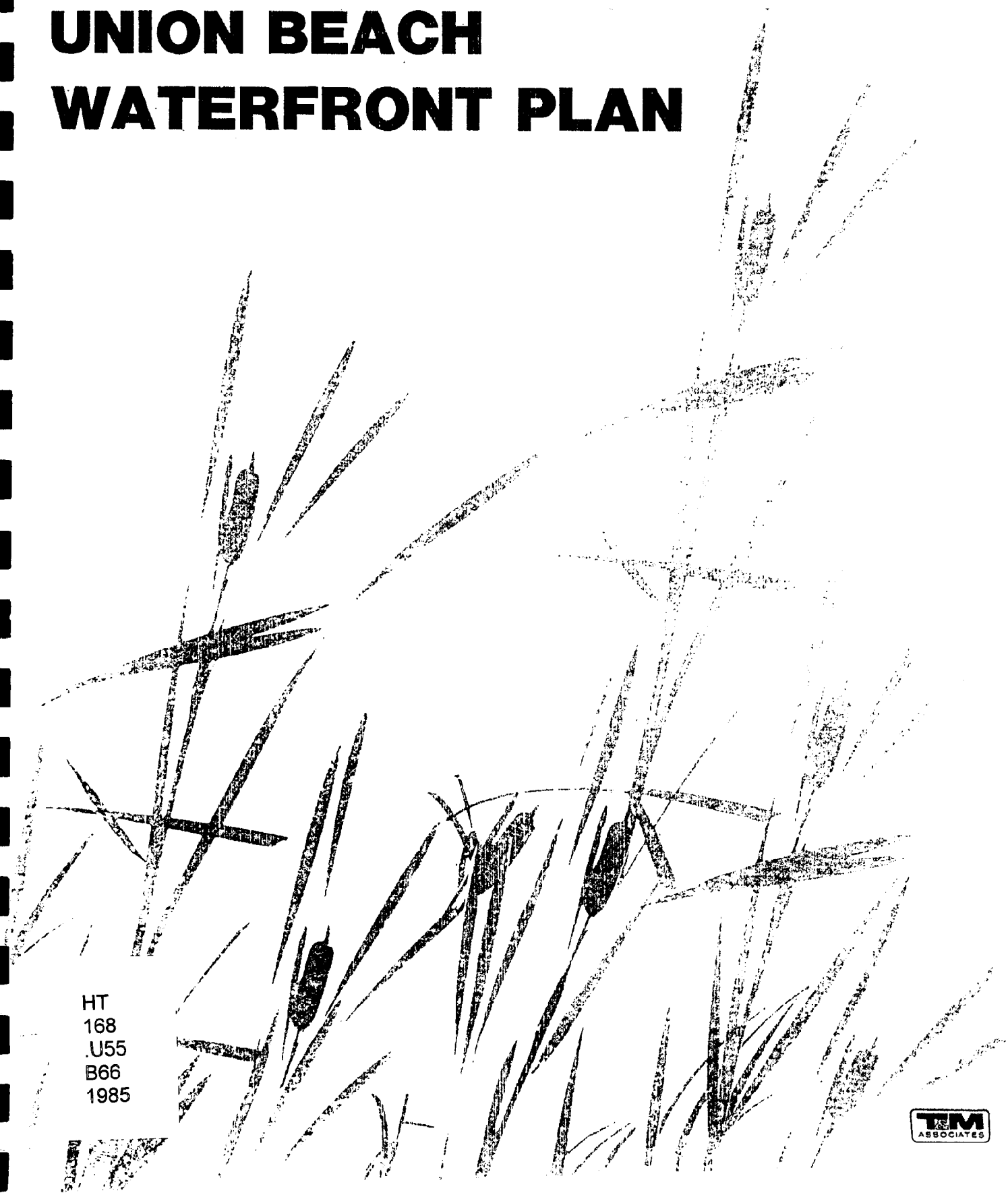
APPENDIX XV

1985 UNION BEACH WATERFRONT PLAN



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BOROUGH OF UNION BEACH

WATERFRONT PLAN

U.S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

Prepared for:
BOROUGH OF UNION BEACH
MONMOUTH COUNTY, NEW JERSEY

November, 1985

Prepared by:
T & M ASSOCIATES
CONSULTING AND MUNICIPAL ENGINEERS
1060 HIGHWAY 35
MIDDLETOWN TOWNSHIP
P.O. BOX 828
RED BANK, NEW JERSEY 07701-0828

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BOROUGH OF UNION BEACH
WATERFRONT PLAN

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I. INTRODUCTION

In December 1980 a Waterfront Revitalization Plan was prepared for the Borough of Union Beach by T & M Associates. This plan was funded by a Local Coastal Grant from the New Jersey Department of Environmental Protection (NJDEP) in conjunction with the Federal Coastal Management Program administered by the National Oceanic Atmospheric Administration.

In 1985 funding was again received by the Borough from the NJDEP to prepare a revised Waterfront Plan.

The purpose of this new plan is to create a workable Waterfront Development Plan which is not only consistent with the New Jersey Coastal Resource and Development Policies, but can be readily adopted and implemented by local governing officials and the land use planning process.

The need for this revised plan evolved from the changing bayfront environment, the changing land use patterns, the impending threat of a severe storm, and the updated methods of mitigating adverse environmental conditions.

II. EXISTING CONDITIONS

Area Description

The Borough of Union Beach is a 1.8 square mile municipality located in northern Monmouth County. It is bordered by Raritan Bay to the north,

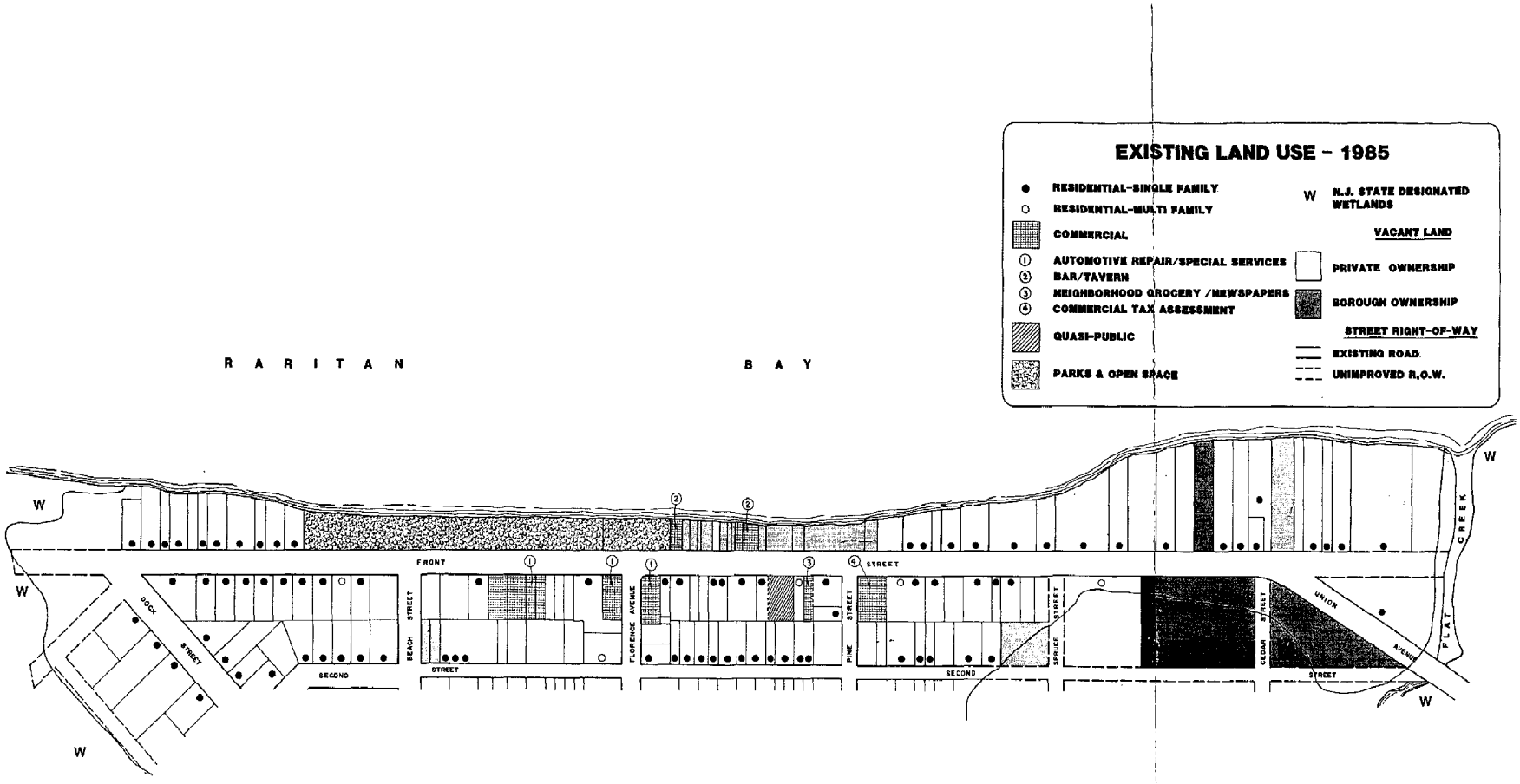
Keansburg to the east, Hazlet to the east and south, and Keyport to the west. The Borough is primarily residential in character and has a population of approximately 6,400.

