

An aerial photograph of a highway construction site. The scene is dominated by wide, reddish-brown dirt roads with numerous tire tracks. Several pieces of heavy machinery are visible, including orange excavators, a red tractor, and a large dump truck. The site is surrounded by green vegetation and some utility poles in the background. The overall atmosphere is one of active construction in a rural or undeveloped area.

# Claim Avoidance on Highway Projects

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## Joe Hellenbrand P.E.; PSP

- 20 years of Construction Management/Scheduling Experience on Highway, Heavy Construction, Wastewater Treatment Plants, Hotels, Casinos, Hospitals, and Government Facilities
- Work with Owners, Designers and Contractors to develop and defend against claims
- Board Member of ASCE Claim Avoidance and Resolution Committee



# Construction Claims

“A construction problem becomes a claim when someone asks for money.”



# Before Problems Arise

- Know the Contract
  - ◆ The Contract states how the Owner expects the Project will be executed and the desired results.
  - ◆ The Contract should dictate each stakeholder's responsibilities.
  - ◆ The Contract states how the Contractor will be compensated.



# Contract Document Pitfalls

- Ambiguities
- Conflicting Information
- Omissions



# Interpretation of Contract Documents

- Order of precedence as defined in contract
  - ◆ Detailed Specifications over Drawings
  - ◆ Drawings over Standard Specifications
- In general more detailed will apply
  - ◆ Details over Standard Drawings
  - ◆ Calculated Dimensions over Scaled Dimensions
- Many courts look to equitable considerations rather than technicalities of the contract language



# Contract Schedule Specification

- ◆ What are the Project Milestones
  - ◆ Liquidated Damages
  - ◆ Early Completion
- ◆ Schedule Requirements
  - ◆ Schedule Program
  - ◆ Level of Detail
  - ◆ Types of Relationships
- ◆ Who owns Project float?
- ◆ No Damages for Delay clause
- ◆ Recovery schedule requirements
- ◆ How to request time extension



# Baseline Schedule

- ◆ This is the Contractor's plan to construct the Project based on the bid documents
  - ◆ Realistic logic and durations to meet all Milestones
  - ◆ Anticipate reasonable weather impacts
  - ◆ Include Non-work periods for seasonal work
  - ◆ Long Lead Items
  - ◆ Buy-in from subcontractors





# Baseline Schedule (Cont.)

- Baseline Schedule Critical Path
  - ◆ Review near critical paths
- What if the Baseline is not approved?



# Schedule Updates

- Status the Project periodically
- Revise logic and durations to reflect changes in the field and Contractor's plan
- Update submittals and utility information
- Track RFIs and Potential Change Items
- Submit schedules to Owner for approval



# When Problems Arise

- Notice
  - ◆ Follow Contract requirements
  - ◆ Miss a notification deadline; a claim can be denied
- Document the Issue
- Add an activity for the Issue into the schedule with appropriate durations and logic and assess how it impacts the schedule.



# Construction Claims

- Changes in Scope (Disputed Changes)
- Delay
- Disruption



# Changes in Scope

- Directed Changes
- Constructive Changes



# Delay v. Disruption

- Delay – Disputes over time of performance
- Disruption – Disputes over labor productivity



# Categories of Schedule Delay

- **Excusable Delay** – Delay that excuses late performance.
  - ◆ **Compensable** – Contractor reimbursed for time-related costs.
  - ◆ **Non-compensable** – Contractor is precluded from reimbursement for time-related costs.
- **Non-Excusable Delay** – Delay within the control of the Contractor.



# Concurrent Delay

- Two or more delays occurring in the same time frame on separate critical paths with both affecting the overall completion of the project.
- If one of the delays is due to the Owner a concurrent delay is excusable
- Concurrent delays prevent either party from recovering damages.





