

# Transformation through Aesthetic Characterization: A Brief Review of Gradient-based Planning Strategy for the El Chorrillo Neighborhood of Panamá

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## INTRODUCTION

El Chorrillo is known as a dangerous place with a bad reputation. Its form has changed radically over the past century through construction, fire, military action and reconstruction. Currently, it is composed of a loose conglomeration of buildings best described as social housing experiments. Significant social and economic challenges exist. Gang violence is prevalent, especially in the high-rise Barraza complex and its environs. The area is a monoculture, housing the poor/working class.

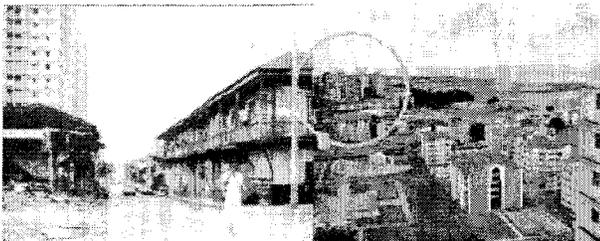


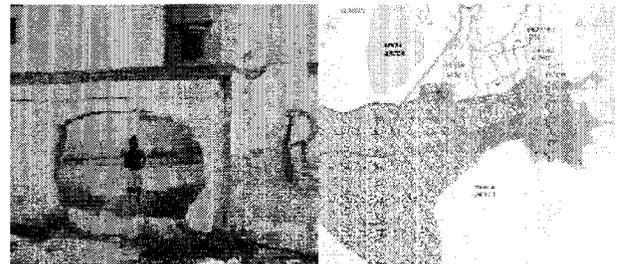
Figure 1 a and b.  
Original housing (post invasion) and new Salomone housing type (post post-invasion, visible by its orange wall) and the Barraza in the orange circle

The studio initially focused on the investigation of uses for a vacant bay-front site, formerly the bus terminal. It was among the properties destroyed in 1989 during Operation Just Cause. Initial reconnaissance revealed a chaotic landscape of partially completed infrastructure, with new housing placed in open areas (seemingly randomly) amid housing and ruins remaining after the invasion. Logically, the tragedy of the invasion created an opportunity to rebuild El Chorrillo as a safe, vital, connective link between the surrounding socio-cultural assets of Casco Viejo, Amador, Cerro Ancon and the Bahía de Panamá. Historic stigma held toward El Chorrillo defeated reason. Leadership at the time accepted the historic preconceptions of El Chorrillo. Reconstruction proceeded with a 'business as usual' approach to restore the neighborhood as one of the very worst

areas of Panamá in terms of quality of life, safety, security, diversity and value. The continuation of an historic squatter system, incomplete infrastructure and institutional neglect maintain an economically nonproductive condition for residents.

The immediate opportunity stems from the return of the Canal Zone properties to the government of Panamá. Historically, Panamá expanded constantly eastward, away from the site. El Chorrillo was literally left behind. This single act transformed the area of El Chorrillo from a neighborhood on the margins that buffers the city from the former Canal Zone into a central location.

### *the 'hole in the doughnut'*



El chorrillo divides Amador & casco viejo

Figure 2. El Chorrillo is located amidst the city's most imageable assets,

The design team prepared a survey of El Chorrillo and its immediate surroundings. Cultural, natural and economic assets were mapped. While the surrounding areas are foci of national and international activity, mapping revealed El Chorrillo as a value-sink amid otherwise valued cultural assets. The negative influence emanating from its central location prevents the social and cultural optimization of any surrounding area. This condition can and should be corrected. An optimal El Chorrillo stands to become a great local asset for the resident populations: an area of safe, desirable, affordable

housing in the heart of the city. In such a location, the prospect of affordable living is generally priced beyond the reach of individuals or families earning modest incomes.

### EARLY PLANS

As an initial charge to the studio, Mayor Navarro recommended a public space, perhaps including a public market to better accommodate existing street markets. The design team realized quickly that 'mitigating decoration' of the area would not lead to meaningful improvement of the area. At worst, this strategy would distract from the core problems of the area's resident monoculture: economic distress, inadequate infrastructure and confused spatial relationships.

