



Barcelona, The New Districts

1992 Olympics, 2004 Forum of Cultures, & 22@ BCN

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TABLE OF CONTENTS

| | |
|----|-----------------------------------|
| 4 | Introduction |
| 5 | History |
| 8 | 1992 Olympic Games |
| 11 | Nova Icaria - The Olympic Village |
| | Key Urban Moves |
| | Seafront Development |
| | El Parque de Icaria |
| 19 | 2004 Forum of Cultures |
| | Urban Plan |
| | Connection - Diagonal to the Sea |
| 23 | 22@ District |
| | Facts |
| | Architecture and Public Space |
| 28 | Conclusion |
| 29 | Bibliography |
| 30 | Appendix - Urban Design Charette |

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Source - <http://www.map-of-spain.co.uk/large-map-of-spain.htm>



Source - http://news.bbcimg.co.uk/media/images/64193000/gif/_64193747_catalonia.gif

INTRODUCTION

Barcelona is one of the major metropolitan centres in Europe. It is located in the Northern region of Spain known as the autonomous community of Catalonia. The city of Barcelona is situated adjacent to the Mediterranean Sea between the Llobregat and Besos rivers. Its location exemplifies its economic dominance and global acknowledgement. Barcelona's population is one of the highest in Spain at 1.6 million, just behind Madrid with a population at 3.2 million. It is one of the densest cities in Europe with an average density of 15,926 inhabitants per square kilometer. Barcelona's high density and growing population demands economic and political dominance in Spain.

Because of its density and global recognition, Barcelona has presented many opportunities for metropolitan urban design projects. In Barcelona's recent history, post Franco, the city has established numerous urban design efforts to generate city identity and acknowledgement. Beginning with the Olympic games in 1992, Barcelona was able to establish itself at the global scale and the 2004 Forum of Cultures enhanced that recognition. Today, Barcelona continues to look towards the future to create dynamic urban centres, such as the 22@ BCN district and the Diagonal Mar development. Throughout this paper, I will discuss Barcelona's urban transformations in the past forty years and how they positively and negatively altered the city's urban dynamic.

1. 1992 Olympic Games
2. 2004 Forum of Cultures
3. 22@ District BCN



1. Olympic Village
2. 2004 Forum of Cultures
3. 22@ BCN District



5th Century BCE - Barcino, Roman Colony
Source - Barcelona Urban Evolution of a Compact City, Page 28

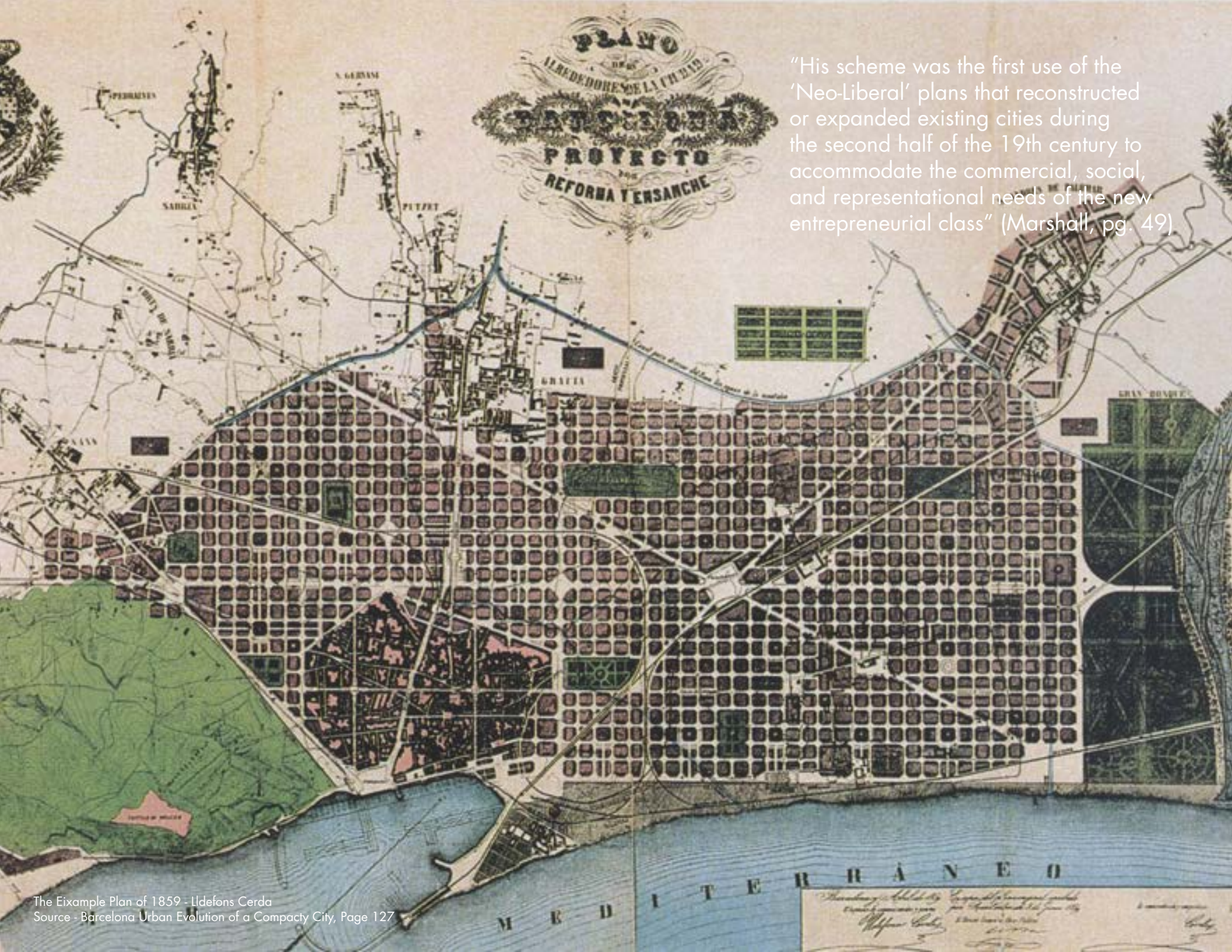


1970 - Medieval Map of Barcelona
Source - Barcelona Urban Evolution of a Compact City, Page 88

HISTORY

Throughout Barcelona's history, the city has witnessed massive urban restructuring. The origin of the city dates back to the fifth century BCE. It was founded by Romans and made into the colony of Barcino. (Marshall, pg. 49) Because of its maritime location, Barcelona became one of the most powerful forces in Europe during the middle ages. Access to the Mediterranean and the Besos and Llobregat river deltas allowed for major maritime dominance. (Marshall, pg. 4) Closely after, Catalonia became part of unified Spain in the late fifteenth century. During the mid-nineteenth century, the walls that bordered the city were deconstructed allowing for a more cohesive urban landscape. Barcelona's historic centre has been honorably preserved into modernity and has always been an underlying framework in restructuring the city.