Land Use

The waterfront project area is located adjacent to Raritan Bay and Front Street, generally between Flat Creek and the northwestern terminus of the Front Street right-of-way. This area contains a mix of uses which include residential, commercial, quasi-public, public open space, and vacant lands in public as well as private ownership. The land uses in the study area are delineated on the Existing Site Conditions Map (see Figure 1). Residential uses include single and multi-unit dwellings. Existing commercial uses include restaurant/ bars, a neighborhood oriented retail store, an automotive repair garage and other similar uses. The only quasi-public use in this area is the American Legion Hall. The Existing Site Conditions Map also located NJDEP designated wetlands. The data used in the preparation of this map was compiled through a field survey conducted by T & M Associates in July 1985 combined with tax assessments, the 1980 Union Beach Waterfront Plan, and the NJDEP Wetlands Maps.

Environment

Union Beach is located in the Inner Coastal Plan Physiographic Province of the Atlantic Coastal Plain. This province is characteristically hilly with highly variable soils and a rich mixed-oak forest association.



UNION BEACH WATERFRONT PLAN

FIGURE 1

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The bedrock underlying the Borough consists of unconsolidated sand, silt and clay of cretaceous origin.

The soil in Union Beach, as mapped by the Soil Conservation Service, consists of tidal marsh, fripp sand, filled and urban land plus the urban complexes of the Klej and Hammonton series. The series in the study area are fripp along the beaches; tidal marsh, approximated on the existing site conditions map as wetlands; and Klej.

As mapped by NJDEP, the wetlands vegetative species in the area include the following; Spartina alternaflora, S. patens, Distichlis spicata, Hightide bush, Phragmites communis, Panicum virgatum, and Iva frutescens.

Wildlife in the project area may include locally common species of herons, geese, ducks, sandpipers, gulls, ferns, wrens, starlings, sparrows, warblers, and robins; oppossum, rats, squirrels and other small rodents; and turtles, snakes salamanders, and frogs.

Project Consistency with Coastal Resources and Development Policies

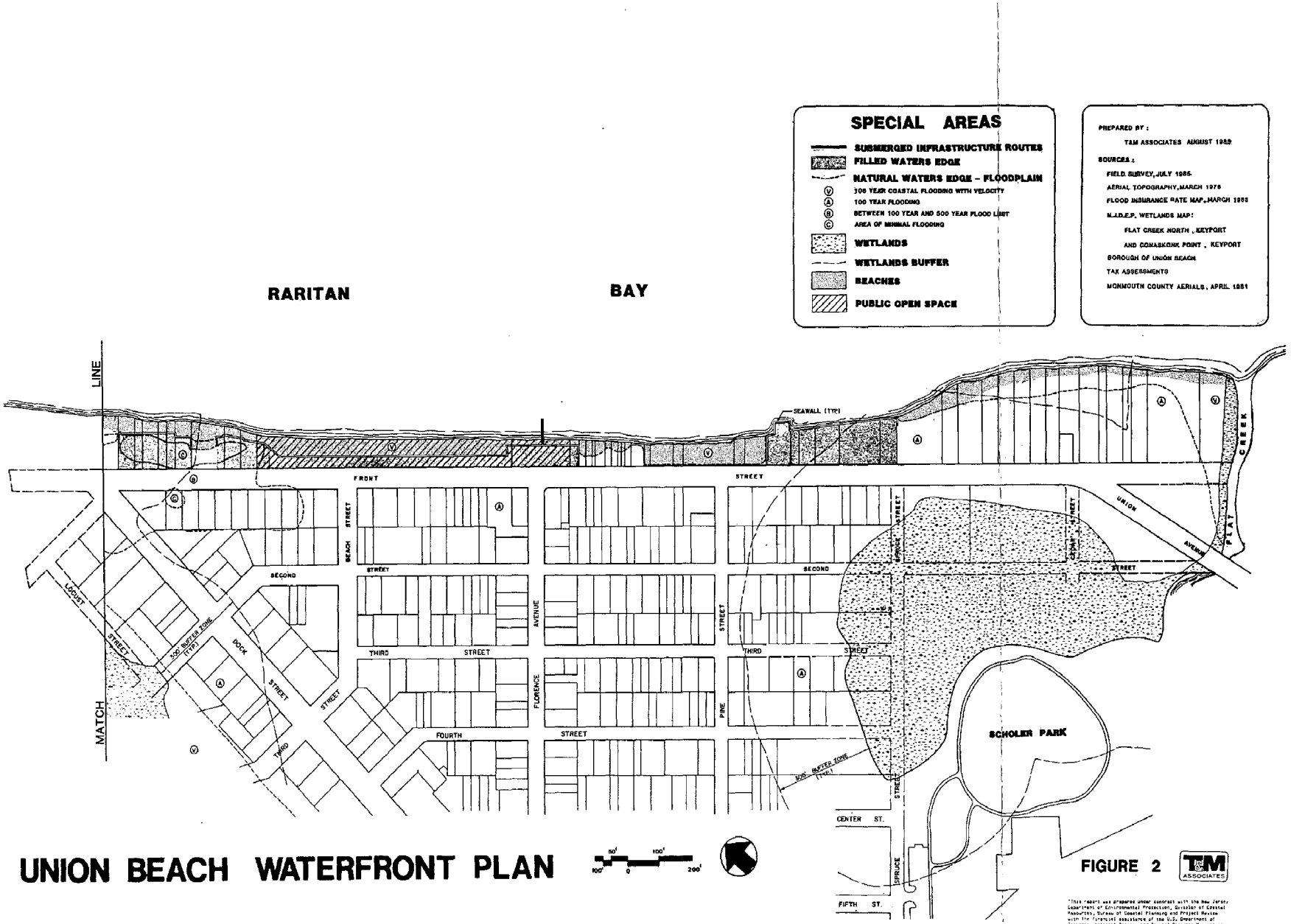
The Union Beach Waterfront Plan is consistent with the Coastal Resources & Development Policies which have been formulated to guide public decisions about significant proposed development and management of resources of New Jersey's Coastal Zone.

