

Grand Junction & Western Slope

Building in gaming town doesn't have to be a gamble

On its face, breaking ground on a new building in the historic mining and gaming towns of Black Hawk, Central City and Cripple Creek presents formidable challenges when compared with the more predictable Front Range urban corridor. Historic mining activity for gold and silver left toxic waste rock and contaminated ground water. Slopes on potential project sites are steep. And the prevalence of mining tunnels in the area essentially left the mountains hollow, introducing an added need for caution during construction.

Despite these challenges, building in any former mining town doesn't have to be a gamble. Remediation of environmental or geotechnical issues does impose additional costs, but proper due diligence investigations and understanding the risks can yield financial benefits to a developer.

While gambling has been legal in the three mountain towns since 1991, the timing appears to be right to consider new projects. In the last year and a half, the new Central City Parkway was completed, providing easier access to Central City and Black Hawk. Amendment 50 ushered in higher-stakes gaming and longer hours for all of Colorado's gaming



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towns and the political climate seems to be favorable for development of new casinos and hotels.

To prepare land in a former mining area for development, our engineering firm performs site, water and

geotechnical assessments; conducts ground-water contamination studies; assesses geologic hazards; evaluates mining hazards; and assists with permitting.

Our staff has advised on more than 15 project sites in Black Hawk and Central City. We have identified below some consistent issues, all of which can be mitigated with proper planning:

■ **Environmental factors.** High levels of arsenic, lead, mercury and zinc have been left behind in the waste rock – known as mine tailings – and ground water. If encountered in the soil, these contaminated materials must be removed and trucked to a permitted landfill



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that is lined to prohibit release of heavy metals or acid mine waste. If found in the ground water during site investigations, groundwater must be neutralized and the heavy metals removed during development.

■ **Terrain.**

Properly preparing an area for a structure requires reshaping steep slopes and removing mine waste and native rock. For example, before the facility now known as Ameristar Casino Resort Spa opened in 2001, approximately 1.5 million cubic yards of rock had to be removed to accommodate a 55,000-square-foot casino and 10-story, 1,500-vehicle parking garage.

■ **Mining heritage.** Some areas proposed for development are on designated historical sites or house historical buildings on the site that must be preserved. That was the case with Bullwhacker's Casino in Black Hawk. In 1992,

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the facility was built around an exposed-brick historical building – its preservation required by the local historical society.

■ **Mining's effects on the land.** Old mine shafts created hazards, which are hidden and often uncharted. These hazards can stop work or add delays and costs to a project, but, with proper due diligence investigations, the impact can be identified and mitigated.

■ **Constraints imposed by geography.** A tight site is made easier to work on

when a large staging area can be established nearby. That's often not possible in mountain towns, where materials must be staged elsewhere and fitted into place with a crane – or workers must start construction inside a project and build out. Also, some towns' roads offer just one way in and one way out, so traffic must be managed carefully. Finally, construction is often limited to 4 1/2 days during the week.

■ **Constraints imposed by climate.** Towns such as Black Hawk and Central City don't see a lot of snow during the winter, but temperatures dip quite low – requiring equipment and materials to be winterized. For example, facilities to heat dewatering and treatment systems are required for construction during winter months.

Anticipating these possibilities prevents the biggest issue of all: surprises. Knowing what issues could be encountered – and building them into the cost and schedule of a project from the outset – helps make an enterprise profitable and reduces the need for costly change orders or work stoppage as the project proceeds. With this level of due diligence, the only gambles will be those made at the slot machines.▲