



## LERY' WITH A DIFFERENCE

A USEFUL RESOURCE FOR OUR CLIENTS

Karachi metropolis has been given its first taste of a 'Design Gallery' by Landscape – a dedicated group of professionals – showcasing innovations in architecture, interior design and urban planning.



The one-of-its-kind Gallery opened its doors on Friday, April 1, 2016, promising to provide an enriched learning experience for its visitors comprising not only architecture and design professionals but also aspiring home [3D PRINTING owners, businessmen, as well as art lovers.

The three-day Open House proved to be a huge success with people from all walks of life visiting the Gallery. Impressed by the presentations, a number of them showed interest in getting their projects executed by the company.

- The Express Tribune, April 1, 2016.

RELAXING ENVIRON FOR BEACH GOERS □ GROUNDING

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DESIGN COMPETITION OPEN HOUSE CHAIRMAN'S MESSAGE



Over the years, our group of energetic, devoted, entrepreneurial professionals have taken in hand, and successfully executed an impressive number of high-profile projects earning widespread acclaim.

This newsletter hopes to serve as a compilation of everything that inspires the Landscape team of designers, architects and engineers. It covers ideas spanning sustainability, the potential of the land and its resources and innovation for the wellbeing of humanity.

When we discuss ideas that motivate us, we demonstrate the desire to be better at what we do.



'Partnering for a Better World'

## A RELAXING ENVIRON FOR BEACH GOERS





Karachi is blessed with the best stretch on the Arabian Sea's 1,050-km Pakistan coastline. The metropolis possesses immense potential for growth as a marine tourist destination.

From its inception, Landscape has made beach development top priority in its 'Think Green' vision so as to help turn our shoreline into a remarkable resort for locals and tourists.

In this regard, we have developed various proposals and plans, some of which we have also been presenting to the relevant local authorities.

The first project we undertook to launch our operations was the construction of a model beach house, at main Turtle Beach, Hawke's Bay Drive.

The beach house serves as a piece of art that allows you to experience the services we offer

including design, aesthetics and use of simple yet innovative materials.

The location – Turtle Beach – is a world-renowned stretch where marine life abounds and aquamarine nurseries are also witnessed offering some of the most attractive sightseeing.

Other sea side locations that can be used for construction, include, Hawke's Bay, Sands Pit, French Beach and Paradise Point.

Our expertise can be used to design and build water sports clubs, resorts and much more.

You may choose amenities such as swimming pool, conference room, dance floor, extended deck, jacuzzi, balconies opening into the ocean view and tranquility being reinforced with natural elements - stones,

pebbles, and beach sand, used indoors (see Grounding below), wood and glass.

One of our earliest proposals to authorities, in fact, was the establishment of a Water Sports Club at Korangi Creek under a regulatory body.

To visit the Landscape Model Beach House, or to get information on beach house design, email us at: info@landscape.com.pk



RN @ Landscape Executive Director



### **Healing Systems Emerging from the Land**

#### Feng Shu

Feng Shui is the Chinese art or practice of organizing spaces to increase positive energy or Chi (flow of energies) in our environment.

The practice is based on a belief in the patterns of Yin and Yang that have positive and negative effects. It commonly influences orientation, placement, or arrangement.

To create a balanced interior design environment, Landscape utilizes the natural elements water, fire, wood, earth and metal in different combinations catered to your living spaces.

#### Grounding

Grounding or Earthing refers to connecting electrically with the Earth.

A 2013 study published by cardiologist and certified bioenergetic psychotherapist Dr. Stephen Sinatra looks at the powerful effects earthing has on the cardiovascular system.

In addition, several studies have also referred to grounding and earthing as the "oldest, easiest and cheapest way to create optimum health."

#### Nature-Oriented Ideology

Studies in Natural healing and Eco-health continue to play an increasingly important role in our design work.

At Landscape, we are inspired by all the forms and healing systems emerging from the land.

We take the environment as a whole and see our homes, offices, recreation spaces and all other constructed shelters as a continuation of this landscape.

With land becoming scarce as the world's population grows and environmental shrinking changes amount of livable space on Earth, some architects say the solution is to build upwards.

Proposed structures can be up to 400 floors, containing all the components of a city, from housing and hospitals to universities and municipal departments.

Advocates say vertical cities will save energy, support a population growing and preserve land for food production, nature, and recreation.

The concept of the skyscraper has evolved with time. Where once they were built solely to provide more office space, many now house numerous different activities.

Previously they consumed huge amounts of fossil fuels, while now skyscrapers are increasingly being designed to minimize energy consumption and will generate a growing share of their own power from renewable sources in the future.

Around the world, tall buildings are now being seen not as forms created in resistance to nature but as essential elements in a sustainable or eco-friendly strategy for urban design.

HIGH-RISE AND BEYOND VERTICAL ARCHITECTURE Over half the world's population lives in urban areas today, according to the United Nations, and that figure is expected to rise to 66% BY A SPACE-SAVING WAY TO HOUSE INCREASING POPULATIONS

> A significant model to look at is the 360° Building by Isay Weinfeld. It is located in São Paulo, the largest city in Brazil, where currently over 10 million people live over 1,525 km<sup>2</sup>.

> this setting, the "norm" live not in spacious shelters but in crammed and confined spaces and to commute long distances everyday between home and work. The time left for leisure is limited.

