

Critical Path Scheduling

CONSTRUCTION SCHEDULING FOR CONTRACTORS AND SCHEDULE REVIEW FOR PROJECT OWNERS

We are recognized as one of the nation's leading scheduling consultants with over 650 schedules prepared, reviewed, or analyzed; a McGraw-Hill reference book and dozens of articles; several thousand managers trained in CPM scheduling; and authorship of a powerful scheduling software program.

OUR TEAM OF EXPERTS

Steve Pinnell, President, P.E.

Steve is a nationally recognized expert in critical path scheduling with 40+ years experience as a hands-on scheduler, trainer, author, and developer of scheduling software and innovative scheduling techniques. His book, published by McGraw-Hill, has a major focus on preparation and review of design and construction schedules, and the use of schedules in delay, acceleration and impact claims.

Blake Marchand, Scheduler

Blake is our Lead Scheduler and a Senior Project Manager with 15 years experience in scheduling and managing major construction projects, including eight years resolving construction disputes. He also teaches MS Project and Primavera scheduling software.

Scheduling Staff

Schedulers and Cost & Scheduling Control staff are available to support any size of project.

Preconstruction Scheduling for Project Owners and Architects/Engineers

We prepare master schedules for large design and construction programs or multi-project public works programs to control progress, reduce financing costs, and avoid delays. This includes consideration of urban planning issues, environmental regulations, cash flow forecasts, funding and permitting. We also estimate construction contract durations or provide proposal schedules to help win contract competitions. And, we can integrate our master scheduling specification into construction contracts.

Detailed Construction Scheduling for Contractors

We help contractors and subcontractors prepare pre-bid, baseline, update, and recovery schedules that meet contract scheduling requirements, achieve on-time completion, forecast manpower and cash-flow, and avoid trade stacking, acceleration, or impacts. Our hands-on knowledge of construction means and methods, high level of scheduling expertise, and well-practiced procedures ensure accurate, doable schedules and protect contractors from uncompensated delays and impact.

Schedule Review and Tracking for Project Owners and Consultants

We help project owners and their consultants review contractors' baseline schedule submittals, monthly updates, and recovery schedules to ensure achievable schedules that protect against delays and claims. We also help establish recordkeeping and contract administration procedures to oversee progress and refute unwarranted delay or acceleration claims.

Troubleshooting, Change Management, and Claim Preparation or Review

We can audit progress, identify the cause and solution for delays or impact, re-schedule, and help negotiate resolution. We also provide change management procedures and support to ensure resolution through the contract changes clause instead of the disputes clause. If necessary, we serve as expert witnesses in mediation, arbitration or litigation. And, we can work with all parties to resolve problems, create win-win solutions, and negotiate fair settlements through team building and partnering.

Organization-wide Scheduling Procedures, Training, and Software

As management consultants, we provide scheduling and change management procedures, training, and software to help public works agencies, facility managers, developers, contractors, and subcontractors. We are also sub-dealers for Primavera scheduling products.

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Project Management
Consultants for the Design
& Construction Industry

