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Cultural Resources Survey of the Proposed Bear Creek Industrial Project Phase I, City of Euless, Tarrant County, Texas

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Cultural Resources Survey of the Proposed Bear Creek Industrial Project Phase I, City of Euless, Tarrant County, Texas

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CULTURAL RESOURCES REPORT



Cultural Resources Survey of the Proposed Bear Creek Industrial Project
Phase I, City of Euless, Tarrant County, Texas



Prepared for:
Texas Historical Commission
Texas Antiquities Permit #7126

On Behalf of:

Dallas Fort Worth International Airport



February 2015

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Cultural Resources Survey of the Proposed Bear Creek Industrial Project Phase I, City of Euless, Tarrant County, Texas

by

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&

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Cultural Resources Report
February 2015

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ABSTRACT

This report documents the substantive findings and management recommendations of a cultural resource inventory conducted by Integrated Environmental Solutions, LLC (IES) for the Bear Creek Industrial Phase I project in Euless, Tarrant County, Texas. As the project will occur on the Dallas/Fort Worth (DFW) International Airport property, the DFW International Airport will need approval from the Federal Aviation Administration to modify their Airport Layout Plan (ALP) to reflect the permanent alterations. This is considered a federal action and will subsequently require compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA). In addition, as the DFW International Airport is a political subdivision of the State of Texas the project will be subjected to the provisions of the Antiquities Code of Texas (ACT).

The goal of the survey was to locate, identify, and assess any cultural resources, which include standing structures and archeological sites that could be adversely affected by the proposed development, and to evaluate such resources for their potential eligibility for listing as a State Antiquities Landmark (SAL) or eligibility for listing in the National Register of Historic Places (NRHP). All work conformed to 13 Texas Administrative Code (TAC) 26, which outline the regulations for implementing the ACT.

The cultural resources inventory was conducted by archeologists Kevin Stone and Joshua Hamilton on 21 and 23 January 2015, under Texas Antiquities Permit No. 7126. Prior to IES's pedestrian survey, several areas along South 20th Avenue and within the north-central portion of the project area or Area of Potential Effects (APE) that could potential contain historic-period cultural features and/or deposits were identified. During the IES survey, three archeological sites (41TR273, 41TR274, and 41TR275) were documented within APE. Through the subsequent analysis, all three sites were determined to be ineligible for listing on the NRHP or as a SAL. No further work is warranted. However, if any cultural resources, other than those documented within this report, are unearthed during construction, the operators should stop construction activities, and immediately contact the project environmental representative to initiate coordination with the Texas Historical Commission (THC) prior to resuming any construction activities.

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- Appendix A – Photograph Location Map and Photographs (Restricted Information)
- Appendix B – Archeological Site Locations (Restricted Information)

CHAPTER 1: PROJECT DESCRIPTION

This report has been written in accordance with the guidelines for reports prepared by the Council of Texas Archeologists (CTA 2002). The report presents a brief description of the project area, environmental setting, and methodology; followed by the results of the investigations and recommendations. This report serves as the cultural resources report to satisfy the Antiquities Code of Texas (ACT) and National Historic Preservation Act (NHPA) Section 106 requirements.

1.1 Introduction

As the project cultural resources consultant for the Dallas/Fort Worth (DFW) International Airport, Integrated Environmental Solutions, LLC (IES) performed a cultural resources inventory to locate any prehistoric or historic-period cultural resources located southwest of the intersection of South Airfield Drive and South 20th Avenue. The project area is plotted on the Euless 7.5-minute series U.S. Geological Survey (USGS) Quadrangle sheet and recent aerial photograph (**Figures 1.1 and 1.2**).

1.2 Area of Potential Effects

1.2.1 Archeological Resources

Although project design details are still in the early stages of planning, current plans call for the construction of a single box style warehouse with associated parking lots, access roads, landscaping, and a detention pond within a 78.2-acre area referred to as the project area or Area of Potential Effects (APE) for this project (**Figure 3**). Although the exact depth of ground disturbing activities has not yet been determined, subsurface investigations within APE were assessed to culturally sterile soil.

1.2.1 Historic-Period Resources

Although an assessment of indirect visual effects is not required per the ACT regulations, the project will require compliance with Section 106, an assessment of indirect effects would be required per the NHPA Section 106 regulations. Thus, any structure of historic age, encountered within the footprint of proposed construction, or within 300 feet (approximately 100 meters [m]) of the project area, will be photographed and assessed for their potential eligibility for listing on the National Register of Historic Places (NRHP).

1.3 Administrative Information

Sponsor: DFW International Airport

Review Agency: Texas Historical Commission (THC)

Principal Investigator: Kevin Stone, MA, RPA

IES Project Number: 03.006.028

Days of Field Work: 21 and 23 January 2015

Area Surveyed: Approximately 78.2 acres (31.6 hectare [ha])

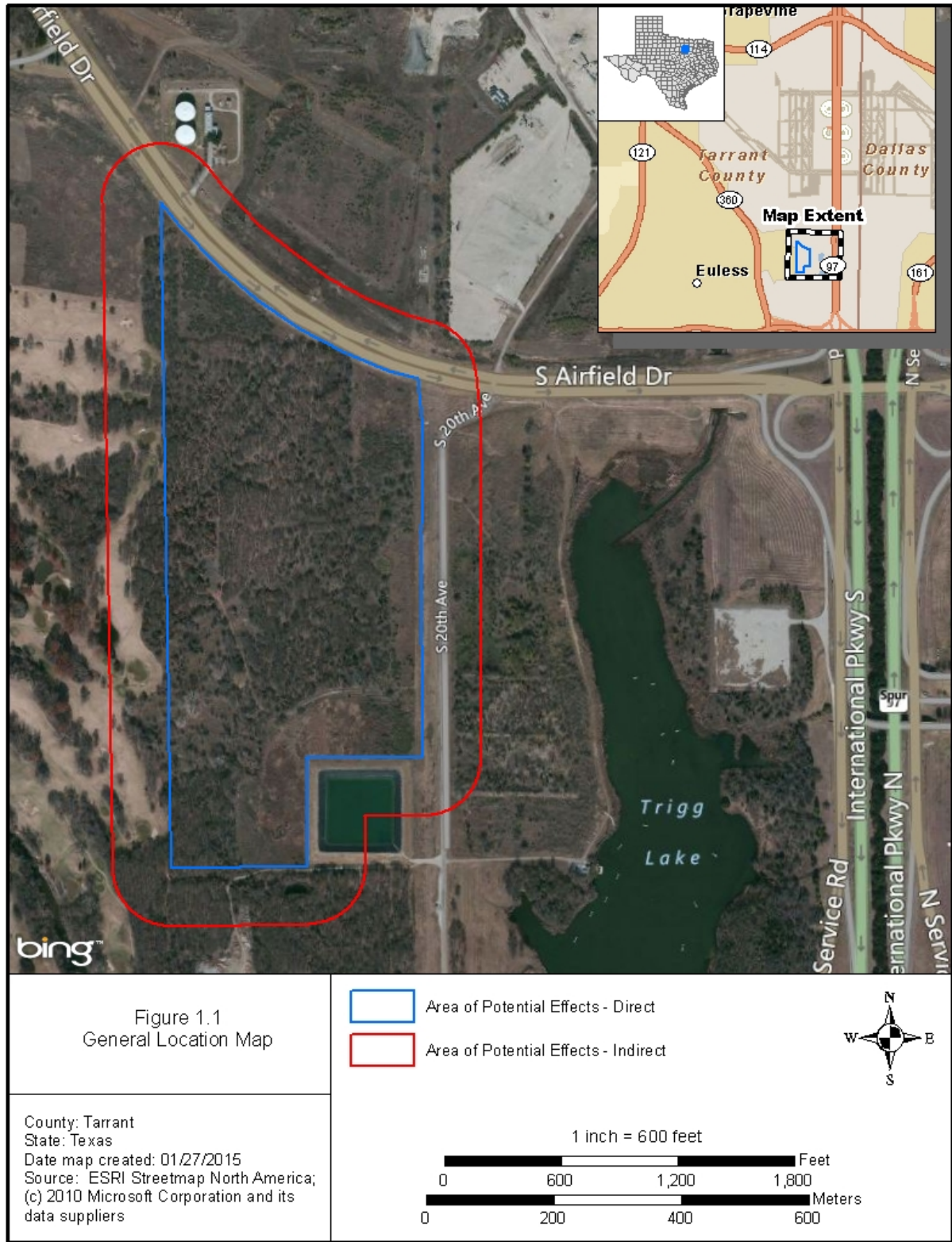
Sites Recommended as Eligible for National Register Listing Under Criteria in 36 Code of Federal Regulations (CFR) 60.4:

None

Sites not Recommended as Eligible for National Register Listing Under Criteria in 36 CFR 60.4:

41TR273, 41TR274, and 41TR275

Curation Facility: No artifacts were collected. Field notes will be curated at IES office in McKinney, Texas.



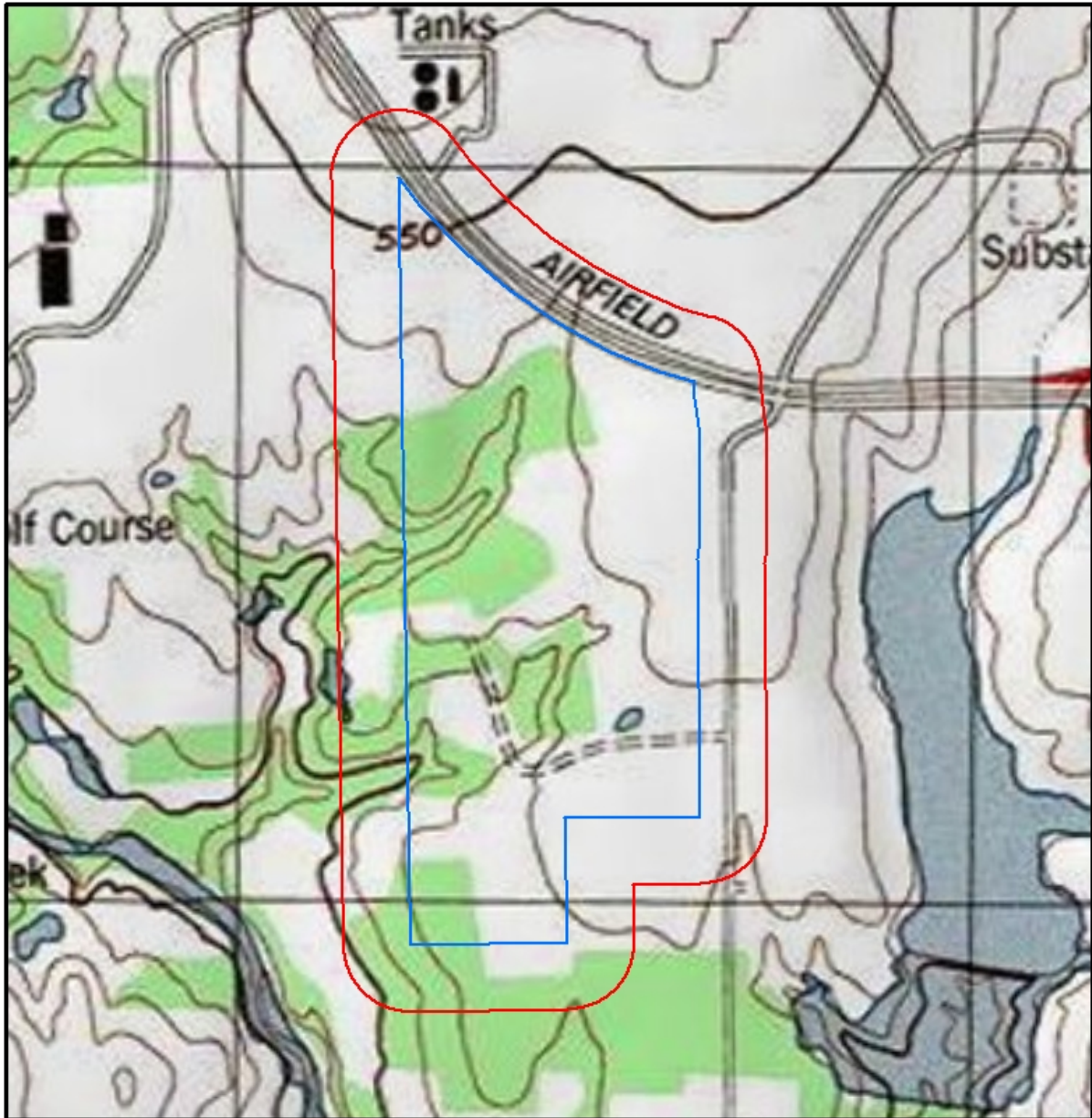
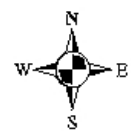
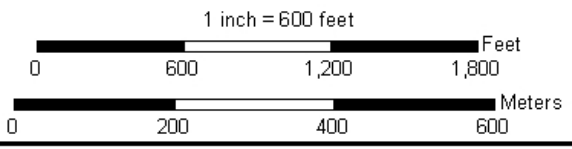


