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Whose Schedule Is It, Anyway?

An Alternative Approach to Construction Project Scheduling

by Craig Lindquist, P.E., M.ASCE

Construction scheduling takes many forms, some more effective than others. The most widely accepted format for scheduling is a Critical Path Method (CPM) network. Regardless of the method employed, the schedule is a key component of virtually every construction project. If the project completes on time, the scheduling effort is considered a success. If not, it is likely to become the focal point of a costly dispute.

The conventional approach to scheduling is to specify in the contract that the contractor prepare and manage the schedule, with little or no input from the owner (who doesn't want to be involved in "means and methods"), although the owner has the most to lose if the completion date is missed. Because construction schedules are typically subjective interpretations of activity durations and logic, the schedule is not something that can be quantitatively specified or evaluated. Many owners simply accept whatever is submitted by the contractor. Others choose to evaluate the schedule that was prepared for their project. Those who choose to evaluate will spend a great deal of time and money doing so; potentially, as much as the contractor did preparing the schedule, and those who don't might encounter difficulties during the project.

There is a distinction to be made between two separate components of scheduling. The primary component of any schedule is the plan. The plan for the work must be developed by the contractor and its subcontractors, within the confines of the contract documents. The schedule document, itself, is simply the "capture" of the contractor's plan into the CPM scheduling software.

With this distinction in mind, it is in the owner's best interest to take an active role in the capture of the plan into the schedule document. Thus, the owner will fully understand the implications of all constraints, lags and how the activities are tied together logically, which determines the float, or lack thereof, in any schedule. In order to do this, it is necessary to specify and develop a collaborative scheduling specification in the contract.

The best way to accomplish this is for the owner to engage a third party, impartial, consultant to "capture" the plan, because such an approach is most likely to develop a high level of trust among the consultant, owner, contractor and subcontractors. Developing trust between the project team members is not a new concept, as there is a similar level of trust involved in any successful "partnering" program. In fact, the two concepts have been quite successfully combined on a major project for the State of Missouri, where a single consultant provided the third party partnering and scheduling consulting services, completing a \$115 million prison project without a single formal claim.

When regularly updated, this collaborative scheduling

approach that includes the owner, designers, contractor and subcontractors has many benefits, including:

- timely schedule development with less overall effort/expense on the part of the contractor and owner;
- buy-in and “ownership” of the schedule by all project stakeholders;
- an open/transparent process for developing and updating the schedule;
- timely evaluation of the impact of weather, changes and/or unforeseen conditions; and
- the ability to address scheduling disagreements immediately, greatly increasing the chances that issues will be worked out “on the fly,” and not result in a dispute or claim at the end of the project.

When implemented, this “Owner-Controlled Scheduling Program” (OCSP), has established a monthly forum for honest, candid discussion of the myriad of issues that affect every construction project. Each project utilizing the approach has been completed in accordance with the contract, without any formal claims or disputes.

This OCSP approach requires the rethinking of long-standing attitudes that the “conventional approach,” consisting of the contractor developing and managing the schedule, is the only option. However, based on the number of claims and disputes that arise on “conventionally scheduled” projects, perhaps the time has come to explore a new approach. Remember when OCIPs were first proposed?

Craig Lindquist, a member of CI's Claims Avoidance and Resolution Committee, is President of CCS Group, Inc., a St. Louis based engineering and construction consulting firm, specializing in project management, CPM scheduling, dispute resolution, and specialized structural engineering. CCS has successfully implemented this Owner Controlled Scheduling Program with the State of Missouri, Division of Facilities Management, Design and Construction, the University of Missouri and Lincoln University of Missouri. Craig can be reached at craig.lindquist@ccsgroupstl.com or through their website, <http://ccsgroupstl.com/>. The opinions expressed in this article do not necessarily reflect the opinions and policies of ASCE and CI. ♦

Run for ASCE Office

In the recently concluded 2008 ASCE elections, Geo-Institute (G-I) former Governor Blaine Leonard was elected as ASCE President-elect and Ron Smith, former G-I President, was elected to the ASCE Board of Direction as Technical Region Director. Both will be sworn into office on Saturday, November 8, 2008 in Pittsburgh.

Next year, it could be a CI member! Each year, the Construction Institute has the opportunity to nominate a candidate for ASCE President-elect, and a candidate for Technical Region Director. If you are interested in seeking CI's nomination, please send a letter of interest and resume to Marvin Oey by November 15, 2008. ♦

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