

URBAN WALLS:  
boundaries or  
border crossings?

SHAPING LIGHT & LAND:  
Life Sciences  
Building repositioned



# DUBE CITY – A PRECEDENT?

Page 14

# PUBLIC



**Dube City holds the potential to set a precedent for opening up precincts for accessible public and pedestrian use, but will the lack of a residential component thwart the plan?**

The Dube City precinct project at King Shaka International Airport reveals a refined and nuanced vision – one which is holistic and multi-layered. The directive was to provide an office, hotel, retail and entertainment core within walking distance of the airport. Construction on the first phase of the scheme started recently and it will be interesting to revisit the precinct in years to come to see if its potential comes to fruition. An enlightened patronage allowed CNUV Africa to take possession of the project. The way the proposal elaborated on the green precinct initiatives, creating lively public spaces, such as squares and activating street edges met with great approval. “We were sold on the vibrant public nature the final proposal had,” says Kate Kelle of Dube TradePort (DTP).

### Public spaces prime position

Most importantly, the design of Dube City acknowledges the creation of the public and outside environment as the determining force of a development, as opposed to controlled interior space. South Africans still show a surprising lack in confidence of

the virtue and potential a truly public space can have in shaping the places we inhabit. Dube City could, therefore, become a case study that rebuts current attitudes of the nature of shared space.

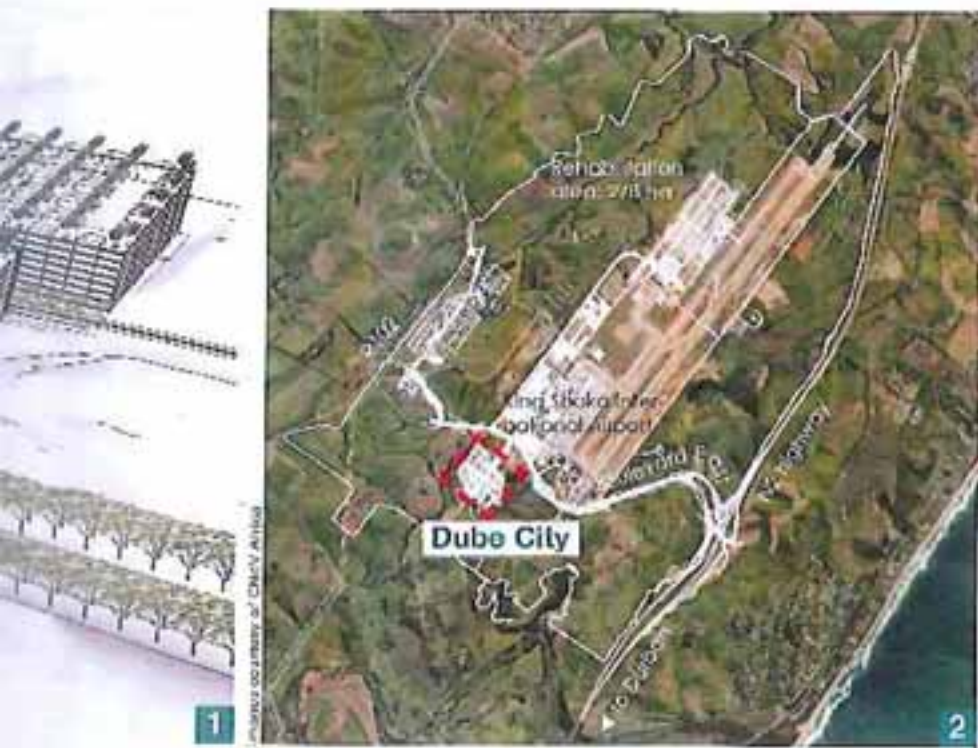
### Place-making at the fore

At Dube City, the urban and landscape guidelines dictate a thorough set of design informants that many contemporary commercial developments lack. This is the result of CNUV engineering several place-making principles which it believes will facilitate the establishment of a vibrant urban environment if DTP matures. More often than not these principles are dismissed as “nice to haves” or secondary priorities in similar property developments.

