



**A Historic Standing Structure
Survey of a Portion of the
San Antonio Zoo, Bexar County, Texas**

by
Kristi Miller Ulrich

**Principal Investigator
Steve A. Tomka**

Restricted



Prepared for:
The San Antonio Zoological Society
3903 N. St. Mary's Street
San Antonio, Texas 78212-7138

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Technical Report, No. 37

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Abstract:

The Center for Archaeological Research (CAR) at The University of Texas at San Antonio (UTSA) was contracted by the San Antonio Zoo to compile archival and historic background and conduct a standing structure survey of a selected portion of the San Antonio Zoo. The Zoo plans to renovate a section that is located near the current Tiny Tot Nature Spot. CAR also was to evaluate the need for a pedestrian survey of the Area of Potential Effect (APE).

Several visits were made to the project area by CAR staff and the existing impacts from previous construction activities were assessed during these visits. Based on documented construction sequences within the project area, and visible construction impacts, CAR does not recommend the need for a pedestrian archaeological survey of the APE.

As part of the Standing Structure Survey, 12 Historic Resources were recorded. Four of the resources were constructed as part of the Children's Zoo that opened in 1982. Seven resources were likely constructed between 1941 and 1960. One appears to have been constructed during the late 1930s.

None of the resources recorded during this survey are considered to be individually eligible for formal listing as State Archaeological Landmarks or warrant nomination to the National Register of Historic Places. Two of the Historic Resources, #7 and #10, are representative of the *Faux Bois* architectural style that is noted in other parts of Brackenridge Park. Dionicio Rodríguez, a one-time resident of San Antonio, was the foremost practitioner of the style. Given the less intricate and detailed nature of the execution of the *faux* wood style, it is likely that the work on the individual *faux* wood architectural elements was not executed by Dionicio Rodríguez but rather by one of his apprentices. One of these two resources, Historic Resource #7, is slated to be moved within the current APE. The other, Historic Resource #10, is to be demolished and selected architectural elements exemplifying the *faux bois* style will be salvaged for future reuse. While Historic Resources #7 and #10 are unique examples of the *faux bois* style, individually they are not considered as warranting listing on the National Register of Historic Places and as State Archeological Landmarks. Historic Resource #12 is a stone wall lining the Waterfowl pond. The wall was likely constructed during the late 1930s and is in line with the Spanish Colonial *acequia* that runs through the Zoo. The resource will not be affected by the proposed improvements.

All research material generated during the course of the project are permanently housed at the Center for Archaeological Research. No artifacts were collected during the project.

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Chapter 1: Introduction

The University of Texas at San Antonio's Center for Archaeological Research (UTSA-CAR) was contacted by the San Antonio Zoo to conduct a historic standing structure survey of a select portion of the Zoo as well as archival background research of the entire property. This research was to be completed in advance of improvements to the Zoo. The San Antonio Zoo plans to construct a new restaurant, amphitheater, plaza, play area, and a carousel in an area close to the current Tiny Tot Nature Spot. The area of potential effect (APE) contains twelve structures and/or facilities. For the purpose of this report, each one has been designated a Historic Resource. Each Historic Resource was documented by CAR through photography and archival research. Several structures will be demolished to make way for the new additions to the San Antonio Zoo. CAR was asked to perform the standing structure survey and archival research to determine whether the features that are slated for demolition are historically significant to the Zoo, Brackenridge Park, and the City of San Antonio. In addition, CAR was to evaluate whether a pedestrian archaeological survey of the APE is warranted or not given the impacts of past construction activities on deposits within the APE.

The San Antonio Zoo is located at the northern edge of Brackenridge Park and abuts a portion of Koehler Park (Figure 1-1). The park consists of approximately 35 acres just south of Hildebrand Avenue and the

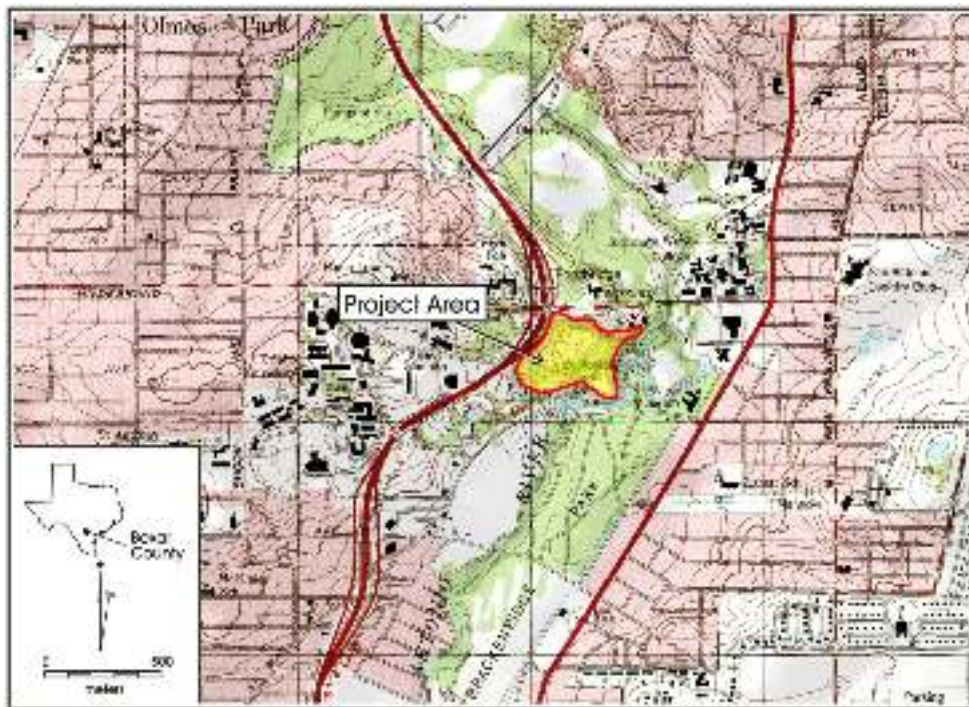


Figure 1-1. Location of the San Antonio Zoo on the San Antonio East USGS 7.5 minute quadrangle map.

headwaters of the San Antonio River. The Zoo sits on property that was granted to the City of San Antonio by the Spanish Crown. The majority of the property was part of a quarry used to obtain limestone for many of the early structures of San Antonio, including Mission San Antonio de Valero (the Alamo). Approximately three acres of the Zoo were obtained from the City in 1979 for the expansion of the Zoo and the creation of a Children's Zoo the current Tiny Tot Nature Spot.

The proposed project consists of the renovation of a significant portion of the Zoo grounds and facilities, scheduled to be completed in celebration of the Zoo's 100th birthday in 2014 (Figure 1-2). The APE is sandwiched between the Cranes of the World exhibit to its northwest and the Tiny Tots Nature Spot exhibit on its south (Figure 1-3); these exhibit areas will remain intact. The bridge located adjacent to the Cranes of the World exhibit leading to the Riverview Restaurant is located outside of the current APE and will not be affected.



Figure 1-2. Planned improvements at the San Antonio Zoo.



Figure 1-3. *Project boundaries within the San Antonio Zoo.*

Chapter 2: Environmental Setting

The project area lies within Brackenridge Park, a 340-acre recreation area in the heart of San Antonio. Though the park is home to many native flora and fauna, it is within an urban area and has been altered for the enjoyment and convenience of the public. The park is bounded by Hildebrand Avenue on the north and Broadway Avenue on the east. Highway 281 wraps around the park to the south and west.

Brackenridge Park and Bexar County sit at the edge of the Edward's Plateau on the Balcones Escarpment. The region encompasses parts of the Gulf Coastal Plain, the Hill Country, and the Edwards Plateau, thereby offering a suite of wildlife and natural resources which were exploited by inhabitants of the area throughout history (Figure 2-1).

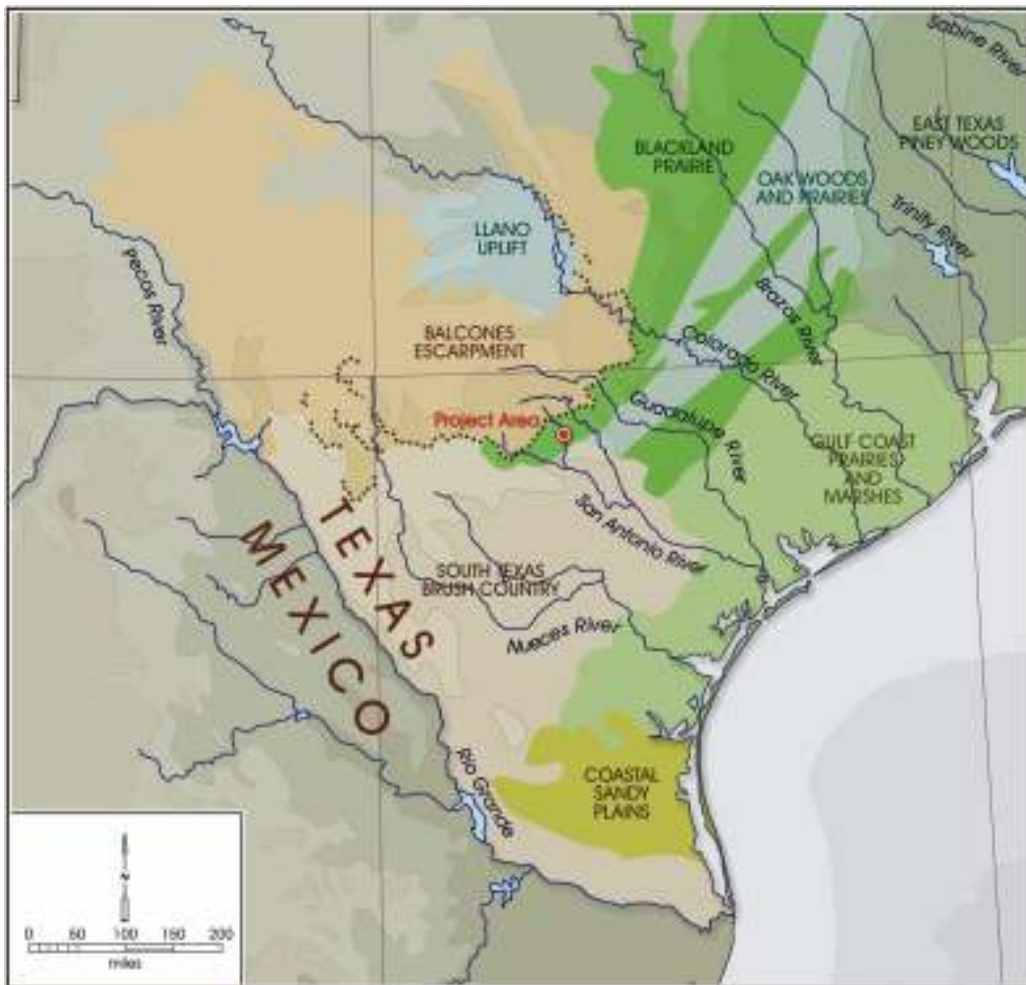


Figure 2-1. Geological Map of Central Texas showing the Edwards Plateau, Blackland Prairie, Balcones Escarpment, and major rivers.

The escarpment is a line of hills and cliffs that extend through Central Texas and serve as a dividing line between the ecological zones of the Edwards Plateau and the Blackland Prairie. It is the surface expression of the Balcones fault zone, which is a series of faults running from Del Rio to Waco, dividing limestones on the west from claystones, chinks, and marls on the east. Numerous caves and springs exist along the fault zone that feed rivers and provide fresh water sources that encouraged human settlement of the area. The landscape changes dramatically moving from east to west across the escarpment. The Edwards Plateau to the west is rugged with thin, stony soils supporting a juniper-live oak savannah best suited for ranchlands. To the east, the Blackland Prairie features rolling hills, broad rivers, and fertile clays that support native prairie grasslands and modern agricultural land use (Woodruff and Abbott 1986).

The San Antonio River crosses through the project area. Its headwaters are commonly reported to be the San Antonio Springs, located 1.6 km (1 mi.) north of the park at the “Blue Hole”. Numerous springs rising from the Edwards Aquifer feed the river within the Olmos Creek catchment basin to the north. The greater San Antonio River Basin drains 6,727 sq. km (4,180 sq. mi.) of land. The San Antonio River is 290 km (180 mi.) long, stretching from downtown San Antonio to Tivoli where it empties into the Guadalupe River and finally in to San Antonio Bay. The Medina River and Cibolo Creek are its two major tributaries (SARA n.d.).

Flora and Fauna

A high percentage of animals found in Texas inhabit the Balconian biotic zone (Blair 1950), and a large proportion of them are found along the Balcones Escarpment. Many of these animals are constricted geographically and live either east or west of the escarpment (Neck 1986). Common mammals include white-tailed deer (*Odocoileus virginianus*), opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), nine-banded armadillo (*Dasybus novemcinctus*) (which is a relatively new migrant), and the black-tailed jackrabbit (*Lepus californicus*). Large mammals that once were commonly found in the area include bison (*Bison bison*), mountain lion (*Puma concolor*), and black bear (*Ursus americanus*), both of which have been driven westward to mountainous regions of Texas (Davis and Schmidley 1997).

Over 80 species of fish live in the San Antonio River Basin. Fish species recorded in the San Antonio River include bluegill (*Lepomis macrochirus*), channel catfish (*Ictalurus punctatus*), red shiner (*Cyprinella lutrensis*), yellow bullhead (*Ameiurus natalis*), largemouth bass (*Micropterus salmoides*), green sunfish (*Lepomis cyanellus*), Texas shiner (*Notropis amabilis*), gizzard shad (*Dorosoma cepedianum*), spotted gar (*Lepisosteus oculatus*), and central stoneroller (*Campostoma anomalum*) (SARA n.d.).

Common migratory birds in the park are the belted kingfisher (*Megaceryle alcyon*), great blue heron (*Ardea herodias*), night heron (*Nycticorax nycticorax*), white-winged dove (*Zenaida asiatica*) and turkey vultures (*Cathartes aura*). Birdwatchers frequent the specific project area and have recorded red-shouldered hawk (*Buteo lineatus*), golden-fronted (*Melanerpes aurifrons*) and ladder-backed woodpecker (*Picoides scalaris*), wood duck (*Aix sponsa*), green heron (*Butorides virescens*), and many other riparian and open field birds (San Antonio Audubon Society).

Native trees common along the river corridor are black willow (*Salix nigra*), cedar elm (*Ulmus crassifolia*), hackberry (*Celtis* spp.), pecan (*Carya illinoensis*), and sycamore (*Platanus occidentalis*). Shrubs and vines include Baccharis, bluewood condalia (*Condalia* sp.), buttonbush, mustang grape (*Vitis mustangensis*), and roughleaf dogwood (*Cornus drummondii*). Common forbs are arrowhead bush (*Sagittaria* sp.), sunflower (*Helianthus annuus*), frogfruit (*Phyla* sp.), pickerelweed (*Pontederia*), and water primrose (*Lugwigia*). Grasses and sedges along the river are bushy bluestem (*Andropogon glomeratus*), Eastern Gamagrass (*Tripsacum dactyloides*), Inland Sea Oats (*Chasmanthium latifolium*), switchgrass (*Panicum virgatum*), and wild rye. The uplands to the west support ashe juniper woodlands and shrubs. Common species include Texas persimmon (*Diospyros texana*), agarita (*Mahonia trifoliolata*), and prickly pear (*Opuntia* spp.). Vegetation in the Blackland Prairie to the east includes hickory (*Carya* spp.), red oaks (*Quercus* spp.), and hackberry (*Celtis* sp.) trees (Gould 1969).

Chapter 3: History of Brackenridge Park and Previous Archaeology

History of Brackenridge Park

The APE falls within the boundaries of Brackenridge Park, a 340-acre park in Central San Antonio just south of the headwaters of the San Antonio River. The park is full of historic and prehistoric cultural resources. Most of those discussed are shown in Figures 3-1, 3-2, and 3-3. We review these resources because they represent a sample of what may be found within the Zoo itself.


Many of the historic features of the park are related to the river. During the early years of San Antonio de Bexar, the property was owned and managed by the Spanish Missions. Two *acequias* started near the headwaters of the river and flowed through the modern boundaries of the park. The first *acequia* constructed was the *Acequia Madre* (1719-1720). It was located on the east bank of the San Antonio River in the vicinity of Witte Museum (Figure 3-4). A large dam was constructed to divert the water from the river into the *acequia*, which flowed to the south, following the path of Broadway Road, and returned to the river south of Mission San Antonio de Valero (Figures 3-1 to 3-3). The water from the *acequia* was used to irrigate the Mission Valero croplands (Cox 2005). Recent investigations there have uncovered part of the dam and two channels of the *acequia* (Ulrich 2011).

The second *acequia* was built much later (ca. 1776) and is known as the Upper Labor *Acequia* (Figure 3-4). This *acequia* was constructed closest to the headwaters of the San Antonio River, with its beginning located south of Hildebrand Avenue and north of the San Antonio Zoo (Figures 3-1 to 3-3). The Upper Labor Dam was built to divert the water from the river into the *acequia*. The *acequia* flows along the west side of the San Antonio River and re-enters the river north of Mission Valero (Cox 2005). The Spanish Colonial dam was found in 1996 during excavations near Hildebrand Avenue (Cox et al. 1999). The limestone dam had been repaired in the nineteenth century by German masons.

Brackenridge Park remained a rural, agricultural area with scattered dwellings until after Texas joined the Union in 1846. The river and Spanish-built *acequias* continued to provide water for farmers and households. Travelers passed east and west of the park on roads leading to Austin and Fredericksburg and land to the north was used for farming and ranching (Pfieffer n.d.).

Redacted Image

Figure 3-1. *Historic resources in the northernmost portion of Brackenridge Park.*


A large rectangular frame with a black border, which is mostly empty. In the center of the frame, the text "Redacted Image" is written in a serif font.

Redacted Image

Figure 3-2. *Historic resources in the central portion of Brackenridge Park.*

Redacted Image

Figure 3-3. *Historic resources in the southernmost portion of Brackenridge Park.*

A large rectangular frame with a black border, which is mostly empty. In the center of the frame, the text "Redacted Image" is written in an italicized font.

Redacted Image

Figure 3-4. Location of backhoe trenches and pipeline in Brackenridge Golf Course (see Houk 2002).

San Antonio grew from 3,488 to 12,256 residents between 1850 and 1870 (Pfeiffer n.d.). The demands of this growing population ultimately led to the park's transformation from irrigated farmland to industrial and commercial uses. This process began in the early 1850s and accelerated during and after the Civil War. Limestone bluffs on the western edge of Brackenridge Park were quarried by German stonemasons for rock to build many of San Antonio's earliest buildings in the 1880s. As the City's population grew, demand for stone grew to the point that the city began to lease quarries. Rock Quarry Road (now North St. Mary's) connected the City to the quarries. The limestone quarry business increased again with the invention of Portland cement. William Lloyd and George Kelteyer founded the Alamo Roman and Portland Cement Company in 1880, which leased the City's quarry until 1908 (Pfeiffer n.d.). This was the first cement company of its kind west of the Mississippi River. The operation included the cement business, but it also sold lime and building stone. The facility included stone quarries, kilns, mills, and houses for the workers. The location in Brackenridge Park served as the company's headquarters until 1908, when it moved to Alamo Heights. The quarries were later incorporated into the Park's Sunken Gardens. Between 1917 and 1947, they were the site of a Mexican market (Katz and Fox 1979).

In the early years of statehood, the City Council planned to sell surplus tracts of city-owned property to meet its growing budgetary needs. Because records of the original town tract boundaries had been lost, the City entered into a lawsuit to re-establish its claims and hired Francois Giraud to complete a new survey of the town tract. Land sales finally began in 1852 (Pfeiffer n.d.).

The majority of land in Brackenridge Park was already privately owned, but the 1852 land sale included property immediately to the north and east where springs forming the San Antonio River were located. The "head of the river," as it came to be called, was purchased by City alderman James Sweet in 1852 at a public auction (BCDR K2:506-509). This sale put the source of the city's water supply under the control of a private enterprise where it would remain for several years.

During the American Civil War, 78 acres of Brackenridge Park was sold to the Confederate States of America for \$5,000 (Katz and Fox 1979:18). The confederates built a tannery to "fill footwear, harness and saddlery needs of the South" (Brackenridge Park marker text). Unlike many tanneries, this facility operated year round and was able to treat 6,000 hides at a time. A cotton and woolen mill, run by water power from the San Antonio River, was also built here. After the Civil War, the land was given to the Freedman's Bureau. In 1868, the land went up for auction and was purchased by the City of San Antonio for \$4,500 (Figure 3-1).

The park's namesake, George Brackenridge, moved to San Antonio in late 1865. His success as a cotton trader during the Civil War as well as his statewide and national connections with political and business leaders served him well. In early 1866, Brackenridge established the San Antonio National Bank that became the foundation of his extensive business holdings. Three years later, he purchased a 108-acre tract and antebellum home at the head of the San Antonio River from J. R. Sweet. Because the word "bracken" was the Scottish word for "fern," Brackenridge named his new home "Fernridge" (Sibley 1973: 91). The property acquired by Brackenridge contained springs that fed the river and the city's two major *acequias* a short distance to the south.

The issue of a privately held water source came to the forefront when, in the aftermath of the cholera epidemic of 1866, local physicians argued for construction of a safe municipal water system. Progress on this issue was slowed by Reconstruction politics and an overall lack of public support (Pfeiffer n.d.). In 1872, a local newspaper began to campaign for repurchase of the head of the river property, leading the City to begin negotiations with George Brackenridge that resulted in the City Council's acceptance of a \$50,000 contract. After public outcry over Brackenridge's potential profit, the sale was eventually voided in April 1872; however, he retained control of the headwaters (Sibley 1973:128-130; CCM D:36-37).

