

# Pull Planning Workshop—Central California Valley

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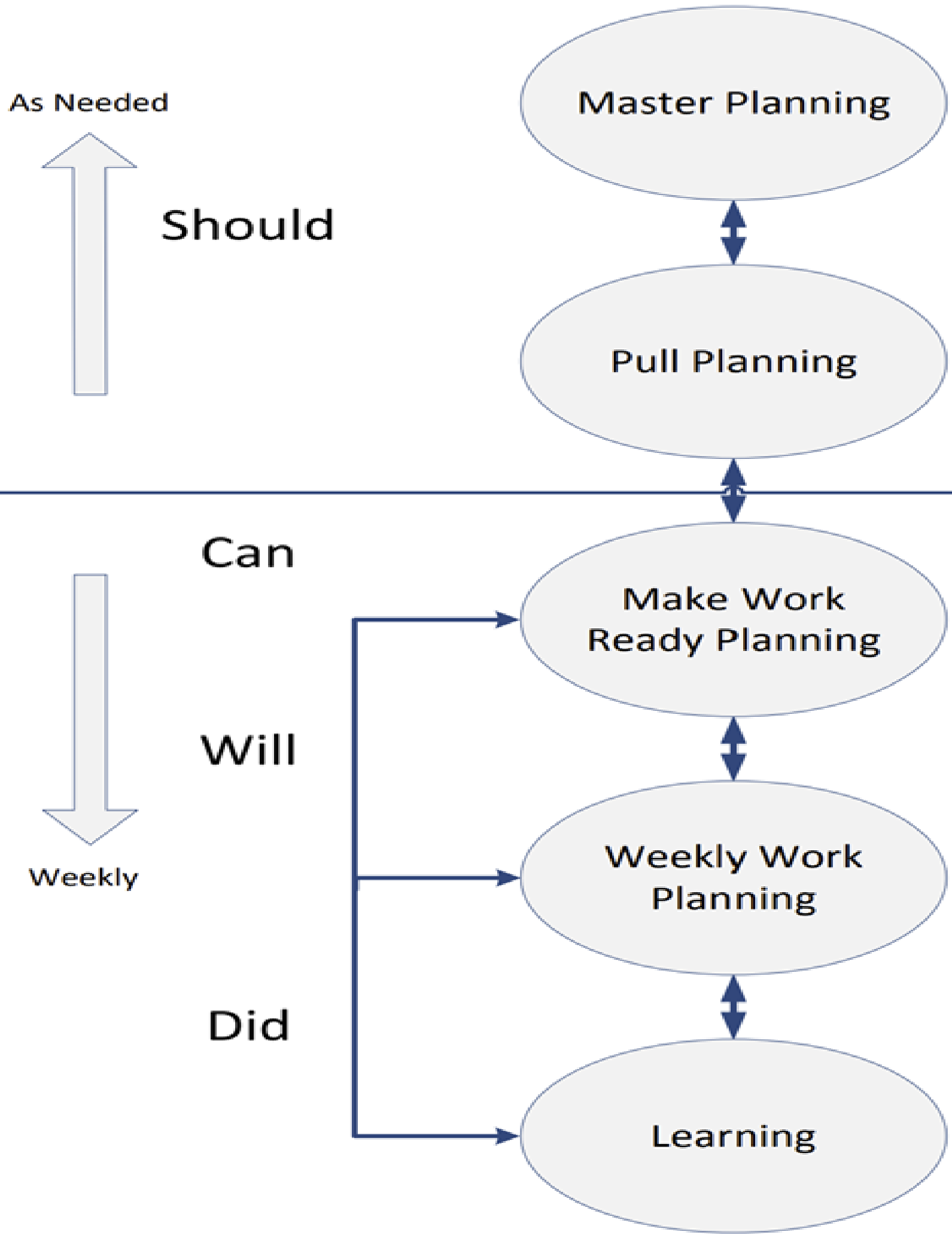
Lean scheduling and pull planning are both excellent methods of scheduling and sequencing a project. It has made huge impacts on scheduling for general contractors in southern and northern region of California. However, Central California has not been able to see the benefits and impacts of these scheduling tools because of the regions lack of use of lean scheduling and pull planning. Lean scheduling is a technique that encourages communication and collaboration between the project stakeholders. Pull planning offers project stakeholders a chance to rally together and collaborate. These pull planning sessions are useful for sequencing work to meet milestones or complete difficult construction activities. Through collaboration, we are able to eliminate waste and simplify the required work for the project. Central California is missing out on the benefits of this program. The traditional way of critical path scheduling is still the dominant scheduling method in this region. This workshop dives deep into defining what Lean scheduling is and what its benefits are. The workshop also helps to explain the full picture as to why lean scheduling and pull planning hasn't made an impact in Central California.

### Deliverables:

- PowerPoint Presentation
- Lean Scheduling/Pull Planning Handout
- Pull Planning Activity

### Central California Issue:

- Lack of Subcontractor Experience



LEAN SCHEDULING: PULL PLANNING

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Camargo,

Feedback Check

This check comes early on in the project. Identifying project constraints and any potential issues is the key to this check. The sooner we identify problems, the easier they will be to correct.

Pull Check

Comparing GC's sequences for specific milestones to subcontractors' sequences. Working backwards from the designated milestone to figure out sequence and durations to meet or beat the milestone's duration.