The team observed a pattern of haphazard investment in the area that ignored any relationship to intrinsic assets, promoting an environment of isolation, stifling future opportunity. A preliminary plan documenting inherent structures and opportunities was produced as a consensus-building tool communicating conditions and opportunities to the neighborhood residents, designers and government officials. Only through the wide dissemination of clear ideas, can a consensus be achieved. Such consensus is invaluable in facilitating easy approval and broad public encouragement for 'consistent' buildings. The plan acknowledged that any solution to this problem has three parts:

- 1) Provide a logical vision for the long-term good of the area and its residents;
- 2) Absolutely define the size, type, location and quality of potential investments; and
- 3) Provide a mechanism to allow responsible investors to realize short/medium-term gain while fulfilling long-term civic goals.

The task of this essay is to describe the ideas that structure conclusions supporting the first point: creating a logical vision. The format is too short to consider the detailed development of individual investments that satisfy the investment criteria of a broad plan—that is the work of another study, as

is work considering overcrowding, housing and unit requirements, unemployment and economic growth potential. Also necessary is the future development of a rigorous set of design guidelines that reinforce the planning benefits for all. Guidelines must communicate the language of a planning structure that has the potential to add significant cultural and economic value to the land and buildings through an enhanced image of the city.

### BRIEF HISTORY

The area of El Chorrillo ('the little stream or waterfall') was the namesake of a now-lost watercourse that traveled from the base of the Cerro Ancon to the Bahía de Panamá.



Figure 3 a and b: *Lavanderas y the original El Chorrillo*

The stream was notable as the clothes-washing location for the servants of early residents of Casco Viejo. In the 1904 map of C. Bertoncini, there were only fields in the area of El Chorrillo. By 1915, the first three streets of Chorrillo are shown mapped on a plan of the new Exposition expansion of the city. First generation housing consisted of one to three-storey wooden houses. Over time, the area grew to merge with the edge of the Arrabal—the area of the city built outside the defensive walls.

Housing was not well maintained; often large areas burned. From the 1940's onward some small areas were raised (or burned) and replaced with a few notable modern examples of social housing. In the 1980's, during the rule of Manuel Noriega, the headquarters building of the Policia Nacional was surrounded with densely packed 'social' housing.

On December 20, 1989, El Chorrillo was the primary target of a military invasion of Panamá. American forces destroyed a corridor from the bayside to the headquarters building of the Policia Nacional. All but the largest of the surrounding buildings were razed in a matter of hours. After the invasion, the

Ministerio Vivienda filled in many of the open areas with new housing, but the location new housing did not respond to any strategic planning for the future of the area. A large park located at the site of the former Policia Nacional site provided the principal new public space.

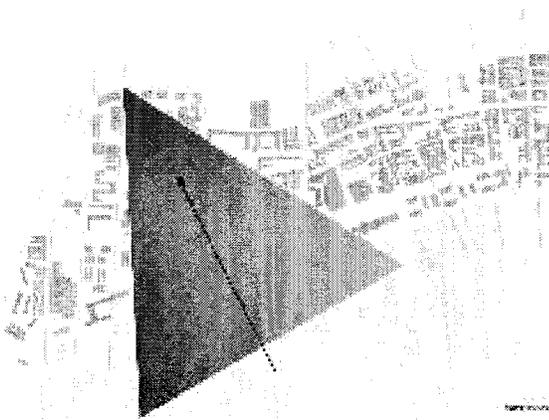


Figure 4: Existing Conditions.

Building patterns demonstrate the soft center of new infill buildings left filling the site of the destruction from the Invasion (left) and older fabric (right). The triangle indicates the principal area of destruction from Operation Just Cause. The arrow indicates the location of the former Policia Nacional headquarters

## INFLUENCE

The site borders five of the most powerfully imageable locations in Panamá:

### Casco Viejo

Casco Viejo is the center of Panamá in the Panamanian collective conscious, whether they use it or not—or visit it or not. It holds the origins of modern Panamá. By definition, Casco Viejo is area of the walled fort-city, strategically located on a point of rock in the Ocean. Areas outside the wall developed as poorer suburbs of the Casco Viejo and maintain this legacy into the present. New elite neighborhoods leapt over the Arrabal and expanded through Exposition (Caledonia), Bella Vista, Marbella, Punta Paitilla and San Francisco (where the city's expansion 'reclaimed' the site of the original settlement, Panamá Antiquo!).

