ABSTRACT

Title of Document: Layers of Connection: Re-Stitching Riverside

and Locust Point together.

William Story, Masters of Architecture, 2006

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This thesis proposes the intervening of different layers of connections which link together the neighborhoods on the South Baltimore peninsula. The industries on the peninsula, which gave reason for being to the neighborhoods, have disrupted the community fabric and destroyed the connections between the neighborhoods and the waterfront. The use of greenways, tram lines, pedestrian pathways, and zones of activity will reduce the amount of vehicular traffic within the neighborhoods and will provide stronger, more continuous connection that unites the peninsula together with the waterfront and other amenities throughout Baltimore.

This thesis investigates in detail the layers of connection which influence the re-knitting of the urban fabric of Locust Point and Riverside. These layers all come together at the seam between the two neighborhoods. This seam is composed of Southside Market Place, Lawrence St. and a waterfront brown field. This site is transformed into a mixed-use retail development surrounding a series of open spaces.

CONNECTING NEIGHBHORHOODS; THE RE-DEVELOPMENT OF SOUTHSIDE MARKET PLACE, BALTIMORE.

By

William L. Story

Thesis submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Master of Architecture

2006

Advisory Committee: Professor Steven Hurtt, Chair Professor of Practice Gary Bowden, FAIA Associate Professor Brian Kelly, AIA © Copyright by William L. Story 2006

Dedication

I would like to dedicate this thesis to my family, with out their support none of this would have been possible. And to Lindsay Harmon, whose unselfish support and confidence in me over the last year, gave me strength to finish. I love you all.

Acknowledgements

I would like to thank my fellow studio mates that have helped me out through the last two years. I wish you the best of luck in your future endeavors.

A special thanks to those who helped me in the end and to Steve Hurtt, Brian Kelly, Gary Bowden, Chris Rice, and Thomas Schumacher

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Chapter 1: Introduction

"Building on the best of yesterday while articulating a visionary agenda for tomorrow..." -James Cramer



Figure 1 Photo looking towards Locust Point and the Domino Sugar factory.

South Baltimore Peninsula is in the process of change and growth. As the industry, which once dominated the area and spawned the multiple row house style neighborhoods, relocates; it leaves behind a fractured urban landscape. The present-day redevelopment of this condition supports the recent growth of the population within cities and the changing economy. Current revitalization projects by the city are looking for solutions to transportation problems caused by this fragmentation,

1

¹ Design plus Enterprise. P. 46

which will be looked at in more detail in chapter two. Unfortunately, their scope of work doesn't deal with fragmentation in its larger context. This thesis proposes a model for establishing connections which will link the peninsula together and over come the fragmentation created by the industry. These connections will reclaim the peninsula's most defining feature and greatest amenity, the waterfront. This thesis makes the assumption that the cities projects, which deal with isolated issues within the large fragmentation problem, are not substantial enough to provide a strong foundation for the redevelopment of the industrial area.

The cities revitalization plans for the industrial lands have caused a conflict between the existing communities and the developers. The neighborhoods, such as Riverside and Locust Point, have established a strong sense of community throughout their history, and see new development as a threat to their way of life. They feel that the new development has caused more transportation problems and brought new demographics into the neighborhoods that maintain different lifestyles. These neighborhoods, at community meetings, challenge new developments on a constant basis. As the industrial land becomes more and more vacant, the more pressure there is to redevelop the land to satisfy demands of growing city. Change is and will continue to happen on the South Baltimore Peninsula, regardless of protest from the neighborhoods. This thesis assumes that redevelopment which provides more density, greater city connections, and enhances neighborhood and city amenities, is more important for the growth of the peninsula than the individual neighborhoods. This assumption stems from a larger desire to promote inner city growth and revitalization over suburban sprawl.

This thesis does not promote the idea that the individual neighborhoods are irrelevant or negate the importance of their "strong sense of community". The positive elements of the neighborhoods have made the peninsula an attractive place to live and the ideal location for redevelopment. This thesis relies on the "best of yesterday" to generate a foundation for the redevelopment of the industrial land and establish a subtle transition between old and new. Through architecture, compensating amenities will be designed that afford the neighborhoods a place for their daily activities. These architectural elements such as a community theatre will take a crucial step towards creating a pedestrian-friendly 24/7 area to serve the cultural needs of the community, provide jobs for indigenous artists, attract healthy commercial growth in the neighborhood, and improve the quality of life for its residents. These compensating amenities in relationship with the larger layers of connections will act as a catalyst for the urban regeneration.

This "best of yesterday" approach is similar to Urban Design Associates (UDA) design approach, "accentuate the positive and eliminate the negative". They "seek out the best local precedents and incorporate those characteristic elements into the fabric of the new, linking past and future to create harmony across the continuum of space and time."²

Good urban design, according to UDA, addresses a project through various scales of design and intervention, which have a relationship to each other. Different levels such as: City, Districts, Neighborhoods, Blocks, and Individual Buildings,

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² The Urban Design Handbook by Urban Design Associates. UDA is a Pittsburgh-based national practice that engages citizens creatively to revitalize city neighborhoods, transform public housing, bring new life to downtowns and waterfronts.

serve as a "kit of parts" that will help to understand the urban elements and the complexity of the project.(12) This thesis will utilize this "kit of parts" approach to investigate possible connections throughout the peninsula and what effect they will have on the thesis site and building; keeping in mind:

"The urban design process functions like a camera lens. When you first look, the image is blurry, out of focus. At each step of the process....the image comes into tighter focus until the ultimate resolution is sharp and a design solution emerges."

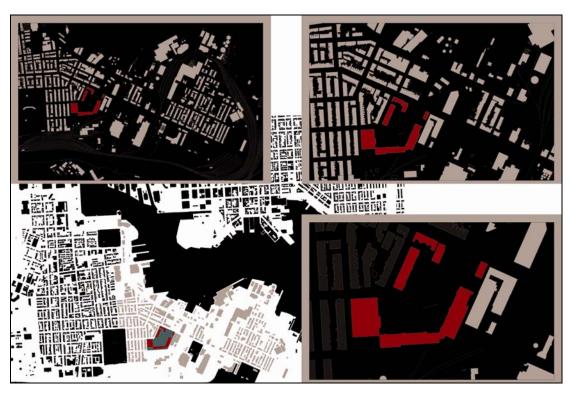


Figure 2 Thesis Site "Kit of Parts" Scales 1:100,1:200,1:400,1:600

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³ The Urban Design Handbook. P. 56.

Chapter 2: Current Projects

Baltimore Comprehensive Plan

The city of Baltimore is in the process of developing a new Comprehensive Master Plan that will direct the economic growth and quality of life initiatives for the next 10 years. The plan is divided into four categories: *Live, Earn, Play and Learn*. The first category, *Live*, is concerned with strengthening neighborhoods, elevating the quality of urban design and improving land use and improving environmental and public resources. This thesis accepts all of the points under the *Live* category and these viewpoints will receive special attention:

- 1. Maintaining and promoting clean and attractive neighborhoods;
- 2. Improving design quality of the built environment;
- 3. Increasing public awareness of urban design issues;
- 4. Promoting mixed-use development and reinforcing neighborhood centers;
- 5. Promoting expansion and improvement of public transportation.

Earn is concerned with economic climate where qualified job-seekers meet the growth opportunities in the market, through training, access, and intentional collaboration. Under the Earn category, the major issues are: strengthening identified growth sectors; building the city resident workforce; and improving access to jobs. This thesis will attempt to highlight the third issue by investigating:

⁴ Baltimore's Comprehensive Plan. http://www.ci.baltimore.md.us/government/planning/compplan/index.html

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- 1. Enhancing transportation choices for the city residents;
- 2. Encouraging creative parking and traffic management solutions.

Play is concerned with residents getting the most out of their free-time.

Play's major points are: celebrating and enhancing the enjoyment, appreciation and stewardship of Baltimore's heritage and cultural resources; improving the entertainment and night life experience for area residents; and increasing the attractiveness of parks, greenways, landscaped property, natural areas and stream valleys. This thesis will focus closely on these issues:

- 1. Increasing live entertainment venues;
- 2. Increasing local participation in city recreational activities.

Learn makes education and opportunities for Baltimore safer and smarter for the long term. The big issues under Learn are: improving public school facilities; capitalizing on untapped potential of large number of higher education institutions; creating educational and vocational opportunities; and ensuring safe and convenient connections between students and schools. This thesis will focus on:

- 1. Improving and expanding learning opportunities for all residents;
- 2. Creating safe routes to schools.

These four elements of the city's Comprehensive Plan will remain underlying objectives throughout this thesis investigation. It is important that the re-development of Southside Market Place be based on a similar framework plan as the rest of the

projects for the city, for the purpose of maintaining a level of cohesiveness and unity for the vision of Baltimore.

Currently, the Planning Department of Baltimore is developing two projects that have a direct relationship to the site of this thesis. There exist a Revitalization Plan for Key Highway and a Comprehensive Plan for Locust Point. This thesis site hard boundary is the joint between these two projects, and its soft boundary overlaps both projects. Understanding the goals of each project will allow this thesis to better integrate all three projects under a unified vision. The aim of this thesis is to close the gap between these two projects and the communities involved and to show that an integration of the two into a larger framework plan will enhance the ideas set forth by the city of Baltimore.⁵

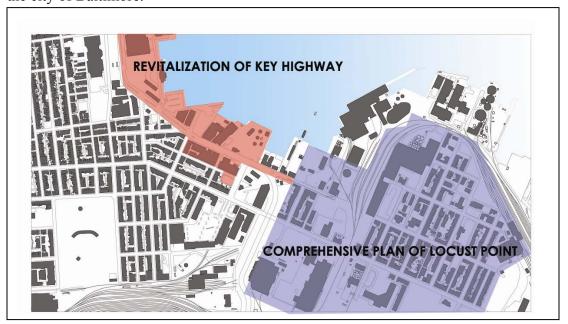


Figure 3 Diagram of the two Department of Planning Projects

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⁵ Baltimore's Comprehensive Plan. http://www.ci.baltimore.md.us/government/planning/compplan/index.html

Revitalization of Key Highway

Key Highway today is a major traffic artery that links US 95 to downtown Baltimore. It runs parallel to the waterfront, acting as a barrier between the residential neighborhoods and the harbor. Its form is primarily low-rise, large lot buildings typical of a highway strip. Much of the land that fronts Key Highway is either industrial or underdeveloped. Over the past decade, there have been attempts to redevelop these areas, but they are generally residential projects and lack the elements to create an active pedestrian zone along Key Highway. They also make no attempt to make connections to the waterfront.



Figure 4 Key Highway is 105' wide.



Figure 5 Recent Residential development. The buildings do not engage the street and acts as a second barrier along Key Highway, not allowing view to the water.

The city has developed a vision to handle the revitalization of Key Highway and to solve the problems associated with re-development of the area. The major goals of this vision are:

- 1. Creating a world-class waterfront which has access and views from Key Highway;
- 2. Turning Key Highway into a destination by creating a more dense, lively mixed-use area.

The plan calls for a view corridor to the water along Lawrence Street and an open space at the end of the street. This strategy for access will have a significant effect on this thesis site. Any development will have to accommodate the Museum of Industry and Sailing Club that currently resides on the site terminating at Lawrence St. The plan also requires ground-floor activity (retail, office, lobby) along Key

Highway to promote a more pedestrian-active zone. This will affect the type and the extent of mixed use retail in the redevelopment of Southside market Place.⁶

Comprehensive Plan: Locust Point

In its Comprehensive Plan for Locust Point, the Department of Planning recommends a balance between residential and industrial development. It also proposes development guidelines to help preserve the neighborhood character and quality of life.

Today there exists approximately 35 acres of industrial and undeveloped area surrounding the residential part of Locust Point. Industry has dominated the Locust Point peninsula, and while there is a change in the global economy, which is affecting many industries in the area, the Port-related activities will continue. A goal of the comprehensive plan is to stay in context with the new Maritime Industrial Overlay Zone which preserves economically valuable industries in North and South Locust Point. To attract new residents and businesses, the plan will redevelop industrial sites that exist within the Locust Point Neighborhood and the inner loop of Locust Point.

The comprehensive plan also addresses traffic issues. The major issues today are:

 Growth of commuter traffic to new employers, particularly at key intersections;

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⁶ Revitalization of Key Highway" Department of Planning, City of Baltimore

2. Potential traffic impact of projected future development.

Based on future growth in Locust Point, studies predict approximately 90% increase in traffic volume over current traffic conditions. The plan recommends roadway improvements for the Key Highway Extension and Andre Street that will disperse traffic to three main entry-exit points: Fort Avenue, the Loop Road, and Andre Street. These moves will help to overcome Locust Point peninsula's "one-way-in, one-way-out" condition.

Based on the findings of the Department of Planning, this thesis addresses the neighborhood character of Locust Point. While it predicts higher density (currently 35-40 units per acre even though the area is in a zone R-8, which allows up to 58 units per acre), it does not predict any change in the neighborhood's small size, relative isolation, and proximity to industry. This thesis plan maintains the size of the neighborhood, but enhances the "strong sense of community" in order to overcome the issues of isolation and proximity to industry that exists in Locust Point. ⁷

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^{7 &}quot;Comprehensive Plan: Locust Point" Department of Planning, City of Baltimore http://www.ci.baltimore.md.us/government/planning/images/locust%20point%20plan.pdf "Towards a Community Plan, Locust Point, Baltimore, Spring 2002", Urban Studies and planning, UMD

Chapter 3: Site

<u>History</u>

Baltimore is the 12th largest city in the United States and is 5th among United States' ports. It is nick-named the "Charm City" because of its residents' well-established concern for the quality of life. Baltimore's early development was influenced by its geography, it is the farthest west Atlantic port making it attractive to shippers. Its development is also influenced by the economy and cultural life. Baltimore has clearly defined neighborhoods and a strong sense of local identification. On August 8, 1729 Baltimore officially became a town, and its reason for being was due to economic needs. Maryland farmers wanted a more local customs house that took advantage of the harbor, instead of having to transport their goods to previously established ports farther away. Baltimore became a shipping/merchant town which thrived on foreign trade.

During the War of 1812, Baltimore and Fort McHenry served crucial roles in preserving America's independence. When regular economic activities continued after the war, Baltimore played an important part in the national economic expansion to the west. Baltimore invested in the Baltimore & Ohio (B&O) Railroad. The railroad and industrial port shaped the urban fabric of Baltimore all the way up into the present day.

