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(1983)

A Development Plan for The Newark Passaic Riverfront

Downtown Newark, New Jersey

Wallace, Roberts and Todd Architects, Landscape Architects, Urban and Ecological Planners FINAL REPORT A Development Plan for the NEWARK PASSAIC RIVERFRONT Downtown Newark, New Jersey (9)

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February 21, 1983

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Cover: A view across the Passaic River toward the Primary Study Area after implementation of the Development Plan.

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1. INTRODUCTION

This Report is the result of a two phase study of approximately one mile of Passaic River frontage in Newark, New Jersey (See Figure 1). The six month Study Process is diagrammed in Figure 2. The first phase of work consisted of an analysis of existing conditions in the General Study Area (See Section 1.2 for a description of this area) and the generation and testing of alternative concepts for the longrange redevelopment of the northern two-thirds of the site, which is adjacent to Newark's Central Business District. The second phase focused on the central portion of the overall study area (the area between Penn Station and Saybrook Place) and proposed a more detailed plan and implementation mechanisms.

The Study was supported by a Local Coastal Grant from the Department of Environmental Protection, Division of Coastal Resources, Bureau of Coastal Planning and Development, administered through the City of Newark's Office of Planning and Grantsmanship. The work of the Consultant was reviewed at regular intervals by a Project Steering Committee comprised of representatives of City, County and State Government and the private sector. The members of the Project Steering Committee are listed in Appendix A.

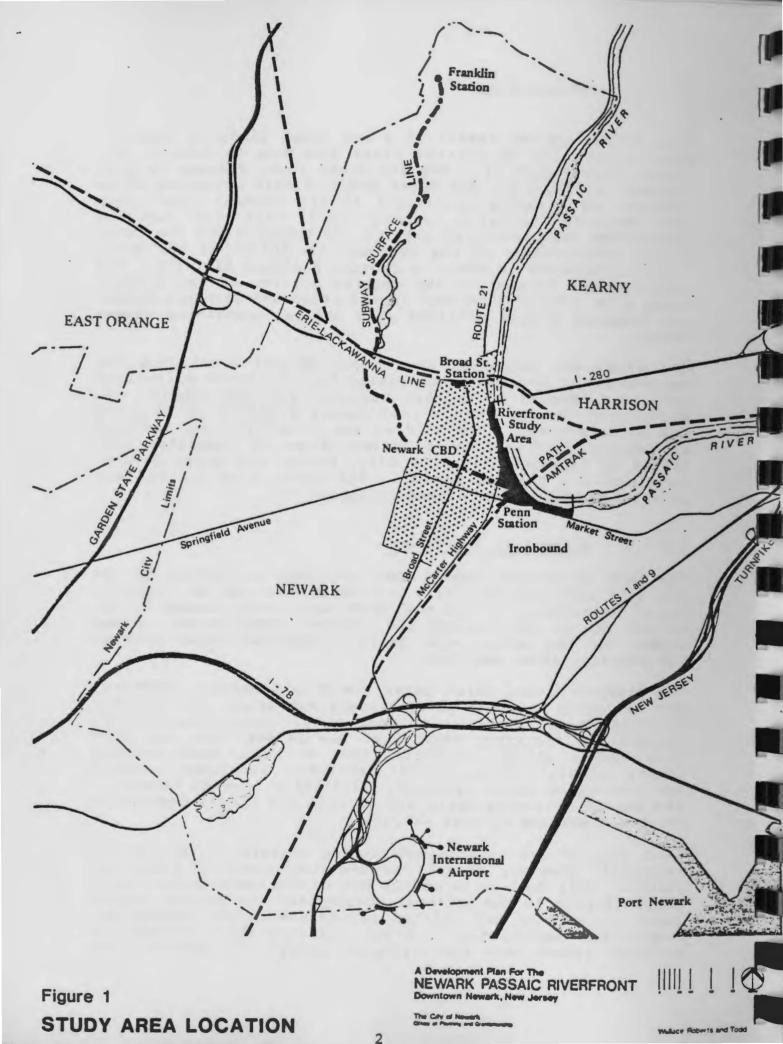
1.1 Historical Background

The City of Newark, established in 1666, is located in the New York Metropolitan Area, six miles west of the southern tip of Manhattan. It was the third major city founded in the United States and remains the largest urban center of New Jersey and the second most densely populated major city of the country, after New York.

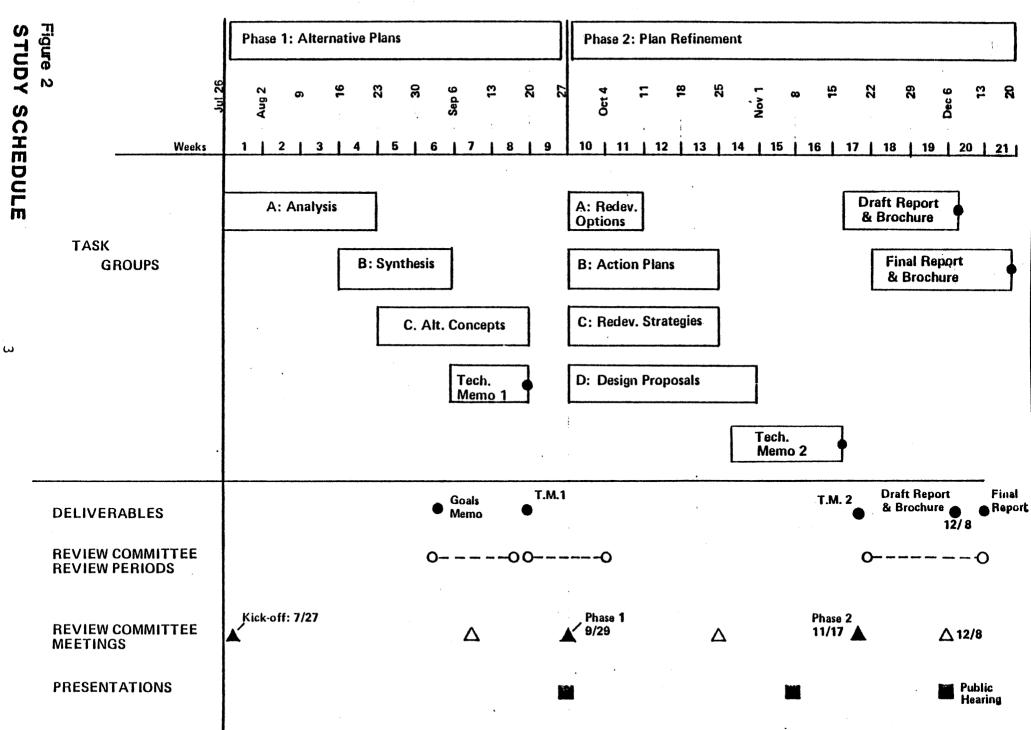
The Passaic River, which forms the City's eastern boundary, was navigable by ocean-going vessels and Newark grew rapidly prosperous as an important port city. Traditionally the finance and insurance capital of New Jersey, the city also developed a strong industrial base of small manufacturing firms, primarily in electrical machinery, chemicals, apparel and fabricated metal products. Industrial growth peaked in the decade following World War II when the City's population reached a maximum of over 440,000.

Like many of the older manufacturing centers of the eastern seaboard, however, Newark has declined steadily since the 1950's. This decline is mainly due to the decreasing role of manufacturing in the national economy and the growing importance of service and related non-manufacturing industries. Modernized technologies and new industry types forced industrial growth away from areas of mature development, like

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NEWARK PASSAIC WATERFRONT STUDY SCHEDULE



Newark, where existing land use and transportation patterns proved difficult to adapt to the changing demands.

Completion of a new network of interstate highways through New Jersey in the late 1960's attracted new industries to previously rural areas in the central and western parts of the State. With modernization inhibited by a decaying infrastructure and the shortage of available land for expansion, even established industries in Newark tended to relocate outside the city.

These trends are reflected in a 27.7% county-wide decline in manufacturing employment during the 1970's, with greatest impact in Newark and adjacent eastern municipalities. Added to these macro-economic changes, Newark suffered particularly as a result of civil disturbances in 1968, which had a damaging effect on the City's image and significantly altered its demographic composition.

In the 1970's, Newark's population declined by 13.8% to 329,248; with a sharp increase in the proportion of minorities, to a total of 70% of the 1980 population. Per capita income in the City declined steadily and unemployment rose to 12.5% in 1980, almost 4% higher than the county average.

The decline in industrial activity, however, has been offset by a slow but steady increase in the vitality of Newark's business sector. From 1970-1980, non-manufacturing employment rose by 5.5%, representing increases in insurance, financial and public service jobs which now account for over half of the City's 86,000 office jobs.

The stability of Newark's insurance and financial base is apparent in the several new downtown office buildings that have been constructed in the last decade. Given its central location in the New York Metropolitan region and an excellent transportation network of road, rail and air services, continued expansion of the business sector is the most probable future for the City and present revitalization efforts are aimed at attracting further office development to the downtown.

Commercial development, however, must be balanced with residential and recreational facilities to make the CBD a more vital, safe and interesting place to live and work. The riverfront area on which this study focuses provides an ideal opportunity for mixed development of both private and public activities. The main purpose of this Study, therefore, has been to define a framework for the long-range development of this key area of the City, combining public and private investment to establish a focal area of mixed activities and development types.

1.2 General Description of the Study Area

The General Study Area consists of a narrow strip of land along the western bank of the Passaic River from Jackson Street on the south to Bridge Street on the north (See Figure 3). The western boundary of the General Study Area is McCarter Highway and Raymond Boulevard.

The General Study Area can be divided into three subareas, each of which has different characteristics, as follows:

- Primary Study Area (Penn Station to Saybrook Place) This subarea is adjacent to the CBD and is part of two Urban Renewal Areas (NJR-50 and NJR-58).
- . Bridge Street Subarea (Saybrook Place to Bridge Street) This subarea is also adjacent to Newark's CBD but is not within an existing Urban Renewal Area.
- Ironbound Subarea (Jackson Street to Penn Station) This subarea is adjacent to the Ironbound neighborhood and is not within an existing Urban Renewal Area.

The General Study Area today can be characterized as underutilized, consisting of parking lots, vacant lots and old commercial buildings, some of which are unoccupied. Despite the area's low level of current use, it enjoys two significant assets: proximity to Penn Station and proximity (for the area north of Penn Station) to the Central Business District. A third potential asset is the Passaic River itself. However, at present the river is not used for recreational purposes, and water quality is severely degraded, as discussed in Section 2 of this Report.

1.3 Study Goals and Objectives

In the statement which follows, a goal (which is general) is distinguished from an objective (which is specific).

The overall GOAL of this study is:

To prepare a staged plan for the long-range redevelopment of the riverfront area of downtown Newark.

In particular, the study has the following OBJECTIVES:

. To examine the physical development potential of the study area in terms of possible new structures, rehabilitation and conservation of existing structures, and public improvements.

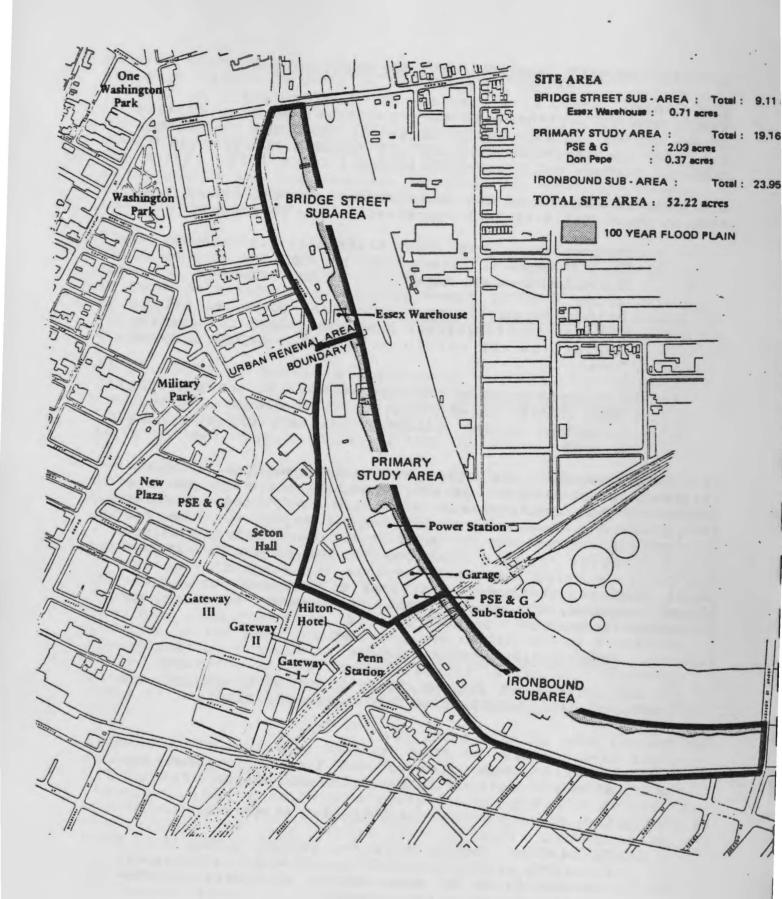


Figure 3 DOWNTOWN CONTEXT A Development Plan For The NEWARK PASSAIC RIVERFRONT Downtown Newark, New Jersey

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- . To contribute the information required to complete Newark's application for Green Acres Funding, and submissions to other potential funding sources.
- . To prepare a public improvements plan for the study area as a framework for private development.
- . To define development opportunities, or "development packages" for marketing to private developers.
- . To prepare a plan for public access to the riverfront.

Footnotes:

- 1. Overall Economic Development Program Findings, Technical Memorandum, 1981.
- 2. 1980 Census Data.
- 3. O.E.D.P. Technical Memorandum, p. 8.

2. ANALYSIS OF EXISTING CONDITIONS

2.1 Primary Study Area and Bridge Street Subarea

A detailed analysis of existing conditions was carried out not only for the Primary Study Area but also for the Bridge Street Subarea because of the physical interrelationships of these subareas to each other and to Newark's CBD.

2.1.1 Physical Conditions

An examination was made of on-site conditions as well as the adjacent areas of Newark's Central Business District (CBD), which is the context for the General Study Area north of Penn Station.

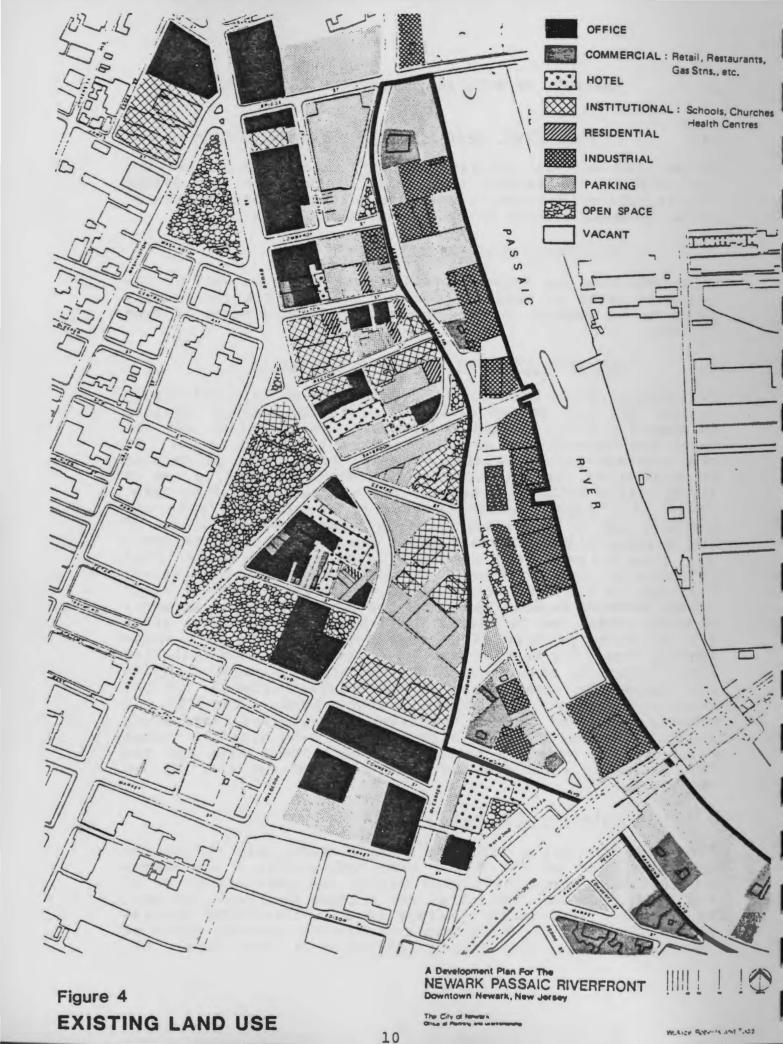
a. Adjacent Uses and Development Activity

The General Study Area north of Penn Station is a relatively narrow (200 feet to 600 feet) strip of land roughly parallel to Newark's CBD. Several concentrations of office and related development are adjacent to the riverfront area. At the northern end, a cluster of major development is related to Washington Park, including One Washington Park, a new 18 story office building scheduled for completion in late 1983. There is a second concentration of development near the southern end of the riverfront area, west of Penn Station, in the Gateway District, where three new office buildings and a 254 room Hilton Hotel are tied together with upper level walkways to Penn Station. Closely related to the Gateway District is the core of the CBD, which centers around Broad Street between Raymond Boulevard and Market Street. Appendix B lists recent new CBD development near the riverfront site. The existing pattern of CBD development takes an L-shape running from Penn Station west to Broad Street, and following Broad Street to Washington Park. Within this core of office and commercial uses there is no visual awareness of the Passaic River or the adjacent Study Area. The CBD, in effect, turns its back on the river, despite its close proximity. McCarter Highway, a four to six lane arterial street which is the boundary between the riverfront site and the CBD, helps to reinforce the separation between the CBD and the river.

b. Existing Land Use

Figure 4, "Existing Land Use", shows land uses within the northern part of the Study Area and within a one block radius. The predominant uses within the northern parts of the Study Area are industrial and surface parking. Adjacent to the Penn Station rail bridge is an active PSE&G Substation. There are two restaurants within the northern parts of the Study Area: Don Pepe's and Don's 21 (See Figure 5).

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There are no residential or institutional uses within the northern part of the Study Area.

c. Architectural and Archeological Resources

WRT contacted the State of New Jersey's Office of Historic Preservation, Department of Environmental Protection, to determine whether any architectural or archeological resources are located north of the Study Area. The Chief of the Office of Historic Preservation responded as follows:

"At present, there are no known sites within this portion of the Passaic waterfront which have been either listed on the State or National Registers of Historic Places, determined eligible for listing, or identified by the State Historic Preservation Officer as eligible. However, there has never been a comprehensive cultural resource survey of this area.