Casco Viejo is recognized as a world heritage site by the United Nations. This is an important relationship for El Chorrillo in two ways. First, it serves

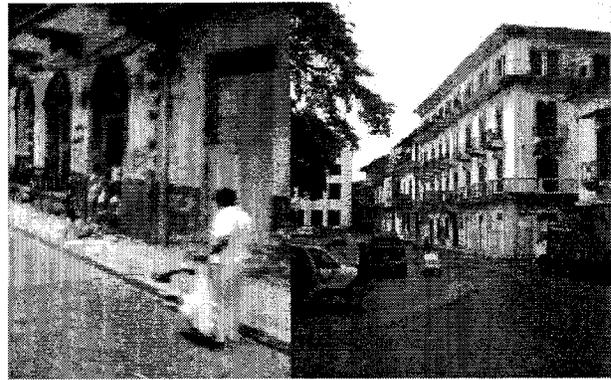


Figure 5 a and b. Casco Viejo Streets

as a neighbor of incontrovertible value, one of two important neighbors framing El Chorrillo. The other framing element is the former Canal Zone, which is a defacto heritage site—containing Cerro Ancon, the Pan American Bridge and Amador. The second relationship is more subtle. It relates to the requirement of World Heritage sties to have buffer areas; the Arrabal is a designated buffer for Casco Viejo. By extension eastern part of El Chorrillo—that area with partially intact fabric—can serve as a buffer between El Chorrillo and Casco Viejo, introducing the idea of a gradient of density and 'historic exactness', that becomes absolute at the boundary of the Casco Viejo.

### Former Canal Zone

- *Ancon Hill (Cerro Ancon)*. Cerro Ancon forms a backdrop to every west view of the City. It rises to a height of almost 200m over the old city of Panamá. The hill is significant symbolically, politically, geographically and formally. In 1964, three Panamanian students were shot by American soldiers for replacing the American flag with the Panamanian.

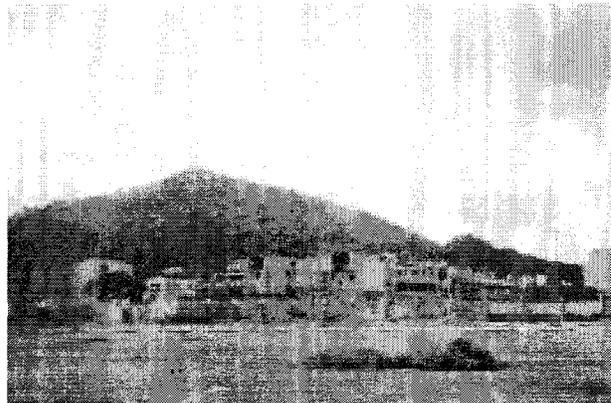


Figure 6. Cerro Ancon from the old terminal site

- Amador. Amador is a peninsula that separates the Canal from the Bahía de Panamá. It is the site of a popular walking/jogging trail. A new Museum of Biodiversity (designed by Frank O. Gehry) is planned as the leading attraction for the peninsula.



Figure 7. Pan-American Bridge

- *Pan American Bridge/Inter-American Highway.* The Pan American Bridge is a hemispheric symbol, symbolically uniting the north and south hemispheres over the Canal. El Chorrillo is located off the first two exits after the landfall of the Pan-American Bridge, making it a potentially desirable location for visitors from west of the City and the former Canal Zone. The first exit after the Bridge is a well marked and significantly scaled interchange leading directly to El Chorrillo's bay-front Avenida de los Poetas.

#### *Bahía de Panamá*

The bay is a direct connection to the Pacific Ocean. Three areas directly engage the water:

- Punta Mala: Punta Mala sports fields can be enhanced in the short term. In the long term, Punta Mala has great promise as the site of a major civic complex, perhaps a courts complex. New sports fields can be integrated into the fabric of El Chorrillo along the proposed green spaces.
- Avenida de los Poetas: The seaside street provides beautiful views of the historic walled city of Casco Viejo, but unfortunately, instead of leading one

to the historic site, Poetas stops abruptly at a la Barraza, a dangerous high-rise housing project. This termination point represents a dysfunction of intuitive wayfinding, mobility, scale and personal safety.



Figure 8. Avenida de los Poetas with Punta Mala beyond

- La Barraza: A series of ten high-rise apartment buildings on the border of El Chorrillo and the Arrabal. These are reputed to be centers of significant gang activity.

Between these valued imageable assets lays El Chorrillo.