Workload Check

Manpower is an aspect of scheduling that can be overlooked. Once the pull check has been done, it is time to make sure we have the right size crew for the production. Overstaffing and understaffing slow down projects. A detailed manpower plan helps keep crew size at the right threshold.

Last Planner System

Communication can often be lost between the many entities of the project. Repeatedly, it seems the contact between the "last planner" (most often foremen) can be lost or never exist entirely. Seldomly, we find ourselves separated and communicate only through email or phone call with each other. In the Last Planner System, communication between foremen and project management is prioritized. Because of this prioritization, the last planner system is able to improve both design and construction project workflow reliability. This system consists of a planning phase that has stages:

Master Planning:

The intro stage of phase planning is all about establishing the promise of the project to the owner. In this stage we identify milestones and develop the master schedule.

Pull Planning:

This stage is the most collaborative out of the five because it involves the GC and the specific subcontractors for the distinctive milestone. Here we specify handoffs and define phases.

Make Work Ready Planning:

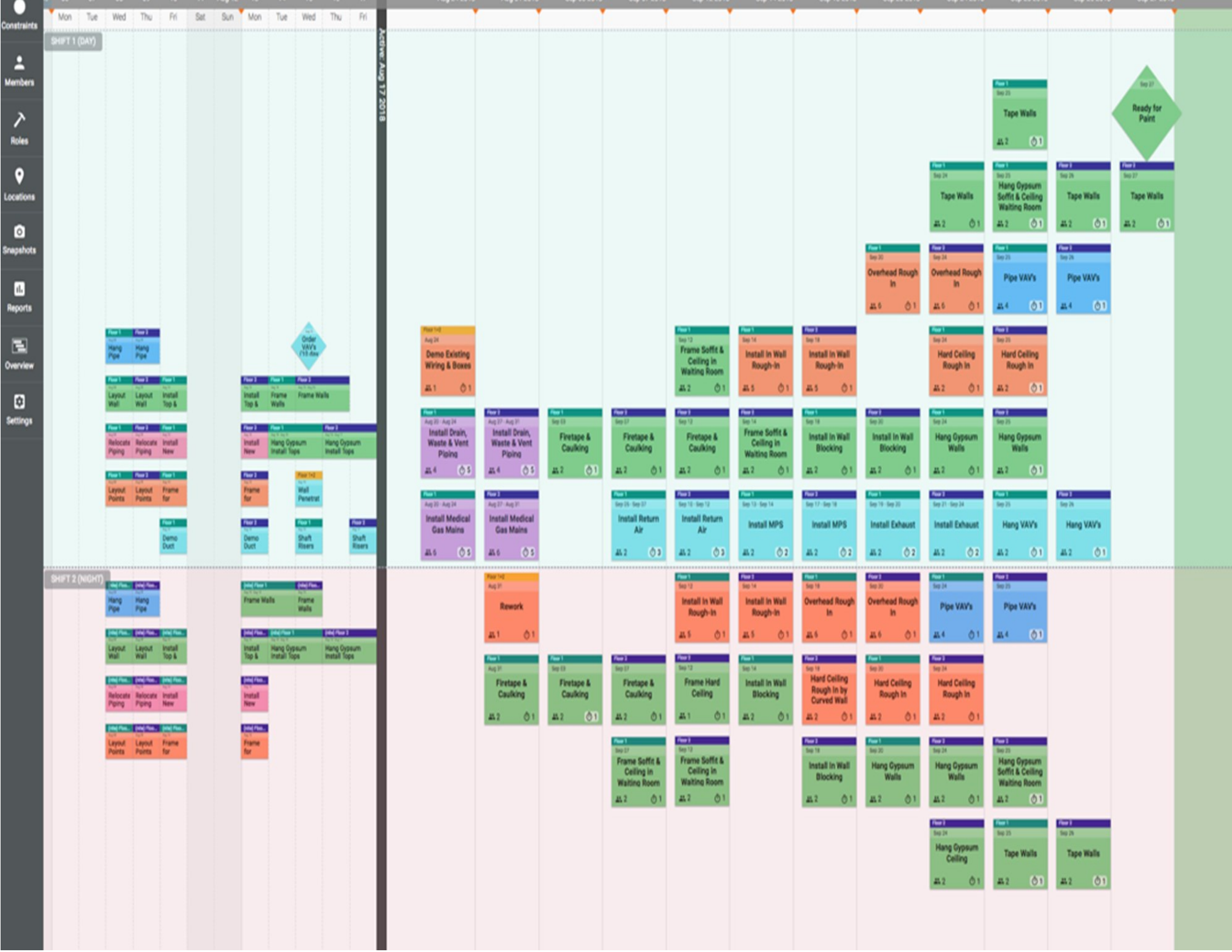
Removing constraints is the name of the game in this phase. We utilize a look ahead schedule in this phase that is associated with the identified milestone and focus on adding work that is "make ready". This means work that is free of constraints and ready to be put into a weekly plan.

Weekly Work Plan:

Moving onto the most definite phase, here we develop reliable promises with trade partners to get closer to completing the milestone. Our trade partners will have a defined scope for the week that will be measured in PPC%.

Learning:

Project closeout gives us an opportunity to review how the last planner system helped our job and how it put out job at a disadvantage. Learning the limitations of the system can help prepare you to face them on future projects. Learning and adapting is how we use this system to its fullest.



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