Figure 1.2
U.S. Geological Survey
Topographic Map

- Area of Potential Effects - Direct
- Area of Potential Effects - Indirect



County: Tarrant
State: Texas
Date map created: 01/27/2015
USGS Quad Name: Euless
Source: Copyright: ©2011 National Geographic Society, i-cubed



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CHAPTER 2: ENVIRONMENTAL BACKGROUND

2.1 Environmental Setting

2.1.1 *Climate*

Tarrant County is in the north-central part of the state of Texas. This region has a humid subtropical climate and an annual rainfall averaging between approximately 35.01 to 40.00 inches. About half of the rain usually falls between April and May, with July and August being the two driest months of the year. The subtropical region tends to have a relatively mild year round temperature with the occasional exceedingly hot and cold snaps (Estaville and Earl 2008; Brooks et. al 1964).

2.1.2 *Topographic Setting*

The APE was located within an upland setting north of Big Bear Creek. The APE encompassed the headwaters of two unnamed tributaries within a gently sloping to sloping margins of a broad, north/south oriented ridgeline that abuts the Bear Creek floodplain. The tributaries confluence with Big Bear Creek approximately 775m downstream. The elevation of the APE generally slopes from northeast to southwest and ranged between approximately 555 to 518 feet (ft) above mean sea level (amsl). The northern and eastern portions of the APE maintained a relatively uniform surface that was occasionally dissected by shallow drainage depressions. The western half of the APE was much more heavily dissected by several more pronounced drainages that have created smaller, more discrete ridges within the overall landscape. These two distinct settings correlate to a transition from the more stable, clay rich Blackland Prairie soils to the more erosive, sandy soils of the Cross Timbers ecological regions.

2.1.3 *Vegetation, Geology, and Soils*

The APE was located within an environmental interface, known as an ecotone, between the Northern Blackland Prairie and Eastern Cross Timber ecoregions (McGowen et al. 1984). Variation among each ecoregion is a direct result of the underlying geology (Diggs et al. 1999). The natural divide between these two geological formations parallels Big Bear Creek, which runs from the northwest to the southeast through the western portion of the DFW International Airport property.

Northern Blackland Prairie

The northern and eastern portions of the APE were located within the Northern Blackland Prairie, which is characterized by low-relief topography containing dark, thick, plastic clay soils typical of the Houston Black, Heiden, and Wilson soil series (Ressel 1981). The Eagle Ford Formation (Kef) underlies these soils, which is the westernmost and oldest geological group within the Blackland Prairies (McGowen et al. 1987). This formation dates to the late Cretaceous and is comprised of sedimentary rock consisting of shale, siltstone, and limestone, which grades upward into highly plastic clay (Coffee 1980, McGowen et al. 1987, USGS 2014).

Eastern Cross Timbers

The Eastern Cross Timbers region was historically characterized by a narrow strip of timbered, low hills that are orientated along a north/ south axis from Tishomingo, Oklahoma to Waco, Texas (Ferring 1994; McGowen et al. 1987.) This region contains countless hills that were once heavily wooded and contained oak, walnut, blackjack, and hickory trees that grow in deep sandy soil (Hill 1901). Early pioneers referred to the region as the Monte Grande (Grand Forest) and later the Lower Timbers. However, due to urban expansion, agricultural development, and other modern activities, the natural vegetation has become highly fragmented and only a few large tracts of undisturbed woodlands remains today (Texas Parks and Wildlife Department [TPWD] 2014). The APE was underlain by the Woodbine (Kwb)

geological formation (**Figure 2.1**). The Woodbine underlies the Eagle Ford Formation and the strata dates back to the Late Cretaceous in the Upper Cenomanian stage (Winton 1925). The Woodbine is primarily sandstone and contains a small percentage of siltstone, mudstone, and clay.

The southernmost portion of the APE contains the northernmost Fluvial terrace deposits (Qt) within Big Bear Creek. These deposits are Quaternary in age and comprised of gravel, sand, silt and clay. These deposits are located adjacent to the Trinity River and its tributaries and were formed as the Trinity River changed course (Scoggins 2004).

Soils Description

Eight soil series are contained within the APE (**Figure 2.2**). **Table 2.1** provides a brief description of the eight soils and their percentages. According to the *Soil Survey of Tarrant County* (Ressel 1981) and U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) web soil survey data for Tarrant County (USDA 2015), the three primary soil series within the project are relatively equally distributed across the APE. Soils within the APE primarily pertain to the Crosstell fine sandy loam 1 to 3 percent slopes; Leson clay, 1 to 3 percent slopes; and Navo clay loam, 1 to 3 percent, which comprise 30.3, 23.1, and 19.2 percent of the APE, respectively. The upland setting of the APE was confirmed as no frequently flooded soils were identified within the APE. Soils data were viewed from the NRCS Web Soil Survey (Web Soil Survey 2014).

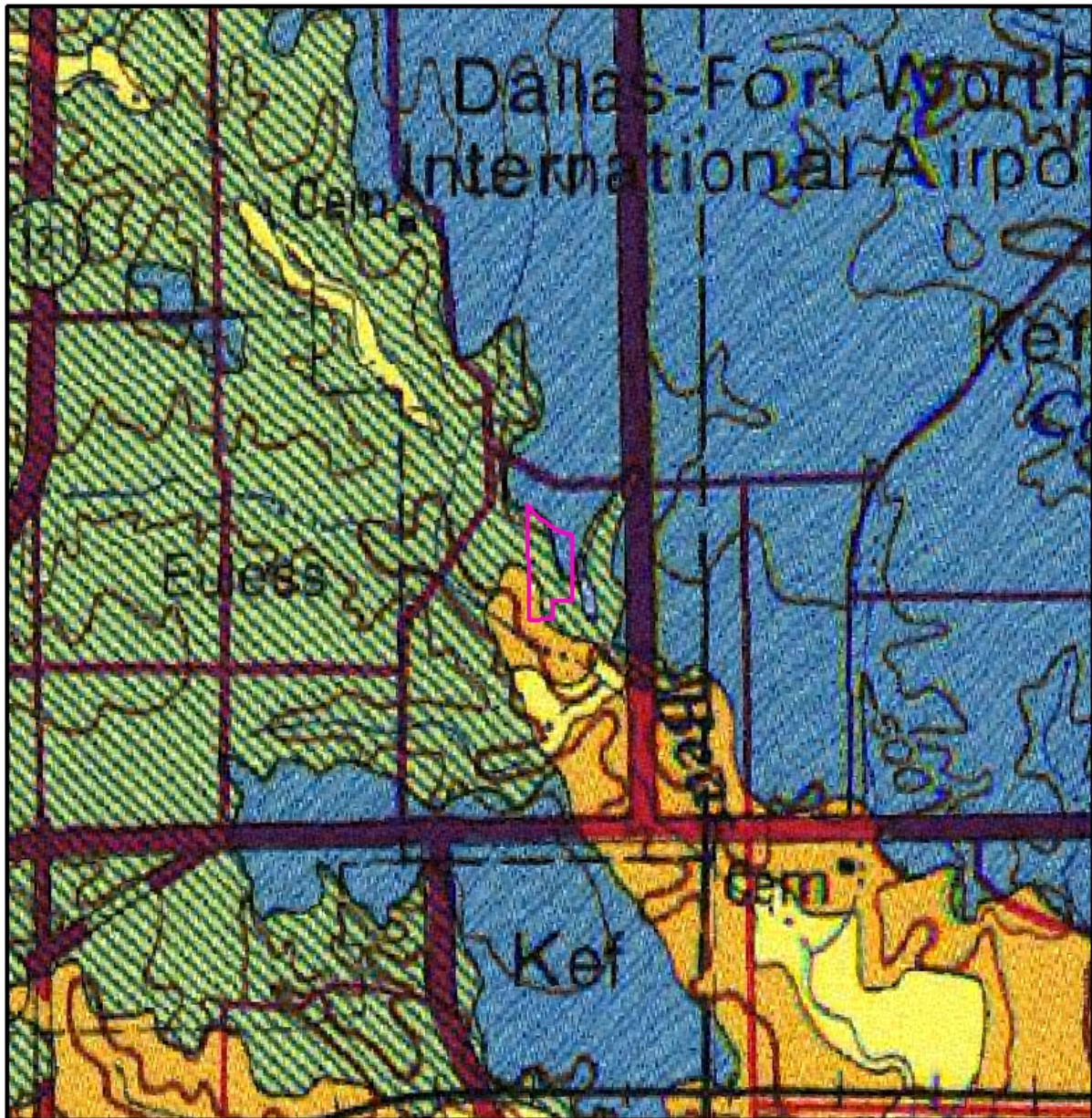




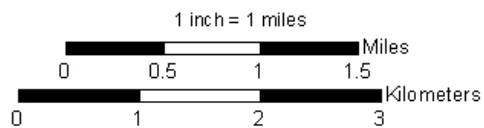
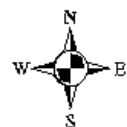


Figure 2.1
Geologic Setting

County: Tarrant
 State: Texas
 Date map created: 01/27/2015
 Source: TNRIS Geologic Atlas
 of Texas; Dallas Sheet

-  Area of Potential Effects - Direct
- Geologic Formation
-  Kurb - Woodbine
-  Kef - Eagle Ford Formation
-  Qt - Fluvial terrace deposits



