

OTAISHAN CONSULTING ENGINEERS

INDEX

Introduction

Design

Project Management

Supervision

Value Engineering

Environmental
Consultations

OTAISHAN CONSULTING ENGINEERS

P6 Introduction

Introduction.....	6
Our Vision.....	7
Our Values.....	7
Management and key persone.....	7
Benefits	7
services and activities.....	8
Architecture and Engineering Design	8
Supervision	8
Value Engineering	9
Environmental Consultations	9
Project Management Services	10
Project planning and control system	11
Planning/ progress control systems.....	11
Cost control system.....	12
Quality assurance system	12
List of major projects.....	13
Commercial Centers	13
Military Projects	15
Hospitals / Health Care	15
Social Care Centers	17
Universities/Colleges Projects	17
Private Palaces/Residences	19
High Rise Commercial Buildings.....	19

P27 Design

ADA - Health Specialist Center.....	27
Al-Dere'ya Farm.....	28
Al Bayadh Project.....	29

Al Kuwait Embassy.....	30
Al Rarajhi Mosque.....	32
Al Madina Hotel.....	33
Abdul Lateef Jameel	35
Sudan Football Association	36
Aloula Office Project	37
Wildlife Project	39
Riyadh School Project	40
Riyadh Bank Project	41
Al Howaiyat Mall	43
Shakawy Villa Project	44
Vip Loung Project	45
Majmaah Sciences Oasis	47
Al Remal Commercial Center.....	48
Azazia Mall	49
Al Dara Hospital	51
Prince Sultan University	52
Al Aqariyah Office Tower	53
Dental Girls College	55
King Khaled Uni	56
King Saud Uni Faculty of Science	57
Master Plan for Girls College	59
Medical Services Headquarter.....	60
King Khaled Hospital	61
Sultan City.....	63
Majmaah Commercial Complex	64
Prince Sultan Kardiak Center	65
Olaya Towers	67
Al Fanateer Commercial Center	68
Al Malaz Horse Racing	69
Al Bassam Tower.....	70
Al Jerasy Residential Complex	72
Al Owiya Palace	73
Al Jouf University	74
Dammam Uni & Information Technology	76
Dammam Uni and Nerve Center	77
King Abdulaziz University Hospital	79
Municipal Services Building	80
Shumou School.....	81

INDEX

Introduction

Design

Project Management

Supervision

Value Engineering

Environmental
Consultations

OTAISHAN CONSULTING ENGINEERS

P84 Project Mangement

Project Management & InfoTechnology	84
Technical Support for the General Department	84
Affordable House Competition.....	86
Geographical survey of the villages of Riyadh Region.....	88

P118 Supervision

Abdul Lateef Jameel	118
Princess Al-Anoud Tower 1	120
Princess Al-Anoud Tower 2.....	121
I.P.A Housing Complex.....	122
Taibah Aramas Hotel -Madinah	124
Saudi Council for Health Specialization	125
Diriyah Hospital Project	126
GAB Office Building, Riyadh	128
GAB Office Building, Jeddah	129
Water Supply for Hail Villages	130
Solidare Buliding	132
Bayanat Building.....	133
IKIA Project	134
Azizia Panda Mall -Jubail	136
Azizia Panda Mall - North Riyadh	137
Ar,ar Uni Fences & Site Development	139
Riyadh College of Dentisty&Pharmcy	140
Faculty of Science , Ar,ar University	141
Huraimla Community College	143
Al Dara Hospital	144
Al-Jeraisy Residential Palaces	145
Haqbani Building	146
Skaka 1 (Sulaymaniyah)	148
Skaka 2 (Petromin)	149
Rafha Housing Project	150
Al-Khorma Housing Project.....	152
Al-Qunfuda Housing Project	153
Alquriayat-Housing Complex.....	154
Arar Housing Project	156
Capital Market Authority Faisaliah Tower ...	157

P92 Value Engineering

Value Engineering Definition	92
Management of VM Studies	94
VM Procedures for Conducting VE	95
VM Services.....	96
List of Selected Otaishan Consulting Engineers VE Clients	97
Real Estate Clients	98
Selected Value Engineering Project	99
VM Team Members	100
VE & Design Review Services	101
Hyper Panda	102
Headquarters Business Bark	103
Al-Nakheel Tower.....	104
Al-Taif Municipality	106
RCJY Headquarter	107
Najran Airport	108
Criminal Court	110
Olaya Towers	111
King Abdullah Economic City	113
New Ministry of Education Headquarter	114
Ministry of Municipality and Rural Affairs (MOMRA)	115

P160 Environmental Consultations

Introduction	160
Objectives.....	161
Areas & Activities	162
Environmental Site Assessment.....	164
Environmental Management Systems	165
Toxicology Services	167
Completed Project	168

Introduction

OTAISHAN CONSULTING ENGINEERS

Introduction.....	6
Our Vision.....	7
Our Values.....	7
Management and key persone.....	7
Benefits	7
services and activities.....	8
Architecture and Engineering Design	8
Supervision	8
Value Engineering	9
Environmental Consultations	9
Project Management Services	10
Project planning and control system	11
Planning/ progress control systems.....	11
Cost control system.....	12
Quality assurance system	12
List of major projects.....	13
Commercial Centers	13
Military Projects	15
Hospitals / Health Care	15
Social Care Centers	17
Universities/Colleges Projects	17
Private Palaces/Residences	19
High Rise Commercial Buildings.....	19

OTAISHAN CONSULTING ENGINEERS

INTRODUCTION

Otaishan Consulting Engineers (OCE) is a multi-disciplinary firm of professional Architects, Planners and Engineers which was founded in 1991 by Dr. Engineer Abdulaziz Bin Turki Al-Otaishan. OCE is considered today one of the leading Consulting Engineering Firms in the Kingdom of Saudi Arabia, the Gulf Countries and the Middle East consisting of over 450 staff that form a team of Professionals, Technical & Administrative staff.

For the past eighteen years, OCE has successfully undertaken the design and supervision of a large number of distinguished master planning, architectural and engineering projects and has developed in the process tremendous experience in conceptual design, engineering and supervision that enabling it to participate in several local and international competitions.

Environmental, Traffic Studies, Geographic Information System (GIS), Value Engineering and Arbitration Services. All of which are managed by highly qualified professionals in their field to be recognized as the premier provider of the highest quality of integrated engineering consultancy services in the region.

OCE continued success has been hinged on recognizing the clients need for quality, controlling cost and time. This would not have been possible without the wealth of knowledge, talents and dedication of its multi-disciplinary human resources in optimizing the latest technology information and network system to maximize productivity and accuracy for the best interest of the projects and Clients.

Understanding the need for specialized professional services, OCE house under one roof specialized departments offering Architectural and Engineering Design, Project Management, Interior Design, Construction Management,

In recognition of its Quality Management System, OCE has been one of the first Consulting Engineering Firms in the region to earn ISO 9001:2000 certification.



D

6

OUR VISION

To be recognized as the premier provider of the highest quality of consultancy services for planning and design of facilities in the region.

OUR VALUES

Relying on our Islamic Heritage and our genuine Arabic traditions, we manage our work efficiently applying high quality standards and utilizing latest technology.

We adhere to uncompromising integrity and honesty in all our activities and we implement team spirit that encourages cooperation and builds trust. We plan and act for the future for our Company, our customers and our Country.

MANAGEMENT AND KEY

PERSONNEL

The management and staff of OCE are its most important assets. OCE success in the field of Consulting and Engineering Services depends greatly on the compounded knowledge and experience of its staff and professionals with their involvement over the year in complex project.

OCE maintain 120 full time employees of various academic training and experience. The following graph illustrates the various departments and the associate's number.

Benefits

In addition to our normal available and engineering design projects Otaishan Consulting Engineers also Provide Value Engineering (VE) services that can add more enhancement and cost control for your projects by adding the following benefits :

- Cost Improvement
 - Performance Improvement
 - Productivity Improvement
 - Quality Improvement
 - Time Saving
 - Proven Over 50 Years
- Functions Achieved
 - Results Oriented
 - Enhanced Operation
 - 5 - 25% Cost Savings
 - Lower Life Cycle Costs
 - Increased Revenue
 - Benefit to Cost Ratio 70:1 or More

After the growth and development in Otaishan Consulting Engineers in recent years has expanded to provide many of the engineering and consulting services to many of the facilities and utilities Including but not limited to the following:

- High-rise Buildings
- Schools
- Commercial and Office Buildings
- Industrial Buildings
- Housing
- Hospital & Medical Facilities
- Multi-storey Parking Facilities-
- The Office shall provide the following specialized consulting services as following:-

1- Architecture and Engineering Design:

A- Architecture Design :

- Conceptual Design
- Master Planning
- Interior Design
- Space Planning
- Landscaping
- Urban Planning

B- Engineering Design

- Structural Design
- Electromechanical Design
- Civil Design

D- Contracting Documents :

- Contract Documents
- Bill of Quantities
- Specification

2 - Supervision:

- Cost control and reporting
- Manage the contract and schedules
- Monitor and activate the safety and security procedures
- Approval of the devices, equipment, materials and suppliers and control supplies materials .

- Approval of Sub-contractors
- Approval the performance of contractors and technical supervision
- Claims Management and change orders
- Technical Review of the contract documents.
- Primary and final submission



3 - Value Engineering:

- Conducting VE studies and Workshops.
- Conducting certified VE Seminars by (SAVE international) include (Module I) & (Module II)
- Projects life cycle costing and quality.
- Projects Budgeting
- Strategic value planning and design.
- Cost and Quality Modeling.
- VM executive Briefly.
- Post occupancy evaluation of facilities.

4 - Environmental Consultations:

- Pollution Control & Prevention Programs
 - Environmental Impact Assessment
 - Environmental Site Assessment
 - Environmental Auditing
- Environmental Risk Assessment & Management
- Environmental Management System (EMS) & ISO 14001

- Environmental Legislations
- Environmental Project Planning
- Environmental Resource Management & Regional Development
- Environmental Pollution Control Facility Design
- Hazardous Waste Management System Planning
- Hazardous Waste Facility Design etc.,

5 - Project Management and Information Technology:

I-Project Management :

A- Construction Project Management:

- Studies and Design Phase Management.
- Bid/Award Phase Management.
- Construction Phase Management

B- Operation and Maintenance Phase Management

- Preparation of Operation and Maintenance Manuals.
- Maintenance Phase Management.

C- Information Technology Projects Management:

- Bid/Award Phase Management.
- Execution Phase Management.
- Operation and Maintenance Phase Management.

II- Geographic Information Systems(GIS)

- Preparation of Base maps.
- Geographic Survey.
- Preparation of Geographical Applications
- Preparation of Field Studies.

OCE Project management services include development of project management plan, Schedule, Resource and Budget planning, Quality assurance and quality control activities, Human resource and Communication management, Administrative and Technical support, Top supervision, Management of project finances, Logistics arrangement and Procurement control, Evaluation and resolution of technical issues, Interpretation of contract documents, Preparation and evaluation of quotations & bid proposals, Selection of contractors, Meetings and discussion with Clients, Manufacturers, Suppliers and other related tasks. Trained office staff in project management techniques and Soft ware development for engineering systems techniques and modules

OCE has the full capability of managing the project budgets from project initiation to completion including budget revisions and change orders, update project statistics, prepare, create, compare and analyze budget detail with actual cost, measuring the accuracy of project budget and evaluating the impact on profitability, Create new budgets by using templates based on earlier budgets, or import budget estimates from external sources. Efficiently managed changes to project budget by making, approving, or rejecting changes. Preview the impact of proposed budget changes on project profitability before making the changes. Tie budget revisions directly to change orders for easier management of project accounting. Keep track of all changes made to a project budget. Prepare budget estimates utilizing Unifomat and CSI master format systems for conceptual, assemblies and final design;

OCE has managed and conducted Life Cycle Cost Analysis (LLCA) for evaluating various design alternatives for selection of the optimum solution in VE and other design works. Used LCCA as a tool in VE analysis for improving the design decisions. Created construction and O&M cost data base including cost components related to the total cost of ownership for LCCA and used it in design, construction and O&M projects. Work include present worth and annualized methods for life cycle costing analysis using realistic discount rates, effects of inflation, specific time period, starting point of time period and types of costs



In order to ensure a timely and accurate completion of all documentation, OCE has developed a number of Project Planning and Control Systems which orientate and assist a Project Team in meeting these objectives.

Four such major developments are:

A. Planning/ Progress Control System

B. Cost Control System

C. Quality Assurance Management

It is OCE declared intention to make extensive use of these systems in the implementation of all projects.

PLANNING/ PROGRESS CONTROL SYSTEMS

Project Control System consists of the following tasks:

Man-hour and Progress Forecasting

Actual Man-hour and Progress Monitoring

Comparison between Planned and Actual Man-hour

Man-Hour and Progress Forecasting is based upon the Project Schedules and man-hour estimates prepared by the Project Management.

These form the 'base-line' estimates for future comparison. Both the Progress estimates and the man-hour estimates are divided into discipline categories and constitute the particular disciplines estimate for a given week.

Actual Man-Hour and Progress Data is accumulated from weekly time-sheets and weekly progress reports. The time sheet system, which forms the heart of the man-hour reporting system, has been developed entirely in-house. The system allows for accurate distribution of man-hours between the various elements of the project and disciplines and allows extensive reporting on these man-hours. The progress report system operates in parallel to the time-sheet system allows easy processing of individual discipline progress,

down to a single drawing or document.

Each week, a comparison can be made between the Planned and Actual data collected for the project. Such a comparison provides early warning of delays, should they occur and thus gives the Project Management ample time to take necessary action.

COST CONTROL SYSTEM

All members of the Quantity Surveying Department are computer literate and produce cost plans and cost summaries on a range of proprietary spreadsheet programmes or in-house written programmes. Tailor-made programmes to produce quantity take-offs and bills of quantities to suit the specific need of each project will be developed, based on existing programmes.

An extensive materials cost data base is maintained to assist with estimating and this is continuously updated to reflect current costs.

QUALITY ASSURANCE SYSTEM

To ensure that the requirements of its Clients are fully met and all deliverables which it produces is strictly controlled and checked. OCE

have established an in-house Quality Assurance Department for this purpose

All deliverables produced which includes drawings, specifications, schedules, bill of quantities etc. are subjected to rigorous checks/ reviews, falling into three separate categories comprising:

Category 1:

An inter-departmental co-ordination review carried out by a team of senior professionals who were responsible for the design of the work under review.

Category 2:

A comprehensive word by word, figure by figure, departmental review, carried out by a senior professional who has not been involved in the design of the work under review.

Category 3:

A final review of deliverables assembled for release.

All reviews, which are formally conducted, are comprehensively

documented. The quality Assurance System itself is subject to continuous upgrading and surveillance to ensure that all of OCE activities and involvements are adequately and properly monitored and controlled.



LIST OF MAJOR PROJECTS

The following constitute a comprehensive list of all major projects executed and/or currently under assignment by OCE.

Although the projects are listed under major category headings such as Master Plans, it is pertinent to note that, particularly with

larger projects, a very wide range of Specialty Buildings are included, e.g., Clinical and Medical Facilities, Mosques, Sports and Recreational Centers, Shopping Facilities, Housing, Schools and Training Centers, etc.

Commercial Centers

No	Name	Work Description	Client
1	Al-Azizia Panda Supermarket - Dammam	Detailed Design & Supervision	Kingdom Establishment Riyadh
2	Al-Azizia Panda Supermarket (SACO) - Dammam	Detailed Design & Supervision	SACO
4	Al-Azizia Panda Supermarket - Unaiza	Detailed Design	Kingdom Establishment Riyadh
5	Al-Safi Marketing Building	Detailed Design	Al-Safi Marketing Establishment
6	Azizia Panda 1 & 3	Supervision	Kingdom Est.
7	Al-Azizia Panda Supermarket - Dammam	Design & Supervision	Kingdom Est.
8	Azizia Panda Al Kharj Stores	Design & Supervision	Kingdom Est.

OTAISHAN CONSULTING ENGINEERS

9	Azizia Panda 1130/24/12/	Design	Kingdom Est.
10	Azizia Panda Al-Deera	Design / Electro-Mech>l	Kingdom Est.
11	Commercial Center	Designed & Supervision	National Marketing
12	Al-Azizia Panda Hypermarket - North Riyadh	Complete Design/ Engineering and Supervision	APU-Savola Group
13	Al-Azizia Panda Hypermarket - East Ring Road	Detailed Design & Engineering Services	APU-Savola Group
14	Azizia Panda Hypermarket - Jeddah Globe Square	Design	APU-Savola Group
15	Azizia Panda P114 - AbuBakr Siddiq St., Riyadh	Design	APU-Savola Group
16	Azizia Panda Supermarket - Ras Tanura	Design	APU-Savola Group
17	Azizia Panda Supermarket - Al-Shifa	Design	APU-Savola Group
18	IKEA Store, Riyadh	Design	APU-Savola Group
19	Riyadh Commercial Strip	Detailed Design	Riyadh Development Co.
20	Al-Mousa Commercial Complex	Design	Mr. Khalid Al-Mousa
21	Al-Fanateer Commercial Center	Design	Royal Commission of Jubail



22	Al-Hokair Office & Entertainment Building - Riyadh	Complete Design/ Engineering and Supervision	Al-Hokair & Sons Group
23	Al Saloom Commercial Center	Designed & Supervision	Dr. Saloom
24	Lexus Center	Design	Abdullateef Jamel

Military Projects

No	Name	Work Description	Client
1	Package 103 Al-Bayad Project	Design & Construction	GDMW - Ministry of Defence & Aviation
2	Jeddah Airspace Mgt. Complex	Design	PCA/AE

Hospitals / Health Care

No	Name	Work Description	Client
1	Primalry Care Building - (RKH) Riyadh AlKharj Hospital Program Riyadh	Design & Construction	GDMW - Ministry of Defence & Aviation
2	Prince Abdul Aziz Bin Masaad Hospital (100 Beds) - ARAR	Design & Construction	Ministry of Health

OTAISHAN CONSULTING ENGINEERS

3	Medical Services Directorate Headquarters Buildings (MSD)	Design & Construction	GDMW - Ministry of Defence & Aviation
4	Sabia Hospital - Gezan	Project Supervision	Ministry of Health
5	Prince Sultan Cardiac Center for Cauterization, King Fahad Hospital - Buraydah, Qassim	Designed & Supervision	Ministry of Health
6	Blood Filtering Building In King Saud Hospital	Design	Al Jufalli
7	Riyadh Medical Center	Supervision	Riyadh Development Co.
8	King Khaled University Hospital	Design	King Saud University
9	King Abdulaziz Univerity Hospital	Design	King Saud University
10	Dental College	Design	King Saud University
11	Pharmacy & Dental College	Supervision	Ahmed Shammary
12	Mental & Drug Rehabilitation Hospital	Design	Ministry of Health
13	Dallah Medical Tower	Design	Dallah Hospital



Social Care Centers

No	Name	Work Description	Client
1	H.R.H.Prince Sultan City for Humanitarian Services	Detailed Design and Engineering Services	Prince Sultan Bin Abdulaziz Charity Foundation
2	Prince Salman Charity Housing	Supervision	Prince Salman Bin Abdul Aziz Al-Saud
3	Comprehensive Rehabilitation Center, Taif	Design	Ministry of Labor
4	Comprehensive Rehabilitation Center, Jizan	Design	Ministry of Labor
5	Al-Birr Social Center	Supervision	Prince Salman Bin Abdul Aziz Al-Saud

Universities /Colleges Projects

No	Name	Work Description	Client
1	Prince Mohammad University, Damman	Design Competition	Prince Mohammad Bin Fahd Foundation
2	Prince Sultan University Riyadh	Design Competition	Prince Sultan Bin Abdulaziz Foundation

