

## LEGISLATIVE SUMMARY SHEET

Tracking No. 0150-15

**DATE:** April 30, 2015

**TITLE OF RESOLUTION:** PROPOSED STANDING COMMITTEE RESOLUTION; AN ACTION RELATING TO RESOURCES AND DEVELOPMENT; APPROVING THE LAND WITHDRAWAL OF 100.00 ACRES, MORE OR LESS, OF NAVAJO NATION TRUST LANDS FOR THE CORNFIELDS CHAPTER DEER POINT BUSINESS DEVELOPMENT TRACT LOCATED IN THE CORNFIELDS CHAPTER VICINITY, NAVAJO NATION (APACHE COUNTY, ARIZONA)

**PURPOSE:** Approving the withdrawal of 100.00 acres for the Cornfields Chapter Deer Point Business Development tract located in Cornfields Chapter vicinity, Navajo Nation (Apache County, Arizona).

**This written summary does not address recommended amendments as may be provided by the standing committees. The Office of Legislative Counsel requests each Council Delegate to review each proposed resolution in detail.**

5-DAY BILL HOLD PERIOD: Katanyu Bulak  
Website Posting Time/Date: 3:55pm 5/6/15  
Posting End Date: 5/11/15  
Eligible for Action: 5/12/15

PROPOSED STANDING COMMITTEE RESOLUTION  
23<sup>ND</sup> NAVAJO NATION COUNCIL -- First Year, 2015

INTRODUCED BY

ALTON JOE SHEPHERD  
(Prime Sponsor)

TRACKING NO. 0150-15

AN ACTION

RELATING TO RESOURCES AND DEVELOPMENT; APPROVING THE LAND  
WITHDRAWAL OF 100.00 ACRES, MORE OR LESS, OF NAVAJO NATION  
TRUST LANDS FOR THE CORNFIELDS CHAPTER DEER POINT BUSINESS  
DEVELOPMENT TRACT LOCATED IN THE CORNFIELDS CHAPTER  
VICINITY, NAVAJO NATION (APACHE COUNTY, ARIZONA)

BE IT ENACTED:

**Section One. Findings**

- A. Pursuant to 2 N.N.C. §500, the Resources and Development Committee is hereby established as a standing committee of the Navajo Nation Council; and
- B. Pursuant to 2 N.N.C. § 500 B 2(a), the Resources and Development Committee grants final approval for all land withdrawal; and
- C. Pursuant to Resolution No. CF/FEB2014-80, attached hereto and incorporated herein as Exhibit A, the Cornfields Chapter requests the withdrawal of 100.00 acres, more or less, for Deer Point Business Development tract; and
- D. The proposed area consists of 100.00 acres, more or less, of Navajo Nation Tract Lands located in the Southeast Quarter (SE¼) of Section 22, the Northwest Quarter (NW¼) of Section 26 and the Northeast Quarter (NE¼) of Section 27, Township 27 North, Range 25 East, G&SRM, Navajo Nation (Apache County, Arizona). The location is more particularly described on the survey map attached hereto as Exhibit B; and

1 E. The Project Review Section with the Navajo Land Department has obtained the  
2 consent from the affected land users (i.e. grazing permittees) attached hereto as  
3 Exhibit C; and

4 F. All environmental and archaeological surveys and studies have been completed  
5 and received appropriate clearances attached hereto and incorporated herein by  
6 this reference. The Navajo Nation Department of Fish and Wildlife Biological  
7 Resources Compliance Form is attached as Exhibit D. The Deer Point  
8 Development Parcel Environmental Assessment is attached as Exhibit E. The  
9 Cornfields Chapter Deer Point Development Parcel containing Chapter  
10 Resolutions, Consent Forms, Survey & Land Descriptions,  
11 Archaeological/Cultural Resource Inventory Report, Environmental  
12 Assessment, and other supporting documents is attached as Exhibit F

13 **Section Two. Approval**

14 The Resources and Development Committee of the Navajo Nation Council hereby  
15 approves land withdrawal of 100.00 acres, more or less, of Navajo Nation Trust Lands  
16 for the Cornfields Chapter Deer Point Business Development tract at Cornfields  
17 Chapter, Navajo Nation (Apache County, Arizona). The location is more particularly  
18 described on the survey map attached hereto as Exhibit B.

CF/FEB2014-80

## RESOLUTION OF THE CORNFIELDS CHAPTER

Reaffirming Resolution #CF/APRIL10-30 Supporting and Approval of the Community Land Use Planning (CLUP) Committee's Request to the Navajo Nation Land Administration to Withdraw Land for Three (3) Sites Within Cornfields Chapter Designated for Business Development

## WHEREAS:

1. The Cornfields Chapter is a duly certified local governing entity recognized by the Navajo Nation Council to address the needs of the Chapter residents and the economic development of the chapter for primary benefit of the local people, and to facilitate communications between and among the local people with agencies of the Navajo Nation, the United States, and where appropriate, the State of Arizona; and
2. The Cornfields Chapter approved Resolution #CF/APRIL10-30 that supports and approves the CLUP Committee's request to Navajo Nation Land Administration to withdraw land for three (3) sites within Cornfields Chapter designated for business development; and
3. The Cornfields Chapter with CLUP Committee completed and identified the three (3) business sites, which are:
  - a. Former Sunrise Trading Post
  - b. Intersection of Route 15 and Route 151
  - c. Deer Point Business Development
4. The Cornfields Chapter believes it is in the best interest of the community to support and approve CLUP Committee's request for withdraw of land for the three (3) designated business sites.

## NOW THEREFORE BE IT RESOLVED THAT:

Cornfields Chapter reaffirms and supports and approval of the Community Land Use Planning (CLUP) Committee's request the Navajo Nation Land Administration to withdraw land for three (3) sites within Cornfields Chapter designated for business development.

## CERTIFICATION

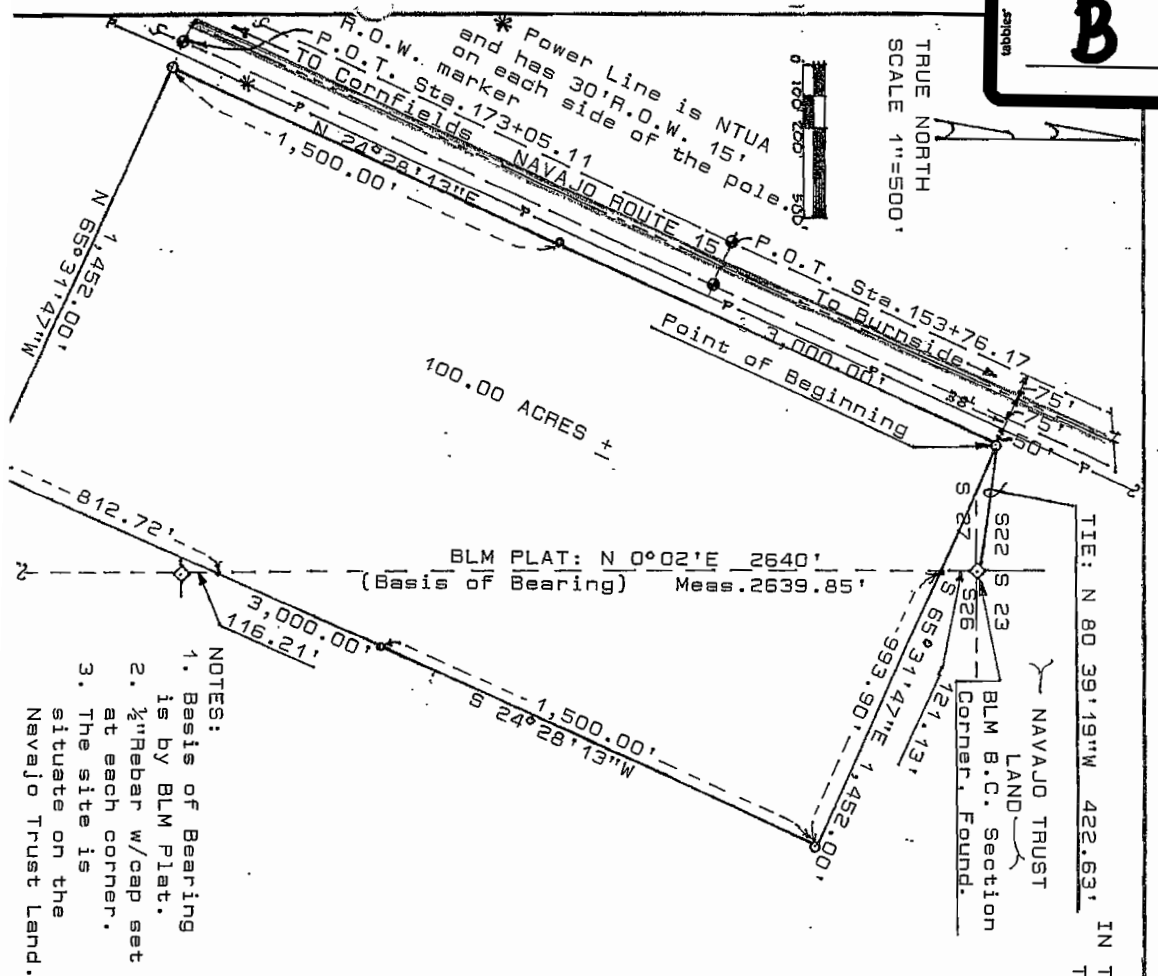
We hereby certify that the foregoing Resolution was considered at a duly called regular meeting of the Cornfields Chapter at Cornfields, Navajo Nation, Arizona at which a quorum was present, and that the same was passed by a vote of 35 in favor, 0 opposed, and 1 abstained this 9<sup>th</sup> day of February 2014.



Presiding President

Motion: Cecelia White  
Second: Alban Yazzie





- NOTES:
1. Basis of Bearing is by BLM Plat.
  2.  $\frac{1}{4}$ " Rebar w/cap set at each corner.
  3. The site is situate on the Navajo Trust Land.

CORNFIELDS MULTIPURPOSE TRACT  
IN THE SE $\frac{1}{4}$  OF SEC. 22, THE NW $\frac{1}{4}$  OF SEC. 26, &  
THE NE $\frac{1}{4}$  OF SEC. 27, T27N, R25E, G8SRM  
CORNFIELDS, APACHE COUNTY, ARIZONA  
OCTOBER 03, 2007

## LEGAL DESCRIPTION

A CERTAIN TRACT OF LAND SITUATE IN THE SOUTHEAST QUARTER (SE $\frac{1}{4}$ ) OF SECTION 22, THE NORTHWEST QUARTER (NW $\frac{1}{4}$ ) OF SECTION 26, AND THE NORTHEAST QUARTER (NE $\frac{1}{4}$ ) OF SECTION 27, TOWNSHIP 27 NORTH, RANGE 25 EAST, GILA & SALT RIVER MERIDIAN IN THE NORTHERLY VICINITY OF CORNFIELDS COMMUNITY CHAPTER HOUSE, IN CORNFIELDS, APACHE COUNTY, ARIZONA MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING at a BLM Brass Cap, the northeast corner of said Section 27, thence run N 80°39'19"W a distance of 422.63 feet to the northwest corner and the point of beginning of the herein described tract of land;

Thence S 65°31'47"E a distance of 1452.00 feet to the NE corner; Thence S 24°28'13"W a distance of 3000.00 feet to the SE corner; Thence S 65°31'47"W a distance of 1452.00 feet to the SW corner; Thence paralleling the existing power line along the east R.O.W. line of Navajo Route 15 Highway, N 24°28'13"E a distance of 3000.00 feet to the point of beginning.

The enclosed described area comprises of 100.00 acres more or less.

Subject to any and all existing underground utility easements.

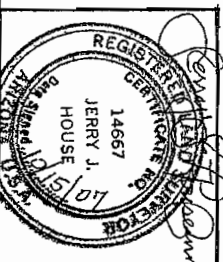
## SURVEYOR'S CERTIFICATION

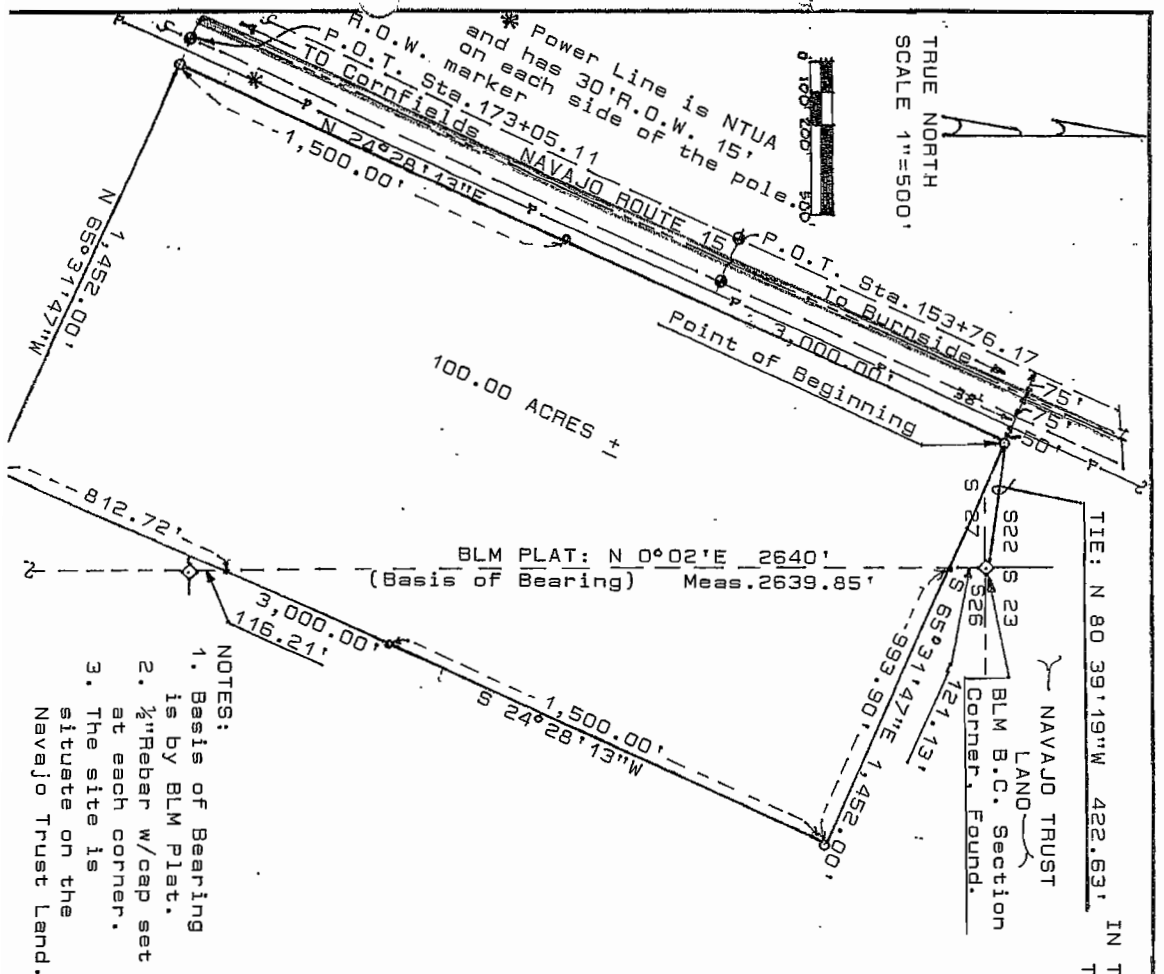
I, Jerry J. HOUSE, a duly qualified Registered Land Surveyor under the laws of the State of Arizona, do hereby certify that this survey and the plat as shown hereon were prepared from the actual survey by me or under my direct supervision and that they are true and correct to the best of my knowledge and belief.

October 16, 2007

*Jerry J. House*  
Jerry J. House

Registered Land Surveyor  
Arizona Certification No. 14667  
Post Office Box 3334  
Gallup, New Mexico, 87305





- NOTES:
1. Basis of Bearing is by BLM Plat.
  2. 1/2" Rebar w/cap set at each corner.
  3. The site is situate on the Navajo Trust Land.

CORNFIELDS MULTIPURPOSE TRACT  
IN THE SE¼ OF SEC. 22, THE NW¼ OF SEC. 26, &  
THE NE¼ OF SEC. 27, T27N, R25E, G85RM  
CORNFIELDS, APACHE COUNTY, ARIZONA  
OCTOBER 03, 2007  
LEGAL DESCRIPTION

A CERTAIN TRACT OF LAND SITUATE IN THE SOUTHEAST QUARTER (SE¼) OF SECTION 22, THE NORTHWEST QUARTER (NW¼) OF SECTION 26, AND THE NORTHEAST QUARTER (NE¼) OF SECTION 27, TOWNSHIP 27 NORTH, RANGE 25 EAST, GILA & SALT RIVER MERIDIAN IN THE NORTHERLY VICINITY OF CORNFIELDS COMMUNITY CHAPTER HOUSE, IN CORNFIELDS, APACHE COUNTY, ARIZONA MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING at a BLM Brass Cap, the northeast corner of said Section 27, thence run N 80°39'19"W a distance of 422.63 feet to the northwest corner and the point of beginning of the herein described tract of land;

Thence S 65°31'47"E a distance of 1452.00 feet to the NE corner; Thence S 24°28'13"W a distance of 3000.00 feet to the SE corner; Thence N 65°31'47"W a distance of 1452.00 feet to the SW corner; Thence paralleling the existing power line along the east R.O.W. Line of Navajo Route 15 Highway, N 24°28'13"E a distance of 3000.00 feet to the point of beginning.  
The enclosed described area comprises of 100.00 acres more or less.

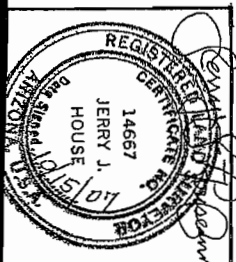
Subject to any and all existing underground utility easements.