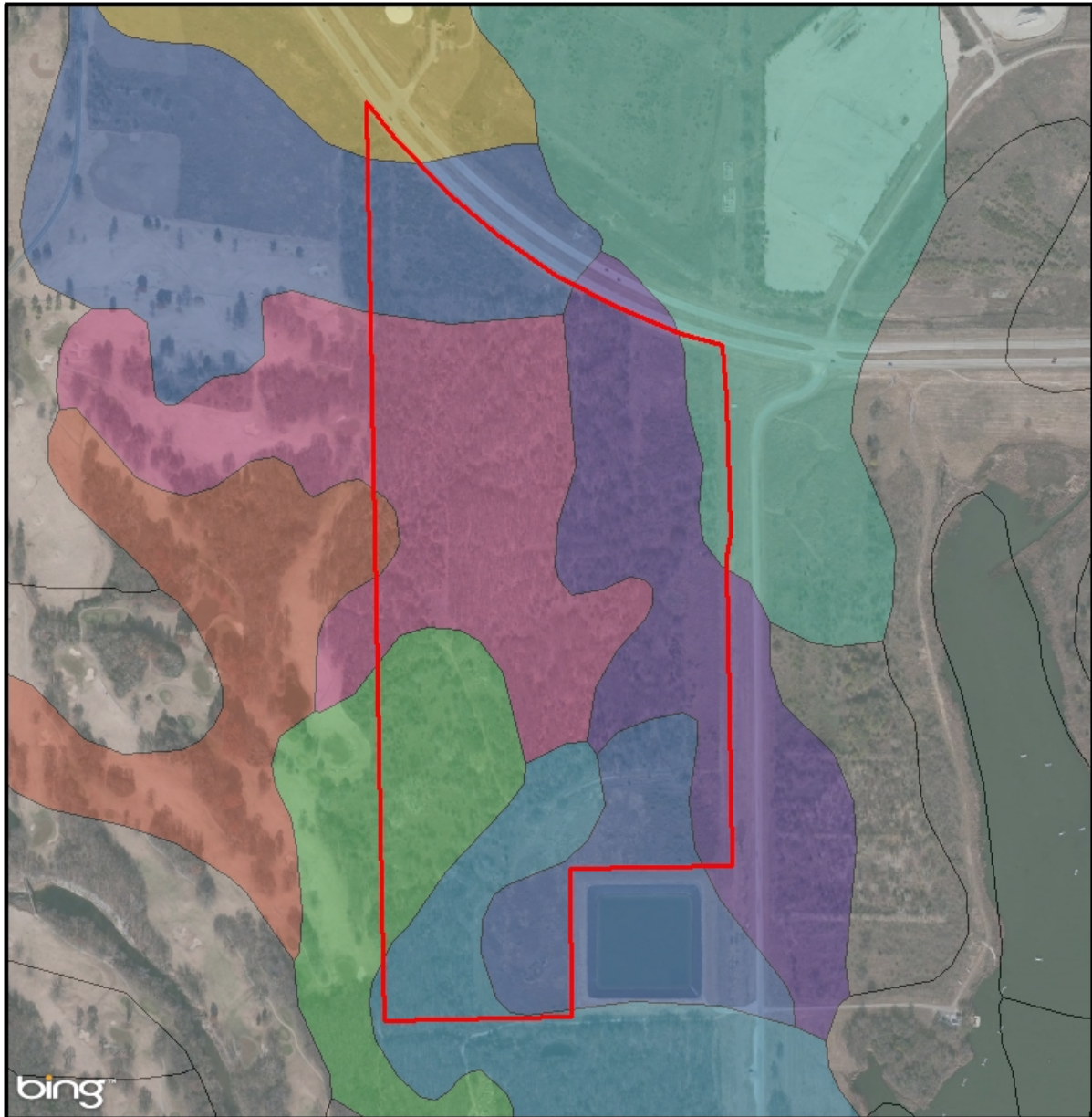


Figure 2.2
Soil Types Located Within
and Adjacent to the APE

County: Tarrant
State: Texas
Date map created: 01/27/2015
Source: (c) 2010 Microsoft
Corporation and its data suppliers;
2013 USDA NRCS Digital Soils
Database

- Area of Potential Effects - Direct**
- Soils Description**
- Arents, loamy
 - Crosstell fine sandy loam, 1 to 3 percent slopes
 - Crosstell fine sandy loam, 3 to 6 percent slopes
 - Heiden clay, 1 to 3 percent slopes
 - Houston Black clay, 1 to 3 percent slopes
 - Leson clay, 1 to 3 percent slopes
 - Navo clay loam, 1 to 3 percent slopes
 - Silawa fine sandy loam, 3 to 8 percent slopes
 - Other Values

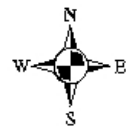
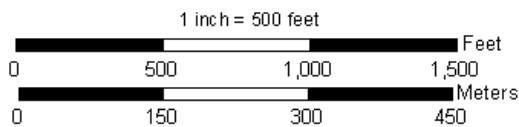


Table 2.1: Soils within the APE

Map Unit Symbol	Soil	Approximate Percentage of the APE
8	Arents, loamy - This component is described as a loamy soil smoothed and reclaimed after sand and gravel mining. This soil is located on terraces and has a depth to a root restrictive layer or bedrock more than 80 inches. The natural drainage class is well drained.	12.9
21	Crosstell fine sandy loam, 1 to 3 percent slopes - This component is described as a fine sandy loam weathered from interbedded sandstone and shale located on ridges and summits. Depth to a root restrictive layer, bedrock, lithic, is greater than 80 inches. The natural drainage class is moderately well drained.	10.3
22	Crosstell fine sandy loam, 3 to 6 percent slope – This component is described as a fine sandy loam weathered from interbedded sandstone and shale located on ridges and summits. Depth to a root restrictive layer, bedrock, lithic, is greater than 80 inches. The natural drainage class is moderately well drained.	30.3
33	Heiden clay, 1 to 3 percent slopes – This component is described as a clayey residuum weathered from mudstone located on interfluvial ridges and summits. Depth to a root restrictive layer, bedrock, lithic, is 40 to 65 inches. The natural drainage class is well drained.	0.6
34	Houston Black clay, 1 to 3 percent slopes – This component is described as a clayey residuum weathered from calcareous mudstone located on interfluvial ridges and summits. Depth to a root restrictive layer, bedrock, lithic, is greater than 80 inches. The natural drainage class is moderately well drained.	2.9
38	Leson clay loam, 1 to 3 percent slopes – This component is described as a clay residuum weathered from calcareous shale located on interfluvial ridges and summits. Depth to a root restrictive layer, bedrock, lithic, is greater than 80 inches. The natural drainage class is moderately well drained.	23.1
50	Navo clay loam, 1 to 3 percent slopes – This component is described as a loamy clay residuum weathered from sandstone and shale of the Woodbine formation located on ridges. Depth to a root restrictive layer, bedrock, lithic, is greater than 80 inches. The natural drainage class is moderately well drained.	19.2
70	Silawa fine sandy loam, 3 to 8 percent slopes – This component is described as a fine sandy loam derived from sandy alluvium located on stream terraces. Depth to a root restrictive layer, bedrock, lithic, is greater than 80 inches. The natural drainage class is well drained.	0.6

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CHAPTER 3: CULTURAL BACKGROUND

3.1 Previous Investigations

The Texas Archeological Sites Atlas (TASA) database, maintained by the THC, indicated that a small portion of the northern and eastern sections of the current APE have been previously surveyed for cultural resources. The survey was conducted by AR Consultants, Inc. between April 2007 to February 2008 under Texas Antiquities Permit No. 4491 (TASA 2014). Other than this survey, the TASA archives indicated four additional archeological surveys have been conducted within one-mile of the APE (**Figure 3.1**). These surveys are summarized in **Table 3.1**.

Table 3.1: Previous Surveys within One-Mile of the APE.

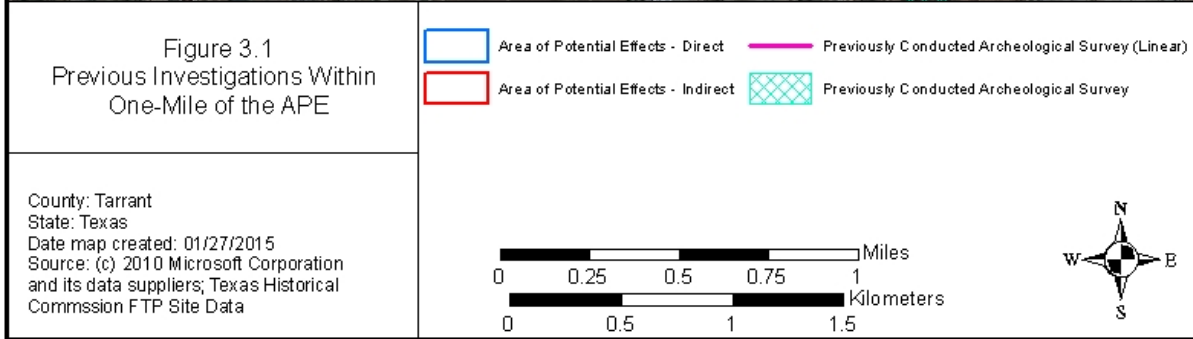
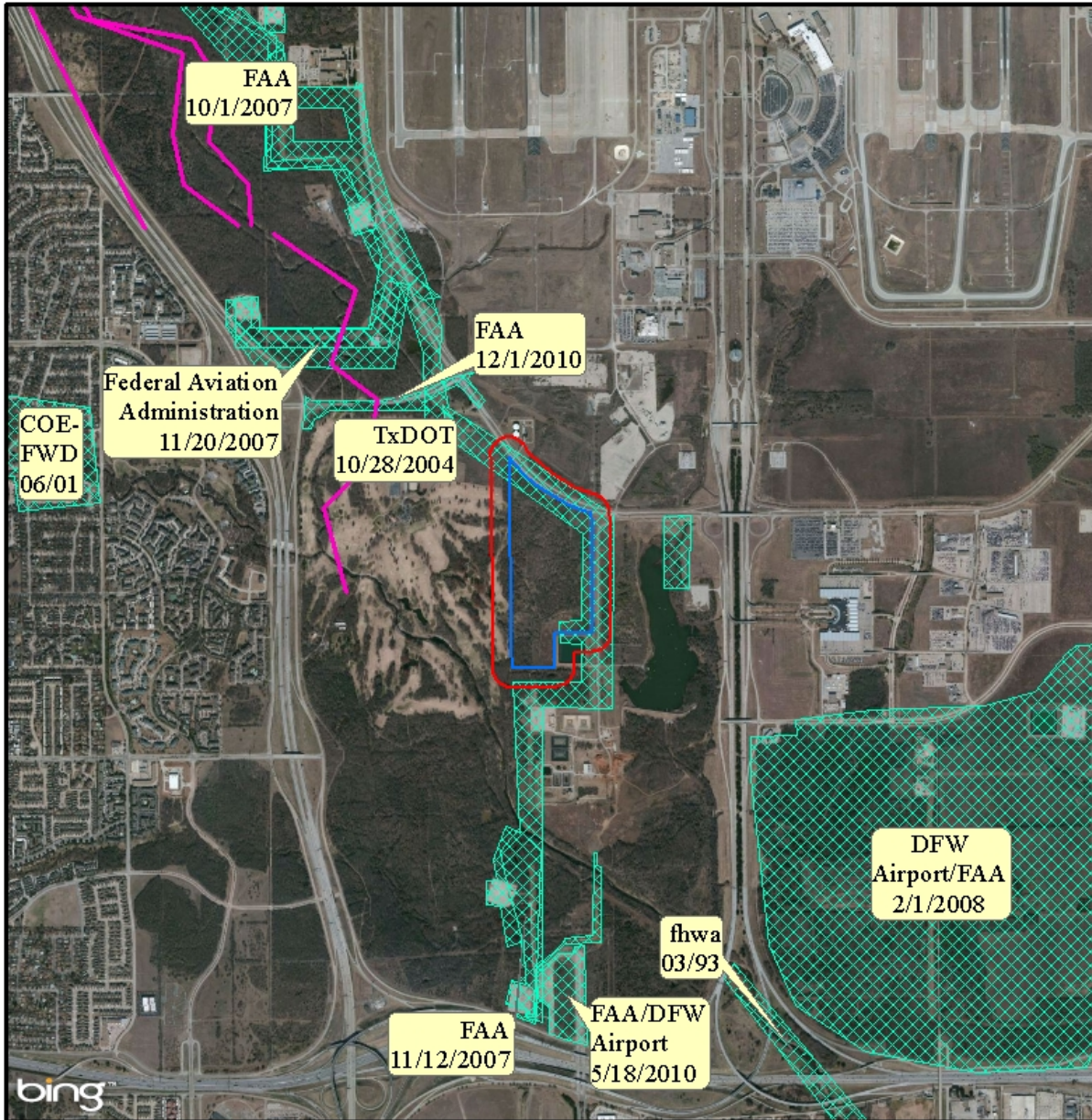
Agency	Firm/Institution	Antiquities Permit #	Date	Survey Type	Location (Approximate)
EPA	Unknown	-	1979	Linear	800m west of APE along Big Bear Creek
Texas Department of Transportation	Geo-Marine	3561	2004	Area	355m northwest of APE along West Airfield Drive
FAA/DFW International Airport	AR Consultants	4491	2007	Area	Crosses northern and eastern portions of APE
FAA/DFW International Airport	Geo-Marine	5563	2010	Linear	1.15km south of APE along Big Bear Creek
FAA/DFW International Airport	Hicks and Company	5773	2010	Linear	500m northwest of APE along Mid Cities Boulevard

3.2 Previous Recorded Sites within Vicinity

A file search within the TASA identified that there are no previously recorded archeological sites, National Register Properties, historical markers, or cemeteries located within the proposed APE (TASA 2014). According to the TASA records, there were six recorded sites within one-mile (~1600m) of the APE. These sites were 41TR16, 41TR17, 41TR18, 41TR63, 41TR82, and 41TR241 and are summarized in **Table 3.2**.