In 1859, Ildefons Cerda radically defined the urban fabric of Barcelona with the implementation of the Eixample plan. The plan sought to expand Barcelona's urban core from the historic centre into a grid-planned extension of the city. Cerda's underlying theory for the plan was developed around three components, hygiene, circulation, and the intersection of the built and the future city. (Busquets, 128) It was the first plan in history where an urban plan addressed a modern set of principles with a social component. Today, Cerda is praised for his urban planning feats in Barcelona and is recognized as one of the first urban planners in history.



“His scheme was the first use of the ‘Neo-Liberal’ plans that reconstructed or expanded existing cities during the second half of the 19th century to accommodate the commercial, social, and representational needs of the new entrepreneurial class” (Marshall, pg. 49)

The Eixample Plan of 1859 - Ildefonso Cerda
Source - Barcelona Urban Evolution of a Compact City, Page 127

In 1931, Catalonia was granted autonomy. This allowed for artistic and intellectual activity that engendered a short period of growing city and cultural identity in Barcelona. In 1934, GATCPAC leader Josep Lluís Sert prepared a metropolitan plan for Barcelona with collaboration with Le Corbusier. This plan devised harsh separation of functional program and encapsulated modern architectural principles into an unmotivated plan for the city. The Spanish Civil War abruptly brought an end to artistic creativity, although the GATCPAC plan stayed in place. (Marshall, pg. 50)

In 1939, Francisco Franco seized victory of the war and kept Spain in darkness for thirty-six years. In 1959, the economy was liberated, leading to massive economic growth in the sixties and seventies. (Marshall, 50) Serratosa, Solans, and Riera-Junyer implemented the Plan Comarcal in 1974. This plan reduced the allowable density from 9 million to 4.5 million and reclaimed a large amount of public land for parks, plazas, schools, and other public facilities. Barcelona's population increased dramatically in the sixties and seventies to 1.8 million inhabitants in 1981, which was one of the highest density levels in the world. After the reign of Franco, Barcelona was rejuvenated and put forth many urban planning efforts that have defined its urban centre today.



Urban Growth - 1900's
Source - Transforming Barcelona, pg. 5



Oriol Bohigas
Source: <http://www.conca.cat/ca/premis/premiatrajectoria2011>



Pasqual Maragall
Source: http://www.sabadelluniversitat.org/SBDCongres/p/PMaragall_cat.asp

1992 OLYMPIC GAMES

The mayor of Barcelona at the time, Narcis Serra, was presented with the idea for the Olympics during his candidacy. He thought it was an intelligible opportunity to redefine Barcelona as a global metropolis. The Olympic games required a comprehensive plan that would attain metropolitan scale, in a brief period of time. Roma Cuyas completed the first documents drawn up for the Olympic concept. (Busquets, pg. 400) Throughout the design process, mayor Pasqual Maragall (1982-97), led an in-depth transformation of the city. In 1986, Barcelona was officially nominated to host the Olympics under the presidency of the International Olympic Committee. The Olympic games presented a great opportunity for Barcelona to be acknowledged at the global scale as a major metropolitan centre. The games assisted Barcelona in ending the dark period in local history of the dictatorship of Francisco Franco.

"The '92' programme was approached as a major project for the urban restructuring of the city: within the urban continuum, seeking to interconnect empty interstitial areas, or by introducing breakpoints such as the triangle that was the Olympic Village to trigger off a process of a larger scope." (Busquets, pg. 393)

The framework for the plan was a compromise between the historic fabric and the urban grid of Cerda's Eixample plan. (Busquets, 395) It was important to keep the historic identity of the city, but also reinvent Barcelona for future growth. Until this point, Barcelona had ignored the seafront as a potential urban space. The city had been cut off from the sea by the coastline railway, a highway, and numerous industrial sites. The Olympic plan was the first in Barcelona history to redefine the five kilometers of seafront for public access.

The urban plan encompassed the larger metropolitan area of Barcelona, including four sectors of major redevelopment. These areas include, the Olympic Ring – Montjuic, the Diagonal, Vall d'Hebron, and Olympic Village – Nova Icaria. Various other areas were targeted for redevelopment, but these four sectors provided the most opportunity and focus for the revitalization of the urban centre.

The sectors were spread across the metropolitan centre of Barcelona, which accumulated to a 2.5-mile radius. As a result, there was an urgent need to revitalize

the public infrastructure. This effort included the implementation of 'ring roads', which connected the four sectors and thus reduced traffic congestion during the games. Other efforts included the undergrounding of the Glories branch and the dismantling of the coastline railway.

The Olympic Ring

Architects - Fredrico Correa, Alfonzo Mila, Charles Buxade and Joan Margarit
Location - Upper hills of Montjuic

The Olympic Ring is the central location for Olympic events. It includes four large buildings on east/west axis and the Olympic Stadium. The Olympic Stadium was a remodel of an existing stadium that was built for a previous exhibition.

The Diagonal

Architects – Oriol Clos and Maria Rupert



1. Olympic Ring - Montjuic
2. Diagonal
3. Vall d'Hebron
4. Olympic Village - Nova Icaria

Source - Barcelona Urban Evolution of a Compact City, pg. 401



Location – Southeast Diagonal Avenue

The Diagonal development had existing sports facilities but lacked a clear urban structuring. The existing facilities included the Barcelona FC Stadium, Tuo Tennis Club, The Polo Club, and University sports facilities.

Vall D'Hebron

Architect – Eduard Bau

Location – North, between city and hills

The Vall D'Hebron development had a series of open-air sports stadiums. The landscape was easily transformed into park and open space after the end of the Olympic games.

Olympic Village – Nova Icaria

Architects – Josep Martorell, Oriol Bohigas, David MacKay, and Albert Puigdomenech

Location – Poblenou District

This area was an industrial sector comprised of dilapidated buildings. The beaches were in despair and were dumping grounds for waste. This site was the most opportune to reconnect the city to the sea.