# Other Delay

- **Force Majeure**
  - ◆ Acts of God (Hurricane, Labor Strike, Etc.)
  - ◆ Excusable
  - ◆ Not Compensable

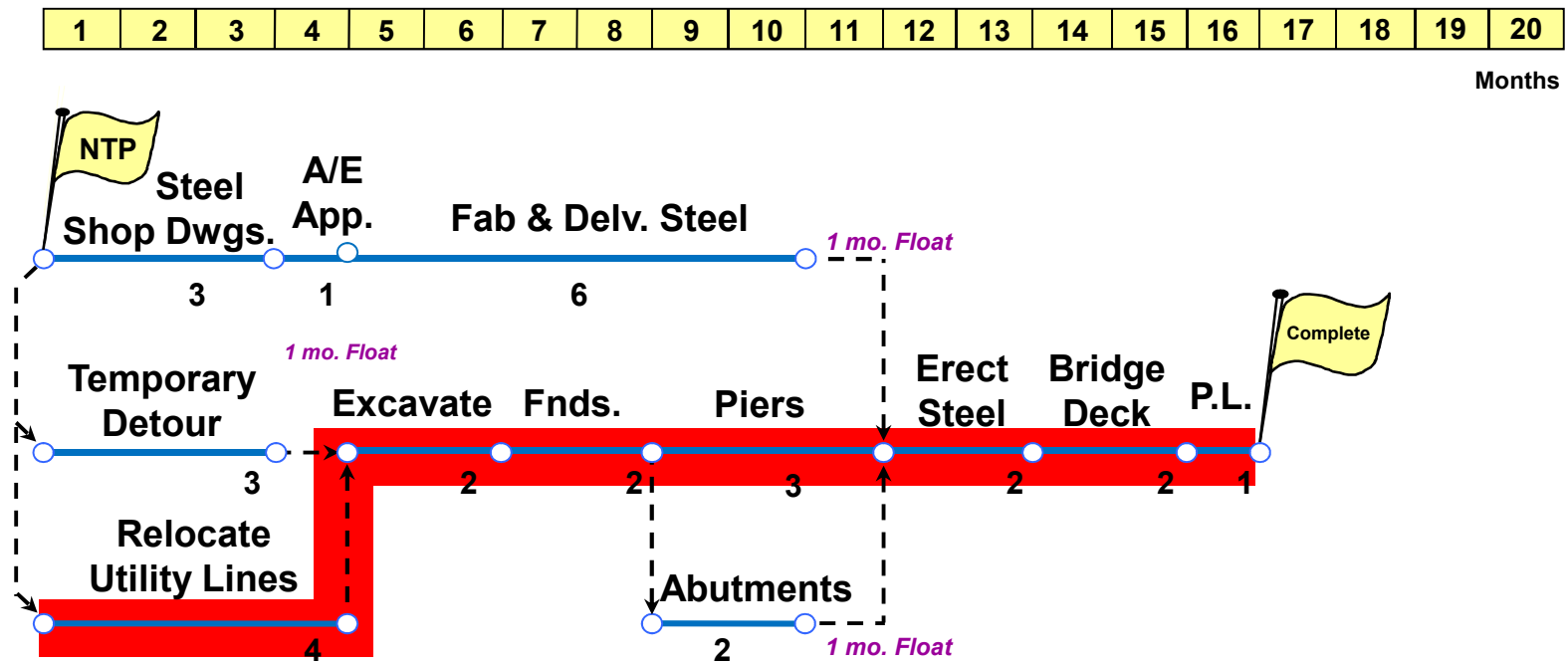


# Project Example

- **Project:** Construction of multi-span highway bridge
- **Value:** \$25 Million
- **Contract Duration:** 16 months
- **Liquidated Damages:** \$10,000 per day



