

Achievement award goes to Waco

Abandoned cotton gin pond restored as part of SH 6 project

By **JIM DOBBINS**

Environmental Affairs Division

The 2001 Environmental Achievement Award was presented to the Waco District on Oct. 15 at the TxDOT District Engineer/Division Director/Office Director meeting in College Station.

The Environmental Achievement Award recognizes the best examples of projects and processes that fulfill transportation objectives while protecting and enhancing the natural and human environment. The award is presented annually by the Environmental Affairs Division to the district whose efforts demonstrate outstanding results.

The Waco District took home top honors for its Texas 6 wetland modification project.

When improvements to Texas 6 in Riesel threatened a pond, the staff of the Waco District went the extra mile to preserve and enhance the wetland, even

after the U.S. Army Corps of Engineers (USACE) determined that no mitigation efforts would be required.

The two and a half-acre pond is along a branch of Sandy Creek, which crosses Texas 6 north of the pond. The pond had once been used by a nearby cotton gin and was a popular illegal dumping site for local scofflaws. A plan was developed with advice from Texas Parks and Wildlife Department (TPWD) staff to restore the pond to its original shape and size and revegetate with native species.

The stream channel was lined with rock mattresses and seeded with native grasses to stabilize it. Crews removed approximately 10,000 cubic yards of silt from the pond, as well as trash, tires and debris. The pond also received a new berm. To ease the re-establishment of native vegetation, the top four inches of topsoil, containing seeds and live plant materials, had been removed and stored.

Once the berm was completed, this soil was placed on the berm. The contractor planted native trees, such as Red oaks, bald cypresses, and live oaks and maintained them for nine months. A spillway was constructed to insure that the recommended 18 to 24-inch water depth is maintained. The restored wetland has attracted a variety of wildlife, such as egrets, killdeer, and swallows. An attractive, emergent wetland has replaced what was disparagingly referred to by local residents as a "mosquito pit."

The Waco District's efforts have improved a highway and positively impacted the environment.

Also honored were:

Runner-up – Bryan District for its Texas 40 conservation easement for the endangered Navasota ladies' tress.

Population growth in the Bryan-College Station area necessitated

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Emergency permits secured for Isabella repairs, ferry docks

By **RICHARD GOLDSMITH**
Environmental Affairs Division

The Pharr District and regulatory agencies have proved that in an emergency and with cooperation, the permitting process can be speeded up. Pharr, with help from ENV, discovered how fast permits can be cleared in the wake of the tragedy that closed the Queen Isabella Causeway.

A towboat pushing four barges through the Gulf Intracoastal Waterway collided with the structure in the early hours of Saturday, Sept. 15. Two sections of the bridge collapsed immediately and vehicles plunged into the water in the pre-dawn darkness before traffic was halted. Eight people drowned. A third span collapsed that afternoon. The U.S. Coast Guard is investigating the cause of the accident.

Velma Garcia, environmental coordinator for the Pharr district, said the U.S. Army Corps of Engineers (USACE) was contacted within hours about permits for the first items of concern, clearing debris from the bridge collapse, demolishing and clearing away damaged bridge elements and creating temporary ferry landings to re-establish transportation between South and Padre Island Port Isabel.

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Waco's Mike Rhodes helps district earn honors in 2 of past 4 years

By JIM DOBBINS

Environmental Affairs Division

Taking home two of the last four Environmental Achievement Awards is quite a feat for any district. This accomplishment demonstrates the Waco District environmental staff's high level of commitment, lead by coordinator Mike Rhodes.

Rhodes, a native of Irving, is a 1990 graduate of Texas A&M University with a B.S. in wildlife and fisheries sciences. Following graduation, he worked for A&M's College of Veterinary Medicine until he decided to follow in his father's footsteps by joining TxDOT in June 1993 in Waco's advanced planning/environmental section. His father, Andy Rhodes, recently retired from the Fort Worth District.

"My father told me about the opening, and since my wife, Brenna, is from Waco, we were interested in relocating there," Rhodes explained.

Rhodes' job duties are a good fit for him.

