

ENGINEERING OOPS

MORGAN CITY SINK CENTER

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The Cajun Coast Welcome Center in Morgan City, Louisiana, was only six weeks away from opening when on June 14, 2012, a painter noticed a crack in the sheet rock. After the painter warned one of the contractors, the building was evacuated and continued slowly sinking. From a distance, the flexing roof and the cracking chimney were plainly visible. The building was intended to draw tourists into the city and to local businesses. Instead, locals began gawking and taking pictures of the center sinking. Once officials came on site, the 16,000 square-foot building had sunk nearly five feet into the ground. About seven months later, the settlement paperwork for the structural failure was completed and signed. This gave contractors the funding and permission to repair the building. A company named Expert House Movers (EHM) lifted the building so that the foundation could be strengthened and other necessary repairs could be made. The EHM contractors cut through the center's cement bottom, hydraulically jacked the building back up an inch at a time, added on to the piles, and drove the piles much farther into the earth. The Tourist Commission stated that the number of piles went from 57 to 228, all driven 120 feet below ground.

Piles are the primary type of deep foundation, a type of foundation that anchors structures into the ground where the immediate surface is not stable. Although in most situations, a slab of concrete on compacted earth can hold up light structures, large buildings may require foundations burrowed deep into the ground. Often skyscraper foundations will reach all the way into bedrock to stabilize their tall, heavy buildings.

Because of the slow, gradual sinking of the building—as well as modern advancements in design that allow buildings to bend instead of break-the interior and the remainder of the building's center were largely free from damage, helping expedite its repair. Two years after the incident, the welcome center was completed and fully functional. The cost to fix the building was roughly \$3.4 million. This money went toward elevating, reconstructing, and finishing the welcome center. The original building budget covered about a quarter of a million dollars of the funds to fix the building. The rest came from contributions from the various insurers.

The idea to put a welcome center in Morgan City was first envisioned in 2003, nine years before the initial structure was built. This center was governed by the nine-member St. Mary Parish Tourist Commission, which lacked sufficient funding for the initiative. To obtain money for the project, the commission led a demonstration proving that three welcome centers in Richmond, Virginia, contributed to the area's economic growth. They argued that tourists would stop to rest and see all that the city had to offer.

St. Mary officials created the Morgan City Atchafalaya Gateway Initiative to make the parish an attractive place for the thousands of vehicles that travel on US 90 through Morgan City daily to stop and spend money. Eventually, the Tourist Commission managed to procure \$1.35 million, which proceeded to bond markets to become \$1.7 million. The Commission received \$0.425 million in state capital outlay proceeds and another third of a million dollars from the state's Department of Natural Resources. Finally, in 2009, Aegis Construction of LaPlace, Louisiana, was awarded the construction contract with a bid of \$3.77 million.

But why was the welcome center constructed on swampy terrain? Developers believed that implementing the swamp as the backdrop to the center-with moss draped in its cypress trees, their knees protruding from the top of the water, and the beautiful Lake Palourde to the north-would seem idyllic to passing visitors. The original plans for the building included interactive, educational "pods." One of the ideas for these pods was a program titled "In the Air," which would have offered visitors information on bird watching in the area as well as a local aviation museum not far from the center. This educational pod was also intended to include information relevant to Tarzan of the Apes, the first Tarzan movie, which was shot in Morgan City in 1917 and featured Tarzan swinging from vine to vine in the swamp.

Despite the initial impediments to its construction, the center has fully recovered and garnered an impressive amount of attention from tourists. As with any visitor center, it includes numerous brochures and pamphlets of local organizations, sites, and companies, allowing tourists to learn more about what Morgan City has to offer.

Additionally, the welcome center manages many displays that highlight the rich nature of the area and allow outsiders to learn about the rich wildlife that Morgan City-and Louisiana as a whole-has to offer. Because of the center, tourists are able to easily access and learn of the importance of Louisiana swampland. While strolling the covered walkway surrounding the building, visitors can view tupelo and cypress trees, listen to the familiar song of the cicadas, and possibly glimpse a bald eagle in flight. Additionally, visitors can view what is perhaps the center's most attractive sight: Cayenne, a six-foot American alligator and resident of the swamp.