The Special Areas Map (see Figures 2 and 2A) delineates the extent of the DEP Coastal Resource and Development Policies (NJAC 7:7E-1.1 et. seq.) which apply to the project area and are assessed as follows:

Submerged Infrastructure Routes (7:7E-3.12): A submerged infrastructure route is the corridor in which a pipe or cable runs on or below a submerged land surface. The policy is to prohibit any activity which could potentially result in damaging the infrastructure. There is no development planned which would inhibit the safe operation of infrastructure components along the waterfront.

Filled Water's Edge (7:7E-3.17): These are existing filled areas located between wetlands or water areas and either the upland limit of the fill or the first paved public right-of-way. Policy permits water dependent usage of this area, and non-water dependent usage providing use of and access to the waterfront are not prevented, and existing water dependent uses are not adversely affected. The development planned in the filled water's edge consists of a boat ramp, beachfront boardwalk, increased beach area, recreational facilities and ancillary amenities such as benches, gazebo and landscaping. All of the proposed development is in conjunction with water related activities and will enchance the recreational opportunities of the entire Borough. There is no development planned which would preempt use of the waterfront for water dependent or water related uses.

Natural Water's Edge - Floodplains (7:7E-3.19): These areas are the flood hazard areas delineated by NJDEP or FEMA, or in areas which were not



UNION BEACH WATERFRONT PLAN

FIGURE 2

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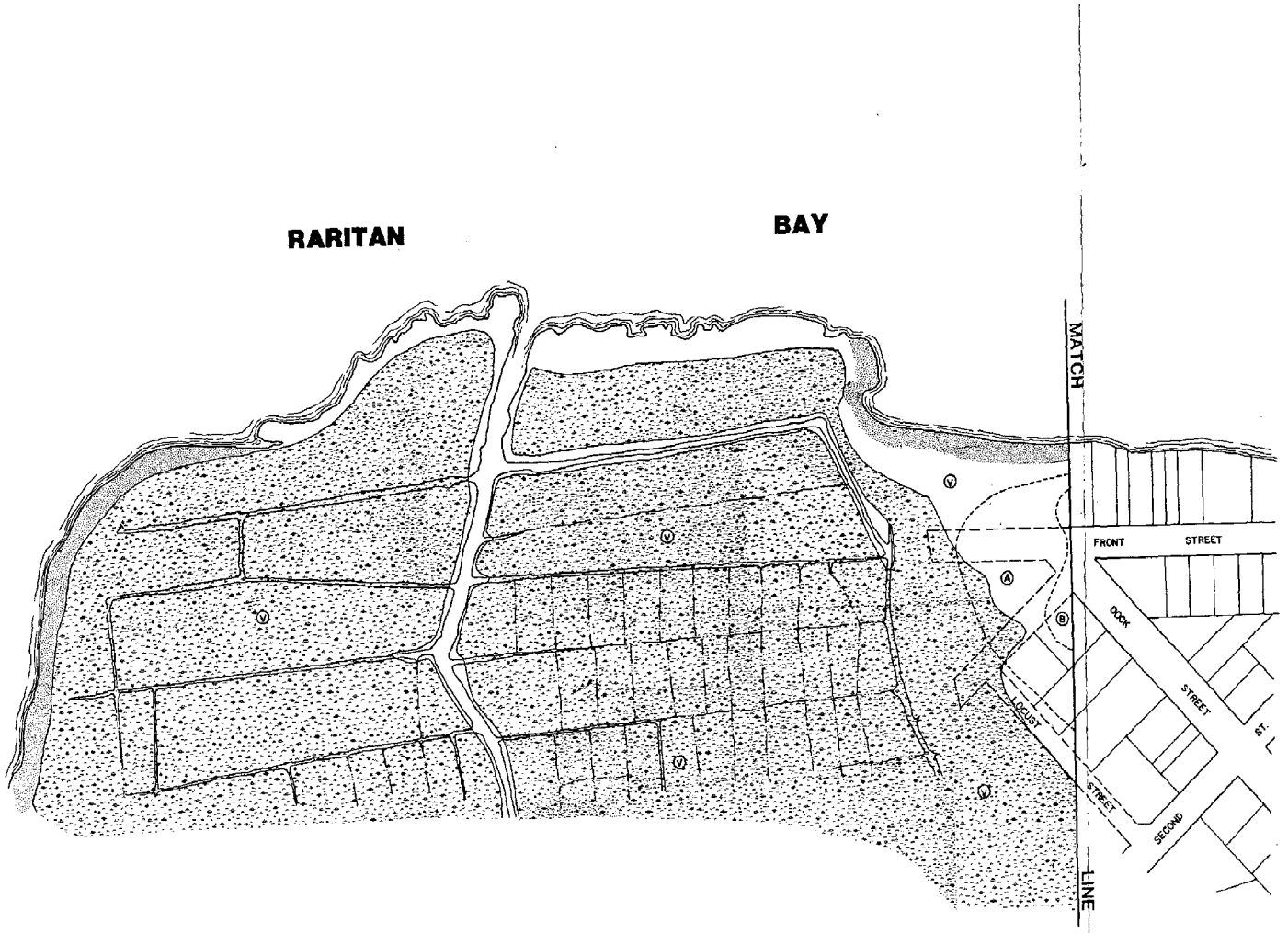

UNION BEACH WATERFRONT PLAN

SPECIAL AREAS MAP

50' 100'
100' 0 200'

FIGURE 2A

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mapped, the 10 foot contour line upland of the water demarcates the flood-plain. Non-water dependent development is prohibited within 100 feet of a navigable water body. Non-water dependent development elsewhere in this area is prohibited unless the site is less than 5 acres and is adjacent to any one of several specific uses noted in 7:7E-3.19 or an appropriate alternate site is not available. The development proposed as part of the Union Beach Waterfront Plan is almost entirely of a passive and/or active recreational nature within the flood hazard areas and not in conflict with the stated policies of this Special Area. It is the intent of this plan that parking lots in or adjacent to the natural water's edge be surfaced with a porous paving system to eliminate point source runoff and for groundwater recharge purposes.

Beaches (7:7E-3.21): Beaches are gently sloping, unvegetated, unconsolidate material which extend landward from the mean high waterline to the vegetation line, a man-made feature located approximately parallel to the shoreline, or the dune toe. Development is prohibited on beaches other than that which will not restrict access, have no long term adverse effect on the ecosystem, and cannot feasibly be located elsewhere. Introduction of native vegetation for stabilizing and shore protection structures are examples of acceptable activities. The proposed Development Plan includes the nourishment of the existing beach. The beach fill will be above the mean high water line to restore historical grade. In addition to the nourishment of the beach, public access will be increased by providing a continuous pedestrian easement along the entire waterfront where public property does not exist at the present

time. Two groins will help protect the beach and contribute to further public access to the waterfront. As a result of these plan details, the development is in agreement with the criteria of this Special Area.

Erosion Hazard Areas (7:7E-3.24): These are shoreline areas experiencing a lack of beach, particularly during high tides; a narrow beach; high sand mobility; a foreshore extended under a boardwalk; lack of dunes, low dunes or gaps in the dune field; escarped foredune; steep beach slope; close proximity to bluffs; insufficient vegetation; exposed, damaged or breached protective structures; high long-term erosion rate; and/or pronounced down-drift effects of groins and jetties. All development is prohibited in these areas with the exception of linear development (see 7:7E-6.1) and shore protection devices (see 7:7E-7.11). With the exception of shore protection devices and the construction of a boardwalk, no development is anticipated in the Erosion Hazard Special Area.

Wetlands (7:7E-3.26): This refers to wetlands regulated by the Wetlands Act of 1970, or the Coastal Area Facilities Review Act; those areas delineated by J. McCormick and L. Jones in "The Pine Barrens Vegetation" (1973), the NJDEP Bureau of Forestry and the Pinelands Commission for the Comprehensive Management Plan; and all wetlands in the Delaware and Raritan River Basins. All development is prohibited in the wetlands unless it meets the following conditions:

1) is water dependent or oriented;

2) has no feasible upland site alternative;

3) will result in only minimal disruption of natural circulation; and

4) will result in only minimal disruption of the natural contour and vegetation.

