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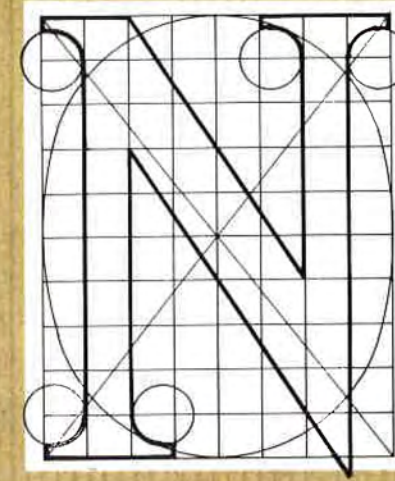
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**d'URBAN**  
C H A N G E S  
**FORUM**

# d'URBAN CHANGES FORUM

The d'Urban Changes Forum is an autonomous group of individuals who share a common concern that existing urban and natural environments are in need of urgent reconsideration if the needs of a post-apartheid society are to be addressed.

The aim of the Forum is to conceive and assist in the birth of a comprehensive, fully integrated urban design philosophy for the city, ensuring that an economically viable environment of excellence is created for the benefit of all. The perusal of the aim in terms of ideas and visions has been the initial objective, focusing on the polemical to stimulate debate.

The issues are not necessarily new - a holistic approach to city design has been discussed before ('Parcels and Boundaries' NPIA Journal Vol. 14 No. 4 1989); what has been lacking are the drawings and models which allow us to visualise an image of the future.

With these intentions in mind a series of urban design workshops was convened in September 1990. Key areas in the Durban region were identified and issues relating to appropriate and better land use were investigated. Various group studies emerged, the results of which are illustrated on the following pages. The work has been carried out on a voluntary basis and therefore a detailed research approach was not possible. The group studies have on the other hand concentrated on potentials which may arise out of changing socio-political scenarios to which present norms may no longer apply.

The Forum has operated on three levels of expectation:

- Each participant should expect to gain experience and knowledge from being involved
- proposals emanating from the Forum would be made available for presentation and dissemination
- the proposals could influence various bodies concerned with these issues

The Forum has already been active in a critical role during the public debate surrounding the controversial Victoria Embankment proposal and more recently as urban design advisors on the newly convened Point Steering Committee.

It is the intention of the Forum to further broaden its representational field and consultational base, to pursue initiatives which have already been made and to continue as an 'urban watchdog' monitoring schemes considered to be detrimental to the potential and transition of the city.

Paul Sanders



The Metropolitan Group was given the task of providing an overview of:-

- future metropolitan growth trends within the Durban Functional Region (DFR);
- to indicate the implications of this growth on each of the action areas;
- to suggest appropriate planning principles to supplement in the detailed design proposals for each action area;
- to outline the application of these principles in the 'heart' of the city.

Figure 1 illustrates the extent of the DFR and the various planning regions which will be referred to in this article.

### Problem Statement

Due to the 'apartheid' model Durban has emerged, and in the context of rapid urbanisation and escalating unemployment is likely to remain as a sprawling, segregated, low density city in which there has been a substantial variation in the density and a highly variable quality in local urban environments throughout the city. Moreover the tendency for economic activity to centralise at established locations in the inner zone reinforces the effect of expanding the rates base of this zone at the expense of the outer and peripheral zones. These latter zones are likely to be the major reception areas for the future urbanisation of lower income groups. Indeed, the residents of townships and informal settlements provide considerable amount of labour and patronage to support economic activity in the inner zone yet until recently, through the introduction of the Joint Services Board (JSB), very little of the rates income derived from industrial and commercial activity in the inner zone was spent on improving conditions in townships and informal settlements.

These trends indicate that many of the problems facing the DFR are likely to worsen in the foreseeable future. However, it has been argued that if a commitment to narrowing the gap between the have's and have not's in the DFR is to occur, the situation where higher income areas obtain most of the rateable income at the expense of lower income areas, has to be addressed. Consequently, amalgamation of lower income with adjacent higher income areas which have considerable administrative capabilities, more diverse economic bases and therefore higher rates income is a possibility. The larger, integrated local authority areas could fall under a metropolitan government authority which is primarily responsible for the administration of overall planning for the future and facilitating re-distribution of resources from high to low income areas for the socio-economic upliftment of poorer communities.

In essence then employment and consumption opportunities are likely to remain centralised in the inner zone with some decentralisation to the outer and peripheral zones. However, the majority of people will be living in the outer and peripheral zones and will have to continue travelling great distances to and from work. Transportation planners have acknowledged this problem and have come up with a freeway/expressway network which envisages the continued focus on Durban and Pinetown for employment and consumption opportunities but acknowledges some decentralisation to Phoenix, Inanda, Verulam/ Canelands and Tongaat to the north, Amanzimtoti and Umlazi/ Umbumbulu to the south and Queensburgh/ Westville, Upper End of Langefontein/Hillcrest and Cato Ridge/Hammarsdale to the west of Durban (see Figure 2).

### A new Urban Vision for the DFR

It is likely that this proposed transportation system in Figure 2 will provide the framework around which future metropolitan growth will be structured.