The City had failed to reacquire the headwaters and was making no progress in establishing a public water system. It was in this context that George Brackenridge began to purchase additional riverfront land. The acquisition of the riverfront property would play an important role in the City's water management in future years (Pfeiffer n.d.). George Brackenridge acquired four of the upper five riverfront lots when the City placed ten lots from the Confederate Tannery property up for auction in 1875. These included lands in Kohler Park, Allison Park, and the Polo Field. He purchased the fifth lot in 1881. Brackenridge made his most significant purchase in June 1876, when he and his brother, John, paid Mary A. Maverick \$25,000 for a wooded 200-acre tract on the east side of the river that ran from the head-gate of the *Acequia Madre* south to the property of Francois Guilbeau. The land was bounded on both the west and north by the river and on the east by the *Acequia Madre* (BCDR 4:473; BCDR 25:612).

J. B. LaCoste began the privately owned San Antonio Water Works Company after constructing a pump house and canals in 1877-1878, 0.8 km (0.5 mi.) from the Blue Hole on land leased from Brackenridge in the northern section of Brackenridge Park (Figure 3-1). The facility pumped water into a reservoir in Mahncke Park at the current site of the botanical gardens (Figure 3-2). The company did not do well and controlling interest went to Brackenridge in lieu of rent in 1883 (Pfeiffer n.d.). Brackenridge expanded the facility, building a second pump house at the south of the park near the current Golf Course Clubhouse and an additional canal to connect both pump houses. The city's growing water need outpaced

Brackenridge's ability to supply enough water, despite additional drilling. The original springs on his Fernridge property dried up by the turn of the century, but he continued to run the water works until 1906.

George Brackenridge donated 199 acres of riverfront land to the City of San Antonio for use as a park in 1899. The gift, accepted by the City Council on December 4, 1899, was celebrated in both the *San Antonio Light* and *Daily Express*.

This place [sic] of property is one of the loveliest pieces of land of Texas and for beauty is unrivaled. It is the largest natural park in the south controlled by a city, its scenery back on the river bank being unsurpassed (*San Antonio Light*, 7 November 1899).

Outside of Fairmount Park in Philadelphia, there is probably no city park that is in any way comparable to it (*San Antonio Daily Express*, 11 November 1899).

The gift of the Water Works property was generous but tightly constrained by reservations and restrictions. These caveats were at least partially attributable to years of distrust between Brackenridge and the City over financial dealings. The Water Works Company retained a 250-foot wide strip running the length of the property along the west side of River Avenue, and a 25-foot strip along each side of the river and the east bank of the Upper Labor ditch. The company retained full control of ingress and egress to the park as well as the banks of the river and *acequia*. A fence was built around the park and access was restricted to two locations. The issue of access remained unresolved until after Brackenridge sold the Water Works in 1906. Perhaps most notably, the bequest was restricted by its prohibition of the sale or consumption of alcoholic beverages in the park (BCDR 185:183; CCM N:284, 291, 304-305).

Brackenridge also donated land that is Mahncke Park and the former Polo Field. The Polo Field was created ca. 1952 when the San Antonio Polo Club leased the field from the City for five years. After the Polo Club's lease expired, the field was then leased as a driving range. The field is now home to the Polo Field Golf Center.

Other donors to Brackenridge Park include Emma Koehler, who donated lands west of the river, the site of the Confederate Tannery, and Bexar County, which donated ten acres west of the river, south of Mulberry Avenue in honor of Judge James Davis (Pfeiffer 2010a).

Previous Archaeology

The area surrounding the San Antonio Zoo has undergone many archaeological investigations. Brackenridge Park, located adjacent to the Zoo, is rich with cultural resources providing valuable information regarding the occupation and use of the river throughout prehistoric and historic times. Archaeological work within Brackenridge Park began as early as the late 1970s. CAR and the Texas Archeological Research Laboratory (TARL) conducted two of the largest investigations of Brackenridge Park in 1979.

Investigations at Incarnate Word and Olmos Dam

Unfortunately, archaeological investigations of the area did not become common place early enough to fully document the many sites that were destroyed due to the construction of Olmos Dam. During the 1920s and 1930s, amateur archaeologist C. D. Orchard recorded sites and collected artifacts. Orchard published much of his findings in the 1960s and 1970s (Fox 1975: 3). Professional archaeological investigations were conducted near the current project area by the CAR in 1975 (Fox 1975). This survey focused on documenting both recorded and reported sites on the grounds of Incarnate Word College (known today as the University of the Incarnate Word). During the course of the project, 12 recorded sites were visited: 41BX289, 41BX282, 41BX283, 41BX284, 41BX285, 41BX286, 41BX287, 41BX288, 41BX24, 41BX290, 41BX291, and 41BX292. In addition to the twelve sites, Orchard identified five areas that contained cultural remains prior to the construction of the Olmos Dam and Incarnate Word. These sites were not issued trinomials, but their locations were recorded on a sketch map of the area. Site 41BX288 is a prehistoric, open campsite consisting of a scatter of burned rock and chert flakes. Site 41BX290 is a prehistoric, open campsite characterized by the presence of burned rock, cores, and chert flakes. Site 41BX291 is a prehistoric, open campsite that produced cores, debitage, and biface fragments, as well as a few historic artifacts. Site 41BX292 is a prehistoric, open campsite exhibiting cores, debitage, burned rock, and biface fragments.

Near Olmos Dam, a cluster of prehistoric middens was identified and designated as Site 41BX24. The site is an open camp with a large midden. This midden yielded faunal remains, debitage, scrapers, gouges, and fragments of projectile points, as well as historic ceramic fragments. The site is approximately 250 m (820 ft.) in diameter and is suspected to extend to the southern end of a crescent mound as observed by Orchard and Campbell (1954:457-458). The majority of the site has been disturbed (Fox 1975:8).

Site 41BX283 is a historic quarry located on the University of the Incarnate Word grounds. The quarry is rumored to have been first used during the Colonial Period, although no artifacts were noted to support

that claim. The quarry does not appear to have been used prior to 1890, and by 1938, it was abandoned. Located on the site was a metal frame bridge that was recommended for preservation (Fox 1975:4).

Site 41BX285 is also located on the University of the Incarnate Word grounds. This site consists of the remains of a stone foundation. There were likely several stone structures present at the site. C. D. Orchard recalled that he helped to tear down several rock houses in that location during the early 1900s. The stone foundation at the time of the recording of the site (1975) was partially obscured by a trash dump.

Site 41BX282, the San Antonio Springs (the Blue Hole) consists of an unidentified metal structure and pipes, as well as a concrete casing around the top of a natural spring located on the University of the Incarnate Word grounds. The spring is at the headwaters of the San Antonio River, west of Brackenridge Villa. The surrounding land was likely used as a campground prior to European contact. Historic military encampments were located in the vicinity of the springs during the early nineteenth century according to historical records; cultural remains dating to this period have not been located at the site (Fox 1975:4).

Site 41BX284 is a cut-stone structure across an un-named tributary of the San Antonio River located on the grounds of the University of the Incarnate Word. According to local tradition, this cut-stone structure was part of a mill. However, if its function was as a mill, the building would be considered very small, measuring at just 5.5 m (18 ft.) across. In addition to this, the current flow of the tributary would not provide enough energy to support a mill.

Site 41BX287 is a possible historic dump located on the University of the Incarnate Word grounds. The dump contained glass, ceramic, burned rock, bricks, and metal fragments. The majority of the artifacts found indicate a late nineteenth-century temporal affiliation.

Site 41BX289, Fernridge, is Brackenridge's historic house located on the grounds of the University of the Incarnate Word. The property was purchased by J. R. Sweet, who constructed the East Wing in 1852. Brackenridge later purchased Sweet's holdings and then built a three story addition to the structure in 1886. Each building episode is typical of the styles of the period. In 1872, Brackenridge offered the City of San Antonio the Sweet property, along with his other holdings, totaling 217 acres, for a sum of \$50,000. The City considered the offer for approximately two years before finally rejecting it due to the inability of both parties to negotiate a better price (Dunn 1975). In 1897, the Sisters of Charity of the Incarnate Word petitioned Brackenridge to sell them the parcel of land that contained the Fernridge structure. Brackenridge agreed but only under the condition that they purchase his entire holdings, approximately 300 acres, for the sum of \$125,000. Although this was an amazing sum of money to the order, but they accepted and utilized Fernridge as the convent until they were able to construct the Mother

House (Ramsdell 1959:213). Today, the structure is known as Brackenridge Villa and is used by the university as meeting space.

In 1976, the Incarnate Word College Archaeological Field School conducted test excavations at 41BX291. The field school ran for 23 days during July and August. Ten 2-x-2-m (6.6-x-6.6-ft.) units were set up and two backhoe trenches were excavated. The excavations indicated a multi-component site with two major occupation episodes. The earlier episode dates to the Terminal Archaic (ca. 1750-1250 BP) and the later episode dates to the Late Prehistoric Period (ca. 1250-200 BP). Both occupations of the site were characterized by artifacts relating to short-term, repeated hunting and gathering activities (Katz and Katz 1982).

During the last few weeks of December 1976, the CAR conducted an archaeological and historical survey within the boundaries of Brackenridge Park. Four prehistoric sites were recorded. These included 41BX321, 41BX322, 41BX264, and 41BX323 (Katz and Fox 1979).

Additional archaeological work on the grounds of the University of the Incarnate Word encountered a multi-component site, 41BX261. The prehistoric portion of the site is a possible lithic workshop dating to the Late Archaic. Prehistoric artifacts encountered included biface fragments, chert flakes, blanks, preforms, cores, a fragment of Leon Plain ware, and two Late Archaic projectile points. The historic component of the site is a dump, possibly dating to the 1880s. It contained fragments of glass, metal, and historic ceramics (Stoothert 1989:82; THC 2008).

In June 1977, the CAR conducted a pedestrian survey in the vicinity of the Olmos Dam. The goal of the survey was to evaluate cultural deposits that might be affected by two proposed alternate roads through Olmos Basin. It was recommended that archaeological testing occur along the proposed routes (Brown 1977).

During November of 1977, the CAR conducted archaeological testing just south of the Olmos Dam at 41BX291. The project resulted with the delineation of the northern boundary of the site, which extended north of the Incarnate Word property and into the Olmos Dam right-of-way. The site produced Paleoindian through Historic Period deposits.

The CAR conducted archaeological investigations at portions of 41BX1, in the vicinity of the University of the Incarnate Word, spanning December 1979 to May 1980. The project consisted of the excavation of backhoe trenches, block excavations, and documentation of in situ burials. Excavations revealed Middle Archaic and Late Archaic components, with a single Paleoindian point recovered from one excavation

area. The excavation of the burials provided a wealth of information on the people, as well as insights into the burial practices of the Late Archaic sub-period (Lukowski 1988).

Site 41BX170 is a historic site consisting of the outline of a lime kiln and remnants of stone foundations. Historic artifacts, including fragments of a large ceramic pot and glass fragments were noted when the site was recorded in 1994 (THC 2008).

Witte Museum Investigations

Meskill and Frederick (1995) conducted archaeological testing at the Witte Museum. The work was conducted prior to the construction of the new science building that was to be located on an area previously recorded as Site 41BX323. Two backhoe trenches (BHTs) were excavated down to the water table. Diagnostic material was not recovered, but excavators did note the presence of debitage, charcoal, and burned rock. Within the trenches, historic ceramics also were noted and consisted of fragments of white earthenware, stoneware, and porcelain. In addition to ceramic, other historic items included wire nails, window glass, bottle caps, and other metal artifact fragments. A hearth-like feature was encountered in one of the trenches.

Additional testing was recommended prior to the construction of the H-E-B Treehouse located on the grounds of the Witte Museum. In 2000, 23 test units were excavated to examine the prehistoric component of the site. During fieldwork, three Archaic Period features were encountered. Despite natural erosion and bioturbation affecting the integrity of the deposits, the site still provided insights into the utilization of the San Antonio River during the Archaic Period (Meskill et al. 2000).

In 1996, a portion of the Upper Labor *Acequia* was exposed in Brackenridge Park prompting the Parks and Recreation Department of the City of San Antonio to contract with CAR to investigate the feature. A prehistoric component was revealed during the investigation, located approximately 120 cm (47.2 in.) below the current surface (Cox et al. 1999). The prehistoric component consisted of lithic debitage. During the course of the investigation, Site 41BX1273 was identified and documented as the location of the Upper Labor Dam. This dam was constructed of limestone blocks in 1776 by Spanish colonists. Its function was to divert water from the river to the Upper Labor *Acequia*. The dam was modified with dressed stone during the nineteenth century and set at a slightly different orientation.

In November and December of 2010, the CAR was contracted by Ford, Powell, and Carson Architects and Planners Inc. to conduct intensive pedestrian survey and testing in search of the *Acequia Madre* (41BX8) and Alamo Dam on the grounds of the Witte Museum. Archival research was conducted to

search for information that would pinpoint the location of the dam and irrigation ditch. Historic maps were consulted and overlaid onto current aerials of the project area in an effort to offer insight regarding the potential location of these features. The investigations consisted of the excavation of nine backhoe trenches and three auger borings. A portion of the Alamo Dam was located in BHT 7, adjacent to the current channel of the San Antonio River. The dam consisted of large, stacked limestone blocks. It appears that the top of the dam was likely sheared off in the 1930s during the construction of the stone wall lining the channel of the river.

Evidence of the *Acequia Madre* (41BX8) was found in one of the backhoe trenches, located in the grassy area in front of the Pioneer Hall between Curiosity Lane and Broadway. This trench extended to a depth of 3.7 m (12 ft.) below the surface before encountering the water table. Two ditch outlines were noted in the profile of the trench, one undercutting the other. They represent two paths of the *acequia*, one older than the other.

Archaeological Investigations in Brackenridge Park

Numerous archaeological projects have occurred in and near Brackenridge Park due in part to the park's wealth of historic and prehistoric resources. Much of this work was conducted by CAR and SWCA Environmental Consultants. The current study area crosses two sites, 41BX264 and 41BX1396, previously examined by SWCA and others.

Brackenridge Park Survey

In 1977, Katz and Fox (1979) of CAR conducted an archaeological survey of Brackenridge Park to inventory all prehistoric and historic resources in the park. This included a pedestrian survey of the entire park but did not include subsurface excavations. They documented four prehistoric archaeological sites, 11 collecting localities, and 27 historic sites (Figures 3-1 to 3-3). The collecting localities were areas where artifacts were observed in quantities too low to be considered a site. The four prehistoric sites (41BX264, 41BX321, 41BX322, and 41BX323) contained debitage, stone tool fragments, and burned rock dating from the Early to the Transitional Archaic. At site 41BX264, the Polo Field Site, Katz and Fox recovered multiple tools including Pedernales, Nolan, and Castroville points, bone and mussel shell, debitage, and hearth features. Sites 41BX321 and 41BX322 were small lithic scatters, but site 41BX323, the Paddle Boat Concession Site, was more substantial and has seen additional archaeological excavations (see Houk et al. 1999; Meskill et al. 2000; Miller et al. 1999; Houk and Miller 2001; Houk 2002b; Figueroa and Dowling 2007). It was recorded as a large lithic scatter (300-x-75-m; 984-x-246-ft.) with at least 30 cm (11.8 in.) of cultural deposits below ground surface, including one Late Archaic Frio point.


The historic resources included water control, industrial, and recreational features. Katz and Fox (1979) recommended nomination of Brackenridge Park to the National Register of Historic Places (NRHP) as a Historic District. The nomination for Brackenridge Park to be on the NRHP was not completed until late 2011. To date, the nomination process has not been completed.

SWCA Water Main Survey

SWCA performed the archaeological survey and backhoe trenching ahead of installation of a 41-cm (16-in.) water main for the San Antonio Water System (SAWS) (Houk 2002a). This survey crossed three site boundaries (41BX264, 41BX1396, and 41BX321) discussed individually below. The pipeline began west of the San Antonio River on East Mulberry and was bored under River Road and the river. Then, on the east side of the San Antonio River, the pipeline was bored beneath large trees on the north edge of the golf course (and through the current APE and 41BX1396) and exited near the Catalpa-Pershing Drainage Ditch at the northeast corner of the golf course. The pipeline turned south through the golf course, parallel to the ditch, and passed through site 41BX321. At the southern extent, the pipe crossed the ditch, running parallel with it to the eastern side of Mill Race Road, and finally turned into the parking lot of the Brackenridge Golf Course Club House. SWCA did not recommend any archaeological work along the pipeline segment that ran through the current study area along Mulberry Avenue east of the river. They did excavate one backhoe trench west of the river on Mulberry and a series of backhoe trenches along the pipeline parallel to the ditch within the golf course (Figure 3-5). Cultural materials related to both 41BX264 and 41BX321 were observed in the backhoe trenches. Houk (2002a:10) found that because of the paucity of materials, lack of buried features, and disturbed subsoil (in the case of 41BX321) neither of the two sites warranted formal designation as a State Archeological Landmark (SAL) or NRHP listing.

The Polo Field Site, 41BX264

The western portion of the current APE crosses site 41BX264, which is on the Brackenridge Driving and Practice Range and former Polo Field. The site was examined by Dunphy in 1963, by Fox and Katz in 1976 (Katz and Fox 1979), by Miller of SWCA in 2001 (Miller and Barile 2001), and by Uecker and Molineu (2004) of South Texas Archaeological Research Services (STARS) in 2003. The site boundaries were determined by Katz and Fox based on a surface scatter of stone tools, faunal remains, debitage, and burned rock features but were expanded by Miller and Barile (2001) after subsurface trenching during a renovation project of the driving range. Houk (2002a) discussed the site again when he assigned artifacts identified in a backhoe trench south of Mulberry to 41BX264 (Figure 3-5).

A large rectangular area is completely blank, indicating that the image content has been redacted.

Redacted Image

Figure 3-5. *Location of previous work at 41BX264.*

This project was undertaken ahead of construction on the driving range that involved extensive Miller and Barile's (2001) work included a surface survey and mechanical trenching of a 20-acre area that encompassed the driving range from Mulberry Avenue in the south to the train track in the north and from North St. Mary's on the west to the San Antonio River on the east (Figure 3-6).

The project was undertaken ahead of construction on the driving range that involved extensive modifications to the landscape and renovations to the club house. Surface visibility was poor, but debitage was noted in the northern portion of the project area within the boundaries of site 41BX264. Eight backhoe trenches revealed a low density of lithic debitage, burned rocks, and tools, including one Langtry projectile point, from 5-130 centimeters below the surface (cmbs; 2-51.2 in.). However, most of these artifacts were within the upper 60 cm (23.6 in.) of disturbed deposits. SWCA concluded that, though intact cultural materials may remain on some portions of the site, they would not yield information important to prehistory, and therefore, the site was not recommended for listing on the NRHP or considered eligible as a SAL. This work revealed a larger site boundary than previously recorded though the northern extent remained undefined. They recommended monitoring during construction. This monitoring was conducted by Uecker and Molineu (2004) in 2003. In the interim, Houk (2002a) recorded artifacts that he considered part of 41BX264, south of Mulberry in a backhoe trench along a proposed pipeline.

Uecker and Molineu (2004) monitored excavations that exceeded 40 cmbs (15.7 in.) and conducted some data recovery excavations of features observed during scraping and trenching. They observed three distinct areas of cultural materials in the eastern portion of the site near the San Antonio River. Area A contained 36 burned rock clusters and associated cultural materials that were uncovered by paddle scraping. Three such clusters were identified in Area C from ground scraping. In Area B, two small burned rock clusters with other artifacts were identified in a trench wall. Features in Areas A and C were mapped and recorded but not investigated. These areas were covered with sterile sand and topsoil in efforts to preserve the deposits for future work. Limited data recovery efforts were conducted on features in Area B which were hand excavated in a 1-x-2-m (3.28-x-6.6-ft.) unit. Artifacts recovered from scraping in Areas A and C include projectile points dating to the Middle to Late Archaic and to the Late Prehistoric periods. Some of the typed points include Marshall, Pedernales, Castroville, Langtry, Noland, and Travis. A Guadalupe tool fragment was also found. These investigations confirmed what previous archaeologists had reported: clusters of burned rock and associated chipped stone artifacts, which were also heat altered, scattered across the landform. Though the research potential was considered low, preservation of the deposits below the construction impact and outside the project area was deemed sufficient to recommend eligibility as a SAL, especially within 150 m (492 ft.) of the center of the river

Redacted Image

Figure 3-6. *Location of previous work at 41BX1396.*

channel. The site also has historic elements that contributed to the site's eligibility for inclusion on the NRHP, SAL, and the City of San Antonio Historic Landmark or Heritage Property list. Historic overviews of the Polo Field are provided in Miller and Barile (2001), Houk (2002a), and Uecker and Molineu (2004).

41BX1396

In 2002, SWCA also conducted archaeological investigations in Brackenridge Golf Course for SAWS Water Recycling Program (Barile et al. 2002). This work involved shovel testing and monitoring along a water line running parallel to the cart path at the 9th hole in the vicinity of two CLs (1 and 3) recorded by Katz and Fox (1979) (Figure 3-3). Barile et al. (2002) formally recorded 41BX1396 after observing an area dense with lithic materials, including stone tools around two of Katz and Fox's CLs (1979; CL1 and CL3).

Further impacts to 41BX1396 occurred with the installation of a 41-cm (16-in.) water main installed by SAWS in 2002 (Houk 2002a). As described above, a 41-cm (16-in.) water main was bored under the river and through the boundaries of 41BX1396 (Figure 3-5).

Site 41BX1396 was investigated by SWCA again in 2008 in conjunction with restoration of the golf course to its original design (Carpenter et al. 2008). This project involved complete assessment of cultural resources in the golf course including sites 41BX1396, 41BX13, and 41BX321 and involved pedestrian survey, shovel testing, and data recovery. Backhoe trenches exposed cultural material (burned rock, debitage, tools, and bone) from the surface to approximately 70 cmbs (27.6 in.), the upper portions of which had been impacted by previous projects on the golf course. The data recovery excavations occurred to explore deeper deposits 50-70 cmbs (19.7-27.6 in.; Figure 3-7). Carpenter et al. (2008) recommended that the site is eligible for designation as a State Archeological Landmark (SAL).