#### SURVEYOR'S CERTIFICATION

I, Jerry J. HOUSE, a duly qualified Registered Land Surveyor under the laws of the State of Arizona, do hereby certify that this survey and the plat as shown hereon were prepared from the actual survey by me or under my direct supervision and that they are true and correct to the best of my knowledge and belief.

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Post Office Box 3334  
Gallup, New Mexico, 87305



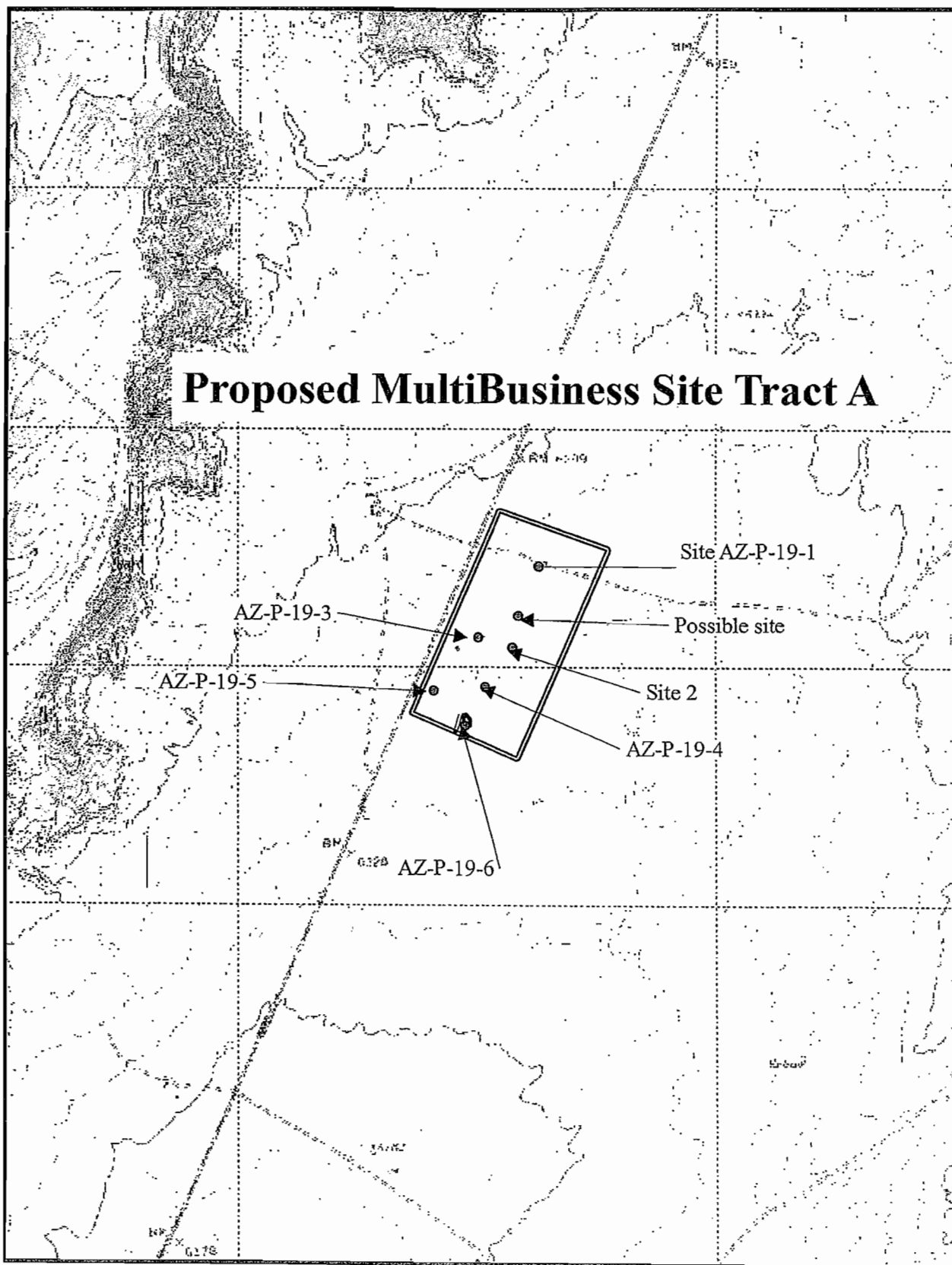


Figure 2. Location map showing project area and identified cultural resources. Sunrise Spring, Ariz., 1973, 7.5' series USGS map; T.25N and T.26N, R.24E, GSRPM (NNAD 09-334).



# The Navajo Nation

**DR. JOE SHIRLEY, JR.**  
President

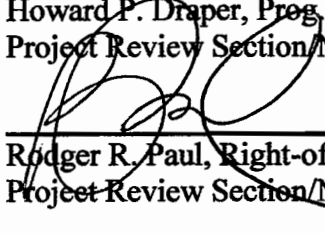
**BEN SHELLEY**  
Vice President

EXHIBIT

C

## MEMORANDUM

**TO:** Howard P. Draper, Prog. & Project Specialist  
Project Review Section/NLD

**FROM:**   
Rodger R. Paul, Right-of-Way Agent  
Project Review Section/NLD

**DATE:** June 04, 2014

**SUBJECT:** **FIELD INVESTIGATION FOR LAND WITHDRAWAL**  
**Cornfields, Apache County, Arizona**

The Cornfields Chapter, Post Office Box # 478, Ganado, Arizona 86505 has a chapter resolution and other supporting documents requesting for field clearances to withdraw one hundred (100.00) acres, more or less of Navajo Tribal Trust Land (NTTL), for construction of a new hospital, employee housing, parking lot and other related facilities (Deer Point Development). The proposed tract is located in the SE ¼ of Sec. 22, the NW ¼ of Sec. 26, & the NE ¼ of Sec. 27, Township 27 North, Range 25 East, G&SRM, Cornfields, Apache County, Arizona.

The Project Review Section/Chinle Land Department has conducted and completed the field investigation on the above project. Met with Mr. Patrick Yazzie Grazing Committee Member from Cornfields chapter to identify the affected land users, upon review of the attached survey plat (legal description) the proposed site is located on the Navajo Tribal Trust Land (NTTL), according to his records and knowledge there are four (04) land users (grazing permittee) affected by the project. Project Review Section (PRS) has contacted the affected land users (grazing permittee) to inform them of and to obtain their written consents for the proposed project. The affected land users (Elaine Curtis, Paul Cornfields, Janice Keyonnie & Johnson R. Kee) had no objection and gave their written consent. Attached hereto are Land User Consent Forms #3 signed by the affected land users and Field Clearance Check List Form for your information and use.

Should you have any question please contact me at Chinle Land Department (928) 674-2315 or (928) 797-1835

**cc:** Office File  
Cornfields Chapter

## FIELD CLEARANCE CHECKLIST

This form covers only damages and compensation to individual land users. It doesn't cover consideration or other fee to the Navajo Nation. (use back if necessary to complete this form).

1. Project Identification:

Application: Cornfields Chapter

Type of Project: Land Withdrawal

Purpose: Deer Point Development

Location: Cornfields, Apache County, Arizona

Identification number(s): \_\_\_\_\_

2. Amount of land affected: 100.00 acres, more or less

3. Land Status: Trust: ☒ Fee: \_\_\_\_\_ Other: \_\_\_\_\_

4. List names of all individuals whose land use rights will be affected by the proposed project.

Name	Census Number	Type of Land Use Right
1. <u>Elaine Curtis</u>	_____	<u>G/P# 17-23-99</u>
2. <u>Johnson R. Kee</u>	_____	<u>G/P# 17-24-01</u>
3. <u>Janice James</u>	_____	<u>G/P# 17-24-01</u>
4. <u>Paul Cornfields Jr.</u>	_____	<u>G/P# 17-33-89</u>
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____

5. Are all the land users with claims to the affected lands as shown in Branch Land Operation records included in the list in item 4? Yes

6. Have the Grazing Committee or Land Board Member (which ever appropriate) for the affected area confirm land user list in item 4 by signing acknowledgement below. Yes

### ACKNOWLEDGEMENT

I acknowledge that due notice was given to the affected community of the proposed project, and according to my records and to the best of my knowledge, the list of the individual in item 4 includes all land users who have land use rights in the affected lands.

6/6/14  
Date:

[Signature]  
Grazing Committee/Land Board Member

17-3  
Dist. No.

**CONSENT FORM-3**

**(Waiver of compensation for damages)**

**CONSENT TO USE  
NAVAJO TRIBAL LANDS**

**TO WHOM IT MAY CONCERN**

I Elaine Curtis hereby grant consent to the Navajo Tribe and the Bureau of Indian Affairs to permit Cornfields Chapter of Post Office Box # Ganado, Arizona 86505 to use a portion of my land use area for the following purpose(s) to withdraw one hundred (100.00) acres, more or less of Navajo Tribal Trust Land (NTTL) for the Deer Point Developments Tract, located within the Southeast Quarter (SE 1/4) of Section 22 & Northwest Quarter (NW 1/4) of Section 26, & Northeast Quarter (NE 1/4) of Section 27 Township 27 North, Range 25 East, Gila & Salt River Meridian, Cornfields, Apache County, Arizona as shown on the map showing the location of the proposed project on the back of this consent form.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

**REMARKS:** \_\_\_\_\_

5/2/14 X Elaine Curtis \_\_\_\_\_ G/P# 17-23-99  
Date: Land User Signature (Thumb Print) Census No. Permit No.

**WITNESS:**

5-5-14 [Signature] 17-3  
Date Grazing Committee or Land Board Member District No.

**Acknowledge of Field Agent**

I acknowledge that the contents of this consent form was read ☒ or fully explained ☒ to the land user in Navajo ☒ or English ☐ / check where applicable

[Signature]  
Field Agent Signature

**CONSENT FORM-3**

**(Waiver of compensation for damages)**

**CONSENT TO USE  
NAVAJO TRIBAL LANDS**

**TO WHOM IT MAY CONCERN**

I Johnson R. Kee hereby grant consent to the Navajo Tribe and the Bureau of Indian Affairs to permit Cornfields Chapter of Post Office Box # Ganado, Arizona 86505 to use a portion of my land use area for the following purpose(s) to withdraw one hundred (100.00) acres, more or less of Navajo Tribal Trust Land (NTTL) for the Deer Point Developments Tract, located within the Southeast Quarter (SE 1/4) of Section 22 & Northwest Quarter (NW 1/4) of Section 26, & Northeast Quarter (NE 1/4) of Section 27 Township 27 North, Range 25 East, Gila & Salt River Meridian, Cornfields, Apache County, Arizona as shown on the map showing the location of the proposed project on the back of this consent form.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

**REMARKS:** \_\_\_\_\_

5/2/14  
Date:

[Signature]  
Land User Signature (Thumb Print)

\_\_\_\_\_  
Census No.

G/P# 17-24-01  
Permit No.

**WITNESS:** \_\_\_\_\_

5-5-14  
Date

[Signature]  
Grazing Committee or Land Board Member

17-3  
District No.

**Acknowledge of Field Agent**

I acknowledge that the contents of this consent form was read / ✓ or fully explained / ✓ to the land user in Navajo / ✓ or English / ✓ / check where applicable

[Signature]  
Field Agent Signature

**CONSENT FORM-3**

**(Waiver of compensation for damages)**

**CONSENT TO USE  
NAVAJO TRIBAL LANDS**

**TO WHOM IT MAY CONCERN**

I Janice James hereby grant consent to the Navajo Tribe and the Bureau of Indian Affairs to permit Cornfields Chapter of Post Office Box # Ganado, Arizona 86505 to use a portion of my land use area for the following purpose(s) to withdraw one hundred (100.00) acres. more or less of Navajo Tribal Trust Land (NTTL) for the Deer Point Developments Tract, located within the Southeast Quarter (SE 1/4) of Section 22 & Northwest Quarter (NW 1/4) of Section 26. & Northeast Quarter (NE 1/4) of Section 27 Township 27 North, Range 25 East, Gila & Salt River Meridian, Cornfields, Apache County, Arizona as shown on the map showing the location of the proposed project on the back of this consent form.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

**REMARKS:** \_\_\_\_\_

5/2/14 X Jan James \_\_\_\_\_ G/P # 17-24-01  
Date: Land User Signature (Thumb Print) Census No. Permit No.

**WITNESS:**

5-5-14 Steve J2 17-3  
Date Grazing Committee or Land Board Member District No.

**Acknowledge of Field Agent**

I acknowledge that the contents of this consent form was read / T or fully explained / 4 to the land user in Navajo / H or English / check where applicable

[Signature]  
Field Agent Signature



## FIELD CLEARANCE CHECKLIST

This form covers only damages and compensation to individual land users. It doesn't cover consideration or other fee to the Navajo Nation. (use back if necessary to complete this form).

1. Project Identification:  
 Application: Cornfields Chapter  
 Type of Project: Land Withdrawal  
 Purpose: Deer Point Development  
 Location: Cornfields, Apache County, Arizona  
 Identification number(s): \_\_\_\_\_
2. Amount of land affected: 100.00 acres, more or less
3. Land Status: Trust: XX Fee: \_\_\_\_\_ Other: \_\_\_\_\_
4. List names of all individuals whose land use rights will be affected by the proposed project.

Name	Census Number	Type of Land Use Right
1. <u>Elaine Curtis</u>	_____	<u>G/P# 17-23-99</u>
2. <u>Johnson R. Kee</u>	_____	<u>G/P# 17-24-01</u>
3. <u>Janice James</u>	_____	<u>G/P# 17-24-01</u>
4. <u>Paul Cornfields Jr.</u>	_____	<u>G/P# 17-33-89</u>
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____

5. Are all the land users with claims to the affected lands as shown in Branch Land Operation records included in the list in item 4? Yes
6. Have the Grazing Committee or Land Board Member (which ever appropriate) for the affected area confirm land user list in item 4 by signing acknowledgement below. Yes

### ACKNOWLEDGEMENT

I acknowledge that due notice was given to the affected community of the proposed project, and according to my records and to the best of my knowledge, the list of the individual in item 4 includes all land users who have land use rights in the affected lands.

6/6/14  
Date:

[Signature]  
Grazing Committee/Land Board Member

17-3  
Dist. No.

**BIOLOGICAL RESOURCES COMPLIANCE FORM**  
**NAVAJO NATION DEPARTMENT OF FISH AND WILDLIFE**  
**P.O. BOX 1480, WINDOW ROCK, ARIZONA 86515-1480**

It is the Department's opinion the project described below, with applicable conditions, is in compliance with Tribal and Federal laws protecting biological resources including the Navajo Endangered Species and Environmental Policy Codes, U.S. Endangered Species, Migratory Bird Treaty, Eagle Protection and National Environmental Policy Acts. This form does not preclude or replace consultation with the U.S. Fish and Wildlife Service if a Federally-listed species is affected.

**PROJECT NAME & NO.:** Cornfields Junction Development Parcel

**DESCRIPTION:** Cornfields Chapters proposes land withdrawal consisting of 25± acres for economic development.

**LOCATION:** NW¼ of Sec. 17 and NE¼ of Sec. 18, T25N, R26E, G&SRM, Apache County, Arizona

**REPRESENTATIVE:** Howard Draper, Project Review Section, Navajo Land Department

**ACTION AGENCY:** Navajo Nation & Bureau of Indian Affairs

**B.R. REPORT TITLE / DATE / PREPARER:** EA-Cornfields Junction Development Parcel/JAN 2014/UrbanTech Ltd. i.a.w. Arcadis US

**SIGNIFICANT BIOLOGICAL RESOURCES FOUND:** Area 3. [1] Potential suitable nesting habitat is present on and adjacent to the 25-acre land tract. Migratory Birds and their habitats are protected under the Migratory Bird Treaty Act (16 USC §703-712); [2] The 25-acre land tract is located within a Raptor Sensitive Area (RSA).

**POTENTIAL IMPACTS**

**NESL SPECIES POTENTIALLY IMPACTED:** [1] *Athene cunicularia* (Burrowing Owl), G4, MBTA.

**FEDERALLY-LISTED SPECIES AFFECTED:** NA

**OTHER SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES:** NA


**AVOIDANCE / MITIGATION MEASURES:** NA

**CONDITIONS OF COMPLIANCE\*:** [1] The 25-acre land tract is located within a Raptor Sensitive Area (RSA). All future proposed power line extensions and associated facilities shall be raptor-safe per Raptor Electrocution Prevention Regulations (REPR); [2] If clearing and grading of the project site is scheduled to occur during the Burrowing Owl (*Athene cunicularia*) breeding season of 01 MAR-15 AUG, a survey will be required. The survey must include a 0.4 km (¼ mi) buffer outside the edge of the area to be cleared and graded. Follow the survey protocol outlined in the NESL Species Accounts.

