



Movers and Shakers

During December, crews will continue excavating the west side of Bear Valley Parkway to build this half of the roadway. Excavation will run the entire 1.5-mile length of the road from Boyle Avenue to SR 78.

Crews started replacing the storm drain pipeline near SR 78 last month and are continuing to excavate further north, near Suburban Drive and Idaho Avenue. Our 'movers and shakers' feature story this month is about the machines used of breaking up asphalt and digging through dense materials to make trenches.

Some machines that excavate the new storm drain pipeline include:

- **Backhoe Tractors:** These multi-functional machines, pictured top-right, include both a backhoe and a tractor with a bucket. Crews use the backhoe to dig trenches and pile dirt next to the trench. Then, they use the tractor and bucket to lift and dump dirt into transport trucks that remove it from the project area. These machines are common on urban construction projects because they are rubber-wheeled and can cruise at up to 25 miles per hour on streets. These construction machines pack quite a punch!
- **Excavators:** These tractorless-backhoes (pictured bottom-left) are larger than backhoe tractors and commonly used for pipeline projects. Excavators have increased capacity but are less mobile than backhoe tractors. Crews use the large tractor and bucket to dig 6-12-foot trenches and handle major earthwork tasks.
- **Skid Loaders:** These machines (see Bobcat, pictured top-left) are also known as skidsteers, and are used to pick-up and transport material around a project site. Crews use these machines on Bear Valley Parkway to move and dispose of piles of excavated materials. They are highly mobile and convenient for transporting activities. To move or dispose of larger amounts of materials, crews resort to a backhoe tractor or excavator.

These machines make it possible for crews to excavate the existing roadway so that an improved one can be built.



Project Update: Current Construction Activities

In December, crews will work on the following tasks:

- › **Roadway excavation:** Crews are excavating the west side of the roadway on Bear Valley Parkway to prepare for grading, framing, and pouring new travel lanes.
- › **Storm drain pipeline installation:** Crews are using excavators to dig trenches and remove the old storm drain pipeline on the west side of Bear Valley Parkway. Next, crews

will replace the pipeline with a new storm drain line the length of Boyle Avenue to SR 78.

- › **Stormwater Pollution Prevention Plan (SWPPP):** Crews are continually maintaining their SWPPP for the project site. With so much excavation and loose piles of dirt along Bear Valley Parkway, crews hydromulch slopes and cover piles of material with tarps to prevent dust and hazardous materials from blowing away from the project site.
- › **Utility undergrounding:** Crews are continuing to coordinate with utility companies to install water and gas pipelines under the roadway.



Meet the Team

Chris Munro
Assistant Land Surveyor,
County of San Diego

Q What are your responsibilities?

A I oversee and calculate all the



construction staking for the project. Before breaking ground on a project we have to stake or map out specific topographical landmarks and boundary points on the project to guide the excavation. This shows crews where to dig and cut.

Q How long have you worked with the County of San Diego?

A I've been working with the County for eight years. I conducted the original surveying for Bear Valley Parkway and have been surveying since the beginning of this project.

Q What is something unique about this project people might not know?

A One unique thing I noticed is the uncommonly-large number of drainage inlets designed into the plans on Bear Valley Parkway. This is to ensure proper drainage on the project site and to reduce standing water by efficiently conveying water into the stormwater system. I have

never seen this many drainage inlets in a small area, and it is telling of how considerate engineers were in planning for drainage on the roadway.

Q What surveying needs will the project have moving forward?

A The new road alignment has erased the original property boundary markers. So, after we complete building the new roadway on Bear Valley Parkway, I will mark the original locations of the property boundaries on the new alignment. This is known as "remonumentation" and is a critical final step in finalizing the record of survey.

Q What do you do in your spare time?

A I enjoy golfing in my spare time. I also coach my daughter's sports team, which has taught me about leadership.

Thinking ahead: Crews scheduled the storm drain installation along the west side of the roadway before the winter season begins because meteorologists have been predicting a wet El Niño winter this year. El Niño is a climactic shift that typically occurs every seven years and warms the Pacific ocean temperature. These shifts create large storm systems, especially on the west coast. El Niño is projected to bring strong rainstorms and winds to San Diego through Spring 2016. Because San Diego is predicting impacts to roads, businesses, and communities, crews prioritized the trenching and storm drain installation so they can re-bury the exposed underground work before heavy rains begin to fall here.

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Know