# As-Planned Schedule



## Activity Description

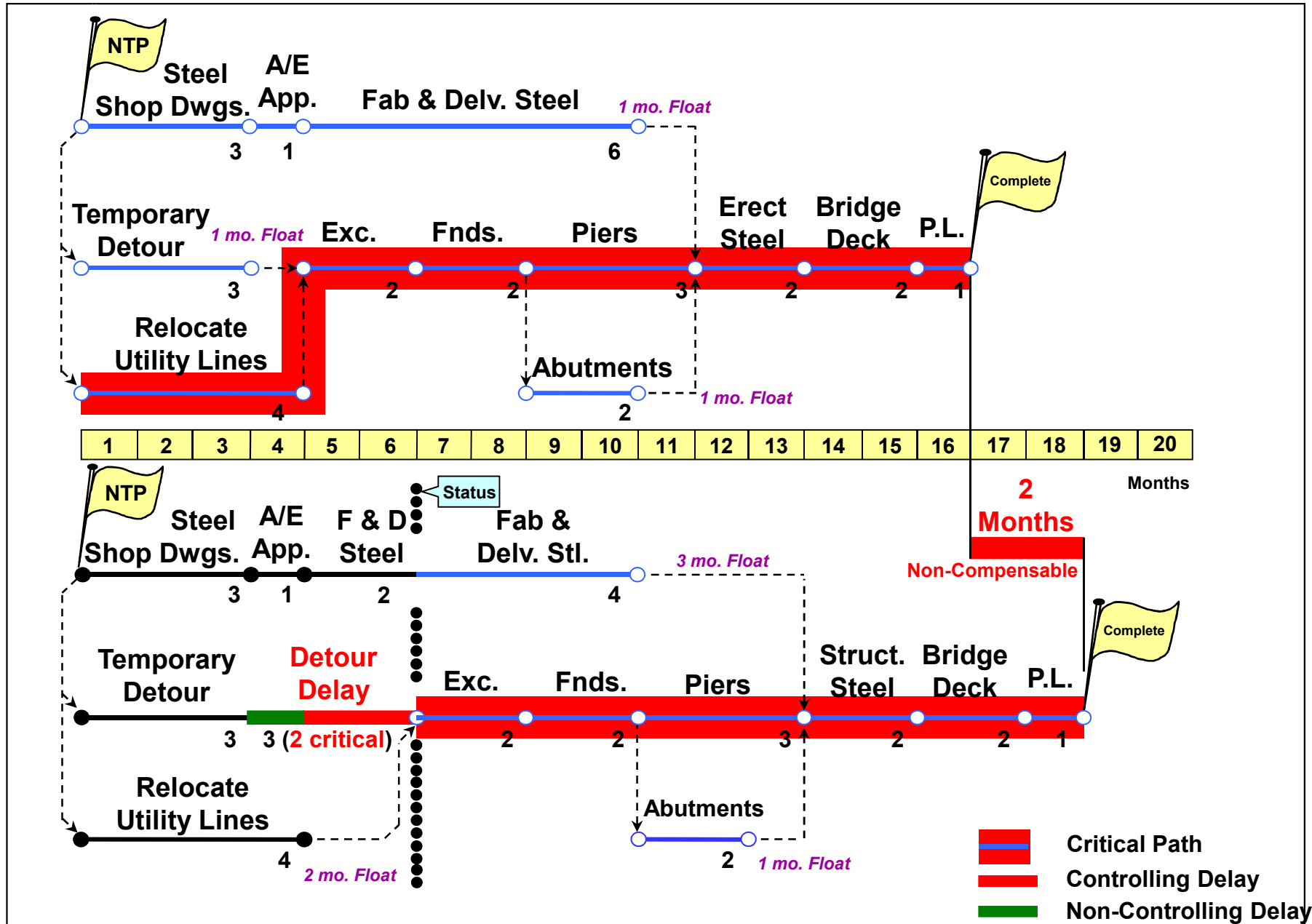
- Duration in Months
- Logic Restriction
- Critical Path
- 1 month Float

