

American Road & Transportation Builders Association (ARTBA)


Representative Contractor Feedback on the Administration of Construction Scheduling Issues









Prepared for the AASHTO Subcommittee on Construction Contract Administration Section





1. The Baseline Schedule (As-Planned Schedule) should be prepared and submitted as early as possible once the project is awarded, no more than 60-90 days thereafter, depending on project size and complexity. The Baseline Schedule should reflect how the Contractor envisioned the project at the time of bid. The schedule should be based on the contract documents/specs at bid time, not necessarily based on planned methods at bid time. This will prevent either party from adjusting the schedule to their own benefit based on impacting “as built” events that may have occurred since award. The baseline schedule should not change, but rather subsequent updates should incorporate changes.
2. For record purposes, the Contractor should be required to submit an electronic copy (disk) of all schedule submissions, directly from the scheduling software, not a PDF file, along with its hard-copy submission.
3. The Owner’s schedule reviewer must produce timely reviews of both the original baseline schedule and the updates required by the contract provisions. The timely reviews should be defined with the number of days allowed clearly stated. Subsequent updates should not be due until at least five (5) days after the comments on the previous update are received by the Contractor. Many times the next schedule update is due prior to the Contractor’s receipt of comments from the previous update.
4. By delaying timely reviews of updates, the reviewer can use hindsight in unfairly providing pro-Owner comments that weaken what could be a Contractor’s legitimate claim for a time extension. The schedule should show accurate progress through the data date of the update without the benefit of the knowledge of what occurred subsequent to the data date. If the Contractor has an update submittal deadline, the reviewer should also have a deadline to provide comments on that update.
5. The Contractor should provide a written schedule narrative with every schedule update. The narrative should address all problem areas, any delays encountered, as well as identify areas of “potential” impact. Documentation of any logic revisions that have been incorporated into the schedule update should be included. A discussion of the current critical path should also be addressed in the written narrative. The narrative should be limited to the items that have changed and to the impact on the remainder of the project.
6. The Contractor should not be required to revise logic based on hindsight resulting from the period of time between the update’s data date and the actual review date. The actual dates for completed work will eventually be entered in the appropriate update.

7. Data should not be manipulated by either side for self-serving purposes. The schedule should simply be an unbiased representation of the facts regarding the project. Avoid focusing on the minute details or the intricacies of the schedule at the risk of missing the “big picture.”
8. For the schedule to be effective there must be a partnership atmosphere. Although the schedule may be used later to prove or disprove a claim, a “gotcha” feeling by either side must be avoided at all costs. For many reasons other than scheduling, an initial partnership meeting is desirable. A discussion should be held prior the start of the project between the scheduling representatives from both sides to set the ground rules on how the baseline schedule and updates will be handled, as well as to coordinate the appropriate software “settings” that will be utilized. Both the Owner and Contractor’s representatives should be willing to work together to achieve this goal.
9. The schedule should be a management tool, not just a required report. Requirements for update frequency and content should be clear and reasonable. The schedule should be as forward-looking to mitigate delays as it is backward-looking in order to verify a delay.
10. The schedule should be a tool used to allocate manpower and resources as efficiently as possible, while mitigating any changes and/or delays that may arise. In order to effectively do so, it is important to incorporate those impacts into the schedule as soon as they become apparent, including any ongoing or known future impacts.
11. In order to maintain a complete and useful “as-built” record for the work, the Contractor should be required to provide accurate as-built (start and finish dates) dates for all work that was completed during each update period.
12. The required complexity of the schedule should vary based on the size and complexity of the project. Common sense should dictate the appropriate level of detail needed. The Owner should clearly define the required schedule details in each case.
13. The purpose of the requirement for a schedule for all stakeholders should be the successful completion of the project. Planning and scheduling should not be viewed as merely an administrative function. Both sides must put in appropriate efforts.
14. The Contractor is the construction expert. While the Owner or the Owner’s representative might be schooled in scheduling and schedule review, that person is usually not an authority on construction means and methods. The reviewer should not “talk down” to the Contractor or the team spirit will be lost. Mutual respect among all stakeholders is critical to ensure cooperative efforts.
15. It might be appropriate to require the Owner’s reviewer to have some actual construction experience. As an alternative, the Owner’s field representative should be actively involved in the schedule review if the reviewer lacks field experience.
16. The feeling that the construction schedule is an important tool starts with direction from the top, especially within the Contractor’s team which is always composed of production-oriented personnel. It is understood that both sides need the expertise to understand the schedule.
17. How is float in the schedule treated? Who owns the float? To clarify the issue, a float ownership clause should be included in all scheduling specifications. As such, defining float as “project float,” available to whichever party uses it first, might be a mutually agreeable solution. Float