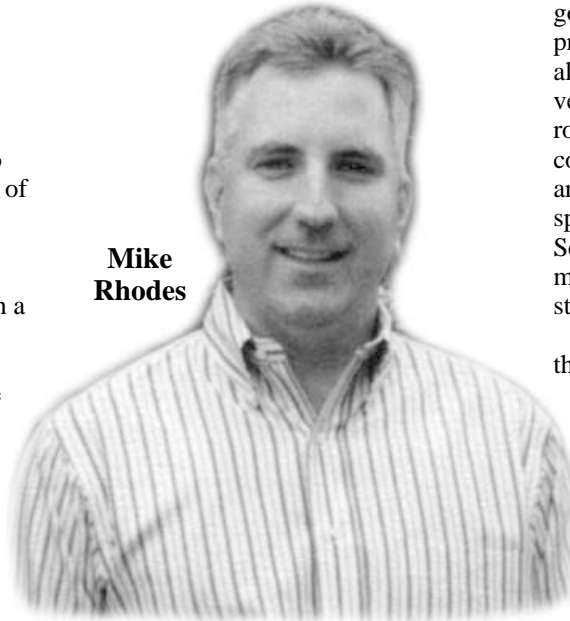
"I like the variety of work," Rhodes said. "One day we are working on a historic issue, the next day it is endangered species. Best of all, I get to use my degree. I was told when I was in college that only 20 percent of wildlife and fisheries sciences graduates get a job in a related field. I could not stand to have a 100 percent office job, as I like to get out in the field. One of my former bosses, Billy Pigg, who was head of advanced planning, was rather jealous, as he was always making comments about going out in the field, particularly on sunny days."

While Rhodes job is a good fit for him, it is not always the proverbial "bed of roses."

"I'm not crazy about the shifting priorities - one day this project is hot, the next day it is another one," Rhodes said. "The sheer volume of work does not always allow me to do as thorough a job as I would like."

Jo Jarrell, a water quality specialist in ENV's Natural Resources Management Section, worked with Rhodes when she was the ENV project manager for the Waco District.

"Mike is very knowledgeable, an excellent researcher and always a



Mike Rhodes

gentleman," Jarrell said. "He uses his knowledge and experience to get the district's projects approved."

"I owe a lot to Alisa Polansky, who was the environmental coordinator when I first arrived here," Rhodes said. "I learned the NEPA process from her. I also have two excellent employees in David Jayroe and John Moravec, who I have complete confidence in. They both make my job easier. Alisa set the example when she was here (she is now with the district's I-35 project office), as I feel that our district never tries to 'just get by' with any project. By going the extra mile, it saves us a lot of headaches down the line."

Rhodes has worked on a number of varied and interesting projects since joining the district more than eight years ago.

"One of the most interesting projects that I have worked on is not even in our district," Rhodes said. "SH 195 in Williamson County (in the Austin District) ended up on our plate through a D.E. to D.E. deal and since most of the project was in our district anyway in Bell County. The project has endangered karst invertebrate issues, an influential landowner who opposes the project, microwave towers, electric transmission lines, a hill that must be avoided, and half the project is over the Edwards Aquifer recharge zone! As far as the landowner

goes, we've minimized the impact to his property, but we're still pursuing that alignment regardless of the fact that he's very vocal. We feel that this is the best route for the environment and constructability. We've realigned the road around the karst invertebrates to meet the spirit of what the U.S. Fish and Wildlife Service asked for at our early coordination meeting. This route meets current design standards."

Rhodes was also involved in the project that reconditioned and moved the historic Dodd's Creek Bridge from Coryell County Road 133 to Main Street in Salado, which was recognized with the 1998 Environmental Achievement Award (see "Waco District takes home top environmental award," Fall 1998).

"I wrote the categorical exclusion for the Salado bridge project, along with Dean Tesmer (now a supervisor in ENV's Project Management Section). I will never forget the public hearing - there was a lot of misinformation going around that the city was going to get a rusty old bridge, and not the renovated span that they actually got. We had to close the hearing because of all the profanity," Rhodes said.