Table 3.2: Recorded Archeological Sites within the APE

Site	Time Period	Site Type	Site Size (m)	Depth Extent (cm)	Cultural Materials	Topographic Setting	Reference
41TR16	Prehistoric/historic	Open campsite/trash scatter	200 x 500	10-50	Lithics, tool fragments, burned rock, 1920-1940 refuse	Stream terrace	Hayden and Fox 1979
41TR17	Prehistoric	Artifact scatter	150 x 400	10-15	Lithic debitage	Bluff	Hayden and Fox 1979
41TR18	Prehistoric	Artifact scatter	120 x 340	10	Lithic debitage	Upland terrace/hill	Hayden and Fox 1979
41TR63	Unknown	Unknown	Unknown	Unknown	Unknown	unknown	Unknown
41TR87	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
41TR241	Historic	Farmstead	100 x 80	0-20	Household refuse and debris, construction material	Upland terrace	Hunt 2010



3.3 Prehistoric Chronology

The APE lies within the North-Central Texas archeological region. Archeological investigations within the region have been summarized by Hoffman and Brooks (1989), Lynott (1981), McCormick (1976), Prikryl (1990), Story et al. (1990), and Vehik (1994). Despite these contributions, the lack of data presents an incomplete understanding of the archeological record within the region. The cultural chronological sequence of the region begins with the Paleoindian and transitions to the Archaic, Late Prehistoric, Protohistoric, and Historic Periods.

3.3.1 Paleoindian Period

The Paleoindian period began as the Pleistocene epoch was ending. It is estimated to have occurred in the North-Central Texas region around 11,150 to 8,500 (before present [circa 1950]) B.P. The Clovis culture is the earliest well defined culture in Texas and consists of kill, quarry, cache, camp, ritual, and burial sites. Early research thought the Paleoindian lifestyle was dependent on the hunting of Late Pleistocene fauna including mammoth, mastodon, bison, camel, and horse. However, current research indicates that the Clovis culture utilized a wide variety of flora and fauna and did not rely solely on megafauna (Bousman et al. 2004; Collins 1995).

The Folsom culture followed the Clovis; Folsom archeological sites are fairly common in Texas. Folsom site types found in Texas consists of camp, stone-working, and kill sites (Holliday 1995). In contrast to the Clovis culture, the Folsom populations were evidently highly mobile and specialized bison hunters (Collins 1995). Bison bones are found in every Folsom site where faunal remains were preserved and the sites were generally situated near grassland habitats. The Early Paleoindian period is characterized by Clovis and Folsom projectile points, while the transition between the Early and Late Paleoindian periods was characterized by several unfluted projectile point styles (Collins 2002).

3.3.2 Archaic Period

A climatic shift occurred around 8,000 B.P. and marked the transition from the Pleistocene to the Holocene epoch. The changing environment altered the landscape and prehistoric inhabitants adapted with the change. The decline and eventual extinction of mammoth, mastodon, horse, camel, and giant bison populations forced inhabitants to focus on deer, antelope, and other smaller game (Bousman and Oksanen 2012; Collins 1995). The change of subsistence practices resulted in technological shifts resulting in a greater diversity of lithic technology and the use of fire-cracked rocks for hearths, ovens, middens, and other thermal features (Collins 1995). The Archaic period is further divided into early, middle, and late sub-periods.

The Early Archaic interval occurred in North-Central Texas from 8,500 to 6,000 B.P. and is primarily documented from surface collections (Prikryl 1990). Significant changes in lithic technology occurred during the Early Archaic and is evident through the development of notched projectile points, specialized tools for woodworking, and grinding and hammering stones (Collins 1995). Projectile points associated with the Early Archaic period include early split stemmed and perhaps Angostura (Prikryl 1990; Story et al. 1990). While the basic hunter gatherer adaptation probably remained intact, a shift away from big game hunting was necessary. Bison during this interval were evidently scarce or absent and it is speculated that the decline in the number of bison within the plains forced the inhabitants to broaden their diets (Collins 1995). Subsistence efforts began to focus on local resources such as deer, fish (Turner and Hester 1999), nuts, fruits, small mammals, and invertebrates (Collins 1995). In addition, they most likely relied on harvesting a wide range of plant resources (Bousman and Oksanen 2012), especially those that provided resources throughout the year such as prickly pear and lechugilla (Story 1985). Due to the change in subsistence practices, researchers have suggested that there was a high degree of mobility within large, poorly defined territories (Meltzer and Smith 1986; Story 1985; Prikryl 1990).

The Middle Archaic interval occurred from 6,000 to 3,500 B.P. and is poorly represented within the North-Central Texas region. Projectile points associated with the Middle Archaic period include Andice, Bell, Calf Creek, Dawson, Carrollton, Wells, and Bulverde (Prikryl 1990; Story et al. 1990). It is suggested that there was a significant population increase during this interval (Black 1989; Turner and Hester 1999). With the wide dispersal of Middle Archaic projectile points (Black 1995) and increased frequency in the use of fire-cracked rock cooking technology (Lohse et al 2014; Hall et al. 1986) it is suggested populations continued to interact as the population grew and came into contact with one another.

The Late Archaic interval took place from 3,500 to 1,300 B.P. and is well documented within the region. Prikryl (1990) suggests that the population density for the region increased during the Late Archaic due to an increase in the number of sites and distribution over the landscape. During the Late Archaic, there was a higher diversity of projectile point types and a distinctive decrease in the size of Late Archaic projectile points when compared to the Middle Archaic points (Collins 1995). Projectile points associated with the Late Archaic period include Marshall, Edgewood, Castroville, Ellis, Trinity, Dallas, Palmillas, Yarbrough, Godley, Gary, and Elam (Prikryl 1990; Story et al. 1990).

3.3.3 *Late Prehistoric Period*

The Late Prehistoric period occurred between 1,300 to 300 B.P. and is further divided into the Austin and Toyah sub-periods or phases (Lynott 1977, Prikryl 1990). The transition from the use of atlatls to the utilization of the bow and arrow and the introduction of pottery brought about significant changes to prehistoric life.

The Austin phase occurred from 1,300 to 700 B.P. During the Austin phase, lithic projectile point technology transitioned from atlatls dart points to large arrow points. The Catahoula, Alba, Steiner, and Scallorn arrow points represent the projectile typology within this cultural interval. Sites from this phase tend to consist of thin deposits, which likely reflect small, mobile groups. Faunal material suggests a broad subsistence strategy including small and medium mammals and in limited quantity fish and freshwater mussels (Ricklis 1996). It is speculated that during this phase there was a population decrease. There is also evidence of conflict during this phase and several burials have revealed incidents of fatal arrow wounds (Black 1989).

The transition to the Toyah phase was the result of several cultural manifestations taking place between 700 to 300 B.P. in Texas. Among these were the use of pottery, the re-introduction of blade technology, and the presence of bison processing tools (Boyd 2012). The ceramics are mostly bone-tempered with stick brushed exteriors used to create plainware jars, bowls, and ollas. The lithic projectile point typology for this phase consists of the Perdiz arrow point (Collins 1995), which is characterized by contracting stem points with flared barbed shoulders (Turner and Hester 1999).

The presence of domesticates at the Cobb-Pool (41DL148) site and other nearby locations has sparked debate surrounding the timing and extent of maize agriculture during the Late Prehistoric period in North-Central Texas (Peter and McGregor 1988; Brown and Simmons 1987). Huhnke and Wurtz (2004) suggest the stable carbon isotope value for a single disturbed burial, dating to 800 B.P., is comparable to those of initial maize-consuming Caddo populations in Arkansas. Based on these findings they suggest maize horticulture may have been introduced into North-Central Texas around 800 B.P. However, without additional samples this suggestion is speculative.

3.3.4 *Protohistoric Period*

The transition to the beginning of the Protohistoric period is characterized by contact between indigenous groups and Europeans. Information from this period comes from written accounts by Europeans and generally reflected life within the missions. Information about Native American life outside the missions is scarce and what documents do exist were written from a Eurocentric perspective. The beginning of the

Protohistoric period in Texas occurs in 1528, when Spanish explorer Cabeza de Vaca and members of his crew were marooned in Southeast Texas. Cabeza de Vaca spent five to six years among hunter and gatherer indigenous populations in Southeast and South Texas and parts of Northern Mexico before arriving in Mexico City in 1536. The earliest historical accounts of Texas come from a joint report from all four survivors and an account written by de Vaca at a later date between 1537 to 1541 (Kreiger 2002).

The Pueblo Revolt of 1680 led to the temporary expulsion of the Spanish from the New Mexico Territories and as they retreated, the Spanish were forced to leave behind thousands of horses (Newcomb 1961). The introduction of horses to the natives en masse completely revolutionized some native cultures and rapidly advanced their hunting and warfare capabilities. The Apache, who had adapted to life on the plains and hunting bison, embraced the use of the horse and now had a means of transportation that would allow them to dominate the plains of the Texas panhandle. They began taking over the hunting grounds in Central Texas and pushed opposing tribes either southward towards the Spanish Missions or northward towards the North-Central Texas region (Campbell 1991). The Comanches were another powerful force during this time in Texas and were relatively latecomers to the area. Coming from the Great Plains, they began raiding and taking horses from the New Mexico area and reinvented themselves as mounted warriors. They entered the areas of Northwestern Texas in the 1720s and waged a long war against the Lipan Apaches, pressuring them and pushing them out from their homelands (Weddle 1964).

3.3.5 *Historic Period*

The establishment of the first Spanish missions in the early 1700s marks the beginning of the Historic period. Spanish missions and settlements in Central and South Texas were often threatened by raids and refugees and settlers often took shelter within the missions (Chipman and Joseph 2010). The Spanish never fully understood the Native Americans political system and often assumed that when they agreed to a treaty or alliance with one group that it reflected the larger group, which was not the case.

In 1821, the nation of Mexico had its independence from Spain and almost immediately was in conflict with the Texas colonists. The Mexican Constitution of 1824 drew immediate repercussions due to the attempt to limit the freedom of the Texas colonists. Throughout this period and its early times as an independent nation, Texas had to deal with Native American problems and issues (Weddle 1964).