#### **AESTHETICS AND CHARACTERIZATION**

El Chorrillo sits at the confluence of five of Panamá's most imageable places: Cerro Ancon, Casco Viejo, the Bahía de Panamá and the Pan-American Bridge. It affects the perception of each area it borders. Thus, it is vitally important land in the future development of the City and surrounding areas. It is a key segment of the Cinta Costera Project, which seeks to join the entire urban coast of the Bahía de Panamá into a continuous urban waterfront parkway.

Casco Viejo is cut off from the rest of the contemporary city by El Chorrillo, Santa Anna and the Marañon, three neighborhoods that are modern extensions of the worst of the old Arrabal—they are the undesirable elements just outside the desirable center. Now they form a barrier that separates Casco Viejo from the rest of the City by areas that considered unsafe for all or parts of the day.

A careful survey of the existing building and street patterns indicated eleven distinct patterns. The building patterns increase in age and density from west to east.

### Existing Gradient of Increasing Density ('civilization')

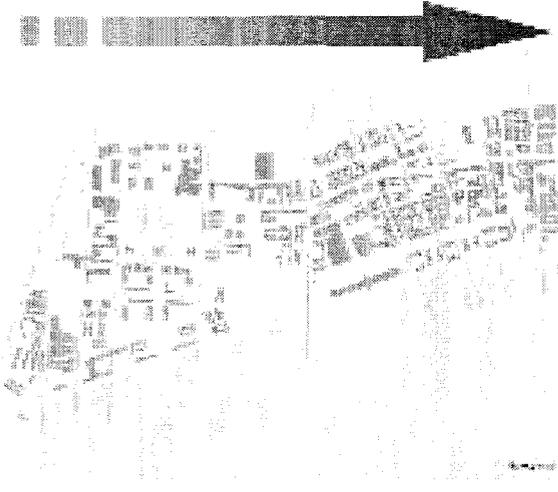


Figure 9: Eleven areas of distinct physical character: density and building type demonstrate a direct relationship.

### Gradient of Increasing Historicity



### and the Inverse Gradient of Contemporaneity

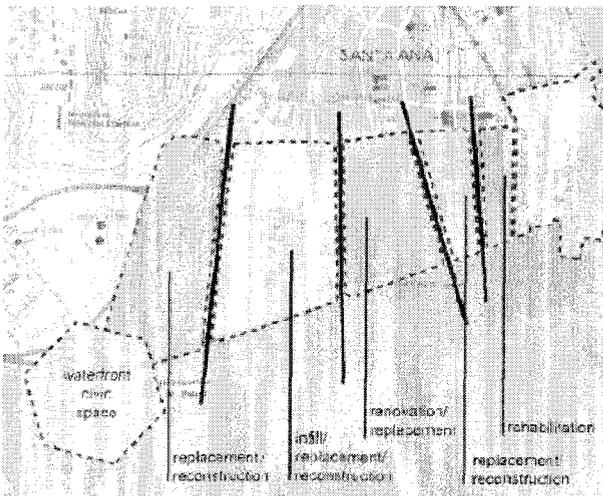


Figure 10 Construction Strategies

Several of these areas can be paired to create five areas, each demonstrating an individual rehabilitation strategy. In this case it demonstrates a west to east gradient of increasing density of historic fabric and an opposing gradient of new expression increasing to the west.

Transitioning reconstruction strategies open opportunities to incorporate additional characteristics such as distinct density of building mass or green space, housing types and aesthetic conditions. Each reconstruction strategy creates opportunities to privilege the logical aesthetic consequences of the gradients that intersect at that point.

### ASPIRATIONS

Presently home to approximately 25,000 people, El Chorrillo serves an important function as an area of affordable housing, located close to employment centers in downtown Panamá.

A significant opportunity exists for El Chorrillo to enter into a positive symbiosis with Casco Viejo, Cerro Ancon and Amador. Like many contemporary cities, Panamá will likely develop a series of centers. The greatest long-range opportunity of the site is its development as a positive 'frame' supporting the re-centering of the City around the cultural assets of Casco Viejo rather than the economic location of the banking district. Given the linear nature of the city—arranged along the Avenida Central/Calle 50, bounded by the Pacific Ocean and the Soberana Park-Forest—a safe and welcoming El Chorrillo will *enable reinvestment* in Casco Viejo and other central areas, providing the additional benefit of retarding sprawl.