No development, whatsoever, is planned in the designated wetlands within the Union Beach Waterfront study area. It is proposed, however, to acquire a portion of a parcel along the coast for public access and passive recreational uses in the future. The majority of the property is designated wetlands.

Wetlands Buffer (7:7E-3.27): Buffers of 300 feet around all wetland areas as defined by 7:7E-3.26, fall within this policy. Development is prohibited unless it will not significantly impact the wetlands or the ecotone between the wetlands and the upland. The Union Beach Waterfront Plan proposes the creation of a boat ramp and parking in the northern sector of the study area which contains wetland buffers. The public parking area is to have a porous pavement system to minimize runoff and preserve as much of the native vegetation as possible. The plan also indicates minimal commercial development at the upland portion of the wetland buffers in the southern sector of the Plan along Front Street and Union Avenue. These areas were previously residential in nature and disturbed from previous development. It is proposed to keep the majority of commercial development out of the buffer areas and only permit parking lots with porous pavement systems at the upland fringe of the wetland buffers. These mitigation measures will minimize the impact on this Special Area.

Public Open Space (7:7E-3.39): All land areas owned and maintained by municipal, county, state or federal agencies, or non-profit private groups, which are dedicated for public recreation, conservation, protection and/or management are subject to this policy. Expansion of these areas, as well as the establishment of new areas, is encouraged. Development of recreational facilities within existing areas in conditionally accepted. Other development is discouraged. The proposed Plan anticipates expansion of a Public Open Space along the entire waterfront in two forms - property acquisition and easement purchase. Under property acquisition, the proposed Waterfront Plan will acquire property along Front Street adjacent to existing public property to facilitate better direct access to the waterfront. Secondly, the plan recommends the purchase of 20-30 acres of the J.C.P.L. property north of Front Street to be used as a wildlife sanctuary and for passive recreation trails and similar facilities. To augment the outright purchase of property, it is proposed to create pedestrian easements along the remainder of the waterfront, in order that a contiguous band of accessible open space be available to residents and users. As such, the proposed development meets the policy and criteria of this Special Area.

Open Bay (7:7E-4.4): Raritan Bay is specifically named as an Open Bay in this General Water Area. The Policy Summary Table (7:7E-4.2) details the various prohibited, discouraged, conditionally acceptable and impractical activities for the three division of the Open Bay category, as well as all general water areas. There is no development in the plan proposed for the Raritan Bay that is in conflict with the policy of the General Water Area.

III. PUBLIC ACQUISITION PLAN

Union Beach currently owns 1,450± linear feet of frontage on Raritan Bay. The largest block of land is the 960± foot long Memorial Park/Public Beach and parking area opposite Beach Street and Florence Avenue. This property consists of Lot 11 in Block 1, and Lot 1 in Block 22. Approximately 310 contiguous feet opposite the Pine Street/Front Street intersection, is comprised of Lots 12-1, 13, 14, 15 and 16 in Block 22. The acquisition of the adjacent, vacant Lot 17, would increase this frontage to 375± linear feet. Also publicly owned in this Block, Lots 3, 4, 5 and 6 combine to provide 80± feet and Lots 8, 9, and 10 add approximately 40 feet. The acquisition of Lot 7, a vacant, privately owned 20 foot wide parcel, would join the two small sections into one 140± foot continuous swath of publically accessible bayfront property.

All bayfront lots between Flat Creek and the Dock Street/Front Street intersection should be considered for purchase by the Borough as they become available. Priority should be given to vacant lots and those adjacent to existing public property. Jersey Central Power and Light Company currently owns Lot 2 in Block 251. This 73.5 acre parcel includes the northern section of the large peninsula which juts out into the bay west of Dock Street. This lot consists primarily of wetlands. Acquisition of a 20 to 30 acre section of this lot, beginning at the Front Street terminus and extending to the western side of the peninsula, possibly combined with Lot 1, Block 2, would provide a site for passive recreation/environmental education facilities and public parking.

Acquisition of property suitable for parking lots should be another priority. Potential lots include Block 2, portion of Lot 2 in Block 251 and, Lots 1, 2, 3, and 18 (partial) in Block 6. These and other nearby vacant lots should be considered for public acquisition as they become available.

In summary, the recommended priority list for land acquisition under the Public Acquisition Plan is as follows:

Priority No. 1 - Lots 2, 7, 11, 12, 17 and 18 in Block 22
Priority No. 2 - Lots 1, 2, 3 and 18 (partial) in Block 6
Priority No. 3 - Lot 1 in Block 2; Portion of Lot 2 in Block 251
Priority No. 4 - Other vacant bayfront lots along Front Street as they become available
Priority No. 5 - Other lots adjacent to existing public property

The Use and Resource Policies which the Public Acquisition Plan must be in compliance with include the following:

Resort/Recreational Use Policies (7:7E-7.3): This use policy refers to all resort and recreationally oriented development attracted to and dependent on coastal siting. It is DEP policy to encourage each waterfront municipality to contain at least one waterfront park on each water body. In Monmouth County, among several others, these uses have the highest priority. The proposed Waterfront Plan is consistent with the Coastal Management Policy in

that the plan provides for recreational facilities such as an expanded beach, boat ramp facility, passive open space park and contiguous public access to the waterfront throughout the project area.

Public Access to the Waterfront (7:7E-8.13): Public access is defined as the ability of all members of the community at large to pass physically and visually to, from, and along the waterfront. Perpendicular and linear access to the water is, therefore, required of any permitted waterfront development. Accessways must be clearly marked and barrier-free where possible. The Union Beach Waterfront Plan encourages public access to the waterfront through the enlargement of the accessible waterfront area; the provision of recreational facilities and the enhancement of the aesthetic quality of the entire project area (see IV. Public Access Plan).

IV. PUBLIC ACCESS PLAN

The Borough of Union Beach currently owns 15 bayfront parcels which combine to provide 1,450± linear feet of intermittent frontage. Approximately 960 contiguous linear feet of this publically owned land is located in the area of Beach Street and Florence Avenue.

Vehicular access to the beachfront will be directed by regional signage along the major routes into the Borough; NJSH Route 36 and Broadway. Additional directional signage will be located on Florence, Poole and Union Avenues (see Public Access Plan Map).

Access points are currently available at the 310± contiguous feet of Borough owned bay front property located at the Pine Street/Front Street intersection.

Future phase access points, crosswalks, and signage will be added as additional property is acquired by the Borough. The proposed shore protection devices will be made accessible for public use. In addition, the creation of pedestrian easements will be required adjacent to the shore protection devices in order to optimize public accessibility along the bayfront. A recommended easement width of ten (10) feet for all private property will be necessary. Donation of a conservation easement via a deed restriction would be the principle method for obtaining these easements. Both shore protection devices and easements will provide various suitable sites for surf fishing and passive enjoyment of the New York Skyline and Raritan Bay.

A passive open space park is proposed if property can be acquired from Jersey Central Power & Light Company. Such an acquisition would preserve wetlands for the public at large and provide access for recreation and environmental education facilities in perpetuity (see III. Public Acquisition Plan).

Additional water access and barrier-free linear access will be available as the future relocation of the existing public parking facilities will provide the space for expansion of the beach and possible construction of a promenade/ boardwalk with passive sitting areas. Easements will be pursued where property acquisition is not feasible.

Off-street parking will be necessary. Parking is proposed for Borough owned lots on Second Street, the upland portion of the Borough land at the Front Street/Union Avenue intersection, future acquisition lots (see Access Plan Map, Figure 3), and at the proposed boat facility.

V. BEACHFRONT AMENITIES PLAN

The Beachfront Amenities Plan element is a vital component of the Union Beach Waterfront Plan. The Beachfront Amenities Plan provides a viable mix of recreational, commercial and residential uses along Raritan Bay with the development of adequate shore protection measures.