By 1849, the population had increased enough to warrant additional military support and Camp Worth was established as an Army outpost. After the Civil War and during Reconstruction years the area suffered a decline in population and economic activities. However, in 1870 the construction of the Texas and Pacific Railroad and the Missouri-Kansas-Texas Railroad through Fort Worth revitalized the economy and secured future economic development. The combination of agriculture and cattle ranching activities continued to fuel growth in Tarrant County and the population increased from 41,142 to 152,800 between 1890 to 1920.

The economy continued to improve with the onset of World War II and Fort Worth became an aviation powerhouse in both the military and manufacturing sectors. The area experienced a population surge during the mid to late 20th century and the population rose from 361,253 in 1950 to 1.4 million by 2000.

3.4 Cultural Resources Potential

In addition to the TASA review, several additional sources were referenced to determine the overall potential for encountering cultural resources within the APE. These sources included the *Soil Survey of Tarrant County, Texas*, the Geologic Atlas of Texas (Dallas Sheet), the USGS topographic map, the NRCS digital soil database for Tarrant County, the National Archives and Records Administration's (NARA) 1940 Census Enumeration District Maps for Tarrant County, the Texas Historic Overlay (THO) georeferenced maps, the Fort Worth District Potential Archeological Liability Map (FT-PALM), and both past and current aerial photography.

3.4.1 *Archeological Resources*

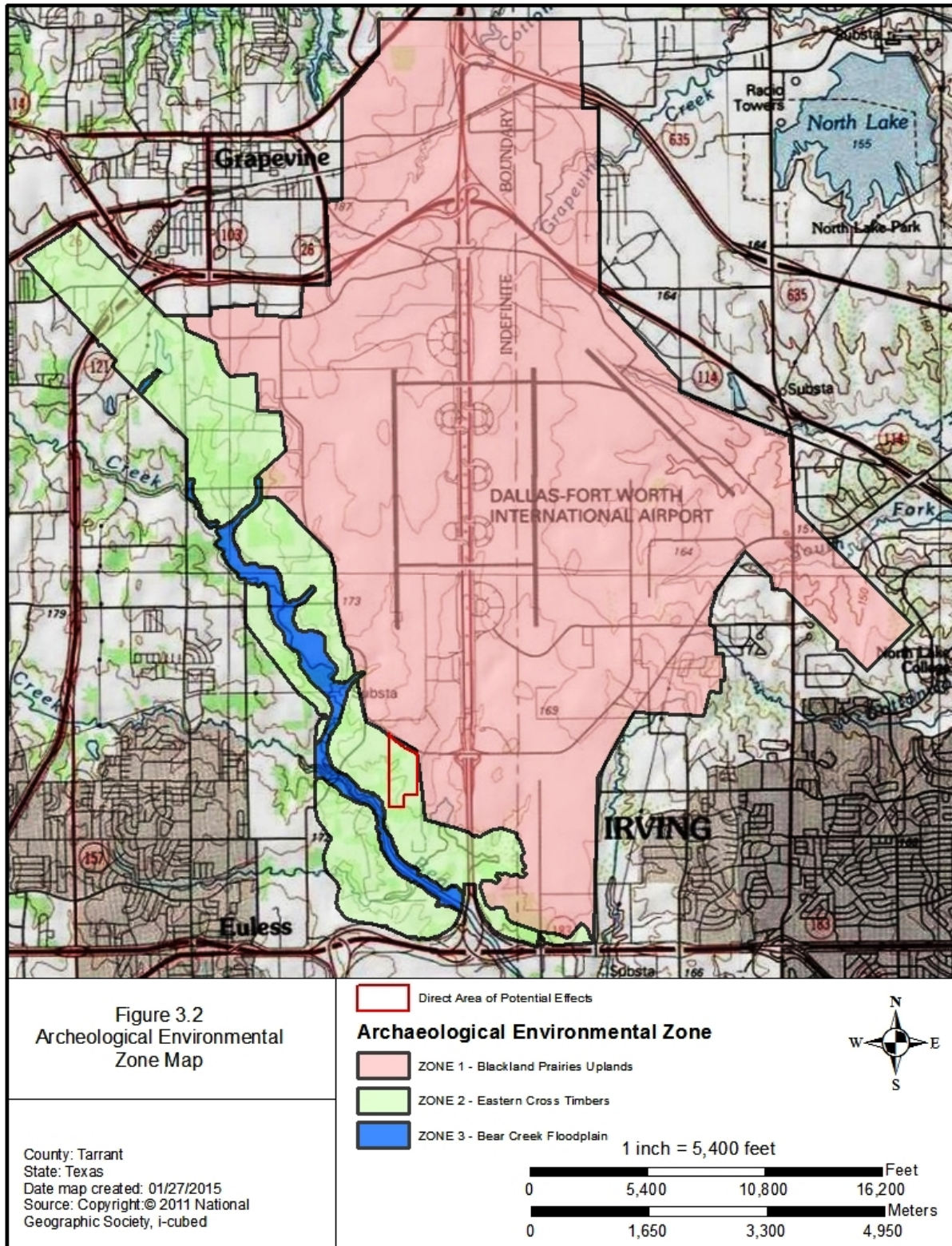
In 2007 and 2008, AR Consultants, Inc. conducted intensive pedestrian surveys of 1,210 acres on DFW International Airport property under Texas Antiquities Permit No. 4491 and published their results in the report *An Archeological Survey for Chesapeake Energy Corporation at DFW International Airport Dallas and Tarrant Counties, Texas*.

According to the AR Consultants study, the Blackland Prairie Uplands, Zone 1, was located within the northern and eastern margins of the APE (**Figure 3.2**). Zone 1 consists of mostly level clay or clay loam soils over a thin layer of limestone bedrock. Water permeates very slowly to the water table causing slow surface runoff and high shrink and swell potential. This setting has a low biotic diversity and is dominated by short grasses. Due to the limited resources available within the area, it has a low probability for containing prehistoric sites. This zone has primarily been used over the last century for agricultural and ranching activities. Due to the large-scale construction of the airport during the late 1960s, it is unlikely to contain any intact historical sites (Shelton et al. 2008).

The majority of the APE was located within the Eastern Cross Timbers (Zone 2) environmental setting. Zone 2 is typified by a wide range of well-drained soil types ranging from those with high clay content to sandy loams located on uplands, ridges, terraces, tributary streams, and valleys. Accordingly, these soils support a wide range of vegetation and during the prehistoric period dense stands of old growth trees. The upland soils are moderately well suited for cropland, pastureland, or urban development and the area has been well utilized for agricultural purposes since early historic settlement. Thus, Zone 2 is considered to have a high potential for containing both prehistoric and historic sites (Shelton et al. 2008).

3.4.2 *Historic-Period Resources*

Historical aerial photographs and topographic maps illustrate that the land within the APE was used as agricultural land and/or pastureland as early as 1956. Historical documents indicated that one structure was present within the current APE before 1920 and two outbuildings associated with a farmstead before 1956. Based on images observed on historicaerials.com, it appears that any remaining structures were removed between 1972 and 1979. Since the early 1970s, the APE has remained unused and become overgrown by secondary growth. As such, the potential for encountering historic-period resources remained moderately high within the APE.



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CHAPTER 4: METHODOLOGY

The archeological inventory for the Bear Creek Phase I project was conducted on the 21 and 23 January 2015. The methods and density of excavating shovel test met the minimum requirements for field tactics stipulated by the THC and CTA Archeological Survey Standards for Texas (CTA 1996, 2001). Prior to field work, the IES staff conducted a historical and archeological records search to determine what cultural resources have been recorded within the APE and within a one-mile (~1,600m) radius of the APE. This information was detailed above. Additionally, IES staff reviewed ecological, geological, soils data, as well as, historic and recent topographic maps and aerial photography.

4.1 Survey

The 100 percent intensive pedestrian survey consisted of a careful examination of the ground surface and existing subsurface exposures for evidence of archeological sites within the APE. The survey consisted of a multiple transect scheme with transect lines spaced at 30m intervals orientated north and south across the project area. Areas displaying high levels of disturbance were photographed to document the lack of potential for intact archeological deposits. Other documentation methods included narrative notes, maps, and shovel test records.

4.2 Shovel Tests Excavation

In areas with potential for archeological materials, shovel tests were excavated to the top of culturally sterile deposits. Each shovel test was 30cm in diameter and was hand excavated in natural stratigraphic levels not exceeding 20cm in thickness. Excavated soil was screened using ¼-inch hardware cloth to test for the presences of buried cultural material. If clay content was high and could not be efficiently screened, material was troweled through by hand and inspected for cultural deposits. In addition, the physical properties of each arbitrary level were recorded. All test locations were recorded on paper and plotted using hand-help global positioning system (GPS) units. Investigators documented the results of each test on standardized shovel test forms. CTA survey standards recommend that an APE with an area of 78.2 acres (31.6 ha), displaying little to no disturbance, should have approximately 39 shovel tests (one shovel test per two acres) excavated during the pedestrian survey. However, shovel tests numbers varied from this amount due to the level of disturbance observed during the pedestrian survey. All positive shovel tests, cultural features, and other site data were geospatially recorded using Trimble XT handheld GPS.

4.3 Site Recording

When applicable, archeological sites were evaluated through no fewer than six shovel tests (when topography allows or site warrants such investigation) to assess their horizontal extent and characterize depth of archeological deposits. Negative shovel tests, the distribution of surficial artifacts/features, topography, and/or the APE extent delineated the boundaries of each site. For the purposes of this survey, an archeological site was defined as five or more surface artifacts within a 10m radius, a cultural feature observed on the surface or exposed during shovel testing, a positive shovel test containing two or more subsurface artifacts, or two or more positive shovel tests located within 30m of each other. All newly-documented sites were assigned a temporary field number and were recorded on State of Texas Archeological Site Data forms, photographed, sketch mapped, and plotted on the USGS topographic quadrangle.

4.4 Site Assessment

A scaled map was prepared for each identified archeological site, and each site was plotted on the appropriate 7.5-minute USGS topographic map. The data from any encountered site was recorded in the field was processed at the IES office in McKinney, Texas to determine site significance and potential

eligibility as a SAL or listing on the NRHP. When applicable, a variety of data was used to assess site significance including date(s), artifact density, artifact variety, features density, feature variety, feature preservation, stratigraphic integrity, and amount of disturbance. Completed site forms were submitted to the Texas Archeological Research Laboratory (TARL).

4.5 Archival Research

A deed search was conducted for sites that contained evidence that dated to the historic-period. The purpose was to identify historically notable persons possibly associated with the site. Initial research was carried out by examining the primary sources in the deed and land title records in the documents provided by the DFW International Airport and previous archeological reports. The identified persons were then further researched for historic significance in *The Handbook of Texas Online* and within various publications.

4.6 Curation

The survey employed a non-collection strategy. Records, files, field notes, forms, and other documentation will be included in the curation package. All field-generated documents will be temporarily curated at the IES office. These documents and photographs will be organized and catalogued according to TARL curation standards.

