

MUSEUM OF NEW MEXICO  
OFFICE OF ARCHAEOLOGICAL STUDIES

# CLASS III ARCHAEOLOGICAL SURVEY FOR THE JACONA COLLECTION SITE, SANTA FE COUNTY, NEW MEXICO

**RICHARD H. MONTOYA**

WITH CONTRIBUTIONS BY

Susan M. Moga

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PRINCIPAL INVESTIGATOR

**ERIC BLINMAN, PH.D.**

NMCRIS Activity No. 134245

MNM Project No. 41.1036

General Archaeological Permits: NM-15-027-S

ARCHAEOLOGY NOTES 475  
SANTA FE 2015 NEW MEXICO



## NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

<b>1. NMCRIS Activity No.:</b> 134245	<b>2a. Lead (Sponsoring) Agency:</b> Santa Fe County	<b>2b. Other Permitting Agency(ies):</b> State of New Mexico HPD	<b>3. Lead Agency Report No.:</b>
<b>4. Title of Report:</b> A class III Archaeological Survey for the Jacón Collection Site  <b>Author(s):</b> Richard Montoya		<b>5. Type of Report</b> <input type="checkbox"/> Negative <input checked="" type="checkbox"/> Positive	
<b>6. Investigation Type</b> <input type="checkbox"/> Research Design <input checked="" type="checkbox"/> Survey/Inventory <input type="checkbox"/> Test Excavation <input type="checkbox"/> Excavation <input type="checkbox"/> Collections/Non-Field Study <input type="checkbox"/> Overview/Lit Review <input type="checkbox"/> Monitoring <input type="checkbox"/> Ethnographic study <input type="checkbox"/> Site specific visit <input type="checkbox"/> Other			
<b>7. Description of Undertaking (what does the project entail?):</b> Survey of a 24 acre parcel for Santa Fe County in Jacón, NM. Survey was done prior to the construction of a collection station for the County.		<b>8. Dates of Investigation:</b> 9/10/15 & 9/14/15.	
		<b>9. Report Date:</b> 11/25/2015	
<b>10. Performing Agency/Consultant:</b> Office of Archaeological Studies <b>Principal Investigator:</b> Eric Blinman <b>Field Supervisor:</b> Richard Montoya <b>Field Personnel Names:</b> Susan Moga and Isaiah Coan		<b>11. Performing Agency/Consultant Report No.:</b> Office of Archaeological Studies, Archaeology Note 475	
		<b>12. Applicable Cultural Resource Permit No.:</b> State Permit NM-15-027-S	
<b>13. Client/Customer (project proponent):</b> Santa Fe County <b>Contact:</b> Joseph J. Martinez (Project Manager Projects Division Public Works Dept.) <b>Address:</b> <b>Phone:</b> 505-992-3014		<b>14. Client/Customer Project No.:</b>	
<b>15. Land Ownership Status (<i>Must be indicated on project map</i>):</b>			
<b>Land Owner</b>	<b>Acres Surveyed</b>	<b>Acres in APE</b>	
Santa Fe County	24.20		
<b>TOTALS</b>	<b>24.20</b>		

**16 Records Search(es):**

Date(s) of ARMS File Review 8/18/15.	Name of Reviewer(s) J. Badner	
Date(s) of NR/SR File Review 8/18/15.	Name of Reviewer(s) J. Badner	
Date(s) of Other Agency File Review	Name of Reviewer(s)	Agency

**17. Survey Data:**

**a. Source Graphics**

- NAD 27     NAD 83    Note: NAD 83 is the NMCRIS standard  
 USGS 7.5' (1:24,000) topo map     Other topo map, Scale:  
 GPS Unit    Accuracy  <1.0m     1-10m     10-100m     >100m

**b. USGS 7.5' Topographic Map Name                      USGS Quad Code**

Espanola	35106-H1

**c. County(ies): Santa Fe**

**17. Survey Data (continued):**

**d. Nearest City or Town: Pojoaque, NM**

**e. Legal Description:**


Township (N/S)	Range (E/W)	Section	¼	¼	¼
19N	8E & 9E	12	SE,	SW,	NE.
			,	,	.
			,	,	.
			,	,	.
			,	,	.
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			,	,	.
			,	,	.

Projected legal description?  Yes     No     Unplatted

**f. Other Description (e.g., well pad footages, mile markers, plats, land grant name, etc.):**

**18. Survey Field Methods:**

Intensity:  100% coverage     <100% coverage

<p><b>Configuration:</b> <input type="checkbox"/> block survey units <input checked="" type="checkbox"/> linear survey units (l x w): 10 meters  <input type="checkbox"/> other survey units (specify):</p> <p><b>Scope:</b> <input checked="" type="checkbox"/> non-selective (all sites recorded) <input type="checkbox"/> selective/thematic (selected sites recorded)</p> <p><b>Coverage Method:</b> <input checked="" type="checkbox"/> systematic pedestrian coverage <input type="checkbox"/> other method (describe)</p> <p><b>Survey Interval (m):</b> 10 <b>Crew Size:</b> 3 <b>Fieldwork Dates:</b> 9/10 &amp; 9/14/15.</p> <p><b>Survey Person Hours:</b> 18 <b>Recording Person Hours:</b> 4 <b>Total Hours:</b> 22</p> <p><b>Additional Narrative:</b> Survey consisted of three people walking 10 meters apart on a north – south transect. The highway ROW was also surveyed and the area of the footprint for the building was surveyed more intensely.</p>	
<p><b>19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):</b> Vegetation in this area is characterized as Great Basin desert scrubland. The NRCS soil designation is 116, Arents-Urban land-Orthents complex. The elevation in the project area is 5782 feet.</p>	
<p><b>20.</b> a. <b>Percent Ground Visibility:</b> 76 - 99%  b. <b>Condition of Survey Area (grazed, bladed, undisturbed, etc.):</b> There was some vegetation cover throughout the survey area and the survey area was undisturbed with the exception of two dirt roads.</p>	
<p><b>21. CULTURAL RESOURCE FINDINGS</b> <input checked="" type="checkbox"/> Yes, see next report section  <input type="checkbox"/> No, Discuss Why:</p>	
<p><b>22. Required Attachments (check all appropriate boxes):</b> All of the information below is included in the attached report.</p> <p><input checked="" type="checkbox"/> USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn</p> <p><input checked="" type="checkbox"/> Copy of NMCRIS Mapserver Map Check</p> <p><input checked="" type="checkbox"/> LA Site Forms - new sites (<i>with sketch map &amp; topographic map</i>)</p> <p><input type="checkbox"/> LA Site Forms (update) - previously recorded &amp; un-relocated sites (<i>first 2 pages minimum</i>)</p> <p><input type="checkbox"/> Historic Cultural Property Inventory Forms</p> <p><input checked="" type="checkbox"/> List and Description of isolates, if applicable</p> <p><input type="checkbox"/> List and Description of Collections, if applicable</p>	<p><b>23. Other Attachments:</b></p> <p><input type="checkbox"/> Photographs and Log</p> <p><input type="checkbox"/> Other Attachments</p> <p>(Describe):</p>
<p><b>24. I certify the information provided above is correct and accurate and meets all applicable agency standards.</b></p> <p>Principal Investigator/Responsible Archaeologist: Eric Blinman</p> <p>Signature <u></u> Date 11/25/2015 Title (if not PI):</p>	
<p><b>25. Reviewing Agency:</b></p> <p>Reviewer's Name/Date</p> <p>Accepted ( ) Rejected ( )</p> <p>Tribal Consultation (if applicable):</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><b>26. SHPO</b></p> <p>Reviewer's Name/Date:</p> <p>HPD Log #:</p> <p>SHPO File Location:</p> <p>Date sent to ARMS:</p>

**CULTURAL RESOURCE FINDINGS**

*[fill in appropriate section(s)]*

<b>1. NMCRIS Activity No.:</b> 134245	<b>2. Lead (Sponsoring) Agency:</b> Santa Fe County	<b>3. Lead Agency Report No.:</b>
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**SURVEY RESULTS:**

Sites discovered and registered: **1**  
 Sites discovered and NOT registered: **0**  
 Previously recorded sites revisited *(site update form required)*: **0**  
 Previously recorded sites not relocated *(site update form required)*: **0**  
**TOTAL SITES VISITED: 1**  
 Total isolates recorded: **6**      Non-selective isolate recording?   
 HCPI properties discovered and registered: **0**  
 HCPI properties discovered and NOT registered: **0**  
 Previously recorded HCPI properties revisited: **0**  
 Previously recorded HCPI properties not relocated **0**  
**TOTAL HCPI PROPERTIES (visited & recorded, including acequias): 0**

**MANAGEMENT SUMMARY:**

**IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.**

**SURVEY LA NUMBER LOG**

Sites Discovered:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)
183295		N

Previously recorded revisited sites:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

**MONITORING LA NUMBER LOG** *(site form required)*

Sites Discovered *(site form required)* :      Previously recorded sites *(Site update form required)*:

LA No.	Field/Agency No.	LA No.	Field/Agency No.

Areas outside known nearby site boundaries monitored? Yes , No  If no explain why:

**TESTING & EXCAVATION LA NUMBER LOG** *(site form required)*

**Tested LA number(s)**

**Excavated LA number(s)**

Tested LA number(s)	Excavated LA number(s)





## ADMINISTRATIVE SUMMARY

At the request of Joseph J. Martinez, Project Manager of the Public Works Department for Santa Fe County, the Office of Archaeological Studies (OAS) conducted an archaeological survey on Jacona Land Grant land in Santa Fe County. The survey was performed in anticipation of the construction of the Jacona Collection Site and is located on the Española quadrangle (1984). Twenty-four acres were surveyed with one site, one feature, and seven isolated occurrences being located. The site (LA 183295) was a dump area utilized from the mid-1950s to the early 1960s; the feature was a trench cut-arroyo with modern trash and asphalt deposits. Isolated occurrences consisted of prehistoric ceramics and chipped stone. LA 183295 is recommended eligible for the National Register of Historic Places under Criterion D. Portions of the proposed construction zone overlap with the trash scatter of LA 183295, and detailed historic artifact recording was conducted in and adjacent to those areas of overlap. Although the site is recommended as eligible, OAS believes that this recording has documented the significant data potential within the construction zone and that construction will therefore have no significant effect on the qualities of the site that make it eligible. No further archaeological work is recommended for the project area.

**MNM Project No. 41.1036**  
**Permit No. NM-15-027-S**  
**NMCRIS No. 134245**



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# 1 ↘ Introduction

On Sept. 10-14 and Nov. 18, 2015, OAS personnel conducted an archaeological survey on state land in the area of the Jacona Land Grant in Santa Fe County (Fig. 1.1). The survey was conducted at the request of Santa Fe County prior to the construction of the proposed Jacona Collection Site. Twenty-four acres were surveyed, and one site, one feature, and six isolated occurrences were recorded.

The site (LA 183295) was a dump area utilized from the mid-1950s to the early 1960s; the feature was a trench cut-arroyo with modern trash and asphalt deposits. Isolated occurrences consisted of prehistoric ceramics and chipped stone. LA 183295 is recommended eligible for the *National Register of Historic Places* under Criterion D. A shovel test revealed a lack of subsurface deposits and the re-

worked nature of existing deposits. Portions of the proposed construction zone overlap with the trash scatter of LA 183295, and detailed historic artifact recording was conducted in and adjacent to those areas of overlap. Although the site is recommended as eligible, OAS believes that this recording has documented the significant data potential within the construction zone, that construction will therefore have no significant effect on the qualities of the site that make it eligible. In-field analysis exhausted the site's potential for yielding information that would further contribute to the understanding of the site.