> The 360° Building features 62 elevated homes with yards designed as genuine living spaces, wide, airy and bright. It presents seven types of apartments - either 130, 170, 250 or 415 m<sup>2</sup> combined in sets of 2, 3 or 4 units per floor,

in six different arrangements.

TYPES OF **APARTMENTS** 

DIFFERENT **ARRANGEMENTS** 

Starting with single vertical structures, Pakistan must adopt a culture to build upwards. Such projects give us the opportunity to combine modern, sustainable living with plenty of nature, featuring car parks and public gardens.



A South American case-study reference JK @ Landscape **Principal Architect** 





## UNDERGROUND GARD

Piping in sunlight beneath street surface

The LowLine is a proposed park in New York city of the United States that would take up an acre of land beneath the streets of the Lower East Side in Manhattan.

The plan is to convert an abandoned trolley station into an underground green space by packing it with thousands of plant species that would be sustained by pumping in natural sunlight through a complex capture system.

To test if this system would actually work, the LowLine Lab was created - a 5,000 square feet warehouse that has been transformed into an experimental space. This is about five percent the size of the actual LowLine space.

The tubes above that look like fluorescent lights are actually polycarbonate plumbing tubes, fitted with mirrors and lenses which transport sunlight from high rooftops to this interior space of the lab. The light emitted is all natural, from the sun.

Pakistan, by virtue of being located in the sub-tropical belt, annually receives a considerable amount of sunshine. Inspired by viable proposals like the LowLine, we see the potential for abandoned and vacant structures or enclosed spaces in the country to be revitalised using sunlight.

## **SUSTAINABLE ARCHITECTURE**

**ECO-FRIENDLY ENVIRONMENT** 

Sustainable building requires that architects, engineers and contractors all co-create with the environment focusing on renewable energy, sustainable materials, water conservation, site development and quality of indoor ambiance.

Sustainable design improves the quality of life while eliminating the need for non-renewable energy. It creates solutions that solve the economic, social and environmental challenges of the project simultaneously. These solutions are powered by sustainable energies.

Typically, sustainability is illustrated as three intersecting circles connecting community, economy and the environment. The three rings of sustainability illustrate interdependence of the elements.

The environmental, economic and social benefits of sustainable building can be generally categorized in the following ways:

#### **Economic Benefits**

Not only does sustainable building improve the quality of our environment, it also has many economic benefits. Using sustainable materials, reducing energy consumption and improving water efficiency will enable you to:

- · Help expand the 'Green Market'
- Reduce operating costs
- Optimize life cycle of the building
- Increase property value
- Improve occupants' attendance and productivity

Buildings utilize resources such as raw material, water and energy, generate waste and emit harmful atmospheric emissions. The built environment is a major source of CO<sup>2</sup> (Greenhouse gas) emissions, energy and water consumption, conventional air and water pollution and solid waste stream.

Green design and construction not only help cut down emissions released into the ozone layer, but also help significantly reduce energy, water and HVAC costs.

Landscape, as a design-build firm, believes that a building that approaches sustainability and green materials from its design phase has a very strong potential to perform in an environmental-friendly manner.

Based on this, Landscape advises the inclusion of "green" standards during the design phase as a proactive way to reach great performances.

#### **Environmental Benefits**

The whole purpose behind sustainable building is to preserve our environment and avoid depletion of natural resources. When sustainable substitutions are made throughout the development of a project they allow us to:

- Protect the ecosystem
- Reduce emissions
- Improve air and water quality
- Conserve water
- Reduce waste streams
- Conserve and restore natural resources
- Reduce waste
- Control temperature

**Green facades** can play a role in reducing the urban heat effect. On hot days, buildings and roads radiate heat, making cities much warmer than less-developed areas nearby.

A recent report from the global engineering firm Arup makes the case that they do, and that as cities get denser it's even more important that buildings have built-in greenery to help suck up carbon, filter air pollution, dampen noise, and keep cities cooler.

In the year 2015 only, there were 1,242 recorded deaths from heatstroke in Pakistan. Local hospitals/clinics reported treating more than 80,000 patients suffering from dehydration during the extreme weather.

Plants and greenery cool cities by absorbing sun, shading buildings, as well as through evaporation.

The green design development will continue to flourish and with time the benefits of sustainable building will continue to grow.





FS @ Landscape Architect

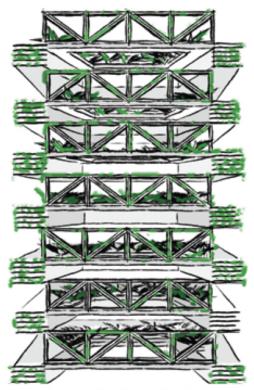


To be sustainable is to be resilient. It goes hand in hand with our goal as a nation to thrive and flourish.

#### **Social Benefits**

Although the environmental and economic benefits of green buildings are well known, their social benefits are often ignored Improving indoor environmental quality will allow you to:

- Improve occupants' comfort and health
- Create an aesthetically pleasing environment
- Minimize strain on local infrastructure
- Boost occupants' overall morale
- Increase worker productivity



Conceptual design integrating plantation into the facade

# MELDING CONCEPTS INTO REALITY

Landscape Architecture and Interiors Ltd is incorporated in the United Kingdom and Pakistan, offering architectural planning, interior design and a complete scope of construction and fit-outs, together with bespoke furniture design and production.

The seasoned architects at landscape strategically plan the space dynamics by understanding the context. After an in-depth survey is conducted, the zoning and initial layout designing begins.