It appears that this area of the city has the potential for containing historic, architectural, and archeological properties. Several of the structures appear to be older than 50 years. In addition, this area is reported to be the original dock for the Port of Newark (ca. 1848-50) as well as the general area where Robert Treat may have first landed. Due to the complexity and apparent historic significance of this area, it is my opinion that a professional cultural resource consultant should be retained to evaluate the National Register eligibility of above and below ground resources."

d. Building Conditions

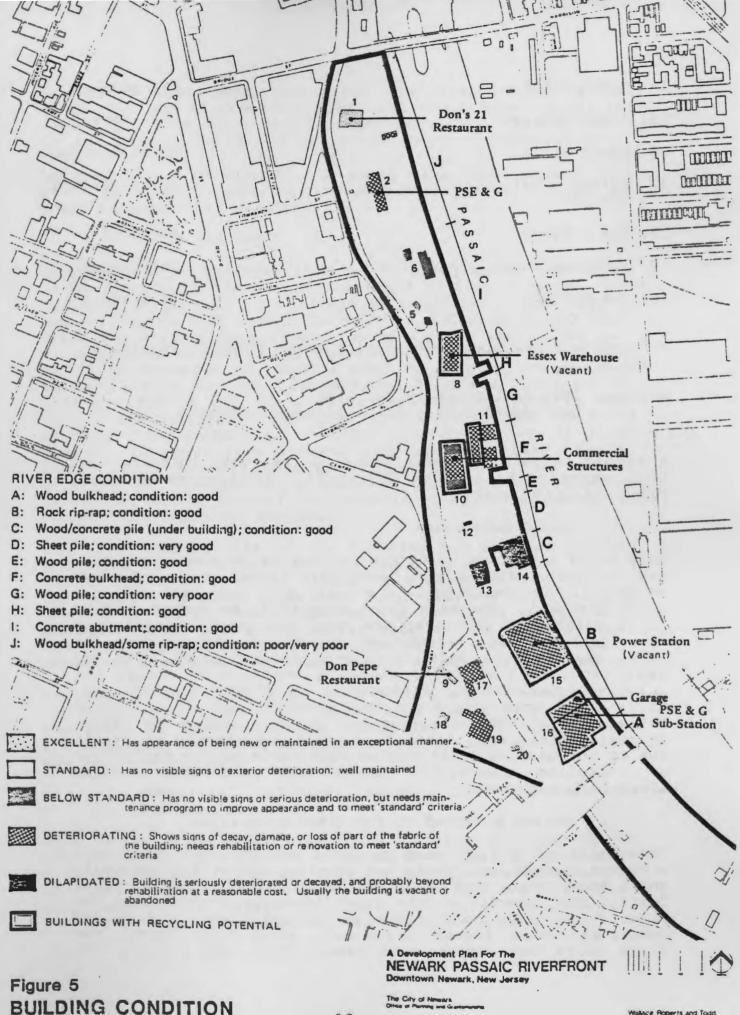
A visual inspection of the exterior of all buildings within the northern Study Area was conducted. Buildings were classified according to the following criteria:

- Excellent: Has appearance of being new or maintained in an exceptional manner.
- Standard: Has no visible signs of exterior deterioration; well maintained.
- Below Standard: Has no visible signs of serious deterioration, but needs maintenance program to improve appearance and to meet "standard" criteria.
- Deteriorating: Shows signs of decay, damage, or loss of part of the fabric of the building; needs rehabilitation or renovation to meet "standard" criteria.
- Dilapidated: Building is seriously deteriorated or decayed, and probably beyond rehabilitation at a reasonable cost. Usually the building is vacant or abandoned.

The results of the survey are recorded in Table 1 and Figure 5. On the basis of this visual inspection several structures were identified as buildings with recycling potential; interior visual inspections of these structures were made and further conclusions reached, as described below.

Property*		Assessed Value	Building Condition	
1.	Don's 21	Land: \$127,100 Improvements: \$135,400	Standard	
2.	PSE&G Workshop	Land: \$149,100 Improvements: \$210,300	Deteriorating	
3.	Parking Lot	Land: \$150,200 Improvements: \$800		
4.	Parking Lot	Land: \$11,100		
5.	Service Station	Land: \$15,200 Improvements: \$2,000	Standard	
6.	Masonry Products Manufacturing Co.	Land: \$46,600 Improvements: \$34,000	Below Standard	
7.	Vacant Lot	Land: \$13,700 Improvements: \$400		
8.	Essex Warehouse	Land: \$33,700 Improvements: \$96,300	Deteriorating	
9.	Don Pepe	Land: \$33,700 Improvements: \$22,000	Standard	
10.	Various commercial & light industrial uses		Below Standard & Deteriorat- ing	
11.	Trucking Co. Storage Yards		Deteriorating	
12.	Storage Yards		Dilapidated	
13.	Warehousing		Dilapidated	

Table 1 - PRIMARY STUDY AREA & BRIDGE STREET SUB-AREA PROPERTIES: ASSESSED VALUE & BUILDING CONDITION



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14. Warehousing 15. Power Station 16. Sub-Station 17. Atlantic Refigeration Co. 18. Gas Station 19. Suburban Foods

Dilapidated Deteriorating Deteriorating Deteriorating Standard

Deteriorating

20. Gas Station

- Standard
- * Property numbers correspond with those shown in Figures 5 and 6.

Source: 1981 Real Property Tax List WRT Visual Survey of Building Condition

A number of buildings were judged to be worth investigating for potential reuse (See Figure 5). From south to north these buildings are:

PSE&G Substation

This brick structure is currently used as an electrical substation and is filled with heavy duty transformers and other equipment. The building is one story with very high ceilings and a basement. The main floor appears to be constructed of heavy reinforced concrete; the roof has steel trusses with clerestories. The clerestories and arched windows give the major space on the main floor good natural light. It has been reported that PSE&G plans to continue to occupy the building indefinitely. Although it is in good physical condition, the structure would be reuseable only for a limited set of specialized activities and is not suitable for office or residential use. Demolition would undoubtedly be costly due to the massive construction used and also the high costs of rerouting electrical cables and relocating complex electrical equipment.

Garage Attached to the PSE&G Substation

This building is also owned by PSE&G and shares a party wall with the Substation. It is two stories high with brick walls and a steel truss roof structure (approximately 160 feet x 60 feet). The interior on the first floor is divided into two large rooms with brick piers supporting steel girders and beams, with heavy timber joists and a plank floor above. The brick piers form approximate twenty foot square bays; the ceiling is about twenty feet high. The first floor is a concrete slab and is presently used as a truck repair shop; the second floor is unoccupied. Architecturally, this building is not distinguished. Reuse would require construction of two new fire stairs (the building has none) as well as other improvements. Because of its small size (9600 square feet per floor) and dimensions, its most suitable use is for industrial/commercial purposes.

Power Station

This large brick building is owned by PSE&G and is the former Power Station of the New Jersey State Railway Company. The building is currently vacant and is comprised of two adjoin-The ing structures (270 feet by 90 feet and 260 feet by 100 feet) which share their long dimensions as a party wall. The part of the building facing the Passaic has a basement, but most of it is occupied by massive masonry support structures. There is over 40 feet of clearance from the floor to the bottom chord of the truss which supports the roof on this half of the building. The truss spans 100 feet and has a row of supporting columns at 50 feet. Plenty of natural light enters the space from clerestories and the river facade. There are a few dividing partitions in this part of the building and a suspended plaster ceiling over a portion of the space, but in general the space is clean and unobstructed except for structural supports.

The River Street side of the building has a lower ceiling estimated at 25 to 26 feet from the concrete floor, to the bottom chords of the roof truss. The floor of this half of the building is about three feet lower than the Passaic half; the two halves are interconnected via two broad ramps. With the exception of a small boiler room at the northern end, this half of the building is comprised of two large rooms. Large arched windows and clerestories allow natural light in.

In summary, the Power Plant is a 50,000 square foot, single story building comprised of large, high spaces which would be adaptable to indoor athletic facilities or an open market. The shell of the building appears sound, and the interiors are simple and clean.

Commercial Buildings Between Centre Street and Saybrook Place

This series of attached three story buildings parallel to the Passaic River is currently occupied by a variety of commercial enterprises. Although they are not distinguished architecturally, their low scale present condition and configuration suggest the possibility that they could be recycled, perhaps as a retail commercial and mixed use complex.

Essex Warehouse

This eight story brick warehouse is approximately 80 feet by 170 feet in plan and is presently "on the market". Although the structure has some interesting brick detailing and plan dimensions which suggest the possibility of reuse for multifamily housing, the Essex Warehouse has several major problems. Heavy timber construction, which is the type of structure used, has a limit of four stories or fifty feet in height for multi-family residential use under the BOCA Code, which is a national building code used in New Jersey. Furthermore, the building lacks any legal fire stairs or elevators. These items as well as the need for new window openings and other improvements suggest, notwithstanding the code problems, very high rehabilitation costs.

e. River Edge Conditions

A variety of edge conditions exists along the Passaic River within the northern part of the Study Area as shown on Figure 5.

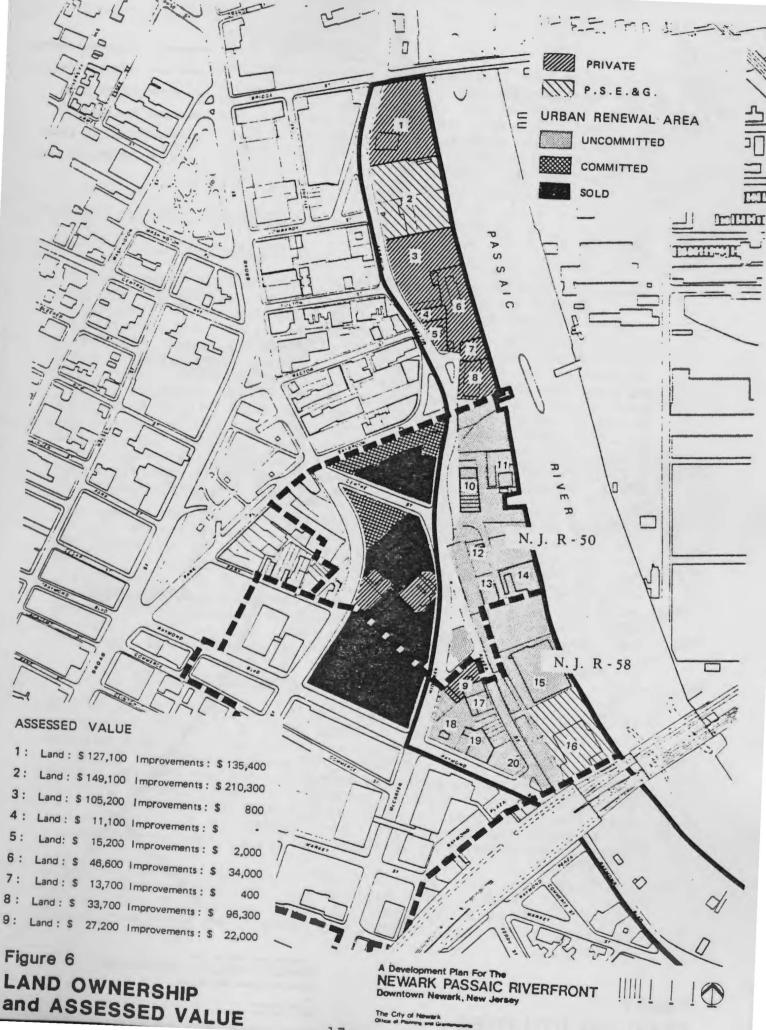
f. Land Ownership and Assessed Values

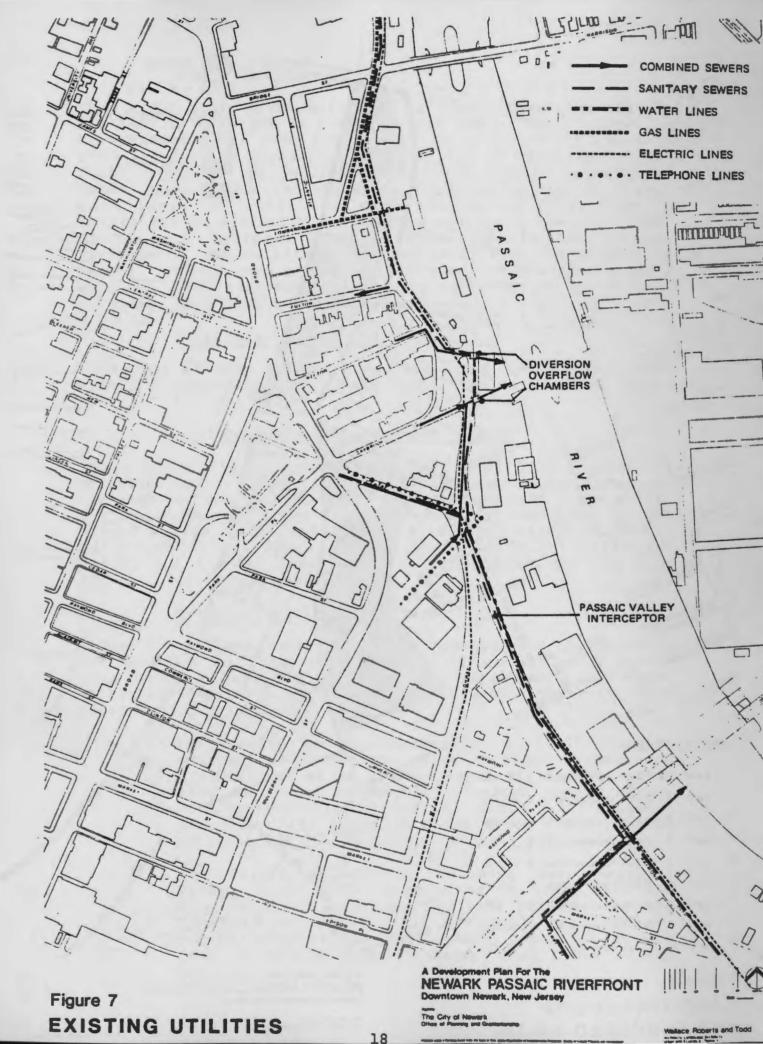
Table 1 and Figure 6 show each parcel of land within the northern part of the Study Area, its ownership status, and the assessed value of the land and improvements. Land within the Urban Renewal Areas has been assumed to be owned by the Newark Redevelopment and Housing Authority, except as shown. Land outside the Urban Renewal Areas has eight different owners and a total assessed value of \$527,900 for the land and \$501,200 for improvements.

g. Existing Utilities

Figure 7 shows the location of major underground utilities in the northern part of the Study Area. There are major utilities below McCarter Highway and River Street, and minor utilities under most of the existing streets. The major constraints are as follows:

- 1. The Passaic Valley Interceptor, an 11'9" diameter sanitary sewer running below McCarter Highway and River Street at an average depth of 19 feet. This line cannot be reasonably relocated and no structures may be built across it. Hence a 40' easement protecting its location along River Street should be respected in any design proposal for the area.
- 2. The diversion overflow chambers near Saybrook Place, which allow storm water to drain into the Passaic River in heavy rainfall periods. These chambers cannot be built over and therefore severely restrict the development potential of the Essex Warehouse site. However, they could be relocated.





3. The electrical cables connecting to the PSE&G Substation. These lines are presently indispensable sources of power to the City and because of their size and complexity, would be extremely costly to reroute. A 100' minimum clearance to the west of the Substation has therefore been preserved to allow service access to these cables and the electrical generators inside the building.

2.1.2 Environmental Conditions

a. Water Quality

Water quality in the Lower Passaic River is severely degraded due to the cumulative effect of population and economic development. Water pollution is primarily attributable to nonpoint sources (urban runoff) and to point sources (sewer treatment plant outfalls). During storms an unquantified load of pollutants enters the river via storm drains including lead, nickel, cadmium, nitrates, phosphate, deicing salts, coliform bacteria, and petroleum hydrocarbons. Data collected during 1977 confirm the presence of most of these pollutants and further document the presence of the following substances: copper, iron, manganese, sodium, arsenic, chromium, mercury, selenium, zinc, PCB's, pesticides, aromatic hydrocarbons, chloroform, bromoform, trihalomethanes, other chlorinated organic compounds.

The New Jersey DEP has classified the Lower Passaic River as TW-3. The category is for all tidal surface waters that are non-suitable as a source of public water supply but are usable for secondary contact recreation, maintenance of fish populations, and migration of anadromous fish and wildlife. Those standards, however, are not normally met in the Lower Passaic River because of pollution loads. Specifically, dissolved oxygen is low, and nutrients, ammonia, toxics, and fecal coliform counts are high.

b. Aquatic Resources

Recent fish samplings (1981 and 1971-73) indicate that twenty-six species of fish inhabit the Lower Passaic River. Species found include estuarine and anadromous fish typically found in the Lower Hudson River and New York Bight Esturary. Newark bay and the Passaic River are used as an extended part of their range. There is, however, little habitat since most of the wetlands and bankside sources of food and cover have been displaced by urban uses, and the river channel is dredged periodically (2-4 year cycles) to a depth of 30 feet.

The most numerous adult species collected were alewife, white perch, blueback herring and striped bass. Among the juveniles, American shad, blueback herring, alewife, striped bass, and white perch were most common (decreasing order of abundance). The presence of young fish in late summer suggest that successful spawning had occurred in the Lower Passaic River. However, the limited amount of spawning and nursery habitat indicates that the Passaic River is not a major contributor to regional anadromous clupeid fish populations. Anadromous fish have been cited to be of national importance by the U.S. Department of the Interior.

Benthic macro-invertebrate species that are tolerant of heavy organic pollution are characteristic of the Lower Passaic River. Sampling in 1981 indicated the presence of chiromid larvae, oligochaete worms, and gastropods. There are few species of macro-invertebrates, the largest number occurring in the lower reaches where tidal influences are greatest.

c. Floodplain

The Federal Insurance Administration has mapped the flood hazard areas for the Passaic River in the City of Newark. Based on the Flood Insurance Rate Map,⁴ approximately 5.3 acres of the study site is in the 100-year floodplain (Zone A). Structures built in the floodplain are required to have the first floors elevated to a height above the 100-year floodplain in order to qualify for insurance under the federal program. (See Figure 3, for location of floodplain.)

The Flood Insurance Map also indicates that the base flood elevation is at 10 feet and that the difference between the 100-year and 10-year flood is 2.5 feet. Elevation requirements for insurance purposes are based only on the 100-year flood boundary.

d. Vegetation and Wildlife

Most of the vegetation remaining along the Passaic River is urban land cover types. Habitat diversity is very low with little food or cover available for wildlife. Animals likely to be found include starlings, house sparrows, gulls, pigeons, grackles, cardinals, crows, doves, bluejays, kestrals, feral dogs, cats, and rodents.

The river provides stopover habitats for certain species of waterfowl such as canvasback, redhead, bufflehead, mallard, and blackduck. Diminished wetland and water edge habitat severely limit the population of amphibians and reptiles.

Recent investigations suggest that there are no rare, threatened or endangered plant species in the Lower Passaic River Valley. Except for potential incidental occurrences associated with the migratory patterns of the bald eagle and peregrine falcon, there are no federally designated threatened or endangered animal species known to inhabit the Lower Valley subbasin.

Air Quality

e.

Major urban areas typically experience degraded air quality because of their position as commercial, industrial and business centers and as high-density areas for automobiles. As a major element of the New York metropolitan area, Newark's air quality problems stem from emissions associated with the large daily volume of commuter traffic and contributions generated by residents and the marketplace.

The New Jersey State Implementation Plan (NJSIP) identifies certain portions of the state as attainment and non-attainment areas for specific pollutants. The entire state is considered in non-attainment of the National Ambient Air Quality Standards (NAAQS) for ozone. $Ozone (O_2)$ is not introduced into the air but can be produced through chemical reactions of pollutants. The Plan also identified the City of Newark among the sixteen central business districts in the state as being in non-attainment of the carbon monoxide (CO) standard. Most of the CO admitted into the air originates from internal combustion engines used in automobiles and trucks. A large portion of northern New Jersey, including the City of Newark, has also been found to be in violation of the 24-hour secondary air quality standards for particulates. Particulates include solid particles as well as liquid droplets and are produced primarily by combustion and industrial processes.