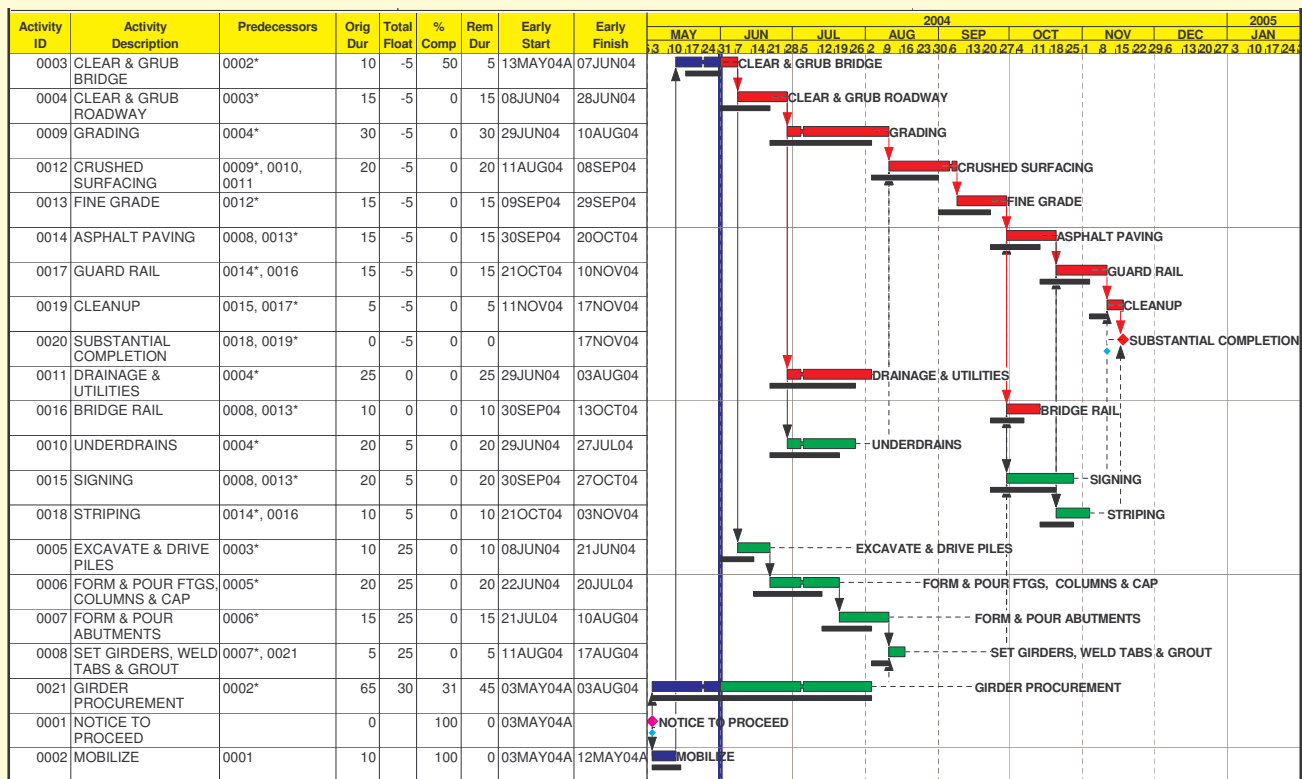
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Critical Path Scheduling

Recommended Report Format for Schedule Review

With over 650 projects scheduled for contractors, reviewed for project owners, or analyzed in preparation or defense of scheduling claims, we believe the following example best illustrates our scheduling expertise. It is a good guide for contractors generating schedule reports, and for owners reviewing a contractor's schedule.

1. **Combination Tabular Report and Graphical Bar Chart** – two essential elements of a CPM schedule report, facilitating both a quick visual understanding and detailed analysis.
2. **Basic Scheduling Information** – activity, number, description, predecessors, duration, float, % complete, and early/late start dates are the minimum needed. Show responsibility and work area for each activity if possible.
3. **Predecessors** – are essential for understanding the network logic. Show successors and late start/float if possible to aid analysis.
4. **Total Float** – is needed for defining the critical path, with negative float indicating delay.
5. **Comparison Schedule** – allows graphical display and analysis of schedule updates and comparing actual progress with plan – showing delay, longer-than-planned durations, logic changes, etc.
6. **Sort by Float, then Early Start** – focuses attention on the critical path and shows the logical sequence of activities, with concurrent critical paths and near-critical paths prominently featured.
7. **Status, Float and Relationship Lines, plus Color** – graphically shows the data date, float and relationships between activities with the critical path (red), non-critical activities (green), and completed activities (blue).



Anyone familiar with construction can analyze the report, identify problems and take action before it's too late:

1. The overall project status, any delay or acceleration, and forecast completion date will be apparent.
2. The planned sequence of construction can be readily confirmed or challenged, and unreasonable durations and missing or illogical relationships will be easier to identify.
3. Late starts or projected late finishes, along with longer than planned durations, will be obvious.
4. Attempts to hide delays will be evident if actual durations are longer than planned, future durations are shorter than originally planned, and logic ties of sequential activities are broken or loosened.

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