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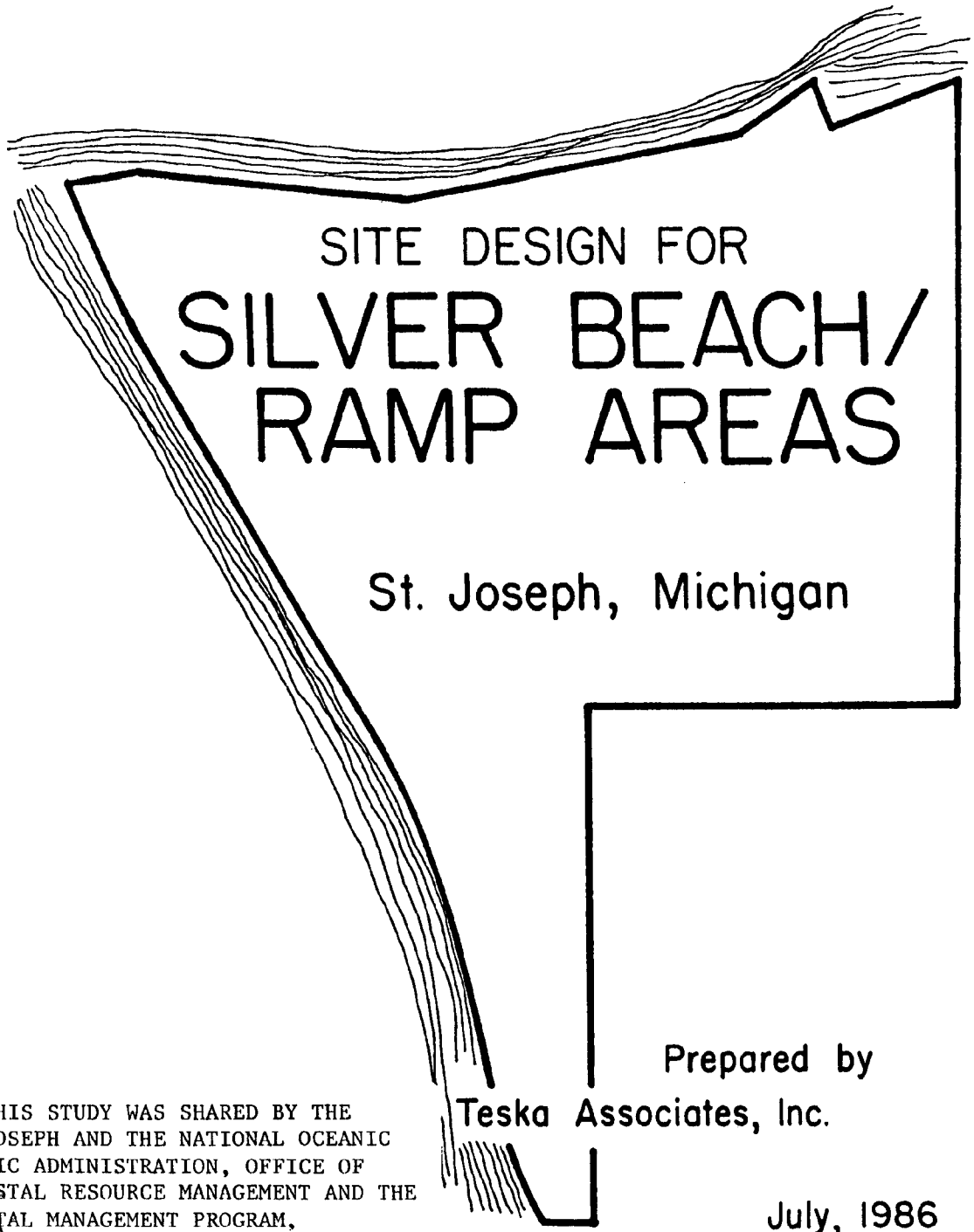

SITE DESIGN FOR
SILVER BEACH/ RAMP AREAS

St. Joseph, Michigan

Prepared by

Teska Associates, Inc.

July, 1986

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I. INTRODUCTION

This study of the St. Joseph Lakefront Development Tax Increment Financing and Development Plan (TIF) represents an extension of the work previously completed October 1978 by Teska Associates, Inc. titled The Silver Beach/Lion's Beach Park Development Study. For TIF District Boundaries see Figure #1.

The overall effort was coordinated by the City of St. Joseph Community Development Coordinator. Funding for the study was shared by the City of St. Joseph and the State of Michigan.

The purpose of the current study was to apply the previous studies design principles in the creation of design concepts for public improvements within the TIF District based on current development and resultant land use arrangements.

The work described in this memorandum and its accompanying illustrations is intended to be a guide for critical public improvements that provide a functional as well as aesthetic infrastructure for the revitalization of the TIF District and Silver Beach area. A conscience exists in these recommendations and includes sensitivity to preservation of the single family neighborhood to the south of the District; protection of the natural character of the bluff and of the historic railroad station; pedestrian access and pathways that link areas within the TIF District to the Central Business District, Arboretum, and public beach.

The last section of this memorandum deals with probable general construction costs for various improvements contained in the Design Concept Plan. These costs are based on worst-case situations and seldom give consideration to existing facilities that may be adopted or preserved in lieu of total construction of new facilities. As a result these costs may exceed the actual value of the improvements if constructed today. Of course, factors due to unforeseen conditions (including inflation), are difficult to predict and are included in these costs in the form of a contingency.

This memorandum is not intended to answer technical questions related to the actual implementation of these design concepts. Those answers must be found in the next phase of the design process. In the next phase trade-offs between desired facilities, their impact on the physical environment and their fiscal feasibility must be evaluated.

At this point in time this study should be used as a point of departure; like a good friend offering suggestions for the future whose advice must be weighed by the circumstances of the day the advise will be taken.

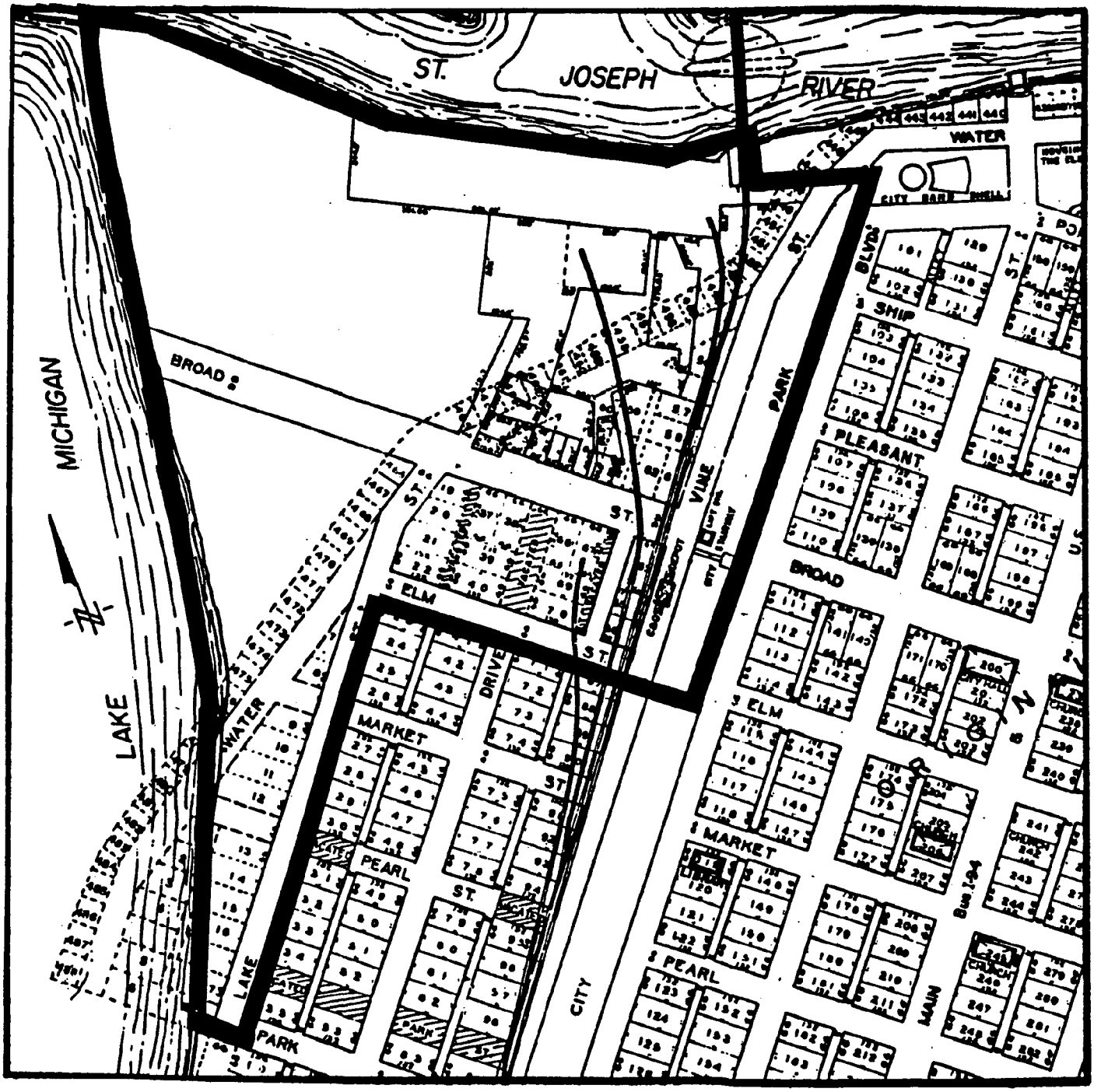


FIGURE 1

T.I.F. DISTRICT BOUNDARIES

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

TESKA ASSOCIATES INC.

II. SITE ANALYSIS

The Site Analysis has examined existing conditions within and surrounding the Silver Beach TIF District which will influence Design Plan recommendations. The following are key components which Teska Associates, Inc. recognize as having major impact on the Silver Beach TIF District. (Site Analysis Plan see Figure #2)

A. SURROUNDING LAND USE

Central Business District:

The St. Joseph Central Business District (CBD) east of the bluff is important to the development of the TIF District and is connected at major east-west streets. The Broad Street connection to the Bluff Stairs provides a natural pedestrian connection between the CBD, the Railroad Station, and the lake front.

The Bluff:

The Bluff is a public open space providing an attractive recreational resource for the public, the downtown and residents of the Silver Beach area. The natural landscape creates an attractive buffer between the TIF District and Central Business District.

The Railroad Station:

The historic quality of the Railroad Station make it a unique structure in the TIF District, its horizontal lines and architectural character compliment the entire bluff area, particularly when viewed from points west, across the undeveloped Whirlpool site. The Railroad Station is an asset to the TIF District and adds to the enjoyment of the TIF District users.

Waterfront Development:

The Waterfront, condominium/marina, Development west of Vine Street and north of Broad Street will limit public access to the St. Joseph River and will obstruct some desired views from the bluff. Residents of this development will utilize public improvements in the TIF District such as boardwalks, and public beaches.

Leco Industries:

Leco development owns beach frontage north and south of the 99-foot Broad Street right-of-way, along Lake Michigan. Presently this beach is open to the public. If Leco were to deny public access, it would leave St. Joseph with only 99-feet of public beach in the Silver Beach TIF District.

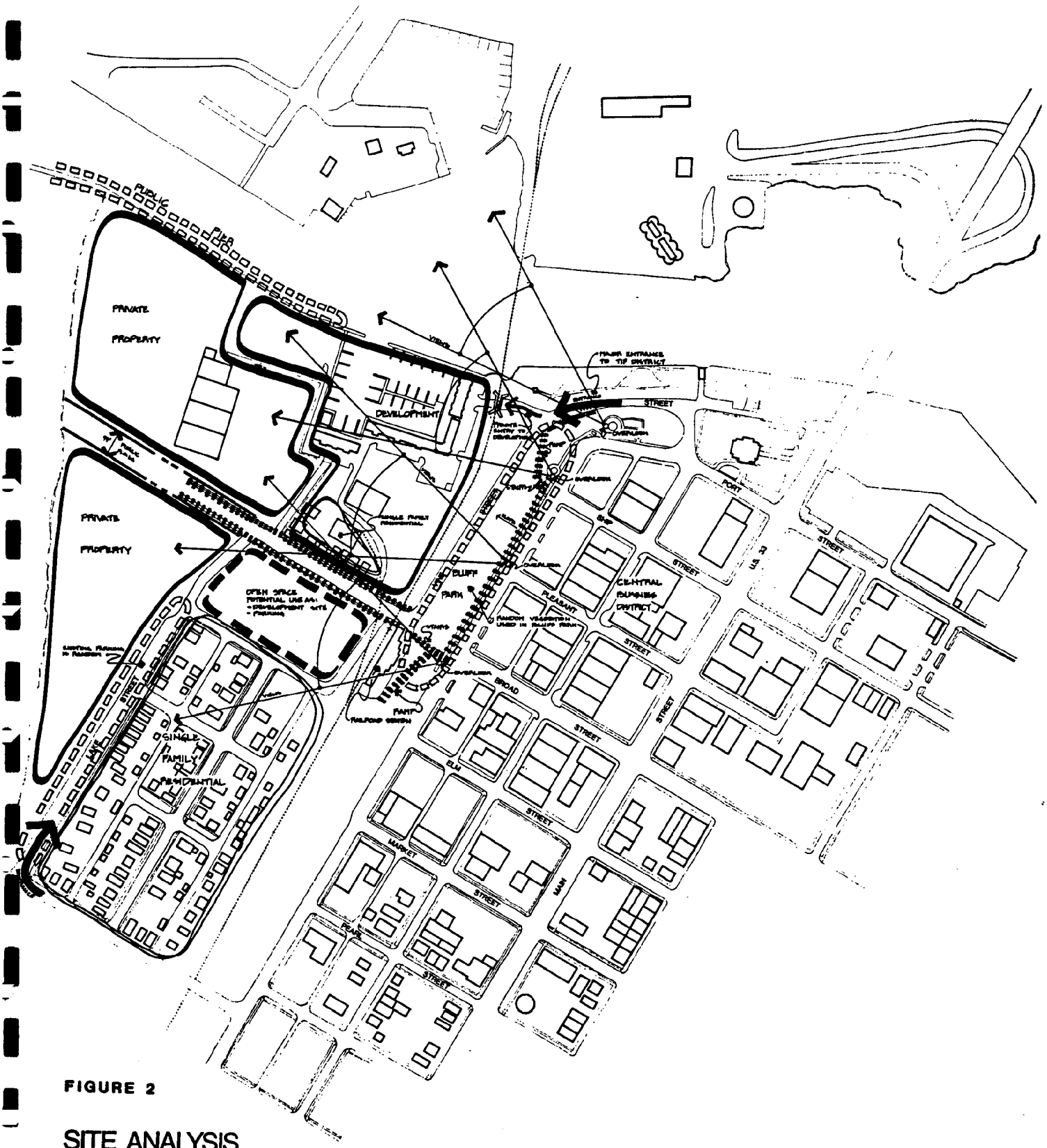


FIGURE 2

SITE ANALYSIS
LAKEFRONT T.I.F. DISTRICT STUDY
ST. JOSEPH, MICHIGAN

TESKA ASSOCIATES INC.