# Assessing Delay

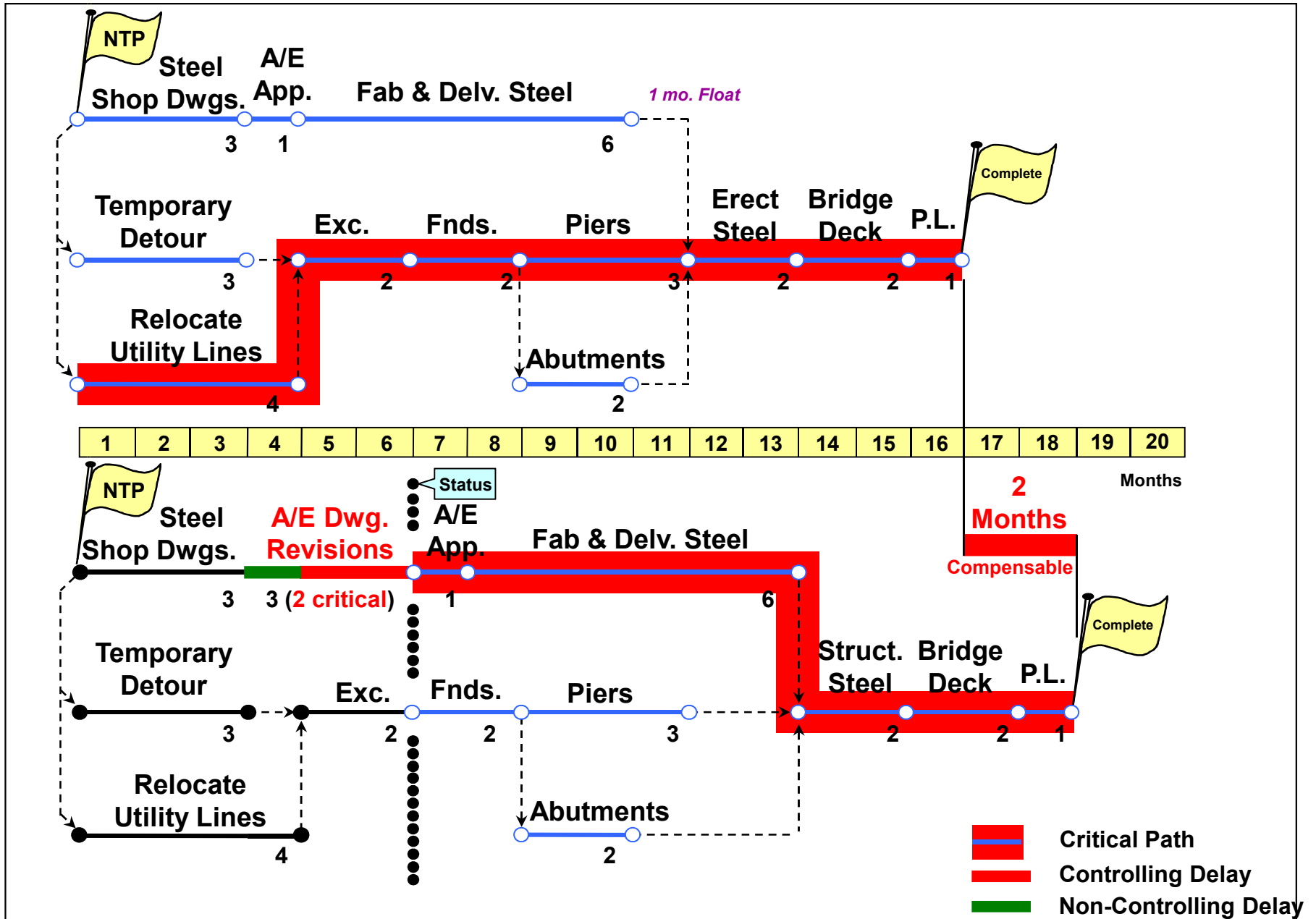
- Establish as-planned schedule
- Reflect planning changes and as-built history
- Evaluate delays against a schedule reflecting status of the project at the time the delay occurred
- Analysis must be thoroughly grounded in the project records
- Loss of Float vs. Critical Path Delay



