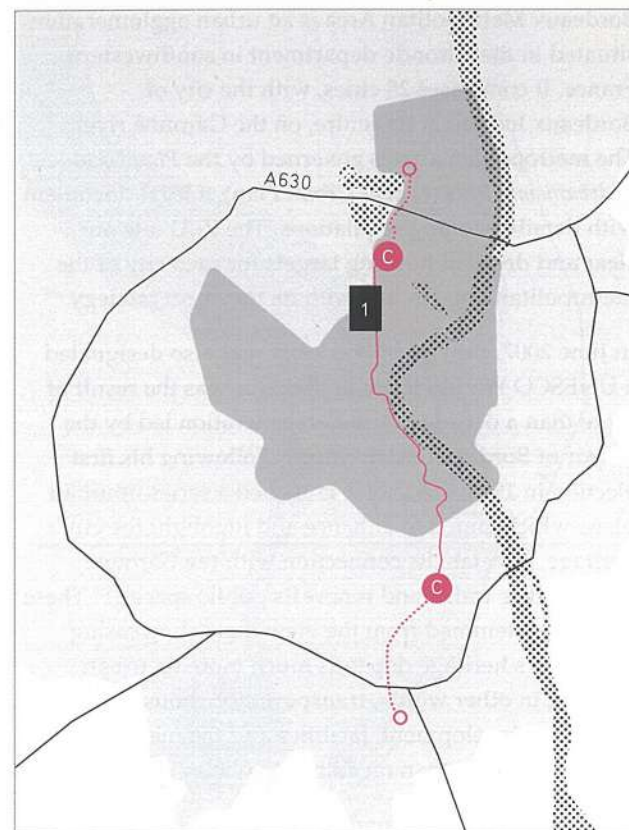


Vital Neighbourhoods

Lessons from international housing renewal



Project information	
LOCATION	Bordeaux Metropolitan Area, France
SITE AREA (HECTARES)	Unknown
DEVELOPER	Aquitanis
ARCHITECTS	Druot, Lacaton & Vassal
STATUS	Completed
START-COMPLETION DATES	2010–2016
LEVEL OF INTERVENTION	Stock improvement
ORIGINAL NUMBER OF RESIDENTIAL UNITS	530
NUMBER OF RESIDENTIAL UNITS AFTER WORKS / UPLIFT	538 / +8
DENSITY (DWELLINGS PER HECTARE)	Unknown
ORIGINAL TENURE MIX	100 percent social rent
TENURE MIX AFTER WORKS	100 percent social rent



SITE

Context

The GHI Le Grand Parc project is situated north of the Bordeaux city centre, in the *Cité du Grand Parc* (Grand Parc estate) which comprises over 4,000 housing units in total. As part of the first phase of a large rehabilitation scheme aiming to regenerate the Grand Parc estate, the project involves the refurbishment of the blocks Gounod (G), Haendel (H) and Ingres (I) and was completed in 2016. Architects Druot, Lacaton & Vassal demonstrated ways to reuse, expand and transform existing modernist housing blocks by creating semi-external amenity space as well as minimising decanting and disruption during renewal.

History

The *Cité du Grand Parc* is a *grand ensemble* (housing estate) spanning 60 hectares in the heart of the city of Bordeaux. It was built on reclaimed marshland in the post-war period of mass construction of housing during the 1950s. Organised along an orthogonal plan

devised by Jean Royer and Claude Leloup, the *cité* was conceived according to the functionalist principles of the Athens Charter, a manifesto written in part by Le Corbusier summarising the 1932 Fourth Congress of the International Congress of Modern Architects (CIAM). The original design aimed to provide 4,000 units to house between 16,000 and 25,000 residents. It currently comprises four tower blocks of 22 storeys each and 18 other buildings of between 12 and 16 storeys.¹⁷⁹ The estate is notable for hosting a large amount of social and cultural amenities (detailed in the following pages).

Site today (district level)

While the Grand Parc estate is situated on the edge of the city centre and is well connected by tram and bus, it currently suffers from a negative stigma. This is in part due to its insular qualities. The large housing blocks contrast markedly with surrounding residential neighbourhoods, which are predominantly formed by single- or two-storey houses. Its urban form also creates a feeling of isolation; there is, for example, very limited

visual connection to the surrounding areas at the ground level, due to views being blocked by buildings, and public spaces having little oversight. The immediate neighbourhood, however, did feel vibrant and lively during site visits. Residents were seen greeting each other and many children were seen walking back from school on their own.

The estate comprises a wide range of social infrastructure. Several schools, including one opposite the GHI buildings, are present within walking distance from the case study site. School playgrounds and the sound of pupils playing performed a distinctive role in animating the unused spaces around the estate. Several other amenities, such as a social security centre, a medical practice, a youth centre, a church, a library, a day-care centre and a swimming pool complex, were also available in the centre of the estate. While these facilities varied in the level of their upkeep, they all appeared to be functioning at the time of the site visit in December 2016. A community centre featuring various spaces including a concert hall, originally built in 1967 and designed by architects Claude Ferret, Robert Bedout and Serge Bottarelli, is currently being refurbished following extensive public consultation.¹⁸⁰ The high quality and substantial scale of these social, school, sporting and cultural facilities is one of the key assets of the estate. Other amenities include various retail outlets, a post office and two shopping centres, one of which is currently being refurbished.

