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CONSTRUCTION: CONNECTING THE DOTS

ISSUE 2

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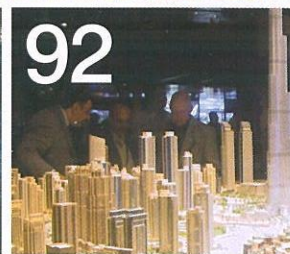
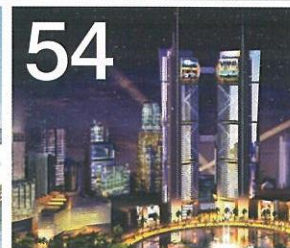
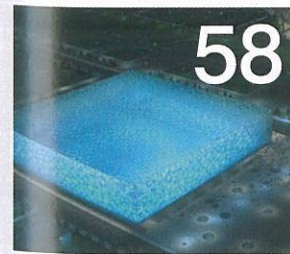
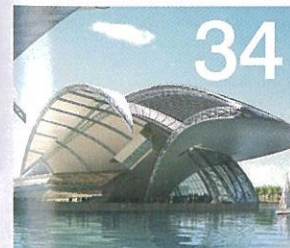
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THE **BIGPROJECT**

CONSTRUCTION: CONNECTING THE DOTS

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# The Lagoons



Seven districts: a green themed development



Far left: The Lagoons masterplan  
Left: Scenic views  
Below: A Marina

Text: Sona Nambiar (with inputs from Sama Dubai) | Images: Sama Dubai

**A** waterfront project site that is strategically located in the heart of Dubai. Yet a sensitive site that abuts the Ras Al Khor Wildlife Sanctuary (RAKWS) on the west – Dubai’s famed flamingo reserve. Treading the fine line between both these key project parameters, Sama Dubai, the international real-estate arm of Dubai Holding launched The Lagoons, a spectacular waterfront development on 14 April, 2006.

Taking a genuinely responsible approach to conducting business profitably is the Sama mission. It is one of the first projects in Dubai to undertake a comprehensive Integrated Environmental Impact Assessment (EIA) following international standards across all phases of the project. Sama Dubai, with Dubai Municipality, is exploring ways to protect and enhance the sanctuary and to ensure that the project development is in harmonious existence with the surrounding ecosystems.

During the launch, HE Mohammad Al Gergawi, UAE Minister of State for Cabinet Affairs and Executive

Chairman of Dubai Holding said, “The Lagoons project is one of the biggest real estate projects being undertaken and is aimed at creating a unique development that adds another value proposition to the overall offering of Dubai in the regional and international arena. His Highness Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President and Prime Minister and Ruler of Dubai has identified tourism and real estate as a key driver of growth. The Lagoons will reinforce and strengthen the positioning of the UAE and particularly that of Dubai as the international centre of business, trade and tourism.”

Adds Farhan Faraidooni, CEO of Sama Dubai, “The Lagoons is one of the first projects in the emirate, to develop an environmental policy statement and principles, which will ensure an environmentally responsible development. It is also Sama Dubai’s first project and in Dubai.” Hence there is ongoing consultation with different international and local organizations and stakeholders, such as Dubai Municipality, the World Wide Fund for Nature (WWF) UAE office and the Wildlife Protection Office (WPO) to ensure

this commitment is more than mere talk.

Estimated to cost around Dh 65 billion, The Lagoons is slated for completion by 2010. Spread over an area of 70 million sq. ft, it combines proximity to the necessities of city life while offering seclusion and natural surroundings. It will comprise of seven beautifully landscaped islands, with residential units, shopping centres, a central business district (CBD) and marinas, which will be interlinked with bridges. It will also feature a plethora of parks and green belts and reduced density housing and reduced building heights in the ecologically sensitive buffer zone.

