

**PLEASE NOTE THAT THIS ANNEXURE IS TO
BE READ IN CONJUNCTION WITH ITEM 324 :**

**“URBAN DESIGN FRAMEWORK : RICHARDS
BAY SMALL CRAFT HARBOUR AND NAVAL
ISLAND, DECEMBER 1994**

RICHARDS BAY

SMALL CRAFT HARBOUR AND NAVAL ISLAND

URBAN DESIGN FRAMEWORK

PHASE TWO:
GOALS • OBJECTIVES • PRINCIPLES
DESIGN GUIDELINES • FRAMEWORK PLANS
AND IMPLEMENTATION

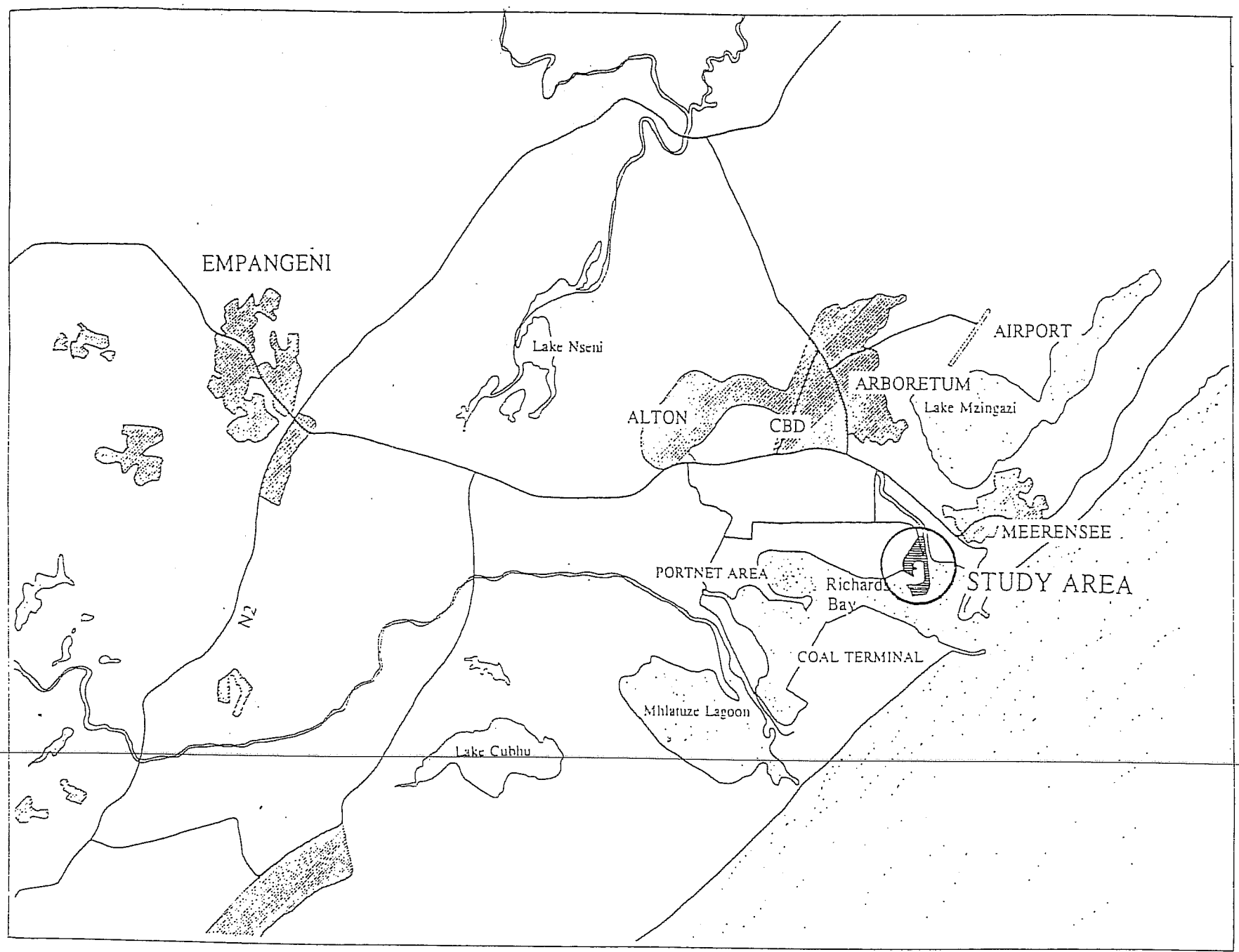
DECEMBER 1994

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INTRODUCTION

(i) Brief and Scope of Work

The following study was commissioned by Propnet. The brief and scope of work is detailed in Appendix A.

(ii) Purpose of the Study

To assist Propnet in guiding development by setting in place an Urban Design Framework to:

- identify those inherent qualities of the site which give it its value (tangible and intangible).
- ensure that the inherent qualities of the site are not destroyed but are reinforced/enhanced so that the asset value, both as a public resource and as a (Propnet) investment is retained and increased over time.
- co-ordinate public and private investment in infrastructure in an effort to optimise investment.
- set in place a development structure which responds to the needs of the people of Richards Bay and to the realities of sustainability, both economic and ecological.
- formulate a strategy for sequencing of land release and development to ensure the above.

(iii) Study Area

The study area encompasses Propnet-owned land surrounding the Richards Bay Small Craft Harbour and the entire area known as Naval Island. Adjacent areas which form an integral part of the study area have also been considered where necessary. These areas include Portnet owned land surrounding the Small Craft Harbour and land leased or sold by Propnet within or adjacent to the study area. The study area is depicted in Figure 1.0

(iv) Structure of the document

The Urban Design Framework comprises 6 Parts. For financial reasons it was agreed that the report has been split into two phases (See Appendix 1). The Phases are described as follows:

Phase One: - is a data collection, an analysis as well as a problem, opportunities and constraints identifying exercise which will be necessary for confirming the negotiable and non-negotiable issues relating to the future development of the project area (e.g. which features of the harbour are to remain freely accessible to the general public and which areas could be alienated or leased out for private uses). It would also establish the planning, design and development goals and objectives for the project site. The above tasks have been separated into the following sub-sections:

- Part 1: Approach
- Part 2: Analysis
- Part 3: Synthesis

Phase Two - would be dedicated to preparing the Framework plan and accompanying development guidelines which would need to be followed in order to retain/enhance the quality of future development. This section of the report comprises the following sub-sections:

- Part 4: A Framework Plan
- Part 5: Principles and Guidelines for Development
- Part 6: Strategy for Implementation

* *In terms of the agreement regarding the phasing of this study (See Appendix 1) this report will deal with the first phase only.*

1.1 Position Statement

Successful Urban Development is not the product of physical and/or spatial planning initiatives only, but requires a co-ordinated and inclusive process of interaction between people and organisations, both public and private, who are committed to the management of scarce resources required for the development, growth, and improvement of living and working environments.

Urban Development generally is by its nature a dynamic process which responds to different opportunities and constraints within the urban economic environment. These in turn are invariably the result of some form of interaction between people who represent the public authorities responsible for promoting and controlling development, the private sector who wish to maximise either development and/or commercial opportunities, and the community who seek a healthy, convenient, and safe living environment. Furthermore, development is facilitated only when people direct and transform financial, human and physical resources into products and actions which meet their needs (eg. buildings, social services, infrastructure) through purposeful and informed intervention in the urban development process.

The cornerstones of the approach adopted for the preparation of the Richards Bay Small Craft Harbour and Naval Island Urban Design Framework are discussed briefly in the sections below. Together they elaborate a frame of reference against which intervention in the future development of the Small Craft Harbour can be judged and also form a basis for assessing the assets and qualities it possesses.

• Strategic Intervention vs Master Planning

The "fluid" and uncertain nature of the economic and socio-political context in South Africa and the rapid growth of its cities, militates against modes of planning or design and city management that attempt to determine human activity by the imposition of preconceived and "static" physical plans.

Urban Planning and Design is concerned with both "urban process" and "urban product" and as such it should focus on processes of urban change as well as on the spatial structure and physical form of the city. It is an activity which itself is a continual, cyclical and iterative process which recognises the city as a dynamic entity. The future physical form of urban areas cannot be predicted accurately by any one person, or group of people, at any one point in time.

Instead, the identification and interpretation of urban change processes should precede and inform the formation of planning and design frameworks which can:

- i) respond to the dynamic context of the South African environment,
- ii) accommodate "incremental" change as well as large scale renewal and development, but
- iii) provide a clear direction for existing and future growth for both public and private city builders.

• Mediation between Individual and Collective Action and Control

The right to private ownership of land is one of the basic cornerstones of the capitalist economy and is also an important vehicle for growth and development. However, to ensure the equitable distribution of resources certain assets, amenities and land have always been held in collective (public) ownership.

This diversity of ownership is necessary to ensure both individual and collective rights and to retain the essential value of both private and public assets and resources.

An urban design framework thus attempts to mediate between private and public interests by setting in place a spatial framework with a set of guidelines which ensures that the essential value of each is held in balance.

• Measure Environmental Performance

Environmental performance is a complex concept which cannot be precisely or clearly defined as a universal entity. Rather it is a phenomenon consisting of a number of identifiable qualities or ingredients each interrelated and interdependent with each other in a mutually reinforcing manner. Furthermore, it manifests itself in different forms which reflect the organisation and interrelationships between activities and people as they respond to the circumstances of their socio-cultural and socio-economic context.

Identification of the qualities provides a basis for assessing the contents of the design framework.

"Balance and Vitality"

It is important to provide the essential elements and facilities required for effective and efficient functioning and sustainability of the environment (i.e. parking, services, environmental protection, mix of land uses, mix of public and private development etc.)

"Diversity"

Mix of land uses and activities which complement one another providing a varying, rich, complex, sustainable and intense atmosphere. Permit the multi-functional use of space to accommodate seasonal and diurnal changes in activities.

"Equity and Access"

Permitting free access to the opportunities and amenity of the area to all user groups within the community (i.e. big business, informal traders, tourists, etc.) so that they can interact socially and economically in a mutually beneficial manner.

"Integration"

Acknowledge the interrelationship between different urban systems and the spin off benefits which can occur from their interaction (eg. market activities attract people - people attract business and traders which in turn attract more people!).

"Legibility"

Create an environment which has identity, structure and meaning, which reflects the uniqueness of both place and culture.

• Understanding the Context in which we Plan

The basis of an Urban Design Framework which attempts to achieve the performance dimensions discussed above is contained in the notion of identifying, protecting and enhancing the potential which exists, within the connections between "people", "place" and "context".

"People"

Meaningful development cannot be achieved if planning strategies and actions are not informed and directed by those who the planning and development initiatives are meant to serve. It is thus imperative that an understanding of who the users are, their needs, and the way they use the area is gained. (Users include the local and regional population and those who own, administer and operate businesses within the area). It is through such an understanding that spatial and physical components of the environment can be made meaningful, useful and appropriate.

"Place"

Place may be conceptualised in terms of temporal "layers" of experiences and qualities pertaining to the site and its surroundings which when superimposed upon one another, provide clues and cues that can be used to identify, structure and define meaningful spaces for human activity. The Urban Design Framework should seek to consolidate the elements of the "layers" of the area into a spatial framework which structures physical development into a co-ordinated, legible, convenient, comfortable, and meaningful environment.

"Context"

Development does not occur in isolation of wider socio-political, socio-economic and socio-cultural trends or forces nor is it contrary to the opportunities and constraints inherent in the locational and spatial conditions prevailing at any one point in time. Development needs to be planned for within the context of those changing urban forces which might impact on development at any one point in time.

FACILITIES	USERS																			
	WORKERS :		VISITORS :		BUSINESS OWNERS :		SPORTS OWNERS :		FISHERMEN :		RESIDENTS		YACHT OWNERS/CREW		SAILORS					
	Formal	Informal	"Day trippers"	Holiday makers	Small	Medium	Large	Internal	Participants	Spectators	Commercial	Recreational								
1. COMMERCIAL :																				
Specialty shops																				
Fast food outlets																				
Convenience store																				
2. RECREATION :																				
Public park																				
Childrens' play area																				
Picnic facilities																				
Swimming pool																				
Beach facilities																				
Information centre																				
3. SERVICES :																				
G.P.O.																				
Public Telephones																				
Public Amenities																				
4. ENTERTAINMENT :																				
Restaurants																				
Night Clubs																				
Cinemas																				
Hotels																				
Casino																				
Museum																				
5. HARBOUR																				
Slipway																				
Moorings																				
Boathouse																				
Water Access																				

● existing
○ required

TRANSPORT	USERS																			
	WORKERS :		VISITORS :		BUSINESS OWNERS :		SPORTS GOERS		FISHERMEN :		RESIDENTS		YACHT OWNERS/CREW		SAILORS					
	Formal	Informal	"Day trippers"	Holiday makers	Small	Medium	Large	Informal	Participants	Spectators	Commercial	Recreational								
1. PRIVATE :																				
Arterial																				
Collector																				
Access street																				
Parking :																				
Long term																				
Short term																				
Sidewalks																				
Cycle way																				
2. PUBLIC																				
i) Rail :																				
Conventional																				
Light																				
Stations																				
ii) Bus :																				
Halts																				
Terminals																				
Parking																				
iii) Taxi :																				
Halts																				
Terminals																				

2.1 Context : People and Need

Meaningful development cannot be achieved if planning strategies and actions are not informed and directed by those who the planning and development initiatives are meant to serve. It is thus imperative that an understanding of who the likely users of Naval Island and small craft harbour are, and the way they use the environment, is gained. It is through such an understanding that spatial and physical components of the environment can be meaningful, useful and appropriate.

The harbour area of Richards Bay will be used by many different people in many different ways. People will live there, stop there, work there, spend their recreational time there, and seek out a range of opportunities which the area has the potential to offer.

Some of the facilities which accommodate these activities exist, although it is likely that many new or additional facilities would need to be introduced or upgraded to optimise the use of the area and to enrich peoples experience of it.

The ingredients required need to take many forms, but above all they need to respond to the perceptions, meanings, and needs of those people who will give the harbour area its life.

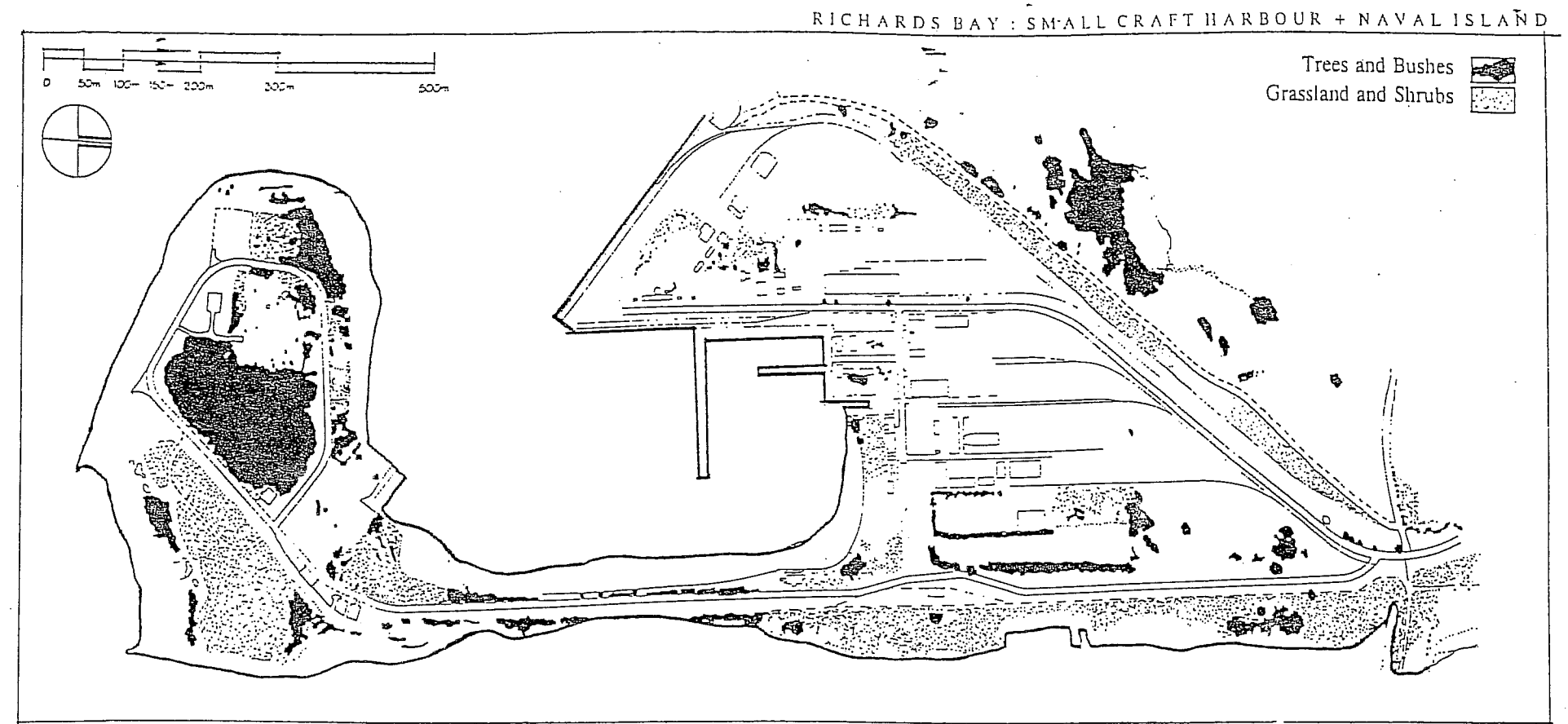
The adjacent matrices have been compiled as explorations into who the users of the Small Craft Harbour and Naval Island are likely to be, and what requirements they may have in terms of facilities and accessibility.

- The existing activity patterns and prevailing development trends provide an indication as to who the future user groups of the study area are likely to be. The matrix indicates that, whilst there are certain facilities which exist in the study area, a greater diversity and mix of facilities could be encouraged if the Small Craft Harbour and Naval Island area is to develop into an environment which is responsive to the needs of its users.

- Given the proposed and potential future development which could take place in the study area, it is likely that a greater diversity of transportation options and facilities will be required. The needs of the envisaged user groups indicate that more public oriented transport opportunities would be appropriate.

Vegetation

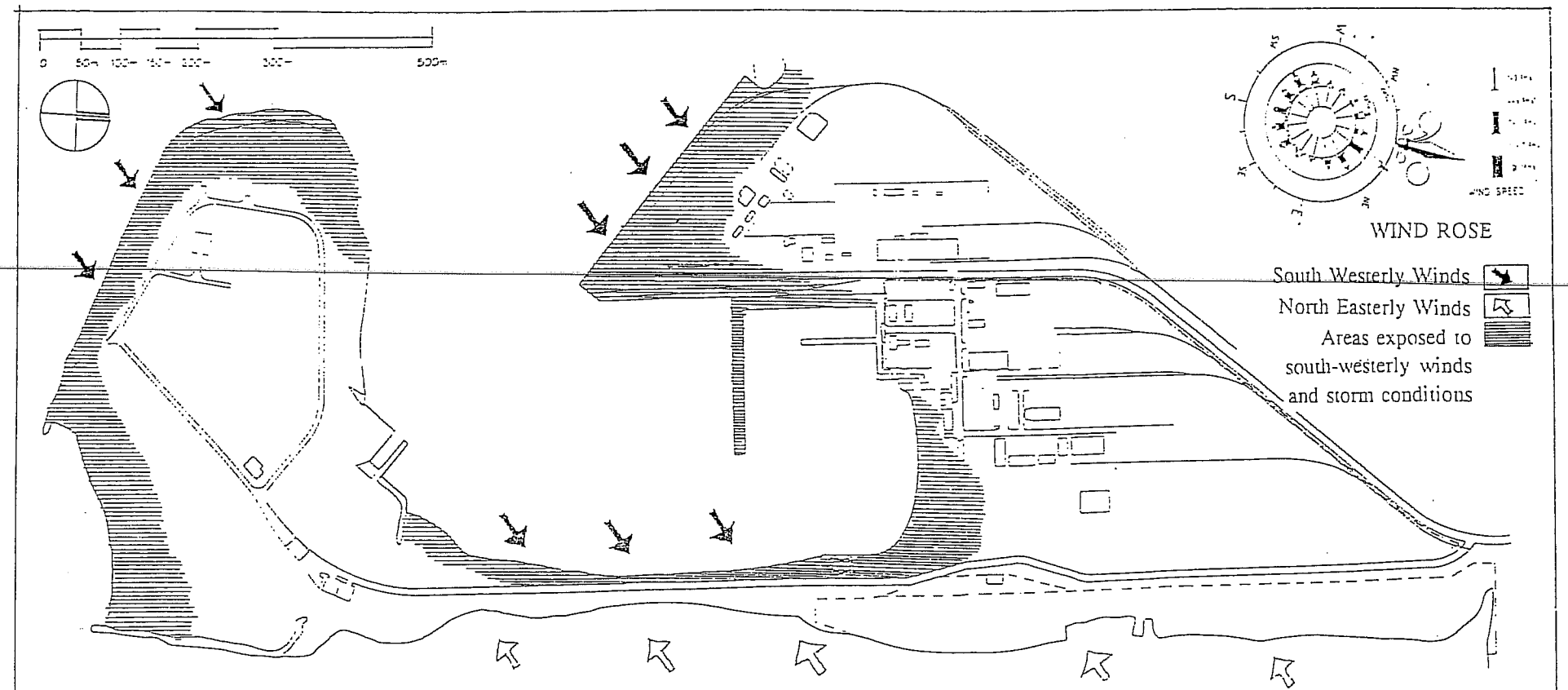
- Indigenous vegetation presently occurring in the study area is limited to the central portion of Naval Island. This portion of landscape originally formed part of the dune system which occurs along the coastline, and is characterised by a relatively dense, sub-tropical forest.
- The remainder of the study area is sparsely vegetated, as it consists primarily of reclaimed land. Vegetation which has been introduced is limited, and does not contribute significantly to the environmental quality of the area.
- An exception to this is the planting of trees along side the road between Naval Island and the small craft harbour, which begin to offer some protection to an otherwise exposed movement corridor.



2.2.1 a. Vegetation

Microclimate

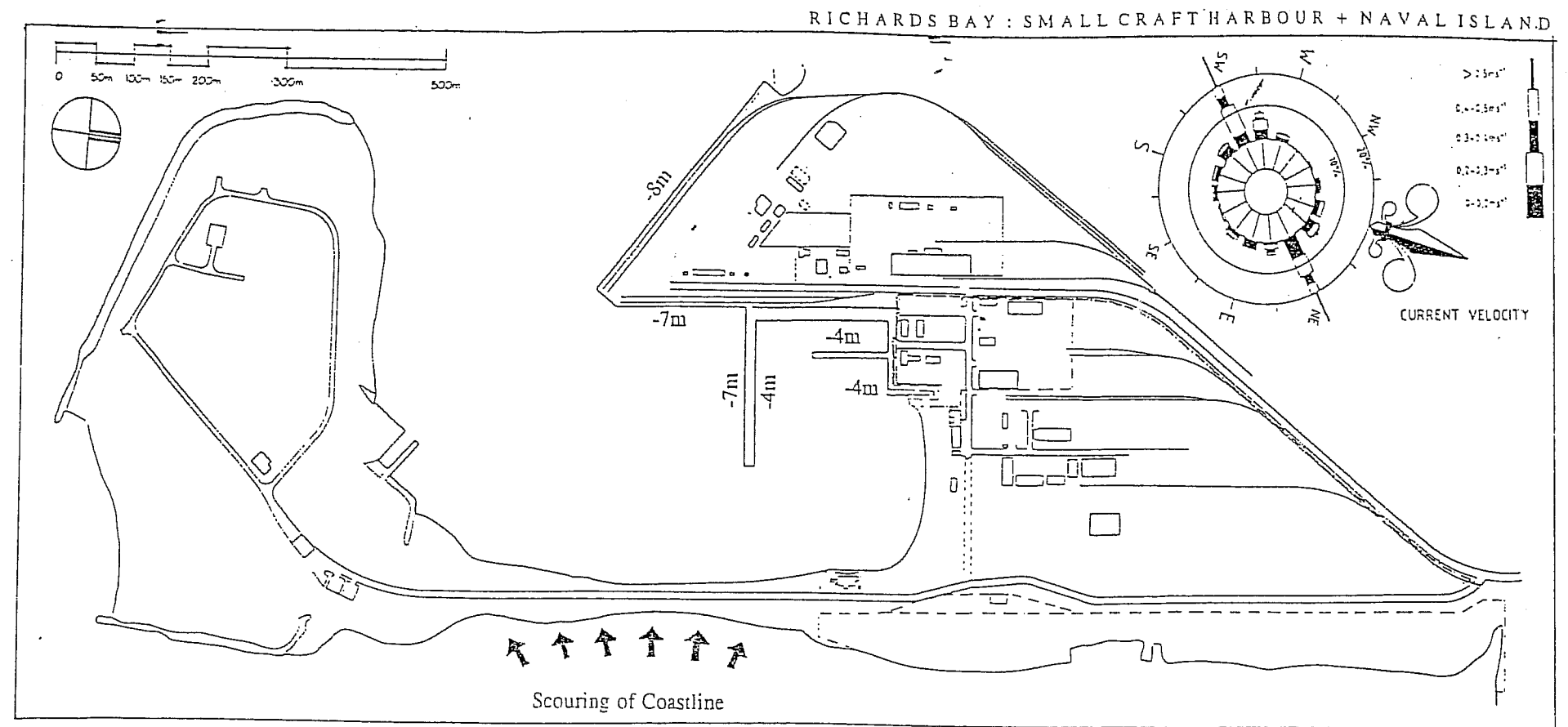
- The sub-tropical climate of the study area is characteristic of this portion of Natal, with relatively high temperatures experienced through much of the year.
- Temperatures range from mild during the winter months, to warm and hot during the summer.
- Prevailing wind directions are north-easterly in the summer months and south-westerly during winter.
- The prevailing north-easterly winds bring clear, warm weather.
- The south westerly winds can cause falls of temperature, occasionally accompanied by cold rain.
- Large parts of the study area are exposed to these wintery conditions, particularly the south-eastern edges of the quay side and shoreline.