Casco Viejo is the cultural heart and origin of the City; it is one of the most intriguing historic areas of the world. Removed from the daily life of the City, the place is less than whole. Casco Viejo must be reconnected as an imperative to the future health of the whole city: El Chorrillo must cease to be the area characterized as "El Chorrillo—dangerous place". It must change character: mostly, it must cease to become a 'thing'. This can be accomplished in many ways; it can become a series of other 'things' or it can become a 'frame'. It could become parergon—as described by Jacques Derrida—a necessary supporting element—a pause between Casco Viejo and Amador—the physical neighbor—but not an

extension—of the Arrabal.

A new plan must search for a system that integrates the area into its surroundings, literally assuming a role as reinforcing and joining the positive identities of its positive neighbors. El Chorrillo is a logical location for intensive, mixed-use development for all Panamanians; focused on a tradition of workforce housing, but open to new civic, commercial and retail uses, housing types and populations.

### GRADIENTS OF CHARACTER AND POSITIVE DIFFERENTIATION

The imageable cultural assets of Cerro Ancon, Casco Viejo, the Pan American Bridge and the Sea present the origins of positive gradients of influence over El Chorrillo. Gradients provide a mechanism to determine existing conditions and project an area's future character.

The analysis shows three related gradients. El Chorrillo's longest gradient of transition extends from the wooded slopes of Cerro Ancon through the area, into the dense clusters of the Arrabal and further into the clear, dense order of Casco Viejo. Two opposing follow this path: Cerro Ancon represents 'wilderness' and Casco Viejo represents 'civilization'. The intensity of wilderness is represented by the Green Gradient; the intensity of 'civilizing' urban fabric is

#### Gradient of Increasing Green Density (wilderness)

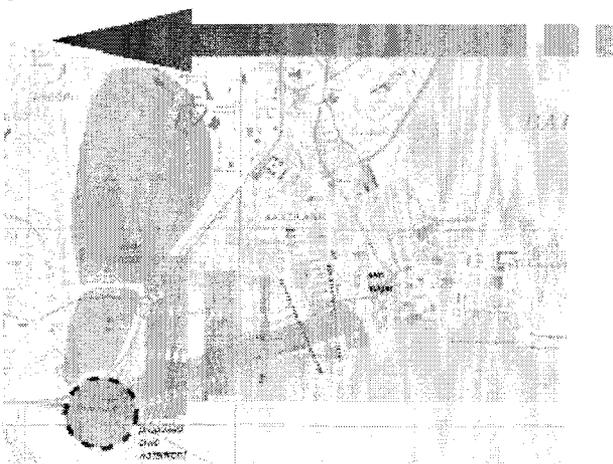


Figure 11. The green spaces relating to the green gradient diminish as they approach Casco Viejo. Buildings transition from 'Objects in the Park' at the foot of Cerro Ancon to the dense fabric of the Arrabal. Casco Viejo terminates the gradient in dense 'historically exact' building fabric.

signified by the mass/density Gradient. These two gradients correlate directly.

The Green Gradient begins symbolically in the 'wilderness' rain forest of Panamá and become fully diminished at the old walled city. Conversely the built mass/density gradient begins at the center of historic Casco Viejo and diminished fully in the rain forest 'wilderness'.

### RESULTS OF THE GRADIENTS

#### Definition and Reuse of the Arrabal

The Arrabal represent an existing gradient condition mediating between the dense buildings of Casco Viejo and former fields of El Chorrillo. The field have now been replaced by building, the buildings removed and then —to a degree—rebuilt again. The Arrabal's mediating structure remains, but the ending condition of open field at El Chorrillo is changed. Calle 21 Oest marks a dividing line between two areas of El Chorrillo. It is thee point where two grids meet. The eastern extension of the 'independent' grid that formed between 1904 and 1915 at the Canal Zone boundary, meets the westward expanding street pattern of the Arrabal.

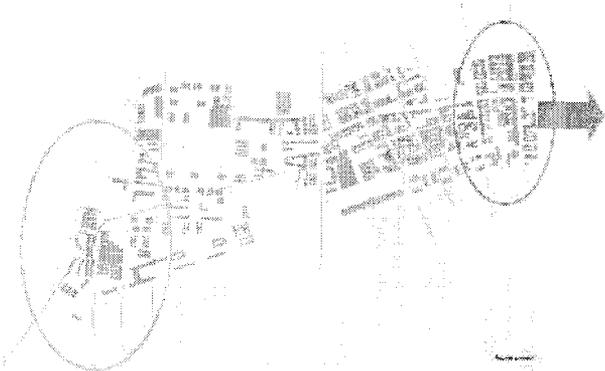


Figure 12: Arrabal (w/arrow to Casco Viejo) and La Bisagra, the hinge between Panamá/El Chorrillo and Amador