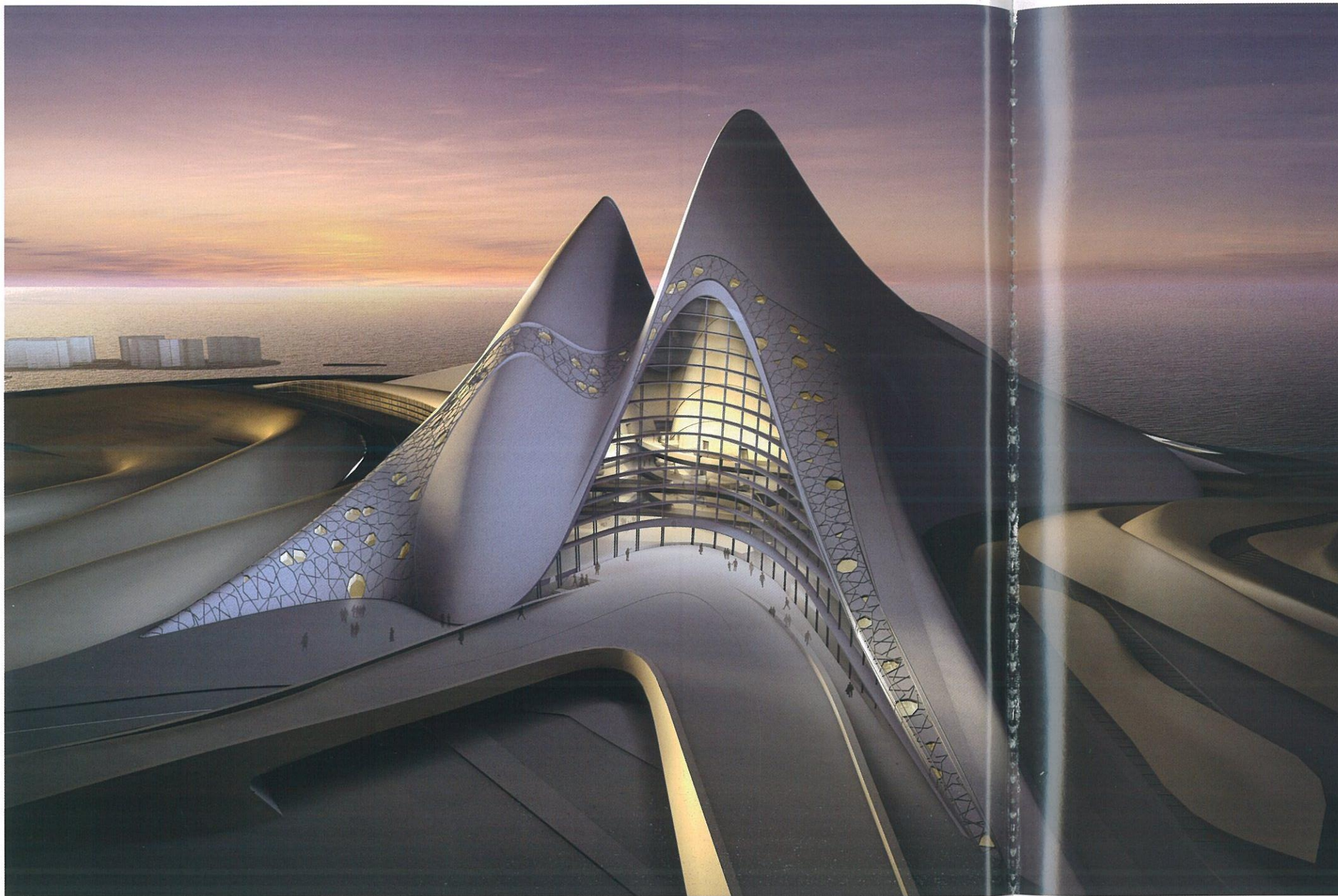
Water is a main component of the development, and canals and promenades form an integral part of the project and define its character. A series of continuous promenades along the edges of the canals, both primary and secondary, provide uninterrupted, active access for pedestrians and cyclists to enjoy The Lagoons. The north-western island will play host to Dubai’s first opera house totally sized at 3.3 million square feet. The main hall will house roughly 2500 people. The opera house will also accommodate other facilities including

a theatre, museum, art gallery, a six star hotel, restaurants, as well as a performing arts institution/music school.

The project is a self-financing property development through pre-sales and financed directly by Sama Dubai (including options such as the establishment of joint ventures). In June 2006, Sama Dubai established a joint venture with Emirates Bank Group to create multiple funds and sub-funds for the real estate sector, including open ended real estate funds. Investments in the development funds will come from three sources – the founding partners, Emirates Bank Group and Sama Dubai, and institutional and private investors. The said funds will cater to both conventional investors and those looking for Shari’ah compliant options.