Air quality in Newark is monitored as part of the New Jersey air pollution monitoring network. A continuous monitoring station, located at Washington and Willow Streets, measures smokeshade, sulfur dioxide (SO_2) , carbon monoxide (CO), nitrogen oxide (NO), nitrogen dioxide (NO_2) , and aldehydes. This station is approximately 0.8 miles from the waterfront site under consideration in this study.

Data collected in Newark from 1970 to 1980 indicate that air quality has improved to some degree. As seen in Table 2, there has been a decline in certain pollutant concentrations in the past decade. The most significant improvements have been in ambient concentrations of CO, SO₂, and total suspended particulates (TSP).

Table 2 - POLLUTANT CONCENTRATIONS IN NEWARK (Annual Average except where noted)

	<u>1970</u>	1980
Carbon Monoxide (ppm)	5.3	1.8
Sulfur Dioxide (ppm)	0.051 ^a	0.018
Ozone (ppm) Nitrogen Dioxide (ppm)	0.244 ^{a,b} 0.047 ^C	0.161 ^a 0.039
Total Suspended Particulates (mg/m ³)	125 ^a	64 ^a

- Notes: a) Exceeds primary or secondary NAAQS b) 1974 is first year data (maximum 1-hour) available
 - c) 1973 is first year data available

Because vehicular traffic is a primary contributor to air pollution in Newark, major emphasis is given to concentrations of carbon monoxide and hydrocarbons. Both pollutants have severe implications for public health and welfare.

Data collected for major street intersections throughout the Newark Central Business District (CBD) have been evaluated to identify CO hot spots.⁵ These hot spots are specific locations where CO concentrations exceed acceptable standards. Carbon monoxide concentrations tend to be greatest at intersections because the most CO is generated from slow moving, idling and stop/start traffic. Sixteen hot spots were identified in the CBD, five of which are non-attainment intersections on or adjacent to the study site. The five intersections are noted below:

State Jurisdictional Hot Spots:

McCarter Highway and Raymond Boulevard McCarter Highway and Bridge Street McCarter Highway and Clay Street

Municipal Hot Spots:

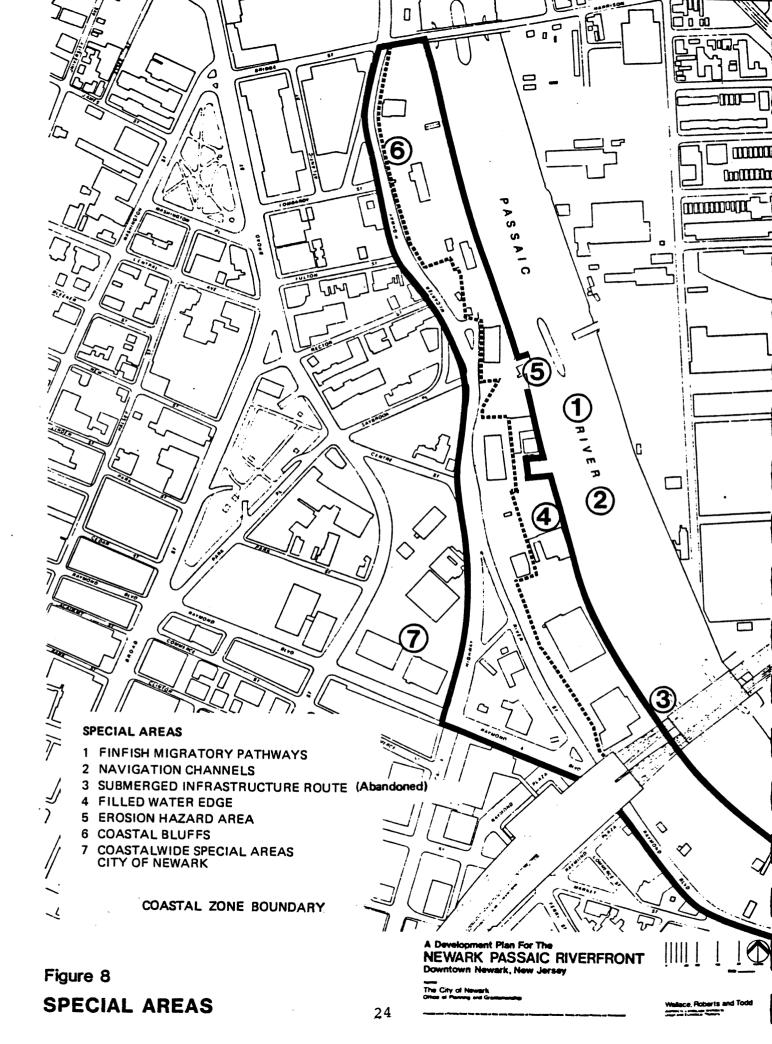
Broad Street and Bridge Street Raymond Boulevard and Raymond Plaza East Previous impact mitigation studies indicate that reasonably available control measures can be used at these locations to reduce CO concentrations to more acceptable levels. Measures may include traffic signalization, mass transit, altered traffic patterns, etc.

Hydrocarbon (HC) emission is more of a regional problem than a site specific condition (i.e., hot spot) as in the case of carbon monoxide. However, as with carbon monoxide, hydrocarbons are produced by traffic and tend to increase with greater traffic volumes and slower speeds. Hydocarbons contribute to smog and to the formation of ozone and other oxidants. The overall approach to mitigating the problem is to reduce emissions by reducing vehicle miles travelled within specific corridors. One of the principal strategies for achieving reduced emissions is diverting automobile trips to transit. Many of the corridors for which mitigation measures are necessary and proposed are in close proximity to the study site.

f. Special Areas

Forty-four types of coastal areas which are known as Special Areas have been identified in Rules on Coastal Resource and Development Policies (revised June 1982). These Special Areas have values which are inherent to the coastal zone and therefore merit particular attention and specific management policies. The forty-four types are further distinguished according to the following four categories:

- . Special Water Areas These extend landward to the mean high water line. (Section 7:7E-3.2 through 7:7E-3.16)
- . Special Water's Edge Areas These extend from the mean high water line (or the level of normal flow in non-tidal streams) to one of the following: the inland limit of alluvial soils with a seasonal high water table equal to or less than one foot; the one hundred year flood hazard line, whether tidal or fluvial; the inland limit of water's edge fill; or the inland limit of coastal bluffs, whichever is the most extensive. (Section 7:7E-3.17 through 7:7E-3.31)
- Special Land Areas These are landward of the Water's Edge Areas. (Section 7:7E-3.32 through 7:7E-3.34)
- Coastalwide Special Areas These are more general in nature and may include any of the three other categories. (Section 7:7E-3.35 through 7:7E-3.45)



The northern part of the Study Area was evaluated to determine which of the Special Area designations were applicable. Based on this investigation, the following Special Areas occur on or are directly associated with the study site, as shown on Figure 8.

Special Water Areas

Finfish Migratory Pathways (7:7E-3.5) - Recent U.S. Fish and Wildlife Service surveys confirm the use of the lower Passaic River for spawning of anadormous fish. Juvenile fish collected included blueback herring (Alosa aestivalis) and American shad (A. sapidissina); adult species collected include blueback herring, American shad, alewife or river herring (A. pseudoharengus), striped bass (Morone saxatilis), and white perch (M. americana).

- Navigation Channels (7:7E-3.7) The U.S. Army Corps of Engineers maintains a navigable channel to a depth of 30 feet in the Passaic River adjacent to the site. The channel is maintenance dredged every 2-4 years.
- Infrastructure Submerged Routes (7:7E-3.12)Several utility corridors transect the site and one passes under the Passaic River adjacent to the Primary Study Area. The corridor contains electric transmission cables (PSE&G). There are no gas lines (Newark Gas Company), sewer, or water lines (City of Newark, Division of Water/Sewer Utility) or telecommunication lines (N.J. Bell) passing under the river adjacent to the Primary Study Area. Treated effluent and stormwater are discharged into the river through several outfall pipes.

Special Water's Edge Areas

- Filled Water's Edge (7:7E-3.17) The Passaic River edge has been bulkheaded and filled to an undetermined point landward of the bulkhead.
- Erosion Hazard Areas (7:7E-3.24) Portions of the bulkhead are deteriorated, although there is no major evidence of bank slumping. At some locations, the bulkhead line is broken allowing swales and erosion gulleys to discharge runoff and sediment into the river. It is unlikely that the current bulkhead can protect the edge from additional erosion over the next 50 years.
- Coastal Bluffs (7:7E-3.30) Although not uniform and continuous throughout the site, a steep embankment parallels the river a short distance inland

from the edge. The rocky bluff shows signs of change by man (excavation) and natural processes (weathering).

Coastalwide Special Areas

. Special Urban Area (7:7E-3.42) - Newark is one of the 21 coastal municipalities qualified to receive state aid under state urban aid legislation (N.J.S.A. 52:27D178). State funds are made available for maintaining and upgrading municipal services and offsetting local property taxes.

2.1.3 Transportation Conditions

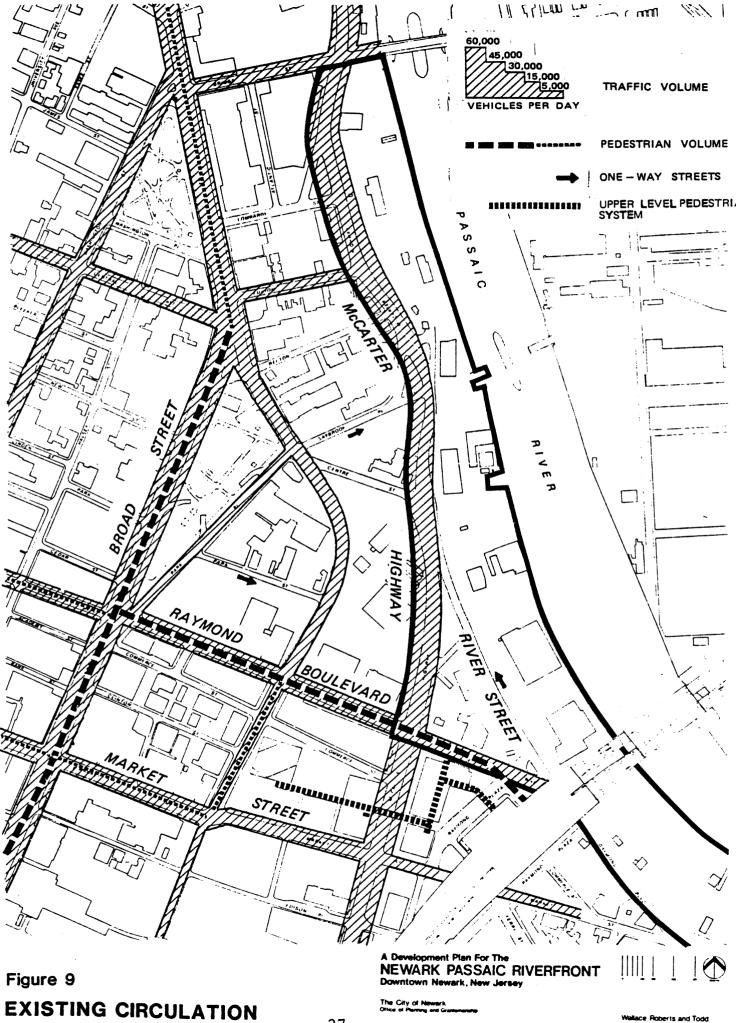
a. Vehicular Circulation

The northern part of the Study Area is bounded by two major streets, McCarter Highway on the west and Raymond Boulevard on the south (See Figure 9). McCarter Highway (New Jersey Route 21) is a major link between Interstate 78 (Newark Airport) and Interstate 280 (See Figure 1). It carries the highest traffic volume of any arterial street in Newark, and serves as the only through truck route within eastern Newark.

The most recent study related to McCarter Highway is the Newark Highway Access Feasibility Study, completed in May 1981. The study developed and evaluated short and long range alternative highway improvements within the primary access corridors to the City.

The thrust of the study was to examine the possibilities for better access to the downtown by improving the existing network which presently serves the CBD.

At present, Route 21 is a four to six lane arterial with painted left turn lanes and numerous intersections and traffic signals. It carries high volumes of automobile and truck traffic in serving adjacent commercial and industrial land The Access Study's recommendation for the Route 21 uses. corridor was to construct a 6-lane expressway (based on a 50 MPH design speed) rather than a freeway. Implementation of this recommendation would allow Route 21 to become the "main travel corridor into and through the City". The expressway recommendation included costly grade separations at Raymond Boulevard and Market Street. Further detailed engineering and environmental studies will be required before any of these recommendations can be built. Furthermore, the long term improvements in the vicinity of the riverfront site are listed as Stage II of the Route 21 corridor program, with the start of construction no sooner than 1986 (as foreseen at the time of the report). In order to provide more immediate traffic congestion relief the Study recommends a host of short term improvements for the Route 21 Corridor.



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A review of the alternative recommended in the Newark Highway Access Feasibility Study in relation to its effect on the development potential of the riverfront Study Area raises First, the design characteristics of an several concerns. expressway do not permit frequent intersections, thus limiting access to adjacent development sites. The usual solution to this problem is to provide access by frontage roads, but in the case of the riverfront Study Area the distance between McCarter Highway and the Passaic River is very narrow, and the addition of a frontage road to the proposed six lanes of the Highway would severely limit the developability of the remaining land. Secondly, the geometric standards for an expressway require a smoothing out of the existing roadway, particularly in the section between Saybrook Place and Bridge Street. This requirement may also have an adverse effect on the development of riverfront land. The Access Study shows a possible alignment for the expressway (although this is not a location study) which straightens the road but splits the riverfront land through the middle, leaving narrow undevelopable land parcels on each side. Thirdly, McCarter Highway has a grade separated intersection with Raymond Boulevard. As a result northbound traffic on McCarter Highway would have no obvious way to get to the southern part of the riverfront Furthermore, River Street is shown as a northbound onsite. ramp from Raymond Boulevard to McCarter Highway and splits the riverfront site, forcing through traffic to pass through the riverfront site. A fourth concern is the timing and probability of implementation of the recommended improvements.

b. Parking

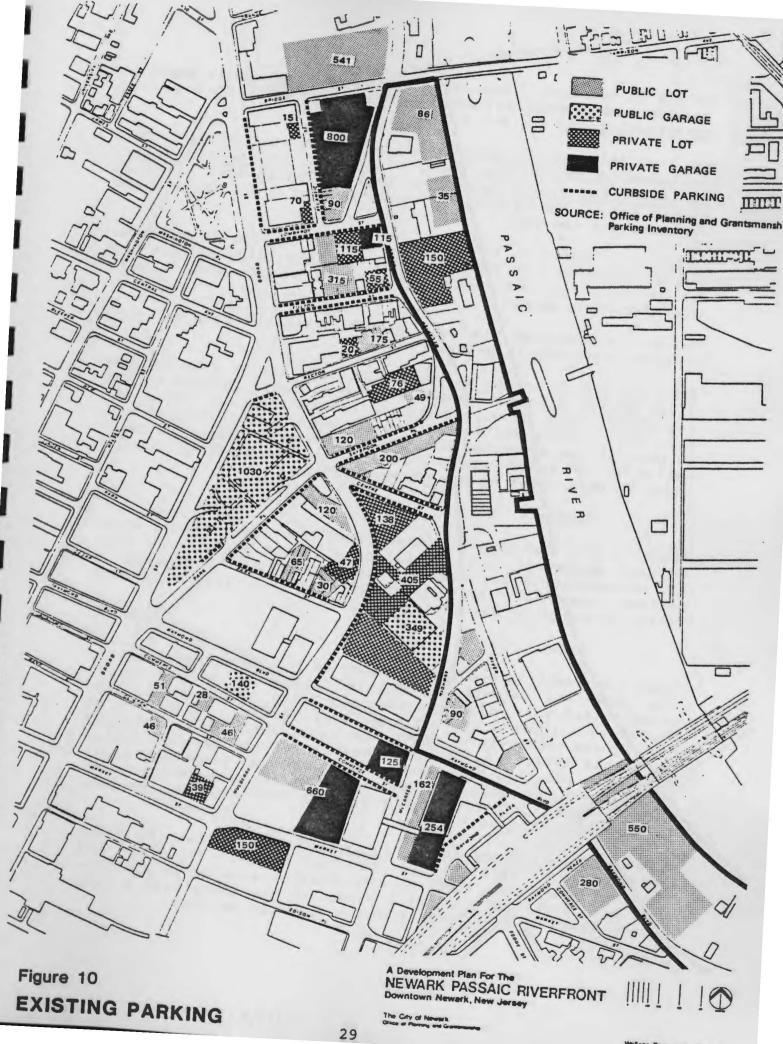
Existing parking spaces in and around the northern part of the Study Area are shown on Figure 10. At present there are over 400 spaces within this part of the Study Area. Most of these spaces are associated with existing on-site businesses so that if these establishments are displaced the related parking need not be replaced. Figure 10 also shows existing parking in the near vicinity of the Study Area north of Penn Station.

c. Public Transportation

One of Downtown Newark's major assets is its accessibility by public transportation (See Figure 11). Approximately 50% of downtown's 86,000 employees arrive by mass transit. The Downtown Newark Parking Study, Wilbur Smith and Associates, 1980, provides the following statistics regarding the public transportation systems serving downtown Newark.

Heavy Rail: Commuter and Long Haul

Downtown Newark has two rail stations: Penn Station and Broad Street (Erie-Lackawanna) Station. Both stations serve as terminals for Newark bound commuters and as transfer



points to New York. Approximately 37,400 passengers board at Penn Station on a typical weekday, 48% of whom are PATH passengers bound for New York.

No statistics on alighting passengers at Penn Station were included in the Wilbur Smith Study, but the <u>Newark Trans-</u> portation and Growth Report of 1974 indicates that approximately 54% of the 24,000 passengers who get off in Newark are destined for the CBD.

Daily rail activity at the Broad Street Station is substantially below that at Penn Station, with the large majority of trips each day made from the west by people whose final destination is Newark.

Table 2 summarizes the most recent available data on rail commuter patterns in Newark.

Penn Station is on the Northeast Corridor and is a Metroliner stop, giving downtown Newark and the southern portion of the riverfront site excellent access from cities all along the Corridor. There are station improvements under construction as part of the Northeast Corridor Improvement Program. Renovation of the Broad Street Station is in the planning stages, under an UMTA Grant to New Jersey Transit.

