

Pre-Construction Project Planning: Temporary Power & Lighting



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While construction planning begins with the bidding process, the majority of planning takes place during pre-construction stages, immediately after notification of a pending award. The activities of pre-construction planning fall into various categories:

1. Team Selection & Turnover
2. Scope & Review of Contracts
3. Administrative Duties
4. Buyout Processes
5. Material Handling
6. Budget
7. Layout & planning
8. Scheduling
9. Tracking/Management
10. Construction Kick off

GOALS:

During the first phases of planning, team selection and turnover, project planners have a number of goals to establish, including:

- Project Managers, Field Supervisors, and other key members
- Meeting between Project Manager and Estimator
- Meeting between Project Manager and Field Supervisor
- Turnover Meeting
- Pre-job kick off with all internal positions to assign responsibilities

The Turnover meeting sparks the conversation about temporary power and lighting. During the meeting, Project Managers will focus the agenda on plans and specifications while identifying any temporary power and lighting requirements.

After these items are established, most Project Managers will hold pre-job kick offs to review the general scope of work, contract costs, purchasing materials, schedules, manpower, and other logistics. After this step, the scope and contract review is essential.



Where does temporary power and lighting come into action within the categories?

It falls into many of the stages of the pre-construction planning. It is necessary to keep in mind the logistics of temporary power and lighting from the standpoint of team selection, budget, scheduling and planning.

SCHEDULING A JOB SITE VISIT:

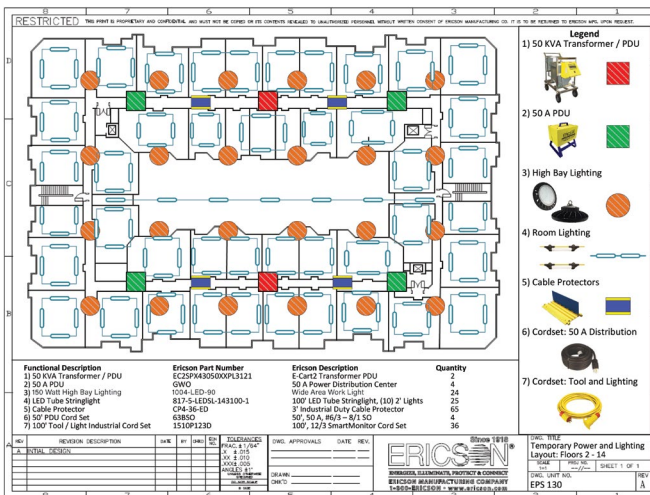
Once details of specifications and schedule are set, construction project teams can schedule a site visit. By conducting a site visit, Project Planners are able to examine a site's access,, layout, personnel parking, material delivery accesses, areas for lifts, cranes, and conditions of the job site. Now a layout plan can be created for temporary power or lighting (if applicable).

When on the site, it is essential to sketch out the temporary power and lighting to determine how these systems will be maintained and used. **A carefully presented temporary power and lighting layout plan can prevent exceeding your budget.**

REQUESTING SUBCONTRACTORS FOR TEMPORARY POWER AND LIGHTING:

Once temporary power and lighting needs are identified, Project Managers move the processes to requesting subcontractors, suppliers and/or vendor pricing (if not requested or bid on during the initial bidding stages). This is where utilizing a supplier's expertise can be extremely helpful. If it is not laid out correctly, requesting temporary power and lighting can be a daunting task. Some construction firms have engineers that can easily provide layouts and specifications in advance. You can also request your suppliers to layout the temporary power, lighting, or electrical safety products on drawings of the job site, saving time and money.

By utilizing the supplier, you can have them quote what you need and offer insight into other products or solutions saving you time, money, plus ensure your job site meets all safety standards.





By utilizing the cost code schemes, your requests for electrical safety products can easily be specified without having any questions asked from your suppliers. The Divisions are a standard set of codes. Codes listed below are for temporary electricity, lighting and power.

01 50 00 TEMPORARY FACILITIES AND CONTROLS

01 51 00 Temporary Utilities

- 01 51 13 Temporary Electricity
- 01 51 16 Temporary Fire Protection
- 01 51 19 Temporary Fuel Oil
- 01 51 23 Temporary Heating, Cooling, and Ventilating
- 01 51 26 Temporary Lighting
- 01 51 29 Temporary Natural-Gas
- 01 51 33 Temporary Telecommunications
- 01 51 36 Temporary Water

26 06 00 SCHEDULES FOR ELECTRICAL

- 26 06 10 Schedules for Medium-Voltage Electrical Distribution
- 26 06 20 Schedules for Low-Voltage Electrical Distribution
- 26 06 20.13 Electrical Switchboard Schedule
- 26 06 20.16 Electrical Panelboard Schedule
- 26 06 20.19 Electrical Motor-Control Center Schedule
- 26 06 20.23 Electrical Circuit Schedule
- 26 06 20.26 Wiring Device Schedule
- 26 06 30 Schedules for Facility Electrical Power Generating and Storing Equipment
- 26 06 40 Schedules for Electrical Protection Systems
- 26 06 50 Schedules for Lighting
- 26 06 50.13 Lighting Panelboard Schedule
- 26 06 50.16 Lighting Fixture Schedule

26 50 00 LIGHTING

26 51 00 Interior Lighting

- 26 51 13 Incandescent Interior Lighting
- 26 51 16 Fluorescent Interior Lighting
- 26 51 19 LED Interior Lighting
- 26 51 23 HID Interior Lighting
- 26 54 00 Classified Location Lighting
- 26 54 13 Incandescent Classified Location Lighting
- 26 54 16 Fluorescent Classified Location Lighting
- 26 54 19 LED Classified Location Lighting

26 55 00 Special Purpose Lighting

- 26 55 23 Outline Lighting
- 26 55 29 Underwater Lighting
- 26 55 33 Hazard Warning Lighting
- 26 55 36 Obstruction Lighting
- 26 55 39 Helipad Lighting
- 26 55 53 Security Lighting
- 26 55 59 Display Lighting
- 26 55 61 Theatrical Lighting
- 26 55 63 Detention Lighting
- 26 55 68 Athletic Field Lighting
- 26 55 70 Healthcare Lighting
- 26 55 83 Broadcast Lighting

26 56 00 Exterior Lighting

- 26 56 13 Lighting Poles and Standards
- 26 56 17 Fluorescent Exterior Lighting
- 26 56 18 Incandescent Exterior Lighting
- 26 56 19 LED Exterior Lighting
- 26 56 21 HID Exterior Lighting

TEMPORARY POWER AND LIGHTING CHECKLIST

Temporary Power Questions to Consider:

- Identify Ground & shock hazards
- What are your Short circuit considerations?
- What is your Power Source connection method?
- What are your requirements for Distribution or Transformation main power supply?
- What are Distribution points throughout job site?
- What are your anticipated load calculations?
- Are your outlets GFCI protected?
- What are your Cable protection methods?

Specific questions needed to know for quoting Temporary Power for the job site:

- Primary Distribution: Voltage: _____ Amps: _____
Phase: _____ Wire: _____
- Quantity: Voltage: _____ Amps: _____
Phase: _____ Wire: _____
- Welding Receptacle Qty: Voltage: _____ Amps: _____
Phase: _____ Wire: _____
- Secondary Distribution: Voltage: _____ Amps: _____
Phase: _____ Wire: _____
- Enclosure Type: NEMA 3R?

Lighting Product Questions to Consider:

- What are the minimum foot candle requirements?
- Ceiling height(s)?
- What is the job site's square footage?
- Number of areas/rooms/hallways?
- What is your power supply method?
- Do your ground lying cables need protection?