Keeping the space and requirements in mind, our designers envision structures that are both versatile and functional. The quality of the built area compared to open spaces is also examined very carefully, in strict compliance with the bye-laws and the client brief to produce a creative bespoke design.

Our team of highly skilled carpenters, painters, polishers, site supervisors, electricians, masons, as well as structure, electrical and civil engineers, work hand in hand so that our designs are executed to perfection.

## DESIGN PHILOSOPHY

Our design philosophy revolves around innovating through materials and observing spaces through a lens which enables us to develop concepts that are evolving with respect to details and the overall experience of space.

With a clear vision of functionality, an awareness of the surrounding environment and an advanced knowledge of current design trends and innovations, we strive to provide our clientele with the most durable and aesthetically attractive design solutions.

Our aim is to further enhance our strategy towards design, going beyond the conventional methods and approach in order to encompass sustainable methods into construction and execution.

You can experience the executed projects and materials at our Design Gallery. It offers a variety of building and design materials to choose from, for all genres of architecture and interior design.

Our trust-rating amongst clients, as well as market peers, has been consistently on the rise and strengthens our resolve to continue to perform to a higher level of excellence.

We are proud of the corporate and commercial assignments, residential undertakings and high-rise projects which we have completed, or are working on.



ZN @ Landscape Managing Director



Cross-departmental research by quantity surveyor, audit procurement team, administration, overseen by ZN.





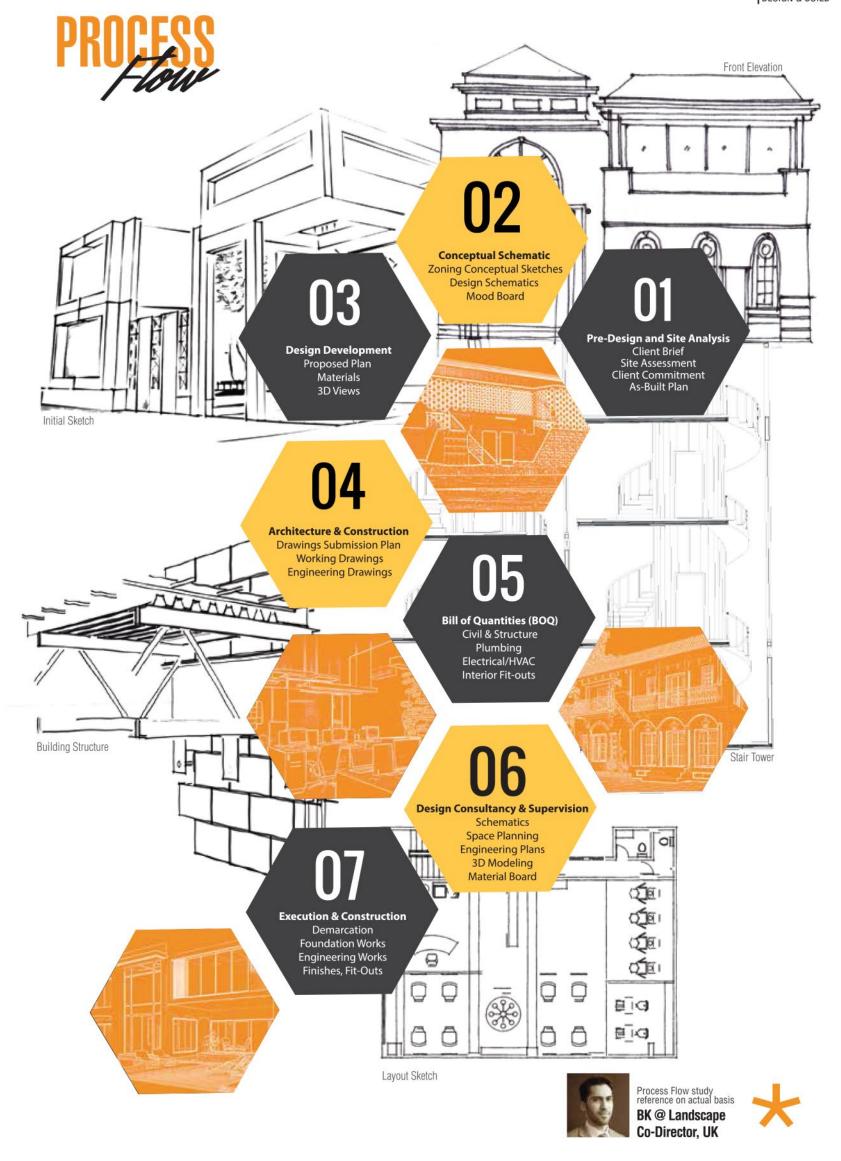












## WHAT DRIVES CONTEMPORARY DESIGN

#### **IN-HOUSE VIEWS**

IN. Chief Executive

In this day and age when overpopulation and massive urbanization exert pressures on space availability, Architects and Engineers are primarily essential to innovate functionality and aesthetics. This is potentially required for all residential, commercial, mixed-use and public arenas and precisely where the services of a professional establishment like Landscape are vital.





RN, Executive Director

Design compliance is an imperative phenomenon. It entails execution and standards being followed on ground with accurate specifications in place. Eventually, this adherence to guidelines becomes a built vocabulary of cities. Our vision as a company is to emphasize greater depth in architecture.

#### JK, Principal Architect

I see the role of architects as evolving. New opportunities will require architects to be involved in tasks beyond 'traditional' scope of architecture. In the future, architecture will be more collaborative. There will be a need to integrate with people from various professions such as social anthropologists, environmental scientists and businessmen.