2.2.1 b. Microclimate

Hydrology

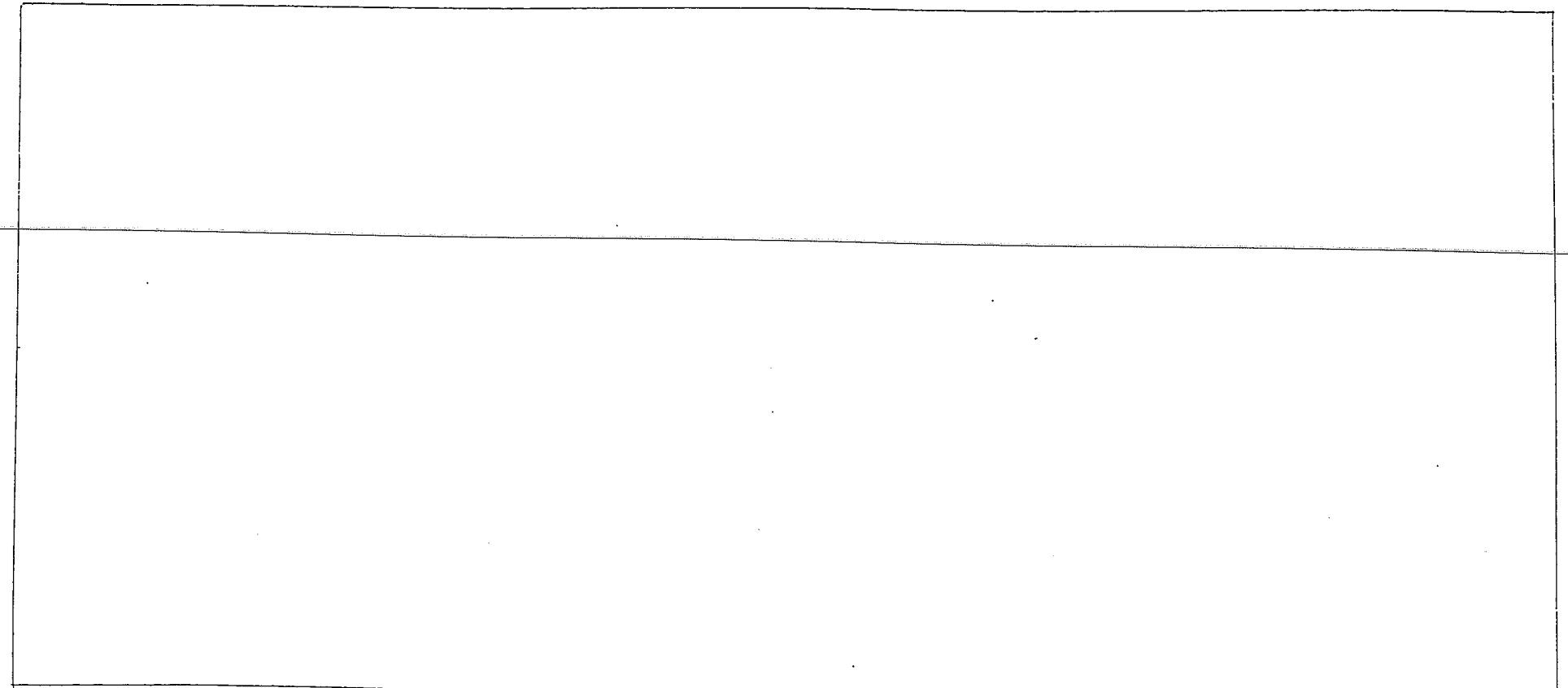
- The study area is located at the interface of two distinct hydrological systems; an inland system of lakes and rivers; and the coastal system. Both of these systems have been modified in order to facilitate the development of the harbour.
- Scouring of the coastline is particularly prominent on the western edge of the Naval Island road, and it is likely that this area would need to be protected in order to prevent additional damage in the future.
- The depth of the harbour varies from 4m at the pilot boat berth and launch jetty, to approximately 8m at the repair berth.
- Future development in the study area would be subject to floodlines. Research undertaken for projects currently being planned in the area have indicated that a building line situated approximately 3.2 metres above mean sea level would allow for all extremes of tidal flow and flooding along the canal system.



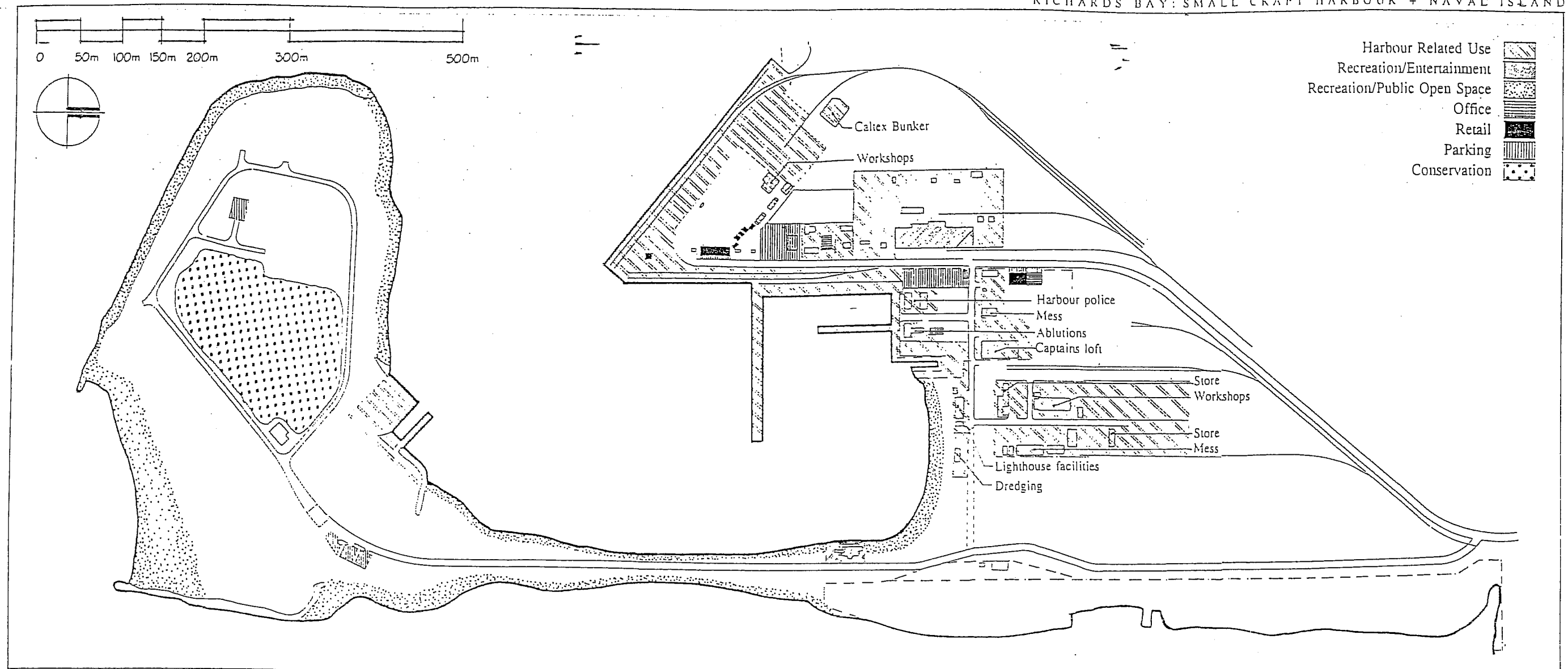
2.2.1 c. Hydrology

Geology

- The preliminary exploration of existing sources of information for this phase of the report has indicated that there has not been a recent comprehensive geological survey undertaken of the study area. It has subsequently not been possible to identify any potential constraints relating to the geological structure of the study area.
- The current shortage of base information suggests the need for project specific geological explorations to accompany new developments.



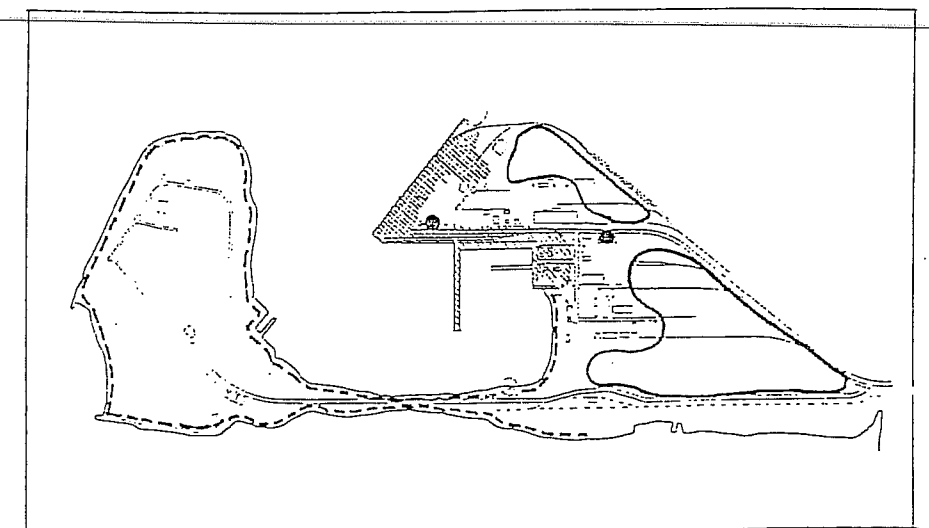
2.2.1 d. Geology

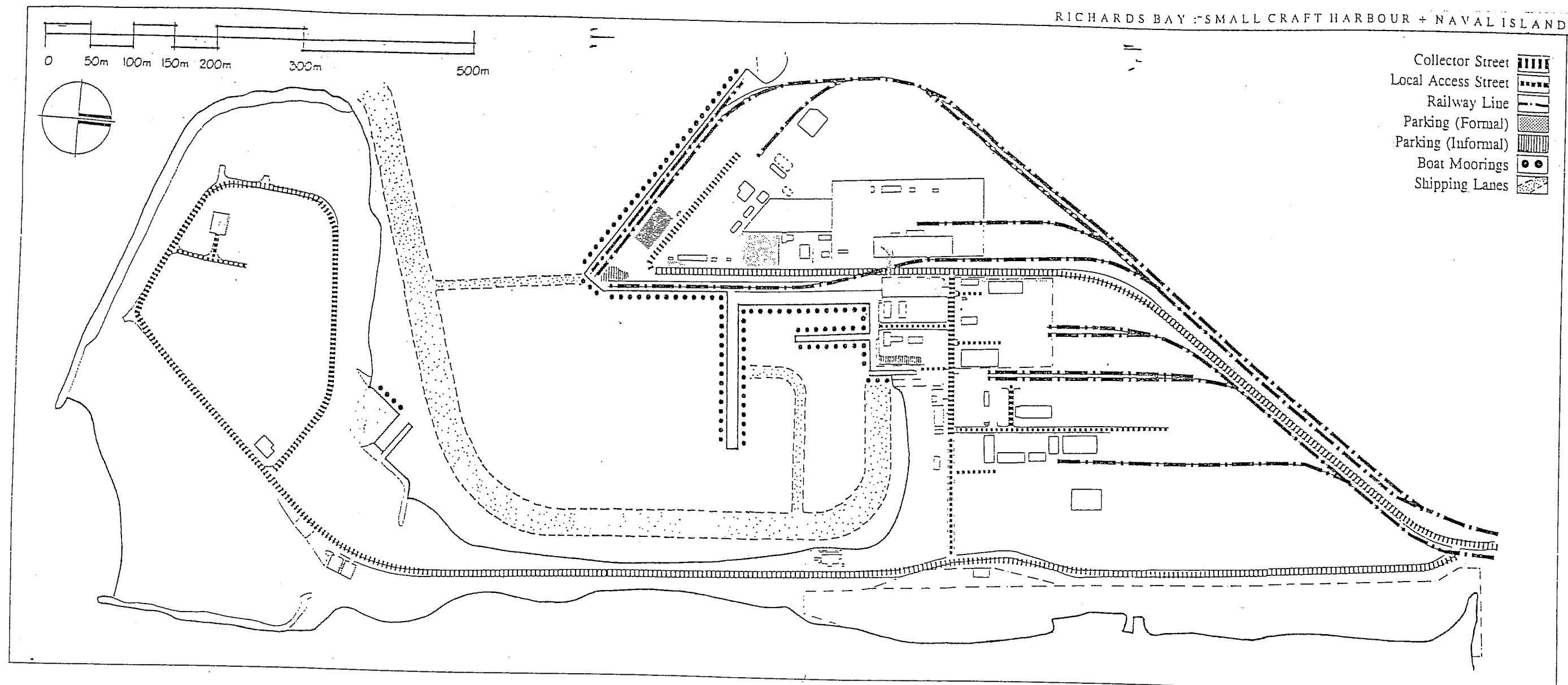


2.2.2 a. Land Use

- The land use pattern indicates that a large portion of the study area is currently being used for harbour related activity.
- Retail development, in the form of small shops and food outlets, is concentrated along Newark Road.
- Other land uses which contribute to activity patterns in the area are the restaurant on the eastern shore of the harbour, and the converted shed which is utilised for active recreational pursuits.

- The shores of the harbour area and particularly those around Naval Island, are used predominantly as public open space, supporting a variety of activities.
- There is a substantial portion of land which is currently vacant or underutilised. The potential exists for this land to be tied back into the overall activity structure of the study area.

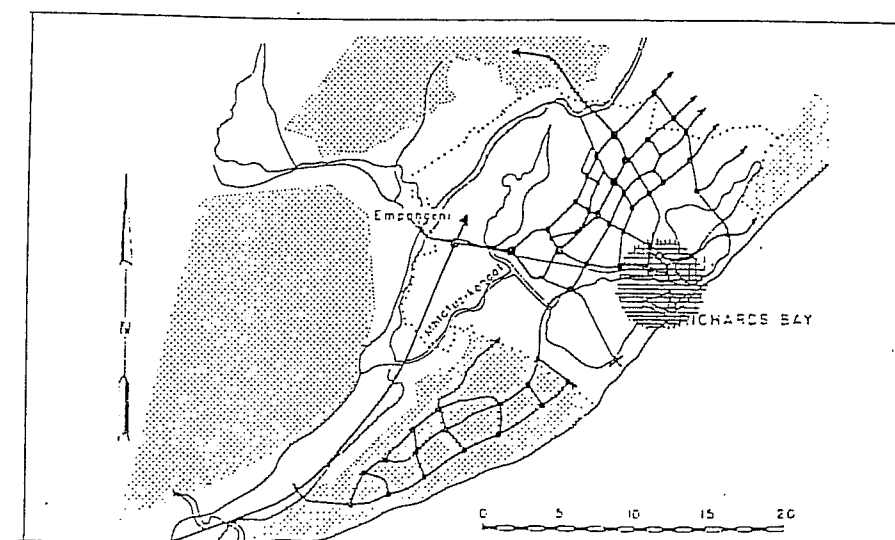




2.2.2 b. Movement

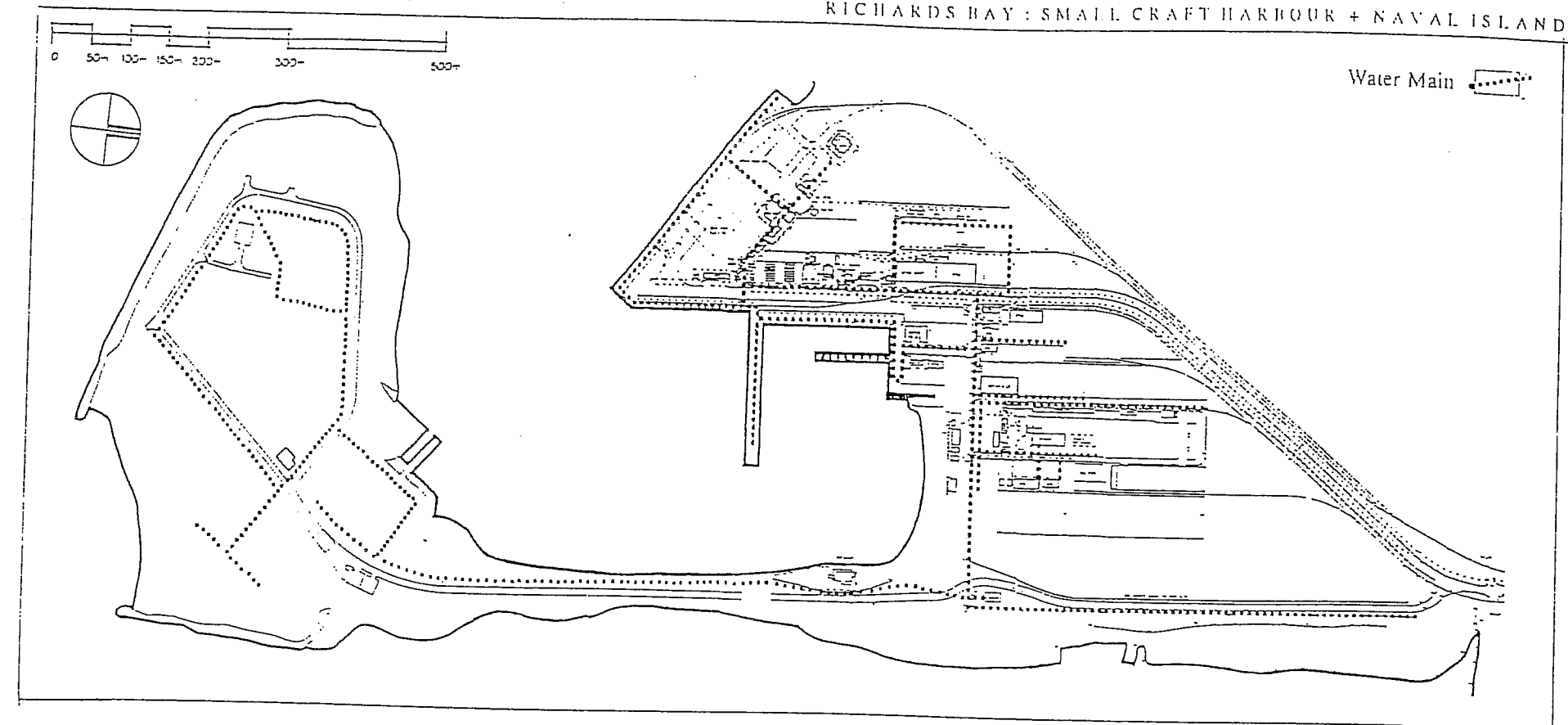
Movement System

- Vehicular circulation within the harbour area is relatively well structured and based on a clear hierarchy of movement.
- The fact that there is only one access point to the study area could pose future problems if the harbour facilities are expanded (conflict between goods traffic and passenger traffic).
- Proposed bridge across the Mzingazi canal could provide more logical access to the study area for non-goods related traffic.
- Informal parking within the study area indicates a need for more formal parking facilities, particularly at peak hours.
- Railway sidings within the Tuzi-gazi area are likely to become obsolete in the future.
- A potential conflict could develop between various modes of water based movement in particular between harbour related movement (i.e. tugs and pilot boats) and recreational activity (such as jetskis).
- Public transportation is limited to bus service linking the harbour to the main business and industrial areas of Richards Bay.



Water

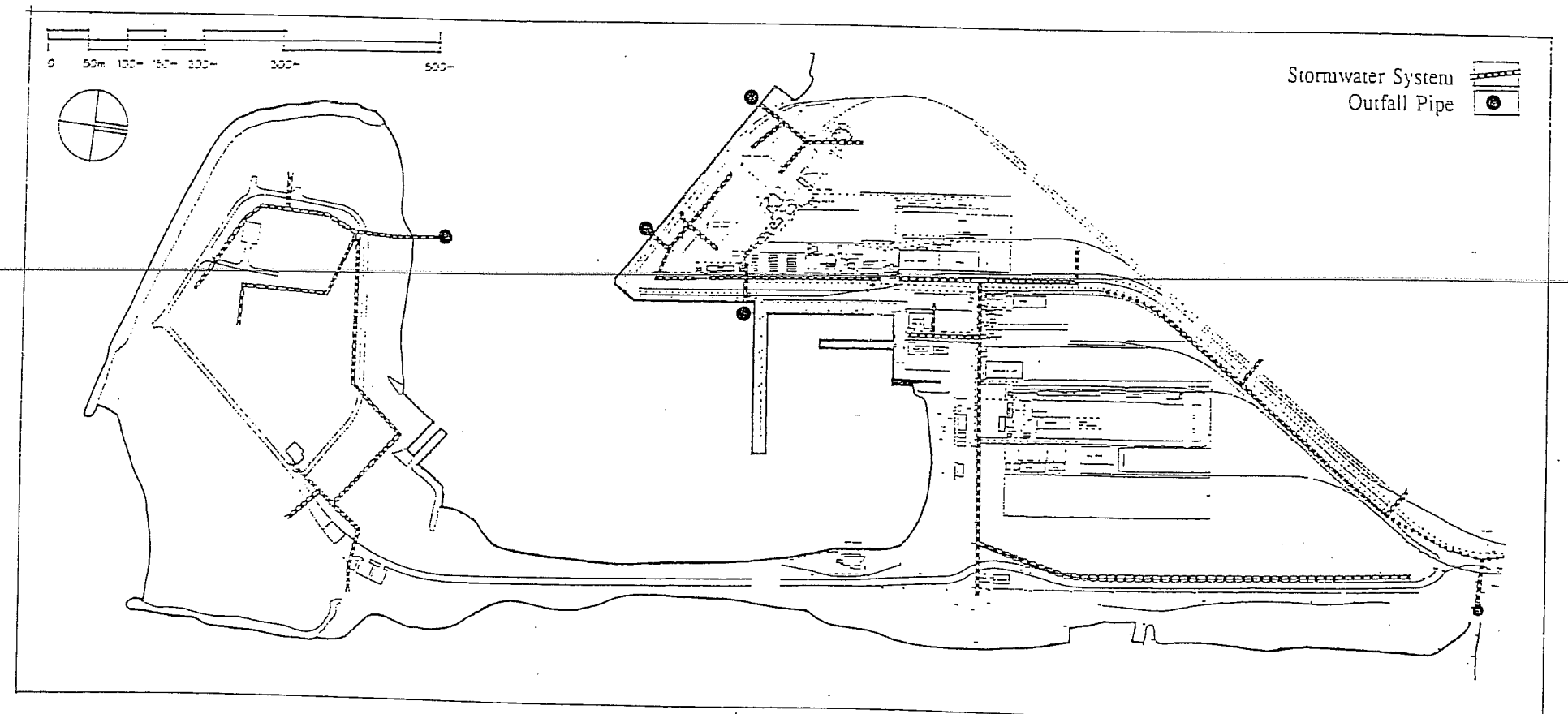
- The bulk water infrastructure is extensive and serves most portions of the study area.
- Capacity of water supply may need to be expanded, depending on demand generated by new development in the area.



