ARCHAEOLOGICAL INVESTIGATIONS FOR A BACKUP GENERATOR PAD LOCATION AT DARRINGTON STATE PRISON, BRAZORIA COUNTY, TEXAS

Texas Antiquities Permit No. 6133

Prepared for **TEXAS DEPARTMENT OF CRIMINAL JUSTICE** Two Financial Plaza, Ste. 400 Huntsville, Texas 77340

Prepared by Marianne Marek, M.A. Principal Investigator Physical Anthropologist

SWCA ENVIRONMENTAL CONSULTANTS 7255 Langtry, Suite 100 Houston, Texas 77040 www.swca.com

SWCA Project No. 21451 SWCA Cultural Resources Report No. 2012-154

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ABSTRACT

On behalf of the Texas Department of Criminal Justice (TDCJ), SWCA Environmental Consultants (SWCA) conducted archaeological investigations for a backup generator pad site at the Darrington Unit in north Brazoria County, Texas. The Darrington Unit was in the process of constructing a concrete pad for a backup generator location when human skeletal remains were discovered. The skeletal remains were analyzed by the Laboratory of Forensic Anthropology at the University of North Texas who determined that the remains were "archaeological" and not the result of a crime. The Texas Historical Commission (THC) was notified of the discovery, and the THC then notified TDCJ that the area needed to be investigated by a qualified professional archeologist per 13 Texas Administrative Code § 26.11(4).

SWCA's investigations consisted of re-excavating and searching the fill in the backup generator pad location for additional human skeletal remains. Investigations were conducted under Texas Antiquities Permit No. 6133. Marianne Marek served as Principal Investigator and Physical Anthropologist. Field investigations were conducted by Marianne Marek, Todd Butler, and Larkin Kennedy on March 22, 23, and 26, 2012.

SWCA thoroughly searched through all of the soil in the backup generator pad location. No additional human skeletal remains were found. The investigations have concluded that the soils in the backup generator pad location consist of mottled fill that was probably brought in during construction of a wastewater treatment plant at the Unit between 1975 and 1987. A cemetery or archaeological site is not present at the backup generator site and construction of the backup generator in this location will not have an impact on intact cultural resources. Multiple Historic cemeteries are located on the Darrington Unit and any future construction at the Unit should be assessed with regard to the potential for impacting unmarked burials.

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MANAGEMENT SUMMARY

PROJECT TITLE: Archaeological Investigations for a Backup Generator Pad Location at Darrington State Prison, Brazoria County, Texas.

SWCA PROJECT NUMBER: 21451

PROJECT DESCRIPTION: Human skeletal remains were discovered during the construction of a backup generator pad site at the Texas Department of Criminal Justice (TDCJ), Darrington Unit. The Texas Historical Commission (THC) was notified of the discovery and as a result the THC requested that the area be investigated by a qualified professional archeologist per 13 Texas Administrative Code § 26.11(4). SWCA's investigations included a background literature and records review and excavation of the generator site to systematically identify, record, delineate, and, if possible, determine the significance of any intact cultural resources located within the area.

LOCATION: The Darrington Unit is situated north of Sandy Point and on the west side of Highway 521 in the northern part of Brazoria County, Texas. It is located on the Juliff, Texas 7.5-minute USGS topographic quadrangle map.

NUMBER OF ACRES INVESTIGATED: 252 square feet (0.006 acre)

PRINCIPAL INVESTIGATOR: Marianne Marek M.A., Physical Anthropologist

TEXAS ANTIQUITIES PERMIT: 6133

DATE OF WORK: March 22, 23, and 26, 2012

PURPOSE OF WORK: The purpose of the investigations was to determine if construction for a backup generator pad had impacted a cemetery or archaeological site. If a cemetery or archaeological site had been impacted, the limits of the site would be delineated and a new location that did not impact the site would be selected for the backup generator. These investigations were conducted for compliance with the Antiquities Code of Texas.

NUMBER OF SITES: None.

CURATION: None of the artifacts from this project will be curated. Modern artifacts will be discarded and the coffin handle will be returned to the Darrington Unit for final disposition.

COMMENTS: In accordance with the Antiquities Code of Texas, SWCA has thoroughly investigated the backup generator pad site. The investigations have determined that a cemetery is not present at the backup generator site and construction of the backup generator in this location will not have an impact on intact cultural resources. Multiple Historic cemeteries are located on the Darrington Unit and any future construction at the Unit should be assessed with regard to the potential for impacting unmarked burials.

INTRODUCTION

On behalf of the Texas Department of Criminal Justice (TDCJ), SWCA Environmental Consultants (SWCA) conducted archaeological investigations for an unanticipated discovery of human skeletal remains during construction of a backup generator pad at the Darrington Prison Unit in Brazoria County, Texas. The purpose of the investigation was to determine if the human bone discovered during construction of the generator pad was from an archaeological site or historic cemetery. Investigations were conducted in compliance with the Antiquities Code of Texas [13 Texas Administrative Code § 26.11(4)].

SWCA's investigations included a background literature and records review. Field investigations consisted of removal and inspection of all soil from the backup generator site.

Archaeological investigations were conducted under Texas Antiquities Permit No. 6133. Marianne Marek served as Principal Investigator and Physical Anthropologist for the project. Fieldwork was conducted by Marianne Marek, Todd Butler and Larkin Kennedy on March 22, 23, and 26, 2012.

PROJECT DESCRIPTION

The project area is located on the TDCJ Darrington Unit in north Brazoria County, Texas. The Darrington Unit is located on the east bank of Oyster Creek, to the west of FM 521, approximately 1.10 miles north of the community of Sandy Point. The project area is depicted on the Juliff, Texas USGS 7.5minute topographic quadrangle map (Figures 1 and 2).

GEOLOGY

The geology for the project area is mapped as Pleistocene Beaumont Formation with stippled overprint (Barnes 1982). This formation is mostly clay, silt and sand, with calcium carbonate, iron oxide and iron manganese concretions in the zone of weathering. The surface is almost featureless, characterized by meander patterns and pimple mounds on meanderbelt ridges separated by areas of low, smooth, featureless deposits without pimple mounds. The stippled overprint shows areas that are dominantly clay and mud of low permeability, high-waterholding capacity, high compressibility, high to very high shrink-swell potential, poor drainage, level-to-depressed relief, low shear strength and high plasticity. Geologic units include interdistributary muds, abandoned channel-fill muds, and overbank fluvial muds (Barnes 1982).