This opens the opportunity for El Chorrillo to acknowledge and pick up the gradient of reduced density and stretch it across the site, substituting Cerro Ancon as the 'open space' tat the field of El Chorrillo former occupied. This created a strong planning imperative for the open, foresee quality

of Cerro Ancon and the visible sections of the old canal zone to be vigorously conserved. Cerro Ancon provides a 'vertical park' visible to all residents of El Chorrillo. The selective introduction of new, dense, green spaces into El Chorrillo can achieve an astonishing effect of connection to this vertical park, provided the designs are skillfully executed and maintained.

### THE CONTEMPORARY/GREEN GATEWAY (LA BISAGRA)

Four edge conditions collect to form a node: Amador, the Waterfront, the Pan American Bridge and Cerro Ancon each adjoin the area identified as a potential Gateway to Panamá. We characterized this key node as "La Bisagra" (the Hinge). Casco Viejo is accessible from La Bisagra through El Chorrillo via Avenida A. Ideally, Casco Viejo could be reached from the gateway along the waterfront Avenida de los Poetas.

The planning team developed a proposal for la Bisagra that invests it with a full spectrum of contemporary Panamanian culture. The natural location at the western edge of the city suggests a natural collection and distribution point for people and goods coming from western Panamá. La Bisagra would include a market for produce from the west, a fish market—to take advantage of the Cooperative Pesquera on site—a multimodal transportation transfer center and housing for recently arrivals to Panamá and those with short term housing requirements.

### ACTIVATION OF THE WATERFRONT

The waterfront must be conceived in a manner consistent with Cinta Costera. While the Cinta Costera appears to me more of a concept than a specific plan, the idea that El Chorrillo serves to link Casco Viejo to Amador *and express a unique, positive identity for El Chorrillo*. Thus one gradient—the water gradient—is strongest here and reduces as one moves north from the waterfront.

Ideally, the waterfront is a place for nearly 24 hour activity. It offers tremendous views of Casco Viejo. It is the natural location for a promenade between Casco Viejo and the planned attractions of Amador. It must be safe for all—all the time. Given the cli-

mate of Panamá, nighttime, outdoor activities are desirable and pleasant. It must also be desirable. Existing sewage outfalls must be eliminated—due to the Pacific Ocean's large tidal change, the area in front of the El Chorrillo is exposed for more time than it is covered with water. The presence of raw sewage is unacceptable; moreover, there is a tradition of walking on the nearby tidal flats around Casco Viejo that should be encouraged and desirable. The planning team is aware that significant fill material may soon be available from the dredging of the canal and the construction of a new set of locks. This creates the opportunity for a modification of the shoreline.

### Gradient of INcreasing Public Use (generally)

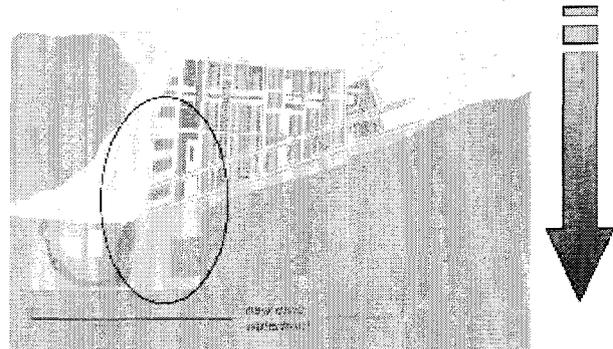


Figure 13 New Civic Waterfront and La Bisagra (oval)

The planning team recommends the relocation of the municipal port to the eastern base of Punta Mala, forming a water connection for la Bisagra that concentrates new public uses and activities on the waterfront. Landfill could be used to form a level-controlled pleasure boat harbor connecting El Chorrillo and Amador. This also represents an opportunity for people to transfer to a local and regional bus system.

The conceptual manifestation of "La Bisagra" brings to attention the potential importance of Punta Mala as a potentially symbolic location for the reconnection of Panamá 'city' and the former Canal Zone, Amador, El Chorrillo and the Bridge

Consistent with the 'la Bisagra' concept, the waterfront would combine activities for rich poor and all in the middle. Activities would include expansion of existing fish restaurants. New features would include restaurants featuring the produce and tra-

ditional food of western Panamá. The promenade would provide eventful connection between Amador and Casco Viejo and house 'non-touristic' destinations for Panamanians.