During November 2010, the CAR conducted a pedestrian archaeological survey of a proposed hike and bike path and data recovery excavations of portions of site 41BX1396 in Brackenridge Park, San Antonio, Bexar County, Texas. The proposed trail routes 12 and 12b run along the south side of Mulberry Avenue from Avenue A to Avenue B on the northern edge of the Brackenridge Golf Course and along the north side of Mulberry from Red Oak to the Polo Field Golf Center. The impacts associated with the path include installation of four light posts, three on the south side of Mulberry and one on the north side, installation of a fence-line separating the south path from the golf course, the construction of stone retaining walls along the south route between the edge of Mulberry Avenue and the path, and the construction of a pedestrian bridge across the location of a historic water canal. Engineering plans showed

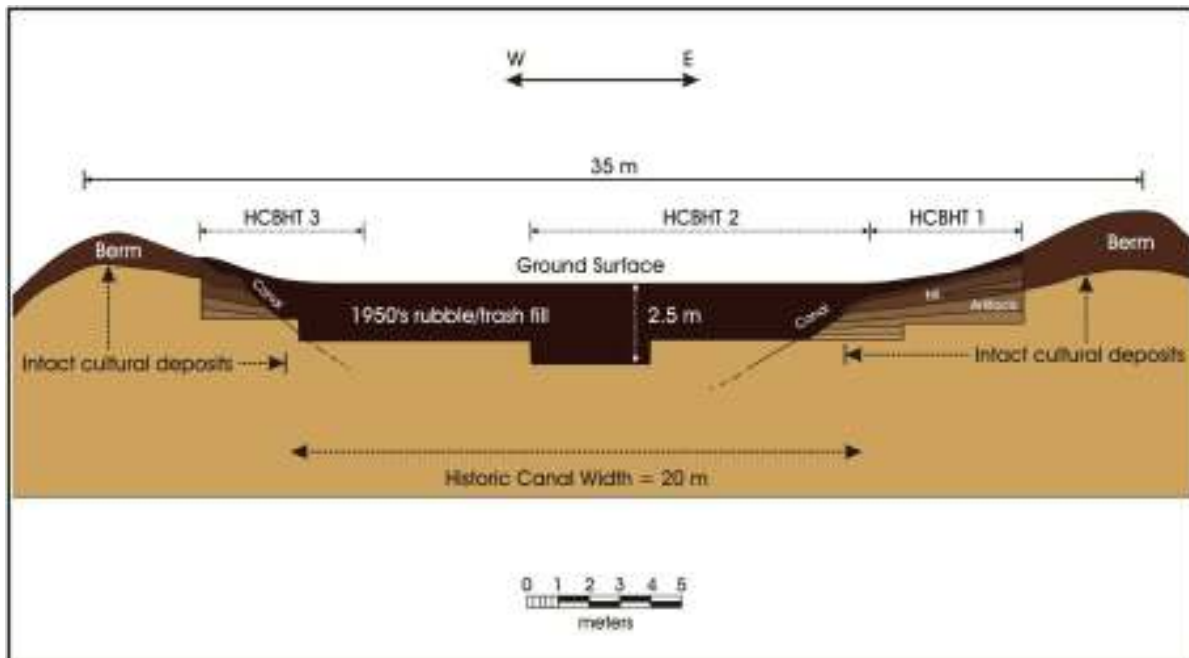


Figure 3-7. *Water works canal cross-section, north of the APE as recorded by Miller et al. 1999.*

the southern path, utility trenches, retaining wall, fence posts, and one of the proposed light poles will transect the boundaries of site 41BX1396, a SAL. The path, a light post, and utilities will pass through the boundaries of site 41BX264.

The pedestrian survey included 20 shovel tests (STs), 6 backhoe trenches (BHTs), and visual inspection of the ground surface. Backhoe trenches were placed in areas of deep impact at three of the proposed locations of light posts, each side of the pedestrian footbridge, and directly across the roadway from site 41BX1396 to explore the extent of the site boundaries. A backhoe was also used to expose a wing wall of the canal.

Two shovel tests along the trail section passing through 41BX264 contained cultural materials in disturbed strata. The integrity of the deeper deposits on 41BX264 within the APE is unknown in part because backhoe trenching was not possible here due to limited space. Backhoe trenching at the location of the light post was canceled because the APE was too narrow to investigate the deposits while also avoiding buried electric lines which run through the APE. Other investigators found cultural materials and features at 41BX264 40-60 cmbs (15.7-23.6 in.). However, any deposits within the upper meter (3.28 ft.) of the site within the APE may have been disturbed from road, train track installation, and utility work here. Deeper impacts, such as those planned for light pole installation, might disturb any archaeological deposits that could have survived because of their depth.

Data recovery excavations on site 41BX1396 included one backhoe trench and two 1-x-1-m (3.28-x-3.28-ft.) units excavated to approximately 2.45 m (8 ft.) below the surface. Early Archaic and possibly Late Paleoindian period artifacts were recovered from approximately 30-235 cmbs (11.8-92.5 in.), including three Guadalupe adzes, one small triangular dart point, one Gower dart point, one large adze fragment, and a rejuvenated Angostura dart point. Burned rock features were also documented at approximately 55 cmbs (21.7 in.; Features 1 and 2) and 115 cmbs (45.3 in.; Feature 3).

After the initial data recovery efforts, monitoring of the grading of the path of the trail occurred in March of 2011. The monitoring was conducted under a separate permit, although the features encountered were kept sequential with the November 2010 findings. Several features relating to the Early Archaic period were encountered, recorded, and removed during the monitoring phase. The features were excavated in whole and returned to the CAR laboratory to be screened, washed, and processed. In addition to the monitoring, additional investigations were requested in areas to be deeply impacted by the installation of light posts. In April of 2011, three light post locations were singled out as having a high potential for producing intact deposits. One location was investigated with an auger test. Two other light post locations were investigated through the hand excavation of four 1-x-1-m (3.28-x-3.28-ft.) units. All locations were excavated to an approximate depth of 2.5 m (8.2 ft.) below the surface. During the course of the excavations, two additional units were opened to further investigate a Paleoindian component encountered in Test Units 5 and 6. Artifacts recovered from the six units excavated during this next phase in the data recovery included a Clearfork Adze, Guadalupe tools, Angostura point, St. Mary's Hall points, and a Dalton point.

41BX13

Site 41BX13 was recorded in 1966 by Witte Museum staff. No other work is noted until SWCA's investigation in 2008 ahead of the golf course restoration project noted above (Carpenter et al. 2008). At this time, the site boundaries were redefined based on surface inspection and backhoe trenching (Figure 3-3). Most cultural materials were found in a buried stratum 60-100 cmbs (23.6-39.4 in.) of the T2 terrace, though scattered burned rock and debitage were also noted eroding out of the surface of the T1 terrace in disturbed areas. The integrity of the deeper deposits contributed to the site's SAL eligibility.

41BX321

In their survey of Brackenridge Park in 1976, Katz and Fox (1979) recorded 41BX321 on the eastern edge of the golf course (Figure 3-3). They noted the site was damaged by the large drainage ditch and sewer line, but observed artifacts 30 cmbs (11.8 in.). The site was mentioned again in 2002 during backhoe trenching for the water main (Houk 2002a). Cultural materials seen in BHTs 5 and 6 of this work were

attributed to 41BX321, though the site boundaries were not revised (Figure 3-5). A few artifacts were noted 80-100 cmbs (31.5-39.4 in.) in these trenches. The quality of the deposits and the quantity of artifacts were not sufficient to recommend further testing. Houk (2002a) did not recommend SAL eligibility for 41BX321.

Site boundaries were explored in 2008 when SWCA returned for the golf course restoration project (Carpenter et al. 2008). Three backhoe trenches excavated here revealed 20-50 cm (7.9-19.7 in.) of fill, some debitage, and burned rock. The burned rock was found in Trench 3, 110 cmbs (43.3 in.). Carpenter et al. (2008) concurred with Houk's (2002a) previous recommendations that the site was ineligible for SAL status.

The Paddle Boat Concession Site, 41BX323

Site 41BX323 (Figure 3-6) has seen excavation by CAR, the Texas Archeological Research Laboratory (TARL), and SWCA since it was first identified in 1979 during the Brackenridge Park Survey (Katz and Fox 1979). TARL conducted testing and data recovery excavations on the eastern portion of the site in 1995 for the Witte Museum H.E.B. Science Tree House (Meskill and Frederick 1998; Meskill et al. 2000). These archaeological and geological investigations identified Archaic components with rock features, lithics, and floral and faunal remains in 23 test units. Meskill et al. (2000) concluded that the site had been impacted by natural erosion and bioturbation.

From 1997 to 1999, SWCA conducted testing and data recovery at the site ahead of construction of the proposed water pipeline for the SAWS Water Recycling Program. The initial testing included backhoe trenches, mechanical augering, and hand excavation of test units (Miller et al. 1999; Houk et al. 1999). Chipped stone and lithic tools, burned rock features, and ceramics were found across the tested area. The results suggested that Early Archaic and Late Prehistoric materials were compressed within the upper meter (3.28 ft.) of the site's deposits. Miller et al. (1999) determined that the site was potentially eligible for listing as an SAL and recommended avoidance of the site or for data recovery.

Houk et al. (1999) report on the data recovery that followed these recommendations. They targeted Archaic deposits with intact burned rock features in two locales (including a burned rock midden) and a shallow Late Prehistoric component in another. The block excavations found the site dates primarily to the Middle Archaic but also has Late and Transitional Archaic components with a near-surface Late Prehistoric component.

Nordt (1999) conducted a geomorphological study of the site during the data recovery excavations. He

observed the site occupied two terrace landforms which were associated with four stratigraphic units. Lower levels of Unit 3 date to the Middle and Late Archaic periods, and the upper portion of Unit 3 date to the Late Prehistoric. Compression and bioturbation were again observed and thought to have negatively affected the deposits. The site was determined to be a SAL after this data recovery work.

SWCA returned to 41BX323 in 2000 to conduct auger testing as part of the Brackenridge Park Rehabilitation Project Survey (Houk and Miller 2001). The auger testing confirmed that intact deposits were located in the western portion of the site, which prompted additional testing in 2002 (Houk 2002b). Testing concluded that Late Prehistoric materials may be better preserved on the site south of Tuleta Drive, where minimal park development and erosion occurred.

In 2007, CAR conducted eligibility testing at 41BX323 at the location of a proposed parking garage facility (Figueroa and Dowling 2007). CAR's testing expanded the site boundaries south with evidence of Late Prehistoric and Archaic occupations recovered. Artifact recovery was sparse, and the southeastern portion of the site was not found to contribute to the site's significance.

In October of 1997 and March of 1998, SWCA conducted cultural resource investigations within Brackenridge Park (Miller et al. 1999). The purpose of the project was to test 41BX323 and to investigate the Second Water Works Canal prior to the installation of a proposed pipeline. SWCA recommended that 41BX323 either be avoided or construction impacts be mitigated. This was due to the potential the site had for producing information concerning the paleo-environment, prehistoric technology, and subsistence patterns of the region. Additionally, because the proposed pipeline was to cross a portion of the Upper Labor *Acequia*, further investigations were recommended in that area. Cultural materials recovered during the SWCA investigation included lithic debitage and tools, ceramics, and faunal remains (Miller et al. 1999).

SWCA returned to 41BX323 in the fall and winter of 1998 to conduct additional archaeological excavations. Excavations were carried out along the proposed pipeline easement. The investigation produced Archaic deposits with intact burned rock features and a shallow Late Prehistoric deposit along one terrace. Cultural deposits at the site appear to date primarily to the Early Archaic, with evidence of occupation in the Late and Transitional Archaic sub-periods (Miller et al. 1999).

In 2001, SWCA returned to Brackenridge Park once more to conduct a survey of 28.3 acres of the park (Houk and Miller 2001). The western portion of the survey focused on 41BX323. Much of the site produced sparse cultural materials, although a concentration of burned rock, debitage, and mussel shell were yielded along one section. The potential for the site to produce additional information about the

prehistoric occupation of the area was recognized once more. Site 41BX323 was again recommended for further testing, if impacts were to occur within the site boundaries. In addition to visiting 41BX323, a previous unrecorded site was documented along the eastern portion of the project area: Site 41BX1425 was identified as a multi-component site with Transitional Archaic and historic components. The prehistoric component consisted of an Enser point, burned rock, and debitage. The historic component is at or near the surface and comprises historic ceramics, glass fragments, and metal objects that date to the late nineteenth and twentieth centuries (Houk and Miller 2001).

In September 2007, CAR conducted archaeological investigations at 41BX323 consisting of both a pedestrian survey and a controlled excavation of test units and trenches. Two components were noted during the investigations along the eastern margin of the site. One component is Late Prehistoric in age, while the deeper deposit may be Early Archaic; however, the absence of temporally diagnostic artifacts makes a positive assignment to this time period impossible (Figueroa and Dowling 2008).

Second Water Works and Canal

A historic mill race or Second Water Works Canal is a long, linear, earthen canal that extends from Tuleta Drive south through the park to Mulberry Avenue where it is exposed as it crosses into the golf course, heads to the site of the Second Water Works building, and re-enters the San Antonio River (Figures 3-2, 3-3, and 3-6). Canal width varies from 10-30 m (32.8-98.4 ft.) with 2-3 m (6.6-9.8 ft.) high berms on each side in a section north of Mulberry Avenue (Figure 3-8; from Miller et al. 1999:3). The berms were likely constructed from intact deposits within the canal. Wing walls of this canal are exposed within the current APE just south of Mulberry Avenue on the northern edge of the golf course. A good view of the canal route appears on a 1905 map of the area (Figure 3-4). The canal is associated with the Second Water Works that was started in 1886 after the previous water works system failed.

The first water works system built in 1877-1878 included a pump house and series of canals that pumped water to a reservoir in Mancke Park. Water flowed downhill to customers through cast iron mains. The first water works system failed to attract enough customers, so ownership transferred to George Brackenridge, who successfully ran the Second Water Works from 1883 until the turn of the century. Brackenridge expanded the system by constructing a two-story limestone structure and canals that connected the original pump house in the north to this new structure in the south. The second pump house stands south of the golf course and was listed on the NRHP in 1981 (Figure 3-3). Demand eventually outpaced the Second Water Works capacity, and the entire operation closed at the turn of the twentieth century (Katz and Fox 1979:14). The city purchased the water works in 1925. Though the feature is sometimes referred to as a “mill race,” it was not connected to a mill.

SWCA conducted archaeological investigations of the Second Water Works Canal in 1997 (Miller et al. 1999). This was to record the structure and to assess its preservation. Three backhoe trenches were excavated in the northern end of the canal near its juncture with the San Antonio River. Two more trenches were placed near Mulberry Avenue. These provided a cross-section view of the canal and berms between Mulberry Avenue and Tuleta (Figure 3-8). Miller et al. (1999:43) reported the canal narrows from 20-10 m (65.6-32.8 ft.) as it approaches Mulberry and reaches depths below 2.5 m (8.2 ft.). The ground surface on which the berms were constructed was evident in the berm profiles as were intact prehistoric deposits beneath the berms along the canal (Miller et al. 1999:43). They found the canal was filled in the 1950s or 1960s with modern concrete, limestone blocks, asphalt, gravel, and recent trash (Miller et al. 1999:45).

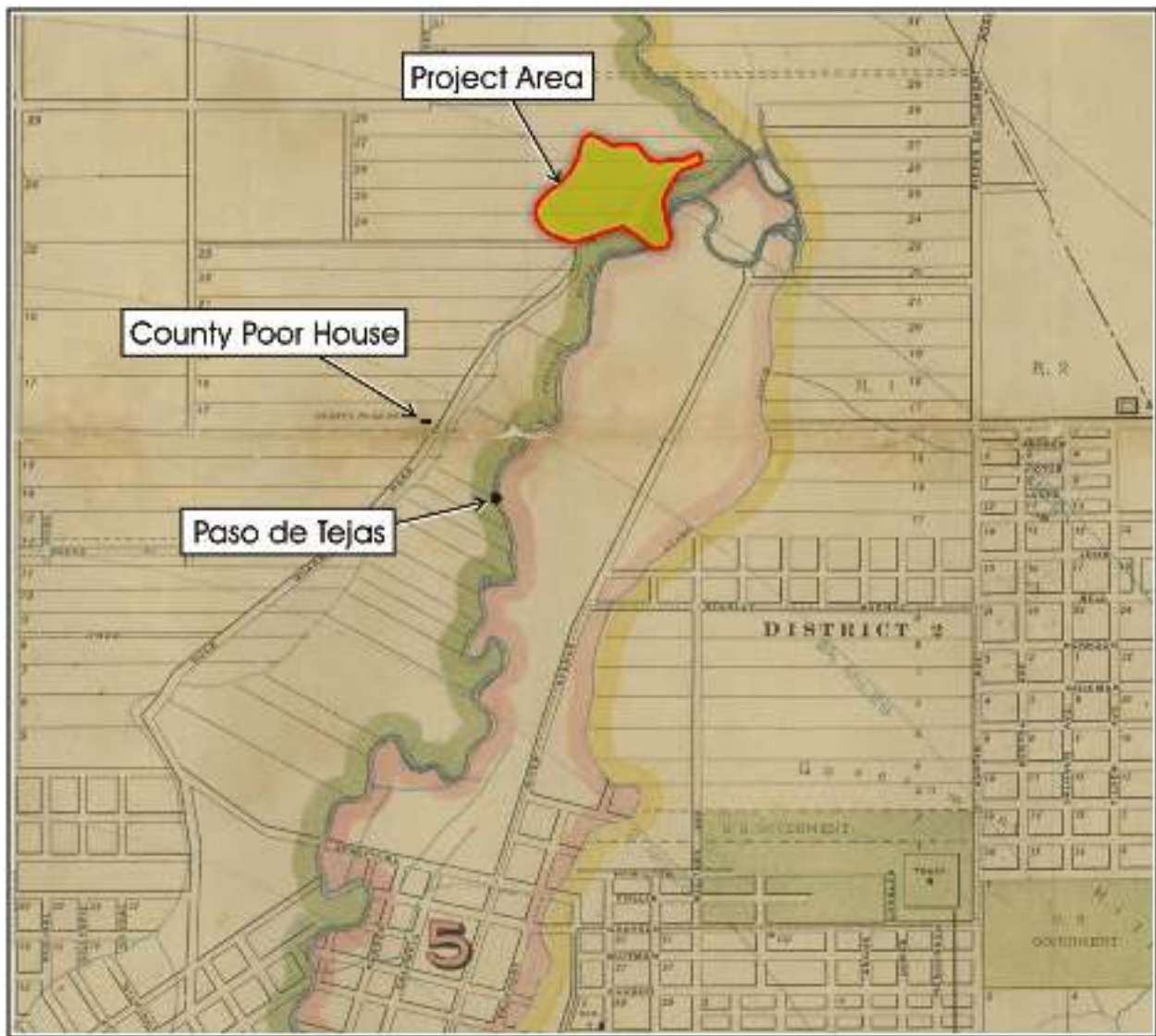


Figure 3-8. Overlay of San Antonio Zoo on 1889 map showing one possible location of Paso de Tejas and the Bexar County Poor House.

Historic Properties

There are several historical properties located in the vicinity of the APE but not associated with the park. The river crossing Paso de Tejas was thought to be in the area and has been mentioned in historic documents (Cooley 1900; Cox 2005). These anecdotal accounts place the crossing at two different locations, one north and one south (near Lone Star Brewery) of the APE. However, one map dated 1879 shows the crossing within the site boundary of 41BX1396 near Katz and Fox's CL 1 and to the north of the Zambrano House. This is the only definitive location pinpointed on a map based on the historical record CAR staff could find. This is not to discount other sources mentioning the crossing. It is possible that the same or similar names were used for multiple crossing locations along the river in San Antonio.

The Bexar County Poor House was located west of Rock Quarry Road (today known as St. Mary's). The property provided some housing for indigent people but also consisted of farm land and a cemetery. The house appears to have been in operation prior to 1889 (Figure 3-8). An article found in the *San Antonio Light* dated to July 27, 1913, indicates that the property was approximately 18 acres. Four years prior, a county judge attempted to sell the property in efforts to establish another County Poor House on 100 acres outside of the city limits. The property was not sold at that time, and efforts were made later to remove the burials to the City Cemetery in hopes of securing a buyer. The cemetery at the Poor House was considered "unsightly", and the county judge in 1913 wanted to remove all evidence of its existence. There is no inventory on the number of interments at the Poor House Cemetery and no record of whether any or all those interments were ever moved to the City Cemetery.

The Bexar County Poor House was noted on the 1886 Bird's-Eye View of San Antonio created by Koch (Figure 3-9). It also appeared on 1889 map of San Antonio. A 1909 map of San Antonio did not detail the Poor House but labeled the parcel of land as Bexar County property (Figure 3-10). Since it is mentioned in a 1913 newspaper article, it can be inferred that the Poor House was likely running from the 1880s to the mid-1910s.