During the 20th century, Baltimore became an economic pendulum. The fire of 1904, the Great Depression, World War II, the "suburban flight" all had a negative impact on Baltimore's economy. The city bounced back each time. With the help of

municipal, business, volunteer partnership, and federal programs, the city is currently in the mode of urban renewal.⁸

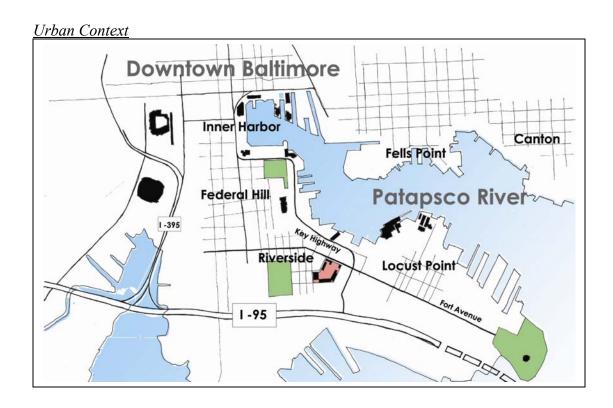


Figure 6. Map of South Baltimore peninsula.

In the larger urban context, Southside Market Place is located on the land south of the Baltimore Harbor, between the Northwest and Middle branches of the Patapsco River. The peninsula is a collection of small neighborhoods, consisting of Federal Hill, Federal Hill South, Otterbein, Sharp-Leadenhall, South Baltimore, Riverside, Key Highway and Locust Point. It also has two industrial zones, Spring Garden Industrial area and Locust Point Industrial area. The site is located south of Fells Point and is approximately 1.5 miles from the Inner Harbor and downtown attractions.

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⁸ History of Baltimore. http://pages.baltimorecountymd.com/history.htm

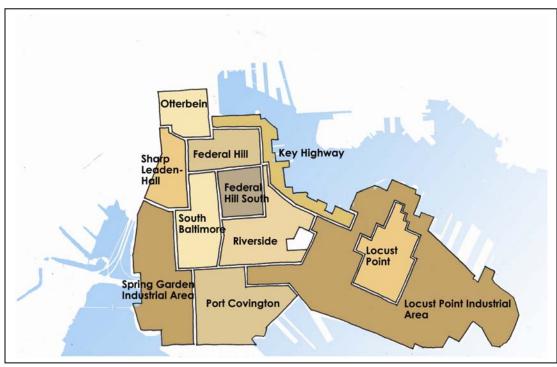


Figure 7 Neighborhood diagram of South Baltimore peninsula



Figure 8. Figure Ground map of South Baltimore Peninsula. 1:500 The dark highlighted area represents Riverside and Locust Point. The shaded area is Southside Market Place.



Figure 9. Green space network on the peninsula. Parks include Federal Hill Park, Riverside Park, Latrobe Park and Fort McHenry Park.



Figure 10 Major street network of Baltimore. Reveals the regular gird system that organizes the city. It also reveals the relative residential areas verse the industrial areas on the peninsula.



Figure 11 Major traffic artery through the peninsula. Fort Ave connects the whole peninsula together along the east/west axis terminating with Fort McHenry Park. Key Highway connects 95 to downtown Baltimore along the north/south axis.



Figure 12 Major Highway system through Baltimore

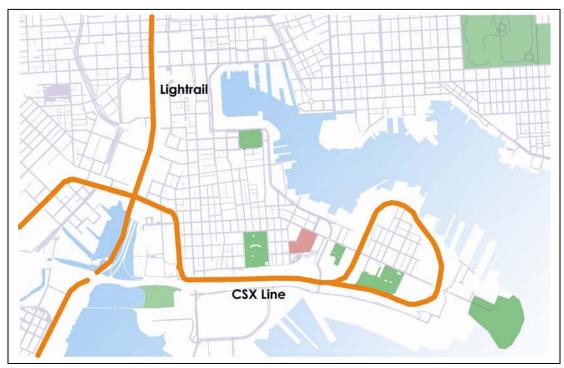


Figure 13 Rail system through Baltimore. The Light rail line connects the city of Baltimore with BWI airport. CSX line is an industrial rail line.



Figure 14 Water taxi stop diagram. There exists a water taxi stop at the Museum of Industry, which is directly north of this thesis site.

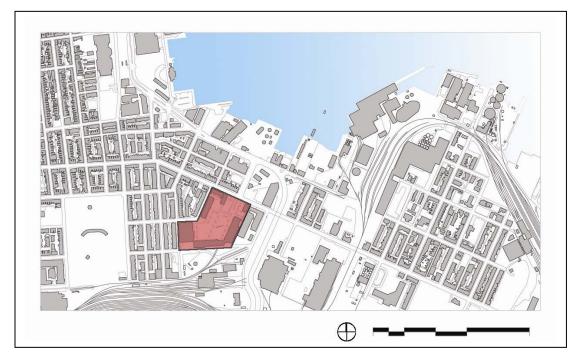


Figure 15 Map of Surrounding Neighborhoods 1:400

The surrounding neighborhoods of Riverside, Locust Point and Key Highway have the most direct relationship and influence on this thesis. The communities in these areas are the target users for the new development, so understanding their existing conditions will influence the re-development of Southside Market Place. These neighborhoods form the soft boundary. They are a mesh of residential and industrial buildings. Fort Ave is the major spine which organizes these neighborhoods together while Key Highway acts as the divider.

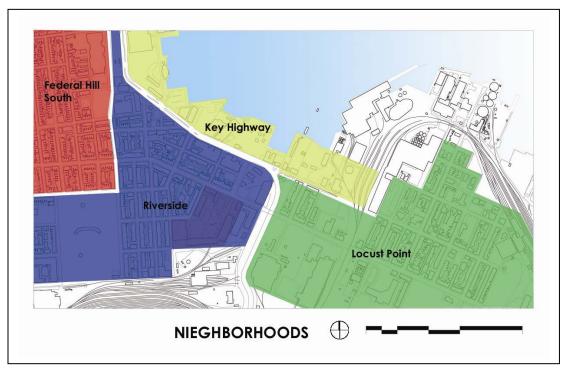


Figure 16 Neighborhood Diagram. Show edges of neighborhoods and relationship to site.

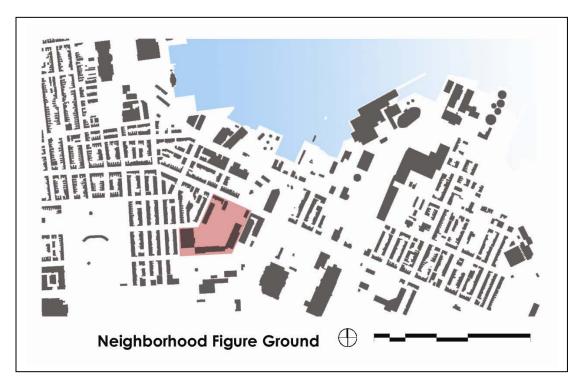


Figure 17 Figure Ground

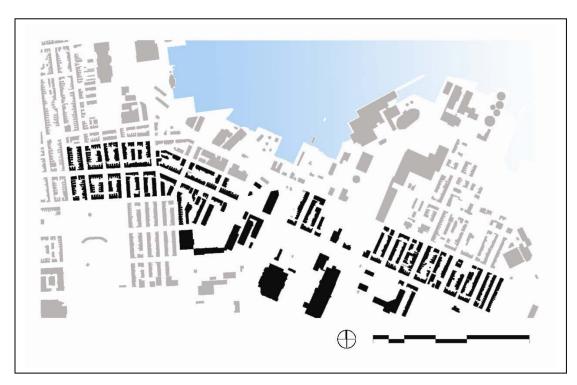


Figure 18 Figure Ground of Fort Ave, as link between Riverside and Locust Point.



Figure 19 Figure Ground of Industrial Buildings.

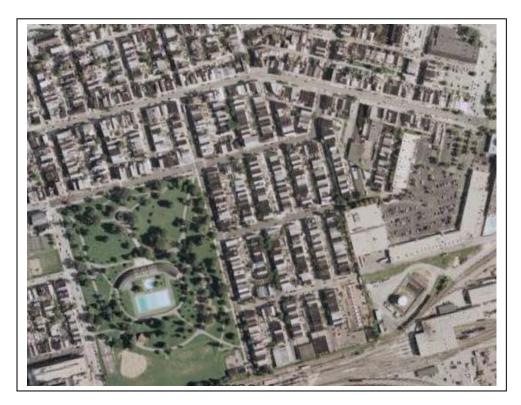


Figure 20 Aerial Photo of Riverside

The area west of the site is comprised of Riverside. It is a small residential neighborhood comprised of typical row houses and corner businesses. Most buildings are around 35' tall and 15-25'wide. Most of this area was built during 1900-1920 as a residential area for people who worked in the surrounding industrial area. Randall Street Christian Church is the only church in the neighborhood and acts as a meeting hall as well. While there are no other public buildings within this neighborhood, they do have Riverside Park. The park is primarily a recreational area with a pool complex, but also serves as a gathering space for neighborhood sponsored events. The closest school is Thomas Johnson Elementary School located just west of Riverside Park. While Riverside boundaries may be clearly defined by streets, most

people visiting the area would have no knowledge of actually being in Riverside. It blends in with the fabric of Federal Hill and South Baltimore, and fits architecturally with these neighborhoods. This condition is not true for the area east of Southside Market Place.





Figure 21 Photos (left) typical row house (right) riverside park

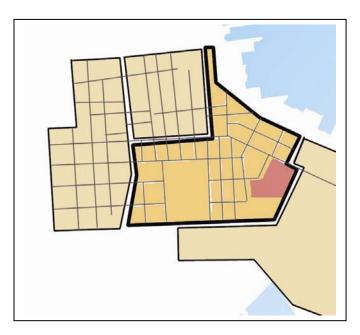


Figure 22 Diagram. Riverside grid blending in with surrounding context

	Riversid	e	2502 25		,
	4000	****			***
Census Data	1990	2000	Pct of Total	Change	% Change
Population					
Total Population	6,212	5,459	100.0%	-753	-12.1%
White	6,068	5,214	95.5%	-854	-14.1%
Elack	57	101	1.9%	44	77.2%
American Indian	8	4	0.1%	-4	-50.0%
Asian	61	89	1.6%	28	45.9%
Other Race	18	12	0.2%	-6	-33.3%
Two or More Races ²		39	0.7%	39	
Hispanic ³	86	63	1.2%	-23	-26.7%
1150				-	
Age					
0 - 4 Years	342	247	4.5%	-95	-27.8%
5 - 11 Years	452	276	5.1%	-176	-38.9%
12 - 14 Years	216	97	1.8%	-119	-55.1%
15 - 17 Years	204	114	2.1%	-90	-44.1%
18 - 24 Years	611	415	7.6%	-196	-32.1%
25 - 34 Years	1,280	1,608	29.5%	328	25.6%
35 - 44 Years	958	822	15.1%	-136	-14.2%
45 - 64 Years	1,204	1,183	21.7%	-21	-1.7%
65+ Years	945	697	12.8%	-248	-26.2%
Family Household Type ⁴					
Families	1,569	1,240	100.0%	-329	-21.0%
Married Couple Family	1,113	904	72.9%	-209	-18.8%
With Persons Under 18	480	296	32.7%	-184	-38.3%
Male Householder, No Wife Present	97	95	7.7%	-2	-2.1%
With Persons Under 18	29	47	49.5%	18	62.1%
Female Householder, No Husband Present	359	241	19.4%	-118	-32.9%
With Persons Under 18	174	112	46.5%	-62	-35.6%
Housing Characteristics ⁶					
Total Housing Units	2,778	2,841	100.0%	63	2.3%
Occupied Units	2,549	2,616	92.1%	67	2.6%
Owner Occupied	1,935	1,898	72.6%	-37	-1.9%
Renter Occupied	614	718	27.4%	104	16.99
Vacant Units	229	225	7.9%	-4	-1.7%
For Sale Only	36	59	26.2%	23	63.99
For Rent	75	52	23.1%	-23	-30.79
Not for Sale or Rent	118	114	50.7%	-4	-3.49

Figure 23 Neighborhood Statistical Area: Riverside. *Courtesy of Baltimore City Planning Department

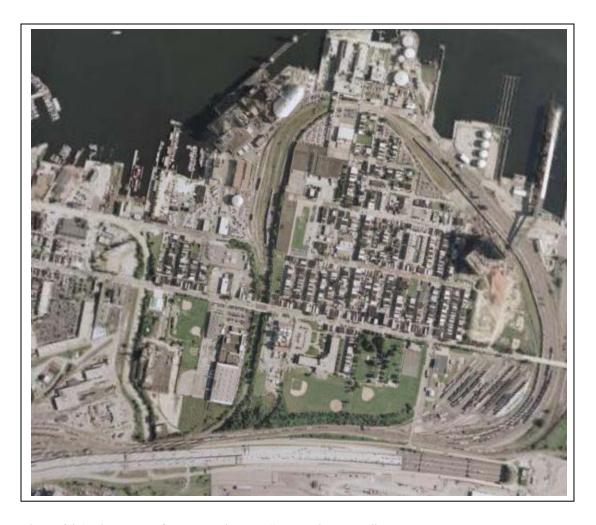


Figure 24 Aerial photo of Locust Point and "Industrial Island"

Locust Point Neighborhood does not blend in with the existing fabric of the peninsula. While it has the same typology of housing and a comparable street network, it is cut off by an industrial area. The boundary of this particular industrial area is from Key Highway to the CSX and from the water front to 95. Not only is it a barrier contextually, but physically as well. Both Key Highway and the CSX rail line cut through the topography of the peninsula, forming a small industrial island. This island is actually a part of a larger ring of industrial buildings that isolate the residential neighborhood of Locust Point.