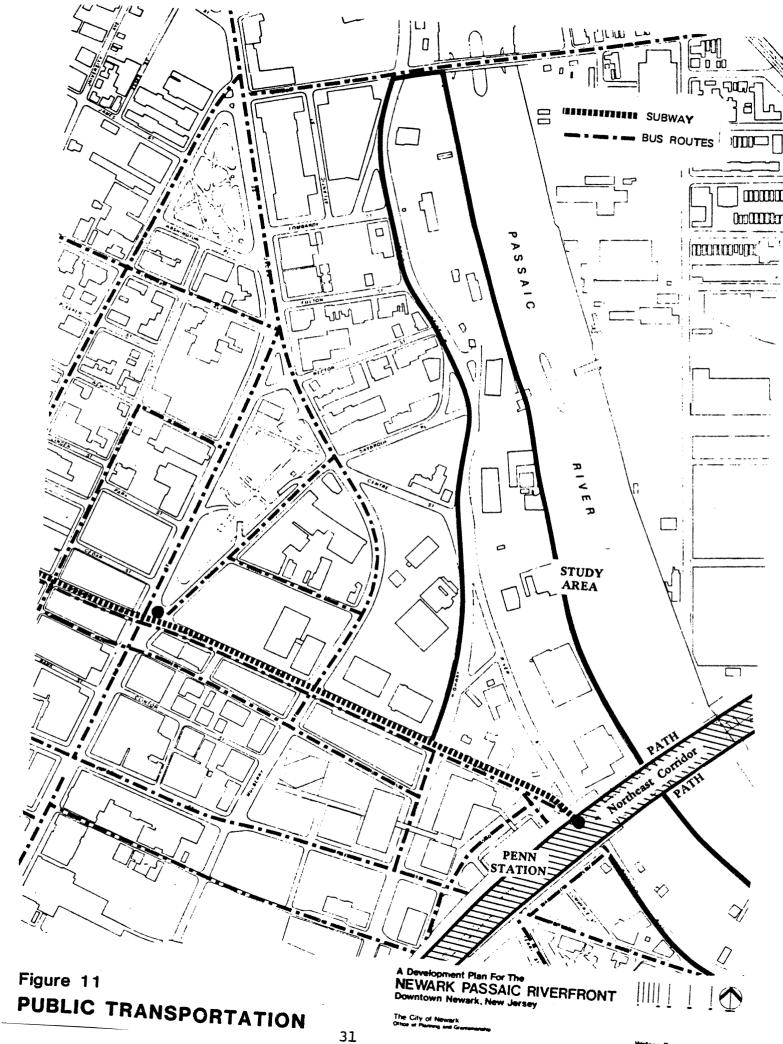
Subway

Newark's City Subway runs underground from Penn Station along Raymond Boulevard, with a station at Broad Street; and then for about four miles west and north where it terminates as surface transit. The system carries about 12,600 riders daily, principally bus transfers.

Buses

Buses are Newark's predominant form of public transportation. The local bus network is operated primarily by New Jersey transit (N.J.T.), with approximately 3,100 riders using these routes in a typical weekday p.m. peak period. There are no bus routes directly serving the riverfront site, although heavy bus traffic exists on Broad Street and Raymond Boulevard. In addition there are other companies providing local bus service as well as long-distance or commuter-oriented buses. These latter carriers pick-up and discharge passengers at Penn Station.

A Bus Terminal Study is currently underway to identify a new location for a Terminal for long haul buses. The study has thus far determined that the Penn Station area could accommodate both local and long haul buses and has identified a site to the south of Penn Station where this can be done.



d. Pedestrian Movement

There is very little pedestrian movement within the northern part of the Study Area today since there are few activities located there. Within the CBD, pedestrian volumes are high in the areas where shopping and employment are concentrated and along routes from the train stations (See Figure 9). In addition to street level pedestrian movement, an upper level of enclosed bridges connects Penn Station with the Hilton and Gateway office buildings. Although the bridges provide a convenient and safe way of crossing wide vehicular spaces (Raymond Plaza and McCarter Highway) they result in diminished street level pedestrian traffic and the removal of commercial activities from the streets to the upper levels.

Table 3 - RAIL COMMUTERS AT NEWARK AVERAGE WEEKDAY RIDERS AT NEWARK STATIONS

	Rider	S
	On	Off
Penn Station		
PATH Conrail Amtrak Total Penn Station	18,012 17,433 <u>1,944</u> 37,389	
<u>Total rem Beatron</u>		
	<u>Rider</u> On	<u>off</u>
Broad Street Station		
Eastbound Westbound	264 2,478	3,017 <u>332</u>
Total Broad Street Station	2,742	3,349
GRAND TOTAL	40,131	

Source: Wilbur Smith and Associates Field Surveys, 1979 -Penn Station New Jersey Transit Operating Information Division of Commuter Services - 1980 Broad Street Station

2.1.4 Regulatory Framework

a. Zoning

The northern part of the Study Area is currently zoned I-2 (Second Industrial District), whereas the majority of the surrounding area is zoned B-4 (Fourth Business District). The main differences between the two zones is with respect to permitted uses. The I-2 District permits all uses permitted in the B-4 District, but also allows certain industrial uses which are not permitted in B-4. Height regulations (which in the Newark Zoning Code control intensity) are identical. The height regulation is:

"Except as hereinafter provided in Article 1 of Chapter 4 of this title (Section 27:4-1 et seq.), no building shall exceed a height of 2-1/2 times the width of the widest street on which it fronts; provided, however, that where streets are less than 60 feet in width, the same height regulations shall be applied as on streets 60 feet in width and provided further, that on streets more than 100 feet in width, the same height regulations shall be applied as on streets 100 feet in width. Five feet may be added to the height of a building or a portion thereof, for each one foot that such building, or portion thereof, sets back from the street line."

Parking and off-street loading is also regulated. With regard to parking, the following indices are required:

Multiple dwelling: One space per two dwelling units.

Hotels: One space per four hotel rooms.

b. Required Permits

The following permits are required depending on the specific type of uses and the improvements proposed for the site.

- . Waterfront Development Permit (State DEP, Division of Coastal Resources, Bureau of Coastal Projects Review) - Requires application form (DEP Form CP-1), fee, development plan, and site photographs (color). An application must include a lawful tidelands (riparian) occupational or use instrument such as riparian grant, lease or license. Additional environmental information may be required for a major project.
- <u>Dredge/Fill Permit</u> (U.S. Army Corps of Engineers) -Application submitted to Corps under Section 404 of the Clean Water Act and Sections 9 and 10 of the Rivers and Harbor Act of 1899.

- Water Quality Certification (State DEP, Division of Water Resources Division of Coastal Resources) -Required for Corps of Engineers Dredge and Fill Permits.
- . <u>Stream Encroachment Permit</u> (State DEP, Bureau of Floodplain Management) Required for any construction in the 100-year floodplain.
- . <u>Sewerage Extension Permits</u> (State DEP, Municipal Waste Management) Required for sewer extensions.
- <u>NJPDES Permit</u> (State DEP, Permits Administration) -Required if a point source discharge of pollutants into Passaic River is necessary.

Tidelands Conveyances

An application must be submitted to the Tidelands Resource Council for a tidelands conveyance (e.g., lease, grant or license), prior to construction on any Tidelands deemed by the State. A lease conveys use of the property for a fixed number of years which is usually the term of convenyance applied for in projects involving solid fill (bulkhead). A license allows for use for a fixed number of years (usually 10 or less) and is commonly issued for residential docks and piers. The application must be accompanied by a current survey and a certificate of title. A fee is required (\$25) for a grant application.

2.2 Ironbound Subarea

The Ironbound Subarea is similar in character to the two subareas north of Penn Station in that its predominant existing uses are industrial and surface parking. However, unlike the two northern subareas, the Ironbound Subarea is not adjacent to the CBD, and is physically separated from the northern subareas by Penn Station and its elevated tracks. Neither is this subarea part of an existing redevelopment area, although a large tract of land is publicly owned and used by the Newark Fire Department Training Facility and fire boat opera-Beyond development of the area immediately adjacent to tion. Penn Station, new economic development in the Ironbound Subarea seems remote when compared to the potential of the Primary Subarea and the other lands north of Penn Station. For this reason, plus the lack of physical interrelationships between this subarea and the northern subareas, a general rather than a detailed analysis of existing conditions in the Ironbound Subarea was conducted.

The main development asset of the area is the proximity of its northern parts to Penn Station. In fact, the current Newark Bus Terminal Study has selected this area as the recommended location for Newark's Intercity Bus Terminal. The Phase I Report of the <u>Bus Terminal Study</u> includes a detailed analysis of that site and has been reviewed as part of this Riverfront Study.

2.3 Major Issues

As a result of the foregoing analysis of existing conditions a number of major issues have been identified which need to be addressed in any development plan for the Newark Passaic Riverfront. These issues are stated below in "how to" terms.

- . How to improve the image of downtown Newark as an attractive and safe place to live and work.
- . How to make downtown Newark an active place, during the day, at night, on weekends and on holidays; specifically, how to attract new residential development to an area that presently has none.
- . How to physically relate the riverfront area to the CBD and to Penn Station.
- . How to provide vehicular access to the riverfront area from McCarter Highway, a major arterial street with limited access points.
- . How to provide pedestrian connections to the riverfront area from the other side of McCarter Highway which is a major physical barrier.
- . How to develop the river's edge, converting it from its present condition to a major asset.

Footnotes:

- U.S. Army Corps of Engineers, 1982. "Plan Formulation Analysis Passaic River Basin Study - Existing Conditions and Plan Formulation Status". (Preliminary Findings)
- Elson T. Killam Associates, Inc., 1979. Report excerpt regarding "Frequency of Toxic Material Detection in the PVSC Service Area Surface Water", transmitted to Newark Department of Administration, Office of Planning and Grantsmanship, August 19, 1982.
- State of New Jersey, Department of Environmental Protection, 1981. New, Revised and Amended Rules Concerning Water Quality Standards, DEP Docket No. 010-80-02.
- 4. U.S. Department of Housing and Urban Development, Federal Insurance Administration, Flood Insurance

Rate Map, City of Newark, New Jersey, Community Panel No. 340189 0004 B, Effective Date, March 28, 1980.

- 5. Newark Transportation Control Plan, 1981.
- 6. Newark City Subway Rehabilitation Project.
- 7. Newark Bus Terminal Study, Wilbur Smith and Associates, 1981.

Based on an analysis of existing conditions, four overall development goals have been formulated for the Study Area. The four goals are related to the subjects of:

- . Image
- . Economic Development
- Vitality
- . Identity and Linkage

3.1 Image

Outside private investment in the downtown area is presently inhibited by a widespread perception of Newark as a city of physical and economic decline. Although the CBD is already a major regional center of office and retail activity and has a number of important development assets, it will remain difficult to attract new development unless the city can project an image of security, optimism and progress.

The riverfront area can make a major contribution to the creation of such an image because of its crucial location at the main vehicular and pedestrian entrance to the CBD where first impressions of the downtown will be formed. Therefore:

- Goal 1: To improve the IMAGE of downtown Newark as an attractive and safe place to live and work.
- Objectives: 1. To concentrate commercial development on sites most clearly visible and directly accessible to pedestrian and vehicular traffic entering the CBD.
 - 2. To reinforce the city "gateway" concept for development around Penn Station by relating new structures functionally and architecturally to existing development on Raymond Boulevard.
 - 3. To extend the overhead walkway system to connect new riverfront development with Penn Station and the Gateway complex and to make similar connections with other adjacent parts of the CBD.
 - 4. To establish pedestrian paths at street level which are adequately lit and under continued surveillance from surrounding development.

3.

5. To add to the visual interest and activity of the public environment by locating entertainment facilities and retail functions along pedestrian paths.

3.2 Economic Development

Commercial development on the riverfront will create new jobs in the downtown and increase public revenues which are two of the primary goals of Newark's Overall Economic Development Program. Therefore:

- Goal 2: To create the conditions for private ECONOMIC DEVELOPMENT of mixed commercial uses.
- Objectives: 1. To define a set of marketable development packages for the area, stipulating allowable uses and optimal densities of development, as indicated in an assessment of long-range market potentials.
 - To ensure that adequate parking can be economically developed in relation to each new increment of development, either onsite or off-site.
 - 3. To provide efficient vehicular access to all development parcels, particularly from McCarter Highway, Raymond Boulevard and Broad Street.
 - To re-route selected existing bus services or to provide new routes to adequately serve the riverfront area.
 - 5. To develop an integrated system of pathways through the area, providing attractive and safe pedestrian access from Penn Station.

3.3 Vitality

Downtown Newark presently tends to be only an employment and retail center of the city, with limited residential opportunities and few entertainment attractions to encourage evening and weekend activity, leaving the streets at night relatively deserted and forbidding. To make the CBD a more active, exciting and safe place, more diversity of development is needed. Office and retail uses should be balanced with residential, entertainment and recreational uses that will produce more consistent activity throughout the day, at night, and on weekends and holidays. Therefore:

- Goal 3: To increase the VITALITY of the downtown area, making it an interesting and safe center of diverse activities throughout the week, both at day and at night.
- Objectives: 1. To designate part of the riverfront area for residential development, on parcels offering the amenities, security and services necessary to attract market housing development.
 - 2. To provide for convenience retail outlets within easy access of housing development.
 - 3. To develop a public promenade along the water's edge with a related outdoor meeting place or entertainment area.
 - 4. To introduce commercial entertainment facilities to encourage night time activity and the use of the area by a broad cross-section of city and metropolitan residents.
 - 5. To provide active recreation opportunities.

3.4 Identity and Linkage

The riverfront site, with its boundaries clearly defined by McCarter Highway and the Passaic River, has the obvious potential for development as a distinct functional area with an identity separate from the remainder of the CBD. While a separate identity for the area can have marketing advantages, new economic development needs to be connected to Penn Station, Gateway and the remainder of the CBD to reach its full potential. Therefore:

- Goal 4: To establish a unique IDENTITY for the riverfront area, while providing strong LINKAGES to the rest of the CBD.
- Objectives: 1. To preserve and enhance the historic nature of the area, and to rehabilitate existing buildings where possible, to maintain their scale and architectural character.
 - To encourage new uses and development types that complement, rather than compete with, existing activities (e.g., specialty retailing).

- 3. To introduce water-related recreational activities (e.g., rowing) and special water-oriented commercial uses (e.g., a floating restaurant).
- 4. To provide efficient, safe pedestrian access from Broad Street and Penn Station to the water's edge and to major activity nodes in the riverfront area.
- 5. To focus riverfront activity in areas visible from Broad Street and protect sight lines from the riverfront to important landmarks of the CBD.

4. DEVELOPMENT POTENTIAL

The Development Potential of the General Study Area is affected by two basic factors: the strength of the market, and the physical capacity of the site. This section of the Report examines both of these factors and outlines a development program for the site in terms of uses suitable for the subareas of the General Study Area.

4.1 Market Assessment and Assumptions

Although a market analysis is not part of this Study, the potential demand for various land uses and activities was assessed by reviewing recent studies and development activity in the CBD. In addition, discussions with local representatives of the business and public sectors in Newark were held. The picture which emerges is that the potential exists for a variety of uses, including office, hotel, residential, retail and other activities, and that the real question is how to make the development of these uses possible.

Overview

Following a decade of industrial expansion after W.W. II, the Newark region, like many of the traditional manufacturing centers of the northeastern seaboard, has undergone a slow but steady decline, accompanied by significant changes in the nature and location of major economic activity. Overall economic statistics, however, conceal the stable and slowly expanding office sector of Newark's economy which is becoming the core of present revitalization efforts.

Despite the decline in industrial activity, Newark remains New Jersey's largest and most densely populated city, with a Central Business District which is one of the largest single retailing areas in the State and which has the highest concentration of office employment, traditionally concentrated in finance, insurance and government concerns. Recent activity in the CBD has shown a relatively high demand for new, quality office space and the possibilities for expanded retail development related to the needs of a growing business community.

The continued viability of Newark's CBD is obviously dependent on the City's ability to adapt to the changing economic forces and to capitalize on its several positive advantages. These include a central location in the New York Metropolitan Area with proximity to Manhattan, and to other centers in the Northeast Corridor; a highly developed transportation network including proximity to Newark International Airport; a welldeveloped communications network via New Jersey Bell; readily available labor resources and many development opportunities for both new construction and rehabilitation. Obscuring these real assets is the City's present poor image as a declining industrial power, where obsolescence and decay are the overwhelming impressions and where the exaggerated perception of personal insecurity is a very real problem.

Following are assessments of the current markets for office, residential, hotel and conference center, and other facilities and activities for the Passaic Riverfront site.

Office

Most recent new development in downtown Newark has been for office space related to expansion of users already located in Newark. Examples of recent developments include:

Project	<u>Major User</u>	Floors	Square Feet
Gateway I	General Tenant	28	548,800
Gateway II	Western Electric	18	838,100
Gateway III	Prudential	18	600,000
PSE&G	PSE&G	26	1 million
One Washington Park	N.J. Bell	18	400,000

As can be seen, the above new office buildings are quite large. In addition, the principal users were already located However, there is also an office market demand in Newark. related to existing New York City firms that wish to avoid Manhattan's very high rents. Renaissance Newark states that users of up to eight million square feet of space in midtown Manhattan have leases coming up for renewal which will result in rent increases of from \$10 to \$12 per square foot to levels of annual rents of \$30 to \$35 per square foot. Downtown Newark, where rents in buildings currently under construction range from \$20 to \$24 per square foot, can serve as an attractive alternative to expensive Manhattan rents. Recent development in the nearby Meadowlands by Hartz Mountain, for example, has capitalized on this market by attracting office users from Manhattan and Queens. Companies with New York City offices whose executives live in northern New Jersey are examples of marketing targets for downtown Newark. In this regard, downtown Newark will be competing with suburban New Jersey locations for a share of the spillover office market related to New York City.

Residential

There is presently no new market housing in downtown Newark, and no housing at all within or near the Study Area. However, based on the fact that the downtown employs approximately 85,000 persons, one can start with the premise that these workers represent a potential market for housing that is convenient to their jobs. The question then becomes, how strong is this potential market, and what is necessary to

attract these people? What qualities must exist to make the riverfront site an attractive place to live? Secondly, assuming that the market exists and can be attracted to the Study Area, what needs to be done to attract developers to undertake the task of building market housing in downtown Newark? In a recent (September 25, 1982) speech to the International Downtown Executives Association, New Orleans' developer, Joseph C. Canizaro, leading addressed this question by stating that "developers will build residential units, but cities have to make it profitable for them". То make downtown housing profitable, and to get developers to act will require, in Mr. Canizaro's judgement, big inducements by the City, as follows:

- 1. Find the site and give the land to the developer, who will build in accord with community desires.
- 2. Abate the developer's taxes.
- 3. Give UDAG grants, not loans, and make the approval process short.

In the case of densely developed downtowns like Newark's, structured parking may also need to be provided by the City. In short, while residential units are vital to the ultimate success of any downtown development program, cities must make it profitable for private developers to build residential units - just as profitable as it is for them to build commercial structures.

Hotel and Conference Facilities

The Hilton Hotel (254 rooms) which is part of the Gateway I project is reported to be operating at a high occupancy rate. Thus, there may be a market for either an addition to the Hilton or a new hotel on the riverfront site in conjunction with larger and improved meeting or conference space.

Other Facilities and Activities

Other uses which have been discussed in meetings with the Steering Committee for the riverfront site include retail commercial, (such as supporting convenience retail for office and residential uses), specialty retail (such as the kind found in the Festival Markets in Boston and Baltimore), and an athletic club (commercially operated). The riverfront site already has a City heliport which serves a PSE&G shuttle from downtown to Manhattan; this activity can lend an element of excitement and interest to the riverfront.

There is also the possibility of providing for water-related activities. Such activities might include boating (row boats, canoes, and paddle boats), rowing (i.e., shells and sculls), and activities such as restaurants or athletic facilities located on tied-up barges or boats.

Summary of Market Assumptions

In summary, the following assumptions have been made regarding the market for development in the Study Area:

- 1. That there will continue to be a long-range demand for new office space in downtown Newark.
- That there is a potential for market housing in downtown Newark that can be met on the riverfront site.
- 3. That there is potential for hotel and conference center development in downtown Newark.
- 4. That with the development of office, hotel and residential uses, there is a potential for related entertainment, commercial recreation (e.g., athletic club), and retail development on the riverfront site.

4.2 Potential Development Sites and Assumptions

Approximately 28.27 acres exists within the northern part of the Study Area, excluding a 110 foot wide right-of-way set aside for McCarter Highway (175 feet at the Raymond Boulevard intersection), and a 110 foot right-of-way set aside for Raymond Boulevard as these roads pass by the site.

The Bridge Street Subarea contains 9.11 acres. The Primary Study Area is Urban Renewal land and contains 19.16 acres.