Historic Park Attractions

The project area is located in the northern portion of the Brackenridge Park. Within the Park is the Brackenridge Golf Course, the oldest municipal course in the state (Figures 3-2 and 3-3). The course was constructed under the direction of City Parks Commissioner Ray Lambert in 1915 and completed by 1917. A. W. Tillinghast of Philadelphia designed the course to incorporate the river's meanders (Pfeiffer

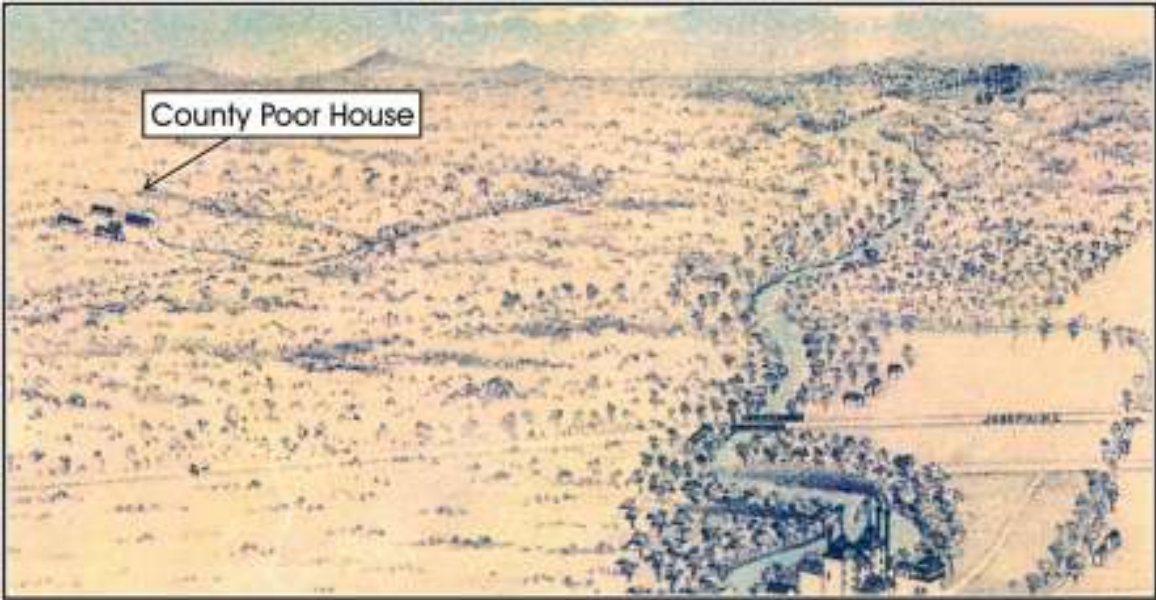


Figure 3-9. Bexar County Poor House on Koch's 1886 Bird's-Eye View.

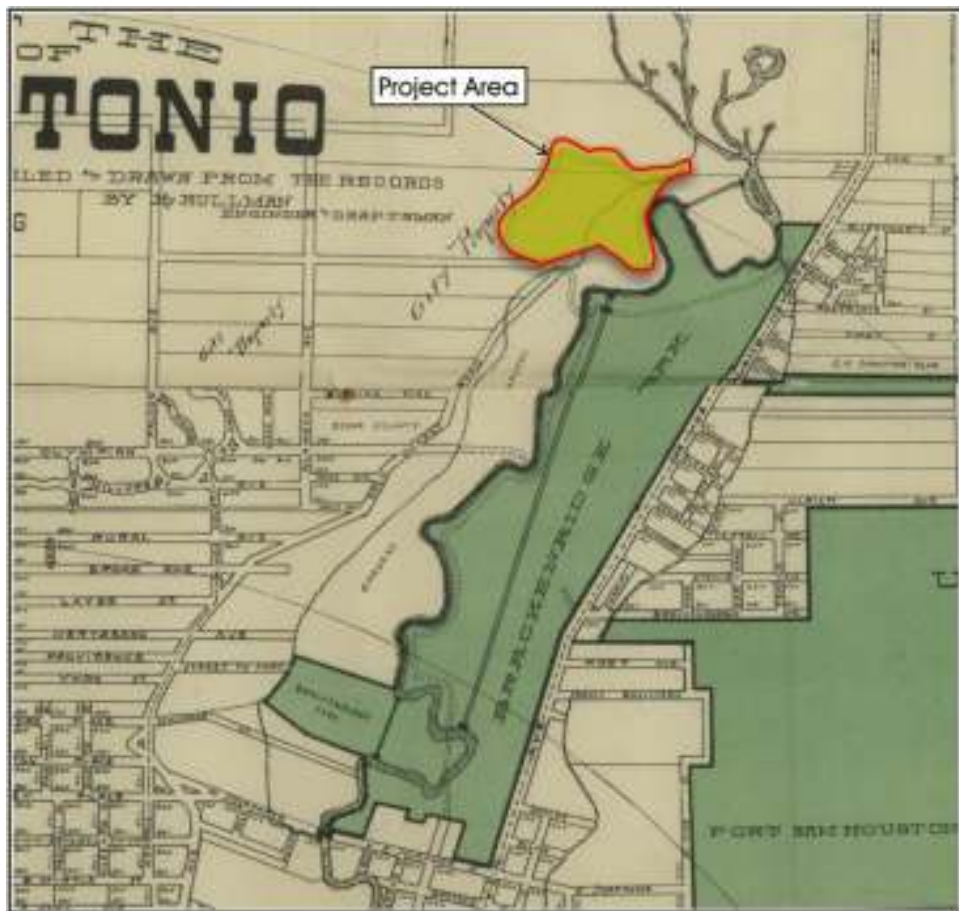


Figure 3-10. Overlay of the San Antonio Zoo on the 1909 map of San Antonio.

2010a). A golf clubhouse was constructed in 1923, replacing a two-story building used by the San Antonio Jockey Club, which was organized in 1889. The Jockey Club and track were popular in the 1890s and early 1900s for both horse and bicycle racing. Weekly horse races were held on the track, which continued until 1910 (Katz and Fox 1979:19).

Numerous other park attractions were developed under Lambert including, Lion's Field (1916), one of the first playgrounds in San Antonio, Joske Pavilion (1926), the Municipal Zoo (1914), Eleanor Brackenridge playground, and a swimming beach (Figures 3-1 to 3-3). The Lambert bathing beach was opened in 1917 and remained open until 1950. Donkey rides were sponsored by the Rotary Club in the 1920s. Today the stone donkey barn lies vacant although it used to house the Parks and Recreation offices. Lambert also converted the abandoned quarry into the Sunken Garden amphitheater attraction and the surrounding buildings into a local crafts market (Pfeiffer 2010a). On the northern end of the Sunken Gardens, he created a lily pond named the Japanese Garden, and to the south, he had the Texas Star Garden designed with rock and flowers (Pfeiffer 2010b).

Few changes have occurred to Brackenridge Park since the 1940s. Construction on US 281 altered the golf course, the Zoo has expanded, and new concessions and pavilions have been built (Pfeiffer 2010a). The bulk of park property is still on lands donated by Brackenridge south of the river and by Emma Koehler and the original Spanish grant on the north side.

Chapter 4: San Antonio Zoo History

The very first zoo in San Antonio was located within San Pedro Park. Beginning in the late 1800s, animals were put on exhibit at San Pedro Park as parts of traveling shows. In 1910, a private collection of small animals was set up, but the public was charged to see these. People were upset about being charged and tried to get the City involved. In 1912, Brackenridge donated some elk and buffalo for public display. Rather than putting them in San Pedro Park, he put them within Brackenridge Park, the property he had donated to the city for public use. The area where the animals were kept was located in the southern portion of Brackenridge Park, in the area that today is the Golf Course. A fenced area allowed the buffalo and elk to roam, while several cages housed monkeys, lions, and bears (Matthews 1991). In the early years of the Zoo (1912-1914 at San Pedro Park, then at the Brackenridge Park location until 1928), the Zoo housed animals that people had collected and donated to the park. As the collection grew, it became apparent that more permanent and better suited enclosures were needed for the animals. The limestone cliffs located in the northern portion of Brackenridge Park seemed an ideal place (Matthews 1989). In 1914, a series of “carnivore dens” were built, likely to house the pair of South African lions that were obtained (San Antonio *Light*, 3 July 1949).

In December of 1928, the San Antonio Zoological Society was started. The Zoological Society is a non-profit organization that was established to oversee the development of a public zoo. In late January of 1929, the Society and Parks Commissioner approved plans for the barless bear enclosures and a primate exhibit. A ground breaking ceremony was held on February 14, 1929, to commence construction on these exhibits (Matthews 1991). The Society entered into an agreement with the City that they would buy the animals, and the City would maintain them (Ramsdell 1959:184). Initially, the animals purchased would be housed within the confines of Brackenridge and Koehler Parks (Bowers 2012), but an actual place within these parks had to be set aside to serve as a zoo. By November of 1929, the first two exhibits opened. These were located in the part of Brackenridge Park that was used as a rock quarry and the abandoned San Antonio Portland Cement Company (*San Antonio Express*, 7 September 1954). The limestone cliffs of the old quarry provided a “natural” environment for the animals. In addition to the natural looking caves and ledges, the location within the old quarry runs approximately 20 degrees cooler in the summertime (Meffert 1994). To keep the animals within these exhibits, designers opted to not use bars. Instead, moats were excavated that would prevent the animals from escaping. These barless exhibits were the first of its kind in the United States (San Antonio Zoo History 2012). In November of 1929, the Zoo accepted \$22,000 worth of new animals (San Antonio *Light*, 3 July 1949).

The construction of the two exhibits was an inadvertent result of Charles Baumberger, Sr. operating the San Antonio Portland Cement Company. The Portland Cement Company removed millions of tons of rock, starting in the 1880s. The removal of the stone made for the limestone backdrop of the exhibits. This made the remaining excavation of the moats a less daunting task (*San Antonio Express*, 7 September 1954). Baumberger and his son donated money and materials for the construction of the moats (*San Antonio Express*, 7 September 1954).

In addition to using the limestone walls from the quarry, the Zoo incorporated the San Antonio River. A portion of a Spanish Colonial *acequia* ran through the grounds. The Zoo developed a system of canals to utilize the water from the river in its exhibits (Bowers 2012). At the time of opening in 1929, the Zoo hosted 344 specimens. This number included approximately 70 white-tailed deer and 70 ring-necked doves. The Barless Bear Terraces and the Primate Paradise were the first two areas that exhibited animals without the use of cages. The moats that had been created allowed the visitors to examine the animals from a distance without the impediment of the bars or worry of a possible escape. Primate Paradise hosted more than 40 monkeys that had previously been kept in cages (Matthews 1991).

During the 1930s, additional spaces were needed for the growing zoo. An Anthropoid House was constructed that acted as the habitat for chimpanzees. The new exhibit was opened in July of 1930. A series of bird cages were constructed throughout the Zoo in 1931. Many of the Society's members competed with each other to see who could donate the greatest amount of money for additional bird exhibits during that time (Matthews 1991). This may have been why the San Antonio Zoo later boasted one of the greatest collection of birds.

With funds from the Works Progress Administration (WPA), additional barless exhibits were constructed to house elephants and other large mammals. The new enclosures constructed by the WPA showed the skill and craftsmanship of the individuals. Stonemasons carved faces of humans and animals into the limestone as they shaped the walls (Meffert 1994). The first exhibit finished through the work of the WPA was an area for the impalas and gazelles located in the northern reaches of the Zoo. The WPA also did extensive work on the camel, dik-dik, and crane enclosures (Matthews 1991). In addition to the craftsmen, in 1938 the National Youth Administration (NYA) was employed to paint the signs for many of the exhibits (Figure 4-1). Between 1938 and 1940, the WPA constructed a large Bird of Prey Aviary. This enclosure is still standing, located just north of the current project's APE. A plaque on the structure indicates that it was constructed by the WPA between 1938 and 1940. By 1941, the additions and new exhibit areas constructed during this period were open to the public (Figure 4-2).



Figure 4-1. Signs that were painted for the San Antonio Zoo by members of the National Youth Administration (NYA) as part of the Works Progress Administration (WPA).



Figure 4-2. Aerial of the San Antonio Zoo taken in 1941 after the completion of new additions to the Zoo.

In 1941, the Society published a guide to the Zoo. It showed pictures of many of the exhibits and shows at the Zoo, as well as how Director Fred Stark and President Richard Friedrich interacted with the public and the animals. A visitor in 1941 could not only see a myriad of mammals, reptiles, and fowl on exhibit, but they were also able to view shows and to ride an elephant. The map of the Zoo in 1941 (Figure 4-3) showed the original bear pits and Monkey Island that were constructed in 1928-29 and illustrated the improvements made up to that date. A portion of the Upper Labor *Acequia* runs through the property. The section closest to the entrance is labeled as “Duck Lake”.

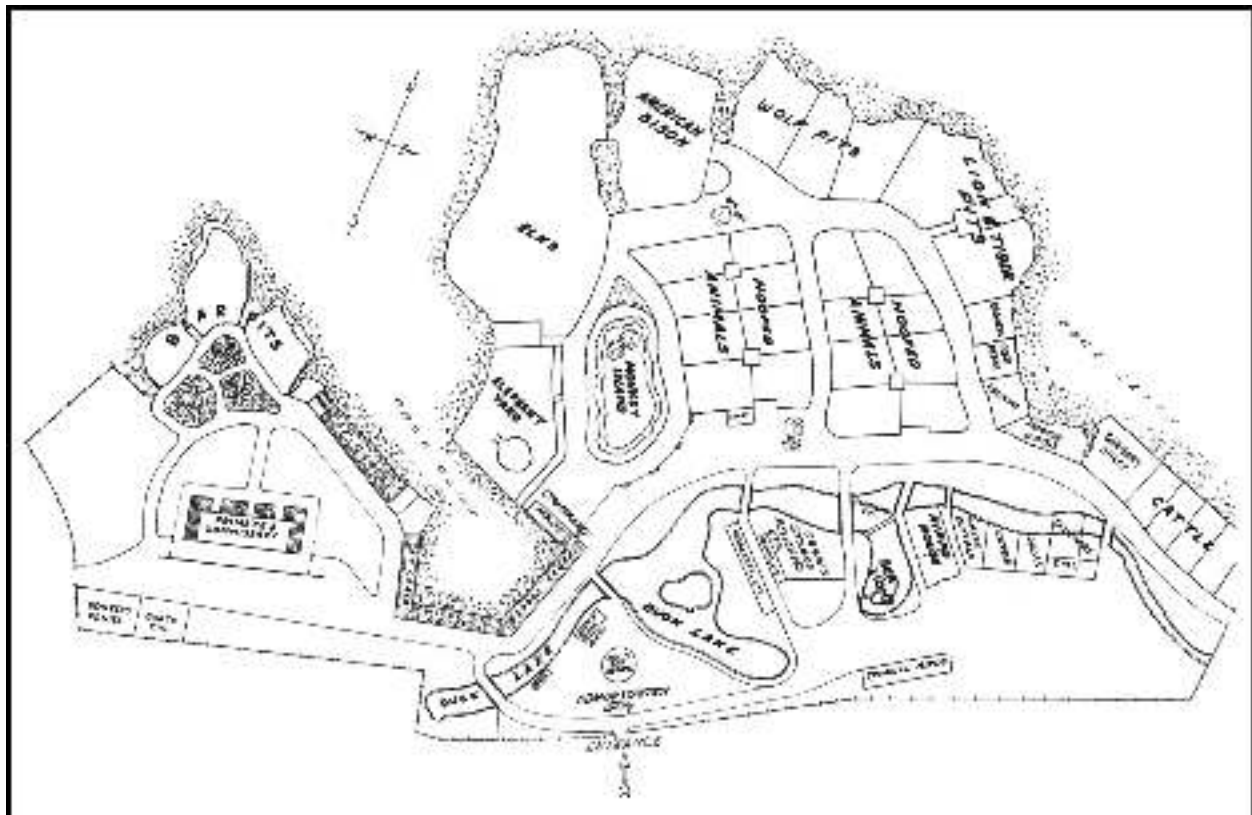


Figure 4-3. 1941 map of the San Antonio Zoo.

Unlike it is today, when the Reptile House opened in June 1942, it was an open-air exhibit that contained up to 150 reptiles. Guests could view the animals while walking under the covered porch of the structure (Figure 4-4). The inhabitants of the Reptile House were representative of the over 100 varieties that had been collected over the years at the Reptile Garden located adjacent to the Witte Museum (Matthews 1991).



Figure 4-4. *Reptile House at its completion in 1942.*

Guests during the 1940s could view a donkey show, which was a demonstration of tricks that had been taught to what is believed to be a stubborn animal. Handlers were able to get the donkeys to sit, lie on their backs, and balance on small platforms to impress the crowds. After the donkey show, patrons could visit the sea lions. At the sea lion enclosure, trainers would have the animals perform tricks such as passing a ball and performing tasks on command. Later, guests could walk over to the lion pen and watch a trainer have the lions perform acts. Although the lion and tiger pits were designed like the barless bear pits, a cage was present with props that were reminiscent of a lion tamer's act at a circus. When the thrill of the lion show wore off, patrons could visit the elephant yard where an elephant would balance on a board 0.9 m (3 ft.) off the ground. Once the elephant show was over, guests could have a ride on one of the elephants for a nominal fee. All of the shows were included in the price of admission. In addition to the shows, if patrons felt walking around the Zoo was too much, they could hire "bunion carts" which were donkey drawn (Figure 4-5; San Antonio *Light* Photograph collection, MS 359, University of Texas San Antonio Libraries Special Collections from the Institute of Texan Cultures).



Figure 4-5. "Bunion Cart" at the San Antonio Zoo in 1942.

The construction of barless enclosures was uncommon, and the “natural” like backdrop of the Zoo had it ranked in the United States as one of the best zoos in the nation. It was in competition with the San Diego Zoo, so improvements seemed to be always on the minds of the Zoo officials. So, in 1948, the Richard Friedrich Aquarium, a collection of fresh- and saltwater fish, was opened to the public (San Antonio Zoo History 2012). The Aquarium was billed as the greatest in the state at the time of its opening. Over the years, the exhibits have changed, but it is still open today with a collection of exotic and local fish.

Another addition to the Zoo was opened in 1966. The Hixon Bird House was constructed at the opposite end of the park from the entrance (Figure 4-6). It was funded through the efforts of Colonel Frederick C. Hixon. The bird house exhibited exotic birds in a simulated tropical rain forest atmosphere. The interior of the bird house allowed some of the specimens to fly freely.

Hixon was not only was a benefactor of the Zoo, but he was also very concerned about what the Zoo provided to the public and scientific community. Hixon felt that while displaying exotic animals was a purpose of a zoo, a great zoo also focused on becoming a world-class research, education, and

conservation facility. The San Antonio Zoo focused on breeding and raising animals that were endangered or close to being endangered. At one time, four tiger cubs were born at the Zoo. Whooping crane breeding was also in process (*Los Angeles Times*, 19 May 1957), though this endeavor proved to be difficult (*Chicago Tribune*, 8 July 1967). The first white rhino born in the New World was born at the San Antonio Zoo.

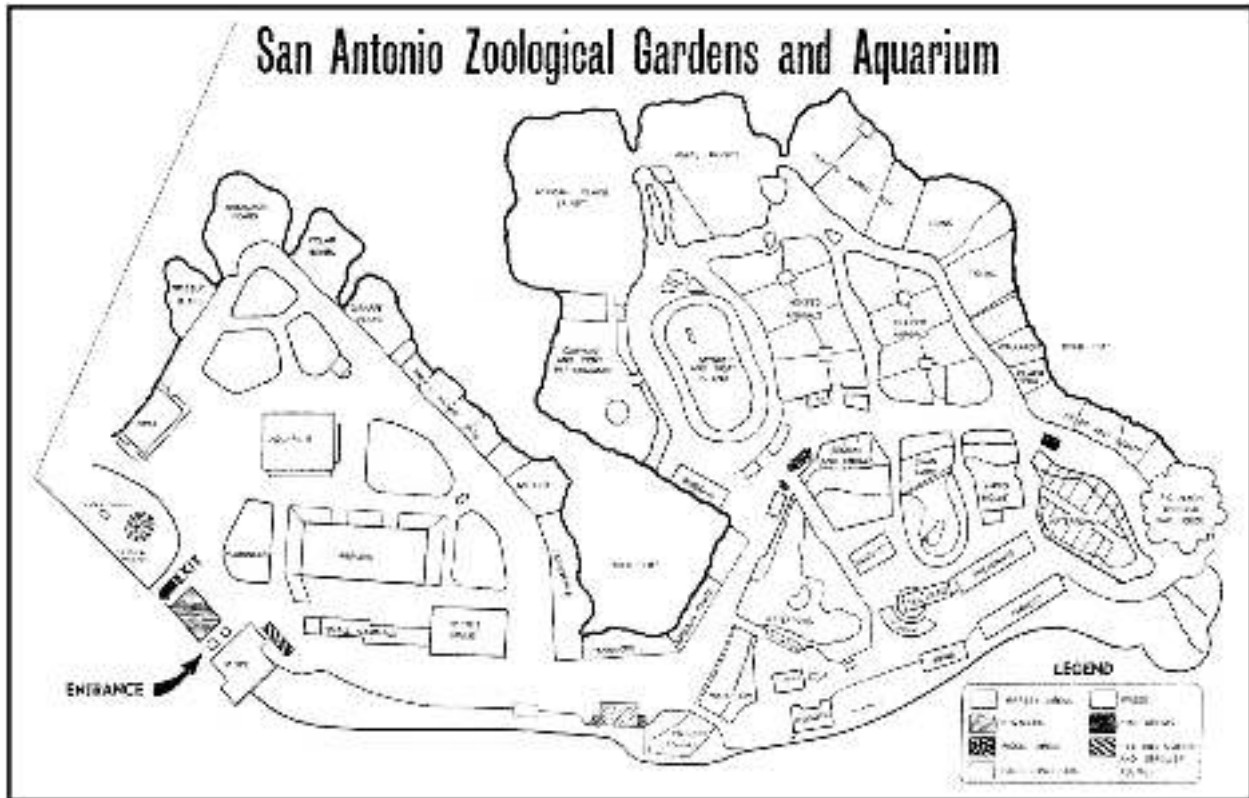


Figure 4-6. Map of the San Antonio Zoo ca. 1960.

A pamphlet on file at the Daughters of the Republic of Texas Library extolled the virtues of the Zoo. The pamphlet likely dates to 1967-68 as it advertised to visit the 1968 Hemisfair. It indicated that visitors needed to visit the Aquarium because it exhibited seals, a manatee, and tropical fish. The canals and pools throughout the Zoo contained various other species of fish. The flamingo exhibit was billed as “World Famous”. In addition, the pamphlet mentioned the various animal acts that were at the Zoo and the 30-minute guided tractor train tour of the property.