### Open ethos

The ethos of the overall design is to prevent growth of a gated community with shielded office parks and inward looking malls. As a provincial government project, it has to be accessible to and serve the public. While Dube City holds potential as an integrating node between the poorer and wealthier settlements to the west and east

# PRIORITY



## 1 Public space is king

- Looking north over Dube City it is clear that public space is a defining element which is unusual for a government precinct. The nature of such projects does, however, allow leeway in design which rebuts conventional South Africa urban layout.
- Urban design features a clear hierarchy of pedestrian and vehicular routes, creation of internal courts, a central square and solar orientation for buildings.

## 2 Ring-fencing

- Dube City is a support precinct to Dube TradePort, which comprises a number of precincts. The entire development at King Shaka International Airport is about 30 km from the Durban city centre, with Tongaat, Verulam, Umhlanga and Ballito lying within a 15 km radius from it. The entire Dube TradePort development lies between the R102 inland corridor and the N2, and Dube City is situated within the development as an ambitious public project.
- Dube TradePort is a KwaZulu-Natal provincial government company and one of the major role players at the development at King Shaka International Airport. Funded by the provincial Department of Economic Development, the project in its entirety has social and economic development as its main focus. The site consists of a number of precincts, such as the cargo terminal and trade zone. It will be interesting to revisit the precinct in years to come to see if its potential comes to fruition.

of it respectively, the opposite can also occur. As tempting as it might be to view the project as an exercise in social engineering, a great many factors beyond the control of the role players at King Shaka International Airport still have to come into play if the project as a whole, as well as its parts, is to succeed.

### Daring to innovate

The proposed density, bulk and parking requirements deviate noticeably from what local authorities stipulate. Rallo points out that the brief for the development did call for innovative proposals which left the door open to alternatives to lower bulk and density requirements. The main thrust of the brief was to enhance the public nature of the development and establish world-class standards. CNdV capitalised on this to take possession of the design and optimise the opportunities it provided. Aside from proposing alternatives to the low-density requirements, CNdV also proposed alternatives to parking requirements and fleshing out of the green building standards. The parking proposed by the government was typical to a shopping mall development.

