

King Fahd University of Petroleum and Minerals  
Construction Engineering & Management  
Department  
CEM 510: Construction Planning & Scheduling

**GROUP PROJECT**

*Submitted to*

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# TABLE OF CONTENTS

<b>1. Company History .....</b>	<b>3</b>
<b>2. Organization Chart.....</b>	<b>3</b>
<b>3. Contractor projects.....</b>	<b>4</b>
<b>4. Management techniques.....</b>	<b>10</b>
4.1. Planning and Scheduling.....	10
4.2. Control .....	11
<b>5. Effectiveness of Techniques .....</b>	<b>11</b>
<b>6. CONCLUSION .....</b>	<b>12</b>
<b>7. APPENDIX.....</b>	<b>13</b>

## **1. Company History**

Ahmed Yahya Al Yami Est. is a Saudi owned Company, based in Abqaiq, Eastern Province, Saudi Arabia with a multi national management, supervision and experience workers who have worked in Saudi Arabia for at least five years and were trained mostly with Saudi Aramco Project Management teams.

Established in 1978, Ahmed Yahya Al Yami Est. has been involved in various prestige projects all over the Eastern, Western, and Central Provinces, mostly with Saudi Aramco.

The contractor is specialized in high quality building constructions. All types of civil, structural, electrical and high voltage power distributions, HVAC fabrication, installation and commissioning, as well as pipeline constructions.

As progressive Company utilizing modern techniques, Al Yami EST. have moved to Computer Aided Engineering, Design, Estimating, Material Procurement, Cost Control, Accounting, and Payroll management since 1993.

Coupled with the most modern tools and construction methods, the company expects to continue to enhance its reputation as a High Quality Contractor well into the future.

## **2. Organization Chart**

For the organization chart see the Appendix (I).

### **3. Contractor projects**

#### ***Project 1***

Title: Upgrade Lab Facilities, Riyadh

Size:

Cost: SR. 4,000,000.00

Location: C/WRPD&CD/CRP

BLDG 310, Riyadh Refinery

Riyadh

Scope of work: Supply, install and commission to 165 ton air cooled Liquid Chillers, air handling units, and Inertial Dust Separators, Water Pumps, VFDs and DDCs and all its electrical and control wirings and terminations. Fabrication and Installation round and rectangular stainless steel ducting including balancing and commissioning. Modification of existing control room including upgrade to MCC's, cabling and instrumentation.

#### ***Project 2***

Title: OFFICE BLDGS BERRI, JUAY & SHED

Size:

Cost: SR. 18,000,000.00

Location: PD&CD/C&IPD

BLDG 7007, East Park 2

Dhahran

Scope of work: Supply and construct three pre-cast concrete w/ structural steel building, (three building with total area of 2550sq.m). Supply and install all its utilities including power, water and sewage system. Site development that includes: street

lighting, sidewalks, asphaltting and signages. Supply installation and commissioning of 750KVA transformers, switchboards, and cables including security, fire alarm, and HVAC system.

### ***Project 3***

Title: DEAERATORS FOR UTILITY AREA 2

Size:

Cost: SR. 2,300,000.00

Location: C/WRPD&CD/CRP

BLDG 310, Riyadh Refinery

Scope of work: Install and commission two-7x4m steel desecrator into a 10m high steel supports. This includes heavy lifts into a very congested Refinery area. Fabricate and install steel supports and structures. Supply and install all instrumentations, controls, valves, and switches. Fabricate and install steel pipes and connections including hydro testing, site development and concreting.

### ***Project 4***

Title: GATE HOUSE & CANOPY, JUAYMAH

Size:

Cost: SR. 1,100,000.00

Location: PD&CD/C&IPD

BLDG 7007, East Park 2

Dhahran

Scope of work: Supply & installation of 432sq.m steel space frame sunshade, construction of concrete security gatehouse and kitchen

including lighting and utilities, and site development, asphaltting and sidewalk.

**Project 5**

Title: CENTRAL A/C COOLING TOWERS

Size:

Cost: SR. 3,100,000.00

Location: PD&CD/C&IPD

BLDG 7007, East Park 2

Dhahran

Scope of work: Erection of five wooden cooling towers (total 12 cells, 2000 gpm cap. ea). Construction of reinforced concrete basin, Supply and installation of steel and RTR pipes and fittings, testing and commissioning of controls and electrical system, and site demolition, site preparation and development, asphaltting and concreting of retaining walls.

**Project 6**

Title: SUNSHADES AT 12 SABG SCHOOLS

Size:

Cost: SR. 9,800,000.00

Location: PD&CD/C&IPD

BLDG 7007, East Park 2

Dhahran

Scope of work: Supply & installation of approx. 16,700sq.m of space frame as a sunshade in 12 SABG schools in central areas. This includes construction of concrete foundations, columns &

slabs, and the supply & installation of lighting and paging system, site demolition, and concrete playground developments.

**Project 7**

Title: CENTRAL A/C COOLING TOWERS – PH 2

Size:

Cost: 7,000,000.00

Location: PD&CD/C&IPD

BLDG 7007, East Park 2  
Dhahran

Scope of work: Erection of eight wooden cooling towers (total 20 cells, 2000 gpm cap. ea). The company constructs reinforced concrete basin, supplies and installs steel, RTR pipes and fittings. It also supplies controls, panels and instrumentations. The contractor tests and commissions controls and electrical system, and does site demolition, developing, asphaltting, and concreting.

