

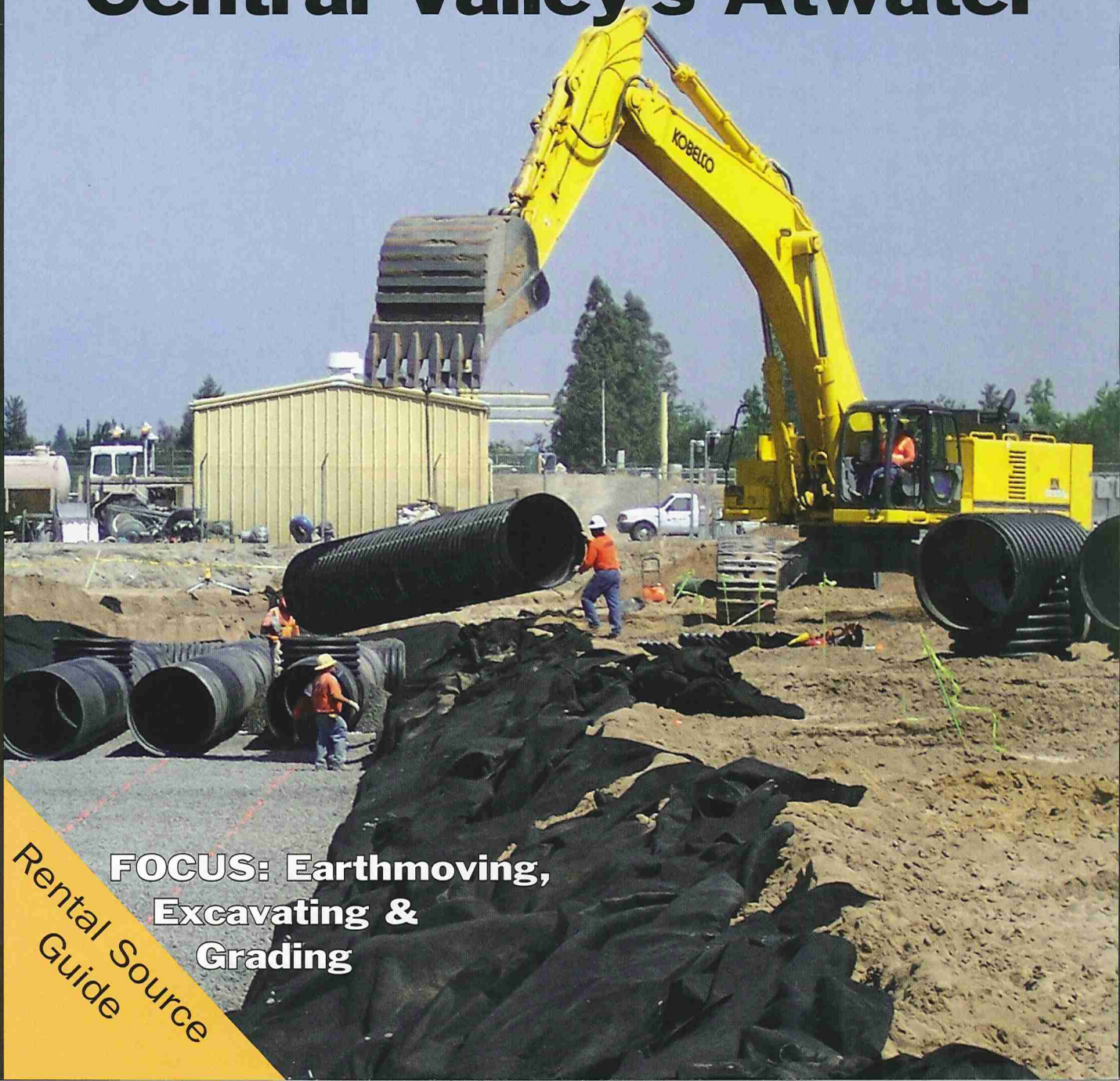
# CALIFORNIA Builder & Engineer

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## Top Grade In Central Valley's Atwater



**FOCUS: Earthmoving,  
Excavating &  
Grading**

**Rental Source  
Guide**

# TOP GRADE

## *In Central Valley's*

# ATWATER

**Dirt work in the Central Valley is getting tougher to get but diversity and high-tech help**

BY LOREN FAULKNER



California's Central Valley region has been one of the steady housing development regions in the past few years, but it has not been immune from the housing decline and its related issues. It will be part of the general trend of construction employment reductions, no doubt. For example, California construction employment averaged 925,200 in July 2007, down 7,800 (0.8 percent) from June and down 18,000 (1.9 percent) from July 2006's 943,200, according to Construction Industry Research Board (CIRB). It predicts the state's construction employment to average 925,000 in 2007, down 14,400 (1.5 percent) from 2006. And how much further reduction will occur due to California Air Resources Board's new off-road diesel regulations is anyone's guess at this point.