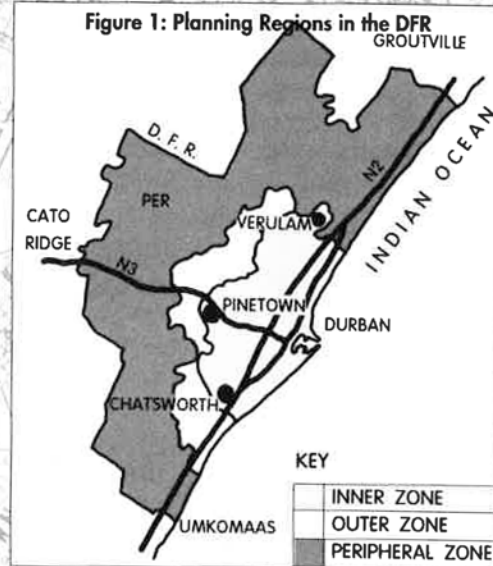
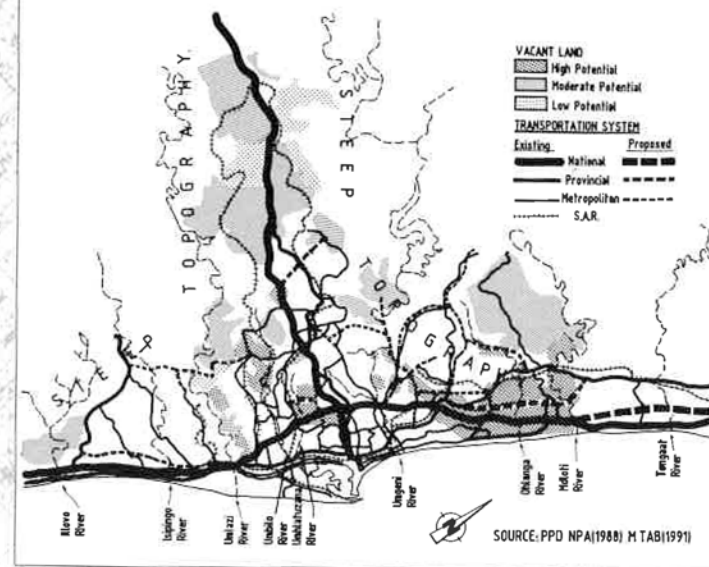


Figure 2: Vacant Land, Existing & Proposed Transportation in the DFR

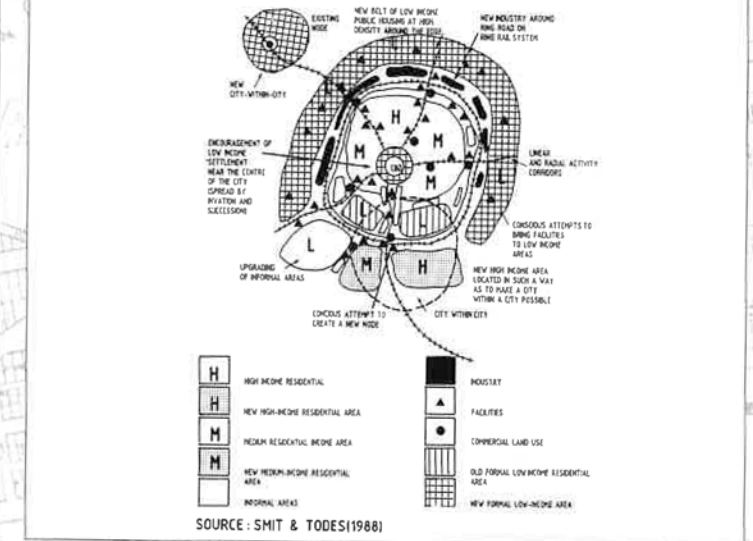


Whilst the metropolitan group acknowledges that the prevailing constraints of problematic topography, the lack of momentum in the decentralisation process, the legacy of segregated and attenuated urban growth and a lack of finance necessitate this response from transportation planners, the group also stresses the need to debate the relationship between transportation, land use and economic planning because the current model of tying unifunctional islands of nodal development via high speed limited access routes is likely to reinforce the spatial and economic imbalances of the DFR.

The compact, integrated city model (see Figure 3) is seen by the group to provide the basis for a new urban vision for the DFR insofar as it envisages a more efficient and equitable city form. In a nutshell the approach comprises four basic elements.

- The careful management and integration of the internal structure of the DFR by simultaneous processes of centralisation and structured decentralisation along mixed land-use activity spines associated with lower speed higher access arterial/collector road and commuter rail routes and appropriately scaled nodal development at the interchange of freeway/expressway/arterial/collector routes.
- The promotion of compact integrated city growth by focusing higher density, lower income development, particularly on vacant land closer to existing and potential future employment opportunities. To ensure that the urban poor have access to and are not displaced from these highly accessible and therefore valued locations, and higher quality urban environments are created, some government intervention in both the land market and assistance in the fields of health, housing and education is envisaged.
- By facilitating some decentralisation of economic activity and concentrating future growth, particularly in the lower-income group, at highly accessible, largely undeveloped tracts of land the major problem of lower-income people living far from major employment and consumption opportunities is addressed. By reducing commuting distances considerable savings to government (reduction in transport subsidies), employers (less pressure for wage increases due to transportation hikes) and to employees (less money spent on public transport) is experienced. Moreover, since employees would spend less time commuting to and from work they would have more leisure time which is seen to be an integral component of raising labour productivity. Finally, this model envisages government assistance in the fields of housing, health and education which would improve the quality of life in lower-income areas and therefore also contribute to raising labour productivity. An increase in labour productivity is necessary if South African exports are to be competitive on international markets; if South African goods are to be produced cheaper than similar imported goods and if more labour rather than capital-intensive construction processes are to be used in the provision of

Figure 3: Compact Integrated City Model



housing (and associated infrastructure), health, educational and recreational facilities for lower-income groups. In summary, this model is seen to be compatible with employment creation strategies.

iv) The integration and enlargement of previously segregated smaller local authority areas into economically viable, functionally related and politically legitimate entities.