"It became evident that the 1992 project once more insisted on the issues that had been raised by earlier events – 1888 with the Citadel and in 1929 with the conquest of Montjuic. This time that larger interventions once again concentrated on the other side of the Citadel (the Olympic Village), opening the city up to the sea, and on the western side of Montjuic, opening the mountain up to the Llobregat delta and beginning a new urban redevelopment process that would erase the shadow

Development of Ring Road System
Source - *Barcelona Urban Evolution of a Compact City*, pg. 378

NOVA ICARIA – OLYMPIC VILLAGE

Architects – Josep Martorell, Oriol Bohigas, David MacKay, & Albert Puigdomenech
Location – Poblenou District



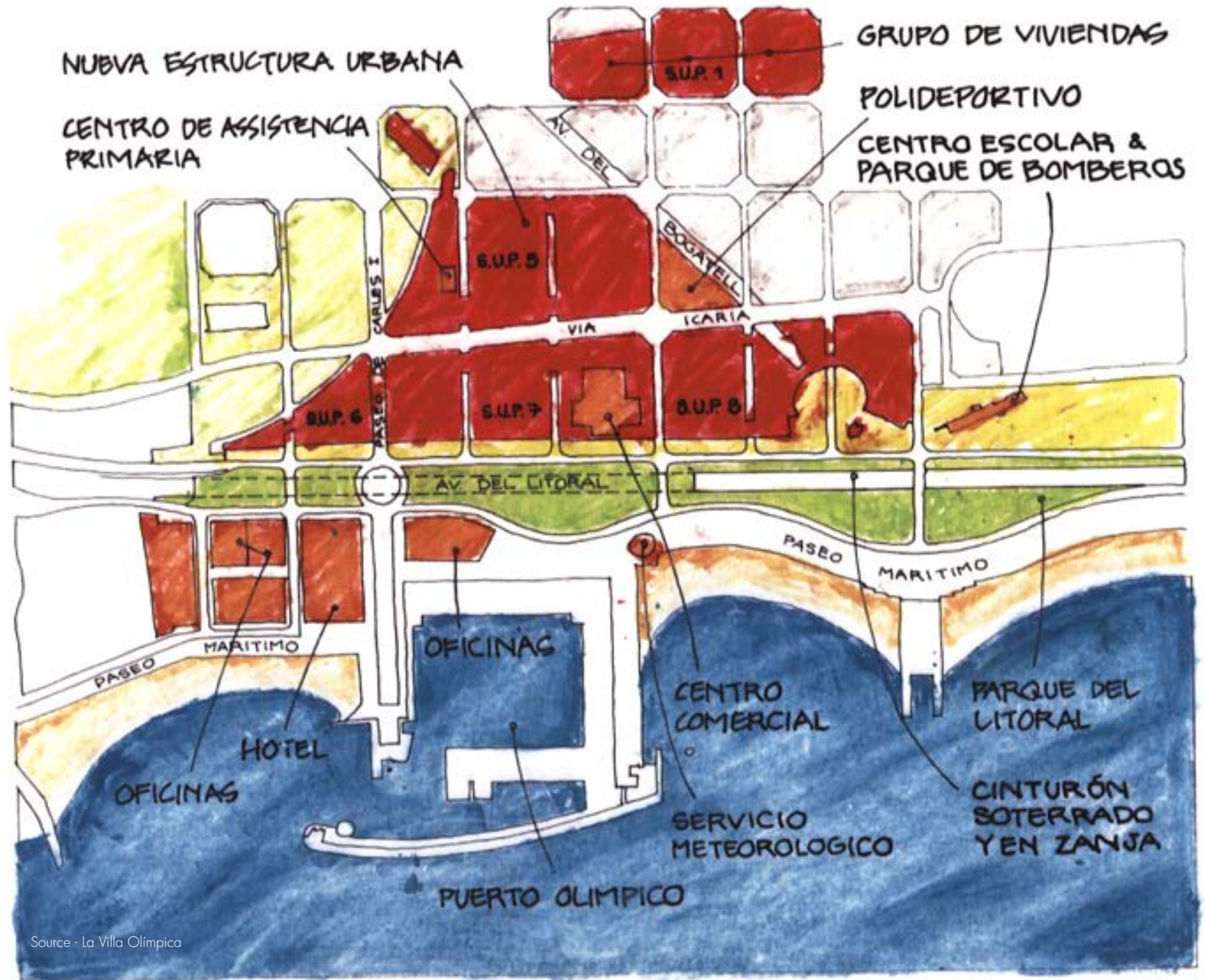
Source - http://farm5.static.flickr.com/4079/5443075535_caa13c5169.jpg

The development of the Olympic Village had the most prevalent influence on the urban center of Barcelona after the Olympic games. The program included the redevelopment of the seafront, creation of public space through a seafront promenade, commercial and retail, housing, and redefining the urban nucleus. In comparison to the other Olympic sectors, the Olympic Village was mostly composed of social and economic activity rather than sports related activity.

The major focus of this district was to superimpose a new urban neighborhood onto the historic Poblenou. Historically, the Poblenou district was the heart of Barcelona's industrial region. In the 19th century, industry moved out of the Poblenou and the vacant buildings went into disrepair. In the early 1990's the Poblenou was in dyer need of renovation. The development was planned strategically to carefully merge the new with the historic centre.



Source - Google Maps



Source - La Villa Olímpica

KEY URBAN MOVES

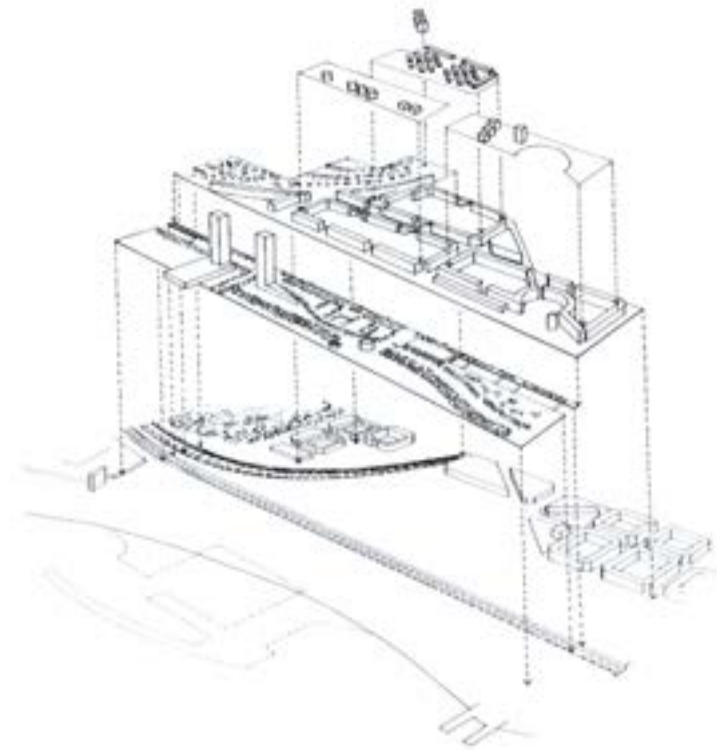
The Olympic Village underwent major renovations to accomplish the anticipated connection of the city and sea. The first was the dismantling of the coastline railway and undergrounding the Glories branch. This gigantic urban endeavor dramatically altered the landscape and allowed for fluid public access to the seafront. Public transportation was implemented to again provide maximum access. Because of the pollution from the industrial sites, the processing of wastewaters and elimination of pollution was essential. Public beaches were reconstructed and opened to the public. Housing was provided in the Olympic Village for athletes participating in the Olympic games and after were privately sold.