Soils

The soil within the project area is mapped as Lake Charles Clay. The Lake Charles Series consists of very deep, moderately welldrained, very slowly permeable soils that formed in clayey sediments. These soils are on broad coastal prairies. Slopes are mainly less than one percent. The soil formed in clayey flood basin deposits on alluvial plains or deltas of the Beaumont Formation of Pleistocene age (NCRS 2011).

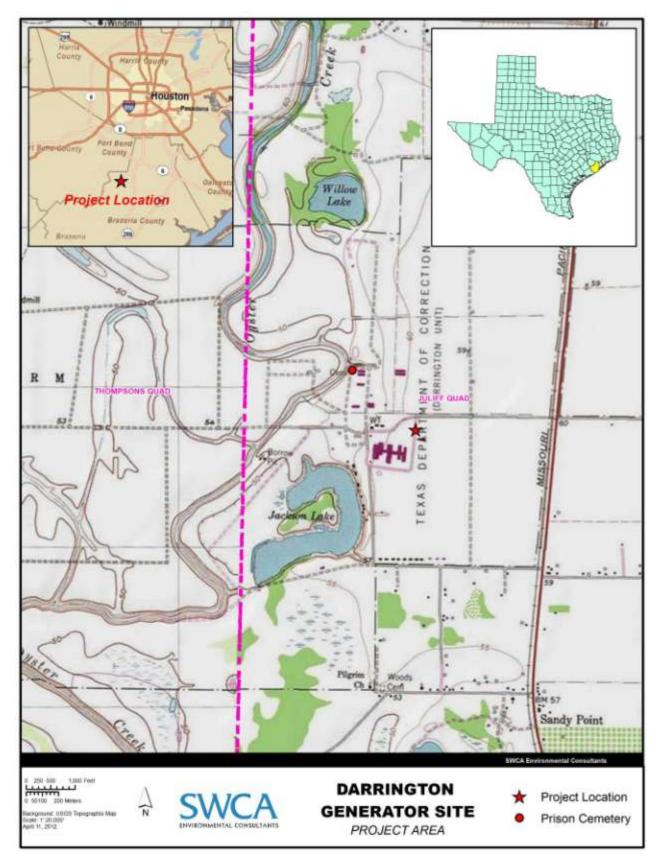


Figure 1. Location of project.

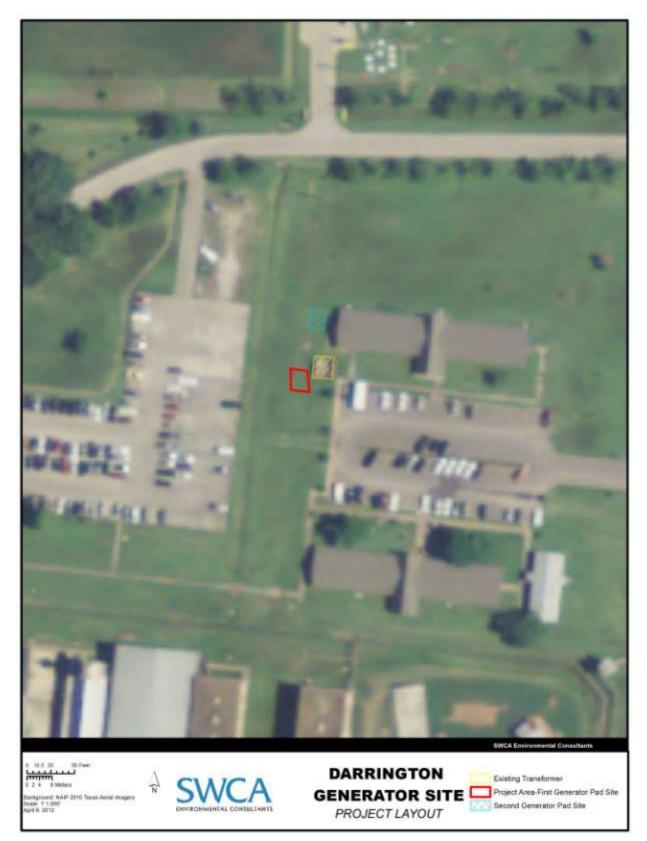


Figure 2. Overview of project area.

HISTORY

The project area was first settled in the 1820's by Francis Bingham and Achilles McFarland, both members of Stephen F. Austin's "Old Three Hundred". Francis Bingham developed a well-known plantation with a sawmill, a brick kiln and a race track. Members of the Bingham family built a series of homes on the property and retained ownership into the twentieth century. The McFarland property was bought and sold a number of times with a man named Darrington and Francis Bingham both owning the property prior to 1840 (Sherman et al. 2009:42).

In 1871, after the Civil War, the State of Texas initiated a program where plantations were allowed to lease convict labor to grow sugar cane and cotton (Few 1994). The Darrington Plantation, owned by T.W. House, was a major contractor of prison labor (Walker 1988).

The lease system worked so well that in 1886 the state began to acquire plantations in Brazoria County and work them with convict labor (Sherman et al. 2009:58). The state continued to purchase plantations and ended the lease system in 1912 (Few 1994). The Darrington Plantation was purchased in 1918 and the Darrington Prison farm was established.

METHODS

BACKGROUND REVIEW

SWCA performed a background literature review of all previous archaeological investigations on the Darrington Unit and all previously recorded archaeological or historic sites in the area. The investigation utilized records available on the Texas Historical Commission's (THC) Archaeological Sites Atlas.