Due to the constraints outlined above the scope for the implementation of this conceptual model is seen to be the greatest within the Inner Zone where underutilised/vacant land, particularly high and moderate potential land (see Figure 2), will be developed for high density land usage. Existing residential areas will continue to densify and increasing pressure will be exerted on public recreation, education and health facilities. Commercial land will be utilised more intensively; particularly in the Durban and Pinetown CBD's and there is likely to be a continued decentralisation of larger scale shopping centres to high income areas. Industrial land will be used more intensively and there will be considerable pressure to relocate the existing airport to the north-coast La Mercy site to free up valuable industrial land. Finally massive pressure will be placed on the transportation network. Consequently, it is strongly felt that the elements of the compact integrated city model can be distilled into appropriate planning principles to guide development in the 'heart' of the city where the majority of the Forums 'action areas' are located.

### Appropriate Planning Principles to Guide Development within the 'Heart' of the City

The following are considered to be the more important of these principles.

- planning should be done on a comprehensive holistic basis. This rational approach will lead to the most efficient and effective use of this valuable urban land;
- the creation of 'total urban' environments which focuses on providing a wide range of employment and consumption opportunities for all income groups. Mixed land usage developed at variable levels of intensity and quality encourages a rich, diverse and legible cityscape;
- the focus should be on higher density urban development with a mix of residential densities and where possible a concentration of the highest density development at points and lines of high accessibility;
- the focus of future residential development in the 'heart' of the DFR should be for low and lower-middle income people. In order to ensure a balanced urban environment however, opportunities for higher income groups should not be ruled out;
- provision for a mix of housing types which takes into account affordability constraints and life-cycle considerations;

The first known comprehensive urban design analysis of the Bay and its relationship with the City was undertaken during the preliminary stage of the Urban Changes Forum workshop.

**Existing Studies**

It was known that various individual precincts around the Bay had received independent planning attention: the Point in 1987, The Victoria Embankment in 1990, and Wilson's Yard in 1985. It was also known that a strategic plan for the harbour and railways existed and was being further developed by the Port and Rail Authorities; while proposals regarding the future road and drainage infrastructure around the Bay existed in the City Engineers Department.

**Change**

Current changes to the structure of the City, the Port and the Defence Force suggest that some degree of co-ordination is required, to ensure that the interests of all Durban's citizens are served as the Bay inevitably changes and develops to meet the pressures and challenges of the future. With change comes conflict and delay in essential development. The Forum aimed to complete at least a preliminary urban design analysis of the Bay in order to be able to propose appropriate planning mechanisms aimed at avoiding wasteful conflict of interest in future.

**Findings**

Use. Recent use of the Port was seen as a direct reflection of the apartheid system in that a narrow group of users, namely the State's Port authorities, dominated the assets to the exclusion of the majority of potential users.

Only 1,4 km of waterfront of a total 23 km edge was accessible to the public while large areas of under-utilised State and City land exist in a derelict condition around the Bay.

**Business and Job Creation.** As a cargo handling business the Port handles some 50% of all South African port traffic. However, only 7 000 employees work in an area much larger than the CBD. Even with a multiplier effect of 4 - 5 this represents a job creation of the order of only 80 000 jobs while the future strategies of Port management appear to be aimed at capital intensive investment in advanced cargo handling as opposed to labour intensive methods.

Whilst it was recognised that the Port services a wide range of commercial clients, the need to selectively encourage value added exports rather than primary goods exports was identified.

The implications of Durban as a Free Port need to be studied further, and the distribution of current Port incomes analysed to determine real benefits to the immediate Durban Functional Region (DFR).

**Tourism and Job Creation.** Durban's traditional role as a tourist destination has resulted in a stock of 32 000 hotel bed nights, more than all other major South African cities combined. 1 job in the hotel industry is created for every 11 tourists indicating some 2 727 jobs.

Using a multiplier effect of 4-5, this results in 13 636 jobs in the hotel industry. However, only R8 per R100 of tourist spending is in hotels, the remainder being spent elsewhere in the City.

This would translate roughly to 34 000 jobs, and with a multiplier effect of 4 - 5, to 170 000 jobs generated indirectly by tourism.

**City Severed from The Bay.** Road and rail infrastructure on the Victoria Embankment effectively prevented the City from linking local and tourist pedestrian traffic to the water's edge. The commuter traffic is largely bound for the City, while heavy vehicles, including granite trucks are bound for the Point.

**Sea Walks • Piers • Harbours**

A strategy of moving heavy freight users off the Point and diverting commuter traffic to the west of the City needs to be actively pursued; only then will new links be achieved and historic relationships restored between Bay and City.

The infrastructure around the Bay needs to be reviewed in the full metropolitan and DFR context. A light rail commuter/tourist system linking the Point, Golden Mile and the Victoria Embankment is a real possibility, while parallel waterfront cycle tracks and linear parkland make good sense.

**Open Space Management.** Tourist Destination: The Bay has, in addition to its business as a Port, great potential as open space rather like a "wet park". When considered as

part of the Durban Metropolitan Open Space System (MOSS), this aspect of the Bay with its Bluff is a valuable tourist resource and landmark not unlike Cape Town's world famous Table Mountain.

Great care needs to be exercised when proposing infill or change to the Bay. Dramatic changes to the water quality are possible if proper design and pollution controls are gradually introduced in the entire catchment area.

The Forum recommends that a Class 1 Environmental Impact Study be the minimum requirement for any major development.

Obviously environmental and touristic concerns need

to be carefully meshed with the cargo handling aspect of the Port, and far from assuming conflict, areas of symbiotic sharing of space should be sought wherever possible.