SCALE 1" = 100'

NORTH

Single Family Homes:

The single family residential homes north of Broad Street between Lake and Vine Streets provide a buffer between the high density Waterfront Development and the open green space of the Whirlpool Site. This buffer effect will be strengthened with added street trees and sodded parkways.

The Whirlpool Site:

The Whirlpool vacant field south of Broad Street north of Elm Street and west of Lake Street is an important undeveloped plot of land within the TIF District. As perhaps the last unplanned site in the TIF area there is an opportunity to tailor the development plan, so that improvements can accommodate important functions which currently occur spontaneously. The preservation of these functions in this open green space will accomplish the following three objectives:

Provide a park setting as a 'front yard' to the Railroad Station.

Provide a place for community oriented activities such as carnivals and concerts.

Provide overflow parking to alleviate seasonal parking demands.

Lake Shore/Beach Area:

The beach front is heavily used by bathers throughout the summer. The beach adjacent to Lake Street is most heavily used which results in congestion along Lake Street. This congestion is created by bathers driving to the beach and people in cars "cruising" the beach area.

South Pier:

The Pier is a favorite spot local people use for fishing, strolling and relaxing. Currently vehicular access is provided from Lake and Water Streets with huge parking resources available on Waterfront Development and Leco Industries property. Pedestrian access to South Pier crosses Leco property from the west end of Broad Street.

B. ACCESS AND CIRCULATION

Vehicular System

Primary Vehicular Access:

The primary vehicular entrance to the TIF District is where Vine Street meets Water Street in the north east section of the district. The majority of vehicular traffic will be entering the TIF area from the Central Business District from State Street to Water Street. Acting as the front door to the area care will be given to creating an attractive Gateway entrance through the use of special signage, lighting and landscape plantings.

Secondary Vehicular Access:

Park Street provides a connection between the downtown area to Lake Street at the southern end of the TIF District via bridge over the Chesapeake and Ohio Railroad tracks. Park Street passes through a single family residential neighborhood and is elevated on a bridge until Lions Street.

Vehicular access occurs along Lake, Broad, Elm and Vine Streets within the TIF District. During summer months a one-way traffic system is employed to minimize traffic congestion. Northbound traffic follows Lake Street to Elm Street to Vine/Water Street. Southbound traffic follows Vine/Water Street to Elm Street and to Lions Street with an option to continue west along Elm Street. Broad Street will be the main access route for the Waterfront Development and the future development of the Leco Industries property and the Whirpool Site.

Pedestrian System

Primary Pedestrian System

Bluff Park

The top of the bluff adjacent to the CBD contains a formal walkway parallel to Lake Blvd. This walk runs north from Broad Street to the fountain and the seating overlook adjacent to the amphitheater. A stairs and ramp connection down the bluff exists between Ship Street (extended), and Water Street. This provides a connection between the fountain, and the west end of the Arboretum. This point west of the Arboretum is also the point of vehicular access to the Waterfront Development.

On top of the Bluff at Broad Street a multi-purpose structure exists which includes a scenic overlook platform, restroom facilities, a stairway leading down the bluff, and is the access point for a ramp leading southwest to the train Railroad Station.

Broad Street Right-of-Way

The Broad Street right-of-way terminates at the Railroad Station where Broad Street intersects Vine Street. Sidewalks exist along both sides of Broad Street and end somewhere west of Lake Street. (due to drifting beach sand, walk locations west of Lake Street are difficult to determine.)

There is an informal pedestrian path between the west end of Broad Street and the South Pier which crosses Leco Industries property. Similar pedestrian access is provided along Lake Street north of Broad Street to the South Pier.

Presently there does not exist a pedestrian connection along Vine Street between Broad Street and the Arboretum. A connection at this location will become very important for residents of the Waterfront Development and others enjoying the recreational opportunities of this area.

Secondary Pedestrian System

A pedestrian walkway along Lake Street is important to connect the parking resource along Lake Street, in the south end of the TIF District, with the Concession Building and the public beach access at Broad Street. Lake and Elm Streets will be connected to sidewalks in the residential neighborhood.

Unique Features

Bluff Park

The bluff provides vast panoramic views of Lake Michigan and the St. Joseph River. Views to the water, the city marina, and the railroad bridge are attractive amenities for park users.

Special Features

Special features such as the Maids of the Mist fountain and the amphitheater further enhance the use and enjoyment of the bluff area.

Presently Lake Blvd. comes within 5-feet of the fountain. The curb, for a stretch of twenty-feet north and south of the fountain, should be punched outward into Lake Blvd. to create a 10-foot sodded parkway that provides more room for pedestrians at the fountain.

Arboretum

The existing Arboretum is an attractive complement to the bluff and Bluff Park, providing expansive open green space and walkways along the St. Joseph River.

III. CONCEPT PLAN

In the development of the design Concept Plan an inventory and analysis process was undertaken as precedent to the actual design improvements. The inventory and analysis included updates of the land use arrangement proposed in the October '78 Teska Associates, Inc. (TAI) development study as well as consideration of contiguous areas outside of the TIF district.

The land use arrangement plan incorporated in this study includes the new Horan Waterfront Development located on the South Haven Redi-Mix site as well as landuse principles for access, circulation, and land development described in the 1978 TAI report.

Other aspects of the site analysis work include the identification of major considerations such as: views, access points, open space, and major pedestrian linkages. These and other items identified are illustrated on the appropriately labeled figures included in this memo. (See Figure 3)

Key principles from the October 1978 Silver Beach and Lion's Beach Development Study were applied to the design development process for TIF district improvements. Although a major excerpt from this study is incorporated in the appendix to this memo, the following key principles were fundamental components to this study:

Design

1. *Blufftop views of Lake Michigan, the St. Joseph River, and the development areas should be protected and enhanced; special consideration should be given to rooftop design.*

3. *The natural landscape environment should be enhanced wherever possible; e.g., along the beach and bluff areas; and floral accents should be introduced elsewhere to provide seasonal color.*

4. *The design of public improvements, such as street pavements, walkways, lighting fixtures, and signage should be coordinated throughout the entire area, with compatible variations permitted in unique situations.*

6. *The visual and physical impact of the existing railroad should be minimized through sensitive design.*

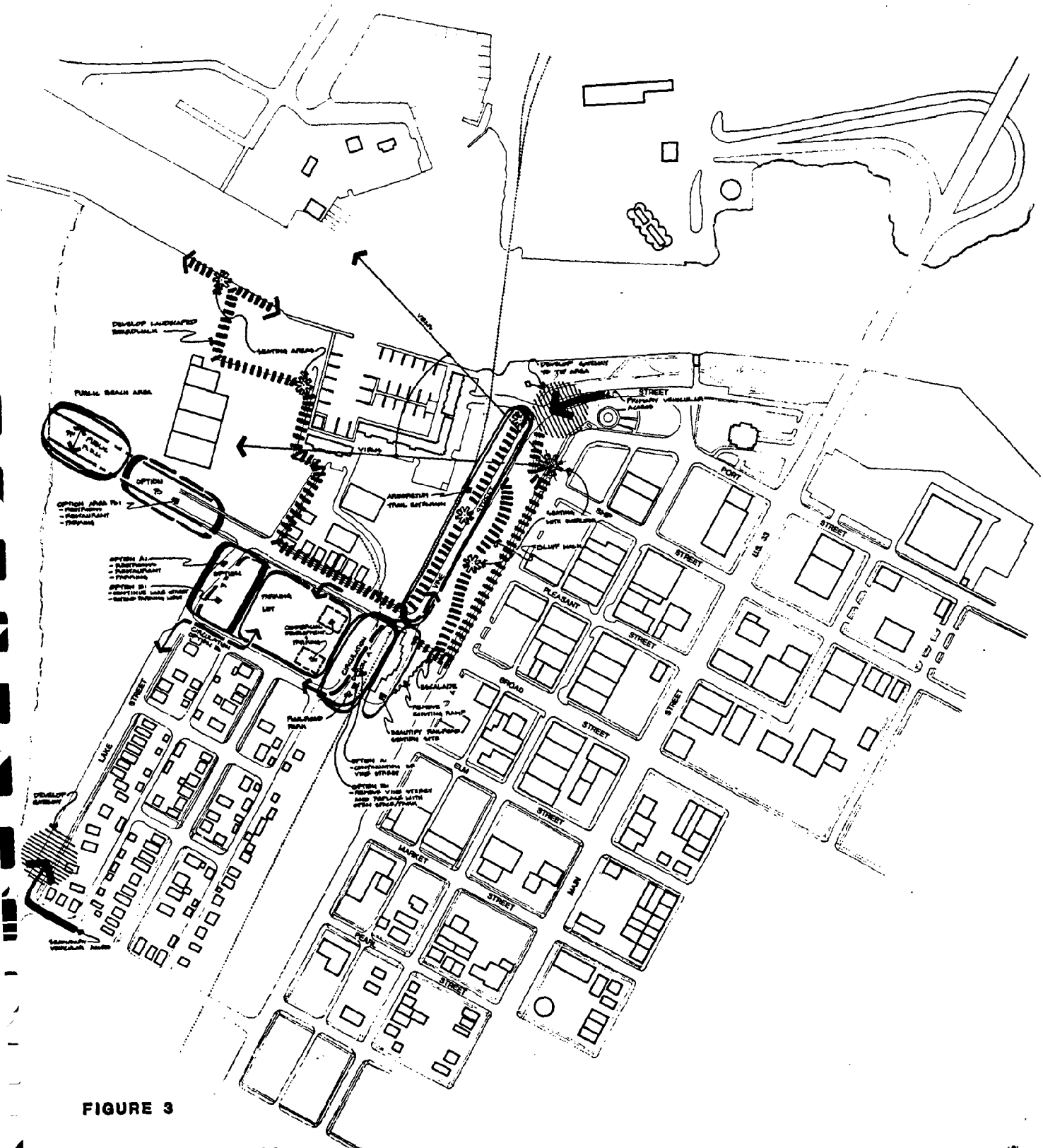


FIGURE 3

CONCEPT PLAN
LAKEFRONT T.I.F. DISTRICT STUDY
ST. JOSEPH, MICHIGAN

TESKA ASSOCIATES INC.

NORTH

Access, Circulation and Parking

1. *Convenient and safe pedestrian access to and circulation throughout the area is essential, including pedestrian pathways available to the public along the river front and lake front.*

2. *Vehicular access should be as direct as possible, considering the physical constraints of topography and existing street systems, and access to different functional areas should be separated to the extent feasible.*

3. *Vehicular circulation within the area should be discouraged.*

5. *Non-residential traffic should be strongly discouraged from utilizing minor residential streets.*

Design

1. *The architectural design of all structures should be harmonious with the nautical theme of the area, the topography, and the scale of the existing residences south of Elm Street and existing residences on the north side of the river.*

2. *Views from the bluff top should be preserved and enhanced, including the distant view of the harbor entrance through the existing bandshell, the near view of the river front from Pleasant Place, and the expansive near and distant views of the Silver Beach area and Lake Michigan from Broad Street.*

5. *The beach area should be designed to incorporate a natural landscape environment to the extent feasible, including small dunes and related vegetation.*

6. *The bluff area should be designed as an arboretum of naturalistic vegetative cover appropriate to steep slopes, and should incorporate sitting areas and overlooks along its several pathways.*

7. *The direct pedestrian connection at Broad Street should be retained, but should be redesigned and reconstructed.*

10. *All parking lots should be landscaped to minimize the negative visual impact of pavement and vehicles.*

Access, Circulation and Parking

4. *Internal vehicular circulation within the Silver Beach area should be discouraged, and non-residential traffic should be restricted from using minor residential streets.*

6. *Pedestrian movement should take precedence over vehicular movement throughout the area.*

7. *A pedestrian walkway available to the public should be located along the riverfront and marina connecting the existing riverfront park and the south harbor pier.*

9. *A series of direct and indirect pedestrian pathways should be integrated with the bluff to provide convenient connections between the area and downtown, specifically Broad Street.*

In effect the preceeding points represent the guidelines, or design conscience for the design concepts presented in this study.

A number of related, yet quite diverse, elements comprise the Design Concept Plan. For example, the pedestrianway system links the central business district to the TIF District as well as provides numerous recreational opportunities from the South Pier to the Arboretum. This system is composed of a number of materials including granular slag paths; elevated wooden boardwalks, brick paved seating areas and wooden overlook platforms.

Landscaping is similarly diverse. Planting recommendations range from formal street plantings in parkways along Broad Street, to the use of natural, indigenous plant materials in the bluff to provide soil stabilization as well as year-round floral beauty.

A detailed discussion of the design features is provided in the following section and includes a breakout of eleven (11) different geographic components. Additionally, two alternatives are presented for improvement options pertinent to the Broad Street beach area, the Whirlpool property and the Vine/Water Street link to Elm and Lake Streets. In conjunction with the design concepts, a cost summary for each of these eleven (11) component areas follows in the last section of this memorandum.

The design concept alternatives and more detailed illustrations of key design improvements for areas such as the bluff area and streetscape improvements are included in Design Plan Alternatives #1 and #2 which have been incorporated into this memorandum.