#### STRATEGIC LOCATION

The Lagoons project is located on an undeveloped site located on the east bank of the Dubai Creek. The existing site comprises an open desert landscape characterized by generally flat to gently undulating topography with vistas



Infrastructure work has commenced  
Below: Farhan Faraidooni



overlooking the Dubai Creek. The site is bounded to the north by the planned 6th Crossing, to the east by Nadd Al Hamar Road, to the south by Ras Al Khor Road, and to the west by the Creek and Ras Al Khor Wildlife Sanctuary. The site is situated on a former Sabkha and the landscape design will therefore incorporate appropriate technical remediation measures to ensure that this very inhospitable environment is transformed into the planned vision.

It is well positioned regionally located between Dubai CBD and directly linked to Sharjah, Ajman and other northern Emirates. It also well positioned on the national road network with links to Al Ain city and Oman. This location will encourage visitor interaction and function as a tourist, business, entertainment and second housing destination.

Community facilities will also be provided as per Dubai and international standards. Views to the Dubai Creek and the panoramic city skyline beyond are available from many portions of the site. With additional development currently

underway along the Creek, including Business Bay and Dubai Healthcare City projects, additional buildings will become part of the views from the site.

The Lagoons masterplan has been designed by the visionary CEO of Sama Dubai, Farhan Faraidooni himself, who has been instrumental to the concept, thinking, and design of the development. The Lagoons site will be defined by a series of striking features including landmarks, gateways, nodes and key visual axes. These will include the Dubai Opera House and the Dubai Towers - Dubai. Building heights will be a major determinant of the built environment that will give vertical expression to each of the development areas. Medium- to high-rise buildings are generally located in the north, south and east of the site framing the dominant and centrally located business district that features buildings and structures rising to more than 90 levels. Building heights taper down to two levels in the buffer zone, which is surrounding the flamingo birds

and other wild life sanctuary area.

Architects and urban designers worldwide prefer east to south-west orientation to get better lighting. But in Dubai north-east and even west is preferable due to hot weather. Routes and directions will also depend on spines and good quiet vistas. Again visual spines and urban design experiences, including the provision of plazas, will create excitement and sculptural effects. Good urban design can be defined as providing people with comfortable outdoor activities and spaces, which will be visible throughout this project. The massing looks proportionate from all sides. Besides, water, greenery and other landscaping will enhance the experiences.

#### HIGHWAYS, ROADS, STREETSCAPES

Strategically located at the crossroads of two major highways - Ras-Al-Khor and Nadd-Al-Hamar Road and the proposed sixth Creek Crossing, Lagoons is very well

connected and integrated with the city road network. Two in-roads from each of the three bordering highways ensure efficient ingress and egress of vehicles from every part of the site. The new regional CBD (Central Business District), is directly connected with the peripheral roads. An extensive hierarchic road network comprising of collector, sub-collector, local roads and access courtyards further connect with every plot and POS (Public Open Space).

A far-sighted and flexible approach has been the basis of the Lagoons masterplan. The diverse plot configurations and locations cater to a range of land-uses with the road-network capable of accommodating reasonable changes in traffic demands. A sensitively employed 'mixed-use' approach ensures alignment with future market-driven land-use demands.

With an unparalleled advantage of the neighboring creek-side Ras-Al-Khor Wildlife Sanctuary and Nature Reserve, The Lagoons has been envisaged as a 'green-themed' development. This has inspired an energy-



A Lagoons Park

#### FACT BOX – THE LAGOONS

- Slated for completion by 2010.
- Total project cost estimated to reach Dh 65 billion
- Total gross floor area around 95 million sq. ft.
- The Lagoons will contain seven detached islands, plus the Opera House Island
- Expected to house more than 150,000 inhabitants.
- Freehold property with 100% ownership for all nationalities.
- 486 buildings, 109 luxury villas, 377 high-rise mixed-use buildings
- More than 40 bridges over the seven islands
- The project will be undertaken in a single phase.
- 61% of the project is earmarked for residential, 24% for offices and 5% for hotels 5% for retail and 6% for community facilities/other.
- 620 HA - 27% water, 22 % open space, 34.5% plot, 16.5% roads
- The Lagoons will house Dubai's first Opera House, designed by an internationally acclaimed architect.
- Half of the project will be sold to third party investors as land plots for development. The remaining 50% of the area will be developed, marketed and operated by Sama Dubai.
- Water navigational canal for yachts that support 100 ft vessels, with over 40 km of waterfront
- Four marinas that can accommodate up to 200 yachts
- An adjacent bridge planned by Dubai Roads and Transport Authority (RTA) will ensure smooth traffic to and from the development.
- Phase I is completely sold out, with intense interest shown by local and GCC investors. Phase II has witnessed continued swift selling 15 million square foot (gross floor area) land plots for residential, retail, commercial, and hotel use.