**Conclusions**

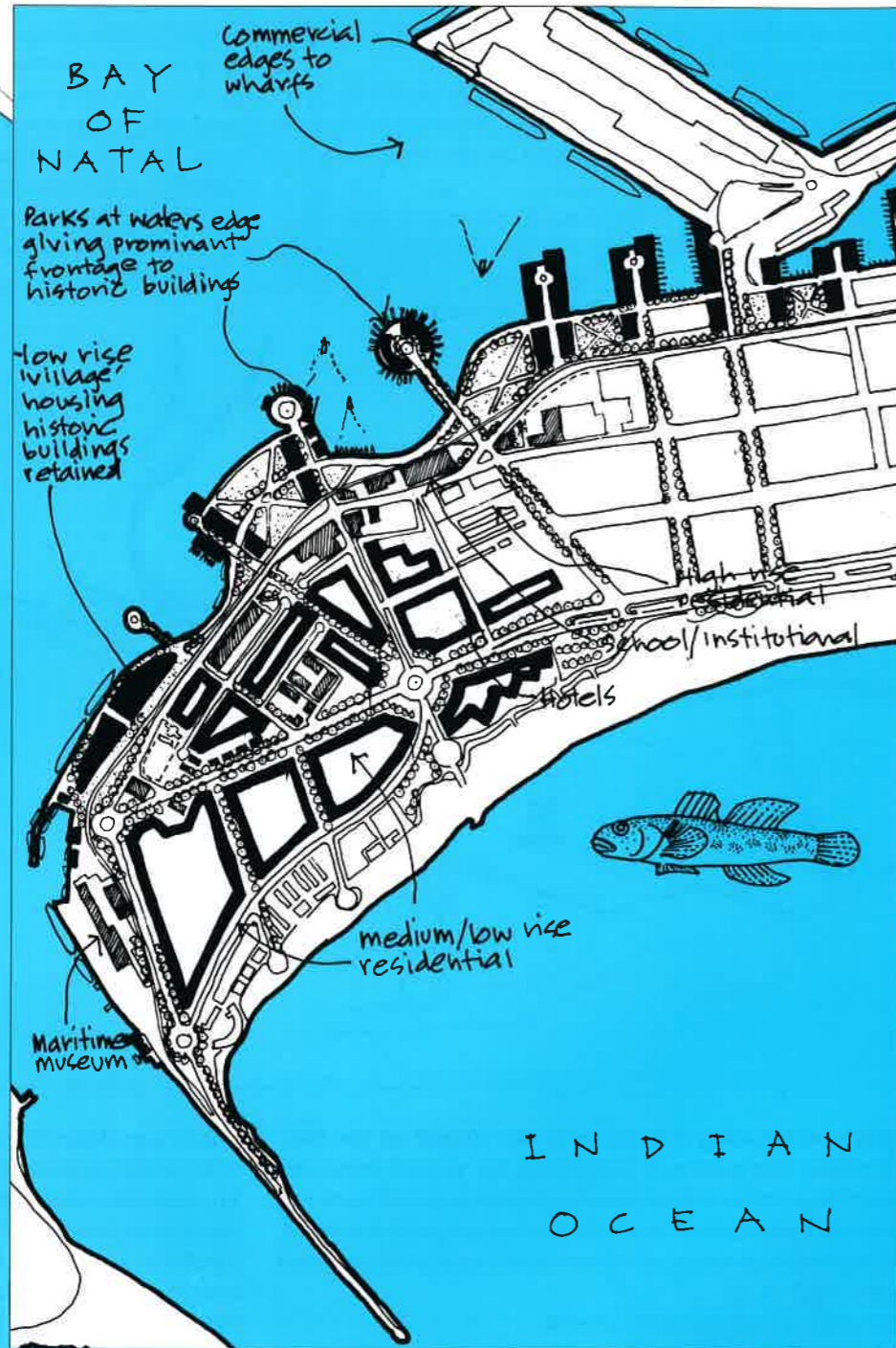
The Forum recommends further detailed investigation of the Point and Wilson's Yard areas, together with Cato Creek as highly desirable commercial and residential nodes.

This view was taken particularly in light of the Victoria Embankment proposal of 1990 which was seen to be over-scaled and misplaced in an existing context of high density development.

A Package of Plans approach as implemented in the Cape Town Victoria and Alfred Waterfront Company, Government-owned land: Unlocking the potential of State surplus urban land. The proposed approach by the city of Cape Town, 1990, combined with substantial and meaningful public participation is proposed for future Bay developments. A Bay City Steering Committee is suggested to ensure that all matters relating to the Bay be jointly guided.

We must ensure that sustainable environmentally sound commercial development is achieved with acceptable levels of City responsibility for mundane issues such as cleaning and security.

We need the best urban design performance together with the most carefully rationalized business and employment strategy for our prime commercial asset - the Bay of Natal.