IV. DESIGN ALTERNATIVES #1 AND #2

For the sake of discussion the Silver Beach TIF District has been divided into eleven geographic areas (See Figure 4 & 5). Areas 1-7 remain unchanged in Design Plan Alternatives #1 and #2. Areas 8-11 Contain design alternatives and are explained in this memo and shown on Design Plan Alternatives #1 and #2. The eleven geographic areas are identified as follows:

1. BLUFF PARK IMPROVEMENTS
2. VINE STREET RIGHT-OF-WAY
3. ARBORETUM TRAIL EXTENTION
4. BROAD STREET RIGHT-OF-WAY B1 (east of Lake Street)
5. MAIN BOARDWALK
6. PIER BOARDWALK
7. LAKE AND VINE STREET IMPROVEMENTS

ALTERNATIVES #1 AND #2

8. BROAD STREET RIGHT-OF-WAY (Parking west of Lake Street)
9. PARKING LOT
10. DEVELOPMENT SITE
11. RAILROAD STATION PARK

A. BLUFF PARK IMPROVEMENTS

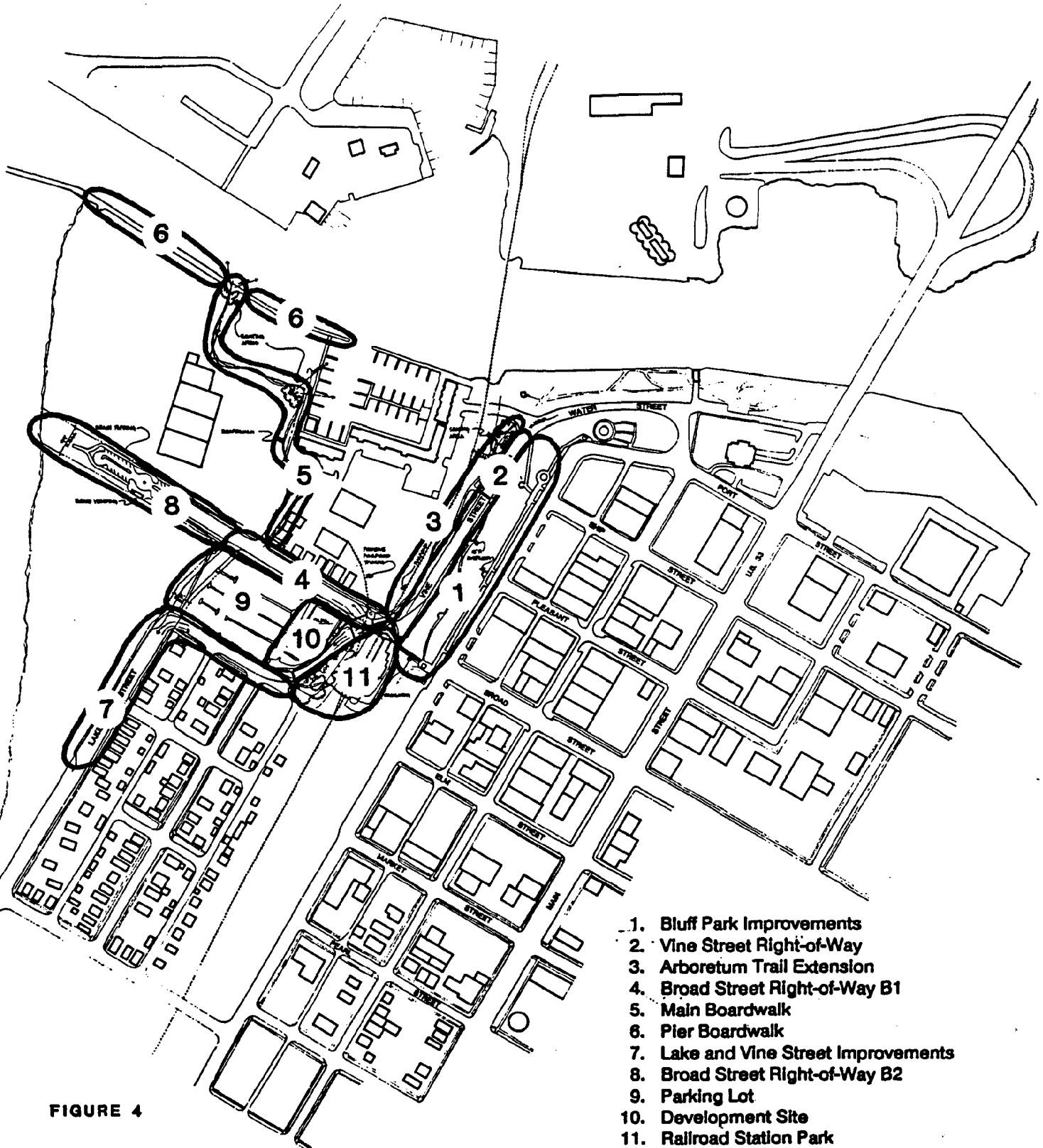
Goal:

Provide pedestrian connections between the St. Joseph Central Business District (CBD) and the Silver Beach TIF District while maintaining and enhancing an aesthetically pleasing green space in an environmentally sound manner.

Conceptual Components:

Overlooks:

Overlooks will be provided for pedestrians to enjoy panoramic views of Lake Michigan and the St. Joseph River, from various locations along the bluff. The overlooks will be constructed out of wood so that they may be elevated to provide the best possible views.

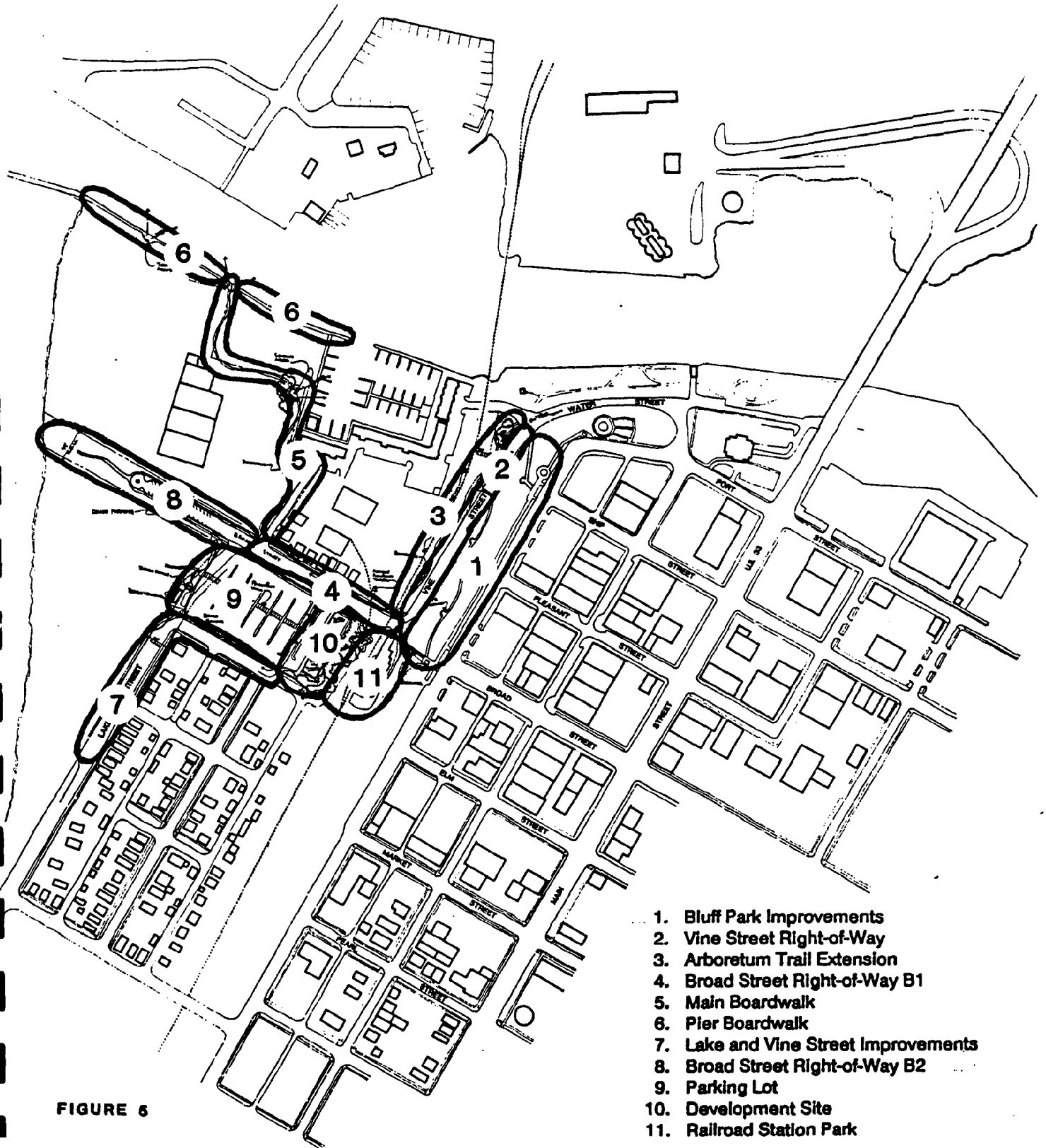


1. Bluff Park Improvements
2. Vine Street Right-of-Way
3. Arboretum Trail Extension
4. Broad Street Right-of-Way B1
5. Main Boardwalk
6. Pier Boardwalk
7. Lake and Vine Street Improvements
8. Broad Street Right-of-Way B2
9. Parking Lot
10. Development Site
11. Railroad Station Park

FIGURE 4

DESIGN ALTERNATIVE #1
LAKEFRONT T.I.F. DISTRICT STUDY
ST. JOSEPH, MICHIGAN

TESKA ASSOCIATES INC.



1. Bluff Park Improvements
2. Vine Street Right-of-Way
3. Arboretum Trail Extension
4. Broad Street Right-of-Way B1
5. Main Boardwalk
6. Pier Boardwalk
7. Lake and Vine Street Improvements
8. Broad Street Right-of-Way B2
9. Parking Lot
10. Development Site
11. Railroad Station Park

FIGURE 6

DESIGN ALTERNATIVE #2
LAKEFRONT T.I.F. DISTRICT STUDY
ST. JOSEPH, MICHIGAN

TESKA ASSOCIATES INC.

Ramp Walkway:

The ramp system will be constructed out of two basic materials; granular slag and wood. Slag pathways will maintain design continuity with the adjacent Arboretum and the proposed Arboretum Trail Extension slag pathways. Wood will enable a boardwalk system to be elevated and continue the ramp from the slag pathway to the elevated wooden overlooks.

The walkway will be serpentine in form, not only to add visual interest, but to allow for ecologically sensitive treatments of the bluff taking into consideration vegetation and topography.

Excalators/Escalade:

At the turn of the century, a moving "toll walkway" was in operation at the bluff, carrying people from the docks up the bluff to the downtown. As a result of this early facility an escalator has been investigated for the south end of Bluff Park. It would provide pedestrian movement between the top of the bluff, at Broad Street, and the bottom of the bluff, at the Railroad Station.

Although this historic reference would be an enjoyable design feature, it and its related costs are somewhat discouraging. The escalator alone has been priced in the neighborhood of $180,000.00 to $200,000.00. The escalator will have the additional related costs of installation, regular maintenance, operating costs, and will require a permanent weatherproof structure, protecting it from snow and rain.

Landscaping:

Landscaping on the bluff will be treated sensitively so as not to disturb the existing native vegetation. Accent plantings will be added to the bluff so that the bluff will take on an appearance of a colorful painting when viewed from the St. Joseph River or various points along Vine Street and the Arboretum Trail Extension. Furthermore, shade trees will be planted around seating areas to provide shady resting places for sightseers along the bluff walkways.

Lighting:

Ornamental pedestrian scaled light fixtures will be installed at overlooks and seating areas, while bollard lights will be evenly spaced along ramps, stairs, and boardwalks providing for safety, security and a pleasant lighting effect. Similar ornamental

pedestrian scaled light fixtures and bollard lights will be employed throughout the Silver Beach TIF District creating a sense of design unity throughout the District.

Utilities:

All overhead utility lines have been proposed to be relocated underground, thus having less of a negative impact on the surrounding visual environment. This condition is typical throughout the TIF area.

B. VINE STREET RIGHT-OF-WAY

Goal:

Upgrade the aesthetic character of the west side of the right-of-way and provide safe and attractive vehicular access within the Silver Beach TIF District. Provide a green connection between the Bluff Park and the Arboretum Trail Extension.

Conceptual Components:

Roadway:

Provide a pavement width which will allow two driving lanes, one north and one south, with parallel parking along both sides of the street.

Landscaping:

Provide street trees on the west side of the right-of-way to match the existing trees that line the east side of the right-of-way. These trees will frame views of the historic Railroad Station and the St. Joseph riverfront.

Lighting:

Street lighting will be approximately 120-feet on-center to illuminate the roadway. Ornamental pedestrian scaled lighting will be provided at the crosswalks to illuminate the area as well as indicate to motorists crosswalk locations. For additional information see Bluff Park.

Utilities:

Overhead utility lines have been proposed for underground placement. This will strengthen the green space quality of the nearby Bluff Park and Arboretum Trail Extension.

Drainage:

Curbs, gutters and drainage inlets should be installed to provide proper street drainage. Drainage inlet openings shall be chosen which will allow for safe bicycle passage.

C. ARBORETUM TRAIL EXTENSION

Goal:

To provide a natural extension of the existing Arboretum Trail into the Silver Beach TIF District, while providing a safe and enjoyable pedestrian walkway between Vine Street and the Railroad tracks.

Conceptual Components:

Landscaping:

Extend the existing Arboretum planting concept. Wildflower beds will be added not only for their beauty and low maintenance, but to create visual continuity between the proposed wildflower beds in Bluff Park and the Arboretum Trail Extension. Shade trees will provide shade in the seating areas and ornamental shrubs will create visual and aesthetic enhancement along the walkway and the Vine Street right-of-way.

Pedestrian Trail:

The trail will be constructed of granular slag creating a tie to the granular slag pathway in the existing Arboretum. Being free-form in layout the trail will allow different viewing angles of the Train Station to the south. The trail being higher in elevation than the St. Joseph River, will allow for views to the riverfront to the north. The trail has been aligned to maintain as much distance as possible from the railroad tracks to the west.

Seating Areas:

Seating areas will be constructed out of wood and brick establishing a continuity between the nearby boardwalks, overlooks, and the expansive brickwork around the Railroad Station. Their circular form will be consistent with the circular forms of the nearby historic Maids of the Mist fountain and the Amphitheater.

Lighting:

See Bluff Park.

Railroad Right-of-Way:

All improvements proposed must be approved by the C & O Railroad. Facilities should be outside a 50-foot railroad right-of-way. Some improvements may fall within this 50 foot zone and must be reviewed for safety and approved by the C & O Railroad.

D. BROAD STREET RIGHT-OF-WAY B1 (East of Lake Street)

Goal:

Provide safe and attractive pedestrian and vehicular access within the Silver Beach TIF District. Create a connection from the Bluff Park covered stairway and the Arboretum Trail Extension, to the beach and South Pier.