**FORM PREPARED BY / DATE:** Pamela A. Kyselka/15 AUG 2014

COPIES TO: (add categories as necessary)

☒ BIA ☐ \_\_\_\_\_

<u>2 NTC § 164 Recommendation:</u> <input type="checkbox"/> Approval <input checked="" type="checkbox"/> Conditional Approval (with memo) <input type="checkbox"/> Disapproval (with memo) <input type="checkbox"/> Categorical Exclusion (with request letter) <input type="checkbox"/> None (with memo)	Signature  Gloria M. Tom, Director, Navajo Nation Department of Fish and Wildlife	Date <u>8/16/14</u>
--	--	------------------------

<p>*I understand and accept the conditions of compliance, and acknowledge that lack of signature may be grounds for the Department not recommending the above described project for approval to the Tribal Decision-maker.</p>	
Representative's signature	Date

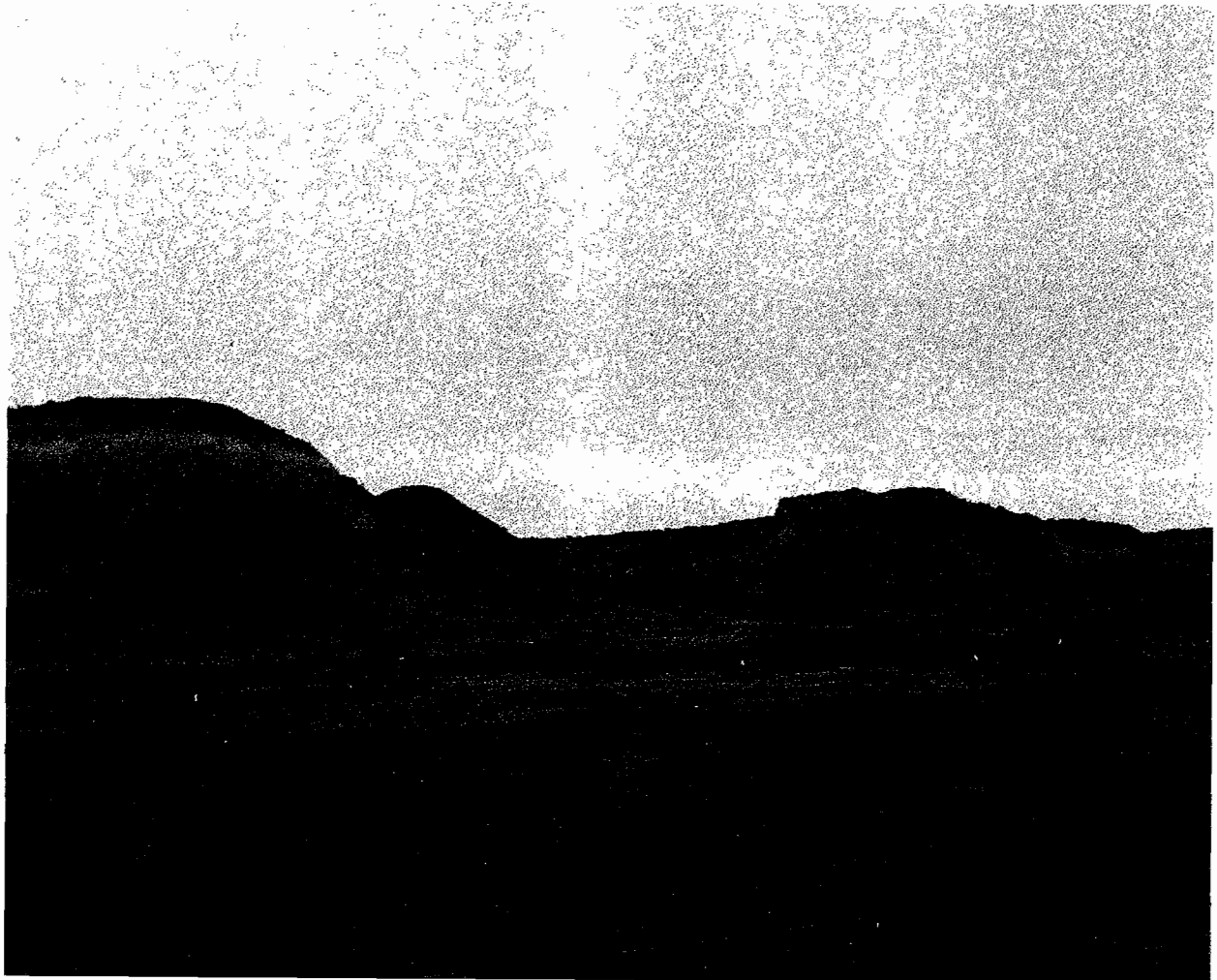
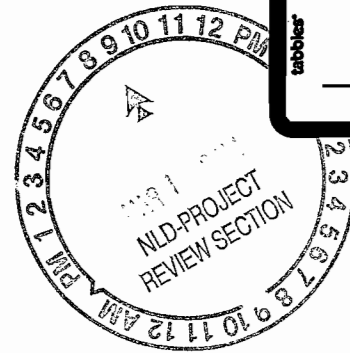


## Cornfields Chapter

### Deer Point Development Parcel Environmental Assessment

January 2014  
Draft #3; Rev. #2

In association with:



**2nd SUBMITTAL DRAFT**

**Delivered: 1/17/14**

**Cornfields Chapter: Deer Point Property  
Environmental Assessment  
(January 2014)**

**Project: Deer Point Site Development  
Environmental Assessment**

**Prepared for: Cornfields Chapter  
Navajo Nation  
P.O. Box 478  
Ganado, Arizona 86505**

**Prepared by:**

**UrbanTech Ltd.  
16845 N. 29<sup>th</sup> Ave.; Suite 1-348  
Phoenix, Arizona 85053**

**In association with:**

**Arcadis US  
410 N 44th St #1000  
Phoenix, Arizona 85008**

**Contact: Philip J. Entz AICP, Pres.  
UrbanTech Ltd.  
Tel: 602-678-0533**

**3.11 Other Values**

**3.11.1 Wilderness Areas**

**3.11.2 Noise and Light**

**3.11.3 Visual**

**3.11.4 Public Health and Safety**

**4 – ENVIRONMENTAL CONSEQUENCES**

**4.1 Land Resources**

**4.1.1 Topography**

**4.1.2 Soils**

**4.1.3 Geology Setting, Mineral, and Paleontological Resources**

**4.2 Water Resources**

**4.2.1 Groundwater and Surface Water**

**4.2.2 Floodplains**

**4.2.3 Wetlands, Riparian Areas, and Wild and Scenic Rivers**

**4.3 Air Quality**

**4.3.1 Quality/Visibility**

**4.3.2 Climate/Meteorology**

**4.4 Living Resources**

**4.4.1 Vegetation**

**4.4.2 Wildlife**

**4.4.3 Federally Listed Threatened and Endangered Species**

**4.4.4 Agriculture/Farmland**

**4.5 Cultural Resources**

**4.6 Socioeconomic Conditions**

**4.6.1 Employment and Income**

**4.6.2 Population and Demographic Trends**

**4.6.3 Lifestyle and Cultural Values**

**4.6.4 Community Infrastructure**

**4.7 Environmental Justice**

**4.8 Indian Trust Assets**

**4.9 Hazardous Materials**

**4.10 Resource Use Patterns**

**4.10.1 Transportation Corridors**

**4.10.2 Agriculture**

**4.10.3 Land Use Plans**

**4.11 Other Values**

**4.11.1 Wilderness Areas**

**4.11.2 Noise and Light**

**4.11.3 Visual**

**4.11.4 Public Health and Safety**

5 – LIST OF PREPARERS AND CONTRIBUTORS

6 – CONSULTATION AND COORDINATION

7 – DOCUMENT PREPARER’S SIGNATURE

8 - REFERENCES

**APPENDICES**

APPENDIX A Property Survey

APPENDIX B Proposed Development Plan

APPENDIX C Apache County USFWS Species List

APPENDIX D Cultural Resources Compliance

**LIST OF FIGURES**

FIGURE 1 Project Area Map

FIGURE 2 Project Area Aerial

FIGURE 3 Topographic Map

**LIST OF TABLES**

TABLE 1 Habitat Suitability Assessment for Sensitive Species

## **1 – INTRODUCTION**

### **1.1 Project Background**

The Cornfields Chapter of the Navajo Nation proposes to implement physical economic development on a 100-Acre site that runs along the eastern frontage of Navajo Route 15 near Burnside Junction, AZ. Strategic Planning, a Feasibility Study, preliminary Development Planning and other actions have been completed in preparation for the proposed development of the site. The development of the site will require approvals from the Navajo Nation and the Bureau of Indian Affairs (BIA). The federal action triggers the National Environmental Policy Act (NEPA) process. This environmental assessment documents the potential impacts of the development of the Cornfields Junction Site on the human and natural surroundings.

### **1.2 Project Location and Description**

The Cornfields Chapter is one of 110 recognized chapters of the Navajo Nation and is located in the southeastern portion of the Navajo Nation, within Apache County. The community of Cornfields has an estimated population of 1600 people. The development site is approximately 100-acres and is designated for economic development. The property is within the Cornfields Quadrangle, Arizona-Apache Co., 7.5-Minute Series USGS Topographic Map (2001). Figure A (following page) illustrates the nature of the site.

The currently proposed Project consists of the development of several site improvements on a portion of the 100-acre site, including:

- Grocery with inside Bank and Pharmacy
- For-Lease Retail Shops with an Internet Café
- Hardware Store
- Medical Office Lease Space with a Dialysis Center and attached Trauma Center
- Fast Food Restaurant (Different Menu than existing Burger King)
- Sit Down Restaurant with a capacity of 60 for dining.
- 24-Room Motel
- 20-space RV Park associated with the Motel

Parking, walkways and landscaping associated with the project are contemplated, along with necessary on-site utility development.

### **1.3 Purpose and Need**

The Deer Point Property is one of three economic development parcels available to the Cornfields Chapter of the Navajo Nation. The purpose and need for the project is to provide locally accessible retail opportunities and services, as well as to provide business opportunities and employment for local Tribal Members. Further, the Deer Point property, by location, can



serve the adjacent communities of Burnside and Ganado, in addition to tourists accessing Canyon de Chelly and Chinle, which are accessed via a nearby highway junction. Nearby existing development includes neighborhoods, schools and an event pavilion that can supply additional users to the site.

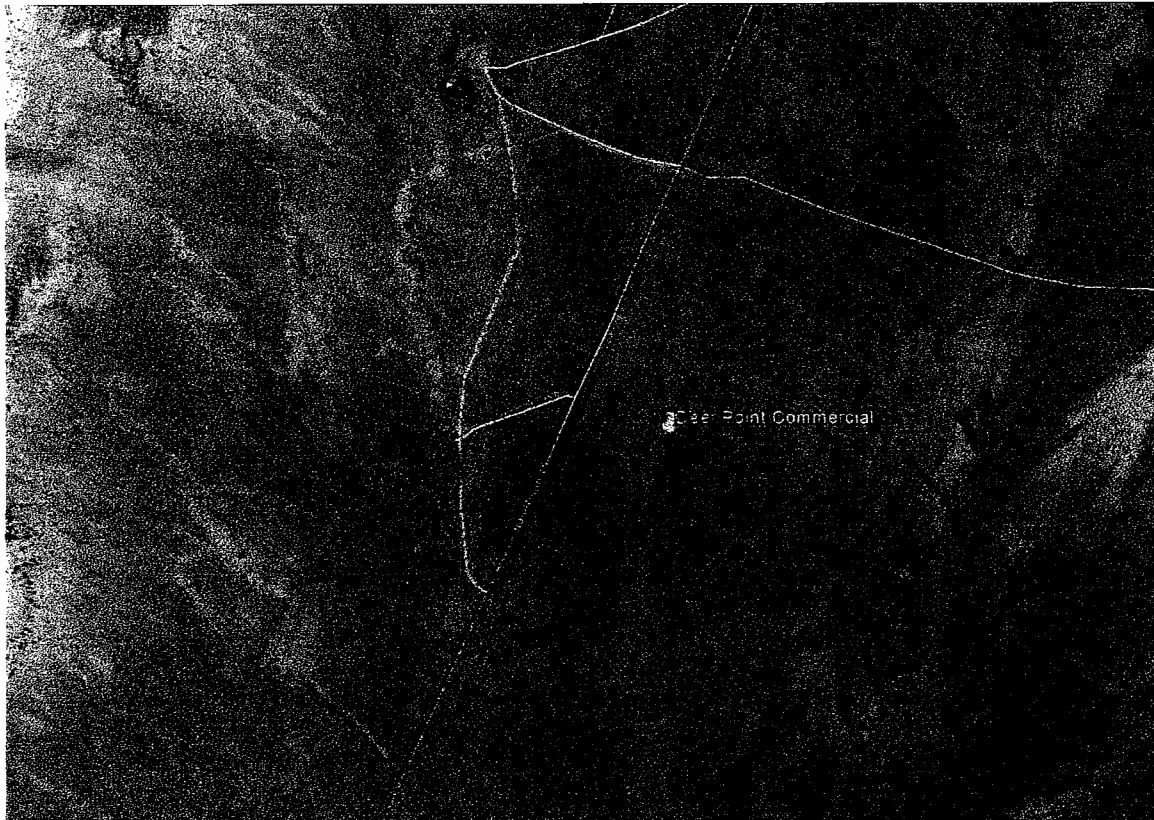


Figure 1: Aerial of Deer Point Area

## **2 – PROPOSED ACTION AND ALTERNATIVES**

### **2.1 Proposed Action**

Under the proposed action, the Cornfields Chapter would implement a phased development program for the Deer Point Property (See proposed Development Plan in Appendix B). The plan would be developed over a period of approximately five-to-ten years, including final project design, obtaining funding and construction of the Project. The plan would include several economic development components that would be developed in a phased plan.

## **2.2. No-Action Alternative**

Under the no-action alternative, the proposed project **would** not be constructed. No economic development **would** occur and the Cornfields Chapter **would** continue to lack local employment and business opportunities. No increases in local resident or governmental income would be achieved.

## **2.3 Alternatives Considered but Eliminated**

During the planning phases of the project, various types of development and various arrangements of elements of site development were considered. The proposed action reflects the development elements determined to be most feasible and related to the property's location adjacent to the heart of the Cornfields Chapter populated area. Other uses were removed from the plans and proposed for development on alternative sites (Sunrise Trading Post and Cornfields Junction) that are being separately studied.

## **3 – AFFECTED ENVIRONMENT**

*This Chapter describes the existing conditions both within and surrounding the subject site. This data is then used to evaluate the impacts that are discussed in Chapter 4.*

### **3.1 Land Resources [Physical characteristics of the site geography and soils]**

#### **3.1.1 Topography**

The general topography of the site consists of a flat area with very gentle slopes. Elevations range from 6230 to 6270 feet ASL in the immediate area, generally sloping to the south and east. Figure 2, next page, illustrates the local topography.

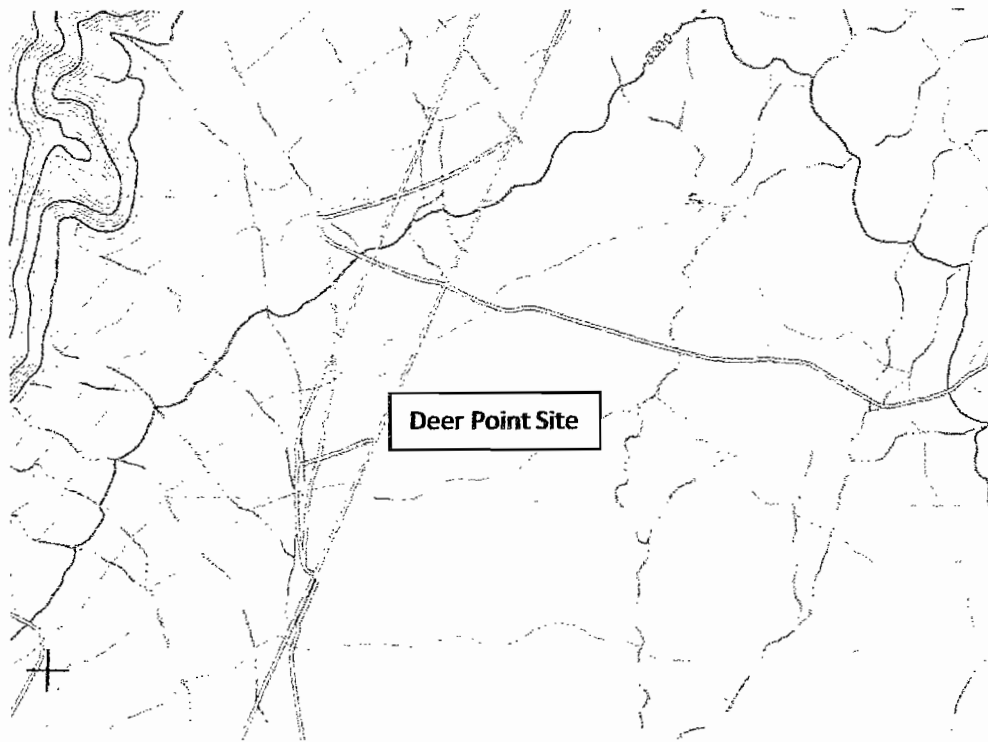


Figure 2

### 3.1.2 Soils

Soils in the Cornfields Junction area have been mapped in *Soil Survey of Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona, and McKinley and San Juan Counties, New Mexico* (NRCS) in 2007. The soils are identified as Zia sandy loam. This is comprised of Zia and similar soils at 85 percent, and other minor components at 15 percent, including Riverwash, Radnik, and Pinavetes family. Parent materials are eolian deposits and stream alluvium derived from sandstone and shale. Zia sandy loam is well drained, has moderately rapid permeability (2.0 to 6.0 in/hr), has low shrink-swell potential (about 2.0 percent), and has negligible flooding or ponding hazards.

### 3.1.3 Geology Setting, Mineral, and Paleontological Resources

The Navajo Nation is situated in the south-central region of the Colorado Plateau, an area that has remained relatively tectonically stable since late Precambrian time and only moderately unstable by the orogeny of Late Cretaceous and early Tertiary time (Cooley et.al 1969).

The reservation has been divided into several hydrogeologic subdivisions on the basis of differences in the exposed sedimentary rocks, structure and physiography (Cooley et. al 1969). The project site lies in the Chinle Valley subdivision, underlain by easily eroded Triassic sediments. It is a lowland between the scarred sandstone slopes on the Defiance Plateau and

the imposing eastern escarpment of Black Mesa. In general, the area consists of gentle slopes underlain with bedrock and alluvium.

### **3.2 Water Resources** *[Surface water, Groundwater, Floodplains and created conditions]*

#### **3.2.1 Groundwater and Surface Water**

Surface water generally drains on the site to the Southeast to access the Pueblo Colorado Wash. The drainage on the site is principally sheet flow with a few shallow braided channels where drainage passing in structures along Navajo Route 15 has created erosion. The predominant form of drainage is sheet flow throughout the property.

Ground water is at a reasonably shallow depth in the alluvium (300'), but increases further in depth where Sandstone and Shinarum occur in the Chinle Valley multiple-aquifer system. The overall system dips westward and northwestward. The subject site is among the highest portions of the aquifer system (shallowest depth to water) [Cooley et. al.].

