

**Critical Path Method (CPM) Seminar**  
**Presented by Wagner Hohns Inglis, Inc.**  
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**Introduction**

**1.0 Contract Specification**

**1.1 CPM Specification**

**1.1.1 Reports PDF v XER**

**1.1.2 Management Analysis Report**

**1.2 Contract Milestones**

**1.2.1 Liquidated Damages-Contract Completion v Intermediate**

**1.2.2 No Damage for Delay Clause**

**1.3 Notice of Delay**

**1.4 Recovery Schedule v Acceleration Schedule**

**1.5 “Ownership” of Float**

**1.6 Concurrent Delay**

**2.0 Baseline CPM Schedule**

**2.1 Subcontractor Contract Requirements**

**2.1.1 Preliminary Bid Schedule**

**2.1.2 Subcontractor Input and Signoff**

**2.2 Contractor Crew Flows**

**2.2.1 Manpower/Materials**

**2.3 Bid Packages/ Contractor Buyout**

**2.4 Procurement-Submit/Approve/Fabrication/Delivery**

**2.5 Coordination- HVAC/Plumbing/ Fire Protection/Electrical**

- 2.6 Start Constraints and Completion Constraints**
- 2.7 Logic Relationships-SS/FF/FS**
- 2.8 Early Completion Schedules**
  - 2.8.1 Early Completion v Contract Completion- Float?**
  - 2.8.2 “Contractor Contingency/Closeout” Activity**
- 2.9 Project Manager v Superintendent Baseline Schedule**
- 2.10 Owner/Architect Presentation Meeting**
  - 2.10.1 Comments and “Acceptance”**
  - 2.10.2 Meeting Minutes**
- 2.11 Reports for Review**
  - 2.11.1 Critical Path and Secondary Critical Path(s)**
  - 2.11.2 Detailed Layout by Location**
  - 2.11.3 Open Ends/Constraints**
- 3.0 CPM Schedule Updates**
  - 3.1 Frequency**
  - 3.2 “Pure” Update**
  - 3.3 “Revised” Update**
  - 3.4 Impact Activities with “Zero” Duration**
    - 3.4.1 Current Delay v Potential Delays**
  - 3.5 Procurement Update**
  - 3.6 Actual Start and Actual Completion Dates**
    - 3.6.1 As-built Schedule/Accuracy**
  - 3.7 Update Report and Analysis**
    - 3.7.1 Critical/Secondary Path Analysis**
    - 3.7.2 Time Lost/Gained Analysis**
    - 3.7.3 Delay/Responsibility-Who did it?**

### **3.7.4 Written CPM Management Analysis Report**

## **4.0 CPM Management Analysis Report**

### **4.1 Update Status Only**

### **4.2 Critical/Secondary Path Analysis**

### **4.3 Time Lost/ Gained**

### **4.4 Assign Responsibility/ If Known/Reservation of Rights**

### **4.5 Time Extension Request/Reservation of Rights**

### **4.6 Time Impact Analysis (TIA) if Needed**

## **5.0 Time Impact Analysis (TIA)**

### **5.1 “Actual” Delay v “Projected” Delay**

#### **5.1.1 Current Update Analysis**

#### **5.1.2 Compensable v Non-Compensable Delay**

#### **5.1.3 “Concurrent” Delay**

#### **5.1.4 Extended General Conditions Costs**

## **6.0 Resolving Time Extension Requests**

### **6.1 Negotiation Using the CPM Schedule Update Schedules**

### **6.2 Alternative-Mediation/Arbitration/Litigation**