FIELD METHODS

A crew of SWCA archaeologists conducted the archaeological investigations of the generator pad site following guidelines provided by the THC and outlined in a scope of work previously approved by the THC:

- Determine if the generator pad location is part of an archeological site or cemetery. The construction backdirt will be screened to collect any artifacts and additional human remains. The area that was dug out during construction will be cleaned and profiled to determine if there are intact archeological deposits and/or additional human remains.
- 2.) The topographic map of the area indicates that the generator site is located in an old road bed. If archeological investigations and the soil profile demonstrate that the human remains originated from construction fill that had been brought in from elsewhere, then no additional site delineation measures will be necessary. The generator construction may continue in its original location. Any additional human remains (if recovered) will be turned over to TDCJ for final dispensation.
- 3.) Should the profile of the construction area determine that the human remains are from an archeological site, addi-

tional archeological investigations will be conducted.

Locations were plotted using a handheld Global Positioning System (GPS) unit. Soils were recorded utilizing standard terminology and colors were determined with a Munsell Soil Color chart.

RESULTS

BACKGROUND REVIEW

The background review determined that the project area has not been previously surveyed for cultural resources, nor are there any previously recorded archeological sites within the immediate area. The nearest previously recorded cultural resources include sites 41BO203 and 41BO204, both recorded in 1999 during a survey for the Grand Parkway. These two sites are historic and associated with the Bingham Plantation.

Site 41BO213 is a historic artifact scatter and site 41BO218 is a plantation-era railroad feature associated with the Houston Tap and Brazoria Railroad. These two sites were recorded during surveys for Segment C of the Grand Parkway (Sherman et al. 2009). All of these resources are located to the north and northwest of the current area of investigation.

Other nearby previously conducted cultural resource projects are two surveys by Moore Archeological Consulting - one for a proposed pipeline route at the Darrington Prison Unit (Beck 2000a) and the other for the proposed Darrington Unit No. 1 Well and associated Road and Culvert improvements (Beck 2000b). No cultural resources were recorded during either of these investigations.

A prison cemetery is located to the northwest of the project area on the bank of Oyster Creek (Figure 1). Graves are marked with concrete crosses (Figure 3) and there are a total of 17 crosses (Figure 4). An "Inter-Office Communications" from May 6, 1970 provides a list of the information for marked graves within the prison cemetery (Figure 5). The earliest marked grave dates to April 12, 1918 and the latest marked grave dates to January 9, 1947. The grave for Will Mabel has an unknown date and there are seven other concrete crosses for which no information is provided. Given the long history of the Darrington Unit (94 years), there is a good probability that many more unmarked graves exist.



Figure 3. Overview of Prison Cemetery, looking south (Photo by S. Rogers 2009).

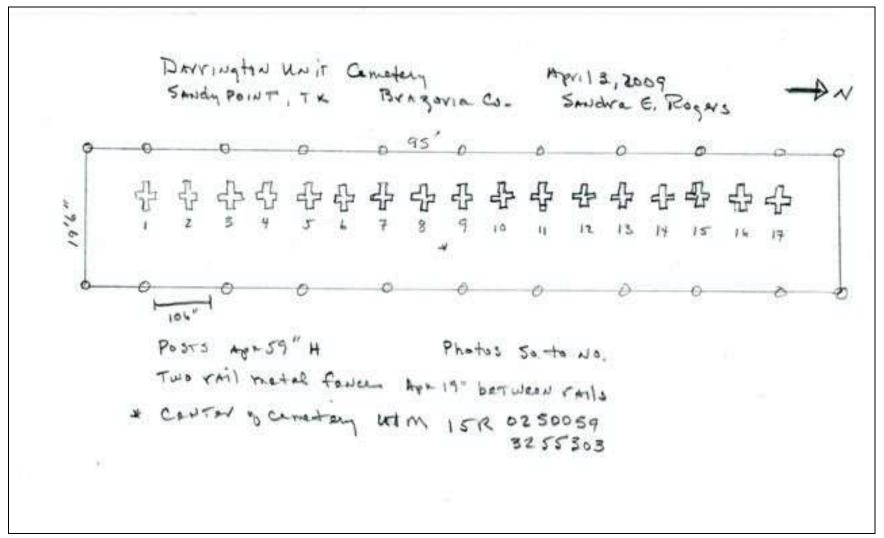


Figure 4. Sketch plan of Prison Cemetery (By S. Rogers 2009).

TEXAS DEPARTMENT OF CORRECTIONS Inter-Office Communications arden May 6, 1970 ate Para J. Bete, Director THMATE GRAVES Subjec To fuentrage bepartment of Correl Listed below please find "Rames of deceased inmates buried in the Darrington Unit Cemetary with marked graves all Minetie DATE DECEASE EANE April 21, 1918 BRINBLY, Jim September 21, 1927 DAW, Nathan June 11, 1920 DRIVER, Lollie April 27, 1918 FARRIS, Clarence October 23, 1923 TACKSON, Robert Unimown MABEL, MILL April 12, 1918 MAY, WII January 9, 1947 MCARTT, Wilmer May 5, 1923 VICKERS, Buss May 19, 1921 YACOBR, Lois Yours very trul; Ronn

Figure 5. 1970 list of marked graves in Darrington Cemetery (Courtesy S. Rogers 2012).

Archaeological Investigations

A preliminary site visit was conducted by Marianne Marek on January 27, 2012. SWCA archaeologists investigated the generator pad site on March 22, 23 and 26, 2011.

During the preliminary visit, it was noted that the original generator pad site had been backfilled and construction of a second generator pad site had been started to the north of the first pad site (Figure 6). At that time, a "swing bail" from a historic coffin was found on the ground surface of the first generator pad site (Figure 7).



Figure 6. Overview of second generator pad site, looking east.



Figure 7. Historic coffin "Swing bail" found on surface of first generator pad site.

In March of 2012, SWCA archaeologists began the re-excavation of the first generator pad site. One corner of the original excavation pit was visible on the ground surface, and this corner was used as reference to outline the area of the original generator pad site, which measured 14 by 18 feet wide and 3 feet deep, according to the construction plans.

On day one, fill was removed by hand and screened through ¹/₄-inch mesh hardware cloth. Soils were very thick, mottled clay (10YR 4/1 and 10YR 4/4) and it was quickly realized that removing the fill by hand and screening it would take an inordinate amount of time and effort. In order to complete the work within a reasonable amount of time it was decided to remove the fill by backhoe and visually screen the excavated sediments for human remains and other artifacts.