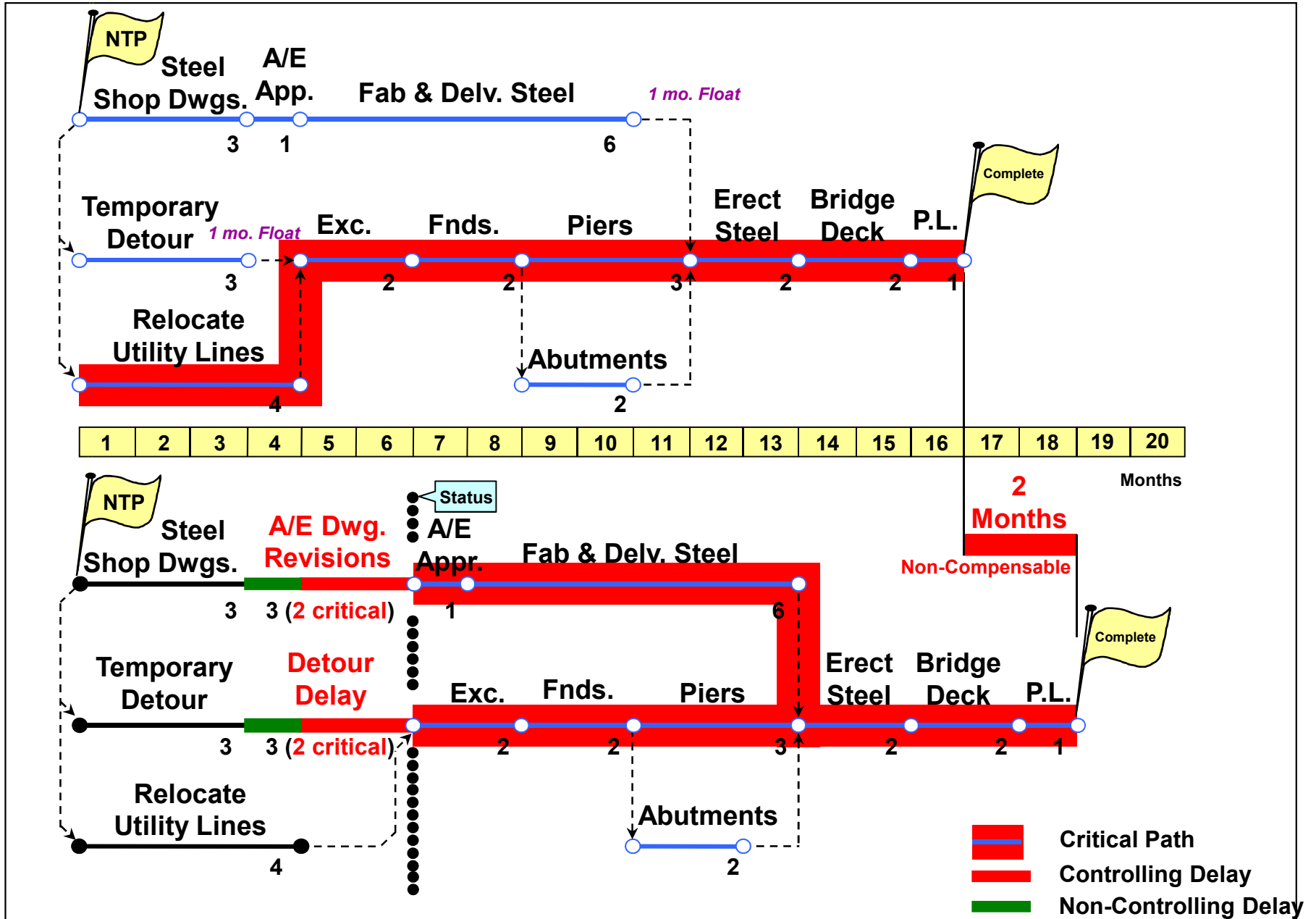
# Non-Excusable Delay



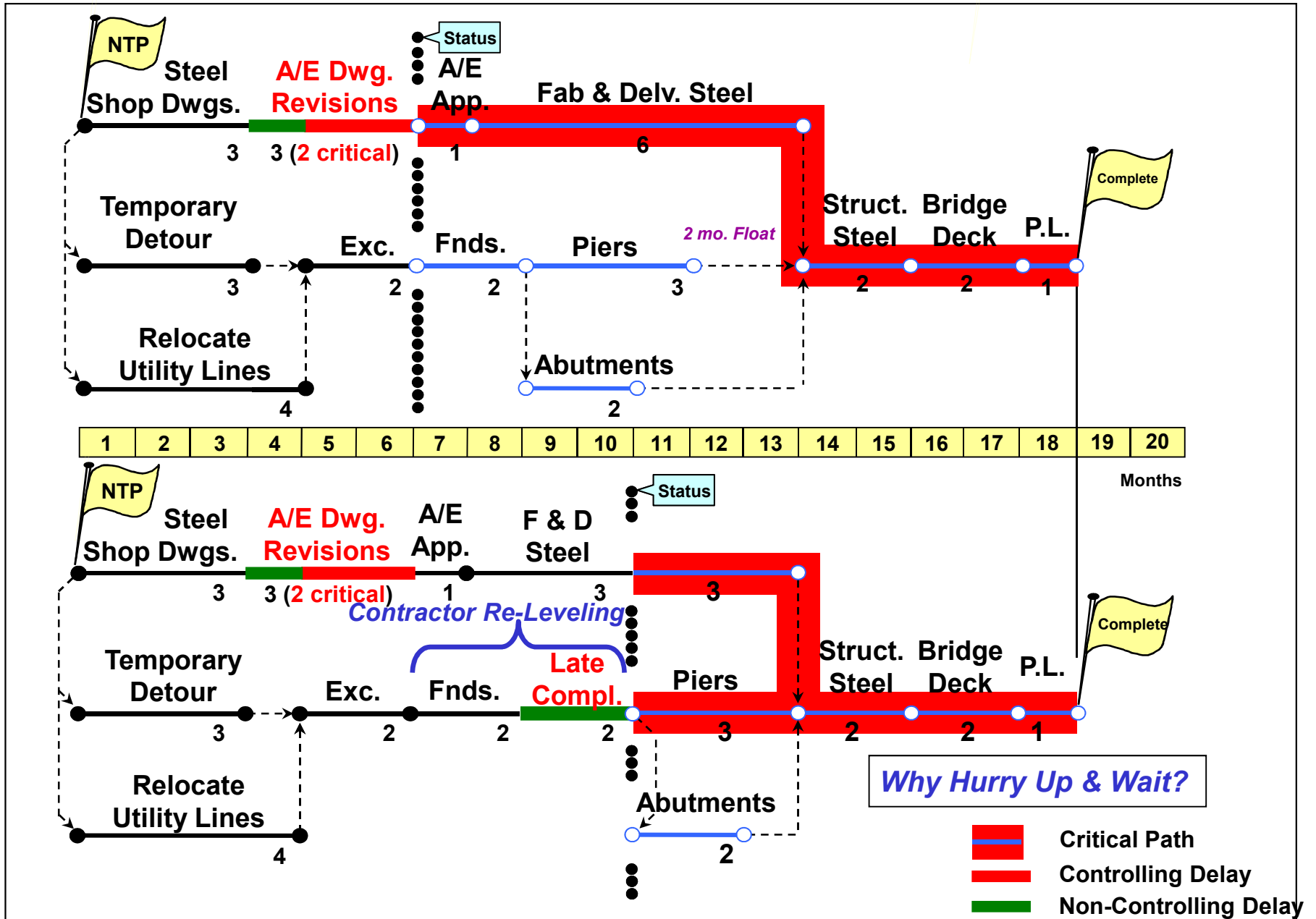
# Excusable Compensable Delay



# CONCURRENT DELAY – EXCUSABLE/NON-COMPENSABLE



# CONCURRENT OR COMPENSABLE DELAY?





# Acceleration

- Expediting progress of the work
  - ◆ **Directed Acceleration** – Owner directs contractor to accelerate work.
  - ◆ **Constructive Acceleration** – Contractor's response to an action by the Owner that can be construed as a demand to overcome the effect of previous excusable delays.
- Contractor must provide notification
- Owner will pay for premium time and inefficiencies