OTAISHAN CONSULTING ENGINEERS

3	King Abdul Aziz University Hospital Extension, Riyadh	Detailed Design & Engineering Services	King Saud University (KSU)
4	King Khaled Hospital Extension, Riyadh	Complete Design	King Saud University (KSU)
5	Faculty of Science Building, Qaseem	Detailed Design & Engineering Services	King Saud University (KSU)
6	Faculty of Dental Medicine for Girls Extension, Malaz	Design	King Saud University (KSU)
7	Qura>an School for Women	Complete Design/ Engineering and Supervision	Ministry of Islamic Affairs
8	Arriyadh Schools for Boys	Design & Supervision	Arriyadh Dev>t. Authority
9	Technical Education & Vocational Training Bldg.(GOTEVT), Riyadh	Design	GOTEVT
10	Qassim Private College	Design	Mr. Fahad Al-Falajh
11	King Khaled College Abha	Supervision	Ministry of Higher Education
12	King Faisal University, College of Applied Sciences	Supervision	King Faisal University



Private Palaces/Residences

No	Name	Work Description	Client
1	Prince Mishal Private Palace	Design	Prince Mishal Bin Abdulaziz
2	Prince Salman Bin Abdulaziz Private Residence	Design	Prince Salman Bin Abdulaziz
3	Al-Jeraisy Residential Complex	Design Engineering and Supervision	Jeraisy Group
4	Al Majid Flats	Design	Tariq Nekhesh
5	Suleimaniya Festival Palace	Design	
6	Buraidah Oasis	Design	Dr. Abdulaziz Al-Otaishan
7	Dar Jana Villas, Riyadh	Design	Dar Jana Group

High Rise Commercial Buildings

No	Name	Work Description	Client
1	Al-Bassam Tower - Dammam	Design	Al-Bassam Group of Companies

OTAISHAN CONSULTING ENGINEERS

2	Al Saloom Commercial Center	Designed & Supervision	Dr. Saloom
3	Administration Institute	Design	Administration Institute
4	VIP Reception Building	Detailed Design	Royal Commission of Jubail
5	Saudi Council for Health Specialization HQ Bldg., Riyadh	Design & Supervision	Arriyadh Dev.t. Authority
6	Al-Aqariah Office Tower	Design	SERCO – Riyadh
7	Al-Madinah Hotel & Commercial Complex	Design (Competition)	Al Rjahi
8	Moaygliah Commercial Strip, Riyadh	Design	Moaygliah Co.
9	Princess Al Anoud Tower	Supervision	Al Anound
10	Al Seadan Comm./ Office Tower	Design	Hamd Al Seadan
11	Olaya Twin Tower for Commercial & Office Center – GOSI (Gen. Org. for Social Insurance)	Design & Supervision	GOSI (Gen. Organization for Social Insurance)
12	Al-Swailem Towers	Design	Al-Swailem Co./Projacs



Others

No	Name	Work Description	Client
1	Al Bank Al Saudi Al Fransi, Badia & Rahmania Branch	Design	Saudi Fransi Bank
2	Qassim Power Plant Extension 300 MW	Design & Construction	MEEDCO
3	Azizia Farm	Design	Kingdom Est.
4	Race Horse - Riyadh	Design	Riyadh Equestrian Club
5	Ravabi Al Marraie	Designed & Construction	Animal Resources
6	Restoration & Studies for Stadiums in the Kingdom	Inspection and Studies	General Presidency of Youth Welfare (GPYW)
7	Riyadh Transportation Center	Project Supervision	Riyadh Development Co.
8	Prince Sultan Bin Fahad New Office and Interior Design	Complete Design/ Engineering and Supervision	General Presidency of Youth Welfare (GPYW)
9	Support Offices for Prince Sultan	Complete Design/ Engineering and Supervision	General Presidency of Youth Welfare (GPYW)
10	Al Yahya Mosque	Designed & Construction	Saliman Al Yahya

OTAISHAN CONSULTING ENGINEERS

11	Cattle Market - Qassim	Design & Construction	Al-Butain
12	Al-Butain Potato Cold Storage - Qasim	Design & Construction	Al-Butain
13	Lexus Showroom, Badia>a Riyadh	Design	Abdul Latif Jameel Co. Ltd.
14	Riyadh Industrial Workshop	Design & Supervision	Mohammed Al-Yehyia and Sons
15	Buraidah Industrial Workshop	Design	Dr. Abdulaziz Al-Otaishan
16	Youth Welfare Olympic Committee Building	Design & Supervision	General Presidency of Youth Welfare (GPYW)
17	Al-Rajhi Mosque	Design	Sheikh Sulaiman Al-Rajhi
18	Al-Khafji Fitness Center	Design	ARAMCO
19	Majma>a Municipality Building	Supervision	Majma>a Municipality
20	Rehabilitation Charity Project, Hail	Supervision	Abdul Latif Jameel Co. Ltd.
21	Sudan Football Association HQ Building, Khartoum	Design	General Presidency of Youth Welfare (GPYW)



22	Traffic Engineering & Transportation Management, Riyadh	Studies & Supervision	MOMRA
23	Geographic Survey for Riyadh Area	Studies & Supervision	MOMRA
24	Value Engineering & Value Analysis	VE Studies	Royal Commission of Jubail
25	Prince Abdullah Gen. Assembly H.Q.	Design	Prince Abdullah Est.
26	Value Engineering Services	Studies Analysis	MOMRA
27	Value Engineering Services	Studies Analysis	Savola Sugar Plan
28	Value Engineering Services	Studies Analysis	Vocational & Training Est.
29	Value Engineering Services	Studies Analysis	Savola Hypermarket
30	Royal Commission H.Q.	Review Design	Royal Commission

Design

OTAISHAN CONSULTING ENGINEERS

ADA - Health Specialist Center	27
Al-Dere'ya Farm.....	28
Al Bayadh Project.....	29
Al Kuwait Embassy.....	30
Al Rarajhi Mosque.....	32
Al Madina Hotel.....	33
Abdul Lateef Jameel	35
Sudan Football Association	36
Aloula Office Project	37
Wildlife Project	39
Riyadh School Project	40
Riyadh Bank Project	41
Al Howaiyat Mall	43
Shakawy Villa Project	44
Vip Loung Project	45
Majmaah Sciences Oasis	47
AlRemalCommercialCenter.....	48
Azazia Mall	49
Al Dara Hospital	51
Prince Sultan University	52
Al Aqariyah Office Tower	53
Dental Girls College	55
King Khaled Uni	56
King Saud Uni Faculty of Science	57
Master Plan for Girls College	59
Medical Services Headquarter.....	60
King Khaled Hospital	61
Sultan City.....	63
Majmaah Commercial Complex	64
Prince Sultan Kardiac Center	65
Olaya Towers	67
Al Fanateer Commercial Center	68
Al Malaz Horse Racing	69
Al Bassam Tower.....	70
Al Jerasy Residential Complex	72
Al Owiya Palace	73
Al Jouf University	74
Dammam Uni & Information Technology	76
Dammam Uni and Nerve Center	77
King Abdulaziz University Hospital	79
Municipal Services Building	80
ShumouSchool.....	81

Design



Saudi Council for Health Specialties
(First Prize Winner)
Client : Al Riyadh Development Authority
Location : Diplomatic Sector- Riyadh
Date : Dec.2001
Total Built-up Area : 30,000 Sq. m2
Cost : 40,000,000 Saudi Riyals

الهيئة السعودية للتخصصات الصحية
(المركز الأول فيه المسابقة)
المالك : الهيئة العليا لتطوير مدينة الرياض
الموقع : الحيء الدبلوماسي
التاريخ : ٢٠٠١م
المساحة الكلية : ٣٠,٠٠٠ م٢
التكلفة : ٤٠,٠٠٠,٠٠٠ ريال سعودي



D

26

ADA - Health Specialist Center

D

27



Design

Al-Dere'ya Farm



Al-Dere'ya Farm
Client : Arriyadh Development Authority
Location : Al-Der'ya, Riyadh
Date : May 2003
Total Area : 7,000 Sq.m
Cost : 30 ,000,000 Riyals
Scope Of Services : Architectural Design.

مشروع مزرعة الدرعية
المالك : الهيئة العليا لتطوير مدينة الرياض
الموقع : الدرعية - الرياض
التاريخ : مايو ٢٠٠٣ م
المساحة الكلية : ٧,٠٠٠ م^٢
التكلفة : ٣٠,٠٠٠,٠٠٠ ريال
نطاق الخدمات : تصميم معماري



D

28

Al Bayadh Project

D

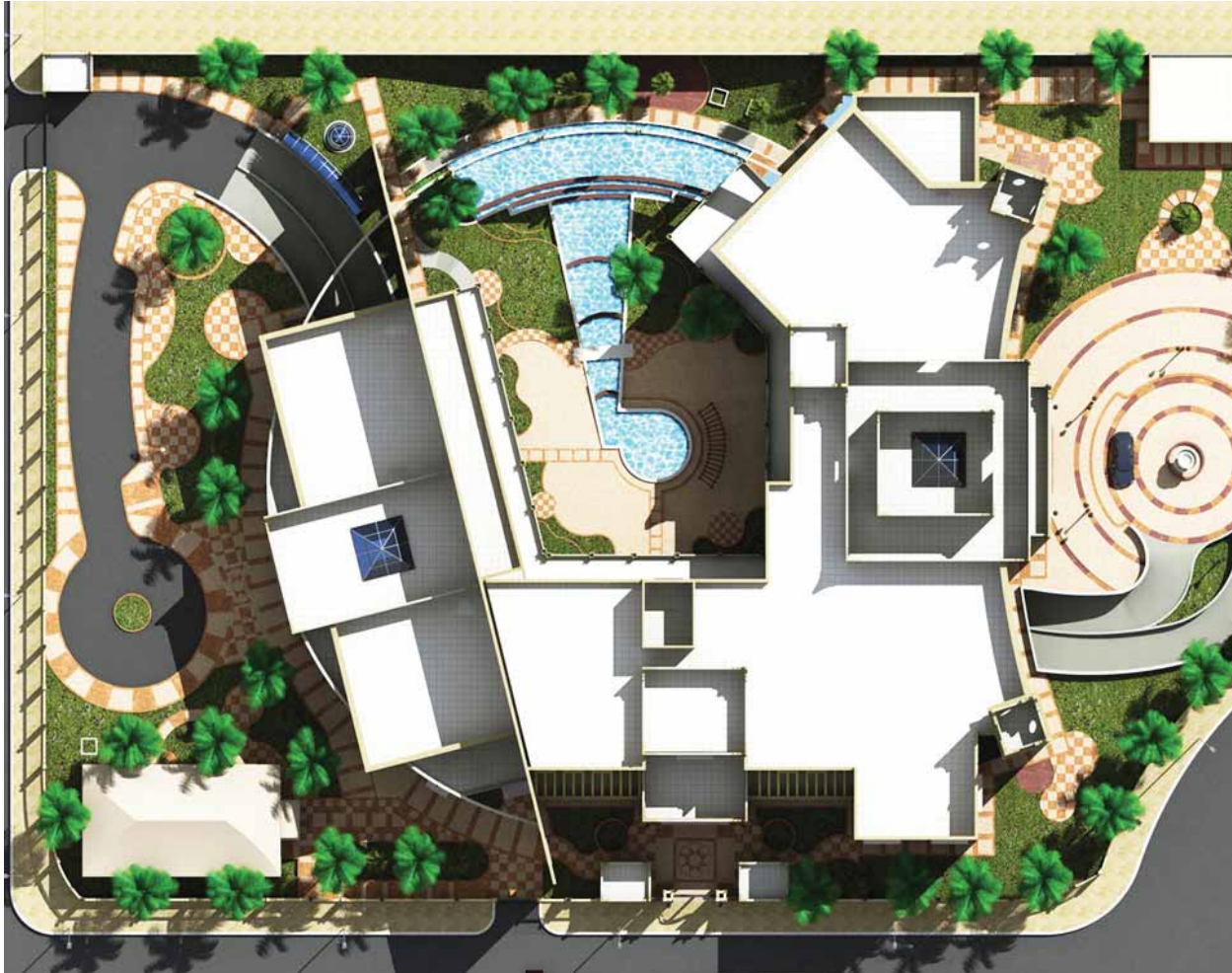
29



Package 103, Al-Bayadh Project
Client : Ministry of Defense & Aviation (MODA)
Location : Al-Kharj
Date : 1996 - 1999
Total Built-up Area : 9825 Sq.m.
Cost : 278,250,000 Riyals

مشروع البياض المجموعة ١٠٣
المالك : وزارة الدفاع والطيران
الموقع : الخرج
التاريخ : سبتمبر ١٩٩٦م - ١٩٩٩م
المساحة الكلية : ٩٨٢٥ م^٢
التكلفة : ٢٧٨,٢٥٠,٠٠٠ ريال

Design



Al Kuwait Embassy
Client : Ministry of al Kuwait Exterior
Location : Al Riyadh , diplomatic Quarter
Date : 2011
Total Built-up Area : 8435 M2
Cost : 400,000,000 SR

مبنى سفارة دولة الكويت
المالك : وزارة الخارجية الكويتية
الموقع : الرياض - الحي الدبلوماسي
التاريخ : ٢٠١١ م
المساحة الكلية : ٨٤٣٥ م^٢
التكلفة : ٤٠٠,٠٠٠,٠٠٠ ريال



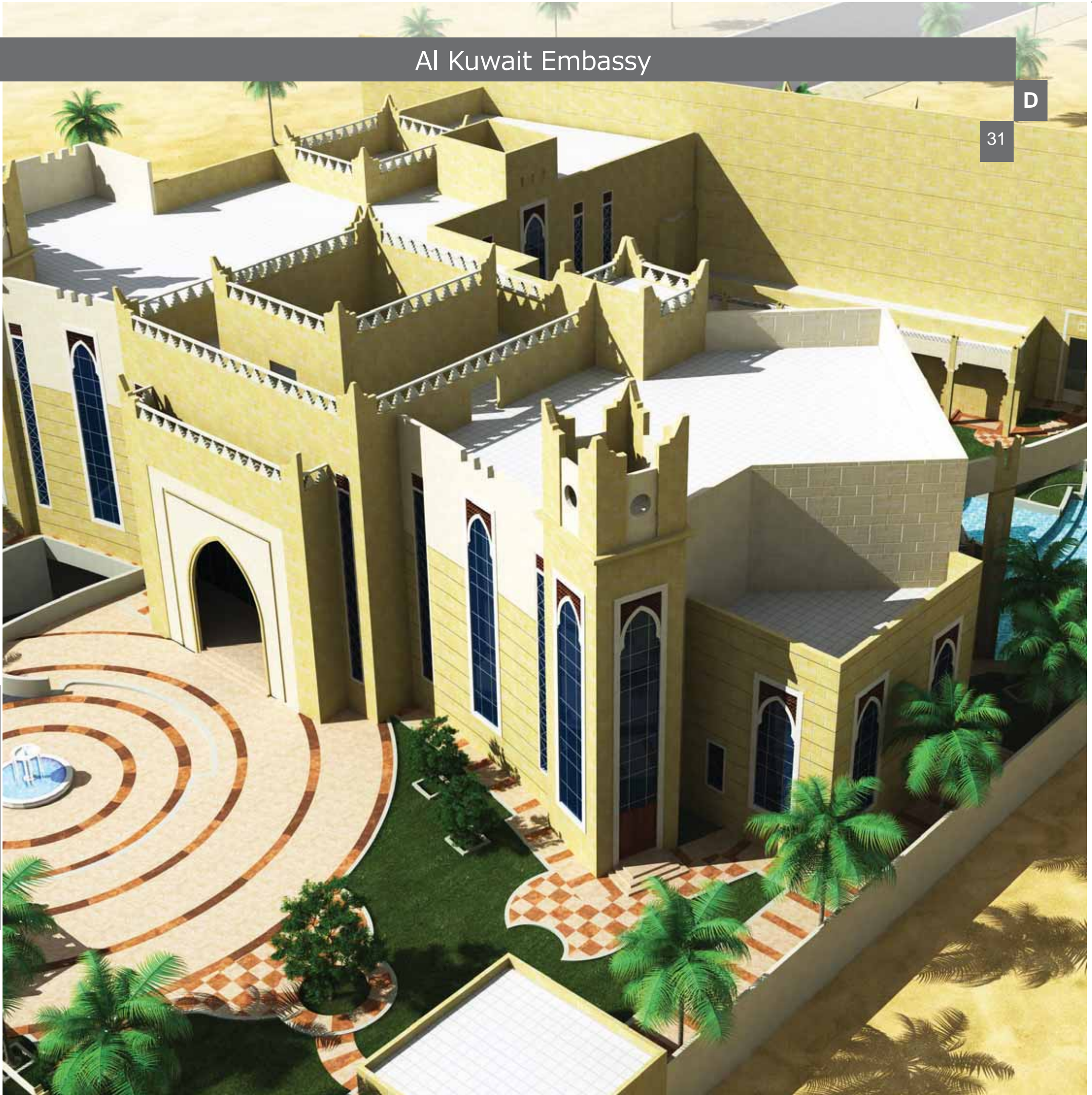
D

30

Al Kuwait Embassy

D

31



Design

Al Rarajhi Mosque



Sulaiman Al-Rajhi Mosque
Client : Sheikh Sulaiman Al-Rajhi
Location : Riyadh - Eastern Ring Road
Date : 2000 - 2002
Total Built-up Area : 15,965 Sq.m
Cost : 100,000,000 Saudi Riyals
Scope Of Services : Architectural Design &
Engineering Services

مسجد سليمان الراجحي
المالك : الشيخ / سليمان الراجحي
الموقع : الدائري الشرقي - الرياض
التاريخ : ٢٠٠٠م / ٢٠٠٢
المساحة الكلية : ١٥,٩٦٥ م^٢
التكلفة : ١٠٠,٠٠٠,٠٠٠ ريال سعودي
نطاق الخدمات : تصميم معماري وخدمات هندسية



D

32

Al Madina Hotel

D

33



Al-Madinah Hotel & Commercial Complex
Competition

Client : Sulaiman Al Rajhi Company

Location : Al-Madinah Al-Monawarah

Date : 2001

Total Built-up Area : 33,203 Sq. m.

Cost : 30,000,000 Saudi Riyals

مشروع مسابقة
فندق المدينة والمجمع التجاري
المالك : شركة سليمان الراجحي
الموقع : المدينة المنورة
التاريخ : ٢٠٠١ م
المساحة الكلية : ٣٣,٢٠٣ م^٢
التكلفة : ٣٠,٠٠٠,٠٠٠ ريال سعودي

Design



Branch of Abdu Latif Jameel
Client : Abdu Latif Jameel Co.
Location : Albdeeah
Date : 2005
Total Built-up Area : 9,000 Sq. m.
Cost : 20,000,000 Saudi Riyals

فرع شركة عبد اللطيف جميل المحدودة
المالك : شركة عبد اللطيف جميل المحدودة
الموقع : البديعة شارع عائشة بنت أبي بكر
التاريخ : ٢٠٠٥م
المساحة الكلية : ٩,٠٠٠ م^٢
التكلفة : ٢٠,٠٠٠,٠٠٠ ريال سعودي



D

34

Abdul Lateef Jameel

D

35



Design

Sudan Football Association



Sudan Football Association
Client : General Presidency of Youth Welfare
Location : Khartoum, Sudan
Date : 2003
Total Built-up Area : 1800 M2
Cost : 3,600,000 SR

مبنى اتحاد كرة القدم السوداني
المالك : الرئاسة العامة لرعاية الشباب
الموقع : السودان - الخرطوم
التاريخ : ٢٠٠٣ م
المساحة الكلية : ١٨٠٠ م^٢
التكلفة : ٣,٦٠٠,٠٠٠ ريال



D

36

Aloula Office Project

D

37



Dar Al-Muntada Office Building
Client : World Assembly of Muslim Youth
Location : Al-Olaya, Riyadh
Date : 2005
Total Built-up Area : 9,000 Sq. m.
Cost : 45,000,000 Saudi Riyals

مشروع مكاتب دار المنتدء
المالك : الندوة العالمية للشباب الإسلامي
الموقع : الرياض - طريق الملك فهد
التاريخ : ٢٠٠٥م
المساحة الكلية : ٩,٠٠٠ م^٢
التكلفة : ٤٥,٠٠٠,٠٠٠ ريال سعودي

Design



Wildlife Administration building
Client : Audi Wildlife Commission
Location : Riyadh
Date : 2011
Total Area : 1350 M2
Cost : 4,500,000 SR
Administration Building contains of 3 floors, offices
and open open space area.