2.2.2 c. Infrastructure: Water

Stormwater

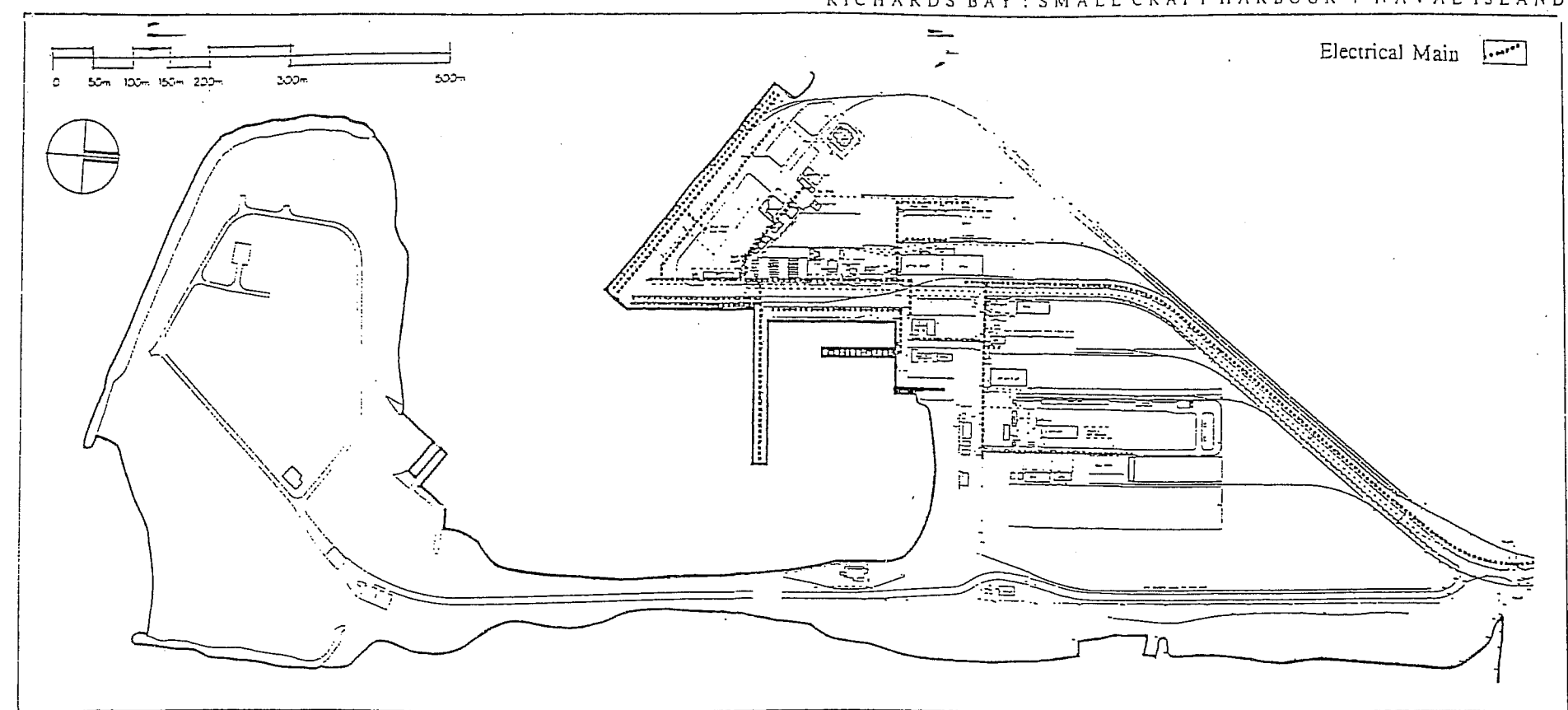
- Major stormwater infrastructure is concentrated along the main movement corridors.
- Stormwater outlets into the harbour are a potential source of marine pollution/contamination, and should be monitored.



2.2.2.c: Infrastructure: Stormwater

Electricity

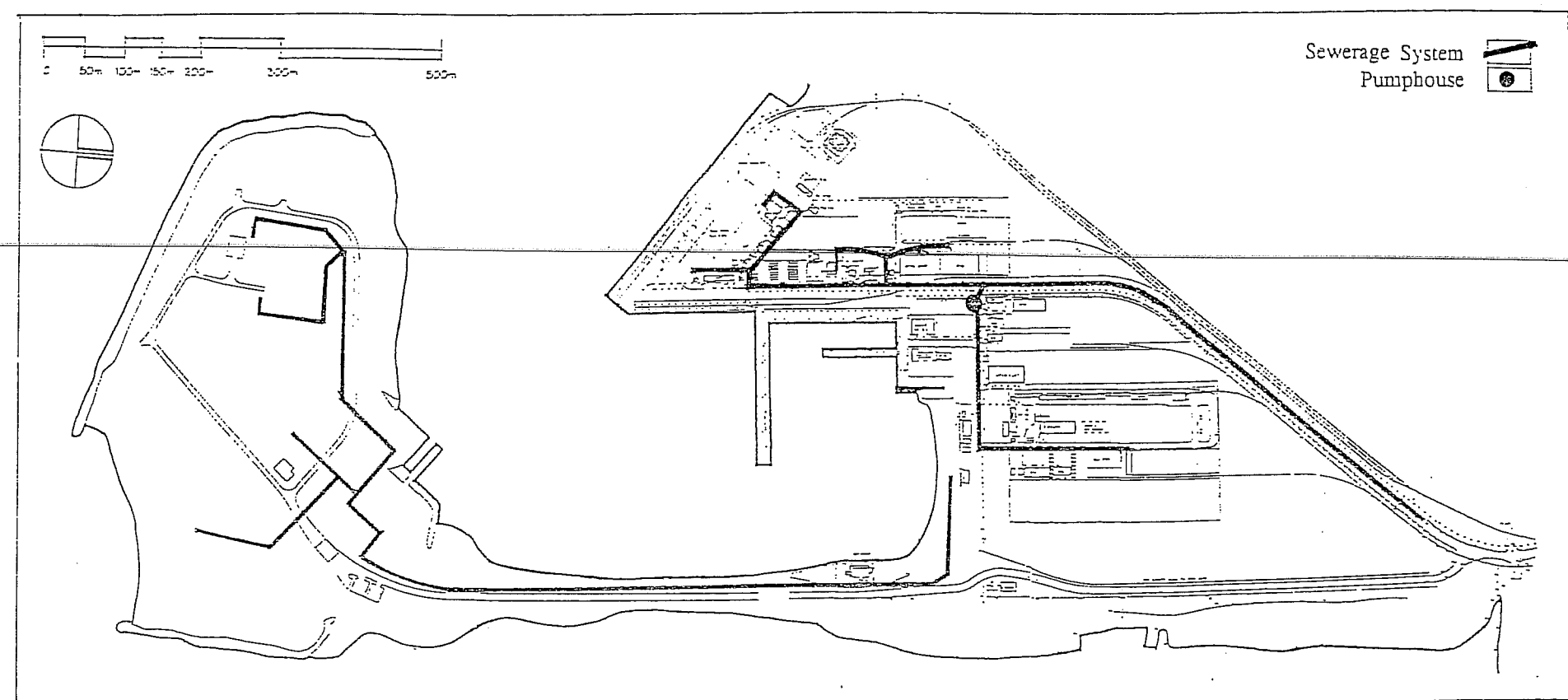
- Bulk electrical infrastructure is located along the main service corridors in the study area (ie: roads and quay edges)
- Electrical infrastructure within the Propnet controlled land is limited.
- There is currently no electrical infrastructure on Naval Island.



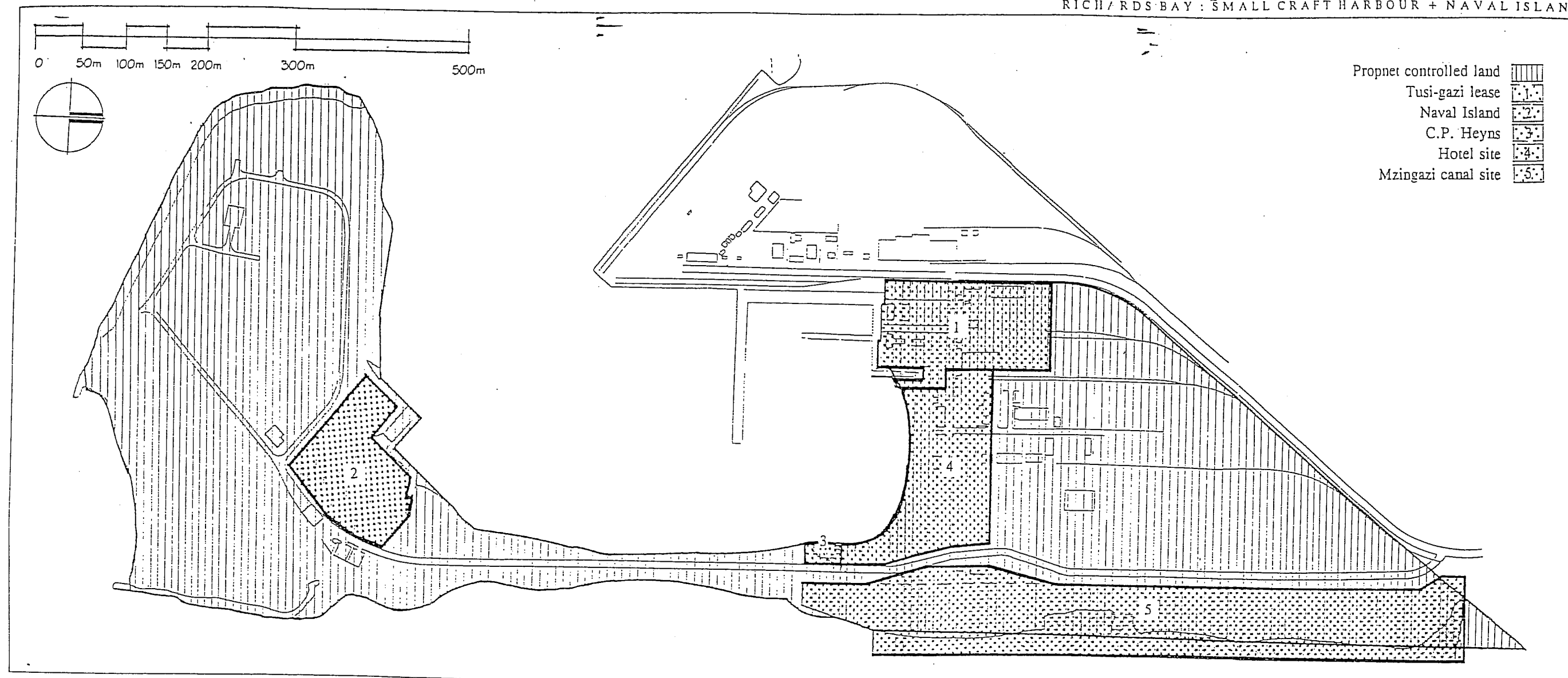
2.2.2 c. Infrastructure: Electricity

Sewerage

- The sewerage network is concentrated on the northern portions of the study area.
- Sewerage infrastructure is in place on Naval Island, although it has been temporarily closed as it is not currently utilised.



2.2.2 c. Infrastructure: Sewerage



2.2.2.d. Ownership

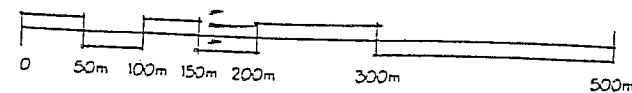
- The bulk of the land in the study area is controlled by Propnet/Portnet, although there are a number of leasehold areas which operate on this land.
- The Tuzi-gazi lease, covering an area of 2.1076 ha, has been leased to the Tuzi-Gazi Waterfront Development Co. for a period of 30 years ending in 2023.
- The C.P. Heyns lease, covering 1324 m², is for 25 years, ending in 2017.
- The mandate area on Naval Island covers an area of approximately 1.6608 ha.

- To the east of the Tuzi-Gazi lease is a Mandate Area of approximately 2.2410 ha on which a hotel development is proposed.
- Along the western bank of the Mzingazi Canal is an alienated area totalling 4.9928 ha which has been planned as a residential development.
- There are no time limits governing the initiation of development on the leasehold areas, although once development has commenced, it must be completed within a stipulated period.

Description	Site Area (m ²)	% of total
Tuzi-Gazi (Lease Area)	21 076	5.2
Naval Island (Mandate Area)	16 608 *	4.1
C.P. Heyns (Lease Area)	1 324	0.3
Hotel site (Mandate Area)	22 410 *	5.6
Mzingazi Canal site (Alienated Area)	49 928	12.4
Remainder	292 574	72.4
Total (Propnet controlled land)	403 920	100

* Subject to confirmation

The area towards the main shipping channel is used by more substantial harbour traffic, such as cargo vessels. Both Naval Island and the working quay provide vantage points for viewing this activity.



The edges of both Naval Island and the harbour area provide spaces for promenading and viewing of harbour activity.

Harbour related activities such as cargo loading and off-loading take place in and around the working quays.

Commercial node comprising speciality shops and small restaurants, frequented by local workers as well as visitors to the area.

An old store converted to an action cricket venue provides a recreational node in the harbour area, although activity at this venue occurs on an infrequent basis.

The Gazi Centre office and retail node has begun to establish itself as an important activity node in the area, and a potential catalyst for the proposed Tuzi Gazi development.

The southern shore of Naval Island provides a setting for significant recreational activity, with opportunities for swimming, picnicking, and fishing.

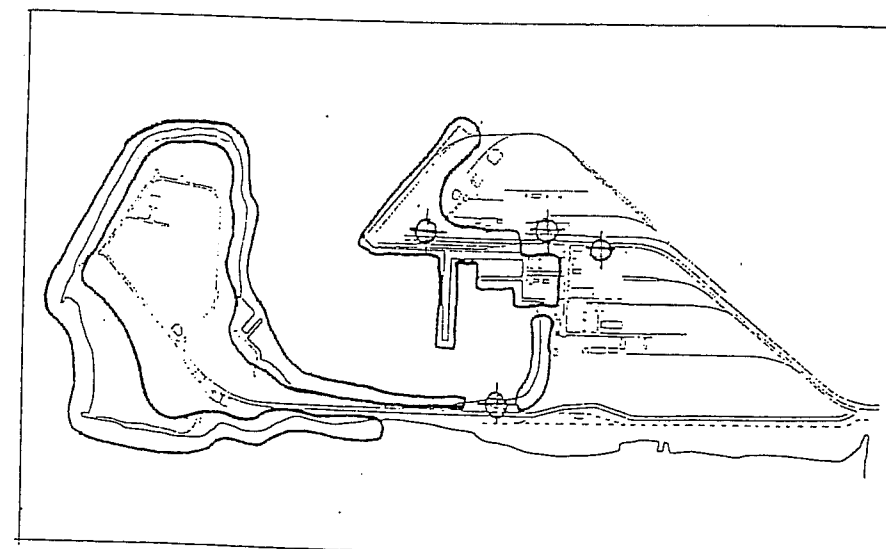
Within the canal area, dredging, yachting, and jetskiing activities dominate.

The tavern/restaurant node has become a prominent "magnet", attracting people to the small craft harbour area.

2.2.2 e. Public Space Activities

Naval Island provides an arena for activities of a predominantly recreational nature. The beaches are used for swimming, fishing, and picnicking; while the shores of the island provide numerous vantage points for viewing harbour activity. The forested area within the island offers unique opportunities for the development of conservation oriented activities.

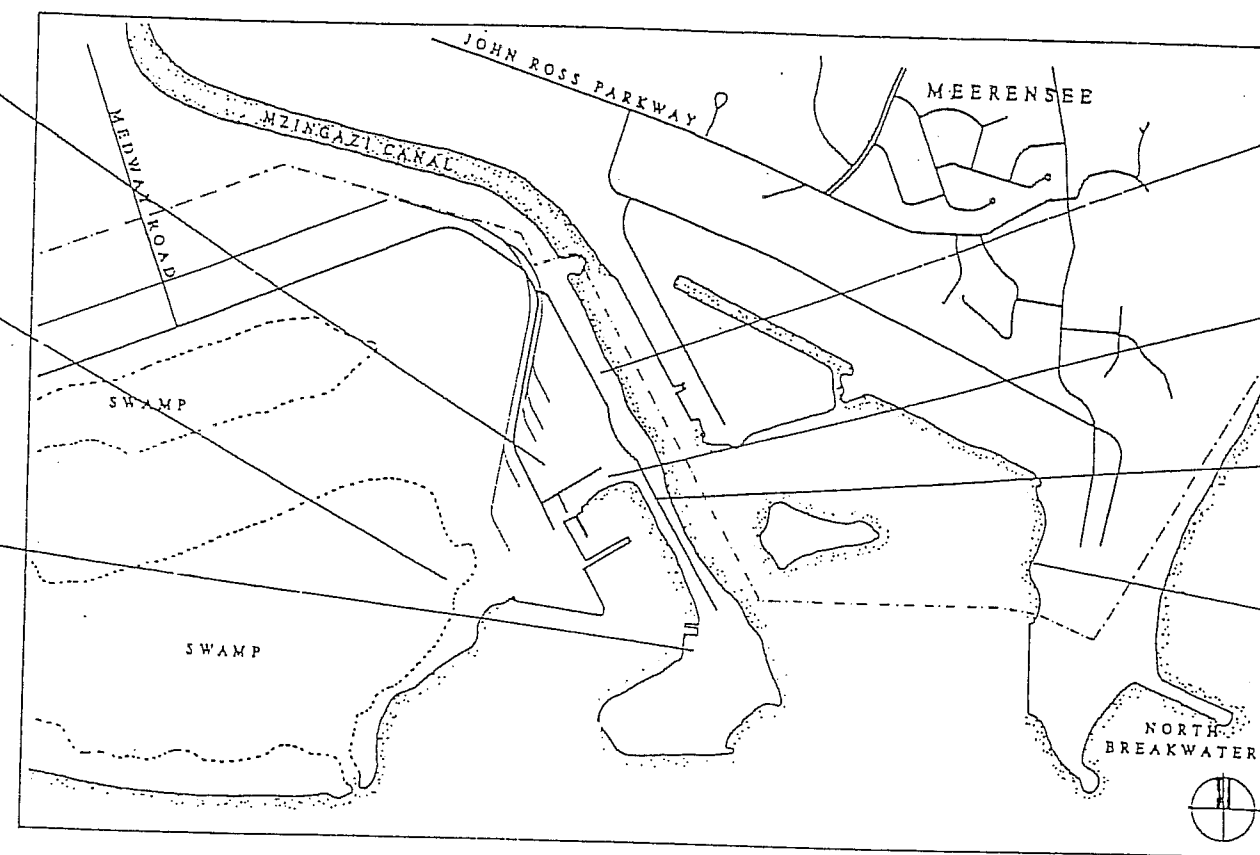
The Small Craft Harbour generates significant activity of both a formal and an informal nature. These include the launching and docking of harbour related craft (such as tugs, pilot boats, etc) as well as private craft (such as yachts and jetskis).



Tuzi-Gazi Waterfront development, with proposals for 5856 m² of retail, 3874 m² of offices, and restaurants seating 160 people.

There are plans to expand the existing facilities in the harbour in the future. These include the development of a container terminal adjacent to the small craft harbour.

Proposals have been drafted for the development of the slipway area on Naval Island into a mixed use precinct oriented towards commercial fishing activity.



Mzingazi residential development, comprising a first phase of 80 units and a second phase of approximately 100 units.

Proposed hotel development with 105 rooms and 42 cabanas, as well as restaurants, a casino, and a video arcade.

C.P. Heyns restaurant development, with a total of 180 seats.

Development of the Council owned bay area and Pelican Island is currently being investigated, and is likely to include a mix of land uses.

A total of 44 555m² of development is planned for the Small Craft Harbour and Naval Island. The adjacent table provides a summary of these proposed developments. The areas used in the table indicate floor area.

Apart from these developments within the Proprietor controlled area, there are plans by Portnet to expand the existing harbour facilities. This is likely to have an impact on the use and activity patterns in the western portions of the study area.

Proposals by the Richards Bay Municipality to develop the bay/marina area have not been finalised, although work is under way to stabilise Pelican Island, which could become the first phase of the development.

	Residential		Retail (Floor Area)	Office (Floor Area)	Restaurants		Entertainment (Floor Area)	Mooring Berths	Hotel		Cabanas	
	Units	Floor Area			Seats	Floor Area			Rooms	Floor Area	Units	Floor Area
Tuzi-Gazi (Proposed)			5 676m ²	3 574m ²	160	440m ²						
Tuzi-Gazi (Existing)			180m ²	300m ²				80				
Hotel (Proposed)			620m ²		432	1 058m ²	300m ²		105	8 000m ²	42	4 000m ²
Mzingazi Phase 1 (Proposed)	80	10 407m ²										
Mzingazi Phase 2 (Proposed)	100	10 000m ²										
Naval Island (Proposed)			971m ²			160m ²	324m ²					
C.P. Heyns (Existing)						636m ²						
Sub Total (Existing)			180m ²		180	636m ²		80				
Sub Total (Proposed)	180	20 407m ²	7 267m ²	3 874m ²	592	1 658m ²	624m ²		105	8 000m ²	42	4 000m ²
TOTAL	180	20 407m ²	7 447m ²	3 874m ²	772	2 294m ²	624m ²	80	105	8 000m ²	42	4 000m ²

Subject to confirmation

2.2.2 f. Proposed Developments

Contextual Forces & Trends

The following section attempts to provide a perspective on the key trends and/or issues in the Richards Bay urban and regional environment which could either be affected by or affect development of the Small Craft Harbour and Naval Island. It is not the intention here to provide a fully substantiated report, but rather to offer an interpretation of the socio-economic, socio-cultural and socio-political forces which collectively influence urban development in some way.

(At this stage of the study, information pertaining to the structure plan of Richards Bay is still awaited. It is anticipated that the information could enhance this section by providing a clearer understanding of the needs and priorities of the town's and region's population as well as provide insights into the town's economic and spatial growth patterns).

- Mhlathuze sub-regional population is 400 000 with an overall growth rate of 2,5% and a 3,7% growth rate in informal and transitional settlements.
- Marginal increase in middle to higher income groups in Richards Bay and Empangeni due to increase in economic activity in the area.
- Active and inclusive small business and informal trading lobby in the region for deregulation of restrictive legislation and for upgrading and construction of new trading facilities.
- Push by Richards Bay Municipality to market town as an export oriented Port-Industrial city and to establish export processing zone (EPZ).
- Regional push (i.e. Zululand Joint Services Board, Richards Bay, Empangeni, KwaZulu Bureau of Natural Resources) for investment in the tourism industry.

- Limited regional and natural water based recreational opportunities and facilities to serve either tourist or local population with concomitant increasing pressure on existing facilities.
- Increasing pressure on public/quasi public authorities to convert non-productive resources (eg. land and personnel) into viable and productive resources which could stimulate economic growth.
- Potential conflict of interests relating to limited waterfront development opportunities between Portnet/Propnet and the Richards Bay Municipality.
- Emergence and establishment of environmental lobby and legislation to manage environmentally sensitive resources and/or areas.
- Rapid increases in land values/prices due to increase in economic activity in Richards Bay as a result of substantial industrial and associated development.

"Development" in the urban development context may be defined loosely as those actions which add value to land, infrastructure and buildings. "Value" on the one hand can be defined narrowly in investment or financial terms, or on the other hand, more widely in terms of public or socio-economic benefits. For the purposes of this planning exercise "value" includes both definitions.

If it can be accepted that "development" of the Small Craft Harbour and Naval Island not only encompasses the construction of physical infrastructure and buildings to enhance the investment value of the project area as real estate, but also includes either changes to, or retention of, existing environmental conditions which result in the improvement of or enhancement of the "value" of the site, then it becomes essential that those resources which contain "value" be either preserved, conserved or enhanced through the planning process.