The amount of land available for new development depends upon which existing buildings are saved and adapted to new uses. Table 4 shows maximum and minimum amounts of land available for new development assuming the retention of the PSE&G Substation. Each alternative reserves different amounts of land for other existing buildings. Alternative I is based on maximum clearance and retains only the PSE&G Substation. Alternative II retains the PSE&G Substation, and the Power Station. There are, of course, adjustments which can be made within the range represented by Alternatives I and II, but for general planning purposes, one can assume that between 25.32 and 27.16 acres of land are available for development in the northern part of the Study Area.

		Alt. I (Maximum Acres)	
Bride	lable Land ¹ Je Street ary Study Area	$\frac{27.16}{(9.11)}$ (18.05)	$\frac{25.32}{(9.11)}$ (16.21)
Power	ved for Other Uses Station Substation	$\frac{1.11}{(0)}$ (1.11)	$\frac{2.95}{(1.84)}$ (1.11)
TOTAL	<u>.</u>	28.27	28.27

Table 4 - LAND AVAILABLE FOR DEVELOPMENT

Note: 1. Includes any public open space (e.g., river walk) and River Street easement.

4.3 Subarea Development Suitabilities and Assumptions

Given its surrounding uses, length (5900 feet) and narrow width, the General Study Area can be seen as a collection of development subareas or parcels, each with its own physical characteristics, relationships to existing development, potential uses and desirability as a development site. Examining the General Study Area from this perspective, the following observations can be made. These observations have been used in the formulation of the alternative development concepts described in the next section of this Report.

- a. The sites with the most immediate development prospects are near Penn Station, particularly the triangular site bounded by McCarter Highway, Raymond Boulevard and River Street. This is because of this site's visibility as well as its proximity to recent major new development (and to Penn Station).
- b. Conversely, the sites in the Bridge Street Subarea have less development potential, not because they lack proximity to existing major development, but because they are far from Penn Station, are not visible from existing development areas (i.e., from Washington Park and Broad Street) and are separated from the CBD by McCarter Highway and intervening development.
- c. Because of the difficulty of attracting residential users and developers to the riverfront site until a

strong positive image and context is created in this area, and in view of observation a) above, residential uses seem unlikely in the southern portions of the Primary Study Area.

- d. The southernmost areas of the General Study Area (i.e., areas near Riverbank Park) have the least potential for commercial office, hotel or similar development because of their distance from Penn Station and the CBD.
- e. The Primary Study Area exhibits the greatest potential for immediate development for the following reasons:
 - . Its location near Penn Station, the Gateway District, and the CBD makes it the most attractive site for new private development within the General Study Area.
 - . The land is part of two existing urban renewal areas.
 - . The City has an application pending for Green Acres funding to the State of New Jersey for public open space improvements in this area.

ALTERNATIVE DEVELOPMENT CONCEPTS

5.

Following the analysis of existing conditions, the assessment of the site's development potential and the formulation of development goals and objectives, a wide range of alternative development concepts was explored. The concepts were reviewed and evaluated with the Steering Committee and a preferred concept was adopted for further design refinement. This section of the Report discusses the planning issues and choices which were confronted, describes and evaluates the alternative concepts and outlines the recommended alternative.

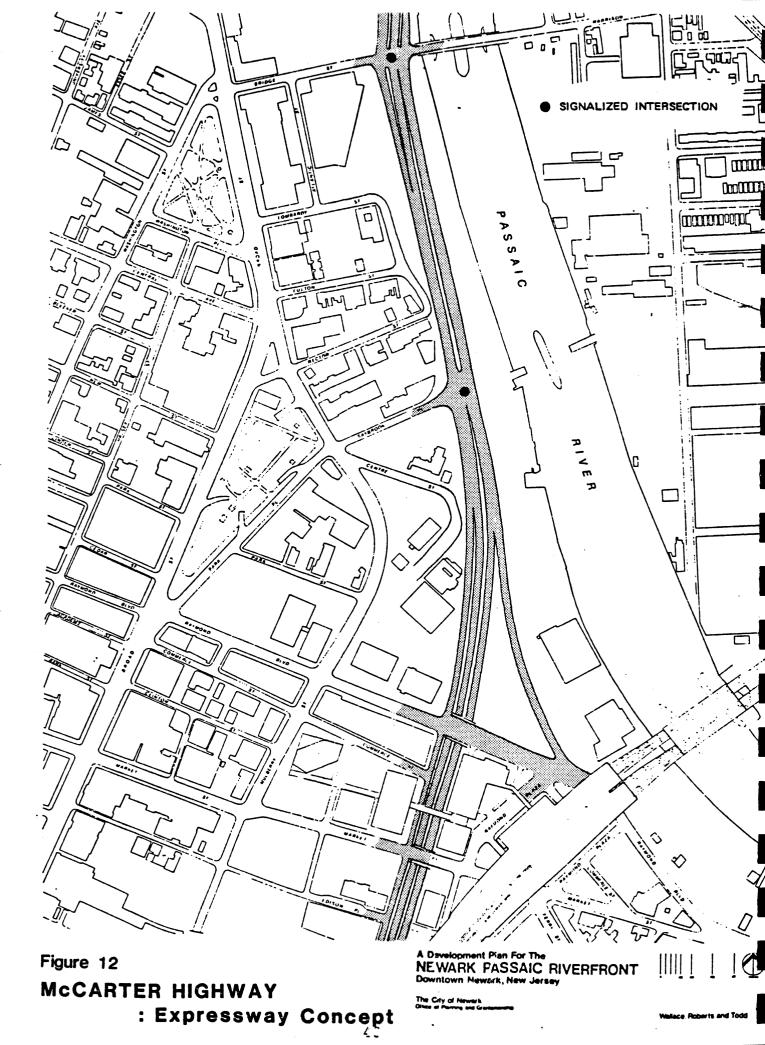
5.1 Planning Issues and Choices

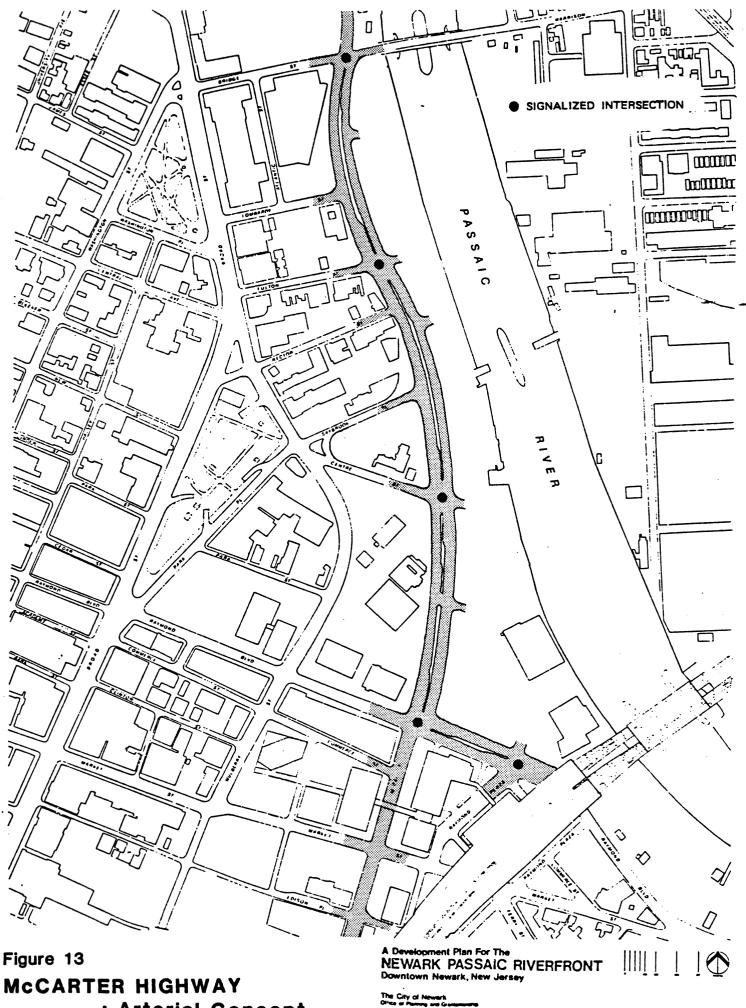
During the process of formulating and evaluating alternative development concepts, a number of planning issues emerged as major design determinants. Each of these issues, as well as the choices associated with each issue, is discussed below as a preface to the description of the alternatives.

1. McCarther Highway and Traffic

Very early in the study process it became clear that the expressway concept recommended for the rebuilding of McCarter Highway in the 1981 <u>Newark</u> <u>Highway Access Feasibility Study</u> was in conflict with the objective of optimizing the development potential of the riverfront site. The expressway concept described in the <u>Access Study</u> is shown in Figure 12 and includes the following elements: six moving lanes with signalized intersections at Saybrook Place and Bridge street, grade separated intersections at Raymond Boulevard (and Market Street), and River Street as a northbound on-ramp to McCarter Highway.

The concept for McCarter Highway assumed as the basis for all of the alternatives for this Study is an at-grade arterial, so that direct access to the northern part of the Study Area can be obtained. This concept is shown in Figure 13 and includes the following elements: provision of a 175 foot wide right-of-way at the Raymond Boulevard intersection tapering to a 110 foot right-of-way farther north; at-grade signalized intersections at Raymond Boule-Centre Street, Fulton Street and Bridge vard, Street; substitution of River Street as an on-ramp to McCarter Highway by an additional northbound lane on Raymond Boulevard from Penn Station to McCarter Highway. Also proposed is a number of right-turn-in, right-turn-out connections with McCarter Highway on the eastern edge of the high-





: Arterial Concept

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way. These modifications are deemed necessary in order to gain access to the riverfront sites.

2. Access

Various alternatives were studied for providing access to the development parcels located along McCarter Highway. Because of the narrowness of the Bridge Street Subarea, direct access from McCarter Highway was deemed necessary there. In the southern portion of the Primary Study Area, access from within the Study Area to garages, service docks, etc. was deemed appropriate because of the size of the parcels and to limit curb cuts close to the McCarter Highway/Raymond Boulevard intersection. There was considerable discussion within the Steering Committee regarding whether a vehicular connection between Raymond Boulevard and McCarter Highway through the riverfront site would be necessary since the elimination of this connection could result in a traffic-free pedestrian zone on the site. Elimination of this connection, on the other hand, would limit internal vehicular circulation and access, and therefore such a connection was recommended. Nevertheless, should the developers of the affected parcels conclude upon further detailed traffic engineering studies that a through connection is not needed, the reconfiguration of internal access could be accomplished within the framework of the overall Development Plan.

3. Parking

Several alternative physical arrangements for the provision of parking were studied, including a centralized (i.e., shared) location on-site, a dispersed (i.e., parcel-by-parcel) system on-site, and off-site locations.

A dispersed system was judged to be the most practical assumption for planning purposes because of the length of the site, the unavailability of off-site locations for new parking and the need for staging of parking. However, as development plans are finalized, opportunities should be sought to tie in off-site parking with the riverfront sites.

Certain assumptions were made regarding the amount of parking to be provided, based on experience and the availability of mass transportation in Newark.

For planning purposes the following parking indices were used:

- Office 1 space per 1000 sq.ft.
- Hotel Shared with office parking, if adjacent.
- Residential 1 space per dwelling unit.
- Retail None for local service shops; 1 space per 1000 sq.ft. for regional retail.

The actual amount of parking to be provided, as well as whether it is to be provided on-site or off-site, should be subject to negotiation between the City and each developer.

4. Rehabilitation and Reuse of Existing Structures

Existing structures were visually inspected and evaluated regarding their architectural merit and potential for reuse. An assessment was also made in regard to each structure's compatibility with proposed new development. In all cases emphasis was placed on finding ways to save and reuse structures wherever possible. Although several structures have been identified for potential recycling, the feasibility of adapting them to new uses rests with finding a willing developer and detailed architectural and engineering designs, costs and economic testing. The Overall Development Plan, therefore, provides for the possibility that any building for recycling may in fact need to be removed, should a viable reuse proposal not emerge.

5. Market Flexibility

Maintaining flexibility within the plan to respond to changing conditions in the market place is important if Newark is to be able to capitalize on every desirable development opportunitity which arises. For example, while provision of market rate housing on the riverfront site is a desirable objective, current interest rates and construction costs preclude its development now. However, these conditions may become favorable in the future. Therefore, the Riverfront Development Plan is based on establishing a series of development parcels with a range of potential uses rather than a single prescribed use.

The parcel programs stated in the plan represent practical maximums for the amount of development on a parcel based on an assumed car parking index and the physical capacity of the parcel to accommodate the parking and suggested uses. There is nothing in the plan that precludes development at lesser intensities if the market so dictates, or a change in the parking index (mutually agreed upon by the developer(s) and City) which could result in lower or even higher intensities.

6. Public Open Space

An attractively designed system of public open space is a key ingredient in attracting private development to the riverfront site. Such a system should have the following characteristics:

- . A focus on the riverfront and the pedestrian experience.
- One or more major outdoor public gathering places.
- . Strong visual and pedestrian connections to Penn Station and the Central Business District which are "invitations" to the riverfront site.

7. Upper Level Walkways

The existing Gateway complex has an extensive system of enclosed upper level walkways linked to Penn Station. One unfortunate effect of the walkway system is to remove pedestrians and related commercial activities from street level. An important objective of the Riverfront Plan is to attract people to the riverfront. To do this, upper level bridges are recommended at key locations, principally to overcome the physical barriers for pedestrians represented by Raymond Boulevard and However, once pedestrians cross McCarter Highway. these roadways, they ought to be brought back to ground level to help reinforce ground level activities and vitality.

5.2 Description of the Alternative Concepts

Three "sets" of alternative concepts were developed, based on the assumptions and analysis described previously. They are:

Alternative A:		Festival Market (demolish Power Sta- tion)
Alternative B:		Demolish Power Station
B-1: B-2:		Linear Activity Center Centralized Activity Center

C-1: Southern Activity Center C-2: Dual Activity Center

a. Alternative A: Festival Market (Figure 14)

This alternative is the result of trying to accommodate a "Festival Market" like the one WRT designed for Enterprise Development Company for the Norfolk Waterfront. It is similar in concept to Harborplace in Baltimore, that is, it is a regional commercial center which contains a mix of specialty retail (50%) and food-related shops and eating places (50%). To succeed, it needs visibility, accessibility, a market area of sufficient size, and an outstanding amenity which will make people want to be there - even without the market. The minimum size for the Festival Market (first phase development) is 75,000 square feet of gross leasable area, or 125,000 gross square feet, with the potential for almost doubling of this size. Nearby parking is essential. To create the amenity needed, a marina on the Passaic River, with boats in view, is probably needed. There is only one area of the site where this program can be accommodated, and that is in the general location of the Power Station, which must therefore be demolished. In order to attract a developer the City would need to provide a number of financial incentives. These would probably include donation of the land, clearance, construction of the foundations, construction of a parking garage, all site improvements outside the glass line of the building, the marina, and capital for the construction of the building.

The remainder of the site could be developed as offices and housing, with a hotel located across from the existing Hilton.

b. Alternative B-1: Demolish Power Station; Create Linear Activity Center (Figure 15)

In this alternative a mixed use development of hotel, office and retail is located on the corner of Raymond and McCarter, with access from (the former) River Street. This development is related to a public plaza along the river, as are two new flanking office buildings. A second plaza and cluster of either residential or office space is located farther north near Centre Street. A linear "Activity Center" related to the riverfront connects the two clusters of development. The "Activity Center" would include retail shops and restaurants, and an athletic club, with parking behind. The Bridge Street Subarea is comprised of several parcels of office and/or housing development.

c. Alternative B-2: Demolish Power Station; Create Centralized Activity Center (Figure 16)

This alternative is based on the idea of locating an "Activity Center" comprised of retail shops, restaurants, hotel and athletic center in the center of the northern part of the Study Area, where it would be a focus for the entire length of the riverfront and tied back to the CBD via Saybrook Place and Centre Street. Because the Power Station is not suitable for office or residential reuse, it is demolished in this alternative and its site used for office development. Office development is proposed to the south of the Activity Center, with housing on the north. If housing proves infeasible, these northern sites could be used for more office space.

d. Alternative C-1: Recycle Power Station, Southern Activity Center (Figure 17)

This alternative is based on recycling the Power Station for use as a commercially operated Athletic Club. The Club is one component of a single Activity Center, focused on a plaza to the north of and adjacent to the Power Station. A mixed use development of hotel, office and retail is located on the corner of McCarter and Raymond, with clusters of office and/or housing to the north of the Activity Center.

e. Alternative C-2: Recycle Power Station; Create Dual Activity Center (Figure 18)

This alternative is similar to B-2 in that it shows a location for retail activities (and perhaps a hotel) in the center of the site, but retains and recycles the Power Station for a commercial athletic club. This results in a Dual Activity Center. As with other alternatives, parcels to the north of the Essex Warehouse can be developd for housing, and/or office use, depending on market need.

5.3 Evaluation

Each of the five Alternative Concepts described above has advantages and disadvantages, as described briefly below.