The buildable area was divided into eight superunits. Half of the blocks were of equal or smaller than the city blocks of the Eixample and the others were doubled or tripled to accommodate for public space and other amenities. The buildings were meant to create a continuous block, with a shallow depth, about 40'. This was meant to allow for good ventilation and new housing typologies. Overall, the Olympic Village has approximately 2,000 dwelling units and other uses include hotels, retail, offices and other services.

URBAN STRUCTURE

The underlying urban structure for the Olympic Village was based on five layered elements. These elements were carefully laid upon the historic fabric of the existing Eixample plan.

1. Beaches and sea wall
2. Seafront Promenade
3. Coastal Activities
4. Avinguda del Litoral
5. The Urban Nucleus



Five Elements of Urban Structure

- A) Beaches and sea wall
- B) Seafront Promenade
- C) Coastal Activities
- D) Avinguda del Litoral
- E) The Urban Nucleus

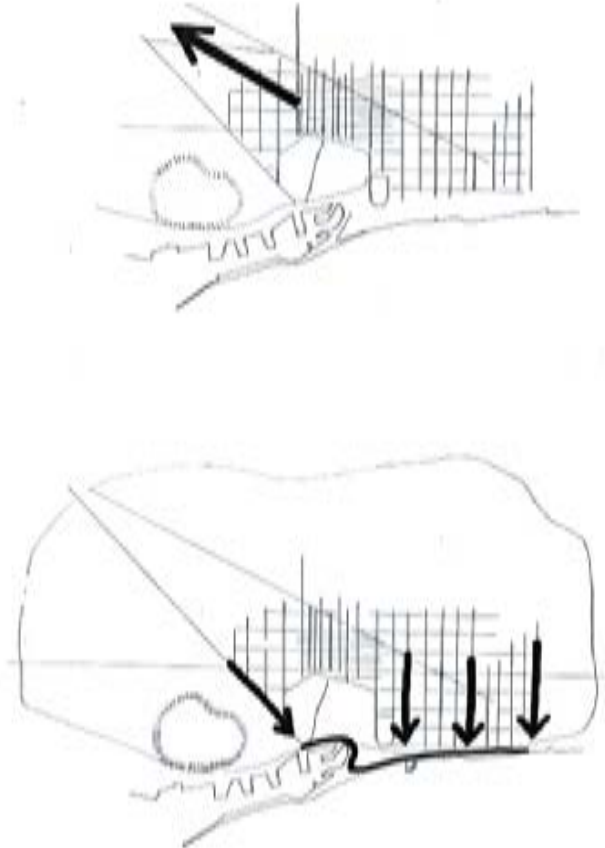
Source - City and Port, pg. 172

“Nova Icaria had to ensure that the new typologies, the consequence of the whole architectural and urban design culture of the Modern Movement, were organically superimposed on the traditional urban morphologies: streets, squares, and blocks in line with the historical models, but with an architecture which would allow more highly developed uses – the private garden, sports facilities – a more satisfactory layout – sunlight and views privacy, transport links – and a higher standard of interior living conditions – new proportions and a new structure in the built volumes” (Maratorell, 15)

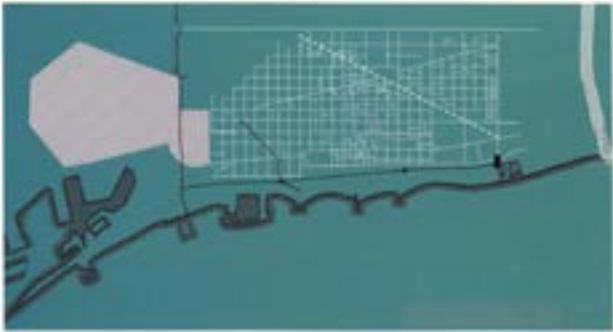
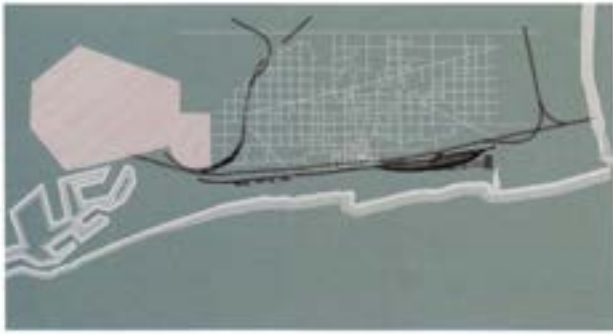
SEAFRONT DEVELOPMENT

The underlying goal for the urban plan for the Olympic games was to connect the city to the sea. Throughout history, not one urban plan for the city of Barcelona was concerned with the Mediterranean seafloor. It was and still is today a critical component of the development of the city as an economic stronghold and globally recognized city. The Eixample plan by Francisco Cerda was more concerned with the development of the urban grid and left the seafloor development to form organically. The GATCPAC team with Le Corbusier was another account of disregarding the sea in their metropolitan plan. Later, the first railroad system in Spain was built along the seafloor to define a clear boundary between the city and sea. It wasn't until the Olympic games where the urban design team felt it necessary to reconnect to the sea.

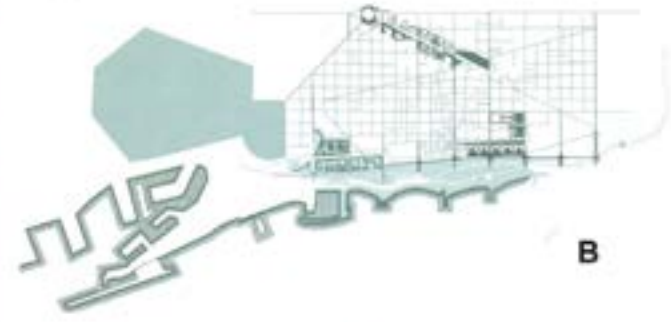
It was a major investment to renovate the polluted seafloor into beautifully defined beaches for public use. The revitalization has been widely admired by cities across the world. The beaches have attracted tourists and residents alike to tremendously enhance Barcelona's economic status. The five-kilometer span of seafloor includes public beaches, parks, promenades, transit access, and extraordinary access to the city.