L	ocust Po	int			
Census Data	1990	2000	Pet of Total	Change	% Change
Population	1990	2000	Per or rotar	Change	>= Change
	2,105	4.000	100.0%	-176	-8.4%
Total Population White	2,105	1,929	97.3%	-1/0	
Black		1,876	0.5%	-210	350.0%
American Indian	0	10	0.5%	10	
T THE THE STATE OF				- ''	
Asian¹	10	7	0.4%	-3	
Other Race	1	10	0.5%	9	900.0%
Two or More Races ²		17	0.9%	17	
Hispanic ³	9	23	1.2%	14	155.6%
Age					
0 - 4 Years	144	111	5.8%	-33	-22.9%
5 - 11 Years	184	141	7.3%	-43	-23.4%
12 - 14 Years	66	50	2.6%	-16	-24.2%
15 - 17 Years	59	56	2.9%	-3	-5.1%
18 - 24 Years	161	161	8.3%	0	0.0%
25 - 34 Years	381	288	14.9%	-93	-24.4%
35 - 44 Years	293	305	15.8%	12	4.1%
45 - 64 Years	420	474	24.6%	54	12.9%
65+ Years	399	343	17.8%	-56	-14.0%
Family Household Type ⁴					
Families	576	497	100.0%	-79	-13.7%
Married Couple Family	412	333	67.0%	-79	-19.2%
With Persons Under 18	198	129	38.7%	-69	-34.8%
Male Householder, No Wife Present	47	45	9.1%	-2	-4.3%
With Persons Under 18	21	26	57.8%	5	23.8%
Female Householder, No Husband Present	116	119	23.9%	3	2.6%
With Persons Under 18	50	60	50.4%	10	20.0%
Housing Characteristics ⁵					
Total Housing Units	950	979	100.0%	29	3.1%
Occupied Units	889	895	91.4%	6	0.7%
Owner Occupied	680	663	74.1%	-17	-2.5%
Renter Occupied	209	232	25.9%	23	
Vacant Units	61	84	8.6%	23	
For Sale Only	16	26	31.0%	10	
For Rent	13	16	19.0%	3	
Not for Sale or Rent	32	42	50.0%	10	

Figure 25. Neighborhood Statistical Area: Locust Point. *Courtesy of Baltimore City Planning Department

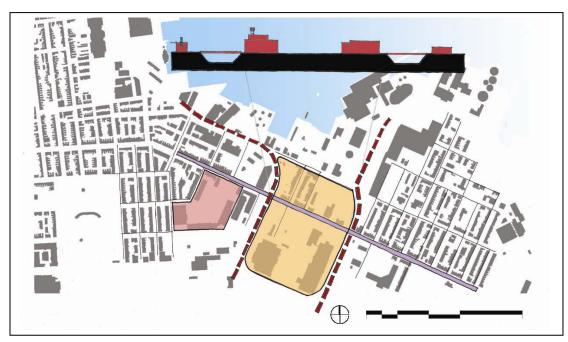


Figure 26 Diagram representing the industrial island created by Key Highway and the CSX Line

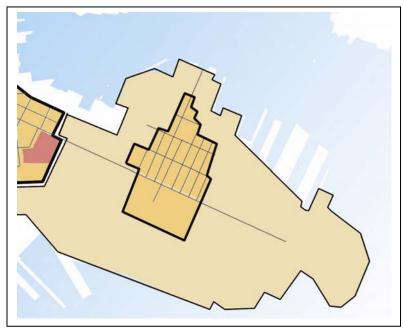


Figure 27 Diagram representing the relationship of residential area to the industrial area of Locust Point.

Historically, Locust Point has a direct relationship, physically, economically, and socially to the history of the Port and its industries. The port was established in 1706 which would make it older than the city. This area was also a point of entry for European immigrants. The entry was at the end of Andre Street and was the second largest after Ellis Island. The historic Fort McHenry, established in 1800, has played a large role in protecting Baltimore during the Wars of Independence and is where the Star Spangled Banner was written.

The settlement of Locust Point was originally know as Whestone Point which became an official town in 1706. It was laid out with a traditional gird system with blocks perpendicular to the water front. By 1782 all 76 lots were sold. It is believed that the strong sense of community in Locust point is due in part to the German, Irish, and Polish immigrants that remain in Locust Point to work in the port industries. These immigrants helped to establish the neighborhood bars, restaurants and churches that still characterize Locust Point today. The fabric of Locust Point has change very little since the 19th century. Today Locust point has three churches, a Recreation Center, Fire department and Francis Scott Key Elementary/ Middle school. It has a large collection of organizations and clubs.

Neighborhood Analysis

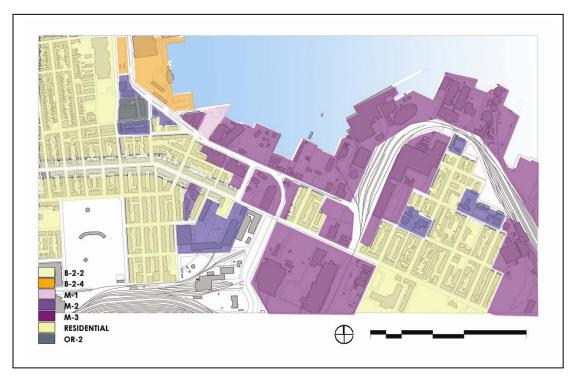


Figure 28 Zoning Map of Riverside, Key Highway and Locust Point

Most residential areas are Zoned as R-8, which the City of Baltimore defines an area as single family detached homes at 21.7 units per acre, single family attached townhouses at 58 units per acre, and multi-family housing at 58 units per acre. Schools, recreational facilities and churches also fall under R-8. Community Business and Residential are zoned as B-2-2, and are primarily located along Fort Ave. The thesis site used to be zoned as M-2, General Manufacturer, but today is zoned as B-2 Community Commercial.⁹

 $^9\ Zoning\ Map.\ \underline{http://www.benfrederick.com/Info/ZoningSum.pdf}$

28

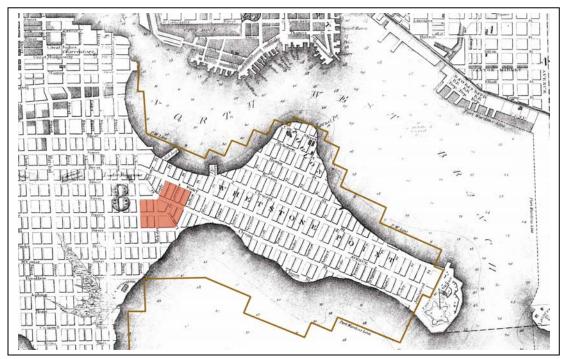


Figure 29 Historical Map

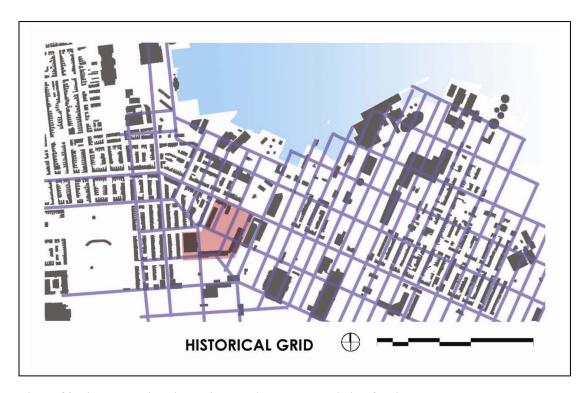


Figure 30 Diagram. Historical grid superimposed on existing fabric

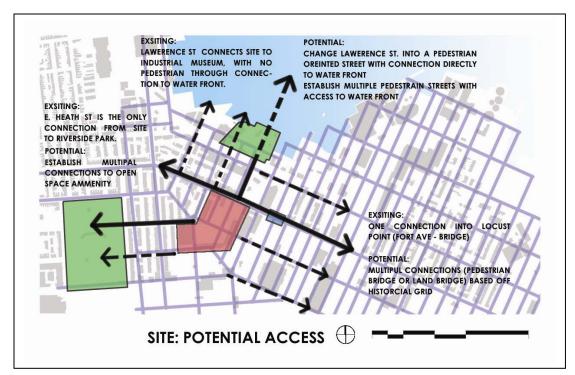


Figure 31 Diagram showing access from the neighborhoods to the site





Figure 32 Photos. (left) connection to Riverside Park (right) connection to Locust Point

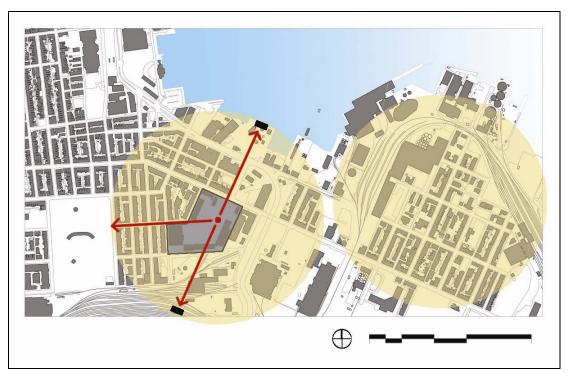


Figure 33 Five minute walking radius. 1:400 This diagram shows that both Riverside and Locust Point are a quarter mile long. It raises the issue that the existing rail lines and the water taxi are a 10 minute walk apart. That is not an acceptable distance between mass transit stops.

Site Analysis



Figure 34 Aerial of Southside Market Place

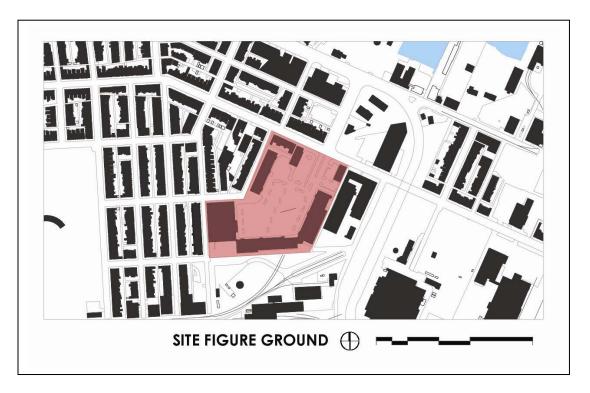


Figure 35 Site Figure Ground 1:200

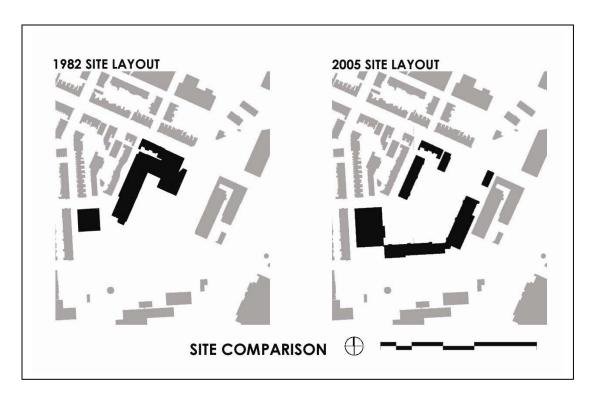


Figure 36 Site layout comparison. 1:200

The site is a typical example of auto-oriented strip mall found in most cities. The stores are arranged in a row with a sidewalk in front and it surrounds a large parking lot. It faces the major traffic arteries of Fort Ave. and Key Highway. The site is self-contained with two pedestrian connections to the surrounding neighborhoods. It is characterized by its service-oriented program which is anchored by the grocery store. The architecture is relatively plain, making no attempt to blend in with the surrounding context. Two positive aspects: the site contains a pedestrian connection to a neighborhood park and articulates an entrance to the site is marked by landscape design and signage.¹⁰

¹⁰ Shopping Center Definition. http://en.wikipedia.org/wiki/Shopping_centre



Figure 37 Site Diagram for Dimensions and Program.

Site =	424,452 sf
Total Acre =	9.7
Buildings on Site: Large Box Retail.	Single Story,
Building Size	
A: 43,750 sf B: 18,368 sf C: 6,572 sf D: 5,356 sf E: 34,424 sf F: 22,844 sf	
Total SF =	131,314 sf
% of Site Built =	31%

Merritt Athletic Clubs
 McDonalds

3. Whetstone Point Vet Hospital

- 4. Blockbuster Video
- 5. World Cleaners
- 6. Mustang Pizza & Subs
- 7. Hunan Empire Chinese Food
- 8. Totally Tan
- 9. Subway
- 10. Metro Supermarket
- 11. Provident Bank of Maryland
- 12. Sally Beauty Supply
- 13. Radio Shack
- 14. Pet Value
- 15. GNC
- 16. Great Clips for Hair
- 17. Huntington Learning Center
- 18. Popeyes
- 19. Your Nails
- 20. Southside Chiropractic
- 21. Norwest Financial
- 22. Drs. Dennis, Lowder, Dart & Muneer
- 23. Rite Aid Pharmacy
- 24. Knight Laundromat
- 25. Family Dollar
- 26. Goodyear

Figure 38 Tables (left) site dimensions (right) site program



Figure 39 Photo. View of architectural character of strip mall



Figure 40 Photo. View of Grocery Store

These images show the architectural character of the strip mall. It is a very plain aesthetic that surrounds a large parking lot. There is a covered loggia for pedestrian movement along the perimeter. The grocery store is the anchor for the strip mall.

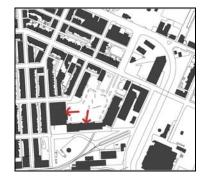


Figure 41

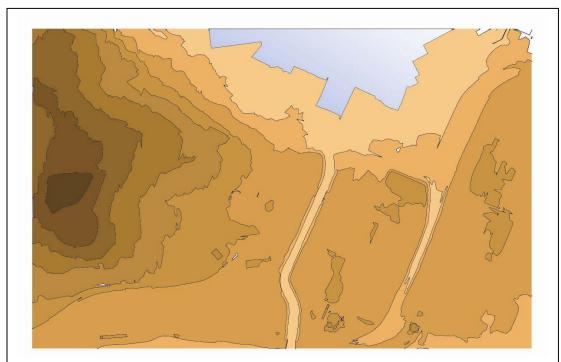


Figure 42 Topography Map of Site 1:300

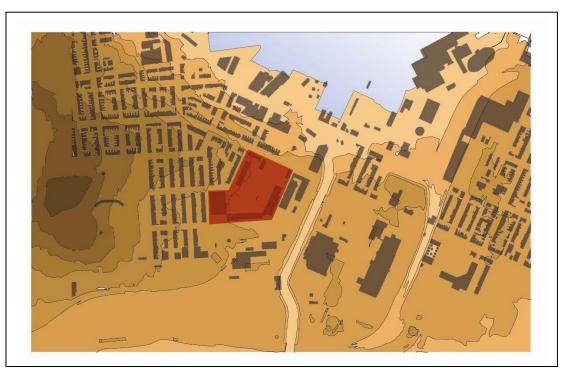


Figure 43 Topography Map with context 1:300



Figure 44 View Corridor Diagram. The site has views of the water front, the Industry Museum, Riverside Park, and the Domino Sugar sign, which is an icon for Baltimore.



Figure 45 Photo. View towards waterfront.



Figure 46 Photo. View of Domino Sugar sign.

These images show views towards the water front and the Domino Sugar Factory from the site. The sign is an iconic element that can be used as a locator throughout the city. These view corridors should be maintained throughout the thesis.