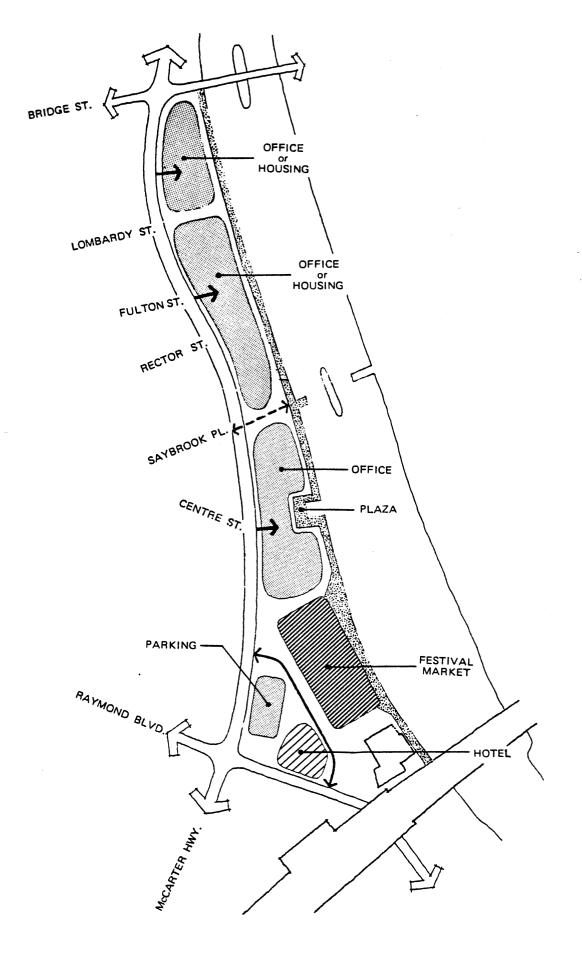
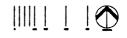


Figure 14 ALTERNATIVE A : Festival Market

A Development Plan For The NEWARK PASSAIC RIVERFRONT Downtown Newark, New Jersey



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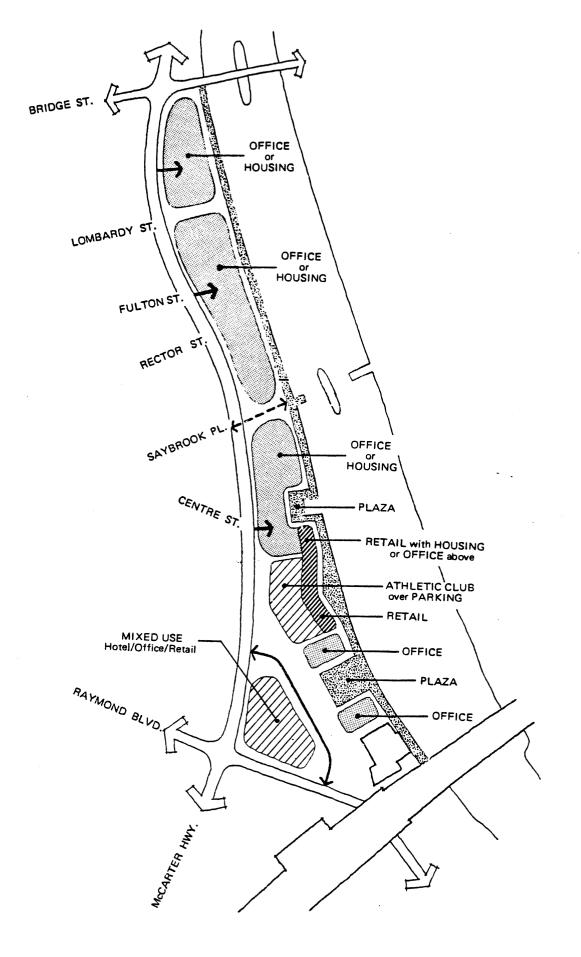
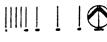


Figure 15 ALTERNATIVE B1 : Demolish Power Station

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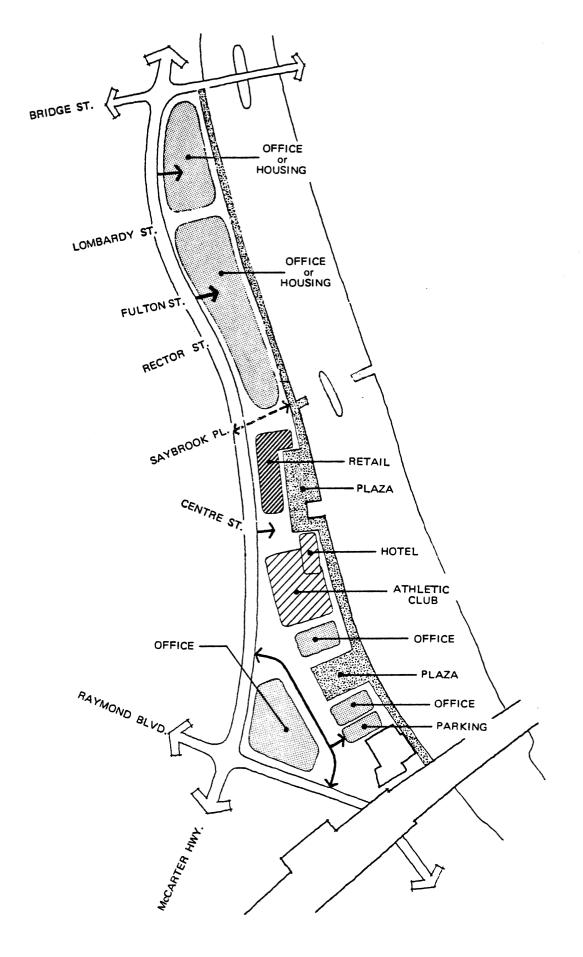


Figure 16 ALTERNATIVE B2 : Demolish Power Station

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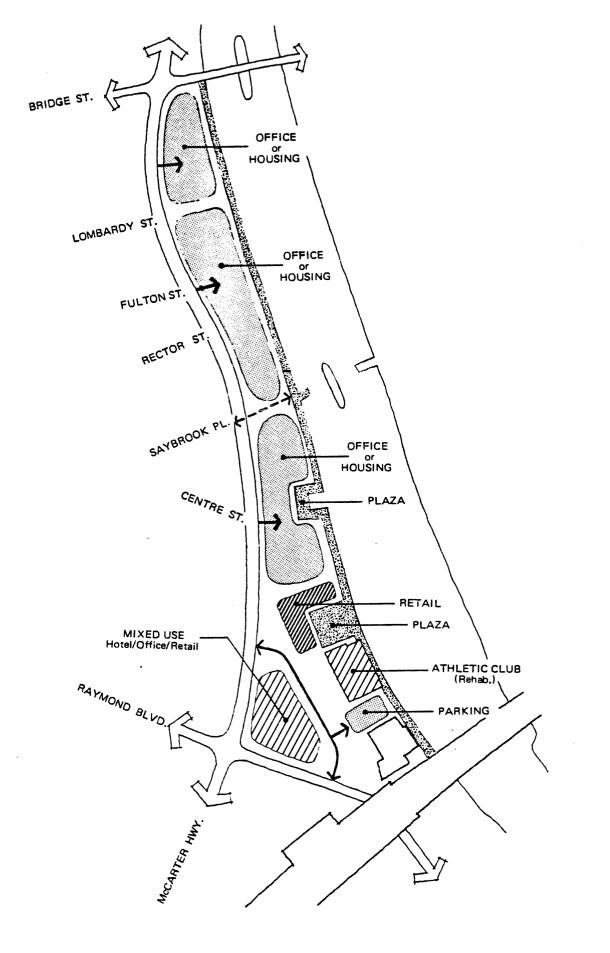


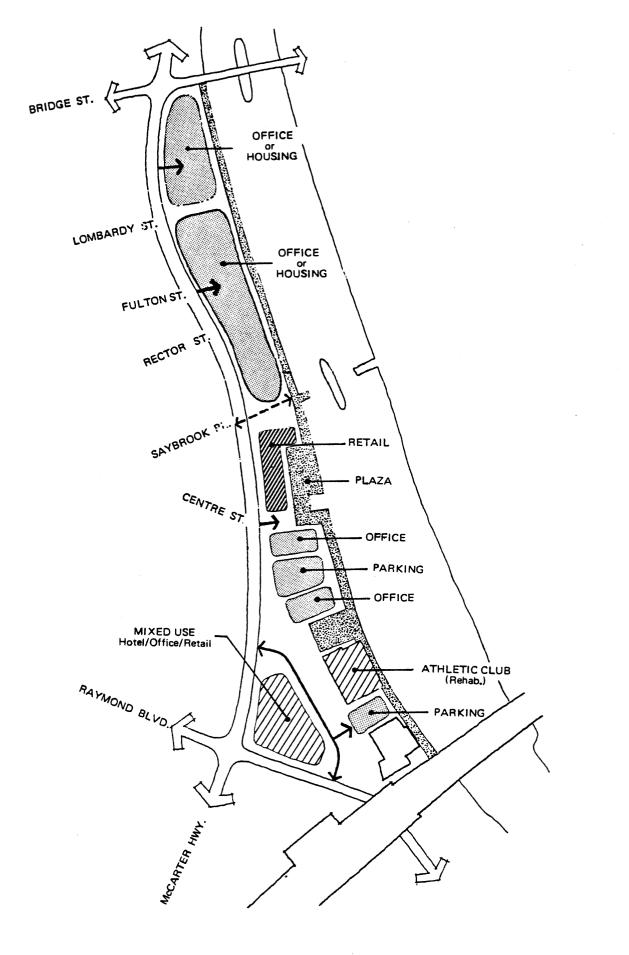
Figure 17 ALTERNATIVE C1 : Recycle Power Station

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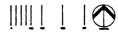
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ALTERNATIVE C2 : Recycle Power Station A Development Plan For The NEWARK PASSAIC RIVERFRONT Downtown Newark, New Jarsey



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Alternative A: Festival Market

This is an option whose feasibility could be tested immediately by approaching potential developers with the concept plan and getting their expression of interest. Development of such a market would be a powerful image maker for downtown Newark. As previously described, the City must provide substantial incentives to complement a private developer's willingness to undertake this program. There must be a partnership between the private and public sectors.

Alternative B: Demolish Power Station

Both Alternative B-1 and B-2, because of the removal of the Power Station, represent development opportunities with maximum flexibility for new construction. The main weakness of B-2 (Centralized Activity Center) is the location of the hotel in the center of the Study Area, away from the existing Hilton and Penn Station. In both alternatives the flexibility gained by demolishing the Power Station is negated by the expense of demolition and the loss of an old building with architectural character and reuse potential.

Alternative C: Recycle Power Station

In these alternatives, the Power Station becomes a physical constraint in a key site location. However, this is a problem only in the sense that it requires a deft design solution. The main difference between C-1 and C-2 is the location of the retail component. In Alternative C-1 the retail complex would probably be developed in an earlier phase, and may prove more difficult to promote with a limited amount of adjacent supporting development. The retail component of Alternative C-2 might be located in recycled buildings which could be an economic advantage. Its location is more directly related to the CBD, and would probably be developed late in the development process.

5.4 Recommendation

Following much discussion and further design studies, a variation of Alternative C-2 was adopted as the basis for detailed planning for the Primary Study Area. The Design Concept for the Primary Study Area is shown on Figure 19 and is based on the following elements:

- A continuous Riverwalk from Penn Station to Saybrook Place with potential future extensions to Bridge Street to the north and to Riverbank Park to the south.
- . Landscaped open spaces and pedestrian connections at Saybrook Place and at the intersection of McCarter Highway and Raymond Boulevard in order to link the Riverwalk to the CBD.

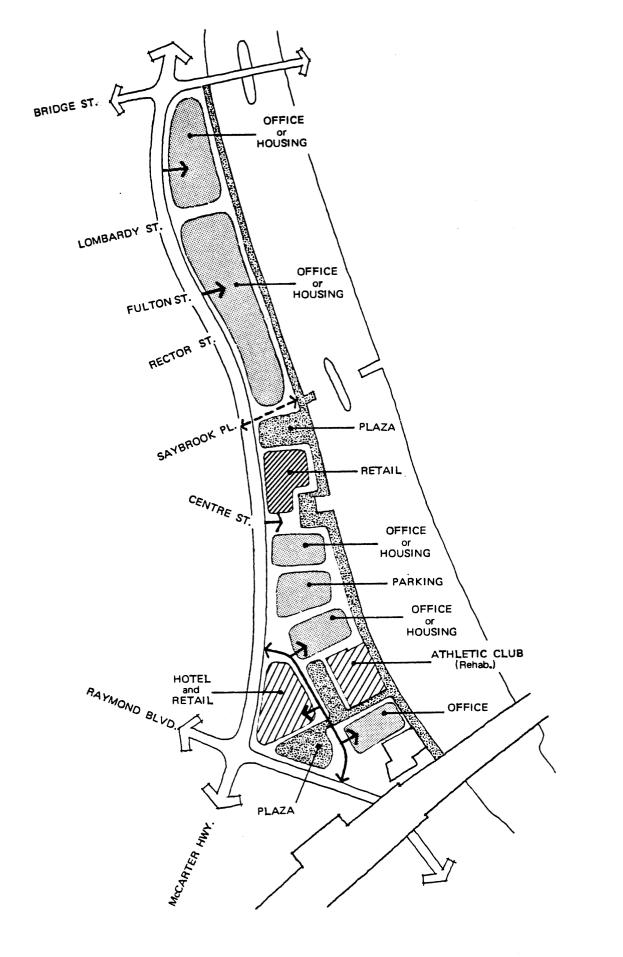
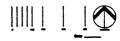


Figure 19 RECOMMENDED DESIGN CONCEPT A Development Plan For The NEWARK PASSAIC RIVERFRONT Downtown Newark, New Jersey



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- . A mix of uses hotel, conference, athletic club, offices, housing, retail, and restaurants as well as outdoor recreation attractions - to bring people and activity to the riverfront.
- . Selective recycling of existing buildings: the Power Station as an athletic club, old commercial structures near Saybrook Place as a retail/restaurant and mixed use activity center.
- . Creation of a large public open space along Raymond Boulevard across from Penn Station and the Hilton Hotel to serve as a visual focus for the area and as an "invitation" to the riverfront site.

A phasing plan would begin with the development of a mixed use complex of hotel, conference and retail development on the corner of McCarter and Raymond, and a new office building between the Power Station and PSE&G's Substation, followed by development of the area where the Power Station is located. Should recycling prove infeasible, the building could be demolished and the site redeveloped as offices or other uses.

6. OVERALL DEVELOPMENT STRATEGIES AND PRIORITIES

It has been pointed out that each of the General Study Area's three subareas has different developmental characteristics and opportunities. These have been taken into account in defining a development strategy and establishing priorities for each subarea, as discussed below and as illustrated on Figure 20.

6.1 Primary Study Area

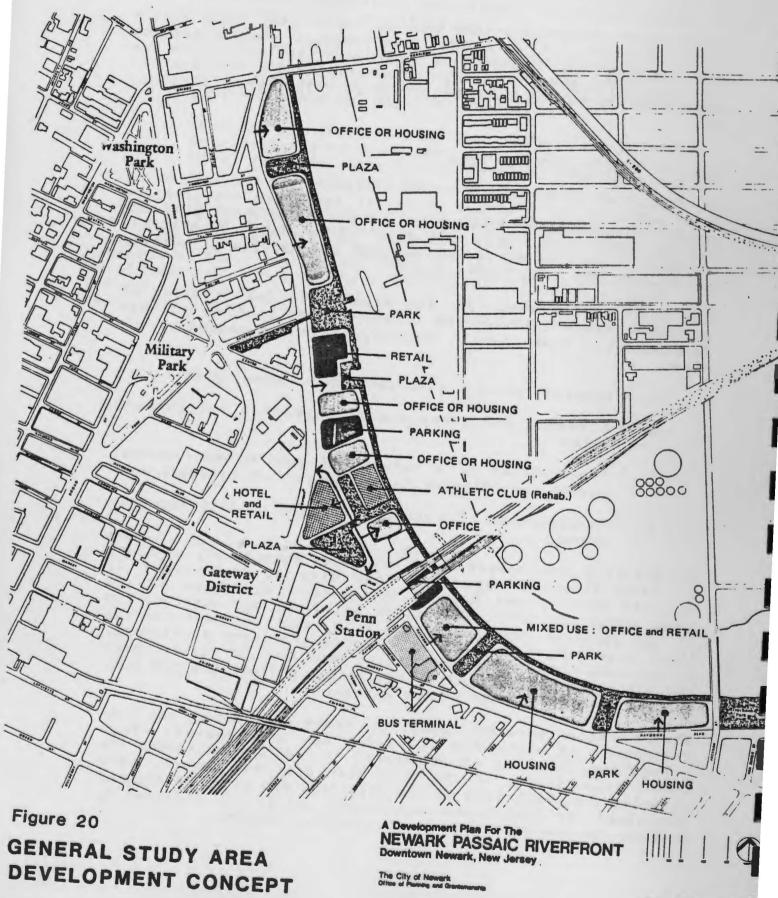
As discussed in Section 4 of this Report, the Primary Study Area exhibits the greatest potential for immediate development. Successful implementation of the recommended plan for the Primary Study Area requires an overall development strategy, and flexibility to respond to changing priorities and opportunities as they occur.

The principal strategy for the area is to use a series of public actions to "set the stage" for attracting private development. These public actions, listed in sequence, include:

- 1. Preparation of a long-range development plan;
- Assembly and clearance of potential development sites;
- 3. Construction of a network of public open spaces: plazas, the Riverwalk, and pedestrian bridges; and
- Construction of minor highway and utility improvements.

The priority development sites are those immediately adjacent to Penn Station, especially the site on the corner of McCarter Highway and Raymond Boulevard. Clearance of the sites shown for hotel and office buildings and construction of the proposed plaza will result in prestige locations for these uses and should aid in attracting private developers. At the same time, efforts should be made to find viable users for the Power Station and, during later phases, the old commercial structures near Centre Street.

Should viable users not appear for these structures, the last resort is to clear the sites for new development. This possibility requires an adjustment to the plan, although the basic organization of the site plan need not change. For example, implementation of the Riverwalk and plaza on Raymond Boulevard can take place regardless, and is not affected by whether the Power Station is recycled or removed.



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6.2 Bridge Street Subarea

This portion of the General Study Area has very good proximity to one of the Central Business District's prestige office locations - Washington Park. It is also relatively close to the Erie-Lackawanna commuter rail station. These two developmental assets, however, are offset by the following liabilities:

- . The land is not presently designated as a Redevelopment Area and ownership is divided among eight different owners.
- . Existing development around Washington Park, although in close proximity to the area, turns its back to the riverfront.
- . The subarea is approximately 2000 to 3600 feet from Penn Station and the Gateway complex, with no new development linking the Station with the Bridge Street Subarea.

Because the Bridge Street Subarea is physically interrelated with the Primary Study Area, the CBD and McCarter Highway, long range plans for this subarea need to be compatible with plans for these three major elements. However, development opportunities in this area are secondary to those of the Primary Study Area and depend upon the successful development of this area. Thus, general planning of the Bridge Street Subarea and related facilities (particularly McCarter Highway) ought to be based on the following objectives:

- Extension of the Riverwalk from Saybrook Place to Bridge Street.
- Provision of adequate vehicular access from McCarter Highway to the riverfront.
- Program flexibility which permits either housing, offices or other special uses to be developed.
- . Close attention to any changes in the blocks immediately west of the subarea so that pedestrian movements to the riverfront are encouraged.

6.3 Ironbound Subarea

Because the Ironbound Subarea is physically separated from the northern part of the General Study Area, and because its redevelopment is relatively remote, this study has examined the Ironboud Subarea primarily to identify long range principles for development in the area. One near term development opportunity is the area recommended in the <u>Bus Terminal Study</u> for Newark's Intercity Bus Terminal. The Study selected a site immediately south of Penn Station for a new terminal, and proposes joint development of the Bus Terminal, parking for 750 cars and a "riverfront office/retail and public space complex" on 7.3 acres.

Within the Ironbound Subarea and in addition to the potential for economic development near Penn Station, the potential exists for extending the proposed Riverwalk along the Passaic to Riverbank Park, which is located to the south of the Jackson Street Bridge.

7. PRIMARY STUDY AREA DEVELOPMENT PLAN

7.1 The Design Concept

The Design Concept for the Primary Study Area has been described in Section 5.4 of this Report and is diagrammed on Figure 19. The purpose of this section of the Report is to describe in further detail the elements of the Primary Study Area Development Plan.