conscious and nature-priority approach in its urban design and planning. In keeping with this, extensive cycle paths and pedestrian walkways have been planned within and between district communities also highlighted by the extensive waterfront boardwalks all along the water edges.

#### URBAN STREET

The Lagoons comprises a series of related commercial hubs. These urban nodes are served by ring roads that circumnavigate the high density development and distribute traffic from the main arterial routes to the private plots and associated parking locations. The landscape character will be contemporary and functional, through the appropriate use of street furniture, paving and lighting that creates a pedestrian scale environment, with extensive shade tree planting.

#### RETAIL BOULEVARD

Residents and visitors will gravitate to these boulevards, as they are landscaped to provide quality pedestrian spaces encouraging social interaction and activity. Through the integration of a tram line, good traffic management and plenty of parking access, the retail boulevards impart an active connection between the varied character districts and offer a variety of retail and hospitality amenities. Landscape features will include wide footpaths, extensive canopy tree planting to provide shade all year round, seating, places for people to congregate and grassed central medians for the tramway.



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**▣ SUBURBAN STREET**

The residential areas within The Lagoons will be served by a series of local suburban roads. Cobblestones will be used on these low design speed roads to provide character and encourage low traffic speed and pedestrian priority. Shade tree planting will be used throughout and under-storey shrub planting where pedestrian circulation spaces permits.

**ACCESS COURTYARDS**

Access courtyards will enable both vehicle and pedestrian access to buildings. Priority is given to pedestrians and paving treatments and streetscape furniture design will emphasize this. On-street parking will be discouraged.

**SEVEN DISTRICTS**

The vision for the Lagoons site is that the major mixed land uses will be developed by a series of man-made islands or districts and on the semi-circular perimeter of land that surround them. The islands and perimeter will be interconnected by a hierarchy of roads and bridges, pedestrian and bicycle network and internal transit system. The business district is earmarked as the central and primary employment focus for the residential community living on the other islands and districts at the Lagoons. Recreation and entertainment uses are focused along the boardwalks and the numerous marinas adjoining the canals.

One of the overriding objectives of the project is to establish an urban community within an open space setting. These components include parklands, access courtyards, water canals and active water edges. The provision of extensive natural landscaping, bicycle and pedestrian pathways, the parklands are an important part of the project-wide amenity. An important aspect of the master plan is the internal visual and physical axes inter-connecting the various components within the scheme. These provide important pedestrian connections and also provide vehicle access in some situations.

There are four main linear open spaces, each employing specific landscape features to emphasise the sightlines, lead the viewer to key locations and accentuate the scale of the development. The linear open spaces are designed on the theme of a landscape 'carpet', by manipulating water features, paving patterns and tree and shrub planting beds in patterns that echo traditional carpet designs. These will create cool shaded walkways that are visually interesting at both the small and large scales.

The Lagoons has been divided into a number of specific land zones to accommodate a range of mixed uses including villas, apartments, commercial and retail, recreation and entertainment uses. The zones are distributed across the Lagoons site in a parkland setting and interconnected by a road hierarchy system and pedestrian and bicycle pathway network. Community facilities, which respond to Dubai Municipality standards include:

- **Neighborhood:** including local mosque, retail facilities, local plaza



**PROJECT PROGRESS:**

Construction of the Dh 5 billion infrastructure works for The Lagoons commenced in April 2006.

**Construction Update:**

1. Water edge treatment is in its early stages, while road works are nearing completion.
2. Excavation work has commenced for four buildings
3. Main structural work has commenced for the 10,000 sq meter onsite sales office
4. Shoring work has commenced for the first building (of the abovementioned four). The shoring for the rest will commence on 20 Jan 2007. Piling work for the first building will commence in February 2006
5. Excavation work for four new buildings will commence on 22 Jan 2007.