Conceptual Components:

Roadway:

Provide a pavement width which will allow two driving lanes, one east and one west, with parallel parking on both sides of the street.

Sidewalks:

A concrete sidewalk will be installed on the north side of Broad Street, allowing for a safer pedestrian connection between the Central Business District and Lake Michigan. Expanded driveways will be removed allowing for safer pedestrian movement down the north side of Broad Street. The sidewalk on the south side of Broad Street shall be refurbished as necessary.

Landscaping:

Provide a parkway along both sides of the street with street trees which will frame views to Lake Michigan, while creating an attractive pedestrian environment. Existing maples on the south side of the right-of-way should be matched on the north side parkway taking into consideration the preservation of existing shade trees on the north side.

Utilities:

See Bluff Park.

Drainage:

See Vine Street Right-of-Way.

Lighting:

Street lights have been proposed at approximately 120 on-center spacing to illuminate the roadway. (For additional information see Bluff Park.)

E. MAIN BOARDWALK

Goal:

Provide a pedestrian connection between Broad Street and the South Pier adjacent to the St. Joseph River.

Conceptual Components:

Boardwalk:

A wooden boardwalk has been proposed for this pathway system. This boardwalk will be elevated to allow wind blown sand to pass beneath, rather than bury the walking surface. The wooden boardwalk would accomplish two objectives; 1) a wooden boardwalk will provide a rustic seaside character desired in this TIF District, and 2) important public access which will be greatly reduced by new developments, would be maintained.

Landscaping:

Dune plantings will be utilized where possible to further strengthen the seaside character desired along the boardwalk. Plants selected for the dunes should occur naturally, and require far less maintenance than other types of planting materials.

Seating Areas:

Seating areas along the boardwalk are located to provide resting places while capitalizing on interesting views. Plantings, particularly the trees, are concentrated in these locations to provide shade and identity for these resting areas.

Lighting:

See Bluff Park.

10' Right-of-Way:

Property owners adjacent to the boardwalk have each allowed a 5-foot easement along their property lines to allow a total 10-foot wide boardwalk easement. The five 5-foot wide boardwalk has been aligned down one side of the easement and then shifted to the opposite side, thereby allowing a 5-foot planting strip on alternating sides of the easement. A much preferred easement width would be 50-feet, which would accommodate a meandering boardwalk alignment more in keeping with the natural character of the beach.

F. PIER BOARDWALK

Goal:

To provide a pleasant, safe and well maintained pier for public recreational use.

Conceptual Components:

Pier:

The concrete pier would be refurbished where necessary by replacing old deteriorated concrete with new concrete.

Boardwalk:

A wooden boardwalk would be provided as a pedestrian walkway along portions of the public pier. A wooden boardwalk will be an extension of the boardwalk between the River and Broad Street and will be an attractive alternative to the concrete pier.

Seating Areas:

Seating areas located along the public pier have been provided for pedestrians to rest and take in the wonderful views of the St. Joseph River and Lake Michigan.

G. LAKE AND VINE STREETS IMPROVEMENTS

Goals:

Provide safe and attractive vehicular and pedestrian access within the Silver Beach TIF District.

Conceptual Components:

Roadway:

Resurfacing of the existing asphalt roadway from Park Street to the Railroad Station has been provided for. There will be modifications to the west curb alignment of Lake Street to provide for 45 degree on-street parking. As stated in the Lions Beach Study closing off the ends of Pearl Street, Market Street, and Lions Park Drive, so as to reduce vehicular circulation within the single family residential neighborhood, has also been followed.

Sidewalk:

A concrete sidewalk has been proposed for the west side of Lake Street to provide a safe pedestrian connection to the Broad Street Swimming Beach.

H. BROAD STREET RIGHT-OF-WAY B2 (West of Lake Street) - ALTERNATIVE #1 AND #2

Goal:

To provide an attractive, safe, and efficient design incorporating: on-street parking, concession and picnic area, boardwalks, and a swimming beach, all of which will be required to fit within the 99-foot Broad Street right-of-way.

Conceptual Components:

Roadway - Alternate #1 and #2:

Provide a pavement width which will accommodate two driving lanes, one east and one west, and off-street parking. To provide as many parking spaces as close to the swimming beach as possible, a 45-degree parking area west of Lake Street has been suggested. The original brick street pavement will be refurbished the length of the parking area.

Boardwalk - Alternate #1 and #2:

To provide safe pedestrian access to the swimming beach on the north and south sides of Broad Street similar in character to the Main Boardwalk. This boardwalk will be elevated and include steps with seating and connect the parking/concession area with the beach. The west end should be elevated two to three-feet above the beach to minimize sand cover of the boardwalk and provide seating platforms adjacent to steps.

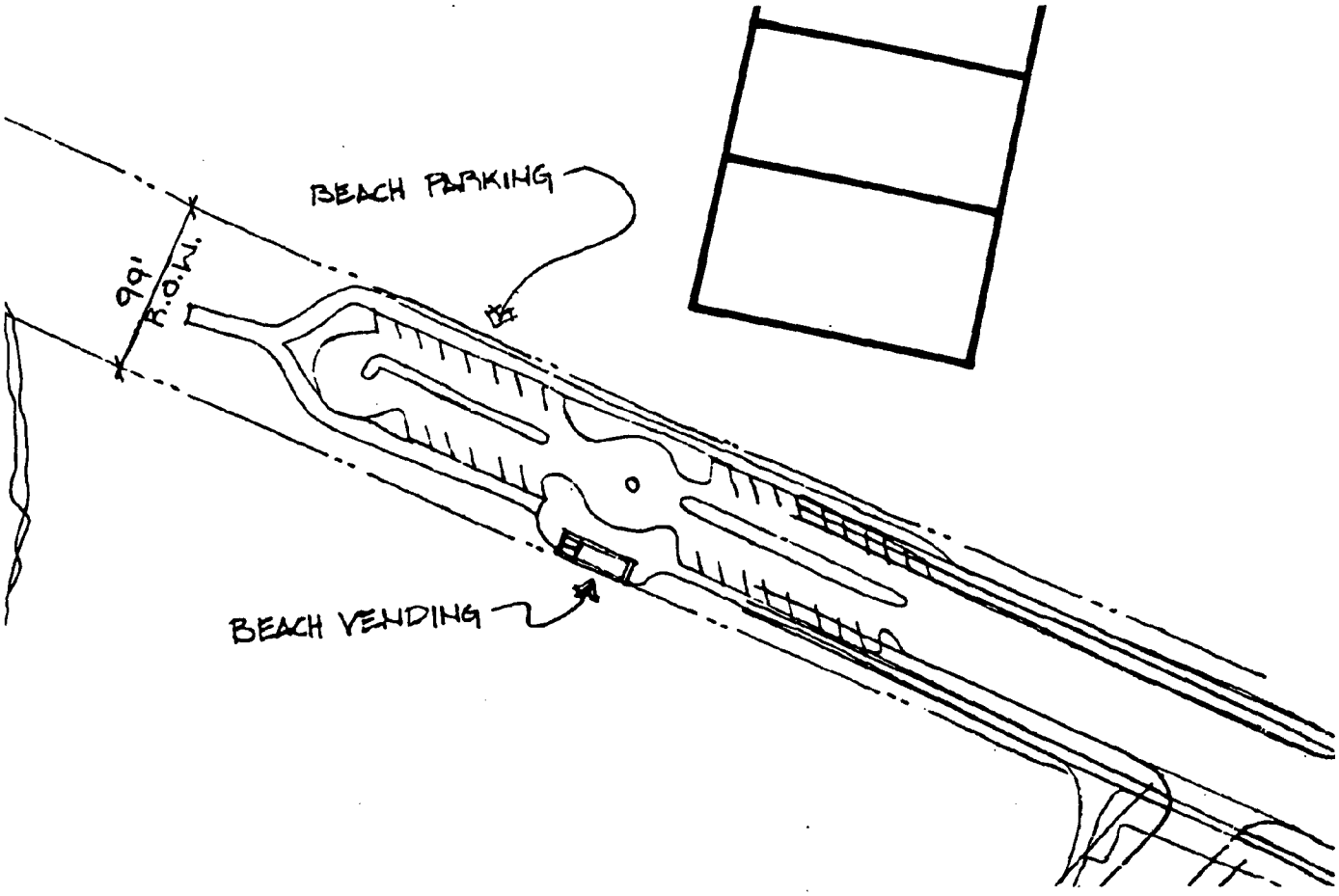
Trellis Seating Area - Alternate #1 and #2:

Wooden trellis seating will provide a pleasantly shaded area where pedestrians can come to watch the daily beach activities or the dramatic sunset over Lake Michigan.

Adjacent to the trellis there are seating platforms and steps in a configuration that will allow for direct access to the beach area or sun bathing on wooden platforms.

Concession Building - Alternate #1:

A beach concession building will provide food and refreshments as well as rest room facilities for beach goers. This building should be designed with an architectural character compatible with the area's nautical character.



8. Broad Street Right-of-Way B2

FIGURE 6

DESIGN ALTERNATIVE #1

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

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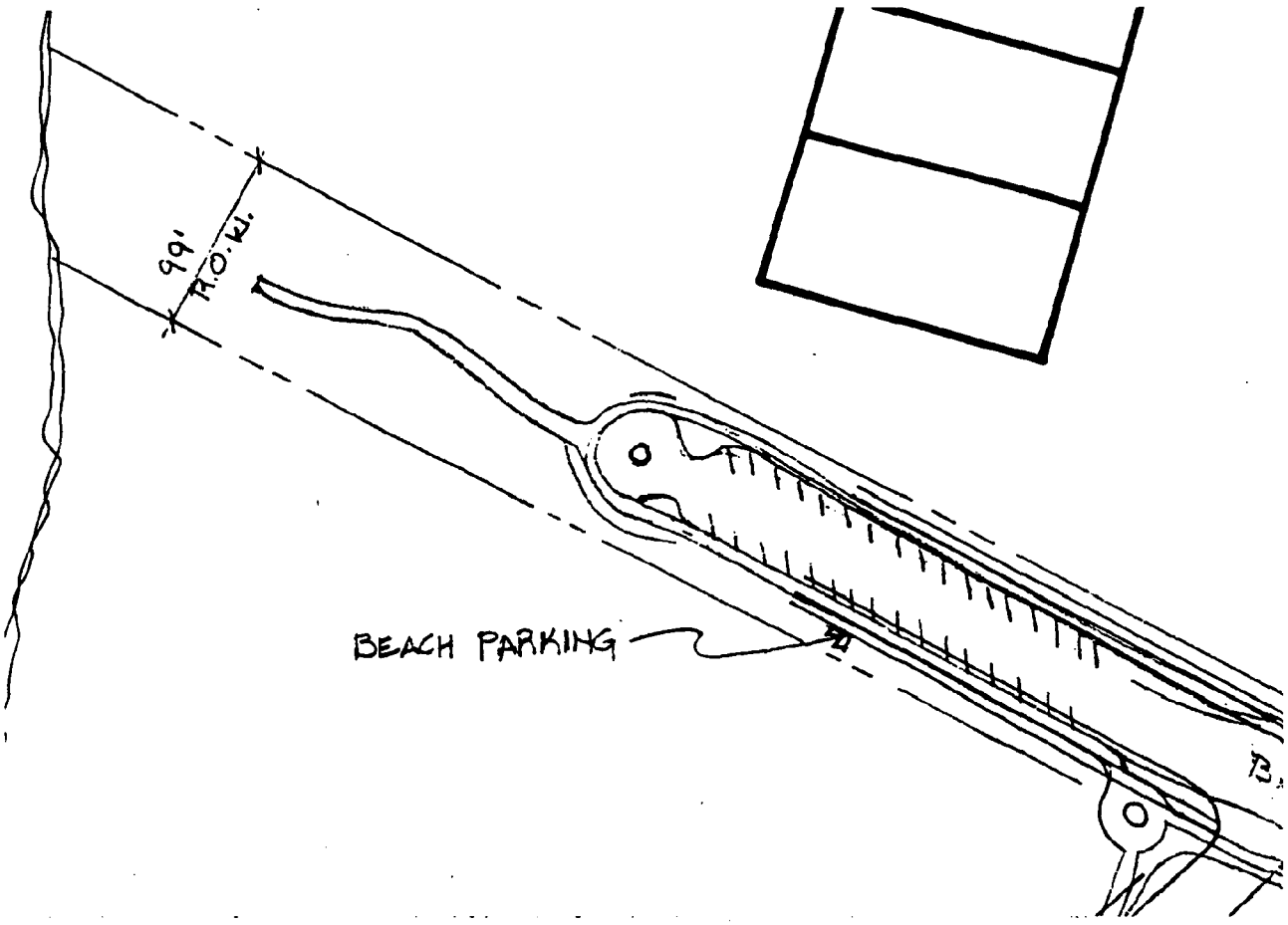

8. Broad Street Right-of-Way B2

FIGURE 7

DESIGN ALTERNATIVE #2

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

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Concession Building - Alternate #2:

In Design Alternate #2, the Concession Building has been relocated to the beach area west side of Lake Street between Broad and Elm Streets. (See Parking Lot - Design Alternative #2).

Picnic Area - Alternate #1:

Wooden picnic tables will be provided adjacent to the beach concession building for patrons and beach goers.

Picnic Area - Alternative #2:

The picnic area in Design Alternative #2 has been relocated with the Concession Building to the west side of Lake Street between Broad and Elm Streets. (See Parking Lot - Design Alternative #2).

Landscaping - Alternative #1:

Native dune plants will comprise the landscaping in the beach areas of the 99-foot right-of-way. Parkway plantings complete with Street trees and sodded parkways will be installed in a planted median down the center of the parking facility located in the Broad Street right-of-way.

Landscaping - Alternative #2:

Native dune plants will comprise the landscaping in the beach areas areas of the 99-foot right-of-way. Lacking planted medians as in Alternate #1, the planting strips to the north and south of the parking will be wider than in Design Alternative #1.

Utilities - Alternative #1 and #2:

See Bluff Park.

Drainage - Alternative #1 and #2:

See Vine Street Right-of-Way.

Lighting - Alternative #1 and #2:

Street lights have been proposed approximately 120 feet apart spacing to provide illumination of the parking lot, roadway and adjacent pedestrian boardwalk. Ornamental pedestrian scaled lighting that will be used throughout the TIF district will provide safety, and security.