ownership is often a controversial issue. Because the Contractor bears the most burden of scheduling and risk on the project, the float ownership rights should lean toward the Contractor. 

18. How do we create the mutual sense that the schedule is a useful tool rather than a “hammer” for either side to use against the other relative to claims for money or time? Open communication and honest negotiations amongst the parties involved would be helpful to achieve this goal. Litigation is usually not a financially successful outcome for either party, so avoidance would seem to be the best solution. 
19. Develop an understanding that “Time = Money” and that a proper schedule actually saves time. All sides “win” if a project can be achieved with an early completion through partnering and working together. 
20. The Owner must convey in the specifications that they are not only serious about requiring a good and useful schedule, but that they are willing to pay for the effort, especially in a competitive environment. Again, “Time = Money,” and an early completion will help both sides achieve their goals. 
21. To ensure that the Contractor exerts the proper effort toward providing a useful schedule, the Owner should consider providing an allowance bid item where the Contractor is compensated for actual costs expended for schedule-related activities. This will place all bidders on an equal footing. This will also provide a means of payment for the cost of excessive schedule revisions resulting from unanticipated extra/additional work or changes in scope. 
22. If the payment for the schedule is by means of a regular bid item or if there is no specific bid item, Contractors should receive additional compensation for providing schedule revisions due to delays for causes beyond the Contractor’s control. 
23. Extensions of time should be “automatic” for delays beyond the Contractor’s control and for additional work unless the Owner directs an acceleration effort or otherwise mitigates the additional time required to complete the contract. 
24. The Baseline Schedule should incorporate any anticipated inclement weather days and/or seasonal restrictions, as shown in the specifications, or based upon the Contractor’s previous experience. This will provide a realistic calculation of the proposed interim and final completion dates for the project. Unusually severe weather impacts encountered should be appropriately compensated by the Owner on a monthly basis. If the potential future impacts of weather are to be included in the Baseline Schedule, then this requirement should be made expressly clear in the contract documents. Assurances should be given that the same consideration was made in the development of the initial contract time. The fairest approach is to analyze any occurrence on a case-by-case basis. If the critical path is impacted by more than 50 percent in any given day, then time should be granted on a one-to-one basis. 
25. The Baseline Schedule should be grouped and sorted by an appropriate means (i.e. work breakdown structure, activity codes, etc.) to convey the Contractor’s work plan in an easily understandable product (i.e. hard copy printout). If it cannot be understood, then it will not be used and may be virtually worthless. 
26. The Contractor’s schedule representative should be sufficiently proficient in the use of the scheduling software that will be utilized on the project. Also, the Contractor’s schedule

representative should have access to an experienced, field-knowledgeable mentor (Superintendent, Project Manager, etc.) who will assist him/her in properly updating the schedule with the appropriate dates and logic revisions. 

27. When the Owner establishes the initial contract time, he/she should be held to the same standard of proficiency as the Contractor. Rather than looking at the overall quantities and saying “that should take this long,” the Owner or the Owner’s representative should completely account for phasing, the “as-final-designed” impact of construction phasing on utility installations, utility relocations by others beyond the control of the contractor, sequencing of any utilities to be installed by the contractor, weather allowances if not granted on an as-incurred basis, etc. 

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