



Keeping Everything in Place:

The Mighty Job of Retaining Walls

During May, we are focusing on retaining wall construction along Bear Valley Parkway. Retaining walls hold the soil under the roadway in place and prevent it from settling and forming an uneven surface. Retaining walls can also control erosion by directing storm water runoff into designated drainage pathways.

There are several steps in constructing a retaining wall:

Step 1–Subgrade: After excavating the area and preparing the foundation, soil is compacted to ensure it is stable.

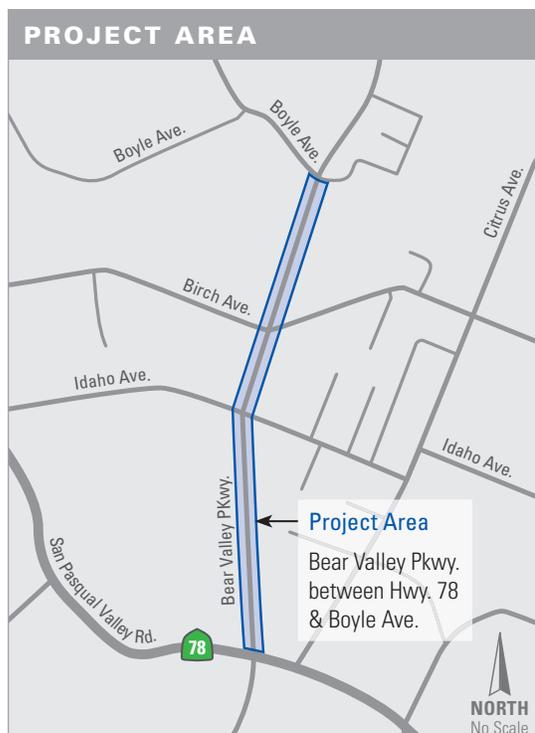
Step 2–Foundation: In this step, a reinforced concrete foundation is constructed. This foundation will support the wall that is ultimately built on it.

Step 3–Wall construction: Masonry block layers are then constructed and tied into the reinforcement of the foundation. Masonry block and reinforcement will be added until the wall reaches the height it is designed to be.

Step 4–Backfill and compaction: In this final step, permeable material is placed behind the wall to allow for drainage and soil is compacted until the wall is backfilled. A concrete drainage ditch is then usually installed along what is now the top of the backfilled wall to direct storm water runoff.

Bear Valley Parkway includes two new retaining walls. One of these new walls has already been constructed near Idaho Avenue. A second retaining wall is being built in May at the north end of the project near Boyle Avenue. Here, crews are removing an existing retaining wall and installing a new one farther back into the slope to create more space to widen the road in that area.

Thank you for your patience during construction. Feel free to give us a call if you have any questions on our hotline or visit our website.



Project Update: Current Construction Activities

Along with the retaining wall near Boyle Avenue, our crews are working on:

- › **Utility Relocation:** Crews are continuing to relocate utility lines and have moved efforts from Birch Avenue towards Idaho Avenue and Viewmont Drive. Placing utilities underground will protect utilities from damage by storms or environmental impacts and create a clear view in the neighborhood.
- › **Roadway Grading and Paving:** Crews will continue to grade and pave

from Idaho Avenue to Viewmont Drive. This work consists of three stages: Subgrade Grading (dirt foundation), Aggregate Base Grading (second grade layer), and Base Paving (first layer of paving on aggregate base grading).

- › **Curb and Gutter Installation:** Crews will install curbs, gutters, and drainage along the paved areas of Bear Valley Parkway from Idaho Avenue to Viewpoint Drive.

Crews are working to ensure the project site is safe and accessible to emergency vehicles by using signage that clearly directs traffic through Bear Valley Parkway. Thank you for respecting these signs.



Crews grade the parkway prior to paving

Meet the Team

Resident Engineer, Ben Mehtlan

Q What is your role on the project?

A I am the resident engineer for the project. With the help of two assistant engineers, I am tasked with ensuring the contractor is building the project per the approved contract plans and specifications. I am also the main point of contact for the project with the County, the Contractor, other government agencies, and the public. On this project we have to coordinate with various utilities like SDG&E, AT&T, Cox Communications, Escondido Water Authority and San Diego Water Authority.



Resident Engineer, Ben Mehtlan

Q What other projects have you worked on prior to the Bear Valley Parkway Project?

A I have worked on various airports projects at Gillespie Field Airport and Palomar Airport. I have also worked on various bridge projects, one in Jamul and one in Valley Center, which was a 500-foot bridge next to the Harrah's Casino.

Q What significance will retaining walls have on the project?

A These walls are integral components to the widening of Bear Valley Parkway. One of the retaining walls on the project is supporting the roadway and the other wall is supporting the existing slope.

Q What is one important thing you would like people to remember about public improvement projects in their area?

A We are performing this work to better the community. A lot of time and effort is involved in choosing the project and preparing the design and it is always with this goal to improve the area. The community's cooperation and understanding is always appreciated as we work to create improvements for the neighborhood.

Q What is your favorite part of your job?

A My favorite part of the job is that I get to be involved in the construction of something that I can use when I am done. I have a great sense of pride when I construct something others and I can use.

Q What do you like to do in your spare time?

A I like to spend my free time with my wife and my son, who is almost 11 months old. We like going to the park or the beach or just hanging out at home. I also enjoy cooking for my family when I have the time.

Did You Know

Retaining walls are not only part of modern day improvements, but also part of ancient ones too. The famous retaining walls of Machu Picchu, a historic and mysterious mountaintop city of the Inca people from Peru, has miles of retaining walls that were constructed in the 15th century to create more space for cultivating agriculture. Scientists recently analyzed the walls and found them to use the same concepts that engineers use to design retaining walls today.