"In general, the Central Valley dirt work has really slowed down in recent months due to the residential market collapse," says Lee Myhre, spokesman for Top Grade Construction, Inc., a major contractor in the region. But he says the company is keeping consistent growth through a diversity of project types – plus using high-tech gear – not just relying on the residential segment of the industry. Top Grade projects include commercial/industrial as well public works projects.

Above: Sewer lines being constructed at Applegate Ranch.

Top: Aerial view of 50-acre commercial development of Applegate Ranch in Atwater, Calif.

“ In general, the Central Valley dirt work has really slowed down in recent months ... ”



### Atwater Work

Typical of Top Grades' growth strategy is a current commercial site. The community of Atwater, near Modesto in the Central Valley, has been growing. A major construction project there is Aplegate Ranch, a multimillion-dollar, 50-acre retail center just off Highway 99. Target and Home Depot are anchor tenants in the Regency Centers-owned project. Top Grade is providing the rough grade, finish pads, sewer, storm drain, water, joint trench, site concrete, paving, parking lot lights, stripe, landscape, trash enclosures, erosion/dust control, and off-site improvements –

including traffic signals and constructing three intersections. Work began in April of this year and is scheduled for completion in spring 2008.

### Excavation/Construction Challenges

The excavation at the site is being performed by D.A. Wood Construction Inc. of Modesto Calif. All rainwater and other drainage remains onsite in a storm infiltration system. This system uses 12-inch to 48-inch HDPE perforated pipe. The run-off water is to be stored underground in large HDPE pipe and will eventually percolate

Above: Loading truck for material to be off-loaded/graded at different portion of the construction site.

into the ground. The average depth of this system was 8 to 11 feet, and 19,800 feet of pipe will be placed in the retention system alone, according to Danny A. Wood Jr., president of the company.

“The challenges were obtaining the specified rock from a local quarry (17,800 tons of drain rock) that was not readily available,” said Wood. “It had to be specially crushed to meet the design. The other challenges were keeping the

WET UTILITIES – **D.A. Wood Construction** out of Modesto – sewer storm drain and water

DRY UTILITIES – **Angelo Utilities** out of Stockton – Electric, gas, TV and phone

CONCRETE – **Allen and Sons Construction** out of Stockton – site concrete

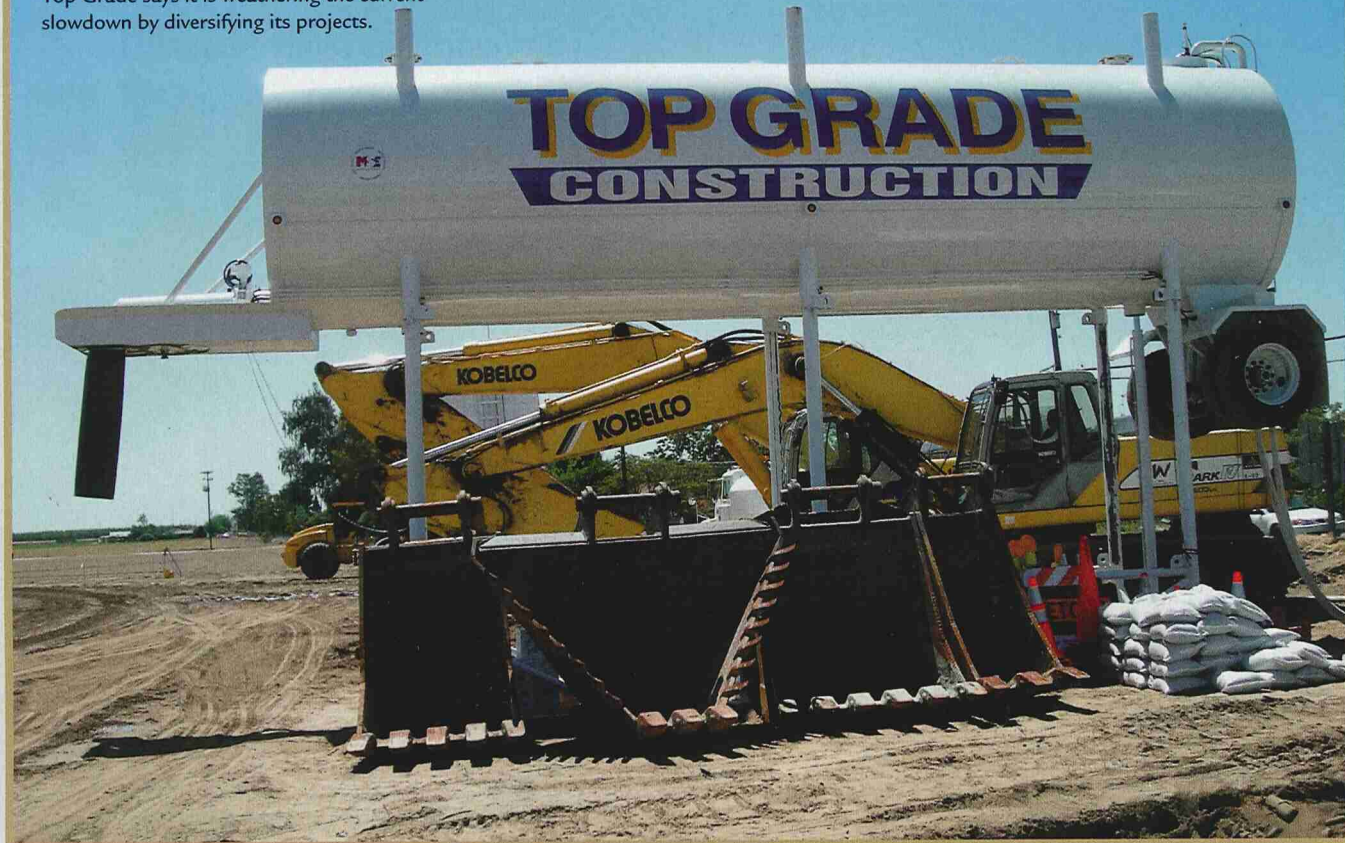
LANDSCAPING – **ValleyCrest Landscape** out of Sacramento – work not performed yet