The specific amenities include the following:

1) The construction of a municipal beach of approximately 800 feet in length by 150 feet deep. Beach fill will be required for this construction.

2) The development of extended passive open space along the peninsula, presently owned by Jersey Central Power and Light Company, to be acquired by the Borough with the assistance of "Green Trust" for a wild life sanctuary and for other passive recreational purposes including surf fishing and nature trails (see Public Acquisition Plan).

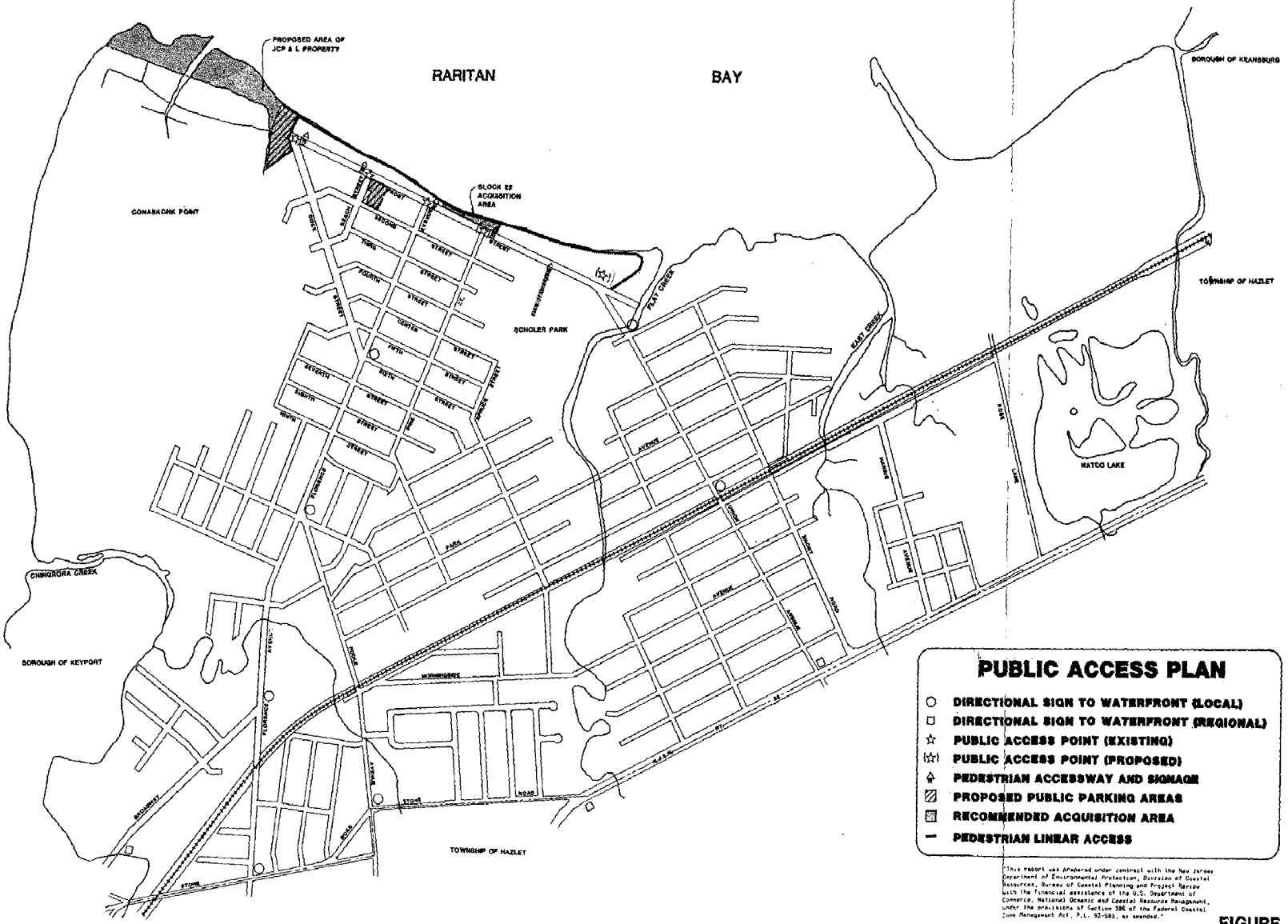

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FIGURE 3

400' 200' 0 400' 800'

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3) The construction of a boardwalk along the existing and proposed beachfront. This is a passive walkway with some sitting areas and landscaping for residents and users. The design concept for the boardwalk is to have the walkway behind the sidewalk for approximately 800 feet and then jog the boardwalk to the bayshore adjacent to one of the shore protection structures proposed in the plan.

4) The creation of a public boat launch facility with ancillary parking for cars and boat trailers at the intersection of Front and Dock Streets.

5) The development of public parking areas within the project limits. These areas include the parking facility adjacent to the boat ramp and wildlife sanctuary north of the intersection of Front and Dock Streets and the acquisition of property adjacent to the intersection of Front and Beach streets for beachfront and marina use.

The Beachfront Amenities Plan complies with the following General Water Area and Resource Policies:

Acceptability Conditions for Uses (7:7E-4.11)

Part (b) - Boat Ramps

The Plan proposes to build a concrete boat ramp facility for public use. Minimal disturbance of subaqueous vegetation is foreseen and the need

for such a facility in Union Beach is demonstrated by the success and long waiting lists which exist in other coastal communities providing similar popular public boat facilities.

Part (i) - Filling

The Plan proposes to use clean sediment from nearby sources for beach nourishment. The expansion of the beach area will be done with minimal adverse environmental impacts and will restore the beach area to historical grade.

Part (m) - Bridges

In order to create a pedestrian nature trail system as proposed in the passive open space park, it is likely a stream will be crossed to maximize the utilization of the property. An elevated pedestrian crossing will cause minimal environmental impacts and encourage passive recreational use of the area as well as increase the public accessibility of the waterfront.

Buffers and Compatibility of Uses (7:7E-8.15)

The Beachfront Amenities Plan proposes to develop needed facilities such as beach, boat ramp, boardwalk (passive) and open space park within the Borough and preserve two existing residential pockets east of Front Street. The preservation of these areas is feasible if adequate buffers

Wide sidewalks with special pavement treatment, ornamental street trees, street furniture and pocket parks will further facilitate a connection between the beachfront amenities and the proposed commercial development.

On the eastern side of Front Street, it is proposed to retain two existing food establishments adjacent to the proposed boardwalk to further encourage the integration of service commercial development and recreational amenities. It is also proposed to construct a floating type walkway across the marshland to the west of the proposed commercial area to provide access to and from Scholar Park, another municipal recreational facility within the project vicinity.

Finally, at the southern terminus of the project area east of Union Avenue, it is proposed to augment an existing commercial zone and develop retail shops in a small village atmosphere. Other pedestrian-oriented uses such as a restaurant with outdoor sitting viewing the bay and distant New York skyline may be appropriate.

The Water-oriented Commercial Facilities plan is in compliance with the following Coastal Management Use and Resource Policies:

Commercial Facility Use Policies (7:7E-7.10)

Part (c) - Retail Trade & Services

The Plan recommends commercial development mostly west of Front Street, which enhances the waterfront area and compliments proposed recreational uses directly on the waterfront. In this way, the commercial development will not destroy the natural resources attracting people to the waterfront.

Traffic - (7:7E-8.9)

The Waterfront Plan proposes the rehabilitation of a portion of Union Avenue, Front Street, Dock Street and Florence Avenue in order to accommodate traffic volumes generated by the proposed facilities. Existing right-of-ways on Front Street, Dock Street, Florence and Union Avenues can support future road and sidewalk improvements.

VII. LANDSCAPING PLAN

The Landscaping Plan Element of the Union Beach Waterfront Plan is vital to the success of the overall plan because it is the bonding force between all the other elements of the Waterfront Plan.