AA, Senior Electrical Engineer

Environmental regulations are being introduced in the designing of electrical systems the world over. These regulations restrict the use of lead and mercury as well as other hazardous substances in the manufacturing of consumer and electronic products. The waste from electrical equipment requires programmes for the processing of electronic waste. We as engineers and designers should work towards enforcing similar strategies in Pakistan.

#### Dr. MA, Senior Structure Engineer

For the future, I would like to see more structure engineers who have an understanding of architecture and space planning. This will lead to a greater appreciation of the role of architects by engineers and clients, alike. Architectural design and structural engineering are interdependent and the successful implementation of modern structures in the future, depends on cohesion between the two.





GQ, Senior Civil/Plumbing Engineer

The earth has a complex, natural biospheric recycling system that converts air, water and solid waste into fresh water and air. I see the future of civil MEP engineering as being inspired by this phenomenon, we must be able to design systems while considering the entire building and preserving and respecting the natural earth systems.

## KARACHI OUR HOME, OUR CITY

Help us envision an integrated, resilient and inclusive city

7th largest urban city of the world, 23.5 million people over an area of about 3,527 km², with 15,500 people per mile².

Mega city:

'A continuous urban area of more than 10 million people.'

There are currently 30 mega cities on the planet and Karachi will soon be one of the biggest cities of the future.

## 53 million people, by 2050

Being a part of Karachi, we strive to make it a better place to live in. At Landscape, we believe in keeping an optimistic and futuristic approach towards improving our city in terms of architecture and design. We work towards finding solutions for problems.

There are currently 30 mega cities on the planet and Karachi is the 7th largest urban concentration with about 23.5 million people over an area of about 3,527km². By 2050, there will be more than 53 million people, that's bigger than all of present-day South Korea.

Studies by the Planning Commission of Pakistan show that by 2030, about half of the population shall be living in cities and other urban settlements. Comprehensive planning is required to meet this increasing urbanization, particularly in Karachi where an influx of people from rural areas and small towns of the country has created environmental pollution, putting heavy burden on the city's resources.

There is a foremost need to give attention to housing, particularly to the rapidly increasing backlog in the sector. We see unprecedented growth in *katchi abadis*, as the local slums and

squatter settlements are called. Furthermore, the need for high-rise buildings and single-unit villas in all urban locations is escalating.

Some studies show a backlog of nine million housing units as per current estimates. Around 300,000 formally built units are constructed yearly in urban areas. Thus, the backlog continues to build up resulting in the emergence of *katchi abadis*.

A backlog of nine million housing units exists in Pakistan. This situation needs to be urgently addressed and remedied.

Our focus is on how we can contribute to improving - if not eliminating - the situation. Landscape believes it is our social responsibility to make an effort in raising living standards for our fellow citizens.

We strive to adhere to the vision of the Father of the Nation as enunciated in his address at a gathering of the Karachi Municipal Corporation, on August 25, 1947.

# Jinnah's Wision

EXCERPTS FROM THE QUAID-E-AZAM'S ADDRESS AT KMC ON AUGUST 25, 1947

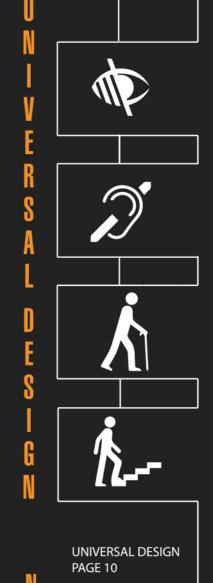


I have great love and regard for this beautiful town not only because of my old associations with it, or because it is my birthplace, but because it has now become the birthplace of the free, sovereign and independent state of Pakistan. Karachi will on that account not only be symbol of special significance but will occupy a place in history for which there is no parallel.

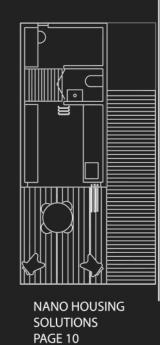
Karachi is no ordinary town. Nature has given it exceptional advantages, which particularly suit modern needs and conditions. That is why starting from humble beginnings it has come to be what it is, and one could say with confidence that the day is not far when it will be ranked amongst the first cities of the world. Not only its airports, but also the naval port and also the main town will be amongst the finest.

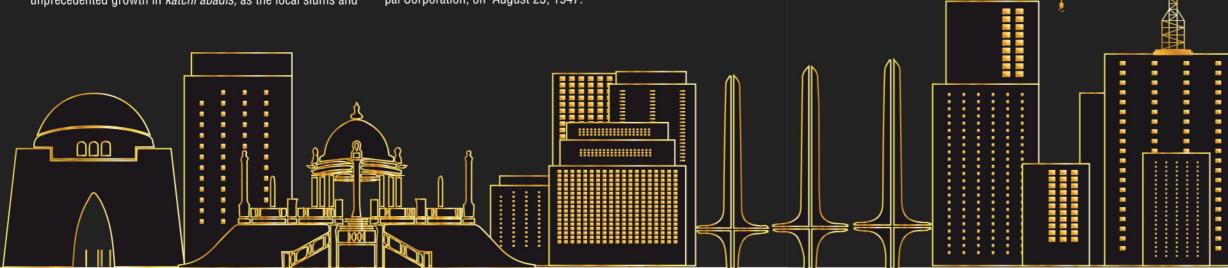
There is one specially pleasing feature about Karachi. While most of the big cities are crowded and cramped with over towering structures, Karachi has large open spaces and hill station style roofs which give to the visitor a feeling of space and ease. It has also got the advantage of a salubrious climate. I visualize a great future for Karachi.