The estate was, however, characterised by a lack of play spaces. Very few green spaces for informal play and other leisure activities were observed around the estate. A small paved plaza within a gated area is located in front of the post office, in the middle of the estate, but no activity was observed during site visits in the winter.

STAKEHOLDERS

Aquitanis

Created in 1920, Aquitanis is the Office Public de l'Habitat de Bordeaux Métropole (public office for housing of the Bordeaux Metropolitan Area) and the main social landlord in Le Grand Parc. It owns and manages more than 18,500 social housing units in the metropolitan area,¹⁸¹ and is responsible for their maintenance and renewal, as well as for the construction of new housing.¹⁸² In 2010, Aquitanis chose the three buildings (G, H and I) most in need of refurbishment, to be part of the first phase of the wider regeneration programme of the Grand Parc estate, which is steered by the Bordeaux local authority.¹⁸³

Led by Bernard Blanc, who was appointed director of Aquitanis in 2008, the GHI Le Grand Parc project is a political response to the nationwide acceptance of demolition as a key approach to housing renewal. This approach was introduced by the publication of *Programme de Rénovation Urbaine* in 2003 by the Agence Nationale de Rénovation Urbaine (ANRU), France's urban regeneration agency. The programme supported the demolition of 200,000 social units but only planned for the rebuilding of 120,000 units.¹⁸⁴

In 2010, Aquitanis negotiated with the Bordeaux local authority for the UNESCO site boundaries to extend to include the Grand Parc estate, highlighting the heritage value of its plan and urban form.¹⁸⁵ This extension of the UNESCO site boundaries protected the Grand Parc estate from any demolition plan. These arguments were also supported by the fact that the local urban plan does not allow new buildings to be built the same height as the GHI buildings today. This means that demolishing the three buildings would ultimately result in a loss of housing units.¹⁸⁶

179 Aquitanis (2016b)

180 Ragot et al. (2014, p. 53)

181 Mairie de Bordeaux. Le Grand Parc [webpage]

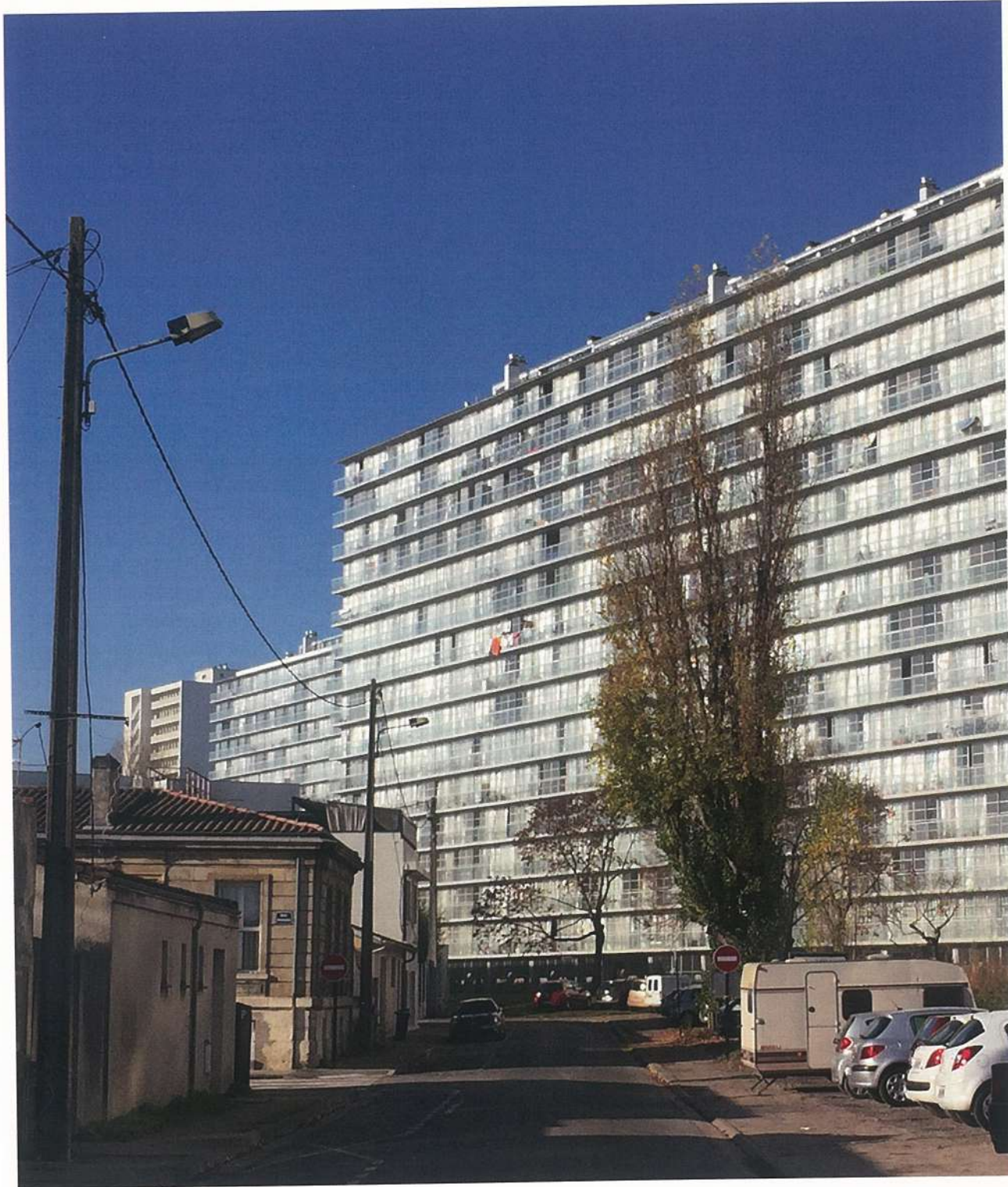
182 Agence Nationale pour la Rénovation Urbaine (ANRU) Objectifs et fondamentaux du PNRU [webpage]