Movement towards the Sea
Source - City and Port, pg. 177



A



B



C



Molt de la Fusta



Vila Olímpica



Poble Nou

Waterfront Redevelopment Timeline
 Source - Barcelona, the Urban Evolution of a Compact City, pg. 449



Seafront before and after 1992
Source - Barcelona, Urban Evolution of a Compact City, pg. 394

“The Barcelona of the eighties was moving outwards in a centrifugal process common to many European cities, with particular attention to the western axis. Moving the city towards the sea meant in part transforming that process and changing public investment properties.” (392, Busquets)

EL PARQUE DE ICARIA

The Parque de Icaria was a grandeur landscape scheme to finish the Olympic Village plan. It includes a grand promenade, which runs parallel along the entirety of the seafront, access to retail and commercial, and public beaches. The site is actively connected to the Olympic Village and the remainder of the city with pedestrian bridges.

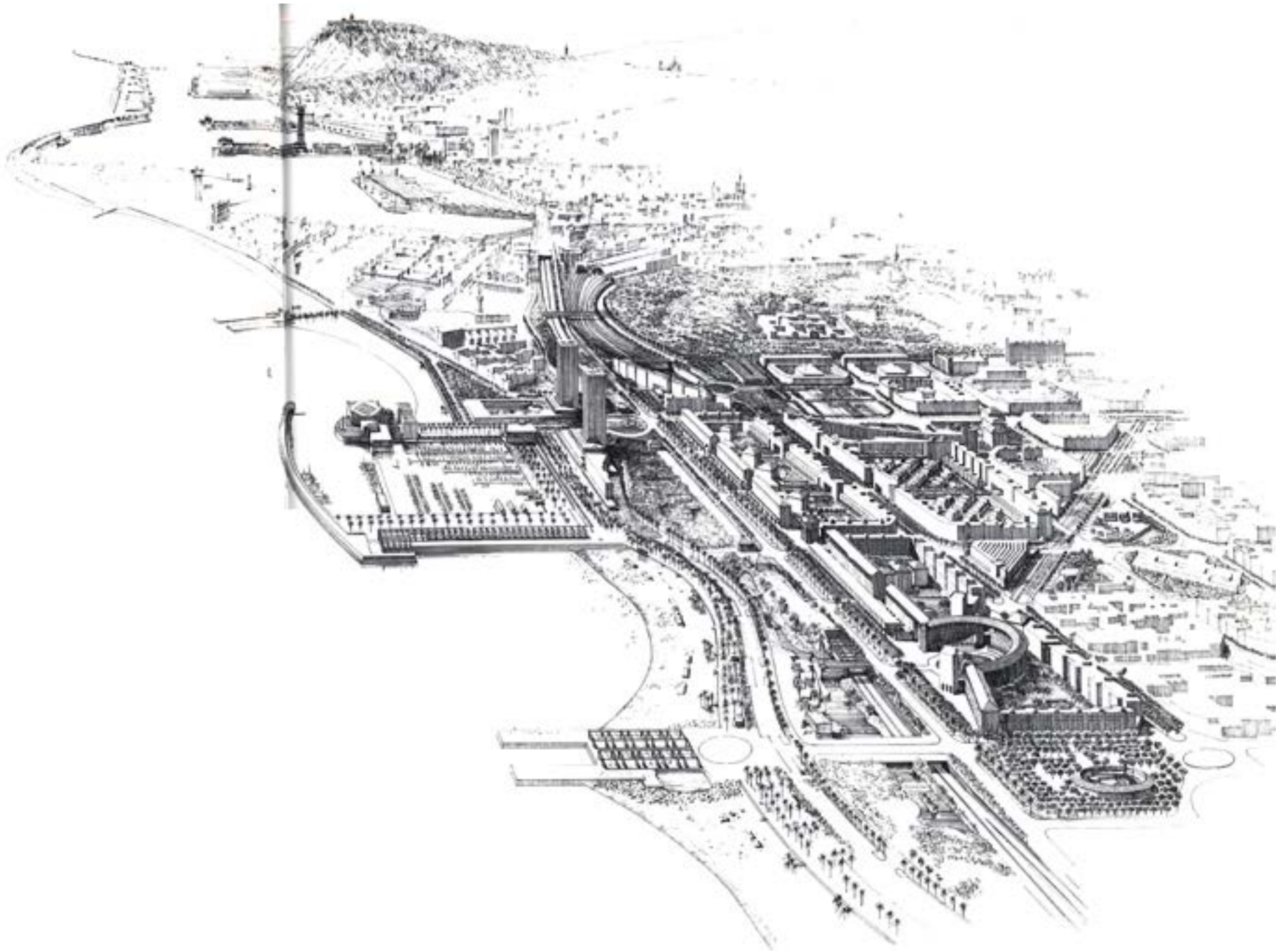
Because the park was built for the Olympics, the scale of the space seems unorthodox. It was planned and built to accommodate large amounts of people in a short period of time. As a result, the space feels vacant and out of scale with the rest of the historic centre of Barcelona.



El Parque de Icaria - Completed
Source - City and Port, Pg 167



Source - La Villa Olímpica



El Parque de Icaria - Plan Concept
Source - City and Port, Pg 168



2004 FORUM OF CULTURES

The 2004 Forum of Cultures was an opportunity that allowed Barcelona to finish their urban planning effort along the seafront. The site is located in Northeast Barcelona, adjacent to the Mediterranean Sea and the Besos delta. Additionally, the end of the Diagonal meets the sea at this point. The existing site was blighted with a sewage treatment plant, a garbage incinerator, and the result of decades of pollution. The larger goal for the city was to utilize this site for the Forum of Cultures and then reuse the buildings and site for the Barcelona convention center, which stands in its place today. Today, the site has successfully drawn commercial development to the North-eastern half of the city.

The Barcelona Regional – Public Authority master planned the site as part of a larger citywide plan. The plan contributors were Josep Lluís Mateo with Barcelona chief planner Josep Anton Acebillo and architects Enric Miralles and Eduardo Bru. The concept was to create a 'magnetic territory that spills across the site'. It was realized through a multitude of public space and architecturally significant buildings that all had the underlying theme of sustainability.