In 1976, a new enclosure was opened to the public. This was the new home for two lowland gorillas that the Zoo had in its possession. The gorillas had previously been housed in a caged area. The gorillas were both males and approximately 27 years in age at the time the new enclosure had opened (*North San Antonio Times*, 10 June 1976). At the time it was opened, the new exhibit was considered to be “the

zoo's most ambitious to date" (*North San Antonio Times*, 10 June 1976). Keeping with some of the original design, the enclosure was also barless with a moat that would prevent the animals from escaping. Yet another new exhibit was opened at the Zoo in July of 1977. The Mount Kenya Forest Trail was billed as a "mini-mountain safari".

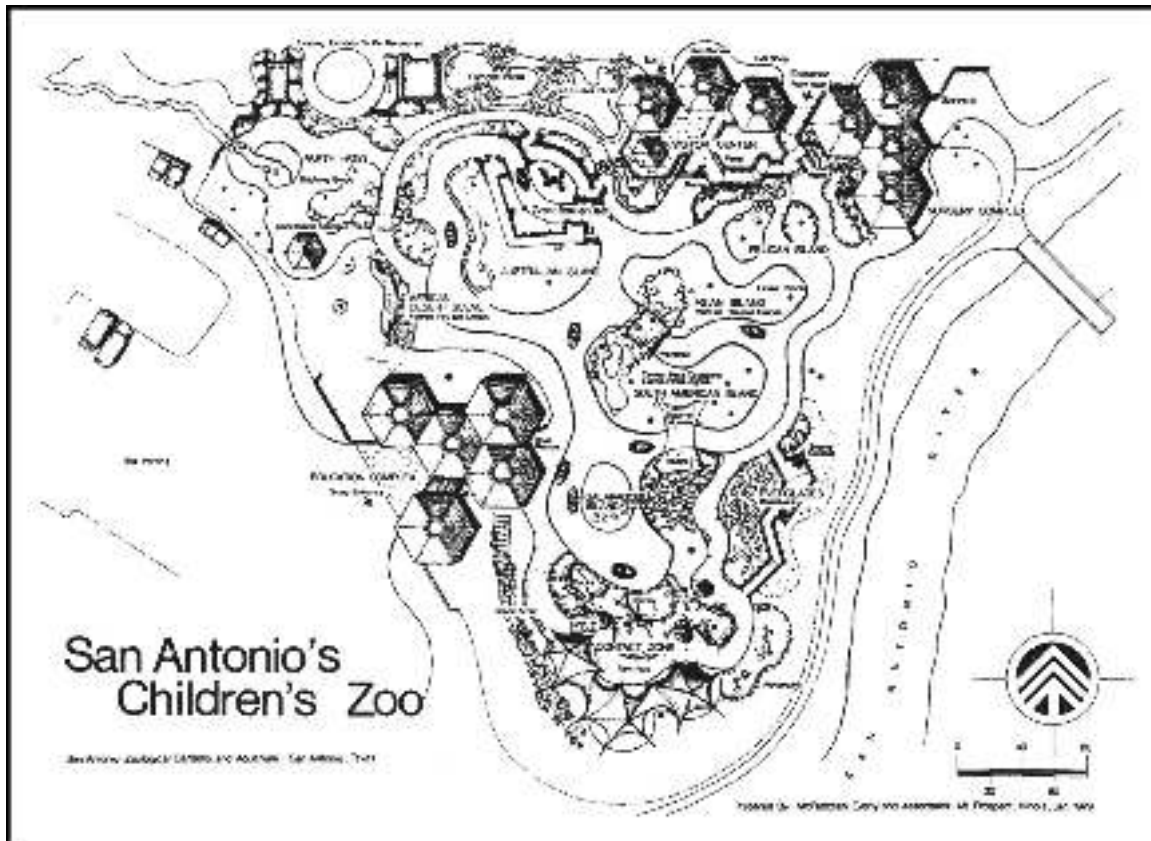


Figure 4-7. Map made public in 1979 of the proposed plans for the new Children's Zoo at the San Antonio Zoo.

During the late 1970s, plans were drawn up to improve the Zoo once again. The Zoo designed a Children's Zoo to occupy a new portion of the grounds. The design was first revealed to the public in 1979 (Figure 4-7). The new exhibits would boast a mechanically guided boat ride that would transport guests from continent to continent without leaving the park's boundaries. The area was to have a playground, a contact zone, a visitor center, a nursery complex, and a party patio (*North San Antonio Times*, 9 August 1979). The plans were released to the public in June of 1980 (Ullmann 1980). The entire project was to cost \$2.7 million and fundraising for the project started in the fall of the year before. The completion of the Children's Zoo was set for three years after the publication of the news article. The nursery portion of the Children's Zoo was scheduled to open in the later part of 1980. This facility was to provide glimpses of the young animals born and reared at the Zoo.

A 1982 article printed in the *Express* indicated that the Children’s Zoo expansion was to cost \$1.1 million and that its completion was still a couple years away. The nursery had been completed in 1981 and was functioning. An ice cream shop, gift shop, restrooms, a pavilion, a flamingo lagoon, and a boardwalk were slated to open to the public in May of 1982 (Phelon 1982; Figure 4-8). The Children’s Zoo was completed in 1987.

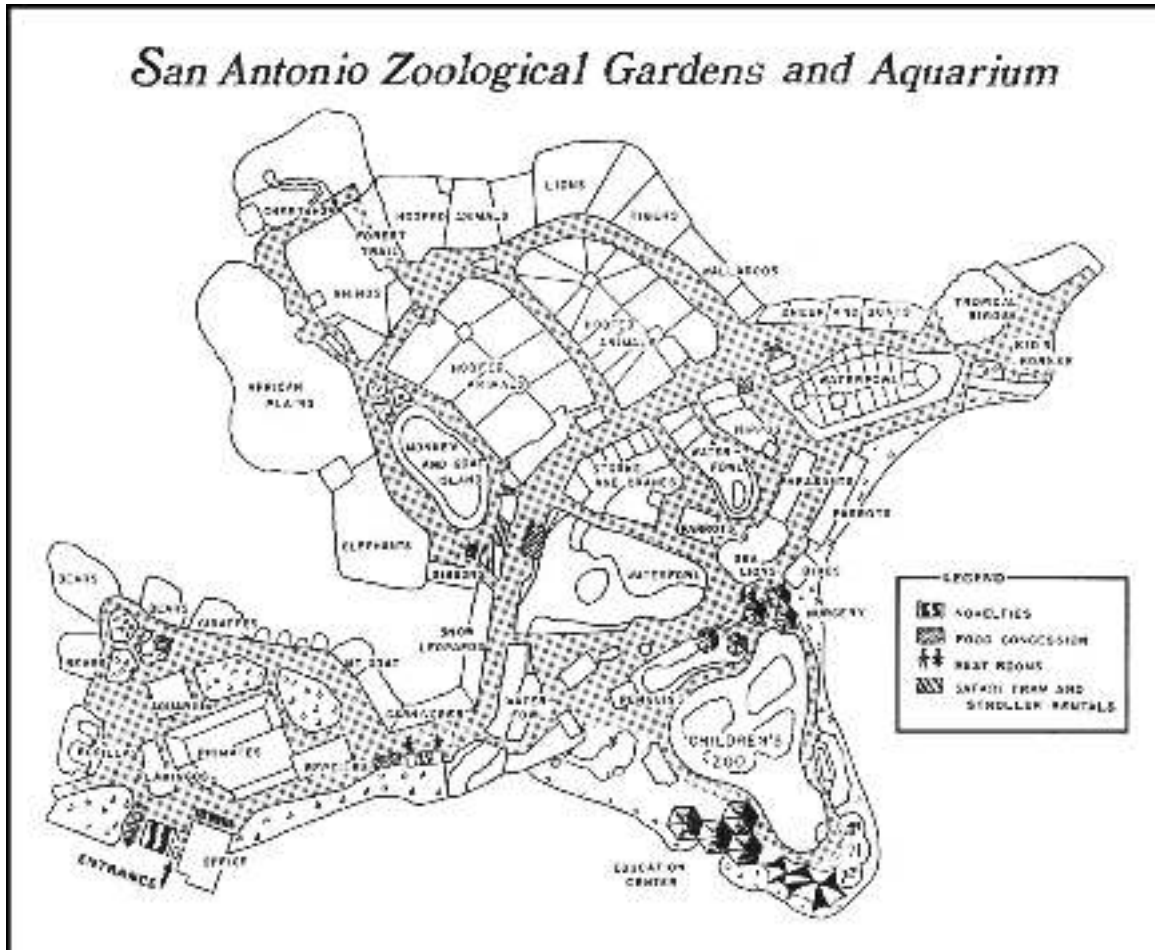


Figure 4-8. Map of the San Antonio Zoo in the 1980s after the completion of the Children's Zoo.

In addition to the construction of the Children’s Zoo, two other projects were underway. One of these was the pathway of the Rift Valley Track. The Rift Valley Track was to consist of winding trails that would pass by a cheetah habitat, Hyenas, an armadillo, cape hunting dogs, and an enclosure of gazelles and ostriches. This new exhibit area was to be located near the northwest corner of the park (Figure 4-9).



Figure 4-9. Stylized map of the Zoo showing the latest exhibits in 1989.

Also 1982, the Zoo planned to create a new exhibit area that would have no less than 17 animal environments. The new habitats would be lined along a grotto walkway that would take visitors past the dens of the animals housed there. The structure would be made of concrete that resembled rock outcropping and cliffs. On the outside of the grotto would be a new “Monkey Island” that was surrounded by a moat to keep the primates in. Across the main walkway from the new exhibit, a new jaguar exhibit was to be created with an enclosed aviary to house the scarlet ibis (Phelon 1982), and it would be part of what was referred to as the Amazon River Forest.

In 1985, a new area was built for sea lions in an attempt to bring the animals back to the Zoo. For seven years prior, no sea lions were present as the old habitat had to be improved at that time. An article published in January of 1985 indicated that the sea lions were to arrive to the new exhibit in March of that year. Also in progress at that time was the construction of a new exhibit area referred to as the Cliffside Grottos and a new Asian exotic cat enclosure (Perdue 1985a). Red pandas, clouded leopards, and other exotic cats were to be housed in the Cliffside Grottos. In August of 1988, the Cliffside Grotto was opened. Outside of the enclosed walkway of the grottos was an island created for ring-tailed lemurs from Madagascar (Matthews 1991). In addition to the new exhibit opening, the Zoo reported that it had received funding to make improvements to the oldest section of the property (Perdue 1985b).

In 1988, the Zoo welcomed a group of koalas brought from Australia. To accommodate the koalas, construction of The Outback commenced (*San Antonio Express-News* 1988). The koala exhibit area today houses the lorikeets. In addition to The Outback, the Australian Walkabout exhibit was started in 1988 and was finished in 1989. The exhibit area included an aviary, which today is in the area of the porcupines, that hosted native Australian species. Enclosures within The Outback also housed kangaroos, emus, and wallabies (Matthews 1991).

In March of 1989, the Rift Valley Tract was opened to the public. The Zoobilation Ball coincided with the opening and attempted to gather funds to finish the Amazon River Forest exhibit area. The Amazon area was set to be dedicated in the spring of that year. This section of the Zoo was to have the San Antonio River flow through the exhibit beneath the jaguar exhibit. The banks of the river were to house the scarlet ibis area that also showcased the aardvark and sloth (Monday 1989). This portion of the San Antonio River flowing through the exhibit appears to be a section of Upper Labor *Acequia*, which had been altered in areas to fit the exhibit needs. Areas relating to the Amazon exhibit were under construction from 1988 to 1991 (Matthews 1991).

At the entrance of the Zoo, a new sculpture was added that became a popular attraction. Even today, as visitors enter the Zoo, they may see many children climbing to become part of the lion pride bronze sculpture while parents try to take a photo. DiSabato, the director of the Zoo since 1967, commissioned the piece to instill an immediate idea of the quality of the Zoo to its visitors as they entered the park (Monday 1989).

DiSabato's vision for the Zoo required many changes and additions. He saw the organization not only as entertainment for the public, but also as a research and conservation facility. He even suggested that the name of the Zoo be altered to include "Botanical Gardens" due to the care that was taken with the foliage

that was placed in each exhibit. The Zoo was a plant rescue center designated by the US Department of the Interior. Many plants that were seized as illegal imports ended up in the exhibits at the Zoo. Not only does the plant life present at the Zoo offer an aesthetically pleasing backdrop to the animal exhibits and walkways, it also played an important role in the lives of the animals that encountered them. In 1989, the horticulturist at the Zoo remarked that the Jaguar exhibit had to be re-landscaped three times due to the jaguars. Prior to being put into the new enclosure, the jaguars had not been exposed to much of the fauna. The curious creatures played with, ate, and trampled many of the plants (Monday 1989). In addition to the plant conservation, the Zoo focused on a breeding program that aimed at helping to increase the numbers of animals that were categorized as endangered species.

During the early 1990s, the Zoo started a campaign to raise funds for a new visitor's center. The new center was part of a four-part expansion project that the Zoo had been considering for years. The fiesta-themed plaza and center was supposed to offer guests a place to relax upon entering the park, as well as gift shops and an air-conditioned mall. The hope was that the new addition would help to create revenue for the Zoo. The other three parts included expansion of other exhibit areas and visitor relations. The Zoo hoped to expand the entrance to eight stalls to accommodate a heavier traffic flow into the park. After the entranceway was expanded, the Zoo planned to expand the flamingo and aquarium area. The expansion would focus on the aquarium to include a "South American-style water world". The last project anticipated in the four-part expansion was to expand the reptile house (Parker 1990).

Later in 1990, the Zoo's last gorilla was transferred to the National Zoo in Washington, D.C. (USA Today, 1 November 1990). Mopie, an 18-year-old, 400-lb., silverback lowland gorilla originally from the Bronx Zoo, was a resident of the Congo Falls exhibit (Smith 1990) and had been at the San Antonio Zoo for approximately seven years. While the transfer of the gorilla was unfortunate, the Zoo continued to expand in other areas. During the same year, funds provided by Betty and Bob Kelso allowed for the renovation of the Parrots of the World exhibit (Matthews 1991).

At a 1991 Zoobilation Ball Committee meeting, plans were revealed for an exhibit that would showcase the wetlands of the world. The new exhibit was described as being on a lake adjoining the seal exhibit and the parrot enclosures. The new exhibit was to host crocodiles and waterfowl (Prevost 1991). In 1991, a new exhibit dedicated to the rainforest was opened. Amazonia consisted of animals from the Amazonian rainforest, including a giant anaconda.

The plans for the new entrance were approved in June of 1992. The original idea for a fiesta-themed courtyard was scaled-back. The new plan was to move the gift shop into what was the primate house and

to build an amphitheater for bird shows. The new design near the entrance had a more “natural” appearance than the formal design of the Mercado Plaza and air-conditioned mall (Greenberg 1992).

In August of 1992, Little John, the giraffe, died of septicemia. The giraffe was 27 years old. His father, John, passed away in the 1960s. The giraffe enclosure was located near the African Waterhole, adjacent to the elephant enclosure. At the time of Little John’s death, there were three female giraffes, one being a baby that was born in March, and one other male (Coburn 1992).

In mid-December of 1992, tragedy struck in the elephant enclosure. The oldest female elephant, Ginny, picked up one of the keepers with her trunk and slammed him down onto the ground. The keeper did not survive the blow and died en route to Brooks Army Medical Center. Zoo officials decided not to put down the 37-year-old Asian elephant (Garcia and Driver 1992), however as a result of this incident, Zoo officials had to re-evaluate their elephant policies. Until this time, elephant rides were still offered at the Zoo. Many patrons rode the elephants during regular operating hours for an additional fee (Bird and Garcia 1992). The day after the accident, elephant rides were halted and never resumed at the Zoo.

In 1995, Rosie the giraffe was euthanized. Although many believed she was over 40 years old, Rosie was 34 years old. Her teeth had been worn down or were missing completely, making it hard for her to eat. Two other giraffes survived her, though the Zoo had no plans to replace Rosie (*Houston Chronicle* 1995).

In March of 2007, the San Antonio Zoo opened a new exhibit located next to the Aquarium. The exhibit was called “Butterflies! Caterpillar Flight School” and consisted of a screened enclosure (*San Antonio Express-News* 2007). The exhibit displayed many varieties of exotic butterflies. Visitors were allowed to enter the screened structure to walk through what appeared to be like a densely planted greenhouse. The butterflies flew freely and would perch on the foliage or bird baths filled with fruits. The exhibit was to remain open during the warmer months and close during the winter.

The Zoo launched Africa Live! in mid-January of 2008. The launch was one of at least four phases that the Zoo had planned. This first phase provided a new habitat for the hippos and crocodiles. An enclosed, air-conditioned space that was designed to resemble the underground also provided room for the display of African cichlids, bullfrogs, lungfish, a Gabon viper, a banded Egyptian cobra, a green mamba, and caymans. A new gift shop was constructed along with the new exhibit that was designed to resemble an African street market (Arias 2008). Additional phases were planned to commence as soon as funding was secured. The first phase occupied the area that once had the Monkey Island and an area reserved for hoofed stock. Monkey Island was one of the original portions of the Zoo when it opened in 1929.

In August 2010, the Zoo lost two of its signature animals. Daisy, a 33-year-old giraffe, was the last of the giraffe population at the Zoo. Daisy had been born at the San Antonio Zoo. Her father, Little John, had died in 1992. Three days later after Daisy’s death, Malaya, a Sumatran tiger, died after a surgery to treat a uterine infection. Malaya had arrived at the San Antonio Zoo in 1999. She had two cubs shortly after arriving, but she never reproduced again. Her enclosure mate, a male Sumatran tiger, survived her. At the time, Zoo officials stated that they were considering a search for replacements for both animals (Davila 2010). As of the spring of 2012, replacements had not been obtained.

In 2010, the second phase of the Africa Live! exhibit opened (Figure 4-10). This exhibit was an expansion of the first phase that included an open aviary for guests to walk through. The path from the first phase of the Africa Live! exhibit to the elephant enclosure now contained exhibits on the okapi, African wild dog, dwarf mongoose, hyrax, and the Angolan colobus monkey.

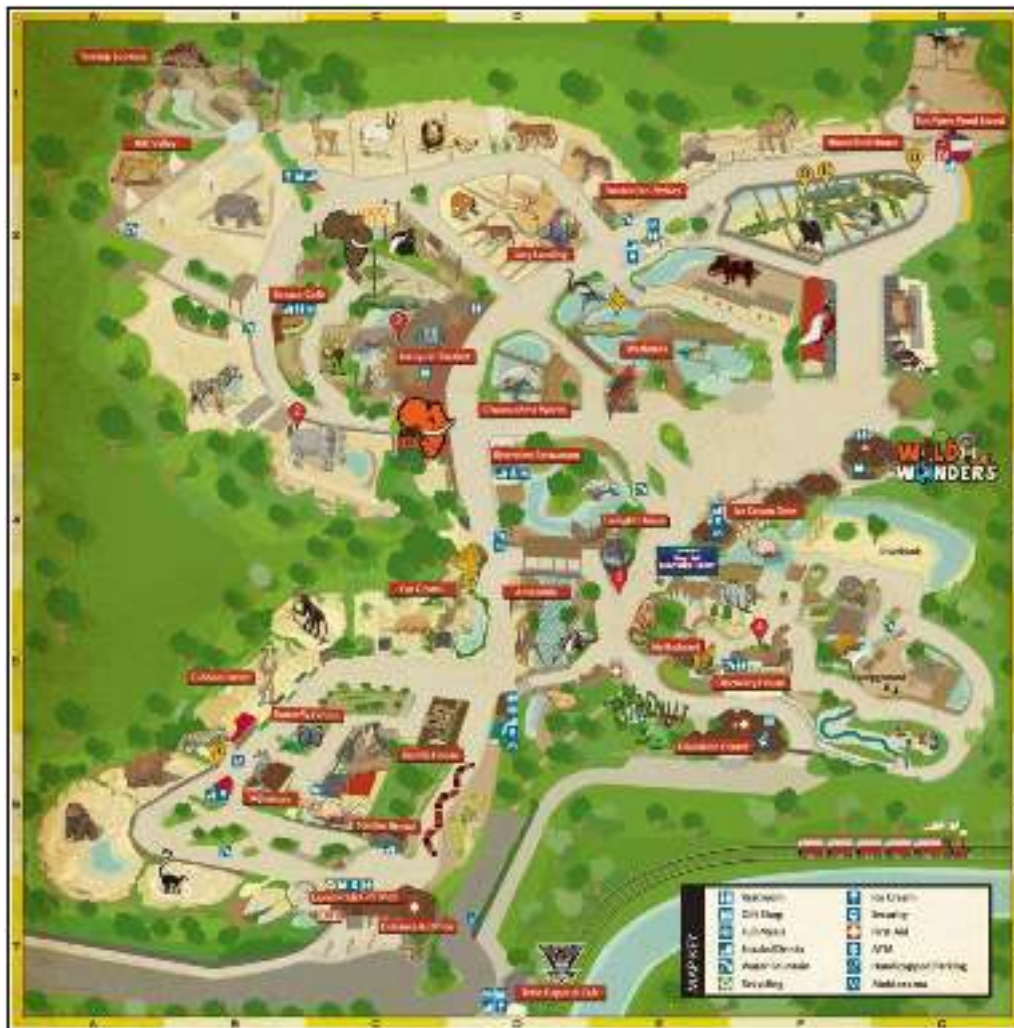


Figure 4-10. Current map of the San Antonio Zoo, 2012.

In 2010, City officials suggested that the donkey barn should be used to house the new education center for the Zoo. The University of the Incarnate Word had previously asked the City to lease the property so they could build a fine arts center. The City initially considered the idea but later decided to keep with the Master Plan developed in 1979 that used the parcel as part of the Zoo expansion. The structure, which has a façade that resembles the Alamo, was constructed in 1920. The building acted as a hay barn for the Zoo and hosted donkey rides in the park. During the 1950s, the building was turned into office space for the City's Parks and Recreation Department and the surrounding land was used as a maintenance yard (Chasnoff 2011). Parks and Recreation vacated the building in 2009. By the end of 2011, no changes had been made to the property, although many meetings between the Zoo and the City had occurred to discuss what needed to be done. Under pressure from the University of the Incarnate Word, the City wanted to lease the property to the Zoo. The Zoo wanted the lease, but was hesitant due to the amount of work needed to rehabilitate the donkey barn and fix the area used as a maintenance yard (Ludwig 2011).