The plan proposes to enlarge Avenida de los Poetas' thin promenade to a formal paseo. In combination with the new paseo, the plan proposes a new thoroughfare parallel to Poetas. The new boulevard has three purposes. 1) to reroute traffic from Avenida de los Poetas to Casco Viejo, allowing Poetas to close to traffic frequently, perhaps weekly for weekend festivals, while maintaining the expectation of direct automotive connection between the Inter-American Highway and Casco Viejo 2) the new boulevard would produce an active, public 'place' in the heart of El Chorrillo that cuts through and expresses the rich change of conditions planned by the gradient characterization method used in this plan, 3) to provide an internal security cordon between the city and the public waterfront in the event that the waterfront requires enhanced security.

### PRELIMINARY CONCLUSION

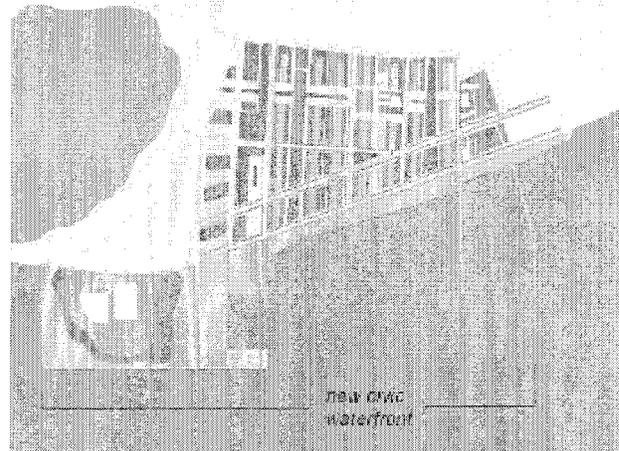
The gradient system creates a nuanced system to begin defining the appropriate type and character of architecture and landscape architecture at each location of the study area. This gradient system maps a unique set of criteria at each point within the neighborhood. This informs the character of new buildings and open spaces designed at the point. This creates a collectively understood map, which creates consensus around planning concepts and provides criteria for assessment of proposed works of architecture. As the gradient promotes significant change, the entire character is differentiated and a new neighborhood can be defined. This is particularly helpful in creating a transformation of character along linear elements such as new greenspaces, the redesigned Avenida de los Poetas and the proposed boulevard. Most importantly, it permits the beginning of differentiation of local building types in the area, reducing the existing monoculture and its moribund social conditions.

### RECOMMENDATIONS

The following recommendations are the results of the gradient-based planning process. The next step

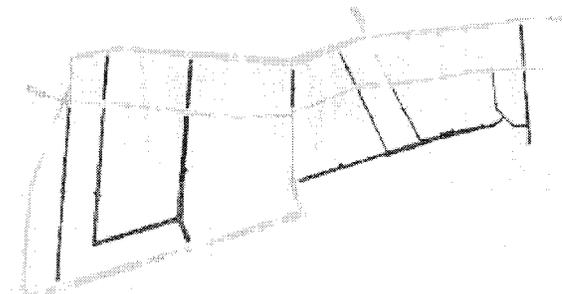
of planning must verify these initial opinions and expand them if they prove valid:

1. El Chorrillo is a sink in the center of valuable assets. It must be repositioned as an asset, or at *least a neutral presence*, in order for the surrounding assets to flourish.
2. A safe, highly visible public area must be established at the waterfront.

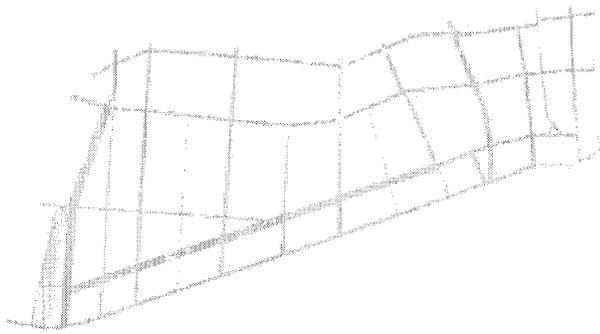


*Proposed new civic waterfront and schematic green plan*

3. The street grid must be completed for ease of movement throughout the area, both internal circulation for convenience and safety, and external circulation. The grid must also promote the pedestrian and vehicular connection of the surrounding cultural assets of Amador, Casco Viejo, Cerro Ancon and direct visual and mobile connection to the waterfront. Importantly, Avenida de Los Poetas and Calle 17 Oest must be linked.