Tesmer worked with Rhodes in the Waco District for two and a half years in the mid-1990s.

"Mike enjoys working on biological issues and has done some great work in Waco," Tesmer said. "He is ambitious and is excellent at resolving issues, often with innovative solutions, as they arise. I remember when we were concerned about getting added to the endangered species survey permit held by ENV, and got into a time crunch. Mike went to work on the permit application and had it finished and approved in time to conduct our own golden-cheeked warbler surveys the following spring."

Rhodes and his wife (who majored in soil and crop science) met in college. They reside on 30 acres near the Brazos River in Bosqueville with their three and a half year old daughter Raelynn. He keeps co-workers in the district stocked with fresh eggs from the chickens that the family raises. In his spare time Rhodes enjoys hunting, bird watching, music, travel and spending time with the family.

Bat Conservation International (BCI) honors Bridge Division's Bloschock

By JIM DOBBINS

Environmental Affairs Division

Mark Bloschock, a supervising bridge engineer in the Bridge Division recently was recognized by Bat Conservation International (BCI) with its Distinguished Service Award - the first time someone other than a professional conservationist has received the honor.

Bloschock has cheerfully served as TxDOT's unofficial bat expert since bats moved in considerable numbers into the reconstructed Congress Avenue Bridge in the mid-1980s. The presence of the large colony of Mexican free-tailed bats roosting in the bridge's crevices had caused alarm among local citizens. Bloschock decided to educate himself on the subject, reading up on the topic and eventually forming a working partnership with BCI. It was discovered that there was still much to be learned about bats and their roosting habits. A partnership was formed between BCI and TxDOT, which resulted in two groundbreaking studies, "The Texas Bats and Bridges Project" and "Bats in American Bridges." The results of the two studies have greatly influenced the design of TxDOT bridges and culverts and trimming practices on south Texas palm trees (Southern yellow bats roost under dead palm fronds that were typically trimmed away for aesthetic reasons.)

"Creating and maintaining bat habitat is beneficial to our ecosystem and keeps insect populations under control," Bloschock said. "Bridges and culverts can be designed to be attractive to bat colonies, when appropriate, at no additional cost. For example, in central Texas, there is a 94 percent chance that a structure built to accommodate bats will be occupied within five years."

Brian Keeley, a project coordinator with BCI, has worked closely with Bloschock over the



Bridge Division engineer Mark Bloschock surveys at dusk bats living under a bridge (above) and with a "batometer" (right) that more accurately measures bat populations.

Bridge Division photos

years.

"Mark was already working with the Texas Bats and Bridges Project in 1994 when I joined BCI," Keeley said. "Due to his leadership, the project has been one major success after another. First in Texas, then nationally, project applications have made their way into transportation departments worldwide."

In addition to his TxDOT duties, Bloschock has lectured nationally and internationally about bats and their roosting habitats in bridges and culverts.



Award: Tresses conservation honored

(Continued from Page 1)

construction of new Texas 40 to connect Texas 6 with FM 2154. The path of the proposed highway passes through an area where the endangered Navasota ladies' tress, a species of orchid, is found. This flowering plant is found only in about 100 locations in a 10-county area. In order to build the highway and avoid adversely impacting the endangered plant, the Bryan District's environmental staff teamed with TPWD, U.S. Fish and Wildlife Service, and a local landowner to come up with a pragmatic solution.

To conserve the plant and obtain the approval of resource agencies, the Bryan District created TxDOT's first conservation easement. TxDOT purchased an interest in 38 acres of land containing a population of Navasota ladies' tresses, situated along Spring Creek and one of its tributaries. The land ownership is retained by a private landowner who will not develop the site. Staff will perform more work at the

easement to improve conditions for the endangered plant. Brush has been thinned to allow sunlight

to reach the orchids and make the habitat more favorable for its propagation. The easement will be monitored and surveyed periodically to ensure that no harm is done to the endangered plants.

Endangered species habitat was preserved while addressing transportation needs of the community.

Also **Runner-up** – Corpus Christi District's U.S. 77 project in Refugio.

