# **Dubai Lake Foutain Design** Burj Khalifa Tower, Dubai

#### Project

(Intended) World Largest Outdoor Iconic Water Feature and Show

Owner Emaar Properties PJSC

Client Emaar Properties PJSC, Dubai, UAE

Assignment

Thematic Design Management, Design Interfaces Management, Conceptual Design (P&A Engineering)

Completion August 2007

The unique layout of the fountain feature a non-symmetrical design. The purpose and goal of this non-symmetrical design was to offer a different scene or perceived view from different vantage points. As the guests walk around the viewing areas, different water formations will make themselves apparent and each vantage point will be unique, hence making each viewing of the show a different experience.

This special design consideration keeps guests wanting to come back many times to view the shows from different locations both outdoors and indoors.

The overall maximum height of the water features was intended to strike awe into the guests viewing at water level. Viewers inside the building structures surrounding the fountain will enjoy a show that will appear to reach out to them at their elevated vantage points and they too will be in awe at just how large and beautiful this fountain and light spectacular is.

The show consists of eight fountain formations;

- The Wave Curtain
- The Misting Rings
- The Sky Jets
- The Crown Effects
- The Water Screens
- The Sea Waves
- The Fire Effect

Laser lights and projection animation are used to choreograph with the rest of the

show elements to create a unique encounter to make this Dubai Lake Fountain the main iconic attraction of the venue, Burj Khalifa Tower.







- thematic design management;
- overall requirements management;
- specialist design review;
- design interfaces management;



# **Dubai Metro** Dubai, UAE

Project Mass Rail Transportation

**Owner** Road and Transport Authority (RTA)

Client Bovis Lend Lease International Ltd (BLL)

### Assignment

Management Organization Support Services, project management, project planning and co-ordination

Completion August 2010

The Dubai Metro Project is a fully automated and driverless system running on two lines: the Red Line and the Green Line. Most of the two lines run elevated.

A number of multi-modal stations and Park & Ride facilities will ensure full integration of the Metro network within the transportation network of Dubai, including a common Metro and bus fare policy.

The Metro is operated at start of operation with a fleet of 51 trains and ultimately with a fleet (Red and Green Lines) of around 166 five carriage-trains, each seating around 690 passengers and including VIP section and private section for women and children.

Trains are around 85m long and approximately 2.78m width and fully air-conditioned.

The automated train operation system will allow two minutes headway (90 seconds headway for maximum capacity). The fully operational system will carry about 1.85 million passengers each working day, of which 215,000 passengers transfer between the Red and Green lines, with an annual total of about 650 million passengers in the year 2020.

The operation of the Metro system is centrally controlled from the Operation Control Centre.

Driverless operation allows maximum operational flexibility and disruption recovery.









- facilitated Hong Kong MTRC to provide full range of rail system expertise to support BLL;
- preliminary evaluation of bringing the HK MTRC business model to apply on the Dubai Metro project;
- detailed organization and job development for both the BLL team and the Rail Agency of RTA;
- internal policies and procedures development for the Rail Agency for the planning, execution and management of its projects.



### Durrat Al Bahrain Development Kingdom of Bahrain

#### Project

Durrat Al Bahrain Development

#### Owner

The Government of The Kingdom of Bahrain and Kuwait Finance House Joint venture

Client DKAB, Kingdom of Bahrain

#### Assignment

Development Management, Thematic Design Management

Completion August 2007-2010 (in Phases)

The Durrat Al Bahrain has been planned as a world-class residential leisure and tourist destination, offering a quality of residential and urban lifestyle experience to rival anything elsewhere available in the Middle East. It is to offer facilities for all market sectors - permanent residence, holiday homes, short stay and day visitors. The resort have an international flavour but be focussed particularly on the requirements of the Gulf market. Durrat Al Bahrain is readily accessible to the main Gulf market but will be distinctly international in flavour, becoming a sophisticated destination that will attract a well travelled clientele.

The inspiration for the design of Durrat Al Bahrain is derived from a concept of the green oasis, paradise islands and atolls. The project is intended to provide a relief from the arid climatic conditions and bare landscape of the surrounding environment.

Durrat Al Bahrain lies about 50 km from central Manama and approximately 60km from Bahrain International Airport. It is only 30 km from the King Fahad Causeway, which links Bahrain with Saudi Arabia, bringing the cities of Dammam and Al Khobar also to within 60 km of Durrat.

The project consisted of the followings:

- Hotels
- Marina
- Community Facilities
- Golf Courses
- Residences (villa + apartment)







- development management support;
- thematic design management;
- specialist design and contract review;
- design interfaces management;



# Meydan 5-Star Hotel Mayden Racecourse, Dubai

Project Hotel Specialist Materials Supply

Owner Meydan LLC

Client Shenyang Yuanda Aluminium Engineering Co. Ltd. (CNYD)

Assignment Special materials supply, engineering design, logistics

Completion September 2009

At the heart of Meydan City lies an architectural masterpiece that is the iconic Meydan Grandstand and Racecourse. With a capacity of 60,000, this landmark stadium houses the world's first luxury 5-star trackside hotel, The Meydan.