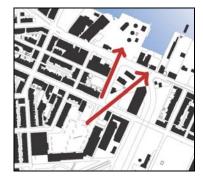


Figure 47



Figure 48 Photo. Pedestrian Gateway into the site.



Figure 49 Photo. Pedestrian plaza

These two images look at the pedestrian plaza that connects the site to Riverside Park. This is the only pedestrian space on the site. It has minimal landscaping and a few outdoor tables that service Subway. The brick wall, which frames the entrance helps to establish a gateway, unfortunately the park connection terminates on a parking lot.



Figure 50



Figure 51 Photo. Front/back condition on the west side of the site.



Figure 52 Photo. Alley way condition on the east side of the site

These photos look at the east/west boundaries of the site. There is a front/back issue on the west side of the street, which has row house fronting the back side of the retail buildings. Rows of trees are used to hide the back of the retail. A service alley defines the east boundary of the site.



Figure 53



Figure 54 Photo. Looking south from the entrance.



Figure 55 Photo. Looking north into the space.

These photos look at the open space in the recently re-developed Foundry on Fort, adjacent to the east boundary of the site. These images show how to create an intimate pedestrian space which is used to collect people before distributing them into the buildings. This space contrast sharply with the pedestrian space that links the site to the park seen above.

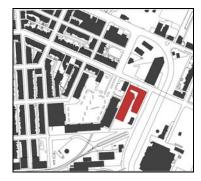


Figure 56



Figure 57 Photo. Museum of Industry



Figure 58 Photo of waterfront.

These images address the north side of Key Highway. The Museum of Industry is an amenity for the area and will be used to generate connections to and from the waterfront. The area east of the museum, has a fence that cuts of pedestrian access to the water front. There is a gate that allows vehicular traffic to access a parking lot behind the fence.

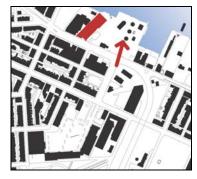


Figure 59



Figure 60 Photo. Looking south toward entrance to site.



Figure 61 Photo. Looking west along Key Highway

These images look at the conditions of the two major streets that provide access to the site, Key Highway and Lawrence Street. Both streets lack pedestrian-related activities and are dedicated to the movement of vehicles. Key Highway is 100' feet wide with 5 lanes of traffic. Lawrence Street is 75' wide with 4 lanes of traffic.



Figure 62



Figure 63 Photo. View of Fort Ave crossing over Key Highway.



Figure 64 Photo. View of Key Highway carving through the topography.

The images reveal Key Highway carving through the land and separating Riverside from Locust Point. It creates a canyon of vehicular traffic coming from I-95. The bridge is the only access into Locust Point. These picture highlight the biggest barrier to re connecting the urban fabric.

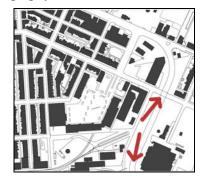


Figure 65

Chapter 4: Precedent Analysis

Urban Strategy Precedents



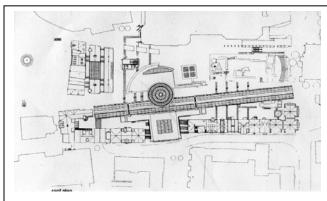


Figure 66 Photo (left) aerial photo of building spine (right) Site Plan of "Romerberg"

Schirn Kunsthalle

Am Romerberg, Frankfurt am Main, Germany

Architects: Bangert, Jansen, Scholz and Schultes

Constructed: 1983-1985

The main goal of the Schrin was to resonate with the old city pattern. Until WWII, the site maintained its medieval character and served as a town center. After the bombings, more than 2000 medieval buildings were destroyed; amazingly the cathedral and Romer town hall remained intact. The two buildings sat opposite each other with a large void separating them for almost 40 years. The bombings did lead to the discovery of ancient roman ruins directly in front of the cathedral. Due in part to the discovery of these ruins, the city left the area untouched because of the importance of the Romerberg (Roman Hill).

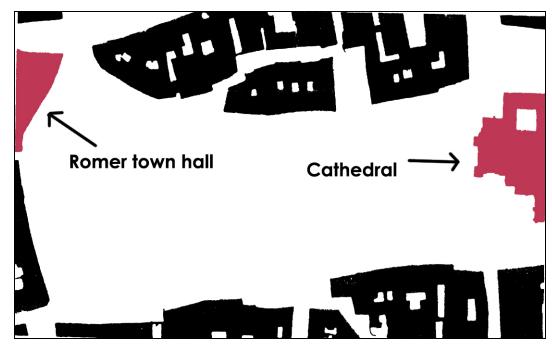


Figure 67 Romerberg, Frankfurt after WWII

It wasn't until the 1970's, when the city started to regain its traditional commercial eminence that the city started to make proposals for the re-development of the area. The architects who won the competition allowed the medieval fabric to be the generator for their design.

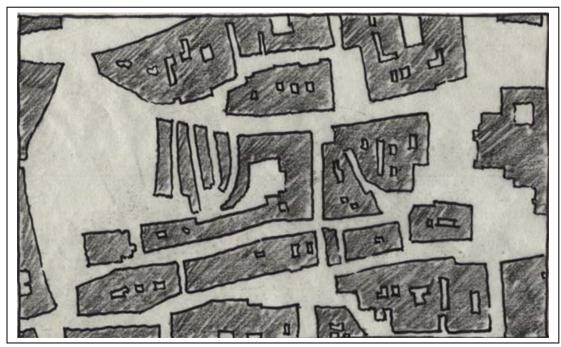


Figure 68 Medieval city figure ground

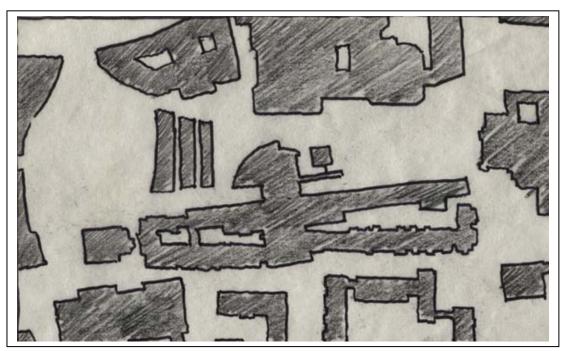


Figure 69 Modern city figure ground

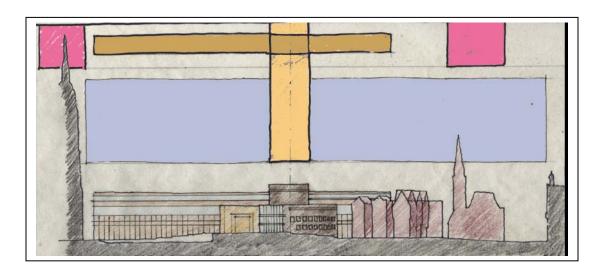


Figure 70 Section and Parti. Shows a bar building making a physical and symbolic connection between the cathedral and town hall/church. The rotunda piece and auditorium form a cross axis that generates two open spaces, one for the roman ruins and one for the town hall.



Figure 71 Street comparison. The medieval city had a street that connected the two churches together. The bar building symbolizes this street and connection.

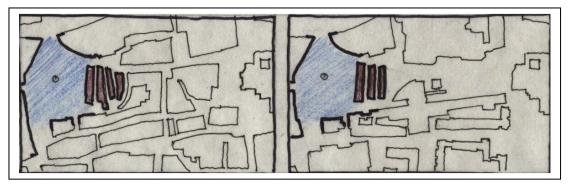


Figure 72 Medieval re-construction. This medieval housing block helped to form the Romerberg square. The new plan re-constructs a mixed-use housing block in the same manner to recreate the square.

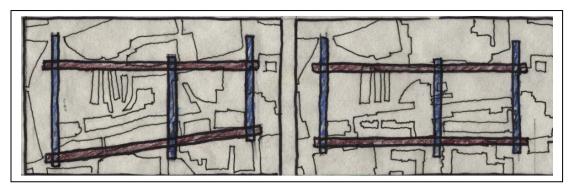


Figure 73 Street network comparison. The new design recreates the pedestrian movement systems that existed in the medieval city.

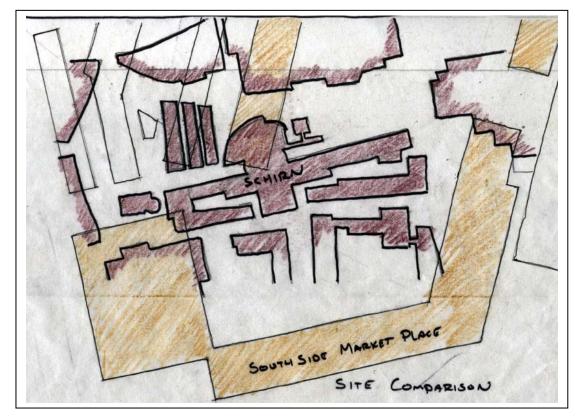


Figure 74 Scale comparison. This diagram shows the size of the Schirn with in the site of the Southside Market Place, Baltimore.

Through its example of re-knitting the fabric back together on an open site, the Schirn Kunsthalle guides the framework plan for this thesis. The physical and symbolic connection of the main civic building generates ideas on how to make connections between Riverside and Locust Point. Also, the use of medieval

typologies in the modern city, helps to re-establish the "the sense of place" which will be helpful in figuring out typologies and aesthetics that enhance the strong sense of community that exists in both neighborhoods today. ¹¹

11 Schirn. Davey, Peter "Rationalsim is not enough" The Architectural Record,

Piazza della Signoria/ Uffizi Pllace Florence, Italy



Figure 75 Aerial Photo of Piazza della Signoria and the Uffizi Place (P2)

Piazza della Signoria in Florence represents a compound square built during the middle ages. It was originally designed to be an entirely self-contained urban center. It made no attempt to make a connection to the river, which was an element that sustained the city. The Palazzo Vecchio extrudes into the piazza, causing the compound condition. This move established two unique spaces that relate to different urban conditions. During the Renaissance, statues placed strategically to orient,

disorient and reorient a person within this compound space. Also during this time, Giorgio Vasari designed the Uffizi Palace, a practical and an architecturally symbolic link between the town center and the River Arno.

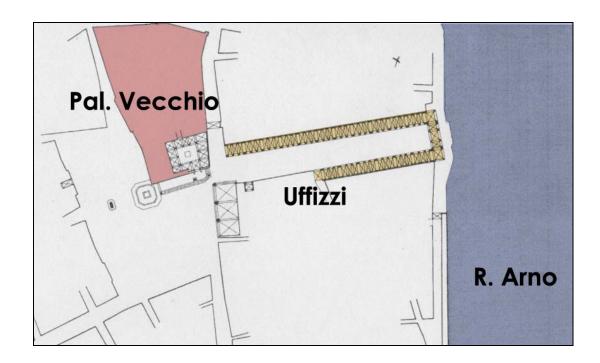


Figure 76 Parts of a whole

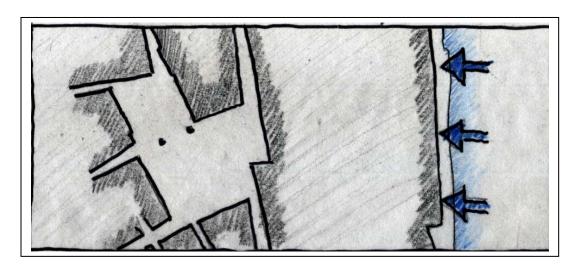


Figure 77 Piazza della Signoria as a self-contained space with no relationship to the water.

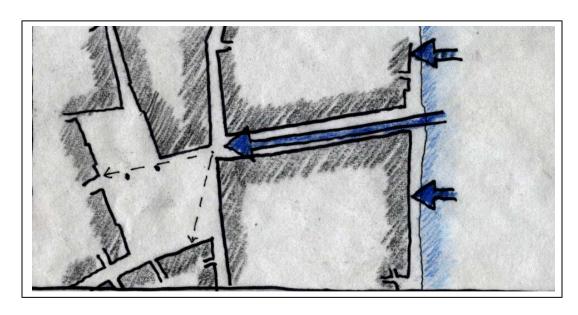


Figure 78 Piazza della Signoria relying on the Uffizi to make a connection to the water

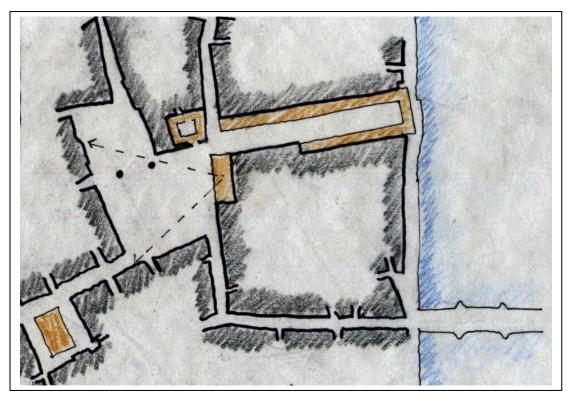


Figure 79 Public space and Semi-Public space

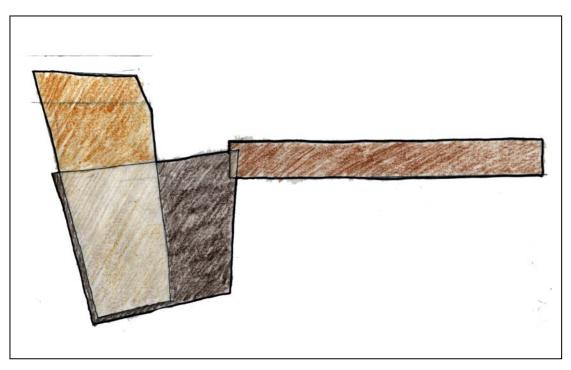


Figure 80 Parti of compound spaces

The overlapping spaces within the Piazza della Signoria allow for intimate and unique spaces within themselves, but also act as parts of a whole. The use of compound spaces has the potential to allow for smaller more intimate spaces for each neighborhood, while using the overlapping quality to bring them closer together. The Uffizi Place is a strong example of making a direct pedestrian connection to the water front. This strategy could help the neighborhoods make a strong connection to the water front and to the rest of the city. 12

¹² Zucker, Paul Town and Square: From the Agora to the Village Green.