When a project to improve U.S. 77 through Refugio turned up the cemetery of a Spanish mission hidden under the highway, the staff of Corpus Christi District's public information office went to work planning and executing a major public relations campaign and partnership with area citizens. Contract

archeologists found more than 160 sets of remains from Spanish and Native American inhabitants of mission *Nuestra Senora del Refugio* when the highway pavement was removed for replacement. This required extensive coordination under Section 106 of the National Historic Preservation Act and some delay to the completion of

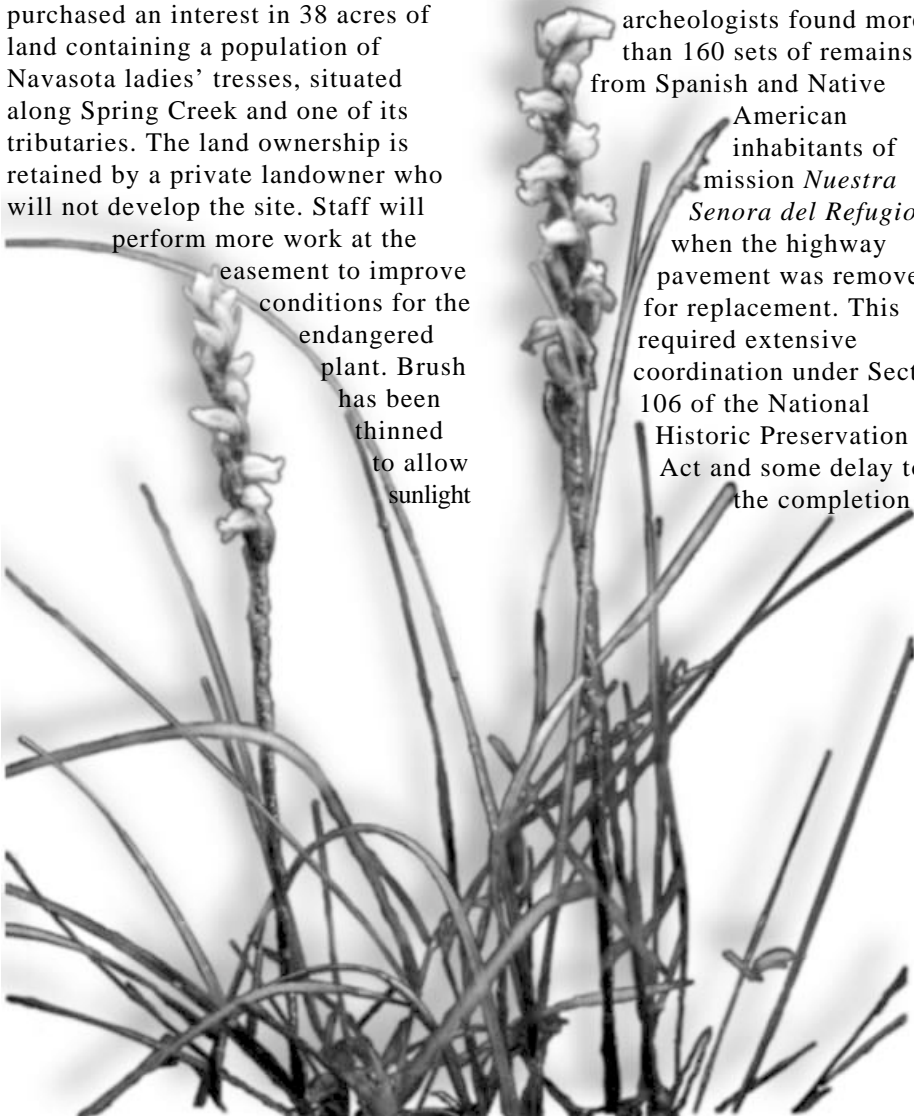
the project on this major travel corridor that bisects the city of Refugio. Contract archeologists removed the remains for study and later reburial in a more appropriate location. District staff held meetings with affected parties and launched a campaign to keep area citizens informed as the project unfolded. The district provided local citizens and the media with weekly on-site updates of the progress made and discoveries of interest. A videotape chronicling the story of the mission and the project itself was made with the assistance of staff from the Travel and Environmental Affairs divisions. The video premiered at a project completion celebration that was attended by more than 100 area citizens. Refugio mayor Ray Jaso presented letters of appreciation to many TxDOT staffers at the celebration.