The Universal Forum of Cultures is a global event that occurs every three years and is planned by the Forum Foundation. Barcelona was the first city to accommodate the Forum of Cultures in 2004. It was organized by Barcelona's local council, the Catalan government, the Spanish Government, and UNESCO. The aim of the conference was to gain support for peace, sustainable development, human rights and respect for cultural diversity.

"The conference was a new type of global event, organized in order to promote dialogue between peoples of all cultures. Debates will be organized on many topics of common interest, as well as a thematic World Festival of the Arts and exhibitions on human diversity and its history. It will be a major event, an expression of the creativity of all the peoples and a political gathering of global dimensions with new imaginative forms of participation, centered on one of the main challenges of the twenty-first century: the dialogue between cultures" (43 Marshall)

Right: Source - http://upload.wikimedia.org/wikipedia/commons/thumb/e/eb/Maharaji_Forum_of_cultures.jpg/120px-Maharaji_Forum_of_cultures.jpg
 Left: Source - <http://www.promopress.net/mini/Forum-Barcelona-2004.gif>



Source - <http://www.m1441arquitectura.com/public/img/transiciones-arquitectonicas-forum-universal-de-las-culturas-2004-01.jpg>



URBAN PLAN

The underlying concept for the urban plan was to continue the seafront redevelopment effort and create an urban sustainability district. The existing site was blighted with pollution from industry, so to create a new eco-district was a major transformation. The creation of this plan meant the restructuring of a few neighborhoods around the area. The La Mina neighborhood was altered as well as sectors of the Lull-Taulat and La Catalana neighborhoods.



Source - <http://upload.wikimedia.org/wikipedia/commons/thumb/9/90/BCN-ParcForum-4923.jpg/300px-BCN-ParcForum-4923.jpg>

The program includes a new platform that protrudes into the sea, beaches, zoo, a port to accommodate 2,000 boats at the Besos delta, and a multitude of forum installations. These installations included a central building, designed by Herzog and De Meuron, plaza, and urban park. The existing waste treatment plant was renovated to meet sustainability standards and energy production mechanisms were introduced to give back site energy. Additionally, the establishment of major metropolitan facilities was implemented in the plan, including the Congress Center of Catalonia and a new university campus.

The urban design principles followed in the 2004 Forum of Cultures were similar of that in the 1992 Olympic games. The spaces were designed to accommodate a



Source - <http://urbanwaterfront.blogspot.com/2011/01/barcelona-event-as-catalyst.html>

large amount of people in a short period of time, which results in massive, unused space. Although the forum building was repurposed into a convention center, the spaces around the Forum create an uncomfortable scale for visitors. Additionally, the site is more of a tourist destination, rather than a space, which is utilized by everyday residents of Barcelona. Overall, the site was successful for its purpose and is representative of a great feat in Barcelona's urban design history.

CONNECTION – DIAGONAL TO THE SEA

One of the greatest opportunities with the Forum of Cultures is that its location is at the end of the Diagonal. Cerda implemented the Diagonal in the Eixample plan. The 10 Kilometer avenue crosses Barcelona from east to west, descending gradually 100 meters to the sea. The Diagonal was revitalized in its eastern sector, which is closest to the Forum of Cultures. Its previous state was in dyer need of attention, as it lacked structure and identity. Infill based developments were introduced which ended up in high land values. The city benefitted greatly from the urban plan for the Forum of Cultures. Land values increased and city identity began to flourish in older developments such as the Poblenou.



Source - Barcelona: City, Architecture, Society

22@ DISTRICT

The idea for the 22@ District was realized in early 2000, when government initiative sought to transform the neglected neighborhood of San Marti into an innovation district centered around research and technology. This plan was realized when a modification to the Metropolitan Plan was passed in early 2000. San Marti is an urban neighborhood located in the Poblenou district. It covers about 200 hectares of privately owned land. (22@ Barcelona) The urban design goal of the district was to transform the historic fabric of the Poblenou into a cutting edge technology district based on a mixed-use sustainable urban model. The underlying framework is meant to meld new and old ideals for future development.

“This project mixes economic activities (companies and offices) with training (university campuses) and residential areas (re-urbanizing streets and building housing). An initiative that has been christened a compact city and aims to be a benchmark for the Barcelona of the future. Thus, the 22@Barcelona district is committed to a high quality, compact, mixed and sustainable urban model, making the resulting city more balanced, more hybrid, more eco-efficient, economically stronger and more cohesive.” (10 Years of 22@)



Source - Barcelona: City, Architecture, Society, pg. 139

10 anys innovant per Barcelona
 10 años innovando por Barcelona
 10 years innovating in Barcelona

4.000 nous habitatges socials
 143.000 m² de nous equipaments
 114.000 m² de noves zones verdes
 1.502 empreses ja instal·lades
 44.400 nous treballadors

4.000 nuevas viviendas sociales
 143.000 m² de nuevos equipamientos
 114.000 m² de nuevas zonas verdes
 1.502 empresas ya instaladas
 44.400 nuevos trabajadores

4,000 new social dwellings
 143,000 m² for new public facilities
 114,000 m² for new green areas
 1,502 firms already established
 44,400 new active workers



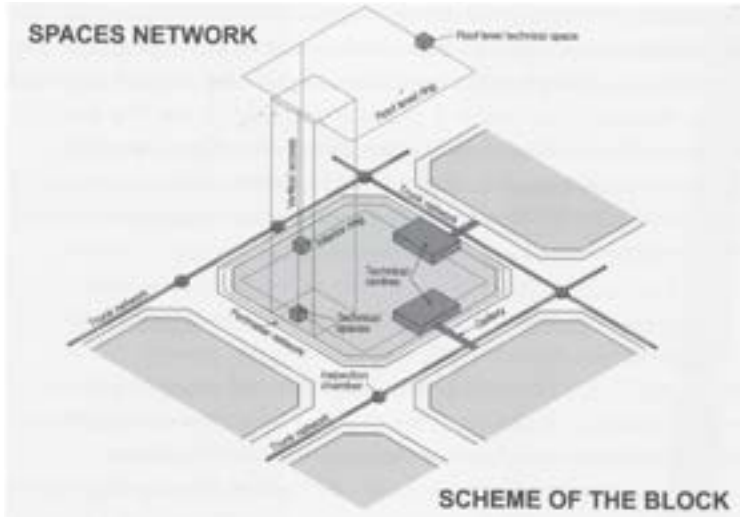
Six areas have been developed through public initiative. Between 2000 and 2005, the 22@ Barcelona municipal company was responsible for the urban planning and design of the district. The 22@ Barcelona company with collaboration of the Urban Planning Department of the Barcelona City Council created the 22@ Barcelona plan.

