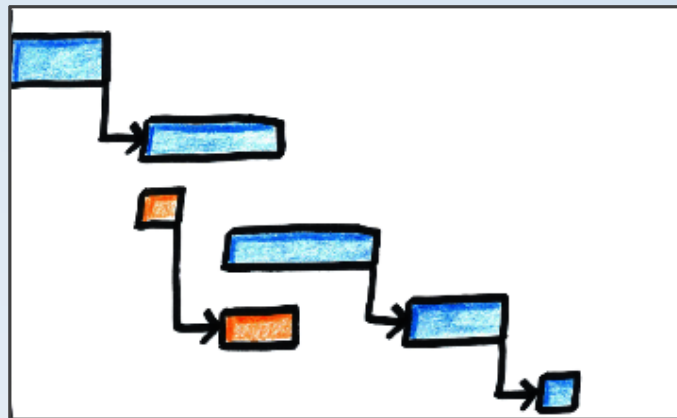


Critical Path Method Schedule Special Provision

APAM Conference - February 16, 2017



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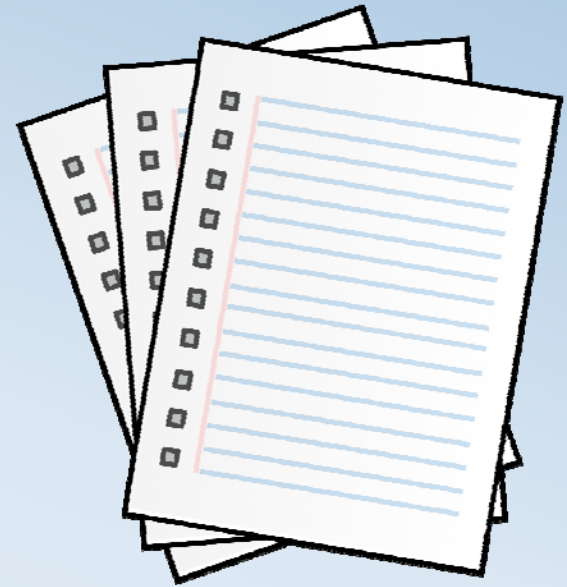
WHY?



- Existing statewide Frequently Used Special Provision was written in 2002 - Outdated
- Increased emphasis and scrutiny
 - Innovative contracting
 - Complex, time-sensitive projects
- FHWA Initiative

Critical Path Method Network Schedule SPs

- 2002 Statewide FUSP
- 2014 Metro Region PASP



Spec Development Collaboration

MDOT Construction Field Services

Consultant – Scheduling Expertise

MITA Ad Hoc Committee

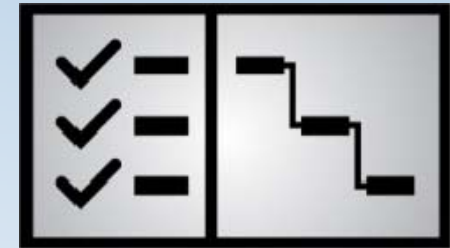
- Keep it simple
 - One Special Provision to cover all projects
- Metro PASP used as foundation to create new
- Meetings to discuss and develop an SP that works for all parties

Spec Comparison

Spec	Scheduler Qualifications	Software
Statewide FUSP	No	Any approved, Contractor submit 1 copy to MDOT
Metro PASP	Yes	Primavera, Contractor submit 1 copy to MDOT
New Statewide FUSP	Yes	Primavera, no software needs to be provided

Why Primavera P6 Software?

- Industry standard scheduling software
- Many other State DOTs require it
- Other software options have limitations



	License Fee						Update License and Support
	1 year	2 year	3 year	4 year	5 year	Perpetual	
Primavera P6 Professional Project Management	\$500	\$875	\$1,250	\$1,500	\$1,750	\$2,500	\$550
Primavera Contractor						\$1,295	\$285

Spec Comparison

Spec	Baseline Submittal After Award	Approved Baseline After Award	Interim Schedule
Statewide FUSP	15 days	30 days	No
Metro PASP	15 days	Prior to construction operations	No
New Statewide FUSP	15 days	Prior to permanent field work, 60 days	Yes, reflecting the first 90 days

Spec Comparison

Spec	Updates	As-Built/ Final Updated Schedule	Look Ahead Schedule	Narrative
Statewide FUSP	Monthly	No	60 days	Yes
Metro PASP	Monthly	Yes	4 weeks	Yes
New Statewide FUSP	Monthly	Yes	4 weeks	Yes

Spec Comparison

Spec	Resource Loading	Payment
Statewide FUSP	Yes	None, included in work
Metro PASP	Yes	Yes, Lump Sum bid item
New Statewide FUSP	No	Yes, TBD (established budgetary amount)

Time Extensions & Delay Analysis

Prospective Delays

Time Impact Analysis(TIA)

Use a fragmentary network (fragnet) modeling the potential delay and insert into the approved schedule to illustrate the impact on the critical path

Retrospective Delays

Windows Analysis

Using the approved schedule and updates, identify and track the critical path throughout the delay period to quantify and equate delays

Spec Comparison

Spec	Year	# of pages
Statewide FUSP	2002	6
Metro PASP	2014	9
New Statewide FUSP	2017	13

What type of projects will this be on?

- Developed a Decision Making document to help determine if the SP is appropriate for certain projects
- Don't expect a drastic change in the types and quantity of projects

Summary

- New Statewide SP to replace outdated existing SP
- Primavera Software required
- CPM Schedule used a valuable project management tool