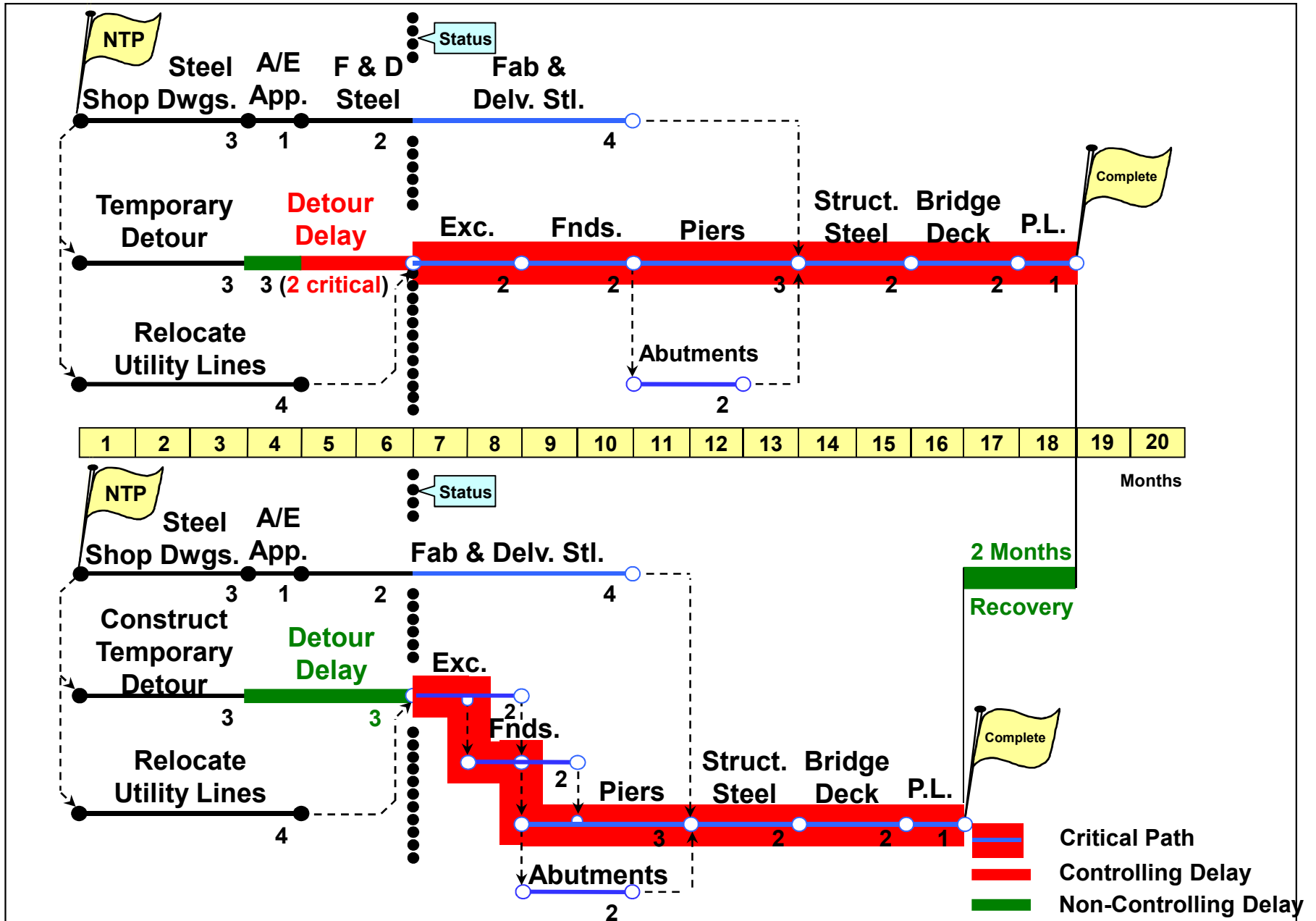


# Recovery Schedules

- Contract may have triggers for Contractor to implement actions to meet contract milestone.
- Delayed Milestones are due to Contractor performance.
- Contractor is required to use additional resources, work longer and revise schedule.
- Not paid by Owner



# Recovery



# Disruption

- Disruption – Disputes over labor productivity
  - ◆ Results from changes in the method of performance, resources, or planned sequence of work.