183 Aquitanis (2016a, p. 40)

184 Aquitanis (2014)

185 Aquitanis (2014)

186 Druot, Lacaton & Vassal (2007)



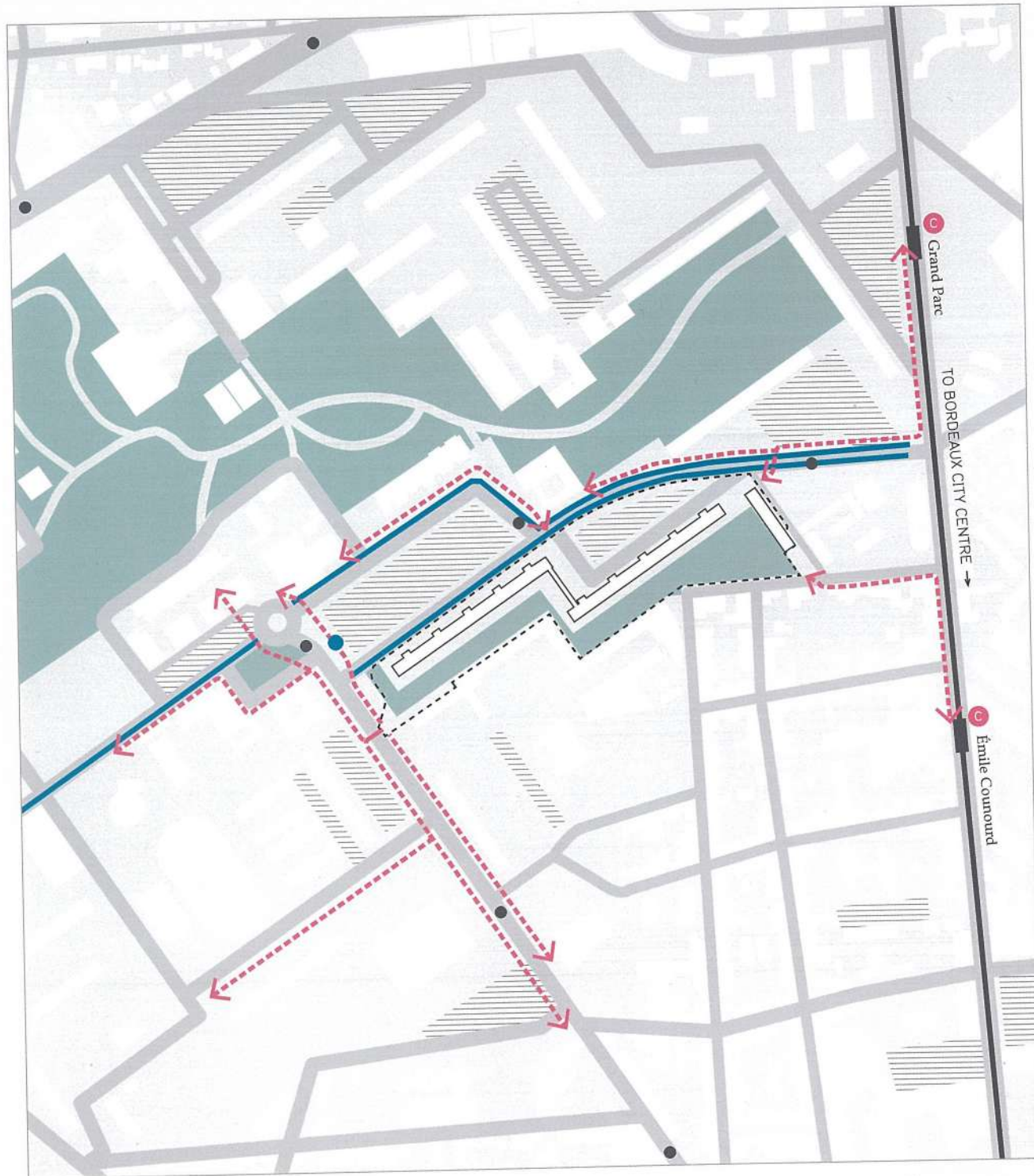
Site approach

The scale and density of housing of GHI Le Grand Parc is remarkable when compared to Bordeaux's traditional single-storey housing typology (bottom left foreground).