“The 22@Barcelona Plan allows for the reinterpretation in current terms of the functioning of the former industrial fabric of Poblenou and the creation of the appropriate conditions and incentives to favor urban regeneration of the area and the establishment of qualified jobs and knowledge-intensive productive activities.” (10 years of 22@)

1. Lull Pujades East
2. Peru-Pere IV
3. Audiovisual Campus
4. Central Park
5. Llacuna Axis
6. Lull Pujades West



Other areas not included in these initial neighborhoods may be developed through public or private initiative. “By 2010, the innovation district already had 114,000 m² of new green space and 7,000 companies, businesses and shops, half of which moved to the district after 2000.” (22@ Barcelona)



Source - Transforming Barcelona, pg 198

FACTS (22@ Barcelona)

Regeneration of approximately 65% of the industrial area in Poblenou.

117 plans approved, 78 of which (66.7%) have been promoted by the private sector.

As a whole, the approved plans deal with 2,830,596m² of floor space, 136,837 m² of land for facilities, 119,720 m² of land for open spaces and nearly 3,000 subsidized housing units.

10 universities with more than 25,000 students.

12 R&D and technology transfer centers.

1,502 companies established between 2000 and 2010, not taking into account companies from the retail, hotel, construction, real estate, travel agency and banking sectors.

74.2% of the 1,500 companies (1,114) are devoted to activities that are considered @

ARCHITECTURE & PUBLIC SPACE

Along with the 22@ districts urban plan, it has been widely acclaimed for its progressive architecture and public space. Jean Nouvel has designed numerous projects, some realized others not for the district. The Torre Agbar, completed in 2005, is a Nouvel project that has become a landmark for the 22@ district. It is a commercial office building by day, and by night the building lights up with a multi-colored array. Another building representative of the 22@ district is the Media-TIC. This building is the meeting place for public communication with companies and institutions to discuss information technology. The building itself is experimental and provides many public spaces within it. The building was completed in 2007 by Cloud 9.

Lastly, the Parque de central Poblenou is a large public space designed by Jean Nouvel. It spans over three blocks and includes a procession of public spaces that are constructed with a plethora of sustainable materials.

The 22@ district has become one of the leading innovation districts in the world. Its architecture and public space fit the district's goals by producing spaces that feature cutting-edge and innovative technology.



Images of current landscaping and parque
Source - http://1.bp.blogspot.com/_Ymx9e66vrGc/SHAb99qiApl/AAAAAAAAADLo/zhU5JJRn1jg/s400/poblenou-park1.jpg



Left: Source - http://es.globedia.com/imagenes/noticias/2011/11/9/propuesta-mejora-avenida-buhaira_3_961220.jpg
Right: Source - <http://i.bssl.es/bcnhoy/2010/05/poblenou-park9.jpg>



Source - http://www.detail-online.com/daily/wp-content/uploads/2011/11/mediatic_cloud9_sda2.jpg

CONCLUSION

Barcelona has evolved tremendously over the past forty years. The city has taken advantage of many great opportunities, such as the 1992 Olympics and the 2004 Forum of Cultures, to realize massive metropolitan urban design proposals. As a result, Barcelona has succeeded remarkably in utilizing these events to restructure its landscape on an economic, political, and social level.

At the district scale, the city has successfully implemented a gracious amount of public space while preserving its historic fabric. Beginning with the Cerda plan, it has been a principal concept to successfully overlay the historic fabric with new urban proposals. Barcelona has successfully done this in many aspects, such as the Olympic Village and the 22@ district.

The 22@ district and the Forum of Cultures have prospered through 'concept-focused' districts. The underlying motive, such as technology or sustainability has ensured success economically in the larger city. Other cities around the world could learn from Barcelona in this aspect and implement similar districts in their landscape.

Barcelona finished the seafront revitalization with the completion of the 2004 Forum of Cultures. Reconnecting the city to the sea has been the largest urban design success in Barcelona to date. It is recognized as an economic achievement throughout Spain, Europe, and the world. A negative aspect to the seafront is that it attracts more tourists than it does residents. The tourism rate in Barcelona has dramatically increased since the 1992 Olympics. This has caused a lack of community identity amongst residents. Architecturally, the scale of design is at a grandeur level, which seems confusing and unattractive to everyday visitors.

Overall in Barcelona's modern history the urban design efforts have been tremendous. The city has successfully created an identity at the global scale and has many projects that are recognized urban design feats around the world.

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APPENDIX - URBAN DESIGN CHARETTE

Barcelona's Key Urban Design Issues

- Separation of city and sea
 - Insignificant public access
 - Increased pollution from industry
 - Transit barriers
- Increasing need for public infrastructure because of city growth
- Lack of public space
- Tourism as fundamental catalyst in urban plan
 - Desire to celebrate city culture
 - Disconnect in context and human scale
 - Lack of community identity
- Increasing amount of pollution derived from industry

Barcelona's Urban Design Accomplishments

- Took advantage of global events, such as the 2004 Forum of Cultures and the 1992 Olympic games, to generate urban design efforts
- Implementation of Ring Road system and other public infrastructure to decrease urban congestion
- Connection of city to sea through reconstruction of waterfront into beaches and natural habitat
- Redevelopment of historic centers, Poblenou, into active urban elements
- Implementation of innovative districts, 22@ BCN
- Preservation of historic fabric through new design typologies
- Accommodation of public space

Urban Design Theories Employed

Barcelona took advantage of large scale events such as the 1992 Olympic Games and the 2004 Forum of Cultures to drastically alter its urban landscape. Instead of developing sites that would in return become vacant, Barcelona employed urban design measures that united the broader city through public infrastructure and urban centrality.