'The Guide to Karachi' distributed to American soldiers posted in the city, during the 2nd World War described Karachi as the 'Paris of the East' and the 'cleanest city in the whole of [British] India', while praising its sea, beaches and bathing places.



THIRD LARGEST CITY IN THE WORLD





## MANO-HOUSING SOLUTIONS FOR OVER-CROWDED URBAN SPACES



A 'green' pre-engineered concept for residential use that presents an innovative and sustainable architectural proposition offering an optimistic solution for the global housing issue of very small living spaces with integrated functionality.

Finding sustainable living solutions in urban areas has become increasingly challenging, both in the developed and the developing world.

POD-INDAWO, a sustainable, modular, prefabricated nano-home designed by, Collaborate000. South Africa, offers one such solution.

#### **PREFABRICATED**

Each pod is prefabricated off-site to each client's specification allowing you to simply order a bare-bone shell or to go for a fully kitted deluxe interior.

#### **MODULAR**

Several 17m<sup>2</sup> units can be positioned in various configurations to form larger, multi-use, living areas.

#### WE NEED NANO HOUSING BECAUSE OF:

- = the ever-decreasing amount of sufficient living space in high-density urban areas.
- = the desire for a solution to cope with continuing density growth.
- = the need to create more efficient and intelligently designed living quarters having flexible spaces.

#### **SUSTAINABLE**

Pre-fabrication ensures quality, lower labour costs, added productivity and reduces material waste to just 2%. The module is fitted with energy saving devices appropriate to its size and location. Specific advice is given for each pod's location to maximise solar gain.



ML @ Landscape Architect



## **ENABLING ACCESS**

#### **EQUITABLE USE**

The design is useful and marketable to people with diverse abilities.

#### **FLEXIBILITY IN USE**

The design accommodates a wide range of individual preferences and abilities.

#### SIMPLE AND INTUITIVE USE

Use of the design is easy to understand regardless of the user's experience, knowledge, language skills or current concentration level.

#### PERCEPTIBLE INFORMATION

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

#### TOLERANCE FOR ERROR

The design minimizes hazards and adverse consequences of accidental or unintended actions.

#### **LOW PHYSICAL EFFORT**

The design can be used efficiently and comfortably, with a minimum of fatigue.

#### SIZE AND SPACE FOR APPROACH AND USE

Appropriate size and space is provided for approach, reach, manipulations and use, regardless of user's body size, posture or mobility.

The concept of Universal Design is about a new quality relationship between a diversity of users (old and young, strong and weak) and human-made physical environments/objects.

Universal Design goes beyond the mere provision of special features for various segments of the population as it also emphasizes a creative and inclusive approach to make the mainstream built environment more sustainable and better for everyone.



Personal Assistance



Assistive Technology



Design for Special Needs



Universal Design

Wheelchair ramp standards as an example of inclusive design strategies







MORE CARE NEEDED, MORE STIGMA

reat as Different MACRO approach







MORE INDEPENDENCE, MORE DIGNITY

Freat as Normal MACRO approach

1:20 - 30cm over 6m 1:15 - 40cm over 6m 1:12 - 50cm over 6m 1:10 - 60cm over 6m 1:8 - 75cm over 6m

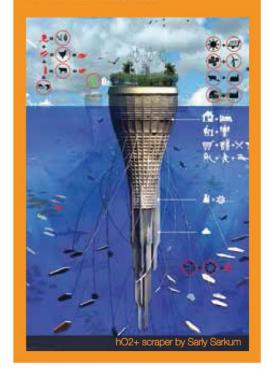
## AQUATECTURE

#### **WATER & ARCHITECTURE**

Exploring innovative technologies that let us live on – and within – water, Aquatecture strengthens the notion that progress in the realm of Architecture and Design relies on the responsible and sustainable consumption of all resources.

Not only does Aquatecture aim to have 'zero' negative impacts, it also creates and produces nature.

The hO2+ scraper proposal by Malaysian architect Sarly Adre Bin Sarkum, a multi-storey housing tower extending deep into the sea, is designed to feed sea fauna through bioluminescent tentacles; emitting light to attract sea fauna thus ultimately stimulating the vast marine food webs.





A pioneering model to look up to is Underwater Eco Villages by Belgian architect Vincent Callebaut. In addition to providing living space, each sector would house science labs, offices, hotels, sports fields and farms across 250 floors and reach a depth of up to 3,280 feet. Seawater would be desalinated separately for drinking, microalgae would recycle organic waste, and light would be provided through bioluminescence.

The Netherlands is one of the lowest lying countries in the world. Over one-quarter of the nation lives below sea level. Sea walls which can be altered in accordance with rising sea levels are being constructed as part of a monumental scheme to eliminate fragile links in the country's coastal stability.

From single homes to office blocks and even roads, the evolution of floating communities and shelter could make low-lying countries habitable during rising sea levels and storm intensification, claims DeltaSync, a Dutch design and research company that specializes in floating architecture.

In their scholarly treatise *Aquatecture*, Architects Robert Barker and Richard Coutts have outlined new ways of 'designing for water',

using examples from around the world to illustrate methods of utilizing water innovatively, efficiently and safely.