مبنى إدارة الحياة الفطرية
المالك : الهيئة السعودية للحياة الفطرية
الموقع : الرياض
التاريخ : ٢٠١١م
المساحة الكلية : ١٣٥٠ م^٢
التكلفة : ٤,٥٠٠,٠٠٠ ريال
مبنى يتكون من ثلاثة أدوار
(المكاتب ، ومنطقة عمل مفتوحة) .



D

38

Wildlife Project

D

39



Design

Riyadh School Project



Riyadh Schools for Boys Secondary Section)
Client : Riyadh development Authority
Location : Riyadh
Date : 2003
Total Built-up Area : 15,000 Sq. m
Cost : 42,000,000 Saudi Riyals

مدارس الرياض القسم الثانوي للأولاد
المالك : الهيئة العليا لتطوير مدينة الرياض
الموقع : الرياض
التاريخ : ٢٠٠٣م
المساحة الكلية : ١٥٠٠٠ م^٢
التكلفة : ٤٢,٠٠٠,٠٠٠ ريال سعودي



D

40

Riyadh Bank Project

D

41



Riyadh Bank

Client : Riyadh Bank

Location : Riyadh, K.S.A

Date : 2003

Total Built-up Area : 3,000 Sq. m.

Cost : 4,000,000 Saudi Riyals

بنك الرياض

المالك : بنك الرياض

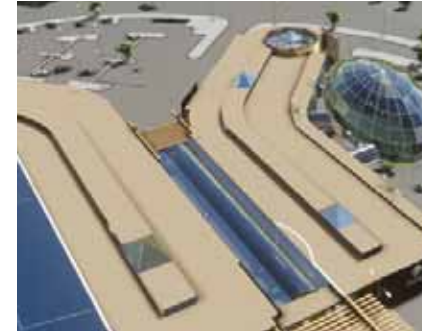
الموقع : الرياض

التاريخ : ٢٠٠٣ م

المساحة الكلية : ٣,٠٠٠ م^٢

التكلفة : ٤,٠٠٠,٠٠٠ ريال سعودي

Design



Al howaiylat Center
Client : Savola Panda Company
Location : Al-Jubail
Date : 2011
Total Built-up Area : 12.460 Sq. m.
Cost : 36,000,000 Saudi Riyals

مركز الحويلات الجبيل
المالك : شركة صافولا
الموقع : الجبيل
التاريخ : ٢٠١١ م
المساحة الكلية : ١٢,٤٦٠ م^٢
التكلفة : ٣٦,٠٠٠,٠٠٠ ريال سعودي



D

42

Al Howaiyat Mall

D

43



Design

Shakawy Villa Project



Dr.Al Shakawy Private Villa
Client : Dr.Abdulrahman Al Shakawy
Location : Riyadh
Date : 2011
Total Built-up Area : 2731 M2
Cost : 30,000, 000 Saudi Riyals

فيلا خاصة د / الشقاوي
المالك : الدكتور / عبد الرحمن الشقاوي
الموقع : الرياض
التاريخ : ٢٠١١ م
المساحة الكلية : ٢٧٣١ م٢
التكلفة : ٣٠,٠٠٠,٠٠٠ ريال سعودي



D

44

Vip Lounge Project

D

45



VIP – Lounge at Al Helal Stadium
Client : Etihad Etisalat Company
Location : Riyadh
Date : 2011
Total Built-up Area : 80 M2
Cost : 300,000 Saudi Riyals
VIP Lounge in al hilal Stadium with luxury design and glass curved specially for VIP

استراحة كبار الزوار باستاد الهلال
المالك : شركة اتحاد اتصالات
الموقع : الرياض
التاريخ : ٢٠١١ م
المساحة الكلية : ٨٠ م^٢
التكلفة : ٣٠٠,٠٠٠ ريال سعودي
استراحة كبار الزوار باستاد الهلال بالرياض بزجاج
منحني وتصميم فاخر خصيصاً لكبار الشخصيات

Design



Majmaah Sciences Oasis
Client : Majmaah Municipality
Location : Majmaah
Date : 2012
Total Built-up Area : 2000 M2
Cost : 6,000,000 Saudi Riyals

وادة العلوم بالمجمعة
المالك : بلدية محافظة المجمعة
الموقع : المجمعة
التاريخ : ٢٠١٢م
المساحة الكلية : ٢٠٠٠م^٢
التكلفة : ٦,٠٠٠,٠٠٠ ريال سعودي



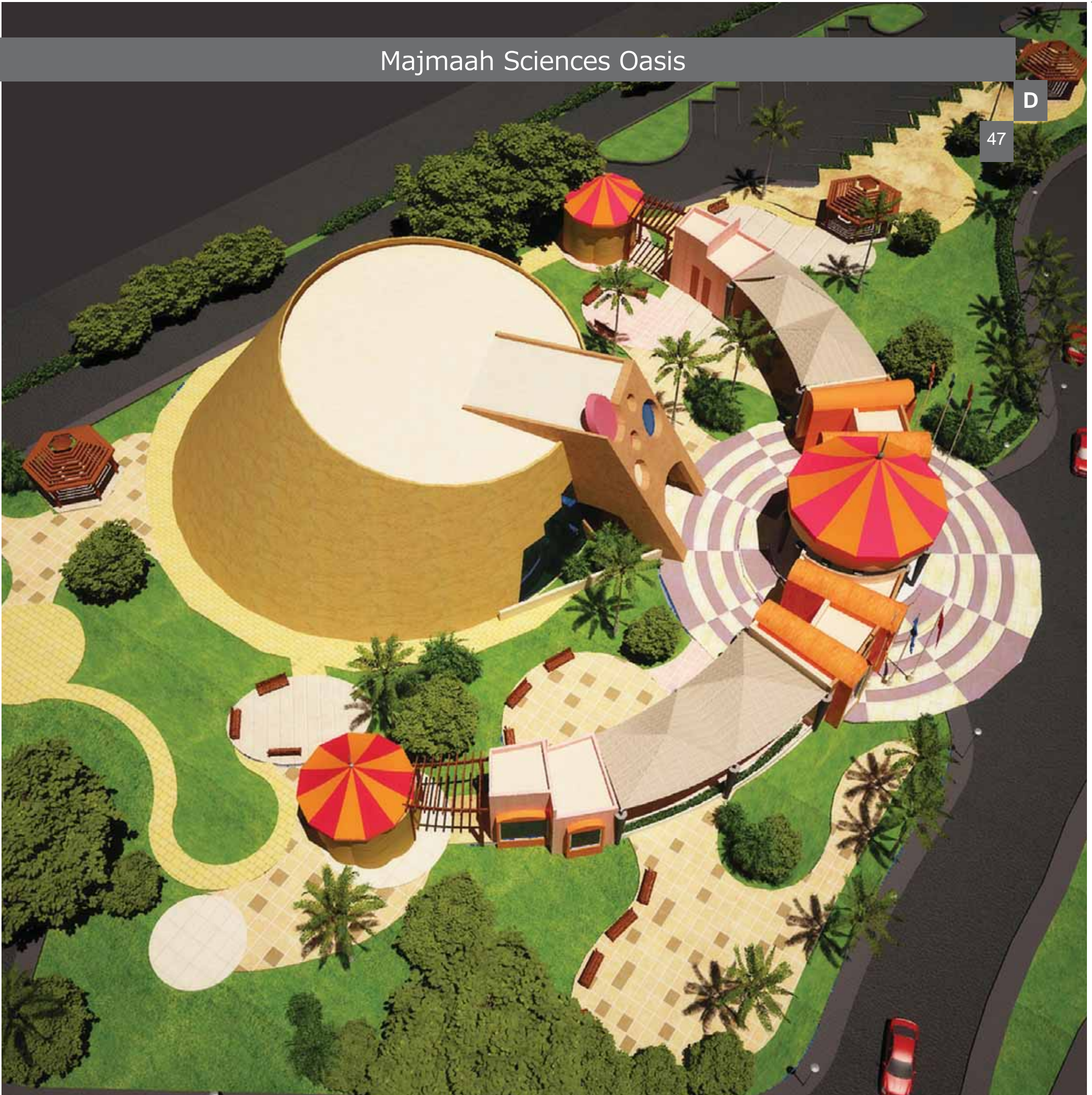
D

46

Majmaah Sciences Oasis

D

47



Design

Al Remal Commercial Center



Al Remal Commercial Center
Client : Savola Group.
Location : Riyadh, Between exit 16 and 17
Date : 2005
Total Built-up Area : 124,000 Sq. m.
Cost : 20,000,000 Saudi Riyals

مركز الرمال التجاري
المالك : مجموعة صافولا
الموقع : الرياض ، بين مخرج ١٦ ومخرج ١٧
التاريخ : ٢٠٠٥م
المساحة الكلية : ١٢٤,٠٠٠ م
التكلفة : ٢٠,٠٠٠,٠٠٠ ريال سعودي



D

48



Azizia Panda – North
Client : Savola Group
Location : Riyadh North
Date : 2000
Total Built-up Area : 130,000 Sq. m.
Cost : 100,000,000 Saudi Riyals
Design engineering services and supervision

بنءة العزیزة الشمال
المالك : شركة صافولا
الموقع : شارع العلیا العام – شمال الریاض
التاریخ : ٢٠٠٠ م
المساحة الكلية : ١٣٠,٠٠٠ م^٢
التكلفة : ١٠٠,٠٠٠,٠٠٠ ریال سعودیة
تصمیم خدمات هندسیة والإشراف على التنفيذ

Design



Al Dara Medical building
Client : Hobbs and Black
Location : Riyadh
Date : 2011
Total Built-up Area : 26000 M2
Cost : 600,000,000 Saudi Riyals

مستشفى الادارا الطبيه
المالك : هوبس أند بلاك
الموقع : الرياض
التاريخ : ٢٠١١م
المساحة الكلية : ٢٦٠٠٠ م٢
التكلفة : ٦٠٠,٠٠٠,٠٠٠ ريال سعودي



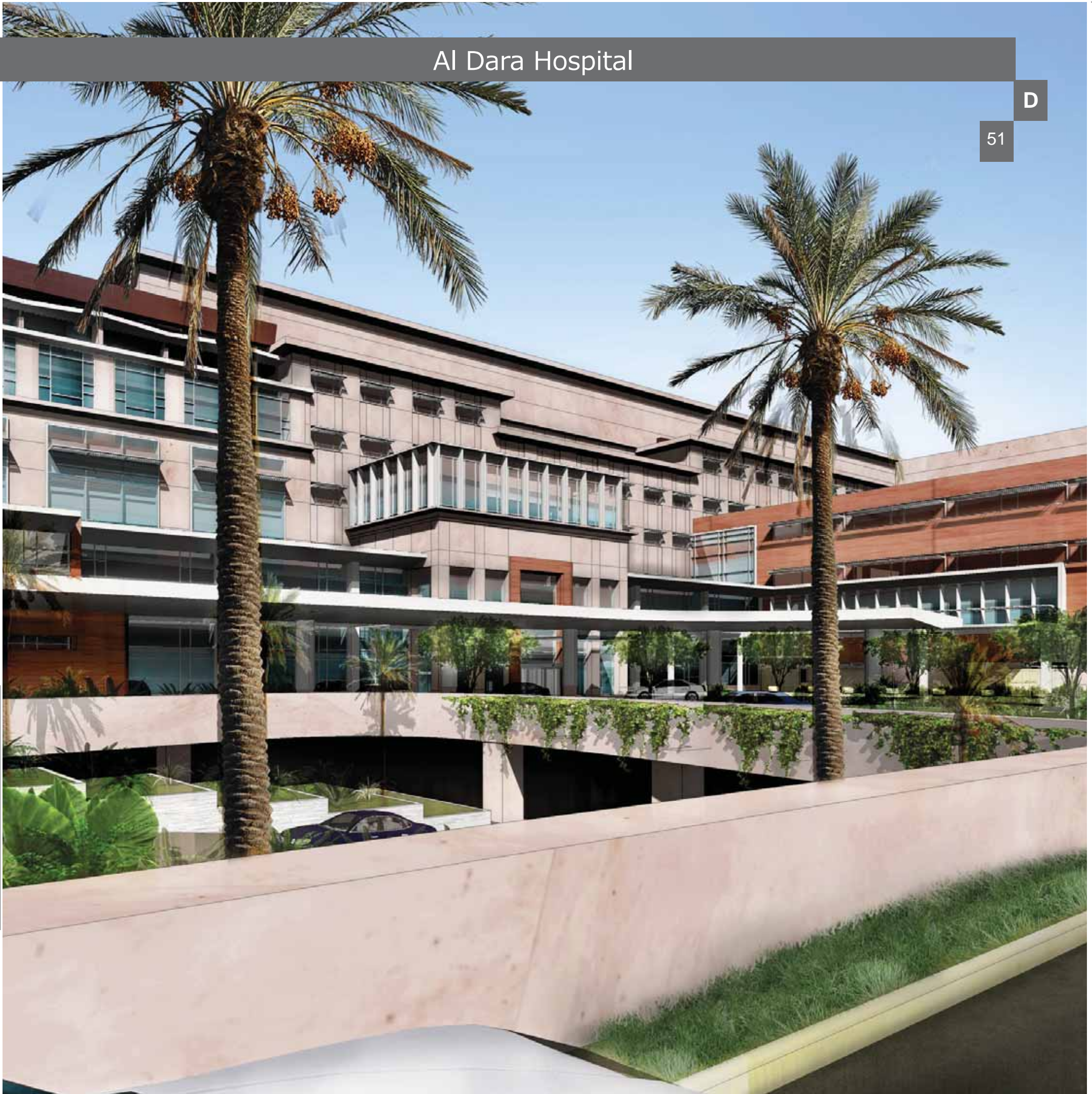
D

50

Al Dara Hospital

D

51



Design

Prince Sultan University



Peince Sultan university(Competition)
Client : Arriyadh Development Authority
Location : Riyadh, Between exit 16 and 17
Date : 2003
Total Built-up Area : 80.000 M2
Cost : 200,000,000 Saudi Riyals

جامعة الأمير سلطان (مسابقة معمارية)
المالك : هيئة تطوير مدينة الرياض
الموقع : الرياض
التاريخ : ٢٠٠٣ م
المساحة الكلية : ٨٠,٠٠٠ م^٢
التكلفة : ٢٠٠,٠٠٠,٠٠٠ ريال سعودي



Al Aqariyah Office Tower

D

53



Aqariyah Office Tower (Competition)
Client : Aqariyah Real estate Company
Location : Olaya Road, Riyadh
Date : 2002
Total Built-up Area : 100,000 Sq. m.
Cost : 200,000,000 Saudi Riyals

مبنى مكاتب العقارية (مسابقة معمارية)
المالك : الشركة العقارية السعودية
الموقع : شارع العليا العام - الرياض
التاريخ : ٢٠٠٢ م
المساحة الكلية : ١٠٠,٠٠٠ م^٢
التكلفة : ٢٠٠,٠٠٠,٠٠٠ ريال سعودي

Design



Extension of Dental Girls Collage - King Saud Uni.
Client : Ministry of Health
Location : Riyadh
Date : 2005
Total Built-up Area : 12,000 Sq. m.
Cost : 50,000,000 Saudi Riyals
Clinics and medical offices, classrooms,
laboratories, architectural design.

توسعة كلية البنات لطب الأسنان - جامعة الملك سعود
المالك : وزارة الصحة
الموقع : الرياض
التاريخ : ٢٠٠٥ م
المساحة الكلية : ١٢,٠٠٠ م^٢
التكلفة : ٥٠,٠٠٠,٠٠٠ ريال سعودي
عيادات ومكاتب الطاقم الطبي فصول دراسية ومختبرات
تصميم معماري.



D

54

Dental Girls College - King Saud Uni.

D

55



Design

King Khaled Uni. Hospital Extension



King Khalid University Hospital Extension
Client : King Saud University
Location : Riyadh
Date : 2004
Total Built-up Area : 126.000 M2
Cost : 265,760,000 Saudi Riyals

توسعة مستشفى الملك خالد الجامعي
المالك : جامعة الملك سعود
الموقع : الرياض
التاريخ : ٢٠٠٤م
المساحة الكلية : ١٢٦,٠٠٠ م^٢
التكلفة : ٢٦٥,٧٦٠,٠٠٠ ريال سعودي



D

56



King Saud University faculty of Science Building

Client : King Saud University

Location : Qassem

Date : 2004

Total Built-up Area : 50.000 M2

Cost : 100,000,000 Saudi Riyals

جامعة الملك سعود - كلية العلوم

المالك : جامعة الملك سعود

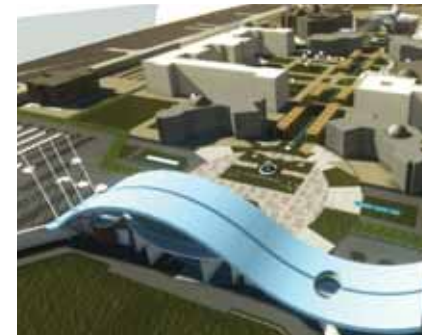
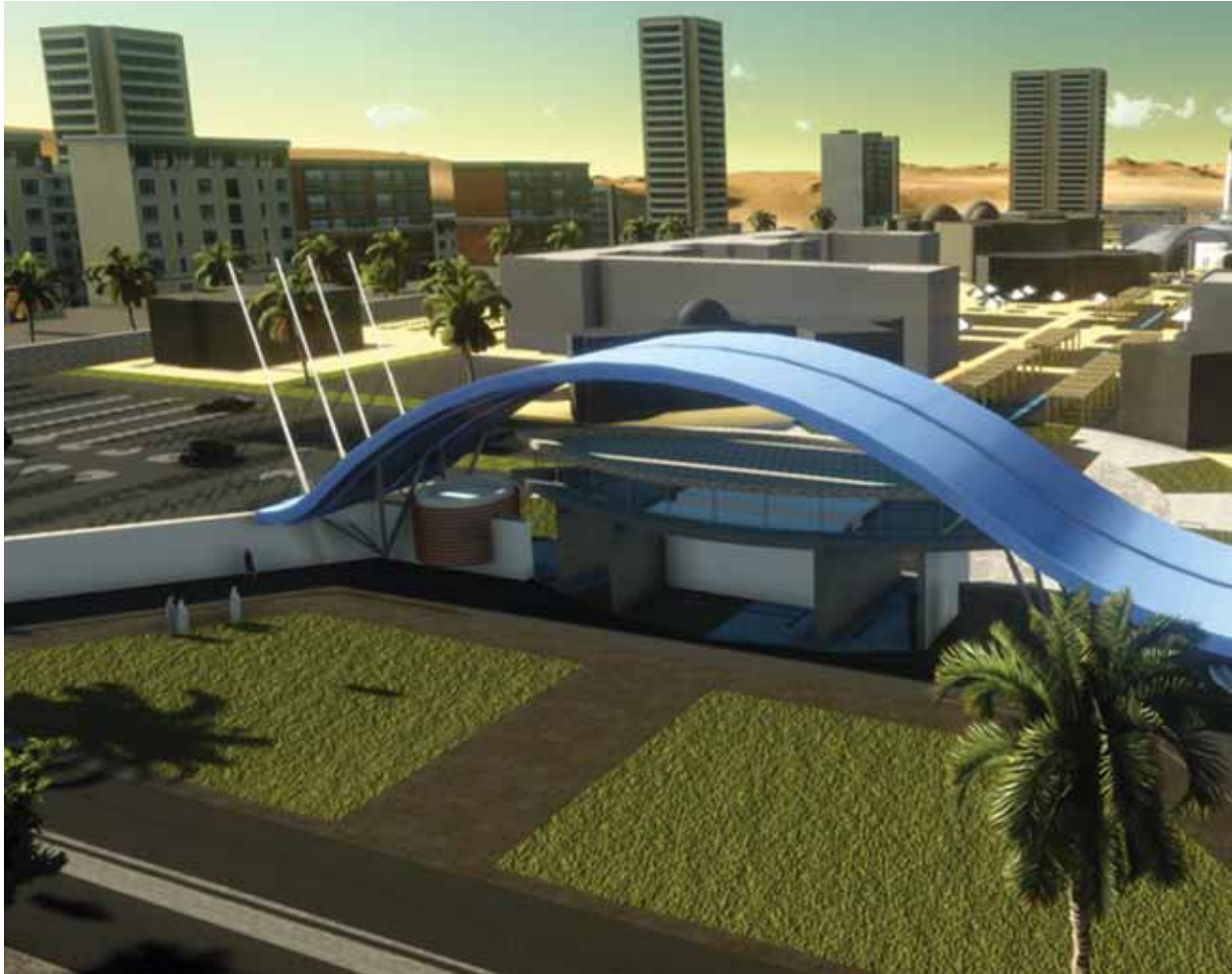
الموقع : القصيم