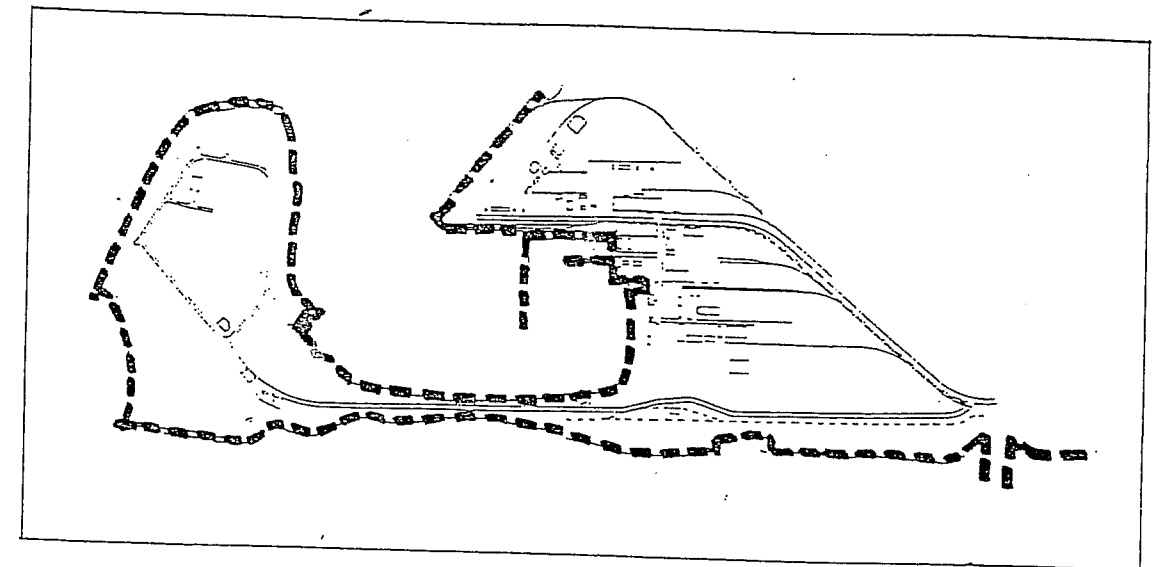
In some instances the actions required to enhance, retain or improve the "value" may be described as being "non-negotiable". If the relationship between the project site's resources, their control and accessibility by either the public or its owner, were to be altered in any way, then there may be a material impact on the future "value" of the project site.

In the following pages the "value" of particular resources and or circumstances as they pertain to the assets of the project site identified in the analysis have been categorised as being either "negotiable" or "non-negotiable".

The identification of the negotiable and non-negotiable resources is particularly important when planning in an uncertain and fluid development context. Since development in urban areas is so complex as to preclude accurate predictions of future demand and need it becomes necessary to clarify those resources which need to be carefully planned for and hence effectively managed. Those which are "non-essential" can be less rigidly controlled and their use "negotiated". Furthermore, the clarification assists in defining any new or additional elements which may be necessary to secure an existing resource value or enhance it.

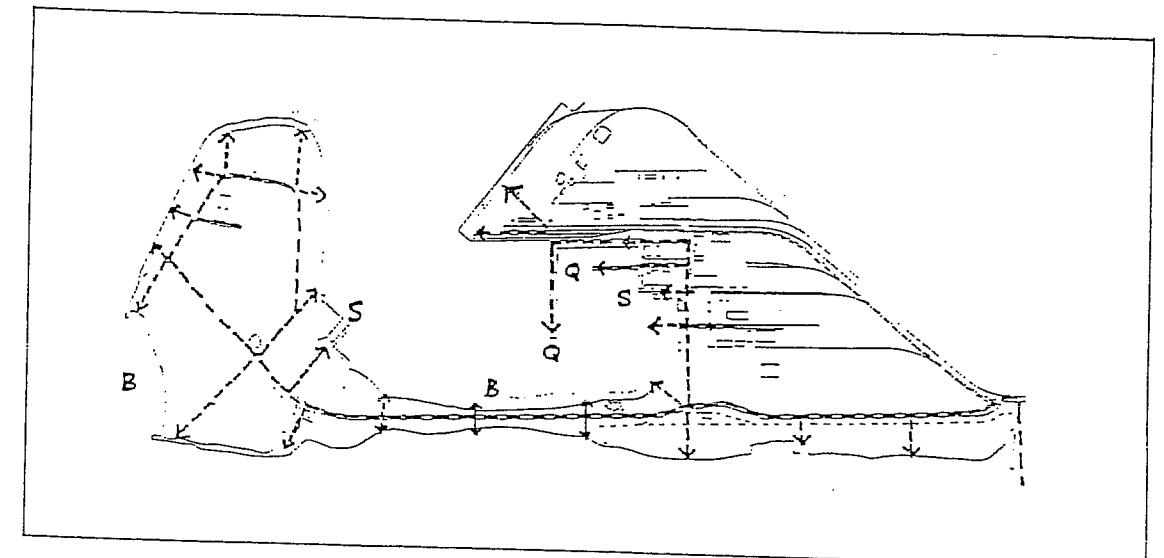
1. Public Accessibility

- Public Accessibility to all waterfronts must be ensured and ownership of such land be retained by a public authority.
- No waterfront edges may be privatised. Continuous public access along the waterfront must be ensured.



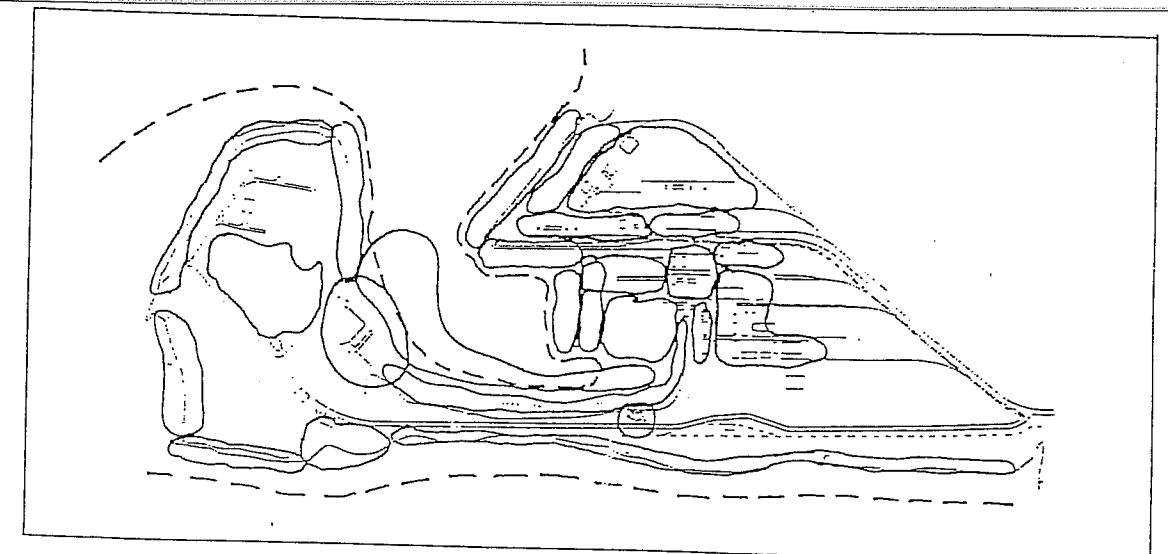
2. Public Use of Amenities

- Existing public amenities may not be privatised and must remain accessible to the public. These include: public roadways, water surfaces, slipways, and quaysides.
- Management must ensure that there is no conflict between operational and recreational use of public amenity and infrastructure.



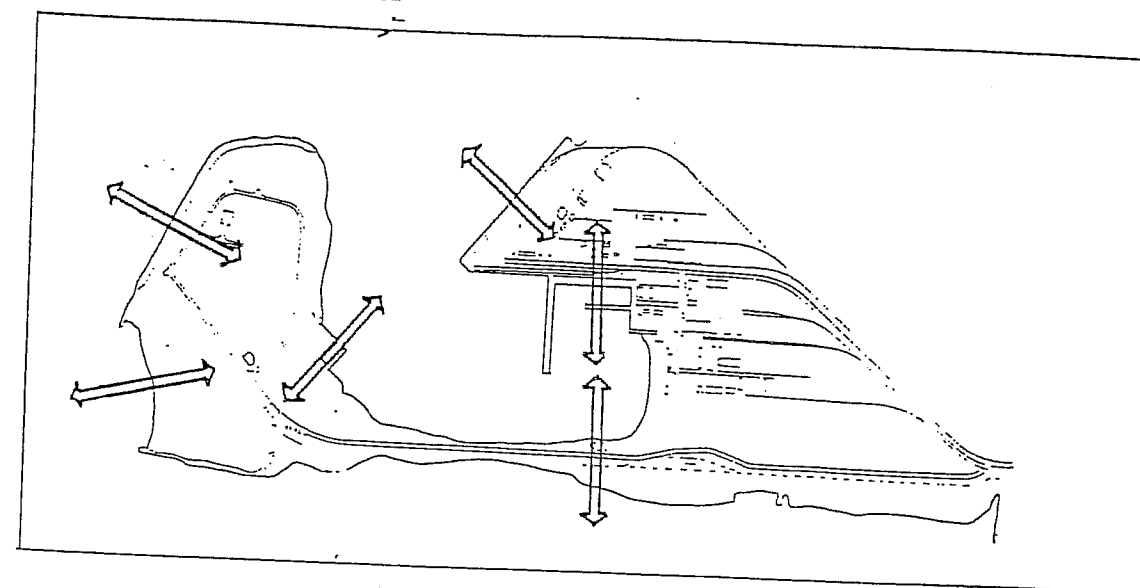
3. Integration of Uses

- Integration of harbour and recreational uses is unique and valuable to Richards Bay. All water-related and port-related activities should be retained to preserve the essential character of the precinct - ie. property value and location suitability cannot be determined in financial terms only.
- Do not segregate port, harbour and recreational uses.
- Any segregation of small craft harbour activities will reduce their collective impact on the character and vitality of the small craft harbour.



4. Relationships of Value: Between Activities

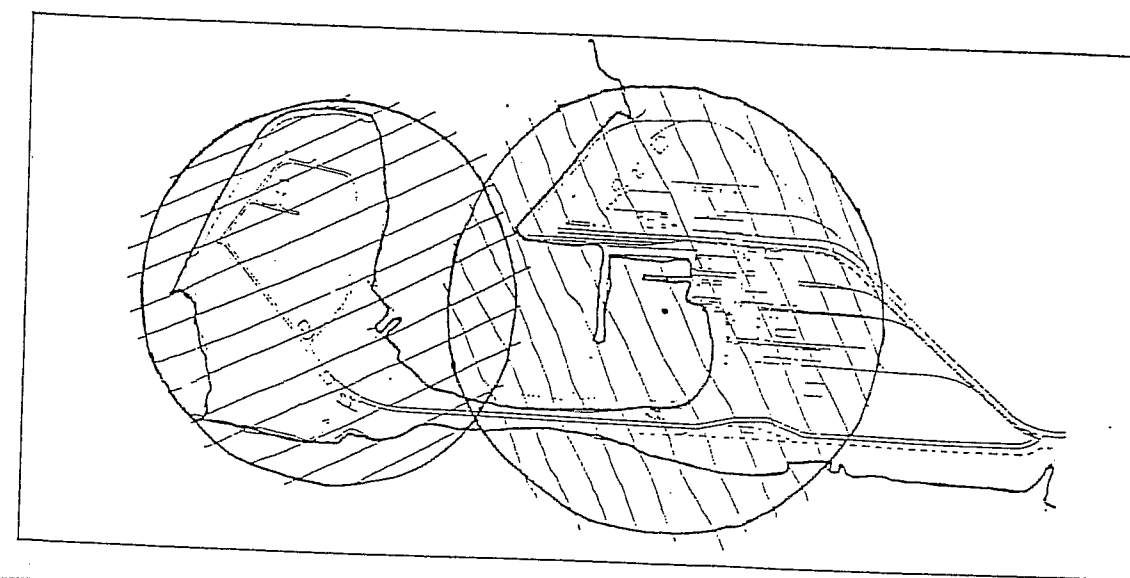
- Certain activity combinations are unique to the precinct and must be acknowledged and retained to ensure that the value of these essential qualities are not reduced but reinforced.



5. Relationship of Value:

Naval Island : Small Craft Harbour

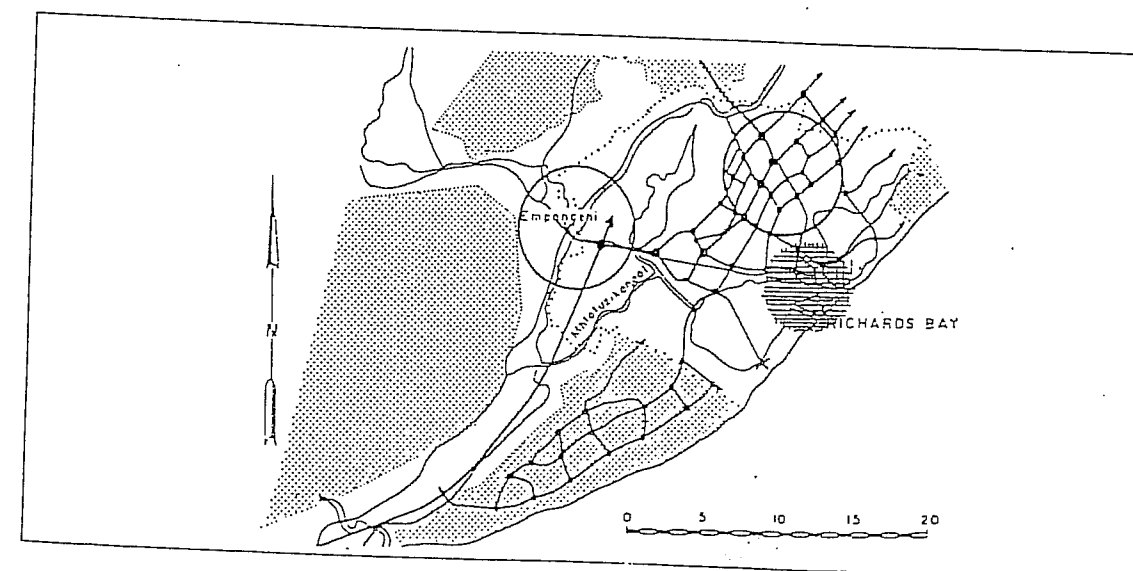
- The island and harbour are distinctly different in character and as separate entities represent a different set of inherent constraints and opportunities.
- The value of each is dependent on and reinforced by the other and hence the inherent character cannot be destroyed.



6. Relationship of Value:

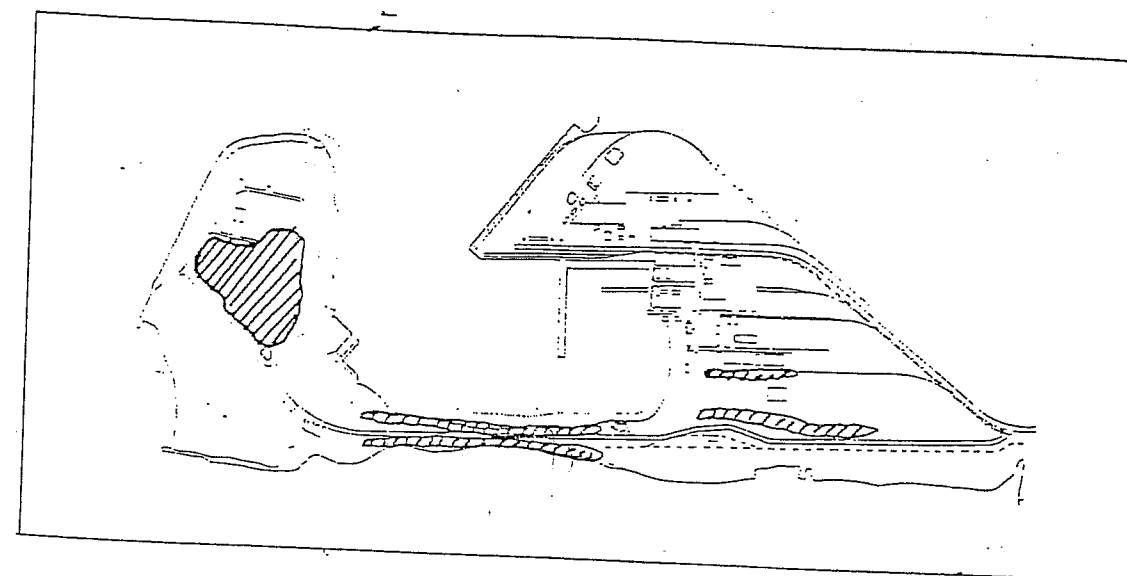
Study Area : Richards Bay/Empangeni

- At present the Study Area represents an important public amenity to the People of Richards Bay and Empangeni. Commercial and Recreational Activities in the study area are in turn dependent on the patronage of local people.
- It is the latter which contributes to the economic sustainability of many activities.
- It is important, therefore, that the amenities of this area are not privatised through resort developments which would deny the essential clientele from enjoying the resource and thereby induce dependency on seasonal patronage.



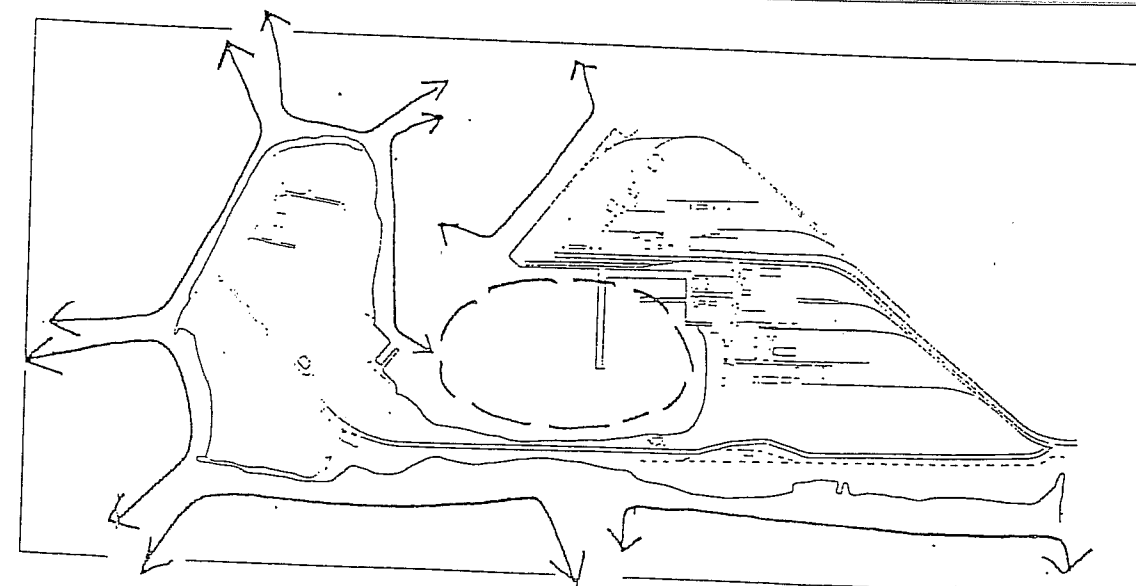
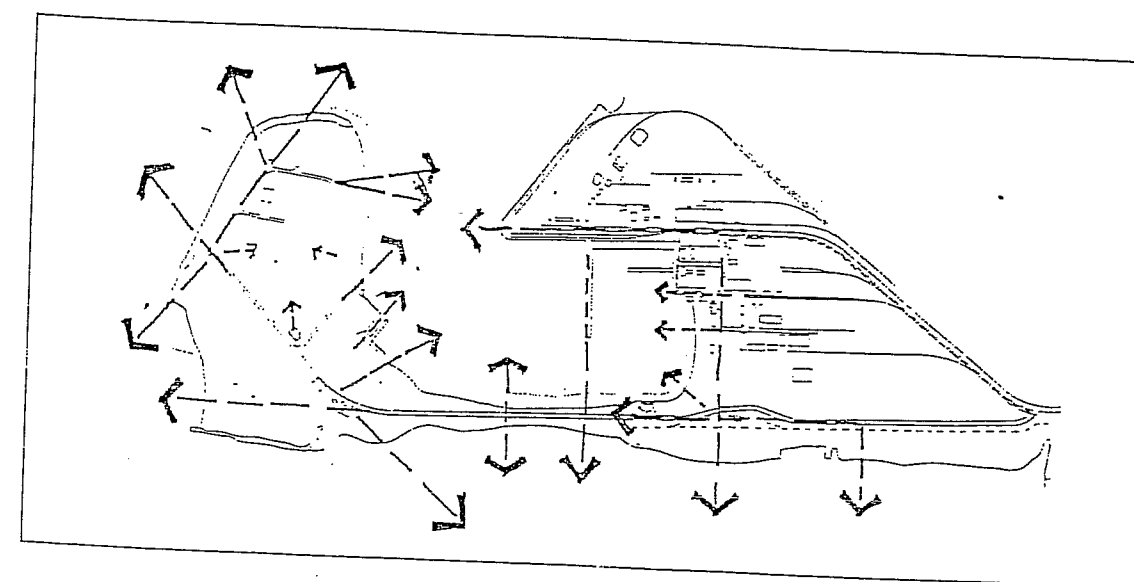
7. Vegetation

- Conserve the Natural and Indigenous Vegetation.
- The real value of this resource exceeds its potential land or development value. It must be retained, not just as an aesthetic asset but as a habitat for animal and bird life.
- Vegetation also performs an important sheltering function and must not be removed without careful consideration of the consequences.

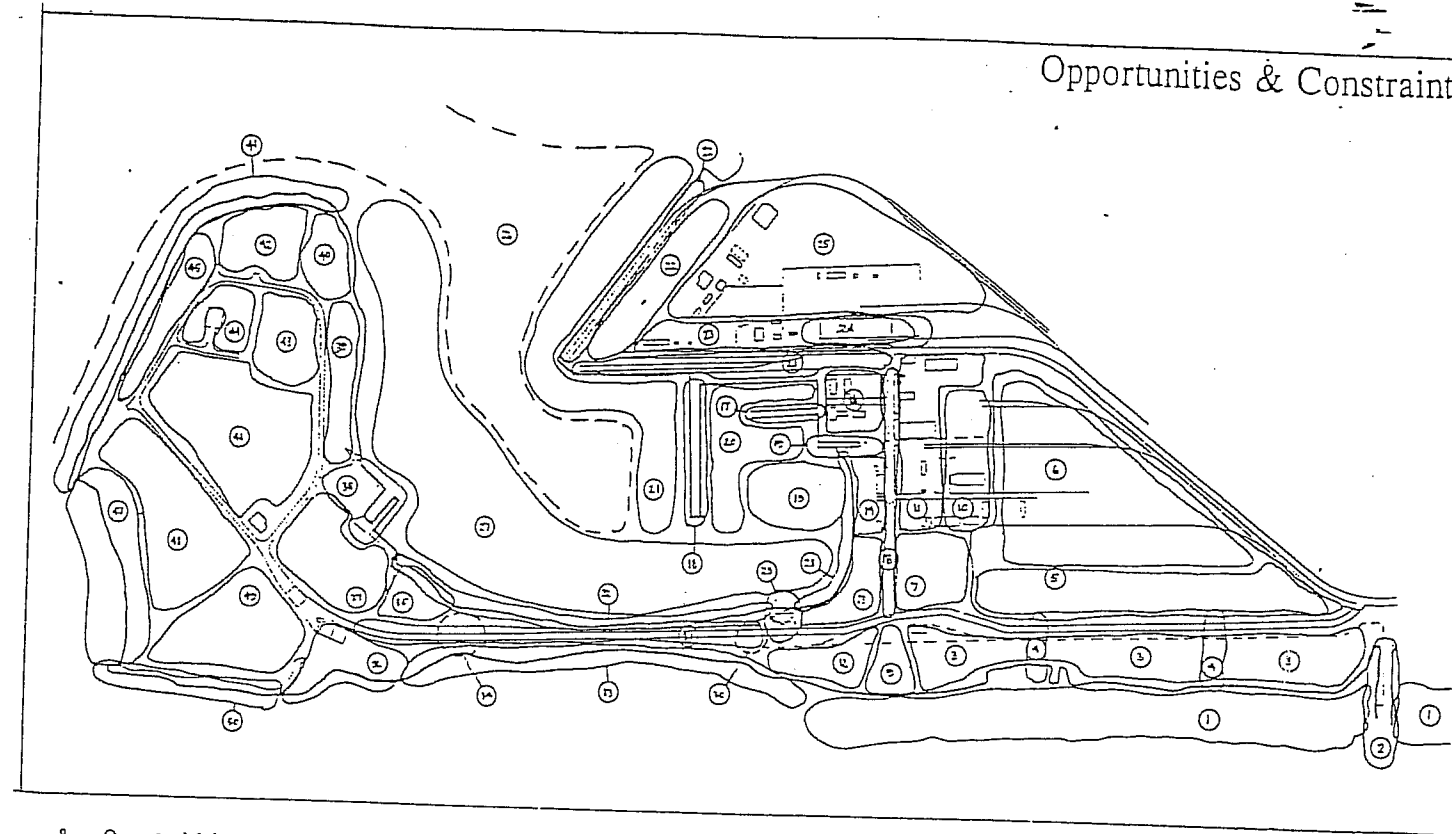


8. Views and Vistas

- Views which contribute to the unique sense of place and which connect important activities or places must be retained to ensure the qualitative values of the harbour and island are not lost. The following have been identified:
 - Retain view corridors as shown
 - Retain view sheds as shown.