The crew consisted of Richard H. Montoya, Susan M. Moga and Isaiah T. Coan. Eric Blinman, Ph. D., served as the principal investigator for the project. Jessica A. Badner was the project supervisor.

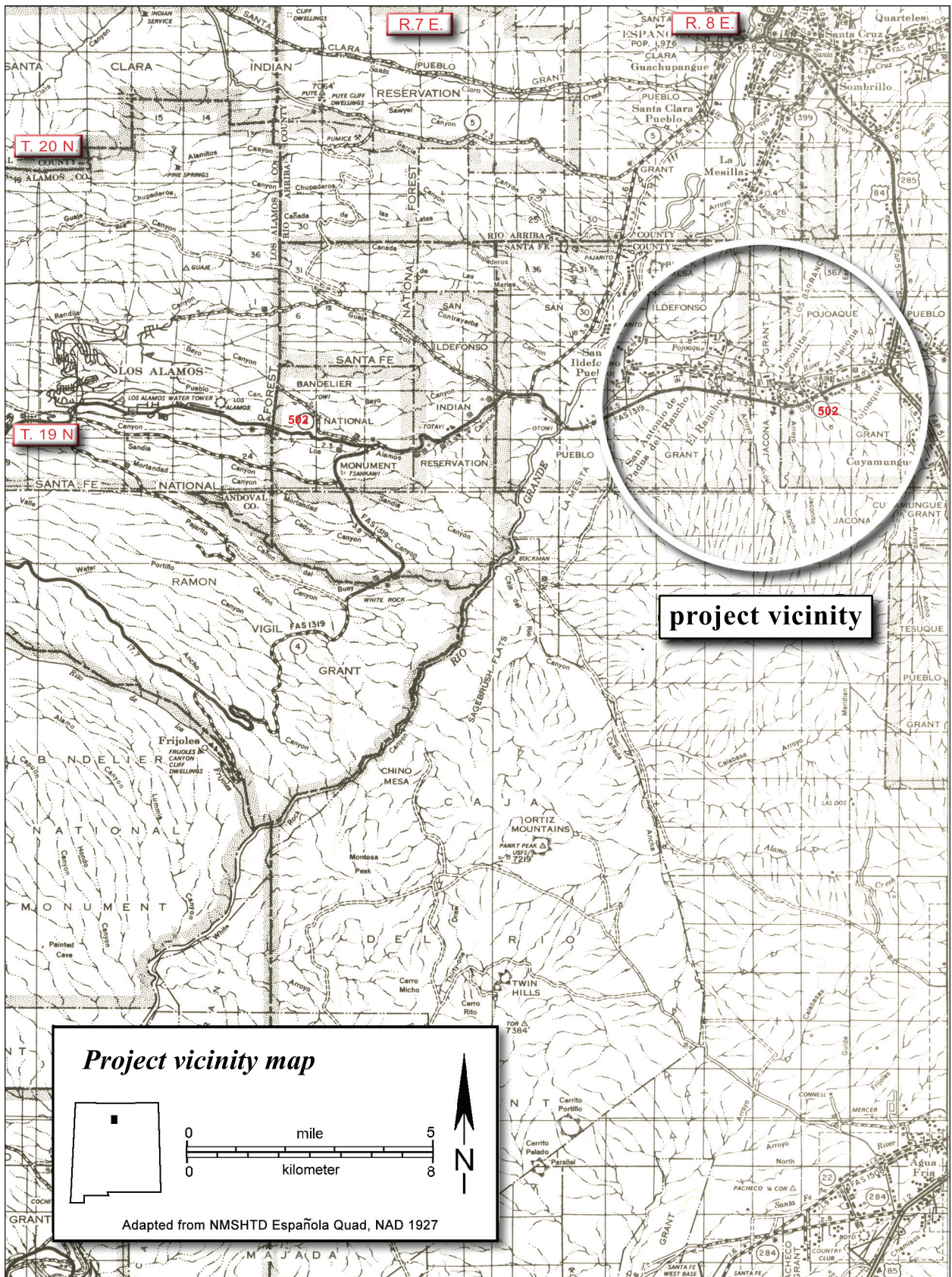


Figure 1.1. Project vicinity map.



## 2 Environmental Setting

Adapted from James L. Moore (in prep.)

The US 84/285 project area falls within the Southern Rocky Mountain Province of the western United States. The main feature of this province is the central Rio Grande Valley, flanked to the east and west by parallel mountain ranges that form the southern end of the Rocky Mountains. Both ranges are linear in form and run north-south. The Sangre de Cristo Mountains are on the eastern side of the Rio Grande Valley, while the Tusas (sometimes referred to as the southern San Juan), Jemez, and Nacimiento ranges are on the western side (Fenneman 1931). The project area is located in the southern Española Basin. The Rio Tesuque and Rio Pojoaque, which drain near the project area, are tributaries of the Rio Grande and merge before flowing into the Rio Grande. In this chapter, we provide details of the geology and geomorphology of the region, the biotic environment, and climate.

### GEOLOGY

The Española Basin is considered an extension of the Southern Rocky Mountain Province (Fenneman 1931) and is enclosed by mountains and uplifted plateaus (Kelley 1979:281). The Rio Grande flows through the long axis of the basin, entering through the Taos Gorge to the north and exiting through the White Rock Gorge to the south (Kelley 1979). Boundaries for this physiographic feature include the Taos Plateau to the north; the Brazos and Tusas mountains to the northwest; the Sangre de Cristo Mountains to the east; the Cerrillos Hills and northern edge of the Galisteo Basin to the south; the La Bajada fault escarpment and Cerros del Rio hills to the southwest; and the Jemez volcanic field to the west.

The Rio Chama is the main tributary of the Rio Grande in the Española Basin. The confluence of those rivers is near the center of the basin (Kelley 1979). The Rio Tesuque and Rio Pojoaque are the principal drainages of the southern basin, in which the project area is located. These originate in the

Sangre de Cristo Mountains. Both streams flow north through narrow valleys and merge northwest of Pojoaque Pueblo, then trend west to empty into the Rio Grande (Anschuetz 1986).

### SOILS

Soils in the project area can be divided into two groups based on geomorphology. Soils of the Dissected Piedmont Plain group are most common, with soils of the Recent Alluvial Valleys group also occurring (Folks 1975). The Pojoaque-Rough Broken Land soil association is comprised of the former group and is derived from Quaternary sediments and alluvium of the Tesuque formation of the Santa Fe Group (Lucas 1984). These deep soils are well-drained and occur on rolling to hilly uplands dissected by intermittent gullies and arroyos. A few, nearly level to gently sloping valley bottoms and floodplains next to intermittent streams are also included in the association. Most of these soils have formed in unconsolidated, coarse- to medium-textured and gravelly old alluvium and have calcareous, sandy clay loam, sandy loam, or gravelly sandy loam surface layers. Lag gravel deposits often cover the surface of these soils (Folks 1975:4; Maker et al. 1974:33).

Soils of the Rough Broken Land soil association occur on broken topography, steep slopes, and rock outcrops. This association is dominated by rock outcrops and small areas of highly variable soils (Maker et al. 1974:24). Rough Broken Land soils are intermingled with Pojoaque soils. Both soils tend to occur together on ridgetops between drainages.

The El Rancho-Fruitland soil association dominates the soils of the Recent Alluvial Valleys group. They are deep and loamy, like the Pojoaque soils, but tend to occur on low terraces along the Rio Tesuque and Rio Pojoaque. El Rancho-Fruitland soils are derived from sedimentary rocks of the Tesuque formation and granites from the Sangre de Cristo Mountains (Folks 1975:3). They are currently used

for irrigated crops, while the Pojoaque soils are not used in modern agriculture.

## CLIMATE

In terms of temperature and precipitation, the climate of New Mexico is moderate and arid to semi-arid. There is plenty of sunshine. Skies are clear. Relative humidity is low, and the amount of evaporation over open water is high (Tuan et al. 1973:185). The temperature range, between day and night and winter and summer, is wide because the dry, clear air of Northern New Mexico allows rapid heating and cooling (Tuan et al. 1973:185). Three general climatic zones are recognized in New Mexico: arid, semi-arid, and sub-humid/humid, with differences controlled by latitude, location in relation to moisture-bearing winds, and variation in elevation (Tuan et al. 1973:186, 188). The project area is in a semi-arid zone near a boundary with a sub-humid zone (Tuan et al. 1973:187).

Temperature is determined by latitude and elevation. The latter is the more powerful determinant in New Mexico, with temperatures decreasing more rapidly with a rise in elevation than with an increase in latitude (Tuan et al. 1973). Mean annual temperatures reported for the Española area are 9.7° to 10.4° C, or 49.5° to 50.7° F (Gabin and Lesperance 1977). Summers tend to be warm, while winters are cool. The Española area averages 152 frost-free days during the growing season (Reynolds 1956). However, Tuan et al. (1973:79) note that there are some problems with modern meteorological measurements. A standard instrument shelter is normally positioned 1.83 m (6 ft) above the ground surface. Closer to the ground, where most crops grow, frosts can occur later in the spring and earlier in the fall (Tuan et al. 1973:79). This factor is not taken into account in calculations of frost-free days, so the frost-free season at ground level may actually be shorter than the average.

## FLORA

The distribution of plants is conditioned by a number of factors including availability of water, exposure, and soil type. The types of plants growing adjacent to the Rio Tesuque differ from those occupying the floodplain and adjacent upland areas. Three basic plant communities are found in the project area:

juniper-piñon grassland, dry riparian, and riparian-wetlands. The juniper-piñon grassland is the most common community and consists of an overstructure dominated by juniper and piñon pine, with an understructure containing muhly grass, grama grass, other less common grasses, four-wing saltbush, sagebrush, rabbitbrush, prickly pear, and cholla.

A dry riparian habitat is present in arroyo bottoms, on arroyo banks, and on floodplains adjacent to some of the wider drainages (Anschuetz 1986). Plants commonly found in this community include rabbitbrush, four-wing saltbush, mountain mahogany, scrub oak, Rocky Mountain beeplant, Indian ricegrass, three-awn grass, side oats grama, and flax (Pilz 1984).

The riparian-wetland habitat occurs only along perennial streams such as the Rio Tesuque and Rio Pojoaque (Anschuetz 1986). Today, this habitat supports willow, cottonwood, tamarix, rushes, and sedges (Pilz 1984).

## FAUNA

In general, juniper-piñon woodlands support at least 70 species of birds and 48 species of mammals, with species distribution determined by geographic location and type of habitat (Gottfried et al. 1995:104). Birds that commonly live in juniper-piñon woodlands include piñon jay, scrub jay, gray flycatcher, mockingbird, lark sparrow, and plain titmouse; turkeys may be present where ponderosa pine is available for roosting (Gottfried et al. 1995:104). Several types of raptors also occur in this zone including golden eagle, Swainson's hawk, Cooper's hawk, red-tailed hawk, kestrel, screech owl, and great-horned owl (Gottfried et al. 1995:105). Many species of bats have been netted at night in juniper-piñon woodlands, but whether they simply forage there or roost in the trees is unknown (Gottfried et al. 1995:105).