The two architects explore the historical relationship between water and architecture and how cities and civilizations have been drawn to water and have attempted to control it.



The narrative goes on to assess how this relationship has changed over time, and introduces us to a range of brand new techniques that will revolutionize the way we think about water, design and urban planning.

## **SEA LEVELS & FLOODING**

Experts attribute the doomsday scenario to changes in weather patterns and temperatures as well as unplanned development in coastal areas.

Rising sea levels caused by the melting of glaciers and ice sheets have caused multitudes of people living in low-lying areas the world over to be displaced, turning them into Climate Change Refugees.

Sea levels rose as much as 20 cms or 7.8 inches, over the course of the 20th century. The UN Intergovernmental Panel on Climate Change estimates a further increase of 18 to 59 cms by 2099.

Experts at the National Institute of Oceanography (NIO) predict that rising sea level could sink Karachi displacing 40 million people and causing damage to the national economy.

They have warned that Karachi could drown in the next 35-45 years. With parts of district Malir already having been reclaimed by the ocean, the NIO apprehend that Karachi, as we know it now, may not exist in the next four decades.



## INDUSTRIAL ARCHITECTURE

In order to survive and flourish, cities need to offer a varied supply of jobs for blue and white-collar workers.

Research and development are dependent on the proximity of theory and practice, large and small-scale companies, research institutions and trade and industry. Only routine processes can be communicated virtually and controlled over great distances; innovative processes are

COMMUNICATION

CONCENTRATION

COMMUNICATION VERSUS

- FLEXIBILITY AND SYSTEM

"NEW TECHNOLOGIES, MATERIALS

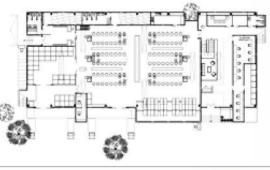
AND CONSTRUCTION METHODS

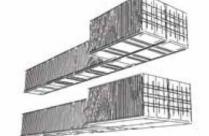
dependent on direct communication, creative collaboration and synergy effects.

Cities, therefore, have to create short- and long-term strategies and sustainable perspectives for the spatial development of industrial firms. Thus structural transformations and global competition do not lead to industrial firms relocating elsewhere. This will minimize the loss of jobs in commerce and industry.

# The primary concept was to accommodate a handful of functions that dynamically relate to one another.

The 12,000sqft. prefabricated space consists of three spatial actions: firstly, providing storage; secondly, providing a space for assembly and packaging that effectively communicates with the storage and in-bound and out-bound docks; and thirdly, office space for repairing and quality control departments.





Container configuration

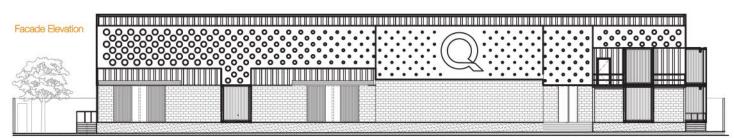
Initial planning sketch Process plan

COMPLETION	2017
COVERED AREA	12,000 SQ. FT.
EXTERIOR DIMENSIONS	158'- 4" X 66'- 0"
SYSTEM	PREFABRICATED STEEL
MAXIMUM SPAN	60′
SHEET COVERING	MGO SHEET
COOLING SYSTEM	HVAC

The facade, consisting of a perforated metal sheet attached to the structural columns, creates a dynamic landmark for the main Shahra-e-Faisal.

The ground floor functions as a multipurpose space with a variety of facilities containing reception, storage area, assembly and packaging lines, kitchen and prayer area. A total of 11 shipping containers make up the office space, adding a sustainable element to the project.







## OPINIONS, FACTS AND TWEETS.

## INNOVATION IN GREEN CONSTRUCTION

#### Tesla



Tesla has recently unveiled their newest product: solar roof tiles manufactured with durable, long-lasting tempered-glass. The new roofs will be a collaboration between SolarCity and Tesla and can be combined with Tesla's Powerwall to home battery. The tiles are hydrographically printed and are made of textured glass. From most viewing angles, they look just like ordinary shingles, but they allow light to pass through from above onto a standard flat solar cell.

#### Conceptos Plásticos



Conceptos Plásticos, a Colombian enterprise works with local communities to source plastic and rubber and train locals on the building process. With the building blocks, locals can build their own houses, emergency shelters, community halls and classrooms. A home for one family of four people, will take five days to construct with the recycled building blocks — and there's no construction experience necessary. The blocks fit together like LEGOs.

#### Maid Almashharawi and Rawn Abdullatif



Majd Almashharawi and Rawn Abdullatif, two Palestinian engineers have developed a new method to make bricks in Gaza. The environment-friendly project named Green Cake utilizes recycled ashes in a new brick mix. The Green Cakes are half the weight of bricks commonly used in Gaza construction, as well as being 30 percent cheaper. They aim to mass produce Green Cakes in the future to help Gazans and develop their business.

#### Gul bahao



People living in Karachi, generate 12,000 metric tones of trash every day. To deal with the issue, many burn the garbage, which comes with a slew of environmental and health hazards. Nargis Latif, a local environmentalist, decided to do something about the burgeoning plastic waste in particular, transforming it into bricks that can be used to build homes "in just a matter of hours". To build a Chandi Ghar, strips of recycled plastic are put into a "thermopore shell" which is tied together to form the bricks.

Your principle should be to see everything and say nothing. The world changes so rapidly that if you want to get on, you cannot afford to align yourself with any person or point of view.