#### **3.2.2 Floodplains**

Based on a general definition of floodplains, the project site is not located within a floodplain. A floodplain has been defined as "lowland and relatively flat areas adjoining inland and coastal waters...." and "a nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially", by Presidential Executive Order 11988-Floodplain Management and the U.S. Department of Agriculture, respectively.

#### **3.2.3 Wetlands, Riparian Areas, and Wild and Scenic Rivers**

There are no wetlands or riparian areas on or near the subject site. There are no "Wild & Scenic Rivers" designated anywhere on the Navajo Reservation. Solely Fossil Creek and the Upper Verde River in Arizona have that designation.

### **3.3 Air Quality** *[characteristics of the air and the air quality in the area]*

#### **3.3.1 Quality/Visibility**

The National Ambient Air Quality Standards (NAAQS) establish limits for pollutants considered harmful to public health and the environment. Under the NAAQS, there are six principal pollutants which are called "criteria" pollutants. They include carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter and sulfur dioxide. Air quality trends show air pollution concentrations in the southwest have improved since the standards were established. Maps posted at the U.S. EPA website ([www.epa.gov/region9/air](http://www.epa.gov/region9/air), May 2013) indicate that air quality of the Navajo Nation is within the NAAQS.

### **3.3.2 Climate/Meteorology**

The project region experiences relatively cold winters with temperatures averaging near 10-degrees Fahrenheit. Snow depths however are minimal and snows are irregular throughout December, January and February. Precipitation averages a relatively low 9.5" annually and rains are scattered throughout the year. The average maximum temperature (early August) is 84.7° Fahrenheit but can peak in the 90's. The average minimum temperature (mid-January) is 10.1-degrees Fahrenheit (Wunderground.com Historical Data (Ganado, AZ). Prevailing winter winds are from the northwest and summer winds are generally from the southwest. Winds are light to moderate, averaging 10 miles-per-hour or less.

### **3.4 Living Resources [vegetation and wildlife of the area, included protected species and their likelihood to occur (field investigation conducted 6/4/13)]**

#### **3.4.1 Vegetation**

The project site is within an area defined as Great Basin Desert Scrub (Brown 1994). The area is associated with Upland Sonoran Desert Scrub and Great Basin Pinyon-Juniper Woodland vegetation. Species diversity is low with dominant shrubs occupying vast tracts of land. Characteristic vegetation is low growing, widely spaced hemispherical, non-sprouting shrubs with widely-spaced bunchgrasses. Dominant shrubs include big sagebrush, black sagebrush, Bigelow sagebrush, shadscale, fourwing saltbush, rabbitbrush, winterfat, hopsage, horsebrush, blackbrush, and greasewood. Associated grasses may include blue gramma, galleta grass, Indian ricegrass, western wheatgrass, Junegrass, and several muhleys or dropseeds. Forbs include several gilia, buckwheat, penstemon, lupine, and globemallow species. Cacti number and species in Great Basin Desertscrub are relatively few in comparison to those found in warm deserts. Cactus plants are small in stature or prostrate and include several species of prickly pear, hedge hog, and cholla. The Deer Point site is covered in grasses. No major vegetation occurs within the site boundaries.

#### **3.4.2 Wildlife**

During the field survey of the Deer Point Site, no wildlife was observed.

#### **3.4.3 Federally Listed Threatened and Endangered Species**

A biological evaluation was conducted to assess potential impacts to threatened and endangered and sensitive species. The evaluation was based on a list of TES species provided by US Fish and Wildlife Service (USFWS) that are known to occur or have potential to occur on or near the project site. The list was supplemented by information contained in the "Navajo Nation Endangered Species List; Species Accounts; Version 3.08; August 2008". The effects are discussed in Section 4.4.2. A chart illustrating the results follows:

**Federally Listed Species Potentially Occurring in Apache County, Arizona  
(USF&W Listing 1/31/13 - current on 7/8/13 and**

**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<i>Common Name (Species Name)</i>	<i>Status</i>	<i>Range or Habitat Requirements</i>	<i>Potential for Occurrence in Project Area</i>	<i>Determination of Effect</i>
Apache (Arizona) trout ( <i>Oncorhynchus gilae apache</i> )	USFWS Threatened  NESL RCS-41-08 Not Listed	Streams and rivers generally above 6,000 ft. elevation with adequate stream flow and shading; temperatures below 77 degrees F, and substrate composed of boulders, rocks, gravel and some sand and silt.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.
Black-footed ferret ( <i>Mustela nigripes</i> )	USFWS Endangered  NESL RCS-41-08 Group 2	Grassland plains generally found in association with prairie dogs. Elevation less than 10,500 ft.	Unlikely to occur. No wild populations of this species are currently known to exist in Arizona. Reintroduced population exists in Aubrey Valley (Coconino County), Arizona.	No Effect.
California condor ( <i>Gymnogyps californianus</i> )	USFWS Endangered  NESL RCS-41-08 Group 4	High desert canyons and plateaus. Elevation varies.	Recovery program has reintroduced condors to Northern Arizona, but in Coconino County. The subject site does not include nesting habitat.	No Effect.

**Federally Listed Species Potentially Occurring in Apache County, Arizona  
(USF&W Listing 1/31/13 - current on 7/8/13 and**

**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<b>Common Name (Species Name)</b>	<b>Status</b>	<b>Range or Habitat Requirements</b>	<b>Potential for Occurrence in Project Area</b>	<b>Determination of Effect</b>
<b>Chiricahua leopard frog (<i>Lithobates chiricahuensis</i>)</b>	USFWS Endangered  NESL RCS-41-08 Not Listed	Restricted to springs, livestock tanks, and streams in upper portion of watersheds that are free from nonnative predators or where marginal habitat for nonnative predators exists. Elevation of 3,281 – 8,890 ft.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.
<b>Little Colorado spinedace (<i>Lepidomeda vittata</i>)</b>	USFWS Endangered  NESL RCS-41-08 Not Listed	Moderate to small streams; found in pools and riffles with water flowing over fine gravel and silt substrate. Elevation of 4,000 – 8,000 ft.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.
<b>Loach minnow (<i>Tiaroga cobitis</i>)</b>	USFWS Endangered  NESL RCS-41-08 Not Listed	Benthic species of small to large perennial streams with swift shallow water over cobble and gravel. Recurrent flooding and natural hydrograph important. Elev. <8000 ft.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.



**Federally Listed Species Potentially Occurring in Apache County, Arizona**  
**(USF&W Listing 1/31/13 - current on 7/8/13 and**  
**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<b>Common Name (Species Name)</b>	<b>Status</b>	<b>Range or Habitat Requirements</b>	<b>Potential for Occurrence in Project Area</b>	<b>Determination of Effect</b>
<b>Mexican gray wolf (<i>Canis lupus baileyi</i>)</b>	USFWS Endangered  NESL RCS-41-08 Not Listed	Chaparral, woodland, and forested areas. May cross desert areas. Elevation of 4,000 to 12,000 ft.	Unlikely to occur. Generally reintroduced in southern Apache County on the White Mountain Apache Reservation. Critical habitat was established as old-growth forests; none exist in this portion of the Navajo Reservation.	No Effect.
<b>Mexican spotted owl (<i>Strix occidentalis lucida</i>)</b>	USFWS Threatened  NESL RCS-41-08 Group 3	Nest in canyons and dense forests with multi-layered foliage structure. Elev. 4100 - 9000 ft.	Unlikely to occur. There is no habitat in the project area or the surrounding vicinity.	No Effect.
<b>Navajo sedge (<i>Carex specuicola</i>)</b>	USFWS Threatened  NESL RCS-41-08 Group 3	Found in silty soils at shady seeps and springs. There is Designated critical habitat on the Navajo Nation near the Inscription House Ruins. Also found at seep springs on vertical cliffs of pink-red Navajo sandstone at elevations of 5,700 – 6,000 ft.	Unlikely to occur. There is no habitat in the project area or the surrounding vicinity. The designated critical habitat is 100-miles northwest of the subject site.	No Effect.



**Federally Listed Species Potentially Occurring in Apache County, Arizona**  
**(USF&W Listing 1/31/13 - current on 7/8/13 and**  
**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<b>Common Name (Species Name)</b>	<b>Status</b>	<b>Range or Habitat Requirements</b>	<b>Potential for Occurrence in Project Area</b>	<b>Determination of Effect</b>
<b>Southwestern willow flycatcher (Empidonax traillii extimus)</b>	USFWS Endangered  NESL RCS-41-08 Group 2	Cottonwood/willow and tamarisk vegetation communities along rivers and streams. Designated habitat in this area of Arizona only includes the Little Colorado River. Elev. < 8500 ft.	Unlikely to occur. There is neither riparian habitat nor tamarisks on-site or in the vicinity.	No Effect.
<b>Three Forks springsnail (Pyrgulopsis trivialis)</b>	USFWS Endangered  NESL RCS-41-08 Not Listed	Rheocrene springs, seeps, marshes, spring pools, outflows and diverse lotic waters. Distribution limited to Boneyard Creek and Boneyard Bog Spring complexes in the North Fork of the East Fork Black River watershed. Critical habitat is designated for 17.2 acres (77 FR 23060).	Unlikely to occur. The habitat lies in southeastern Apache County, over 100 miles from the subject site.	No Effect
<b>Zuni bluehead sucker (Catostomus discorbolus yarrowi)</b>	USFWS Proposed Endangered  NESL RCS-41-08 Not Listed	Small streams in low velocity, moderate deep pools, and pool-runs with seasonal dense algae. The fish is found in two drainages on the Navajo Nation (1.) Kinlichee Creek [Little Colorado River] and (2.) Canyon de Chelly [San Juan River]. Elevations over 6,000 ft.	Unlikely to occur. The closest habitat would be Kinlichee Creek, which lies approximately 20-miles east of the subject site.	No Effect.

**Federally Listed Species Potentially Occurring in Apache County, Arizona  
(USF&W Listing 1/31/13 - current on 7/8/13 and  
NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<b>Common Name (Species Name)</b>	<b>Status</b>	<b>Range or Habitat Requirements</b>	<b>Potential for Occurrence in Project Area</b>	<b>Determination of Effect</b>
<b>Zuni fleabane (<i>Erigeron rhizomatus</i>)</b>	USFWS Threatened  NESL RCS-41-08 Not Listed	Selenium-rich red or gray detrital clay soils derived from the Chinle and Baca formations at elevations between 7,300 and 8,000 ft.	Unlikely to occur. The subject site does not contain the correct soils. Site is below habitat elevation.	No Effect.
<b>New Mexico meadow jumping mouse (<i>Zapus hudsonius luteus</i>)</b>	USFWS Candidate  NESL RCS-41-08 Not Listed	Nests in dry soils but also uses moist, streamside, dense riparian/wetland vegetation. The New Mexican jumping mouse occurs in 6 populations in the White Mountains, Arizona. An inventory and status assessment throughout its historical range in Arizona is currently being conducted.	Unlikely to occur. There are no springs or riparian habitats in the vicinity. The current habitat analysis shows the populations to be in central and southern Apache County.	No Effect.
<b>Northern Mexican Gartersnake (<i>Thamnophis eques megalops</i>)</b>	USFWS Candidate  NESL RCS-41-08 Not Listed	Cienegas, stock tanks, large river riparian woodlands and forest, streamside gallery forests. Elevation range is 130 - 8500 ft.	Unlikely to occur. There is no habitat on site. There are no riparian woodlands or forests in this area of the Reservation. There have been no observations of the species on-site.	No Effect.
<b>Roundtail chub (<i>Gila robusta</i>)</b>	USFWS Candidate  NESL RCS-41-08 Group 2	Cool to warm waters of rivers and streams. Occupy the deepest pools and eddies of streams. Elev. range is 1,000 – 7,500 ft.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.

**Federally Listed Species Potentially Occurring in Apache County, Arizona**  
**(USF&W Listing 1/31/13 - current on 7/8/13 and**  
**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<i>Common Name (Species Name)</i>	<i>Status</i>	<i>Range or Habitat Requirements</i>	<i>Potential for Occurrence in Project Area</i>	<i>Determination of Effect</i>
<b>Yellow-billed cuckoo (Coccyzus americanus)</b>	USFWS Candidate  NESL RCS-41-08 Group 2	Large blocks or riparian woodlands (cottonwood, willow, or tamarisk galleries). Elev. < 6500 ft.	Unlikely to occur. There is no habitat. There are no riparian woodlands or forests in this area of the Reservation.	No Effect.
<b>Arizona Willow</b>	Conservation Agreement between USFWS, Forest Service and Park Service.  NESL RCS-41-08 Not Listed	Unshaded or partially shaded wet meadows, streamsid es and cienegas; typically in or adjacent to perennial water. Known in the vicinity of Mount Baldy, on the Apache-Sitgreaves National Forest, and private land at elevations greater than 8,000 ft.	Unlikely to occur. There is no habitat and the site's elevation (6,500 ft.) is substantially below the species' range.	No Effect.
<b>Gooddings Onion (Allium gooddingii)</b>	Conservation Agreement between USFWS, USFS.  NESL RCS-41-08 Not Listed	Shaded sites on north-trending drainages, on slopes, or in narrow canyons, within mixed conifer and spruce fir forests.	Unlikely to occur. There is no habitat and the site's elevation (6,100 ft.) is substantially below the species' range.	No Effect.

#### **3.4.4 Agriculture/Farmland**

The site has not been in agricultural use. Some localized grazing has been allowed, but the land does not lie within a current livestock permitted area. There are no prime or unique farmlands in the immediate project area.

### **3.5 Cultural Resources** *[The status of Cultural Resource Investigations on the Site]*

The Navajo Nation Historic Preservation Department (NNHPD) conducted a survey of the site reflected in report #HPD-09-1040. The survey was completed by Linda Laughing, ASO of the Navajo Nation Archaeology Department. The results are reflected in report #NNAD 09-332 in Appendix D.

The findings were five archaeological sites; AZ-P-19-58, AZ-P-19-59, AZ-P-19-60, AZ-P-19-61, and AZ-P-19-62. In addition, there were twenty-two isolated occurrences identified during the inventory. Three of the five sites were determined to be Register-eligible properties. The sites are: AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62. The remaining two sites did not appear to be Register-eligible properties.

A determination of no historic properties affected was recommended for the project undertaking provided that the potential Register-eligible properties are avoided.

Also, in the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified.

### **3.6 Socioeconomic Conditions** *[The status of the residents of the area impacted by the proposed action]*

#### **3.6.1 Employment and Income**

According to American Factfinder (Cornfields Chapter Navajo; custom data search), there are 61 people in the Labor Force in the Cornfields Chapter, of which only 37 are employed. The unemployment rate is severe at 23.8%. Per Capita income is low at \$9,399. Primary employment categories include Educational, Recreation, Ranching and Food industries.

#### **3.6.2 Population and Demographic Trends**

According to the U.S. Census 2010 Census Summary File DP-1 for Cornfields, the total population in the census tract is 911, though the extended area served may include as many as 1600 residents. The median age was 35.4 years. The census also shows 355 housing units with 286 of them occupied. The average household size is 3.06 persons. In comparison, the U.S. average is about 2.5 people per household.

### **3.6.3 Lifestyle and Cultural Values**

Generally speaking, the communities of the Navajo Nation comprise a variety of people and lifestyles. Residents in Cornfields are generally isolated with the nearest commercial outlet at least ten (10) miles away. Due to the remoteness of the chapter and the community, there is a lack of jobs. A majority of the people still rely on livestock and farming for subsistence, if working locally. The few people who have jobs commute out of the community. Most residents practice the traditional Navajo lifestyle or live a combination of traditional and modern lifestyles. Individual lifestyles reflect cultural values, attitudes, and expectations.

### **3.6.4 Community Infrastructure**

The following infrastructure systems are in effect for the Cornfields Chapter area of the Navajo Reservation

- **Water:** Water services in the area are predominately provided for home sites. The Indian Health Services (IHS) designed and provided these existing services for the home sites. There is a six (6") inch main pipeline along Navajo Route 15 with lateral pipelines feeding the homesteads. After a year of operation IHS turns these water services over to NTUA for operations and maintenance. There are water sources in the vicinity of the potential development site.
- **Sewer:** The sewer conveyance piping for a central sewage collection system is not available at the site. The only central collection sewer pond system is at the Chapter House area supporting facilities around the Chapter House and the Navajo Housing Authority (NHA) housing development adjacent to the Chapter House.
- **Power:** Three phase power would be needed for the potential development sites. The subject site has both single-phase and three-phase power available. The overhead line runs adjacent to the NR15 Right-of-way, along the west boundary of the property.
- **Natural Gas:** Natural gas service is not available in the immediate area. The service would have to be piped from Ganado, Arizona. Liquefied Petroleum Gas (LPG) may have to be considered if the development sites are going to require gas service.
- **Telecommunications:** Frontier Communications is the provider for telephone and internet services in the Cornfields Chapter area. The telephone lines and fiber optics cabling are provided adjacent to power line provider lines. This may be aerial lines on existing telephone poles or direct burial cable in the ground.

## **3.7 Environmental Justice**

The proposed project is located in Cornfields Chapter where 98% of the population is Native American. Federal agencies are required to evaluate issues related to environmental justice where it is defined as the pursuit of equal justice and equal protection under the law for all

environmental statutes and regulations without discrimination based on race, ethnicity, and/or socioeconomic status. No environmental justice issues were identified.

### **3.8 Indian Trust Assets**

Except for management of allotment lands, no Indian Trust Resources are found in the project area.

### **3.9 Hazardous Materials** *[Primary Research was performed using mapping data at the EPA Envirofacts Warehouse website and the Arizona Department of Environmental Quality website.]*

#### **3.9.1 RCRA Sites**

Based on the EPA data base, there are no Subtitle C or Subtitle D sites involving hazardous waste near the proposed site. The closest RCRA sites are in the Town of Ganado.