التاريخ : ٢٠٠٤ م

المساحة الكلية : ٥٠,٠٠٠ م^٢

التكلفة : ١٠٠,٠٠٠,٠٠٠ ريال سعودي

Design



Master Plan for Girls College Dammam University
Client : Dammam University
Location : Dammam
Date : 2011
Total Built-up Area : 854.912 M2
Cost : 1,480,000 Saudi Riyals

المخطط الرئيسي لكلية البنات بجامعة الدمام
المالك : جامعة الدمام
الموقع : الدمام
التاريخ : ٢٠١١ م
المساحة الكلية : ٨٥٤,٩١٢ م^٢
التكلفة : ١,٤٨٠,٠٠٠ ريال سعودي



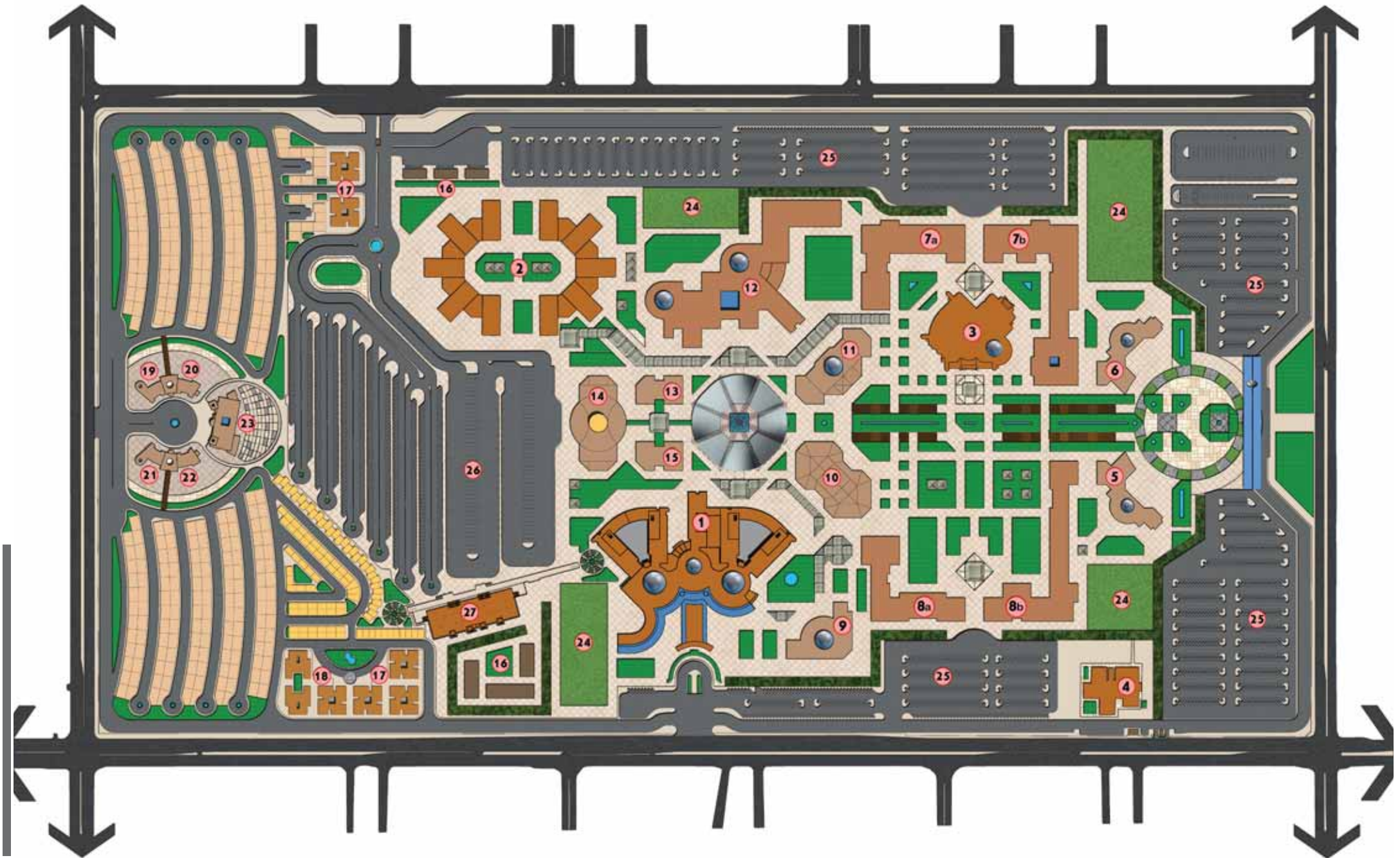
D

58

Master Plan for Girls College- Dammam Uni.

D

59



Design

Medical Services Directorate Headquarters



Medical Services Directorate Headquarters (MSD):
Client : Ministry Of Defense & Aviation
Location : Riyadh
Date : 2000
Total Built-up Area : 21.000 M2
Cost : 98,000,000 Saudi Riyals

مبنى إدارة الخدمات الطبية للقوات المسلحة
المالك : وزارة الدفاع والطيران
الموقع : الرياض
التاريخ : ٢٠٠٠ م
المساحة الكلية : ٢١,٠٠٠ م^٢
التكلفة : ٩٨,٠٠٠,٠٠٠ ريال سعودي



D

60

King Khaled Hospital

D

61



Expansion of King Khalid University
Hospital and outbuildings
Client : King Saud University
Location : Riyadh
Date : 2004
Total Built-up Area : 110,000 Sq. m.
Cost : 265,760,000 Saudi Reception

توسعة مستشفى الملك خالد الجامعي والمباني الملحقة
المالك : جامعة الملك سعود
الموقع : الرياض
التاريخ : ٢٠٠٤م
المساحة الكلية : ١١٠,٠٠٠ م^٢
التكلفة : ٢٦٥,٧٦٠,٠٠٠ ريال سعودي

Design



Sultan Bin Abdulaziz City For Humanitarian Services
Client : Prince Sultan Bin Abdulaziz Charity
Foundation
Location : Riyadh
Date : 1996 - 2000
Total Built-up Area : 95,000 Sq. m.
Cost : 750,000,000 Saudi Riyals

مدينة سلطان بن عبد العزيز للخدمات الانسانية
المالك : مؤسسة سلطان بن عبد العزيز الخيرية
الموقع : الرياض
التاريخ : ١٩٩٦ / ٢٠٠٠ م
المساحة الكلية : ٩٥,٠٠٠ م^٢
التكلفة : ٧٥٠,٠٠٠,٠٠٠ ريال سعودي



D

62

Sultan Bin Abdulaziz City For Humanitarian Services

D

63



Design

Majmaah Commercial Complex



Majmaah Commercial Complex
Client : Majmaah Municipality
Location : Majmaah
Date : 2012
Total Built-up Area : 3000 M2
Cost : 6,000,000 Saudi Riyals

المجمع التجاري بالمجمعة
المالك : بلدية محافظة المجمعة
الموقع : المجمعة
التاريخ : ٢٠١٢م
المساحة الكلية : ٣٠٠٠ م٢
التكلفة : ٦,٠٠٠,٠٠٠ ريال سعودي



D

64

Prince Sultan Cardiac Center

D

65



Prince Sultan Center For Cardiac Catheterization,
King Fahad Hospital:
Client : King Fahad Hospital
Location : Qaseem
Date : August 2000
Total Built-up Area : 1,075 Sq.m
Cost : SR 5.000.000

مركز الأمير سلطان لقسطرة القلب، بمستشفى
الملك فهد القصيم
المالك : مستشفى الملك فهد التخصصي بالقصيم
الموقع : القصيم - بريدة
التاريخ : أغسطس ٢٠٠٠م
المساحة الكلية: ١,٠٧٥ م^٢
التكلفة : ٥,٠٠٠,٠٠٠ ريال سعودي

Design



AL-OLAYA TOWERS

Client : General Organization for Social Insurance

Location : Al-Olaya, Riyadh

Date : 2006

Total Built-up Area : 140.000 M2

Cost : 680,000,000 Saudi Riyals

مشروع أبراج العليا

المالك : المؤسسة العامة للتأمينات الاجتماعية

الموقع : الرياض

التاريخ : ٢٠٠٦م

المساحة الكلية : ١٤٠,٠٠٠ م^٢

التكلفة : ٦٨٠,٠٠٠,٠٠٠ ريال سعودي



D

66

Olaya Towers

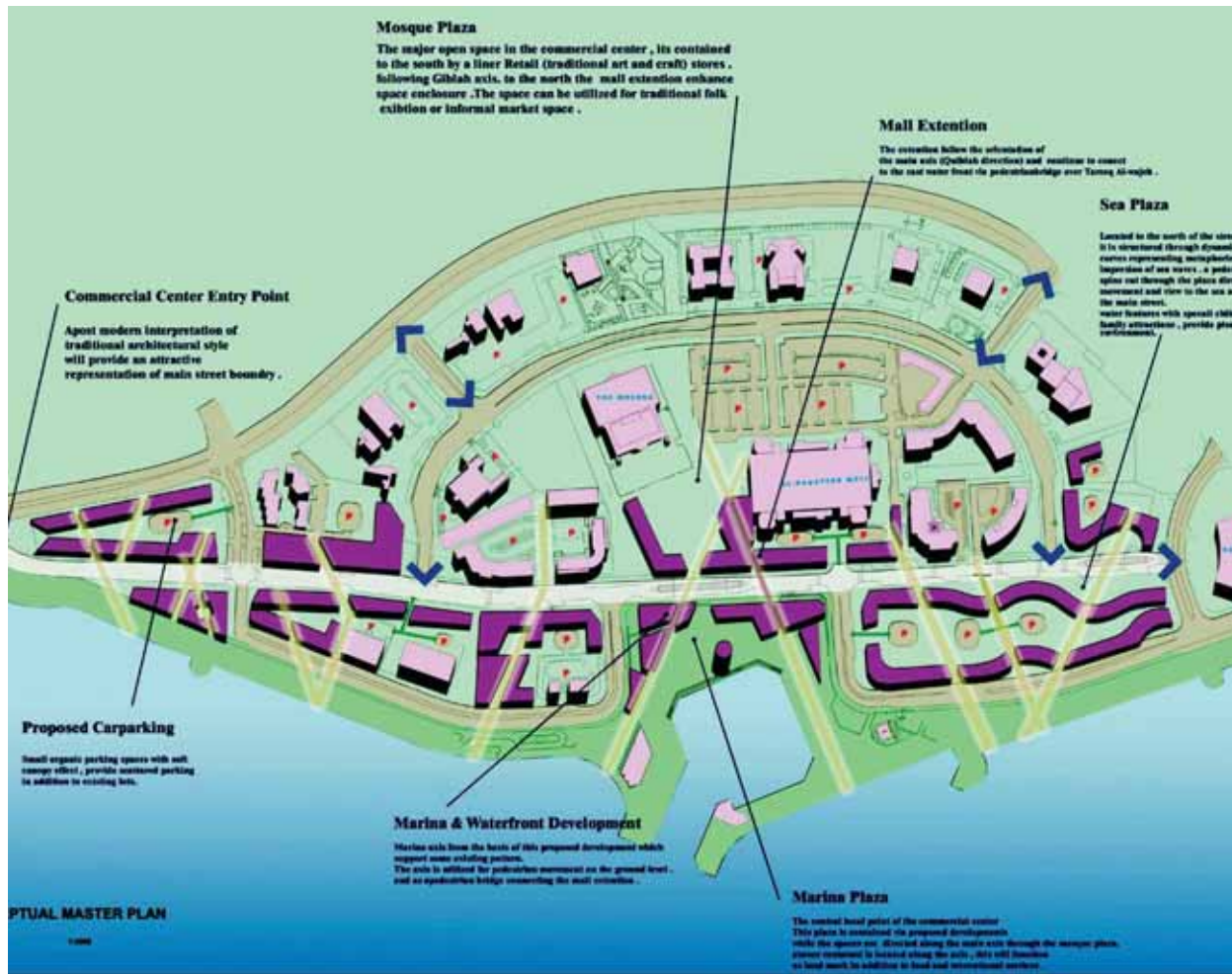
D

67



Design

Al Fanateer Commercial Center- Jubail



Site Rehabilitation of Al Fanateer Commercial Center- Jubail
 Client : Royal Commission For Jubail & Yanbu
 Location : Jubail
 Date : 2001
 Total Built-up Area : 20.000 q. m.
 Cost : 32,000,000 Saudi Riyals

مركز الفناثير التجاري - الجبيل
 المالك : الهيئة الملكية للجبيل وينبع
 الموقع : الجبيل
 التاريخ : ٢٠٠١ م
 المساحة الكلية : ٢٠.٠٠٠ م^٢
 التكلفة : ٣٢,٠٠٠,٠٠٠ ريال سعودي



D

68

Al Malaz Horse Racing

D

69



Development of Al-Malaz Horse Racing Area
King Fahad Hospital:
Client : Riyadh Municipality
Location : Riyadh
Date : 2000
Total Built-up Area : 317.000 M2
Cost : 951.000.000 Saudi Riyals

تطوير منطقة نادي الفروسية بالملز
المالك : أمانة مدينة الرياض
الموقع : الرياض
التاريخ : ٢٠٠٠ م
المساحة الكلية : ٣١٧,٠٠٠ م^٢
التكلفة : ٩٥١,٠٠٠,٠٠٠ ريال سعودي

Design



Al-Bassam Tower
Client : Al-Bassam Group of Companies
Location : Al-Khobar
Date : 1999
Total Built-up Area : 8.680 M2
Cost : 28,000,000 Saudi Riyals

برج البسام
المالك : مجموعة البسام
الموقع : الخبر
التاريخ : ١٩٩٩ م
المساحة الكلية : ٨,٦٨٠ م^٢
التكلفة : ٢٨,٠٠٠,٠٠٠ ريال سعودي



D

70

Al Bassam Tower

D

71



Design

Al Jerasy Residential Complex



Al-Jeraisy Residential Complex
Client : Shaikh/Abdulrahman Al-Jeraisy
Location : Riyadh
Date : 1999 / 2001
Total Built-up Area :21.000 M2
Cost : 60,000,000 Saudi Riyals

مجمع الجريسي السكني
المالك : الشيخ / عبد الرحمن الجريسي
الموقع : الرياض
التاريخ : 1999 / 2001 م
المساحة الكلية : 21,000 م²
التكلفة : 60,000,000 ريال سعودي



D

72

Al Owiya Palace

D

73



Al Owiya Palaces
Client : Al Sheikh Ibrahim Al-Owida
Location : Riyadh
Date : 2011
Total Built-up Area : 4115 M2
Cost : 1.100.000 Saudi Riyals

قصر العويضة
المالك : الشيخ ابراهيم العويضة
الموقع : الرياض
التاريخ : ٢٠١١ م
المساحة الكلية : ٤١١٥ م٢
التكلفة : ١.١٠٠.٠٠٠ ريال سعودي

Design



College of Engineering - Al-Jouf University
Client : Al Jouf University
Location : Al-Jouf
Date : 2011
Total Built-up Area : 39067Sq. m.
Cost : 80,000,000 SR

كلية الهندسة - جامعة الجوف
المالك : جامعة الجوف
الموقع : الجوف
التاريخ : ٢٠١١ م
المساحة الكلية : ٣٩٠٦٧ م^٢
التكلفة : ٨٠,٠٠٠,٠٠٠ ريال سعودي



D

74

College of Engineering - Al-Jouf University

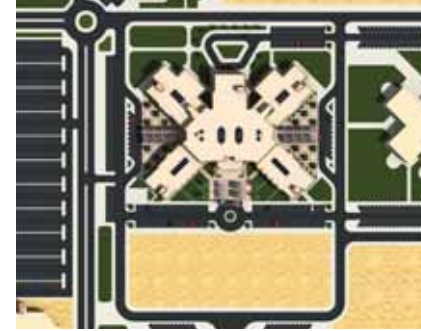
D

75



Design

Dammam Uni and Information Technology



Faculty of Information Technology Dammam
University
Client : Dammam University
Location : Dammam
Date : 2011
Total Built-up Area : 23.812 M2
Cost : 2,575,000 Saudi Riyals

كلية تقنية المعلومات بجامعة الدمام
المالك : جامعة الدمام
الموقع : الدمام
التاريخ : ٢٠١١ م
المساحة الكلية : ٢٣,٨١٢ م٢
التكلفة : ٢,٥٧٥,٠٠٠ ريال سعودي



D

76

Dammam Uni and Nerve Center

D

77



Faculty of Information Technology
University of Dammam
Client : University of Dammam
Location : Dammam
Date : 2011
Total Built-up Area : 23.812 M2
Cost : 2,575,000 Saudi Riyals

كلية تقنية المعلومات بجامعة الدمام
المالك : جامعة الدمام
الموقع : الدمام
التاريخ : ٢٠١١ م
المساحة الكلية : ٢٣,٨١٢ م^٢
التكلفة : ٢,٥٧٥,٠٠٠ ريال سعودي

Design



King Abdulaziz University Hospital
Client : King Saud University
Location : Riyadh
Date : 2000
Total Built-up Area : 120.000 M2
Cost : 120,000,000 Saudi Riyals

مشروع توسعة مستشفى جامعة الملك عبد العزيز
المالك : جامعة الملك سعود
الموقع : الرياض
التاريخ : ٢٠٠٠ م
المساحة الكلية : ١٢٠,٠٠٠ م^٢
التكلفة : ١٢٠,٠٠٠,٠٠٠ ريال سعودي



D

78

King Abdulaziz University Hospital

D

79



Design

Municipal Services Building



Municipal Services Building
Client : Majmaah Municipality
Location : Majmaah
Date : 2012
Total Built-up Area : 1300 M2
Cost : 4,000,000 Saudi Riyals

مشروع مبنى خدمات البلدية
المالك : بلدية محافظة المجمعة
الموقع : المجمعة
التاريخ : ٢٠١٢ م
المساحة الكلية : ١٣٠٠ م^٢
التكلفة : ٤,٠٠٠,٠٠٠ ريال سعودي



D

80

Shumou School

D

81

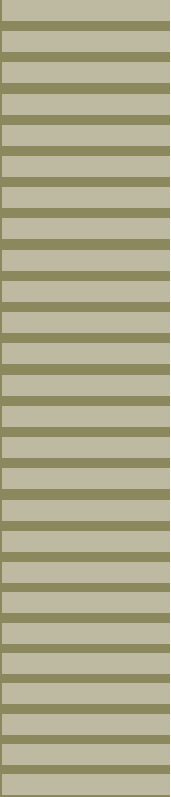
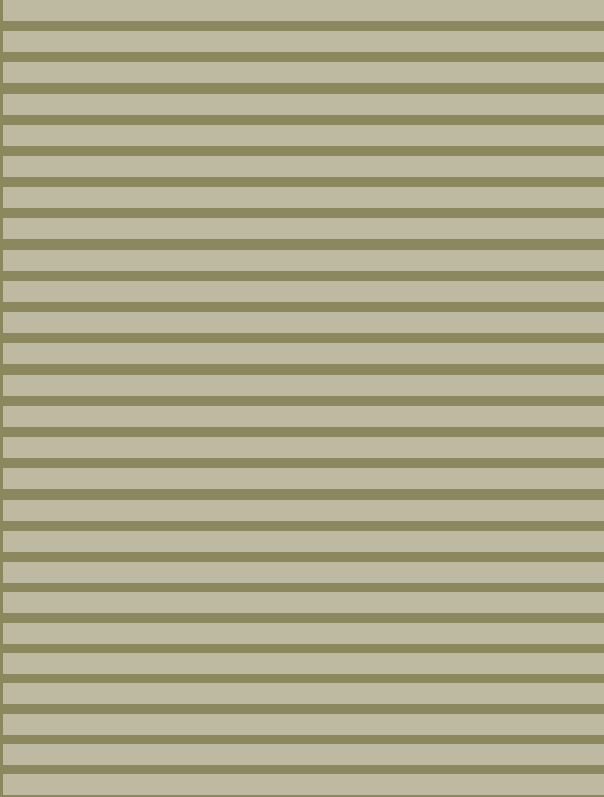


Shumou International School
Client : Shumou Group
Location : Riyadh
Date : 2011
Total Built-up Area : 42.000 M2
Cost : 1,800,000 Saudi Riyals

مدارس الشموع العالمية
المالك : مجموعة شموع
الموقع : الرياض
التاريخ : ٢٠١١ م
المساحة الكلية : ٤٢,٠٠٠ م^٢
التكلفة : ١,٨٠٠,٠٠٠ ريال سعودي

Project Mangement

OTAISHAN CONSULTING ENGINEERS



Project Management & InfoTechnology	84
Technical Support for the General Department	84
Affordable House Competition.....	86
Geographical survey of the villages of Riyadh Region.....	88

Projects Management & Information Technology :

A-Projects Management

As a result of the accumulation of past experience formed our conviction of the importance of benefiting from the system management of construction projects and conviction of the importance of complete OCE departments by establishing this section has been launch under the name of Project Mangement and Information Technology which was the first production the project management of Technical Support for the General Department of Execution and Supervision – Riyadh Municipality of the Riyadh region,whith the following information:

Client	Project	Date
Riyadh Municipality	Technical Support for the General Department of Execution and Supervision – Riyadh Municipality. Project Value SR 57,254.670	2011

Project Description:

The purpose of the project is to provide consulting services in project management to support and develop the General Department of Execution and Supervision in Riyadh Municipality, which is summarized as follows:

- 1.Development of business procedures in the General Department of Execution and Supervision.
- 2.Preparation of the infrastructure and basic setup for automating these procedures using the latest and state-of-the-art software.
- 3.Qualifying General Department of Execution and Supervision employees and transferring knowledge and experience to them.