▼ Where boats and buildings meet

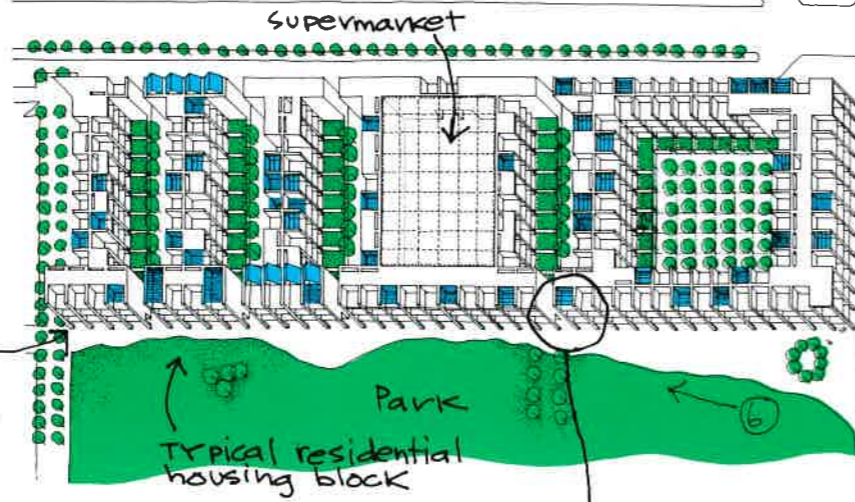
▼ Wilson's Yard Development



▲ Freeway Interchange



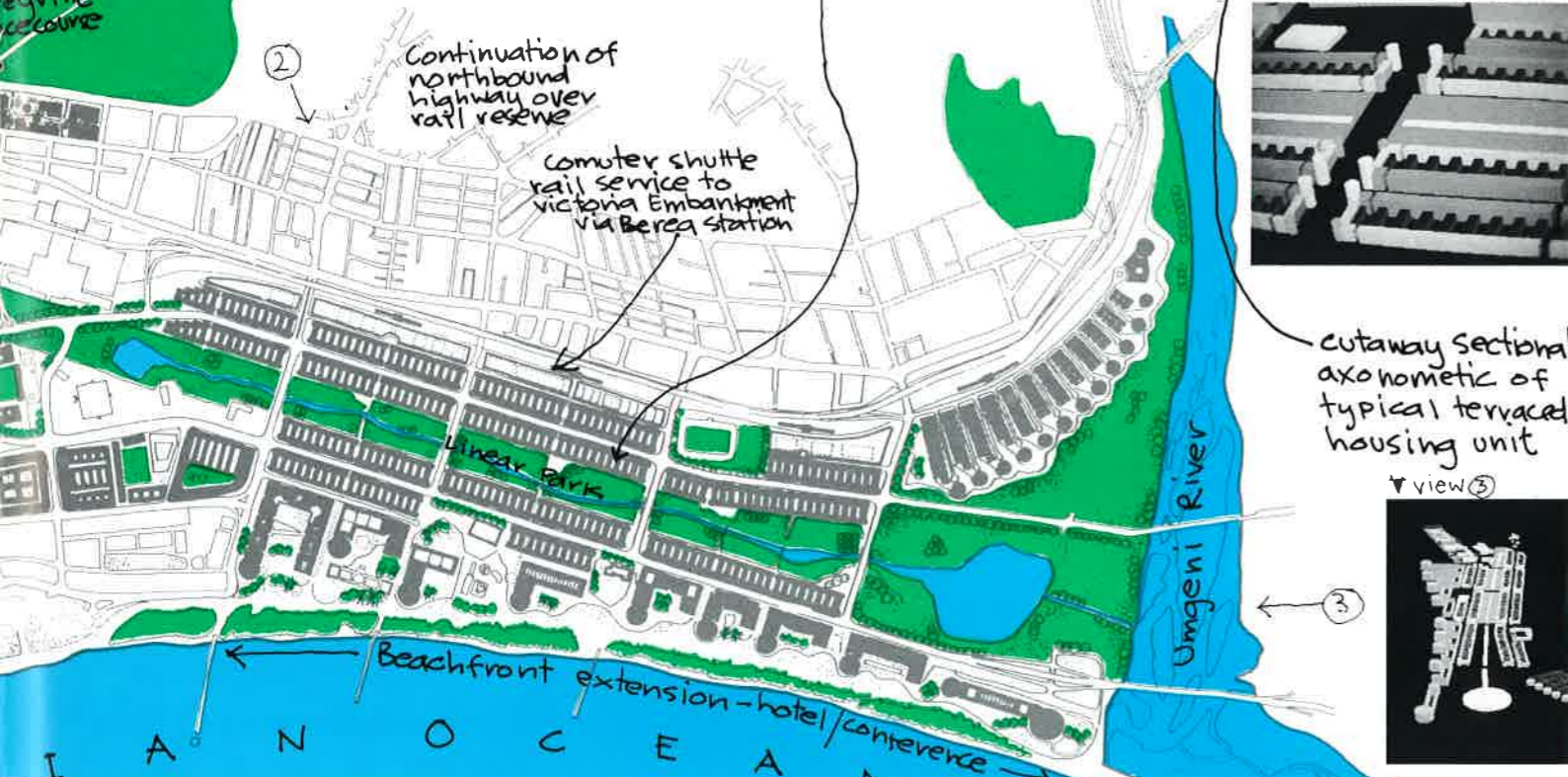
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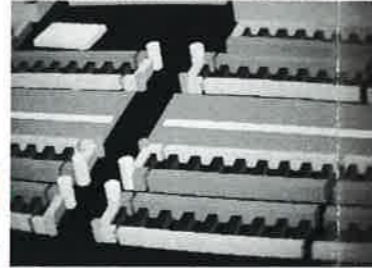
3 storey terraced housing units