Through the efforts of the Corpus Christi District, a potentially controversial situation resulted in significant community support and good will for TxDOT.

Honorable Mention – Pharr District's U.S. 77 salt flats erosion control.

When erosion problems threatened a sensitive wetland along U.S. 77 in Kenedy County, Pharr District environmental staff teamed up with the Raymondville Maintenance Section to stabilize both the highway and the wetland.

Pharr District staff met with their counterparts at USACE and the Maintenance Division to develop and implement a plan. District maintenance employees placed silt fences at the ordinary high water mark and hauled dirt in to fill gullies and crevasses. They dug a 400-foot ditch approximately six feet from the edge of the pavement and placed about 800 timber poles at ground level to stabilize the site. Crews added a second similar trench about six feet from the first one, and also



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May 2002: Next award nomination deadline

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filled it with timber poles. This second group of poles was placed so that six inches of each pole was exposed above ground level to slow storm water run-off. Staff dug out the accumulated sediment and reshaped the slopes, and constructed a concrete drain to remove rainwater from a nearby bridge and prevent washouts. Soil was analyzed and favorable vegetation planted to ensure that the slopes do not wash out. The use of soil retention blankets prevented erosion until the plants became established.

The Pharr District staff addressed the safety of motorists and a preserved wetland.

“We had a difficult time choosing a winner this year because we had so many strong nominees,” said Terry Dempsey, an environmental quality specialist in ENV’s Hazardous Materials Management Section, who served on the review committee. “I liked the Waco District’s project because they took what was essentially an eye-sore and made it into something that the community can be proud of.”

Look for the call for nominations for the 2002 Environmental Achievement Award in early January. Entries must be received at the Environmental Affairs Division by 5 p.m. on Friday, May 3, 2002.



Waco District Photo



The Waco District took top honors for its Texas 6 wetland modification project that restored a stagnant pond (inset) to its original shape with native vegetation. The Corpus Christi District earned runner-up recognition for its U.S. 77 project in Refugio (left) in which archeologists studied and relocated the remains of 160 Native Americans and Spanish settlers.

Corpus Christi District Photo

The Pharr District was recognized for the U.S. 77 project in Kenedy County in which the district worked to control erosion in a sensitive salt flat (right).

Pharr District Photo



Los Tomates Expressway extension honored by ARBTA Globe Award

By JIM DOBBINS

Environmental Affairs Division

Construction of the U.S. 77/83 Los Tomates Expressway extension in the Pharr District was one of nine projects from across the nation recently honored with the American Road and Transportation Builders Association's (ARBTA) Globe Award.

Located in Brownsville, the project added a two-mile long, four-lane divided highway that connects with the Veterans International Bridge - providing a way for large trucks engaged in international commerce to avoid the congested downtown crossing to Mexico.

Unique elements of the project include the replacement of a neighborhood park, relocation of 110 large Sabal palm trees to form a corridor near the bridge, planting

shrubs and olive trees, adding irrigation and preserving a wildlife corridor.

Context sensitive design was employed for the first time on a large scale in the district. The columns on the project were cast to resemble cut stone, a common design element in the older buildings of Brownsville. A lone star design, used elsewhere in the district, was incorporated, as was a design element borrowed from Brownsville City Hall.

Velma Garcia, environmental coordinator in the Pharr District, worked extensively on the project.

"We went through a lot to get the project cleared," Garcia said. "Public involvement was a major part of this project, in part because of a city park that stood in its path. We replaced Lincoln Park with New Lincoln Park on an acre-

for-acre, picnic-table-for-picnic-table basis. Because the project ties in with an international bridge, it received a presidential permit instead of the usual FONSI."

ARBTA's Globe Awards is in its second year recognizing transportation projects that protect and enhance the natural environment, and transportation construction-related material suppliers that use exemplary environmental processes.