The backhoe and operator were provided by TDCJ. Backhoe work was directed and monitored by the permitted archaeologist. The backhoe slowly removed thin layers of fill from the construction pit, and placed it to the side where it was searched through by hand to look for human skeletal remains and other artifacts (Figure 8).

Removal of the fill from the generator pad site revealed that the edges of the pad site had been outlined with sandbags and concrete "footings" (Figure 9). The concrete "footings" and sandbags were positioned where they would be under the edges of the poured cement pad in order to keep it from settling. Therefore, the edges of the original excavated pit could be defined by the sandbags and concrete "footings".



Figure 8. SWCA archaeologist and prison trustee searching through excavated fill.



Figure 9. North profile of generator pad site showing the undisturbed Lake Charles clay at the base of the pit and sandbags and PVC pipe in the wall. The sandbags and PVC pipe were placed in the trench that brings electrical conduit to the generator pad site.

According to the prison Trustee that operated the backhoe and who was present during the construction of the first generator pad when the human skeletal remains were first located, "the bottom of the construction pit was filled with clean sand". This layer of sand was not visible during the reexcavation of the construction pit, and therefore the fill within the generator pad site was removed down to the undisturbed layer of black Lake Charles clay (10YR 3/1) that underlies the mottled fill (Figure 9).

Artifacts recovered from the fill within the generator pad site included perforated brick that is identical to that used in a nearby brick wall enclosing a transformer for the dorms and regional directors office. There were also a few fragments of an earlier sandy paste brick. Mortared sections of this brick were used as fill in a trench at the base of the wall around the "transformer equipment enclosure". Various sized globules of concrete from the footings and flat sections of mortar from between brick courses were also found. Modern nails and screws, most of which were obviously associated with the construction of the backup generator pad site, were recovered. Pressed plywood and other boards from the construction of the form for the generator pad were present. A few shards of glass and fragments of various plastic items were also recovered. Oyster shell with some Rangia were the most numerous items present in the fill, and these originated from a shell road that formerly ran through the area. Only four fragments of animal bone were recovered from the fill within the 14 by 18 foot wide by 3 foot deep generator pad site. The recovered bone includes three long bone shaft fragments and one innominate fragment (Figure 10). None of the recovered bone could be definitely identified as human.



Figure 10. Anterior and posterior views of non-human bone recovered from generator pad site.

The south profile of the generator pad site (Figure 11) clearly reflects the history of the area. Undisturbed Lake Charles clay is covered by an oyster shell road that is shown on the 1965 and 1975 aerial photographs of the Darrington Unit (Figures 12 and 13). The oyster shell road is absent in the 1987 aerial photograph of the Unit (Figure 14). In profile the oyster shell road is covered by 80 cm of mottled fill that was brought into the area and contained the human skeletal remains that were found during construction of the generator pad site (Figure 11).

A story told to this author by one of the archaeological stewards from Brazoria County (Pollan, personal communication 2012) may explain the origin of the human skeletal remains and coffin hardware at the generator pad site. A new wastewater treatment plant was built at Darrington Prison in 1981 under the tenure of a warden named "Christian". During construction of the wastewater treatment plant, a historic cemetery was disturbed. The archaeological steward (who was working for the Brazosport Museum at the time) was asked to look at the area. Warden Christian took the steward to look at the wastewater treatment plant site. At the new wastewater treatment plant site the steward observed a "large amount of human skeletal remains and coffin wood strewn over a large area around the construction site". Warden Christian told the steward that the bone was "animal bone" to which the steward pointed to a human mandible on the ground and replied that the bone was definitely "human skeletal remains". The steward also observed a cemetery "outlined by a concrete curb" that was located nearby but outside of the wastewater treatment plant construction area (Pollan, personal communication 2012). The steward states that "there were unmarked graves located exterior to the concrete curbing surrounding the cemetery".

Afterwards, the steward left Darrington and does not know if anything else was done with the remains. In a Texas Department of Corrections Inter-Office Communications dated October 20, 1981 (Figure 15) warden "David A. Christian" writes...

"the remains of three bodies were found while digging one of the pits for the Darrington Unit sewer plant. I [warden Christian] contacted Brazoria County Precinct 1 Justice of the Peace

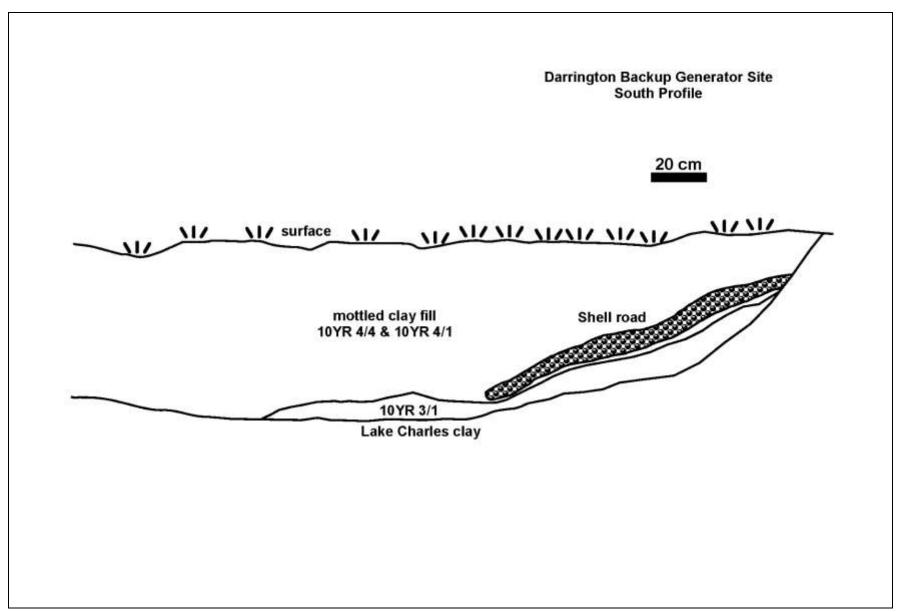


Figure 11. South Profile of generator pad site.