Artiodactyls commonly found in juniper-piñon woodlands include mule deer and elk, with pronghorns living in more open zones. Predators include mountain lion, bobcat, coyote, gray fox, long-tailed weasel, western spotted skunk, and hog-nosed skunk (Gottfried et al. 1995:105). Common small mammals are cliff chipmunk, rock squirrels, brush mice, piñon mice, rock mice, white-throated woodrats, and Mexican woodrats (Gottfried et al. 1995:105). Jackrabbits, cottontails, prairie dogs,

pocket gophers, and kangaroo rats also live in this environment (Anschuetz 1986).

Small numbers of mule deer now occur in the general region, as do black bears (Pilz 1984). Animals originally common in the higher elevations of the region include elk, mule deer, gray wolf, coyote, bobcat, mountain lion, squirrel, various species of mouse, chipmunk, prairie dog, woodrat, jackrabbit, cottontail, skunk, raccoon, black bear, and grizzly bear (Allen 2004; Anschuetz 1986; Fiero 1978).

Bighorn sheep are native to the Jemez and Sangre de Cristo Mountains and occur on portions of the Pajarito Plateau (Allen 2004:30). The Pueblo of Tesuque has reintroduced elk to the area and maintains a small, protected herd. The Rio Grande Valley, adjacent to the project area, is an important corridor for migratory waterfowl including geese, cranes, and ducks (Allen 2004:30). Waterfowl winter in marshes along the Rio Grande and fly up and down the river on daily foraging trips.



### 3 Cultural History Overview

Adapted from Stephen C. Lentz et al. (1994)  
and Matthew J. Barbour et al. (2014)

Researchers in the Rio Grande area have perceived the developments in the area as departing from the traditional Pecos Classification (Kidder 1927). Wendorf and Reed (1955) have redefined the Pueblo I through Pueblo V periods based on the occurrence of ceramic types, changes in settlement patterns, economy, and other characteristics. The principal temporal intervals defined by Wendorf and Reed include the Developmental, Coalition, and Classic periods.

#### PREHISTORIC PERIOD

**The Developmental Period (AD 600–1200):** The early portion of the Developmental period in the Northern Rio Grande dates between AD 600 and 900 and is comparable to the late Basketmaker III and Pueblo I periods of the Pecos Classification. Late Basketmaker sites are rare and tend to be small with aceramic assemblages composed primarily of Lino Gray, San Marcial Black-on-white, and various plain brown and red-slipped wares. The majority of the documented Early Developmental sites are in the Albuquerque and Santa Fe areas (Frisbie 1967; Reinhart 1967; Peckham 1984). Although the settlement of the Rio Grande drainage has typically been attributed to immigration from southern areas (Bullard 1962; Jenkins and Schroeder 1974), investigations north of Albuquerque suggest an in situ development of an indigenous population (Frisbie 1967; Lent et al. 1986).

Within the vicinity of the present study area, early Developmental sites are scattered along the Rio Tesuque and Rio Nambe drainages (McNutt 1969; Peckham 1984:276). Based on excavation data, Early Developmental habitation sites are small villages of shallow, circular pithouse structures. The sites commonly feature between one and three pithouses (Stuart and Gauthier 1981). Rectilinear surface storage cists are often found in association with these pithouses. These pit structures appear to be more similar to San Juan Anasazi examples than

those of the Mogollon, although San Juan architectural “elaborations” such as benches, partitions, and slab linings are absent (Cordell 1979:43). Sites of the Developmental Period tend to be located near intermittent tributaries of the Rio Grande, presumably for access to water and arable land. A preference for elevated settings near hunting and gathering resources is also exhibited, possibly for their potential use as an overlook (Cordell 1979).

The transition to above-ground rectilinear and contiguous habitation structures is more apparent in the Santa Fe district (Wendorf and Reed 1955:140). However, McNutt (1969) reports the presence of pithouses in the Red Mesa component of the Tesuque Bypass site near modern-day Tesuque Pueblo. A Late Developmental community (LA 835, the Pojoaque Grant site), is composed of 12–15 small roomblocks with associated kivas and a Cibola-style great kiva. Ceramics recovered through excavation in conjunction with tree-ring dates suggest an occupation between AD 800 and 1150. The variety of pottery and other materials of nonlocal origin associated with the site suggest that LA 835 may have served as a regional economic center (Stubbs 1954). At the northeastern juncture of the Pojoaque Pueblo access road and US 84/285 is LA 61, the ancestral component of Pojoaque Pueblo. The associated site complex consists of an extensive series of prehistoric Anasazi components and the historic and modern Tewa pueblo of Pojoaque. Pueblo occupation in the area began around AD 950, and has continued, with occasional abandonment, to present day. Ceramics associated with the site include pottery from the Developmental, Coalition, and Historic periods, i.e., mineral-painted wares, organically painted wares, biscuit wares, glaze wares, micaceous wares, historic Tewa polychromes, and polished black-on-red and buff types.

**The Coalition period (AD 1200–1325):** The Coalition period in the Northern Rio Grande is marked by a shift from mineral pigment to organic paint (primarily Santa Fe Black-on-white) in

decorated pottery. There are substantial increases in the number and size of habitation sites coinciding with expansion into previously unoccupied areas. Although above-ground pueblos were built, pit structure architecture continued into the early phases of this period. Rectangular kivas, which were incorporated into roomblocks, coexisted with the subterranean circular structures (Cordell 1979:44). Frisbie (1967) notes the shift away from less optimal upland settings and a return to the permanent water and arable land adjacent to major drainages.

In the northern Rio Grande, the Coalition period is characterized by two interdependent trends in population and settlement reflected in substantial population growth. These trends include a significant increase in the number and size of the habitation sites and the expansion of permanent year-round settlement by Anasazi agriculturalists into areas of greater latitude and elevation. The Chama, Gallina, Pajarito Plateau, Taos, and Galisteo Basin districts, which had been the focus of infrequent Anasazi use prior to AD 1100–1200, were intensively settled during this period (Cordell 1979). Among representative sites of the Coalition period is LA 4632, LA 12700, and Otowi, or Potsuwii (LA 169).

**The Classic period (AD 1335–1600):** The Classic period postdates the abandonment of the San Juan Basin by sedentary agriculturalists. This period is characterized as a time when regional populations may have reached their maximum size and large communities with multiple plaza and roomblock complexes were established (Wendorf and Reed 1955:13).

The beginning of the Classic period in the northern Rio Grande coincides with the appearance of locally manufactured red-slipped and glaze-decorated ceramics in the Santa Fe, Albuquerque, Galisteo, and Salinas area after AD 1315 and of biscuit ware in the Pajarito Plateau, Santa Fe, and Chama areas (Mera 1935; Warren 1979). In the Santa Fe area, the Galisteo Basin saw the evolution of some of the Southwest's most spectacular ruins. Many of these large pueblos were tested or excavated by N. C. Nelson in the early part of the twentieth century (Nelson 1914, 1916). Possibly the first stratigraphic excavation in the United States was executed by Nelson on the roomblocks and middens of San Cristobal Pueblo (LA 80). Other projects in the Galisteo area include those by Smiley, Stubbs, and

Bannister (1953); the School of American Research (Lang 1977); a project at San Lazaro (LA 91, LA 92) by Southern Illinois University (Smiley 1988); and in the summer of 1992, a project at Pueblo Blanco for Northern Illinois University (Creamer in prep.). The majority of these Classic period sites were established in the early 1300s. By the late 1400s, this area appears to have experienced a substantial decline in population.

Sites of the Classic period are characterized by a bimodal distribution, large communities associated with small structures, fieldhouses, or seasonally occupied farmsteads. This contrasts with the preceding Coalition period, during which a greater range of site types characterized settlement patterns. Investigations of the large biscuit ware pueblo sites on the Pajarito Plateau include initial studies by Adolph Bandelier (1882), Hewett (1953), and Steen (1977), who recorded sites within Frijoles Canyon including Pueblo Canyon, Tshirege, and Tsankawi. Several large archaeological projects have included Cochiti (Biella and Chapman 1979) and include a UCLA intensive survey and limited excavation project (Hill and Trierweiler 1986) and a National Park Service survey of Bandelier National Monument (McKenna and Powers 1986).

The biscuit series and incised wares were produced in study areas within the vicinity of the project. Beginning with Wiyo Black-on-white (AD 1300–1400), the series includes Biscuit A (AD 1375–1450); Biscuit B (AD 1400–1500 or 1550); and Sankawe Black-on-cream (AD 1500–1600) (Bretternitz 1966). The appearance of Potsuwii Incised around the time that Biscuit B became common, suggests contact with Plains Indian groups.

The addition of a red slip to Sankawe (or Tsankawi) Black-on-cream was the origin of the Tewa Polychrome series, ancestral to types that are still being produced in the Rio Grande pueblos. The Chama Valley and Pajarito Plateau were mostly abandoned by the end of this period, and the population was largely concentrated along the Rio Grande when the Spanish arrived in AD 1540.

Native groups underwent numerous changes in lifestyle, social organization, and religion after the Spanish settlement of New Mexico. The introduction of new crops and livestock contributed to major changes in subsistence, as did mission programs that taught new industries (Simmons 1979: 181). Incursions by Plains Indians caused the aban-

donment of many pueblos and a constriction of the region occupied by Pueblo groups (Chavez 1979; Schroeder 1979). A combination of new diseases to which the Pueblos had no natural defenses, intermarriage, conflict attendant with the Pueblo Revolt from 1680–1692, and abandonment of their traditional life contributed to a significant decrease in the Pueblo population over the next few centuries (Dozier 1970; Eggan 1979).

## HISTORIC PERIOD

**Exploration, 1539–1597:** New Spain began exploring its northern expanse with a series of punctuated expeditions. Initial exploration by de Niza and Coronado in 1539 and from 1540–1541 were based on information gathered by Alvar Nuñez Cabeza de Vaca and his companions during a previous foray into the area. No other formal contact between New Spain and New Mexico occurred until 1581, when Father Augustin Rodriguez and Captain Francisco Sanchez Chamuscado led a group up the Rio Grande to Pueblo country (Hammond and Rey 1966). Antonio de Espejo led a party of explorers into New Mexico in 1582, ostensibly to rescue two priests left by the Rodriguez-Chamuscado expedition. Between 1590 and 1591 Gaspar Castano de Sosa entered the region. He was arrested for colonizing without appropriate approval and was returned to Mexico (Simmons 1979). In 1593, a second attempt at colonization was made under the leadership of Francisco de Legua Bonilla and Antonio Gutierrez de Humana, but the expedition was nearly decimated by Indians (Hammond and Rey 1953).

**Colonization, 1598–1680:** Juan de Oñate established the first successful colony in New Mexico at San Juan Pueblo in 1598. By 1600, the Spanish had moved into San Gabriel del Yunque, sister village to San Juan, which had been abandoned by its residents for Spanish use (F. Ellis 1987). Oñate was removed from the governorship in 1607, and replaced by Pedro de Peralta, who founded Santa Fe and moved the capital there around 1610 (Simmons 1979).

The early period of Spanish occupation was predicated on Christianization of the Pueblos. Oñate's colony was a disappointment—they failed to find the mineral wealth for which they had originally traveled north. The Crown almost abandoned New Mexico because of its poverty, but the

numerous native inhabitants provided a good opportunity for the Church to win new souls. The colony was allowed to continue, with its maintenance almost entirely underwritten by the royal treasury (Simmons 1979:181). Because seventeenth century New Mexico was primarily a mission area, the Church was extraordinarily powerful and influential, causing considerable conflict with the secular government (R. Ellis 1971:30-31). Beginning in the 1640s, this struggle weakened the Spanish hold on New Mexico (Simmons 1979:184). New Mexico was supplied by wagons from New Spain during this period, a service controlled by the missions (Moorhead 1958). Caravans were scheduled for every three years, but their departures were actually quite irregular (Moorhead 1958).