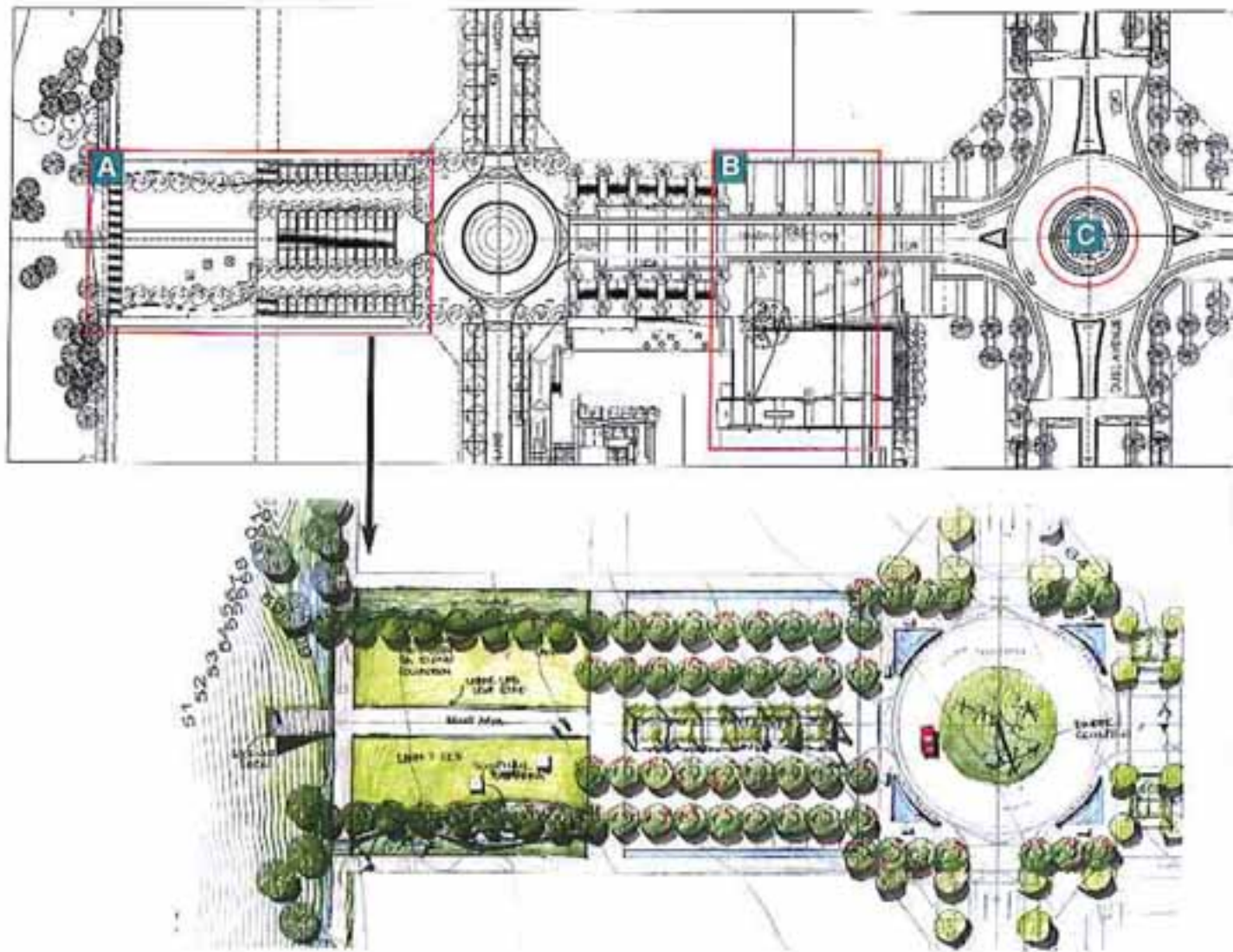
### Convincing local authorities

The fact that the project is, in essence, a government project has not absolved DTP from going through the standard development consent processes which are slowing down the implementation of the project to some extent. "We are confident the motivations for the deviations are sound" says Rallo, "and will continue working with the local authorities to obtain the required consent." Simon Nick of CNdV hopes that this project will create a precedent for surrounding town councils to review their zoning and development guidelines.

### More time for better principles

Nick notes that there is a lack of mechanisms to encourage the creation of diverse urban environments at municipal planning levels, even when authorities recognise the merits of an unconventional scheme. However, an advantage of public-funded projects is absence of pressure for rapid return on investment. This creates opportunity to pursue better principles that also lead to better performance of the final product.

## UMSINSI Junction



### Transport link to airport

The north-south axis forms the major transport route to and from the airport and links it with the existing environment. This axis aligns with the control tower of the airport forming a distant focal point to the north of the axis and Mount Moreland as its southern focus. In addition, it provides opportunity for extending the axis round which other developments can begin to cluster.

### Pedestrian and activity axis

The major east-west axis – uMsimsi Junction – is a wide pedestrian boulevard that grades into the natural landscape which lies to the east and west of the precinct. “This axis will provide the space for a range of activities such as Saturday markets or public performance arts,” explains Janya de Villiers of CNDV. Currently, the natural landscape east and west of the precinct is part of a major alien vegetation clearance project, the largest of its kind in the country. De Villiers says that upon completion the land will be rehabilitated to become parklands with trails and routes that thread through the main east-west axis of Dube City.