**Construction Facts:**

- A Dh 5 billion investment will cover the cost of marine works, bridges, roads, elevated roads and water treatment facilities.
- Water body - 1.5 million cubic meters
- Length of constructed waterway edge blocks - 4500 m
- Utility and services tunnels - 4500 m
- Total length of quay walls - 37 km
- Total length of arterial roads - 21 km
- Seven to nine district cooling plants
- Seven to nine 132/11 KV substations
- Two drainage pumping stations.

- **Community:** Mosque, shopping, kindergartens, primary school, clinics, playgrounds and community park
- **District Level:** secondary and intermediate schools, post office and health care center and district park
- **Multi-districts:** civil defense and police station and DM centre

**GREEN LUNGS**

Three large centrally located public parks will provide large areas of green open space, by acting as 'green lungs' for the development and to provide opportunity for active and passive recreation. Each will provide slightly different functions and possess its own unique character. Each ▣



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Dubai Towers  
- the movement  
of candlelight



will contain significant mounding to provide appropriate scale and definition to the open space within the overall urban context, and to provide a green buffer between the densely developed districts.

The public park is conceived as a 'Family Park' The park contains central mounding with peripheral terraced areas, large water features and cascades, multi-purpose lawn areas, extensive shade tree planting for outdoor picnic areas, and lush shrub and ground cover planting providing attractive floral garden and scented garden effects. The 'Art Park' contains central mounding with peripheral terraced areas, artfully sculptured earthworks with integrated water features, opportunities for integration of outdoor sculpture pieces, an open air amphitheatre, semi-indoor spaces

and galleries integrated with mounding, extensive shade tree planting and lush shrub and ground cover planting providing attractive floral effects. The 'Botanic Park' contains a series of open and enclosed gardens portraying different ecological zones. Extensive shade tree planting will be provided and a large multi-purpose open area will be provided over underground car parking in the eastern area.

A large number of smaller open spaces are distributed throughout the project. These provide local focal points and an abundance of lush tree, shrub and ground cover planting to improve the microclimate and provide visual softening throughout the development. A number of plazas are planned in key locations within the urban fabric. They will adopt a more formal design approach, with primarily

hard landscape treatments providing opportunity for a wide variety of activities suited to the particular local context.

#### INFRASTRUCTURE

Integrated water and electricity services will be provided and maintained by DEWA. A STP (Sewage Treatment Plant) has been planned with flexibility of connecting with future DEWA sewage lines. All building services will be in accordance with DEWA building norms with priority to high-quality services. State-of-art building energy systems highlight the character of the buildings in The Lagoons.

Services like garbage collection and loading-unloading activities have particularly been controlled by specified guidelines towards maintaining a visually pleasant and serene ambiance. Intelligent-building features like access-control and climate-control will vary in accordance with the development type and developer. Eco-friendly concepts of water-recycling and grey water-separation will be incorporated.

#### SIGNATURE TOWERS

One of the focal points of the project is the Dubai Towers - Dubai, a cluster of breath-taking towers that combine, to form a truly inspiring and dynamic sculpture. This CBD centrepiece comprises of four state-of-the-art towers for residential, commercial, retail and hospitality purposes. Ranging between 57-94 floors, the estimated date of completion of 'Dubai Towers - Dubai' complex is mid-2010. Launched under the 'Dubai Towers' brand of Sama Dubai, the iconic structures will feature a choreographed concept of form and function to metaphorically represent the movement of candlelight. Farhan Faraidooni, CEO, Sama Dubai said, "The Towers will be visible from extended distances as the main feature of The Lagoons skyline." Sama Dubai will also develop these signature towers in every country identified as a potential market for 'Dubai Towers.' These include Dubai Towers - Doha, Dubai Towers - Casablanca and Dubai Towers - Istanbul. The towers offer facilities including retail, restaurants, entertainment, health spas, gymnasiums, hotels and residential apartments.

The architectural language in the project is mainly contemporary modern, except in Area 6. The latter design will utilize architectural elements from the traditional architecture of the Gulf area and Morocco/Andalusia. Sama Dubai is keen to provide an architecture that attends to small details in this area. Hence, themed architecture is the choice in these small buildings as it opens the door for richer details and experiences.

