

Engineer

Trends that won't change: Skilled labor shortage, strict regulations, and compressed delivery schedules



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One easy prediction to make for the year ahead is that there will be some significant changes, not just in the construction and real estate industry, but throughout the econo-

my: some for the better, some for the worse. So, let's instead take a look at a few things that probably won't be changing: compressed project delivery schedules, difficulty in finding skilled employees, and increasingly strict development regulations.

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The skilled labor shortage will not be going away soon. We are seeing in our own business-and hearing similar complaints from others – that the training and education current graduates receive at colleges and technical schools these days does not align well with actual employer needs.

No doubt it is hard to keep up with the fast pace of change as technology takes a larger and larger role in construction. For example, in steel construction today, the structural

engineer designs a 3D model that the steel fabricator translates directly into shop drawings, that are then fed into the computer-controlled shop floor equipment... and then out the door, onto a truck, and delivered to the jobsite, without need for pencil or paper anywhere along the line!

Meanwhile, applicants with college degrees from well-known schools have only rudimentary training in the software that they will need on the job from day one. As design professionals, we need to communicate this education gap to the institutions that need to better prepare young people for the skills they need to become a productive part of the construction industry.

And the same is true for the construction trades, the lack of properly

trained job applicants. Although there have been some slowdowns due to the pandemic, construction job hiring was at one of its highest levels in late 2020, meaning it is increasingly hard to find the skilled help the construction trades need at all levels of experience.

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- Threatened and endangered species studies
- Studies of historic structures archaeological sites
- Vernal pool studies – where the buffer can occupy ten times more area than the vernal pool itself
- Studies of trace contaminants like PFOA/PFAS – and there will be others – creating enormous new contamination zones, including large open lands that have never been developed.
- Studies of Archeological sites and Historic Structures (potentially anything – even a culvert – over 50 years old)

As a result, the permitting process controls more and more the project delivery date, rather than design and construction timeframes.

A realistic schedule must allow enough time for the project team to minimize impacts in the first place, and then to support positive findings in each of these areas. The alternative is simple: delayed permits or no permits.

Another thing that won't be changing in the year ahead: it will take a team of skilled experts working together from the earliest possible moments to deliver a successful project on time.

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