CHAPTER 5: RESULTS

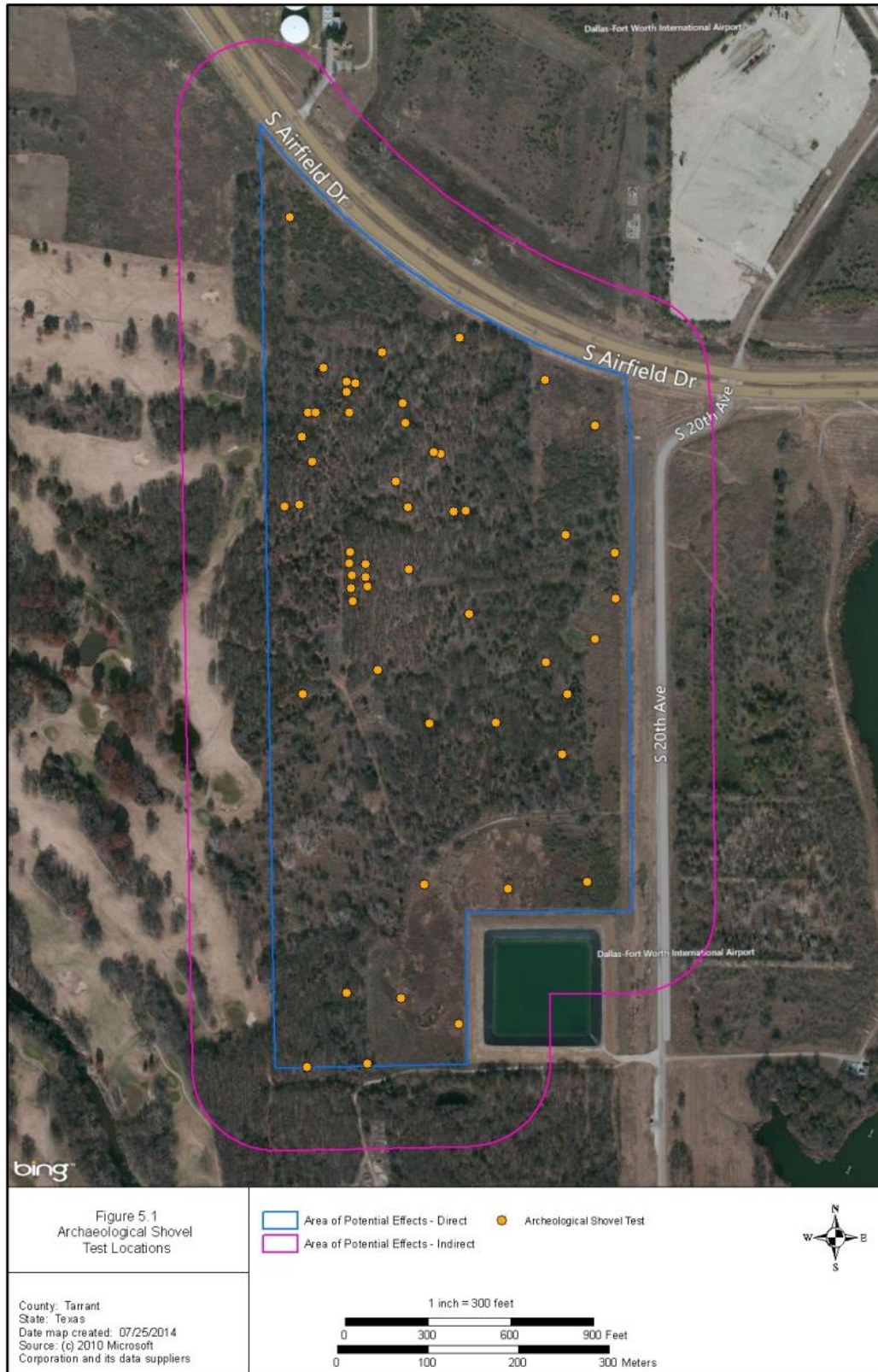
5.1 Survey Area

The APE encompassed the gently sloping to sloping margins of a broad, north/south trending ridgeline that abuts the Bear Creek floodplain. The western half of the APE was dissected by several small drainages that have created smaller, more discrete ridges within the overall landscape. Based on historical and modern aerial images, the APE has been exposed to variable amounts of previous ground disturbing activities since the mid-20th century. The most widespread level of disturbance was related to vegetation removal and residential structural demolition that took place between 1956 to 1972. Although the entirety of the APE was never clear-cut, obvious signs of land clearing were identified within referenced aerials (**Appendix A, Photographs 11 and 12**). The southeasternmost portion of the APE was completely devoid of trees and used for agricultural purposes as early as 1956. The most intensive ground disturbances occurred within the southwestern portion of the APE, which was used as a quarry area between 1957 to 1972. In addition, this area also had several stock ponds constructed during the same time. The quarry was filled with debris and rubble between 1972 to 1979 (**Appendix A, Photographs 13 and 14**). The central and northwestern portions of the APE had only been exposed to relatively minor disturbances. The easternmost portion of the APE was cleared and graded between 2002 to 2003 during the construction of the gas pipeline (**Appendix A, Photographs 15 and 16**).

The APE was predominantly comprised of forested uplands with shrub and grass dominated uplands surrounding. The shrub and grassland areas persisted where the property has been more recently disturbed. The vegetation communities observed were divided into three distinct communities: **forested upland**, **shrub upland**, and **grassland**. The **forested upland** vegetation community persisted through the majority of the APE. The dominant vegetation observed within the forested upland was post oak (*Quercus margarettiae*), cedar elm (*Ulmus crassifolia*), honey mesquite (*Prosopis glandulosa*), sugarberry (*Celtis laevigata*), black willow (*Salix nigra*), Hercules'-club (*Zanthoxylum clava-herculis*), and honey locust (*Gleditsia triacanthos*). The **shrub upland** vegetation community was dominated by thickets of cedar elm or willow baccharis (*Baccharis salicina*), predominantly in homogenous stands. The **grassland** vegetation community was observed along the forest and shrub upland areas where disturbances appeared to be more recent. The species observed included little bluestem (*Schizachyrium scoparium*), silver bluestem (*Bothriochloa saccharoides*), prairie three-awn (*Aristida oligantha*), meadow dropseed (*Sporobolus asper*), King Ranch bluestem (*Bothriochloa ischaemum* var. *songarica*), Bermudagrass (*Cynodon dactylon*), and perennial ryegrass (*Lolium perenne*).

5.2 Pedestrian Survey and Shovel Testing

During the pedestrian survey, 34 shovel tests were excavated on transect, of which 32 tested negative and two tested positive for cultural material (**Figure 5.1**). An additional 19 negative shovel tests were excavated during the delineation of three archeological sites encountered during the transect survey. Excavating shovel tests within the APE revealed three predominant soil types across the APE and were consistent with data received from the soil survey. The northern and eastern portions of the APE were dominated by a clay or clay loam pertaining to the Leson and Navo soils series. The soil contained a very dark gray (10YR 3/1) to a dark grayish brown (10YR 5/3) upper layer that overlaid a more compact and stickier black (10YR 2/1) to a dark brown (10YR 4/3) clay at approximately 20 to 40 cmbs. The APE's central and portions of the western landscape were comprised of a sandy loam pertaining to the Crosstell and Silawa soil series. These soils were comprised of a dark yellowish brown (10YR 4/4) to brown (10YR 5/3) sandy loam that overlaid a red (2.5YR 5/6) to yellowish red



(5YR5/6) clay or sandy clay transition at approximately 10 to 20 cmbs. No shovel test was excavated deeper than 50 cmbs because of the shallow depth of Holocene-aged soils. In addition to excavating shovel test, subsurface exposure including animal burrows, disturbed patches, and cutbanks along any erosional feature were examined. Excavating shovel tests and visual inspections revealed that there are no soils suitable for containing deeply buried cultural material within the APE.

5.2.1 41TR273

Site 41TR273 is a newly recorded multicomponent site that contained a prehistoric lithic scatter from an unknown period and a discretely defined historic-period trash midden. These components were defined by a surface accumulation of prehistoric lithic flakes, debitage, and crude bifacially reduced tools, as well as, historic-period household, construction, and mechanical debris. The site was located within the margins of a dissected upland ridge surrounding the headwaters of an unnamed tributary to Big Bear Creek, which is located approximately 775m downstream. The site occupied several distinct ridges that were separated by small drainages across a 2.6-acre area (165 by 175m [N/S by E/W]) portion of the APE. Each ridge rapidly rises approximately 10 to 15 feet above the dividing drainages, and was comprised of a relatively open understory dominated by leaf litter from the dense post oak woods. Historical and modern aerial photographs indicated that the ground within the site had remained moderately wooded since as 1956.

All artifacts were found on the ground's surface, and all shovel tests excavated within the site boundaries tested negative for cultural material. During the site delineation, it was determined that the site's location correlated directly with the presence of Pliocene or early/mid-Pleistocene-aged stream deposited terrace gravels similar to those of South-Central Texas known as Uvalde gravels. While these stream deposited gravels share some similarities to the Uvalde gravels, like a diverse lithological composition of rounded gravel and rock, the terrace gravels in North-Central Texas are much more sporadically and discretely dispersed across the upland terrace landscape to a point that they cannot be mapped within the geological atlas. The gravels are typically dominated by cherts and quartzites that were transported during the erosion of the Ogallala Formation within the Texas High Plains (Abbott 2011).

A thick layer of senescent foliage covered most of the site's surface and hindered surface visibility. Small bare patches were disbursed over the site and revealed a low-density lithic scatter. The lithic assemblage observed resembled early stage reduction sequences in an area that contained low quality chert and quartzite sources. A total of 44 pieces of debitage were recorded for the site. Within the site, two Stage 2 bifaces, six tested cobbles, 10 chunks, and 26 flakes were observed. The flake debitage consisted of five primary flakes, 10 secondary flakes, and 11 tertiary flakes. The lithic assemblage was composed of 24 chert and 20 quartzite pieces.

The trash midden (Feature 1), containing historic-period artifacts, was located within the headwaters of a small drainage located at the northern boundary of the site. The artifacts within the midden were consisted of baby food jars, paint cans, sheet metal, lumber fragments, metal springs, tin metal, milk glass, truck parts, tires, brick fragments, glass fragments, rubber lining, metal frame, metal pipes, barbed wire, and chain link fence. Several diagnostic artifacts were encountered that pertain to a 1962 license plate and 11 glass bottles (**Table 5.1**).

Table 5.1: Sample of 41TR273 Diagnostics

Artifact Number	Artifact Type	Makers Mark	Function	Age
1	Bottle	Owens Illinois Glass Company	Food Bottle - Condiments	1946
2	Bottle	Owens Illinois Glass Company	Alcohol Bottle - Dandy Flask	1945
3	Bottle	Owens Illinois Glass Company	Food Bottle - Condiments	1945
4	Bottle	Triangle	Medicinal Bottle- Vicks Vaporub	1946-1970
5	Bottle	Ball Brothers	Food Bottle - Condiments	1960-present
6	Bottle	Owens Illinois Glass Company	Food Bottle - Condiments	1945
7	Bottle	Owens Illinois Glass Company	Food Bottle - Canning Jar	1945
8	Bottle	Owens Illinois Glass Company	Household Bottle (non-food related)	1945
9	Bottle	Brockway Glass Company	Food Bottle - Canning Jar	1946-1988

5.2.1.1 Disturbances

Several disturbances were observed during the site delineation that have reduced the site's overall integrity. These disturbances included several push piles of modern debris, soil, gravel, and irrigation pipe scatter along the western margins of the site. In addition, erosion along the small drainages dissecting the site have further displaced artifacts.

5.2.1.2 Shovel Testing

Eighteen shovel tests were excavated during the site delineation and yielded no subsurface artifacts (**Figure 5.2**). These shovel tests were excavated in close proximity to surface finds to determine the vertical depth of the scatter. The surficial nature of the site was confirmed through shovel testing efforts.

Soils that could potentially contain cultural deposits were identified by a sandy loam matrix pertaining to the Silawa fine sandy loam, 3 to 8 percent and were shallow across the site typically no greater than 20 cmbs and were underlain by an abrupt transition to a compact clay layer.

