



AUTODESK CONSTRUCTION CLOUD™

GRANITE®

# Granite connects the office with the field using PlanGrid

Communicating quickly and efficiently on a large project is key to staying on schedule and avoiding rework. Together with the California Department of Transportation (Caltrans), Granite is leading a shift in the heavy civil construction industry by adopting technologies to achieve these goals.

## Fast communication across all teams

Granite Construction is a heavy civil general contractor with a deep history of building American transportation systems. Located in the Fresno, CA metropolitan area, the \$150 million Highway 99 Realignment project required Granite to move several miles of highway from adjacent Union Pacific railroad tracks, relocate multiple local streets and utilities, and remove and replace three bridges.

On the Highway 99 Realignment project, Caltrans required that Granite provide mobile devices for the field. Granite chose PlanGrid to help improve communication and collaboration on the project.

Implementing PlanGrid across Caltrans, Granite, and the subcontractors on Highway 99 dramatically sped up the process of sharing project information. Randy Lucchesi, Lead Project Engineer at Granite,

explained, “Our supervisors can sit with an inspector in the field and know that we’re looking at the right information needed to resolve the problem now. It’s not, ‘you’re working off an old plan sheet, I need to run into the office to verify,’ or, ‘we need that RFI that was responded to three weeks ago, but I don’t have it with me.’”

The project also involved boundary encroachment for existing businesses and properties, requiring coordination between Granite and Caltrans. Caltrans used PlanGrid to share plans for the outside properties they needed to build on, so the field foremen and inspectors were able to compare drawings and identify conflicts.

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Lead Project Engineer, Granite Construction



## Preventing rework though up-to-date plans

Plan revisions often get lost during complex projects. On Highway 99, every plan revision was successfully and instantly shared with the field using PlanGrid. The app notified the project team when and where their plans had changed and allowed users to easily overlay and compare different sheet versions.

Coordination and keeping up with changes were critical on Highway 99, a project with several thousand drawings and separate teams for day and night shifts. According to Lucchesi, “PlanGrid helped me catch what would have been a \$30,000 to \$40,000 mistake. I saw an area of the roadway that wasn’t graded properly, and when the foreman, who wasn’t using PlanGrid, pulled out his paper plans, I quickly opened PlanGrid to show him that there was a revision. They were able to fix it before it became an issue.” He also said that the field team loved having instant access to the latest versions without unnecessary back and forth.

While Granite’s project managers and project engineers used PlanGrid to keep drawings and construction documents organized, the field was quick to adopt it for its mobility and ease of use. “It’s simple for people in the field to use, and plans download to your device so you’re not reliant on internet connectivity. Whether you’re working in a metropolitan area (like we are) or out in the middle of nowhere, it works,” Lucchesi says. Granite runs a PlanGrid training at least once per quarter on the Highway 99 project, either at the end of daily safety/production meetings, or by dedicating entire meetings to foreman-specific training. PlanGrid’s consulting team has also come to the site as needed to offer hands-on training and demos.

As the lead project engineer, Lucchesi saves hours a week by having the latest plans on his mobile device, “We have more than 2,100 sheets for this project, and I’m easily saving at least a few hours a week by not having to go back and forth from the office. I’m able to find the sheet I need in seconds.”



## Simple to use, both in the office and in the field

Granite has seen huge gains in field productivity by using PlanGrid on dozens of other projects, including the Folsom Dam Spillway in Folsom, CA where the company saved as much as \$500,000 in rework costs and an average of five hours per person per week. Granite continues to explore rolling out PlanGrid across projects in other regions across the country.



## Collaboration Stats

4.16

average hours saved per week

11,000+

annual hours saved by Granite Valley Region team

1.98

average days to recover cost per employee

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