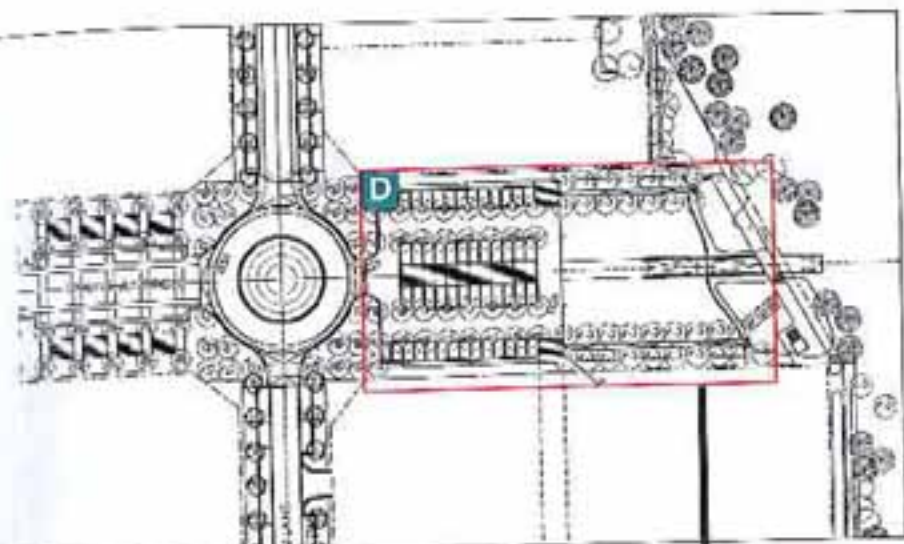
### Green Precinct

In keeping with contemporary trend of using green design as a major component of responsible design, Dube City will be a green precinct. As such, all designs for buildings will have to achieve the Green Building Council of South Africa’s fourstar Green Star rating.

Retention ponds to collect rainwater will appear across the precinct to ensure water supply for planted spaces in the winter months. In addition, the use of greywater will also be an important source of water for planted landscape features.

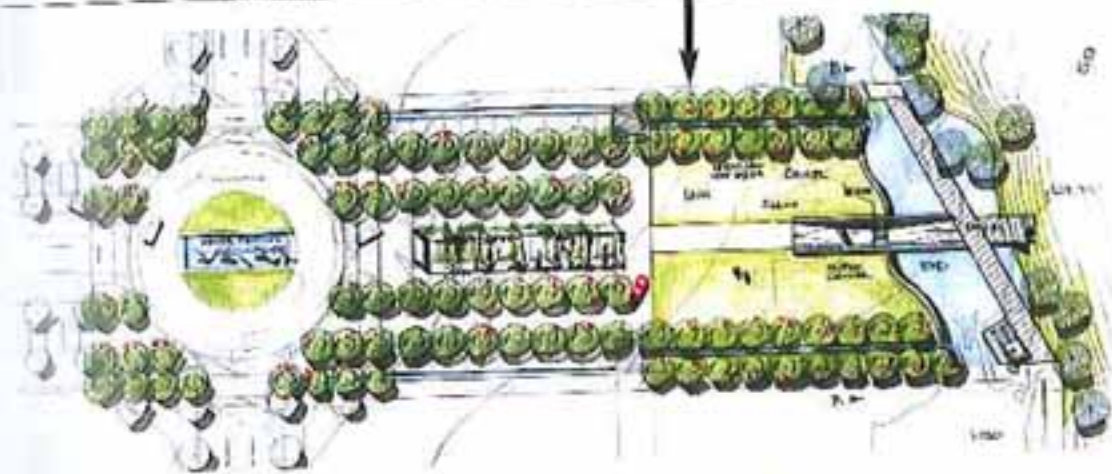
The client has also stipulated that only indigenous and endemic plants are allowed on the precinct which, at times, will call for creative solutions to meet design intentions.

Shading devices on buildings and the parking garages will house photovoltaic cells that will generate power for street lamps and public lighting. CNDV conducted a careful lighting study to ensure ambient light contributes to creation of nocturnal spaces of activity without causing light pollution.