#### **3.9.2 RCRA Subtitle I Sites**

No underground storage tanks were evidenced in a site visit and none appear on the RCRA search or in a search of ADEQ records. No underground storage tanks will be installed as part of the proposed project.

#### **3.9.3 Toxic Substances**

Based on site visits and the U.S. EPA Envirofacts website ([www.epa.gov/enviro](http://www.epa.gov/enviro)), no Toxic Substances Control Act sites occur on or near the project area. No toxic substances will be used, generated, handled, or stored on or near the project site as part of the construction or operation of the proposed project.

### **3.10 Resource Use Patterns** *[The following resources or land uses are not found in the project area: hunting, fishing, gathering, timber harvesting, mining, or solid waste dumpsites. However, the following land uses or practices occur in this region: transportation network, land use plans, and agriculture.]*

#### **3.10.1 Transportation Corridors**

The site fronts on Navajo Route 15 near Burnside Junction. NR15 is the principle corridor between Dilkon and Burnside Junction where it intersects Highways 264 and 191 accessing Ganado, Chinle and Canyon de Chelly, among other destination in this area of the Navajo Reservation. NR15 is paved; however, there are no other paved roads within or accessing the Deer Point site.

### **3.10.2 Agriculture**

The 100-acre site is not in agricultural use, as referenced previously in Section 3.4.4. The records research performed by the Archeology Department did not identify previous agricultural uses of the property.

### **3.10.3 Land Use Plans**

Several Land Use Planning exercises have been performed over the years. Documentation includes the following:

- Cornfields Chapter: Community Land Use Plan 2005 (April 29,2005); [Jones & Stokes]
- Strategic Planning: Cornfields Chapter: Among the Rabbit Brush
- Cornfields 4 Commercial Sites Economic Feasibility Study (June 2013); [Southwest Business Development Consultants]

The proposed project site and the proposed project elements are reflected in the previous Land Use Plans and Strategic Planning that has been performed.

## **3.11 Other Values**

### **3.11.1 Wilderness Areas**

There are no wilderness areas near the subject Deer Point property.

### **3.11.2 Noise and Light**

The primary noise generator in the area is traffic on Navajo Route 15. The traffic is not of sufficient levels to create a noise nuisance.

### **3.11.3 Visual**

The subject site has long-distance views generally to the southeast toward the Pueblo Colorado Wash. No scenic byways or scenic areas protected by law occur in the project area.

### **3.11.4 Public Health and Safety**

The Cornfields Chapter community is primarily served via services provided out of Ganado Arizona, approximately ½-hour away by Road. Police and Fire Services are from that location. Medical services are provided by Sage Memorial Hospital, a private facility also located in Ganado.



## **4 – ENVIRONMENTAL CONSEQUENCES**

*[This section discusses the impacts on the natural or human environment as a result of the proposed action. The section also lists mitigation measures that reduce or eliminate any impacts that are identified.]*

### **4.1 Land Uses**

#### **4.1.1 Topography**

Since the Deer Point site is principally flat, the existing topography will not substantially be changed. Therefore, no impact on the site's topography is anticipated.

#### **4.1.2 Soils**

Soils will be disturbed during the construction of project elements. The extent of soil erosion will be minimal, not only due to the nature of the soils, but also because the project is designed to conform to the existing topography without appreciably altering drainage patterns.

#### **4.1.3 Geology Setting, Mineral, and Paleontological Resources**

No mining is proposed as a part of this project, so no impact to the geological or mineral resources is contemplated.

### **4.2 Water Resources**

#### **4.2.1 Groundwater and Surface Water**

As described under "4.1.2 Soils previously, no impact on drainage is anticipated. Due to the quantity and depth of groundwater resources in the immediate area, no appreciable impact on groundwater resources are anticipated. Water demand is also limited by the nature of facilities that are planned for the site, most of which are low-impact outdoor uses.

#### **4.2.3 Floodplains**

There are no floodplains in the immediate area of the proposed project; therefore, there will be no impacts.

#### **4.2.4 Wetlands, Riparian Areas, and Wild and Scenic Rivers**

There are no Wetlands, Riparian Areas, or Wild & Scenic Rivers in the area of the proposed project or nearby; therefore, there will be no impacts.



### **4.3 Air Quality**

#### **4.3.1 Quality/Visibility**

The construction of the project will cause some increase in localized particulate matter that can be mitigated by implementing dust control measures during the construction period(s). The impacts will be short term and minor.

**Mitigation:** Minimize fugitive dust during the construction period by applying water to the ground.

#### **4.3.2 Climate/Meteorology**

The surrounding area's climate and meteorology will not be impacted by the proposed project.

### **4.4 Living Resources**

#### **4.4.1 Vegetation**

Removal of any vegetation is limited to removal of some native grasses. Impacts on vegetation in the area will be minimal.

#### **4.4.2 Wildlife**

No wildlife was observed during site visits; therefore no impact on wildlife is anticipated.

#### **4.4.3 Federally Listed Threatened and Endangered Species**

The biological evaluation showed that the site contains no habitat for the majority of species on the Federal and Navajo lists. Individual species may have slight losses of potential habitat, but due to the proposed projects size and type, the impact will be long-term, but negligible.

#### **4.4.4 Agriculture/Farmland**

No agricultural uses exist on-property and the property is not significant as Prime farmland. There will be no impact.

### **4.5 Cultural Resources**

All but three of the sites on the Deer Point property have been determined to be non-eligible for the Register. However three sites may be eligible: AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62. No impact on Cultural Resources is foreseen if those three sites are avoided during development of the property. Construction specifications shall require that any discovery of artifacts be reported.

## **Mitigations:**

- a. Development of the property shall avoid cultural resource sites AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62.
- b. Construction specifications shall state that: "In the event of a discovery ("discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified."

## **4.6 Socioeconomic Conditions**

### **4.6.1 Employment and Income**

The proposed project should have a positive impact on employment and income, and will be long-term. There is no negative impact anticipated.

### **4.6.2 Population and Demographic Trends**

No impacts on local population or demographic trends are expected to be generated by this Deer Point property project.

### **4.6.3 Lifestyle and Cultural Values**

No impact on lifestyle or cultural values is expected to be generated by this project.

### **4.6.4 Community Infrastructure**

Improvements will be necessary to Community infrastructure in the area. Electric, telecommunications and roadway access are developed. Water and sewer development are expected to be on-site as a portion of the proposed project's development. These will be new systems and will not impact the Community's existing water and wastewater capacities or systems due to the distance of the Deer Point site from the Community's existing facilities.

## **4.7 Environmental Justice**

The Community is comprised of low-income minority residents. Based on the purpose of the project and the nature of the project, only positive benefits are expected from its implementation. No negative impacts are anticipated.

#### **4.8 Indian Trust Assets**

There are no listed Trust Assets in the area; therefore no impact on trust assets is contemplated.

#### **4.9 Hazardous Materials**

There are no RCRA sites in the vicinity and no toxic substance sites, so there is no impact on the proposed project. The proposed project does not include any elements that would generate hazardous or toxic materials; therefore, there is no impact from implementing the proposed project.

#### **4.10 Resource Use Patterns**

##### **4.10.1 Transportation Corridors**

Since the purpose of the project is primarily to capture existing traffic along Navajo Route 15. The property in an area with similar developments and NR15 is of sufficient capacity to serve the property. No major impact is expected on existing traffic corridors.

##### **4.10.2 Agriculture**

There is no agricultural use existing on the property; therefore, there will be no impact.

##### **4.10.3 Land Use Plans**

The proposed project is a continuation of existing studies that have identified the site and the elements of the project on the site. The proposed project is in conformance with previous planning activities.

#### **4.11 Other Values**

##### **4.11.1 Wilderness Areas**

There are no designated wilderness areas in the vicinity; therefore, there will be no impact.

##### **4.11.2 Noise and Light**

There will be a local increase in noise during the construction period. Ambient noise would return to pre-development levels once construction is complete. The proposed project will have no long-term impact to ambient noise levels.

The installation of security lighting will increase light levels in the long-term; however, the use of "Dark Sky" fixtures and photometric design to minimize light-bleeding will contain light level

increases within the project boundaries, minimizing impacts on surrounding property.

**Mitigation:** On-site lighting shall consist of “Dark Sky” fixtures and shall be designed to minimize any light-bleeding into surrounding properties.

#### **4.11.3 Visual**

The project includes development of a portion of the overall Deer Point property with multiple buildings and parking. The buildings are of moderate scale and all are planned as single-story structures. The area surrounding the development property is similarly developed with relatively dense residential and public buildings, including the aforementioned pavilion and high school. While the Deep Point site lies approximately ¼ mile from these, the Burnside Junction area is emerging as a “core” and additional similar development is expected in the surrounding area. The proposed project may accelerate this, which is not anticipated to have a negative impact on the area.

#### **4.11.4 Public Health & Safety**

No negative impact to the Health & Safety of the Cornfields Community is expected to result from the proposed project.

#### **4.12 Cumulative Impacts**

The impacts resulting from project activities are minor in the form of temporary and highly localized surface disturbances. Cumulative impacts result from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency or person undertakes these actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.

No adverse cumulative impacts are anticipated as a result of the proposed project.

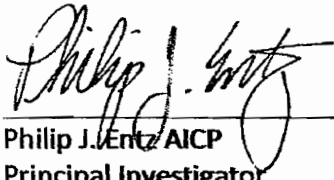
## 5 – LIST OF PREPARERS

Preparer/Title	Task	Company/Agency
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Al Francis Senior Project Manager	Utilities and Regulatory Coordination	Arcadis US
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Dave Ullrich Planning Consultant	Drainage considerations and mapping	O'Neill Engineering LLC
Douglas Stroh Architectural Consultant	Architectural Considerations	Stroh Architecture Inc.
Linda Laughing ASO Cultural Resources	Cultural Resource Clearance	Navajo Nation Archeology Department
Antoinette Kurley-Begay Principal Archeologist	Cultural Resource Inventory	Navajo Nation Archeology Department

## 6 – CONSULTATION AND COORDINATION

Name	Title	Company/Agency
Justin Johnson	President	Cornfields Chapter
Jimmy Taliman Sr.	Vice President	Cornfields Chapter
Elizabeth Johnson	Chapter Manager	Cornfields Chapter
Cecelia White	Resident	Cornfields Chapter
Joyce Moore	Resident	Cornfields Chapter
Charlie Taliman	Resident	Cornfields Chapter
Gordon Dempsy	Resident	Cornfields Chapter
Bertha Dempsy	Resident	Cornfields Chapter
Kevin S. White	Resident	Cornfields Chapter
Alton Shepherd	Council Delegate	Navajo Nation
Ralph T. Begay	Representative	Ft. Defiance Regional Business Development Office, Division of Economic Development
Gregory Bahe	Civil Engineer	Navajo Tribal Utility Authority
Anslem Harney	Representative	CRBDO / FDRBDO

7 - DOCUMENT PREPARER'S SIGNATURE



Philip J. Entz AICP  
Principal Investigator

17 January 2014

Date

## 8 – REFERENCES

### **LAWS:**

The Clean Air Act as amended (42 USC 7401 et seq.)  
National Historic Preservation Act, as amended (16 USC 470)  
Archaeological and Historic Preservation Act  
Native American Graves Protection and Repatriation Act  
Archaeological Resources Protection Act  
Threatened and Endangered Species Act of 1983, as amended (16 USC 1531 et seq.)  
American Indian Religious Freedom Act of 1978 (42 USC 1996)  
Resource Conservation and Recovery Act of 1976 (43 USC 6901, et seq.)  
Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended (43 USC 9615)  
Clean Water Act of 1977 (33 USC 1251 et seq.)  
Indian Gaming Regulatory Act (25 USC 2701, et seq.)  
Energy Policy Act of 2005

### **EXECUTIVE ORDERS:**

E.O. 12898, Environmental Justice, February 11, 1994  
E.O. 11988, Protection of Floodplains, May 24, 1977  
E.O. 131189, Responsibilities of Federal Agencies to Protect Migratory Bird, January 10, 2001  
E.O. 11990, Protection of Wetlands, May 24, 1977  
E.O. 13007, Indian Sacred Sites, May 24, 1996

### **BIBLIOGRAPHY:**

On-Site Visits: Al Francis BSCM: Arcadis US; Philip J. Entz AICP: UrbanTech Ltd.; Dave Ullrich; ONiell Engineering; Jerry Taliman Sr.; Cornfields Chapter V.P.

Linda Laughing ASO, Navajo Nation Archeology Department. *"A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona: NNAD 09-332"*. October 5, 2010.

Jones & Stokes. *Cornfields Chapter: Community Land Use Plan 2005*. April 29, 2005

GrantExperts. *Strategic Planning: Cornfields Chapter: Among the Rabbit Brush*. 8/27/11 Workshop/ Visioning

Southwest Business Development Consultants. *Cornfields 4 Commercial Sites Economic Feasibility Study*. June 2013

Klara Kelley and Harris Francis. *Bibliography for Navajo Land Trading Posts*. Updated Jan. 1, 2010.

David Mikesic & Daniela Roth. *Navajo Nation Endangered Species List*. Version 3.08; August 2008

U.S. Fish & Wildlife; "National Wetlands Inventory; Custom Map".  
<http://www.fws.gov/wetlands/Data/Mapper.html>; 6/10/13

EPA Pacific Southwest Region 9. "24-Hour Particulate Matter (24-Hour PM-2.5) Attainment Designations". [http://www.epa.gov/region09/air/maps/r9\\_pm25.html](http://www.epa.gov/region09/air/maps/r9_pm25.html). 6/10/13

MVD: Arizona Department of Transportation. "Airport Development ~ Airports".  
[http://www.azdot.gov/MPD/Airport\\_Development/airports/airports\\_list.asp?FAA=85V](http://www.azdot.gov/MPD/Airport_Development/airports/airports_list.asp?FAA=85V).  
6/10/13

The University of Arizona, College of Agriculture and Life Sciences. "Upper Colorado River Basin". [ag.arizona.edu/azaqua/watershed/uprcolo.html](http://ag.arizona.edu/azaqua/watershed/uprcolo.html). 6/10/13

EnviroMapper for Envirofacts | US EPA. "Custom Site Maps for: (1.) Air, (2.) Water, (3.) Waste, (4.) land, (5.) Toxins and (6.) Radiation". [www.epa.gov/emefdata/em4ef.html](http://www.epa.gov/emefdata/em4ef.html). 6/10/13

Arizona Department of Environmental Quality. "Custom Site Maps for: (1.) Hydrography, (2.) Water Quality, (3.) Waste Programs [Brownfields, etc.] and (4.) Air Quality".  
[gisweb.azdeq.gov/arcgis/emap/?topic=places](http://gisweb.azdeq.gov/arcgis/emap/?topic=places). 6/10/13

NOAA Office of Ocean and Coastal Resource Management. "My State" [note: Arizona is not listed]. [coastalmanagement.noaa.gov/mystate/welcome.html](http://coastalmanagement.noaa.gov/mystate/welcome.html). 6/10/13

National Wild and Scenic Rivers System. "Fossil Creek" and "Verde River".  
<http://www.rivers.gov/arizona.php>. 6/10/13

The University of Arizona, College of Agriculture and Life Sciences. "Little Colorado River Basin". [ag.arizona.edu/azaqua/watershed/ltlcolo.html](http://ag.arizona.edu/azaqua/watershed/ltlcolo.html). 6/10/13

The University of Arizona, College of Agriculture and Life Sciences. "Arizona Watershed Information". [ag.arizona.edu/azaqua/watershed/water.html](http://ag.arizona.edu/azaqua/watershed/water.html). 6/10/13

SDWIS Search | Envirofacts | US EPA. "Safe Drinking Water Information System; Apache County". [oaspub.epa.gov/enviro/sdw\\_query\\_v2.get\\_list?](http://oaspub.epa.gov/enviro/sdw_query_v2.get_list?). 6/10/13

Sole Source Aquifer: Ground Water | Region 9: Water | US EPA. "Ground Water; Sole Source Aquifers". [www.epa.gov/region9/water/groundwater/ssa.html](http://www.epa.gov/region9/water/groundwater/ssa.html). 6/10/13

U.S. Fish & Wildlife. "Apache County Endangered Species List; 1/31/13".  
[www.fws.gov\\_southwest\\_es\\_arizona\\_Documents\\_CountyLists\\_Apache.pdf](http://www.fws.gov_southwest_es_arizona_Documents_CountyLists_Apache.pdf) (Downloaded 6/10/13)



EPA Pacific Southwest Region 9. "Air Quality Analysis: Sulfur Dioxide (SO<sub>2</sub>) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_so2.html](http://www.epa.gov/region09/air/maps/r9_so2.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Air Quality Analysis: Ozone (O<sub>3</sub>) Attainment Designations in Region 9 (1-hour Standard)". [www.epa.gov/region09/air/maps/r9\\_o3.html](http://www.epa.gov/region09/air/maps/r9_o3.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Ozone (O<sub>3</sub>) Attainment Designations in Region 9 (8-hour 2008 NAAQS)". [www.epa.gov/region09/air/maps/r9\\_o38hr.html](http://www.epa.gov/region09/air/maps/r9_o38hr.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Carbon Monoxide (CO) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_co.html](http://www.epa.gov/region09/air/maps/r9_co.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: 24-Hour Particulate Matter (24-Hour PM-2.5) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_pm25.html](http://www.epa.gov/region09/air/maps/r9_pm25.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Particulate Matter (PM-10) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_pm10.html](http://www.epa.gov/region09/air/maps/r9_pm10.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Nitrogen Dioxide (NO<sub>2</sub>) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_no2.html](http://www.epa.gov/region09/air/maps/r9_no2.html). 6/10/13

RCRAInfo Search Results | Envirofacts | US EPA. "RCRA Custom Search by Zip Code 86505: Enforcement Facilities, Hazardous Waste Data". [iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac\\_search](http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search). 6/10/13 (database dated 5/13/13)

Francis, Al. Arcadis-US. "Cornfields Chapter I Economic Development Study; Draft Utility Section: June 14, 2013".

