## 5-Day

## Long-Range/Strategic Planning of Industrial Facilities

## **Description**

This week long working conference was developed to meet a recognized need – how to establish requirements and plan facilities beyond the horizon of current forecasts and business plans. It gives top management and facilities planners the latest tools for setting up a comprehensive, systematic program to make sure your company has the plants, warehouses, offices, and laboratories it will need in the future.

Working in small teams, with real-life case exercises, you will *learn by doing* how and when to apply such techniques as "total saturation", "ratio trend and projection", and "space balance for planning and control." Pioneered by world authority Richard Muther, these methods will enable your company to develop and maintain a full, yet flexible plan to meet its needs 5, 10, or even 20 years ahead – and do so largely bypassing conventional sales forecasts!

You will also learn how to get faster decisions from top management and how to provide for flexibility, adaptability, and growth.

Essential know-how for those planning a major facilities investment. Presented in six countries. Relevant to all types of facilities and industries. Note: Content will be adapted to meet the specific needs of your company.

## **Objectives**

- To maximize the strategic value and flexibility of your company's most fixed assets.
- To improve the link between business needs and facilities plans.
- To shorten the time required to expand, consolidate, or move.
- To prepare those attending for leadership roles in effective facilities planning.

## **Who Will Benefit**

- Senior executives
- Plant & Operations Managers
- Real Estate & Facilities Managers
- Industrial and Plant Engineers

## **Timing**

Duration: 5 days

(Condensed 3-day version also available)

Start each day: 8:30 AM Break: 10:30 Lunch: 12:00 – 1:00 PM Breaks: 2:15 & 3:45 Adjourn Days 1-4: 5:15 Adjourn Day 5: 2:15

## **Evening Assignments**

This is a working conference. Attendees will have evening reading assignments of 1-2 hours on Days 1 and 2. Team exercises may extend beyond the dinner hour on Day 3.

## **Course Outline**

Day One - Theme: "Understanding"

### A. WELCOME & INTRODUCTION

- Why plan facilities?
- Current planning practices.
- Benchmark survey results.
- Economic consequences of facilities planning.

## **B. FACILITIES PLANNING IN PERSPECTIVE**

- · Anatomy of an industrial plant.
- · Basic concepts of facilities planning.

## C. A STRUCTURED APPROACH TO PLANNING

- The facilities planning process.
- Phases and physical components.
- Short- and long-range inputs.
- Non-physical and external influences.
- Systematic Planning of Industrial Facilities (SPIF)
- Planning procedures and conventions.

## 5-day

## Long-Range/Strategic Planning of Industrial Facilities

### Course Outline continued

#### **Day One continued**

### D. TIE-IN TO STRATEGIC BUSINESS PLANNING

- The strategic planning process.
- · Outputs of strategic planning.
- Product and business life cycles.
- Facilities issues by stage of business life cycle.
- Matching facilities and business strategies.
- · Mission statements.
- Scenarios for long-range planning.
- Owners and planners: differences in viewpoint.

#### **E. COMPILING PLANNING INFORMATION**

- · Information on current facilities.
- Key input data and where to get it.
- · Projecting key inputs.
- External trends and non-physical influences.

### F. LONG RANGE PLANNING IN ACTION

- Trends in industrial facilities.
- Major issues facing planners today.
- Case exercise: Delphi forecast of future issues.

### Day Two - Theme: "Projecting"

### A. REVIEW, SUMMARY & DISCUSSION

- How long is long-range?
- Differences in planning facilities, short- and long-term.

# B. THE "ODDS ARE" APPROACH (TRENDS & LIFE CYCLES)

- Projecting capacities and space required.
- · Historical growth and projection.
- Class of space projections.
- Calculating and converting total area requirements.

# C. THE "PLAYING THE AVERAGES" APPROACH (RATIO TREND AND PROJECTION)

- Relationship of space to business activity.
- Why space ratios change over time.
- Trending and projecting the ratios.
- Case example in ratio-trend & projection.
- Historical data and where to get it.