Opportunities & Constraints



1. O • The sheltered and shallow waters of the Mzingazi canal are ideal for novice sailboarders, canoeists and paddleboats.
C • Private servitudes over the water surface and private yacht moorings restrict public access and use of the canal.
2. O • If the proposed bridge is built to permit the movement of boats beneath, the entire canal could become "navigable" to small vessels.
• The bridge could serve as a gateway to the precinct.
C • The proposed bridge design does not cater for the underpass of boats and has been designed to fulfil only its utilitarian value.
3. O • New development along the canal could serve to stimulate public activity along the entrance roadway and along the canal water surface
• It could also serve as catalyst for complimentary activities along the water edge and along the roadway.
C • The proposed development is private and public access to the water edge has been limited to its ends.
• The proposed development turns its back on the road and forms a wall between the road and the water sterilising potential uses for the land behind.
4. O • Openings within the proposed development would give area '5' access to the water edge and thereby increase the potential value
C • Private ownership of area '3'
5. O • Potential Commercial and Retail along the entrance roadway could capitalise on passing traffic and thereby encourage stimulate along its edge.
C • No direct view or access to the water edge.
• Low land value does limit potential uses for the site.
6. O • Potential site for development
• Good service and rail infrastructure
C • Accessibility to water frontage and possible interface with future Portnet Warehousing lease areas
7. O • The location of this site at the junction of access roads to the harbour and the island, and its proximity to the water edge present opportunities for public or retail facilities.
C • The site presently is included within the mandate for a proposed hotel.

8. O • Main vehicular access to the harbour could become the activity street of the small craft harbour
C • Lease lines across the path
9. O • The extension of roadway (8) would permit vistas across the canal to the yacht club. It would also increase accessibility to the water edge at this point.
C • Private land ownership and the proposed resort development limit this possibility.
10. O • Existing semi-industrial harbour/maritime related industries contribute to the character of the harbour.
• They do not require waters edge and lower land values permit opportunities, particularly for the informal sector.
• Existing utilitarian and industrial buildings could easily be converted to other uses (As some already have)
C • Existing leases and high rentals inhibit the location of maritime and values sensitivity regarding location
11. O • Well located, well serviced Semi-industrial and Commercial node which could be used to reinforce and compliment harbour activities
C • Conflict with existing lease areas

12. O • Well located site for public amenities
C • No services as yet
13. O • The site is well located in terms of accessibility, proximity to the water edge, to harbour activities and to the existing restaurant that it presents an opportunity to link these amenities as well as to stimulate and attract public activity along the water edge.
C • Private control of this site limits control over the design and character of the proposed development
• Privatisation also limits public access and activities along the water edge.
14. O • Interface between beach and harbour
C • Falls between existing lease mandate areas
15. O • Existing slipway should be retained for public usage
C • Conflict with harbour police operations
16. O • Existing harbour police contribute to the authenticity of harbour and are a public attraction
C • They occupy valuable real estate and do not pay high rentals

17. O • The Quay is a valuable public promenade - offering visitors and inside view of harbour activity
C • Access to the quay could be limited by proposed private developments
18. O • Main Quay - offers opportunity to view Port operations close up
C • Tugs and pilot boats
• Public access may conflict with port operations
19. O • Yachting berths are an important attraction
C • The berths are private/expensive - not public
• Hinder movement on water surface
• Privatised water space
20. O • The harbour is publicly accessible to visitors by land and sea - this contributes to its vitality
C • Pressure to capture this vitality for private benefit - this would destroy its inherent character
21. O • Existing port activity is an attraction
C • Pressures to relocate
22. O • Public access to "real port activity" on loading/off loading, foreign sailors, ship captains and stevedores present and important attraction
C • Pressures to relocate (Portnet Centre)
• Potential conflict between port operations and public safety
23. O • Port Captain and Pilots contribute to the authenticity of the harbour.
• This character could be reinforced by allowing harbour pubs, fish shops, and other speciality stores to develop
C • The area is under Portnet control
24. O • Existing Action Cricket facility attract people to the harbour area. This facility could be expanded to encourage more harbour-related public activity
• Well serviced
25. O • Portnet land for shipping related activities
26. C • Retain shipping lane for port operations
27. O • A range of water sport activities on sheltered water surface
C • Conflict with port and harbour operations

28. O • Shallow bathing area and beach edge provides important public link between harbour and restaurant

- C • Possible private ownership

29. O • Existing restaurant could be connected to harbour via public promenade

- C • Private ownership

30. O • Opportunity to create "gateway" to mainland

31. O • "Bridge" between Island and "Mainland" allows views to both sides and could serve as a pedestrian promenade

32. O • Protected beaches/sheltered
• Shallow bathing area with a direct interface with harbour
• Could serve as public promenade

- C • Too narrow for development
• Vegetation under pressure and edges have not been stabilised

33. O • Good views and vistas to the opposite side of the bay and canal. An important observation point

- C • Tidal scouring is causing the erosion of the Beach
• Re-establishment of Pelican Island may exacerbate this

34. O • Opportunity to create "gateway" to the island

35. O • Existing public picnic area - close to roadway and water edge

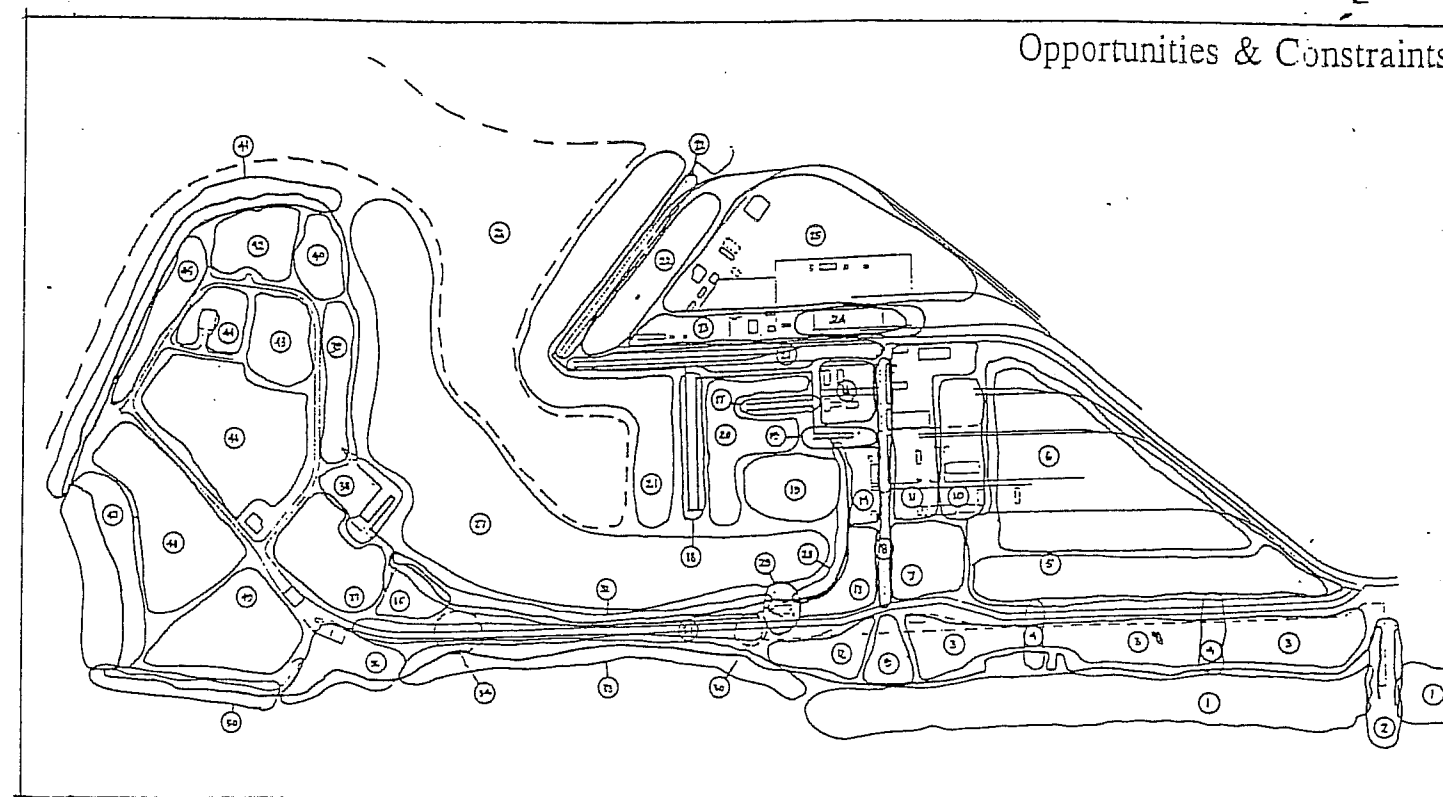
- C • Under pressure to develop

36. O • Well utilised site near existing picnic area
• existing parking facilities

- C • Development pressure may cause traffic conflict and a bottle neck at this position
• No public ablutions

37. O • Possible development site (as proposed)

38. O • Possible development site



48. O • Well located
• Possible development site

- C • Exposed site

49. O • Possible development site

- C • Could limit public access
• Exposed site

50. O • Good public fishing area
• Views to Municipal bathing area across Mzingazi

38. O • Existing slipway allows for launching of boats on sheltered water
• Good public fishing area
• Proposed development could capitalise on this amenity

- C • Privatisation of the edge could destroy public access to this amenity if incorrectly handled

39. O • Sheltered beach with good views of harbour
• Popular public picnic area

- C • No public ablutions or services

40. O • Sheltered beach

- C • Vegetation under pressure
• No public ablutions or services

41. O • Popular fishing area with good view of shipping activity could serve as a public promenade

- C • Exposed to wind
• Difficult to walk along the water edge

42. O • Popular picnic area

- C • Exposed to the wind
• No public ablutions or services

43. O • Sheltered area - clay compacted parade ground
• Possible development site

- C • No access to waterfront
• No services

44. O • Existing parking and road access
• Possible development site

- C • No services

45. O • Good view of ships
• Picnic - views across to the bay and of the harbour mouth

- C • Exposed site
• No services

46. O • Indigenous vegetation has and historical significance
• Aesthetic and ecological importance

- C • Cost of maintenance and management of this asset

47. O • Good bathing beach
• View of mouth and passing ships

- C • Exposed area

INTRODUCTION : PHASE 2

This document constitutes Phase 2 of the Urban Design Framework for the Small Craft Harbour and Naval Island. It follows the Data Collection and Analysis conducted in Phase 1. Here identified are the development goals and supporting development objectives for the project site, the main planning and design principles to be employed for guiding physical development and the framework plans which elaborate and formalise the key components of the proposed urban structure. Finally the principles of an implementation strategy are also described although the details would need to be tested against market information.

Structure of the Study

In order to contextualise this report the structure of the study is repeated here.

Phase 1: Involved data collection and analysis, identified the opportunities and constraints and established the negotiable and non-negotiable issues relating to the future development of the project area. The latter was separated into 3 sub-sections:

Part 1 : Approach

Part 2 : Analysis

Part 3 : Synthesis

Phase 2: (This report) focuses on the preparation of a Framework Plan and sets out development guidelines to ensure that the inherent characteristics and qualities are retained and enhanced. This report comprises the remaining 5 sub-sections

Part 4 : Goals and Objectives

Part 5 : Principles and Guidelines for Development

Part 6 : Framework Plan

Part 7 : Design Guidelines

Part 8 : Implementation Strategy

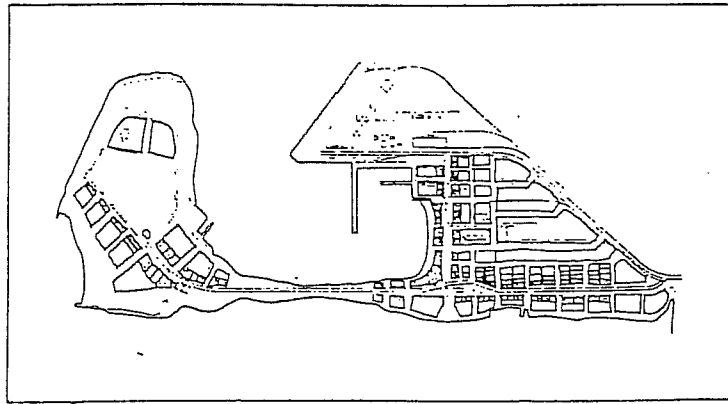
4.0 GOALS AND OBJECTIVES

4.1 Goal

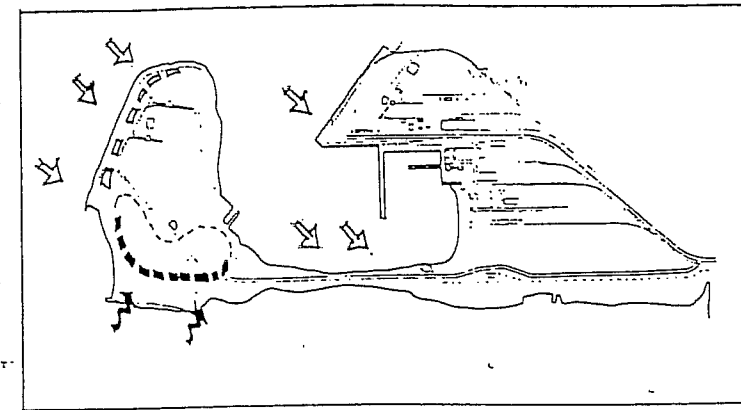
To create a clearly identifiable and authentic waterfront experience by retaining and enhancing the inherent value of the Small Craft Harbour and Naval Island in a manner which optimises its benefit to locals and visitors as a public amenity and which optimises investment returns to land owners, developers and investors.

4.2 Objectives

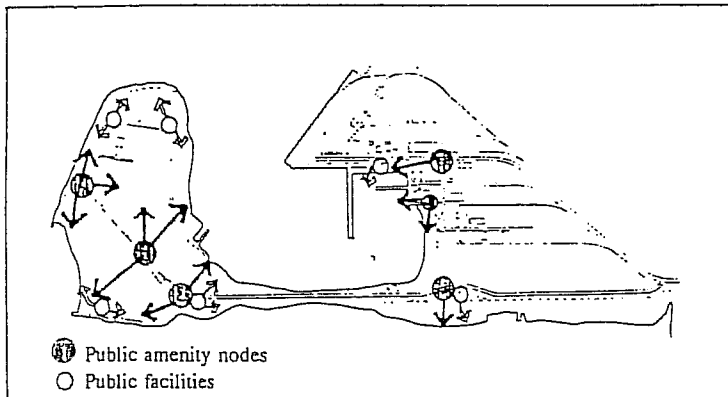
- To provide a public amenity accessible to all the people of Richards Bay and the surrounding region.
- To manage the privatisation of the sites resources and assets so as to optimise the mutual support between local and tourist interests.
- To respond to uncertain international trends in business and tourism.
- To retain, utilise and enhance the range of environmental characters and infrastructural resources.
- To enable a range of size and type of developer to become involved in the development of the site.
- To ensure the efficient and effective operation of port activities.
- To respond to different rates of economic growth and various types of physical development.
- To facilitate interaction and interdependence between different stakeholders and the land uses and activities that they generate and maintain in a mutually beneficial manner.
- To physically and economically integrate the development of the Small Craft Harbour with Naval Island.
- To promote sustainable development and environmental quality.
- To respond to and incorporate the energies and activities of the incumbents of the site.



Provide for a range of subdivision sizes and shapes and control subdivision consolidation and land assembly.
Locate smallest subdivisions along public edges to encourage fine grain building edge.
Avoid individual building components becoming dominant or destroying the existing environmental scale.

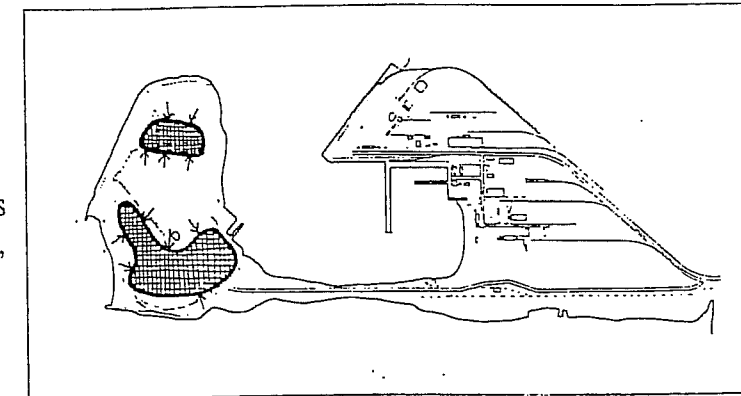


Respond to varying climatic conditions of the site.

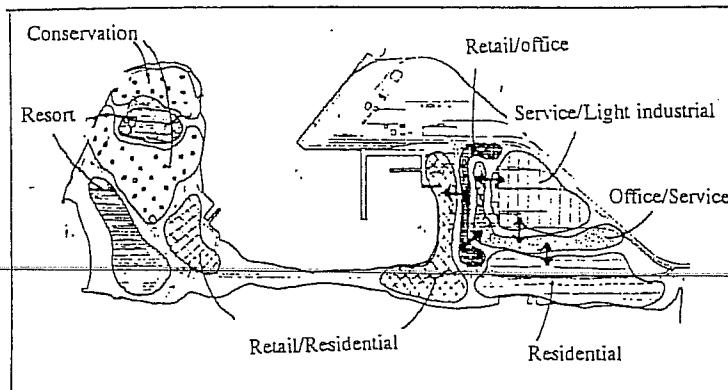


Establish public amenity nodes to provide focus and access points connecting with open space system and water related activities.

Support public edges with essential services and public facilities (eg: parking, ablutions, food kiosks, etc.)

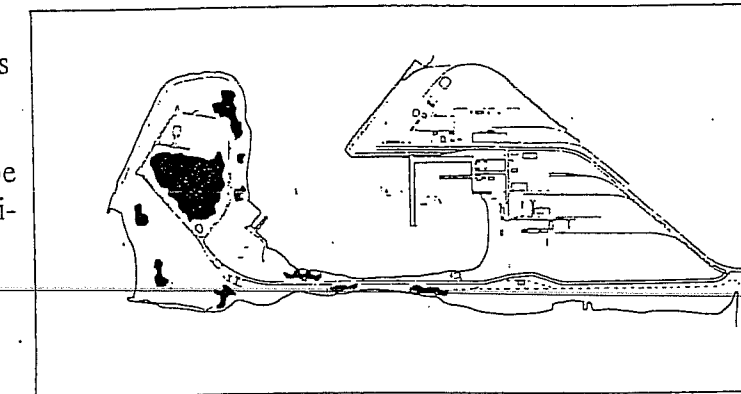


Limit development on Naval Island to protect ecologically sensitive vegetation and increase land values of developable sites.

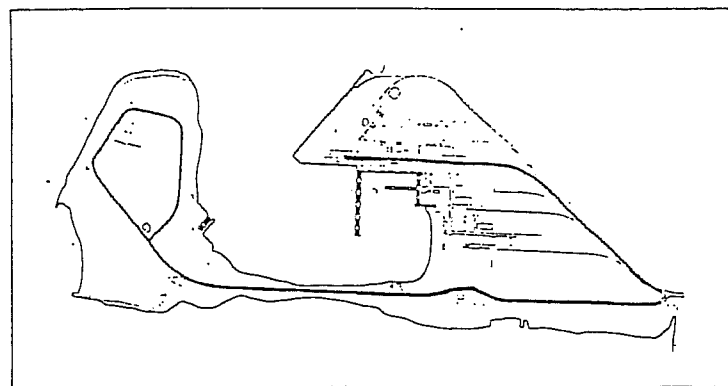


Use 'compatible' land uses to act as interfaces between different types of activities.

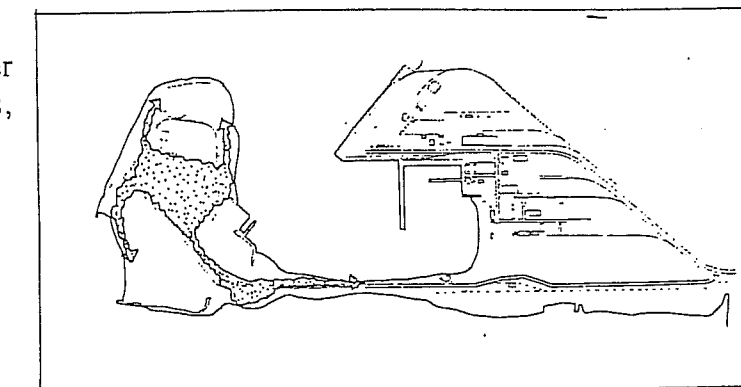
Permit different land uses and activities to be integrated. Promote the development of multi-functional buildings and spaces.



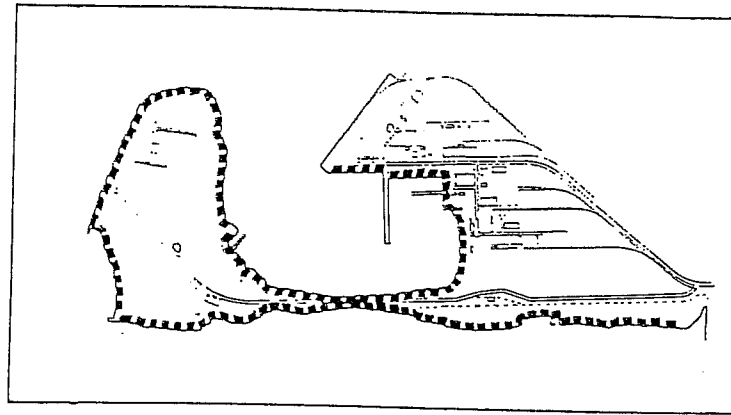
Utilise ecologically sensitive vegetation for landscaping purposes.



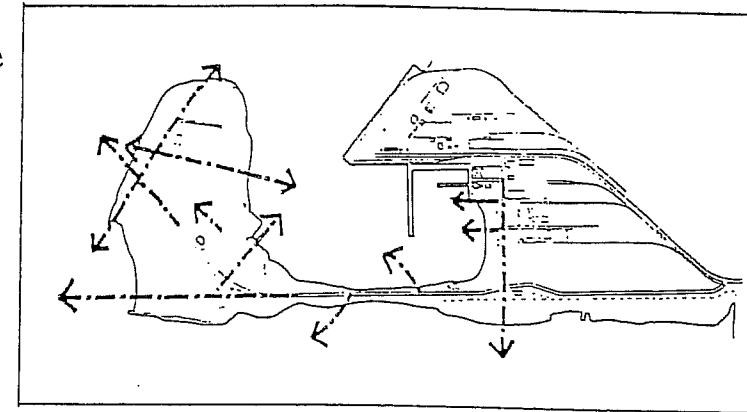
Utilise existing infrastructure wherever possible (eg: roads, reservoirs, slipways, jetties, wharfs, etc.).



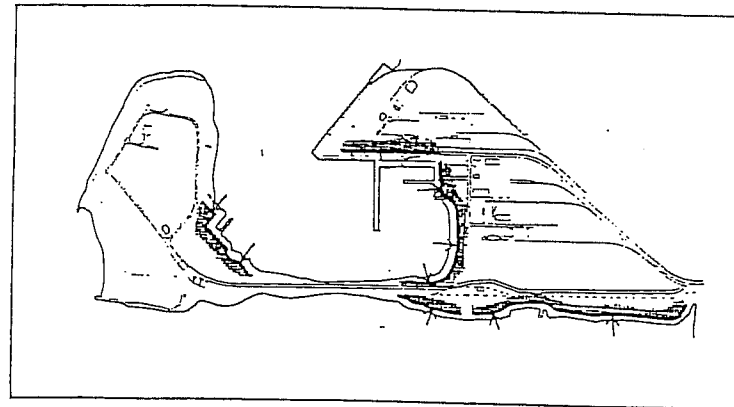
Connect conservation core to other open space components (beaches, causeway, canal).



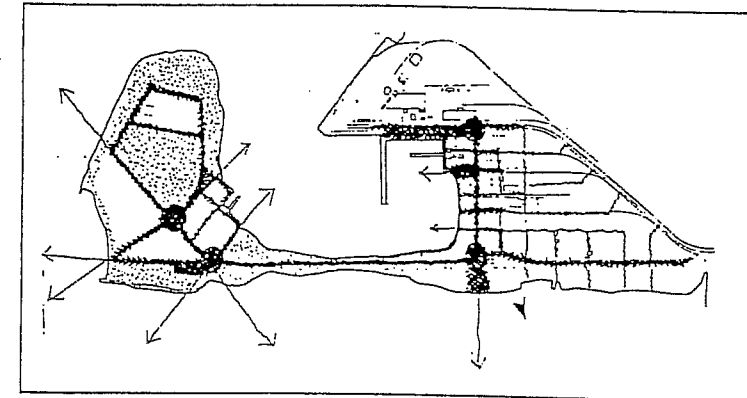
Keep the water's edge public around the entire perimeter of the site.