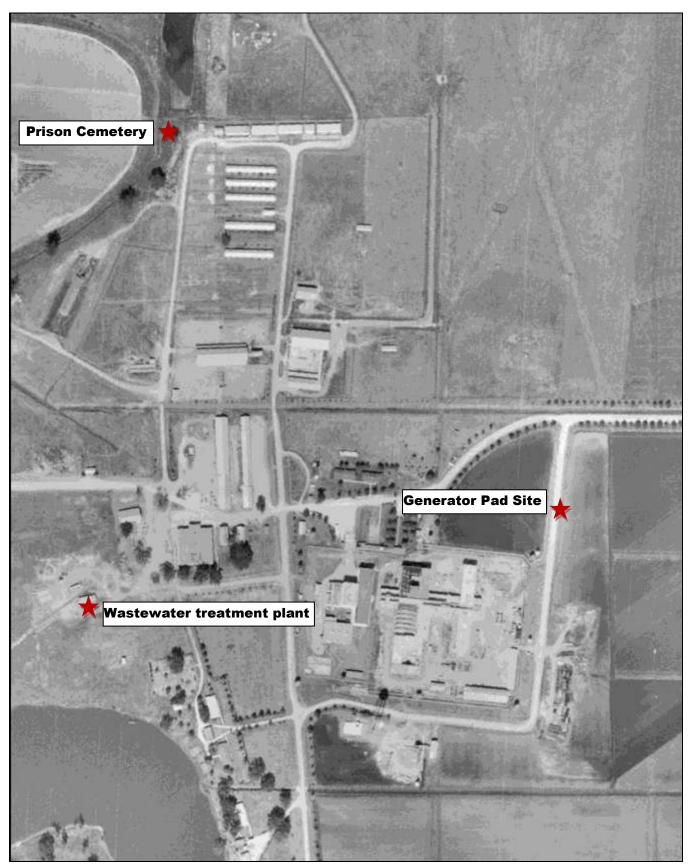


Figure 12. 1965 Aerial of Darrington Prison showing future backup generator, prison cemetery, and wastewater treatment plant locations.

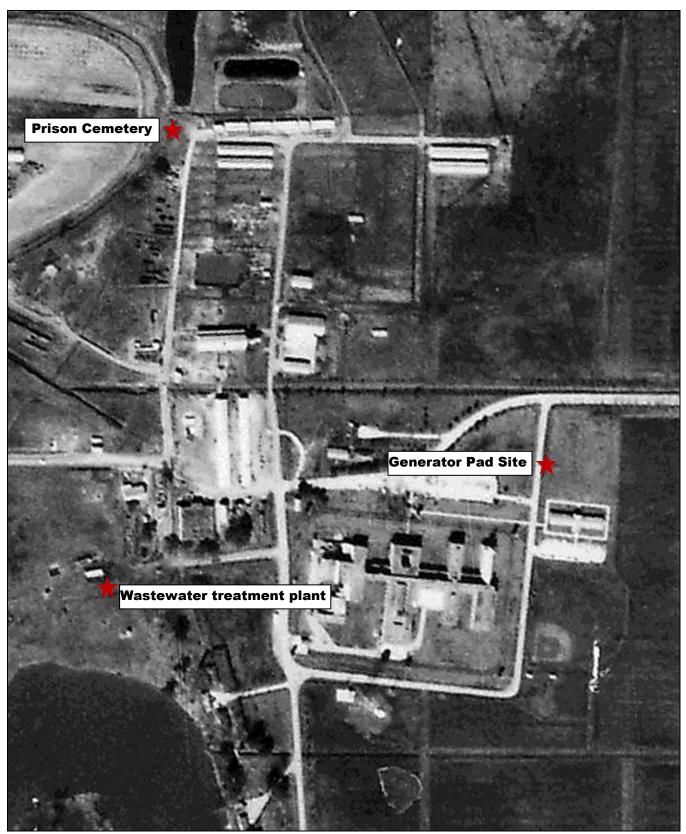


Figure 13. 1975 Aerial of Darrington Prison showing future backup generator pad, prison cemetery, and wastewater treatment plant locations.

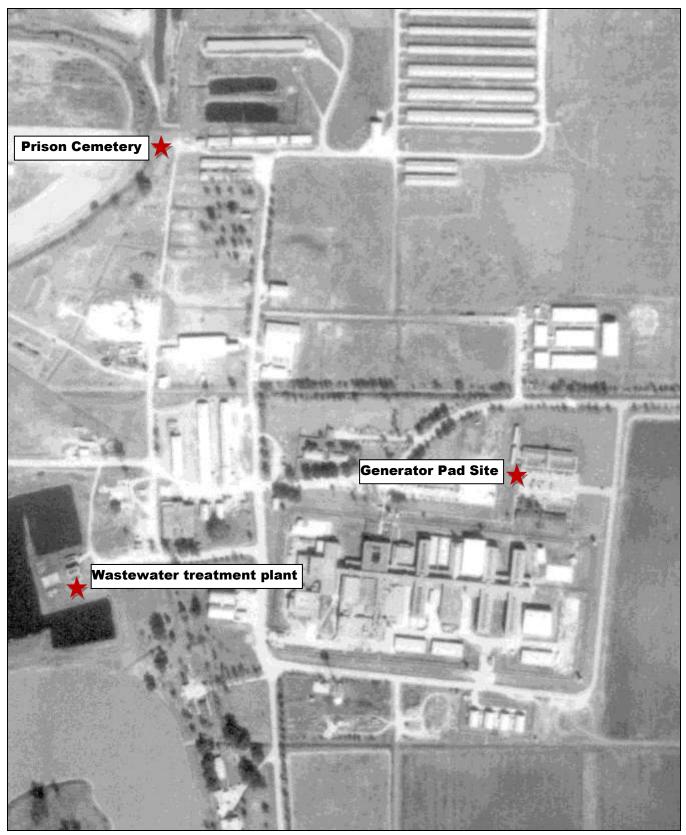


Figure 14. 1987 Aerial of Darrington Prison showing future backup generator pad, prison cemetery, and wastewater treatment plant locations.