I. PARKING LOT DESIGN - ALTERNATIVE #1 AND #2

Goal - Alternative #1 and #2:

Provide additional off street parking to alleviate the pressure of seasonal parking demands, while maintaining a large green space character.

Conceptual Components:

Parking - Alternative #1 and #2:

Provide an additional 200 to 250 parking spaces for seasonal overflow parking.

Circulation - Alternative #1:

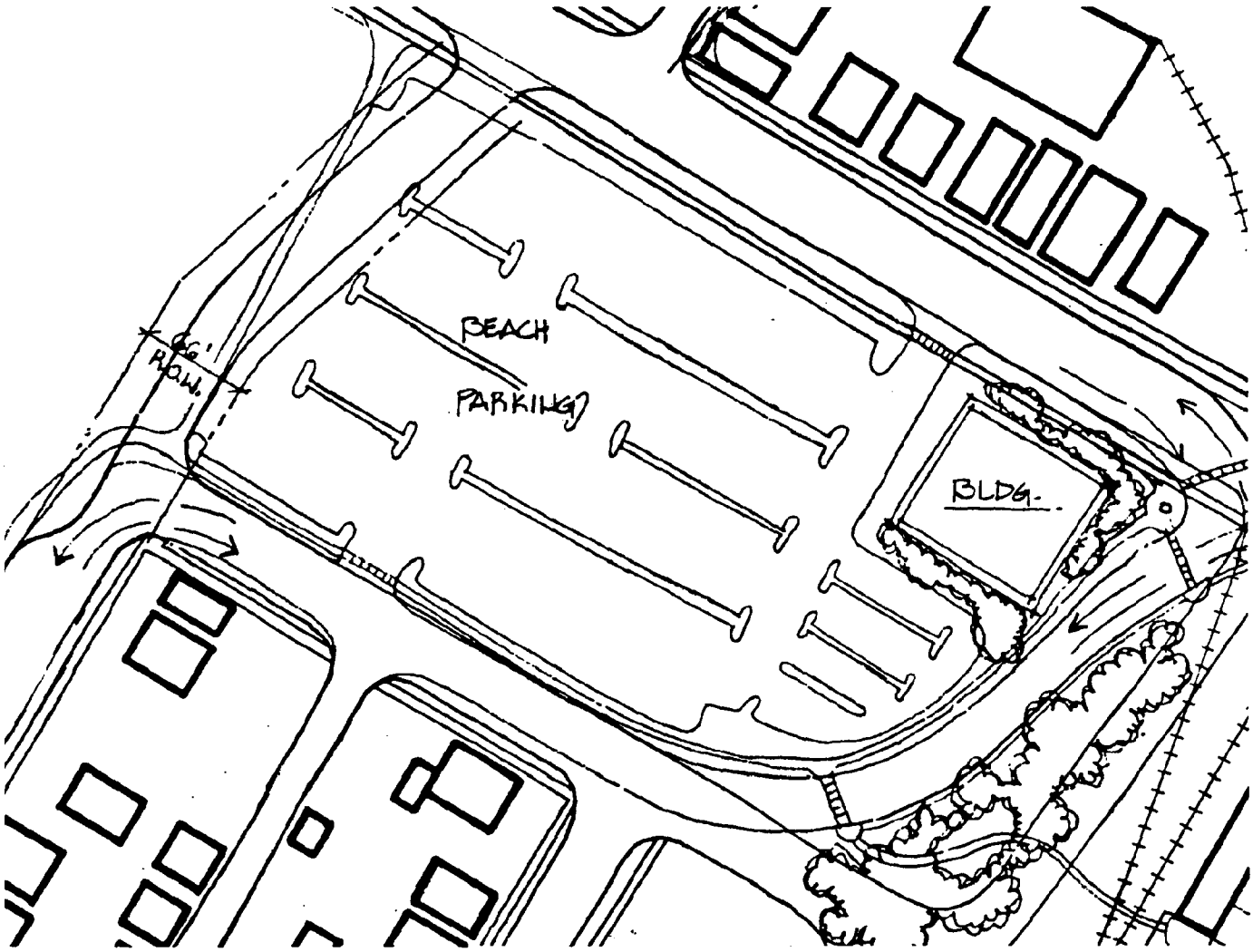
The parking lot will be extended west to the right-of-way of Lake Street between Broad Street and Elm Street. Traffic will be diverted to the newly aligned Vine/Elm Street south of the Railroad Station. Circulation within the parking lot will be designed to accomodate parking needs and discourage the use of the parking lot as a cut through between Elm and Broad Streets. This shall be accomplished by having the driving lanes run in an east/west orientation with staggered parking lot entrance locations.

Circulation - Alternative #2:

Lake Street shall be closed between Elm Street and Broad Streeet. Traffic will be re-routed to pass through the east end of the parking lot just west of the Development Site.

Walkways - Alternative #1:

There shall be a 5-foot wide sidewalk installed on the south edge of the parking lot to provide for a safe and efficient pedestrian walkway around the parking lot to the beach area.



9. Parking Lot

FIGURE 8

DESIGN ALTERNATIVE #1

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

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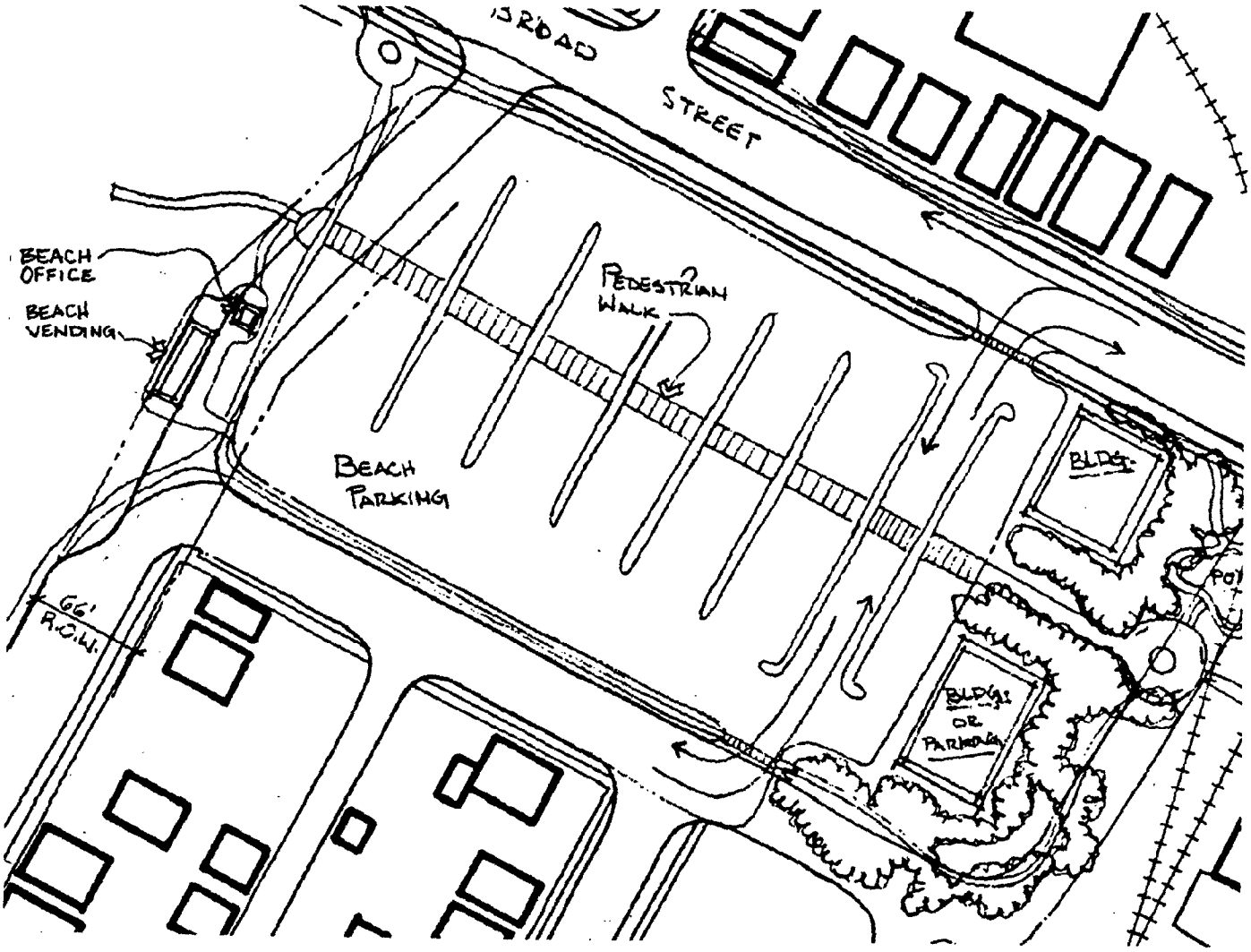

9. Parking Lot

FIGURE 9

DESIGN ALTERNATIVE #2

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

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Walkways - Alternative #2

There shall be a pedestrian crossing extending through the parking lot from the Development site to the beach front. This walkway will identify where exactly pedestrians are to walk and where motorists will need to exercise extra caution. There shall also be a concrete sidewalk installed along the south perimeter of the parking lot to provide for additional pedestrian safety.

Landscaping - Alternative #1 and #2:

The north and south sides of the parking lot will have a 10-foot planting buffer to screen the parking lot. The buffer shall be planted with shade trees, ornamental trees, and ornamental and deciduous shrubs. The parking lot shall have 10-foot wide planted medians, which will have 1- to 2-foot tall earth berms planted with: shade trees, ornamental trees, and ornamental and deciduous shrubs. Furthermore, the lots will contain random tree planting cutouts, so that from locations on the bluff this will give a more natural appearance rather than a linear planted parking lot.

Utilities - Alternative #1 and #2:

See Bluff Park - Utilities.

Drainage - Alternative #1 and #2:

See Vine Street - Right-of-Way - Drainage.

Lighting - Alternative #1 and #2:

See Vine Street - Right-of-Way - Lighting.

(Beach Area - Design Alternative #2)

The following Beach Area is for Design Alternative #2 only.

Goal:

The beach area will be located in the vacated Lake Street 66-foot right-of-way at the west end of the parking lot. Its goal will be to provide for beach activities which will not be incorporated in the 99-foot Broad Street right-of-way.

Concession Building - Alternative #1:

The Concession Building in Design Alternative #1 is located in the Broad Street right-of-way B2 (west of Lake Street).

Concession Building - Alternative #2:

For Concession Building description see Broad Street Right-of-Way B2 - Design Alternative #1

Beach Office - Alternative #1:

Not provided.

Beach Office - Alternative #2:

This building shall be used mainly by life guards as a beach equipment checkout location, an information center, and a security guard station. This building style and design of architecture shall be consistent with the style and design of the Beach Concession Building.

Picnic Area Alternative #2:

Wooden picnic tables will be provided adjacent to the beach concession building for patrons and beach goers.

Landscaping - Alternative #2:

See Main Boardwalk.

Lighting - Alternative #2:

See Bluff Park.

J. DEVELOPMENT SITE DESIGN - ALTERNATIVE #1 AND #2

Goal - Alternative #1 and #2:

The Development Site will provide for the opportunity of a small commercial/office development. This development will need to be sensitive to the local pedestrian scaled and oriented neighborhood.

Conceptual Components:

Building - Alternative #1:

There shall be a single, one-story building designed with an architectural character consistent with the local beach architectural style. This building should be located so that it will not block views of the Train Station from various points along Broad and Lake Street. It should allow for open green space to the west of the Railroad Station for a parklike setting.

Building - Alternative #2:

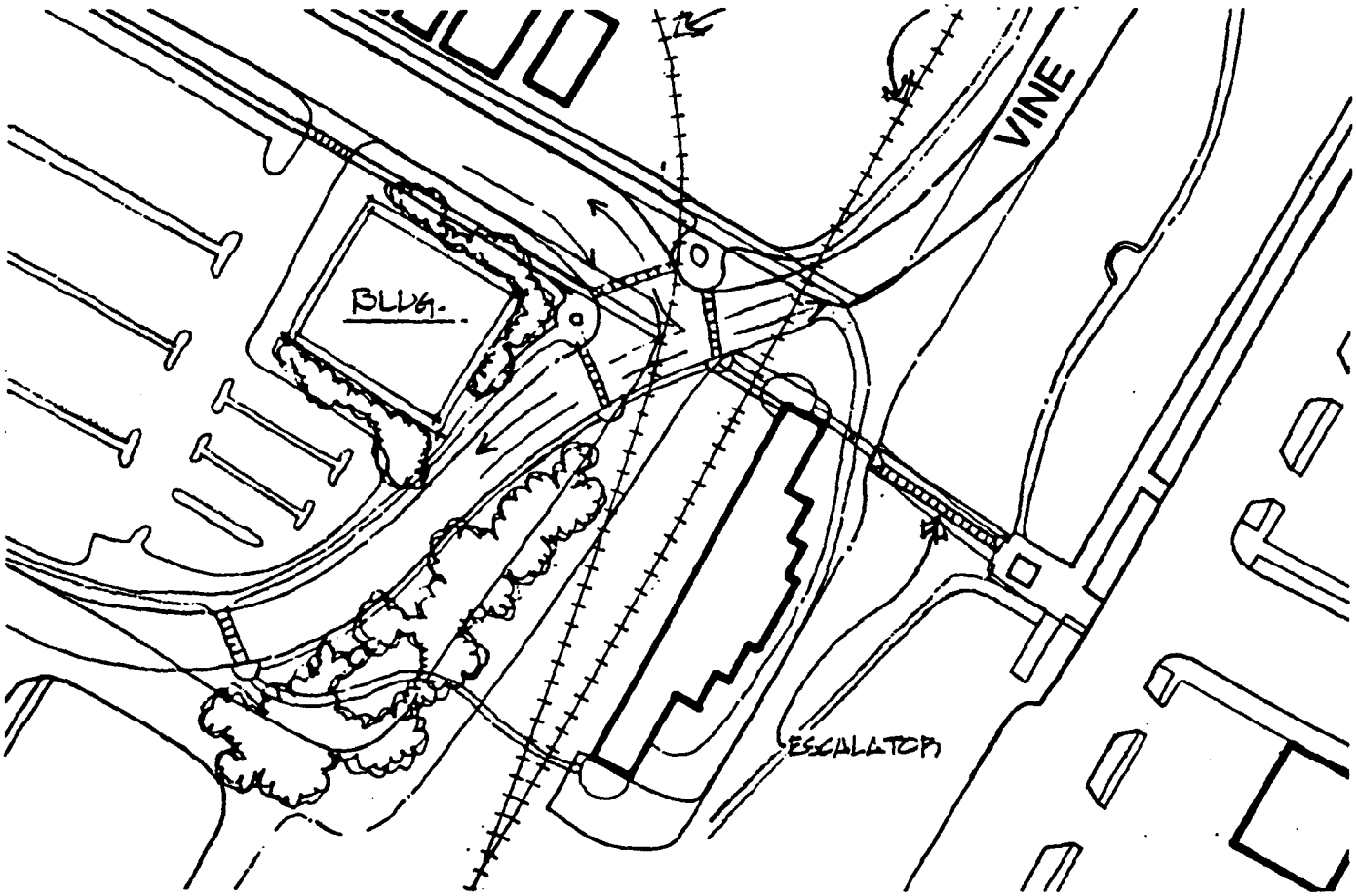
There shall be two, one-story buildings designed with an architectural character consistent with the local beach architectural style. The buildings on the Development Site shall be sited approximately 100-feet apart, north and south of one another, thereby creating a strong axial sightline from the Railroad Station to the beach area. The 100-foot space between the two buildings will be developed as a pedestrian courtyard, perhaps even with a small fountain. This space will provide a nice area for the building's occupants, and Railroad Station users which will need to pass through this space when parking in the proposed parking lot on the existing Whirlpool site.