U.S. Census Bureau; American Factfinder. Cornfield CDP Arizona: DP03 – Selected Economic Characteristics. 2007-2011 5-year estimates.

U.S. Census Bureau; American Factfinder. Cornfield CDP Arizona: DP01 - Profile of General Population and Housing Characteristics: 2010

Cornfields Chapter Website at <http://cornfields.navajochapters.org/>

USDA, Natural Resources Conservation Service. *Soil Survey of Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona, and McKinley and San Juan Counties, New Mexico.* (Sheets 51 and 52 of 112). 2008

Federal Emergency Management Agency, 1988. Flood Insurance Rate Map, Maricopa County,

Arizona Unincorporated Areas. Panel 2595 of 4350, Map Number 04013C2595D.

Cooley, M.E. 1967. Geologic Map of Arizona. Arizona Bureau of Geology and Mineral Technology.

Brown, David E., ed. 1994. Biotic Communities: Southwestern United States and Northwestern New Mexico. Salt Lake City: University of Utah Press.

Arizona Geological Services. Geologic Map of Arizona. <http://services.usgin.org/azgs/geologic-map-arizona.htm>

## Appendix A Property Survey

CORNFIELDS MULTIPURPOSE TRACT  
THE SE¼ OF SEC. 22, THE NW¼ OF SEC. 26, &  
THE NE¼ OF SEC. 27, T27N, R25E, G89RM  
CORNFIELDS, ARACHE COUNTY, ARIZONA  
OCTOBER 03, 2007

A CERTAIN TRACT OF LAND SITUATE IN THE SOUTHEAST QUARTER (SE $\frac{1}{4}$ ) OF SECTION 22, THE NORTHWEST QUARTER (NW $\frac{1}{4}$ ) OF SECTION 26, AND THE NORTHEAST QUARTER (NE $\frac{1}{4}$ ) OF SECTION 27, TOWNSHIP 27 NORTH, RANGE 25 EAST, GILA & SALT RIVER MERIDIAN IN THE NORTHEARLY VICINITY OF CORNFIELDS COMMUNITY CHAPTER HOUSE, IN CORNFIELDS, APACHE COUNTY, ARIZONA MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING at a BLM Brass Cap, the northeast corner of said Section 27, thence run N 60°39'13"W a distance of 422.63 feet to the northwest corner and the point of beginning of the herein described tract of land;

Thence S 65°31'47"E a distance of 1452.00 feet to the NE corner;

Thence S 24°28'13"W a distance of 3000.00 feet to the SE corner;

Thence N 65°31'47"W a distance of 1452.00 feet to the SW corner;

Thence paralleling the existing power line along the east R.O.W. Line of Navajo Route 15 Highway, N 24°28'13"E a distance of 3000.00 feet to the point of beginning.

The enclosed described area comprises of 100.00 acres more or less.

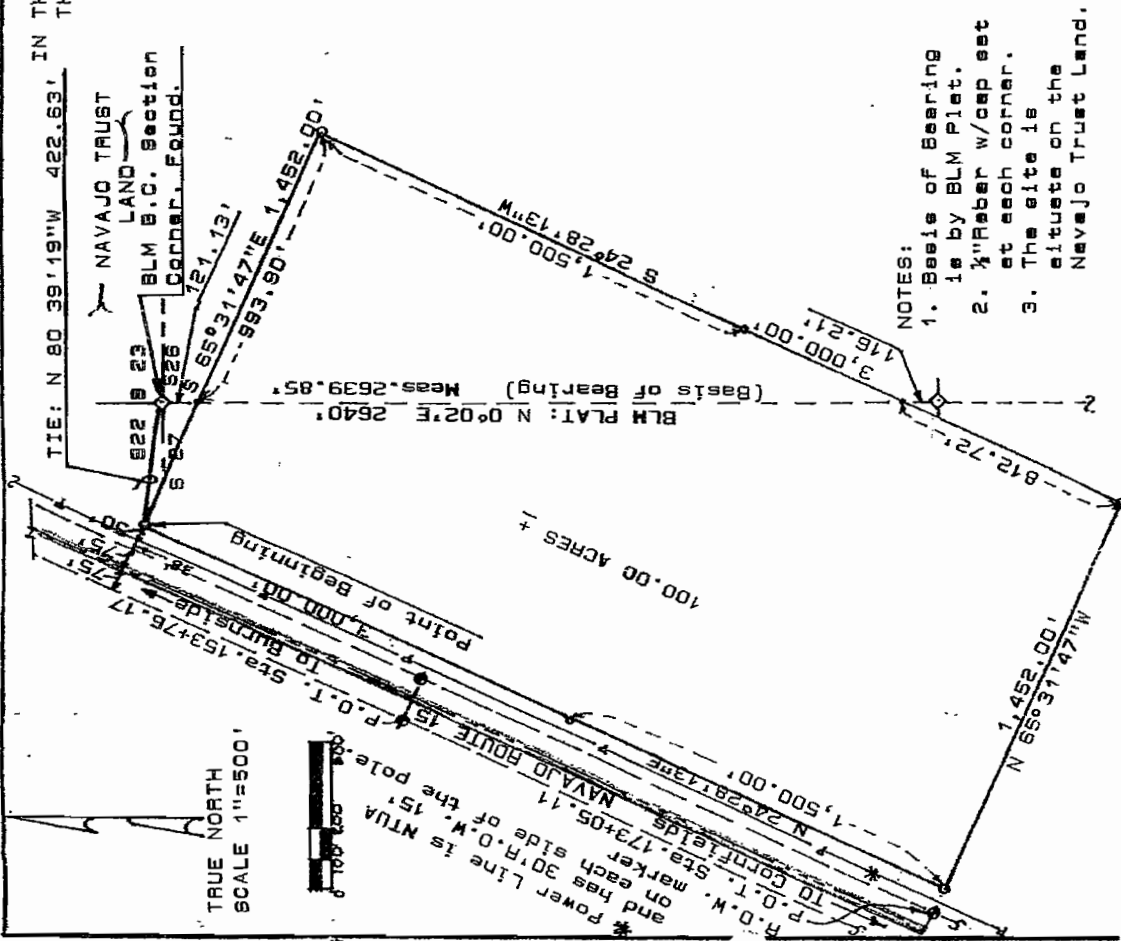
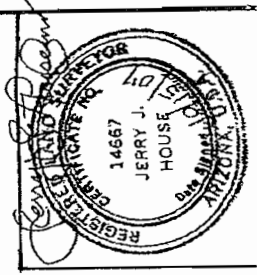
Subject to any and all existing underground utility easements.

SURVEYOR'S CERTIFICATION

I, Jerry J. HOUSE, a duly qualified Registered Land Surveyor under the laws of the State of Arizona, do hereby certify that this survey and the plat as shown hereon were prepared from the actual survey by me or under my direct supervision and that they are true and correct to the best of my knowledge and belief.

October 15, 2007

*Remy R. Anderson*  
 Larry D. House  
 Registered Land Surveyor  
 Arizona Certification No.  
 Post Office Box 3334  
 Gallup, New Mexico, 87305



NOTES:

1. Baseline of Bearing is by BLM Plat.
2. 1/4" Rubber w/cap set at each corner.
3. The site is situated on the Navajo Trust Land.

**Appendix B**  
**Development Plan**

NOT FOR CONSTRUCTION

**STROH ARCHITECTURE, INC.**  
 1003 South Greenway, Suite 100  
 Phoenix, AZ 85040  
 (602) 771-0540

**DEER POINT SITE PLAN**  
 APACHE COUNTY ARIZONA

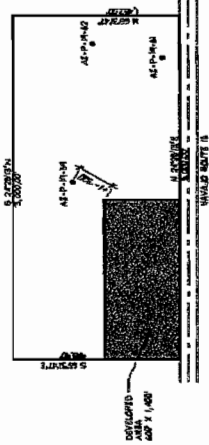
REVISION

**A10**  
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 DATE: [blank]  
 JOB NO.: [blank]



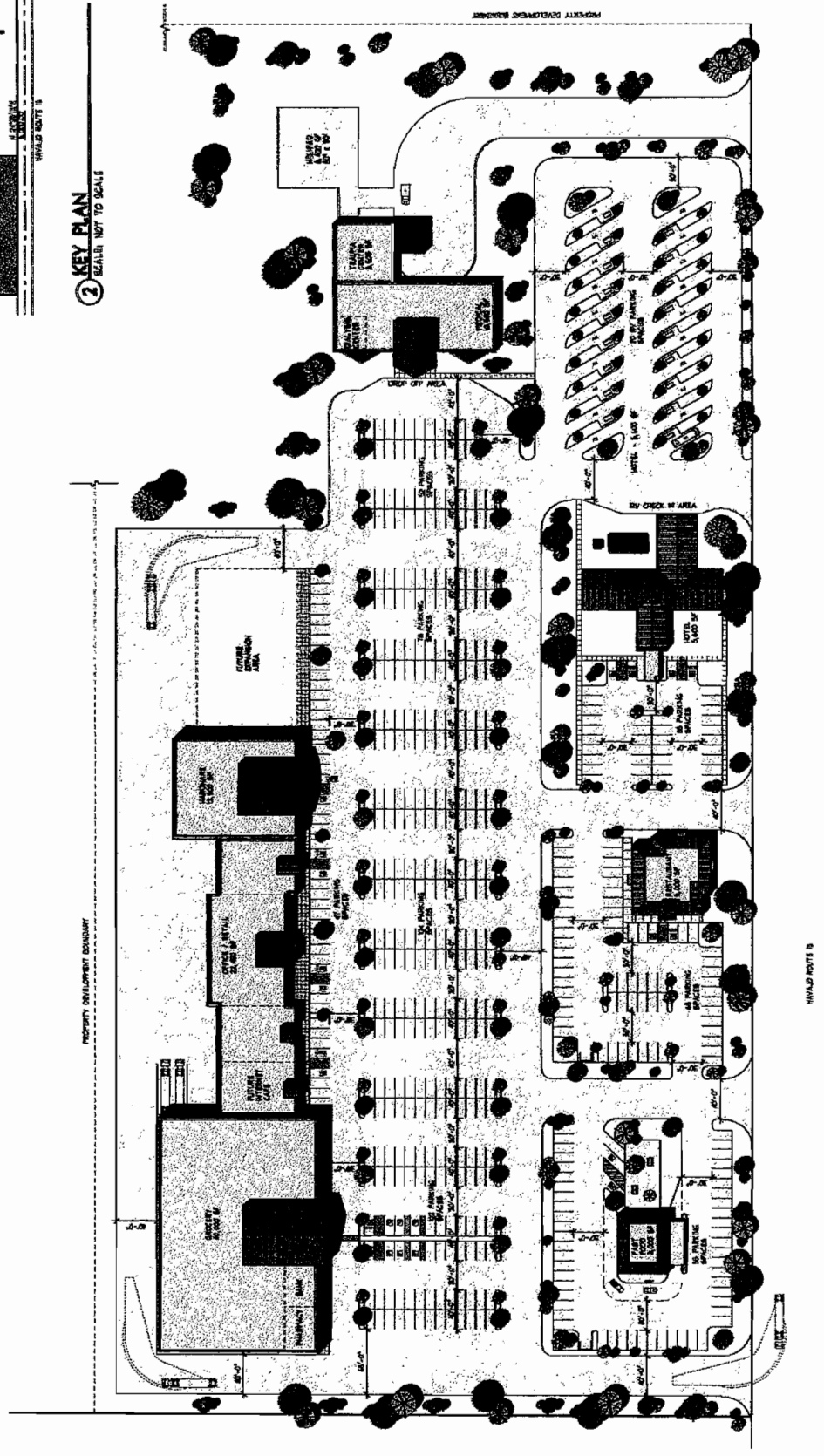
**1 DEER POINT SITE PLAN**  
 SCALE: 1" = 50'

**SCHEMATIC DESIGN**



**2 KEY PLAN**  
 SCALE: NOT TO SCALE

**SITE ANALYSIS**  
 1.156 ACRES DEVELOPED  
 50 ACRES TOTAL PARCEL  
 50 TOTAL PARKING SPACES  
 20 IN PARKING SPACES



Appendix C  
Apache County USFWS Species

# Apache County

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Apache (Arizona) trout	<i>Oncorhynchus gilae apache</i>	Threatened	Yellowish to yellow-olive cutthroat-like trout with large dark spots on body. Dorsal, anal, and caudal fins edged with white. No red lateral band.	Apache, Coconino, Gila, Graham, Greenlee, Navajo	> 5,000 ft	Streams and rivers generally above 6,000 ft. elevation with adequate stream flow and shading; temperatures below 77 degrees F; and substrate composed of boulders, rocks, gravel and some sand and silt.	Presently restricted to drainages in the White Mountains. Hybridization with introduced trout has complicated efforts to maintain the genetic purity of some populations. Special regulations (4d Rule) allow Arizona to manage the species as a sport fish (40 FR 29863).
Black-footed ferret	<i>Mustela nigripes</i>	Endangered	Weasel-like, yellow buff coloration with black on feet, tail tip, and eye mask. It has a blunt light colored nose and is 15-18 inches long and tail length is 5-6 inches.	Apache, Coconino, Navajo, Yavapai	< 10,500 ft	Grassland plains generally found in association with prairie dogs.	Unsurveyed prairie dog towns may be occupied by ferrets or may be appropriate for future reintroduction efforts. The Service developed guidelines for surveying prairie dog towns which are available upon request. No wild populations of this species are currently known to exist in Arizona. Reintroduced population exists in Aubrey Valley (Coconino County), Arizona.
California condor	<i>Gymnogyps californianus</i>	Endangered	Very large vulture (47 in., wingspan to 9 1/2 ft, weight to 22 lbs); adult plumage blackish, immature more brownish; adult wing linings white, immature mottled; head and upper parts of neck bare; yellow-orange in adults, grayish in mature.	Apache, Coconino, Mohave, Navajo, Yavapai	Varies	High desert canyons and plateaus.	Recovery program has reintroduced condors to Northern Arizona, with the first release (6 birds) in December 1996. The release site is located at the Vermillion Cliffs (Coconino County), with an experimental, nonessential area designated for most of Northern Arizona and Southern Utah. The area in Arizona is within a polygon formed by Hwy 191, Interstate 40, and Hwy 93, and extends north of the Arizona-Utah and Nevada borders. Breeding is documented in Arizona.



COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Chiricahua leopard frog	<i>Lithobates chiricahuensis</i>	Threatened	Cream colored tubercles (spots) on a dark background on the rear of the thigh, dorsolateral folds that are interrupted and deflected medially, and a call given out of water distinguish this spotted frog from other leopard frogs.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Navajo, Pima, Santa Cruz, Yavapai	3,281-8,890 ft	Restricted to springs, livestock tanks, and streams in upper portion of watersheds that are free from nonnative predators or where marginal habitat for nonnative predators exists.	Critical habitat is designated for 10,346 acres in Apache, Cochise, Gila, Graham, Greenlee, Pima, Santa Cruz, and Yavapai counties in Arizona; and Catron, Hidalgo, Grant, Sierra, and Socorro counties in New Mexico (77 FR 16324).
Little Colorado spinedace	<i>Lepidomeda vittata</i>	Threatened	Small (<4 inches long) silvery minnow.	Apache, Coconino, Navajo	4,000-8,000 ft	Moderate to small streams; found in pools and riffles with water flowing over fine gravel and silt substrate.	Critical habitat includes 18 miles of East Clear Creek, 8 miles of Chevelon Creek, and 5 miles of Nutrioso Creek (52 FR 35034).
Loach minnow	<i>Tiaroga cobitis</i>	Endangered	Small (<3 inches) slender, elongated fish, olive colored with dirty white spots at the base of the dorsal and caudal fins. Breeding males vivid red on mouth and base of fins.	Apache, Cochise, Gila, Graham, Greenlee, Navajo, Pinal, Yavapai	< 8,000 ft	Benthic species of small to large perennial streams with swift shallow water over cobble and gravel. Recurrent flooding and natural hydrograph important.	Presently found in Aravaipa Creek, Deer Creek, Turkey Creek, Blue River, Campbell Blue Creek, Little Blue Creek, San Francisco River, Eagle Creek, North Fork of the East Fork Black River, Boneyard Creek, and White River and East Fork White River in Arizona, and Dry Blue Creek, Pace Creek, Fieborn Creek, the San Francisco River, Tularosa River, Negrito Creek, Whitewater Creek, the East, Middle, and West Forks of the Gila River, mainstem upper Gila River, Bear Creek and Mangas Creek in New Mexico.

Populations have been recently reintroduced in Hot Springs and Radfield canyons in Cochise and Graham counties; Fossil Creek in Gila County; and Bonita Creek in Graham County Arizona. Critical habitat has been designated in Apache, Cochise, Gila, Graham, Greenlee, Pinal, and Yavapai counties, Arizona, as well as in Catron, Grant, and Hidalgo counties in New Mexico (77 FR 10810).

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Mexican gray wolf	<i>Canis lupus baileyi</i>	Endangered	Large dog-like carnivore. Head and feet are large in proportion to rest of body. Coat color varies with mix of brown, rust, black, gray, and white. Distinct white lip line around mouth. Adults weigh between 60-80 pounds.	Apache, Gila, Greenlee, Navajo	4,000-12,000 ft	Chaparral, woodland, and forested areas. May cross desert areas.	In January 1998, Mexican gray wolves were reintroduced as an experimental nonessential section 10(j) population under a program to re-establish the subspecies to a portion of its historical range (63 FR 1752). Wolves are released within the experimental boundary into a designated area known as the "Blue Range Wolf Recovery Area" (BRWRA) located in the Apache National Forest in Apache and Greenlee counties. Mexican gray wolves found outside of the experimental nonessential boundary are considered endangered. In 2002, the White Mountain Apache tribe (WMAT) became one of the lead agencies for the reintroduction and allowed wolves on their lands. This effectively expanded the experimental nonessential population into Apache, Gila, and Navajo counties on WMAT lands.
Mexican spotted owl	<i>Strix occidentalis lucida</i>	Threatened	Medium sized with dark eyes and no ear tufts. Brownish and heavily spotted with white or beige.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai	4,100-8,000 ft	Nests in canyons and dense forests with multi-layered foliage structure.	Generally nest in older forests of mixed conifer or ponderosa pine/gambel oak type, in canyons, and use variety of habitats for foraging. Sites with cool microclimates appear to be of importance or are preferred. Critical habitat was finalized on August 31, 2004 (69 FR 53182) in Arizona in Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Navajo, Pima, Pinal, Santa Cruz, and Yavapai counties.
Navajo sedge	<i>Carex speculicola</i>	Threatened	Perennial forb with triangular stems, elongated rhizomes. Flower: white June and July.	Apache, Coconino, Navajo	5,700-6,000 ft	Silty soils at shady seeps and springs.	Designated critical habitat is on the Navajo Nation near Inscription House Ruins. Found at seep springs on vertical cliffs of pink-red Navajo sandstone (50 FR 19370).