Site approach

Although there are well-used pedestrian walkways connecting into the site itself, the arrival experience at GHI Le Grand Parc is dominated by roads and car parking, an issue which will be addressed as part of the Grand Parc estate's wider regeneration programme.

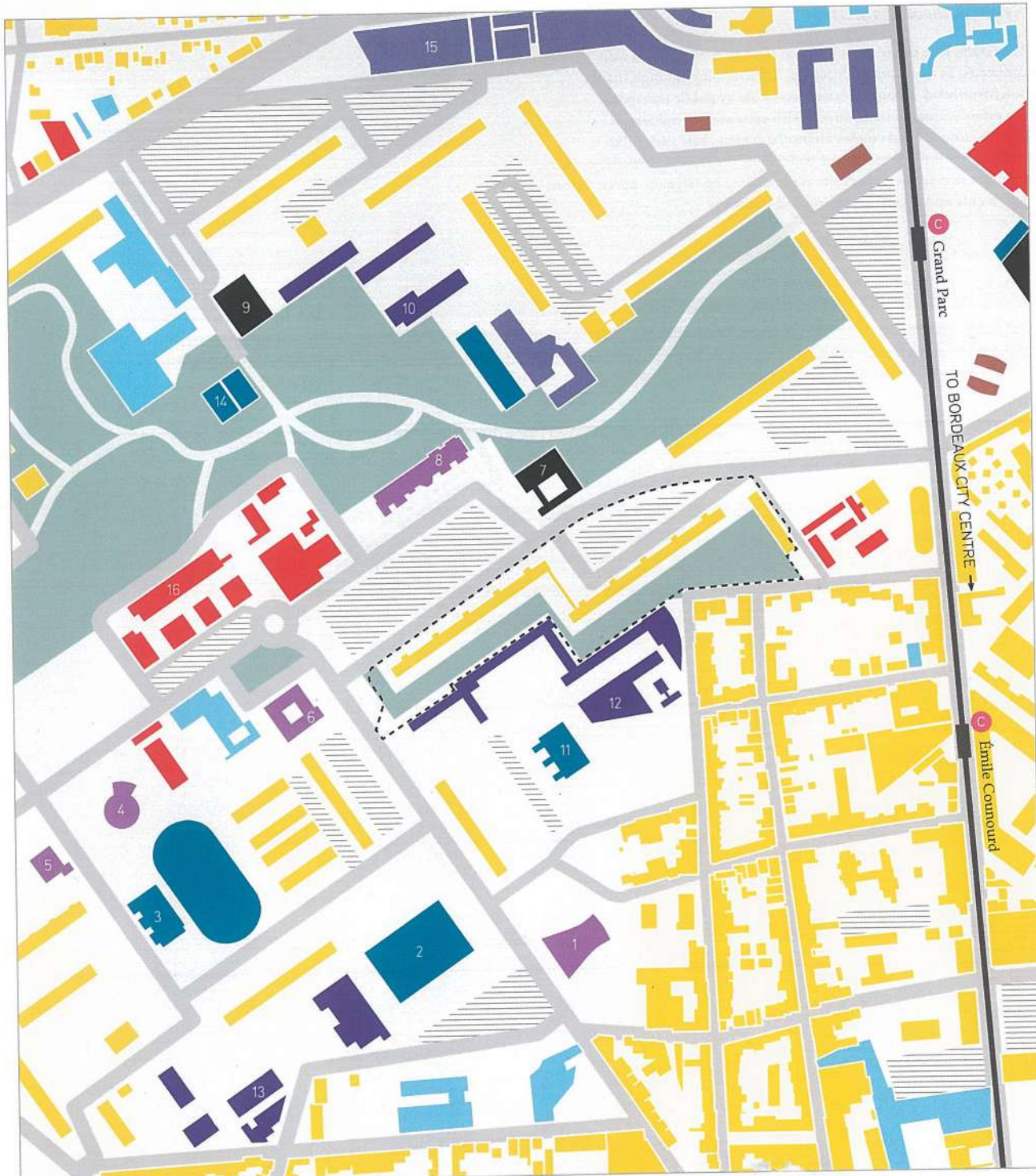


Neighbourhood connections

The Grand Parc estate is visible from the city centre, and is well connected by tram and multiple bus lines running through the neighbourhood. Although easily accessible by public transport, the estate's urban form contrasts with surrounding residential neighbourhoods and creates an insular feeling. Few pedestrian connections link the site to the wider area; the walking experience from the tram stop to the project site is dominated by large car parks, narrow pavements and poor landscaping and walkways.