Parking - Alternative #1 and #2:

The Development Site shall contain sufficient parking on-site to avoid adding to the present seasonal need for parking in the Silver Beach TIF District.

Landscaping - Alternative #1:

The landscape concept here is to blend the adjacent streetscape and dune plantings. Ornamental shrubs and trees shall be utilized at the buildings entrances to signify them as such. Dune planting shall be utilized throughout the remains of the site so that it will blend with the nearby beach character.



10. Development Site

FIGURE 10

DESIGN ALTERNATIVE #1

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

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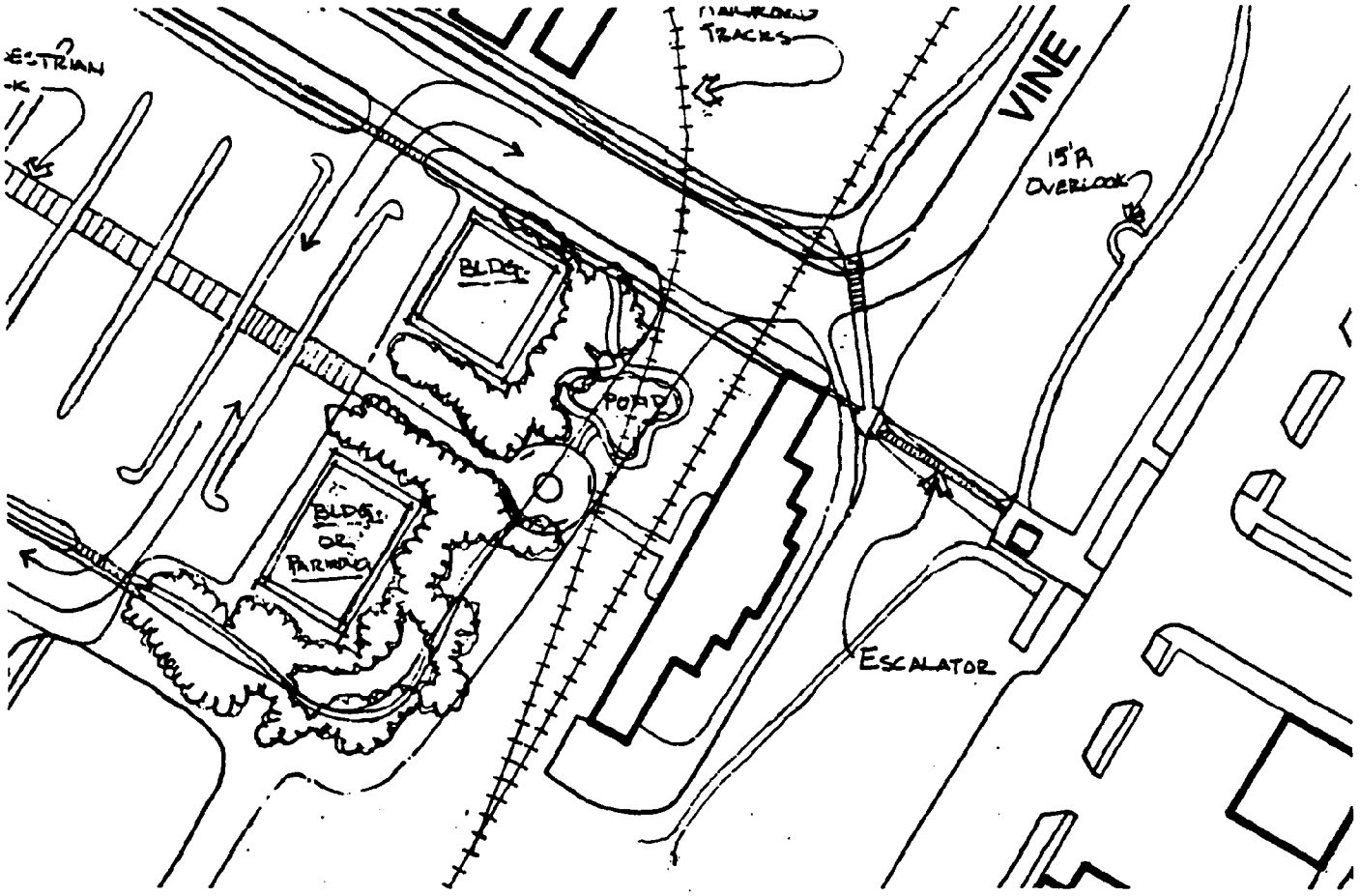

10. Development Site

FIGURE 11

DESIGN ALTERNATIVE #2

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

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Landscaping - Alternative #2:

The landscape concept here is to blend the adjacent streetscape of Broad and Vine Streets and the dune planting of the beach area to the west. Ornamental shrubs and trees shall be utilized at the buildings entrance and within the courtyard. Dune plantings will be incorporated along the edges of the site, such as along Vine Street and the Parking Lot.

Circulation - Alternative #1:

Vine Street has been realigned through the eastern section of the development site. This has been done to accomplish three objectives: 1) Develop a safer and more comfortable turning radius over the railroad tracks connecting Vine Street with Elm Street. 2) To handle vehicular traffic which has been diverted from the Lake Street closing between Broad and Vine Streets, and; 3) To expand the green space to the west of the Railroad Station allowing for the desired parklike setting adjacent to the station.

Circulation - Alternative #2:

See Parking Lot - Alternative #2.

Sidewalks - Alternative #1 and #2:

Sidewalks will be installed along the new Vine Street alignment. This sidewalk will provide for a safe pedestrian linkage to the beach area and the single family residential neighborhood south of Elm Street.

Lighting - Alternative #1 and #2:

See Bluff Park.

K. RAILROAD STATION - DESIGN ALTERNATIVE #1 AND #2

Goal:

To revitalize the Railroad Station structure with sensitivity to historic references as well as strengthen the surrounding green space.

Conceptual Components:

Railroad Station Structure - Alternative #1 and #2:

The Railroad Station shall be historically revitalized for its present use as an Amtrak Station, with partial conversion to a restaurant. The Railroad Station has become a major landmark in the area. Its relationship to surrounding amenities and land uses will be critical to the sucessful revitalization of the Silver Beach TIF District.

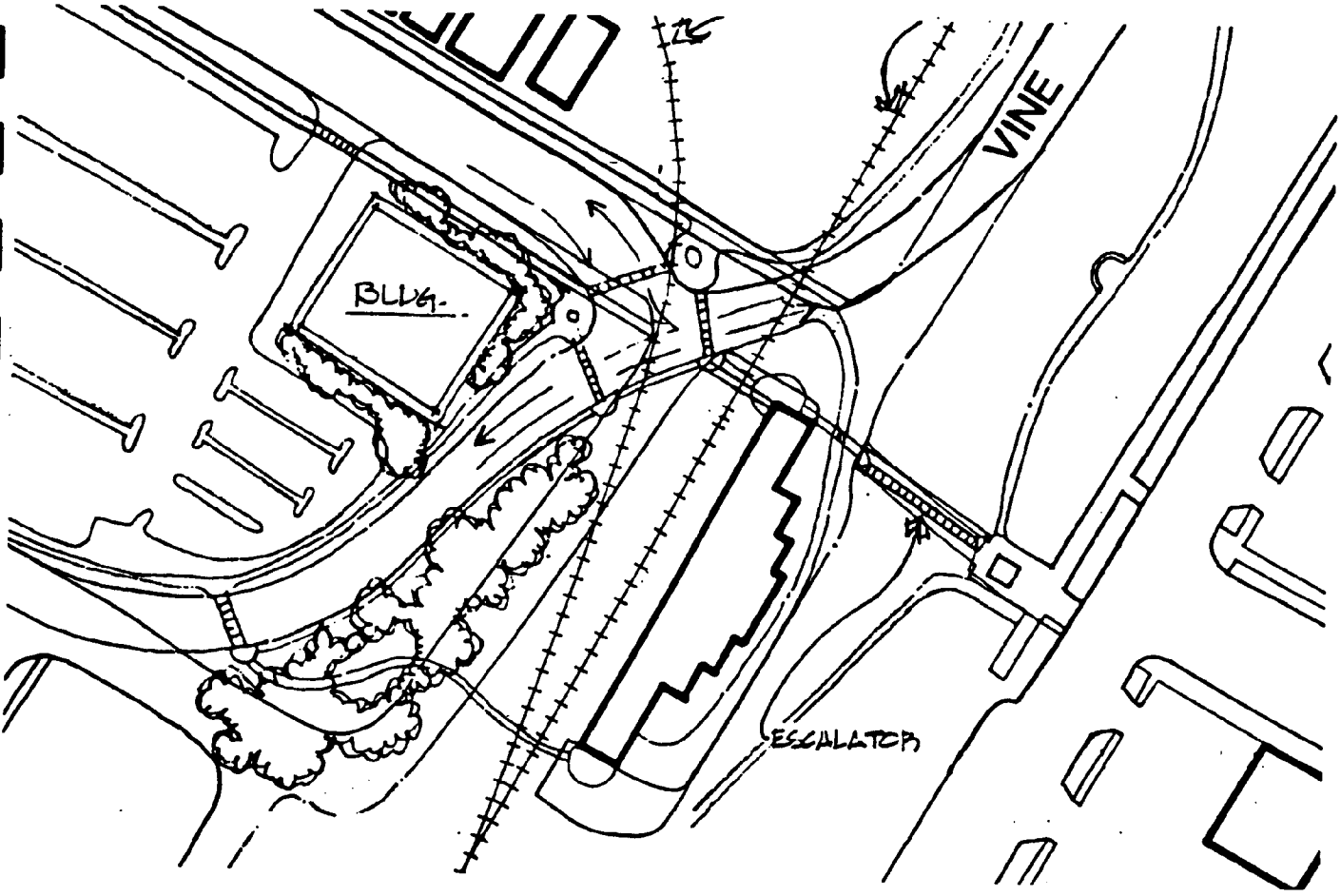
Particular sensitivity will be shown to the Stations connection to the bluff. Here at the south end of Bluff Park is the covered stairway leading from the Central Business District. To make the connection between Bluff Park and the Railroad Station a brick seating area will be placed at the lower opening of the covered stairway which will become part of and match the brick work to the rear of the Railroad Station. The west side of the Railroad Station will be preserved as open green space allowing views of the Station from points along Broad and Elm Streets.

Driveway - Alternative #1 and #2:

The existing driveway will be eliminated and a new service drive will be established through the brick seating area. When service vehicles need to pass through the seating area removable street bollards, which normally keep out street traffic, will be temporarily taken down to allow access to the station.

Landscaping - Alternative #1:

The green space adjacent to the Railroad Station will receive new plantings and be expanded to the west. Plantings around the brick seating area would be somewhat more formal with ornamental trees, shrubs and flowers in raised planters and planting beds. Planting to the west will be an informal park-like setting, establishing a landscaped buffer to the west, while still allowing the desired views of the station. The importance of the green space westward expansion has been discussed in the Railroad Station Structure section.



11. Railroad Station Park

FIGURE 12

DESIGN ALTERNATIVE #1

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

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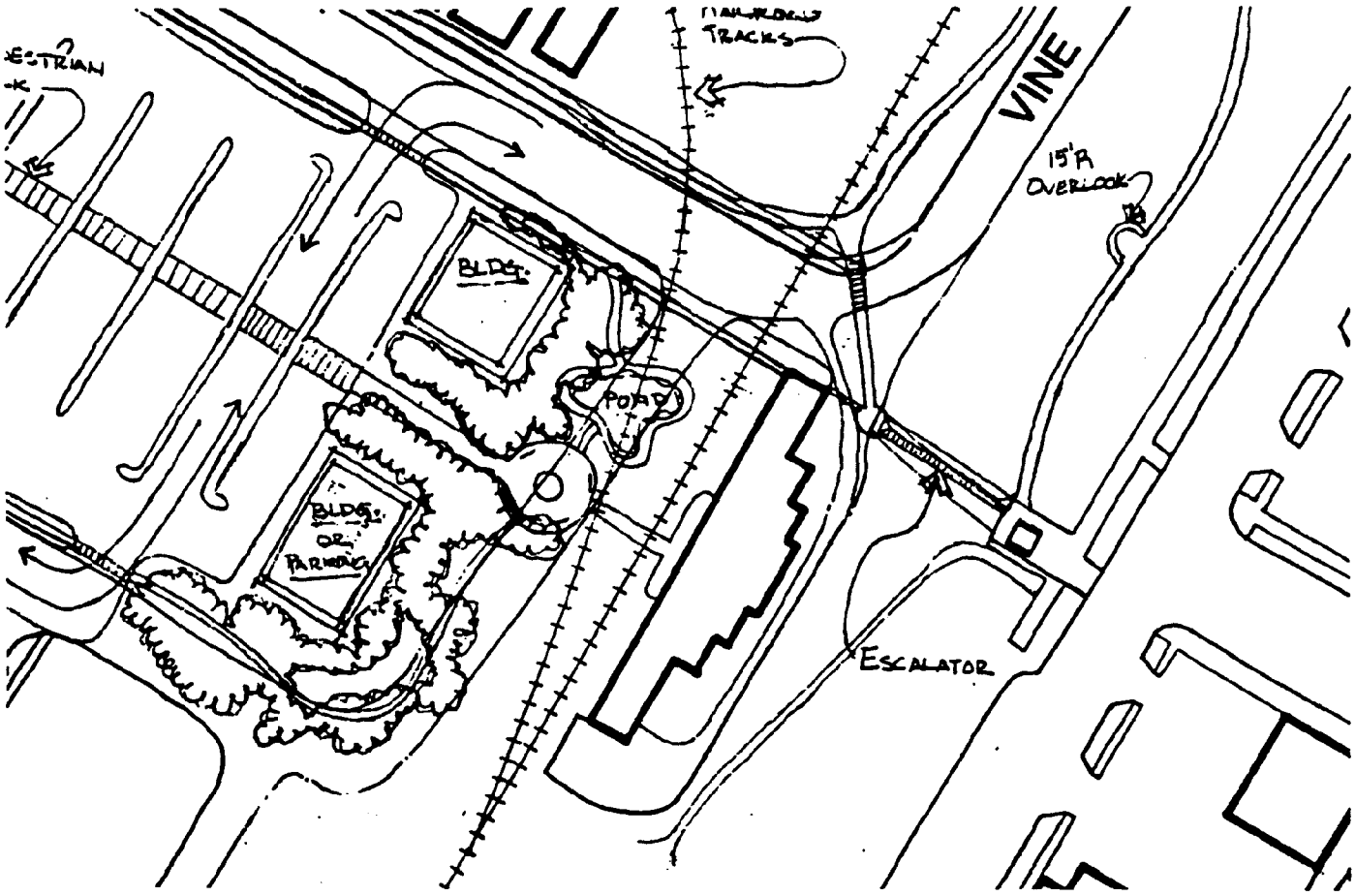

11. Railroad Station Park

FIGURE 13

DESIGN ALTERNATIVE #2

LAKEFRONT T.I.F. DISTRICT STUDY

ST. JOSEPH, MICHIGAN

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Landscaping - Alternative #2:

Planting to the west will create a park-like setting, establishing a landscaped buffer to the west, while still allowing the desired views of the station. Landscaping will be more formal near the buildings courtyard on the Development Site. (For more information see Railroad Station Park - Design Alternative #1).