Sama Dubai is providing the concept architectural guidelines and specifications, which the individual developers must adhere to within The Lagoons. However, no two buildings will be alike in the project. Every building is carefully designed to respond to its location as well as to its role in the whole development. Yet, the position and the forms of these buildings when put together, creates a strong dialogue that responds to people's communal needs. As people move from one area to the other, they will experience a subtle

#### SAMA DUBAI - ECO-SENSITIVE PHILOSOPHY

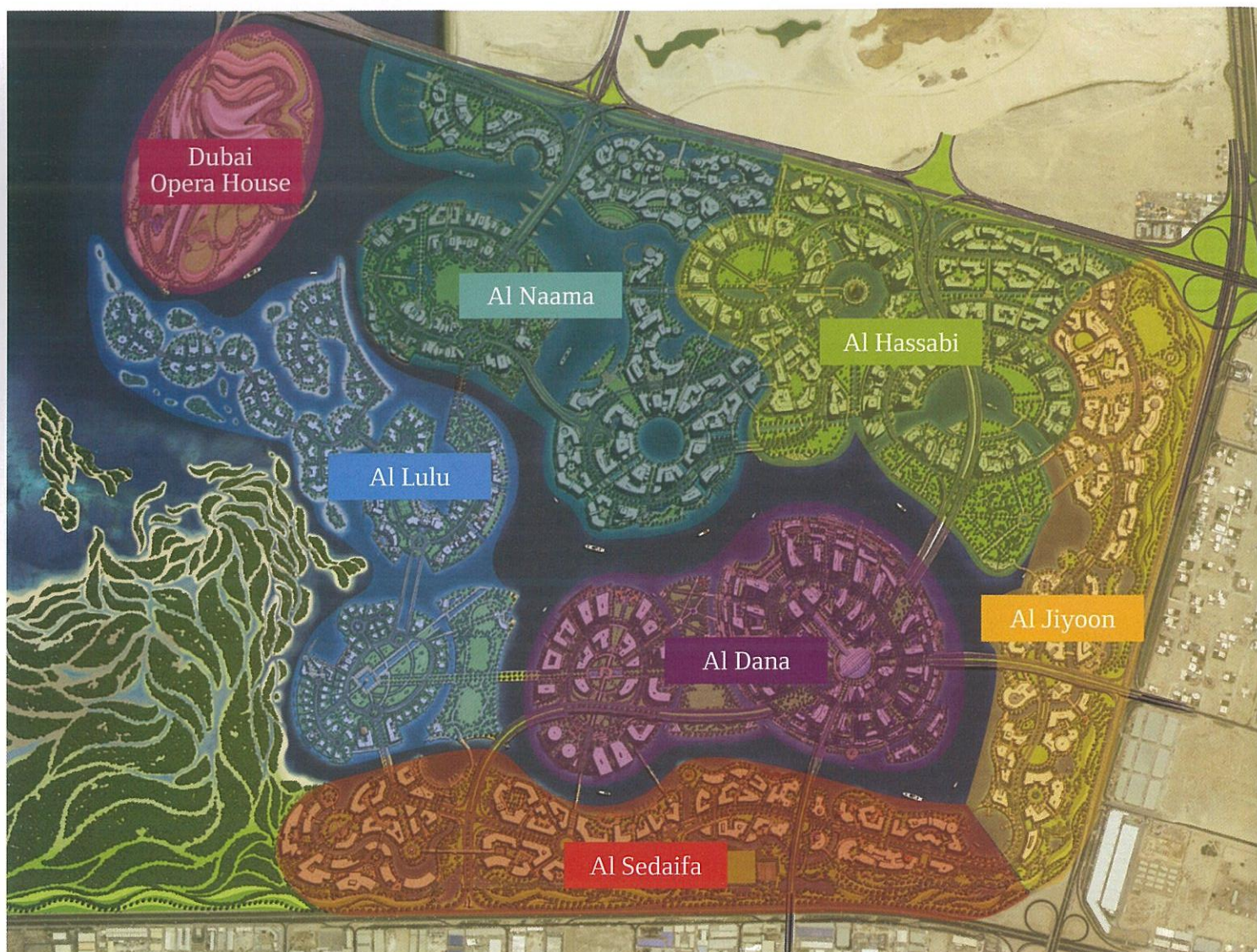
Dubai Holding launched Sama Dubai, its international real-estate arm with the intent of developing and investing in international real estate on 11 April 2006 Sama aims to reach the top five rankings list in the international sector and the first initiative was to launch its first project in the UAE entitled The Lagoons. Due to the project site being located adjacent to the Ras Al Khor Wildlife Sanctuary (RAKWS), Sama Dubai has strictly adhered to international standards of environmental protection from the earliest stages of master planning and engineering. Hence, the development has been designed and constructed to be in harmony with the surrounding ecosystems. Besides, Sama Dubai believes in using the latest available technology to reduce water and energy needs and to minimise waste and pollution within its project. It also takes advantage of renewable energy sources and initiatives to protect and preserve natural habitats. Again, as part of its ongoing corporate social responsibility programme, The Lagoons has sponsored a Dh 10 million visitor centre at Ras Al Khor Wildlife Sanctuary (RAKWS), with Sama Dubai overseeing the design and conceptual quality of the new facility. The centre will promote awareness on the significance of environmental conservation, and will act as a centre for learning and providing updated information on the country's bio-diversity. The initiative will also help promote Dubai as a prime eco-tourism destination says Sama Dubai CEO Farhan Faraidooni.

