

Implementation Plan

TARGET PARTICPANTS: Superintendents & Assistants, PMs, PEs, Trade Contractor Foremen, Superintendents and PMs. Best if participants also include: Designer, Owner's Rep, sometimes consultants (especially in Design-Build and IPD).

Introducing Pull Planning in design and construction on a project requires an initial 2-session foundation: the Villego[®] Simulation and LPS[®] Simulation Training – offered separately. This training is amplified by using the 3-9 minute videos on Construction Accelerator (<u>www.tryCAnow.com</u>).

Once this is in place, our typical introduction and implementation of Last Planner[®] specific to the project includes the following:

- 1. An initial meeting with General Contractor or Design-Builder staff (Superintendent, PM, PE, Director, etc.) to further train in the basics of managing the Last Planner[®] System and get them comfortable in their roles:
 - a. Identify project Milestones (30,000' level) and Superintendent milestones (20,000' level)
 - b. Plan the upcoming Phase Pulls with trades
 - c. Introduce PM/PE/Supers to facilitating and managing the phase, look-ahead, and weekly work plan generation (this already begins building internal capacity).
- 2. An initial 4- to 5-hour session to introduce the entire project team and all trades and/or consultants to Pull Planning and Last Planner[®] process and its underlying Lean construction principles.
 - a. Create a collaborative environment to support Pull Planning and explain 4 levels of Last Planner[®] System
 - b. Understanding of Milestone Pull Planning for the project
 - i. Create a Milestone Pull Schedule for the entire Project or at least the initial 12 months of the Project
 - c. Review and discuss opportunities for phase planning
 - i. Create the initial Phase Pull Plan for the next 8-12 weeks
 - d. Create the Weekly Work Plan through the initial 3-6 weeks
- 3. ONE TO TWO WEEKS LATER: A 3-hour working and coaching session where we develop the next 8-12 week look-ahead pull schedule and flesh out the Weekly Work Plan assuring a full six weeks. In addition to posting the first six weeks' worth of activities on the pull plan wall, we will:
 - a. Train participants in their roles for working collaboratively through the look-ahead process, for making work ready and for execution in a productive and effective manner.
 - b. Train participants in the improvement cycle of:
 - 1. calculating PPC and tracking Variance categories (including posting)
 - 2. reviewing weekly work plan results and taking mitigation measures
- 4. TWO WEEKS AFTER THAT: A 2-hour to 3-hour working and coaching session where we may develop the next six-week look-ahead pull schedule and Weekly Work Plan update. In addition,

we will:

- a. Train participants in the improvement cycle of:
 - 1. identifying root-causes for misses (5 Why)
 - 2. identifying counter-measures
 - 3. developing a plan for enacting counter-measures
 - 4. assigning responsibilities for plan implementation.
- b. Coach PM/PE/Super to assure they are able to facilitate and document the Pull Planning and Weekly Work Planning Meetings.
- 5. DURING THE NEXT TWO MONTHS: Three 2-hour follow-up weekly coaching sessions (spaced increasingly apart to wean the team) to implement the Look-Ahead and Weekly Work Planning Meetings during which we:
 - a. Coach the PM/PE/Super on facilitating the meetings
 - b. Coach all participants on any short-comings observed in the process
 - c. Refine participants' understanding of the process and Lean Principles behind it.
- 6. Depending on the length of the project we also highly recommend at least two additional coaching sessions to audit the team's adherence, realign the team if needed, train and coach on difficult or different meeting and project challenges, and get into additional phase pulls to ensure the process flow is maintained moving forward.