Project Scope:

The General Department of Execution and Supervision in Riyadh Municipality supervises the execution of many projects such as floods discharge, roads, tunnels, electric networks...etc.

The main objective of the department is to guarantee the completion of these projects satisfactorily according to the scheduled time and target budget.

The project has acquired a very competent and professional team of experts and specialized consultants to deliver the required services according to the best management standards and practices. These specialized professionals and experts in project management work within the department's framework as follows:

1. Provide a primary team to manage projects in the department of execution and supervision head office and to provide the following managerial and consulting services:

- a. Management and follow up of contracts under execution (contracts related to execution contractors as well as execution consultants)
- b. Management and follow up of technical works during the execution phase.
- c. Establishing the primary schedule.
- d. Preparation and follow up of financial procedures for the projects.
- e. Providing technical support for the equipment used during the execution of the project.

2. Provide secondary teams in the branch offices for:

- a. Management of projects and necessary follow up.
- b. Setting and Adjusting the Schedule.
- c. Cost Control.
- d. Contracts Management.
- e. Quality Control and Assurance.

3. Projects Portfolio Management System Implementation which is conducted through the following phases:

- a. First Phase: Assessment and evaluation of the general department of execution and supervision requirements.
- b. Process Re-Engineering.
- c. Preparation of Processes Manual.
- d. Designing, Development and Implementation of the system.
- e. Final Operation.
- f. Final Handover.

Client	Project	Date
Riyadh Development Authority	Affordable House Competition	2003

Project Description:

The Riyadh Development Authority in 2003 organized a competition under the headline «Affordable Housing Competition». The Competition is considered the first of its kind worldwide and was organized in two categories; student and professional categories. The competition was attended by a large number of competitors from more than nineteen countries.

The role of the of Otaishan Consulting Engineers as the following:

- 1 – Determine the type and location of the project.
- 2 - Respond to inquiries, whether from professional or students
- 3 - Organize a committee to receive and screen Competitors' works .
- 4 - Sort Participations works commensurate with their compliance with the conditions.
- 5 - Preparation of projects in the form of matching plates and presented to the arbitration committee .
- 6 - Participation in the arbitration and the selection of the winners of each discipline.
- 7 – Preparation of simultaneous exhibition.
- 8 - Organize and prepare awards and Competition models .





B- Information Technology

Information Technology Department at Otaishan Consulting Engineers provides several GIS solutions that would help the clients to connect to the geographical dimension with the existing needs. Our mission is to be the pioneer in providing GIS solutions in the Kingdom of Saudi Arabia. We can provide the following solutions to our customers:

- Providing GIS System Design and Implementation.
- Establishing and Supporting GIS Units for all government and private sectors.

OTAISHAN CONSULTING ENGINEERS

- Designing and Modeling Geodatabases.
- Maintain and provide experienced GIS data Management.
- Producing digital maps in all scales.
- Image satellite processing & analysis.
- Developing GIS applications with the latest technologies to enhance areas such (Communications, Transportation, Defense, Security, Investment sectors, Agriculture, Industry, Natural Resources, Government applications, Infrastructures Municipal Process).
- Employ the latest GIS techniques and tools to provide effective solutions and support to a broad range of users.

Client	Project	Date
Riyadh Municipality	Geographical survey of the villages of Riyadh Region	2001

- The project purpose is to collect, store and process data of the villages in the Riyadh Region, as well as utilize them in various services.
- Information was collected on every village so as to prepare a template for data collection by depending on the geographical field survey team, which attended all the villages in the Riyadh Region. The forms were collected, the data point coordinates for each village were taken, and a geographical information system was established by establishing programs for the system.



Project Objectives :

Provide a geographic database on all the villages of the Riyadh Region, that could be referenced and updated; knowing the factors which affect the value of information, avoid energy and resources wasting, as well as investigating the efficiency and effectiveness of the data; this requires:-

- The provision of hardware and software to build a geographic information system of the villages in the Riyadh Region.
- Develop an appropriate mechanism for the update.
- Gather information on the region from various sources later on integrate it on the system.
- Gather information on the level of each village and entered into the system.
- Training of employees in the Riyadh Municipality on the operation of the system and update it.
- Determine the dependence of each to the nearest municipal services.
- Find the equation of the standard viability of villages and hamlets.
- Create an inventory on the population, comprated with the statistics, schools and health centers.



Value Engineering

OTAISHAN CONSULTING ENGINEERS

Value Engineering Definition	92
Management of VM Studies	94
VM Procedures for Conducting VE	95
VM Services.....	96
List of Selected Otaishan Consulting Engineers	
VE Clients	97
Real Estate Clients	98
Selected Value Engineering Project	99
VM Team Members	100
VE & Design Review Services	101
Hyper Panda	102
Headquarters Business Park	103
Al-Nakheel Tower.....	104
Al-Taif Municipality	106
RCJY Headquarter	107
Najran Airport	108
Criminal Court	110
Olaya Towers	111
King Abdullah Economic City	113
New Ministry of Education Headquarter	114
Ministry of Municipality and Rural Affairs (MOMRA)	115

Value Engineering Definition

Value Analysis / Value Management is a Creative, Function-Oriented, Organized / Systematic Team Approach whose objective is to Optimize Quality / Performance and Reduce Total life cycle costs of Projects/Processes.

Brief History:

- VE Began at GE early 1940's
- 1947 - Value Analysis Lawrence D. Miles "Father of VA and VE"
- 1954 - Value Engineering (U. S. Navy)
- Society of American Value Engineers (SAVE) Formed in 1959
- SAVE International name changed in 1996 SAVE Conference

Value Engineering Definition

The Kingdom of Saudi Arabia is taking the lead in applying the Value Engineering Methodology in the Gulf Region in particular and in the Middle East on different types of construction projects. The first Value Engineering Program was established at the General Directorate of Military works (GDMW) under the supervision of Colonel Dr. Abdulaziz Al- Otaishan, General Director of GDMW and the valuable support of His Royal Highness Prince Sulltan Bin Abdulaziz, Minister of Defense and Aviation of MODA. The Gulf Chapter of SAVE International was established in 1992 in the Kingdom of Saudi Arabia. In 1995 the VE Department of the Ministry of Municipalities and RuralAffairs was established

by Otaishan Consulting Engineers until present. In 1996 the Saudi Society of Engineers established its VE section. In 2003 Otaishan Consulting Engineers established the VE Studies Department at the Royal Commission for Jubail & Yanbu under the leadership of Dr. Khaled A. Obeid, PE, CVS-Life the Director of VE at Otaishan Consulting Engineers and the Certified Value Specialist as per SAVE International. Now there are many VE studies conducted for both government and private sectors, therefore, as a result of implementing VE recommendations on those projects Billions of Saudi Riyals have been saved, in addition to improving projects overall quality and operational cost effectiveness.



Otaishan Consulting Engineers is recognized internationally as a leader in the practice of Value Management (VM) in the Gulf Region, with members of our staff helping to develop the theories and the practical application of those theories throughout the Middle East. As a result, Otaishan Consulting Engineers has gained special expertise in the application, instruction, and writing of procedures for Value Engineering, Life Cycle Costing, Cost Estimating, Scheduling & Project Management, and Post Occupancy Evaluation to meet the needs of our clients in many different industries and commercial facilities types.

We have further enhanced our VM activities through development of quality models for our clients that relate the functional needs and goals of the end users of a facility to the expressed design criteria for that facility. We evolve our design model through application of Quality Function Deployment (QFD) Techniques.

Otaishan Consulting Engineers is headquartered in Riyadh, Saudi Arabia. Value Engineering activities are centered in Riyadh, the heart of Saudi Arabian Business under the direction of Dr. Khaled A. Obeid, PE, CVS- Life and the General Supervision of Dr. Abdul Aziz Al-Otaishan, President and CEO, the first to introduce VE in the Gulf Region. Resources are available to conduct studies in more than one location at the same time in the Gulf Region and Worldwide.

For the past ten years, Otaishan Consulting Engineers has been active in the Middle East (Saudi Arabia, the Gulf Region and Egypt) by conducting VE seminars and studies with full time VE specialists from local and international consultants. Dr. Obeid has spent over 15 years full time in the Middle East and is very familiar with local conditions, customs, traditions and religious needs. Dr. Obeid established the VM Program for the Royal Commission of Jubail and Yanbu (RCJY), the largest infrastructure industry in the world. In addition, Dr. Obeid has spent over 13 years in conducting VE studies, seminars and other VM activities in the USA and worldwide.

Management of VM Studies

Management of VM services are conducted through the leadership of Dr. Khaled Obeid, PE, CVS-Life as well as certified value specialists (CVS-s) having extensive experience in this type of work. A key to developing meaningful proposals is to use experienced multidisciplinary teams which were not involved in the original design decisions. This approach brings to the process an objective design appraisal which resembles a Quality Control;Quality Assurance approach as an effort which can significantly improve many traditional designs.

Why VM?

When faced with significant legal, financial, or contractual problems, owners invariably seek second opinion before making major decisions. Why not apply the same logic regarding their cost of ownership? Value Management services are designed to provide this expertise using proven methodology.

VE Process:

Otaishan Consulting Engineers Value Management efforts are administered by our centralized Value Engineering Department Managed and Directed by Dr. Khaled Obeid, PE, CVS-Life and is based in our Riyadh Headquarters Office. Otaishan Consulting Engineers is committed to the highest standard of quality in applying quality control measures on their VM process through its Quality Control Methodology, and the associated results it brings to our client's projects and to us as well.

Our VE techniques are integrated into our project design process in such a way that it's organized and implemented following the principle of our commitment to excellence program. Otaishan Group VE program provides value engineering, life cycle costing, cost estimating, scheduling & project management, and post-occupancy evaluation services for Otaishan Group projects as well as for our associated A/E & CM firms and clients .



VM procedures for conducting VE workshop :

- 1) Pre-workshop preparation 2) Workshop study 3) Post-workshop

Task Flow Activities of VE Process are summarized as follows:

PRE-WORKSHOP

- Project Coordination: Team members, Schedule, Agenda
- Data Preparation: Facility criteria, Drawings, Budget
- Modeling: Quality, Program (Space), Cost, Energy and LCC Models.

WORKSHOP

- Information Phase: Secure facts, determine cost as well as fixed costs on specific criteria and requirements.

- Function Phase: Active Verb/Measurable Noun definitions of Function, evaluation relationships (FAST Diagramming) and associated cost of these functions.

- Creativity Phase: Establish positive thinking, develop creative ideas in a team setting.

Evaluation Phase: Refine and combine ideas, establish costs on all ideas, develop function alternatives and evaluate by comparison.

Recommendation Phase: Present proposals that resolve the study issues and motivate to action.

POST WORKSHOP

Study Report Acceptance, Implementation of Proposals and Project Follow-up.

VM Services:

VM Training Programs /Seminars

A.Executive Briefings (2 - 4 hours)

B.Seminars/Workshops

- Introduction to Value Engineering
(2 - 3 days) Seminars
- VE Workshop for Design and Construction Module I
(5 Days) Certified Seminar
- VE Advanced Leadership Workshop for Design and Construction Module II
(3 Days) Certified Seminar
- Life Cycle Costing for Design and Construction
(3 - 5 Days) Seminar
- Project Budgeting for Buildings
(3 - 5 Days) Seminar
- Strategic Value Programming of Facility Requirements Prior to Design
(3 - 5 Days) Workshop.

Both MOD.I and MOD.II Certified courses are approved by the Certification Board of SAVE International. These two courses are required as prerequisites for Value Specialist Certification (AVS & CVS).

- Post Occupancy Evaluation of Facilities
(13- Days) Seminar

C.VM Courses

Value Engineering Theory
(5 weeks 10 Sessions) Course



Design Review Services

- Constructability
- Discipline Correlation
- Bidding Packages Coordination
- Discipline Technical Review
- Building and other Code Conformance
- Program Verification
- Maintainability
- Cost Effectiveness
- Cost Estimating Approach & Tools

List of Selected Otaishan Consulting Engineers VE Clients

A. Government

- Al-Riyadh Development Authority (ADA), Riyadh- Saudi Arabia.
- The Highest Development Authority of Makkah Al Mokarama.
- Al Medinah Al Monawarah & Holy Places, Jeddah- Saudi Arabia
- Royal Commission for Jubail and Yanbu, Riyadh-Saudi Arabia
- Ministry of Defense and Aviation, Riyadh- Saudi Arabia
- Saudi Port Authority, Riyadh- Saudi Arabia

- Ministry of Interior (MOI), Riyadh- Saudi Arabia
- Saudi National Guards, Riyadh- Saudi Arabia
- General Organization of Education and Technical Training

B. Corporate/Institutional

- APU SAVOLA GROUP, Jeddah - Saudi Arabia
- King Abdulaziz Foundation, Riyadh - Saudi Arabia
- Prince Sultan Bin Abdulaziz Charity Foundation, Riyadh - Saudi Arabia

- Saudi ARAMCO Corporation, AlKhobar Saudi Arabia
- Soliman Al Rajhi Company, AlMedina AlMonawarah, Saudi Arabia
- Saudi Basic Industry Company, SABIC - Riyadh, Saudi Arabia
- Al Safi Marketing Establishment, Riyadh - Saudi Arabia
- General Organization of Social Insurance (GOSI), Riyadh Saudi Arabia
- King Saud University, Riyadh, Saudi Arabia
- King Abdulaziz University, Jeddah- Saudi Arabia.
- Royal Commission of Jubail & Yanbu (RCJY)
- SABIC
- Ministry of Interior (MOI)
- Ministry of Finance (MOF)
- Ministry of Defense and Aviation and Inspector General (MODA)
- General Directorate of Military Works, (GDMW)
- Ministry of Municipal and Rural Affairs, (MOMRA)
- King Abdul Aziz City for Science and Technology, (KACST)
- Riyadh Development Authority (ADA)
- ADNOC , ADMA , ADGAS Oil & Gas Companies, (UAE)
- ENPPI Oil & Gas Company, Egypt

Real Estate Clients :

- Emaar Properties
- Dar Al Arkan Real Estate Development Company
- Memar Development and Construction
- Al-Dar Al-Khasa for Urban Development Company
- Midrar Development Management
- Obelkan Real Estate Investment
- Al Habib Investment Company
- Al Rajhi Investment Company



C. International

- University of Michigan, Ann Arbor, Michigan
- University of Cincinnati, Ohio
- Smith Group, Detroit, Michigan USA
- Smith Group Washington DC, USA
- Smith Group Southwest, Arizona USA
- Johnson, Johnson & Roy (JJR), Ann Arbor- Michigan USA
- KZF Associates, Cincinnati, Ohio
- ARCHPLAN Consulting Architects & Engineers, Cairo Egypt
- Shaker Consultancy Group, Cairo, Egypt
- Kirk Associates, Detroit, Michigan USA

D. Associate A/E & CM Firms

- Saud Consult, Riyadh- Saudi Arabia
- Dar Al- Riyadh for Engineering Consultancy, Riyadh - Saudi Arabia
- Zuhair Faiz Partnership for Engineering Consultancies, Riyadh, Saudi Arabia
- Al- Jazira for Engineering Consultancy, Riyadh- Saudi Arabia
- The Environment Planners, Architects and Engineers, Riyadh - Saudi Arabia
- Middle East Center for Engineering Consultancies, Riyadh - Saudi Arabia

Selected Value Engineering Projects :**Royal Commission for Jubail & Yanbu (RCJY)**

- Infrastructure Expansion, Jubail 2
- Fanateer Hospital Expansion, Jubail 2
- Corniche Road, Yanbu
- Product Pipeline Corridor, Jubail
- Heavy Modular Path, Jbail
- Jubail Industrial College Phase 2
- De-Bottlenecking Corridor, Jubail 2

Saudi ARAMCO Projects & Saudi ARAMCO Training Program of 2010

- Abu Ali Flanks Scraped Water Handling Facility
- Upgrade Wastewater Treatment Facility
- De-Bottleneck Condensate Systems, Haradh Gas Plant
- Al-Khafji Oil & Gas Offshore Facilities

General Organization for Technical Education and Vocational Training (GOTEVT)

- Jizan Technical College,
- Alhassa Technical College
- Buburaidah College of Technology

Other Clients :

- EMAAR, King Abdullah Economic City , Resort core, Rabegh
- Ministry Of Finance , Alnakheel Project, Riyadh

VALUE ENGINEERING RESULTS :

- On average savings range from (10- 25%) of construction cost of all projects.
- On average 60% of our VE recommendations are implemented

PEOPLE

VM Team Members

Key members of Otaishan Consulting Engineers Value Management team are listed below. The team represents a unique combination of professional skills in construction, engineering, architecture and life cycle costing. Otaishan Consulting Engineers is a Corporate Member of SAVE and most of the VM Team are SAVE members. The Certified Value Specialists (CVS) are also registered professional consultant engineers. They are supported by other engineers and architects who have International VE training and have participated in many VE studies/workshops. Their resumes are available upon client request.



V

100

VE & Design Review Services

VM director of Certified
Value specialist for Life

Dr. Khaled A. Obeid, PE, CVS- Life

Certified Value Specialist

Mohammad Amin, CVS

Certified Value Specialist

Mohammed A. Hussain, CVS

Associate Value Specialist ,

Mohamed A. Essa, AVS, PMP

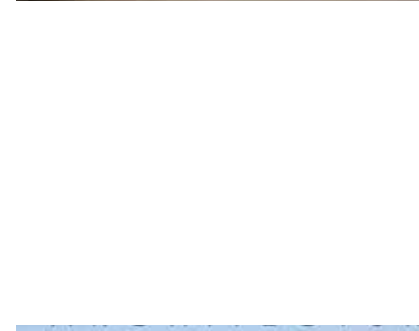
Associate Value Specialist, Architect

Willie Wael Martinez, AVS

Why Otaishan consulting Engineers Value Management?

- o Recognized Leadership
- o Proven Expertise
- o Comprehensive Services
- o Training Experience

- o International Experience
- o Resources
- o Organizational Capability to Assemble Team and Conduct VE Study within Less Than 2 weeks Notice
- o Ability to Assemble and Distribute VM Reports within Five Days after Completion of VE Workshop .



