

Executive Summary

Hidden Quarry - Data Center - Innovation Park - Texas

Daniel Duke | June 2026

The Opportunity

Transform abandoned quarries and sand pits across Texas into hidden, self-sustaining innovation hubs that solve critical infrastructure challenges while creating major economic and community value.

The Concept

Build sealed data centers inside existing quarry excavations using closed-loop geothermal cooling. Pair with on-site or nearby Small Modular Reactors (SMR) for clean, reliable power. Fully restore and landscape the surface into a flexible mixed-use Innovation Park.

Addressing the Main Community Concerns

- Visibility - Data center fully hidden underground with restored surface development above
- Noise - Dramatically reduced through underground placement and natural barriers
- Water Usage - Near-zero freshwater consumption via closed-loop geothermal cooling
- Electricity/Grid Strain - Net power exporter to ERCOT instead of a major consumer

Key Benefits

- Reclaims brownfields and restores scarred industrial land
- Thousands of high-wage jobs in tech, medical, and research
- Significant tax revenue and land value uplift
- Strong sustainability profile in a time of growing data center opposition

Project Scale

- Pilot Phase (20–50 MW): \$300M - \$800M
- Full Development: \$1B - \$3B+

Contact

Daniel Duke

Liberty Hill, Texas

512-663-0492

danduke.author@gmail.com