



Project Manager's Guide to
Pre-Construction:

5 Costly Mistakes and How to Avoid Them

Presented by Essel Environmental

Introduction

We understand that navigating the construction process as a project manager comes with its challenges. Communicating with your team, whether remotely or on-site, setting accurate schedules, and maintaining your calm when something goes awry requires flexibility that we all admire. From our experience on the ground,

Our team has noticed that preconstruction tends to be an area that's consistently neglected by PMs. Preconstruction best practices can help make sure construction projects stay on track, within budget, and reduce the risk of surprises that cost time and worse – money.

Over the course of 2,500 projects, Essel has observed a few common (yet avoidable) mistakes in preconstruction that project managers often make. With the help of a few Project Managers that we interviewed, our team created this guide to help manage some of the misconceptions PMs might have about the precon process.

1 Not testing soil before breaking ground

No one likes surprises, but you could have one if you don't get your soil tested before a construction project. Also called "soil characterization," "geotech" or "environmental sampling," **this is not a step you want to skip as a project manager.** The cost to offhaul soil, especially contaminated soil, is one of the most common surprises on a construction project. Finding out that there are contaminants present in soil makes it very expensive to remove, haul, and find a place to dispose of it.

Most projects use the following sequence:

1. Design includes excavation of x amount of soil from the site. This is known for at least a year before the project breaks ground. What people forget is that before any landfill accepts soil, they will want to review the soil characterization data (lab reports) to ensure they are within the required parameters set forth by the landfill which usually coincide with state regs.
2. Testing is done when the construction has already started. If any results come back higher than the screening levels, the options are to assume a worst case scenario quantity or do further testing to identify the vertical and lateral extent (how deep & how wide) of the project.

When an owner is given the bad news during construction, they are left to make a rushed decision which can often cost a significant amount of money. It's not uncommon for it to cost over six figures to haul contaminated soil from a job site.

To avoid these risks to your project timeline and budget, we recommend testing the soil before breaking ground. That way you can account appropriately if it is contaminated.

2

Not performing due diligence when it comes to hazardous building materials

The proper classification and quantification of hazardous materials is critical to ensuring that they don't hinder progress in other phases of construction. Hazardous materials, such as asbestos and lead, can impact projects and timelines because of the need to stop all progress to dispose of hazardous materials, or the unplanned damage that they've done to the site in the past.

At Essel, we usually recommend performing a hazardous materials survey in advance to allow for proper sequencing of the abatement, time for clearances, and closeout of the projects. Common hazmat surveys test for lead or asbestos, and should be conducted before you prepare paperwork for construction.

3 Neglecting to prioritize your safety plan

Each project and subcontractor should be aware of the safety protocol unique to each site. As every PM knows, each site has individual features that can prove dangerous to a team unaware of what lies on or underneath the property. To solve this problem and keep your team safe, make sure to provide a proactive safety plan in order to ensure that safety is top of mind.

Through analysis of the scope of work, creating a safety plan helps make sure there aren't any areas missed that could end up being a liability for the owners.

For those in need of help creating a safety plan, companies like XO Safety provide great templates.



Keeping your schedule flexible

One of our Bay Area PMs mentioned that his secret to success has been creating “flexible space” for delays in approvals or shipments of supplies. He said that this built-in flexibility has made his life easier many times, as “something always goes wrong.”

Pro tip: While building out your calendar, always round up when it comes to scheduling. For example, if a shipment is expected to come between June 6th and June 12th, plan for June 12th. This way, you’ll be pleasantly surprised if the shipment comes early, and the shipment arriving on the last possible day won’t negatively impact your schedule.

5 Poor Managerial Style

As we addressed in our “Remote Project Management Tips” blog post, management styles have a huge impact on the overall effectiveness of the team, especially if the PM is working remotely. Listening to your team, making sure systems of direct communication are set up (such as Slack, Microsoft Teams, or project management systems such as Asana and Trello), and setting expectations from the start can be ways to combat this problem.

For those looking for construction specific project management software, Monday.com might be your best bet. One Bay Area PM we interviewed recommended the software because of its ability to communicate with both internal and external stakeholders. Additionally, colorful visuals make organization more eye-catching in comparison to the typical spreadsheet.

Action item: If you don’t have a system of direct communication in place, the above options are a great place to start. Talk to your team about technology they’ve used best in the past. Chances are, they’ll have input on how they’d like to communicate with you.

Get in Touch!

Our team at Essel hopes we could provide some insight into what's working (and not working!) for PMs across the country. Contact us at 1-800-595-7616 to help you avoid these pre-construction mistakes.

EMAIL ADDRESS

nlahiri@esseltek.com

PHONE NUMBER

1-800-595-7616