100M

- Case study site
- Case study blocks
- > Pedestrian connections
- Cycle lane
- Tram line
- ⊙ Tram stop
- Bus stop
- Cycle hire stand
- Green space
- ▨ Parking



100M

- | | | | | |
|---------------------|---------------|--------------------|--------------------------|------------------------------------|
| --- Case study site | Residential | Sports and leisure | 1. Community centre | 10. High school annex |
| — Tram line | Retail | Health | 2. Swimming pool | 11. Sports facility |
| ⊙ Tram stop | Commercial | Utilities | 3. Gymnasium | 12. High school and nursery school |
| | Education | Transport | 4. Youth centre | 13. Middle school |
| | Religious | Parking | 5. Library | 14. Tennis courts |
| | Civic Amenity | Green space | 6. Post office | 15. Hospital |
| | | | 7. Church | 16. Retail centre and supermarket |
| | | | 8. Social support centre | |
| | | | 9. Mosque | |

Predominant land use

The estate is characterised by a generous provision of social infrastructure, an important legacy of its modernist planning. The social infrastructure includes several schools, all within walking distance of the project site, as well as amenities such as a social security centre, a medical practice, a youth centre, a church, a day-care centre and a swimming pool complex. A community centre featuring various spaces including a concert hall – originally built in 1967 by architects Claud Ferret, Robert Bedout and Serge Bottarelli – is currently being refurbished following public consultation in 2012.

Druot, Lacaton & Vassal architects

Following a design competition in 2011, Aquitanis appointed the architects Druot, Lacaton & Vassal, with whom Bernard Blanc had previously worked on a project in Saint-Nazaire.¹⁸⁷ The architects had also articulated a strong belief in renewing housing stock rather than demolishing it. Their publication *PLUS+* (2004), reacting to the *Programme National de Rénovation Urbaine* (2003), envisions how to reuse, expand, and transform neglected housing blocks in a way that is more cost effective and less disruptive to existing residents than tearing down and rebuilding.¹⁸⁸ The study gained some support from the Paris local authority who, after organising a competition for the refurbishment of a social housing tower block in the 17th district, Tour Bois-le-Prêtre, commissioned architects Druot, Lacaton & Vassal in 2005 to apply their methodology on this pilot project.

The *Plus+* approach seeks to establish and highlight a precise inventory of site conditions and assets in order to transform it successfully and cost effectively; thus, “working with the existing”.¹⁸⁹ Their proposals seek to undertake minimal architectural intervention in order to minimise costs. They also argue for the benefits of avoiding decanting as, in addition to supporting community cohesion by keeping residents in their homes, it also encourages a more efficient and economical construction process. Indeed, having residents on site creates an important pressure in ensuring that deadlines and quality targets are met. Architects Druot, Lacaton & Vassal argue that improving the existing stock and the quality of life of its residents in this way is a necessary first step before establishing a precise and site-specific densification strategy: “first transform, then implement”.¹⁹⁰

Local authority

The Bordeaux local authority, led by Alain Juppé since 1995, is responsible for the wider regeneration of the Grand Parc estate.¹⁹¹ The programme was initiated in 2011 with the realisation of an initial study of the estate. A multi-disciplinary team comprising architect-urban planner François Leclercq and landscape architects BASE Paysagistes was then appointed in 2014. The programme is articulated around four main objectives: renovating public spaces and pedestrian connections within the estate; refurbishing key social and cultural amenities; introducing new green spaces and play spaces; and refurbishing the existing housing stock as well as introducing tenure mix through the construction of new housing.¹⁹²

The local authority was responsible for engaging with the estate’s residents. The first period of consultation was realised between February and April 2012, before the appointment of the design team. This took the form of a series of workshops structured around different themes such as the refurbishment of the community centre, green spaces around the estate, and the retail strategy. A second period of consultation then took place between October 2012 and October 2013, and focused on more specific proposals for different streets, public spaces or amenities. These discussions were recorded in the form of two small booklets, published by the local authority and freely available to the public.

An information point was set up on the estate in October 2016 with information (models, plans, timeline) about the renewal programme. The space also hosts monthly activities such as site visits, workshops, project presentations and other exhibitions.

Consultation with residents

The arrival of Bernard Blanc as director of Aquitanis in 2008 marked a turning point in the organisation’s relationship with residents. The GHI Le Grand Parc project is characterised by extensive engagement with residents, going beyond mandatory consultation requirements. The first step in enabling residents to understand and fully engage with the project was the organisation of a site visit to Druot, Lacaton & Vassal’s previous project, Tour Bois-le-Prêtre in Paris. Around 20 residents from the GHI buildings were able to visit the proposed ‘winter gardens’ and meet with residents in Paris to discuss their experience of the project and its construction phase. Back in Bordeaux, these residents were then able to act as ambassadors for the project.¹⁹³

The second step of the consultation strategy was the setting up of a show-flat on the first floor of one of the three buildings. In addition to enabling residents to understand and experience the winter garden design, the show-flat exhibited posters with information about the timeline of the project and its construction process. Sound and vibration simulators were also installed to enable residents to better grasp the impact of construction works. This show-flat also served as a pilot for the design and construction teams, enabling them to further refine the construction process and ensure its efficiency.

The third phase was the mandatory consultation period, between May and September 2013, which involved regular workshops and public meetings with residents. At the end of this period, 389 households representing 75.53 percent of the total residents of the GHI buildings responded to the consultation survey with 91.77 percent voting in favour of the project. Aquitanis notes that this turnout is well above the average of 25 to 30 percent.¹⁹⁴

The construction phase of the project also required Aquitanis to closely collaborate with residents as flats remained lived in during works. Two permanent members of staff from Aquitanis were responsible for liaising with residents regarding any issues or enquiries about the project. A second porter was recruited in 2012 to ensure the security of the site was maintained. Works lasted on average three weeks per flat and a number of steps were taken by Aquitanis to facilitate the process. Residents were supplied with a guide to living within the building during works and were helped as they prepared their flats for the refurbishment. Aquitanis also invested in 500 pairs of ear-defenders to help residents deal with noise problems. Lastly, three fully-fitted flats on the estate were made available during the day to residents who were unable to cope with disruptions.