Hyper Panda – Rimal Center

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Stronger Image
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

هايبر بنده – مركز رمال

- الوفرة و المنافع الأخرى:
 - نسبة الوفرة فيه المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ %)
 - واجهة أفضل
 - زيادة المرونة
 - توفير الطاقة
 - تبسيط الإنشاء
 - تحسين الجودة





Headquarters Business Park (56 Story Tower):

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Stronger Image
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

مبنى مقر مجمع الأعمال (برج ٥٦ طابق) • الوفرة والمنافع الأخرى:

- نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ %)
- واجهة أفضل
- زيادة المرونة
- توفير الطاقة
- تبسيط الإنشاء
- تحسين الجودة

Value Engineering



AL-Nakheel Tower

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Electromechanical Systems improvement
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

برج النخيل

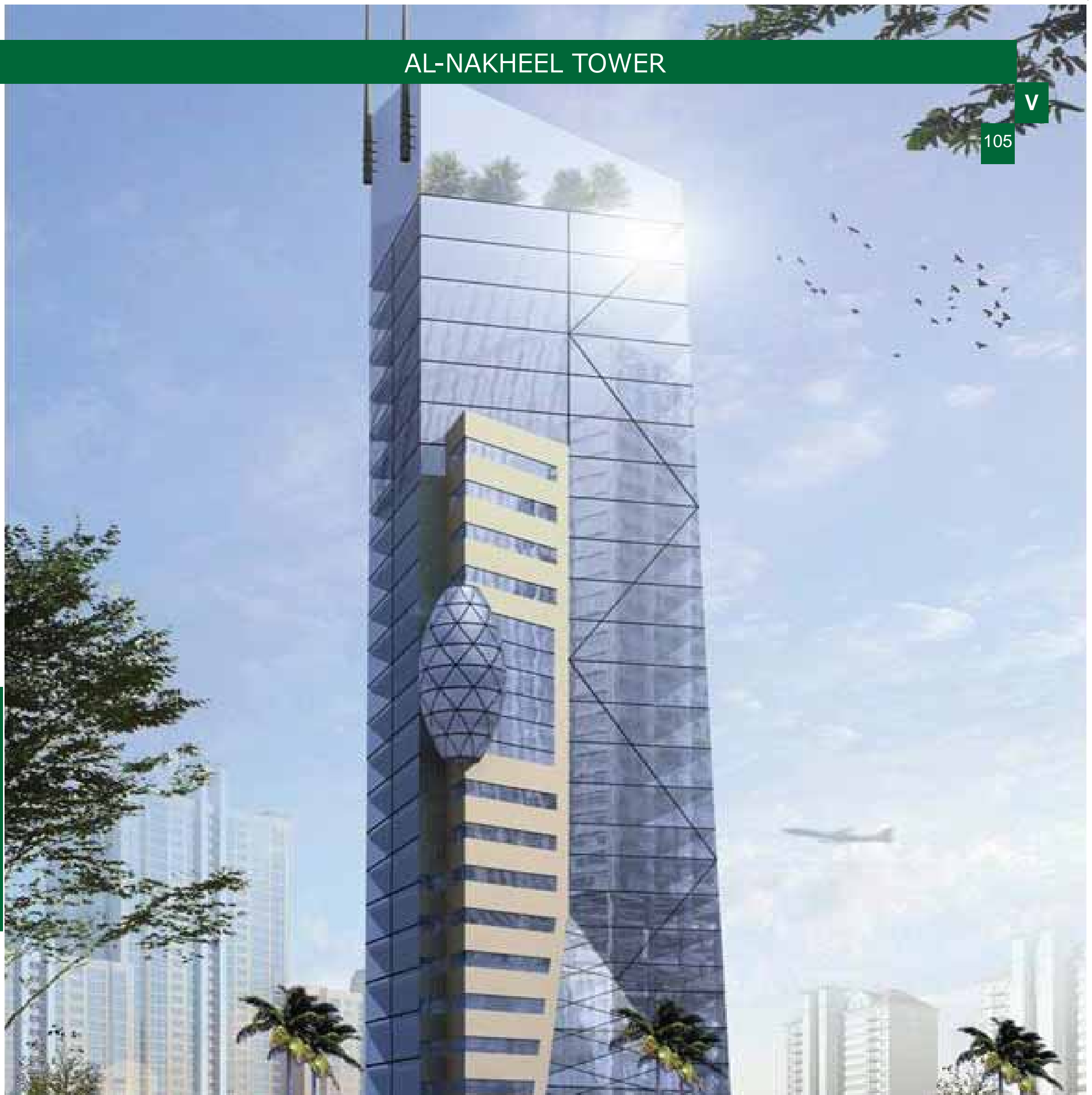
- الوفرة و المنافع الأخرى:
- نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ %)
- تحسين الأنظمة الإلكترونية وميكانيكية
- زيادة المرونة
- توفير الطاقة
- تبسيط الإنشاء
- تحسين الجودة



AL-NAKHEEL TOWER

V

105





AL-TAIF MUNICIPALITY HEADQUARTERS

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Stronger Image
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

مبنى أمانة الطائف

- الوفرة و المنافع الأخرى:
 - نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ ٪)
 - واجهة أفضل
 - زيادة المرونة
 - توفير الطاقة
 - تبسيط الإنشاء
 - تحسين الجودة





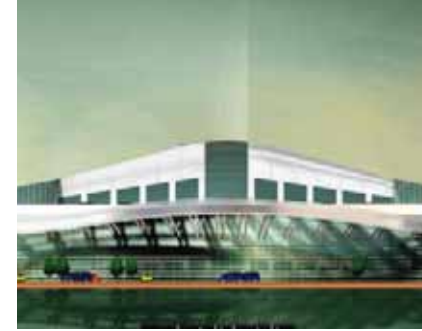
RCJY HEADQUARTER

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

المقر الرئيسي بالرياض لهيئة الملكية للجيل و ينبع
• الوفرة و المنافع الأخرى:

- نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ %)
- زيادة المرونة
- توفير الطاقة
- تبسيط الإنشاء
- تحسين الجودة

Value Engineering



Najran Airport

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Stronger Image
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

مطار نجران

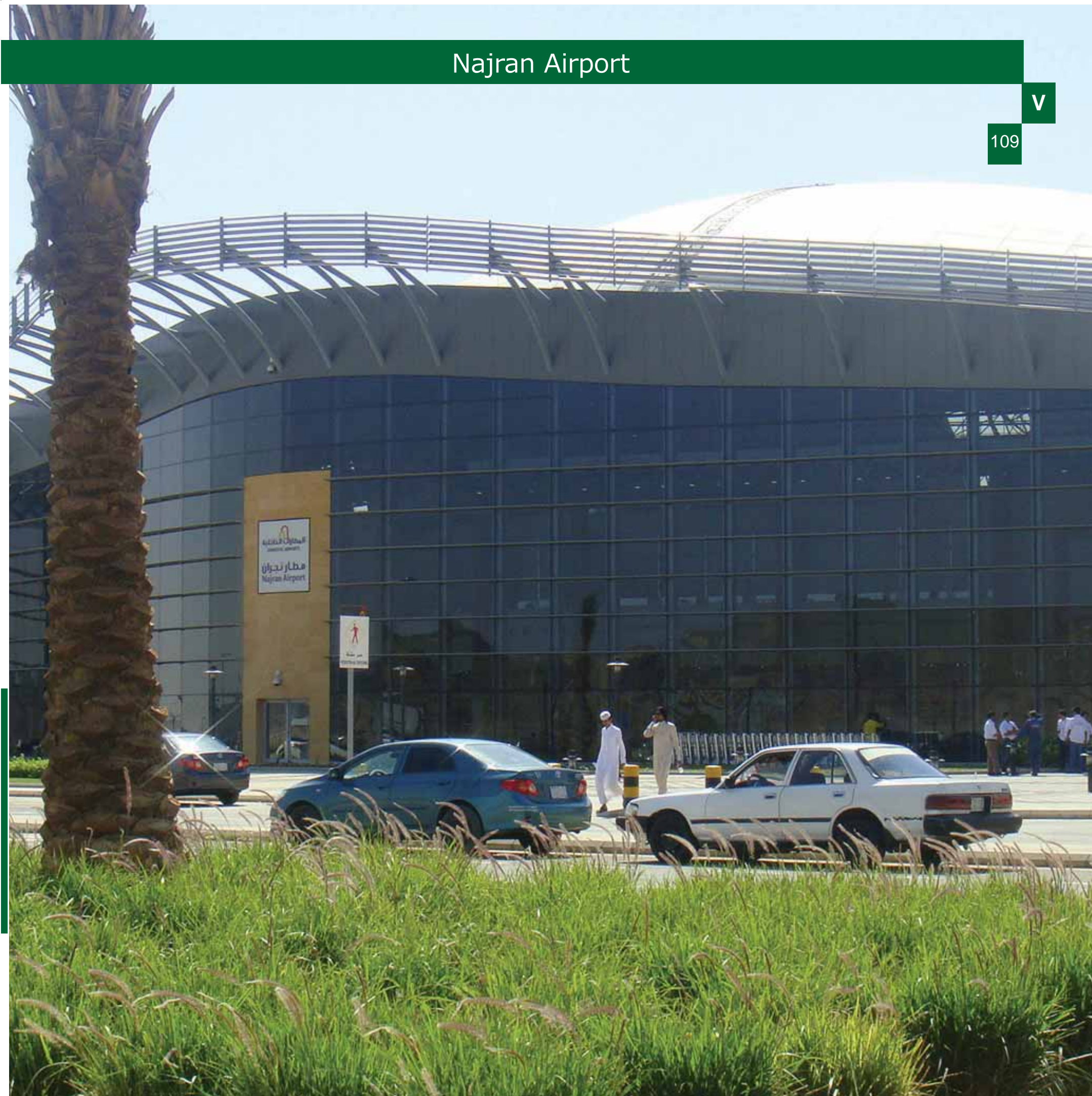
- الوفرة و المنافع الأخرى:
 - نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ %)
 - واجهة أفضل
 - زيادة المرونة
 - توفير الطاقة
 - تبسيط الإنشاء
 - تحسين الجودة



Najran Airport

V

109





Criminal Court Riyadh

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

المحكمة الجزائية بالرياض • الوفرة و المنافع الأخرى:

- نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ %)
- زيادة المرونة
- توفير الطاقة
- تبسيط الإنشاء
- تحسين الجودة





OLAYA TOWERS

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

أبراج العليا

- الوفرة و المنافع الأخرى:
 - نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ %)
 - زيادة المرونة
 - توفير الطاقة
 - تبسيط الإنشاء
 - تحسين الجودة

Value Engineering



King Abdullah Economic City- Resort Cove

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Stronger Image
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

إعمار - مدينة الملك عبدالله الاقتصادية - منتجع كوف

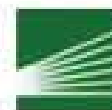
- الوفرة والمنافع الأخرى:
 - نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (10 - 25%)
 - واجهة أفضل
 - زيادة المرونة
 - توفير الطاقة
 - تبسيط الإنشاء
 - تحسين الجودة



KING ABDULLAH ECONOMIC CITY- RESORT COVE

V

113



مدينة الملك عبدالله الاقتصادية
King Abdullah Economic City

Value Engineering

New Ministry of Education Headquarter



Ministry of Education

- VE Savings & Benefits:
 - On average saving range from (10 -25%) of construction cost
 - Greater Flexibility
 - Energy Savings
 - Construction Simplification
 - Quality Improvement

المقر الجديد لوزارة التربية و التعليم • الوفرة و المنافع الأخرى:

- نسبة الوفرة في المشروع عند تطبيق الهندسة تتراوح ما بين (١٠ - ٢٥ ٪)
- زيادة المرونة
- توفير الطاقة
- تبسيط الإنشاء
- تحسين الجودة





Ministry of Municipality and Rural Affairs (MOMRA)
Sixteen years contract for value Engineering include
conducting the following services:

- VE studies / workshops on different types of Commercial and Industrial projects including Hospital, Headquarter, Building, Universities, Malls, Correction Facility, Court Houses, Sport facilities, Waste Water Treatment Plant (WWTP), Sewage and Potable Water Networks and other projects.

- VE Certified Training Seminars
- Life Cycle Costing
- Project Budgeting
- Cost Estimating / Cost Review
- Prepare Cost Model, Quality Model, Risk Model and Function Cost Model
- Follow up Implementation of VE projects as required by client

Supervision

OTAISHAN CONSULTING ENGINEERS

Abdul Lateef Jameel	118
PrincessAl-Anoud Tower1	120
Princess Al-Anoud Tower 2.....	121
I.P.A Housing Complex.....	122
Taibah Aramas Hotel -Madinah	124
Saudi Council for Health Specialization	125
Diriyah Hospital Project	126
GABOffice Building, Riyadh	128
GAB Office Building, Jeddah	129
Water Supply for Hail Villages	130
Solidare Buliding	132
Bayanat Building.....	133
IKIA Project	134
Azizia Panda Mall -Jubail	136
Azizia Panda Mall - North Riyadh	137
Ar-ar Uni Fences & Site Development	139
Riyadh College of Dentisty&Pharmcy	140
Faculty of Science , Ar-ar University	141
Huraimla Community College	143
Al Dara Hospital	144
Al-Jeraisy Residential Palaces	145
Haqbani Building	146
Skaka 1 (Sulaymaniyah)	148
Skaka 2 (Petromin)	149
Rafha Housing Project	150
Al-Khorma Housing Project.....	152
Al-Qunfuda Housing Project	153
Alquriayat-Housing Complex.....	154
Arar Housing Project	156
Capital Market Authority Faisaliah Tower ...	157

Supervision



Lexus Showroom and Maintenance
Client : Abdu Latif Jameel Co.
Location : Albdeeah
Date : 2005
Total Built-up Area : 9,000 Sq. m.
Cost : 20,000,000 Saudi Riyals

مبنى معرض سيارات لكزس - ورش الصيانة
المالك : شركة عبد اللطيف جميل المحدودة
الموقع : البديعة شارع عائشة بنت أبي بكر
التاريخ : ٢٠٠٥ م
المساحة الكلية : ٩,٠٠٠ م^٢
التكلفة : ٢٠,٠٠٠,٠٠٠ ريال سعودي



S

118

Lexus Showroom and Maintenance

S

119



Supervision

Princess Al-Anoud Tower-1



Princess Al-Anoud Tower-1
Client : Princess Al-Anoud Charity
Foundation
Location : Olaya, Riyadh
Date : February 2005
Total Area : 52.0000 m2
Cost : SR 165,000,000

برج العنود ١
المالك : مؤسسة الأميرة العنود الخيرية
الموقع : الرياض ، العليا
التاريخ : فبراير ٢٠٠٥
المساحة الكلية : ٥٢,٠٠٠ م٢
التكلفة : ١٦٥,٠٠٠,٠٠٠ ريال سعودي



S

120

Princess Al-Anoud Tower-2

S

121



Princess Al-Anoud Tower-1

Client: Princess Al-Anoud Charity Foundation
Location : Olaya, Riyadh
Date : February 2009
Total Area : 50,000m²
Cost : SR 240,000,000

برج العنود ٢
المالك : مؤسسة الأميرة العنود الخيرية
الموقع : الرياض ، العليا
التاريخ : فبراير ٢٠٠٩
المساحة الكلية : ٥٠,٠٠٠ م^٢
التكلفة : ٢٤٠,٠٠٠,٠٠٠ ريال

Supervision



Institute of Public Administration Housing
Complex
Client: Institute of Public Administration
Location : Narjis District-North Riyadh
Date : 2009
Total Area : 325,000 Sq. m.
Cost : 400,000,000 Saudi Riyals

سكن أعضاء هيئة التدريب بمعهد الإدارة العامة
المالك : معهد الإدارة العامة بالرياض
الموقع : حي النرجس - شمال الرياض
التاريخ : ٢٠٠٩ م
المساحة الكلية : ٣٢٥٠٠٠ م^٢
التكلفة : ٤٠٠٠٠٠٠٠٠٠ ريال سعودي



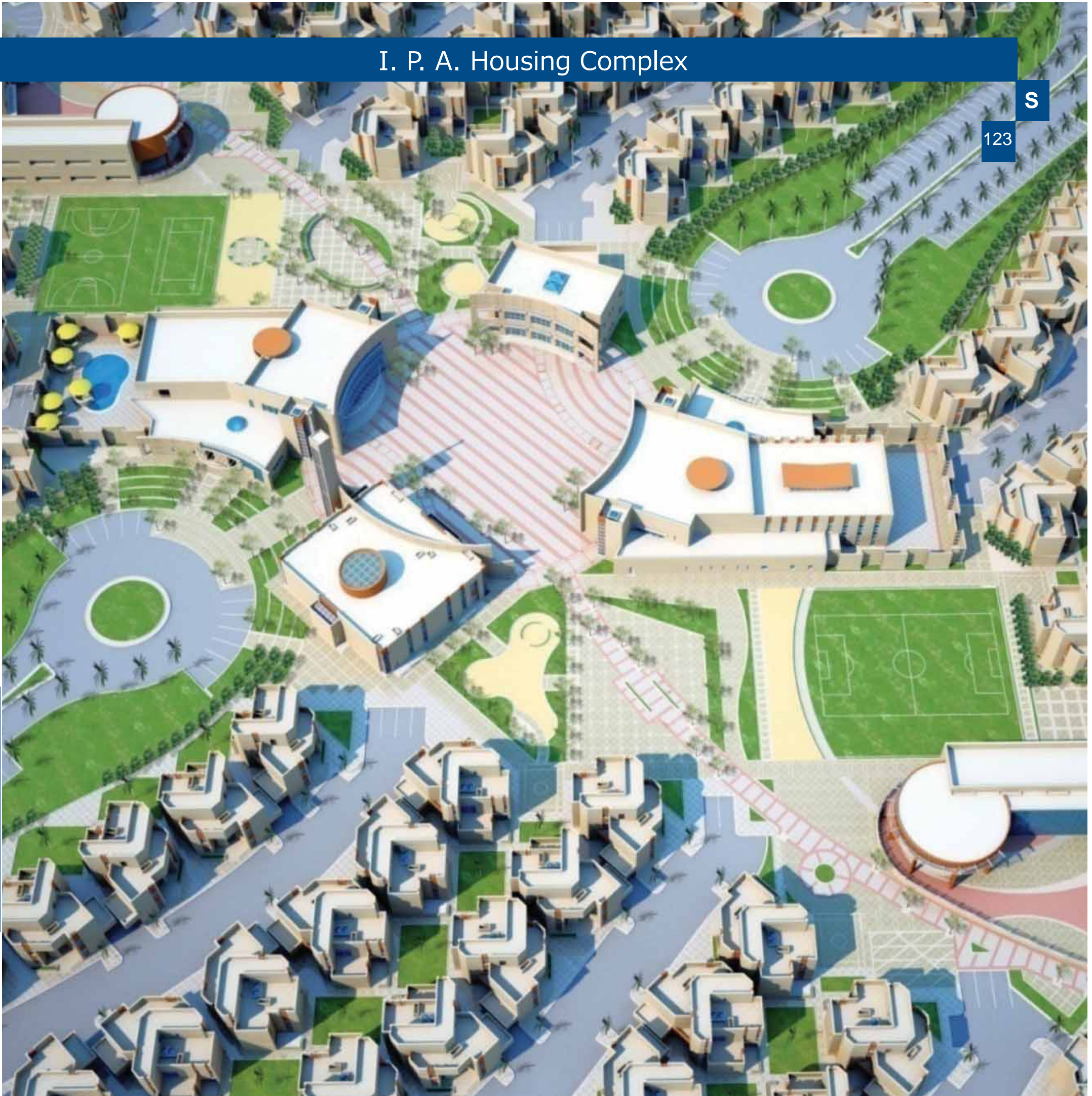
S

122

I. P. A. Housing Complex

S

123



Supervision

Taibah Aramas Hotel - Madinah



Taibah Aramas Hotel-Madinah

Client : Taibah holding Cmpany
Location : Central Area, Madinah
Date : 2009
Total Area : 27,600 Sq. m.
Cost : 191,000,000 Saudi Riyals

فندق طيبة أراماس

المالك : شركة طيبة القابضة
الموقع : المنطقة المركزية بالمدينة المنورة
التاريخ : ٢٠٠٩م
المساحة الكلية : ٢٧,٦٠٠ م^٢
التكلفة : ١٩١,٠٠٠,٠٠٠ ريال سعودي



S

124

Saudi Council for Health Specialization Headquarter

S

125



Saudi Council for Health Specialization
Headquarter
Client: Saudi Council for Health Specialization
Location : Diplomatic Quarter
Date : 2004
Total Area : 30,000 Sq. m.
Cost : 45,000 Saudi Riyals

مبنى مكاتب هيئة التخصصات الصحية
المالك : الهيئة السعودية للتخصصات الصحية
الموقع : الدية الدبلوماسية
التاريخ : ٢٠٠٤م
المساحة الكلية : ٣٠,٠٠٠ م^٢
التكلفة : ٤٥,٠٠٠,٠٠٠ ريال سعودي

Supervision



A 300 Bed general hospital constructed on 100,000 M2 total lot area. The main building foot print is 12,000 and total built-up area about 33,000 m2. The project contains many annexes such as outpatient clinics and Administration Building, kidney dialysis building, service building, warehouse, mosque and Nurse dormitory. The total built-up area is about 19,300m2 in addition to service tunnel, water tanks and sewage treatment plant.

