100867-ELE-D-E-2004
Senior Electrical Design Engineer

Holds a B. Sc. in Electrical Power Engineering and has about 6 years hands-on experience in electrical design field.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	06/02/1982
Gender	:	Male
Marital Status	:	Married
Residence	:	Cairo

EDUCATION

: B. Sc. in Electrical Power Engineering, Ain Shams University, 2004

LANGUAGES

Arabic	:	Native Language
English	:	Excellent

COMPUTER SKILLS

: Windows, MS Office, Internet
: AutoDesk, AutoCAD (all versions)
: Bentley Micro station V7, V8 and V8i

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jan. 2010 till now
Employer : Arab Consulting Engineers (ACE - Muharram - Bakhom), Cairo
Job title : Senior Electrical Design Engineer
Job Description :

- DAMAC Park Avenue (Sheikh Zaid City, Cairo):
  - Unique mix between retail an office spaces consists of G+5 floors and basement level. Retail units in G and G+1 floors "10,250 sq. m each" while from G+2 to G+5 "10,700 sq. m each" designed as offices, the basement "28,800 sq. m" accommodates 750 car parks and other services such as storage areas, MEP rooms, etc. The total power for the project was 13.5 MVA.
    - Designing the M.V. and L.V. networks.
    - Sizing the power supply (M.V. switchgear, transformers, Generators, UPS, M.V. cables, L.V. cables, etc.).
    - Designing the lighting & small power system.

        - Short circuit and V.D. calculations.
        - Earthing and Lightning protection systems.
- Jabal Omar Project (Mekka – KSA):
    - Unique urban re-generation scheme purpusing to provide 5 stars hotel accomodations, commercial/retail spaces, car paring, public spaces and public amenities to support religious, social and commercial activities to Hajj and Omrah pilgrims all year round. The total built built up area is approximately 208.316 sq. M (12 floors for Podium and 4 towers each 26 floors for Hotels "Sheraton & Wilson"). The total power for the project was 16.5 MVA.
        - Designing the M.V. and L.V. switchgears. the M.V. and L.V. networks have been designed to meet the requirements of each operator considering the functional requirments of each space.
        - Sizing the power supply (M.V. switchgear, transformers, Generators, UPS, M.V. cables, L.V. cables, etc.).
        - Designing the lighting & small power system for public areas. For other areas a proper coordination has been done with the ID consultant to accommodate his design in the design drawings and BOQ.
        - Based on the input data from other consultants a sufficient electric power supply have been provided for Kitchen, laudry, FAÇADE lighting, ID lighting, etc.
        - Short circuit and V.D. calculations.
        - Earthing and Lightning protection systems.
        - Proposing the optimum number and space for electric rooms and electric shafts.
- Rod El Farag Corridor (Cairo):
    - The Rod El Farag Highway PPP Project (the “Project”) is being procured by the Ministry of Housing, Utilities and Urban Development (“MHUUD”) of the Arab Republic of Egypt through its executiv agency, the Central Authority for Development (“CAD”) and the Ministry of Finance (“MoF”) PPP Central Unit. The Project will connect the existing Central Cairo with the ring and the Cairo – Alexandria Desert Highway. The key features of the project are likely to include:
        - Total length of 35 km.
        - 10 lanes (4 in each direction + 2 dedicated bus lanes).
        - Service road on either side.
        - Alignment only for twin track light rail.
        - Two major bridges across the River Nile with a span of approximately 300 meters each.
        - A number of small bridges and embankments.
        - 5-7 major Interchanges.
        - Toll Plaza and Ancillary Buildings.
    - Responsibilities:
        - Designing the lighting system for the main road and under bridges according to the international Norms "CIE-115 and BS-5489-1".
        - Designing the power supply (transformers, Generators, RMU).
        - L.V. cables design calculations.

- Berat – Tepelene Tunnel (ALBANIA):
  - A road represents a part of the North-South corridor of Albania. It serves to join two main cities of the middle of Albania (Tirana Berati Tepelena). It improves evidently the traveling conditions in this area. The total power for the project was 12 MVA.
    - Designing the lighting system for a long tunnel "2.8 km long" according to the international Norms "CIE-88 and BS-5489-2".
    - Sizing the power supply (transformers, Generators, RMU).
    - M.V. and L.V. network design calculations.

