framework in which to develop the rest of the scales of the competition.*

### 2. DISTRICT SCALE

Even though the intervention area is the Left Bank of

the River Rímac (MIRR) and the proposals should be planned on a district scale, the interventions must contemplate the landfill known as “El Montón” as the main intervention area. This mountain of waste has been a source of insalubrity and risk for the neighbourhood for decades, both from a hygiene point of view (diseases, toxic vapours, etc.) and a physical one, due to the inconsistency of the ground, increased by the presence of invasions on its limits. This contributes towards the emergence of residual space where illegal activities are carried out and which are a source of insecurity.

Initiatives which considering the following aspects will be valued:

#### 1. Proposing the **DEVELOPMENT OF STRATEGIES ON A SHORT, MEDIUM AND LONG TERM IN “EL MONTÓN”.**

The main aim of the intervention in this area should be to reduce the risk it occasions for its surroundings by planning the sanitation of the landfill (in environmental, physical and legal terms). This kind of interventions tends to be long term so the proposals must contemplate plans for the different sanitation phases (short, medium and long term).

#### 2. The need to develop **INTERVENTIONS ON PUBLIC SPACE WHICH MAY CONTRIBUTE TO THE SOCIAL AND ECONOMIC DEVELOPMENT OF THE MIRR.**

Taking into account that there is a deficit of public spaces in the MIRR: Even though the PVPR plans to improve this si-





# OPPTA COMPETITION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

tuation with the creation of a metropolitan park, reflection on public space on different scales (metropolitan, district, area, and neighbourhood) is also necessary, as well as the relationships between them and the role of different social agents (local inhabitants, visitors, administration) in the maintenance, use and management of public spaces.

3. The need to develop a **HOUSING RELOCATION PLAN** which relocates on the one hand the 600 families currently living on the banks of the River Rímac and who will be evicted during the development of the PVPR, and on the other hand the 110 families who currently live

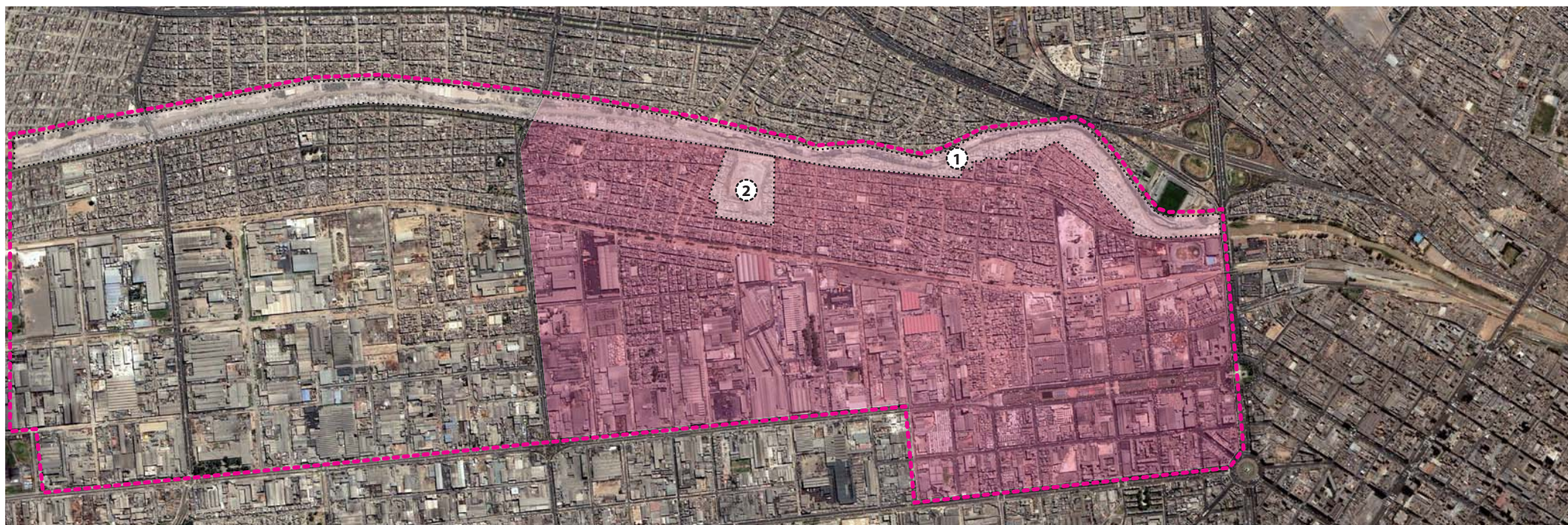
in the land occupied by “El Montón”. There are already some programmes promoted by the PVPR, but there is a need for innovative and imaginative proposals for the relocation of these people to areas near their current homes, decreasing the vulnerability of their current settlements and coordinating it with the integral proposal of the PVPR.

4. The development of strategies which redefine **RECYCLING ACTIVITIES AND SOLID WASTE MANAGEMENT AS ECONOMIC ENGINES OF THE NEIGHBOURHOOD.**

Today the MIRR is an important point in the chain of



### 2. DISTRICT SCALE INTERVENTION





# OPPTA COMPETITION

## HOW TO REGENERATE A NON-PLANNED SETTLEMENT THREATENED BY ANTHROPIC RISKS

solid waste use in Lima. There are numerous informal collection venues (transfer centres) and an important presence of solid waste recyclers, many of them formalised in associations whose main productive activity is recollecting and separating useful waste from the rubbish of commerce, industry and houses. The proposals should plan, using a maximum of 20% of the ground, an Industrial Recycling Centre as a work place for the small recyclers where the packing of the solid waste collected is separated and organised. This Centre should have at the very least: spaces for solid waste separation, storage spaces for collected waste, a parking area (for tricycles and other vehicles they may use), a loading and unloading bay, showers and changing rooms. Additionally, it will be linked with a nursery school where the recyclers will leave their children while they carry out their occupation.

5. Proposals with designs which mitigate the effects of a seismic event on the urban fabric, contemplating **EVA- CUATION PROTOCOLS** towards safer areas, and plans which **MITIGATE RISKS IN THE DESIGN OF PUBLIC SPACES AND COLLECTIVE FACILITIES**.

6. Proposals which consider the development of **PUBLIC CONSULTATION AND COLLABORATION PROCESSES**, in order to make the community part of the project development. In some way, this involvement opens a theoretical framework from which to study the contribution of the neighbours in redefining the identity of the city, the

neighbourhood and the buildings. At the same time it would be interesting to mix traditional techniques, and therefore accessible and known, with other technical, formal, historical and socio-political aspects in order to pose effective and real solutions: self-construction processes, citizen management, action protocols...

**AMBIT OF REFLECTION:** Left Bank of the River Rímac (MIRR).

**AMBIT OF INTERVENTION:** Left Bank of the River Rímac (MIRR).

*Panel 2 will present the planning proposals for the ambit delimited by the area of action and indicate and develop the new interventions, uses of the ground and building conditions. The graphic content will include a description of the project as a whole at an appropriate scale.*

### 3. DETAIL SCALE

*Panel 3 will elaborate on an area belonging to the intervention area on an urban unit scale (MIRR), and which may be chosen by the contestant in relation to the general approach of their proposal.*

*Aspects related to the design and the materiality of the proposal will be developed in more detail.*

