

# PROJECT OF THE YEAR:

TAMING THE DESERT AT THE APACHE SKY CASINO

## BUESING CORP

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VP OF BUSINESS DEVELOPMENT

**B**uesing Corp was involved in "Taming the Desert" the last two years, as a major site development contractor for the Apache Sky Casino in Dudleyville, located about halfway between Globe and Tucson on State Route 77. Buesing Corp was awarded a subcontract in

January 2015 by Killian Construction for this new development project by the San Carlos Apache Nation. The initial phase one project consisted of a 170-acre site and one-mile access road that was planned and built with minimal disturbance to the nearby pristine desert. Still, more than 450,000 cubic yards (cy) of mass excavation and cut/fill earthwork was involved in the road development.

The initial RFPs in the Fall of 2014 were based solely on two basic color 11 x 17 schematics over laid on a Google Earth image. The initial project budget was refined somewhat with a few more schematics in early 2015, and the basis of a subcontract scope and price was formed so that early site work could begin. This alternative project delivery method



(APDM) of design-build is becoming more popular across all market sectors to help expedite projects to completion.

Killian asked Buesing Corp to start the mass excavation and road work based on a draft soils report and recommendations. Jump-starting the project before the civil design was completed helped meet the sched-

ule.

The geotechnical report recommendations and the civil engineering design both initially required substantial over excavation and recompaction and the import of thousands of cubic yards of spec soil to use as fill for embankments, roadways, and parking lots. Through some expedited value engi-





involved extending existing box culverts, and widening the roadway cut through a ridge. While the earthwork initially seemed easy, a power line structure and its alignment needed to be protected. Buesing Corp performed a design-build scope to install a permanent soil nail shoring/earth retention system on a batter. This shored wall was more than 30 feet high at its peak. Also, to save time and costs, Buesing proposed and installed a permanent structural shotcrete wall facing using colored shotcrete.

Much of this project was constructed by Killian, Buesing, and its subcontractors working extended hours due to the remoteness of the site and to meet the schedule. The project required 9-10 hour days, including many Saturdays. In the final push leading up to the April 2017 deadline, our crews worked even longer days and a few Sundays. Our schedule milestone was met due to these extraordinary efforts by Buesing's crew and our subcontractors.

Buesing's work was substantially completed in April 2017, while the modular gaming facility was completed in Fall 2017. Although the San Carlos Apache Nation has plans for future phases of a larger, more permanent gaming casino and hotel, phase one of this project is complete, gaming has been ongoing since October 2017, and the "Desert has been Tamed" - for now.

neering options of approach and cost evaluations submitted by Buesing Corp, hundreds of thousands of dollars were saved by collaboration with the project team surrounding these soil issues and the final resolution.

The deceleration, or turn lane off, of State Highway 77 onto the new access road in-

**PROJECT TEAM**

- Owner:** San Carlos Apache Nation
- Civil Engineer:** Wood Patel
- Geotechnical Engineer:** Atek Engineering Consultants
- General Contractor:** Killian Construction Co.
- Major Civil Subcontractor:** Buesing Corp
- Other Stakeholders:** Pinal County and AZDOT

**Thanks to our Talented Subcontractors**

Killian and Buesing Corp collaborated on the best subcontracting strategy for other civil-related scopes and Buesing subcontracted the following:

- Paving – PaveCo
- Concrete curbs and sidewalks – CPC Concrete
- Water and Sewer – Mission U.G.

**Specific Subcontractor Shout Outs**

- Buesing self-performed the subgrade prep and aggregate base for the access road and the off-site turn/deceleration lane on Highway 77 but PaveCo performed the asphalt concrete (AC) pavement placing.
- CPC Concrete installed the curb and gutter along the road and the parking lots, the sidewalks at the gaming facility, and storm drain headwalls and inlet structures.
- Mission U.G. installed the fire line consisting of 1,187 lineal feet (lf) of 8" ductile iron pipe (DIP), 290 lf of 6" DIP, and 6,880 lf of 4" diameter DIP, and miscellaneous fire hydrants, valves, and risers.
- Mission U.G. installed the commercial use water line, consisting of 1,838 lf of 2" diameter force main pipe, cleanouts, and air relief valves.
- Mission U.G. installed the sewer line, consisting of 160 lf of 4" diameter SDR 35 sewer pipe and cleanouts.
- The modular building, packaged sewer treatment plant, and lighting were all subcontracted by Killian directly.

**For more information:**

**Official Website:** [apacheskycasino.com](http://apacheskycasino.com)

**Supplemental Website:** [500nations.com/casinos/azApacheSky-Casino.asp](http://500nations.com/casinos/azApacheSky-Casino.asp)

**Killian Construction Website and feature Project Description:** [killco.com/project/apache-sky-casino](http://killco.com/project/apache-sky-casino)

**Buesing Corp Website and Feature Project Description, Pictures, and Two Videos:** [buesingcorp.com/projects/apache-sky-casino/](http://buesingcorp.com/projects/apache-sky-casino/)



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- Trucking (End Dumps and Bellies)
- Site Cut/Fill Earthwork
- Aggregate Supply (Virgin and Recycled)
- Site Grading
- Recycling / Crushing Concrete and Asphalt
- Foundation Drilling
- Import / Export Dirt
- Earth Retention Shoring / Sheet Piling



**Buesing Corp is a leader in the construction industry providing a variety of services for at least 8 of the market sectors in Arizona including private and public projects. Buesing Corp has been providing ancillary services to the utility and underground contractors statewide for decades as we are now in our 51st year in business. Please give us the opportunity to assist you on your next project.**