Dates : From Dec. 2006 till Dec. 2009

Employer : PARSONS International LTD – Dubai, UAE

Job title : Electrical Utilities Design Engineer

Job Description :

- Alsafouh Tram Dubai (UAE):
  - Al Sufouh Transit System was primarily proposed to help in serving the increasingly growing travel demand in Al Sufouh and Dubai Marina urban areas. The purpose of this transit system is to absorb the high level of future person trips expected to be generated from the future developments being. The Transit system will run at-grade on the land side of Al Safooh Road for 14 km. The Transit system will be elevated adjacent to Dubai Marina for 2.3 km. The Tram will have 19 stations.
  - Scope of work:
    - To undertake the design of the utilities, road works, landscaping, electromechanical and structural elements in the project and design support during construction. The project also comprises the Traffic Operations Study in addition to the detailed civil design**.**
  - Responsibilities:
    - Designing Earthing and Lightning protection systems for the tram stations according to BS and IEEE standards.
    - Checking the short circuit calculations and Voltage drop for the law voltage networks using Amtech software.
    - Cable sizing and cable tray calculations.
    - Preparing design drawings for the Lighting and small power systems.
    - Access control system for the stations.
- Comprehensive Improvement of the Parallel Roads (Dubai, UAE):
  - Comprehensive Improvement of the Parallel Roads, consists of modifying and improving these two new north-south roads. The new roads pass through such areas as Zabeel, Burj Dubai, Business Bay, the Al Quoz Industrial area, Al Barsha, Emirates Hills, Jumeira Islands and Gardens Developments, Jebel Ali Free Zone Area (JAFZA) and the Sheikh Mohammed Bin Rashid Technology Park.
  - Scope of work:
    - A preliminary study phase in which the most appropriate improvements are determined through traffic analysis.
    - A design phase (including preliminary and detailed final design) in which the recommended improvements will be developed and Tender documents prepared.
    - A construction phase (including supervision of the construction of the contract as requested by the Dubai Municipality).

- Responsibilities:
  - Preparing designs, drawings for all utilities such as DEWA-ED, DEWA-WD, Etisalat, etc.
  - Designing Street and area lighting system based on the international codes and using related software.
  - Designing the lighting system for the interchanges.
  - Preparing L.V. Switchgear, load schedules MCCs, Fire Resistant Power and Control Cables, Fire Protection and Fire Alarm System.
  - Designing the lighting system Short and long tunnels according to CIE-88 and using a professional tunnel software.
  - Designing the traffic signals system.
  - Conducting technical review meetings with clients, for reviewing detailed designs, conceptual designs, drawings and standardization.

- Dubai Land Phase-1 Roads (Dubai, UAE):
  - The project will be built on a 3 billion square foot (278 km²) site and includes 45 mega projects and 200 sub-projects. Dubailand encompasses over 100 development projects. At completion, Dubailand will have a resident population of 1,280,000 people, 140,000 hotel guests and an employment of over 1.0 million people. The Dubailand development Project is surrounded by Emirates Road on north side, Al-Hibab Road on west side and south side and Al-Ain Road on east side. The Dubai outer bypass road and Gas pipe line road are crossing through Dubailand project along west-east direction and Al Qudra road along north-south direction.
    - Preparing designs for Helipad lighting.
    - Designing Street and area lighting system based on the international codes CIE-115.
    - Designing the traffic signals system.
- Dubai Creek crossing seventh crossing (Dubai, UAE):
  - The 7th Crossing, Contract R777/4, is located just east of the Maktoum Bridge and will replace the Floating Bridge, which is an interim solution to the traffic issues. The 7th Crossing is including constructing new access roads to improve operations on the roads accessing the Maktoum Bridge and increase travel speeds on both sides of Dubai Creek. The improvements consist of constructing a new roadway corridor beginning at Oud Metha Road, running adjacent to Rashid Hospital Compound with new signalized intersection at Riyadh Street and through the Dubai Creek Park to the new bridge crossing over Dubai Creek and landing at Road 9 and Baniyas Road intersection.
    - Preparing designs for L.V. Switchgear, Intelligent MCCs, L.V. Generators, UPS, L.V. & H.V. Cabling, Cable trays, Special Tunnel Lighting, Tunnel Monitoring, telephone system, fire fighting system. Total electrical load ~ 3MW.
    - Designing Street and area lighting system based on the international codes CIE-115.
    - Designing the traffic signals system.
    - Preparing designs, drawings for the telephone, access control, lighting and small power systems for the ancillary buildings.

