

# freewayTODAY



## TxDOT to restore former playa lake

### FREEWAY BRIEFS

- TxDOT will build a wetland at Quaker Avenue and the freeway. The new 4.1 acre playa lake will be created to the north of the existing lake and will be lined with Randall Clay excavated from the site.
- The “Windy Man” icon will be placed on the retaining walls at each interchange.
- Granite Construction, Inc.—the contractor for the first phase of the Marsha Sharp Freeway—was also the contractor on the IH27 project.

There's a lake in the way of the future Marsha Sharp Freeway. What to do? Move it, of course.

The almost 2-acre playa lake at Brownfield Highway and Quaker Avenue is a designated wetland. It cannot be disturbed during construction without a permit or approved plan. The problem is that the lake is sitting right smack in the way of the new freeway.

Fortunately, the engineers at the Texas Department of Transportation (TxDOT) solved the problem early in the design process. The solution was to move the lake to a new location that was actually the site of an older playa lake.

The department submitted a request to the Army Corps of Engineers to restore

the former playa lake just north of the existing one. The new location would be on the same spot as the old Cinema West Theater that was demolished last year.

Actually, the lake used to be much bigger, explained Joslyn Tomlinson, TxDOT environmental specialist for the Lubbock District. "This lake actually extended as far north as 17th Street and all the way west to Raleigh Avenue."

Over time, developers filled in portions of the lake leaving the present alignment of one half acre on the west side of Quaker and 1.62 acres on the east. So the area where the restored lake will be—just north of the existing one—is actually part of the playa lake that survived years ago.

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But there are strict guidelines for establishing or restoring a wetland, said Tomlinson.

"The Corps of Engineers has a long list of criteria for this new location," she added. "The restored lake must have the same soil make up as the old one."

To do this, TxDOT will use soils that have existed in the wetland for the last 50 years. Those Hydric soils include the native Randall Clay that makes up the majority of the wetland.

TxDOT will excavate 1,223 cubic yards of material at the new location—using that dirt to build embankments on the freeway and to fill in the old lake site. Then the lake cavity will be lined with Bentonite Clay, a hydric soil that exists in wetlands in other parts of the country, but not in Texas. The geosynthetic Bentonite Clay will be used as a sealant to keep large amounts of water from seeping into the underground aquifer. TxDOT will purchase the clay from a commercial distrib-

utor.

Next, Randall Clay set aside from the excavation will be placed on top of the Bentonite to form the foundation of the restored wetland. The water surface for the restored lake, including the portion on the west, will be 4.1 acres.

Once the lake is established, TxDOT will introduce native vegetation. A local biologist helped select plants common to playa lake wetlands. In addition, the seed imbedded in the Randall Clay will produce more vegetation.

"The native vegetation provides cover for the wildlife," Tomlinson said.

Lubbock Playa Lakes are important to the local environment. The vegetation is also a food source for the waterfowl that migrate through the area—primarily Canadian Geese that winter on the South Plains. Proper vegetation maintains an accurate balance in the ecosystem. It increases the aquatic diversity and abundance of wildlife and helps with sediment stabilization.

The lakes also serve as a natural storm water drainage system and a source for flood control. The Quaker Avenue playa lake drains into Maxey Park, which, in turn, is connected to an underground storm water system that drains into the North Fork Double Mountain Fork of the Brazos River.

The playa lakes are protected under the Clean Water Act of 1973, and the Corps of Engineers, the jurisdictional agency for waters of the United States, are also responsible for the conservation of the lake system. Any changes in these wetlands must be coordinated through the Corps. That means applying for a nationwide permit to get permission to restore the wetland.

The challenge is to prove to the

Corps that the location for the new lake was actually a former wetland. To help justify the restoration, TxDOT retained a soil specialist, Southwest Geological and Environmental Services. This group is helping TxDOT convince the Corps that this is a restoration instead of a new location.