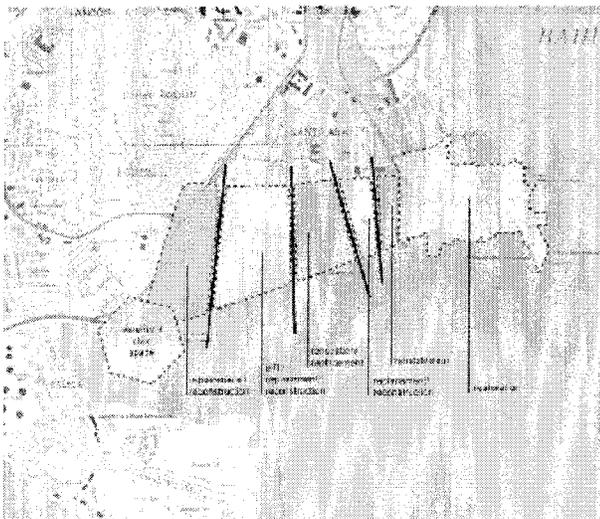


*Proposed Road system*



*Proposed Road system*

4. The monoculture of poor housing must be diminished. A variety of housing types must be introduced that better serve existing residents and provide improved housing alternatives for socio-economic variety in future residents. Thin and remodel existing buildings; larger buildings may adopt a single-room occupancy structure with strong management and heavily present social services.
5. Positive property values must be established through a gradual transfer of squatters from sub-standard housing to desirable, owner occupied housing. This housing should occupy sites on long-term lease or collective ownership.



*Changing perception through name changes, subdivisions and differing redevelopment strategies*

6. New commercial and retail space must be provided for live/work and live-near-work opportunities.

7. Existing economic strength must be reinforced: the Pesquera cooperative, boat repair, boat building, and construction skills. These can be supplemented with job training such as Youth-build and vocational training programs.

8. A comprehensive landscape plan must be commissioned, continuing a variety of controlled public, semi-public and private spaces must be created adjacent to each housing area to promote family and community appropriation of open space.

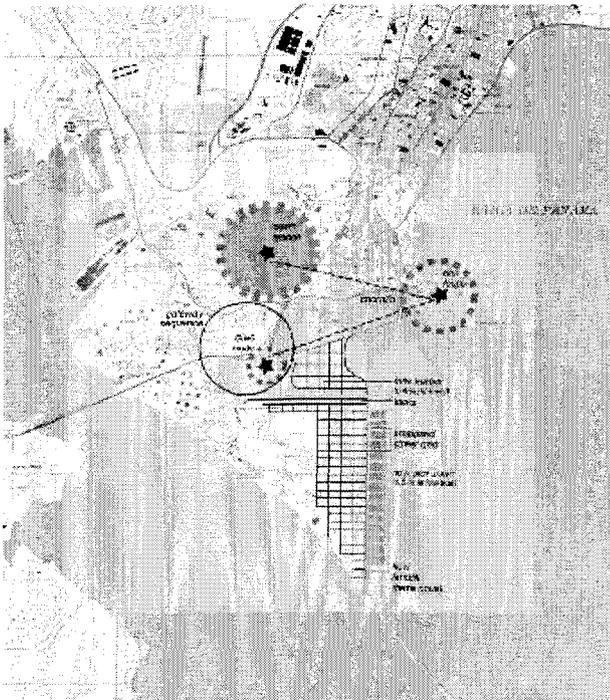


*Conceptual Landscape Strategy (Preliminary)*

9. A long range plan including landfill options must be prepared. These options should concentrate on the continued dilution of the poor housing monoculture with other housing types, recreational spaces and additional retail/commercial space.

## FINAL CONCLUSIONS

Our analysis demonstrates conclusively that El Chorrillo's location between Panamá's most important historic and symbolic resources will continue to inhibit their evolution towards mature social and physical development, public service and economic valuation. Substantial transformations must occur in El Chorrillo in order for Panamá to develop to its fullest potential as a pleasant, productive and positively memorable world city.



*Long-range plans help guide investment to opportunities with short and long-term returns*