Implications Regarding Pedestrian Archaeological Survey

The previously reviewed history of the zoo indicates that extensive construction activities have occurred within the San Antonio Zoo and have impacted the APE under consideration here. CAR's inspection of the project area also identified signs of several subsurface disturbances. These disturbances were a result of the installation of sewer lines and electrical conduits and have impacted deposits to a depth of 1.2-1.8 m (4-6 ft.) below the surface (see Figures 4-11 and 4-12). These factors in combination with the shallow water table in the project area reduce the potential of the APE to contain intact cultural deposits.



Figure 4-11. *Subsurface electrical conduit box.*



Figure 4-12. Culvert connecting sewer lines in the vicinity of the Ice Cream Shop.

Chapter 5: Standing Structure Survey Methods

At the request of the City of San Antonio's Historic Design Review Commission and because the project falls under the jurisdiction of the Antiquities Code of Texas, a standing structures survey of the project area was needed to ensure that no significant historic properties would be impacted by the proposed improvements. The survey was conducted to document the architectural characteristics of the structures present within the APE.

The historic standing structure survey follows the guidelines that have been set by the state of Louisiana since guidelines for such surveys conducted in Texas have not been formally established. Documentation of the standing structures occurred during an on-site visit. Additional photographs of architectural details were provided by Elizabeth Porterfield of the City of San Antonio's Office of Historic Preservation (OHP).

Photography

Architectural photographs of the structures were taken during the on-site visit. Typically, the photographs are of two types: perspective and elevation. Perspective photographs show two sides of the structure taken at a 45-degree angle. This documents the structure by giving it a three-dimensional form, including size and volume. Typically the structure comprises 75% of the frame. The remaining 25% gives the structure an environmental context. Elevation photographs were taken, head-on, of one side of the structure. This type of photograph approximates an elevation architectural drawing. The photograph is more axiomatically correct, allowing for approximate measurements to be taken. In these photographs, the structure should fill the entire frame. Elevation photographs provide the best documentation of shape and proportion, whereas perspective photographs offer a three-dimensional view of the structure.

At least two perspective photographs and one elevation photograph were taken for each structure. One of the two perspective photographs included the front of the structure and one side, while the other showed the back of the structure and the other side. In the cases of uniquely shaped structures, additional frames were shot to document the entire building. Photographs of the interiors of the structures could not be taken because they are currently occupied by bird populations. In some instances, this inhibited detailed photo documentation of architectural elements, as well. Additional photographs provided by the City's OHP offered better detail of elements CAR did not have access to.

Documentation

For each structure a Standing Structure Survey form was completed. The form contained information concerning the shape, use, construction, and potential eligibility of each structure. Construction materials were noted on each form. The form also includes a section for miscellaneous observations regarding the resource and its characteristics. Following the field survey, the photographs were linked to the forms.

Curation

All records obtained and generated during the project were prepared in accordance with federal regulation 36 CFR Part 79, and THC requirements for State Held-in-Trust collections. Additionally, the materials are curated in accordance with current CAR guidelines. Field notes, field forms, and photographs were placed into labeled archival folders. Digital photographs were printed on acid-free paper, labeled with archivally appropriate materials, and placed in archival-quality plastic sleeves. All field forms were completed with pencil. Ink-jet-produced maps and illustrations were placed in archival quality plastic page protectors to prevent against accidental smearing due to moisture. All project related documentation is permanently housed at CAR.

Chapter 6: Historic Standing Structure Survey

Field visits were made to the Zoo on November 27, January 20, and February 29. The structures to be affected by the improvements to the Zoo were documented on February 29, 2012. Documentation included the photography of the structures and features as well as the completion of the Standing Structure Survey Form. The CAR archaeologist met with the Superintendent of Maintenance at the Zoo to be shown the boundaries of the APE. Armed with this information, aerials, and a master plan map, the archaeologist identified 11 Standing Structures within the APE needing documentation. All 11 resources were located in an area of the Zoo to the northeast of the Tiny Tot Nature Spot, to the southeast of the Riverview Restaurant, and to the south of the Wetlands exhibit (Figure 6-1). The bridge leading to the Riverview Restaurant is located outside of the current APE and will not be affected by construction. It was not included in the current survey.



Figure 6-1. Historic Resource locations within the current APE.

Historic Resource #1

Historic Resource #1 is the current Ice Cream Shop located adjacent to the entrance to the Tiny Tot Center (Figure 6-2). The hexagonal shaped building is entered from an attached boardwalk area. The structure sits atop a concrete slab foundation and exhibits a hexagonal roof. The roof is conical in shape with the peaks from each side of the hexagon meeting at a metal cap. The side of the structure that is exposed to the walkway has a stone veneer on the façade of the base. The upper portion of the structure's exterior wall consists of vertical boards. Three elevations of the structure have large, fixed, aluminum framed windows. In addition, the front of the building has two double glass, aluminum frame doors for the entrances.

This structure was built as part of the Children's Zoo in the 1980s. It shows up on the 1979 master plan of the area but appears to not have opened to the public until 1982. A plaque on the front of the structure indicates that it was the Hixon Visitor Center. It is likely that it has always served as an ice cream shop.



Figure 6-2. *Historic Resource #1, the Ice Cream Shop located next to the Tiny Tot Nature Spot at the San Antonio Zoo.*

Historic Resource #2

Historic Resource #2, the Boardwalk patio and pavilion, is located adjacent to Historic Resource #1 (Figure 6-3). The area is referred to as the Ice Cream Deck on the current map of the Zoo. The construction was done in the same style as Historic Resource #1, with a hexagonal covered pavilion as the main focal point. A boardwalk patio was constructed on a pier and beam foundation, though it appears that the pavilion is on a concrete slab foundation. Tables are found under the pavilion and serve as a seating area for the Ice Cream Shop patrons and other visitors. Handicap access is possible through a concrete ramp that is lined by a stone wall.

Similar to the Ice Cream Shop, this feature was part of the Children's Zoo expansion that was completed in the 1980s. It also appears on the 1979 master plan of the new addition but likely did not open to the public until 1982. Today, the wood of the boardwalk and railings shows some deterioration, but it is still in good condition. Many groups use the pavilion for lunch and party gatherings.



Figure 6-3. *Historic Resource #2, the Ice Cream Deck adjacent to the Ice Cream Shop at the San Antonio Zoo.*

Historic Resource #3

Historic Resource #3 is adjacent to the Ice Cream Deck and consists of a hexagonal structure. The side that is connected to the Ice Cream Deck is a gift shop labeled as The Outpost (Figure 6-4). Three elevations of the building exhibit metal retractable garage style doors. The rear elevation of the building houses restrooms for Zoo patrons. A stone planter box is attached to the western elevation of the building. Similar to the Ice Cream Shop, the structure's composite shingled roof is conical in shape and is capped by a metal vent. It is unlikely that Historic Resource #3 was used for anything other than a restroom and a gift store.

This is another building that was constructed during the early 1980s. The same shape and construction techniques were used in these three Historic Resources. Newspaper articles and old maps of the Zoo place these near the entrance of the Children's Zoo addition.



Figure 6-4. *Historic Resource #3, The Outpost, a gift shop and restroom facility at the San Antonio Zoo.*

Historic Resource #4

Historic Resource #4 consists of four interconnected hexagonal structures (Figure 6-5). A larger building that houses the Wild Wonders exhibit, plus an area for the keepers' use. The aerial of the building shows that the four hexagonal buildings are combined. The Wild Wonders exhibit is viewable from the exterior of a portion of one section of the building. Windows of various sizes allow visitors to look in on the animals of the exhibit. The interior houses the animal pens and the area for the care of the animals. It appears that the remainder of the structure is used by the zookeepers for storage and working with the animals.

This building is part of the complex of hexagonal shaped buildings that were constructed in the 1980s as part of the Children's Zoo. Originally, the structure was used as the Nursery. Later, the exhibit was changed to allow for the display of other animals. The area of the Wild Wonders exhibit has likely been altered throughout the years to accommodate the different exhibits. These alterations were superficial in nature and would not have required changes to the architecture.

A fenced area to the north of Historic Resource #4 has a few small hutches and sheds. It is likely that these provide additional room for animals and the storage of tools and supplies.



Figure 6-5. *Historic Resource #4, larger building that houses the Wild Wonders exhibit.*

Historic Resource #5

Historic Resource #5 is a stone-veneered structure with bird enclosures extending from four sides of the building (Figure 6-6). The structure itself is fairly small, with the height of the building not much more than 2.1 m (7 ft.). An exterior door leads into the structure that appears to have inner cages for the birds that are kept in the enclosure. The structure façade has been made to resemble the birdhouse that is located to the northeast of Historic Resource #5. The birdhouse, located to the northeast of Historic Resource #5 and outside of the project APE, was constructed between 1938 and 1941 as part of the WPA projects that were conducted in San Antonio during this period. Though Historic Resource #5 resembles the structure constructed during the WPA era, it is a later addition to the Zoo. It does not show up on the 1941 map, but it does appear on a map of the Zoo dated to the 1960s.

The structure sits on a concrete slab and is aligned like an “X”. Since the roof is flat, the construction materials cannot be determined from the ground. A brick pathway allows visitors to walk around the building and see each of the birds housed in the exhibit.



Figure 6-6. *Historic Resource #5, a bird enclosure located to the north of the Wild Wonders exhibit.*

Adjacent to the structure is a round birdcage with a shingle roof. The small, round cage sits on a concrete pedestal (Figure 6-7). The date of construction is unknown for this cage, but it could be contemporaneous with Historic Resource #5.



Figure 6-7. Round birdcage associated with Historic Resource #5.

Historic Resource #6

Historic Resource #6 is located at the northwestern edge of the waterway on which the Riverview Restaurant sits (Figure 6-8). This small enclosure houses turtles of various species. The enclosure is lined by wooden posts in order to keep the turtles contained. Inside the enclosure is a concrete-lined “pond” that provides water for the turtles’ habitat. The southern boundary of the enclosure is a wooden boardwalk that allows visitors to walk over the pond portion of the turtle enclosure. Two pipes allow water to drain into the pond.

The date of construction of this enclosure is unknown. It appears to be part of the much larger waterway that had exhibited Waterfowl as early as the 1930s. The division of this portion of the waterway is not

noted on any map of the Zoo. The Waterfowl pond connects into the Upper Labor *Acequia*, although the *acequia* appears to run closer to the western portion of the waterway.



Figure 6-8. *Historic Resource #6, turtle enclosure located on the edge of the Waterfowl pond at the San Antonio Zoo.*

Historic Resource #7

Historic Resource #7 is a small bird enclosure located to the west of Historic Resource #6. Currently the small structure houses a few Galah Cockatoos (Figure 6-9). The small structure is constructed of stone and concrete. The bird enclosure has a wire cage front with what appears to be four cubbies for the birds. A very small door on the back is not large enough for a person to pass through, indicating that the cage front is temporary. A concrete stairway leads to the opening. The “shingle” roof is actually composed of concrete that is fashioned to look like wood. Also, the timber and wood lintels at the front of the structure are made of colorized concrete. The technique of fashioning concrete to look like wood was developed by Dionicio Rodríguez and is called *faux bois* (see below). On the outside of the structure, a plaque notes that the exhibit was “Sponsored by Hertzberg Jewelry Co.” The plaque is very similar to the one on the

WPA era birdhouse outside of the project APE. However, the rock façade resembles Historic Resource #5, and the WPA era structure does not exhibit any *faux bois* elements.

The structure does not show up on any of the Zoo maps perhaps because it is so small. A date of construction is unknown, though it may be contemporaneous with another Historic Resources (Historic Resource #10) exhibiting the *faux bois* style.



Figure 6-9. *Historic Resource #7, a bird cage located at the edge of the Waterfowl pond at the San Antonio Zoo.*

Historic Resource #8

Historic Resource #8 is known as the Parrots of the World (Figure 6-10). The structure consists of many bird enclosures surrounding a stone-veneered building. Above the cages is a wood lattice cover that provides some shade for the birds. Some of the posts appear to be rotting. An iron fence surrounds the exhibit. Behind the structure, in a fenced area, a modern shed is present that probably holds tools and supplies. The main stone structure appears to have been constructed to resemble Historic Resources # 5

and #7. A plaque in front of the structure indicates that it houses the Parrots of the World exhibit that was sponsored by Betty and Bob Kelso in 1990. The structure appears on an earlier version of the San Antonio Zoo map that likely dates to the 1960s. There are minimal *faux bois* elements on this structure such as a lintel over a rear door. It does not exhibit the *faux bois* shingle roof as seen on Historic Resources #7 and #10.

Modern additions to the structure are evident in the form of metal casement windows on the rear elevation and the additions to the front and side for the bird enclosures. It appears that glazed brick has been used in the construction of the bird enclosure additions to the structure. The wrought iron fencing and the wood shade covering are also elements that have been added after the initial construction of the structure.



Figure 6-10. *Historic Resource #8, Parrots of the World exhibit located just north of the Waterfowl pond at the San Antonio Zoo.*

Historic Resource #9

Historic Resource #9 consists of the stone-lined planters that are present in front of the Parrots of the World structure (Historic Resource #8; Figure 6-11). There are three in total, and the two outer planters are larger than the central circular one. Each planter is constructed of limestone rocks that are mortared

together. The limestone blocks used in these planters are uniform in size and shape. Metal benches are situated in the curves of the two outer planters. The inner circular planter contains a stone with a plaque that reads, “Parrots of the World Sponsored by Betty and Bob Kelso in appreciation for the beauty and diversity of this family of birds 1990.”



Figure 6-11. *Historic Resource #9, planters located in front of the Parrots of the World exhibit.*

Historic Resource #10

Historic Resource #10 is located adjacent to the Cranes of the World area. The building, known as the Brooder House, consists of a stone structure with cages made of chain-link fencing lined with wire mesh screen in the front (Figure 6-12). Three sides of the structure have the same rock facing as seen on Historic Resource #7. The western wall appears to have cubbies that may have previously been used to house animals at one time. The outer perimeter fencing and pens in front of the stone structure are definitely a later addition. The front of the structure itself exhibits a door and a window framed with real wood.

Similar to Historic Resource #7, this structure exhibits *faux bois* accents. The roof is composed of *faux bois* shingles. Along the east side, a *faux bois* lintel is present above a doorway into the structure. Along the west side, a *faux bois* timber is seen above the “cubbies”. It appears that this resource was constructed approximately at the same time as Historic Resource #7, although the chain-link fencing and enclosures are more recent additions. The structure does not appear on the map of the Zoo dated to 1960s, but an exhibit area specified for storks and cranes appears on the ca. 1980s map. The structure may have been built prior to 1960, although none of the Zoo maps show these buildings.



Figure 6-12. *Historic Resource #10, a bird enclosure located to the west of the Parrots of the World exhibit, note that the fenced area is attached to a stone building.*

Historic Resource #11

Historic Resource #11 is located at the northern edge of the Waterfowl pond. Similar to Historic Resource #7 and #10, it does not appear on any of the maps of the Zoo. This structure consists of a small stone structure with a patio addition (Figure 6-13). The structure is very low and is currently being used to

house some geese and goslings. The screened patio is a wood frame construction with wire mesh screen and a corrugated flat plastic roof. The structure is on a concrete slab while the patio is on the ground. The stone structure is divided into at least two rooms. It appears that the north wall of the stone structure has two construction styles (Figure 6-14). The eastern half of the north wall consists of small to medium limestone rocks mortared together. The attached western half of the north wall consists of larger stones. The western section appears to have the *faux bois* shingles. The southern wall of the stone structure has large stones and *faux bois* roof. The western portion of the structure also appears to be incorporated into a water feature that consists of a small waterfall and pool (Figure 6-14).



Figure 6-13. *Historic Resource #11, bird enclosure located at the edge of the Waterfowl pond at the San Antonio Zoo.*



Figure 6-14. *Historic Resource #11, note the difference in the stones used.*

Historic Resource #12

Historic Resource #12 is a stone wall located along the water fowl pond at the San Antonio Zoo (Figure 6-15). The wall is constructed of limestone rock held together by Portland cement. The wall portion located on the opposite bank from Historic Resource #11 is in line with the old path of the *acequia*. It is likely that the stone wall was constructed during the early development of the Zoo when the water fowl pond was created. The style and stones that were used in the construction are consistent with the walls that are found outside of the Zoo grounds along the San Antonio River. The waterway is visible on both the 1941 aerial and the 1941 map of the San Antonio Zoo. Although it is not possible to tell if this wall was present on either the maps or the aerial, it is very likely that the wall was constructed prior to 1941 because the pond has not changed in shape. This would place construction likely during the late 1930s, and it may be contemporaneous with the WPA-era work that was done in 1938.

Although Historic Resource #12 is located within the project APE, it will not to be affected by any of the improvement activities. Contractors will be given very clear instructions to avoid disturbing the wall.



Figure 6-15. *Historic Resource #12, stone wall located along the eastern edge of the Waterfowl pond.*

Faux Bois

Faux bois is a style of sculpturing that uses concrete as a medium fashioned and treated to resemble wood. The technique appears to have originated with a French gardener during the mid-nineteenth century (Light 2008). Joseph Monier developed a method of using wire to reinforce concrete allowing him the ability to create gardening tubs, planters, and tanks. He tried to mimic the rustic styles found all thorough the world in garden gazebos, railing, bridges, and benches. One of the best known examples he aimed to mimic was the Petit Trianon at Versailles that had been commissioned by Marie Antoinette.

Monier patented his technique in 1867 and later exhibited his work at the Paris Exhibition. He led the way for numerous artists to use the *faux bois* methods to create their own work around the world. Many of these artists did not sign their work, leaving much mystery to the origins of pieces (Light 2008). Others became well known for their *faux bois* work. Nineteenth-century France became a prominent display ground for many artists' works. Concrete stairways were displayed in two parks in Paris. Other examples

of *faux bois* stairways were found at Musée Hotel Baudy in Giverny. A small building behind the Notre Dame exhibits *faux bois* architecture and displays a plaque that identifies the artist (Light 2008).

The *faux bois* methods quickly spread and examples popped up in other continents. In 1877, the Sultan Abdulhamid used *faux bois* bridges at the Sale Kiosk near Istanbul. Japanese artists began using the technique and referred to it as *giboku*. Examples began to appear in Argentina and several cities in Mexico (Light 2008). One of the artists who picked up the technique was Dionicio Rodríguez.

Rodríguez developed his own techniques for producing *faux bois* sculpture. Similar to the methods used by others, Rodríguez's first step was to create a frame of the sculpture using steel rods, then used rebar and wire mesh to form the piece. Cement was added between the steel rods and mesh, followed by a coat of rough cement. Depending on the size of the piece, Rodríguez would employ a footing using Portland cement.

He would use a variety of tools to shape and texture the cement surface. Initially, Rodríguez had an arsenal of homemade tools, but as he continued producing pieces he acquired some professional tools as well. Rodríguez was able to finely reproduce the textures of rock, thatch, and wood (Light 2008).

Rodríguez was very secretive of his methods, most so during the application and use of colorants to the cement. He used combinations of sulfuric acid, muriatic acid, iron oxide, saltpeter, and lampblack to achieve the desired colors. His niece recalled obtaining chemicals from the San Pedro Drug and Laboratory in San Antonio during the later years. They would boil the colored "stones" to extract the dyes and mix and bottle them how he saw fit. On some occasions he would share the colors with other artists, but never leaving them enough to determine the combinations he used. Extremely protective of his dyes and surface treatments, he would break empty bottles so no one can get the "recipe" and hide the mixtures from the other artists (Light 2008).

Dionicio Rodríguez

Dionicio Rodríguez was born in Toluca, Mexico, on April 11, 1891. Much of what is known about Rodríguez is due to interviews with his niece, fellow artisans, and his great nephew. His niece, Manuela Vargas Theall, traveled with him during many of his commissions outside of Texas between 1937 and 1938.

Rodríguez was the son of Luz Alegría and Catarino Rodríguez. When he was a young man, his family moved to Mexico City. Rodríguez worked with his father and brother building brick houses. It often

became a competition between the brothers to see who could lay bricks faster. Later, Rodríguez went to work for Luis Robles Gil. Gil was a civil engineer who specialized in creating concrete pieces that mimicked rock and wood. It is believed that Gil came to Mexico from Spain, which makes it likely that while in Spain he was introduced to the *faux bois* methods. After working for Gil, Rodríguez worked for J. W. Douglas. Douglas was also known for creating concrete objects that resembled rock and wood. While Rodríguez worked for Douglas, it is likely that they were responsible for the creation of the fountain and artificial rocks at Chapultepec Park near the presidential palace. It is also believed that Rodríguez created the many *palapa*-style benches and fountain at Parque de Mexico in Mexico City. These *faux bois* benches resemble those he completed in San Antonio (Light 2008).

Rodríguez left Mexico City and resided in Monterrey for a time in the early 1920s. He began working with Cortés making ornamental cast stone. In addition, Rodríguez completed two *faux bois* benches for the grounds of Cervecería Cuauhtémoc. It was Cortés who encouraged Rodríguez to go to Laredo, Texas (Light 2008). This may have also been prompted by the political unrest that Mexico was undergoing at the time. Rodríguez met up with Cortés' son, Maximo Cortés, while in Laredo. It appears that Rodríguez spent some time with Maximo working to create cement embellishments for a local school. Rodríguez left Laredo and arrived in San Antonio, Texas by 1924 (Light 2008).

During the 1920s, San Antonio was experiencing a boom in construction. The years before the onset of the Great Depression saw much expansion and commissioning of buildings and artwork throughout the City. San Antonio had also seen an influx of Mexican immigrants who had settled here after the revolution. Rodríguez became employed at the Alamo Cement Company after arriving in town in 1924. Maximo Cortés met up with Rodríguez shortly after, and the two ended up working together.