change in mood. The architectural language will change as the buildings change orientation, location relative to the water, and function. Some areas will be more business oriented, some will be more leisure oriented, and some will be low density residential, and so on. Naturally this will be reflected in the architecture. This is what will differentiate each area/district from the other within the project, while maintaining the individuality and the integrity of each building's design.

Promenades are conceived as an integral and vital ingredient of The Lagoons lifestyle. They link with the open space networks and key public transport nodes, both land and water-based. A significant characteristic is the 500mm freeboard between the impounded canal water level and promenade level, which will ensure excellent visual integration between the water and the surrounding activities. The promenades are 15m wide alongside the primary canals and 5m wide alongside the secondary canals.

The 15m wide promenades will contain pedestrian walkways alongside the water's edge, dedicated cycle tracks, and break-out areas / sitting areas fronting the adjacent buildings. It will be stepped down from the adjacent building thresholds to the water's edge, so as to provide visual interest and promote slightly elevated views from the buildings and sitting out areas towards the canals and distant landmarks beyond. Extensive canopy tree planting will be provided to provide shade and





## THE SEVEN DISTRICTS

**Al Dana** - The uniquely designed Dubai Towers - Dubai will be the iconic anchor within this Central Business District, which will also offer premium apartments and house international hospitality chains. It will be serviced by a well-planned transportation system that includes trams, travelers, water ferries and Dubai's new Metro Transport System. Al Dana's lifestyle will be complemented by various nightlife entertainment options interwoven amongst the waterside cafes.

**Al Lulu** will offer luxury homes with spectacular views of the iconic Opera House. Residents will live in individual waterfront villas and townhouses and enjoy vast private spaces and private jetties. The district will overlook the scenic Ras Al Khor sanctuary with a backdrop of the Sheikh Zayed road skyline.

**Al Sedaifa** will house mid-rise buildings offering luxury apartment and high-end retail. The latter will include leading fashion labels from Milan, Paris, London and New York.

**Al Jiyoon** will epitomize the bazaar experience. Residents and visitors can browse boutiques and shops amidst the richly landscaped parks, plazas and piazzas along the waterfront.

**Al Naama** will offer a sanctuary for body and mind with health clubs and spas.

**Al Hassabi** will feature open markets, art galleries, large parks, walkways and bicycle tracks running alongside winding waterways. The planetarium and amphitheatre will provide third-generation acoustics for hosting international performances.

**The Dubai Opera House** forms the seventh and final district. This district will also house an international six-star hotel, upmarket restaurants and cafes.

ensure that pedestrians and cyclists can use the promenades at all times of the year. Shade structures will also be provided in certain locations. Two primary quay wall types will be adopted according to local functional requirements – a vertical quay wall and a revetment wall. Within each of these two major types, a wide variety of aesthetic edge treatments and physical barriers will be adopted to create local character and reflect the functional differences of different areas.

Secondary waterways will mainly be non-navigable and will have shallower depths and only vertical quay walls. They will frequently traverse changes in topographic levels and thus will contain weirs and cascades which will provide visual interest as well as water aeration qualities. The promenades alongside secondary canals will generally be 5m wide and will contain pedestrian walkways, adjacent informal seating, and canopy tree planting to provide a mixture of dense and dappled shade in different areas.