In its recent history, Barcelona has developed focus-oriented urban districts. This typology employs an urban plan based on a specific emphasis, such as technology, to engender diverse



Left - 22@ BCN District

Source - <http://mw2.google.com/mw-panoramio/photos/medium/84288381.jpg>

jpg

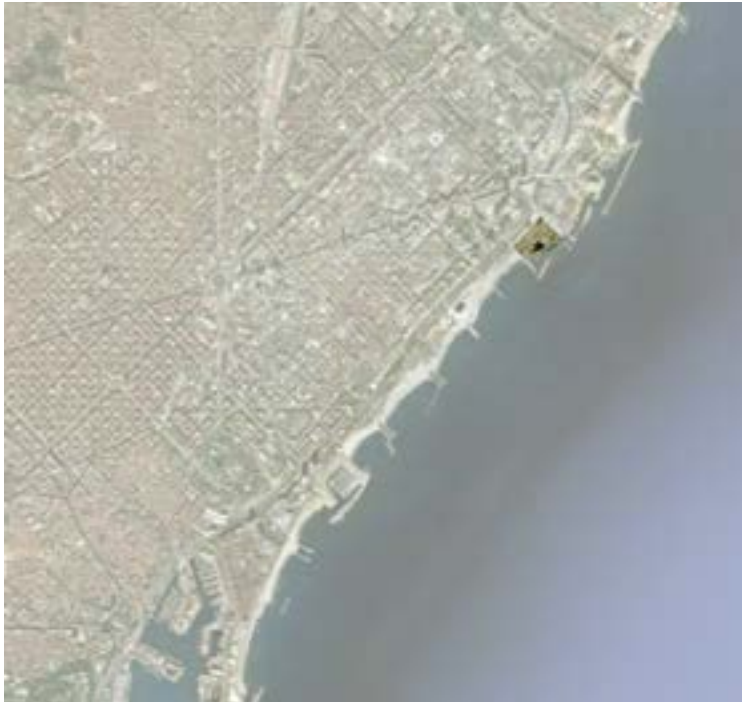
Right - Barcelona Seafront

Source - http://www.barcelona-tourist-guide.com/images/int/attractions/beaches/IMG_9763.jpg



Historic Poblenou District

Source - <http://www.feelathomeinbarcelona.com/blog/wp-content/uploads/rambla-poblenou.jpg>



urban neighborhoods. An example of this development is realized in the 22@ district with its focus on technology and innovation and in the 2004 Forum of Cultures with their underlying theme of sustainability.

Site

The site chosen for the urban design charrette proposes an interesting intersection between the Forum site to the North, public beaches to the South, the Mediterranean Sea to the east, and the city to the West. Currently, the site is an undeveloped plot with pedestrian and vehicular access from the city and the Ronda del Litoral expressway. It is the only plot of undeveloped land which connects to the Barcelona waterfront.

The 22@ BCN District is reachable by the Diagonal and the 2004 Forum site is adjacent to the North. Close by is the The Diagonal Mar development. The site is prime real estate which the city would highly benefit from economically.

Proposed Program

Sustainability District

Create an intersection between humans and the natural environment by protecting and revitalizing the seafront and using it as a research laboratory for understanding the future of sustainable needs.

Seafront Revitalization

- Reconstruction of beaches and public space while preserving natural habitats

Site for Institutions focused on environmentally based research

- Inclusion of public spaces for education on sustainable practices

Promotion of green technology and sustainability programs through innovation hub

- Intensives for buildings which meet net-zero energy consumption

- Intensives for sustainability focused businesses and industry

Ground floor retail and commercial

- Required to physically open towards the seafront and park space

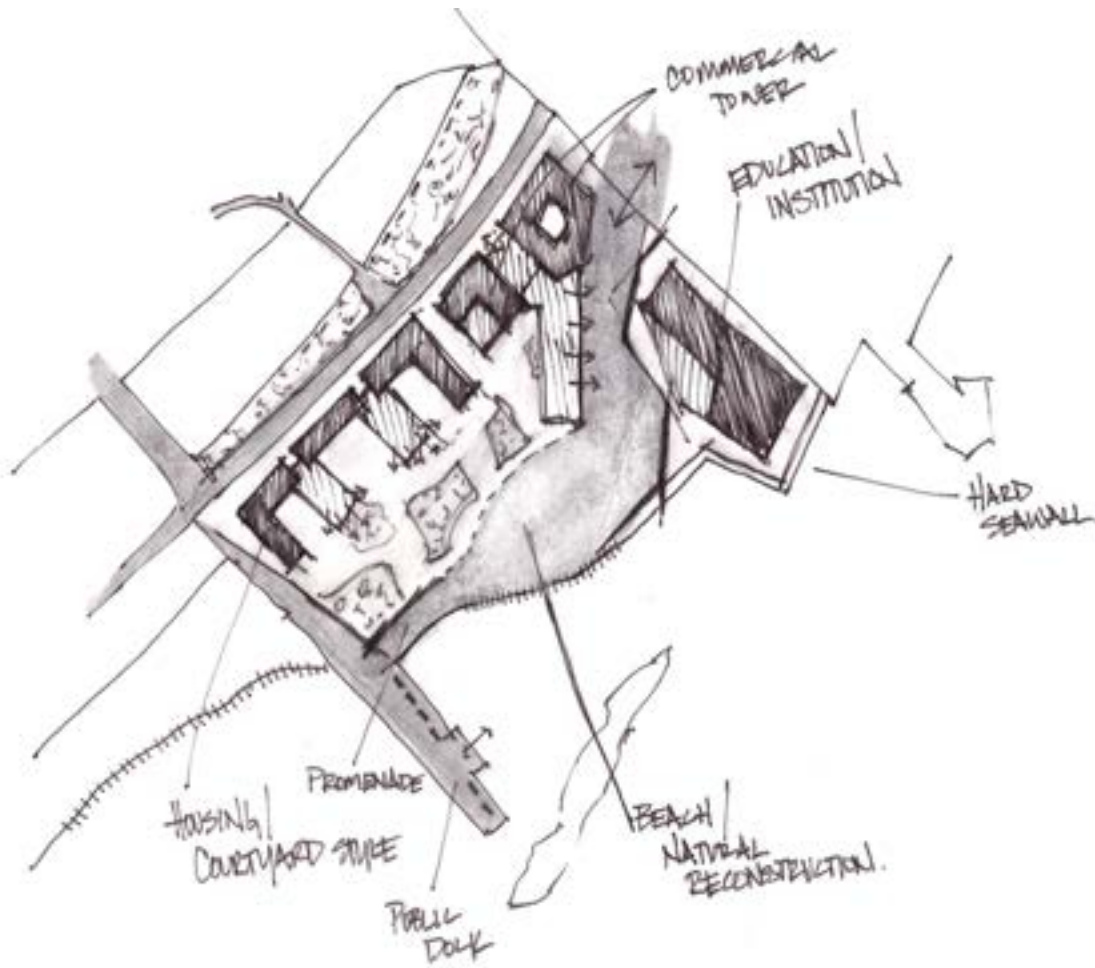
Mixed Income housing

- 1,000 condominium units, including 10% reserved as apartments for low income.

Promotion of city/community identity through scale







Urban Design Proposal - Plan



Existing Site Conditions
Source - Google Maps



Existing Site Conditions
Source - Google Maps



Urban Design Proposal - Axonometric diagram