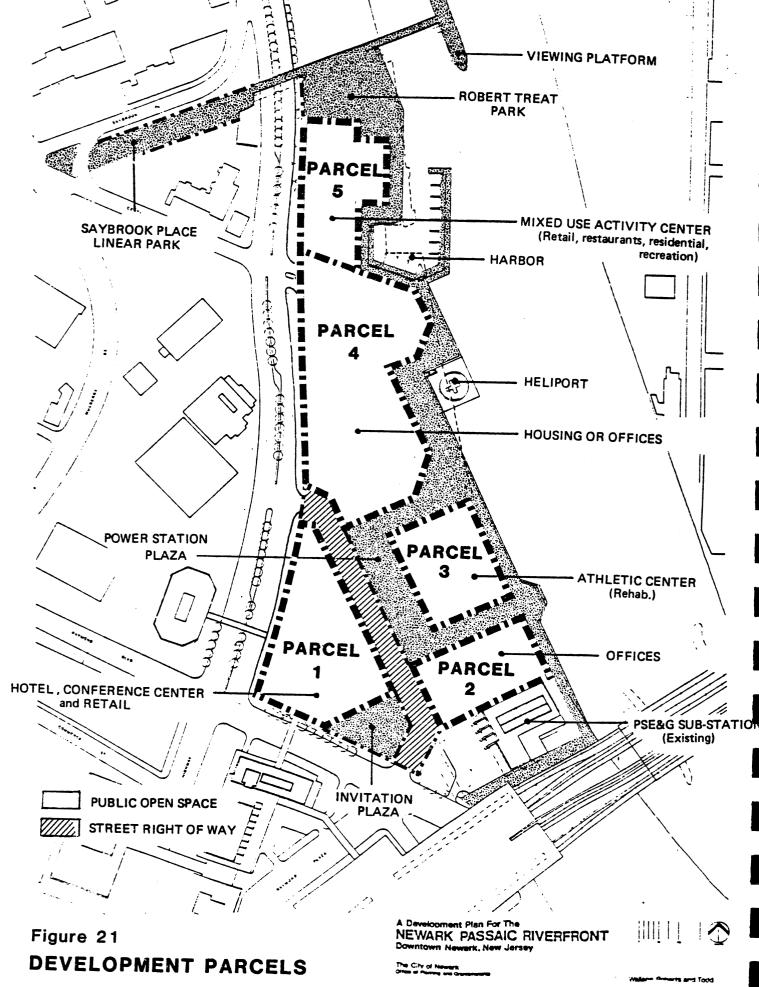
7.2 Proposed Land Uses; Parcelization and Development Programs

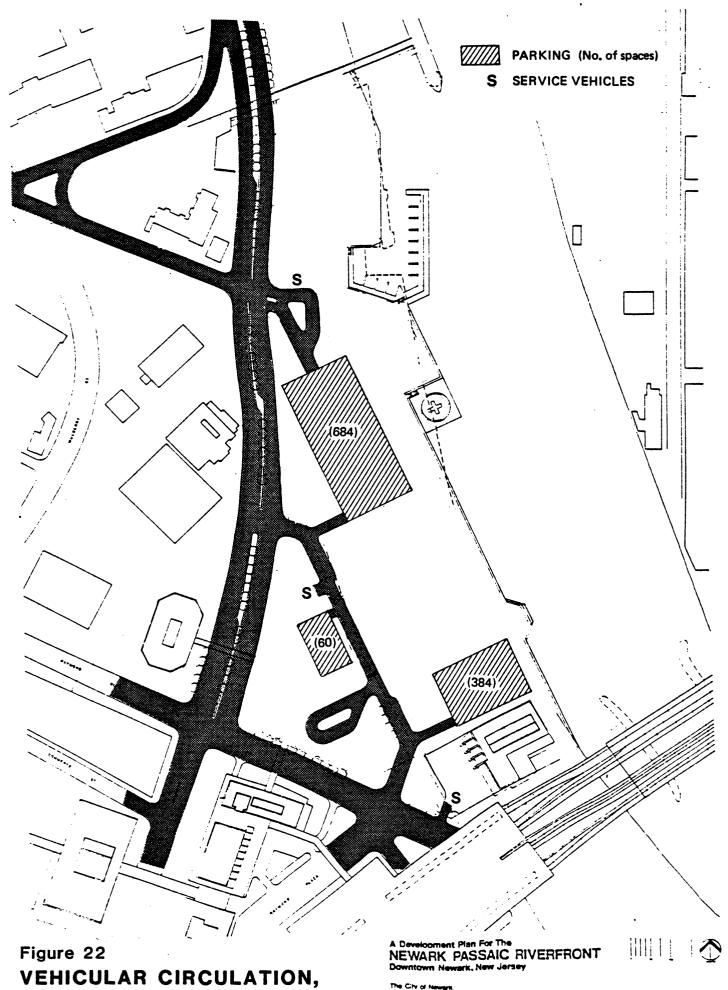
The Primary Study Area has been subdivided into Development Parcels, as shown on Figure 21. The parcels are defined by the network of public streets and open spaces proposed for the site. For each parcel, proposed uses have been identified, including suggested maximum amounts of parking, floor space (per use) and/or numbers of dwelling units (See Section 9.4.2 Parcel Design Guidelines).

7.3 Proposed Vehicular Circulation, Service and Parking

Figure 22 shows the internal vehicular circulation concept for the site. The system has been conceived using the following criteria:

- . Limited access from McCarter Highway and Raymond Boulevard due to the high volumes existing on these thoroughfares. In particular, this means limiting curb cuts (and especially left turns), as far as practicable, along both roads, especially near their intersection with each other.
- Primary access to the site from three points: 1) opposite Raymond Plaza on Raymond Boulevard, 2) opposite Centre Street along McCarter Highway, and 3) at a point between Raymond Boulevard and Centre Street along McCarter Highway. The detailed design of these intersections will depend on specific developer proposals and detailed traffic engineering studies.
- . Direct access to parking structures, hotel and office drop-offs and service courts from within the Primary Study Area, either from an internal street or from cul-de-sacs.
- Access to the PSE&G substation by flat-bed articulated trucks.
- Adequate parking provided as part of each development project.





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SERVICE and PARKING

7.4 Proposed Pedestrian Circulation and Public Open Space

Figure 23 shows the proposed Pedestrian Circulation and Open Space system for the site. The system is comprised of the following elements:

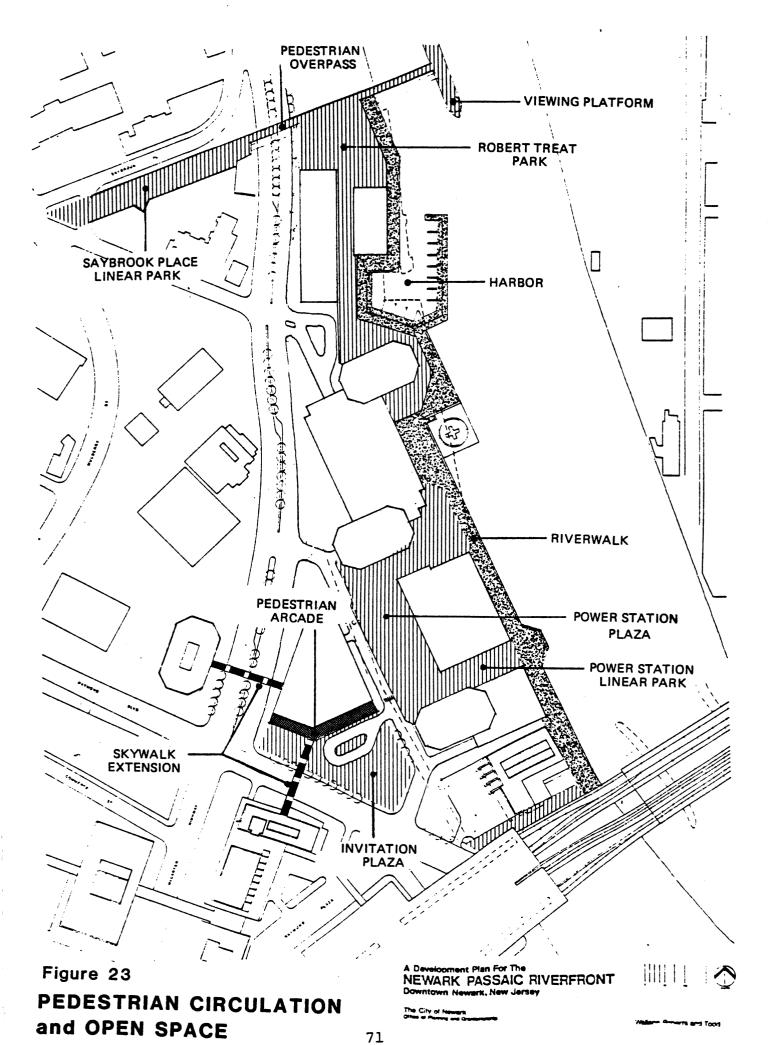
- A continuous Riverwalk along the Passaic. The Riverwalk should be richly landscaped and provide for bank stabilization, sitting and gathering opportunities for viewing the river, places to tie up boats (including "character" vessels like ferry boats), lighting, and planting.
- Pedestrian connections which link the Riverwalk with the CBD and the Penn Station/Gateway District, as follows:
 - An extension of the Gateway Skywalk system across Raymond Boulevard to the riverfront site to encourage the large number of workers in the Gateway complex to cross Raymond Boulevard.
 - 2. An open pedestrian bridge and landscaped pedestrian way parallel to Saybrook Place, perhaps extending to the center of the Passaic River, terminating on the permanently opened bridge. The bridge over McCarter Highway can take advantage of the old bridge supports.
 - 3. A pedestrian bridge which crosses McCarter Highway on the north side of Raymond Boulevard in conjunction with development on the west side of McCarter Highway.
- A landscaped public plaza facing Penn Station and Raymond Boulevard opposite the Hilton Hotel.
- A landscaped pedestrian connection from the above plaza to the Riverwalk.
- Other plazas and pedestrian ways integrated with development as it occurs, and designed to be compatible with the site's other public open spaces.

7.5 Public Improvements

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Redevelopment of the riverfront site will require the participation of the public and private sectors. Public improvements will be needed for establishing the Riverwalk and open space system, and for street and utility improvements. Detailed project design will determine the extent of the improvements needed and the exact costs involved, particularly

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for streets and utilities. The City may also need to become equity participants in some of the development projects if they are to be feasible. Key public improvement elements are shown on Figure 24 and include:

1. Riverwalk and Edge Treatment

At present there is a variety of river edge conditions present in the Primary Study Area, as indicated on Figure 5. One necessary requirement for new development is stabilization of the interface between upland development and the river. Given the nature of the existing river's edge and the intensity and relationship of proposed development to the river, two types of edge treatments seem appropriate. Detailed engineering studies which take into account the types of soils present in the upland area, the extent of fill required and its possible subsidence will be needed to determine the exact requirements for edge stabilization. At this point, the two potential generic treatments and their characteristics are:

Pile Supported Relieving Platform

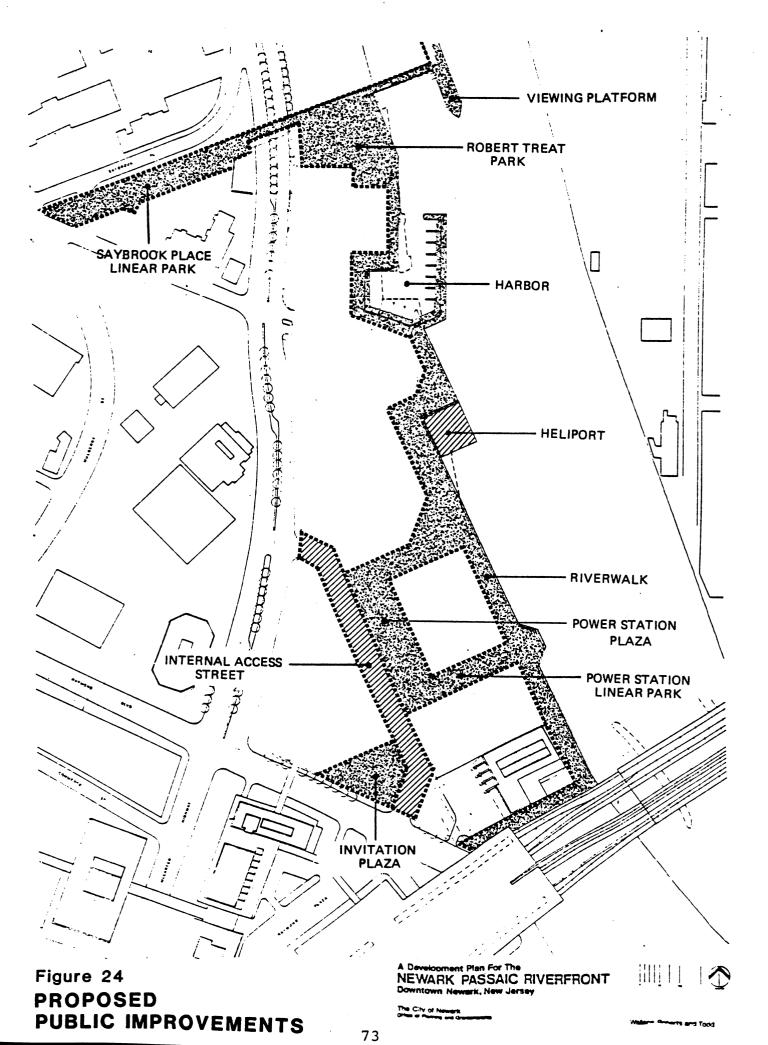
This treatment (Figure 25) will result in a vertical edge at the river's edge and will allow small boats to berth against it. The system will also result in minimal settlement and a paved horizontal edge or walkway approximately thirty feet wide. Portions of the edge can step down to the water to create a more intimate relationship with the river. The control elevation of the Riverwalk should generally be an elevation of 8 feet to avoid overtopping and flooding.

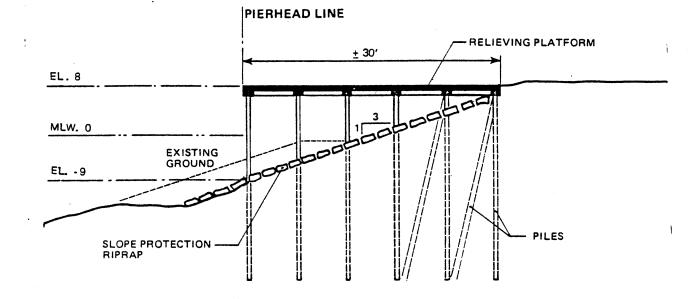
Sheet Piling

A bulkhead constructed of steel or concrete sheet piles with an earth anchor system as shown on Figure 25 can be used in certain circumstances where conditions permit.

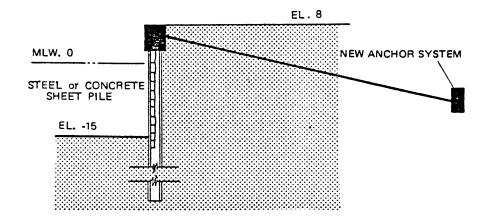
Where a particular method can be most successfully and economically used will be contingent upon soil conditions, which are unknown at this time, the condition of existing edge structures, and the type of adjacent development.

The proposed Riverwalk should be designed concurrently with the method of edge stabilization. Figure 26 shows a typical cross-section





RELIEVING PLATFORM



SHEET PILING

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Figure 25

RIVER EDGE TREATMENTS

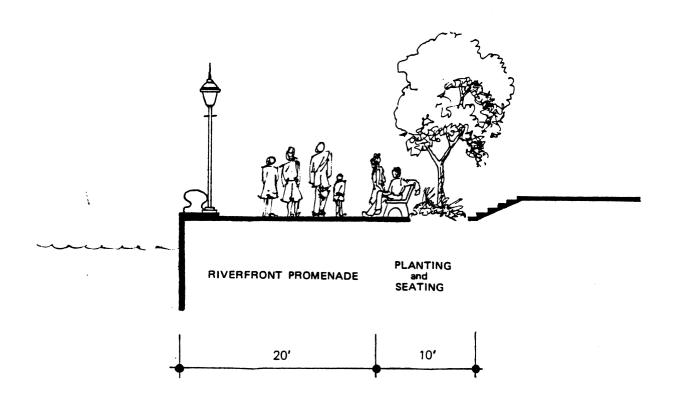


Figure 26 RIVERWALK : Typical Cross Section

A Development Plan For The NEWARK PASSAIC RIVERFRONT Downtown Newark, New Jersey

The City of Newark Office of Parroys and Grants through the riverwalk. The edge stabilization and Riverwalk, from Penn Station to Saybrook Place, would be approximately 2200 feet long.

2. Saybrook Place Linear Park

This open space is a connection between Military Park and the Riverwalk and includes an open pedestrian bridge over McCarter Highway, stairs down to the Riverwalk, and a potential pedestrian bridge over the Passaic to a viewing platform and gazebo in the center of the river. This latter element would probably necessitate restricting the boat channel in the River to the north side and will need required approvals.

3. Invitation Plaza

This proposed public plaza along Raymond Boulevard will serve as an outdoor public gathering place and an "invitation" to the riverfront. It will be visible from Penn Station, serve as a focus for surrounding development, and provide a link between the CBD and the river's edge.

4. Power Station Linear Park

This is the southern counterpart to the Saybrook Place Linear Park and links the Riverwalk with Invitation Plaza.

5. Power Station Plaza

This public open space adjacent to the Power Station is proposed as an unobstructed, paved area suitable for a variety of public activities such as temporary exhibitions and art displays, craft fairs and flea markets. This plaza is linked to the Riverwalk both by the Power Station Linear Park south of the Power Station building, and by a connection north of the Power Station building which could include outdoor eating space related to a cafe in the building.

6. Gateway Skywalk Extension

This extension is intended to link Invitation Plaza with Penn Station and Gateway.

7. Secondary Open Spaces

Additional public outdoor spaces are proposed within the Primary Study Area to complement the four elements described above. These "secondary" open spaces are located within development parcels but may require public funding. They should be designed not only as extensions of the primary open space system but also in conjunction with the other elements within their own and adjacent development parcels.

8. Street Improvements

It has been assumed that major reconstruction of McCarter Highway is not to be carried out in the immediate future, and that development in the Primary Study Area will occur prior to the rebuilding of the highway. Therefore some interim modifications to the existing highway will be required. These changes can be made incrementally, as a given parcel is developed.

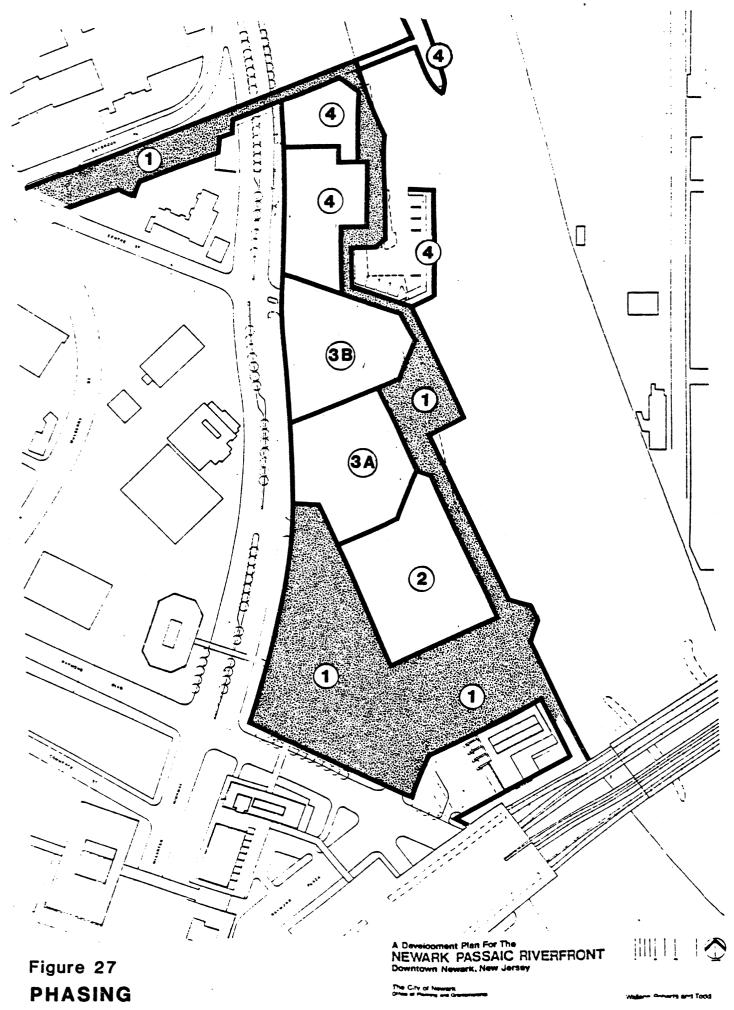
The Development Plan also proposes the elimination of existing River Street as an on-ramp to McCarter Highway. This will necessitate adding a westbound right-turn lane to Raymond Boulevard from Penn Station to McCarter Highway. Depending on negotiations with developers, it may also be necessary to reconstruct River Street, but with a new configuration which discourages through traffic (as shown on the Development Plan). In any event, the redesign of River Street ought to be done concurrently with detailed development planning for adjacent parcels.