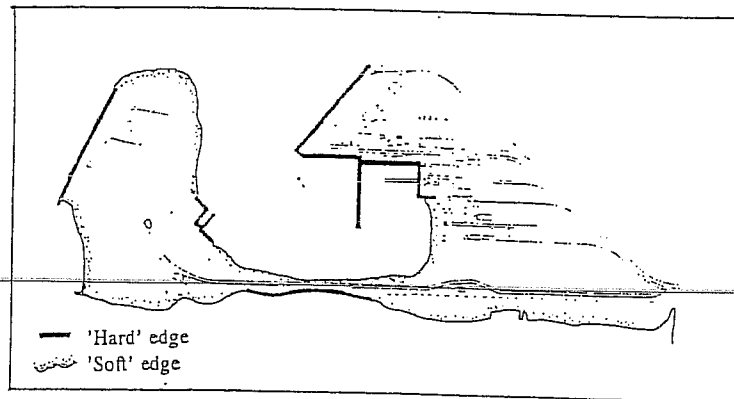
Retain and enhance the visual experiences of the site and its surrounds.



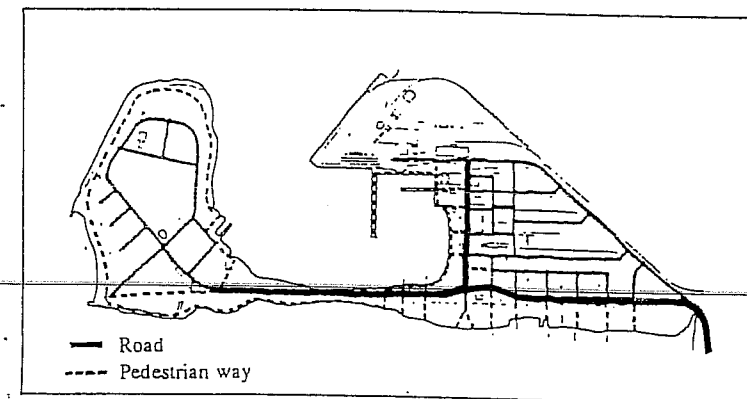
Keep buildings and support infrastructure off the water's edge.



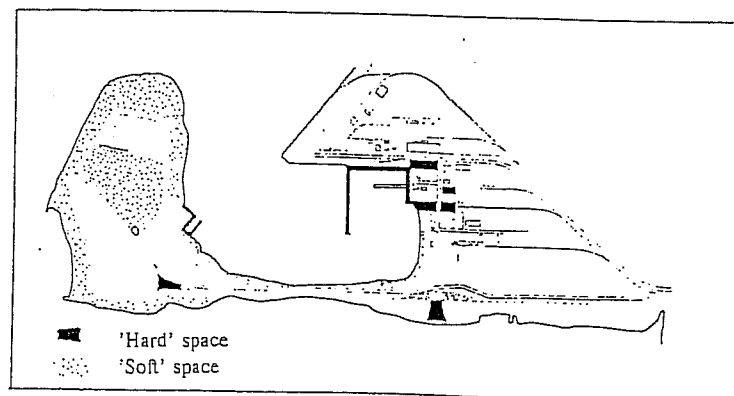
Provide a cohesive/integrated open space system connecting "on site" and "off site" experiences.



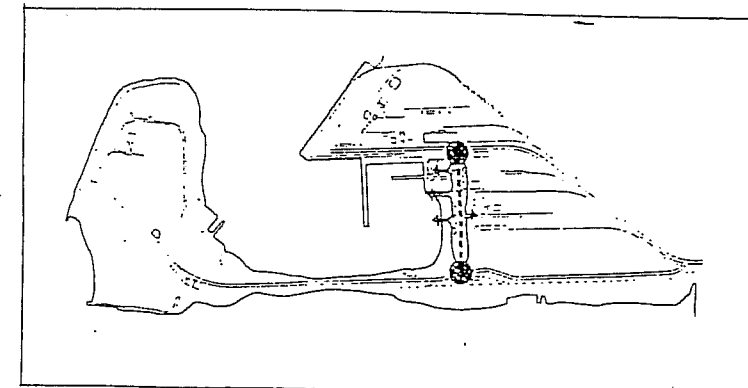
Provide 'hard' and 'soft' water's edges.



Establish a coherent vehicular and pedestrian movement hierarchy and Provide a permeable and fine grained access system.



Provide 'hard' and 'soft' open public spaces.



Develop Pioneer Road as a multifunctional urban space with pedestrian priority/ 'village' character. Linking nodal intersection at Bridgetown and Navark Roads and connecting via pedestrian lanes and public squares through to the water's edge.

6.0 FRAMEWORK PLANS

6.1 Concept

The main concepts are based on earlier ideas expressed in the Position Statement (1.1), the Analysis (2.1 - 2.3) and on Principles established in the preceding section. Emerging from these are 3 basic ideas which form the basis of the physical framework.

6.1.1 The "Island", "Mainland" and "Bridge"

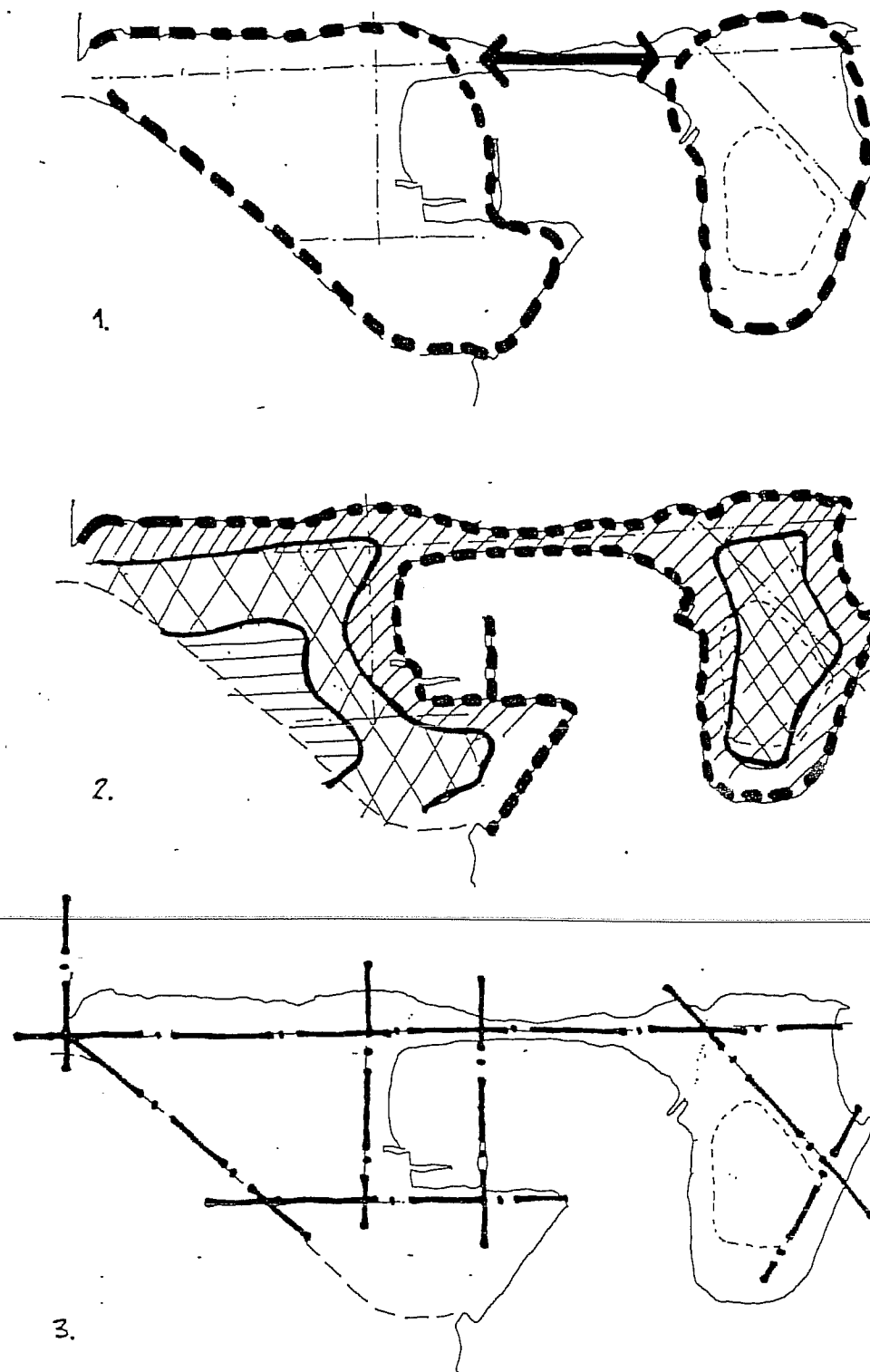
Naval island and the Small Craft Harbour are two distinct entities which represent a different set of opportunities and constraints. Capitalising on their inherent qualities, it is envisaged that Naval island is retained as a relatively unbuilt, natural, "green" island. The small craft harbour, in contrast, is intensely developed, particularly along its edges. The causeway between the two is developed as a bridge between the two, reinforcing the idea of "mainland" and "island".

6.1.2 Activity Layering

Activities are layered in terms of a "privacy gradient" ie., from most public to least public. Activities which are dependant on, and attract public activity are encouraged nearest the water edges and activity streets whilst the least public uses are located furthest from the water edge.

6.1.3 Geometry

The geometric rationale is drawn from inherent layout of roads and service infrastructure, and imposed axes set up to capture vistas, and connect key activities. Also important is the idea of a gradation of fine grain to coarse grain patterns from the water's edge inwards.



6.3 Circulation

- * The circulation system will significantly contribute to the impact and character of the Small Craft Harbour and Naval Island. It is therefore imperative that the Traffic Engineers liaise with the Urban Designers in regard to the design thereof.
- * This sub-section should be read in conjunction with sub-sections 7.1 to 7.3.

6.3.1 Pedestrian System

- A Pedestrian System along the entire water's edge linked to conservation and activity nodes and activity spines ensures public accessibility to all major amenities.

6.3.2 Major Collector

- Newark Road provides major access to the site and to wharf side activities of main port. It is intended that this roadway be separated from the proposed new access and bridge link to Bridgetown Road in order to avoid conflict between Port-related and Resort-related traffic. The intersection between Bridgetown and Newark road will need to be altered to achieve this. (See alternative intersections).

6.3.3 District Collector

- Retain existing road infrastructure as a district collector providing access to Small Craft Harbour and Naval Island along the existing Bridgetown Road and Pioneer Street.
- The existing road on Naval Island to operate as access road to development sites and to public amenity nodes.
- The proposed Bridge link to Bridgetown Road will effectively form the entrance "gateway" to the project area. The design thereof will need to be carefully considered in terms of its impact on the character of the total development.
- Parking is accommodated along the entire roadside.
- The character of the road section differs between the Island and "Mainland" (See Part 7.0)

- Establish new "waterfront" roads along alignment of Pioneer Road and as an extension of existing Newark Road activity spine. These roads to become multi-functional urban spaces with pedestrian orientation/"village" character.
- Important intersections to be developed as landmarks within the movement system.

6.3.4 Access Roads (Service/Light Industrial)

- Service zone accessed separately off Newark Road, but provision made for accessing waterfront and northern slipway via internal service roads.

6.3.5 Access Roads (Residential/Resort)

- Provide access to sub-divided portions.
- Roadways are narrow (See sub-section 7.1) and designed to slow vehicular movement, allow for pedestrian movement and contribute to a village character.
- There should be no separation between vehicular and pedestrian movement. ie no kerbs, pavements etc. Road surfacing should be textured or cobbled.

6.3.6 Access Way

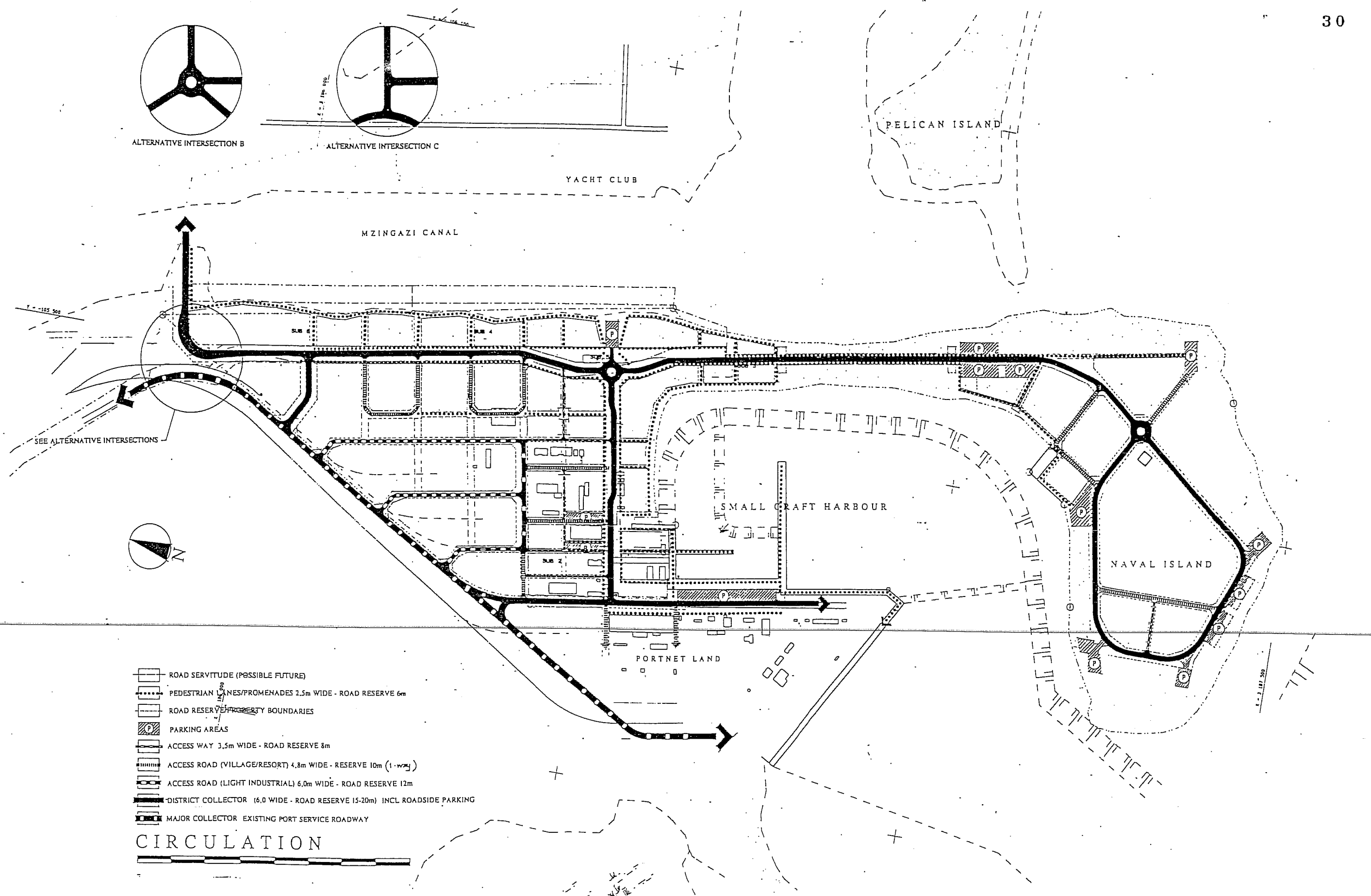
- Access way provides predominantly for pedestrian access but is made sufficiently wide to accommodate service and emergency access when required.

6.3.7 Pedestrian Way

- Provides for pedestrian access only.
- Surfacing could be hard or soft.

6.3.8 Parking

- Public Parking distributed at public amenity nodes off water's edge.
- All streets in the Small Craft Harbour area to accommodate parking. Off street private parking to be provided by office, residential, service industrial and administration developments.
- Pedestrian system along entire water's edge to be linked to conservation node and activity spines.



6.3. Land Use

6.3.1 Main Ideas: Naval Island

- The essential, natural character of Naval Island is to be retained by linking the conservation core as the main feature to other open space components such as the beaches, causeway and the canal.
- Development is to be limited to sites on the south eastern and western precincts.
- Resort accommodation for visitors/tourists is to be permitted only on Naval Island with limited commercial use adjacent to public nodes.
- The island should remain highly accessible to public with a range of recreation opportunities.
- Major commercial development is to be limited to the mandate area adjacent to the slipway, related to fishing activity.

6.3.2 Main Ideas: Small Craft Harbour

- Small Craft Harbour is to contain a mix of land uses structured to orientate public activity to the water edge.
- Retail, office and tourist accommodation permitted behind public edge.
- Housing and offices to wrap around inner core of service industrial uses.
- Permanent rented housing located along eastern edge of the Small Craft Harbour (west side of Bridgetown Road) fronting onto/overlooking Mzingazi Canal.
- Ground floor use along Pioneer Street to be restricted to retail and entertainment with offices above (northern side) and residential above (Harbour side).

6.3.3 Floor Areas

Development site areas indicated in Table 1.0 should be read in conjunction with the Land Use Map (6.3). This represents approximately 43% of the total site area (Total Site Area 403 920 m²).

Developable floor areas in Table 2.0 have been derived from the urban form directives (i.e. controls aimed at retaining inherent qualities of the site) and are indicative only of the building bulk which could be achieved. These yields would need to be tested against market demand and viability studies.

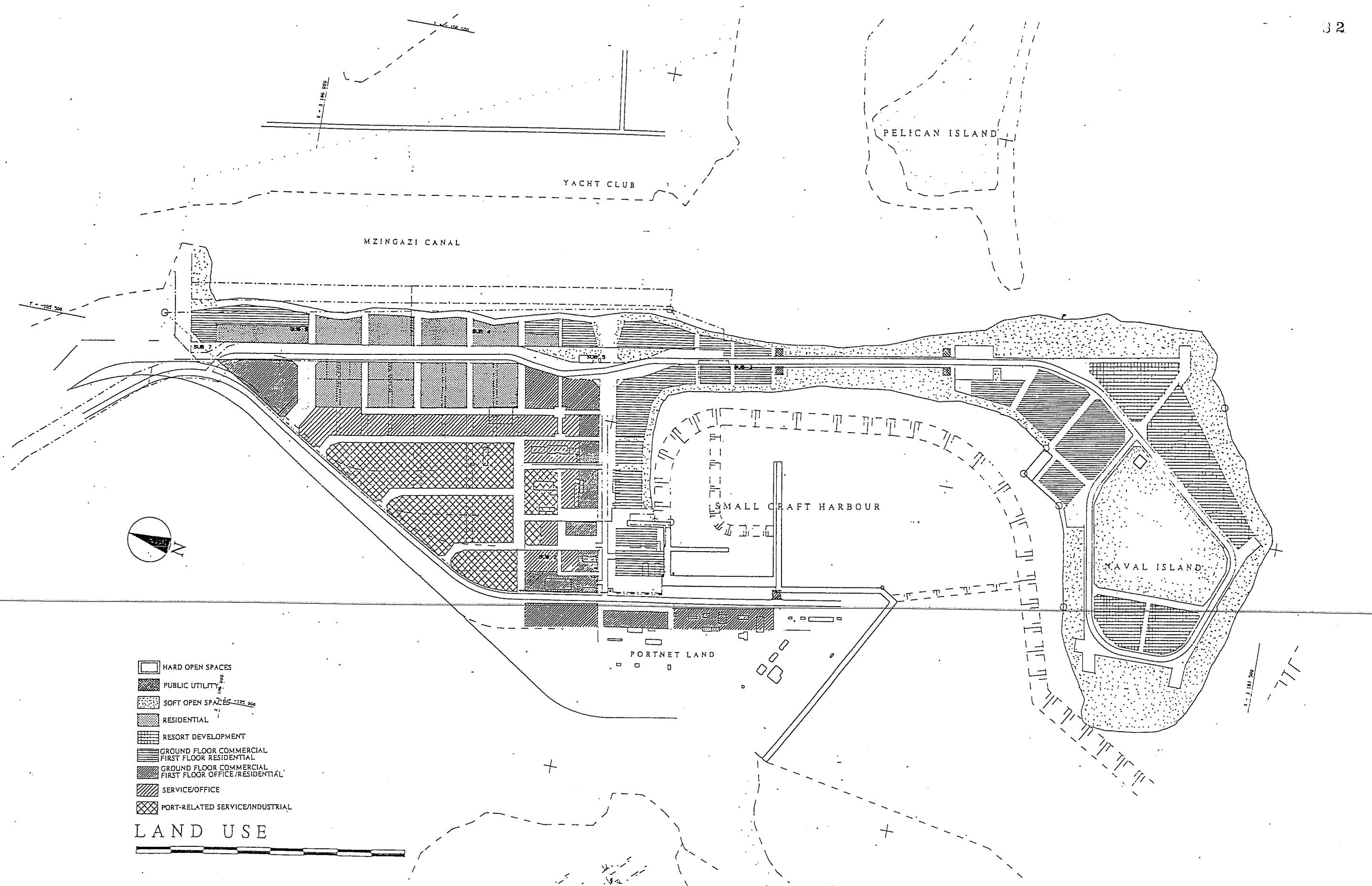
TABLE 1.0

DEVELOPMENT SITE AREAS	
Land Use	Total (m ²)
Residential	32 180
Resort	19 710
Commercial	47 074
Office	18 443
Service/Office	18 724
Service/Industrial	39 375
TOTAL (Development Areas)	175 506

(Total Propnet Site Area : 403 920 m²)

TABLE 2.0

DEVELOPABLE FLOOR AREA			
Land Use	Naval Island 50% coverage	Small craft harbour 80% coverage	Total
Residential	8 298	91 287	99 585
Resort	25 687	-	25 687
Commercial	8 298	37 947	46 245
Office	-	18 640	18 640
Service/Office	48 537	-	48 537
Service/Industrial	31 500	-	31 500
TOTAL	122 320	147 874	270 194



6.4 Urban Form Directives

The map overleaf indicates a series of broad level directives that will ensure a carefully composed overall urban form. The level of directive will need to be more detailed and more explicit when reviewed in terms of site specific development.

6.4.1 Edge Response Directives

- "Build to line" indicates that building frontages are to be built on the boundary line in order to achieve an urban wall and specific shape, proportion and quality of urban open space.
- Colonnaded edges are required to ensure continuity of shopping experience along the activity streets.
- Waterfront edges imply specific responses to waterfront activities and are meant to ensure continuity of waterfront experience.

6.4.2 Height Directives

- Minimum heights are imposed to ensure that in certain precincts, particularly around public spaces, building frontages form an urban wall in proportion to the open space they enclose.
- Maximum Height limits ensure that the scale of development remains in keeping with the character of surrounding development and with the scale of the harbour and island.
- Overall human scale of the harbour and Island to be retained and enhanced. Building height maximum of 3 storeys on Small Craft Harbour to permit views from 'back' sites and to establish edge to northern waterfront.
- Service and light industrial buildings are restricted to one storey to ensure no visual intrusion.
- A two storey limit on water's edge ensures that the intimate scale of the Small Craft Harbour is maintained.