- A. West
- B. Dube Square
- C. Large tree as circle feature
- D. East

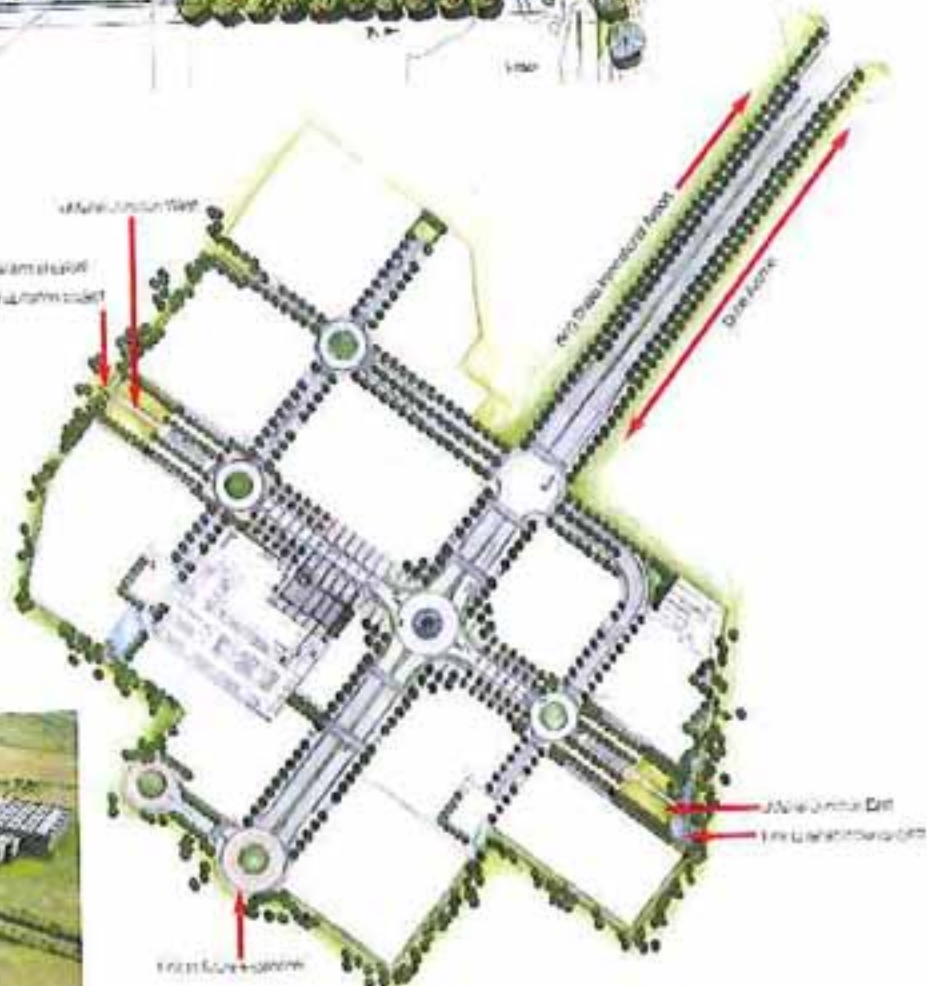
While daring to create a precinct with a clear emphasis on open spaces, the precinct design allows for spillage of market areas onto the sidewalk with ample space for pedestrian movement along official Junction.



## PRECINCT SWING: axial green

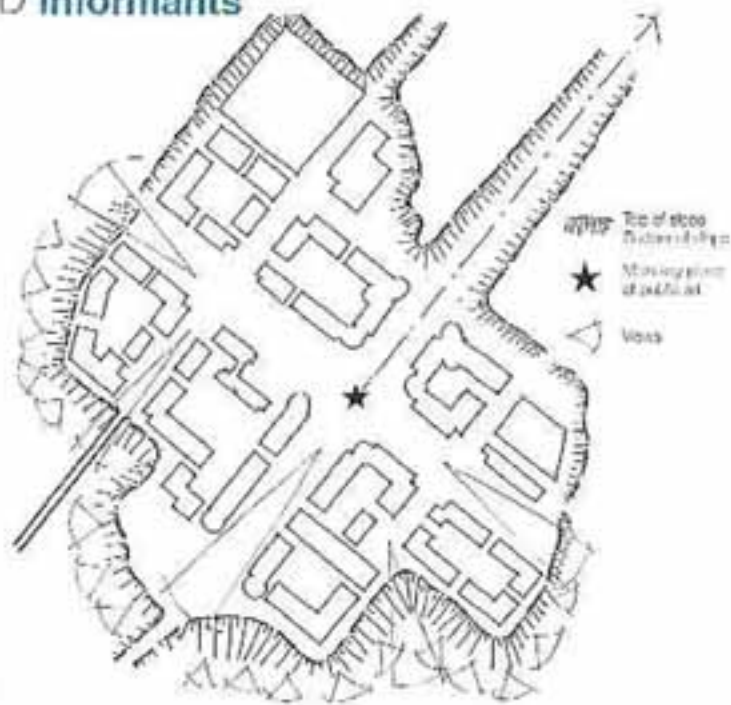
The spatial ordering of Dube City follows a classic grid layout with the north-south axis roughly parallel to the coast and the east-west axis perpendicular to it.

Architectural guidelines will call for buildings to establish "green" roof spaces in addition to meeting green building ratings.