The landscape plan is included in the complete rehabilitation of Union Avenue within the project limits, Front Street, Dock Street and Florence Avenue. The plan provides for street trees, wide sidewalks, curbing, benches, ornamental pavers and lighting on Union Avenue and Front Street with small pocket parks in appropriate locations across from the beachfront amenities.

Street trees, sidewalks and curbing are proposed on Dock Street and Florence Avenue for upgrading the aesthetics of the area and circulation improvements in regard to the overall waterfront plan. A second objective of the Landscape Plan is to preserve existing vegetation to the greatest extent possible throughout the project area.

Recommended tree species for street tree plantings include the following:

1) Bradford Callery Pear* (Pyrus Calleryana "Bradford")
2) Sweet Gum* (Liquidambar Styraciflua)
3) Golden Rain Tree* (Koelreuteria Paniculata)
4) Regent Scholar Tree* (Sophora Japonica Regent)

The Landscape Plan conforms to the Vegetation Resource Policy (7:7E-8.9) of the Coastal Resource & Development Policies.

* Street trees are proposed to be 40 feet on center with or without tree grates as specified.

VIII. SHORE PROTECTION AND LAND PRESERVATION PLAN

An average of 35 to 50 winter storms occur in this area each year causing varying amounts of damage. The recurrence interval for storms of moderate and severe magnitudes, is estimated to be one storm every 1.4 years. The most severe storms have a frequency of one in thirty years. Hurricanes also pose a threat to life and property. These storms are less predictable and are accompanied by high winds. The duration of hurricanes, however, is generally shorter than the northeasterly storms.

The New Jersey Shore Protection Master Plan (1981) has delineated this area of Union Beach as a Critical Erosion Area. Characteristically these areas have little or no suitable natural or man-made protective features to combat significant erosional forces.

Excessive erosion of the beach has created a potential hazard to bayfront structures including bulkheads, residences and commercial buildings. The Union Beach shorefront has sustained substantial damage from the last severe hurricanes in 1960 and 1962. Bulkheads that once existed have been destroyed or at the very best have been weakened to the point that the next severe storm should complete the destruction of the past. Another severe hurricane or northeast storm could well mark the dimise of Union Beach's waterfront. The construction of new shore protection devices and the nourishment of the beach will provide additional public open space as well as reduce storm- related hazards.

Many forms of man-made protective structures are available. These include groins, breakwaters, bulkheads, revetments and vegetative stabilization. Each form has advantages and disadvantages. The most suitable structure, its location, size and orientation to the breakpoint of large waves are all determined by the site specific conditions.

Groins are helpful in retarding the longshore movement of littoral sediments. These sediments tend to accumulate on the updrift side of the groin until they reach a point where they can be transported around the end of the groin and back into the longshore current. If the groin is too short, it cannot retain enough sand to be effective. If the groin is constructed too low, sediments can travel over the groin with "overtopping" wave action.

The downdrift beach, however, is exposed to more rapid erosion as a result of the groin construction. The design of a groin, therefore, cannot be too long nor too high so as to prevent the appropriate amount of sediment transport. The proposed plan would protect the beach, boat ramp and adjacent shore with a capstone seawall groin combination. The seawall and adjacent bulkheading would provide protection along existing and proposed structures including the planned commercial area and boat ramp facility. A beach area will be created through the nourishment of the area adjacent to the groin, south of the municipal boat ramp. Additional bulkheading and rip-rap will be installed along the southern half of the project area adjacent to Flat Creek.

Under this plan, it was determined that the groin/seawall combination is necessary for shoreline protection, and bulkheading will be utilized for shoreline stabilization in the proposed commercial areas plus the residential links between. Sand fill will provide additional stabilization plus the recreational and aesthetic benefit of creating a wide beach. This method of shore stabilization was deemed the most environmentally and economically feasible alternative for the project area at this time.

The proposed Shore Protection Plan is in agreement with the Coastal Engineering Use Policy (7:7E-7.11) because the structural shore protection measures are warranted as the area is a Critical Erosion Area as previously discussed. The groin-seawall combination would have minimal environmental impact due to the absence of floodplain vegetation, productive shellfish beds and endangered species habitat. In addition, the groin (south of the boat ramp), bulkheading and rip-rap would eliminate the adverse impacts on the adjacent shoreline sand supply which has significantly eroded during the past 50 years.

Finally, it should be noted that the proposed Waterfront Plan will adhere to the design guidelines and standards set forth in the Coastal Resources and Development Policies including but not limited to:

Runoff (7:7E-8.7)

Energy Conservation (7:7E-8.17)

Groundwater Use (7:7E-8.6)

Flood Hazard Areas (7:7E-8.23)

IX. ACCESS AND INFRASTRUCTURE

For the significant improvements proposed in the Waterfront Plan, a considerable investment for infrastructure will be mandatory. The plan recommends the complete rehabilitation of the following streets:

1) Dock Street - From the intersection of Front Street to Florence Avenue

2) Front Street - From Dock Street to Union Avenue

3) Florence Avenue - From Front Street to the intersection of Dock and Sixth Streets

4) Union Avenue - From Front Street to Bridge at Flat Creek

The rehabilitation of these roadways which include pavement widening, curbing, appropriate drainage, sidewalks and landscape items will provide an improved circulation pattern for access to the beachfront and commercial amenities of the Waterfront Plan. The southern terminus of the roadway improvements (Union Avenue at Flat Creek) is only 3,500 feet from N.J.S.H. 36, a major artery within Union Beach Borough and Monmouth County.

In general, it should be noted that the Union Beach Waterfront Plan (see Figure 5) is conceptual in nature and as such it is susceptible to change or revision as new circumstances warrant.

X. PHASING

The Union Beach Waterfront Plan was designed to incorporate phasing the project, if necessary, as follows:

1) Construction of major shore protection structures
2) Municipal property acquisition and easement program including public parking lot development
3) Construction of Beachfront Amenities including a) boat ramp facility; b) public beach and; c) boardwalk
4) Infrastructure improvements including wide sidewalks and landscaping
5) New Commercial Development and Private Investment

XI. IMPLEMENTATION AND FUNDING

The Borough is aggressively pursuing various funding sources for assistance in regard to the implementation of the Union Beach Waterfront Plan (see Figure 5). As a first action, the Borough has appropriated its share of the first phase development. Other actions initiated by the Borough include:

1) Application to NJDEP Office of Shore Protection for shore protection funds.
2) Discussion of federal funding with Congressman Howard's office.
3) Discussion of "Green Trust" assistance with local representative.
4) Application to the County of Monmouth for Shore Protection funding.