The Meydan is designed by the TAK Group and a specialist material has been selected as the hotel entrance feature design that could withstand the heat of UV level of region.

Traditionally, material supply is often mistaken as simple manufacturing and trading of finished materials. In today's sophisticated market and clientele, projects would demand much more than just material trading. Material provided often requires engineering input to cater for the special application of the materials. Understanding and familiarization of material provided is only the start for our working with the Engineer to come up with the right solutions satisfying all the needs of Client, Engineer, Interior Designer and Project Finance Controller.

Our past successful involvement in other prestigious projects abroad in the hospitality sector and gaming sector have WIT retained by CNYD to manage the design, quality, production, delivery of the required specialist material as part of CNYD's supply and installation package for The Meydan.







- engineering design, production management, and logistics;
- supply chain management;



# Al Garhood Bridge Beautification Dubai, UAE

Project Beautification of the Al Garhood Bridge

Owner RTA

Client Road and Transport Authority, Dubai, UAE

Assignment Thematic Design Management, Design Interfaces Management, Conceptual Design (P&A Engineering)

**Completion** Jan 2009

The Scope of Works included the design, supply and installation, programming, testing and commissioning and 12 months maintenance of the Screen Walls System including the choreography of lighting effect and bespoke LED lighting design.

The Screen Wall System includes 4 Screen walls as follows of i) Sand Walls and ii) Arabesque styled grilles.

The total area of the 4 Screen Walls is approximately 3,000m<sup>2</sup>. In this design, the whole screen will be raised approximately one meter above the ramp surface level.

Within the one meter from the ramp, there are installed cable ducts and flood lights for night illumination. The beautification works shall be as per the shop drawings that are subject to approval of the Engineer.

Construction methodology included a combination of the following:

- 1. Using shotcrete or gunite for the Sand walls and if possible for the Grilles.
- Using shotcrete or gunite for the Sand walls and use pre-cast Grilles. Pre-east Grilles will be hanged onto a steel frame.
- 3. Using shotcrete or gunite for the Sand walls and pre-cast panels for the Sand walls and also the Grilles. Both will be hanged onto a steel frame.







- thematic design management;
- overall requirements management;
- specialist design review;
- design interfaces management;



# Makkah Metro Makkah, KSE

Project Makkah Public Transport Program (MPTP) Metro Phase 1

Owner Makkah Mass Rail Transit Company (MMRTC)/Development Commission of Makkah and Mashaer (DCOMM)

Client Alstom/Drake & Scull JV

### Assignment

Tendering services and full design management & implementation of Platform Screen Door system

### Completion

Tendering work completed in 2016 and JV dedicated a preferred bidder.

Pending final award by relevant government agency.

Upon contract award WIT's role shall include the overall system integration and one-stop shop services...

.....supply chain management of all components of PSD

.....design management process of PSD supplier

.....quality supervision of manufacturing

.....site installation and testing & commissioning













# Diamond Vision Outdoor LED Display System

Mayden Racecourse, Dubai

Project

World Largest Outdoor LED Display System

Owner Meydan LLC

Client Mitsubishi Electric Corp, Japan Parson Brinckerhoff, Hong Kong

Assignment Project Management, Construction Management, Commercial Management

Completion December 2009





At the heart of Meydan City lies an architectural masterpiece that is the iconic Meydan Grandstand and Racecourse. With a capacity of 60,000, this landmark stadium houses the world's first luxury 5-star trackside hotel, The Meydan, peerless breeding and training facilities, world-class amenities, and an exciting mix of food and beverage establishments. It also houses the Meydan Museum and Gallery, an IMAX Theatre, the Dubai Racing Club and Emirates Racing Authority offices.

Currently it is new home of the world's horseracing elite, Meydan Grandstand and Racecourse has marked a defining moment in the sport's global history by hosting the richest, most illustrious race - the Dubai World Cup. This icon is also the world's largest integrated racing facility, which comprises of a 1,750m all-weather Tapeta surface track and 2,400m turf track, providing unsurpassed standards in racing facility and technology for the ultimate horseracing experience.

In this world class venue, Mitsubishi's famous technology in outdoor LED display system has been selected as the supplier to showcase all these important and elite races.

Our past successful involvement in other prestigious projects abroad in the hospitality sector and gaming sector have WIT retained by Mitsubishi for their supply and installation of the world largest Diamond Vision LED Screen at Meydan. This LED span almost 110 meters along the track in front of the Meydan Grandstand. With a screen area of 1,213 square meters, the screen is eligible to go into the Guinness' Book of World Record.

- project management for the supply and installation of the Diamond Vision LED Screen;
- construction management of the site works;
- full contract and commercial management for Mitsubishi;
- local technical staff supply and logistic management.

