

# PROJECT MANAGEMENT

## Introduction to Project Management

Introduces the role and responsibilities of project management, including technical and management skills. Presents an overview of the phases in a construction project and describes alternate project delivery methods.

## Safety

Stresses the importance of job-site safety and identifies the project manager's duties and responsibilities regarding safety. Covers loss prevention and creating a zero-accident work environment. Presents several checklists as references.

## Interpersonal Skills

Discusses the values and expectations of the workforce, building relationships, and satisfying stakeholders. Describes the principles of effective communication, applying the management grid, and using relationship skills to create a leadership environment. Discusses behavioral and non-discriminatory interviewing, and professional development of personnel. Covers issues surrounding disabled workers, sexual harassment, gender and minority discrimination, child labor laws, antitrust laws, and copyright infringement.

## Issues and Resolutions

Describes the key elements of successful negotiations and negotiating techniques. Explains how to recognize nonverbal signals, use negotiating tools, and apply conflict resolution strategies. Identifies symptoms and barriers to solving project-related problems and applying problem-solving techniques, brainstorming, and identifying root cause consequences.

## Construction

Emphasizes the importance of documentation and explains the types of documents, drawings, and specifications used on a project, and the best practices regarding revisions, obsolete drawings, and safeguarding drawing sets. Explains methods of obtaining work in the industry and types of contracts and insurance requirements. Describes the change order process and the documents required to close out a project.

## Construction Planning

Discusses the importance of formal job planning and creating a performance-based work environment. Discusses the Work Breakdown Structure (WBS) as the foundation that identifies deliverables, tasks, and time. Introduces the basics of quality control and defines the roles and responsibilities of an effective team and how to allocate resources.

## Estimating and Cost Control

Emphasizes the importance of accurate estimating and summarizes the estimating process and the steps in developing an estimate, and the difference between parametric estimating and analogous estimating. Defines the purpose of a cost control methodology, explains how to perform simple cost analysis, and covers the project manager's role in controlling cost and tracking rework cost.

## Scheduling

Explains the basics of scheduling from simple to-do lists through bar charts, network diagrams, and methods of managing resources. Discusses the importance of formal schedules, job planning, and establishing priorities. Describes alternative scheduling methods.

## Resource Control

Identifies resources that must be controlled, factors that affect production control, and production control standards. Explains the project manager's role in the process. Defines production and productivity and describes how to evaluate and improve production control and productivity.

## Quality Control

Defines quality control and quality assurance, and stresses management's concerns about quality. Explains project quality management and how to develop an effective quality control plan. Discusses how to identify, assess, and measure weaknesses to avoid rework.

## Continuous Improvement

Describes the project manager's role in creating a culture of continuous improvement. Explains the fundamentals of a continuous improvement program and how to identify the critical problems and processes that require improvement, implement a continuous improvement process, and measure results. Emphasizes the importance of satisfying internal and external stakeholder