

POSITION DESCRIPTION – Senior Electrical Designer

A. MAJOR JOB DUTIES

1. Technical Responsibilities

- a. Prepare electrical designs of moderate complexity.
- b. Obtain information necessary to prepare design.
- c. Assist in field data collection.
- d. Contact utilities for coordination of service requirements.
- e. Prepare lighting and power plans for drafting by self or by others.
- f. Prepare complete single line diagrams including necessary load, feeder, short circuit and other data necessary for approval by plan check.
- g. Prepare communication and data system plan and riser diagrams including cable schedules when required.
- h. Prepare simple fire alarm and security plan and riser diagrams.
- i. Prepare simple control diagrams for lighting, emergency and mechanical systems.
- j. Assist in the preparation of installation details for specialized equipment.
- k. Prepare switchboard, panel and motor control schedules and calculate load and feeder requirements.
- l. Perform short circuit and voltage drop calculations for inclusion in project documents.
- m. Assist in the preparation of short circuit calculations for study only projects.
- n. Prepare Title 24 lighting calculations.
- o. Assist in performing load recordings.
- a. Obtain utility data necessary to determine load in existing facilities.
- p. Prepare service load schedules for new work.

- q. Maintain a knowledge of electrical code commensurate with responsibilities.
- r. Prepare quantity takeoffs for entire design.
- s. Prepare cost estimates for branch circuiting, lighting and low voltage power distribution.
- t. Prepare specifications for simpler projects and assist in preparation for large to complex projects.
- u. Review and comment on contractor's low voltage equipment submittals.
- v. Attend project walk through inspections and prepare punch lists.

2. Planning and Organizational Responsibilities

- a. Maintain a thorough understanding of project work scope and requirements.
- b. Work with client, architect, and other engineering consultants in determining project requirements.
- c. Attend design meetings with client and architect.
- d. Coordinate division of contractor work scope and responsibilities including control and power requirements with mechanical engineer.
- e. Perform drafting in CAD and BIM modeling as much as practical to maintain workflow efficiency.
- f. When needed, coordinate work of draftsmen, CAD operators and other designers to meet project deadline requirements.
- g. Assist in the preparation of work scopes and fee estimates for design proposals.

3. Communications

- a. Assist in the preparation of minutes of design meetings.
- b. Make weekly progress reports on projects including percent completion, progress, schedule, construction budget and design budget.
- c. Provide suggestions and recommendations to correct project constraint deficiencies.

- d. Report changes or increases in project work scope to allow recovery of additional design fees.
- e. Advise when projects are approaching fee limits and assist in the implementation of cost controls.

B. FREQUENCY OF CONTACT

Contact	Purpose	Frequency
Principal	Obtain assistance and guidance.	As Required
Project Manager	Report on work progress, obtain assistance and guidance.	Daily
Architect/Consultants	Coordinate work in progress.	As Required
Client	Obtain technical information.	As Required
Vendors	Obtain product information.	Weekly
Contractors	Answer questions on design.	As Required
Other Designers	Obtain assistance with design.	As Required

C. DIRECTION OF OTHERS

- 1. Direct progress of drafting.
- 2. Assist junior designers in the performance of their work.

D. DIRECTION RECEIVED

- 1. Work under the supervision of the principal and engineers.
- 2. Receive on the job training.

E. EDUCATION REQUIRED

- 1. High School Diploma or equivalent education.
- 2. Satisfactory completion of algebra and trigonometry.
- 3. Some college level education desirable.

F. EXPERIENCE REQUIRED

- 1. Fifteen (15) years or more as a designer in electrical design.

LOCATION: GLENDALE, CA OR THOUSAND OAKS, CA