5.2.1.3 Archival Research

Site 41TR273 was located on the Isham Crowley Survey, patented on May 7th 1850. The site overlaps the boundary of a 25-acre tract (Parcel 234) and a 19.5-acre tract (Parcel 224), which were both deeded to the DFW International Airport in 1967 and 1968, respectively (TCDR Volume 2143/Page 525). Mr. James Harry Murray and his wife Polly owned Parcel 234 at the time of the transfer. The land was described within deed records as being vacant at the time of the DFW International Airport purchase. Mr. Gean E. Alexander and his wife Erma owned Parcel 224 at the time of transfer. A single story, seven-room house with associated outbuildings was described within deed records. These structures were located within the easternmost portion of the parcel near the gas pipeline corridor, and no evidence was encountered during the IES survey pertaining to the residence. Based on these records and the artifacts encountered during the IES archeological delineation, site 41TR273 most likely pertains to the Murray or Alexander family occupation. None of the deceased names were listed in the Handbook of Texas Online or on The TexGenWeb Project website.

RESTRICTED INFORMATION

Map Removed

Contains Archeological Site Locational Information

5.2.1.4 Summary

Site 41TR273 was a newly recorded multicomponent site with an ephemeral scatter of prehistoric lithic material of an undetermined age and a dense historic-period trash midden. The site is located near the headwaters of an unnamed tributary to Big Bear Creek and measures approximately 165 by 175m. Twenty shovel tests were excavated during the delineation of the site and all tested negative for cultural material. Although one structure was documented within the 1920 USDA Soil Survey map, none of the artifacts observed dated to this time period, nor were structural remains documented during the delineation. The historic trash midden most likely pertains to the Murray or Alexander family occupation of the site.

5.2.2 41TR274

Site 41TR274 was a newly recorded historic-period debris scatter that extended approximately 270 by 270ft. The site was very ephemeral in nature and represented the remnants of a farmstead dating as early as 1957. The site was located within a gently sloping setting along the historic-period road known as Eules-Trigg Road. Although the structures pertaining to the site were demolished in the early 1970s, an ephemeral scatter of surficial and subsurface artifacts and one man-made feature were still present at the time of the survey.

The cultural material recorded during the delineation pertained to Groesbeck Reds and Standard brick fragments, a metal pipe, several historic-aged trees, tiles, plastic fragments, asphalt chunks, whiteware fragments, and eight glass bottles (**Table 5.2**). The densest accumulation of artifacts was encountered within a man-made stock pond (Feature 1) that was visible west of the farmstead's standing structures depicted within historical aerial photographs. The pond measured approximately 43 by 25m (N/S by E/W) and contained an elevated berm ranging from two to 10ft high. It is unclear if the artifacts located within the dry pond were dumped there during historic times or deposited when the farmstead was demolished. Other push piles containing historic debris were located south and west of the site, but were not included within the overall site boundaries due to their extreme out of context nature.

Table 5.2: Sample of 41TR274 Diagnostics

Artifact Number	Artifact Type	Makers Mark	Function	Age
1	Bottle	unknown	Medicinal Bottle - Bayer's Aspirin	1948-1978
2	Bottle	Brockway Glass Company	Food Bottle - Canning Jar	1946-1980
3	Bottle	Hazel Atlas Glass Company	Food Bottle - Condiments	1933-1964
4	Bottle	Brockway Glass Company	Food Bottle - Canning Jar	1946-1980
5	Bottle	Owens Illinois Glass Company	Household Bottle (non-food related)	1946
6	Bottle	Owens Illinois Glass Company	Alcohol Bottle - Dandy Flask	1958
7	Bottle	Brockway Glass Company	Mineral Water Glass	1946-1988
8	Bottle	Knox Glass Bottle Company	Food Bottle - Condiments	1932-1965

5.2.2.1 Disturbances

There are two easily identifiable disturbances that have greatly affected the integrity of the site. The first occurred after the DFW International Airport purchased the property in 1970 and the standing structures within the site were removed and the surrounding landscape was disturbed by heavy machinery. The second occurred between 2002 to 2003 when the gas pipeline right-of-way (ROW) was cleared of vegetation and the pipeline installed. The construction activities further disturbed soils and created a slight berm on the ROW western edge.

5.2.2.2 Shovel Testing

Shovel test (JH12) was excavated within the site boundary and yielded a single clear glass sherd from approximately 20 to 40cmbs (**Figure 5.3**). Based on the results from JH12 and shovel tests surrounding the site, soil within the site consisted of dark, clayey soils typical of the Leson clay, 1 to 3 percent slopes located within the Blackland Prairie. Although there was potential for other subsurface artifacts within the site, no additional shovel tests were excavated due to the extremely disturbed setting that would only contain out of context artifacts. As such, the site was primarily delineated through surface artifacts and features. All artifacts observed were generic in nature and were most likely associated with the previously removed historic-period structures.

5.2.2.3 Archival Research

Site 41TR274 was located on the Isham Crowley Survey, patented on May 7th 1850. The site overlapped the boundary of an 8.5-acre tract (Parcel 1258) and a 10-acre tract (Parcel 1259), which were both deeded to the DFW International Airport in 1970 by Curtis C. Slocum (TCDR Volume 3575/Page 41 and Volume 3579/Page 372). Mr. Slocum and his wife Lila owned the 18-acre property since April 21, 1961, when the Slocum family purchased the land from Woodrow Cox Pritchett and his wife Madelyne (TCDR Volume 1598/Page 86). The Pritchett family owned the property as early as 1957 and the family soon obtained a mortgage for construction of a home on the property. Based on these records and the artifacts encountered during the IES archeological delineation, site 41TR274 most likely pertained to the Pritchett family occupation.

According to a headstone from Restlawn Memorial Park in Sulphur Springs, Hopkins County, Texas, Mr. Woodrow Pritchett lived from 1920 to 1987. Mr. Pritchett was buried next to his wife Madelyne who lived from 1921 to 2003. A headstone from Crown Hill Memorial Park in Dallas, Dallas County, Texas, records that Mr. Curtis C. Slocum lived from 1918 to 1999. Mr. Slocum was buried next to his wife Lila who lived from 1918 to 1984 (Find A Grave 2014). None of the deceased names were listed in the Handbook of Texas Online, or on The TexGenWeb Project website.

5.2.2.4 Summary

Site 41TR274 was a newly recorded, ephemeral scatter of historic-period artifacts. The site is located along the historic road known as the Eules-Trigg Road. Shovel tests excavated within the site yielded a single clear glass sherd. Although several structures were observed within historic aerials photographs and topographic maps, no structural remains were identified during the IES delineation.

5.2.3 41TR275

Site 41TR275 was a newly recorded historic-period debris scatter that extended approximately 240 by 450ft (N/S by E/W). Overall, the site was ephemeral in nature and represented the remnants of a farmstead dating between the 1940s through 1960s. The site was located within a gently sloping setting along the historic-period road known as the Eules-Trigg Road. Historical aerial photographs indicated that two structures were located within and directly adjacent to the site as early as 1953. Although the residential houses and other buildings pertaining to the site were demolished after the DFW International Airport purchased the property in 1968.

Within the ephemeral scatter of historic-period debris were two dense trash middens (Features 1 and 3) and a man-made structure, which was present at the time of the survey. The cultural material recorded outside the two midden areas contained non-descriptive brick and brick fragments, concrete fragments, hog fence, electric insulators, metal cans, scrap metal, barrel rings, plastic fragments, chain link fence, metal buckets, a 1961 J.C. Higgins Flightliner bicycle, fence posts, historic-aged trees, and 13 diagnostic bottles (**Table 5.3**). A third feature (Feature 2) documented within the site pertained to a concrete structure that likely served as a trough for livestock.

RESTRICTED INFORMATION

Map Removed

Contains Archeological Site Locational Information

Table 5.3: Sample of 41TR275 Diagnostics

Artifact Number	Artifact Type	Makers Mark	Function	Age
1	Bottle	Chattanooga Glass Company	Soda Bottle – Sprite	1966
2	Metal Can		Food Container - Ransburge Hand Painted Jar	1930-1955
3	Bottle	Owens Illinois Glass Company	Soda Bottle	1967
4	Bottle	Owens Illinois Glass Company	Beer or Wine Bottle	1964
5	Bottle	Ball Brothers	Food Bottle - Canning Jar	1960-present
6	Bottle	Knox Glass Bottle Company	Food Bottle - Condiments - Kips Ketchup	1958
7	Bottle	Owens Illinois Glass Company	Household Bottle (non-food related) - Windex	1943
8	Bottle	Owens Illinois Glass Company	Medicinal Bottle	1943
9	Bottle	unknown	Household Bottle (non-food related) - Imperial Formula Shampoo	1960-1975
10	Bottle	unknown	Household Bottle (non-food related) - Kings Men Cologne	1944-1974
11	Bottle	Brockway Glass Company	Alcohol Bottle	1959
12	Bottle	Owens Illinois Glass Company	Mineral Water Glass	1945

Feature 1 was located within the headwaters of a small drainage within the eastern half of the site. The midden was approximately 70ft long, 26ft wide and more than 3ft thick. Artifacts observed within the midden consisted of metal fragments and ceramic sherds.

Feature 2 was located approximately 18ft south of Feature 1 within a second drainage. The feature was approximately 23ft long by 2ft wide. The downstream retaining wall, at its highest, extended approximately 3ft above the ground’s surface at the center of the drainage channel and gradually decreased in height as the sloping drainage banks leveled with the surrounding elevation. The trough spanned the drainage and formed a small dam that would collect runoff during rain events and help keep the trough full of water. The feature contained five courses and was constructed using poured concrete with a gravel aggregate within a wooden board frame.

Feature 3 was located 175ft west of Feature 1 and consisted of a 185 by 50-ft (N/S by E/W) trash midden. Feature 3 was similar to Feature 1 in that it was located within a small drainage and contained a wide array of artifacts related to household debris and construction material. The midden was more disbursed than Feature 1 and did not exceed debris greater than 1ft in thickness.

5.2.3.1 Disturbances

There are two easily identifiable disturbances that have greatly affected the integrity of the site. The first occurred after the DFW International Airport purchased the property in 1970 and the standing structures within the site were removed and the surrounding landscape was disturbed by heavy machinery. The second occurred between 2002 to 2003 when the gas pipeline ROW was cleared of vegetation and the pipeline installed. The construction activities further disturbed soils and created a slight berm on the ROW western edge.

5.2.3.2 Shovel Testing

Only a single shovel test was excavated within the site boundary (see **Figure 5.3**). Although there was potential for other subsurface artifacts within the site, no additional shovel tests were excavated due to the extremely disturbed setting that would only contain out of context artifacts. As such, the site was primarily delineated through surface artifacts and features. All artifacts observed were generic in nature and were most likely associated with the previously removed historic-period structures.

5.2.3.3 Archival Research

Site 41TR275 is located on the Isham Crowley Survey, patented on May 7th 1850. The site was located within the south half of a 10-acre tract (Parcel 1259), which was deeded to the DFW International Airport in 1970 by Curtis C. Slocum (TCDR Volume 3575/Page 41 and Volume 3579/Page 372). Mr. Slocum and his wife Lila owned the 10-acre property since April 21, 1961, when the Slocum family purchased the land from Woodrow Cox Pritchett and his wife Madelyne (TCDR Volume 1598/Page 86). The Pritchett family owned the property as early as 1957 and soon obtained a mortgage for construction of a home on the property. The residence was primarily located outside of the current boundaries for 41TR275, but within the gas pipeline corridor present today. The residence consisted of a single story, five room structure with two outbuildings, a detached one-car garage, and a well house. Based on these records and the artifacts encountered during the IES archeological delineation, site 41TR275 most likely pertained to the Pritchett family occupation.