187 Aquitanis (2016b)

188 Druot, Lacaton & Vassal (2007)

189 Notes from interview on 28th November 2016

190 *ibid.*

191 Mairie de Bordeaux. Le Grand Parc [webpage]

192 Aquitanis (2014, p. 75)

193 Aquitanis (2014, p. 76)

194 *ibid.*



Movement through the site

Pedestrian connections through the site are well used, and appear to exist within a spatial hierarchy: public routes used by pedestrians and cyclists moving through the site are often paved; private routes located closer to the buildings and used mostly by residents are also paved; however, informal routes, also used mostly by residents, tend to be unpaved.



Relationship to the wider site

The addition of the winter gardens on the blocks has allowed residents to reconnect with the city of Bordeaux, providing visual links to the wider cityscape.

BLOCKS

Refurbishment strategy and usage study

The central element of Druot, Lacaton & Vassal's renewal strategy is the addition of a *jardin d'hiver* (winter garden) to all existing apartments. These unheated semi-external spaces (3,80m deep) are added on to the south façades of buildings H and I, and the east and west façades of building G. The addition of these unprogrammed and flexible spaces stems from a desire to rethink social housing space standards and are based on the model of the 'villa': every room in the apartment can be accessed from the winter garden in order to facilitate movement within each apartment. This extension thus aims to alter the fixed plan/layout of the apartments and prompt different ways of using the spaces.

The approach used to incorporate the winter gardens allows for an efficient and rapid construction process. Prefabrication enabled the duration of works to be kept to a minimum. This refurbishment strategy involving the addition of an external prefabricated extension was instrumental in allowing residents to remain on site during works, minimising disruption and ensuring the cost-effectiveness of the overall scheme.

The winter gardens also serve to improve the buildings' thermal performance, which is key in offsetting construction costs and ensuring that residents are not subject to rent increases. They act as a thermal buffer, storing solar heat during the winter and shading the interior spaces in the summer. These winter gardens and their attached balconies also serve to fully transform the appearance of the buildings. This is strategic as the two main blocks, H and I, have a city-facing frontage that helps situate the development within the wider context of Bordeaux. The distinctive façades provide a visual cue to the site entrance for visitors approaching the

development from the tram station.

The additional spaces are used in a variety of ways by residents, functioning, for example, as private backyards for some and as extensions of the living room for others. Aquitanis invited students from the École Camondo, a Paris design school, to take part in a competition to design a set of customised products, which can help residents make best use of their new winter gardens. Winning entries featured a *mur végétal* (green wall), an airing cupboard and a set of furniture pieces with a room divider. These winter gardens are well used and open, and they collectively create a façade that is full of character and animation.

The renewal works include improvements such as the refurbishment of entryways and circulation areas, which were made wider and more transparent; the replacement of existing elevators; the addition of two new elevators in blocks H and I and one elevator in block G on the exterior façades of buildings; and the upgrading of plumbing and ventilation systems. Although the addition of new lift shafts helps animate the blank north façade, it further complicates the layout of the circulation cores, which are characterised by blind corners and a lack of visual connections. It was observed during site visits that the cores were used as a space for informal gatherings. Many of the glass door entrances to the buildings were also smashed or damaged, thus reducing the perceived safety of the circulation cores.

Arrival and ground plane interface

The GHI Le Grand Parc site is very well connected to the city centre by the tram. However, the walking experience from the tram stop to the GHI buildings is dominated by large car parks, narrow pavements and poor landscaping and walkways. The primary entrances of the two larger blocks, H and I, are north facing, looking out onto a car park and the carriageway.

The ground floor streetscape of this frontage does not feature the post-renewal frontage distinctive of designs by architects Druot, Lacaton & Vassal. The street is lined with bins and unused grassed areas, and some of the entrance doors were vandalised. The only distinctive features are the lift cores which create a consistent rhythm of movement and activity. On the south side of the blocks, a series of bike racks and internal storage spaces can be found on the ground floor. Druot, Lacaton & Vassal's design sought to split the large ground floor space into a series of smaller pockets to enhance safety and promote a sense of ownership. Soft landscaping and a pedestrian route are found adjacent to the blocks. However, this pedestrian route sits among a number of unused and undefined public spaces, taking away from its purpose.