Bacon, Edmund Design of Cities

"The Shaft at Nancy" Nancy, France

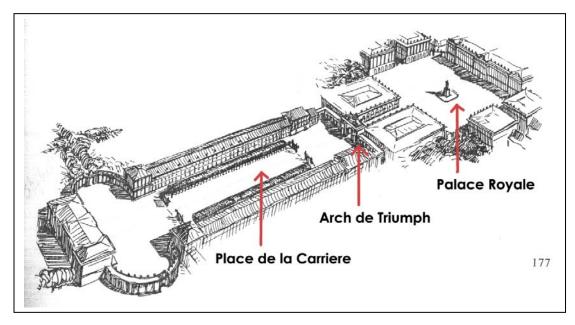


Figure 81 Aerial View of the shaft. Courtesy of Design of Cities

"A shaft of space" is the way Edmund Bacon refers to the series of spaces which organize the civic core of Nancy. Renaissance Nancy consisted of two parts: the medieval city and the renaissance city which were separated by fortifications.

With the removal of the fortifications, the use of a traffic, residential, and pedestrian square along the east/west axis helped organize and connect the two parts of the city. The shaft also created a cross axis with the new regional movement system that ran north/south through the traffic square, Place Royale. From the Place Royale, one moves through an Arch de Triumph, which alludes to the fortified wall that divided the city, to the residential square, Place de la Carriere. The shaft is terminated with the Government Palace and a pedestrian square. The "shaft" creates a sequential architectural experience, both vertically and horizontally.

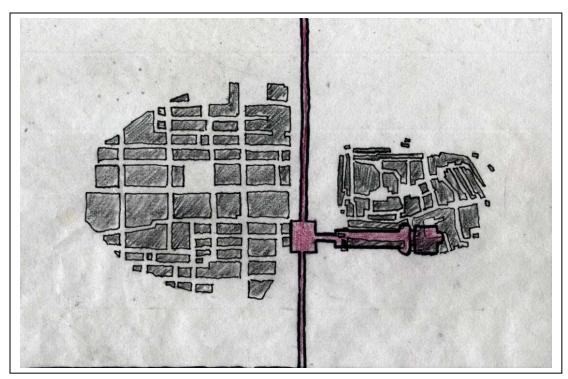


Figure 82 Figure ground of the renaissance and medieval parts of Nancy. Overlapping the plan is the regional movement and the cross axis of sequences of squares.

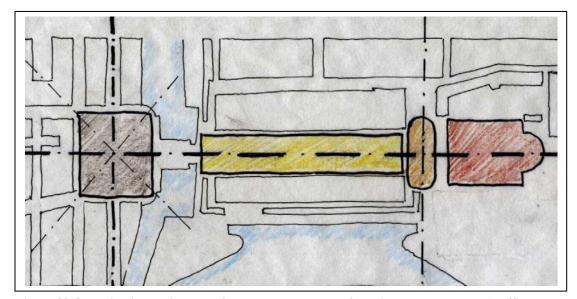


Figure 83 Organizational diagram of the squares. From left to right, Place Royale (traffic square), Place Carriere (residential square), pedestrian square in front of Government Palace, and Garden.

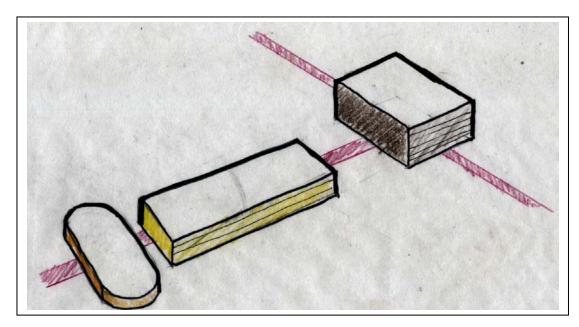


Figure 84 Axon showing density along the sequence of spaces and their relationship to types of squares.

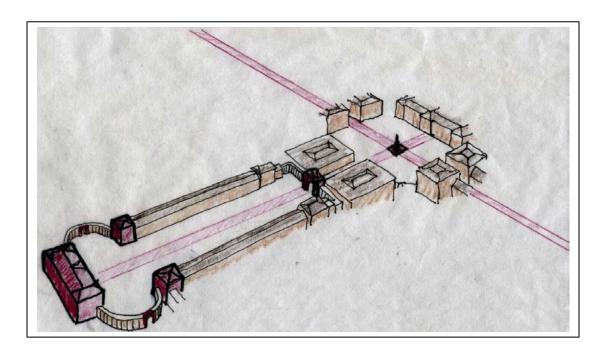


Figure 85 Heroic and supporting elements that help to define the unique squares.

The sequence of squares offers an organizational strategy for helping to connect Riverside and Locust Point together. Both cities had some barriers to overcome. In Nancy it was the fortified wall, and in Baltimore it is Key Highway that needs to be resolved. Nancy is a good example of how different types of squares with different architectural characteristics can be related to one another. The use of heroic and supporting elements to define each space, can guide the process of defining different spaces for different program elements for this thesis. The regional movement as a generative agent and how it affects the development of the "shaft" provides insight on how Key Highway and Fort Ave can generate an organizational tool for the site. ¹³

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Bacon, Edmund Design of Cities

¹³ Zucker, Paul Town and Square: From the Agora to the Village Green.

Program Precedents

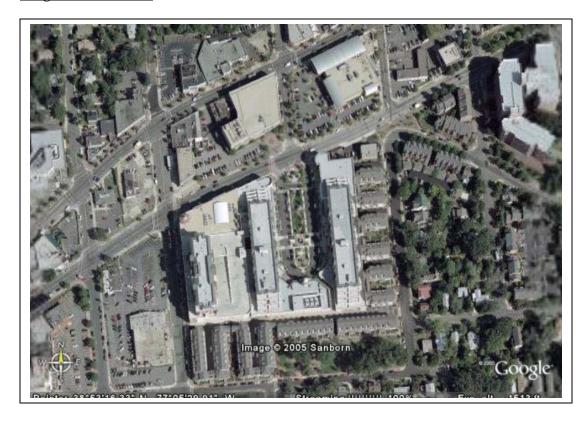


Figure 86 Aerial photo of site





Figure 87 Photo (left) Market Commons (right) Urban Plaza

The Market Commons Clarendon, Virginia

This project is an example of the relationship between diverse higher density, mixed-used buildings and lower density residential neighborhoods. The Market Commons is a mixed-use development that attempts to link the Clarendon Corridor Area by achieving a unified visual image creating attractive urban public and private spaces that will attract maximum desirable use while being sensitive to the surrounding neighborhoods. The community realized the potential to have a distinct character that served as a linkage and transition area for the Clarendon Corridor.

The Market Commons includes 500 residential units, 300 apartments, 87 town-homes, 100,000 s.f. of office space, 240,000 s.f. of retail space, and 1200 parking spaces. This program happens on ten acres of land, which is located two blocks from a metro stop and is within three miles of downtown D.C. and Georgetown.

Some of the major objectives of The Market Commons were:

- Establish a cohesive, urban design framework
- Preserve the integrity of lower density residential neighborhoods
- Establish a balanced and well defined pedestrian and vehicular circulation system
- Foster the development and provision of a diverse mix of uses

The plan develops Clarendon Blvd. to have a "Main Street" feel with mixeduse commercial/ retail. It places mixed-use development around a central plaza that anchors the site at the intersection of two streets. This urban plaza connects to all parts of the development. The taller apartments are set back from the façade of the retail to open up the plaza even more. The program of the plaza allows for big name retail mixed with Mom and Pop shops.

Town houses wrap around the periphery of the mixed use development as a transition from the dense town center to the single-family development. The town houses, along with the public green space provide a smaller scale and quieter public space that complement the denser urban plaza. Surface parking was replaced by a parking garage that is wrapped by the mixed-use development.

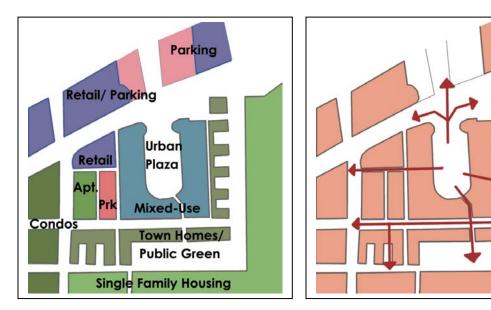


Figure 88 Diagrams (left) program (right) transition zones

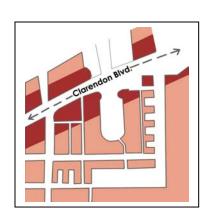




Figure 89 (left) Main Street Diagram (right) Photo of Clarendon Blvd. Clearly define street edge

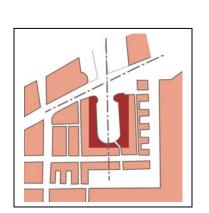




Figure 90 (left) Urban Plaza Diagram (right) Photo of Urban Plaza. Apartments stepping back

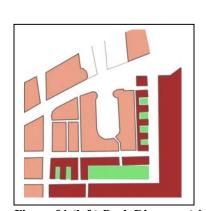




Figure 91 (left) Park Diagram (right) Photo of Town House around Public Park



Figure 92Site Section. Shows higher density mixed use stepping down to lower density residential

The Market Commons site is comparable in size to Southside Marketplace, both are approximately 10 acres. Southside Marketplace has approximately 130,000 s.f. of retail space, compared to Market Commons 240,000 s.f. Potentially, 110,000 s.f. of retail could be added to the program for the redevelopment of Southside Market Place. This provides an example of site layout with relationship to a main street (Fort Ave compared with Clarendon Blvd.) and the low density residential areas. The manner in which The Market Commons handles the stepping down of density to relate to the context demonstrates an approach to providing higher density buildings next to the 2-3 story row houses in Riverside and Locust Point. The multiple transition corridors between the urban plaza and existing condition

highlights the importance of providing more access and making stronger connections to surrounding amenities, which is a major goal for this thesis.

Chapter 5: Design Analysis

Design Goals

The purpose of this thesis is to explore physical connections that overcome transportation and industrial barriers imposed throughout South Baltimore peninsula. The city of Baltimore is currently considering two renovation projects: Key Highway and Locust Point, which begin to address these barriers. While the projects address a particular problem, they do not consider the potential improvement of entire peninsula. This thesis's main underlying goal goes beyond the building, the site, and the framework plan. It establishes a series of connections that addresses an individual issue while connecting the neighborhoods and linking them to the other amenities such as the ball parks and Inner Harbor. These connections will help to solve transportation needs, pedestrian movement, and linking of amenities.

Once these layers of connection have been established, this thesis will generate a framework plan that will incorporate these connections to re-stitch the urban fabric of Riverside and Locust Point. These connections will overcome the barriers of Key Highway and I-95 and will provide more access to Locust Point and the waterfront. Analyzing the fabric of both neighborhoods and the transportation systems will help establish a framework plan which alleviates traffic problems within the neighborhood caused by commuters and allow for a more pedestrian-active neighborhood.

The next goal is to establish a mixed-use retail center where the different layers of connections overlap. While access into and through the site will be based on

types and increase the density, which will break from the typical row house typology of the surrounding neighborhoods. This break allows for a more diverse collection of people, which leads to a wider range of activities, that will be fitting for a site energized by the overlapping of connections. The diversity of people will have an impact of the types of retail for the new development. This thesis is committed to the existing retail, which is appropriate for the needs of the existing neighborhoods, but will introduce 100,000 s.f. of additional retail to accommodate the different demographics moving into the neighborhoods. The new total s.f. will be comparable to that of Market Commons which covers the same acreage

The last goal is to establish a building program that can anchor the different layers of connections and provide a new amenity to the surrounding neighborhoods. The building through architecture will articulate and define spaces that correspond to the different connections. The building will have indoor and outdoor spaces that can accommodate a wide range of neighborhood activities.

To handle the different problems and complexities of this thesis, the framework plan will break down into a series of precincts to allow the investigation of "set pieces" for each precinct. While each "set piece" will deal with the individual problems of their respective precinct, they will be tested against the whole to maintain a continuous decipherable urban fabric. The "set pieces" will operate within the dialogue of the existing conditions to bridge the gap between the communities.

The seam between the Riverside and Locust Point will become the focal point of this thesis. The process of creating more access and connecting the two communities together should not imply a seamless connection. The seam will be used to maintain the individuality of each neighborhood while affording them an opportunity to interact.

The "set pieces" will establish the defined edges of the seam. As the context of the neighborhoods approach the hard boundary of the seam, there will be a change in density and typology of buildings. The 2 – 3 story row houses will be replaced with 4-5 story mixed-use apartment buildings. This shift will establish a vertical element that symbolizes the uniqueness of the seam. While this may seem counter productive to the goal of re-connecting the two communities, it must be stated that the connections happen on the horizontal, extending the gird and establishing more access points.

Special Consideration

The biggest hurdle for this thesis will be the social aspect, connecting the two communities together. Both communities have strong histories and are very concerned and protective of future well-being. There already exists a lack of cohesive cooperation on the two projects discussed earlier. Programmatically, the neighborhoods have different needs and wants. With site restrictions, not all desired program elements can be accommodated by this thesis. The problem is how to keep the level of compensating amenities consistent for both neighborhoods. How does

design help to bring two segregated neighborhoods together that may not want to be connected?

The second issue socially is the introduction of the "young professional" and commuters into the area due to the redevelopment of industrial buildings into offices/ services. Demographic changes brought change in traffic patterns/needs and a change in program needs and desires. Designing a program for the site that breaks down the social barriers between these two diverse groups will be an issue. This thesis will be faced with the notion that because these groups have different wants and needs, they many not or cannot engage each other within the same space.

A program issue from the beginning will be access and transportation. How will parking, which comprises 60% of the site now, be handled with the addition of more program on the site and the desire to develop a more pedestrian-active environment?

Another program issue involves typology and density. Both neighborhoods are defined by the 2-3 story row houses and a consistent height of 35 feet. The residential areas are zoned to allow for 58 units per acre. The people of these communities have voiced there concerns over the development of taller more dense buildings. They worry that taller buildings will block views and cast a continuous shadow on their narrow streets. They also worry that more density will cause more traffic and parking problems. The goal to solve these issues to allow for more density and taller buildings will be to provide clear diagrams of how parking and traffic

patterns will be altered. It will also be important to investigate a strategy for stepping up to the taller buildings, instead of allowing a sudden change in height.

Chapter 6: Program

Development Concept

Locust Point Industry while important to the existence of Locust Point fragmented the urban fabric. The fragmented landscape has contributed to the isolation of Locust Point neighborhood and the lack of physical connections to Riverside and the rest of the peninsula. It has also separated the neighborhoods from the waterfront. The first step is the placement of "set pieces" that help to organize and connect major axis and movement systems throughout the peninsula. These "set pieces" range from light rail stops to small plazas and parks.