Rodríguez first worked for Dr. Aureliano Urrutia on his property located near the headwaters of the San Antonio River. It appears that Urrutia had known Rodríguez prior to his arrival in San Antonio and that he actually wrote to Ray Lambert, San Antonio City Parks Commissioner at the time, recommending his work. For Dr. Urrutia, Rodríguez completed several pieces that were displayed in Miraflores Park and at Quinta Urrutia (Urrutia's home on Broadway). The pieces commissioned by Urrutia included:

- A *palapa*-styled bench for the grounds of Quinta Urrutia (later moved to Miraflores).
- A grotto of stalactites and stalagmites that housed two cherubs (likely created by another artist) with "Ana Maria 1925" inscribed at the base.

- A series of *faux bois* steps leading to the upper and lower levels of Miraflores Park.
- Two pools and a cement fountains encircled with *faux bois* hewn logs. The fountain was destroyed in 2002.
- A hollowed log *faux bois* piece that held electrical equipment at Miraflores.
- A 3-m (10-ft.) tall saguaro cactus at Miraflores.
- A bench resembling a fallen tree. This is one of Rodríguez's often recreated designs. The early example in Miraflores has one backrest of a log with bark; the seat appears to be a cross-cut section of a tree stump.
- One of the entrances to the park from Hildebrand Avenue. To gain access, one has to open a gate resembling sawn planks and enter through a hollowed tree. A single log handrail steadies guests as they descend the cross-cut log steps.

Dr. Urrutia later introduced Rodríguez to Charles Baumberger, the founder of Alamo Portland Cement Company and the man who donated the initial resources for the construction of the moats at the San Antonio Zoo. Rodríguez completed several commissions for Baumberger that were located at the company headquarters, Baumberger's personal residence, and for the City of Alamo Heights. One of the pieces consisted of a fence and decorative entry arch at the headquarters of the Alamo Cement Company. A photograph of the feature taken in 1926 depicts the finished product with the words "Made by D. Rodríguez" on a flat portion above the arch (Light 2008).

Another piece was a fountain that was located at the Alamo Cement Company, now the Stone Werks restaurant. The fountain is surrounded by a *palapa* roof and a *faux bois* fence resembling tree trunks and intertwined branches. The fountain exhibits several details such as cactus plants, snakes, and an alligator that were all fashioned out of concrete. Rodríguez also made a hollow tree sculpture for Baumberger's home that was moved to the Alamo Cement Company grounds. The sculpture was very similar to the other hollow trees he had made. When the property was sold in 2007, the sculpture was removed to an unknown location (Light 2008).

For Baumberger's home, Rodríguez was commissioned to create several pieces. Seats, planters, benches, and a tree house were just a few that Rodríguez had created. It appears that Rodríguez used this time to let his creativity flow, producing some of the most whimsical and inspired pieces during that decade. When the Baumberger property (located in the Monte Vista National Register Historic District) was sold in the 1990s, the majority of the pieces were sold to private collectors (Light 2008).

Baumberger commissioned Rodríguez to produce a streetcar stop for the City of Alamo Heights. He intended to donate the stop as a gift from the San Antonio Portland Cement Company (which is the Alamo Cement Company). The finished piece consisted of three *faux bois* tree trunks with branches that supported a gabled *palapa* roof. Benches were positioned at the base of each tree trunk. The entire piece was placed on a "floor" of crosscut logs (Light 2008).

In addition to the works for Urrutia and Baumberger, Rodríguez created many pieces for the City of San Antonio. At Brackenridge Park, Rodríguez completed five pieces that are displayed throughout the park. In 1925, Rodríguez completed a foot bridge with arbor near the Upper Labor Dam and *Acequia*, across the river from Miraflores Park. The unique details of insect borings, knots, and bark led to the feature being discussed in a 1927 edition of *Popular Mechanics*. Though he created more bridges over his career, this remained the most unique. His partner in the creation of the piece was Maximo Cortés, who imparted information about figures that were incorporated into the design underneath the bridge. Small figures described as "eerie" were emerging from the structure but also acting to support it. The figures were gnome-like with pointed hats exhibiting color. By the time of the interview with Cortés in 1981, the figures had been knocked out and were no longer visible (Light 2008).

In 1942, Rodríguez and Cortés were hired to construct an entryway into the Japanese Tea Garden. In 1942, the anti-Japanese sentiment was predominating in the United States due to WWII. The Japanese Garden was closed and re-opened as the Chinese Tea Garden. The entry portal was considered one of Rodríguez's most enthusiastic pieces.

In addition to the larger pieces such as the bridge and the portal, Rodríguez created smaller pieces for the park. A round table and benches with a *palapa* roof can be found situated near the river. A bench with a *palapa* roof is located near the San Antonio Zoo. The curve in the *palapa* roof of this piece resembles the curve in the portal to the Tea Garden (Light 2008).

Rodríguez went on to create quite a few other pieces within San Antonio including grottoes, façades of buildings, and other portals. Rodríguez spent a good portion of his time between 1925 and 1952 completing work for clients outside of San Antonio. He completed work in Comfort, Sweeny, Houston,

Port Arthur, Beaumont, Dallas, and Castroville, Texas. He also produced works in Arkansas, Michigan, Tennessee, Washington, D.C., Maryland, West Virginia, Alabama, New Mexico, and Missouri. He also traveled to Mexico between 1938 and 1942 (Light 2008).

Rodríguez was not a healthy man in later life. He had diabetes which eventually caused the loss of his sight. Certain individuals who commissioned work from him took to looking after his health and getting him the medical attention he needed. His niece administered insulin shots twice daily when she was in his company. Rodríguez was an exceptional worker and would get lost in trying to finish a project. He was fiercely protective of his methods and would resort to finishing the pieces himself to get the desired effect. By 1941, the effects of his diabetes prompted him to get medical care. Between 1942 and 1955, there are not many records of his activities. He did complete the Tea Garden portal in Brackenridge Park and worked on the façade of the Jacala restaurant in 1952. He worked on small projects during the course of WWII due to the scarcity of materials. By the 1950s, his eyesight was failing, and his work lacked the degree of detail that his earlier pieces exhibited. His health became worse, leading to the amputation of several of his toes. Rodríguez came down with pneumonia in 1955 and was hospitalized. He died on December 16, 1955, at the Robert B. Green Hospital. He is buried at the San Fernando Cemetery No. 2 (Light 2008, Curlee 2012).

Though much research has been done to document Dionicio Rodríguez's works, it is possible that not all have been identified. The majority of his work was conducted in San Antonio during his early years after leaving Mexico. Soon after, he began traveling around Texas and other states to complete commissions. It is likely that he had several projects going on at one time, especially when he was working locally and on smaller pieces. It is not known if he signed every piece, and it is likely that he did not sign some of the smaller works. Due to private sales and expansion of cities, some of his work has been lost, but Rodríguez had a distinctive style that can be seen when examining the work. His attention to details such as worm holes and peeling bark are unique. Today, his great nephew, Carlos Cortes, continues to use the *faux bois* methods to create pieces.

Chapter 7: Discussion and Recommendations

The extensive construction activities that have occurred within the San Antonio Zoo and those that have impacted the APE indicate that the likelihood of encountering intact archaeological deposits is minimal.

Twelve Historic Resources were documented during the Standing Structure Survey at the San Antonio Zoo. These resources will be impacted by the proposed construction activities at the San Antonio Zoo. The proposed construction is slated to include a new restaurant, amphitheater, promenade, carousel, and seating areas. Table 7-1 lists the twelve historic resources documented during the survey, as well as their proposed eligibility status related to their formal listing as State Archeological Landmarks.

Table 7-1. Eligibility assessment for each Historic Resource

Historic Resource	Name/Use	Eligibility	Comment
#1	Ice Cream Shop	Not Eligible	Constructed during the 1980s, not architecturally significant
#2	Ice Cream Deck	Not Eligible	Constructed during the 1980s, not architecturally significant
#3	The Outpost	Not Eligible	Constructed during the 1980s, not architecturally significant
#4	Wild Wonders	Not Eligible	Constructed during the 1980s, not architecturally significant
#5	Bird Enclosure	Not Eligible	Constructed between 1941 and 1960s. Resembles WPA style. No <i>faux bois</i>
#6	Turtle Enclosure	Not Eligible	Although located on the edge of the water feature, in vicinity of <i>acequia</i> , not much architecture to make it significant
#7	Bird House	Not Individually Eligible	Proposed to be salvaged and relocated within project area
#8	Parrots of the World	Not Eligible	Constructed prior to 1960s, similar style as #5, #7, and #10. Additions to the structure over years
#9	Planters	Not Eligible	A later addition to the front of #8. Likely constructed in 1990
#10	Brooder House	Not Individually Eligible	Similar to #5, #7, and #8. May have been constructed between 1960s and 1980s. Slated for demolition with salvaging of some <i>faux bois</i> pieces
#11	Bird House	Not Eligible	A hodge-podge of styles, and incorporated into a waterfall feature. Portions of structure may be contemporaneous with #5, #7, #8, and #10
#12	Wall	Not Individually Eligible	Stone wall lining the Waterfowl pond that is likely constructed during the late 1930s and is in line with the path of the <i>acequia</i>

A number of the Historic Resources were constructed during the Children's Zoo addition that was begun in 1979. The first phases of the Children's Zoo were opened to the public in the early 1980s and included four resources that will be impacted by the construction of a new restaurant and amphitheater. Historic Resources #1 through #4 will be razed to make way for the new facilities. As these four resources were constructed during the early 1980s, they are not considered old enough to be eligible for consideration as State Archeological Landmarks (SAL) and do not warrant listing to the National Register of Historic Places (NRHP).

Historic Resources #7, #10, and #11 appear to have similar architectural characteristics. They exhibit the same rock façade as well as similar *faux bois* architectural accents. These three structures were likely constructed about the same time. Whereas numerous *faux bois* architectural and art pieces executed by Dionicio Rodríguez are present in other parts of Brackenridge Park, these appear to have been executed by another artist or group of artisans. These structures exhibiting *faux bois* elements within the Zoo have not been credited to him. The majority of Rodríguez's work in San Antonio was done during the 1920s and 1930s, and much research has been done on the works of Rodríguez by Maria Watson Pfeiffer and Patsy Pittman Light. During the later portion of the 1930s and into the 1940s, Rodríguez was commissioned to create pieces at locations outside of San Antonio. By the 1940s, Rodríguez's health was beginning to deteriorate, and by the 1950s his work lacked the degree of detail he had once exhibited because his eye sight was failing.

Rodríguez was very protective of the methods he used to achieve his execution of *faux bois* (Curlee 2012). He did have several assistants who helped with completing pieces, but because he did not impart all of his knowledge and techniques, their pieces were considered inferior in comparison. In addition, he worked with a partner, Cortés, on several pieces executed within Brackenridge Park. Examples of Rodríguez's work in San Antonio include the bus stop on Broadway, the Japanese Tea Garden Entrance, the bridge near Miraflores Park, several pieces within Miraflores Park, and several park benches within Brackenridge Park (Curlee 2012). When these Rodríguez pieces are compared to Historic Resources #7 and #10, it is evident that the latter lack the realistic details that Rodríguez originals exhibit. This would suggest that the *faux bois* elements on these particular historic resources are likely pieces done by his apprentices or even Maximo Cortés. One of the biggest differences between Rodríguez's work and these structures is the roof style. Most of the pieces he produced exhibited a *palapa*-styled roof. In contrast, Historic Resources #7 and #10 exhibit *faux bois* shingles. Rodríguez's work tended to showcase similar architectural elements such as bridges, benches, fences, archways, fountains, and grottos. There are no pieces attributed to Rodríguez that exhibit the combination of stone facing, *faux bois* lintels, and shingle roofing as seen in the three (#7, # 10, and #11) historic resources at the Zoo. In addition, no documents

were recovered that indicated that the Zoological Society commissioned Rodríguez to produce any work. Rather, the Zoo did commission Tony Lopez at one time to create an animal enclosure (Light 2008), and Cortés has produced pieces for the Henry Guerra House, one of which is now located at the Witte Museum (Light 2008).

Historic Resource #7, #10, and #11 are not depicted on the 1941 map of the Zoo or on the map from the 1960s. None of the Zoo maps illustrate these structures. The Cranes were located within the same vicinity since 1941, but it is not until the 1980s that the area is shown to have a more defined pathway through the exhibit. Therefore, these structures (Historic Resources #7, #10, and #11) are likely constructed prior to the 1980s, possibly between the 1940s and 1960s. While all three have interesting features, Historic Resource #11 appears to be a mix of building techniques and styles (i.e., large and small stones; wooden screen-in patio addition). The structure has the *faux bois* accents, but a portion of the building appears to be of a different construction technique with two different stone types for the façade. Also, the wood frame patio attached to the structure is a recent addition. Due to the addition and combinations of different styles, this structure was determined to be not eligible. Although Historic Resource #7 exhibits the *faux bois* characteristics, it is not considered eligible for listing as a SAL and does not warrant nomination to the NRHP as an individual resource. The master plan for the construction project indicates that this small bird house is to be relocated to within the current project area. Attempts will be made to move the structure without compromising its structural integrity. Historic Resource #10 also is considered to be not eligible as an individual resource. The structure is currently slated for demolition, but the *faux bois* architectural elements will be salvaged and returned to the Zoo for future use.

Historic Resources #5 and #8 (Parrots of the World) also appear to have similar construction methods. Similar materials were used in these structures, with the rock walls resembling each other. It appears that these structures may have been constructed during the same period. Some structures appear on the 1960s map that are in the same location as Historic Resources #5 and #8. Historic Resources #5 and #8 are the same as those depicted on the 1960s map; the structures were constructed sometime between 1941 and 1960. Historic Resource #5 does not exhibit *faux bois* architectural elements, while Historic Resource #8 has minimal *faux bois* elements. The later appears to have had additions added to the structure over the years, including metal casement windows that are present on the rear of the building. Concrete partitions appear to have been placed on the exterior of the building to create individual bird enclosures. Both of these structures are found to not be eligible for listing as SALs and do not warrant nomination to the NRHP due to the alterations to the structures over the years.

Historic Resource #6 is the concrete-lined turtle pond bounded by round posts. None of the architectural elements exhibit details that would connect the resource to the *faux bois* style seen in the previously highlighted resources. While the age of construction of the resource is not known, based on the lack of stylistic attributes, it is suggested that the resource is not eligible for listing as a SAL and does not warrant nomination to the NRHP.

Historic Resource #9, the planters located in front of the Parrots of the World enclosure, appears to be a later addition that may be related to the Kelso family's sponsorship of the Parrots of the World exhibit in 1990. The materials used in its construction do not match those of the parrot enclosure which further supports the impression that the planters were not constructed at the same time. Due to the late date of construction of this feature, this resource does not meet the age criteria to be considered for formal listing as a SAL or nomination to the NRHP.

Historic Resource #12 is considered potentially eligible for listing as a SAL due to its construction date (between 1930s and 1960s) and its association with the Spanish Colonial *acequia* that runs through the San Antonio Zoo. Although the resource technically falls within the project boundaries, it will not be affected by any of the planned construction. Measures will be taken by the contractors to make sure that the resource will not be impacted. Although not part of the current investigation, the bridge that leads to the Riverview Restaurant is another element at the Zoo that is not individually eligible for listing as a SAL or to the NRHP.

The Texas Historical Commission conducted a review of a draft of this report and indicated that it is difficult to evaluate the significance of the individual buildings comprising the San Antonio Zoo without comprehensive knowledge of the construction history of the entire property. The Architecture Division reviewer of the draft report, Ms. Linda Henderson of the THC recommended that an inventory survey and standing structure evaluation of all of the historic resources found within the San Antonio Zoo be conducted to provide a more comprehensive basis for the evaluation of the SAL and NRHP eligibility of each resource. In addition to the individual resources, the complex as whole would need to be evaluated to determine which building sequences are significant to the history of the development of the Zoo. A thorough survey would aid in reviews of future development projects at the Zoo and could help the City of San Antonio in project planning.

In summary, Historic Resources #1 through #4 were constructed during the early 1980s and are not considered eligible for listing as SAL or warrant nomination to the NRHP. These resources are slated for demolition as part of the improvements master plan. Historic Resource #5, a bird enclosure, appears to

have been constructed between 1940 and 1960 and is not considered architecturally or culturally significant. The resource is not considered eligible for listing as an SAL or warrant nomination to the NRHP. Historic Resource # 6, the turtle pond, is likely a later addition to the edge of the Waterfowl Pond. Due to its lack of architectural significance it is not considered eligible as a SAL or eligible for nomination to the NRHP. Historic Resource #7 is not considered eligible for listing as a SAL and does not warrant nomination on the NRHP as an individual resource. Rather than being demolished, the intent of the San Antonio Zoo is to move the structure to another portion of the current APE. This move will preserve the structure although given the fact that other similar structures will be demolished in its vicinity, it will impact the associational context of the resource. Historic Resource #8, the Parrots of the World exhibit house, has had alterations to the main building and therefore was not deemed eligible as a SAL or warrant nomination to the NRHP. Historic Resource #9, the planters located in front of the Parrots of the World exhibit, are a late addition to the Zoo. This resource is not considered significant and therefore not eligible for listing as a SAL or warrant nomination to the NRHP. Historic Resource #10 also is not considered as eligible for formal listing as a SAL and does not warrant nomination to the NRHP as an individual architectural resource. It is slated for demolition, although the intent of the Zoo is to salvage the more decorative architectural elements such as the lintels present on the structure. Historic Resource #11 exhibits *faux bois* elements, but due to the combination of architectural styles and materials is not eligible for listing as a SAL or warrant nomination to the NRHP. Historic Resource #12 is not individually eligible for formal listing as a State Archeological Landmark and for listing on the National Register. It is a stone wall that lines the route of the Spanish Colonial *acequia* that runs through the San Antonio Zoo. It will not be affected by the proposed construction. CAR recommended no need for a pedestrian archaeological survey of the APE due to the extensive subsurface impacts that have occurred in the area over the past few decades. The Archaeology Division representative of the THC, Mr. Mark Denton, concurred with this recommendation.

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Appendix A: Standing Structure Survey Inventory Forms

Historic Standing Structure Inventory Form

Wednesday, July 25, 2012

10:54:13 AM

San Antonio Zoo

City San Antonio County Bexar Inventory # 1
Historic Name Hixon Visitor Center Complex/Site Name Ice Cream Shop

Location Adjacent to Tiny Tot Nature Spot in Zoo

Resource Type _____ Property Type Ice Cream Shop

Landscape/Site Features Building

Outbuildings none

Function: Current Use Ice Cream Shop Historic Use Same

Construction date: 1982 Actual Estimated

Architect _____ Builder _____

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting _____ Northing _____

Boundary Description and Justification

At the edge of the Tiny Tot Nature Spot

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence

Roof Type Shingle, Conical Materials wood, composite, stone

Wall Façade wood, stone, glass Foundation concrete slab

Window Type Large window panes, fixed, aluminum frame Materials metal and glass

Door Type 2 double at entrance, aluminum frame Door Material metal and glass

General Architectural Description

Hexagonal building with a shingle roof. Three sides have windows. Frame construction. Abuts the Tiny Tot Nature Spot and has flamingo enclosure on the east side. Base of structure has rock on façade. Shop floor is elevated as entrance is from boardwalk.

Additions/Modifications Dates

does not appear to have much modification since construction

Associated Context Historical Information

was constructed as part of the children's zoo. Opened prior to the finish of the entire area.

1



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3



4



9



City San Antonio County Bexar Inventory # 2
Historic Name Boardwalk Complex/Site Name Ice Cream Deck

Location Adjacent to Ice Cream Shop in San Antonio Zoo

Resource Type _____ Property Type Recreational

Landscape/Site Features Boardwalk patio and pavillion

Outbuildings none

Function: Current Use Pavillion Historic Use Pavillion

Construction date: 1980s Actual Estimated

Architect _____ Builder _____

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting _____ Northing _____

Boundary Description and Justification

North of Ice Cream Shop, borders Tiny Tot Spot

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence

Roof Type Hexagonal, Conical,shingle Materials composite,wood

Wall Façade Rock Foundation pier and beam, some concrete?