#tribune #khushwantsingh #indiannovelist

"Don't fear failure; not failure, but low aim, is the crime. In great attempts it is glorious even to fail.

#brucelee #etribune #martialartist #moviestar

Norwegian firm Hareide Design has produced a craft that can be fueled by over 3,000 square feet of solar panels.

#architecturaldigest #twitter

Clean-energy breakthroughs don't happen by chance. We need long-term investments in R&D.

#billgates #twitter.

Dutch company Joris Laarman plans to 3D print a metal bridge over a canal in Amsterdam in 2017.

#jorislaarman #mx3D #newsweek.

NASA's planet-hunting Kepler telescope has spotted an Earth-like world 1,400 light years away, the space agency has announced.

#skynews #nasa.

Switzerland has successfully completed work on the world's longest and deepest railway tunnel, 8,000 feet beneath the French Alps, which will transport passengers from Zurich to Milan.

#etribune #twitter

KE revisits its pledge to plant 100k trees along Karachi's coast as part of its Climate Change policy.

#kelectricpk #twitter #earthday

Obama on Climate change: "What makes climate change difficult is that it is not an instantaneous catastrophic event. It's a slow-moving issue that, on a day-to-day basis, people don't experience and don't see."

#climatechange #twitter #barakobama

Architectural Details Are Just As Important As Plants.

#architecturaldigest #twitter

Inexpensive 3D prosthetics Transforming Lives. It opens and closes (like a claw), but its abilities are limited.

#intel #twitter



## ELECTRIC VEHICLES

Almost 94% of the world's transportation - planes, trains, ships, trucks and cars - runs on oil. Cars cause more carbon emissions than the other four combined, and unless major changes are brought in, car emissions are expected to rise by over 50% by 2030.

Transportation burning oil makes up a third of the world emissions, pollutes cities and makes nations over-dependent on other nations.

The development of the electric motor, therefore, is being hailed as the cheaper and more sensible long-term plan for powering cars. Tesla's end goal is "to accelerate the advent of sustainable transport by bringing compelling mass market electric cars to market as soon as possible". Their mission is to accelerate the world's transition to sustainable energy.

Improvements or repairs through downloads that are sent directly to the car via satellite, wi-fi or cellular signal will soon be possible for everyone. Tesla has been sending updates to its cars' operating systems since 2012. Other manufacturers, including BMW, Mercedes-Benz and Volvo, send wireless uploads to update many in-vehicle apps, including maps and entertainment packages.

They can keep their functionality up-to-date and also get rid of bugs. This direct communications link between an automaker and its vehicles can allow the company to not only update software but also monitor systems for safety. Location, driving style and serviceability can all be tracked.



AP @ Landscape Architect



## **3D PRINTING - FUTURE IS NOW**

3D printing, also known as additive manufacturing, is going to radically transform many design, production and engineering processes.



At Landscape, we are keen to explore the present and likely future applications of this technology, specifically in relation to architecture and design.

Contemporary architects have access to a wide range of mediums to represent, develop and communicate their ideas, from simple sketches to newer digital techniques. The 3D physical model is proving to be an effective means for contemporary design representation.

We have recently begun 3D printing models of clients' projects for them to be able to better visualize our designs. Our 3D printing team and architectural designers work together to produce accurate representations of facades and exterior details.





# POST-VOTE CHALLENGES, OPPORTUNITIES

The RIBA (Royal Institute of British Architects) has outlined five key challenges and opportunities for architects and the built environment and policy recommendations needed to address them, following the leave vote in the European Union referendum on 23<sup>rd</sup> June, 2016.

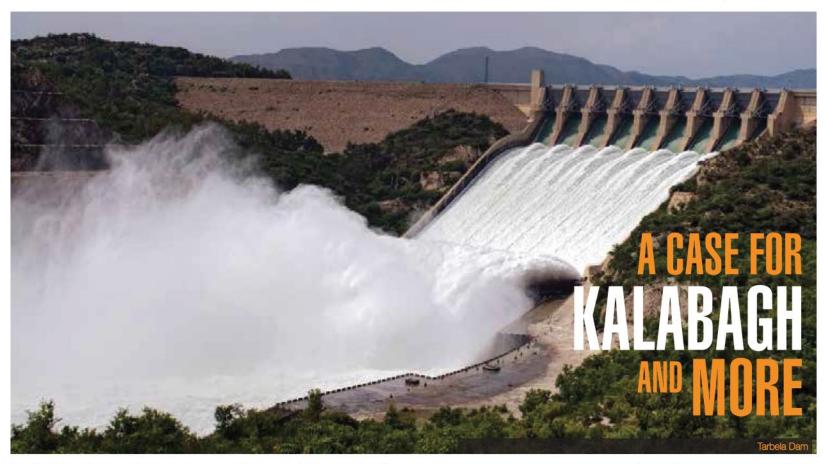
Their analysis reflects the unique position of architecture and the RIBA across a number of sectors vital to the UK economy and its global reach - construction, digital, education and the creative industries.

RIBA believes that with the right actions taken to address the challenges, along with proper utilization of the opportunities outlined, architects can design buildings and spaces that meet the needs of communities and hence contribute to economic growth.

## KEY 5 KEY

- Forging new commercial and research partnerships through new trade agreements.
- ☐ Strengthening the UK economy.
- Gaining a competitive advantage in EU and overseas markets.
- Improving SME access to public sector projects by reforming UK procurement policy.
- Using VAT flexibility to boost construction and bring down costs of meeting standards.