The second step will involve the placement of mixed-use, residential and open space "set pieces" within the neighborhoods to help organize the urban fabric into a decipherable whole. These pieces are parts of a whole which define the new layers of connection. The residential "set pieces" will be generated from the existing context both in layout and typology of buildings.

The third step of the program deals with the thesis site. The site will be broken down into two elements; a mixed-use retail center and a community theater "set pieces". The first part of this program looks to create a more dense area of retail and housing that help to define this space as belonging not to just one particular neighborhood, but that it is actually the seem where the two neighborhoods come together. This program speaks to the special condition of the different layers of connection coming together on this site. The community theater will be planned to

address each individual connection, while providing the local neighborhoods with a program that stimulates 24-hour activity.

Program Elements

Community Theater

A medium-scale facility hosting touring companies covering drama, ballet, and musicals, with a multi-functional auditorium, for both professional and amateur companies. This facility will have a secondary multipurpose space for community meetings and activities. The theater will serve as the anchor for the retail as well as the anchor for the different layers of connections throughout the peninsula.

Mixed-Use Retail Center

Southside Market Place will be re-developed into a mixed-used retail center. The existing program will be reused, but with the addition of more upscale retail/clothing stores, for the purpose of appealing to a more diverse group of residents. Market-rate housing will accompany the retail program. Mixed-use program for the site will create more value for the land in relationship to the level of access that already exist in this area. New additions will include; a gourmet-style grocery store, a Hallmark shop, upscale clothing store, a bakery, a coffee house, and restaurants (not fast food).

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Housing

While the use of the typical row houses will be used to transition between the existing neighborhoods and the new development. The use of apartment housing, assisted living housing, and multifamily apartment housing will provide more options to young professionals, families and elderly people that have lived in these neighborhoods most of their lives.

Open Space

While both neighborhoods have multiple parks, they lack public squares. A large plaza will be designed to be used by both communities for housing outdoor events and the day to day vibrancy of urban life. There will be a second open space along the waterfront which will connect to the Inner Harbor promenade and Museum of Industry.

Linear Park

The linear park will connect the large plaza to the water front and to Fort McHenry. It is characterized my an oversized median in middle of Fort Ave. and Lawrence Street, which is used for pedestrian movement.

Program Tabulations

Housing Component:	455,200 s.f.
Row Houses	
• 106 Single Family Row House @ (2100 s.f.)	222,600 s.f.
Multi-Family Apartment Housing	232,600s.f.
• 60 Studio @ (530 s.f.)	31,800 s.f.
• 80 One Bedroom Units @ (660 s.f.)	52,800s.f.
• 100 Two Bedroom Units @ (1000 s.f.)	100,000s.f.
• 40 Three Bedroom Units @ (1200 s.f.)	48,000s.f.
Storage space per floor	300 s.f.
Laundry facilities per floor	400 s.f.
• Leasing Office	540 s.f.
Community Theater Component:	9,100s.f.
• Theatrical Stage (max 250 seats)	3,000 s.f.
Multi Purpose Room	3,000 s.f.
Gallery/ Lobby	1,500 s.f.
• Offices 4@200 s.f.	800 s.f
• Restrooms	800 s.f.
Retail Component:	240,000 s.f.
Existing Retail	131,314 s.f.
Grocery Store	40,000 s.f.
• Resturants w/ Bar	11,000 s.f.
• Café	1,200 s.f.

• Bakery	2,000 s.f.
New retail	66,000 s.f.
Light Rail Station	2,000 s.f.
Water Taxi Stop	11,000 s.f.
• Water Taxi Stop	1,000 s.f.
• Restaurant w/ Bar	8,000 s.f.
Sailing Club	2,000 s.f.

Chapter 7: Design Approach

Connections Parti

The connections, with which this thesis proposes to knit the two neighborhoods together, are best understood in the context of the entire peninsula.

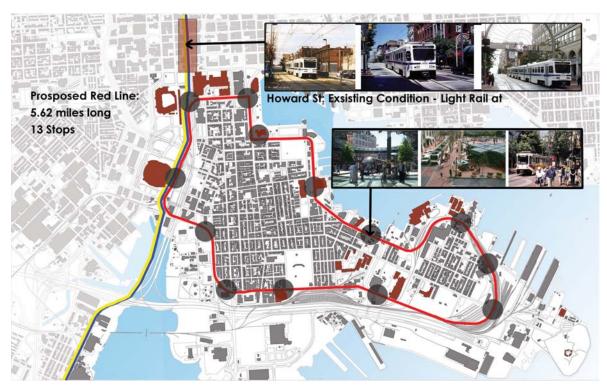


Figure 93 Proposed Tram system. This diagram investigates the potential for a trap loop that connects the whole peninsula and the location of potential stops. These stops, accompanied by parking garages, will help to limit traffic congestions within the peninsula neighborhoods. The loop will connect the city wide amenities such as the ball parks and Inner Harbor to Fort McHenry.



Figure 94 Proposed Greenway. This diagram investigates the potential green connections between existing and proposed parks. The goal is not to just line the parks together, but more importantly, to provide a clear hierarchical pedestrian path throughout the peninsula that is defined by natural elements.

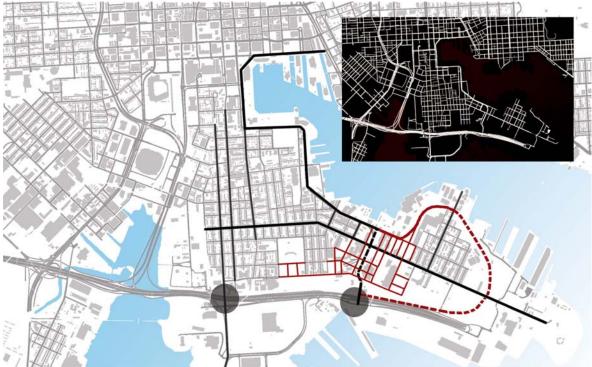


Figure 95. Proposed street connection. This diagram highlights the potential for the extensions of the local street network as well as Key Highway.

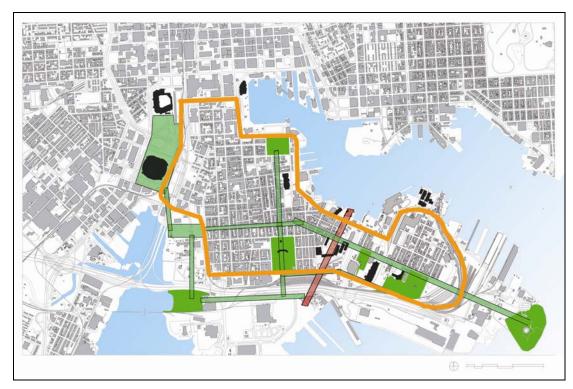


Figure 96. Layers of connections. This diagram investigates the overlapping of the different connection layers. The points of intersection offer a chance for design investigation of an energized node of activity influenced by the combination of connections.

These layers of connections begin to organize the peninsula. The mass transit circles the perimeter, keeping high density traffic out of the neighborhoods. As the industrial zones on the peninsula are redeveloped into offices and commercial buildings, it will enhance the positioning of the mass transit on the perimeter. The majority of industrial land is along the edges of the peninsula and the new program will require a higher level of transportation.

The greenway establishes a major east/west axis that allows for a lower density pedestrian movement system that connects the entire peninsula. The development of an open space on the west side of the peninsula will help to terminate

Fort Ave. which today dead ends into a industrial zone, creating an unbalanced relationship with McHenry Park which terminates the east end.

The street connection layer provides a first look at how to re-knit the fabric back together.

The point where the peninsula is the narrowest is where all there connections have the closest relationship to each other. It is at this point where the thesis site lies. The site becomes a collector and distributor of movement for the peninsula, it becomes an energized node of activity, which can become the focal point that defines the changing character of the peninsula.

Precinct Plan

The site and surrounding areas are broke up into four precincts. Two precincts are residential developments that are generated from the existing grid condition of the surrounding neighborhoods. The precinct below Riverside Park relies on the neighborhood grid to complete the southern boundary of the park while organizing the Riverside Train Yards. The precinct west of Locust Point will re-knit the fabric of the original gird, to provide a strong edge along Fort Ave. The large precinct, which includes this thesis site, is a mixed use zone that deals with the larger context connections layers discussed above. The final precinct, where Phillips Seafood World Headquarters and the old Chesapeake Bay Paper Company are located, will be developed into a mixed-use area that will have different forms of housing and offices. It will provide a secondary connection over Key Highway to Riverside and clearly define the southern edge of Fort Ave, which today is loosely defined.

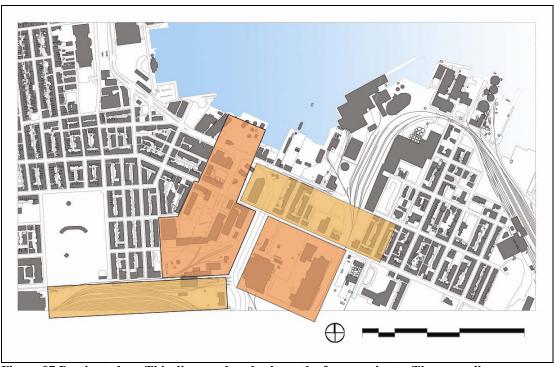


Figure 97.Precinct plan. This diagram breaks down the four precincts. The two yellow zones are primarily residential and the two orange zones are mixed-use.

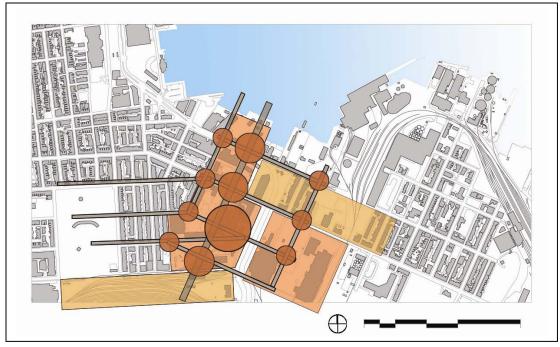


Figure 98 Intersections and Connections Points. This diagram highlights the possible connections streets into and through the precincts as well as locates the potential for open spaces based the intersections of connections.

Framework Plan

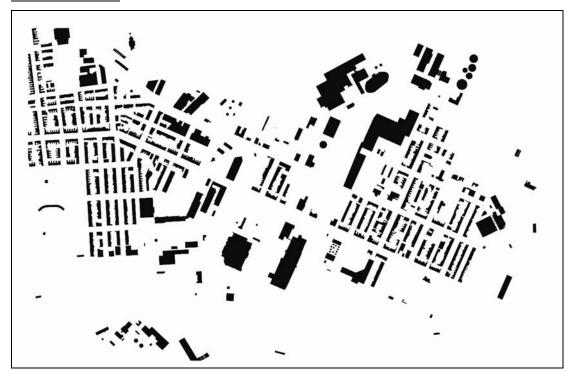


Figure 99 Existing figure ground. 1:400



Figure 100 Scheme A. Proposed figure ground. 1:400. This scheme defines the edges of the two major axes of Fort Ave. and Lawrence St. It also creates two large open spaces, one in each of the mixed use precincts.



Figure 101 Scheme B. Proposed figure ground. 1:400. This scheme is based off of the Market Commons precedent which has a large space that terminates a transportation axis, and defined "Main Street" element.

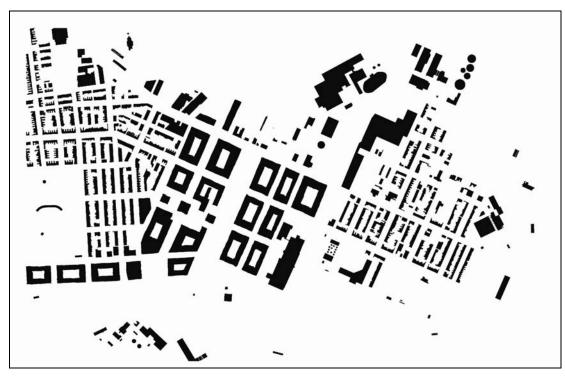


Figure 102 Scheme C. Proposed figure ground. 1:400. This scheme investigates object buildings that generate axis and cross axis that organize the site.



Figure 103 Existing figure ground. 1:200



Figure 104 Scheme A. 1:200. This scheme investigates the two larger space as two different zones of activity, one being a large plaza for retail uses, and the other being a park-like setting for residential use. It also has a linear green way connecting to the water front, where it terminates into the beginning of a 30' promenade that connects to Harborplace.



Figure 105. Scheme B. 1:200. This scheme has one large space that connects down a park along the waterfront. It allows existing streets to penetrate the space to allow for a continuous connection of the two merging neighborhood grids.



Figure 106 Scheme C. 1:200. This scheme employs the same connections to the water front but investigates secondary movement systems, which link the residential blocks together.

Building Parti



Figure 107 Existing figure ground. 1:100

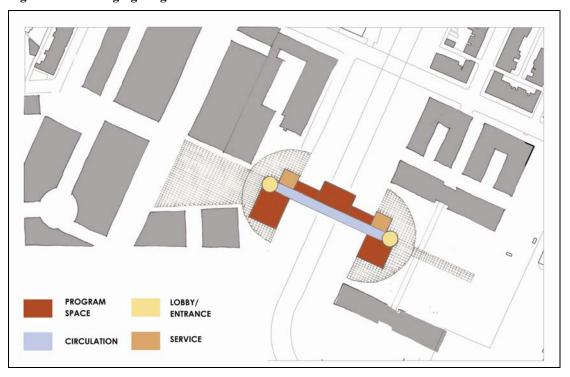


Figure 108 Scheme A. 1:100. Civic Building as physical and symbolic connector between the two neighborhoods.

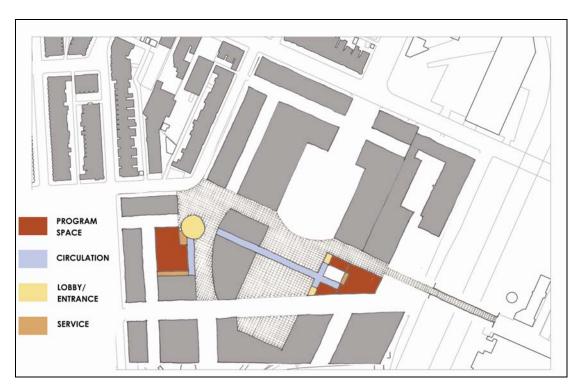


Figure 109 Scheme B. 1:100. Civic Building as parts of a whole. Different program elements exist in different buildings which are secondary to the larger space, but have a defined connection to each other.