# D. THE "FULL HOUSE" APPROACH (TOTAL SATURATION)

- Projecting outside and under-roof requirements.
- Land to building ratios.
- Case example: Site saturation procedure.

## E. CASE PROBLEM: CONVERTING DATA TO REQUIREMENTS

 Converting sales, employment, and unit volumes into future space and land required.

# F. THE DOMINANT CONSIDERATIONS APPROACH

- Internal and external factors.
- Physical and non-physical influences.
- Case example: Rating dominant considerations.
- Case exercise: Planning around the dominants.

## Day Three - Theme: "Planning"

### A. REVIEW, SUMMARY & DISCUSSION

• The process of industrial site planning.

#### **B. HOW TO PLAN SINGLE SITES**

- Typical external considerations.
- Dominant physical site features.
- Picture quiz: What's wrong with these sites?
- Typical approaches to infrastructure, flow and growth.
- Concept planning: Flows, relationships, expansion.
- Summary of site planning principles.

### C. CASE PROBLEM: DOMINANTS AND SITE PLAN

• Identify the dominant considerations for an industrial site plan.

## D. CASE PROBLEM: HOW TO DEVELOP MASTER SITE PLANS

- Teams work to apply concepts and principles.
- Analyze activity relationships and space.

## **E. CASE PROBLEM CONTINUES**

Adjust the ideal arrangement into practical plans.

#### F. CASE PROBLEM CONTINUES

Prepare a recommended plan for presentation to the group.

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### Course Outline continued

Day Four - Theme: "Developing"

## A. TEAM PRESENTATIONS OF CASE PROBLEM PLANS

- Teams present their recommended longrange plans.
- Critique and review of project work.

#### **B. IMPLEMENTING MASTER PLANS**

- Stages of implementation and development.
- Time-phasing the implementation of a master plan.
- Basic growth plans Zone, block, modular.
- Alternative long-range plans.
- · Scenarios and options.
- Space balance for planning and control.

# C. CASE PROBLEM: HOW TO PLAN INTERIM STEPS TOWARD A LONG-RANGE PLAN

- Teams prepare staged implementation plans.
- Timing and plant capacity.

### D. EVALUATING ALTERNATIVE PLANS

- Why cost-justification is not enough.
- · Factor analysis method.
- Factors influencing the choice of alternative facilities.

### **E. HOW TO PLAN MULTIPLE SITES**

- Choosing between single & multiple sites?
- How large should a plant be?
- Ways plants develop from one initial site.
- Configurations for multi-site operations.
- Splitting and combining products and processes.
- Procedure for assigning operations to plants.
- · Consolidation of multiple sites.

#### F. SITE LOCATION

- Site selection process and factors.
- Locating new operations in an existing facility.

Day Five - Theme: "Managing"

#### A. REVIEW, SUMMARY AND DISCUSSION

## B. ORGANIZING YOUR LONG-RANGE PLANNING DATA

- Deciding the information needed.
- Establishing the ratios to be projected.
- Deciding your time horizons.

#### C. FACILITIES PLANNING PRINCIPLES & POLICY

- Ten strategies for long-range/strategic planning.
- Twenty basic strategies that facilities planners must know.

## D. MANAGING YOUR LONG-RANGE FACILITIES PROGRAM

- Types of planning projects and the role of management in each.
- Ways to organize planning.
- Procedures for short-range planning.
- Procedures for long-range planning.
- Guide for presentations to senior company management.
- · What top management wants to know.

### **EXTENSIVE REFERENCE MATERIALS AND TEXT**

Your 150-page course manual includes a set of practical Working Forms and templates for immediate application on your current or next strategic planning project. And in addition to your course manual, you will also receive *Systematic Planning of Industrial Facilities, Volume I*, by Richard Muther and Lee Hales. This text provides you with a complete, step-by-step methodology, with application examples and a wall chart.