Only a few early Spanish sites have been excavated. Materials from this period were found in Santa Fe at the Palace of the Governors and during excavations at the La Fonda Parking lot (Wiseman 1992). A few early Spanish sites were excavated at Cochiti Reservoir. Two, the Cochiti Springs (LA 34) and Las Majadas (LA 591) sites, were occupied by Spanish settlers, while a third (LA 5013) was either Spanish or Pueblo (Bussey and Honea 1971; Lumbach et al. 1977; C. Snow 1979; D. Snow 1973). The Signal site (LA 9142) near the Galisteo Dam may also date to this period (Alexander 1971).

**The Pueblo Revolt and Reconquest, 1680–1694:** A combination of religious intolerance, forced labor, the extortion of tribute, and Apache raids led the Pueblo Indians to revolt in 1680, driving Spanish colonists from New Mexico. The Pueblos resented Spanish attempts to supplant their traditional religions with Christianity, and numerous abuses of the *encomienda* and *repartimiento* systems fueled their unrest (Forbes 1960; Simmons 1979). These problems were further exacerbated by nomadic Indian attacks, either in retaliation for Spanish slave raids or because of drought-induced famine (R. Ellis 1971:52; Sando 1979:195). The colonists who survived the revolt retreated to El Paso del Norte, accompanied by the few Pueblo Indians who remained loyal.

Attempts at reconquest were made by Antonio de Otermin in 1681, and Domingo Jironza Petriz de Cruzate in 1687, but both failed (R. Ellis 1971). In 1692, Don Diego de Vargas negotiated the Spanish return, exploiting the factionalism that had once again developed among the Pueblos (R. Ellis

1971:64; Simmons 1979:186). De Vargas returned to Santa Fe in 1693, and re-established the colony. Hostilities continued until around 1700, but by the early years of the eighteenth century the Spanish were again firmly in control.

**Spanish Colonial Period, 1694–1821:** Though failing in its attempt to throw off the Spanish yoke, the Pueblo Revolt caused many changes. The hated *encomienda* system of tribute was never re-established, and the missionary system was scaled down (Simmons 1979). The New Spanish population grew rapidly and soon surpassed that of the Pueblos. Relations between the Spanish and Pueblos became more cordial. The post-Revolt Spanish colonists tended to be small farmers and herdsman, living in scattered communities that did not demand the amount of forced native labor that the pre-Revolt economic system had.

Spanish settlements were loose clusters of *ranchos*, sometimes grouped together into defensive *plazas*. The increased number of colonists created a great demand for land in the Rio Grande core area, and a drop in the Pueblo population caused a shortage of cheap labor. These trends resulted in a shift from large land holdings to smaller grants (Simmons 1979). The royal government continued to subsidize New Mexico, but the area now served as a buffer against the enemies of New Spain (Bannon 1963) and not as a mission field. New Mexico was a distant province on the frontier of New Spain and continually suffered from a lack of supplies while shielding the inner provinces from Plains Indian raids and the ambitions of the French in Louisiana. These aspects of frontier life are critical to the understanding of Spanish Colonial New Mexico.

Following the Pueblo Revolt, the caravan service continued, but by the middle of the eighteenth century, the merchants of Chihuahua had gained control of the service (Moorhead 1958). A considerable trade developed between New Mexico and Chihuahua during this period (Athearn 1974), benefiting Chihuahuan merchants at the expense of New Mexicans.

This was documented by Father Juan Augustin de Morfi in 1778, who described the dismal situation of the New Mexican merchants (Simmons 1977). Not only did the Chihuahuan merchants inflate prices, they also invented an illusory monetary system that they manipulated to increase profits even further (Simmons 1977:16). Thus, New Mexico

was poorly supplied with goods sold at exorbitant prices. This problem was partly rectified by trading with local Indians for essentials such as pottery, hides, and agricultural produce. Some goods were apparently produced by cottage industries. Unfortunately, many products had no local substitutes.

Metal, especially iron, was in short supply (Simmons and Turley 1980). Nearly all iron came from Spain. Colonial iron production was forbidden by royal policy to protect the monopoly enjoyed by Vizcaya (Simmons and Turley 1980:18). Though imported iron was relatively cheap in Mexico, by the time it arrived in New Mexico it was quite costly. Not only did the lack of metal limit the production of tools and weapons, it also made these items very expensive.

The lack of metal, as well as the unreliable supply system, hurt New Mexico in its role as a defensive buffer. Numerous accounts mention the scarcity of firearms and other weapons in the province (Kinaird 1958; Miller 1975; Reeve 1960; Thomas 1940). In addition to a lack of armaments, few soldiers were stationed in New Mexico, forcing the use of militias and other auxiliary troops. Continued conflict with nomadic Indians led to the adoption of a defensive posture by many settlements. Even individual ranches were built as fortresses.

Mexico declared its independence from Spain in 1821, bringing two major changes to New Mexico — a more lenient land grant policy and the expansion of the trade network (Levine et al. 1985). Trade between Missouri and Santa Fe began soon after independence and dominated events in New Mexico for the next quarter century (Connor and Skaggs 1977).

**Mexican Period, 1821–1846:** At the beginning of the nineteenth century, Spain's hold on Mexico and the northern territories had diminished significantly. Recognizing that the citizens of New Mexico could not partake in normal political, economic, and social activities of the declining empire, Spain allowed New Mexico to operate in virtual independence (LeCompte 1989; Westphall 1983).

The positive effect was that New Mexico could determine much of its social and economic future. The negative effect was that the economic problems, compounded by limited finances, limited access to durable goods, and slow responses to military and administrative issues, created a stagnant economic environment. In addition, pressure from the United States to open up economic ties, applied through



small-scale economic reconnaissance, increased in frequency between 1803 and 1821.

With Mexico's independence from Spain in 1821, New Mexico became a frontier province and an economic avenue to the commercial markets and production centers of the United States. Two major changes instituted by the new government had important consequences in Northern New Mexico: These were the establishment of normal economic relations with the United States through overland trade on the Santa Fe Trail and the abolition of the caste system, which meant that everyone was a Mexican citizen.

**American Territorial Period, 1846–1912:** The quest for statehood during New Mexico's Territorial period was one of the longest endured by any state of the Union. Following the United States' acquisition of new southwestern and western territories, there was a disorderly and turbulent rush to own or control land and mineral and natural resources. The struggle for control created a political, economic, and social order that still affects how New Mexico functions today.

After being designated a territory of the United States under the Organic Act of 1851, New Mexico changed politically (Lamar 1966:13). The act set up the territorial governorship, from which important appointments were made in the territorial administration. The territorial legislative assembly dealt with issues on a local level, while the territorial governor's job was to ensure that federal interests were served (Lamar 1966:14). The center of government remained in Santa Fe, as it had been during the Spanish and Mexican administrations.

From 1880–1912, economic growth in the Santa Fe area began to lag as other areas of the state—Las Vegas, the Mesilla Valley, and Albuquerque—grew in importance. Much of this economic slowdown can

be attributed to the lack of a through railroad (Elliott 1988:40). Santa Fe was no longer an important economic center, only a stop at the end of a spur on the Atchison, Topeka, and Santa Fe Railway. Although Santa Fe marked the end point of the Denver and Rio Grande Railway, which had local and regional significance, the route had little national importance as it did not tie directly to the east-west transportation corridor (Pratt and Snow 1988:419).

**Statehood to Modern Times, 1912–Present:** New Mexico was delayed in its quest for statehood by Eastern politicians who viewed the small population, the arid climate, and the Spanish-speaking majority of the territory as liabilities. Most New Mexicans favored statehood but had different conditions under which they would accept it. Some citizens feared statehood because of the potential for increased taxation, domination by one ethnic group over the others, and the loss of federal jobs under a state-run system. These factors, combined with political factionalism in New Mexico, resulted in a long, drawn out struggle to statehood (Larson 1968:302-304).

On January 6, 1912, New Mexico was admitted into the Union as a state. After statehood, the patterns that were established in the Territorial period continued. New Mexico experienced slow population growth, with most settlements concentrated along the Rio Grande corridor and around Roswell in the southeast. More than half the state land had a population density of fewer than five people per square mile (Williams 1986:135); this was partly because a large area of land, part of the National Trust, could not be settled. Major industries in the state continued to be mining, ranching, lumber, farming within the Pecos and Rio Grande irrigation districts, and tourism (Jenkins and Schroeder 1974:77).



## 4 ↘ Previously Recorded Sites

Archival research was conducted in the New Mexico Cultural Resource Information System (NMCRIIS) database to identify archaeological sites within a 2,000 m (6,562 ft) radius of the project area. This research concluded that there are 10 archaeological sites representing eight different temporal components (Table 4.1). Seven of the sites are defined as

Puebloan sites, followed by three Hispanic sites, two Anglo sites, and one site that is unknown. Pottery found on three of these sites (LA 45255, LA 63, and LA 50837) were characterized as Biscuit B Black-on-white. During this survey, the pottery that was located consisted of Biscuit B and Biscuit A Black-on-white, consistent with other sites in the area.

Table 4.1. Archaeological sites located within 2,000 m (6,562 ft) of the project area by component.

LA	Component	Dates (AD)	Total
<b>Pueblo</b>			
45255	Anasazi unknown	1100–1300	1
140795	Anasazi artifact scatter	1100–1600	1
128715	Anasazi features and artifact scatter	1300–1400	1
128716	Anasazi features and artifact scatter	1300–1450	1
63	Anasazi unknown	1300–1600	1
45255	Anasazi unknown	1300–1600	1
50837	Anasazi artifact scatter	1100–1300	1
<b>Subtotal</b>			<b>7</b>
<b>Hispanic</b>			
63	Hispanic unknown	1539–1993	1
110974	Hispanic ranching/agriculture	1539–1996	1
147805	Hispanic commercial	1950–1985	1
<b>Subtotal</b>			<b>3</b>
<b>Anglo</b>			
140795	Anglo artifact scatter	1846–1945	1
139098	Anglo ranching/agriculture	1912–1980	1
<b>Subtotal</b>			<b>2</b>
<b>Unknown</b>			
181208	Unknown	Unknown	1
<b>Subtotal</b>			<b>1</b>
<b>Total</b>			<b>13</b>



## 5 *↘* Survey Methods and Results

OAS surveyed 24 acres of state land in the Jacona Land Grant area in Santa Fe County. The archaeological survey was conducted by three archaeologists walking a north–south transect 10 m (33 ft) apart until 100 percent of the area had been covered. This methodology was maintained in the plated project area as well as in the highway right-of-way. A Geo XH GPS unit with submeter accuracy was used to confirm the survey boundaries and to record features and isolated occurrences (IOs). Ground visibility was approximately 50 percent in areas of high vegetation and 90 percent where the vegetation was not too dense. On survey days the weather was clear and was 85°F to 89° F.