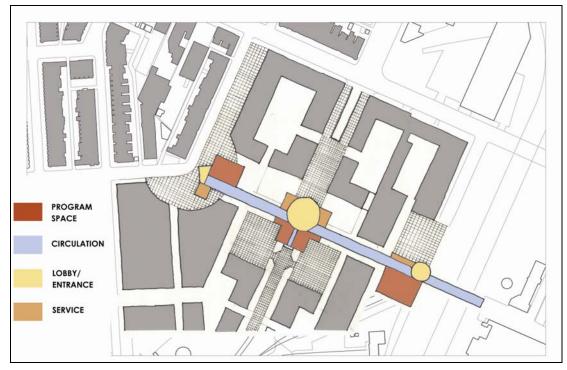


Figure 110. Scheme C. 1:100. Civic Building as a linear element which generates a movement axis.

There are common themes through these schemes: the creation of a forma axis along Lawrence Street to the water front which terminates into a 30' promenade, which has been previously established by the city and retail surrounding a open space within the site. Further investigation will address the potential of the major retail space along Fort Ave. activating the street in areas that are underdeveloped; the street edge becomes loosely defined. This would allow the development of more intimate residential squares on the site, just behind the retail street.

Looking further at Scheme A, the building as a bridge, there is the opportunity to look at the connection over Key Highway in three different ways: as a open space versus a building, as building and open space, or as multiple buildings. In the case of multiple buildings connecting over Key Highway, the best use would be to define the street edges of Fort Ave. The figure ground, regardless of present interventions, still shows a large gap in the context where Key Highway is. For this thesis to achieve its goal of knitting the fabric back together, it must solve this gap along Fort Ave.

Chapter 8: Design Solution

As this thesis entered the actual design phase, it began to focus its attention on the larger greenway connection. The reason being, the street and mass transit connections required much less architectural articulation than the greenway connection. The larger green connection offered the best organization of open space throughout the development of the master plan. The major goal from this point forward became about linking the different cities amenities together, in this case, establishing a link between Riverside Park, Fort McHenry, the water front and the Inner Harbor Promenade.

The final design phase of this thesis achieved its goal of connections through investigations of Urban Fabric, Urban Space, and Urban Facade. It shows how each scale informs each other while staying true to the bigger idea of connection.

Urban Fabric

The major goals under the Urban Fabric investigation are: re-knitting the fabric back together between Riverside and Locust Point; providing more access into Locust Point through the addition of more bridges over Key Highway; establishing a clear vertical edge along Fort Ave as it links the two neighborhoods together; creating footprints of buildings that allow for higher density to be drawn in from the water front, building on the Key Highway proposal for higher density; and creating a series of open spaces that begin to link the different amenities throughout the city. The majority of the density happens along Lawrence Street and on the site of the old

Chesapeake Paper Company building, with smaller 3-4 story buildings being used as infill to ease the transition between the row houses and the 6-8 story buildings on the site.

The placement of the residential tower within the waterfront park serves two purposes. First, the tower has a relationship to the towers being plan in the Key Highway proposal, by continuing the skyline and taking full advantage of the value of the land. Second and more importantly, it is used as a focal point for people coming from the inner harbor promenade or from Riverside Park. It collects people from the inner harbor and redirects them along the urban façade, up Lawrence Street, and on towards the two parks. Vice Versa, it is used to pull people down from the urban plaza towards the waterfront.

The theater building is placed along the major axis of the urban plaza. It is located to have the most profound affect on the pedestrian by fronting the large public space and terminating the major axis from the water front.



Figure 111 South Baltimore Peninsula Locator Map

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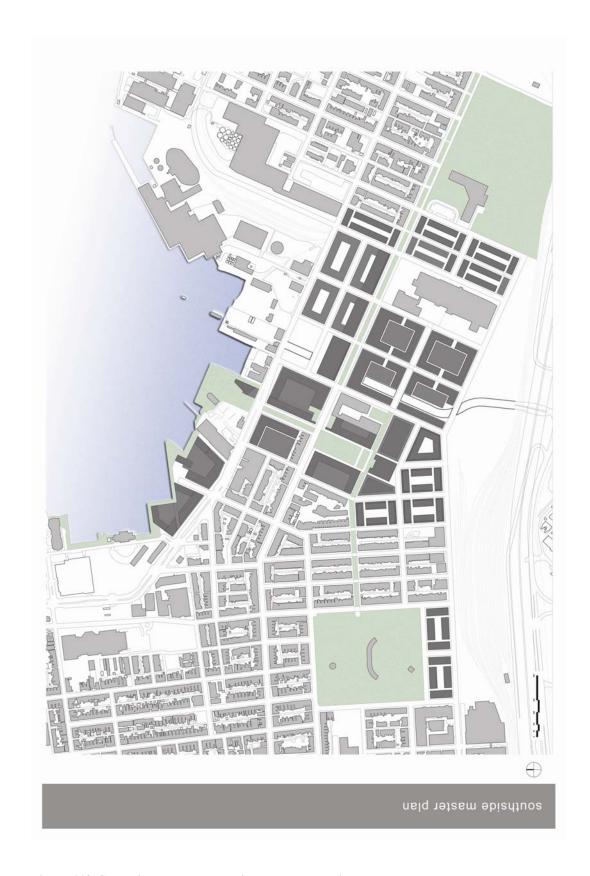


Figure 112 Southside Master Plan with green connections

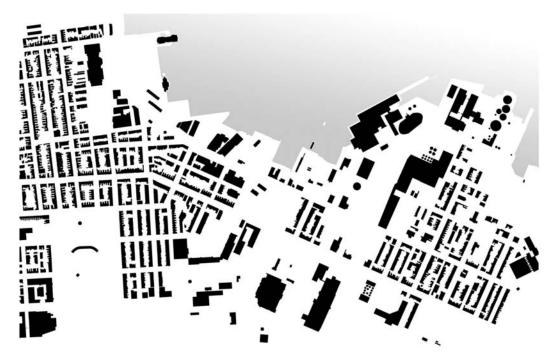


Figure 113 Figure ground highlighting fragmented landscape



Figure 114 Land-use diagram. Focuses on Mixed-use development surrounded by existing residential.

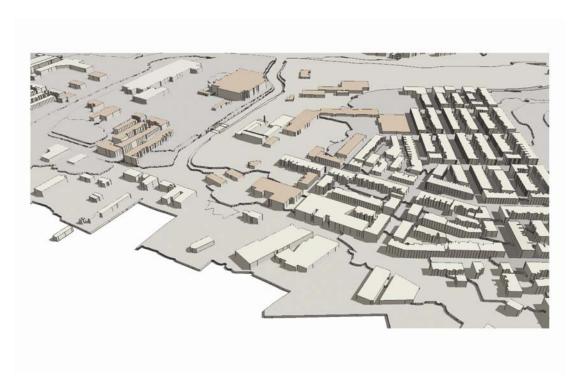


Figure 115 Existing aerial of site. Highlighted building represents proposed demo buildings.



Figure 116 Master plan aerial. Focuses on higher density (with towers) waterfront with the density being pulled inland along Lawrence Street.

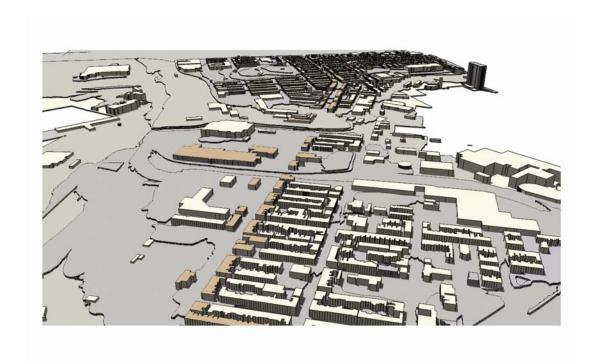


Figure 117 View of Fort Ave existing. Highlights the lack of street definition along Fort Ave where the site is.

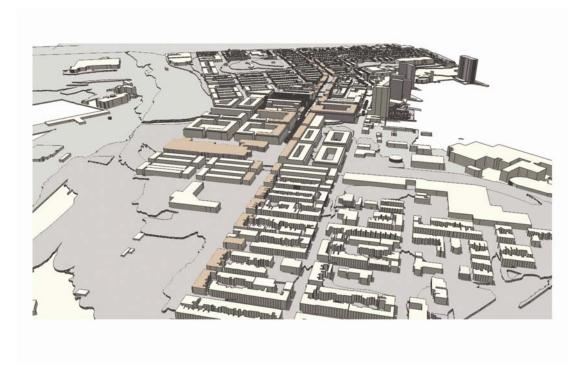


Figure 118 View of Fort Ave proposed. A continuous edge along Fort Avenue establishing a strong visual connection between Locust Point and Riverside.

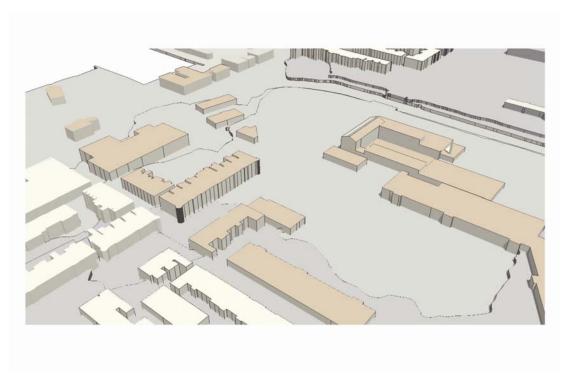


Figure 119 View of Southside Market Place, Lawrence Street, and water front. Existing.

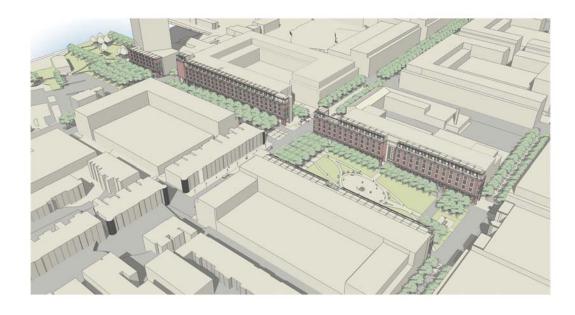


Figure 120 View of proposed open space connections. Transformation of existing auto-oriented spaces into a pedestrian dominate area.

<u>Urban Space</u>

The major goals investigated under Urban Space, were the creation of three spaces that linked Riverside Park to the waterfront and establish a gateway piece that linked to Fort McHenry. The parti for these three spaces already exist today: the large parking lot of South Side Market Place, Lawrence Street as a commuter link, and the open brown field along the water, next to the Museum of Industry. These three existing space are all effected by the automobile, which has led to a disconnect between them. This thesis transforms those spaces into three pedestrian spaces, each of which has its own experience but is linked by the articulation of the ground plane and a series of bar buildings that contain a continuous façade.

The three spaces consist of a urban plaza, a "rambla" style street, and a waterfront park. The urban plaza sits at the junction between Lawrence Street and Fort Ave. It serves as a large civic space that is dominated by the community theater and contained by the urban façade on two sides, which help to set up a formal axis that organizes the plaza. On the side that fronts Fort Ave, is a large grid of trees which serves both as the continuous vertical edge along Fort Ave and as a transition space that resolves the overlapping axes of the plaza and Lawrence Street. There is a second transition space just in front of the theater building that is used to resolve the issues of pedestrian crossing and car drop off for the theater.

Lawrence Street is transformed into a pedestrian dominate street, much like those in Spain, where there is an oversize median where the major pedestrian flow takes places, and the automobile occupies the sides. This center is used to link the waterfront and the plaza together, but also to establish a space for temporary markets and pavilions to set up.

The waterfront park acts as the terminus for the Inner Harbor promenade and has a close relationship to the Museum of Industry and the sailing club. It is a collector space that is used to re-orient people towards different amenities, while also opening up views to the whole harbor. The parti layout of the park is based on the foot prints of pre-existing industrial buildings that once sat on the site.

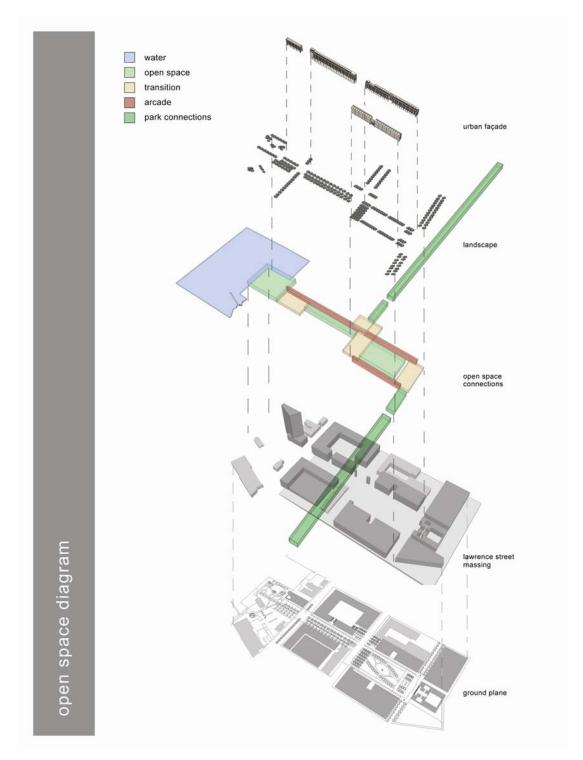


Figure 121 Open Space Diagram.

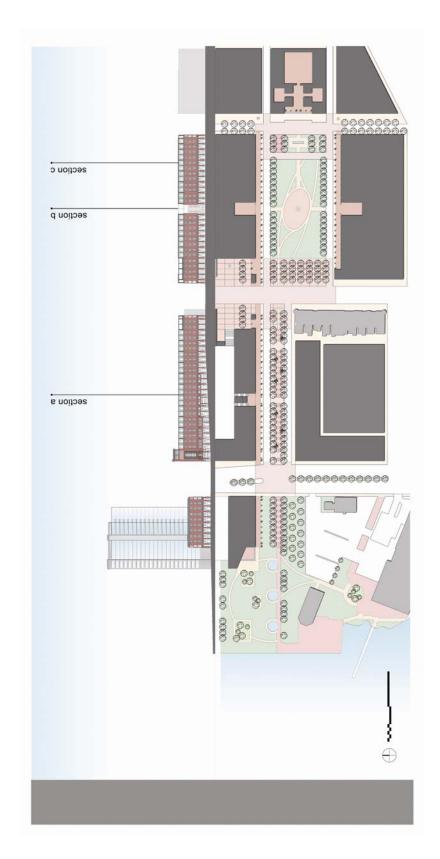


Figure 122 Ground plane plan. Shows relationship between urban space and urban façade.