**Project 8**

Title: AIR CARGO FACILITY, KFIA

Size:

Cost: SR. 18,000,000.00

Location: PD&CD/C&IPD

BLDG 7007, East Park 2  
Dhahran

Scope of work: Supply and construction of a two-story, structural steel warehouse type building of approx. 1500sq.m area. This building includes storage, administrative offices and support facilities. The Contractor installs and commissions two-SF6, 35

KV switches, 480V switchgears, and MCC's. Complete security, camera and CCTV system. Site Development, and preparation, asphaltting, landscaping, street lighting and sidewalks

**Project 9**

Title: REPLACE FIRE STATION, ABQAIQ

Size:

Cost: SR. 8,800,000.00

Location: PD&CD/C&IPD

BLDG 7007, East Park 2

Dhahran

Scope of work: Supply and construction of structural steel and pre-cast concrete panel fire station building, fire truck bay, hydro test building and misc. shades and structures with approx area of 2300sm. Supply, installation and commissioning of hydro test equipment and facilities. Supply, installation and commissioning of HV transformers, Chilled water ACCU's and AHU's, including RTR, steel and pure water, sewer, chilled water and fire water lines. The contractor also does site development, asphaltting, landscaping, street signages, street lighting and sidewalks.

**Project 10**

Title: LIP BUILDING 3137, DHAHRAN

Size:

Cost: SR. 2,600,000.00

Location: C&BMD/R&SHPD

DHAHRAN

Scope of work: Design, Supply & installation of 550sq.m one-story prefabricated office building including its utilities, power supply,



transformers, HVAC system, interior and exterior finishes, communication system, roofing system, under floor electrical and telephone system, and all civil and structural works. Site development, preparation, asphaltting and sidewalks are also included in the project.

**Project 11**

Title: EXTEND ENGINEERING BUILDING

Size:

Cost: SR. 2,250,000.00

Location: SHEDGUM PLANTS

SHEDGUM

Scope of work: Supply & installation of approximately 650sq.m prefabricated office building including its utilities, power supply, transformers, HVAC system, interior and exterior finishes, communication system, roofing system, under floor electrical and telephone system, and all civil and structural works including painting, demountable paneling, tile works and textured coating. Site development, asphaltting and concreting is also included.

**Project 12**

Title: REPLACE HVAC SYSTEM

Size:

Cost: 15,450,000.00

Location: PD&CD/CPD

East Park 3

Dhahran

Scope of work: Replacement & installation ACCu and fan coil units for 11 SABG Schools in Rahima, Safwa and Saihat. This includes installation of HVAC system including pumps, and instrumentations. Pre-insulated chilled water piping and controls. The company does the installation and commissioning of electrical panels, transformers, cables, conduits and controls. It also handles the construction of electrical and pumps building and shades, and site development and civil works.

For more information see the appendix (II)

## **4. Management techniques**

### **4.1. *Planning and Scheduling***

- Prepare and plan project schedule to its realistic situation, taking in consideration the arrival of long lead material, manpower and equipment to site.
- Talk to the management directly and explain your goal to achieve timely completion of the project.
- Talk to the workers from time to time involving their needs and field experiences but never direct orders to them.
- Show to the field management your strong will and motivate them to a successful project.
- Provide incentive to workers and management to enhance and uplift their performance.
- Provide necessary seminars and training to field management and personnel to upgrade their level of experience.
- The software used by the contractor for projects is Primavera.

## **4.2. Control**

- Select and assign highly qualified and experienced teams to handle specific job.
- Monitor progress weekly by meeting with the field management and discuss the progress as well as backlogs of the project.
- Identify the manpower and equipment requirements, project execution and monitor material necessity and see to it that materials arrive in time or earlier than its required installation.
- Timely completion of the project means profit and more projects to undertake.
- Financial support of the Owner and full trust to the Operations Manager plays a very important role in a successful project completion.

## **5. Effectiveness of Techniques**

Direct Management Control is in our opinion the best way to manage the project effectively and efficiently. This will enable the contractor to feel the actual project requirements when it comes to management shortfalls as well as materials, tools, equipment and manpower deficiencies. The contractor will also be able to observe the capability of personnel down to the lowest level category thereby directing and assigning them into the most and effective work they are suited for. Al-Yami Est. is very effective in such a way that the company expands and maintains its high standing level within the field of construction with high competency with other contractors.

## **6. CONCLUSION**

The contractor is specialized in high quality building constructions. All types of civil, structural, electrical and high voltage power distributions, HVAC fabrication, installation and commissioning, as well as pipeline constructions. As progressive Company utilizing modern techniques, Al Yami EST. have moved to Computer Aided Engineering, Design, Estimating, Material Procurement, Cost Control, Accounting, and Payroll management since 1993. Coupled with the most modern tools and construction methods, the company expects to continue to enhance its reputation as a High Quality Contractor well into the future.

The contractor manages his projects through proper planning, scheduling and control. Al-Yami EST. selects and assigns highly qualified and experienced teams to handle specific jobs. They also monitor progress weekly by meeting with the field management and discuss the progress as well as backlogs of the project. Management identifies the manpower and equipment requirements, project execution and monitors material necessity and makes sure that materials arrive in time or earlier than its required installation. Timely completion of the project means profit and more projects to undertake. Therefore, financial support of the owner and with the full trust to the Operations Manager plays a very important role in a successful project completion.

## **7. APPENDIX**

**Appendix (I): Organization Chart**

**Appendix (II): Contractors projects**