ante:	TEXAS DEPARTMENT OF CORRECTIONS Inter-Office Communications
From	Warden - Darrington Unit Date October 20, 1981
To	Kr. W. J. Estelle, Jr. Subject
	On August 19, 1981, it was reported that remains of three bodies were found while digging one of the pits for the Derrington Unit sewer plants.
	I contacted Brazoria County Precinct 1 Justice of the Peace Walter Matthews. Judge Matthews observed the graves and estimated them to be seventy-five years old or older. The State Health Department was then contacted. Mr. Pyle advised that the County Judge had the authority to give permission to move the grave site. (See attached author- ization from County Judge E. E. Brewer.)
	On August 25, 1981, the graves were removed and reburied in the cemetary located on the Darrington Unit, under the supervision of Chaplain Joe P. Self, Jr., and Chaplain Emiliano Gonzales.
	I have contacted several local residents that have been in this area for long periods of time and have found no one that can remember a cemetary being in the area where the graves were located. They did speculate that they ware probably part of the old plantation that was once in this area. David A. Christian Warden Darrington Unit
	man
A.	CC: Mr. D. V. McKaskle Mr. Gerald G. Fall, Jr. Mr. Richard Hartley

Figure 15. Inter-Office Communication from Warden Christian regarding the burials at the wastewater treatment plant (Courtesy S. Rogers 2012).

Walter Matthews....who observed the graves and estimated them to be seventy-five years old or older....The State Health Department was then contacted. Mr. Pyle advised that the County Judge had the authority to give permission to move the grave site."

"On August 25, 1981, the graves were removed and reburied in the cemetery located on the Darrington Unit."

A sketch map of the wastewater treatment plant dated August 26, 1981, shows the location of four graves (Figure 16). The map is drawn on top of a letter from Brazoria County dated September 24, 19[81]. This letter is addressed to Warden D. Christian from the Brazoria County Judge, and gives Warden Christian permission to "remove the remains of the three caskets....and rebury them in the prison cemetery" (Figure 16).

There is no additional information regarding the dispensation of the human remains. As stated earlier, the earlier road that was located near the backup generator site disappears between 1975 and 1987 (Figures 13 and 14). The wastewater treatment plant was constructed around 1981. It is reasonable to assume that the fill covering the shell road was brought in from the wastewater treatment plant site.

The skeletal remains found during construction of the backup generator pad were analyzed by the Laboratory of Forensic Anthropology at the University of North Texas (Appendix A). A report from the Laboratory of Forensic Anthropology dated May 13, 2011, states that the "remains" consist of two fragments of a human mandible and one nonhuman tibia fragment of "archaeological age". The mandible was identified as being from a 30 to 40 year old Amerid male (Appendix A).

DISCUSSION

This section addresses specific questions and comments by the THC in a letter dated May 14, 2012 (Appendix B).

It is important to emphasize that the Darrington Prison Cemetery and the Cemetery at the wastewater treatment plant are two completely different cemeteries. The Darrington Prison Cemetery is located to the northwest of the Unit. The wastewater treatment plant is located to the southwest (see Figures 12, 13, and 14). The Darrington prison cemetery dates to 1918. According to eyewitness description and the swing bail found during the current investigations, the cemetery at the wastewater treatment plant is historic and probably predates the Darrington Unit. The historic cemetery at the wastewater treatment plant was most likely associated with the early occupation of the Darrington Plantation in the 1800's before it was purchased by TDCJ in 1918.

Second, it was not known that a "second generator pad" had been constructed until the preliminary site visit on January 27, 2012. The second generator pad was located to the north of the first backup generator pad site (see Figures 2 and 6) and consisted only of a "wooden form with utility conduit". It is hypothesized that upon the discovery of the human remains at the first backup generator site, the construction crew immediately dismantled the first site and moved north to

begin the construction at the second site. At some point the "stop work" order was received from the THC and all construction was halted pending archaeological investigation of the area.

The ground at the second generator pad site was disturbed from mechanical excavations and the installation of the conduit. It is assumed that the construction of the second generator pad site was similar to that of the first backup generator site – wherein the area was excavated with a backhoe, a layer of sand placed in the bottom, with sandbags and concrete footings placed around the perimeter, before the area was backfilled and the wooden form was constructed. Work was stopped before the concrete pad was poured

Because it was not known that the construction of a second generator site had been started, an archaeological investigation of the second generator pad site was not included within the scope of work for this project. However, an intense visual inspection of the ground surface in and around the second generator pad site did not find any further human skeletal remains or casket hardware.

The second generator pad site is located approximately 65 feet northeast of the first backup generator site (see Figure 2). It is also situated within the same former roadbed as the first backup generator site and a visual inspection of the area confirms that soils around the second site consist of the same "fill" that was most likely brought in during construction of the wastewater treatment plant.

Therefore, although the construction of the second generator pad site should not have been started until after the completion of archaeological investigations of the area, it may be concluded that the soils at the second generator site are identical to those found at the first generator pad site. Therefore, the construction of the second generator pad site probably did not disturb any previously undisturbed soils or impact any intact cultural deposits.

The final topic of discussion is the discrepancy between the Center for Human Identification report by Dr. King which states that the human remains were "archaeological Amerind of unspecified affiliation" (Appendix A) and this report which concludes that the human remains originated from a historic cemetery disturbed by the construction of the Darrington wastewater treatment plant.

A conclusive reason for the discrepancy between the two reports cannot be ascertained. The Center for Human Identification report was based solely on a mandibular fragment. Tests concluded it to be from a 200 to 500 year old archaeological site. The forensic analysis further concluded that the mandible was from a male around 30 to 40 years of age. The determination of "Amerind" was based entirely upon occlusal wear and lack of dental caries (Appendix A).

A historic cemetery from the 1820s is "close" to 200 years old, and the report from the Center for Human Identification does not provide a range of variation for the tests used to make this determination. The Center for Human Identification states the individual was 30 to 40 years old based upon the degree of occlusal wear with no exposure of the pulp cavity. Analysis of Native American skeletal remains by this author (Commuzie et al 1986, Marek 2004, Marek n.d.1, Marek n.d.2) has demonstrated that by 30 to 40 years of age there is some degree of pulp exposure in Native American dentition.