Urban Context of Dube City

BROAD **informants**



Capitalising on space

The proposed higher bulk and density guidelines will assist in achieving critical mass and economies of scale of the precinct more rapidly. The current height restriction stipulated by the council is six storeys whereas the design proposal hopes to establish substantial implementation for eight to thirteen storeys. The parking garages are located on the corners of the precinct that are sunken and the elevated corners create the opportunity of establishing viewing corridors.



Above: Proposed height parameters enforce the hierarchies of activities and create legible landmark and approach areas to the precinct.

Top left: The steep banks either sink or elevate various corners of the site. This peculiar topography is a result of the levelling of land for the runway which was completed in the 1970s for a future airport.



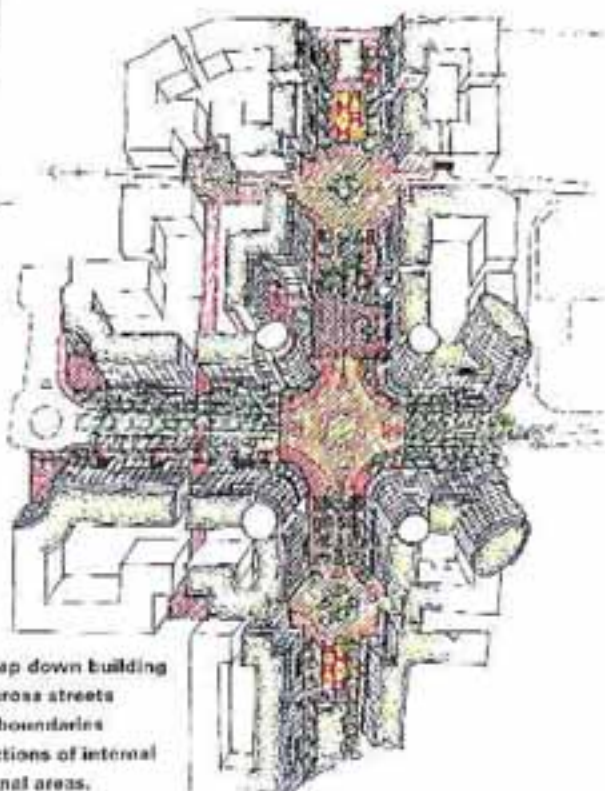
Precinct link for growth

Linking the precinct to its surroundings is very important; public transport to and through the precinct plays a vital role. A proposed light-rail line, probably a tram line, will thread through the precinct taking passengers to the airport from the Durbin. CNdV also hopes the preferred vehicular route to the airport also will become the route going through the precinct. In fact, establishing this route will also determine the future extensions of project.

A light-rail line may wind through the precinct to the airport as part of a feeder route which draws people into Dube City. This route will leverage further precinct expansion.

Precinct in function of people

Zoned spaces wrap down building elevations and across streets creating defined boundaries between the functions of internal and various external areas.



## DUBE Square



A. Branch-like canopy



B. Tree feature



C. John Dube sculpture



D. Fountains



The design principles intend for edges of buildings and streets to create graded zones between areas. For instance, street edges will have sidewalk areas of up to 3 m wide as well as space to accommodate market stalls or spill-out areas from neighbouring buildings. Trees will eventually shade these areas and ensure sheltered external space.

The grading of space continues up along the façades of buildings to mediate between external and internal climate. Colonnaded walkways will provide sheltered pedestrian routes at street level behind building lines. Above these colonnades, façades of buildings will have shading devices to create optimal shading in summer, but allow passive heating in summer.

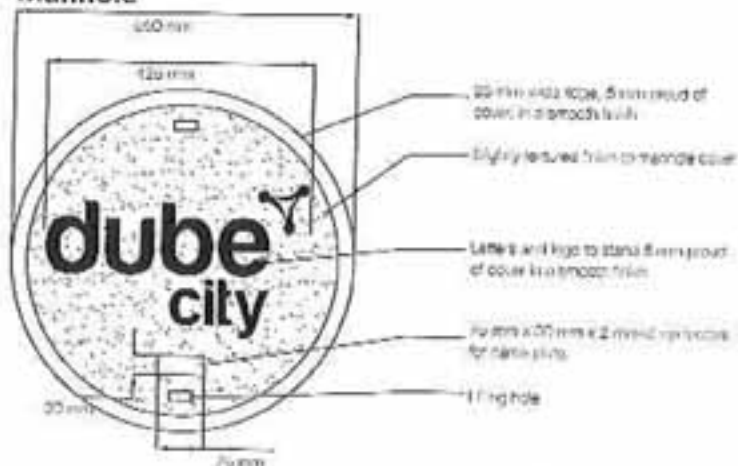
At strategic points along pedestrian routes, sidewalks will swell out into squares to accommodate large groups for any range of activities such as small concerts or the public screening of sports events. A promenade will scam the edge of the development to the south to take advantage of the views provided by the elevated embankment.