Meyville reserve

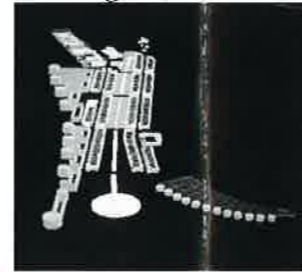


▼ view 2



cutaway sectional axonometric of typical terraced housing unit

▼ view 3



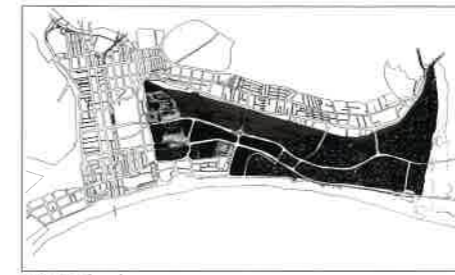
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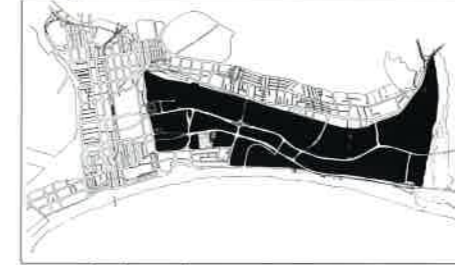
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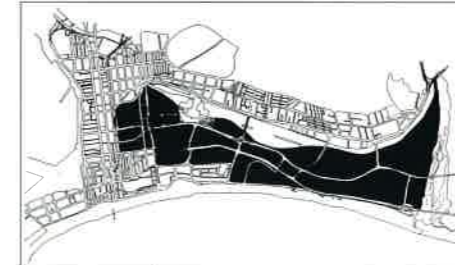
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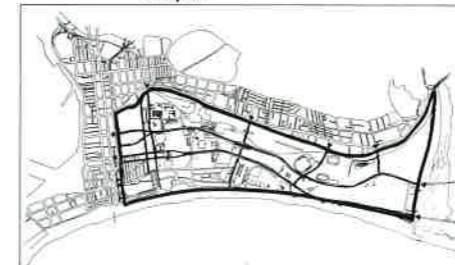
Existing land use



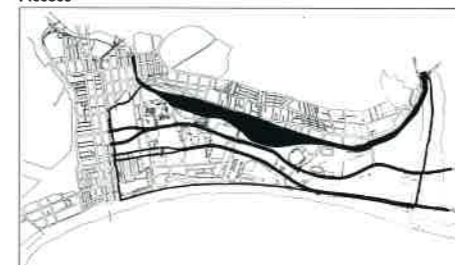
Existing land ownership



Block sizes and shapes



Access



Barriers

- Second, inner city land will have to be better utilized to meet the housing demands of the newly urbanized
- Innovative housing solutions will need to be devised to meet the new demand
- An effective transportation system will be needed to counteract the anomalies of the old system (which will live with us for some time to come)

**Proposals**

It is against this background and developing scenario that the following proposals are made.

A central issue which forms the basis of this study, is the present inappropriate use, and underutilization, of land closely located to the CBD, beachfront and the existing transportation corridor along Umgeni Road.

A major component of the project is the introduction of low-rise high density residential blocks into the area. It is generally accepted that there will be a large demand for residential accommodation in inner city areas. In order to respond to this demand existing as well as new districts will have to be of a much higher density in order to support the normal urban functions within walking distances that are comfortable and pleasant. The process of increasing density will be much slower in existing residential areas, therefore it is even more imperative that where new housing areas are possible these opportunities be exploited to the full.

Another important aspect of the project is the linear park which connects Central Park with the Umgeni River. By rationalising the existing sporting facilities and removing incompatible uses it is possible to make available better utilized recreation space to a wider spread of population. It is proposed that sports fields be incorporated for public, private and school use, and that a canal and lake assist with stormwater management and provide additional recreational opportunities. The park also provides an important internal focus for the residential component which would line its edges.

The realignment of the northbound highways is essential to allow for effective use of the adjacent land as well as forming the basis for a rational movement system.

It is strongly felt that the initial sub-division of land should be at a scale sufficiently small to be within the affordability of the individual. This would enable an initial broader distribution of the land and act as a device for distributing public land to people at the lower end of the market.

It is also the intention of the project to retain as many as possible of the larger existing structures in the study area, incorporating them into the scheme.

A very important factor which facilitates all these issues is the fact that nearly all the land is in the ownership of either the state or the local authority and therefore the initiation and implementation of the proposal would be a matter of social policy, and would not involve the acquisition of privately held land.

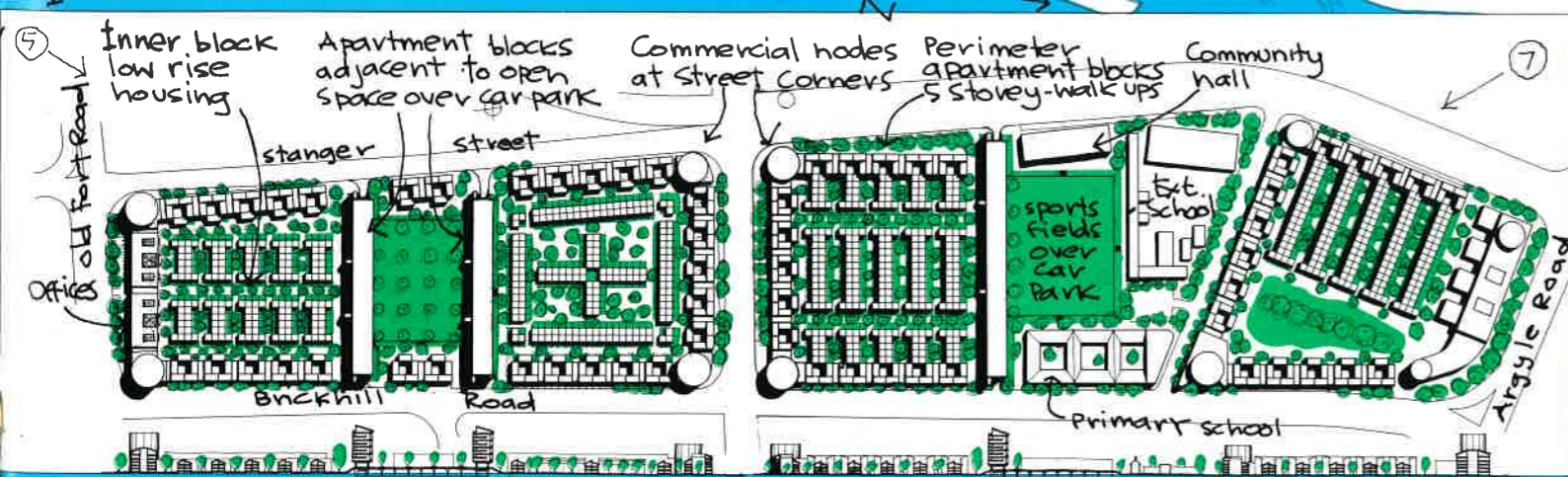
**Housing**

In the quest for the more efficient management of city land and to ensure that our city is capable of meeting the needs of a rapidly expanding population, a new housing type is proposed. It is urban in character but provides for the suburban ideal of ownership of your own piece of land.