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Southwestern willow flycatcher	<i>Empidonax traillii exilis</i>	Endangered	Small passerine (about 6 inches) grayish-green back and wings, whitish throat, light olive-gray breast and pale yellowish belly. Two wingbars visible. Eye-ring faint or absent.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 8,500 ft	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.	Riparian-obligate bird that occupies migratory/breeding habitat from late April-Sept. Critical habitat was finalized on October 19, 2005 in Apache, Cochise, Gila, Graham, Greenlee, Maricopa, Mohave, Pima, Pinal, and Yavapai counties (70 FR 60886). Revised critical habitat was proposed August 15, 2011 (76 FR 50542) and includes river segments in counties currently designated plus those in La Paz, Santa Cruz, and Yuma counties. The 2005 critical habitat designation remains in effect until the current proposal is finalized. Training seminar/permits required for those conducting call playback surveys.
Three Forks springsnail	<i>Pyrgulopsis trivialis</i>	Endangered	Minute hydrobiid snail; shell ovate to narrowly conic; height 0.05 -0.17 inches; whorls 2.5-5.0	Apache	8,000-8,500 ft	Rheocrene springs, seeps, marshes, spring pools, outflows and diverse lotic waters.	Distribution limited to Boneyard Creek and Boneyard Bog Spring complexes in the North Fork of the East Fork Black River watershed. Critical habitat is designated for 17.2 acres (77 FR 23060).
Zuni bluehead sucker	<i>Catostomus discorholus yarrowi</i>	Proposed Endangered	Fusiform, slender, with a terminal mouth. Bluish head, silvery tan to dark green above, silvery to yellowish or dirty-white below. Sexually mature bluehead suckers range between 3.5 to 8 inches in length.	Apache	> 6,000 ft	Small streams in low-velocity, moderate deep pools, and pool-runs with seasonal dense algae. Young prefer quieter shallow areas near shoreline.	Found in two drainages on the Navajo Nation (Kilichee Creek [Little Colorado River] and Canyon de Chelly [San Juan River]) in Arizona and in the Zuni River in New Mexico on lands of the Zuni Pueblo, Forest Service, State of New Mexico, and private lands. Critical habitat is proposed for 475.3 km (291.3 mi) of streams in Apache County, Arizona and Cibola, McKinley, and San Juan counties, New Mexico. Conservation actions for the subspecies are included in the Zuni Bluehead Sucker Recovery Plan (New Mexico Department of Game and Fish) and the Arizona Statewide Conservation Program for Six Native Fish (Arizona Game and Fish Department).

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Zuni fleabane	<i>Erigeron rhizomatus</i>	Threatened	Herbaceous perennial that grows in clusters of numerous erect unbranched stems up to 2.0 feet tall. Flower heads solitary; pale blue ray flowers and yellow disk flowers.	Apache	7,300-8,000 ft	Selenium-rich red or gray detrital clay soils derived from the Chinle and Baca formations.	Only one Arizona location; other 28 sites in Sawtooth Mountains and northwestern part of the Datil Mountains in Catron County, New Mexico. Two sites also on the northwest side of the Zuni Mountains in McKinley County, New Mexico.
New Mexico meadow jumping mouse	<i>Zapus hudsonius luteus</i>	Candidate	Small rodent with extremely long tail and long hind feet. Pelage is coarse with a broad dorsal band of brown or yellowish brown darkened with brownish black hairs; sides paler; under parts white or sometimes suffused with yellowish color. Back of the forefeet and hind feet are grayish white; tail is sparsely haired and distinctly bicolor (dark brown above and yellowish white below). The head is small, narrow, and relatively high crowned. The nose is short and pointed. They are the only mammal with 18 teeth.	Apache, Greenlee	< 8,000 ft	Nests in dry soils but also uses moist, streamside, dense riparian/wetland vegetation.	The New Mexican jumping mouse is diminished to 6 populations in the White Mountains, Arizona. A inventory and status assessment throughout its historical range in Arizona is currently being conducted.
Northern Mexican Gartersnake	<i>Thamnophis eques megalops</i>	Candidate	Background color ranges from olive, olive-brown, to olive-gray. Body has three yellow or light colored stripes running down the length of the body, darker towards tail. Species distinguished from other native gartersnakes by the lateral stripes reaching the 3rd and 4th scale rows. Paired black spots extend along dorsolateral fields.	Apache, Cochise, Coconino, Gila, Graham, Navajo, Pima, Pinal, Santa Cruz, Yavapai	130-8,500 ft	Cienegas, stock tanks, large-river riparian woodlands and forests, streamside gallery forests.	Core population areas in the U.S. include mid/upper Verde River drainage, mid/lower Tonto Creek, and the San Rafael Valley and surrounding area. Status on tribal lands unknown. Distributed south into Mexico along the Sierra Madre Occidental and Mexican Plateau. Strongly associated with the presence of a native prey base including leopard frogs and native fish.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Roundtail chub	<i>Gila robusta</i>	Candidate	Member of the minnow family Cyprinidae and characterized by streamlined body shape. Color usually olive gray with silvery sides and a white belly. Breeding males develop red or orange coloration on the lower half of the cheeks and on the bases of paired fins. Individuals may reach 49.0 cm (19.3 in) but usually average 25-30 cm (9.8 - 11.8 in).	Apache, Coconino, Gila, Graham, La Paz, Maricopa, Mohave, Navajo, Pinal, Yavapai	1,000-7,500 ft.	Cool to warm waters of rivers and streams, often occupy the deepest pools and eddies of large streams.	Historical range of roundtail chub included both the upper and lower Colorado River basins. A 2009 status review determined that the lower Colorado River basin roundtail chub population segment (Arizona and New Mexico) qualifies as a distinct vertebrate population segment (DPS). Populations in the Little Colorado, Bill Williams, and Gila River basins are considered candidate species.
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Candidate	Medium-sized bird with a slender, long-tailed profile, slightly down-curved bill that is blue-black with yellow on the lower half. Plumage is grayish-brown above and white below, with rufous primary flight feathers.	Apache, Cochise, Coconino, Gila, Graham, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 6,500 ft	Large blocks of riparian woodlands (cottonwood, willow, or tamarisk galleries).	Neotropical migrant that winters primarily in South America and breeds primarily in the U.S. (but also in southern Canada and northern Mexico). As a migrant it is rarely detected; can occur outside of riparian areas. Cuckoos are found nesting statewide, mostly below 5,000 feet in central, western, and southeastern Arizona. Concern for cuckoos are primarily focused upon alterations to its nesting and foraging habitat. Nesting cuckoos are associated with relatively dense, wooded, streamside riparian habitat, with varying combinations of Fremont cottonwood, willow, velvet ash, Arizona walnut, mesquite, and tamarisk. Some cuckoos have also been detected nesting in velvet mesquite, neil leaf hackberry, Arizona sycamore, Arizona alder, and some exotic neighborhood shade trees.
Arizona willow	<i>Salix arizonica</i>	Conservation Agreement	Woody, perennial shrub reaching up to 8.5 feet tall; grows as a prostrate mat to large hedge or thicket plant; has small, egg-shaped leaves; new branches are yellow-green, previous years branches are bright red.	Apache	> 8,000 ft	Unshaded or partially shaded wet meadows, streambeds and cienegas; typically found in or adjacent to perennial water.	Known in the vicinity of Mount Baldy, on the Apache-Sitgreaves National Forest, and private land. Conservation agreement between the Service, Forest Service, and National Park Service finalized in April 1995.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Goodings onion	<i>Allium gooddingii</i>	Conservation Agreement	Herbaceous perennial plant; broad, flat, rather blunt leaves; flowering stalk 14-18 inches tall, flattened, and narrowly winged toward apex; fruit is broader than long; seeds are short and thick.	Apache, Greenlee, Pima	7,500-11,250 ft	Shaded sites on north-trending drainages, on slopes, or in narrow canyons, within mixed conifer and spruce fir forests.	Known from the White, Santa Catalina, and Chuska Mountains. Also found in New Mexico on the Lincoln and Gila National Forests. A Conservation Agreement between the Service and the Forest Service signed in February 1998.
American peregrine falcon	<i>Falco peregrinus anatum</i>	Delisted	A crow-sized falcon with slate blue-gray on the back and wings, and white on the underside; a black head with vertical "bandit's mask" pattern over the eyes; long pointed wings; and a long whistling call made during breeding. Very adept flyers and hunters, reaching diving speeds of 200 mph.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	3,500-9,000 ft	Areas with rocky, steep cliffs, primarily near water, where prey (primarily shorebirds, songbirds, and waterfowl) concentrations are high. Nests are found on ledges of cliffs, and sometimes on man-made structures such as office towers and bridge abutments.	Species recovered with over 1,650 breeding birds in the US and Canada.
Bald eagle	<i>Haliaeetus leucocephalus</i>	Delisted	Large, adults have white head and tail. Height 28 to 38 inches; wingspan 66 to 96 inches. Juveniles and subadults are dark brown with varying degrees of white mottling on chest, wings, and head.	Apache, Coconino, Gila, Graham, La Paz, Maricopa, Mohave, Pinal, and Yavapai	Varies	Large trees or cliffs near water (reservoirs, rivers, and streams) with abundant prey.	Nationwide and throughout the State of Arizona, the bald eagle is currently not listed under the Endangered Species Act. On September 30, 2010, the U.S. District Court dissolved an injunction that led to the bald eagle in the Sonoran Desert Area of central Arizona being placed on the Endangered Species list in 2008. This determination is presently (January 2011) under judicial consideration. Bald eagles are protected under the Bald and Golden Eagle Protection Act (Eagle Act) and other Federal and state statutes. The word "disturb" under the Eagle Act was recently clarified, as well as the implementation of new regulations requiring permits to incidentally "take" eagles. Retrieve more information on management and life history at <a href="http://SWBEMC.org">http://SWBEMC.org</a> .

Appendix D  
Cultural Resources Clearance

# CULTURAL RESOURCES COMPLIANCE FORM

THE NAVAJO NATION  
HISTORIC PRESERVATION DEPARTMENT  
PO BOX 4950  
WINDOW ROCK, ARIZONA 86515

ROUTING: COPIES TO



SHPO  
REAL PROPERTY MGT/330  
NNAD

NNHPD NO. **HPD-10-958**

OTHER PROJECT NO.

NNAD 09-332

PROJECT TITLE: A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona

LEAD AGENCY: BIA/NR

SPONSOR: Elizabeth Johnson, Community Service Coordinator, Cornfields Chapter, PO Box 86505 Ganado, Arizona

PROJECT DESCRIPTION: The Cornfields Chapter is proposing to develop a 100-acres of land for a multi-business site leases. Ground disturbing activities include construction new buildings and associated facilities/utilities. Ground disturbance will be intensive and extensive with the use of heavy equipment.

LAND STATUS: Navajo Tribal Trust

CHAPTER: Cornfields

LOCATION: T.27N, R.25E - Sec. 22, 26 & 27; Cornfields Quadrangle, Apache County, Arizona G&SRPM8B

PROJECT ARCHAEOLOGIST: Antoinette Kurley-Begay

NAVAJO ANTIQUITIES PERMIT NO.: NTC

DATE INSPECTED: 08/03/2009 - 08/06/09

DATE OF REPORT: 10/05/10

TOTAL ACREAGE INSPECTED: 118.67-ac

METHOD OF INVESTIGATION: Class III pedestrian inventory with transects spaced 15 m apart.

LIST OF CULTURAL RESOURCES FOUND:

(5) Sites (AZ-P-19-58, AZ-P-19-59, AZ-P-19-60; AZ-P-19-61, AZ-P-19-62); (22) Isolated Occurrences

LIST OF ELIGIBLE PROPERTIES:

(3) Sites (AZ-P-19-59, AZ-P-19-61, AZ-P-19-62)

LIST OF NON-ELIGIBLE PROPERTIES:

(2) Sites (AZ-P-19-58, AZ-P-19-60), (22) IO

LIST OF ARCHAEOLOGICAL RESOURCES:

(3) Sites (AZ-P-19-59, AZ-P-19-61, AZ-P-19-62)

EFFECT/CONDITIONS OF COMPLIANCE: No Historic Properties will be affected with the following conditions:

**Sites AZ-P-19-59, AZ-P-19-61, AZ-P-19-62:**

1. Site boundaries will be flagged by a qualified archaeologist prior to any ground disturbing activities.
2. A permanent fence will be erected around the sites to deter unwanted future impacts.
3. Site boundaries will be avoided by all construction activities by a minimum of 50-ft.

**Site AZ-P-19-60:**

The former patient and medicine man of the ceremony were found and they waive any concerns.

**Site AZ-P-19-58:** No further work is required.

In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 671-7148.

FORM PREPARED BY: Tamara Balic

FINALIZED: November 3, 2010

Notification to

Proceed Recommended:

Yes XX No

Conditions:

Yes XX No

Alan S. Downer, Navajo Nation  
Historic Preservation Officer

Date

11/5/10

Navajo Region Approval:

Yes 1 No


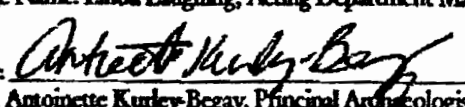
Regional Director

DEC - 2 2010  
Date

Turn 11-29-10



ARCHAEOLOGICAL INVENTORY REPORT DOCUMENTATION PAGE (HPD JAN/91)

1. HPD REPORT NO.	2. (FOR HPD USE ONLY)	3. RECIPIENTS ACCESSION NO.
4. TITLE OF REPORT: A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona  AUTHOR: Antoinette Kurley-Begay		5. FIELDWORK DATES August 3 and 6, 2009
7. CONSULTANT NAME AND ADDRESS: Gen'l Charge: Linda Laughing, ASO Org. Name: Navajo Nation Archaeology Department Org. Address: P. O. Box 689 Window Rock, Arizona 86515  Phone: (928) 871-6540		6. REPORT DATE October 5, 2010
10. SPONSOR NAME AND ADDRESS: Ind. Responsible: Elizabeth Johnson, Community Services Coordinator Org. Name: Cornfields Chapter Org. Address: P.O. Box 478 Ganado, Arizona 86505  Mobile Phone: (928) 755-5911		8. Permit No. NTC
13. LOCATION (MAP ATTACHED): a. Chapter: Cornfields b. Agency: Fort Defiance c. County: Apache d. State: Arizona  e. Land Status: Tribal Trust f. UTM Center: See Report g. Area: T.27N, R.25E, SE ¼, Sec. 22; and NW ¼, Sec. 26; and NE ¼, Sec. 27; G&SRPM (Derived from survey plat) h. 7.5' Map Name(s): Cornfields, Ariz., 1972, 7.5' series		9. Consultant Report No. NNAD 09-332
14. REPORT /X/ OR SUMMARY (REPORT ATTACHED) / / a. Description of Undertaking: The Cornfields Chapter proposes to utilize the parcel of land for a proposed multi-business site lease. The parcel of land will be used to construct business buildings and associated facilities within the 100-acre business site. The area of potential effect within this parcel of land measures 993.30 feet (302.84 m) by 1,500 feet (457.32 m) by 1,452 feet (442.68 m) by 1,500 feet (457.32 m). Ground disturbance, both surface and subsurface, will be extensive. The lead federal agency for this proposed undertaking is the Bureau of Indian Affairs.  b. Existing Data Review: Prior to the fieldwork, a records check using both NNAD Shiprock office files and the Navajo Nation Historic Preservation Department (NNHPD) files in Window Rock, Arizona was conducted to identify previous projects and recorded sites within a 500-foot (152-m) radius of the project area. These two sets of files contained one previously recorded sites located within a 500-foot radius of the project area. This project is NNHPD 03-1036 which entailed the inventory on Navajo Route 15.  c. Area Environmental & Cultural Setting: The project is located in the Cornfields Chapter. The nearest water source is the Pueblo Colorado Wash located to the east of the project area at a distance of about 1.89 miles (9,979 feet; 3042.38 m). The elevation of the project area is 6264 feet (1910 m). Vegetation consists of snakeweed, rabbitbrush, Russian thistle, Indian ricegrass, narrowleaf yucca, and prickly pear cactus. Soils in the project area consist of aeolian sand and silt. The cultural setting is rural with development consisting of the scattered homes, fallow cornfields, Navajo Route 15, power lines, and water lines.  d. Field Methods: See Supplemental Sheet		11. SPONSOR PROJECT NO. N/A
15. CULTURAL RESOURCE FINDINGS: a. Location/Identification of Each Resource: Five archaeological sites, AZ-P-19-58, AZ-P-19-59, AZ-P-19-60, AZ-P-19-61, and AZ-P-19-62, and 22 isolated occurrences were identified during the inventory.  b. Evaluation of Significance of Each Resource (above): Three of the five sites appear to be Register-eligible properties. These sites are AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62. The remaining two sites do not appear to be Register-eligible properties.		12. AREA OF EFFECT: 100.00 acres (30.49 ha) AREA SURVEYED: 118.67 acres (47.49 ha)
16. MANAGEMENT SUMMARY (RECOMMENDATIONS): A determination of no historic properties affected is recommended for the project undertaking provided that the potential Register-eligible properties are avoided.		
17. CERTIFICATION: SIGNATURE:  DATE: 10/5/10 General Charge Name: Linda Laughing, Acting Department Manager  SIGNATURE:  DATE: October 5, 2010 Direct Charge: Antoinette Kurley-Begay, Principal Archaeologist		