Dube Square features references to the historical and natural heritage of KwaZulu-Natal and allows ample space for pedestrians to admire and enjoy these elements.

## CATALYST FOR wider streetscape range

Whereas the broader principles could build on intrinsic advantages of the site, the detailed design poses some unexpected challenges. The design ensures external spaces have refined quality but a surprisingly limited range of hard landscaping materials could be sourced from within KwaZulu-Natal to shape streetscapes – from curb stones and lamp posts to manhole covers and street furniture. De Villiers follows the design of these elements for Dube City will act as a catalyst to broaden the range of elements used for landscape projects elsewhere in the province in future. Another dimension that contrasts with typical development was the client's commitment to ensuring that public art forms are part of the completed project. Artworks by a number of artists will appear in the completed design.

### Manhole



Aerodynamic signage at Dube City mirrors the design of the gateway to Dube TradePort and King Shaka International Airport.

Creative design of street furniture for Dube City may act as a catalyst to create a wider range of streetscape designs which is notably lacking in the province.



Bollards



Bench

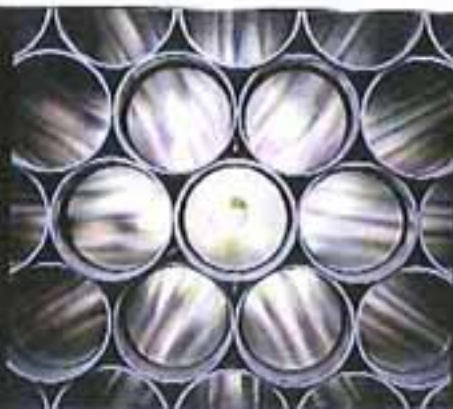


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## OPPORTUNITIES AND hurdles

**People drawcard concern**

A typical challenge of a greenfield development is creating a focal point in an unpopulated environment that will continually draw people to it. A dimension that is missing from the development that CN&V is concerned about is the lack of a permanent residential component near the precinct. The success of establishing an urban environment can be measured by whether it becomes a neighbourhood. Without permanent residents providing the anchor of a continuous presence of people, the precinct could suffer from a transient quality to which people show limited attachment and investment.

**Public urban culture benchmark**

Dube City contrasts with typical property and commercial developments on a few points which is to the project's advantage. The commitment to the public environment and the encouragement of establishing urban culture is in contrast with many suburban mall developments.

Generally, governmental and parastatal companies don't engage on such ambitious projects which tend to compete with private sector offerings. This is curious, as government projects can run along funding and project timelines that ensure a holistic response – an approach to development that many commercial projects cannot take.

Government can, therefore, set the tone of how development should take place at a range of building projects beyond those it is already involved with.

**Enlightened public client**

The final point is acknowledgement of the strategic role that patronage plays in order for enlightened and responsible practice to occur. Urban-, landscape- and architectural design are sorely dependent on patronage to reach realisation. Unlike brilliant literature or mathematical breakthroughs that are, and continue to be, developed by individuals in isolation, urban design will never have that luxury.

**Children's sculpture garden east of Dube City**

Dube City has the potential to set a precedent for creating shared spaces in future public precinct projects and transforming urban interaction in South Africa. The lack of a residential component, however, is a hurdle in achieving this.

The Austrian Architectural Association gives annual awards to clients who commission good architecture. Perhaps it is time to start making an active effort in acknowledging the role such patrons play and encourage them to remain committed to shaping the built environment.

Shared space, customs, tastes and values develop only if there is the opportunity to come together in space. Though space is not the primary reason for establishing a public realm, it can function as the testing ground to a changing society. ■



WHAT IF?

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+27 (0)11 327 3687