Lighting - Alternative #1 and #2:

See Bluff Park - Lighting.

Utilities - Alternative #1 and #2:

See Bluff Park - Utilities.

V. COST ESTIMATE SUMMARY

This section provides probable cost estimates for construction of the various improvements described in this memorandum. These costs are based on Spring 1987 construction, but are general in nature and seldom include cost reductions which might be possible.

Some of these reductions in costs would be from the use of less expensive materials, preservation of existing facilities, or design modifications. Conversely, costs may increase due to unforeseen conditions that increase construction labor and/or material. Other cost increases may result from currently unforeseen improvements to infrastructure facilities such as sewer, water, and other utility systems.

Unit price cost breakdown work sheets are provided under separate cover, which identify cost assumptions made for this memorandum. Also included in these worksheets are alternatives to construction materials proposed and their related costs. The materials selected for the development of these estimates were of first quality and, in some instances, may have exaggerated the costs for certain improvements that could be provided at lesser costs with lesser but still adequate materials. The trade-off between monies available and the quantity/quality of improvements will be an ongoing process that is repeated when improvements are slated for implementation.

Costs for the following improvements have been adjusted to current 1985 material costs and economies based on retention of some existing facilities.

The eleven (11) geographic areas and related costs* are as follows:

1.	Bluff Park Improvements:	$192,876.00
2.	Vine Street Right-of-Way	273,000.00
3.	Arboretum Trail Extension	231,736.00 to 332,235.00
4.	Broad Street Right-of-Way B1 (East of Lake Street)	651,884.00
5.	Main Boardwalk (to South Pier)	322,440.00

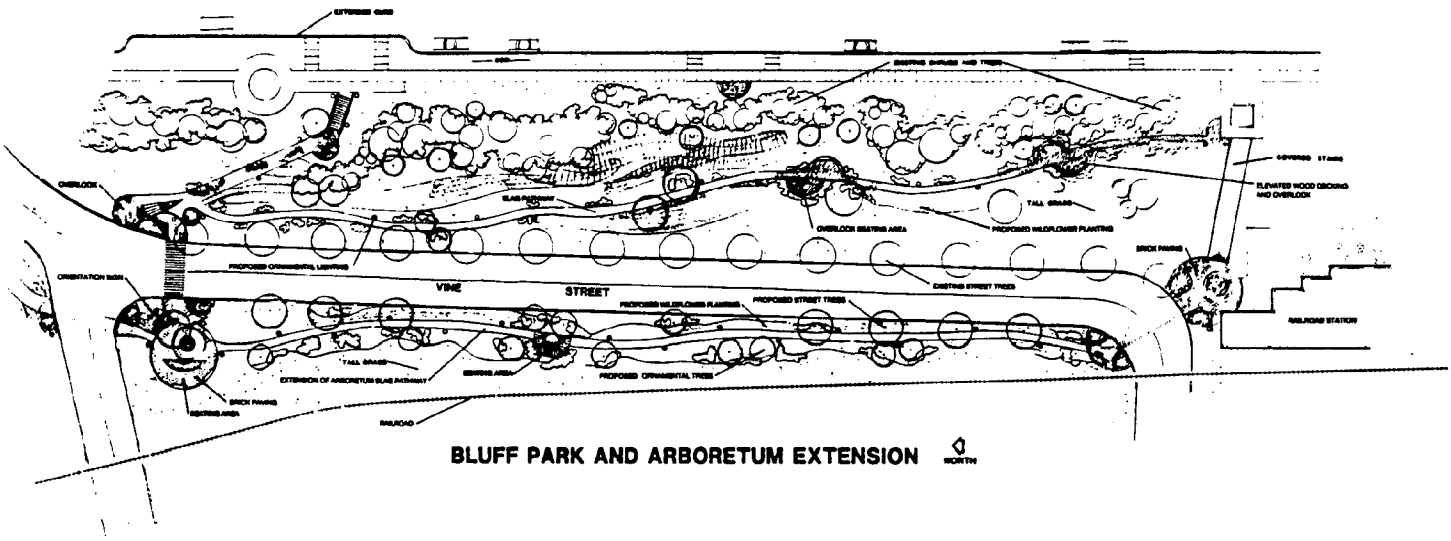
6.	Pier Boardwalk	190,860.00 to 360,210.00
7.	Lake Street Improvements	60,500.00
	Elm Street Improvements	592,080.00 to 718,680.00
8.	Broad Street Right-of-Way - Alternative #1 (Parking Area west of Lake Street)	100,000.00
	Broad Street Right-of-Way - Alternative #2	390,684.00 to 740,184.00
9.	Parking Lot (Whirlpool Site) - Alternative #1	100,000.00
	Parking Lot (Whirlpool Site) - Alternative #2	1,929,750.00 to 2,232,300.00
10.	Development Site (Whirlpool Site) - Alternative #1	1,447,254.00 to 1,556,964.00
	Development Site (Whirlpool Site) - Alternative #2	1,720,200.00 to 1,773,150.00
11.	Railroad Station Park - Alternative #1	359,028.00 to 458,400.00
	Railroad Station Park - Alternative #2	422,652.00 to 498,912.00

* Single figure costs represent those costs which have been tailored to specific improvements and are included in the current TIF program. Other improvement costs are indicated as cost ranges to reflect the cost implications of variables such as quality of improvements, actual construction materials used, and cost increases due to inflation.

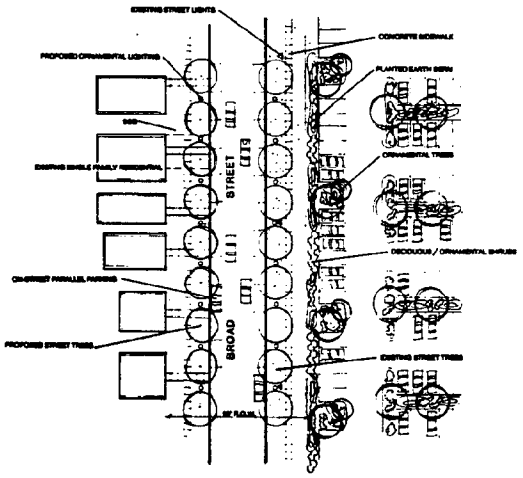
It should be noted that quantities used for estimating purposes were not generated from accurate survey base maps or detailed design plans. As a result, these quantities and associated costs may vary significantly from costs generated from accurate base data.

Similarly, overhead utility relocations were estimated on the basis of field observations and application of general values for relocation. Specific contact with utility companies must be made before accurate relocation costs will be obtained.

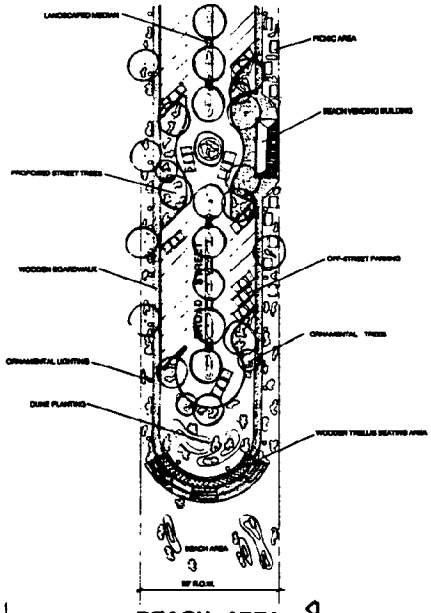
The costs provided in this memorandum are advisory only and intend to provide order-of-magnitude values for a long range planning purpose only. More accurate costs will require greater detailed base maps and design plans.



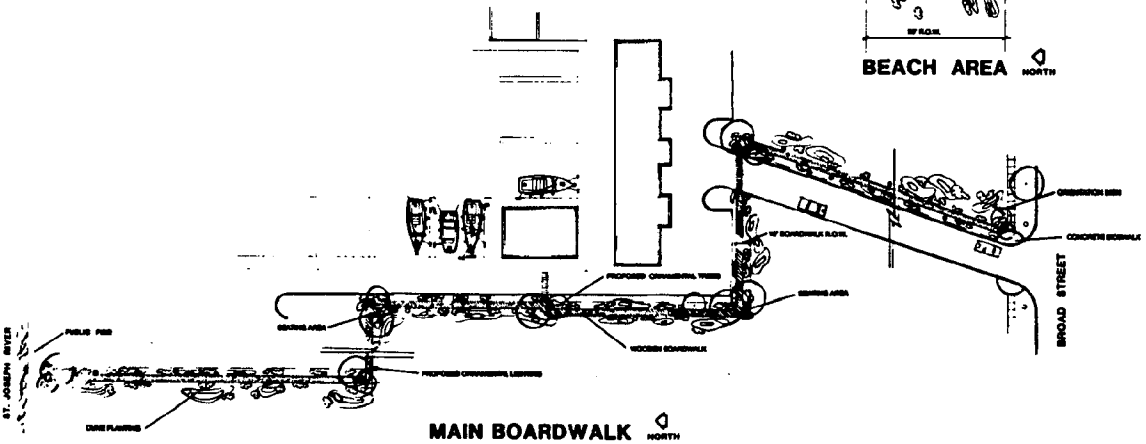
BLUFF PARK AND ARBORETUM EXTENSION



BROAD STREET PARKWAY



BEACH AREA



MAIN BOARDWALK

DESIGN PLAN ILLUSTRATION
LAKEFRONT T.I.F. DISTRICT STUDY
ST. JOSEPH, MICHIGAN

TESKA ASSOCIATES INC.

FIGURE 14

APPENDIX A

Excerpts from Silver Beach/Lion's Beach Park Development Study.

OBJECTIVES

It is the goal of St. Joseph to enhance the attractiveness, vitality, economic value, and utilization of the Silver Beach/Lion's Beach Park area. Pursuant to this goal, the City has considered two alternative municipal strategies:

- It can maintain a "responsive" posture: that is, to review, regulate and participate in redevelopment projects only after they are proposed by property owners or private developers and which are consistent with existing municipal standards; or,

- It can establish an "entrepreneurial" posture: that is, to act aggressively to plan and implement public improvements and to promote and expedite private development consistent with contemporary municipal objectives.

The City has selected the "entrepreneurial" posture. In so doing, it will be guided by the following objectives for the area as a whole, for Silver Beach and for Lion's Beach Park, each separately.

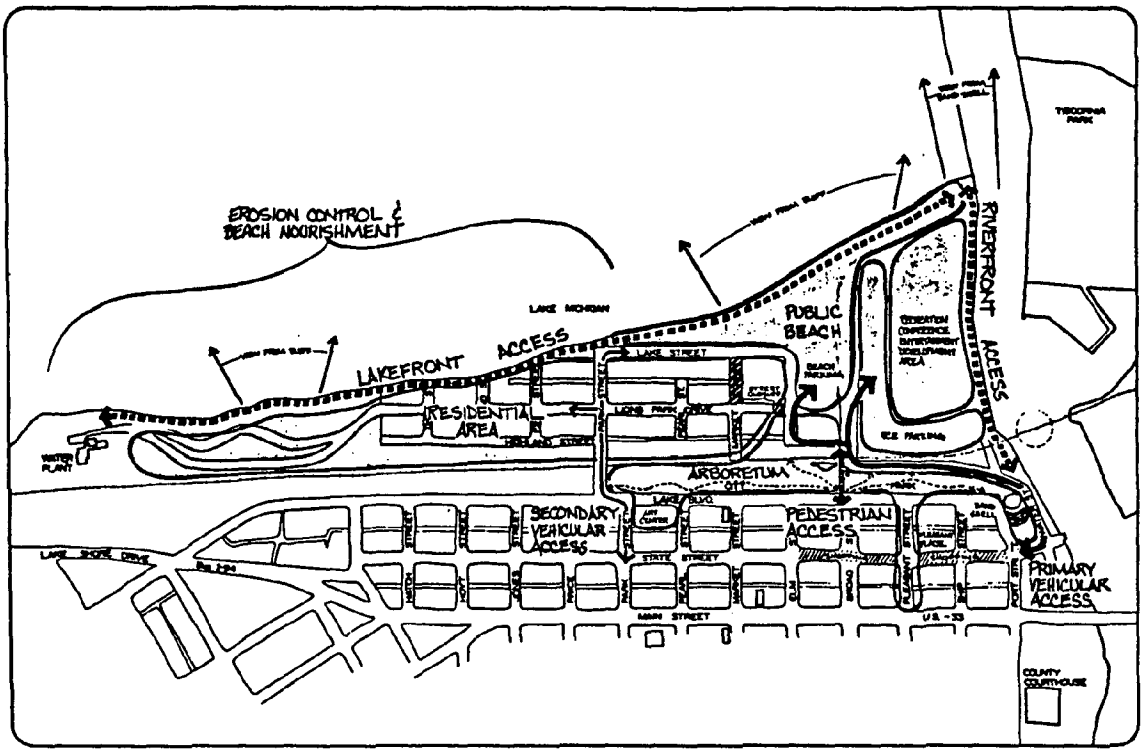
OVERALL OBJECTIVES (Figure 13)

Function:

1. The area shall serve four basic functions consistent with the character of the community and its Comprehensive Plan: public water-oriented recreation; attractive, convenient year-round living; resort, conference and entertainment activity; and enhancement of the scenic quality and image of St. Joseph.