6.4.3 View lines and Vistas

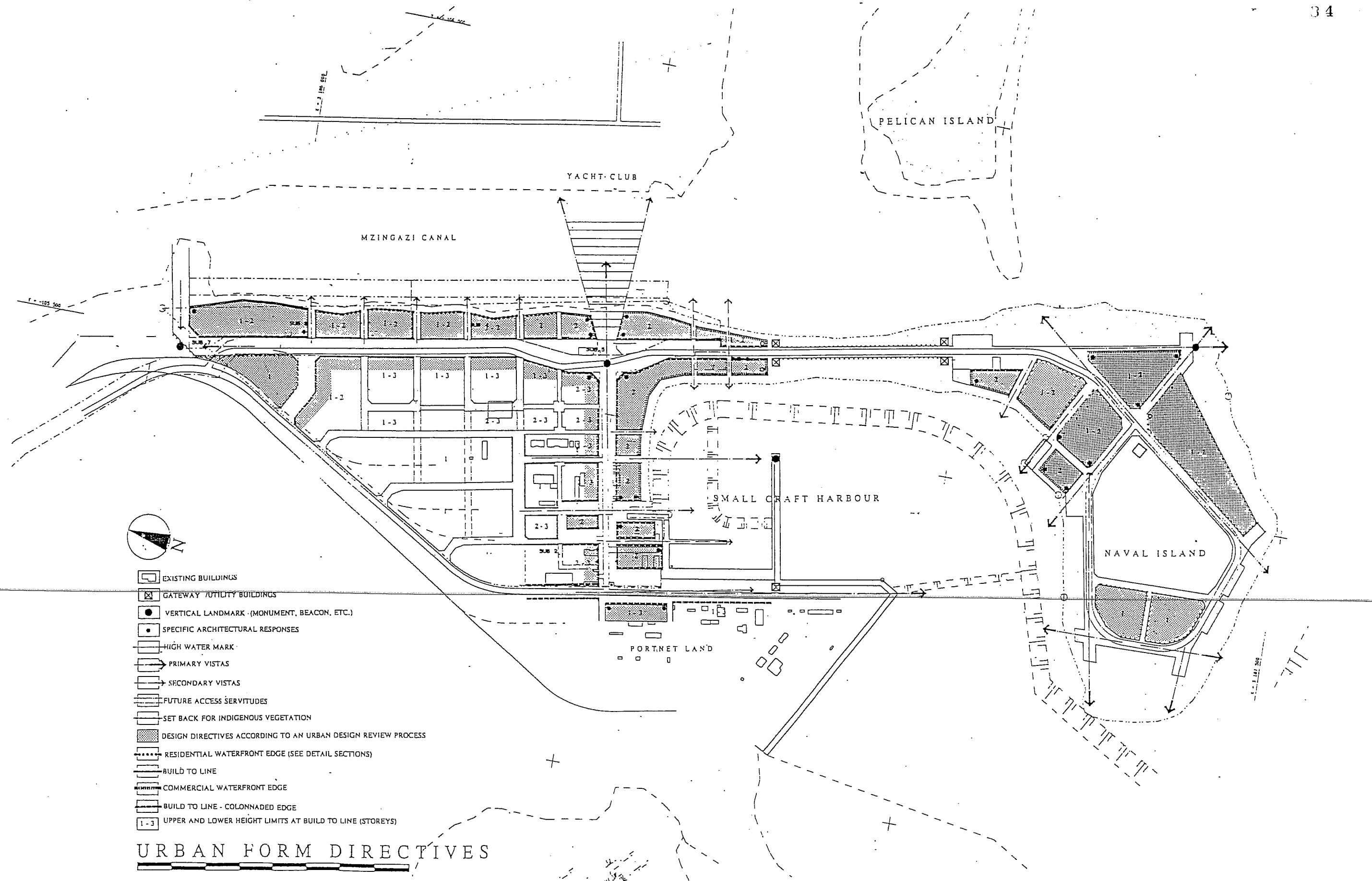
- Vistas indicate important visual connections which assist in orientation and enhance the imageability of the Harbour and Island.

6.4.4 Landmarks and Specific Architectural Responses

- In order to improve legibility and the quality of urban spaces certain Architectural responses are required. These occur along key visual axes, at the intersection of major movement routes and at the corners of important open space.

6.4.5 Land Sub-division and Building Scale

- No buildings should be allowed to dominate the landscape. Architecture and massing to be in keeping with character and sky lines of the site and its surrounds. The floor areas proposed are intended to reinforce the latter. (See 6.3)
- Small subdivisions located along public edges to encourage fine grain building edge. This promotes diversity and richness of spatial and urban experience and enables smaller developers to access development potential. It also enables land release programme which can control pace and form of development and enhance value of adjacent sites which will assist in maintaining the scale and authenticity of the Small Craft Harbour.
- Bigger subdivisions for larger developers made available in strategic locations. Smaller subdivisions can be consolidated but conditional to agreement on building scale and form.



6.5 Urban Space and Landscape

It is essential to establish an authentic character for the site and avoid implementing a theme which has no meaning or connection to Richards Bay.

6.5.1 Green (Soft) and Hard Open Space

- 'Soft' and 'hard' spaces integrated into cohesive "on site" public open space system which links (visually) into "off site" experiences.
- Emphasis on creating a variety of spatial experiences. Urban, intense and market character established around the Small Craft Harbour with activity streets as foci. Landscaping and architectural character to reflect "Richards Bay" vernacular.
- Soft natural and open character of Island to be retained around low intensity holiday accommodation. Public amenity nodes to provide foci and access points into open space system and to water related activities.

6.5.2 Multi-Use Public Space

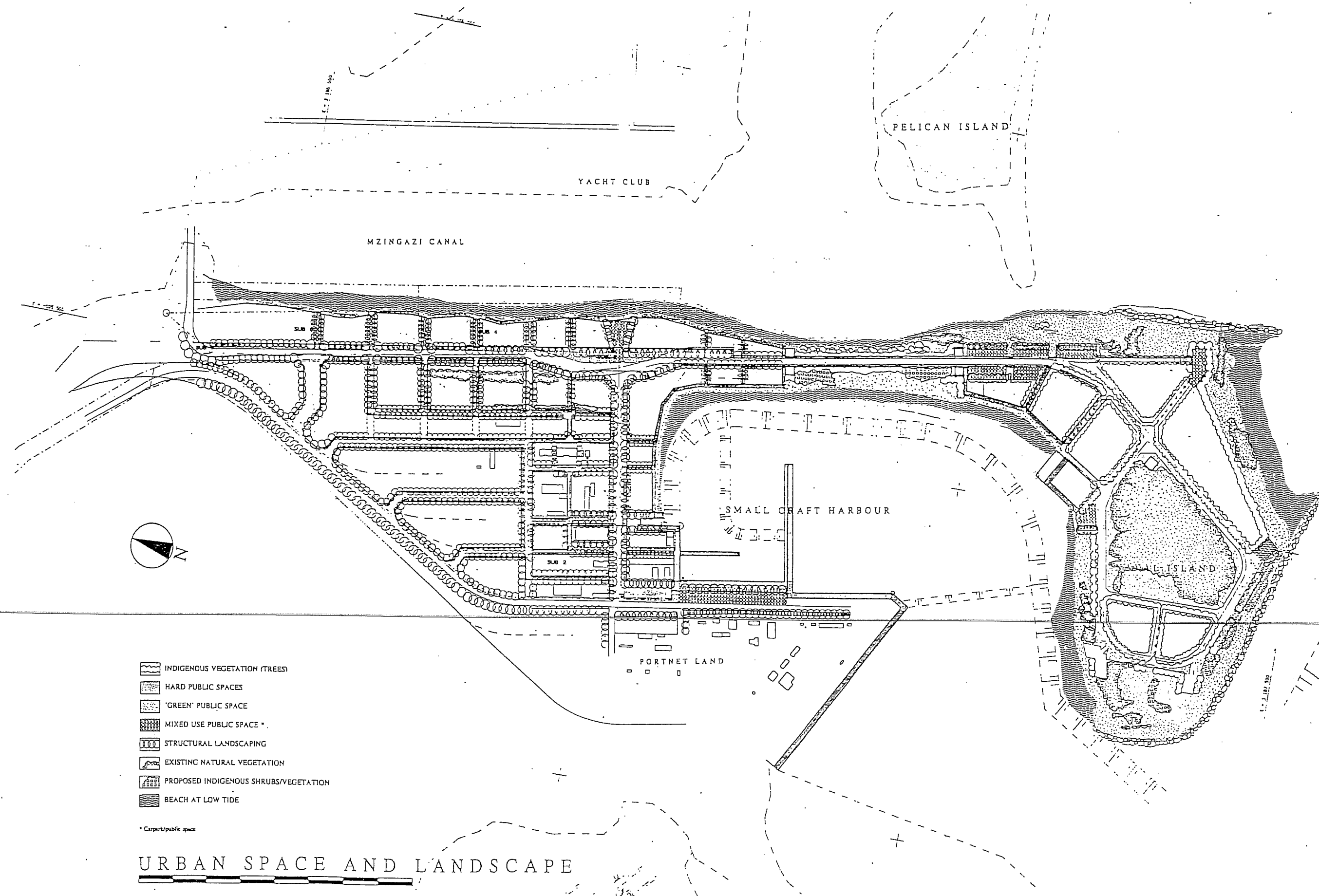
- Streets and Parking areas to be designed and surfaced in such a way as to permit a range of uses.
- Water surfaces should also be managed in such a way as to permit a variety of uses.

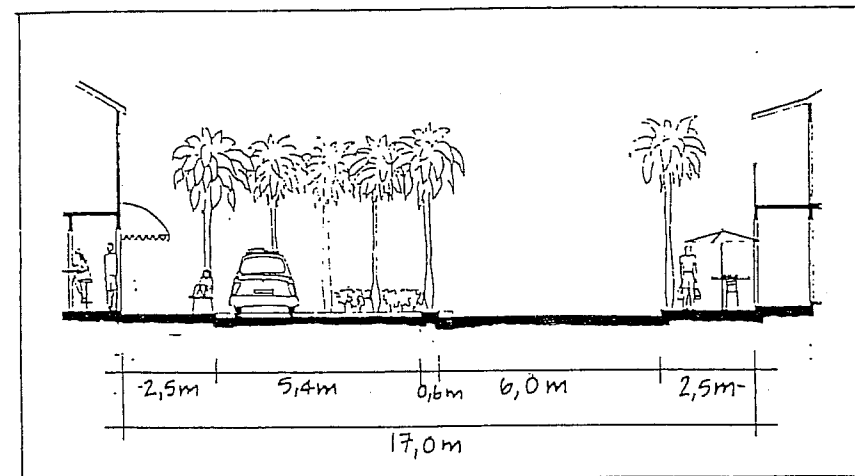
6.5.3 Structural and Natural Landscaping

- Vegetation used for landscaping to reflect varying spatial experiences, but also to be ecologically appropriate so as to be sustainable and self-maintaining.
- Landscape forms an important urban form structuring component and should be implemented early in the development programme. It is also a relatively inexpensive method of "laying the initial foundations" as well as instilling confidence that development is underway.
- The indigenous landscape must be preserved and regrowth should be encouraged along water edges and roadways

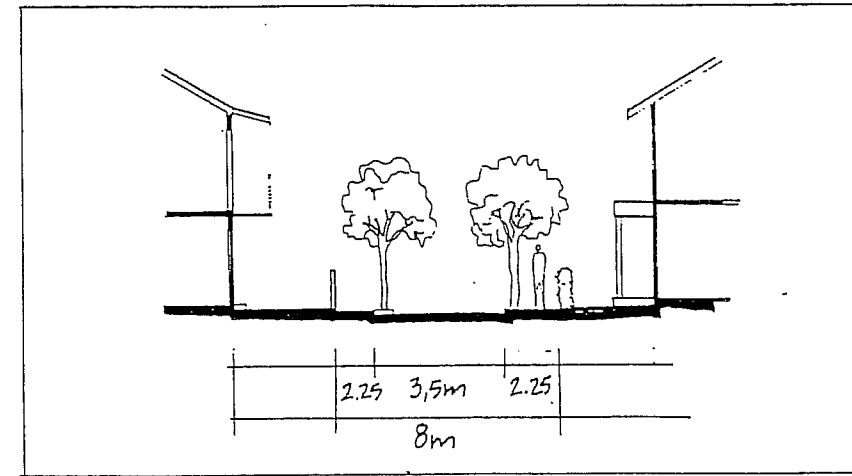
6.5.4 "The Bridge"

- The Causeway between Small Craft Harbour and Naval Island should be developed to form a "bridge" between the two with gateway elements in the form of appropriate landscaping and/or light structures connected to overall visual experience of the site.

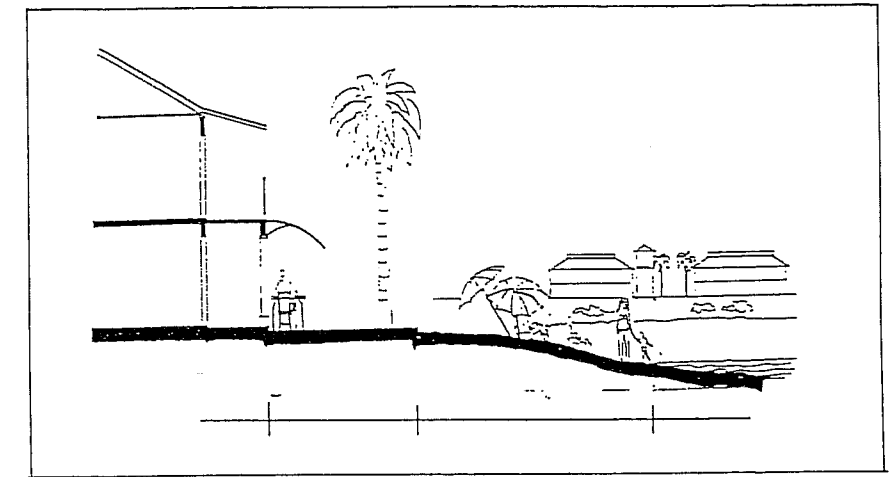




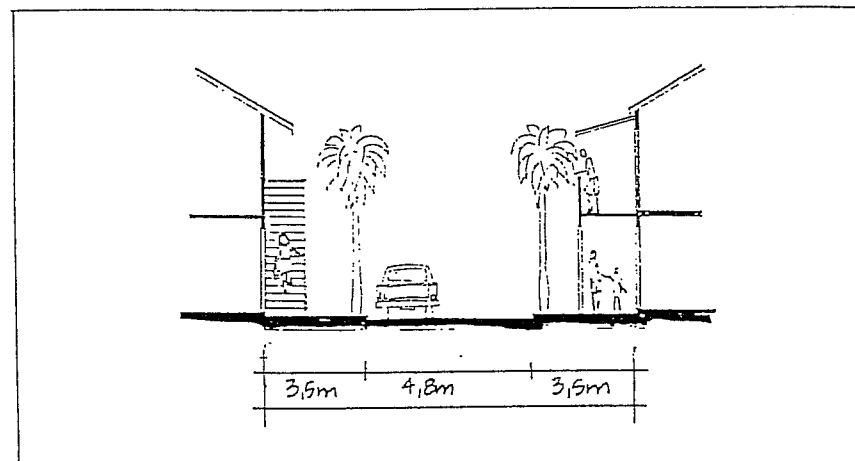
DISTRICT COLLECTOR
6,0m wide - road reserve 15-20m



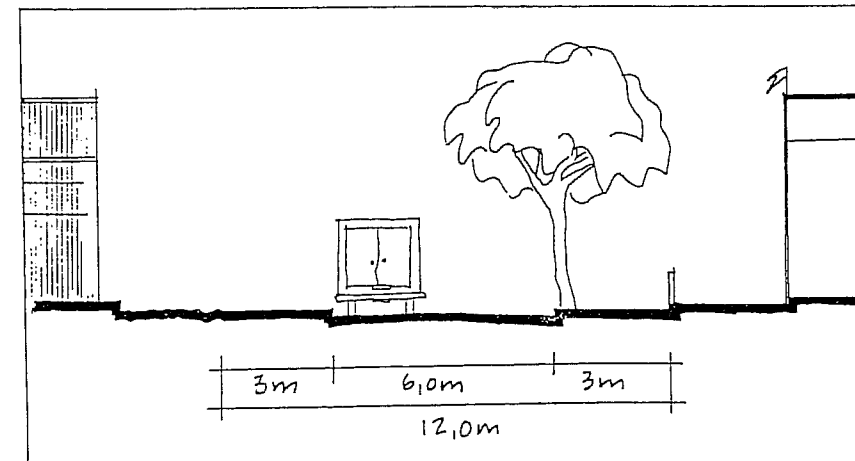
ACCESS WAY
3,5m wide - road reserve 8m



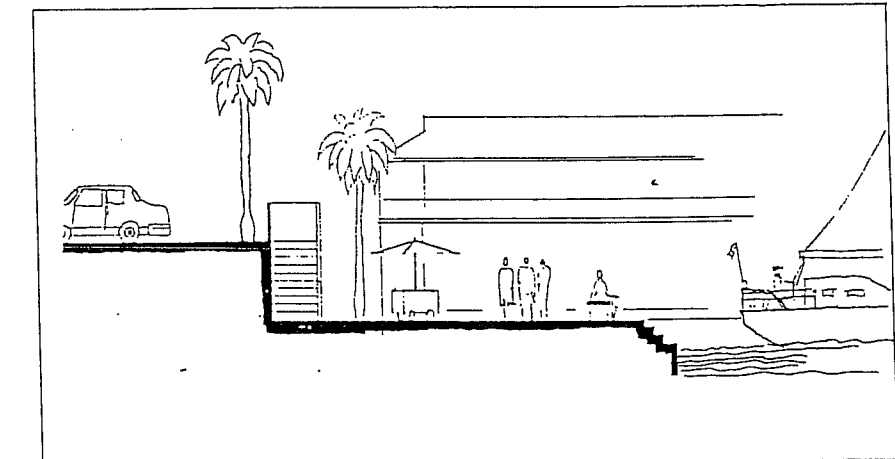
RETAIL/RESIDENTIAL WATER'S EDGE



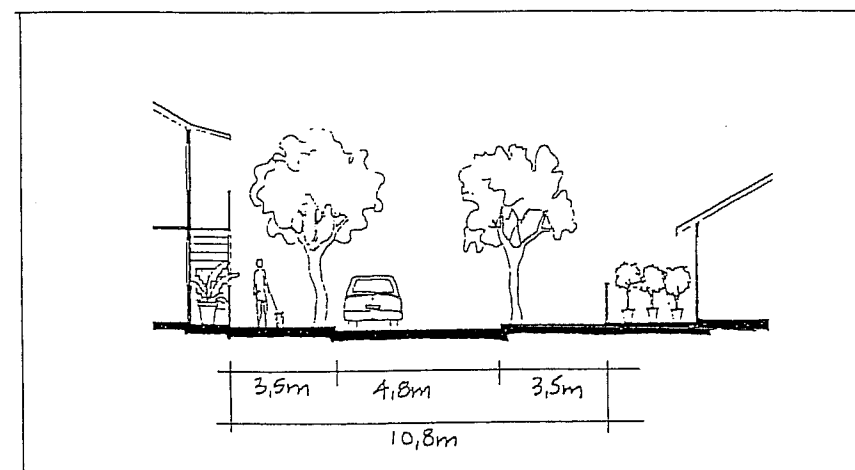
ACCESS ROAD (VILLAGE/RESORT)
4,8m wide - reserve 16,0m



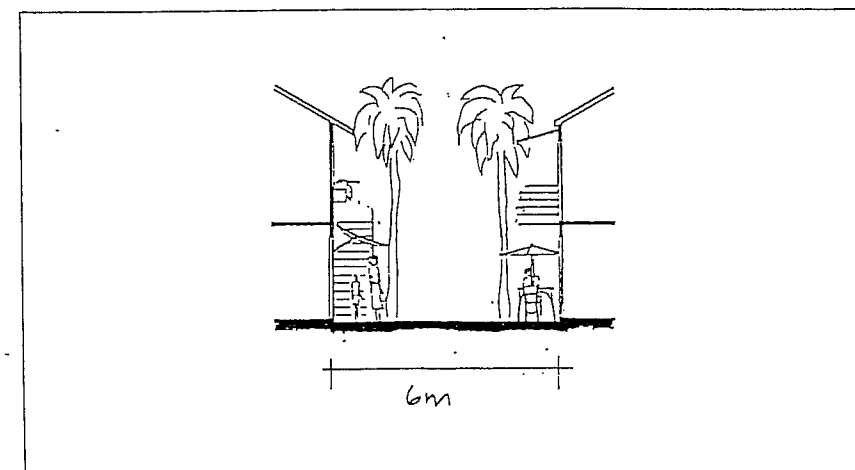
ACCESS ROAD (LIGHT INDUSTRIAL)
6,0m wide - road reserve 12m



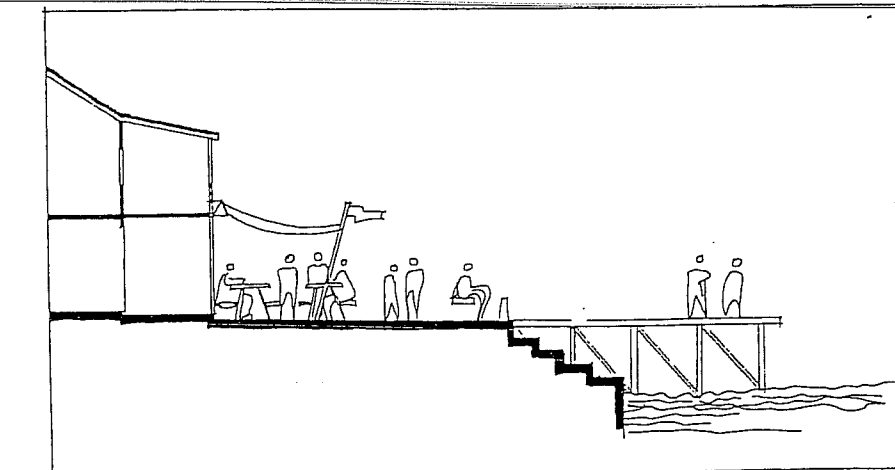
TUG WHARF



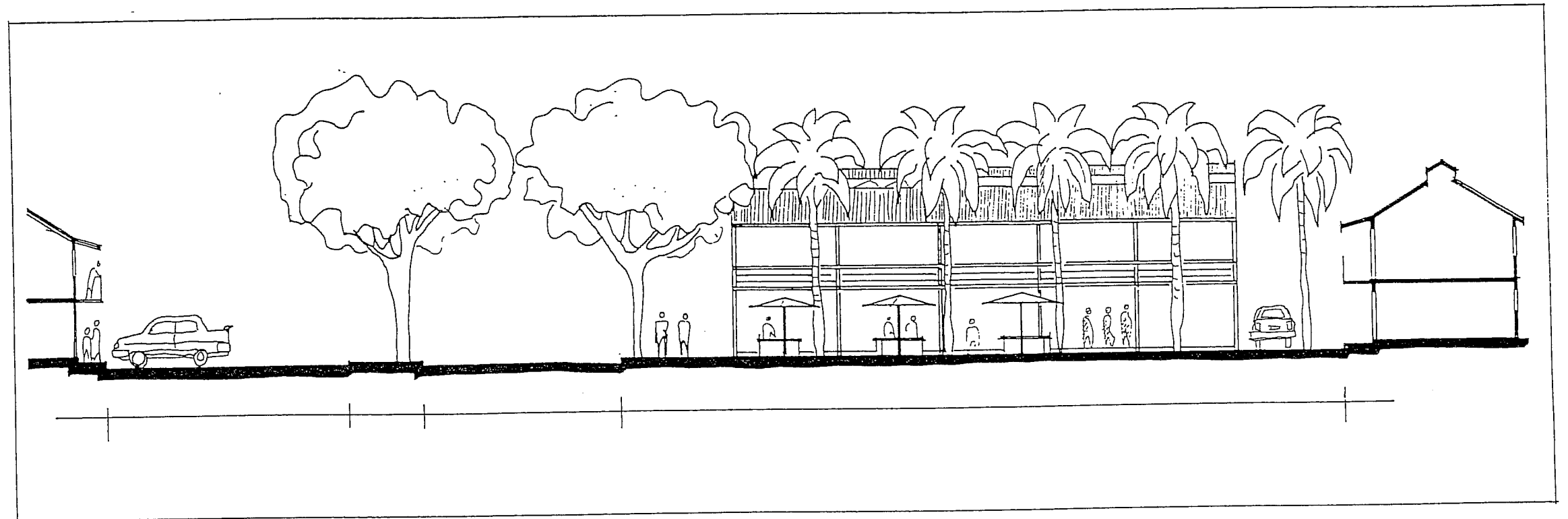
ACCESS ROAD (LOWER DENSITY RESORT)
4,8m wide - reserve 16,0m with setback building lines