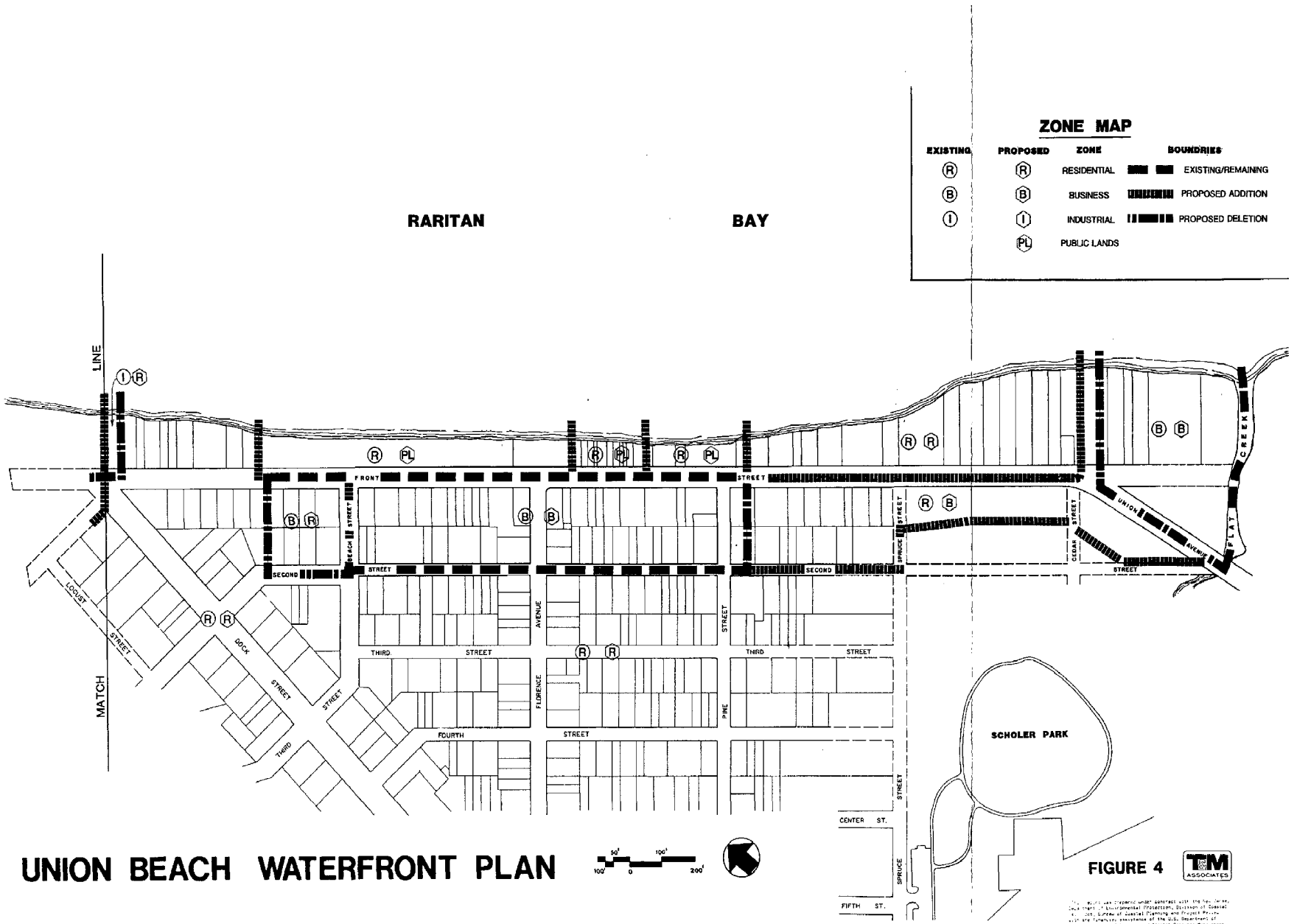
5) Investigation into potential funding under New York/New Jersey Port of Authority.

6) Investigation into Federal U.D.A.G. funding.

Zoning Recommendations

The Union Beach Waterfront Plan project area is currently zoned business and residential along both sides of Front Street. It is recommended, as part of the implementations, that the business zone be extended south down Front Street to Union Avenue within the project area. This extension couples with an existing business zone located east of Union Avenue to form a continuous band along a County roadway. The intent of this proposed zone change is to attract new commercial investment by expansion of the business zone in an appropriate location. The permitted uses considered in this expanded zone are resort/tourist commercial establishments as recommended in the Land Use Plan of the Union Beach Master Plan. The new uses would maximize the unique resources and panoramic views of the waterfront area.

Additionally, to further enhance and improve public accessibility to the waterfront of Union Beach; properties which were previously zoned industrial such as along Conaskonk Point and residential along Front Street are recommended to be zoned as Public Lands upon their purchase by the Borough at a future time (see Zone Map, Figure 4 and 4A).

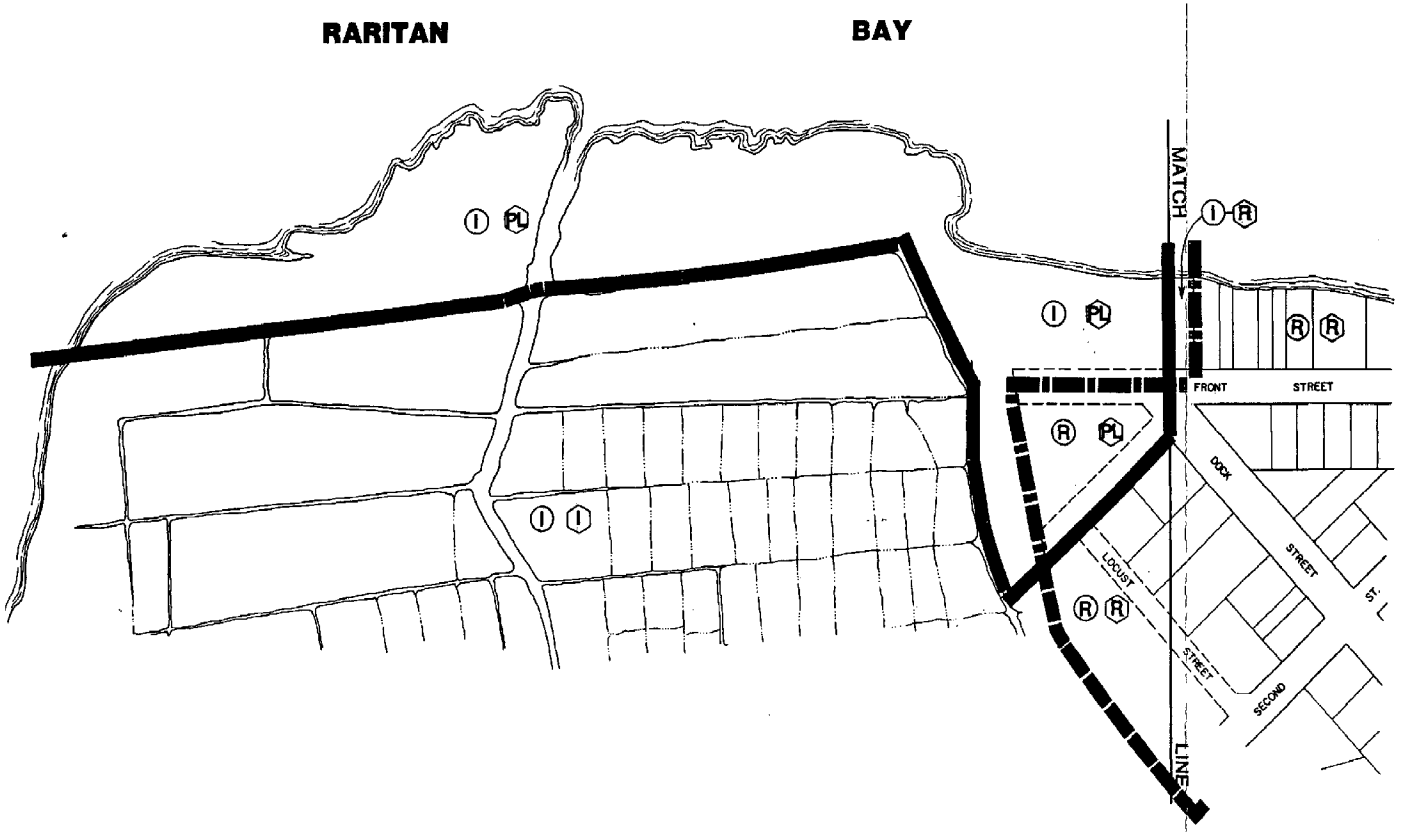


UNION BEACH WATERFRONT PLAN

FIGURE 4

T&M ASSOCIATES

The work was prepared under contract with the New Jersey Department of Environmental Protection, Division of Coastal Resources, Bureau of Coastal Planning and Project Review, with the financial assistance of the U.S. Department of Commerce, National Oceanic and Coastal Resource Management, under the provisions of Section 306 of the Federal Coastal Zone Management Act, P.L. 92-583, as amended.



