the CPM schedule what is it and how to use it

THE CPM SCHEDULE

The critical path method (CPM) is a step-by-step project management technique for process planning that defines critical and non-critical tasks with the goal of preventing time-frame problems and process bottlenecks. It is a diagram that shows each task in relation to each other.

HOW IS A CPM SCHEDULE PUT TOGETHER

To build a CPM schedule the following information is required:

- The activities (tasks) required to complete the project.
- The time that each activity will take to complete.
- The dependencies between the activities (which tasks h
- The milestones (date of the activities completion).
- Deliverables.

Using this information, the CPM program is built as follows:

- Define the required tasks and put them down in an ordered (sequenced) list.
- Create a flowchart or other diagram showing each task in relation to the others.
- Determine the expected completion or execution time for each task.
- Identify the critical and non-critical relationships (paths) among tasks and determine:
  - The longest path of intermediate tasks to the end of the project.
  - The earliest and latest that each activity can star without making the project longer.
- Locate or devise alternatives (backups) for the most critical paths.

So this process determines two kinds of activities:

- **Critical** - Activities located in the longest path so that if they are delayed they will cause the project to delay.
- **Float -** Activities that can be delayed without delaying the project.

And also identifies the"**Critical Path**" which is the sequence of project tasks which add up to the longest overall duration. The Critical Path is the shortest possible time to complete the project.

BELIEVE IT OR NOT, the above information was taken from WIKIPEDIA HTTPS://EN.WIKIPEDIA.ORG/WIKI/CRITICAL_PATH_METHOD

You might never have to put a CPM schedule together, but you will very probably be required to read and understand one when you do contract administration for a project, so find to more about this type of scheduling.

The following is the path to an excellent video on how a CP Schedule is put together. Spend 7 minutes of your time viewing it if you have never felt comfortable around CPM schedules, and this will definitely help with that.

Project Scheduling - PERT/CPM I Finding Critical Path by Joshua Emmanuel.

https://youtu.be/-TDh-5n90vk.

Use the schedule to manage your time. Listing your tasks, information needed at each stage, resources for the task, etc., will help you reduce waste in your time and activities.

When possible, use the information of the preliminary CPM schedule to take a look at the drawings.

Identify what needs to happen at the appropriate phase and determine the coordination tasks between disciplines, specially early in the project design phase:

- Confirm major building systems, including MEP, and their routing.
- Finalize life safety strategy.
- Verify accessibility clearances.
- Achieve horizontal and vertical dimensional control of major building elements such as the structural grid, expansion joints, and slab openings and other items that require strict coordination with other building elements and systems.

AIA Architect's Handbook of Professional Practice, 15 Edition, 10.6 Construction Drawings, Grant A. Simpson and Michael F Czap.