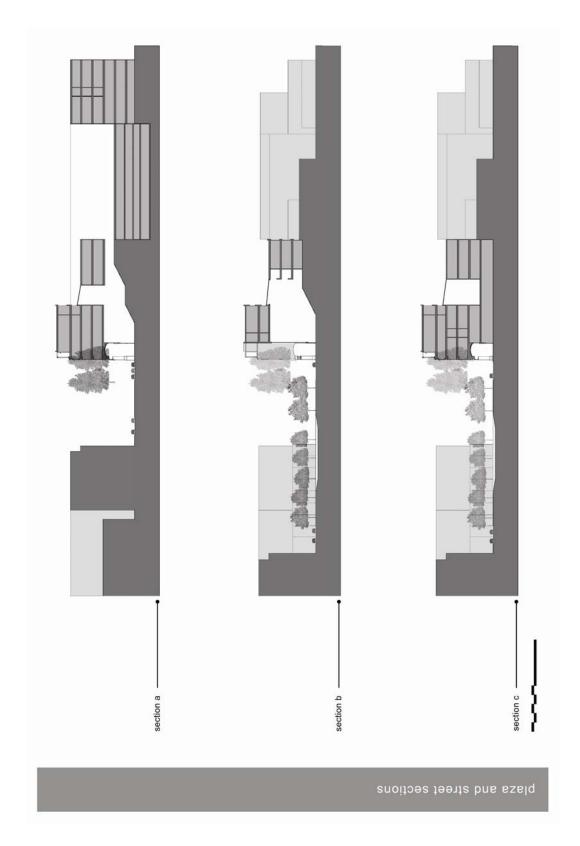


Figure 123 Street and Plaza Sections. Focuses on relationship of urban space to interior public space.



Figure 124 View of urban plaza from pathway linking back to Riverside Park.

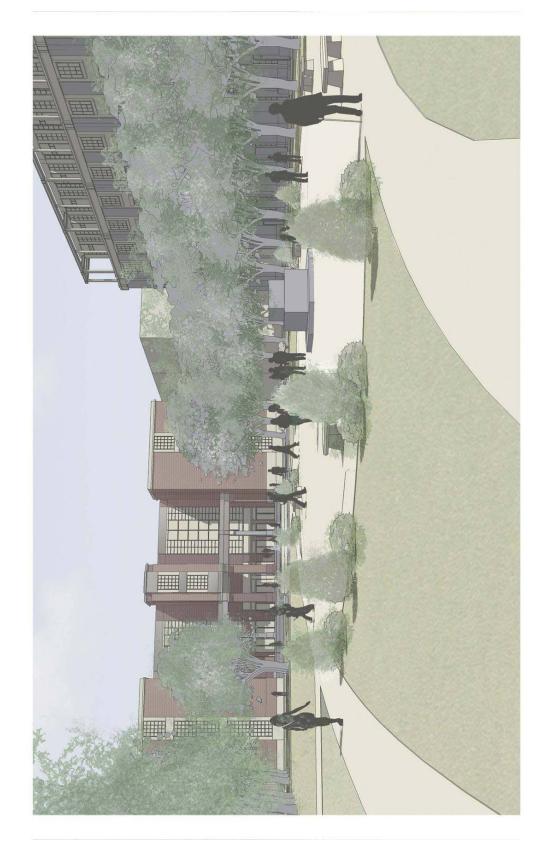


Figure 125 View of urban plaza with focus on Theater (civic) building.

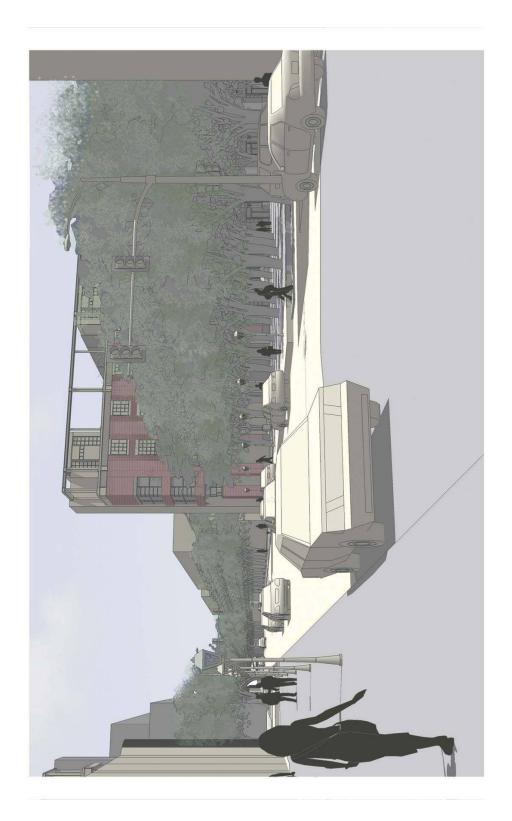


Figure 126 View of Gateway to Locust Point and Fort McHenry. The view shows the rows of trees along Fort Ave being penetrated by the arcade to set up a visual cross axis, which is used to redirect the pedestrian towards the water front. The rows of trees are used at the end of the plaza space to continue the vertical edge along Fort Ave.



Figure 127 View of "rambla" style street. This is the transformation of Lawrence St, a auto oriented street linking Key Highway and Fort Ave, into a pedestrian street linking the urban plaza to the water front. It is design to have pavilions for weekend markets.



Figure 128 View of the waterfront park, coming from the inner harbor along the promenade.

<u>Urban Façade</u>

The major goals for the Urban Façade are; to establish a language which relates to the industrial attitude of the area and of Baltimore; to create a continuous façade over the span of three buildings that establish a rhythm used to direct movement between three spaces; and finally to establish a façade, unrelated to program, that is a backdrop for the three open spaces.

In addition to the façade, this thesis created an arcade that responded to the ground floor retail. The arcade is used as a covered walkway between retail stores, which is wide enough to allow for outdoor retail activity as well as outdoor café tables. Its primary purposes is to separate the demands of retail from the open space. The urban space and urban façade are about creating a uniformed appearance that is about the larger urban moves, whereas the retail is about expressing itself to the pedestrian. The arcade allows for a secondary movement for pedestrian and allows the retail to have freedom of signage that doesn't impose on the open space.

The façade is articulated with brick and steel to allude to an industrial building. It is broken down into the classical three parts; base, piano noble, and attic. The base is articulated to represent the arcade behind. The separation of the brick columns from the brick on the piano noble, helps to place emphasize on the horizontal reading of the piano noble, as it used to direct movement between the urban spaces. The attic consists of setback loft apartments, which creates an exterior zone of movement that allows the tenants to experience the three urban spaces in a much different manner.

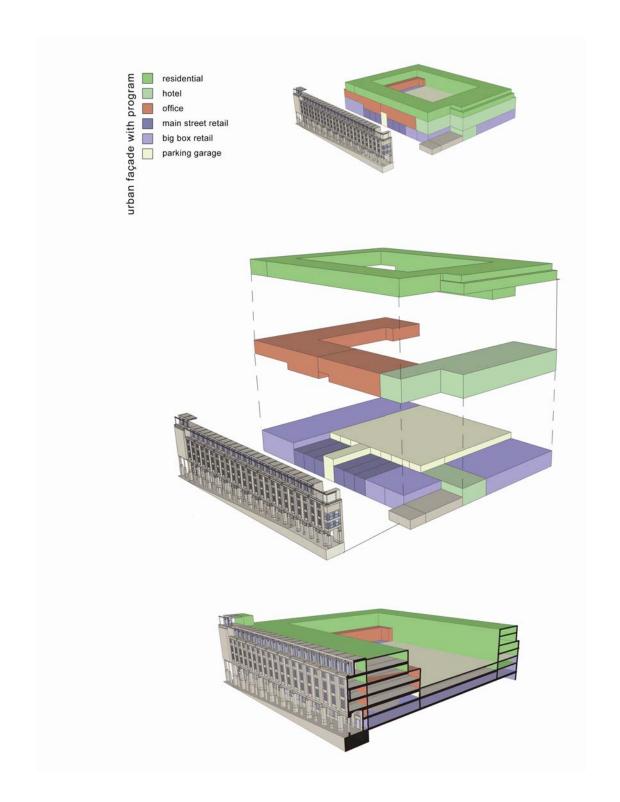


Figure 129 Program Diagram. Shows the relationship of the urban façade to possible program behind. While the façade relates to the larger urban spaces, the program behind is an interlocking organization of mixed-use parts that respond to the diverse needs of the city.

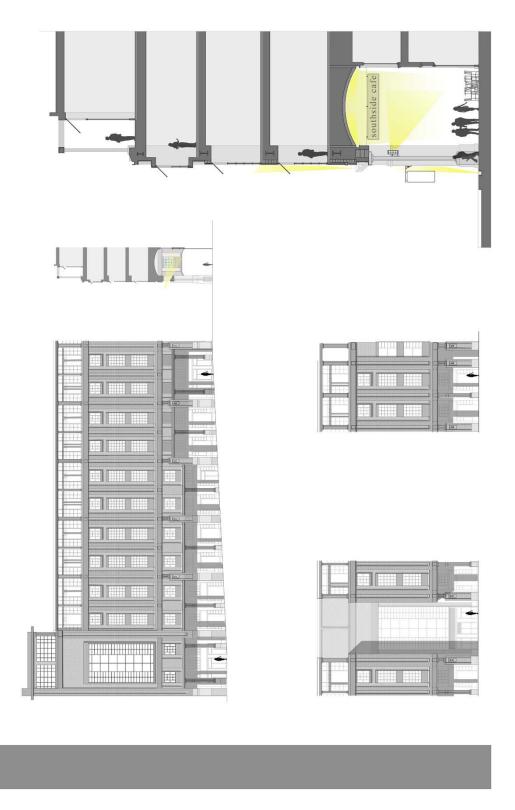


Figure 130 Façade variations. Highlights the different variations that occur on the urban façade. These variations happen in response to their corresponding opens space.

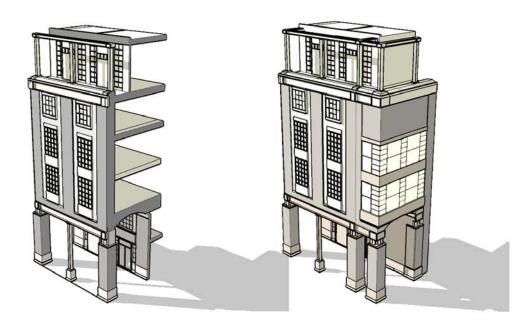


Figure 131 Axons of Standard and End Bay.

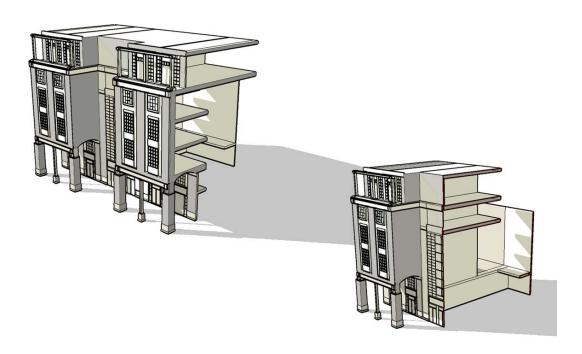


Figure 132 Axons of Center Bay.



Figure 133 Bay Detail. Shows industrial character of façade. This articulation of the façade is in response to the past use of the site and the existing context.



Figure~134~Exterior~view~of~the~arcade.~Shows~the~relationship~of~the~street~to~the~rhythm~of~the~arcade~façade.



Figure 135 Interior view of the arcade. Highlights the potential for a covered pedestrian movement system, as well as having places of events, such as a out door café. The arcade is 15' wide, which is wide enough to accommodate an exterior retail space and the pedestrian.

Chapter 9: Conclusion

The one area of this thesis that did not receive full attention was the theater building, talked about so much earlier on in this document. As this thesis got into the design phase, it become very clear that, while the placement of the theater building was still an important decision, as it related to the organization of the master plan and open spaces, the actual design of the theater was outside the scope of this thesis and would not have contributed in the overall argument of connections. While this thesis still feels that the theater building design is important to the neighborhoods, the open space and buildings that formed those spaces required more attention to achieve the main goals of this thesis.

Those main goals were to establish connections within Baltimore, both at a city scale and at a neighborhood scale. Here at the end, it was successful it that attempt, it established connections between major city amenities and it re-knitted a fragment landscape to reconnect Locust Point back together with the rest of the peninsula. This thesis managed three different scales of design, so that they informed each other and stayed true to the big ideas of connection.

In closing, a quote from a critic reviewing this thesis, "this is Baltimore; this is what Baltimore could be."

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Bibliography

<u>Text</u>

- 1. http://en.wikipedia.org/wiki/Shopping_centre
- 2. Zucker, Paul <u>Town and Square: From the Agora to the Village Green</u>. Columbia University press, New York 1959
- 3. Bacon, Edmund <u>Design of Cities</u> Penguin Group, New York. 1967
- 4. Davey, Peter "Rationalsim is not enough" The Architectural Record, October 1987 pages 70-75
- 5. http://www.ci.baltimore.md.us/government/planning/compplan/index.html
- 6. http://www.benfrederick.com/Info/ZoningSum.pdf
- 7. "Comprehensive Plan: Locust Point" Department of Planning, City of Baltimore http://www.ci.baltimore.md.us/government/planning/images/locust%20point%20plan.pdf
- 8. "Towards a Community Plan, Locust Point, Baltimore, Spring 2002", Urban Studies and planning, UMD
- 9. "Revitalization of Key Highway" Department of Planning, City of Baltimore http://www.riversideactiongroup.org/filemgmt_data/files/key%20highway%2 Openstation.pdf
- 10. http://pages.baltimorecountymd.com/history.htm
- 11. "The Market Common Paper" by John Catania
- 12. Gindroz, Ray <u>The Urban Design Handbook: Techniques and Working Methods</u> W.W. Norton Co. New York 2003
- 13. Cramer, James Design plus Enterprise. Ostberg, Norcross 1994

Photos

- 1. <u>http://www.frankfurtfeinefotos.de/109-1000-M-2.jpg</u>
 Picture of Schirn, Frankfurt
- 2. http://www.thais.it/itinerari/orlandi/lo_res/09a00574.jpg
 Picture of Piazza della Signoria
- 3. http://www.southbaltimore.com/cards/Peninsula.jpg

Picture of Locust Point