Window Type none Materials _____

Door Type none Door Material _____

General Architectural Description

A picnic pavillion sitting on a boardwalk. Wooden plank flooring appears to be supported by pier and beam. Handicap accessible entrance is stone lined.Pavillion is fenced with a wood and metal railing.A partially covered arcade leading to icecream shop is constructed of wood planks and light posts

Additions/Modifications Dates

appears no modifications

Associated Context Historical Information

5



5



6



7



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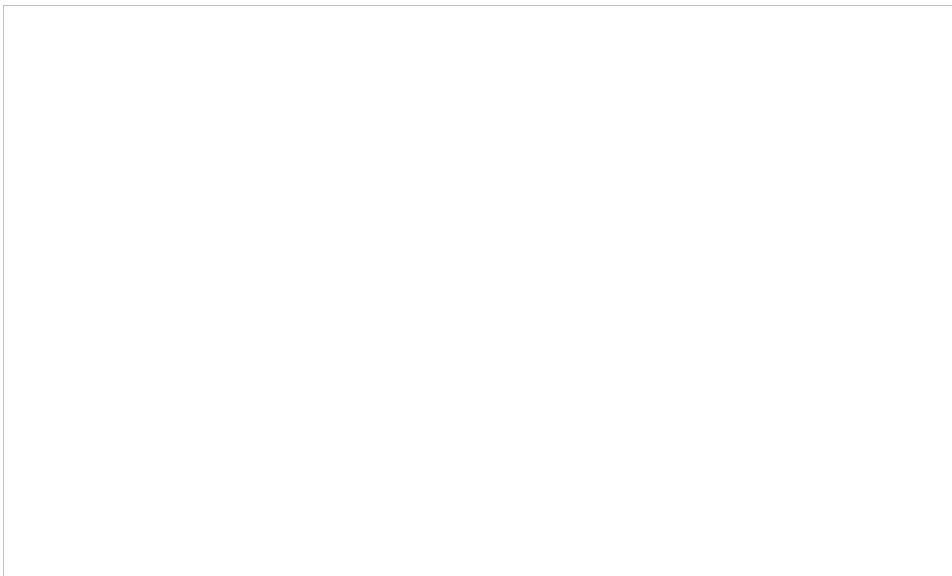
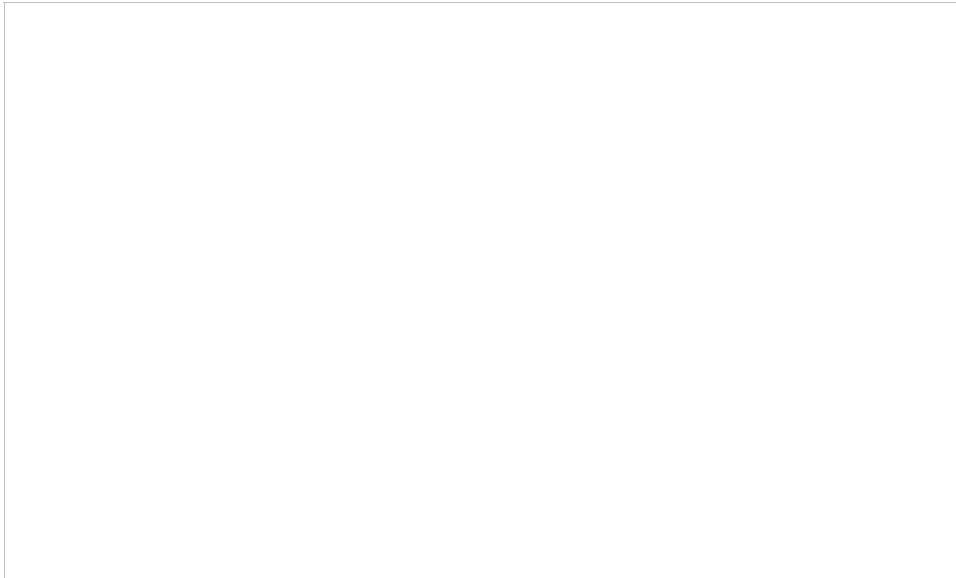


10



Photo Data: Roll 1 Frame 5-8, 10-11 Feature

11



City San Antonio County Bexar Inventory # 3
 Historic Name _____ Complex/Site Name The Outpost/Restroom
 Location San Antonio Zoo, North of Ice Cream Shop
 Resource Type Building Property Type Commercial (giftshop)
 Landscape/Site Features Restrooms on back side of giftshop
 Outbuildings none
 Function: Current Use giftshop Historic Use _____
 Construction date: 1980s Actual Estimated _____
 Architect _____ Builder _____
 Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion
 Integrity: Location Design Materials Workmanship Setting Feeling Association
 USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting _____ Northing _____

Boundary Description and Justification

North of Boardwalk Pavillion

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence Same as Boardwalk and Icecream shop

Roof Type Hexagonal, Conical, shingle Materials composite, wood

Wall Façade wood frame and stone, glass Foundation concrete slab

Window Type fixed, aluminum frame Materials glass and metal

Door Type garage style, retractable Door Material metal

General Architectural Description

Hexagonal structure being used as a giftshop, 4 rolling garage style doors on three sides. Other three sides have high small windows. Base of façade of walls with windos has stone facing. Backside of structure houses public restrooms.

Additions/Modifications Dates

Possible modification to the shop portion

Associated Context Historical Information

Part of the children's zoo constructed in the 1980s

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15



City San Antonio County Bexar Inventory # 4
Historic Name Complex/Site Name Wild Wonders

Location Backside of the Outpost

Resource Type Exhibit and utility area Property Type

Landscape/Site Features Fenced area on north side of complex

Outbuildings lean-tos in fenced area

Function: Current Use exhibit + keeper area Historic Use

Construction date: 1980s Actual Estimated

Architect Builder

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting Northing

Boundary Description and Justification

North of Ice Cream Shop

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence Same as Ice Cream Shop

Roof Type Hexagonal, Conical, Shingle Materials Composite, wood

Wall Façade wood Foundation concrete slab

Window Type fixed, aluminum frame Materials glass and metal

Door Type Industrial Door Material metal

General Architectural Description

Appears like four buildings combined. Wild Wonders exhibit is closest to the Tot Spot water area/ Exhibit is set up so guest can walk under awning of roof on outside (southern portion) of two buildings. Animals are viewable. Inside of building appears to be keeper area.

Additions/Modifications Dates

Altered into exhibit at some point

Associated Context Historical Information

This appears to be where the nursery was located. Modifications to the exhibit area have changed the structure from display of young animals to the current Wild Wonders.

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City San Antonio County Bexar Inventory # 5
Historic Name Complex/Site Name Bird Area

Location North of Pavillion

Resource Type Bird Cages Property Type

Landscape/Site Features

Outbuildings Bird Cages

Function: Current Use Bird enclosures Historic Use

Construction date: Actual Estimated

Architect Builder

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting Northing

Boundary Description and Justification

on east edge of zoo, north of pavillion and south of long bird cages that were constructed by 1938.

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence WPA-era style

Roof Type Materials

Wall Façade rock and cage Foundation rock and metal

Window Type none Materials

Door Type made to look like rock wall Door Material

General Architectural Description

A rock structure, unique in shape with bird enclosures all the way around. One lone circular cage is located just to the south. Brick path leads around the structure to allow for viewing of birds. Roof is flat and cannot tell material. Building itself is not very tall. Four cages come off the building. Rock veneer, but in different style than the WPA-era building located to the north.

Additions/Modifications Dates

Associated Context Historical Information

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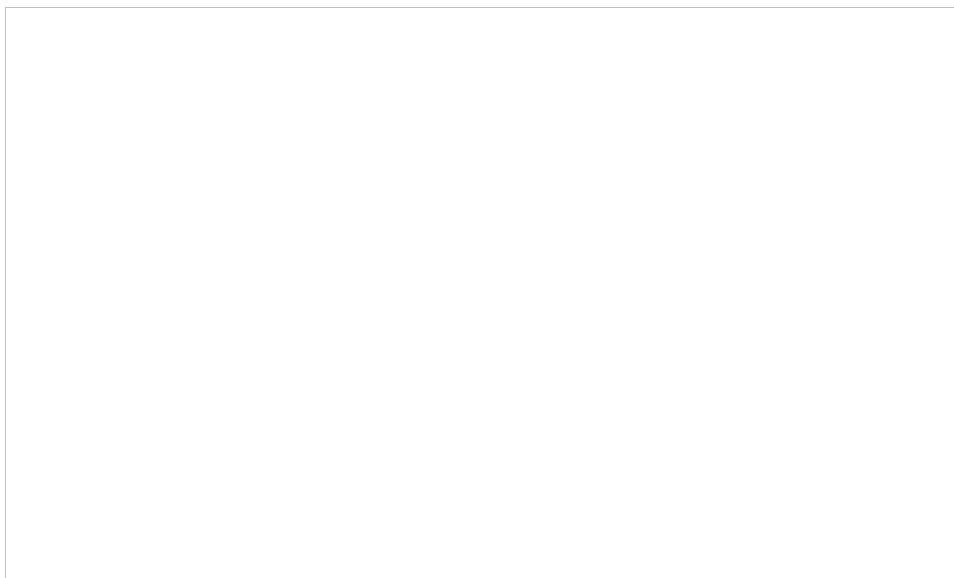
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City San Antonio County Bexar Inventory # 6

Historic Name _____ Complex/Site Name _____

Location Edge of water area of the Waterfowl Pond

Resource Type _____ Property Type _____

Landscape/Site Features pond

Outbuildings none

Function: Current Use Turtle enclosure Historic Use for waterfowl

Construction date: Actual Estimated

Architect _____ Builder _____

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting _____ Northing _____

Boundary Description and Justification

NE edge of water pond

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence _____

Roof Type none Materials _____

Wall Façade stone and woodpost Foundation concrete base to pond

Window Type none Materials _____

Door Type _____ Door Material _____

General Architectural Description

Turtle enclosure on edge of Waterfowl Pond. Wooden bridge is south boundary. Water appears to connect into main portion of although it is created so that the turtles can not get out of the enclosure. Pond is lined with concrete.

Additions/Modifications Dates

unknown

Associated Context Historical Information

34



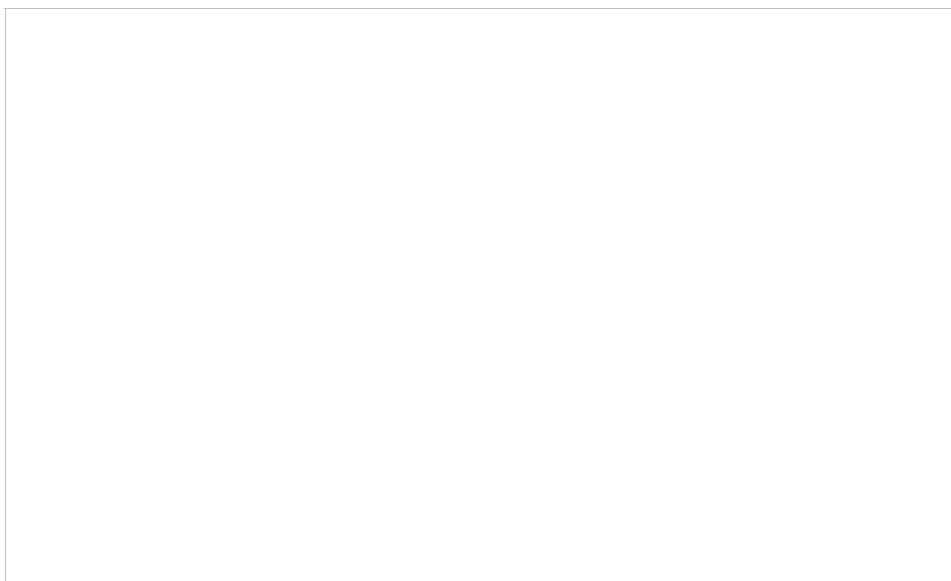
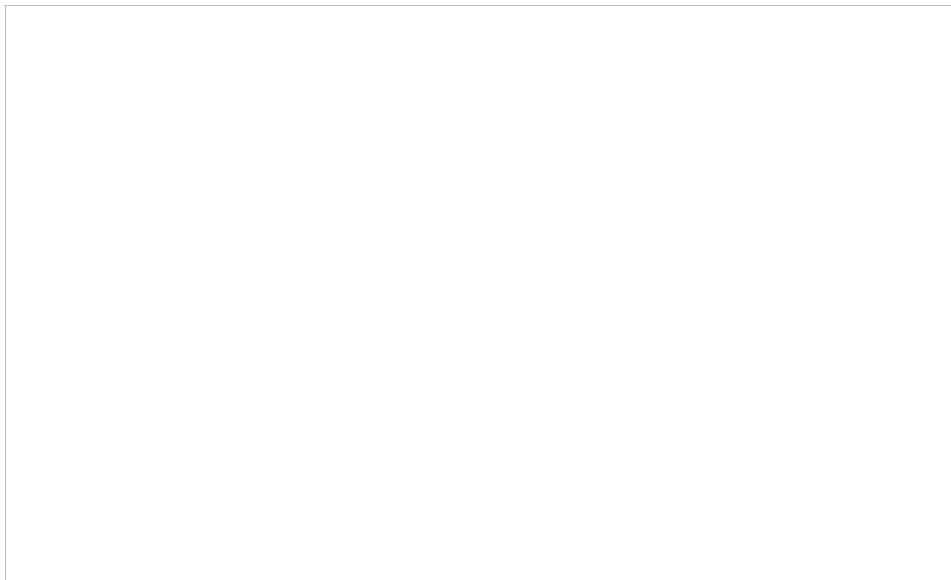
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City San Antonio County Bexar Inventory # 7
Historic Name Complex/Site Name Bird enclosure

Location on bank of Waterfowl Pond

Resource Type Bird Cage Property Type

Landscape/Site Features edge of pond

Outbuildings

Function: Current Use Bird Cage Historic Use

Construction date: Actual Estimated

Architect Builder

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting Northing

Boundary Description and Justification

On edge of Waterfowl Pond

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence Similar to WPA Era buildings (Cuprous plaque similar)

Roof Type rock (concrete) Materials concrete

Wall Façade rock Foundation slab

Window Type none Materials

Door Type Door Material

General Architectural Description

Small bird enclosure on the NE edge of Waterfowl Pond. Has a plaque that notes the donor. Very similar to WPA era design. Front of cage reveals two story (for birds) back has an entrance for keeper. Stone Stairs. Sponsered by Hertzberg Jewelery Co. Roof and beam appear to be in Dionocio Rodriguez style (faux bois).

Additions/Modifications Dates

Associated Context Historical Information

38



39



40



41



45



46



City San Antonio County Bexar Inventory # 8
Historic Name Complex/Site Name Parrots of the world

Location Next to Wetlands

Resource Type Bird Enclosure Property Type

Landscape/Site Features

Outbuildings modern shed in back

Function: Current Use Bird Enclosures Historic Use

Construction date: Actual Estimated

Architect Builder

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting Northing

Boundary Description and Justification

South of Wetlands

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence WPA-Era

Roof Type unknown(maybe stone-concrete) Materials some wood lattice

Wall Façade Rock Foundation slab

Window Type none Materials

Door Type Door Material

General Architectural Description

Inner rock building with many bird enclosures. Some wood planking is used to create shade for the birds. Iron fencing is around the exhibit wood plank for shade is supported by wood posts that are rotting. Fenced area behind enclosure has a modern shed.

Additions/Modifications Dates

unknown

Associated Context Historical Information

Plaque out front in planters says Parrots of the World Sponsored by Betty and Bob Kelso

47



48



49



50



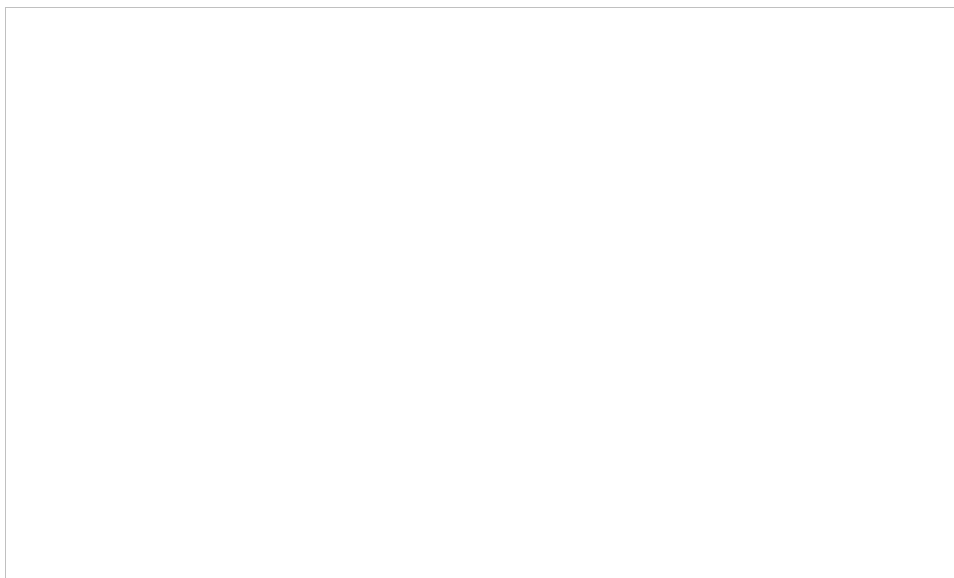
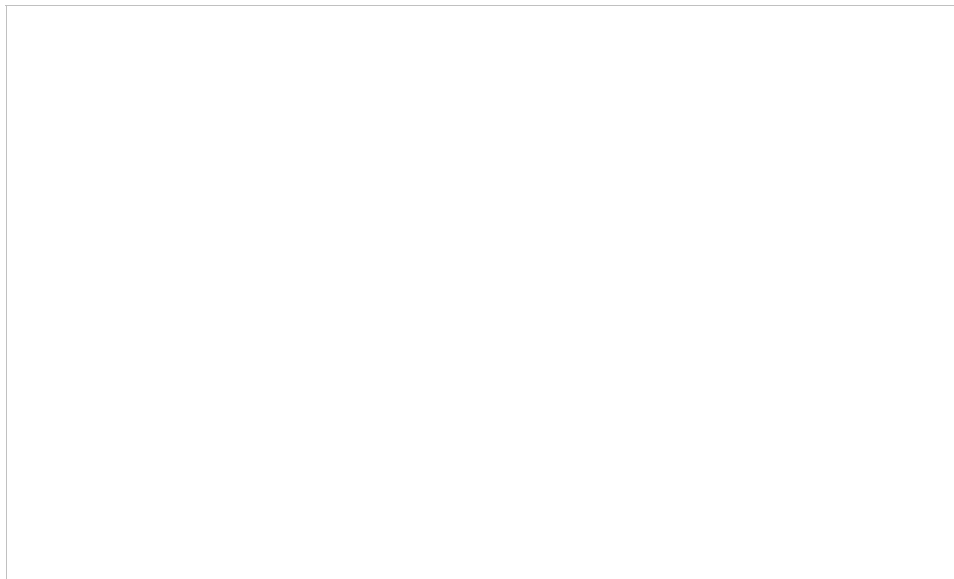
51



52



53



City San Antonio County Bexar Inventory # 9

Historic Name _____ Complex/Site Name _____

Location Along Promenade from Restaurant to Ice Cream shop

Resource Type planters Property Type _____

Landscape/Site Features Planters- rock lined

Outbuildings none

Function: Current Use planters Historic Use _____

Construction date: 1990 Actual Estimated

Architect _____ Builder _____

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting _____ Northing _____

Boundary Description and Justification

In between Parrots of the world and water feature

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence none

Roof Type _____ Materials _____

Wall Façade rock Foundation _____

Window Type none Materials _____

Door Type none Door Material _____

General Architectural Description

Rock walled planters. Three. Two are around the trees (fairly young trees) one has plaque "Birds of the World" Sponsored by Betty and Bob Kelso in appreciation, for the beauty and diversity of this family of birds. 1990. Stones in the planters do not match thoses used in other walls in the vicinity.

Additions/Modifications Dates _____

Associated Context Historical Information _____

54



55



56



City San Antonio County Bexar Inventory # 10

Historic Name Cranes of the World Complex/Site Name

Location West of Parrots of the World

Resource Type building Property Type Bird Enclosure

Landscape/Site Features Cages attached to building

Outbuildings

Function: Current Use Bird enclosure Historic Use

Construction date: 1960 Actual Estimated

Architect Builder

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting Northing

Boundary Description and Justification

South of Wetlands, NE of Restaurant

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence WPA Era Construction

Roof Type Stone/Concrete Materials Concrete to look like stone

Wall Façade Foundation concrete slab

Window Type glass/wood frame Materials wood, glass

Door Type wood frame, glass, screen Door Material

General Architectural Description

Constructed like #7. Rock walls with "timbers" that are concrete made to look like wood. Roof looks to have wood shingles, but "shingles" are concrete. Bird enclosures off the front are chain link. Hard to document.

Additions/Modifications Dates

Bird Cages are constructed of wire and chain link. Recent additions

Associated Context Historical Information

57



58



59



60



61



62



63



64



65



66



City San Antonio County Bexar Inventory # 11

Historic Name _____ Complex/Site Name _____

Location West of #7

Resource Type structure Property Type _____

Landscape/Site Features leanto, rock building, water feature

Outbuildings _____

Function: Current Use Goose/Duck house Historic Use _____

Construction date: Actual Estimated

Architect _____ Builder _____

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting _____ Northing _____

Boundary Description and Justification _____

Within the water pond area

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence WPA- Era

Roof Type Corrugated Plastic Materials plastic

Wall Façade rock Foundation concrete slab

Window Type none Materials _____

Door Type wood frame Door Material wood, screen, plastic

General Architectural Description _____

A stone and concrete structure with a wood frame addition. Wood frame is enclosed with screen and plastic. Being used for geese and gosslings. The back part of the structure (stone part) is connected into the water feature. It resembles WPA-era construction, but not so finely done. Cannot get entire structure. Appears to be three different building styles, and can see a seam in the permanent portion of the small structure. A water feature is attached to the rear elevation of the structure. Faux bois elements are noted on the roof.

Additions/Modifications Dates _____

Associated Context Historical Information _____

67



68



69



70



71



72



73



74



City San Antonio County Bexar Inventory # 12
Historic Name Complex/Site Name Waterway

Location Along water area

Resource Type wall Property Type

Landscape/Site Features wall

Outbuildings

Function: Current Use wall Historic Use

Construction date: Actual Estimated

Architect Builder

Possible Threats Demo Development None Alteration Relocation Vacant Utility Expansion

Integrity: Location Design Materials Workmanship Setting Feeling Association

USGS Quad # 29098 San Antonio East Year 1967 UTM Zone: 14 Easting Northing

Boundary Description and Justification

Recorder: K. Miller Ulrich Date 2-29-12

Stylistic Influence possible WPA-era

Roof Type Materials

Wall Façade rock and cement Foundation rock

Window Type Materials

Door Type Door Material

General Architectural Description

Wall that lines the water area. Contact said that there would be no removal of walls due to the previous work done near the old Spanish Acequia, but included in the survey as a precaution against any impact. It is near acequia, and wall could date to early 1930s. Stones are limestone that are joined together with Portland cement. Same style of wall lines areas that follow the path of the acequia

Additions/Modifications Dates

Associated Context Historical Information

75



76



**Additional Photos from Office of Historic Preservation for
Historic Standing Structure Survey of a Portion of the San Antonio Zoo**



Resource #7



Resource #7



Resource #7



Resource #8 – detail of façade with exterior cages



Resource #8 – rear elevation with casements and *faux bois* lintel



Resource #10



Resource #10 side and rear elevations



Resource #10 detail of *faux bois* lintel and “shingles”