LA 183295 (Feature 2), one modern refuse deposit (Feature 1), and six IOs were recorded. A site map was drawn with the aid of a compass and GPS unit. Digital photographs were taken and a Laboratory of Anthropology form was filled out. The locations of the feature and IOs were recorded by GPS, artifacts were described, and selected diagnostics were digitally photographed and mapped with a GPS unit. A test probe was excavated 20 cm below the ground surface. No artifacts or charcoal were observed in the fill, which consisted of a loose silty, light brown loam. Alluvial erosional cuts made by the arroyos were also observed; no cultural deposits were present. An in-field analysis of the artifacts on the surface of LA 183295 was also conducted. An 80 m transect line was placed on an east–west axis across the site, and artifacts were analyzed every meter. This was done to date the site and to get an idea of artifact distribution across the site.

### LA 183295

LA 183295 (Feature 2) was a trash dump consisting mostly of domestic refuse most of which was alcohol bottles and cans (Fig. 5.1). Most of the artifacts on the bladed flat area of the site were scattered throughout. Two artifact concentrations (Features 2.1 and 2.2) of bottles and cans were dumped over the edge of a flat

bladed surface toward an arroyo on a north–south axis. Historic artifacts related to this feature have initiation dates as early as the late nineteenth century, but termination dates tend to be from the 1960s to the present. Mean dates point to the 1950s and 1960s as the most likely period of trash dumping at the site. It appears that this area was not used for dumping after the 1960s due to the absence of modern trash. Observed natural erosional cuts into the edge of the embankment and a test probe in the middle of the site confirmed that there was no depth to the cultural deposits on the site.

### *Setting*

**Location:** See Appendix.

**Land Status:** Santa Fe County, Jacona Land Grant

**Physical Environment:** LA 183295 is located in a flat (possibly bladed) area with a dirt road to the east and arroyos to the north, south, and west.

**Elevation:** 1,762 m (5,782 ft)

**Vegetation:** The vegetation community in this area is characterized as Great Basin desert scrubland with an understory of various native and non-native grasses and weeds; the overstory includes piñon, juniper, and cottonwood.

**Surface Visibility:** The overall site visibility is approximately 90 percent with low vegetation and 50 percent in areas with a higher vegetative cover.

**Depositional Environment:** The site is near several arroyos. There is evidence of alluvial erosion.

### *Description*

**Site Type:** Simple features

**Cultural Affiliation:** Hispanic

**Temporal Period:** 1930s–1960s

**Site Size:** 97 m (318 ft) north–south by 88 m (289 ft) east–west; 24 acres

**Depth of Cultural Deposits:** A 30 cm by 30 cm test probe was excavated 30 cm below the ground surface. The fill was screened through 1/8-inch-mesh hardware cloth. No artifacts or charcoal were observed in the fill,

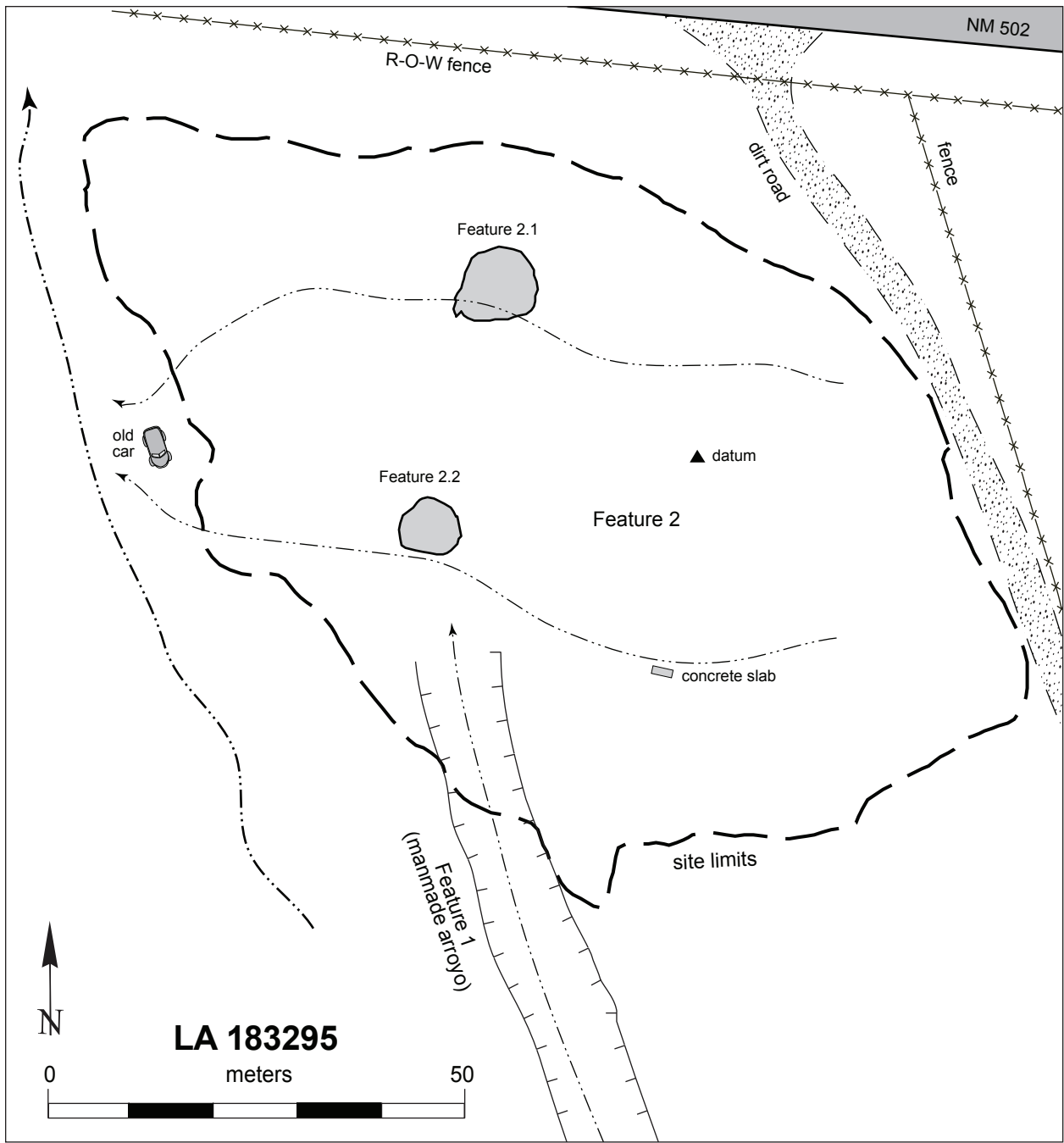


Figure 5.1. LA 183295, Feature 2, site map.



Figure 5.2. LA 183295, Feature 2.1.

which consisted of a loose silty, light brown loam. Alluvial erosional cuts made by the arroyos were observed. No cultural deposits were present.

**Site Integrity:** The site was in poor condition overall due to blading events. It appeared that the site had been bladed at some point to push the trash into an arroyo. There were also some alluvial erosional cut areas from the arroyos in the vicinity.

## FEATURES

Two artifact concentration features (Features 2.1 and 2.2 in Feature 2) were identified at LA 183295 and were subjected to in-field analysis. Another feature (Feature 1) appears to be recent and was not subjected to analysis.

**Feature 2.1** is an artifact concentration that consists of mostly cans and bottles (Fig. 5.2). It measures 9.10 m (30 ft) north-south by 10.10 m (33 ft) east-west and 1 m (3.3 ft) in height, from the top of the embankment to the arroyo. Cans and bottles along with some other domestic trash have been pushed over the northern edge of the site and toward an arroyo.

**Feature 2.2** is similar to Feature 2.1 and is an artifact concentration that consists of mostly cans and bottles (Fig. 5.3). It measures 7.21 m (24 ft) north-south by 8.17 m (27 ft) east-west and 1 m (3.3 ft) in height, from the top of the embankment to the arroyo. Cans and bottles along with some other domestic trash have been pushed over the western edge of the site and toward an arroyo.

**Feature 1** is a cut drainage or arroyo that had been filled with trash over a period of time (Fig. 5.4). It contains different episodes of sporadic dumping that include asphalt, concrete, and car parts. Feature 1 measures 100.84 m (331 ft) north-south by 10.14 m (33 ft) east-west and was 1.5 m (5 ft) in height. It is difficult to determine if the land form is natural or if it was initially excavated to drain water. The sides are straight and steep and there are no curves in this feature as are usually seen in a natural arroyo. This feature is also overgrown with ragweed. Ground visibility is limited due to the cover. Surrounding arroyos in the vicinity do not have ragweed in them and are filled with sand and gravels. These factors indicate that this feature may have been excavated to



Figure 5.3. LA 183295, Feature 2.2.

drain water in the area. Feature 1 appears to be recent and contains local trash, car parts, and concrete and asphalt from road construction. Located south of the dump area, trash has been repeatedly pushed into the arroyo cut. Therefore, the recent trash at Feature 1 was not subjected to in-field analysis. Feature 1 slightly overlaps the site area.

#### ISOLATED OCCURRENCES

A total of six isolated occurrences (IOs) were located throughout the survey area. The ground cover in the area where the IOs were located was not too dense and there was approximately 80–90 percent

visibility. The six IOs included 13 artifacts, which all dated to the prehistoric time period.

Ceramics located in the IOs were similar to those found in the vicinity. LA 63, LA 45255, and LA 50837 (approximately 500 m, 1,640 ft, away) also had Biscuit B Black-on-white present. Biscuit A has a date range from AD 1350–1450 and Biscuit B dates from AD 1400–1550.

After the survey was completed, the crew went back to IOs that were located in the construction zone area for a more thorough investigation and to confirm that there were no features associated with the IOs. No additional features were located in the area.



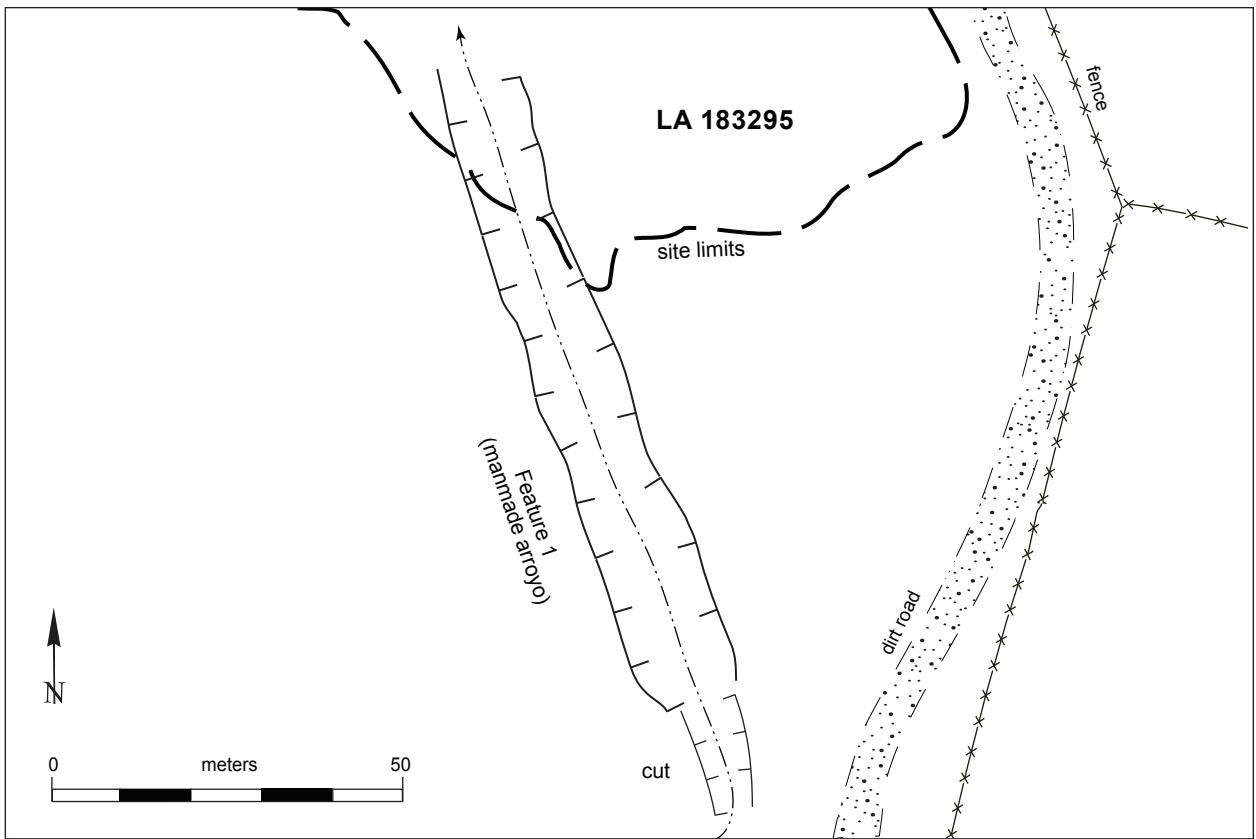


Figure 5.4. LA 183295, Feature 1, site map.