The proposal also helps in the re-distribution of portion of the wealth of the city. Small plots of land (12 x 7.2m) make it possible for the man at the bottom of the income ladder to afford a piece of urban land. In time he can sell and move on to better things or buy out his neighbour and consolidate. It serves as a way of quickly introducing a large number of the population to the normal dynamics of city growth so that they can share in the wealth that it generates.

The houses have a single face and comprise ground floor accommodation measuring 6 x 7.2m and a garden area of 6 x 6m. This lower floor can be used for small shops and businesses and the entrance to the house above. The height of the house is only limited by the number of stories people are prepared to climb.

The three 'blind' faces allow the houses to be closely stacked together and around the more disruptive elements of the urban matrix such as shopping centres and schools.

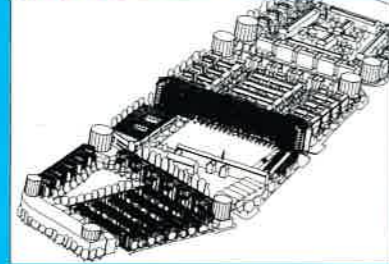
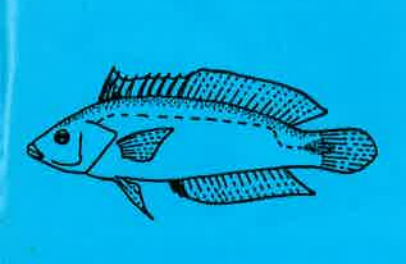


▼ view 7

Hoy Park / Drive In sites - Initial pilot scheme

▲ Preliminary section

▼ Preliminary plan



The greatest challenge facing policy makers within any future Government structure in South Africa is the creation of sustainable living environments for the poor enabling them to gradually improve their standard of living and quality of life.

Most South African cities are presently growing in a sprawling uncontrolled fashion at low densities, placing an enormous strain on existing transportation networks and lengthening the working day for a large portion of the population due to the increasing distances from home to places of work; and family incomes are eroded by the high cost of travel involved.

There is an immediate need, therefore, to create urban environments which:

- Integrate the poor into the fabric of urban life
- Provide adequate shelter and services to the community including sewerage disposal and clean water
- Create possibilities for income generation by defining sustainable nodes linked to the broader area thus enabling commercial opportunities at the local scale to develop
- Allow access to economical public transportation networks
- Allow access to educational and other community services

To achieve the above it will be necessary to create environments at densities considerably higher than those currently achieved. Furthermore the urban structure should integrate new living environments with broader metropolitan opportunities by creating defined transportation routes between nodes of activity.

Major public facilities should be more closely related to these nodes or to the routes between various nodes, thus improving accessibility to urban facilities.

**Cato Manor / Maryvale**

Within close proximity to the Durban C.B.D. lies a piece of land 1700 hectares in extent which has remained undeveloped for reasons similar to those applicable in District Six in Cape Town. Portions of the land are currently administered by the House of Delegates and other portions are under the jurisdiction of various local authorities including Durban, Westville and



Site Plan

Queensburgh.

The major part of the land, however, is owned by the State, and the Department of Planning and Provincial Affairs would normally be responsible for the development of such.

There are also various groups which have a close interest in the development of the land, including the Cato Manor Residents Association, the Chesterville Residents Association, the Ningizuma Town Committee and the Durban Housing Action Committee, amongst others.

A group has recently been formed which consists of various interested parties including representatives of "Operation Jumpstart." The group is known as the Metropolitan Consensus Group. Discussions are currently under way to attempt to define inter alia:

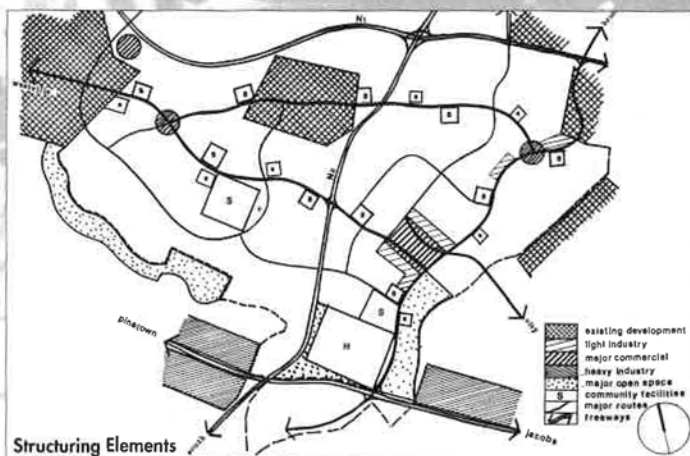
- Who should control land development?
- How should land be allocated?
- What are the development priorities given the fact that there is a limit to the finances available to generate development?
- What form should the development take and what densities should be aimed for?
- What income groups should be catered for?

**Development of the Area**

The Cato Manor / Maryvale area has the inherent capacity to meet some of the demand for housing in the Greater Durban Area and is ideally located in terms of its proximity to work opportunities and transportation routes.

