

2001 N. Buckner Boulevard

Thoughts from Architect Frank Moreland about the Earth Sheltered home owner:

“My clients are ordinary people who have a free spirit and do what they want to do,” Mr. Moreland said. “They aren’t bound by trying to look like the house next door.”

- Officially called an “Earth Sheltered house,” the only one of its kind in Dallas
- This nearly 2 acre plot on North Buckner Boulevard had no address. Mr. Coleman applied for ‘2001’ N. Buckner Blvd. back in 1988 in keeping with the “futuristic” elements of this property.
- Home has been featured on: an HGTV series; the Discovery Channel; the Dallas Morning News; D Magazine; The White Rocker and others including architectural publications
- Architect Frank Moreland and owner Bill Coleman spent months visiting lenders and selling the concept of the underground house to obtain financing.
- Moreland presented a slide show and films for the City of Dallas building and permit inspectors to educate them about this structure, since there was nothing else like it in Dallas.
- Home is almost invisible to passing traffic on Buckner. The only indication there’s a home on the lot is a concrete three car garage that is imbedded in the hillside. It also has a turret-like glass block and concrete assembly protruding through the top of the hill. This is properly called a clerestory window. It contains two rows of glass blocks 55’ long facing to the east and west. Sunlight floods in through these blocks all day long and flows throughout the house making it **LIGHT AND BRIGHT**. From the floor of the interior, those glass blocks are 22’ high, several feet above the rest of the ceiling.
- Initial budget to build was \$500,000 and the final price was close to double that figure.
- Two years of building and planning before it was complete

While this home is not instantly noticeable to those passing by, all White Rock area residents know all about the “Underground house” also referred to as The House under the Hill, The Cave and The Bunker

.....Land was purchased in 1988. Ground breaking on Earth Sheltered Home was in 1989. Construction was complete in 2 years. Coleman’s moved in May of 1991.

About the House

Thoughts from the Architect Frank Moreland about the Earth Sheltered homes.....

The near indestructibility of reinforced concrete could make the units last 3,000 years, the architect said. “We would have something that’s very private, very green with low pollution, low energy use, that would essentially last forever.”

- 100% underground
- 1,000 tons of earth over dwelling
- 100 tons of reinforced concrete over dwelling
- 60 tons of steel. Each piece of rebar was individually tagged, requiring hundreds of hours, but like a puzzle, every piece had its place.
- 72 concrete trucks lined Buckner in 1989 for one continuous pour lasting over 24 hours for foundation. Some places have up to 6’ of concrete in the foundation.

- Soft curves throughout the house with only one right angle (located in master closet) the Architect decided to eschew right angles instead relying on acute and obtuse angles and a few curves to add more variety to the patterns made by sunlight as it tracks across the rooms.
- Rated by State of Texas as Semi-fire proof
- Low insurance rates also because of lack of hail damage issues
- Life expectancy of dwelling over 1,000 years
- A “green” house built before “green” was preferred
- 32 solar panels by themselves cut energy bill by more than 1/3
- Only one exterior wall of the home is visible. The back side of the property (which the owners call the front) faces away from the busy 6 lane street and has an entire 100’ wall of windows which reveal panoramic views of a heavily treed oasis and creek lot.
- Because of the thick wall of concrete and tons of earth, the interior of the home is almost eerily quiet all the time, even though it is close to a major street.
- A perfect bunker house for those wanting high security.
- 4561 square ft on 1.84 acre creek lot
- 1500 square foot living room with built-in stucco finished bench seating for up to 45 people easily can be host to 100 people.
- Turfstone paver driveway. This environmentally friendly driveway is made of a grid that allows grass to grow into the grid. It will not be matted down by cars driving over it. The driveway is almost not detectable as it looks like a continuation of the green lawn. Well over a dozen cars can park on the long circular driveway. There is a heavy iron remote controlled gate at the entry of the driveway.
- Owner refers to home as “solitude in the city.” Under the earth, it is very quiet and has far exceeded his expectations.

About the Architect, Frank Moreland:

- Fort Worth Native
- Has numerous degrees from UT Austin and TCU, meeting all the requirements for his doctorate
- Received his Masters Degree at UC Berkley
- Was a professor of architecture at Penn State and University of Texas
- Published 4 books on structure and design
- Provided reports for the Department of Energy and FEMA
- Was a structural investigator for FEMA
- In 1975 he coordinated a National Science Foundation conference on earth covered buildings and edited the published proceedings
- He did the same for the Department of Energy in 1979
- In 1981 he was contracted to prepare a report for FEMA

- In 1981 he left academia to follow his passion and become a contractor and start his own firm to build sustainable buildings as well as Earth Sheltered Homes.
- Moreland often cited the impact that Frank Lloyd Wright's residential designs had on him as an architect. He also drew inspiration from Professor Phil M. Fergus, one of his professors from the Civil engineering Dept. of the University of Texas. Moreland had the following to say about Ferguson, "He deeply influenced my interest in structures, particularly concrete. I vividly recall his presentation of the performance of reinforced concrete structures in the massive 1950's earthquake in Mexico City"
- The home he built at 2001 N. Buckner Blvd. was the 9th such home nationally and the first to be built in an urban setting.
- Designed five "earth sheltered" homes in the area including Dallas, Fort Worth, Eagle Mountain Lake, Decatur and Waxahachie.

Concrete Contractor: Bob Brandon with A & B Forms

- He also poured some of the launch pads at Cape Kennedy
- Used 72 trucks of concrete to pour foundation, some areas 6' deep
- 100 tons of concrete in the roof of the structure

Interior, About the Artist, Carmen Velarde

- Renowned artist from Taos New Mexico built and designed much of the interior of the 2001 N. Buckner
- Carmen Velarde and her crew of 4 came to Dallas to work on the house for only 2 weeks. During their stay they built 3 Kiva fireplaces, more than 50 feet of banco style benches, display walls and privacy walls – all with stucco finished. Carmen applied the finish stucco on the fireplaces with her own hands. Her signature piece on each of her custom fireplaces is a "retablo" (a Latin American devotional painting on a piece of wood). She makes this herself and leaves one on each of her fireplaces.
- Carmen has been recognized by the Smithsonian Institute in Washington DC. By receiving a Certificate of Appreciation for her contribution to the Festival of American Folk Life
- Award for Excellence and Achievement in the Arts by Governor Garrey Carruthers of New Mexico
- She has received an Award of Merit in appreciation for her work as folklore ambassador from the Taos County Historical Society
- She has received a Proclamation from the office of the Mayor of Taos as Woman of the Year, Carmen Velarde Day
- She has twice been invited to represent New Mexico by the Smithsonian Institute
- At the age of 85 she still (as for many past decades) makes repairs by and to the adobe walls of St. Francis of Assisi Church in Rancho De Taos each year in June.