## 6 $\searrow$ Euroamerican Artifact In-field Analysis

Susan M. Moga

OAS conducted an in-field Euroamerican artifact analysis of two concentrations (Features 2.1 and 2.2) and of a linear transect within LA 183295 but outside of the concentrations. The concentrations were sampled in order to document the diversity of artifact types in each. Artifacts were included in the sample if they had diagnostic features that would contribute to dating or to functional interpretation. Unique items were included, and redundant items were recorded, with quantity magnitude estimates. All artifacts along the transect were recorded.

Feature 1 was a recent trash dump for locals and a dumping station of asphalt and concrete from road construction. Trash had been dumped on the surface and pushed by a backhoe into an adjacent arroyo. This recent trash was not recorded.

The artifacts recorded at the Feature 2.1 and Feature 2.2 concentrations (n = 597) came from a variety of functional categories utilized in the OAS Standardized Historic Artifact format. (Boyer et al. 2007). These categories include: Economy & Production, Indulgences, Domestic, Furnishings, Construction & Maintenance, Personal Items, Entertainment, and Transportation.

Due to the high fragmentation of the glass bottles, the fragments could only be dated by color. Most colored glass came to New Mexico in 1880, when the railroad arrived in the state. The date range for diagnostic artifacts begins with invention or patent dates. Ending dates conclude with their last year of production. If artifacts are currently in use, 2015 is used as an end date. Mid-range dates are included in the tables for each artifact type.

Feature 2.1 (n = 393) at LA 183295 was dominated by Indulgence items (Table 6.1). More than 200 beer cans, with triangular punch openings; 20 liquor bottles; and approximately eight soda bottles were recorded. Triangular punch openers, also known as church keys, date from 1935–1960. When Prohibition was repealed in 1933, canned beer and “stubby” glass beer bottles became common oc-

currences at dump sites. Other types of beer can openings were absent, suggesting that the Indulgence containers were deposited before the 1960s. More than 125 sanitary food cans were estimated to be present in the trash heap, along with lesser amounts of Construction, Personal, and Transportation items. Feature 2.1 has a mean mid-range date of 1956.

Feature 2.2 (n = 204) at LA 183295 was dominated by Indulgence items (Table 6.2). Fragmented glass beer bottles dominated the assemblage with lesser amounts of aluminum cans from the early 1960s. A few unique items were discovered: a portion of a porcelain dog figurine with “Made in Japan” painted on the underside is datable from 1921 to 1941; an intact, amber glass bottle used for “Anacin,” a pain reliever, was embossed with “WHITEHALL” on the side panel and was a popular product from 1940–1950; and an amber “CLOROX” bottle base with stippling was produced in the 1940s (Toulouse 1971). A few Domestic items, including fragments of white-ware dinnerware dating from 1830, are still being manufactured today. Two red glass Christmas tree bulbs were also found in the trash heap. These were first produced in 1903 and remain a popular holiday item.

Although the mean of mid-range dates for the Feature 2.2 artifact types (1955) is similar to that of Feature 2.1 (1956), the content of the two features is different. Tin beer cans with church key openings dominate Feature 2.1 while they are absent from Feature 2.2. In comparison, amber glass beer bottle fragments are more common in Feature 2.2. The need for metal during World War II resulted in the switch from metal to glass beer containers for public consumption, while canned beer was still supplied to the military (Toulouse 1971:403). There may be an age difference between the two dumps, or the differences may represent provisioning differences for the sources of the two dumps.

The final artifact documentation was of an 80

Table 6.1. LA 183295, Feature 2.1, in-field artifact analysis.

Artifacts	Frequency	Date Range	Mid-Range Date
Tin steeled beer cans w/church key opening	200	1935-1960	1948
Sanitary cans (15 oz.) fruit or vegetable	50	1904-2015	1960
Sanitary cans (7 oz.) sauce cans	50	1904-2015	1960
Mesh screen fragments	10	–	–
Red brick fragments	5	1880-2015	1948
Sanitary cans (32 oz.) fruit or vegetable	20	1904-2015	1960
Clear glass liquor bottles (750 ml)	20	1930-2015	1973
White milk glass French soup bowl w/handle, "Fire King"	1	1940-1970	1955
Metal tricycle front wheel frame	1	–	–
7-Up green glass soda bottle, intact	1	1929-2015	1972
Green glass bottle (1/2 gal.), "California Grape Juice"	1	–	–
Clear glass ketchup bottle, intact	1	1920-2015	1968
Clear glass "Coca-Cola" bottle, machine made	1	1904	1904
Toothpaste, metal tube w/cap	1	1921-2015	1968
Metal paint can w/handle (1 gallon)	1	1906-2015	1961
Metal stovepipe section	1	–	–
Aluminum tube "Gillette" Shaving cream	1	1940-1949	1945
Clear glass soda bottle w/aluminum screw top	1	1960-2015	1986
"Coca-Cola" green hobbleskirt bottle, "Roswell, New Mexico"	1	1920-2015	1968
Amber glass beer bottle "Anheuser Busch"	1	1930-1950	1940
Green soda bottle, machine made, "Dr. Pepper"	1	1904-2015	1960
Green champagne bottle fragment	1	1880-2015	1948
Clear glass cooking oil bottle (1 qt.), "Ball"	1	1903-1988	1946
Green glass bottle, "Turtle Wax, Chicago, USA"	1	1940-1965	1953
Metal meat can, short, round sanitary can	1	1904-2015	1960
Whiteware cup w/handle, plain white	1	1830-2015	1923
Green glass soda bottles (1 qt.) "No Deposit No Return"	2	1947-1971	1959
Clear glass bottle (10 oz.) "Dr. Pepper"	1	1904-2015	1960
Clear glass baby food jars (4 1/2 oz.) w/screw caps, "Ball"	10	1928-2003	1966
Amber glass "stubby" beer bottles (12 oz.)	6	1935-1970	1953
<b>Total</b>	<b>393</b>		*

\* Mean of the mid-range dates is 1956.

m (262 ft) long east–west transect across the level surface of the LA 183295 Feature 2 site, east of the concentration areas. Artifacts present at every meter, between 1 m and 80 m along a tape, were analyzed and recorded (n = 256). Some sections were void of artifacts, as seen in Meters 1–5, and were not included in Table 6.3.

The highest frequency of recorded artifacts along the east–west transect came from a shattered, 1/2 inch thick, gray glass television screen (n = 135). The screen fragments extended between Meters 12 and 35. Television sets were commercially available

to the public starting in 1939. By 1941, CBS was able to broadcast the attack on Pearl Harbor.

Approximately 60 items from the Indulgence Category were present. Most of these were broken green glass fragments from three large wine jugs with aluminum screw caps dating to the 1960s. An amber glass liquor bottle with an aluminum screw cap was also in the same time period. Amber glass beer bottle bases and body fragments came from bottles machine manufactured and dated to as early as 1904. One piece of a green "7 Up" soda bottle (as early as 1929); a clear glass "TAB" soda bottle with

Table 6.2. LA 183295, Feature 2.2, in-field artifact analysis.

Artifacts	Frequency	Date Range	Mid-Range Date
Red glass Christmas tree bulbs	2	1903-2015	1959
Blue hand blown glass vessel handle	1	–	–
Green glass wine bottle fragments	2	1880-2015	1948
Amber glass beer bottle fragments	20	1880-2015	1948
White porcelain dog figurine, "Made in Japan"	1	1921-1941	1931
"Coors" aluminum beer can w/church key opening	1	1959-1970	1965
Amber glass bottle w/"WHITEHALL Anacin"	1	1940-1950	1945
Amber glass beer bottle fragments	50	1880-2015	1948
Lead slag fragment	1	–	–
Amber glass "Clorox" bottle base w/stippling	1	1940-1962	1950
Vehicle spark plugs	5	1902-2015	1959
Whiteware, unknown vessel w/scalloped rim	1	1830-2015	1923
White milkglass cosmetic jar w/metal screw cap	1	1870-2015	1943
"Coors" aluminum beer can w/pull tab	4	1962-1980	1971
"Hamm's" aluminum beer can	4	1964-1975	1970
"7 Up" green glass soda bottle	1	1929-2015	1972
Clear glass bottle fragments	100	1930-2015	1973
Clear glass nail polish jar w/external screw finish	1	1932-2015	1974
Clear glass liquor bottle (1 qt.)	1	1930-2015	1973
Amber glass "stubby" beer bottles (12 oz.)	5	1935-1970	1953
Clear glass cooking oil bottle (1 qt.), "Ball"	1	1903-1988	1946
<b>Total</b>	<b>204</b>		*

\* Mean of the mid-range date is 1955.

a crown cap (as early as 1963); and a clear glass soda bottle base with stippling (as early as 1940) and a crown top were also present. The most recent artifact was a "Coors" aluminum beer can with a press button top. Available in 1970–1975, this cumbersome invention, with two pre-cut holes, lasted a few years, with imbibers either getting their fingers cut on or stuck in the can's holes when depressing the buttons (Scarano 2012)

Some Construction items, plaster board (as early as 1917), aluminum straps, a Saltillo tile, and flat metal sheets, along with some Personal Items that included the lower portion of a rubber tennis shoe (as early as 1916) and a white milk glass jar used for cream or pomades were also found scattered along the 80 m stretch. Domestic items were

few in frequency, with a broken white milk glass bowl and several sanitary cans (as early as 1904). The cans were used either for fruit or vegetables, and both 15 and 32 oz cans were present. A 15 oz evaporated milk can, with a soldered drop top, dates from 1885–1904. A meat can, with a key-wind aluminum strip, was available by 1952.

The artifacts encountered along the 80 m transect have a mean mid-range date of 1962, slightly later than the concentrations. The LA 183295 mid-twentieth century trash dump, with copious amounts of beer cans and some liquor bottles, is probably not uncommon throughout New Mexico. With the presence of other household items and baby food jars, these concentrations represent domestic trash dumps.

Table 6.3. LA 183295, in-field analysis of artifacts on an east-west transect.