According to a headstone from Restlawn Memorial Park in Sulphur Springs, Hopkins County, Texas, Mr. Woodrow Pritchett lived from 1920 to 1987. He is buried next to his wife Madelyne who lived from 1921 to 2003. A headstone from Crown Hill Memorial Park in Dallas, Dallas County, Texas, states that Mr. Curtis C. Slocum lived from 1918 to 1999. He is buried next to his wife Lila who lived from 1918 to 1984 (Find A Grave 2014). None of the deceased names were listed in the Handbook of Texas Online, or on The TexGenWeb Project website.

5.2.3.4 Summary

Site 41TR275 was a newly recorded historic site with an ephemeral scatter of historic-period artifacts and a single concrete feature. The site is located along the historic road known as the Eules-Trigg Road. Although several structures were observed within historic aerials photographs and topographic maps, no structural remains were identified during the IES delineation.

5.3 Isolated Artifacts

Isolated finds consists of less than five artifacts found within a 10m radius. In the situation that an isolated artifact occurs, a thorough surface examination takes places within a 30m radius.

Isolated Find 1 (IF1)

IF1 was found 150m south of 41TR273 and was located in close proximity to the historic quarrying activities. The isolated find consisted of a single chert medial flake fragment. A total of seven shovel tests were excavated to the north, south, and east (see **Figure 5.3**). No shovel tests were excavated to the west due to significant disturbances from the historic quarrying area. A moderate amount of black jack oaks were present and contributed to a dense leaf litter that covered the ground. The shovel tests and a thorough surface examination around IF1 and revealed no other cultural materials.

Isolated Find 2 (IF2)

IF2 was located 220ft west of site 41TR274 and consisted of a small 5X5m deposit of two sink basins and a few pieces of scrap metal. The area contained a low to moderate amount of black jack oaks and surface visibility was limited. A thorough examination revealed no obvious disturbances and no other artifacts were revealed by the surface examination. Due to the distance away from other field sites and archeological insignificance, IF2 was not designates as an archeological site.

CHAPTER 6: SUMMARY AND RECOMMENDATIONS

During the pedestrian survey and site delineations, 53 negative shovel tests with two positive were excavated within the 78.2-acre (31.6 ha). Three archeological sites (41TR273, 41TR274, and 41TR275) were encountered during the pedestrian survey.

- Site 41TR273 was a multicomponent site with an ephemeral scatter of prehistoric lithic material of an undetermined age and a dense historic-period trash midden. Due to the commonality and general nature of the site described above, site 41TR273 should be considered ineligible for listing on the NRHP under Criteria A, B, or D, nor should it be considered for an SAL designation.
- Site 41TR274 was a highly disturbed, ephemeral scatter of mid-20th century historic-period artifacts. Due to the commonality and general nature of the site described above and the high amount of disturbance the site has been exposed, site 41TR274 should be considered ineligible for listing on the NRHP under Criteria A, B, or D, nor should it be considered for an SAL designation.
- Site 41TR275 was the remnants of a mid-20th century historic-period farmstead. Due to the commonality and general nature of the site described above in combination with the high amount of disturbance the site has been exposed, site 41TR275 should be considered ineligible for listing on the NRHP under Criteria A, B, C, or D, nor should it be considered for an SAL designation.

Therefore, the DFW International Airport is requesting concurrence for the APE, and that no historic properties are affected under 36 CFR 800.4 (d)(1). It is the recommendation of IES that the SHPO/THC concur with these findings and the Bear Creek Industrial Creek Phase I project be permitted to continue without the need for further cultural resource investigations. However, if any cultural resources (other than those detailed within this report) are unearthed during construction, the operators should cease work immediately in that area, and the THC/SHPO should be prior to resuming any construction activities.

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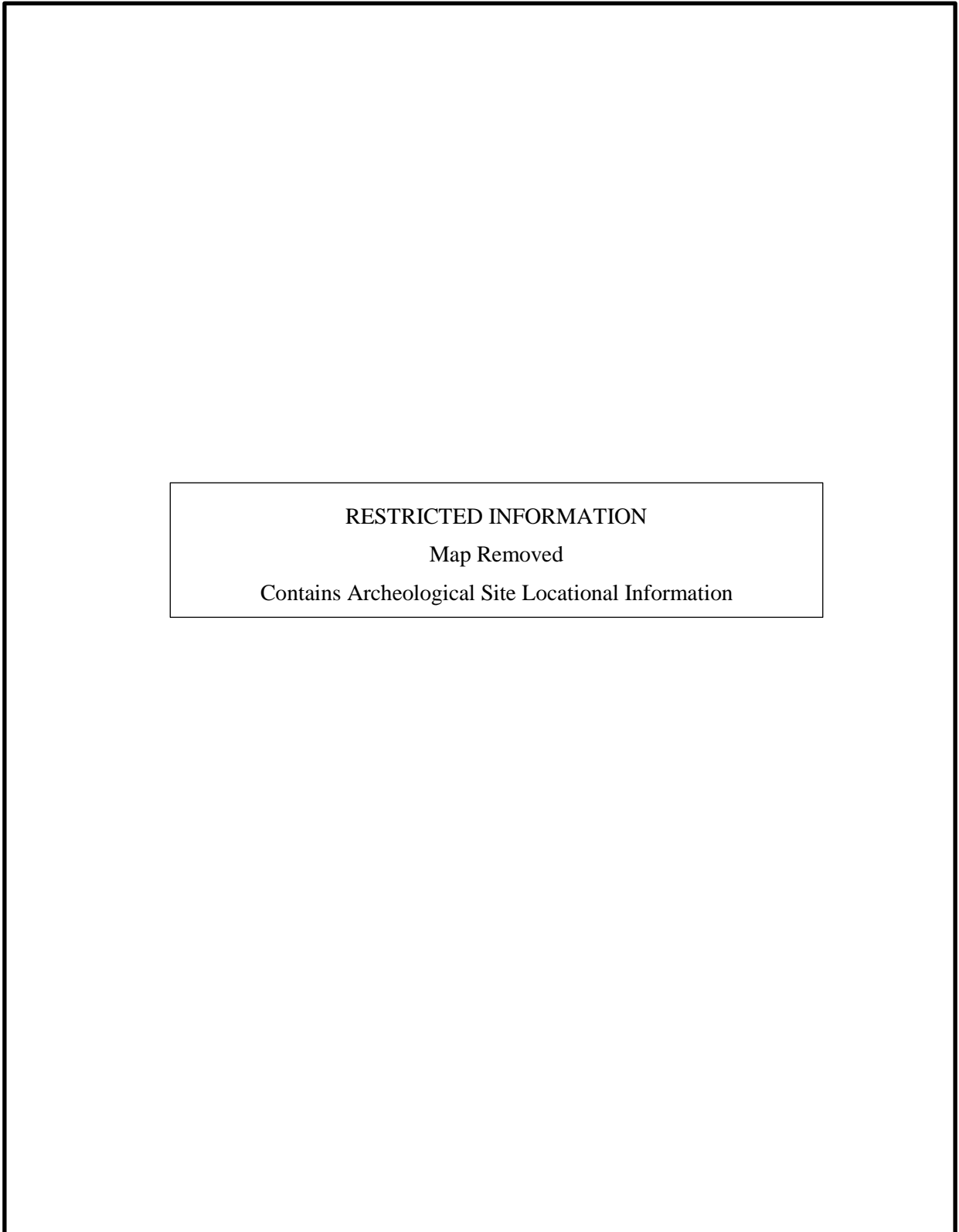
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APPENDIX A
Photograph Location Map and Project Photographs



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Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6



Photograph 7



Photograph 8



Photograph 9



Photograph 10



Photograph 11



Photograph 12



Photograph 13



Photograph 14



Photograph 15



Photograph 16



Photograph 17



Photograph 18



Photograph 19



Photograph 20



Photograph 21



Photograph 22



Photograph 23



Photograph 24



Photograph 25



Photograph 26



Photograph 27



Photograph 28



Photograph 29



Photograph 30



Photograph 31



Photograph 32



Photograph 33

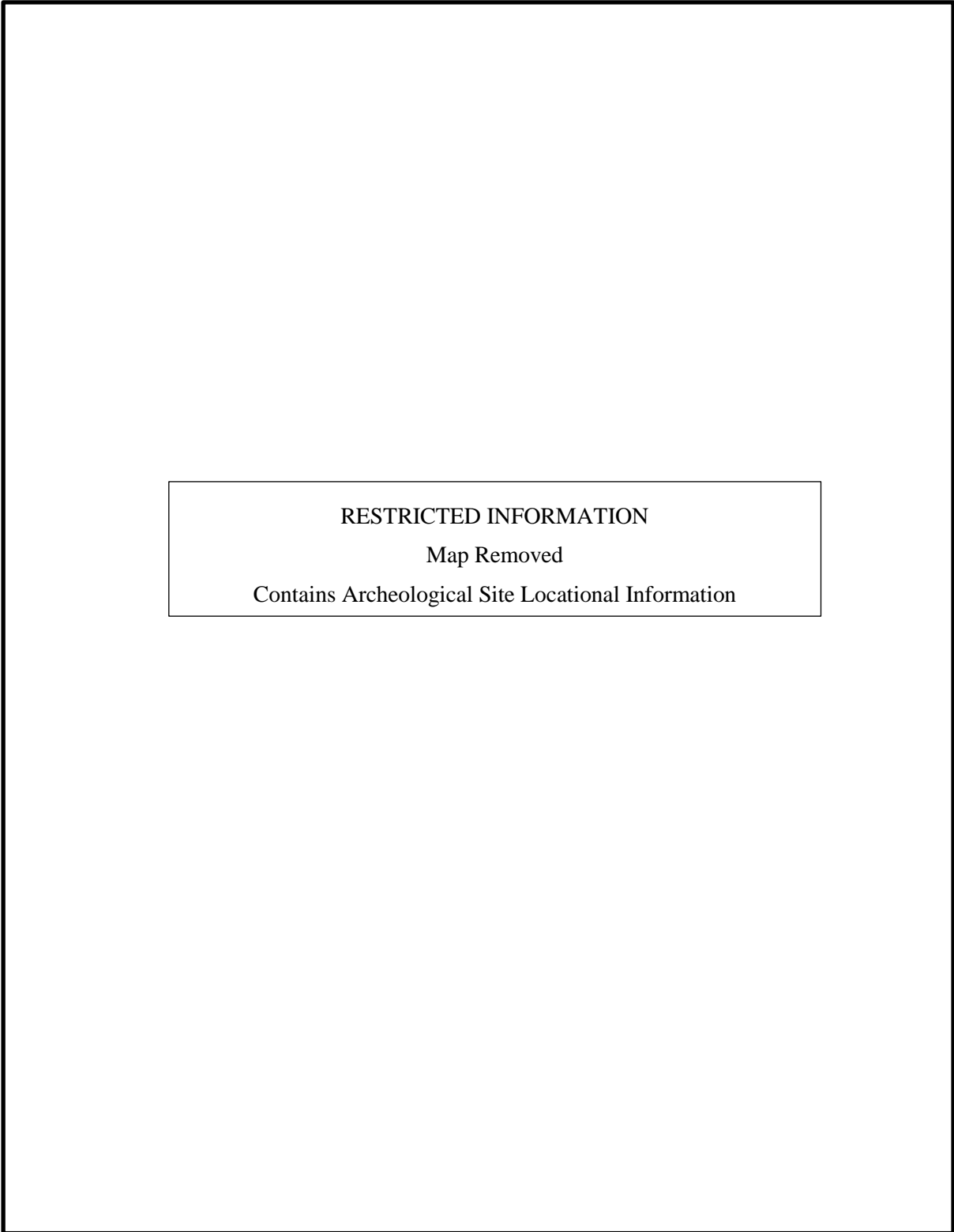


Photograph 34



Photograph 35

APPENDIX B
Archeological Site Locations



RESTRICTED INFORMATION
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