- Maintaining the strength of the UK's world-class architectural sector.
- Maintaining a skilled and innovative profession.
- Retaining the free movement of skills/services and mutual recognition of professional qualifications.
- Maintaining affordable EU product supply and ability to specify product standards.
- Maintaining access to research funding.



As Pakistan battles the fierce waves of its great rivers, experts argue that the destruction caused by the floods could have been prevented if we had invested more in building large dams on our river system, especially the Indus River.

We believe that multipurpose dams and new reservoirs are crucial, given the country's looming water and energy crises, against a backdrop of rapid urbanization, population growth, food insecurity and a growing water demand from the industrial sector.

Pakistan Council of Research in Water Resources (PCRWR) estimates our population at 187 million with an annual growth rate of 1.57 percent.

By the year 2050, the population is expected to double and would become 63.7% urban as compared to only 36% in 2010.

Out of the 140 million acre feet (MAF) of water annually available in Pakistan in a normal year, only about 40 MAF reaches the Indus delta.

The Indus basin irrigates about 14 million hectares of land in Pakistan – the largest irrigated area in the world – for which a huge amount of water is needed. With only two existing major reservoirs in the Indus basin – the Mangla and Tarbela – the storage capacity of Pakistan is only about 30 days, while most of the developed countries have

a 1-2 year water storage capability.

Considering that 21 percent of our economy is based on agriculture, problems of food shortage, high inflation and irrigation water scarcity are critical. Energy crisis is another pertinent issue in the country, linked directly with high inflation.

## WE NEED KALABAGH Dam Because:

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O1 It will control water flow to help avert flooding disasters. We might continue to see more of such flooding problems in the river Indus belt as weather patterns change.

O3 It will be a large source of cheap, clean electricity.

As earlier large dams silt, we will continue to see a smaller water capacity of their reservoirs and decreased electricity generation in both Punjab and Sindh.

This is where the Kalabagh dam comes into the picture. Conceived in 1953, it was initially planned out to be a water storage structure, until 1973 to 1984 when the design was changed to make it a multi-purpose large dam.

As advocates of this project, we would like to highlight its importance. We are not only facing a severe electricity shortage, but despite possessing the best irrigation system, we still import wheat on credit.

The Kalabagh dam is expected to produce 3,600 additional megawatts of electricity. The per unit cost will come to as low as two rupees where thermal power costs Rs16 per unit. This additional electricity will also reduce the dependency on imported fuels.

It is estimated that with the large water reservoir, the irrigation needs of all four provinces will be reasonably met. Furthermore, it is a vital instrument in the prevention of floods and in preventing the devastation we have seen in recent years in KPK, Central and Southern Punjab and Sindh.

The direct benefits after the dam will be functional will amount to Rs 25 billion per annum. This way the investment cost will be covered within a period of 9-10 years. Another incentive is the creation of employment opportunities for 30,000 individuals during construction and significant numbers after commissioning.

TEAM OF ENGINEERS AM, AA, GQ @ Landscape



## PARTNERING FOR A BETTER WORLD

The spirit of the vision that we at Landscape hold as a design-build enterprise defines our passion towards the wellbeing of humanity at large.

We entered the field in 2008 with a well-thought-out, long-term strategy to promote and protect the higher ideals of global best business practices in our corporate relations and social commitments.

Our record affirms that we have been on the right track. Our professional endeavors are – and will always be – focused on transforming the urban spaces we work on into aesthetically laid-out, environmentally sustainable and comfortable places to work, live and relax.

We have enjoyed consistent support from our clients, in particular, and the society, in general, in the pursuance of our dreams.



## From the Editor

Team Landscape's maiden venture in the realm of publishing is intended as a window to the vibrant environment that permeates and shapes the organization and the people.

The creative inputs of the in-house graphics designers need special mention in coming up with an attractive layout for this newsletter. The initials of each personnel are denoted @ Landscape for instant email.

Landscape wants to initiate a public dialogue about social architecture and design; to understand the progressive cultural and social dynamics and help solve societal issues

The Landscape professionals feel it is important for architects to be progressive and keep up with international design and innovations.

I must add a word of gratitude for all the resources (library, architect, engineer, world wide web) used for research content in our newsletter.

Through future issues of the newsletter, Landscape will keep highlighting concerns facing the world.

Hope you like the effort

Abid Ali Syed



Subscribe to our e-newsletter by writing at info@landscape.com.pk

# ARE YOU HE WINDER WE SEEK?

Second & Third Floors, 20-C, Lane 2, Main Khayaban-e-Shahbaz, DHA Phase VI. Here is an opportunity to prove your skills through a competition open for 3<sup>rd</sup> and 4<sup>th</sup> year architecture and interior design students at universities throughout the nation to showcase their skills.

The award jury will comprise top national and international names in the industry. The winner in each category will be invited to present his/her concept and design to the board members.

Submit your designs either through email (c17@landscape.com.pk) or courier (address given at the bottom) or handdeliver till 30<sup>th</sup> Nov 2017. Please include your complete physical address and contact numbers with your entries.

View the brief at www.landscape.com.pk/competition-2017

#### **LUXURY INTERIORS**

Scan for further detail

Create a yacht interior with details and define the concept that derives your design.

#### **VERTICAL ARCHITECTURE**

Design a multi-purpose, high-rise green building, incorporating retail, corporate and residential aspects.

#### PRODUCT DESIGN

Model a sustainable furniture piece defining your concept and material details.