تقدر مساحة الأرض الإجمالية لمستشفى الدرعية العام (٣٠٠ سرير)
١٠٠,٠٠٠ م٢ ومساحة الأرض للمبنى الرئيسي ١٢,٠٠٠ وإجماليه
المساحة الكلية للمباني حوالي ٣٣,٠٠٠ م٢.

المشروع يحتوي على العديد من الملاحق مثل العيادات الخارجية ومبنى
الإدارة ومبنى غسيل الكلى ، ومستودع ومسجد وسكن الممرضات،
بمساحة مبنية إجمالية نحو ١٩,٣٠٠ م٢ بالإضافة إلى نفق الخدمات،
وخزانات المياه، ومحطة معالجة مياه الصرف .



S

126

300 Bed Hospital- Diriyah

S

127



Supervision

GAB H.Q Office Building, Riyadh



GAB H.Q office Building Riyadh

Client : General Auditing Bureau
Location : Riyadh
Date : 2010
Total Area : 40,000Sq. m.
Cost : 182,000,000 Saudi Riyals

مبنى الإدارة الرئيسي لديوان المراقبة العامة بالرياض

المالك : ديوان المراقبة العامة
الموقع : الرياض
التاريخ : ٢٠١٠م
المساحة الكلية : ٤٠,٠٠٠ م^٢
التكلفة : ١٨٢,٠٠٠,٠٠٠ ريال سعودي



S

128

GAB H.Q Office Building, Jeddah

S

129



GAB office Building Jeddah

Client : General Auditing Bureau
Location : Makkah Mukarramah - Jeddah
Date : 2010
Total Area :
Cost : 30,000,000 Saudi Riyals

مبنى ديوان المراقبة العامة بجدة
المالك : ديوان المراقبة العامة
الموقع : مكة المكرمة - جدة
التاريخ : ٢٠١٠ م
المساحة الكلية :
التكلفة : ٣٠,٠٠٠,٠٠٠ ريال سعودي

Supervision



A strategic mega project planned to supply Hail Region (about 56- cities &600- villages) with potable water.

- Well field in the reservoir area (Shaqiq) containing 20 wells producing 98,500m³/day expandable to 37 well to produce 182,200 m³/day .
- Water treatment plant 150,000m³/day capacity .
- 3 main storage water tanks 50,000m³ capacity each.
- 2 conveyors (pipe lines) high strength welded steel

pipes are to Bazakha and the other line to Al -Salf.(difference in elevation about 480m)

- 2-main pump stations one for Al-Salf (32,500 m³/day) and the other one for Bazakha (50,000m³ / day) total no. of pumps (6) each pump giving (310lit/sec) at head 615 m
- SCADA control system .
- Residential complex
- 60 MVA electric substation .



Water Supply for Hail Villages

S

131



Supervision

Solidare Building



Interior Design For Solidare Building

Client : Mobily Etihad Etisalat Company
Location : Olaya, Fron of Kingdom Tower
Date : 2009
Total Area : 4,000 Sq. m.
Cost : 20,000,000 Saudi Riyals

تهئة المكاتب الداخلية لمبنى سوليدير
المالك : شركة اتحاد الاتصالات - موبايلي
الموقع : العليا - أمام برج المملكة
التاريخ : ٢٠٠٩م
المساحة الكلية : ٤,٠٠٠ م^٢
التكلفة : ٢٠,٠٠٠,٠٠٠ ريال سعودي



S

132

Bayanat Building

S

133



Bayanat Building

Client : Mobily Etihad Etisalat Company
Location : Oroubah Street
Date : 2010
Total Area : 2500 Sq. m.
Cost : 3,200,000 Saudi Riyals

مبنى بيانات

المالك : شركة اتحاد اتصالات - موبايلى
الموقع : شارع العروبة
التاريخ : ٢٠١٠ م
المساحة الكلية : ٢٥٠٠ م^٢
التكلفة : ٣,٢٠٠,٠٠٠ ريال سعودي

Supervision



IKEA Store
Client : Ghassan Alsuliman co.
Location : Eastern Ring Road
Date : 2005 / 2004
Total Area : 24,000 Sq. m.
Cost : 60,000,000 Saudi Riyals

مبنى معارض إيكيأ
المالك : شركة غسان السليمان
الموقع : الدائريه الشرقيه
التاريخ : ٢٠٠٤/٢٠٠٥م
المساحة الكلية : ٢٤,٠٠٠ م٢
التكلفة : ٦٠,٠٠٠,٠٠٠ ريال سعودي



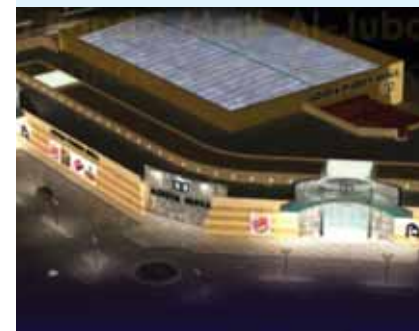
S

134



Supervision

Azizia Panda Mall - Jubail



Azizia Panda Mall - jubail

Client : Savola Co.
Location : Jubail – Fnateer District
Date : 2004
Total Area : 21,000 Sq. m.
Cost : 20,000,000 Saudi Riyals

العزیزة بندة الجبیل
المالك : شركة صافولا
الموقع : حي الفناثیر الجبیل
التاریخ : ٢٠٠٤م
المساحة الكلية : ٢١,٠٠٠ م^٢
التكلفة : ٢٠,٠٠٠,٠٠٠ ریال سعودي



S

136

Azizia Panda Mall – North Riyadh

S

137



Azizia Panda Mall – North Riyadh

Client : Savola Co.
Location : North of Riyadh- Almorooj
Date : 2003
Total Area : 38,000 Sq. m.
Cost : 280,000,000 Saudi Riyals

العزيزية مول شمال الرياض
المالك : شركة صافولا
الموقع : شمال الرياض - حي المروج
التاريخ : ٢٠٠٣ م
المساحة الكلية : ٣٨,٠٠٠ م^٢
التكلفة : ٢٨٠,٠٠٠,٠٠٠ ريال سعودي

Supervision



Fences & Ar'ar University Site Development Project Description:

- 42.6 km length of asphalt roads, with different widths.
- Total parking area: 1,500,000m²
- Pre-cast fence: 4.0km length
- Wire mesh fence: 9.0km length
- 2-main gates and 4-secondary gates
- Total cut & fill: 5.8million m³

يتكون مشروع تطوير الموقع العام والأسوار لجامعة عرعر من:

- ٤٢,٦ كلم من الطرق الأسفلتية.
- مواقف سيارات بمساحة ١,٥٠٠,٠٠٠ م^٢
- أسوار سابقة الصب بطول ٤,٠٠ كلم .
- سياج شبك بطول ٩,٠٠ كلم
- عدد ٢ بوابة رئيسية وعدد ٤ بوابات فرعية
- إجمالي كميات القطع والردم حوالي ٥,٨ مليون مترمكعب



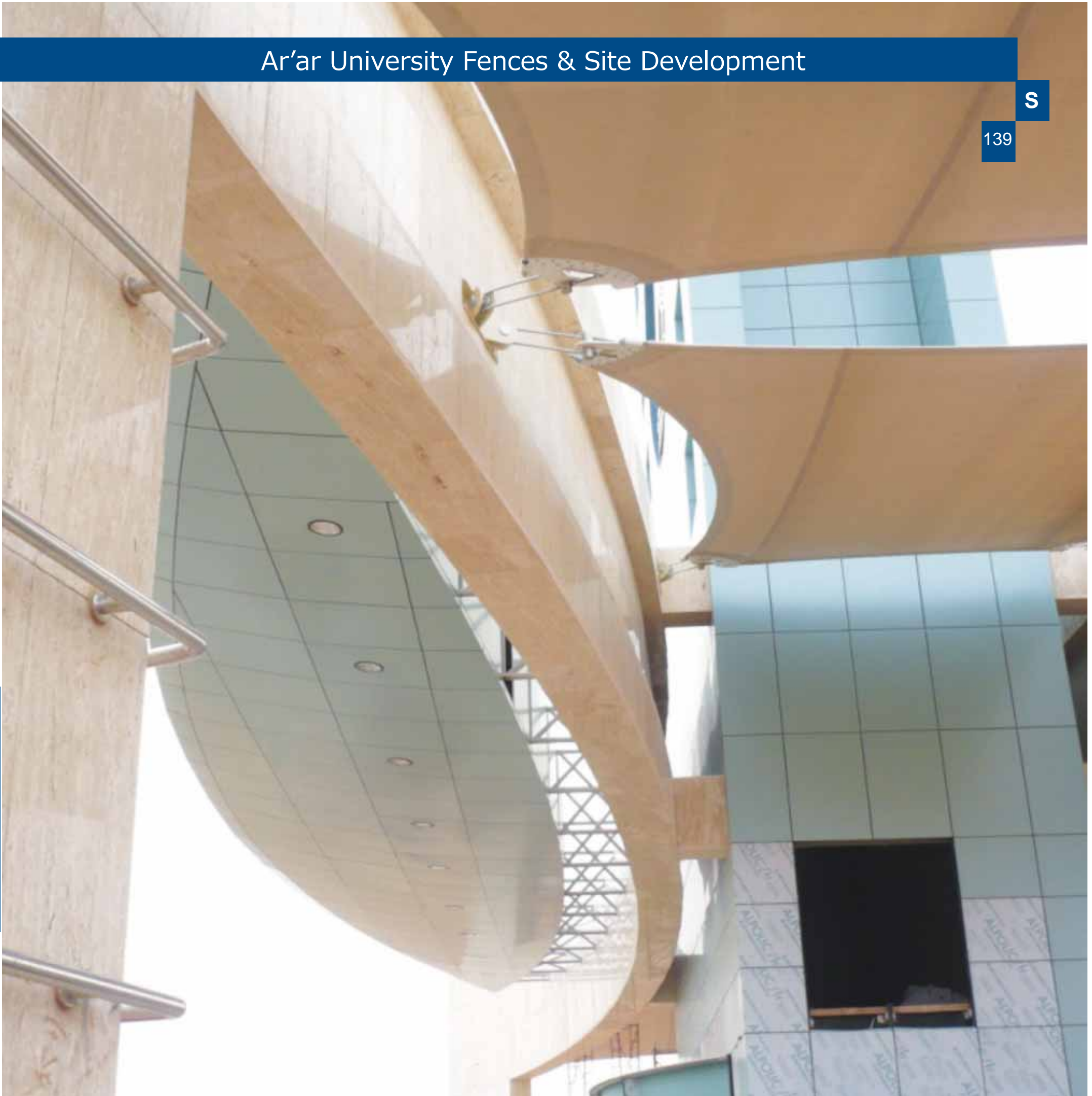
S

138

Ar'ar University Fences & Site Development

S

139



Supervision

Riyadh College of Dentistry & Pharmacy



Riyadh College of Dentistry & Pharmacy
Client : Riyadh Colleges Co.
Location : Olaya King Fahad Road
Date : 2006 /2007
Total Area : 6,000 Sq. m.
Cost : 98,000,000 Saudi Riyals

كلية الرياض لطب الاسنان والصيدلة
المالك : شركة كليات الرياض الأهلية
الموقع : العليا - طريق الملك فهد
التاريخ : ٢٠٠٦/٢٠٠٧م
المساحة الكلية : ٦,٠٠٠ م^٢
التكلفة : ٩٨,٠٠٠,٠٠٠ ريال سعودي



S

140



Faculty of Science, Ar.ar University

Client : Ministry of Higher Education

Location : Ar>ar

Date : 2007

Total Area : 41,000 Sq. m.

Cost : 130,000,000 Saudi Riyals

مبنى كلية العلوم بجامعة عرعر

المالك : وزارة التعليم العالي

الموقع : عرعر

التاريخ : ٢٠٠٧م

المساحة الكلية : ٤١,٠٠٠ م^٢

التكلفة : ١٣٠,٠٠٠,٠٠٠ ريال سعودي

Supervision



Huraimla Community College
Client : Ministry of Higher Education.
Location : Huraimla City, North of Riyadh
Date : On- Going
Total Area : 36,000 Sq. m.
Cost : 143,000,000 Saudi Riyals

كلية المجتمع بحريملاء
المالك : وزارة التعليم العالي
الموقع : حريملاء , شمال الرياض
التاريخ : تحت التنفيذ
المساحة الكلية : ٣٦,٠٠٠ م^٢
التكلفة : ١٤٣,٠٠٠,٠٠٠ ريال سعودي



S

142

Huraimla Community College

S

143



Supervision

Al Dara Hospital



Al Dara Medical building
Client : AL-Dara Midical Company
Location : Riyadh
Date : 2011
Total Built-up Area : 26000 M2
Cost : 600,000,000 Saudi Riyals

مستشفى الادارا الطبيه
المالك : شركة الاداره الطبيه
الموقع : الرياض
التاريخ : ٢٠١١م
المساحة الكلية : ٢٦٠٠٠ م٢
التكلفة : ٦٠٠,٠٠٠,٠٠٠ ريال سعودي



S

144

AL-JERAISY RESIDENTIAL PALACES

S

145



Al-Jeraisy Residential Complex
Client : Shaikh/Abdulrahman Al-Jeraisy
Location : Riyadh
Date : 1999 / 2001
Total Built-up Area :21.000 M2
Cost : 90,000,000 Saudi Riyals

مجمع الجريسي السكني
المالك : الشيخ / عبد الرحمن الجريسي
الموقع : الرياض
التاريخ : 1999 / 2001 م
المساحة الكلية : 21,000 م²
التكلفة : 90,000,000 ريال سعودي

Supervision



Interior Design Al-haqbani Office Building
Client : Mobily Etihad Etisalat Company
Location : Riyadh
Date : 2011
Total Area : 12,000 Sq. m.
Cost : 20,000,000 Saudi Riyals

تهيئة المكاتب الداخلية في مبنى الحقباني
المالك : شركة إتحد الإتصالات موبيليه
الموقع : الرياض
التاريخ : ٢٠١١ م
المساحة الكلية : ١٢,٠٠٠ م^٢
التكلفة : ٢٠,٠٠٠,٠٠٠ ريال سعودي



S

146

Haqbani Building

S

147



Supervision

SKAKA-1(Sulaymaniyah) Housing Complex



Skaka-1 Housing complex

Client : Ministry of Housing
Location : Skaka, Al-Jouf
Date : 2010 - 2012
Total Area : 327,271 Sq. m.
No of Villas: 364 Villas
Cost : 167.000,000 Saudi Riyals

مجمع إسكان سكاكا (١)

المالك : وزارة الإسكان
الموقع : سكاكا الجوف
التاريخ : ٢٠١٠ - ٢٠١٢ م
المساحة الكلية : ٣٢٧,٢٧١ م^٢
عدد الفلل : ٣٦٤ فيلا
التكلفة : ١٦٧,٠٠٠,٠٠٠ ريال سعودي



S

148

SKAKA-2 (Petromin) Housing Complex

S

149



Skaka-2 Housing complex

Client : Ministry of Housing
Location : Skaka, Al-Jouf
Date : 2010 - 2014
Total Area : 766,483 Sq. m.
No of Villas: 521 Villas
Cost : 245.116,059 Saudi Riyals

مجمع إسكان سكاكا (٢)
المالك : وزارة الإسكان
الموقع : سكاكا الجوف
التاريخ : ٢٠١١ - ٢٠١٤ م
المساحة الكلية: ٧٦٦,٤٨٣ م٢
عدد الفلل : ٥٢١ فيلا
التكلفة : ٢٤٥,١١٦,٠٥٩ ريال سعودي

Supervision



Rafha Housing complex

Client : Ministry of Housing
Location : Rafha
Date : 2010 - 2012
No of Villas: 432 Villas
Total Area : 417,823 Sq. m.
Cost : 199.959,949 Saudi Riyals

مجمع إسكان رفحاء

المالك : وزارة الإسكان
الموقع : رفحاء
التاريخ : ٢٠١٠ - ٢٠١٢ م
عدد الفلل : ٤٣٢ فيلا
المساحة الكلية : ٤١٧,٨٢٣ م^٢
التكلفة : ١٩٩,٩٥٩,٩٤٩ ريال سعودي



S

150

Rafha Housing Project

S

151



Supervision

Al-Khorma Housing Project



Al- Khorma Housing complex
Client : Ministry of Housing
Location : Al-Khorma
Date : 2010- 2012
No of Villas: 260 Villas
Total Area : 250,000 Sq. m.
Cost : 124.249.878 Saudi Riyals

مجمع إسكان الخرمة
المالك : وزارة الإسكان
الموقع : الخرمة
التاريخ : ٢٠١٠ - ٢٠١٢ م
عدد الفلل : ٢٦٠ فيلا
المساحة الكلية : ٢٥٠,٠٠٠ م^٢
التكلفة : ١٢٤,٢٤٩,٨٧٨ ريال سعودي



S

152

Al-Qunfuda Housing Project

S

153



Al-Qunfuda Housing Project

Client : Ministry of housing
Location : Al-Qunfuda, Makkah Region
Date : 2010 - 2013
No of Villas: 593 Villas
Total Area : 597.749 Sq. m.
Cost : 270,585,777 Saudi Riyals

مشروع إسكان القنفذة
المالك : وزارة الإسكان
الموقع : مدينة القنفذة - منطقة مكة المكرمة
التاريخ : ٢٠١٠ - ٢٠١٣ م
عدد الفلل : ٥٩٣ فيلا
المساحة الكلية : ٥٩٧,٧٤٩ م^٢
التكلفة : ٢٧٠,٥٨٥,٧٧٧ ريال سعودي

Supervision



Alquriyat - Housing complex
Client : Ministry of Housing
Location : Rafha
Date : 2012
No of Villas: 273 Villas
Total Area : 314,570 Sq. m.
Cost : 122,497,652 Saudi Riyals

مجمع إسكان القرىات
المالك : وزارة الإسكان
الموقع : القرىات
التاريخ : ٢٠١٢ م
عدد الفلل : ٢٧٣ فيلا
المساحة الكلية : ٣١٤,٥٧٠ م^٢
التكلفة : ١٢٢,٤٩٧,٦٥٢ ريال سعودي



S

154

Alquriayat - Housing complex

S

155



Supervision

Ar'ar Housing Project



Ar'ar- Housing complex

Client : Ministry of Housing
Location : Ar'ar, Northern Region
Date : 2010 - 2013
No of Villas: 615 Villas
Total Area : 700,000m²
Cost : 286,814,871.45 SR

مجمع إسكان عرعر

المالك : وزارة الإسكان
الموقع : عرعر
التاريخ : ٢٠١٠ - ٢٠١٣ م
عدد الفلل : ٦١٥ فيلا
المساحة الكلية : ٧٠٠,٠٠٠ م^٢
التكلفة : ٢٨٦,٨١٤,٨٧١ ريال سعودي



S

156

Capital Market Authority Faisaliah Tower

S

157



Rehabilitation of Capital Market
Story-Al Faisaliah Tower
Client : Mobily Etihad Etisalat Company
Location : Olaya – King Fahad Road
Date : 2011
Total Area : 5.500 Sq. m.
Cost : 8,100,000 Saudi Riyals

إعادة تأهيل أذوار سوق المال ببرج الفيصلية
المالك : شركة اتحاد اتصالات – موبيليه
الموقع : العليا – طريق الملك فهد
التاريخ : ٢٠١١م
المساحة الكلية : ٥٠٠٠ م^٢
التكلفة : ٨,١٠٠,٠٠٠ ريال سعودي

Environmental Consultations

OTAISHAN CONSULTING ENGINEERS



Introduction	160
Objectives.....	161
Areas & Activities	162
Environmental Site Assessment.....	164
Environmental Management Systems	165
Toxicology Services	167
Completed Project	168

The OEC is certified and licensed by the Meteorology and Environmental Protection Administration (MEPA) / Presidency of Meteorology and Environment (PME), and registered under Ministry of Commerce and Industry, Kingdom of Saudi Arabia. The OEC serves its clients for the environmental issues such as; environmental policy development, integrated environmental conservation, sustainable environmental performance and human health risk assessment.