Estate management

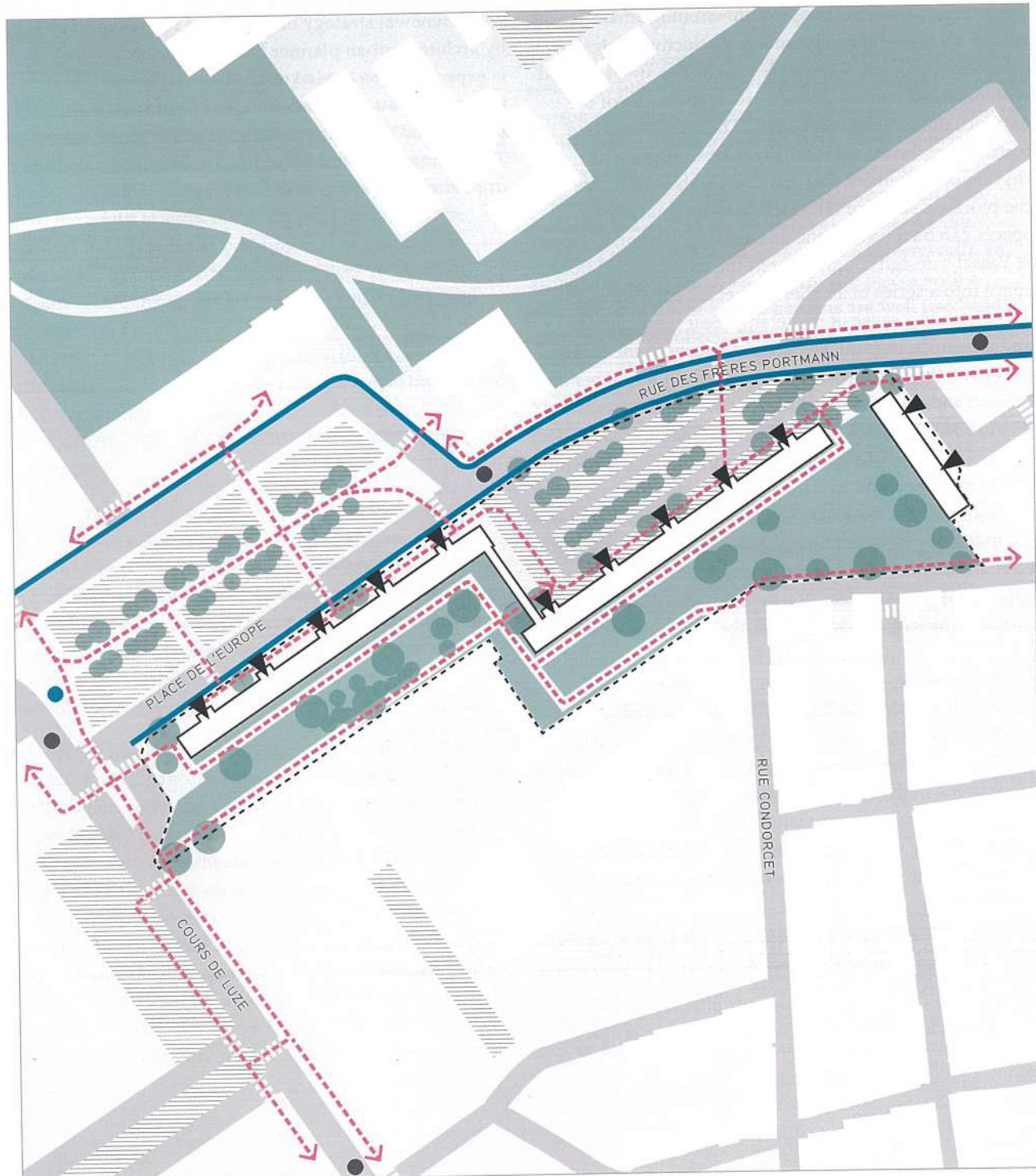
As landowner of the estate, Aquitanis is responsible for the maintenance of the housing blocks, including the G, H and I buildings. During site visits, the buildings appeared well maintained, although signs of vandalism such as broken glass doors were observed.

Public realm

The public spaces which immediately surround the blocks seemed to be used only by the residents of the GHI buildings. There is a lack of definition and programme in many of the shared outdoor spaces. There is substantial parking provision at the site, however, it appeared to be saturated to the point where cars were parked in all available spaces including on verges and in front of service entrances.

The site boundaries of the GHI Le Grand Parc project include a minimal 4-metre-deep buffer space around the buildings, limiting the scope for intervention at this stage. The surrounding public realm is part of the

wider renewal strategy of the Grand Parc estate, led by architect-urban planner François Leclercq, which is expected to be carried out in the near future. The masterplan, among other things, seeks to rationalise car parking and introduce new high-quality green spaces. The setting of the three buildings is thus likely to change dramatically over the next few years.