PARKING LOT LIGHTS AND TRAFFIC SIGNALS – **Pacific Excavation** out of Elk Grove

EROSION CONTROL/DUST CONTROL – **Top Grade Construction** implemented and managed this in conjunction with the various subs at construction entrances, concrete washouts, fueling areas, etc.

*Top Grade Construction, Inc. Livermore, Calif., [www.topgradeconstruction.com](http://www.topgradeconstruction.com); D.A. Wood Construction Inc., Modesto, Calif., [www.dawoodinc.com](http://www.dawoodinc.com); Tri West Tractor, Livermore, Calif., [www.tri-westtractor.com](http://www.tri-westtractor.com); TRIMBLE GPS, [www.Trimble.com](http://www.Trimble.com)*

Top Grade says it is weathering the current slowdown by diversifying its projects.



drain rock clean and scheduling the supply of rock needed as it was coming from over 60 miles away.”

### Kobelco

D.A. Wood uses Kobelco excavators provided by Tri West Tractor of Livermore, Calif., ranging in size from 200 series machines to the new SK850. The SK850 is a new prototype machine. At the time of this project the 850 was not yet available to the public. The machine was announced ready for production on 8/22/07 at UC Davis, said Wood.

### Other Construction Challenges

No doubt each construction site is unique. In the case of Applegate Ranch, “Identifying the various sources of and the logistics of importing dirt has been a challenge,” said Myhre. “Due to soil conditions, we’ve had to import some 40,000 cubic yards of fill sand from myriad sources to aid in balancing/leveling the site. This represents over 2,000 truck loads on-site.” Myhre said

that with this much import, it is critical in the saving of time and effort to use GPS on their equipment.”

### Finding Their Way With GPS

Over the past several years, Top Grade has invested heavily in GPS technology. “Using GPS connects the design engineer and contractor into an integrated workflow,” Myhre added. “From estimating and budgeting to project completion, we’ve found GPS significantly improves productivity, efficiency – the total construction process. With 2,000 truck loads of imported material, it’s top priority to level the mounds in a single pass, with accuracy. After all, saving time is saving money, in this business.”

Most of Top Grade’s fleet – dozers, motor graders, compactors, and scrapers – is GPS equipped, and used on almost every job site. “Many grading and paving contractors hand-pick the projects in which they will utilize their technology, but when GPS technology can guide machinery and grade-setters

within 1/100 of a foot of the desired elevation and location anywhere on the site, there’s no question as to why we use it,” Myhre said.

### In House

According to Myhre, Top Grade’s in-house staff uses state-of-the-art systems and software to produce some of the most accurate models in the industry. “Many companies outsource their model building, which results in increased delays and turnaround times. Top Grade can create specific models to satisfy field demands on short notice. In many cases, we can start grading before the surveyors have begun to stake the project and it results in ‘fast-starting’ the job and getting ahead of schedule from the very beginning. All of Top Grade’s GPS Equipment is manufactured by TRIMBLE,” he added. ■

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