Our focus combines research and analysis, science-based litigation support, human health risk assessment, environmental management/ environmental sustainability and environmental site assessment services into a focused 'Center of Excellence'.

We strive to provide excellent scientific and professional advice to industry, government, local and regional communities through contract research, consultation and technology transfer.

OBJECTIVES

We work with our clients to develop an appropriate Environmental Management System (EMS) to define and attain environmental sustainability that suits their business needs. Environmental sustainability allows the production of goods and services in a manner that protects the environment and natural resources for next generations to meet the concept of «Sustainable development».



OBJECTIVES

E

161

- Our Prime objective is to safeguard public health, safety and welfare; protect environmental resources; provide for conservation of valuable materials and energy resource; and promote the economic and social well being of the Kingdom.
- Control of hazardous waste through proper management of hazardous waste at generation point, and its facilities such as storage, transport, treatment and disposal operations in the Kingdom of Saudi Arabia.
- Strongly encourage absolute waste reduction through promotion of waste minimization techniques, low cost waste technologies, waste re-use and recycling when conducted in a manner that protects human beings and the environment.
- Establish standards for projects through the Environmental Impact Statements/ Assessments Reports, Site Specification Reports and Environmental Audits.
- Designing of water, wastewater (sanitary & industrial) treatment plants, and stacks for gas emissions, etc.
- Environmental legislations.
- Investment and cost lowering on environmental issues.
- Environmental issues of municipality projects.
- Measurement and monitoring of air pollution.
- Industrial and medical waste management.
- Solid waste storage, collection, transportation and treatment.
- Marketing of instruments and equipments used in environmental measurement and control.
- Geographical Information System (GIS).
- Environmental tourism management.

AREAS & ACTIVITIES

OEC's scope of services is to serve up to the professional capabilities in the following fields;

Consultancy Services

- Pollution Control & Prevention Programs
 - Environmental Impact Assessment
 - Environmental Site Assessment
 - Environmental Auditing

- Environmental Risk Assessment & Management
- Environmental Management System (EMS) & ISO 14001
- Environmental Legislations
- Environmental Project Planning
- Environmental Resource Management & Regional Development
- Environmental Pollution Control Facility Design
- Hazardous Waste Management System Planning
- Hazardous Waste Facility Design etc.,

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

EIA is:

A procedure designed to provide information about the potential impact on the environment of a proposed new development

EIA may:

- Consider alternatives to the development;
- Consider wider policy and resource issues;
- Consider methods or reducing impact and related costs.

EIA may:

- Provide a mechanism for interested parties to be consulted;
- Provide a framework within which agreement may be reached between the developers causing the impacts and those who are affected by the impacts.



EIA is:

A management tool providing information upon which decisions may be taken.

People use management tools for a purpose:

- Who needs the information?
- In what way will they use it?
- Who will produce the information?

Decisions are followed by action (or agreement to act)

- How will the decision be implemented? And subsequently monitored?
- Under what powers will the decision be enforced?
- What sanction will be employed if decision is not properly implemented?

The EIA should:

Provide the answers needed by policy makers, planners, engineers, affected groups and government agencies to help them understand the implications and to take the necessary decisions.

The questions that needs Answering:

- What are the key impacts?
- What is their significance? To different groups? To different sectors of the economy?
- What are the available mitigation measures? What are the options? At what cost?

The key Difficulties:

- How to be comprehensive and focus on key issues;
- How to predict change;
- How to present the information in a usable form,

Managing environmental risk has become one of the most important issues facing today's bankers, investors, insurers and trustees. OEC provides timely and cost effective screening to minimize risks associated with various environmental hazards. Each assessment is submitted as both hard copy and multimedia CD-ROM reports. OEC approach generates the highest quality services through techniques and attention to detail exceeding industry standards.

Transaction Screen (Pre-Phase; Site Assessment)

OEC.-OG offers a cost-effective answer to reviewing large property portfolios or low-risk single properties. This preliminary inspection process involves:

- Questioning of property owners and occupants
- An onsite visit
- A one mile regulatory database search
- Interpretation of government records, and relevant historical sources

Phase I Environmental Site Assessment

OEC. -OG evaluates the historical, existing, and potential environmental liabilities associated with on-site and adjacent facilities. Assessments are based on MEPA standards for the projects in Kingdom of Saudi Arabia and standards of the American Society for Testing and Materials (ASTM).

Phase II Testing

OEC implements and manages the Phase II Testing process in order to determine the size and scope of a particular site's environmental liabilities. This step requires sampling soil, water, and identified suspect matter.



Phase III Remediation Management

OEC provides comprehensive management services for complex environmental remediation projects. When Phase II testing identifies hazards needing to be removed, encapsulated, or enclosed, our Phase III service ensures proper management and a successful, cost-saving cleanup process

ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

OEC work with our clients to develop an appropriate EMS that suits their business needs to define and attain environmental sustainability. Environmental sustainability allows the production of goods and services in a manner that protects the environment and consumes resources renewably to meet the triple bottom-line: environment, economic and equity goals.

OEC assists you in attaining environmental sustainable development by:

- Helping clients envision and define strategic and long-term future environmental goals consistent with your product or service quality needs.
- Working with clients in building systems that meet your comprehensive environmental, health and safety performance goals.
- Assisting clients with the maintenance and continuous improvement of your systems and processes.
- Providing clients with education and training on international standards and access to ISO registrar services.

We consider using an ISO 9001 and ISO 14001 systems approach beneficial for our clients and for our business. (Link to QMS / EMS policy statements). We provide our clients with the highest quality scientific research products by continually applying and improving our QMS/EMS.

OEC assists you in attaining environmental sustainable development by:

- Helping clients envision and define strategic and long-term future environmental goals consistent with your product or service quality needs.
- Working with clients in building systems that meet your comprehensive environmental, health and safety performance goals.
- Assisting clients with the maintenance and continuous improvement of your systems and processes.
- Providing clients with education and training on international standards and access to ISO registrar services.

We consider using an ISO 9001 and ISO 14001 systems approach beneficial for our clients and for our business. (Link to QMS / EMS policy statements). We provide our clients with the highest quality scientific research products by continually applying and improving our QMS/EMS.

Capabilities and accomplishments that we have to offer you include

- Staff members who have fulfilled ISO 9001 and ISO 14001 lead auditor education.
- We educate and assist clients in the development and implementation of occupational health and safety, environmental and quality integration of management systems across a wide spectrum of industries:

- construction
- international petrochemical
- agrochemical
- electric power generation (fossil & hydroelectric)
- insurance
- loss-control consulting
- Staff members who have developed and taught courses on integrating environmental, quality and occupational health and safety management systems with BSI, the worlds largest registrar



and international standards education provider, in the U.S., Canada and the Caribbean.

- Staff members who participated in ISO's

HUMAN HEALTH RISK ASSESSMENT

OEC provides a wealth of knowledge, education and experience in conducting risk assessment in the areas of environmental health, hazard characterization, and human health effects. By searching and analyzing scientific literatures, OEC has developed an expansive database, which facilitates our risk assessment activities to define the complex interactions between the well being of people and their lifestyle, occupational, and physical environments. All of our services utilize environmentally sustainable development techniques and adhere to national and international standards. This multi-disciplinary approach is designed to foster sustainable global environments while maintaining viable economies.

Toxicology Services

Provide litigation strategy and scientific support for human health, environmental risk, and occupational exposure issues. Services provided include: medical and scientific data interpretation, literature search and analysis, presentation strategies, design, and approach.

- Perform literature based human health risk assessment of pesticide exposures.
- Review risk assessment data for volatile organic hydrocarbons and particulate levels.
- Assist agencies in setting acceptable exposure indexes for hazardous waste sites and for emergency response to accidental chemical release.
- Review risk assessment methodologies, policies, and public health programs.
- Develop environmental and public health plans.
- Assist industry in establishing emission control procedures.
- Planning, implementation, and performance evaluation for any of the ISO management systems as we have an ISO 14001 Auditor (in training) with the National Sanitation Foundation International Strategic Registrations (NSF-ISR) on staff.
- Assessment and control of food contamination.

- Completed Projects

We consider using an ISO 9001 and ISO 14001 systems approach beneficial for our clients and for our business. (Link to QMS / EMS policy statements). We provide our clients with the highest quality scientific research products by continually applying and improving our QMS/EMS.

No	Name for the project	Company Name	Scope of Work
1	Hazardous Waste Management Site Assessment	Areel Const. & Ind. Co. Ltd.	Study, Design & Supervision
2	Environmental Impact Statement (Arabian Oil Co.)	Areel Const. & Ind. Co. Ltd.	Study & Sup.
3	Environmental Impact Assessment	National Factory for Ovens & Boilers	Study & Supervision
4	Abdullah Al-Athil Resort EIA	Abdullah Al-Athil	Study
5	M O M R A,s Environmental Bylaws review	M O M R A	Environmental Policy Development

6	Environmental Impact Assessment	Cattle Market – Buraida	Study
7	Rukin AL-Magal Factory .	Mayrza Zafar Agbal	Study
8	Environmental Impact Assessment	AWAZEL Waterproofing	EIA Study



PROJECTS & STUDIES

E

169

No	Name for the project	Company Name	Scope of Work
9	AL-Riyadh Air Monitoring	M O M R A	Study
10	Environmental Impact Assessment	Asharqia for Gypsum Powder	EIA Study
11	Environmental Impact Site Assessment, Gypsum factory	National Gypsum factory	EIA Study
12	Environmental Impact Assessment	Yamama Red Bricks	EIA Study
13	Environmental Impact Assessment	Al-Hanaki Factory for Trading and Contraction	EIA Study
14	Environmental Impact Assessment	Deef Factory for Pharmaceutical industries	EIA Study

No	Name for the project	Company Name	Scope of Work
----	----------------------	--------------	---------------

15	Ascertain New Environmental Labs (15#)	Saudi Electric Company	Installation, Testing , Commissioning and Training
16	Revalidation of Environmental & Risk Assessment on Aramco Facility Upgradation	ARAMCO	Study
17	Treatment and Recycling of Municipal Solid Waste in the Kingdom of Saudi Arabia	MOMRA	Study

No	Name for the project	Company Name	Scope of Work
18	Environmental Impact Site Assessment	Medical and Cosmetic Products Company Ltd.	Study
19	Proposal Designs of Solid Waste Landfill in KAS.	MOMRA	Study, Design and Supervision
20	Environmental Impact Assessment, tourist resort/ Al-Khobar	Al-zekry Group	study
21	Environmental Impact Site Assessment, Cement Factory	Al-Wasta Cement Factory	Study
22	Environmental Audit	Saudi snack factory (Int. Pepsi Co.)	Study
23	Dust Pollution Control	Saudi Ceramic Factory	Assessment/ Control
24	Environmental Impact Site Assessment, Irrigation Supplies Factory	Eng. Mohamed H. Aiden	Study

JOINT VENTURE FIRMS:

- Cleansing Service Group-International UK
- In – Touch Systems Ltd.- International UK
- IFU UMWELTANALYTIK – GMBH
- Environics-egypt – Egypt
- El-Dar Al-arabia for Industrial & Management Development- Egypt

Laboratories;

- Rgme-Rashid Geotechnical & Materials Engineers
- Domes & Moore-International
- Al-Hoty-Stanger, Laboratories & Materials Testing
- Nasir Al-assaf Geotechnical & Materials Testing
- King Abdul-aziz City for Sciences and Technology (KACST).
- King Saud University (KSU).



نبذة عن المؤسسة

تم تأسيس مكتب العطيشان مهندسون استشاريون من قبل العميد الركن المتقاعد دكتور مهندس / عبد العزيز بن تركي العطيشان وهو الحاصل على درجة الدكتوراة من جامعة سياتل بواشنطن وهو عضو في العديد من الجمعيات الهندسية الدولية خاصة في مجال الهندسة القيمية حيث تم اختياره لمؤسسة (مورنس مايلز) للهندسة القيمية منذ عام ١٩٨٨ م ، وذلك لدعمه ومجهوده في إدخال الهندسة القيمية إلى المملكة العربية السعودية وهو بكل فخر يعتبر الرائد في الهندسة القيمية في المملكة وكان الدكتور عبد العزيز العطيشان قد بدأ عمله عام (١٩٧٠) في الإدارة العامة للأشغال العسكرية كمهندس في وزارة الدفاع والطيران ، حيث أصبح فيما بعد مديراً عاماً للأشغال العسكرية وفي خلال (٢٣) عاماً من عمله سئحت الفرصة للدكتور / العطيشان بأن يشارك في مشاريع ومنشآت للقوات المسلحة تقدر بالمليارات ، وكان مصمماً على استثمار خبراته المهنية والفنية والإدارية في المملكة فقد شكل مجموعة من المهندسين متعددي الخبرات وذوي كفاءات عالية حيث تفخر هذه المجموعة بما لديها من الخبرات الهندسية في مجالات الإنشاءات والتخطيط والتصميم والإشراف والهندسة

القيمية مما أهلها لإنجاز العديد من المشاريع المتميزة آخذة بعين الاعتبار تحقيق طموحات أصحاب العمل واحتياجاتهم وضمن هذا النسق في مكتب العطيشان مهندسون استشاريون حرص على متابعة تطوير ورفع درجة أداءه والتحكم في النوعية كما كان المكتب دائم الحرص في التعامل مع الخبرات العالمية للشركات الاستشارية الكبرى في العالم من خلال الائتلافات والتضامن مع هذه الشركات في مختلف المشاريع .

رؤيتنا

مكتب هندسي رائد يوفر الخدمات الاستشارية في مجال التخطيط ، وتصميم المرافق والمنشآت بأعلى مستوى من الجودة على النطاق المحلي والإقليمي .

قيمتنا

إعتماداً على تراثنا الإسلامي وتقاليدنا العربية الأصيلة ندير أعمالنا بكفاءة وبأعلى معايير الجودة العالية ، واستخدام أحدث التقنيات وملتزم النزاهة والصدق في جميع أنشطتنا، ونعمل بروح الفريق الواحد التي تشجع على التعاون والثقة المتبادلة ، ونخطط ونعمل من أجل المستقبل لشركتنا، ولعملائنا وبلدنا .

منهجية التصميم

الدراسة المتعمقة هي الخطوة الأولى في العملية التصميمية لفريق التقييم في مكتب العطيشان مهندسون استشاريون ومثل هذه الدراسة تدعمها الخبرات المتوفرة والمتمرس في وضع الحلول التصميمية .

إن مبدأ الفريق والعمل الجماعي هو الأساس في العملية التصميمية ولذلك كان التركيز على فن التواصل بين فريق العمل والعميل وفعاليتها سواء في التخطيط أو في الشروع في العملية التصميمية والإتمام بالمتطلبات المتعددة هو أيضاً من حزمة المعارف اللازمة لإغناء الفكرة التصميمية والوصول بها إلى التكامل الأقصى للتوفيق ما بين المتطلبات الوظيفية ومتطلبات الموقع .

خامساً : إدارة المشاريع وتقنية المعلومات :

أ- إدارة المشاريع :

أ - إدارة مشاريع التشييد :

- إدارة مرحلة الدراسات والتصاميم.
- إدارة مرحلة الطرح والترسية.
- إدارة مرحلة التشييد.

ب - إدارة مرحلة التشغيل والصيانة :

- إعداد أدلة التشغيل والصيانة.
- إدارة مرحلة الصيانة.

ج - إدارة مشاريع تقنية المعلومات :

- إعداد وثيقة طلب العروض (RFP).
- إدارة مرحلة الطرح والترسية.
- إدارة مرحلة التنفيذ.
- إدارة مرحلة التشغيل والصيانة.

٢- أنظمة المعلومات الجغرافية (GIS)

- إعداد خرائط الأساس.
- المسح الجغرافي.
- إعداد التطبيقات الجغرافية.
- إعداد الدراسات الحقلية.

ثالثاً : الهندسة القيمية :

- إقامة ورش العمل والدراسات القيمية .
- عمل ندوات معتمدة من الجمعية الأمريكية للهندسة القيمية (SAVE international) وتشمل المستوى الأول (Module I) والمستوى الثاني (Module II)
- عمل ندوات عن تكلفة وجودة حياة المشروع .
- عمل ندوات عن إعداد ميزانية المشاريع
- المساعدة في وضع أسس التخطيط والتصميم .
- عمل نموذج التكاليف .
- عمل محاضرة قصيرة لكبار المسؤولين .
- تقييم المباني بعد تشغيلها .

رابعاً : الاستشارات البيئية :

- مراقبة التلوث
- تقييم الأثر البيئي
- تقييم الموقع البيئي
- المراجعة البيئية
- إدارة وتقييم المخاطر البيئية

- نظام الإدارة البيئية (EMS) و ISO 14001
- التشريعات البيئية
- التخطيط للمشاريع البيئية
- إدارة الموارد البيئية والتنمية الإقليمية
- تصميم مرافق مراقبة التلوث البيئي
- نظام تخطيط وإدارة النفايات الخطرة
- مرفق النفايات الخطرة التصميم وما إلى ذلك.



العطيشان مهندسون استشاريون (OCE) مكتب متعدد التخصصات المهنية تأسس في أوائل عام ١٩٩٢م من قبل الدكتور مهندس / عبد العزيز بن تركي العطيشان . يقع المكتب الرئيسي في مدينة الرياض وقد اخذ على عاتقه القيام بإدارة أعمال الدراسات والتصاميم والإشراف على التنفيذ ودراسات التكلفة وإدارة وبرمجة المشاريع هذا وقد تعدى المكتب في أعماله الحدود المحلية ليصبح معروفاً حتى على مستوى الدول العربية ودول الخليج العربي .

بعد النمو والتطوير الذي شهده مكتب العطيشان مهندسون استشاريون خلال السنوات الماضية فقد توسع المكتب في تقديم العديد من الخدمات الهندسية والاستشارية للعديد من المرافق والمنشآت تشمل ولا تنحصر في الآتي :

١. الأبراج
٢. المدارس
٣. المراكز التجارية والمكتبية
٤. المباني الصناعية
٥. المجمعات السكنية
٦. المستشفيات والمراكز الصحية
٧. المواقع متعددة الطوابق
- ٨- الطرق والكباري

والمكتب يقدم الخدمات الإستشارية المتخصصة الآتية :

أولاً : الهندسة المعمارية والتصميمات الهندسية :

- ١-الهندسة المعمارية :
- التصميم المعماري
- التصاميم الداخلية

- تنسيق المواقع
- التخطيط الحضري

٢-التصميمات الهندسية :

- التصاميم الانشائية
- التصاميم الإلكتروميكانيكية
- التصاميم المدنية

٣ - الوثائق التنفيذية :

- وثائق التعاقد
- جداول الكميات
- المواصفات الفنية

ثانياً : الإشراف :

- مراقبة التكاليف وإعداد التقارير
- إدارة العقد والبرامج الزمنية
- مراقبة وتفعيل إجراءات الأمن والسلامة
- اعتماد الأجهزة والمعدات والمواد والموردين ومراقبة - -

- توريدات المواد للموقع .
- اعتماد المقاولين المتخصصين
- مراقبة أداء المقاولين والإشراف الفني على الاعمال
- إدارة المطالبات وأوامر التغيير
- المراجعة الفنية لمستندات العقد .
- الإستلام الإبتدائي والنهائي .

مقدمة

العطيشان مهندسون إستشاريون