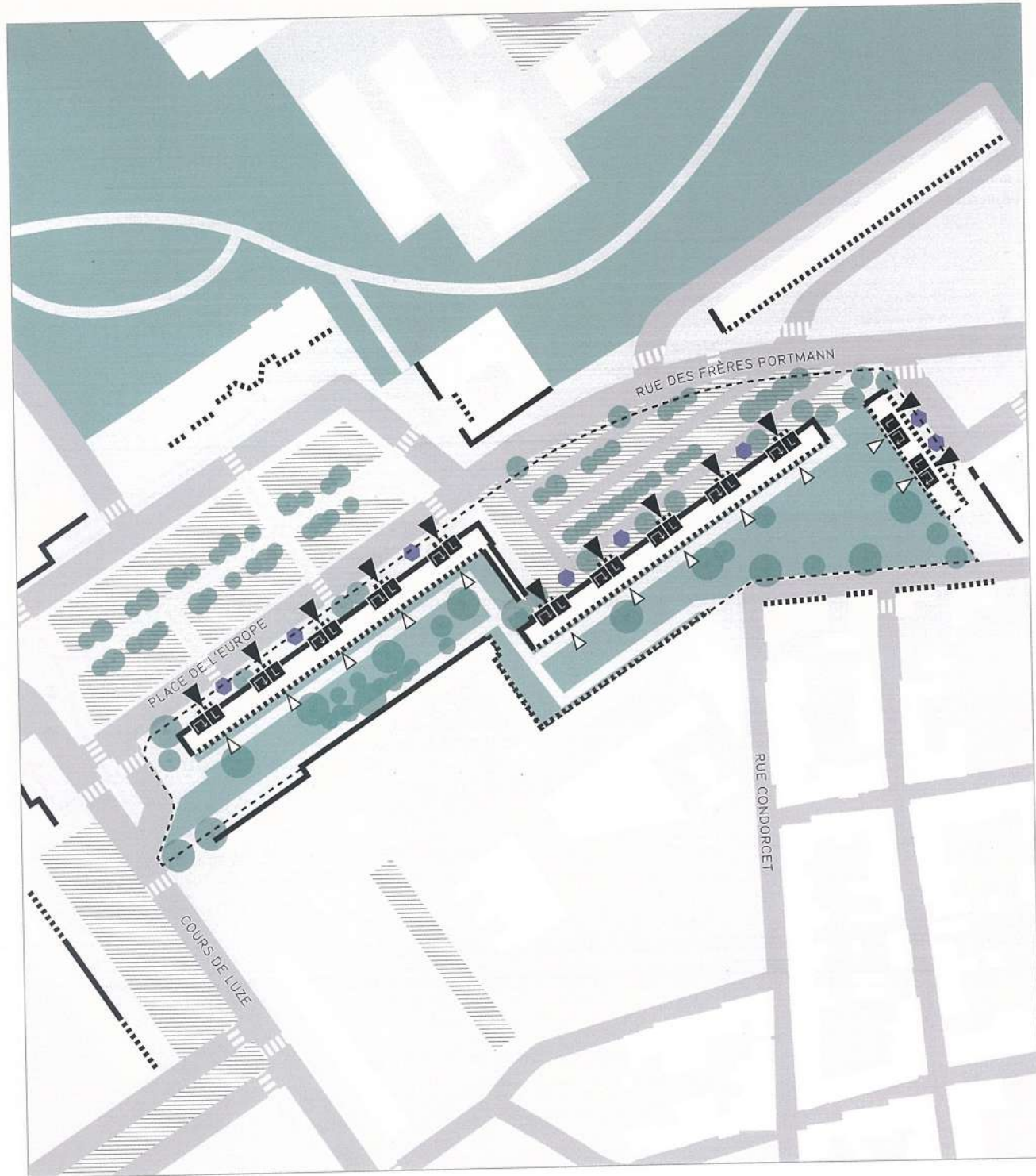


100M

- Case study site
- Case study block
- > Pedestrian connections
- Cycle lane
- Green space
- ▨ Parking
- Bus stop
- Cycle hire stand
- Trees
- ▲ Primary residential entrance

Local connections

The site is relatively permeable, with a number of pedestrian routes and cycle lanes running across it. However, the site suffers from a poorly defined and used public realm. This is due in part to the fact that the boundaries of the GHI Le Grand Parc project only include a minimal 4-metre-deep buffer space around the buildings, thus limiting the scope for public realm intervention. The Grand Parc estate anticipates a more comprehensive public realm intervention as part of the wider regeneration strategy at a later stage.



Building frontages (H and I)

The primary entrances of the two larger blocks look out onto a car park and the carriageway. The ground floor streetscape of this frontage is blank as it does not feature the post-renewal frontage distinctive of designs by architects Druot, Lacaton & Vassal. On the other side of the blocks, winter gardens animate the façade of the buildings, and a series of bike racks and internal storage spaces on the ground floor are available for use by residents.



- Case study site
- Passive frontage
- Blank frontage
- Green space
- ▨ Parking
- ▲ Primary residential entrance
- △ Secondary/service entrance
- Lift core
- Stair core
- Refuse store



Block approaches

At the time of the study trip, in November–December 2016, the public realm surrounding the blocks was awaiting redevelopment as part of the Grand Parc estate's wider regeneration programme; there remains significant potential for the large spaces at the foot of the buildings to be turned into an active public realm.



Amenity in blocks

As part of the refurbishment works by architect Druot, Lacaton & Vassal, the existing bike storage and resident storage lockers were split into small individual spaces to increase the sense of ownership and provide more flexible spaces for use by residents.



Dwellings

Residents have been able to use their new winter gardens and balconies to grow plants, air laundry, create outdoor seating areas, store items and decorate them; activities which help animate the façade of the building and allow residents to personalise their homes.



Druot, Lacaton & Vassal (photograph by Philippe Ruault)

Dwellings

The winter garden is accessible from all rooms within each apartment, and the sliding doors which open onto the balcony allow the space to be used as an additional interior room or as an extended balcony space.