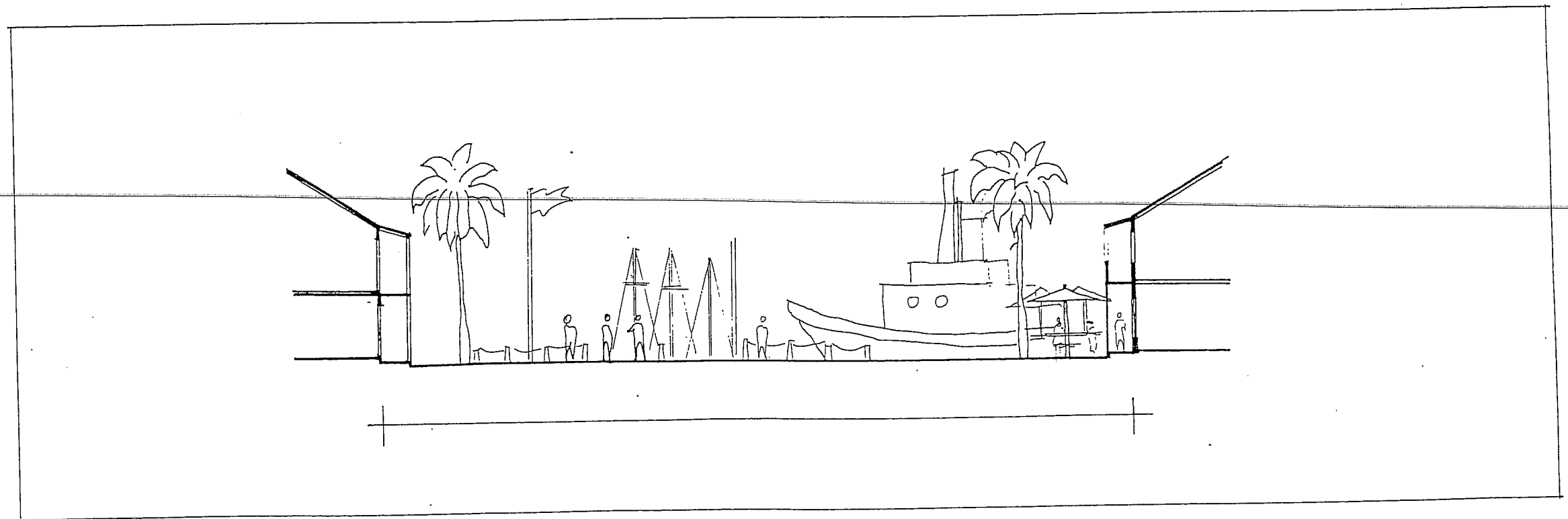
PEDESTRIAN LANE
2,5m wide - reserve 6m



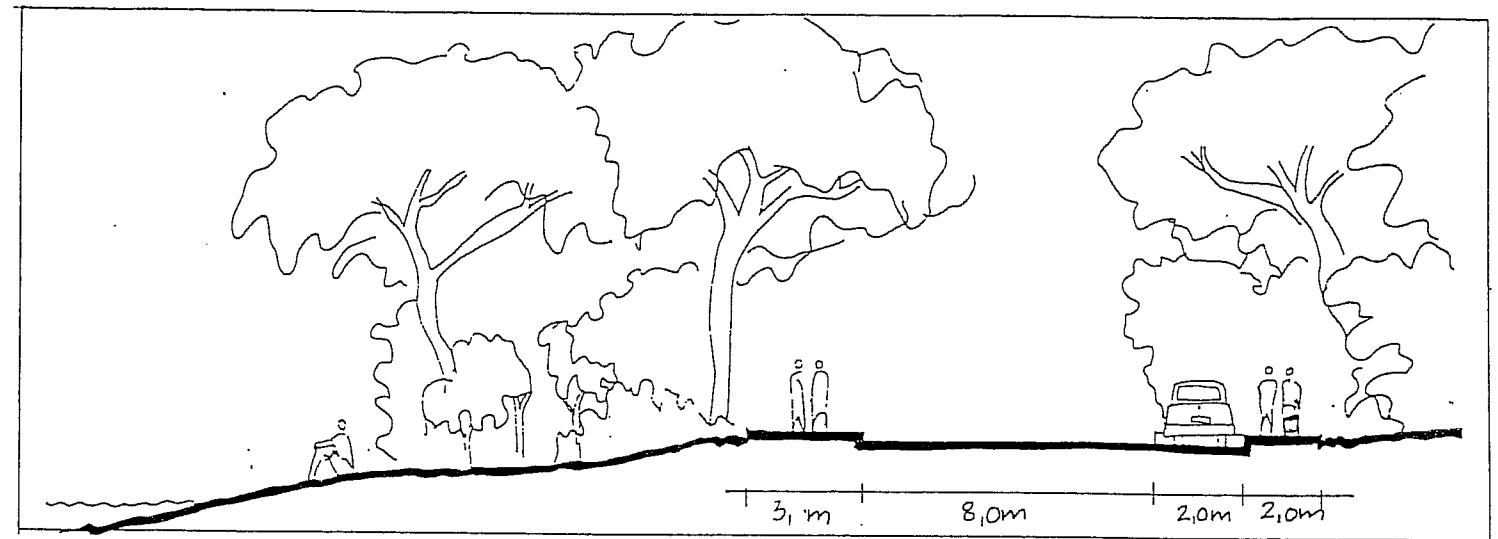
PUB/ENTERTAINMENT/RESORT EDGE



MARKET SQUARE

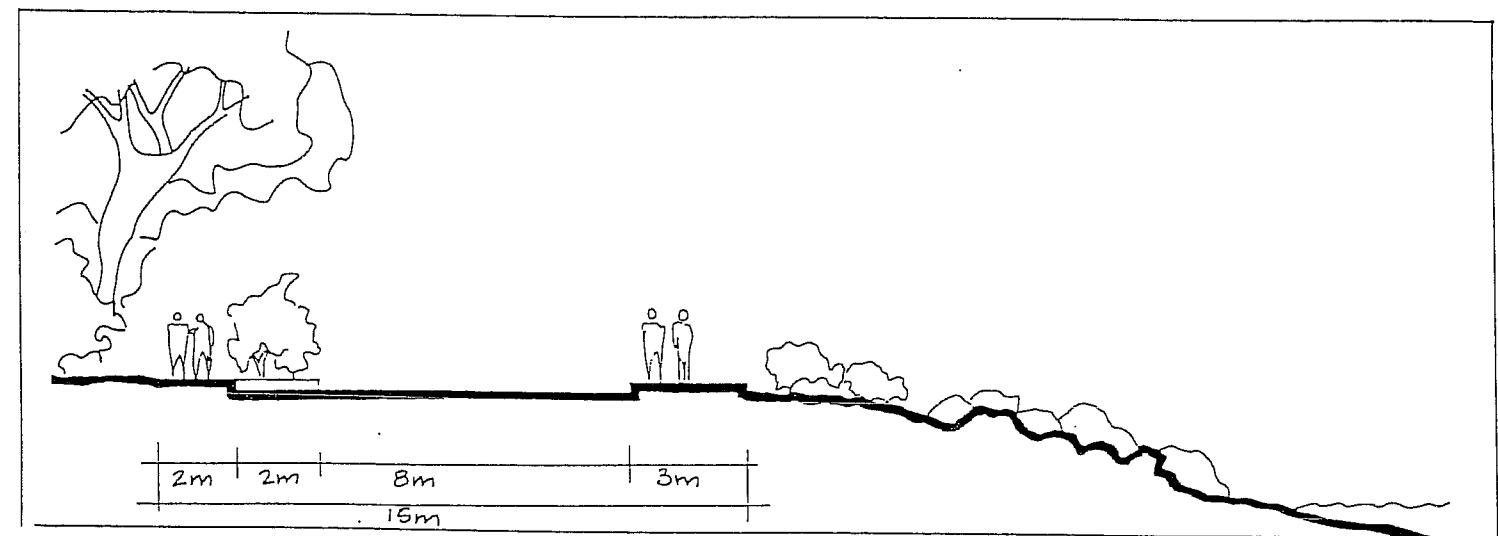


WATERFRONT SQUARE



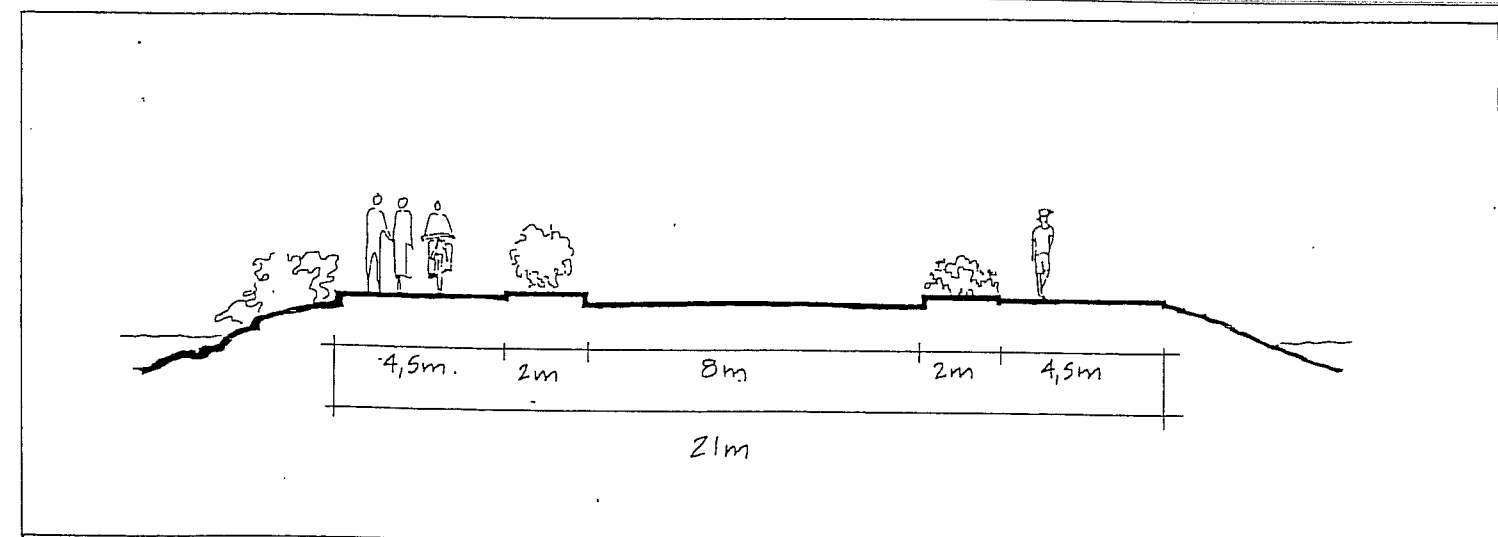
'SOFT' BEACHED EDGE

DISTRICT COLLECTOR (EXISTING)
8,0m wide - road reserve 15-20m



DISTRICT COLLECTOR (EXISTING)
8,0m wide - road reserve 15-20m

HARD ROCKY EDGE



CAUSEWAY

DISTRICT COLLECTOR (EXISTING)
8,0m wide - road reserve 15-20m

8.0 Implementation and Management

Due to the lack of a current market survey and any certainty regarding future economic growth of the area the scale and rate of development cannot be accurately gauged. In addition, too many variables exist which could alter the sequence or priorities of implementation.

The intention therefore has been:

- (a) to set in place a minimal structure to guide physical development.
- (b) to establish a set of principles to guide the implementation and management of development.

8.1 Minimal Structure

- Defines those areas which are to remain public and those inherent qualities which will be retained.
- Instills confidence in the direction that development will take.
- Is robust enough to accommodate changes occurring over time or within the dynamic context of urban development.

8.2 Principles Guiding Development

8.2.1 Activities and the Market

- Development must be as inclusionary as possible and offering the wider spectrum of society an opportunity to participate and benefit.
- Balanced development involves a rich mix of activities.
- Office, retail, resort and entertainment will form the economic backbone of development and will be required to sustain the development process.
- Uses which discourage people activity should be discouraged from locating near to the water's edge.

8.2.2 Participation

- It is essential that the development process includes all stakeholders in the proposed development. This may need to include Propnet, Portnet, Richards Bay, City Council, Potential Developers and representatives from local communities and civic associations.

8.2.3 Development Roles

- The roles of stakeholders need to be defined, particularly that of the council, whose responsibility it will be to ensure that Richards Bay in its broader context, benefits both socially and economically.

8.2.4 Economic vs Financial Feasibility

- Public infrastructure and amenities which do not generate direct financial return must be understood in terms of their ongoing indirect returns.

8.2.5 Land Release

- On no account should land be released in major portions.
- Land release should be selective so as to achieve specific objectives at specific places as informed by the urban design framework.
- By holding land at critical points, land value will be sufficiently enhanced to create a market which will assist in directing the development process.

8.2.6 Catalysis

- Development should be catalytic: Each development should be strategic. It should also be assessed, not just in terms of a single end product but how it impels and guides subsequent development.

8.2.7 Site Subdivision

- Smaller subdivisions encourage fine grain building edges. This promotes diversity and richness of spatial and urban experience and Sites should not be sub-divided in large portions. Small Subdivisions enable smaller developers (and therefore a greater number of developers) to access development potential. It also enables land release programme which can control pace and form of development and enhance value of adjacent sites which will assist in maintaining the scale and authenticity of the Small Craft Harbour.

8.3 First Actions

- Initial strategies should attempt to reinforce the waterfront edge utilising existing activities as the catalysts for 'growing' the edge in an easterly and westerly direction. The intention should be to consolidate development and provide intense nodes at different locations on the site.
- Subsequent phases should further consolidate the waters edge, but by allowing access to back sites so that value is maintained. Initial development could begin to cross subsidize public amenities on Naval Island to attract more public and improve thresholds for other facilities and services.

KEY LAND USE DATA:

Addendum to Richards Bay Small Craft Harbour and Naval Island
Urban Design Framework : Phase Two Report

A. SUMMARY OF PROPOSED LAND USE AREAS :
TOTAL PROJECT SITE

B. SUMMARY OF PROPOSED LAND USE AREAS :
SMALL CRAFT HARBOUR ONLY

C. SUMMARY OF PROPOSED LAND USE AREAS :
NAVAL ISLAND ONLY

D. DETAILED SUMMARY OF DEVELOPABLE LAND

E. DEVELOPMENT SITES KEY

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A. SUMMARY OF PROPOSED LAND USE AREAS:
TOTAL PROJECT SITE : SMALL CRAFT HARBOUR AND
NAVAL ISLAND

Item	Area (m ²)	% Total
TOTAL PROJECT AREA	418 029 *	
Development Site Areas	187 757	45 %
Soft Open Spaces	111 693	26,7 %
Hard Open Spaces (including pedestrian ways)	27 396	6,6 %
Roadways (road services, including sidewalks)	77 659	18,6 %
Dedicated Parking Areas	12 948	3 %
Public Utility	576	0,1 %

* Please note that total measured area differs from initial measurements in Phase 1 Report.

B. SUMMARY OF PROPOSED LAND USE AREAS:
SMALL CRAFT HARBOUR AREAS ONLY

Item	Area (m ²)	% Total
TOTAL SMALL CRAFT HARBOUR AREA	225 841	
Development Site Areas	140 660	62 %
Soft Open Spaces (green only)	7 767	3,5 %
Hard Open Spaces (including pedestrian ways)	17 148	7,5 %
Roadways (including sidewalks)	56 022	25 %
Dedicated Parking Areas	4 244	2 %
Public Utility	0	0 %

C. SUMMARY OF PROPOSED LAND USE AREAS:
NAVAL ISLAND ONLY

Item	Area (m ²)	% Total
TOTAL NAVAL ISLAND SITE AREA	192 188	
Development Site Areas	47 097	24,5 %
Soft Open Spaces (green only)	103 926	54,1 %
Hard Open Spaces (including pedestrian ways)	10 248	5,3 %
Roadways (including sidewalks)	21 637	11,3 %
Dedicated Parking Areas	8704	4,5 %
Public Utility	576	0,3 %

4,

D. DEVELOPABLE SITES

LAND USE CATEGORIES:

- CATEGORY 1 : RESIDENTIAL
- CATEGORY 2 : MIXED USE 'A' (GROUND FLOOR : RETAIL/ ENTERTAINMENT) (FIRST FLOOR & ABOVE : RESIDENTIAL)
- CATEGORY 3 : MIXED USE 'B' (GROUND FLOOR : RETAIL/ ENTERTAINMENT) (FIRST FLOOR & ABOVE : OFFICE)
- CATEGORY 4 : RESORT (NO PERMANENT RESIDENCE)
- CATEGORY 5 : SERVICE / OFFICE
- CATEGORY 6 : SERVICE / LIGHT INDUSTRIAL

CATEGORY 1

RESIDENTIAL - SMALL CRAFT HARBOUR						
SITE NUMBERS	Site Area (m²)	Coverage	Gross Floor Area (m²)			TOTALS
			Ground	First	Second	
			Res.	Res.	Res.	
Site 1	3500	80 %	2800	2800	-	5600
Site 2	2448	80 %	1958.4	1958.4	-	3916.8
Site 3	2856	80 %	2284.8	2284.8	-	4569.6
Site 4	2584	80 %	2067.2	2067.2	-	4134.4
Site 5	2040	80 %	1632	1632	-	3264
Site 6	800	80 %	640	640	-	1280
Site 7	4488	80 %	3590.4	3590.4	3590.4	10771.2
Site 8	4488	80 %	3590.4	3590.4	3590.4	10771.2
Site 9	4488	80 %	3590.4	3590.4	3590.4	10771.2
Site 10	4488	80 %	3590.4	3590.4	3590.4	10771.2
TOTAL	32180		25744	25744	14361.6	65849.6

MIXED USE 'A' - SMALL CRAFT HARBOUR						
SITE NUMBERS	Site Area (m ²)	Coverage factor	Floor Areas (m ²)			TOTALS
			Ground	First	Second	
			(Retail)	(Resid.)	(Resid.)	
Site 11	2520	80%	2016	2016		4032
Site 12	1392	80%	1114	1114		2228
Site 13	2050	80%	1640	1640		3280
Site 14	1200	80%	960	960		1920
Site 15	7050	80%	5640	5640		11280
Site 16	1144	80%	915	915		1830
Site 17	1296	80%	1037	1037		2074
Site 18	800	80%	640	640		1280
Site 19	750	80%	600	600		1200
Site 20	3750	80%	3000	3000		6000
Site 21	2125	80%	1700	1700		3400
Site 22	900	80%	720	720		1440
Site 23	5500	80%	4400	4400		8800
Total Retail			24382			
Total Residential				24382		
TOTAL (S.C.H. only)	30477					48764

MIXED USE 'A' - NAVAL ISLAND						
SITE NUMBERS	Site Area (m ²)	Coverage factor	Floor Areas (m ²)			TOTALS
			Ground	First	Second	
			(Retail)	(Resid.)	(Resid.)	
Site 24	2250	50%	1125	1125		2250
Site 25	5687	50%	2844	2844		5688
Site 26	6500	50%	3250	3250		6500
Site 27	2160	50%	1080	1080		2160
Total Retail			8298.5			
Total Residential				8298.5		
TOTAL (N.I. only)	16597					16598

CATEGORY 3

MIXED USE 'B' - SMALL CRAFT HARBOUR

SITE NUMBERS	Site Area (m ²)	Coverage	Floor Area (m ²)			
			Ground	First	Second	TOTALS
			Retail	Office	Office	
Site 28	2500	80 %	2000	2000	2000	6000
Site 29	2375	80 %	1900	1900	1900	5700
Site 30	896	80 %	717	717	717	2151
Site 31	896	80 %	717	717	717	2151
Site 32	1450	80 %	1160	1160	1160	3480
Site 33	880	80 %	704	704	-	1408
Site 34	840	80 %	672	672	672	2016
Site 35	2677	80 %	2141	2141	2141	6423
Site 36	5890	80 %	4712			4712
Total Retail			14723			
Total Office				10011	9307	
TOTAL (S.C.H.)	18404					34041

CATEGORY 4

RESORT - NAVAL ISLAND

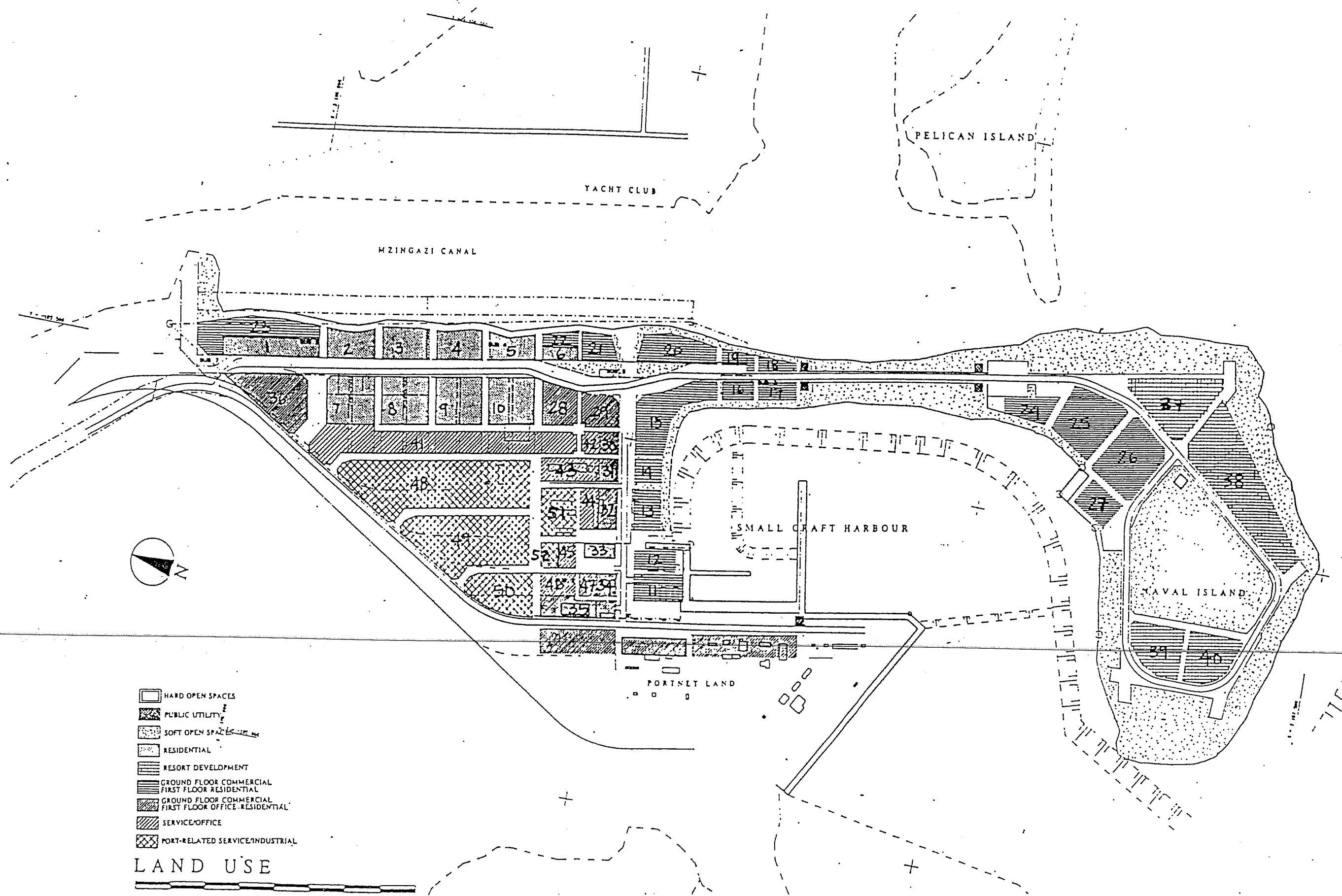
SITE NUMBERS	Site Area (m ²)	Coverage	Floor Area (m ²)			
			Ground	First	Second	TOTALS
			Resort	Resort		
Site 37	7125	50 %	3563	3563	-	7126
Site 38	13750	50 %	6875	6875	-	13750
Site 39	5250	50 %	2625	-	-	2625
Site 40	4374	50 %	2187.0	-	-	2187.0
TOTAL	30500		15 250	10 438		25688

CATEGORY 5

SERVICE/OFFICE - SMALL CRAFT HARBOUR							
SITE NUMBERS	Site Area (m ²)	Coverage factor	Site Areas (m ²)			TOTALS	
			Ground	First	Second		
			Serv/off.	Serv/off.	Serv/off.		
Site 41	12135	80 %	9708	9708	9708	29124	
Site 42	890	80 %	712	712	712	2136	
Site 43	2624	80 %	2099	2099	2099	6297	
Site 44	1450	80 %	1160	1160	1160	3480	
Site 45	875	80 %	700	700	700	2100	
Site 46	1500	80 %	1200	1200	1200	3600	
Site 47	750	80 %	600	600	600	1800	
TOTAL	20224	80 %	16179	16179	16179	48537	

CATEGORY 6

SERVICE/LIGHT INDUSTRIAL - SMALL CRAFT HARBOUR						
SITE NUMBERS	Site Area (m²)	Coverage	Gross Floor Area (m²)			TOTALS
			Ground	First	Second	
			Service/ Light ind.	Service/ Light ind.	Service/ Light ind.	
Site 48	18000	80%	14400			14400
Site 49	12250	80%	9800			9800
Site 50	5000	80%	4000			4000
Site 51	3250	80%	2600			2600
Site 52	875	80%	700			700
TOTAL	39375					31500



E. DEVELOPMENT SITES KEY