The land is very steep in parts and the soil conditions are not conducive to traditional construction techniques. Development would need to be planned with these factors in mind.

In the development of the area it is imperative that a range of housing densities and delivery systems be encouraged to maximize the options available. Development should be controlled, and land allocated, by a fully representative development agency supported by a team of suitable professionals. Where necessary the land should be developed in a holistic way through the creation of a clearly articulated physical structure linked into the surrounding networks. Only when the overall guiding structure is agreed and established should the various parcels be



Structuring Elements

developed in detail. In so doing the future development of the area will respond to clearly defined physical factors.

Town planning standards should be formulated to avoid the wasteful allocation of resources and to respond to the particular difficulties of the site.

Commercial, work, cultural and recreational facilities should be located in close proximity to the major circulation routes, and activity spines should be encouraged so as to create a vibrant community life. These activity spines should link together the major nodes within and outside the area. Development should occur initially in close proximity to these activity spines with the spaces between being developed over time. In so doing a more organic form of development would be encouraged rather than sterile mono-functional and largely suburban housing areas as we have on the periphery of Durban at the moment.

A variety of densities should also be encouraged and they should respond to the structuring elements created initially. Greater densities in close proximity to the major activity spines would generate higher thresholds for commercial and transport activities.



System of Nodes and Activity Spines

**Conclusion**

While it is agreed that there is still a great deal of discussion and negotiation which needs to take place before any physical development occurs it is vitally important that we grasp this opportunity to create more responsive physical environments in the future and in so doing, attempt to undo the thinking of the past in the future development of the broader Cato Manor area.

The Isipingo - Reunion area has been investigated with a view to facilitating its functional integration with the Metropolitan area.

The area is located to the south of Durban and grew around the old South Coast Road. It spans five local authority areas: Durban, Isipingo, Amanzimtoti, Ninguzuma and Umlazi. The co-ordination of development between these bodies is conspicuous by its absence and this has resulted in major development opportunities being overlooked.

The physical structure of the land influenced the original development of the infrastructure, with both the old main road and the rail line following the edge of the coastal plain. It presents a good opportunity to apply the activity spine concept as a structuring device.

**Elements**

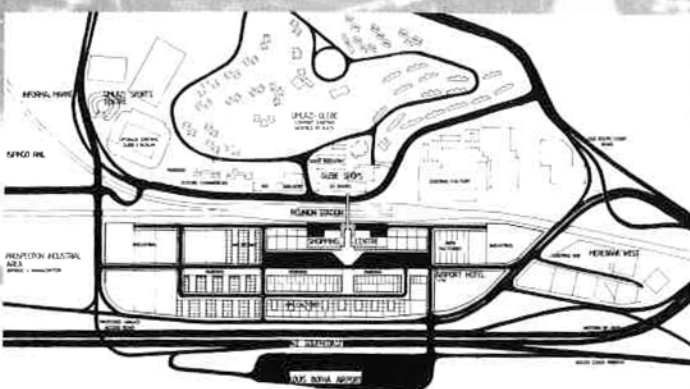
The old South Coast Road works like an activity spine at present with strong development nodes existing adjacent to Isipingo, Pelgrim and Reunion Stations. It is desirable to reinforce these nodes and to promote the development of the intervening areas.

The Isipingo CBD lies adjacent to the station. It lies between the developing areas of southern Umlazi and Umbumbulu and the commercial and employment opportunities of Prospecton and Durban. It functions as a nodal interchange point between taxi, bus, rail and pedestrian movements and provides commercial and health facilities.

The Pelgrim Station area is located between Isipingo's industrial area and a minor shopping



Site Plan



Development Proposals

strip on the main road. To the west lies a large area of underutilised land with significant potential as an employment zone. This area abuts the Reunion-Glebe area to the north.

The Reunion-Glebe area lies to the west of Reunion Station. It is a mixed use area with hostels, a SBDC (Small Business Development Corporation) commercial centre, taxi, and bus ranks, major sports facilities and a thriving informal market. The Reunion area is a low-density housing estate owned by Spoomet and it occupies flat land and could be well suited to Industrial uses.

**Development Proposal**

Just as the Isipingo CBD lies between major residential areas and employment and commercial opportunities, so too does the Glebe area. To make the most of this locational advantage the following measures are proposed:

- existing hostels to be converted to flats to provide family accommodation
- sports facilities to be geared to regional needs
- informal market area to be formalised in a manner that makes it possible for existing traders to remain
- areas adjacent to the old main road to be developed for mixed use with mini factories and shops on the ground floor and residential uses above

In general these measures seek to improve the relationship between the way land is used and the opportunities afforded by good location. Locational advantages can themselves be improved by:

- providing a direct connection between the freeway and the Umlazi arterial
- providing a link between the market area and the Pelgrim Station employment zone
- improving the pedestrian link to the redeveloped Reunion area.

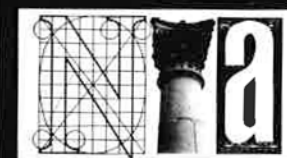
The area appears to be ideal for a mixed estate where large and small industries are located nearby and in close proximity to a large residential market. Accordingly it is proposed to redevelop the area with a mix of large and small industrial sites built around a core shopping/commuter area adjacent to the station. Small scale industries can thus orient themselves to serving other industries or to direct retail sales.

**Conclusion**

This brief report has demonstrated that significant opportunities are to be found in the orientation of future development in the Isipingo-Reunion area around an activity spine. The framework is there - all that is required is a level of co-ordination to generate an environment that will encourage investment.

**d'URBAN CHANGES FORUM**

- |   |  |
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