Meter	Artifact	Frequency	Date Range	Mid-Range Date
6	Aluminum strap fragment, unidentifiable	1	1886-2015	1951
9	Amber glass bottle, body fragment	1	1904-2015	1960
	Clear glass bottle base	1	1930-2015	1973
	Sanitary can (32oz) fruit or vegetable	1	1904-2015	1960
10	Green plastic fragment	1	1945-2015	1980
	Amber glass bottle, body fragment	1	1904-2015	1960
11	Clear glass bottle, body fragment	3	1930-2015	1973
12	Gray glass television screen fragments	65	1946	1946
	Sanitary can (32oz) fruit or vegetable	1	1904-2015	1960
13	Gray glass television screen fragments	30	1946	1946
14	Clear glass bottle, body fragment	1	1930-2015	1973
18	Gray glass television screen fragments	2	1946	1946
19	White plastic, unidentifiable	1	1945-2015	1980
20	Gray glass television screen fragments	30	1946	1946
21	Gray glass television screen fragments	6	1946	1946
23	Green glass wine jug w/aluminum screw cap	26	1960-2015	1988
24	Green glass wine jug w/aluminum screw cap	10	1960-2015	1988
	Gray glass television screen fragments	1	1946	1946
26	Saltillo tile fragment	1	–	–
33	Clear glass bottle, body fragment	1	1930-2015	1973
34	Gold glass bottle base (1 1/2" dia. X 1/2" thick)	1	1880	1880
35	Gray glass TV screen fragments	1	1946	1946
36	Amber beer bottle crown finish	4	1904-2015	1960
39	Beer or soda aluminum can pull tab	1	1962-1980	1971
42	Key wind aluminum strip, meat can	1	1952-1998	1975
46	Machined, amber glass bottle finish, unidentifiable	1	1904-2015	1960
47	Amber glass bottle, body fragment	1	1904-2015	1960
53	Clear glass bottle, body fragment	2	1930-2015	1973
	7-UP green glass bottle fragment	1	1929-2015	1972
54	Amber glass bottle base (1 1/2" dia)	1	1904-2015	1960
59	White rubber fragment	1	–	–
60	Tennis shoe, lower portion	1	1916-2015	1966
62	White plastic, unidentifiable	1	–	–
63	White milk glass jar base	1	1870-2015	1943
65	White milk glass bowl fragment	3	1870-2015	1943
68	Flat metal sheet fragments	2	1875-2015	1945
	Sanitary can fragment	1	1904-2015	1960
69	Evaporated milk can (15 oz) w/solder drop top	1	1885-1904	1895
	Vehicle parts, unidentifiable	1	–	–
	Clear glass bottle w/metal cap (12" X 2" dia.)	1	1930-2015	1973
	Clear glass bottle, ribbed body w/plastic cap	1	1960-2015	1988
70	White sheet rock fragments (1/4" thick)	8	1917-2015	1966
	Clear glass soda bottle w/stippling on base, crown top	1	1940-2015	1978
	Clear glass jug (1 gallon)	1	1930-2015	1973
	Amber glass medicine bottle w/screw cap	1	1880-2015	1948
71	Sanitary can (15 oz) fruit or vegetable	1	1904-2015	1960
72	Clear glass "Tab" soda bottle w/crown cap	1	1963-2015	1985
73	Amber glass liquor bottle, intact, w/aluminum screw cap	1	1964-2015	1990

Table 6.3 (continued)

Meter	Artifact	Frequency	Date Range	Mid-Range Date
73	Machined, amber glass bottle, body fragment	1	1904-2015	1960
	Clear glass bottle, body fragments	3	1930-2015	1973
74	Plastic sheet, unidentifiable	1	–	–
	Amber glass bottle, body fragment	1	1904-2015	1960
75	Clear glass bottle, body and stippled base fragments	3	1940-2015	1978
	Amber glass beer bottle w/crown finish	1	1904-2015	1960
76	Aluminum strap fragment, unidentifiable	1	1886-2015	1951
	Clear glass bottle base w/stippling	1	1940-2015	1978
	Amber glass bottle body fragment	1	1904-2015	1960
78	Green glass wine jug (1 gal.) w/metal screw cap	3	1964-2015	1990
	Amber glass beer bottle, body and base fragments	12	1904-2015	1960
	Beer or soda aluminum can w/pull tab	1	1962-1980	1971
79	"Coors" aluminum beer can w/press button top	1	1970-1975	1973
<b>Total</b>		<b>256</b>		*

\* Mean of the mid-range date is 1962.





## 7 Summary and Recommendations

During the archaeological survey of the proposed Jacona transfer station location, one recent historic trash dump (Feature 1), six isolated occurrences, and one historic trash dump (LA 183295) were located. The isolated occurrences are prehistoric, and to the extent that they are temporally diagnostic, they are consistent with the Classic period occupation of the greater Jacona and Pojoaque areas. Field recording has exhausted the data potential of these artifacts, and they are not eligible for nomination to the *National Register of Historic Places*.

Feature 1 is a drainage cut or arroyo that has been filled with modern trash and waste from asphalt and concrete demolition. The trash is modern, and although it partially overlaps LA 183295, its deposition is discontinuous in time with the earlier period of trash dumping. Field observations indicate that Feature 1 is modern and is not eligible for nomination to the *National Register of Historic Places*.

LA 183295 consists of a trash dump area that was utilized mostly between the 1950s and the early 1960s. There was no evidence of any depth of deposit at LA 183295, and portions of the trash have been moved and pushed into an arroyo. Two trash concentrations are present within the site, with different contents. One is characterized by the presence of abundant metal beer cans with church key openings, while the other lacks these containers. Although mean mid-range dates for the two areas are similar in the mid-1950s, the differences between the concentrations could be either temporal across the 1950s and 1960s or could be related to functional differences between the sources of the trash. LA 183295 is recommended as eligible for inclusion

in the *National Register of Historic Places* under Criterion D, reflecting informal trash disposal patterns for the region.

Proposed construction features for the transfer station are mapped with relative to the LA 183295 boundary and features in Fig. 7.1. The grading plans for two transfer station road segments overlap the boundaries of the site. The main entrance road for the station will result in the covering of up to 10 m of the western site margin with road fill. A connecting road, required by New Mexico Department of Transportation regulations concerning highway driveway entrance design, passes through the middle of LA 183295, running west-east, allowing traffic from NM 502 to connect with an existing driveway to the east and south of the project area. The connecting road will require fill to achieve the grade of the entrance road and to establish the road crown, and the fill will result in the covering of portions of the trash scatter. The connecting road is adjacent to site Features 2.1 and 2.2, but they are both outside of the area of proposed connecting road fill.

OAS recommends that artifact concentrations 2.1 and 2.2 be fenced (i.e., orange construction fencing) to protect their integrity during construction. OAS recommends that no fill for construction be borrowed from within 15 m (50 feet) of the boundary of LA 183295. OAS believes that the recording of surface artifacts of the site has adequately documented their information potential, and that with the stipulations above, construction of the transfer station can proceed as having no effect on the qualities of LA 183295 that make it eligible for inclusion in the *National Register of Historic Places*.

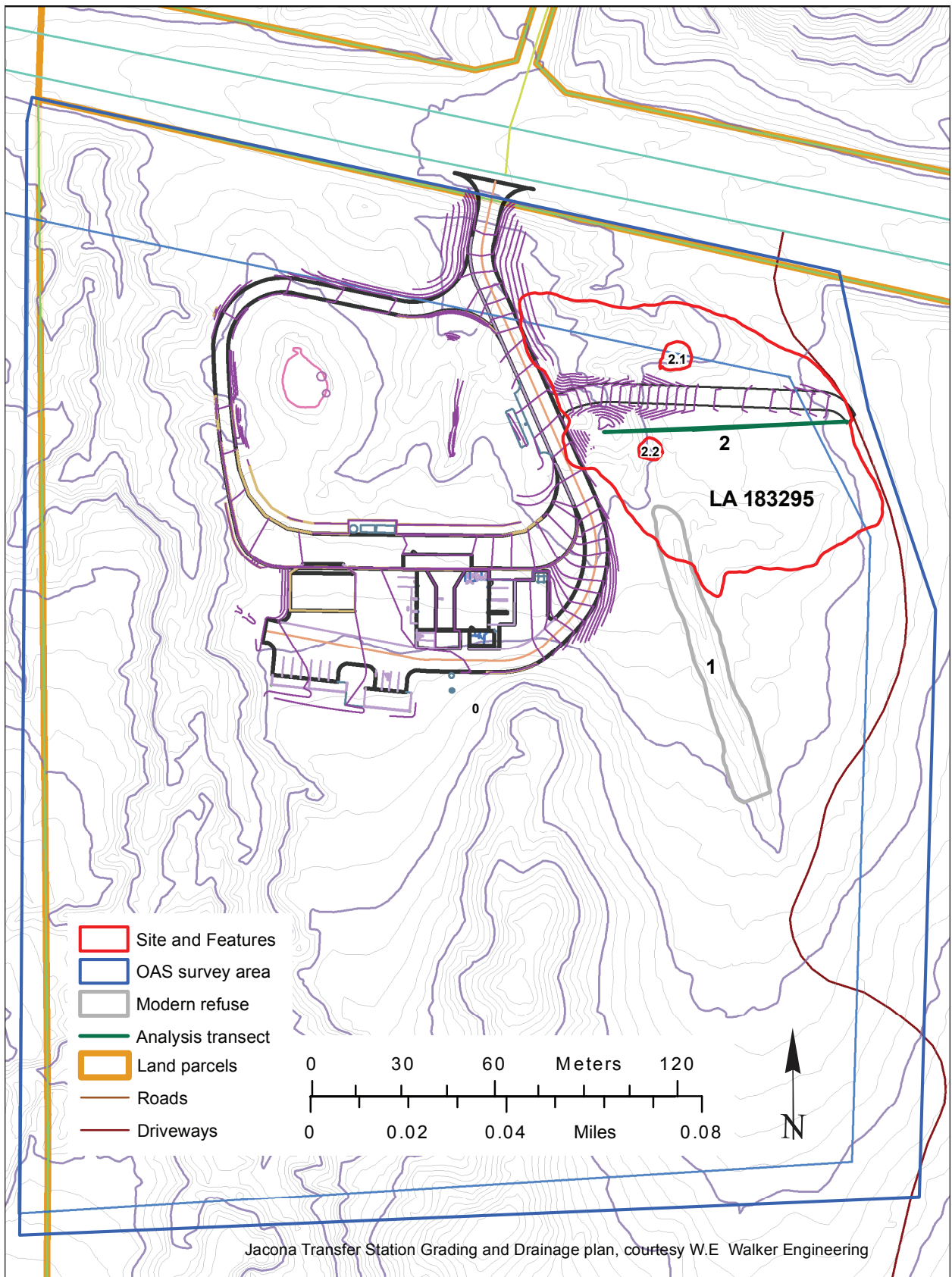


Figure 7.1. Map of the construction area.

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## Appendix ⅄ Site Location Information

The project area is located in Santa Fe County, UTM Zone 13, E 3971341, N 13403352, USGS 7.5' Espanola quadrangle map 1984, in Section 12 of T 19N, 8 & 9E.