2. Public, water-oriented recreation should take full advantage of the unique quality of this segment of Lake Michigan's shoreline for the benefit of all city residents, with special emphasis on fishing, swimming, and small boat sailing.

3. A variety of attractive, year-round living accomodations and environments should



13

OVERALL OBJECTIVES

SILVER BEACH/LIONS BEACH PARK DEVELOPMENT STUDY

PREPARED FOR THE CITY OF ST. JOSEPH, MICHIGAN BY ROBERT G. TESKA ASSOCIATES

e provided for families with and without hildren, and for individuals, to whom a central location in the community is convenient nd a lakefront setting desirable.

4. Hotel, dining, entertainment, marina, nd supporting business activities should trengthen the economy of St. Joseph and its ble as a resort, conference and entertainent center consistent with the program of downtown revitalization.

5. All existing and future activities hould be designed, improved, operated, and maintained in a manner that not only protects ut also enhances the scenic quality of the rea, and the image of the entire City of St. Joseph.

nd Use Arrangement:

1. Land uses should be arranged and esigned as "planned functional units" within he larger area, although actual development may be carried out in stages.

2. Land uses not requiring lake or river frontage (e.g. playfields, off-street parking, boat storage, etc.) should be located inland.

3. Higher intensity activities should e located nearer the bluff and the downtown rea.

4. The entire Lake Michigan beach frontge should be made available for public access; wever, most active areas should be located in e area between Broad Street and Market Street.

5. Resort, conference and entertainment activities should be located north of Broad Street.

6. The residential neighborhood located south of Elm Street should be enhanced and extended to include portions of Lion's Beach Park.

7. The bluff area between Lake Boulevard and Highland Street should be planned and designed as an active transition area, including its own focal points, between the downtown and the project area.

Access, Circulation and Parking:

1. Convenient and safe pedestrian access to and circulation throughout the area is essential, including pedestrian pathways available to the public along the river front and lake front.

2. Vehicular access should be as direct as possible, considering the physical constraints of topography and existing street systems, and access to different functional areas should be separated to the extent feasible.

3. Vehicular circulation within the area should be discouraged.

4. Adequate off-street parking for major public and private land uses (excluding residences) should be located at the periphery of functional areas in the vicinity of access routes.

5. Non-residential traffic should be strongly discouraged from utilizing minor residential streets.

Design:

1. Blufftop views of Lake Michigan, the St. Joseph River, and the development areas should be protected and enhanced; special consideration should be given to rooftop design.

2. Building architecture and facilities design should be harmonious throughout the area, and development near the waterfront should reflect a nautical theme similar to that which has already been established by several properties in the downtown.

3. The natural landscape environment should be enhanced wherever possible; e.g., along the beach and bluff areas; and floral accents should be introduced elsewhere to provide seasonal color.

4. The design of public improvements, such as street pavements, walkways, lighting fixtures, and signage should be coordinated throughout the entire area, with compatible variations permitted in unique situations.

5. The overall scale of development clusters and individual buildings should be restricted to that which is in character with the natural terrain and the existing residential neighborhood.

6. The visual and physical impact of the existing railroad should be minimized through sensitive design.

SILVER BEACH OBJECTIVES (Figures 14 & 15)

Function:

1. The function of the Silver Beach area is to provide for water-oriented public recreation and private resort/conference/entertainment and related activities complementing Downtown St. Joseph.

2. Preferred land uses which support this function include:

Swimming
Small boat sailing
Fishing
Resort/conference hotel
Restaurants/cocktail lounges
Specialty shops
Marina

3. Residential condominiums related to the above uses may also be desirable.

Land Use Arrangement:

1. The entire Lake Michigan shoreline in this area should be available for public access and active recreational use.

2. Fishing and strolling should be permitted on the south pier of the harbor.

3. The beach area north of Elm Street should be reserved as a guarded public swimming beach.

4. That portion of the public beach north of Broad Street should have a minimum width of 110 feet, measured from the ordinary high water mark of 579.8 feet as it exists in 1978.

5. The public beach area south of Elm Street should be reserved as a small-boat sailing area.

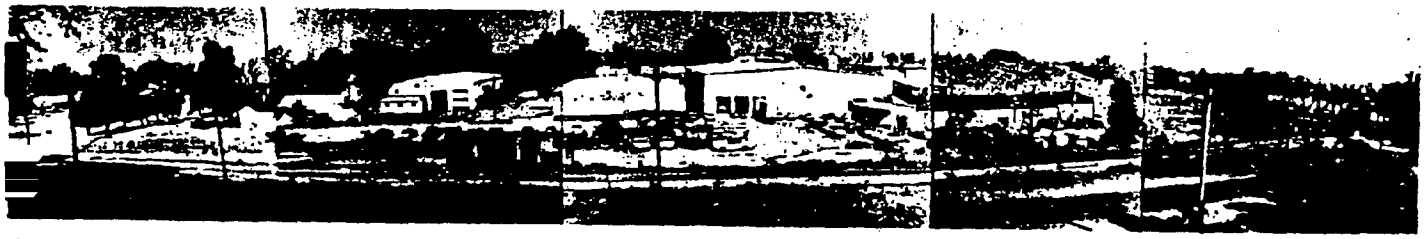
6. The Resort/Conference/Entertainment (R/C/E) complex should be located north of Broad Street, taking advantage of the St. Joseph river front.

7. No structure within the R/C/E development unit should be permitted within 100 feet of the public beach area.

8. If a marina is to be incorporated into the R/C/E development unit, it should be designed parallel to the river.

9. Higher intensity R/C/E activities should be located in the easterly portion of the development unit, and lower intensity activities should be located nearer the lake shore.

10. The bluff area should provide a definitive transitional land use, such as an arboretum, between the Silver Beach area and Downtown St. Joseph.



ILVER BEACH AREA

Access, Circulation and Parking:

1. Water Street should be the primary access route serving the Silver Beach area, especially the R/C/E development unit.

2. Park Street should be the secondary access route serving the area, especially the public swimming and sailing beaches.

3. The principal entrance to the R/C/E development unit should be located on Broad Street no closer to the beach than existing Lake Street; a secondary entrance may be located on Water Street.

4. Internal vehicular circulation within the Silver Beach area should be discouraged, and non-residential traffic should be restricted from using minor residential streets.

5. A minimum of 200 off-street parking spaces related to the beach and private off-street parking, required by the Zoning Ordinance for the R/C/E development unit, should be located at the periphery of both units.

6. Pedestrian movement should take precedence over vehicular movement throughout the area.

7. A pedestrian walkway available to the public should be located along the river front and marina connecting the existing riverfront park and the south harbor pier.

8. Continuous public pedestrian access should be provided along the entire Lake Michigan shoreline.

9. A series of direct and indirect pedestrian pathways should be integrated with the bluff to provide convenient connections between the area and downtown, specifically Broad Street.

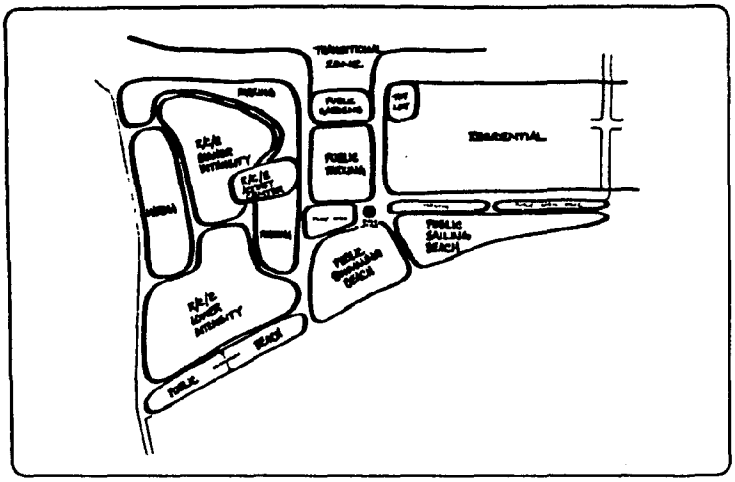
10. Railroad service on the Chesapeake & Ohio may be continued, but unnecessary movements should be discouraged.

Design:

1. The architectural design of all structures should be harmonious with the nautical theme of the area, the topography, and the scale of the existing residences south of Elm Street and existing residences on the north side of the river.

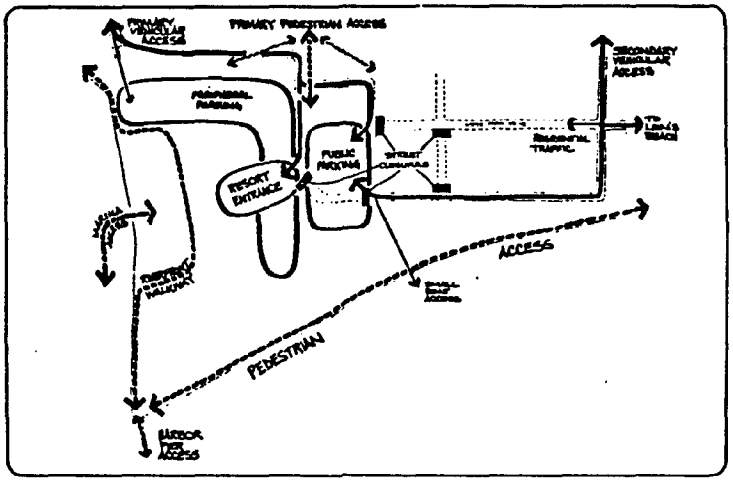
2. Views from the bluff top should be preserved and enhanced, including the distant view of the harbor entrance through the existing bandshell, the near view of the river front from Pleasant Place, and the expansive near and distant views of the Silver Beach area and Lake Michigan from Broad Street.

3. Building height should generally conform to the topography, such that the tallest buildings are closer to the bluff; moreover, such buildings should be located and designed to avoid conflict with desired views from the bluff.



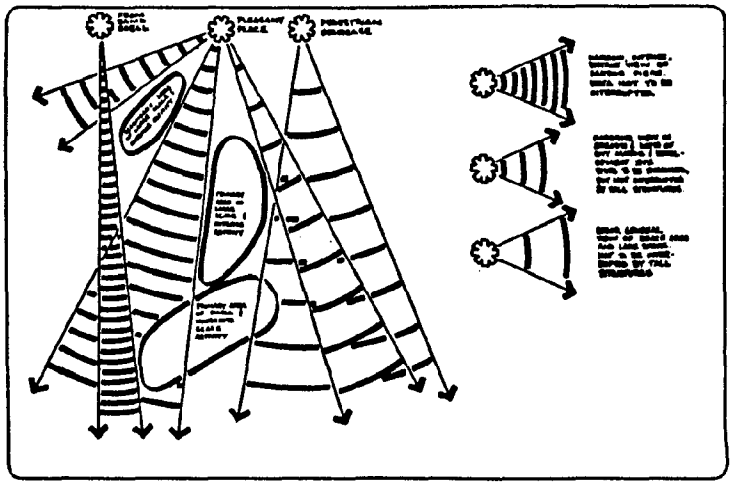
SILVER BEACH
LAND USE
ARRANGEMENT

SILVER BEACH/LIONS BEACH PARK DEVELOPMENT STUDY



SILVER BEACH
ACCESS & CIRCULATION

SILVER BEACH/LIONS BEACH PARK DEVELOPMENT STUDY



SILVER BEACH
DESIGN
CONSIDERATIONS

SILVER BEACH/LIONS BEACH PARK DEVELOPMENT STUDY

4. Specific attention should be given to rooftop architecture, so as to protect views and screen unattractive mechanical equipment.

5. The beach area should be designed to incorporate a natural landscape environment to the extent feasible, including small dunes and related vegetation.

6. The bluff area should be designed as an arboretum of naturalistic vegetative cover appropriate to steep slopes, and should incorporate sitting areas and overlooks along its several pathways.

7. The direct pedestrian connection at Broad Street should be retained, but should be redesigned and reconstructed.

8. The Chesapeake & Ohio Railroad Station should be preserved and enhanced as an historic landmark, and maintained for active compatible uses.

9. A floral garden should be provided across the street from the railroad station as a focal point for the Silver Beach area.

10. All parking lots should be landscaped to minimize the negative visual impact of pavement and vehicles.

11. Public areas and rights-of-way should incorporate a coordinated design treatment of pavements, parkways, street lights, and other special features.

Staging:

1. Stage 1 should focus on the acquisition and initial improvement of the public beach and related parking areas.

2. Concurrently, or shortly thereafter, Stage 2 should focus on construction of the westerly portion of the R/C/E development unit.

3. Stage 3, involving the remaining easterly portion of the R/C/E development unit, may proceed after existing businesses and industries have been satisfactorily relocated.

APPENDIX B

COST DATA SUMMARY

St. Joseph, Michigan

Lake Front - Bluff Development

Estimated Costs

June, 1986

Bluff Improvements	713,754.00	to	871,855.00
Vine Street Right-of-Way	456,480.00	to	483,480.00
Arboretum Trail Extension	231,736.00	to	332,235.00
Broad Street Right-of-Way B1	347,553.00	to	468,498.00
Main Boardwalk	231,780.00	to	322,440.00
Pier Boardwalk	360,210.00	to	190,860.00
Lake and Elm Streets	592,080.00	to	718,680.00
Design Alternative #1	4,297,107.00	to	5,012,757.00
Design Alternative #2	4,463,286.00	to	5,244,546.00
St. Joseph Lakefront-Bluff Development Total Estimated Cost Including Design Alternative #1	7,148,170.00	to	8,679,235.00
St. Joseph Lakefront-Bluff Development Total Estimated Cost Including Design Alternative #2	7,314,349.00	to	8,911,024.00

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