Pharr District Engineer Amadeo Saenz accepted the award on behalf of TxDOT and Williams Brothers Construction, the project contractor, at the awards dinner on September 10 in Tucson, Arizona.

Also recognized with Globe Awards were projects and firms in Arkansas, Wisconsin, Missouri, Maryland, California, New Jersey and Georgia.



Allen Bettis, an archeologist in ENV's Cultural Management Section (CRM), demonstrates flint-knapping for Austin-area middle school students. More than 600 students participated in the second annual Earth Science Week Career Day at the University of Texas' J.J. Pickle Research Center in Austin Oct. 9. Through a program of speakers and exhibits, students explored a variety of earth science-related careers. TxDOT was also represented by Mike Jordan (far left) of the Archeological Studies Branch of CRM, Rodney Conciencie of the Operations and Maintenance Branch of the Hazardous Materials Management Section, and Kathleen Darnaby of the Water Resources Management Branch of the Natural Resources Management Section. TxDOT is a major-sponsor of the event. To learn more about Earth Science Week and the annual career day, please visit the web site at: www.beg.utexas.edu/esw.

Photo by Jim Dobbins

Neeley earns AIPC certificate

Melissa Neeley, with ENV's Project Management Section (PM), earned her certification in August from the American Institute of Certified Planners (AIPC). Neeley's co-workers are having lots of fun making up new definitions for the acronym "AIPC," especially because she is an alum of Texas A&M.

Archeologist Mike Jordan joined the Cultural Resources Management Section March 26 and was inadvertently left out of the last ENVision. Jordan earned his bachelor's degree in anthropology from UT Austin and his master's degree from Durham University in England. His thesis was on Kiowa art. Before joining ENV, Jordan was a living history demonstrator at the Jourdan-Bachman Pioneer Farm. His hobbies include Civil War historical reenactments and Indian dances. He is a native of Corpus Christi and lives in Austin with his wife, Marie, and their dog, Sam.

Rick Costa left ENV's Water Resources Management Branch (WRM) as of July 31 to pursue a new career in Colorado.

Jo Jarrell moved from PM to WRM as of Sept. 1. Jarrell has been part of ENV since December 1999.

Daniel Benson is crosstraining as a project manager in PM for a one year rotation starting July 1. He has worked in the Hazardous Materials Management Section for the past 2 1/2 years.

Causeway: Permits quickly OKed

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Garcia and ENV Permit Assistance Officer Tom Remaley, P.E., worked with USACE to obtain an emergency permit to authorize demolition of the damaged sections of the bridge, removal of rubble from beneath the bridge and construction of a temporary ferry landing on the island to allow loading and unloading of two 16-vehicle ferries borrowed from Port Aransas.

Facilitating the permit process meant conference calls, including one on Sept. 20, that included ENV, USACE, Federal Highway Administration, Texas Parks and Wildlife, U.S. Fish and Wildlife, National Marine Fisheries Service, U.S. Coast Guard and Texas General Land Office. Such interagency coordination usually takes several weeks to accomplish, but using the USACE emergency permitting procedures allowed USACE to give TxDOT verbal authorization to proceed within 24 hours of the conference call.

Pharr District Engineer Amadeo Saenz Jr. said, "In this emergency, all of the resource agencies partnered with TxDOT to expedite the permitting process without hindering policies and procedures. In a crisis situation like this, we learned that all of our goals are similar in protecting human beings and the environment."

"It was amazing that all the resource agencies made an effort to take part in the conference call. The 24-hour turnaround was fast, but when you're working under these conditions every hour feels like one day. Twenty-four hours felt like an eternity," Garcia said.

Remaley said, "This is a real testament to good interagency coordination. With all the state and federal transportation and resource protection agencies working together on an expedited basis, TxDOT was able to move forward in restoring mobility to South

Padre Island while making certain that we were protecting the ecology of Laguna Madre."

The National Marine Fisheries Service was instrumental in getting observers on site to watch for sea turtles and marine mammals to insure that none were in the area prior to blasting for demolition, a condition of the USACE permit.