"This really is a restoration as opposed to a mitigation project because there was a lake at that location many years ago," Tomlinson said. "So, we are not establishing a new lake. We are restoring an old one."

Though the burden of proof is on the department, it shouldn't be hard to validate the restoration point, said Tomlinson.

"When you find Gleying or Hydric soils from 10 feet all the way to 36 feet down, you pretty much know you are in a wetland," she added. "That's what we are finding at the new location. We started seeing Hydric soils at 10 feet."

Progress as usual? Yes. But not at the expense of the environment, said Tomlinson.

"We are moving the lake, not eliminating it," she added.

Progress, conservation and preservation—today's new environmental partners.



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**Randy Hopmann, P.E.**  
District Engineer

**Penny Mason**  
Editor

**806 748-4337**  
Public Information Office



A worker removes asbestos material from the top of the Burrus Elevator. The contractor is required to abate the asbestos before the elevator can be demolished.

## Depression-era elevator coming down

The elevator is coming down. After years of waiting, the second largest grain elevator on the South Plains will be reduced to rubble. Ball and crane demolition will begin in two weeks on the Burrus Elevator. Houston-based Cherry Demolition was awarded the contract on a bid price of \$561,423.

The Texas Department of Transportation (TxDOT) purchased the grain elevator on Fourth Street, just west of IH27, as part of the right-of-way acquisition for the future Marsha Sharp Freeway. The 1998 purchase cost the state \$988,255. The previous owners-Attebury Grain-continued to use the elevator for two more years, leasing the property from the state. Several years ago, TxDOT's General Services Division started putting together specifications to award a contract on the demolition.

"It took a while because this is the first time that the state has demolished an elevator," said Claude Kneisley, TxDOT Lubbock District right of way manager. "Writing the specifications for the contract was the hardest part."

But finally, the day has arrived. The elevator comes down to make way for the freeway. In less than four months, the 76-year-old structure-built in 1928-will be a pile of concrete that the state intends to donate to Lubbock County.

"Originally we wanted to recycle the concrete and use it on the freeway," said Ron Baker, TxDOT Lubbock Urban area engineer. "But, we couldn't crush it on site because of the issue with dust, and it was cost-prohibitive to haul it to a crushing plant and haul it back. So we decided to donate it."



The contractor will haul the concrete to a location southeast of the airport to be

crushed and stockpiled.

The Burrus Elevator is not an easy structure to bring down, said Kneisley. Contractors originally thought it could be imploded, but the structurally-reinforced steel compartments make it impossible to bring down in one piece.

"It has 123 silos and bins, and it is 750 feet long and 160 feet high at its tallest point," he added.

The steel rebar will be separated out during the crushing process.

"The crusher automatically separates the metal," Kneisley said.

It will be sold at a scrap metal price and the proceeds will be credited to TxDOT's account.

It has taken the state about six years to reach the point of demolition. But, it's finally here. Stand

by. The elevator is coming down.