UNION BEACH WATERFRONT PLAN

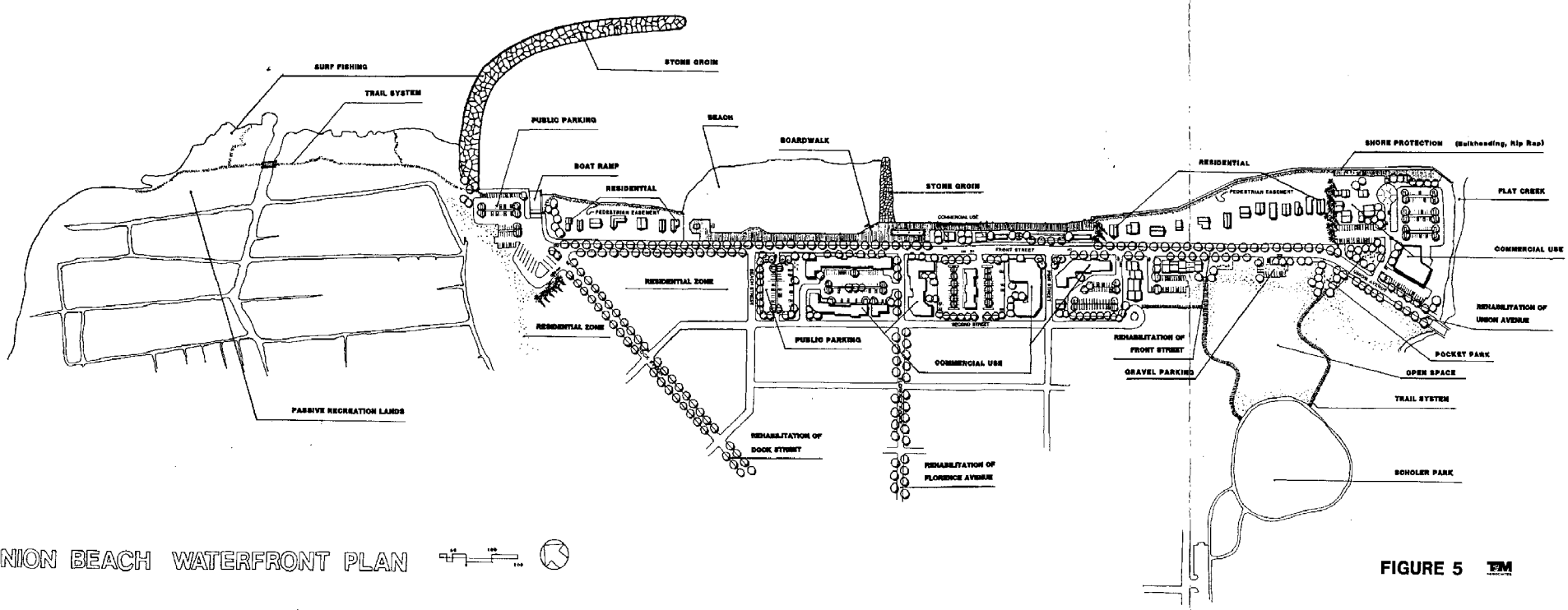
ZONE MAP

50' 100' 100' 0 200'

FIGURE 4A

TM ASSOCIATES

"This report was prepared under contract with the New Jersey Department of Environmental Protection, Division of Coastal Resources, Bureau of Coastal Planning and Project Review with the financial assistance of the U.S. Department of Commerce, National Oceanic and Coastal Resource Management, under the provisions of Section 306 of the Federal Coastal Zone Management Act, P.L. 92-583, as amended."



UNION BEACH WATERFRONT PLAN

FIGURE 5

APPENDICES

RESOLUTION NO. 9: ARTICLE I

RESOLUTION

TO THE MAYOR AND COUNCIL OF THE BOROUGH OF UNION BEACH

Meeting of NOVEMBER 14, ... 19.85

Offered by COUNCILMAN ELLISON ..... Seconded by COUNCILMAN SMITH .....

Be it resolved by the Mayor and Council of the Borough of Union Beach, THAT

THE BOROUGH ENGINEER, EDWARD G. BROBERG, OF T & M ASSOCIATES, MIDDLETOWN, NEW JERSEY, BE AND HE IS HEREBY AUTHORIZED AND DIRECTED TO PROCEED WITH "FINAL DESIGN PLAN" FOR THE BOROUGH'S SHORE PROTECTION REDEVELOPMENT PLAN, AS DEFINED AND RECOMMENDED BY THE STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S LETTER OF OCTOBER 28, 1985, AND;

BE IT FURTHER RESOLVED, THAT EDWARD G. BROBERG, P.E. BE AND HE IS HEREBY AUTHORIZED AND DIRECTED TO SUBMIT SAID DESIGN PLAN TO THE STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DIVISION OF COASTAL RESOURCES.

*NOTE: (SAID PLAN AS WAS PRESENTED BEFORE THE GOVERNING BODY AND THE RESIDENTS OF UNION BEACH, ON OCTOBER 31, 1985.)

RECEIVED

NOV 21 1985

By _____

T & M ASSOCIATES INC.

CERTIFICATION

I, MARY SABIK, BOROUGH CLERK OF THE BOROUGH OF UNION BEACH DO HEREBY CERTIFY THAT THE FOREGOING RESOLUTION IS A TRUE COPY OF A RESOLUTION DULY PASSED AND ADOPTED BY THE GOVERNING BODY AT THEIR MEETING OF NOVEMBER 14, 1985.

DATED: NOVEMBER 14, 1985: Mary Sabik
MARY SABIK, BOROUGH CLERK

Attest: .....

Passed ..... 19.... Borough Clerk

ARTICLE II

GENERAL ASSEMBLY
OF NEW JERSEY
TRENTON

WILLIAM E. FLYNN
P. O. BOX 515
OLD BRIDGE, N. J. 08857

October 15, 1985

Office of the Clerk
Borough of Union Beach
Municipal Bldg., Florence Ave.
Union Beach, N.J. 07735

RE: Shore Front Redevelopment Plan

My Dear Borough Clerk:

Would you kindly advise the Mayor and Borough Council that I am in full support of their proposal to redevelop the shore front. I have reviewed the plans submitted by Edward Broberg and I think that the Borough Council has acted responsibly in coming up with a suggestion which merits everyone's support.

I intend to work very closely with you in getting the necessary funds for this project.

In light of what almost happened recently with the hurricane known as Gloria, I think that it is essential that we implement the plan as soon as possible and protect what we already have in Union Beach and help Union Beach to flourish.

Very truly yours,

WILLIAM E. FLYNN

WEF/pg
cc: E. Broberg, P.E.
Borough Engineer

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OCT 1 ? 1985
By _____
T & M ASSOCIATES INC.

ARTICLE III

PROJECT COST ESTIMATES

The general cost estimates below are based upon projected 1986 construction prices. Since much development will occur beyond this date, construction costs should be increased by 10 to 12 percent for each year after 1986.

MAJOR CONSTRUCTION ITEMS*

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT
1.	Groin/Seawall - 1100 Ft. (northern Terminus of project area)	Lump Sum	--	$1,750,000.00
2.	Stone Groin - 250 Ft. (south of beach)	Lump Sum	--	250,000.00
3.	Nourishment of Beach	Lump Sum	--	200,000.00
4.	Boardwalk Structure and Walkway	Lump Sum	--	175,000.00
5.	Bulkheading, Rip-rapping and Backfill	Lump Sum	--	1,200,000.00
6.	Boat Ramp	Lump Sum	--	300,000.00
7.	Public Parking Area Improvements	Lump Sum	--	275,000.00
8.	Dredging	Lump Sum	--	200,000.00

* Estimated items do not include purchase of land, if necessary.

DATE DUE

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