- Doha express way (Midmac Interchanges), Doha – QATAR:
  - Reviewing the lighting design system based on the Qatar regulations and CIE-115.

Dates : From Jan. 2005 till Dec. 2006

Employer : Arab Consulting Engineers (ACE - Muharam - Bakhom), Cairo

Job title : Junior Electrical Design Engineer

Job Description :

- PANDA – New Distribution Center (Riyadh, KSA):
  - Huge stores Area for different types of the food stores(dry, Frozen, etc.) and truck parking areas. These stores planned to be constructed on 320,600 m2. The total power for the project was 15MVA.
    - Sharing the Design of the power supply (transformers, Generators, UPSs, RMU).
    - Cables Sizing.
    - Checking the short circuit calculations and Voltage drop for the low voltage networks manually and using related software such as Doc under Dos (ABB software for L.V. electrical network calculations voltage drop, short circuits, transformer and generator sizing, etc.).
    - Designing the lighting system according to the international Norms and client requirements, using calculux (Philips software for indoor and outdoor lighting) the lighting fittings were supplied by cables and lighting Bus bars as well.
- South Cairo & Elmania and Eldekhela courts:
  - South Cairo court is one of the biggest courts in Cairo with 13 floors. The total power for the project was 3 MVA.
    - Designing the lighting system using relevance software.
    - Sizing the power supply (transformers, Generators, UPSs).
    - Designing the main distribution board and the branch panel boards and preparing the S.C. & V.D. calculations.
    - Preparing the BOQ.
    - Review and approval of technical submittals for UPS's and lighting fixtures.
- Bags Plant for Cement Pack Elamiria Factory & Royal Factory for Ceramic and Porcelains:
  - Designing the power supply (transformers, Generators, UPSs, RMU).
  - M.V. and L.V. cables design calculations.
  - Preparing short circuit and Voltage drop calculations.
  - Designing the lighting system according to the international norms and client requirements.
- Developing and Rehabilitation 10 Airports in Gabon Republic:
  - Surveying and evaluation the existing electrical systems in 10 airports in Gabon Republic.
  - Designing the power supply (transformers, Generators, UPSs).
  - Designing the Earthing and Lightning protection for the control towers.
- LUXOR Airport:
  - Quantity survey for the electrical systems.

- Administration Buildings, Residential Compounds, Commercial Buildings:
  - Designing the lighting and small power systems as per CIBSE and local standards.
  - Sizing the transformers, Generators and UPS.
  - Cable sizing calculations (Short circuit and voltage drop calculations). Preparing the Bill of Quantities.

Field of experience :

- Electrical Design Engineer with experience in:
  - Preparing designs for M.V.& L.V. Switchgear, L.V. & H.V. Cabling, Cable trays, Lightining Earthing, lighting, small power and sizing Generators, UPS, transformers for the various types of projects such as Huge stores, Factories, Hotels, Malls, administration buildings, commercial building, Villas, Residential buildings, etc.
  - Familiar with professional software like Doc under Dos (ABB software for L.V. electrical network calculations); Ecodial (Schneider Electric software for the electrical networks calculations – voltage drop, short circuits, transformer and generator sizing, etc.); calculux (Philips software for indoor and outdoor lighting); Thorn program; Dailux program (indoor and outdoor lighting).
  - Preparing design drawings for utilities "L.V. and M.V. Cables".
  - Preparing design drawings for the electrical systems in roads, short and long tunnels.
  - Preparing the Bill of Quantities.
  - Familiar with the international standards IEC, BS, CIE, IEEE, CIBSE.
- Electrical Design Software:
  - Ecodial software from group Schneider.
  - DOC program for ABB.
  - Amtech H.V. and L.V. electrical network calculations (voltage drop, short circuits, transformer and generator sizing, etc.).
  - Lighting calculation programs (calculux, Dialux, Thorn software and Schreder).
  - Schreder software for tunnels lighting.
- Good knowledge with:
  - Egyptian Code.
  - CIE-115 and CIE-88.
  - IEC.
  - BS.
  - Dubai RTA and DEWA Standards.