# Freeway projects

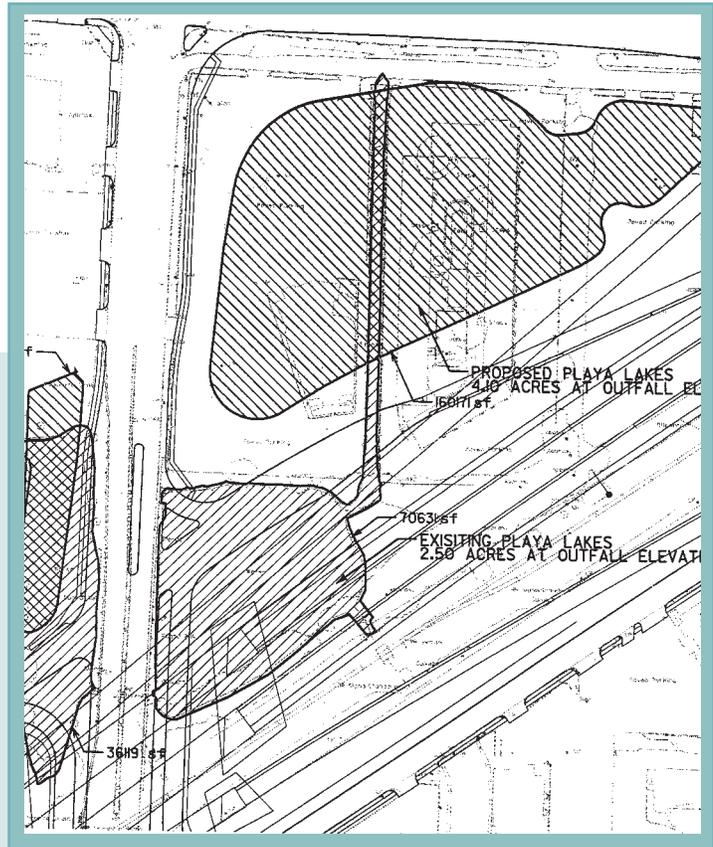
**Phase 1.** Widening of West Loop 289 from four to six lanes from 34th Street to Slide Road. Rebuilding frontage road system under the main lanes—three lanes on each side. Building the 50th Street overpass and extending 50th Street to Frankford. Project is scheduled for completion at the end of 2005.

**Phase 2.** Building the complete freeway from Salem Avenue to Avenue L. Building 19th St., Quaker Avenue, Fourth Street and Avenue Q interchanges. Construction will begin in the spring of 2005 and take about four years.

**Phase 3A.** US 82 main lanes and fly overs at Loop 289. Construction will begin in the spring of 2005. \$23.8 million

**Phase 3B.** US 82 from Chicago Avenue to Salem Avenue. Fiscal Year 2006. \$34.3 million.

**Phase 4.** Building the I27 interchange. Sometime after 2010.



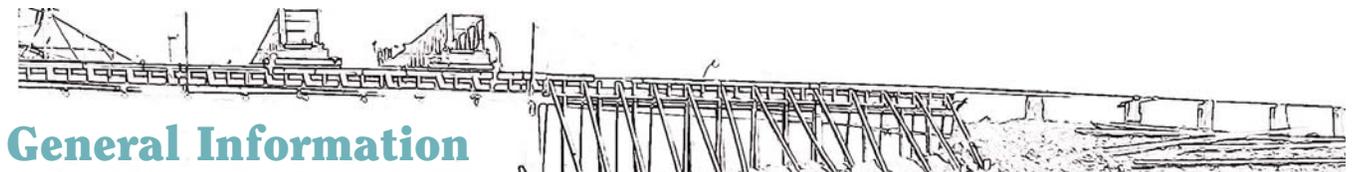
# Economic Benefits

Using a 3.6887 multiplier –the comptroller’s estimated rate of turnover for each construction dollar.

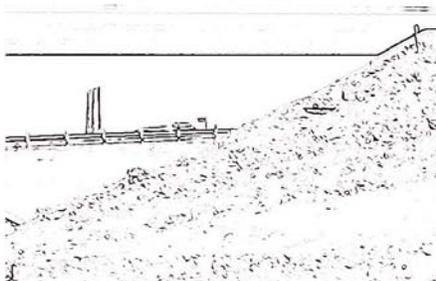
$3.6887 \times \$256 \text{ M} = \$944,307,200 \text{ M}$  in regional benefits.

For every \$100 M pumped into the economy, up to 4,500 jobs are created.

$2.5 \times 4,500 = 11,250$  new jobs



# General Information



Square yards of concrete pavement	1,042,000
Square feet of bridge deck	1,185,500
Square feet of retaining wall	500,000
Linear feet of storm drain pipe/box	107,000
Cubic yards of earthwork	2,581,000
Excavation	2,581,000
Embankment	1,784,000