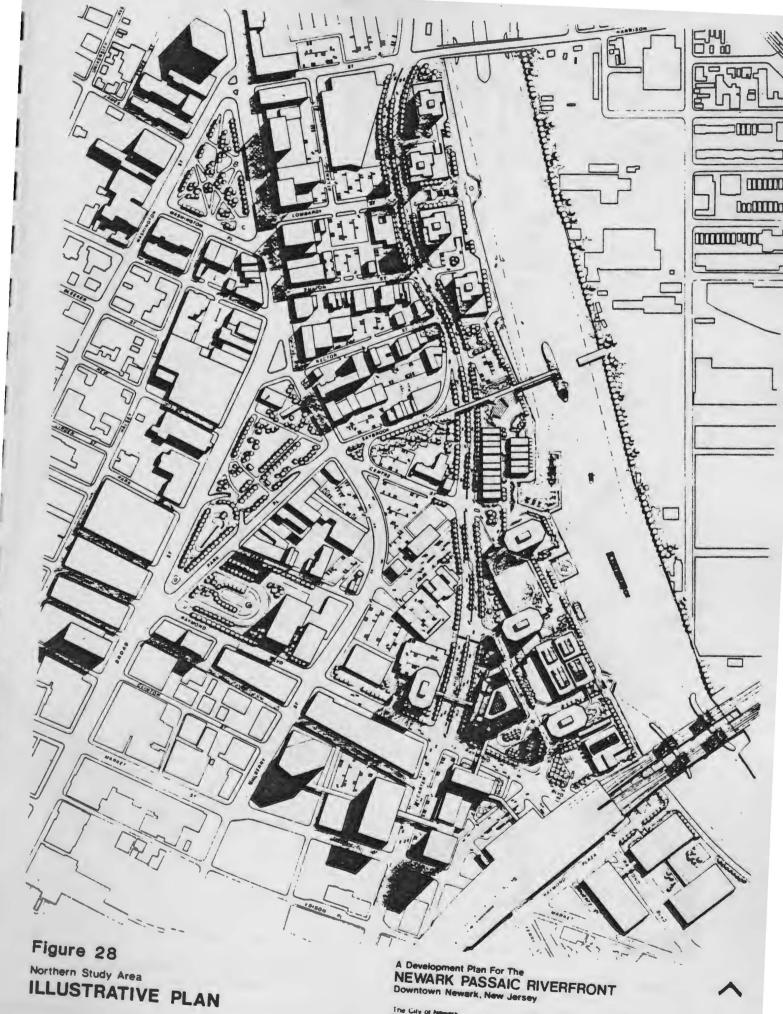
7.6 Phasing

Figure 27 shows the expected phasing of development within the Primary Study Area. In general, the "early action" development parcels are those nearest Penn Station and Gateway Center. Development is expected to proceed from south to north.

7.7 Illustrative Plans

Figure 28 is an illustrative plan of the Primary Study Area and Bridge Street Subarea as they might appear following implementation of the design concepts described previously. Figure 29 is a larger scale Illustrative Plan of the Primary Study Area.





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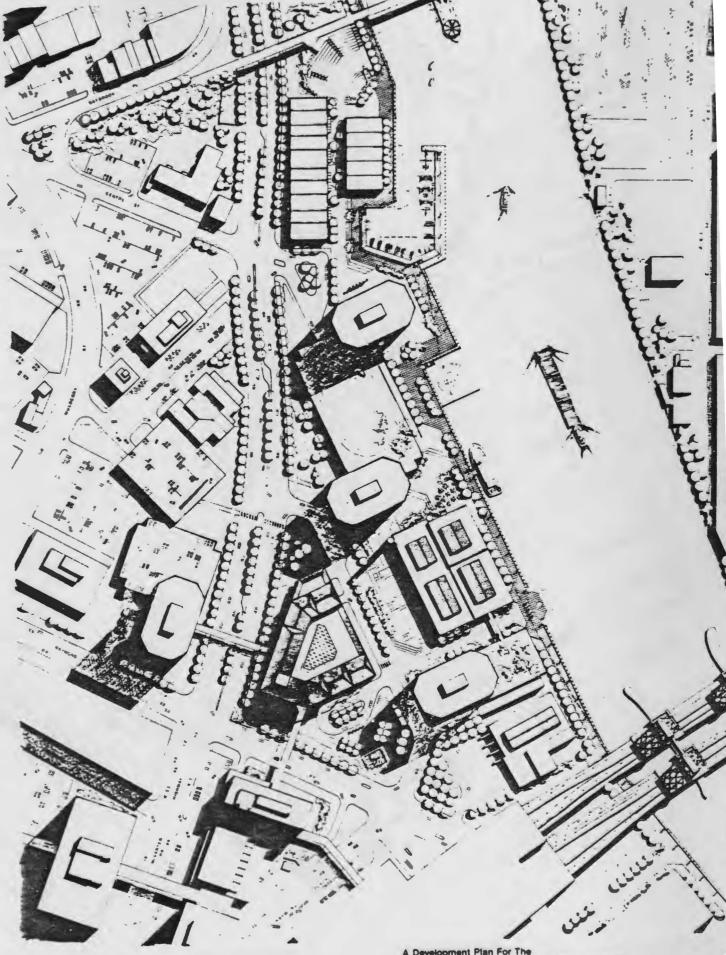


Figure 29 Primary Study Area ILLUSTRATIVE PLAN A Development Plan For The NEWARK PASSAIC RIVERFRONT Downtown Newsrk, New Jersey

The City of Newark

The purpose of this section of the Report is to briefly outline the potential benefits and potential adverse effects of implementing the Riverfront Development Plan.

8.1 Potential Benefits

8.

Implementation of the Riverfront Development Plan will result in numerous benefits to the City of Newark by transforming an underutilized, obsolete part of the downtown into a high density mixed use area in the heart of the City. This should result in:

- . Increased short-term construction jobs as well as permanent jobs for office workers, hotel workers, retailers and others. For example, one million square feet of office space could house 5,000 office workers.
- . Increases in real estate taxes.
- . Increased recreational opportunities and public access to the riverfront.
- . An improvement in Newark's image as an attractive and progressive place to work and live through the elimination of blight.
- . Strengthening of Newark's public transportation system through increased ridership related to new employment on the riverfront site.
- . Recycling of several old buildings through adaptive reuse, thus improving the aesthetic quality of the existing environment.

8.2 Potential Adverse Effects

Implementation of the Plan will result in several unavoidable adverse effects; some of these are long-term and others are short-term impacts. They include:

> Demolition and Relocation Certain obsolete structures will be demolished in order to create the sites for new development. However, only a modest amount of relocation of existing businesses is required. No residential relocation is necessary. It should be mentioned that since the entirety of the Primary Study Area lies within previously established Urban Renewal Areas, the required clearance and relocation has been previously plan

ned and as such was contemplated prior to the creation of this particular plan.

- . Traffic Additional development, especially of the magnitude proposed will result in additional traffic. The potential impact of the additional traffic on the surrounding roads will need to be studied carefully. A major asset of the riverfront site, however, is its accessibility by public transportation, which should be very helpful in minimizing the need for motor vehicles to gain access to the area.
 - Costs Large sums of public monies will need to be expended for acquisition of properties, for clearance and site preparation, and for construction of public improvements. However, these costs are necessary to induce the much greater sums related to private development of office buildings, hotel, and other projects on the riverfront site.

8.3 <u>Compatibility with Coastal Resource and Development</u> Policies

Following the Public Hearing of December 8, 1982, representatives of the Consultant and the City of Newark met with a representative of the Bureau of Coastal Planning and Development of the State of New Jersey to ensure that the Riverfront Development Plan is compatible with the State's policies.

The Consultant has reviewed the Coastal Resource and Development Policies, N.J.A.C. 7:7E-1.1 et seq., as amended. Based on this review, the Riverfront Development Plan was examined to determine whether state policies regulating coastal development were met. The Consultant applied the nine step Coastal Location Acceptability Method (CLAM) in order to evaluate the mixed-use concept plan presented in December 1982. Based on the results of the initial screening analysis, the Plan was found to be in conformance with the Location Policies as stated for both Special Areas and General Areas.

Having met the locational requirements, the second stage of the CLAM screening process was applied. In this analysis, the development plan was evaluated to determine whether the Policies are met. From the review of Use Policies, the Plan was determined to be consistent with the stated policies.

The third step in the screening process involves a review of the Plan in terms of its effect on various resources of the built and natural environment. The Plan is considered to be compatible with the Resource Policies.

9. IMPLEMENTATION

This section of the Report addresses questions related to carrying out the recommended Development Plan for the Primary Study Area.

9.1 Marketing Strategies

Promotion of development in the Primary Study Area has already been initiated by Renaissance Newark, Inc., who have had discussions with several potential developers. However, specific development parcels within the riverfront area will be most attractive to private developers when particular sites are obviously "ready" for development. This means acquisition and assembly of land (and clearance), public improvements designed and funded (and perhaps constructed), etc. As the City's plans and commitments become more detailed, specific proposals from developers will be less contingent upon unresolved circumstancs and therefore subject to greater specificity and control by the City.

In order to market the riverfront sites most effectively, it is also important to designate a single source of responsibility so that coordinated and intensive efforts are made.

9.2 Public Funding Requirements

A number of needed public improvements were identified in Section 7.5 of this Report. Table 5 lists street improvements and open space improvements and an "order of magnitude" cost estimated for each improvement. Further detailed engineering and design studies will be needed to more precisely define public improvements and their costs associated with providing adequate services to new buildings. Estimating these costs will require detailed engineering studies and specific development proposals. The estimates on Table 5 do not include the costs of additional planning and design studies or property acquisition and clearance costs within the Primary Study Area.

9.3 Zoning and Other Approvals

The riverfront site should be rezoned from I-2 (Second Industrial District) to B-4 (Fourth Business District).

As discussed in Section 2.1.4 of this Report, a number of Permits will be required as development proceeds. Based on the recommended Development Plan, the following permits are likely to be required. As detailed planning and design studies are carried out, preparation of required permits will need to proceed simultaneously.

- . Waterfront Development Permit
- Dredge/Fill Permit (for the boat harbor)
- . Water Quality Certification
- . Stream Encroachment Permit
- . Tidelands Conveyances
- . Local Building Permit
- U.S. Army Corps of Engineer's Permits (to extend the bulkhead)
 - Section 10 Permit (River and Harbors Act)
 - Section 404 Permit (Clean Water Act)
 - U.S. Coast Guard Permit (to obstruct the navigable channel, i.e., for the boat harbor and the pedes trian bridge over the Passaic River)

Table 5 - COST ESTIMATES FOR PUBLIC IMPROVEMENTS

STREETS

1. Raymond Boulevard

•

a.	Right turn lane									
	Demolition	750	lf	х	12'	= 9000	sf x	\$1/sf	=	\$ 9,000
	Street	750	1f	х	12'	= 9000	sf x	\$2/sf	=	\$ 18,000
	Curb	750	lf	х	\$12,	/lf		•	=	\$ 9,000
	Sidewalk	225	lf	х	12'	= 2700	sf x	\$3/sf	=	\$ 8,100
										\$ 44,100

2. McCarter Highway

a. b.	New curb New curb cuts	375 lf x \$12/1f	= \$ 4,500
~.	curb street	200 lf x \$12/lf 5000 sf x \$2/sf	$= \begin{array}{c} \$ & 2,400 \\ = \begin{array}{c} \$ & 10,000 \\ \$ & 16,900 \end{array}$

3. New River Street

a.		1300 lf x 50' = 65,000 sf x \$1/sf= \$	
	Cherry Str.	250 lf x 30' = 7,500 sf x \$1/sf= \$	7,500
b.	New River Str	et	
	Street	$30,000 \text{ sf x } \frac{2}{sf} = \$$	60,000
	Curb	1,775 lf x \$12/1 f = \$	21,300
		\$	153,800

PUBLIC OPEN SPACE

1.	Invitation Plaza 28,400 sf x \$30/sf	= \$852,000
2.	Power Station Linear Park 16,500 sf x \$20/sf	= \$330,000
3.	Riverwalk	
	 a. Riveredge Relieving Platform and Utilities 90,000 sf x \$50/sf b. Brick Paving 90,000 sf x \$6/sf c. Planting 300 trees x \$600 each other planting d. Furnishings 100 benches x \$1,000 100 trash receptacles x \$300 300 tree grates x \$500 	<pre>= \$4,500,000 = \$540,000 = \$180,000 = \$ 70,000 = \$ 100,000 = \$ 30,000 = \$150,000 \$5,570,000</pre>
4.	Power Station Plaza 55,750 sf x \$12/sf	= \$669,000
5.	Bridge over McCarter Highway 5,100 sf x \$110/sf	= \$561,000
6.	Saybrook Place Linear Park 35,100 sf x \$12/sf	= \$421,200
7.	Bridge over River 3,600 sf x \$110/sf	= \$396,000
8.	Gazebo and Park a. Gazebo 1,600 sf x \$40/sf b. Park 5,200 sf x \$20/sf	= \$ 64,000 = \$104,000
9.	Robert Treat Park and Amphitheatre 38,000 sf x \$20/sf	= \$760,000
10.	Harbor/Floating Dock System 20,000 sf x \$40/sf	= \$800,000
11.	Heliport 12,500 sf x \$50/sf	= \$600,000

9.4 Development Controls

Detailed controls should be developed in relation to the disposition of each Development Parcel. Following below in outline form are recommended controls for each parcel. (Refer to Figure 21 "Development Parcels" for the location of each parcel.) To achieve the best possible environment it is important that each component of the Plan be sensitively designed in relation to each other. It is also important that design controls leave enough flexibility for the developer and the architect to respond creatively to the opportunities afforded by a particular parcel.

In addition to the controls related to private development, the public sector can exercise direct control over the design quality of the riverfront site through the design of public improvements, particularly the design of the open space system.

9.4.1 General Design Guidelines

- Access: Access to development parcels from Raymond Boulevard and McCarter Highway should be limited as shown on Figure 22 and as determined by detailed traffic engineering studies.
- Open Space: Ancillary open spaces within development parcels should be designed to be compatible with the major public open spaces. Consistent use of materials for paving, lighting, signage, planting and outdoor furnishings should be an important design principle.
- Parking: Adequate parking should be provided for each phase of development, either on-site or off-site.
- <u>Geometry</u>: The physical context of the riverfront site (on-site and off-site) consists of buildings and roads which are oriented at various angles. New buildings ought to be designed to be harmonious with the geometry of their context.

9.4.2 Parcel Design Guidelines

PARCEL 1

Permitted Uses: Hotel (250-400 rooms) Ancillary office and retail meeting facilities as appropriate. Parking: No minimum, 200 space maximum.

Access: From River Street.

Skywalk: An enclosed skywalk connection to the Hilton Hotel (across Raymond Boulevard) is required. Provision for a future skywalk across McCarter Highway must be provided.

Other: The hotel should be designed as a low to mid rise building and its geometry should relate to surrounding structures.

PARCEL 2

Permitted Uses: Offices: 300,000 to 400,000 gross sq.ft.

Parking: 1 space for 1,000 g.s.f. on-site or offsite.

Access: From River Street.

Other: The principal axis of the building should be parallel to the principal axis of the Power Station.

PARCEL 3

Permitted Uses: Commercial Athletic Facilities in recycled Power Station.

Parking: None required.

PARCEL 4

- Permitted Uses: Offices: 600,000 to 700,000 g.s.f. or Housing: 600 to 700 d.u. or Mix of Offices and Housing.
- Parking: l space per 1,000 g.s.f. (offices) l space per d.u. (housing) On-site or off-site.
- Other: The principal axis of the buildings should be parallel to the principal axis of the Power Station.

PARCEL 5

Permitted Uses: Commercial activities (e.g., shops, restaurants), housing, recreational activities, public facilities (e.g., museums). Located in existing recycled 3-story buildings with new additions as required.

Parking: None required.

9.5 Recommended Next Steps

The following next steps are recommended:

- . Preparation of a revised appliation for Green Acres funding for the public open space improvements identified in the Plan.
- A detailed traffic analysis which reexamines the data and recommendations of the <u>Newark Highway</u> <u>Access Study</u> in light of the recommendations of the Riverfront Development Plan. Such an analysis should make recommendations on interim highway improvements to McCarter Highway, including detailed intersection geometries, and identify any limitations regarding the amount and location of parking on the Riverfront site.
- Detailed design, engineering and cost estimates for the first phase of public improvements.
- . Rezoning of the site from I-2 to B-4.
- A comprehensive cultural resource survey of the area by a qualified consultant to identify any significant historic, architectural and archeological properties which may be eligible for the State or National Registers of Historic Places.
- . Amendment of the Redevelopment Plan to make it compatible with the Development Plan recommended in this Study.
- . Acquisition and assembly of the land within the Urban Renewal Areas by the Newark Redevelopment and Housing Authority, particularly the properties within the first phase areas.
- Establishing a Marketing Program for the first phase parcels, and for the recycling of the Power Station.

. Clearance of structures within the first phase development parcels and implementation of related public improvements.

.

. Preparation of a "Development Prospectus" which sets out the City's terms and conditions for offerings of sites within the redevelopment area.

APPENDICES

APPENDIX A:

CITY OF NEWARK, NEW JERSEY

Kenneth A. Gibson Mayor

Municipal Council Ralph T. Grant, Jr. President

Donald Tucker At-Large Marie L. Vallani At-Large Sharpe James At-Large

Ronald L.Rice West Ward

Anthony Carrino North Ward

George Branch Central Ward

Donald M. Payne South Ward

.

Henry Martinez East Ward

Elton E. Hill Business Administrator APPENDIX A:

CITY OF NEWARK'S Office of Planning and Grantsmanship Staff

> Jewel V. Thompson Director

Gregory K. Adams Urban Development Coordinator

Phillip J. Parelli Principal Planner Robert Bottone Principal Planner

Yvonne D. Bell Principal Planner

Martha Tucker Research Analyst Johnnie Mae Pettway Secretarial Assistant

APPENDIX A: NEWARK RIVERFRONT PROJECT STEERING COMMITTEE

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Mr. Gregory K. Adams 2 Cedar Street, 6th Floor Newark, New Jersey 07102 (201) 733-8422

APPENDIX B: RECENT NEW DEVELOPMENT NEAR THE STUDY AREA

Late 60's

- . Hilton Hotel: 254 rooms, 521,500 s.f.
- . Gateway I: 28 stories spec. office space, 100% occupied, 283 cars
- . Blue Cross Building: 19 stories

1970's

- . Essex County College
- . College of Medicine and Dentistry of N.J.
- . Newark Airport New Terminal
- . Gateway II: Western Electric Building, 18 stories, 838,000 sq.ft., completed '72
- . PSE&G: 26 stories, 1,000,000 s.f.

200,000 s.f. spec. space, fully leased prior to completion in 1980

. Alling St.: 60,000 s.f. occupied by N.J. Transit Corp.

Current

- . Gateway III: 600,000 s.f., 60% leased to Prudential, completed '84, 620 parking spaces
- One Washington Park: 18 stories, 400,000 s.f., 80% leased by N.J. Bell Telephone, 80,000 s.f. spec. space to be available late '83

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