Garcia said of the Laguna Madre, "this area is very sensitive. There are sea grasses, sea turtles and dolphins in the area and we had to make every effort to minimize the impacts."

Using similar procedures on Oct. 1, TxDOT was able to secure, in one work day, an amendment to the permit to create a second landing 400 feet from the first when it was discovered that the first landing could not be used for a larger 40-vehicle ferry contracted from Alabama and a 26-vehicle ferry contracted from North Carolina. For both ferry landings, USACE approval was needed to sink clusters of pilings into the ocean bed as mooring dolphins and to fill in between the shore and barges used as floating docks for vehicles to drive on and off the ferries.

Reconstructing the damaged sections of the bridge will be carried out under the original 1974 permit used to build the causeway, the only bridge to the island and the longest bridge in Texas. Williams Brothers of Houston is repairing the bridge under two separate sole source purchase of services contracts. One is for \$1 million for the demolition of damaged bridge sections and the second is for \$3 million for its reconstruction. The contractor has a Dec. 23 deadline to finish the repair with incentives for early completion and penalties for not meeting the deadline.

Pharr District maintenance workers built the two ferry landings on the island.

"Maintenance crews worked diligently to build the ferry

landing in record time. They designed as they built with innovative ideas to get the job done. Our main priority was to provide access to and from the island as soon as possible," Garcia said.

FHWA is reimbursing all eligible transportation related costs such as the passenger boats and ferries and 100

percent of the cost of repairing the causeway.

In a related item, at its September meeting the Transportation Commission approved a route study and environmental assessment as preliminary steps to determine the need to build a second bridge to the island.



Photo by J. Griffis Smith/TxDOT

Behrens speaks to environmental coordinators

In his first public speaking engagement as TxDOT's new executive director, Mike Behrens emphasized the importance of water quality and water supply. He said TxDOT should be careful to design projects to use less water in the future as "water supply will become more and more important."

Behrens also talked about the importance of the environmental streamlining effort, air quality, the use of alternative fuels and wetlands issues to the department.

"We will do the right thing," he said.

Behrens spoke at the Sept. 5-7 Environmental Coordinators Conference hosted by ENV at Austin's Red Lion Hotel. The conference drew about 450 environmental professionals from TxDOT, state and federal resource agencies and the consulting industry.

Behrens became executive director Sept. 1, taking the place of Wes Heald who retired in August. Behrens was assistance executive director for engineering operations under Heald.



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Address correction requested



Two air quality models used in NEPA analysis revised and now available

**By WAYNE YOUNG
Air Quality Specialist**

Environmental Affairs Division

Two of the air quality models used in NEPA analysis have been revised and were sent to the districts in October.

CAL93, the data builder for Caline 3, has been renamed CAL2001 and has several internal changes. These include a slight correction to the algorithm converting English measurements to metric. The new model also causes Caline 3 to calculate carbon monoxide concentrations at several wind angles instead of the single 90 degrees in CAL 93. Background carbon monoxide concentrations have also been added to the computer display.

Average.exe has also been modified. The new model, AVG

2001, also has background carbon monoxide concentrations added to the computer display and now creates a results file that can be imported into word processing software and printed.

TxDOT carbon monoxide look-up tables will be revised after the release of the new EPA mobile source emission rate mode, MOBILE 6. EPA has indicated that MOBILE 6 will be officially released in 2001. Once the model is released, ENV will develop new tables with MOBILE 6. The new model will allow ENV to construct tables extending beyond calendar year 2020. Speeds will be limited to a maximum of 65 mph.

For more information, contact Wayne Young (512) 416-2890, via GroupWise within the department to WYOUNG, and outside TxDOT to WYOUNG@dot.state.tx.us

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We welcome ideas for stories and standing features. Submit those to the above address, attention Richard Goldsmith, phone 512.416.2743; via

GroupWise to "rgoldsmi" within TxDOT; "rgoldsmi@dot.state.tx.us" for e-mail from outside TxDOT.

Does ENVision reach the right person within your organization? Contact us to correct an address or to suggest additions to the mailing list.

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