# Disruptive Events

- Numerous changes
- Slow response to requests for information
- Tardy drawing reviews/inspections
- Interference with other contractors
- Limited site access
- Material availability problems
- Lack of planning and management
- Adverse weather conditions





# Causes of Labor Productivity Losses

- Overcrowding
- Stacking of trades
- Out of sequence work
- Extended overtime
- Changes in crew size
- Restricted access







# CONSTRUCTION COST ELEMENTS

<b>TOTAL COST</b>						<b>NET PROFIT</b>
<b>DIRECT COST</b>				<b>OVERHEAD</b>		
<b>LABOR</b>		<b>EQUIPMENT</b>	<b>MATERIAL</b>	<b>DIRECT OVERHEAD</b>	<b>INDIRECT OVERHEAD</b>	
<b>DIRECT LABOR</b>	<b>PAYROLL BURDENS</b>			<b>GENERAL CONDITIONS</b>	<b>HOME OFFICE</b>	
<ul style="list-style-type: none"> <li>• Craft Labor</li> <li>• Supervision</li> </ul>	<ul style="list-style-type: none"> <li>• Fringe Benefits</li> <li>• Insurance &amp; Taxes</li> </ul>	<ul style="list-style-type: none"> <li>• Leased</li> <li>• Owned</li> </ul>	<ul style="list-style-type: none"> <li>• Direct Material</li> <li>• Sales Tax</li> </ul>	<ul style="list-style-type: none"> <li>• On-Site Staff</li> <li>• On-Site Facilities</li> <li>• Permits &amp; Fees</li> </ul>	<ul style="list-style-type: none"> <li>• G &amp; A</li> <li>• Marketing</li> </ul>	

**EICHLEAY**

**DELAY**

Escalation	Standby	Escalation	Extended Performance
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**DISRUPTION**

Lost Productivity			
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**ACCELERATION**

Additional Resources / Inefficiency	Expediting		
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# Proving Lost Productivity

- Total cost method
- Modified total cost method
- Industry guidelines
- Comparison to industry standard
- Comparison to contractor's historical productivity
- “Measured Mile” – Comparison of impacted period to non-impacted period on project

*Selected method depends on available records.*



# Overhead Costs

- Overhead Costs
  - ◆ Home Office Staff
  - ◆ Home Office Expenses
  - ◆ Misc. Home Office (Travel, Legal)
  - ◆ Depreciation on equipment
- Eichleay



# Termination

- Termination for Convenience (T for C)
  - ◆ Owner ending contract when it suits its needs but not in bad faith
  - ◆ Owner must still pay terminated contractor damages (payment for work completed, demobilization costs, subcontractor close out costs, plus profit on work completed.)
- Termination for Default (T for D)
  - ◆ Nuclear option for Contractor's non-performance
  - ◆ Owner bears burden of proof to show contractor was in default--otherwise it is T for C.



# Settlement of Claims

- Negotiation of Change Orders by all parties
- Mediation
- Arbitration
- Claim Board
- Courts



# Tips for Approaching a Claim

- Be truthful
- Be reasonable about impacts and damages associated with it
- Know the Contract
- Be prepared to explain and defend your claim
- If possible, seek mediation
- Involve counsel



# Warning against Overstating Claims

- Federal False Claims Act
  - ◆ Knowingly submitted false claims to the U.S. Government
  - ◆ Civil penalty plus triple the amount of damages claimed.



# Additional Resources

- ASCE Claim Avoidance and Resolution  
[www.asce.org](http://www.asce.org)
- American Association of Cost Engineers  
International [www.aacei.org](http://www.aacei.org)
- [www.bestpracticesconstructionlaw.com](http://www.bestpracticesconstructionlaw.com)





# Questions



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