The western part of the site falls into the buffer zone surrounding the Ras Al Khor Wildlife Sanctuary. The landscape design of this area will incorporate environmentally sensitive measures in accordance with the recommendations of

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the Environmental Impact Assessment.

Central to the master plan is an intricate system of navigable waterways set at a constant water level, and linked to Dubai Creek via a navigable lock system. The waterways and landscape together create a visually dynamic setting for the development that provides relief from the dense urban form, creates shaded destinations for active and passive recreation, provides a scenic backdrop to landmark buildings, and facilitates public movement throughout the site. The landscape is envisioned to be environmentally sustainable, containing a wide variety of landscape types suited to the many different functional requirements, whilst always providing a beautiful and physically comfortable environment for outdoor activity at all times of the year.

#### PERIPHERAL LANDSCAPE TREATMENTS

The adjacent highway reserves along the 6th Crossing, Nadd Al Hamar Road and Ras Al Khor Road will be given landscape treatments including mounding and dense planting that provide a physical and psychological buffer between the development and the potential noise and visual distraction created by road traffic, while also creating an attractive definition of the project boundary. The area adjacent to the Wildlife Sanctuary will be landscaped in a naturalistic style using species listed in the EIA plus other indigenous species ideally suited to the local conditions. The potential for exploiting views between the development and the Wildlife Sanctuary will be exploited within the parameters defined in the EIA.

#### ICON STATUS

It is intended that two or three selected bridges within The Lagoons will be developed as iconic bridges which become international icons that provide instant recognition and identification with the project. Iconic waterfront landmark structures are proposed at key locations along the waterfront promenades. These will fulfil several purposes, including providing visual orientation to marine traffic, providing local cultural references, and enhancing a sense of place and local character and identity. Gateway features are proposed alongside the principal vehicle entry points to the site, where the Primary Arterial Roads and Secondary Arterial Roads enter from the 6th Crossing, Nadd Al Hamar Road and Ras Al Khor Road. These will provide a sense of arrival and homecoming for residents and key visual markers for visitors.

State-of-the-art modern construction technology, solutions and materials will be extensively used within the project. This will accelerate the construction processes to meet the project delivery schedules. Much of this technology will be used for the first time in the Middle-East – such as façade engineering, building management systems, car parking control systems, vertical transportation systems and so on. Construction of the Dh 5 billion infrastructure works for The Lagoons commenced in April 2006. At the time of writing, water



#### THE LAGOONS AND THE RAS AL KHOR WILDLIFE SANCTUARY

The Lagoons is one of the first projects in Dubai to undertake a comprehensive Integrated Environmental Impact Assessment (EIA) following international standards across all phases of the project. The project is being developed by Sama Dubai in an area adjacent to the internationally important Ras Al Khor Wildlife Sanctuary (RAKWS), where bird watching is world class. Sama Dubai also recognizes the importance of ensuring that biodiversity is managed and conserved for the benefit of future generations. This includes ongoing efforts to conserve and safeguard the UAE wetland's such as sponsoring an expert mission to drive forward the UAE's candidature to the RAMSAR Convention. The latter is an international environmental treaty for the conservation and sustainable utilization of wetlands that aims to stem the progressive encroachment on and loss of wetlands now and in the future.

#### Ramsar site preparations

Environmental experts have visited Dubai to assist in preparations for the designation of RAKWS as an official Ramsar site. Results are expected to confirm the site as the UAE's first internationally recognised and protected wetland area, and the third such site in the GCC. As part of The Lagoons development, the existing Dubai Creek will be extended and reconnected to the Arabian Sea, creating an inland loop with two inlets, which will allow extensive flushing of the entire Creek. This flushing and extension of the existing waterways will also benefit the RAKWS, improving the existing water quality significantly, as well as the water circulation and flow of the lagoon.

edge treatment is in its early stages, while road works are nearing completion.

Come 2010 and Dubai will see The Lagoons as a visual landmark when viewed from both air and land, through the use of strong geometric shapes and landmark/gateway buildings that are framed by a dramatic network of canals. Organic landforms, varying local topography and modern architecture will blend to create a unique project that will also be home to its first inhabitants – the flamingos. Therein will lie the success of this development. ■



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