It is possible that the mandible recovered from the Darrington backup generator site came from a historic burial with dental traits similar to those of a Native American. It is also possible that a Native American burial site was also disturbed by the construction of the wastewater treatment plant. If the construction of the wastewater treatment plant has totally destroyed all evidence of the cemetery at the wastewater treatment plant, this question can never be answered.

SUMMARY AND RECOMMENDATIONS

On behalf of TDCJ. SWCA conducted intensive archaeological investigations for a backup generator pad site at the Darrington Unit in Brazoria County Texas. Human skeletal remains were discovered during construction of the generator pad site. The purpose of the investigation was to determine if an intact cemetery had been impacted by construction. The investigation was conducted under Texas Antiquities Permit number 6133. SWCA's investigations included the complete removal and visual inspection of 14 x 18 x 3 foot section of fill from the backup generator location. No additional human skeletal remains or evidence of intact archeological deposits were identified in the area.

Investigations and research by SWCA revealed that the generator pad site contained a thick layer of fill on top of a shell road that sat on undisturbed Lake Charles clay. It is believed that the fill was brought into the area at the same time a new wastewater treatment plant was being constructed at the prison. The fill is likely to have come from the wastewater treatment plant location. There is documentary evidence that the wastewater treatment plant had impacted a historic cemetery. Therefore, it is reasonable to assume that the human skeletal remains found at the backup generator plant site originated from the cemetery at the wastewater treatment plant site.

In accordance with the Texas Antiquities Code of Texas, SWCA has performed intensive archaeological investigations for a backup generator site at the Darrington Unit in Brazoria County, Texas. The investigations have determined that a cemetery is not present at the backup generator site and construction of the backup generator in this location will not have an impact on intact cultural resources. Historic cemeteries are located on the Darrington Unit and any future construction at the Unit should be assessed with regard to the potential for impacting unmarked burials.

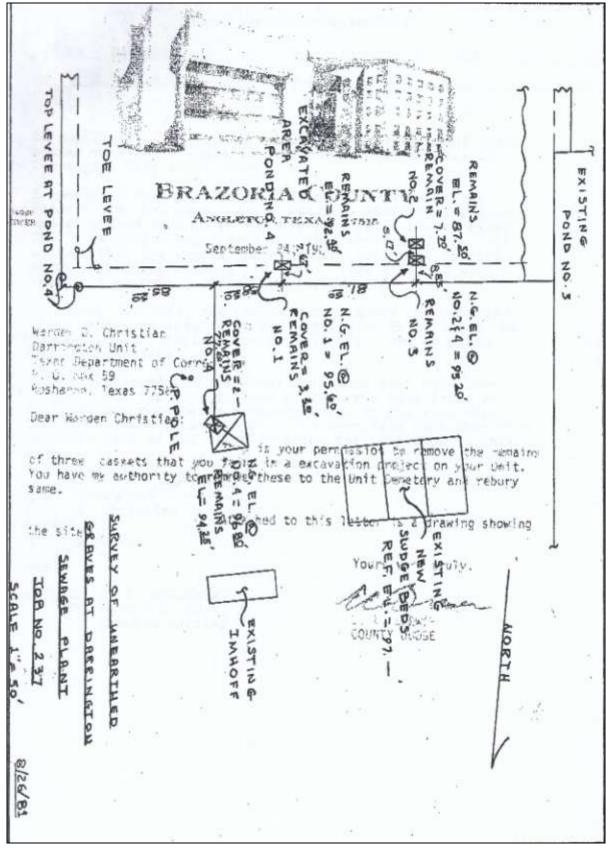


Figure 16. Drawing of wastewater treatment plant showing the location of four graves drawn on letter from the Brazoria County Judge (Courtesy S. Rogers 2012).

REFERENCES

Barnes, V. E.

1982 Geologic Atlas of Texas, Houston Sheet. Bureau of Economic Geology, University of Texas, Austin.

Beck, Abigal P.

- 2000a Archeological Survey of a Proposed Pipeline Route at the Darrington Prison Unit, Brazoria County, Texas. Texas Antiquities Permit No. 2408. Moore Archeological Consulting Report of Investigations. Houston, Texas.
- 2000b Cultural Resource Survey of the Proposed Darrington Unit No. 1 Well and Associated Road and Culvert Improvements, Brazoria County Texas. Texas Antiquities Permit No. 2348. Moore Archeological Consulting Report of Investigations. Houston, Texas.

Comuzzie, A.G., Marianne Marek and D. Gentry Steele

1983 Analysis of the Skeletal Remains from the Palm Harbor Site (41AS80), Aransas County, Texas. Bulletin of the Texas Archeological Society 55:211-249.

Few, Joan

1994 Plantations of Brazoria County. In Antebellum Texas, Brazos Style 1994 Session. A Public Symposium Featuring Archaeological and Historical Research on Nineteenth Century Economic and Social History in the Lower Brazos River Valley. Sponsored by the Texas Committee for the Humanities, Angleton, Texas.

Marek, Marianne

- 2004 Analysis of Human Skeletal Remains from 41FB290B, Fort Bend County, Texas. Report submitted to the Houston Archeological Society, Houston Texas.
- n.d.1 Analysis of Human Skeletal Remains from 41FB3, Fort Bend County, Texas. Report in preparation for the Houston Archeological Society, Houston Texas.
- n.d.2 Analysis of Human Skeletal Remains from 41AU55, Austin County, Texas. Report in preparation.
- NRCS
 - 2010 Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions [Online WWW]. Available URL: "http://soils.usda.gov/technical/classification/osd/ind ex.html" [Accessed 22 June 2011]. USDA-NRCS, Lincoln, NE.

Sherman, David, Eugene Foster, Michelle Dippel, Brandy Lim and Linda Nance.

2009 Intensive Archeological Survey of the Grand Parkway Segment C Preferred Alternative, Fort Bend and Brazoria Counties, Texas. Antiquities Permit No. 2553. PBS&J Inc. Austin, Texas.

Walker, D.R.

1988 Penology for Profit: A History of the Texas Prison System 1867-1912. Texas A&M University Press, College Station, Texas. APPENDIX A.