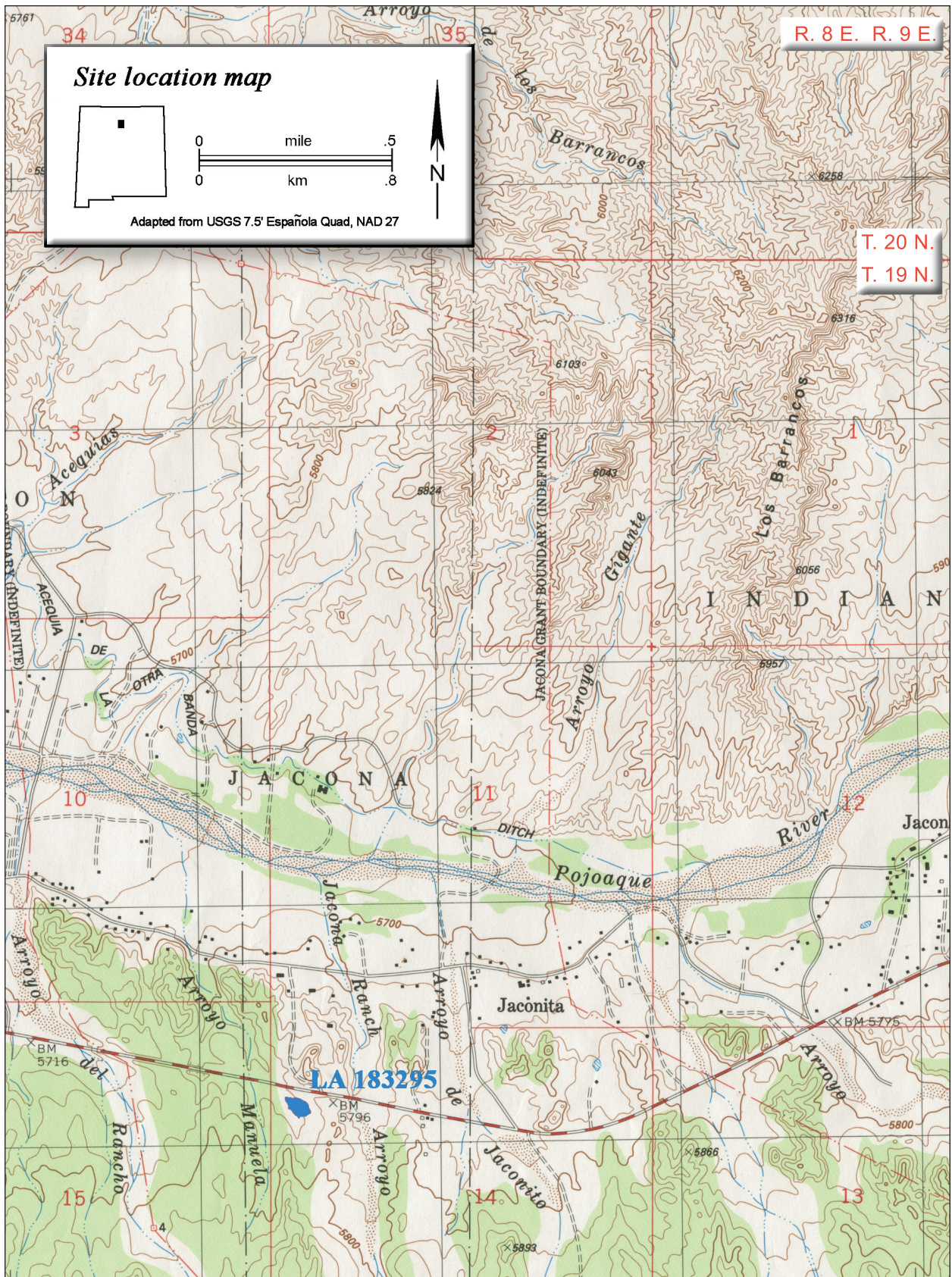


Figure A.1. Site location map.



Figure A.2. Project area map.

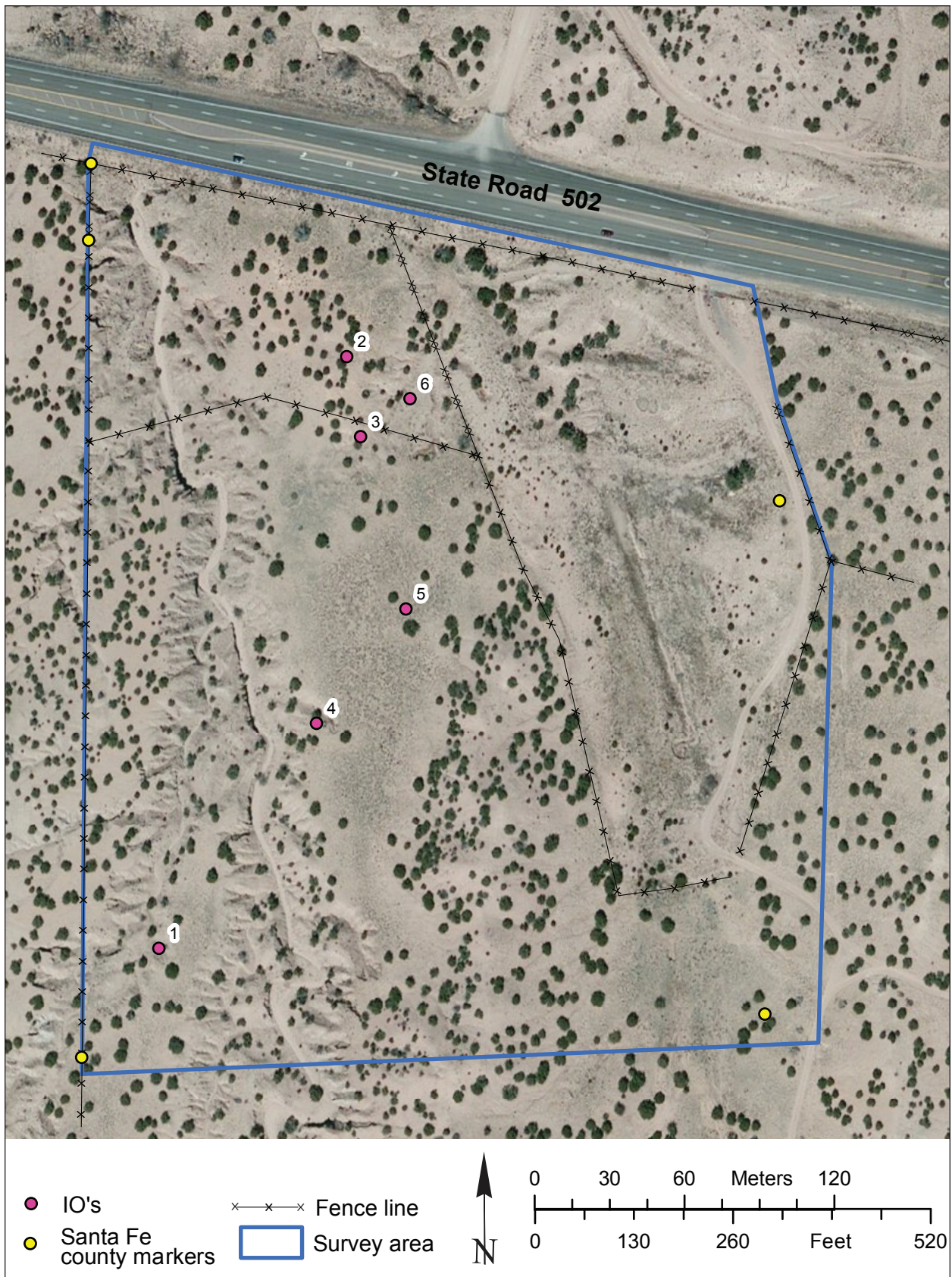


Figure A.3. Isolated occurrences map.

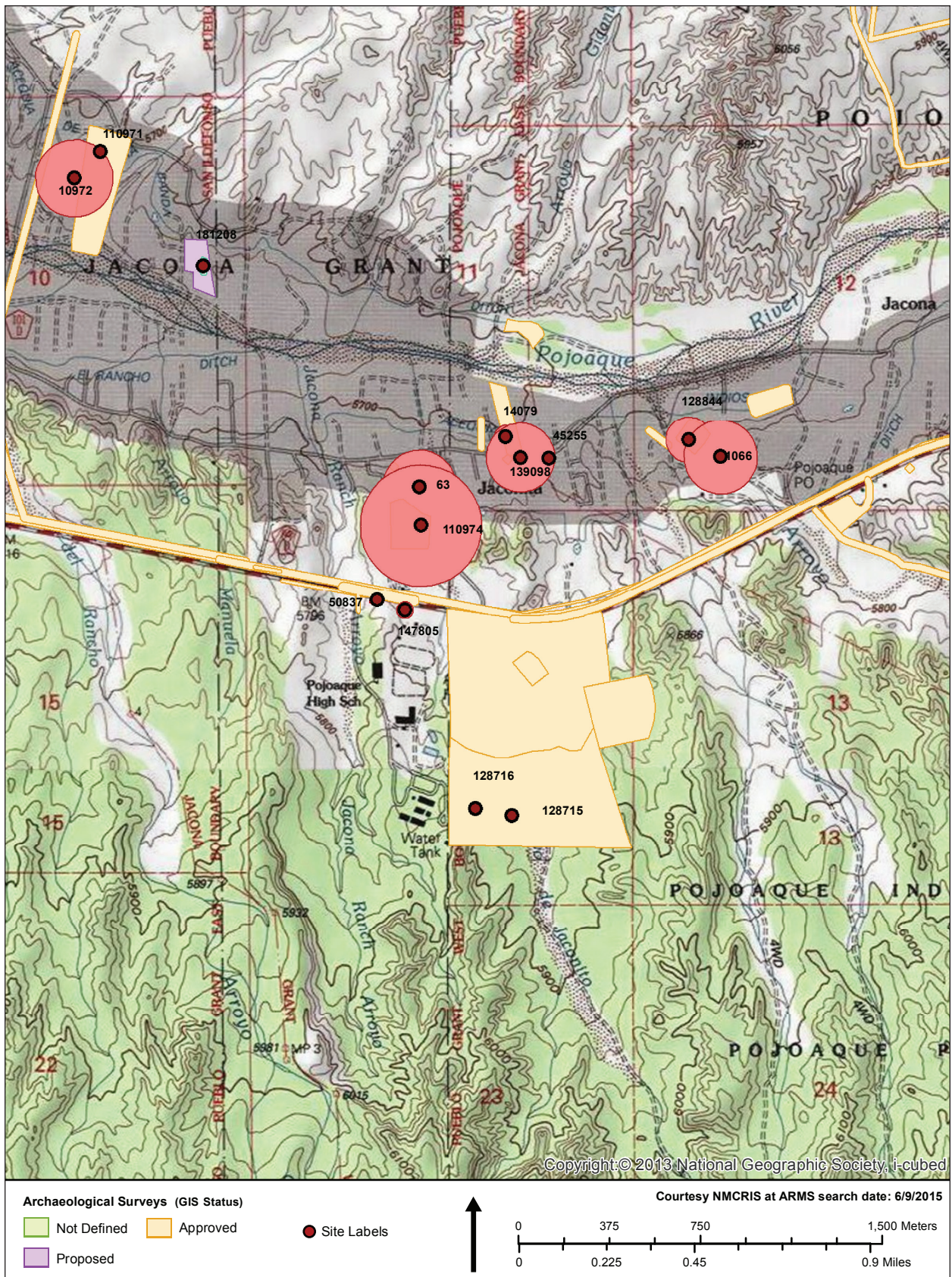


Figure A.4. NMCRI map.