LABORATORY OF FORENSIC ANTHROPOLOGY HUMAN REMAINS ANALYSIS

3-2

GAL. CO. M.E. DEFICE

05-13-11

Galveston County Medical Examiner PA 2011-180 Human Mandible

Background- The specimens consist of two human mandibular fragments and a fragment of tibial shaft from a non-human, (probably cervid), which were recovered from a unit of the Texas Department of Corrections. The specimens were forwarded to our laboratory by Dr. Stephen Pustelnik, Chief Medical Examiner of Galveston County, on 05-12-11. Via bonded courier, (FedEx #874435754307)

Description- The specimen is a fragment of mandible which has lost both vertical rami posterior to teath #s 17 and 32. The right horizontal ramus is recently broken between positions 29 and 30. Tooth #30 was lost during life and the alveolus is completely resorbed. All of the periosteum is long absent, and there are several areas of exfoliated outer cortex. Teeth #s 17-21 and 31 and 32 are present and complete. There is a root remaining in socket #25. The occlusal surfaces of all teeth are worn flat, however, no pulp chambers are exposed. There are no caries.

Postmortem Interval- The specimen is of archeological age, i.e. at least 200-500 years. This is based upon

- 1. Negative fluorescence at long and short UV wavelengths
- Some degree of mineralization as indicated by positive carbonate test, (CO₂ produced with 0.2, molar HCl).
- 3. Some remaining consistency in the alveolar trabeculae

Sex- The sex of the mandible is male based upon

- 1. Bilobate chin
- 2. Strong buccinator insertions
- 3. Ramus thickness at the mental foramen (16mm)

Skeletal / Dental Age- The decedent was of "middle years", perhaps 30s or 40s, based upon

- 1. Degree of periodontoclasis
- Occlusal wear (although this is a weaker indicator due to lack of information about diet. It is safe to infer a diet high in silicates based upon the complete absence of cusps.
- 3. Lack of age-associated atrophy; good cortical thickness and consistency.

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¹¹⁵⁵ Union Circle # 305220 + Denton, Texas 76203-5017 + (940) 565-4335 + (800) 279-1339 + Fax (940)565-3821

Ascestry- The age of the specimen together with the hallmark occlusal wear pattern imply that the decedent was an archeological Amerind of unspecified affiliation. It is unlikely that this specimen would provide DNA markers useful in attributing specific population membership.

Conclusion / Recommendations-

- 1. The specimen is of no medicolegal significance.
- Because it was recovered on public land, we recommend that you remand the human specimen to the U.S. Anny Corps of Engineers under the provisions of NAGPRA, (call 409-766-3899).

Thank you for the opportunity to examine this interesting specimen.

Collegially,

H. Gill-King, Ph.D., DABFA

JGill-King

APPENDIX B. TEXAS HISTORICAL COMMISSION CORRESPONDENCE

TEXAS HISTORICAL COMMISSION

real places telling real stories

May 14, 2012

Marianne Marek SWCA Environmental Consultants 7255 Langtry, Suite 100 Houston, TX 77040

Re: Project review under the Antiquities Code of Texas Draft Report: Archaeological Investigations for a Backup Generator Pad Location at Darrington State Prison, Brazoria County, Texas. (TDCJ, TAC #6133)

Dear Ms. Marek:

This letter serves as comment from the Executive Director of the Texas Historical Commission, the state agency responsible for administering the Antiquities Code of Texas (Texas Natural Resource Code, Title 9, Chapter 191).

The review staff, led by Bill Martin, has examined the report. We find that a few clarifications are needed, but we believe that construction of the generator pad within the area that was examined may proceed. No archeological resources will be damaged by this construction.

There are three separate issues that need to be clarified in the report. First, on p. 8, Figure 6 illustrates a separate pad location near the original pad where the human remains were found. It was somewhat disconcerting to learn of this alternate pad, since this office had specifically instructed TDCJ that a different location for the pad could not be constructed unless, it too, was examined by an archeologist. The alternate area appears to be undisturbed in the photo, but there is no discussion or verification of this in the report. Please add information that answers the following questions. Was the ground disturbed at this location? Was a pad actually constructed at this location and used for the generator? If so, was it examined in the same manner as the original location? If not, was this location abandoned once the archeological work confirmed that the original location did not contain human remains?

The second issue involves the determination that the fragmented bones found during this investigation were not human. We believe that only a physical anthropologist can make such a determination. Were these remains sent to Dr. King or another anthropologist for analysis? The only analysis of bones presented in this report is in the appendix containing Dr. King's letter about the original bones discovered last summer. Until a physical anthropologist examines the bones and submits his analysis to be included as an appendix, we cannot accept the report.

The final issue regards the origin of the fragmented human remains. The author did a very good job of researching the possibilities for the source of the human remains found last summer and the casket hardware observed during this investigation. It is clear that the remains were brought in as fill, and it is likely that the historic prison cemetery was encroached upon to obtain this fill.

Marianne Marek Page -2-

However, the author states that the human remains are likely to have originated from this historic cemetery, whereas the physical anthropologist concluded that the remains were 200 to 500 years old. This discrepancy requires discussion and explanation. Either Dr. King's original age estimate was incorrect, and the remains are those of a prison inmate, or, just as likely given the location of the cemetery immediately adjacent to Oyster Creek, a prehistoric burial was present on an Indian site that was later selected for use as the prison cemetery, and the mandible found last summer does represent the remains of a prehistoric individual. After looking at a photograph of the mandible and especially the tooth wear, and reading Dr. Kings statements about it, the extreme wear and lack of carries are reminiscent of teeth observed in skeletons from hunter-gatherer societies. These possibilities must be investigated and discussed in the report.

Please address these issues and submit a revised report for our review. Thank you for your cooperation in this state review process, and for your efforts to preserve the irreplaceable heritage of Texas. If we may be of further assistance, please call Bill Martin of our staff at 512/463-5867.

Sincerely,

Willim a. Ma

for Mark Wolfe, State Historic Preservation Officer

MW/wam

cc: Michael W. McManus, Deputy General Counsel Texas Department of Criminal Justice