**A Cultural Resource Inventory of Proposed Multipurpose Tract A  
for the Cornfields Chapter, Apache County, Arizona**

**NNAD 09-332**



**Prepared by  
Antoinette Kurley-Begay**

**Submitted by  
Linda Laughing, ASO, Acting Department Manager  
Navajo Nation Archaeology Department  
P.O. Box 689  
Window Rock, Arizona 86515**

**Tribal Permit No. NTC**

**Submitted to  
Alan S. Downer, Ph.D., Department Manager III  
Navajo Nation Historic Preservation Department  
P.O. Box 4950  
Window Rock, Arizona 86515**

**Prepared for  
Elizabeth Johnson, Community Services Coordinator  
Cornfields Chapter  
P.O. Box 478  
Ganado, Arizona 86505**

**Submitted October 5, 2010**

## Abstract

The following report is submitted to the Navajo Nation Historic Preservation Department (NNHPD) as part of the Section 106 archaeological compliance process. The report, entitled *A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona* (NNAD 09-332) details the results of the project. The archaeological inventory was conducted for the Cornfields Chapter. Under this project, the Cornfields Chapter proposes to develop the 100-acre tract of land for businesses and facilities for the Cornfields community in Cornfields, Apache County, Arizona. The types of ground disturbances expected will include blading and/or earthmoving activities to level the land and construction of buildings and facilities such as water lines, power lines, sewage systems, roads, parking lots, and telephone lines. Vehicular traffic will be required throughout the 100-acre tract. Access to the proposed project locations will occur from an existing two-track dirt road and from Navajo Route 15 which is located to the west of the project area. The project area is located on Navajo Tribal Trust lands. The legal descriptions for the project areas are Townships 27 North, Range 25 East, G&SRPM. The project area can be found on the Cornfields, Ariz., 1972, 7.5-minute series USGS map. The total number of acres inventoried under this project is approximately 118.67 acres (47.49 ha). In all, 5 new archaeological sites and 22 isolated occurrences were identified during the course of the inventory. Three of the five sites (AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62) are prehistoric Anasazi specialized activity areas affiliated with a Pueblo I to Pueblo II temporal component. The fourth site, AZ-P-19-58, contains the logs of a dismantled hogan which have been placed in a secondary context. The fifth site, AZ-P-19-60, contains the remains of an Enemy Way ceremonial area. The isolated occurrences consist predominately of isolated prehistoric ceramic and lithic artifacts, and in one case, a recent Navajo trash dump. The three Anasazi sites, AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62 are evaluated as potentially eligible for nomination to the National Register of Historic Places. Although, one of the two Navajo sites (AZ-P-19-60) was affiliated with a Navajo ceremony, information obtained during this project indicated that this site is not considered sacred or of religious importance. Further, AZ-P-19-60 and AZ-P-19-58 are not considered to be potentially Register-eligible properties. A determination of no historic properties affected is recommended for the proposed development activities to occur in the areas containing the three sites that appear to be Register-eligible properties provided the stipulations addressed in the report concerning these resources are adhered to. Finally, a determination of no historic properties affected is recommended for the project areas containing the remaining two sites (AZ-P-19-58 and AZ-P-19-60) and the isolated occurrences without further stipulations.

## TABLE OF CONTENTS

Abstract .....	iii
LIST OF FIGURES.....	vii
LIST OF TABLES .....	ix
Introduction.....	1
Description of Undertaking .....	1
Location.....	1
Area Environmental and Cultural Setting.....	4
Existing Data Review .....	4
Field Methods.....	4
Cultural Resource Findings .....	5
Archaeological Sites.....	5
Isolated Occurrences.....	14
Evaluation of Significance .....	14
Archaeological Sites.....	15
Isolated Occurrences.....	16
Recommendations .....	16
Archaeological Sites.....	16
Isolated Occurrences.....	17
Summary .....	17
References Cited .....	18
APPENDIX A: NNAD Site Survey Management Form and USGS Map Locations	

## LIST OF FIGURES

Figure 1. Vicinity map showing the general project area. Indian County Regional Map (NNAD 09-332).....	2
Figure 2. Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, G&SRPM (NNAD 09-332).....	3
Figure 3. General plan map of Site AZ-P-19-58 (NNAD 09-332).....	6
Figure 4. General plan map of Site AZ-P-19-59 (NNAD 09-332) .....	8
Figure 5. General plan map of Site AZ-P-19-60 (NNAD 09-332).....	9
Figure 6. General plan map of Site AZ-P-19-61 (NNAD 09-332).....	11
Figure 7. General plan map of Site AZ-P-19-62 (NNAD 09-332).....	13

## LIST OF TABLES

Table 1. Legal Descriptions and UTM Coordinates for the Project Area (Zone 12) .....	1
Table 2. Isolated Occurrences Encountered During the Inventory .....	14

## Introduction

On August 3 and 6, 2009, archaeologists with the Navajo Nation Archaeology Department (NNAD), conducted a cultural resource inventory of a 100-acre tract of land for the proposed multipurpose business development activities. The project area is located in the vicinity of Cornfields, Apache County, Arizona. The Cornfields Chapter proposes to develop the 100-acre tract of land for businesses to serve the Navajo community of Cornfields and the surrounding area. Five archaeological sites and 22 isolated occurrences were identified as a result of the archaeological inventory. The purpose of the archaeological inventory was to locate, evaluate, and make recommendations regarding cultural resources in within the project area in accordance with the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act (ARPA), and the American Indian Religious Freedom Act (AIRFA). Detailed information regarding the project area, the identified cultural resources, and the recommendations concerning the identified cultural resources are summarized in this report.

The archaeological inventory was requested by Elizabeth Johnson, Cornfields Chapter Community Services Coordinator. The NNAD performs archaeological inventories on Navajo Nation land under the authorization of the Navajo Nation Cultural Resources Protection Act (CMY-19-88). The lead federal agency for the undertaking is the Bureau of Indian Affairs (BIA).

## Description of Undertaking

The Cornfields Chapter proposes to develop a 100-acre parcel of land for business and facilities which will serve the Navajo people within the Cornfields Chapter and surrounding area. Construction activities associated with the development activities will entail blading and leveling the ground surface with heavy equipment, construction of buildings and associated facilities, as well as the placement of underground water/sewage systems and overhead power lines. In addition, parking areas and road will be constructed within the 100-acre tract of land. Surface and subsurface disturbance will be extensive within the 100-acre area of effect.

The 100-acre tract of land or area of effect measures 993.30 feet (302.84 m) by 1,500 feet (457.32 m) by 1,452 feet (442.68 m) by 1,500 feet (457.32 m). The total area of potential effect for the project area is 100.00 acres (40.50 ha).

## Location

The project area is located on Navajo Tribal Trust land within the Cornfields Chapter, in Apache County, Arizona. The project area is under the jurisdiction of the Fort Defiance Agency of the BIA.

The project areas can be located on the Cornfields, Ariz., 1972, 7.5-minute series USGS quadrangle map. The legal descriptions for the project areas are: Township 27 North, Range 25 East, G&SRPM. Table 1 provides legal descriptions and UTM coordinates for the project area. Figure 1 provides an overview of the general project areas. Figure 2 shows the specific project area.

Table 1. Legal Descriptions and UTM Coordinates for the Project Area (Zone 12)

Project Areas	NAD 27 Datum		NAD 83 Datum		Township	Range	Section	Principal Meridian
	Northing	Easting	Northing	Easting				
Northwest Corner	3953644	622105	3953844	622042	27N	25E	22	G&SRPM
Northeast Corner	3953489	622543	3953689	622480	27N	25E	26	G&SRPM
Southwest Corner	3952803	621737	3953003	621674	27N	25E	27	G&SRPM
Southeast Corner	3952617	622169	3952817	622106	27N	25E	27	G&SRPM

Township and Range projected from Ganado, Ariz.-N.Mex., 1984, 1:100,000 scale USGS map.

2

Figure 1. Vicinity map showing the general project area. Indian County Regional Map, n.d., (NNAD 09-332).



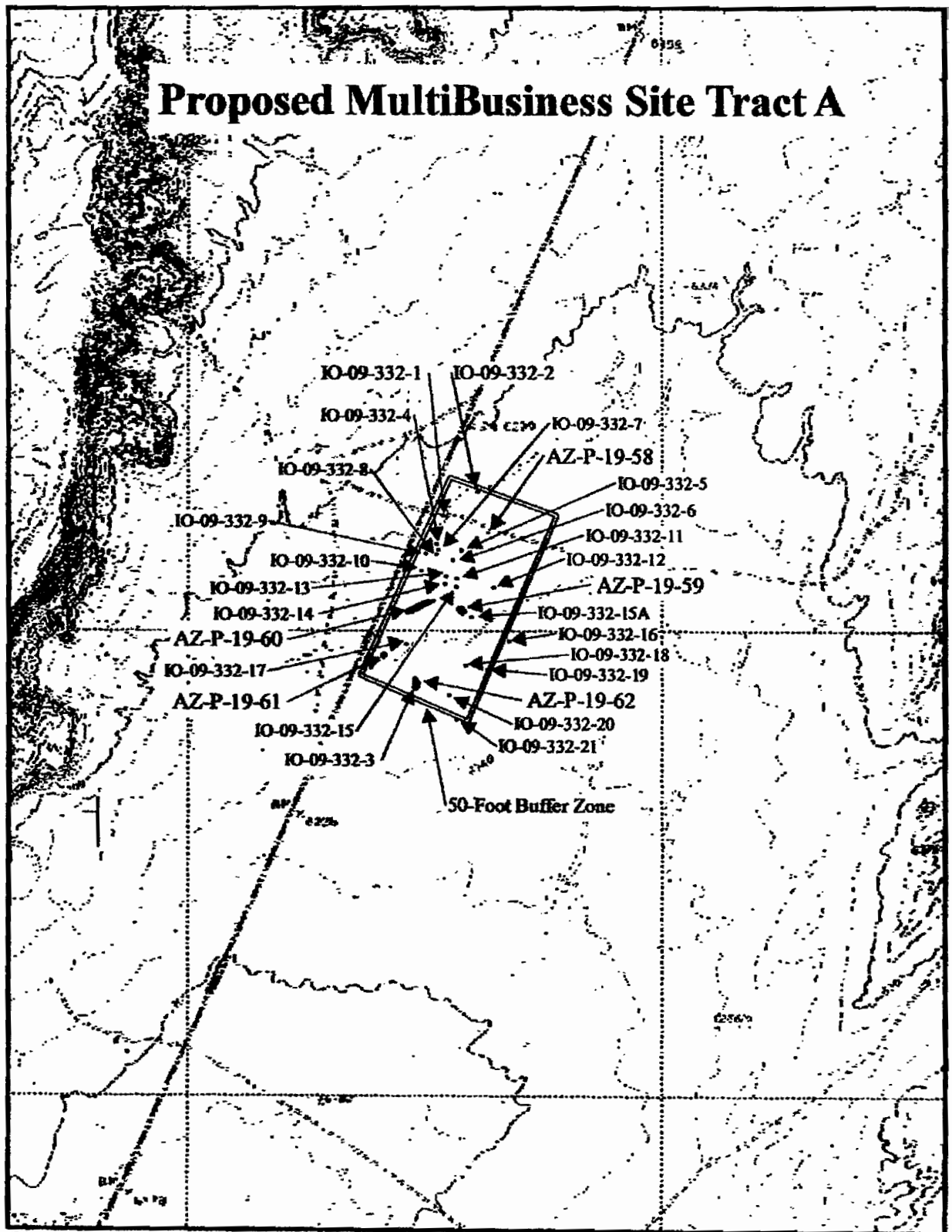


Figure 2. Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, GSRPM (NNAD 09-332).

### Area Environmental and Cultural Setting

The project area is situated in the south-central portion of the Navajo Reservation and in the east-central portion of Arizona. The project area is situated at an elevations ranging from 6250 feet (1905 m) to 6275 feet (1913 m) above sea level. Pueblo Colorado Wash is the main water source in the project area; however, numerous unnamed tributaries, wells, and springs were also noted within the general project area. Geologically, the project area is within an open valley situated between a broad mesa to the west, and the Pueblo Colorado Wash to the east. The project area is situated within the Upper Chinle Formation. The soils within the project area consist of aeolian sand and alluvial gravels. The major species noted in the project area are snakeweed, blue grama grass, Russian thistle, prickly pear cactus, muhly, wolfberry, and a piñon tree.

Development near the project area includes fallow cornfields, homesteads, utility services, dirt roads, and Navajo Route 15 located directly west of the project area.

### Existing Data Review

Prior to the fieldwork, a records check using both NNAD Shiprock office files and the Navajo Nation Historic Preservation Department (NNHPD) files in Window Rock, Arizona was conducted to identify previous projects and recorded sites within a 500-foot (152-m) radius of the project area. These two sets of files contained one previously recorded site located within a 500-foot radius of the project area. This project is NNHPD 03-1036 which entailed the inventory on Navajo Route 15.

A check of Van Valkenburgh (1974) indicates that nearest recognized sacred place in the vicinity of the project area is Buell Park (*Tsé-zhín bodóo kłízh*—Black Rock in a Blue Area) located approximately 50 miles (31 km) northwest of the project area.

### Field Methods

On August 3 and 6, 2009, NNAD archaeologist Antoinette Kurley-Begay, assisted by Aleda Myerson, Matthew Pettigrew, Alviara Lee, Benson Belone, and Bethany Smith conducted a Class III pedestrian archaeological inventory for the proposed business tract. Prior to the inventory, the archaeologists met with Cornfields Chapter President, Jimmie Taliman, who showed the archaeologists the project area. Although several of the stakes indicating the corners of the project area were not relocated, the NNAD archaeologists had produced data providing the location of the project area in a Geographic Information System (GIS) file. UTM coordinates from the GIS file were compiled using a Garmin Global Positioning System (GPS) unit prior to the field and were utilized to identify the unmarked project corners prior to the inventory.

A total inventory area of 118.67 acres (47.49 ha) of land was examined on the proposed business site. The total inventory area included the 100-acre (40.5-ha) area of effect (right-of-way) with a 50-foot (15.24-m) wide buffer zone located along the entire right-of-way perimeter.

The archaeological Class III pedestrian inventory of the project area was performed by the archaeologists walking a series of parallel linear transects spaced about 7 m (22.96 feet) apart throughout the entire project area. The parallel transects were orientated in east-west directions.

During the course of the inventory, 5 archaeological sites and 22 isolated occurrences (IOs) were identified. Locational information concerning the sites and the IOs were collected using a hand-held GPS. Once in-house, the data obtained with the use of the GPS in the field was downloaded utilizing the GIS ArcView software for map preparation and report presentation. Additionally, this data was also utilized to prepare the archaeological site maps.

Additionally, ethnographic interviews with local Navajo residents and/or chapter personnel were conducted to obtain information on potential traditional cultural properties (TCPs—herb gathering places, blessed and/or sacred places), burials, and archaeological sites in the area. Ethnographic information pertaining to the project area was obtained from local residents, Johnson Kee and Gilbert (last name withheld), and the Cornfields Chapter President Jimmie Taliman, by Mrs. Kurley-Begay. The interviews were conducted in the English languages by the archaeologist.

NNAD Site Survey and Management Forms were filled out upon completion of the fieldwork. Navajo Nation site numbers were assigned to the sites in-house upon completion of the fieldwork.

### Cultural Resource Findings

During the course of the cultural resource inventory 5 archaeological sites and 22 isolated occurrences were identified. Descriptions for these sites are provided in the following sections and completed NNAD Site Survey and Management Forms are contained in Appendix A. The locations of these resources are shown on Figures 3 through 7.

#### Archaeological Sites

A total of five archaeological sites was identified in conjunction with this project. Three of the five sites (AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62) are prehistoric Anasazi specialized activity areas affiliated with a Pueblo I to Pueblo II temporal component. The fourth site, AZ-P-19-58, contains the logs of a dismantled hogan which have been placed in a secondary context. The fifth site, AZ-P-19-60, contains the remains of an Enemy Way ceremonial area. Information on all five sites is provided in the following section.

Site Number: AZ-P-19-58 (Figure 3)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953421 Northing, 622262 Easting (NAD 27 Datum)

Zone 12; 3953621 Northing, 622199 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Navajo/Pre-1960/Logs to a dismantled hogan

Site Size: 5 m by 5 m (19.64 sq. m)—area of oval

Site Setting: The site is situated within an open grassland area west of the Pueblo Colorado Wash. Small unnamed draws flowing in a southern direction were noted to the east and west of the site. Pueblo Colorado Wash is located about 1,045 feet (2.66 miles) south of the site. The elevation in the site area is about 6271 feet (1912 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-58 consists of a pile of wood that apparently was used for a hogan located in another location to the west of the project area. Feature 1 contains 15 axe-cut logs piled in a 5 m by 5 m area. No artifacts were noted in association with the log pile. According to an ethnographic interview with nearby local residents of the area, the woodpile was placed at this location years ago; however, the actual date is unknown. Apparently, the logs were used for a hogan that had been dismantled. The location of the hogan could not be located at the time of the fieldwork, but it was suggested that it may have been located about 1,500 feet to the west of where the woodpile currently is placed. It appears that the wood may have been transported to this location which is located immediately south of an east-west-trending road. No artifacts were noted in association with the site.

The logs are in secondary context and the condition of the site is considered to be poor. Thus, the site appears to lack deposition.

According to ethnographic information, the logs within this site appear to have been affiliated with a hogan that had been dismantled. Apparently, the logs were from a hogan that was used over 50 years ago. Further, the location of this hogan could not be located since it appeared to be located out of the current project area.

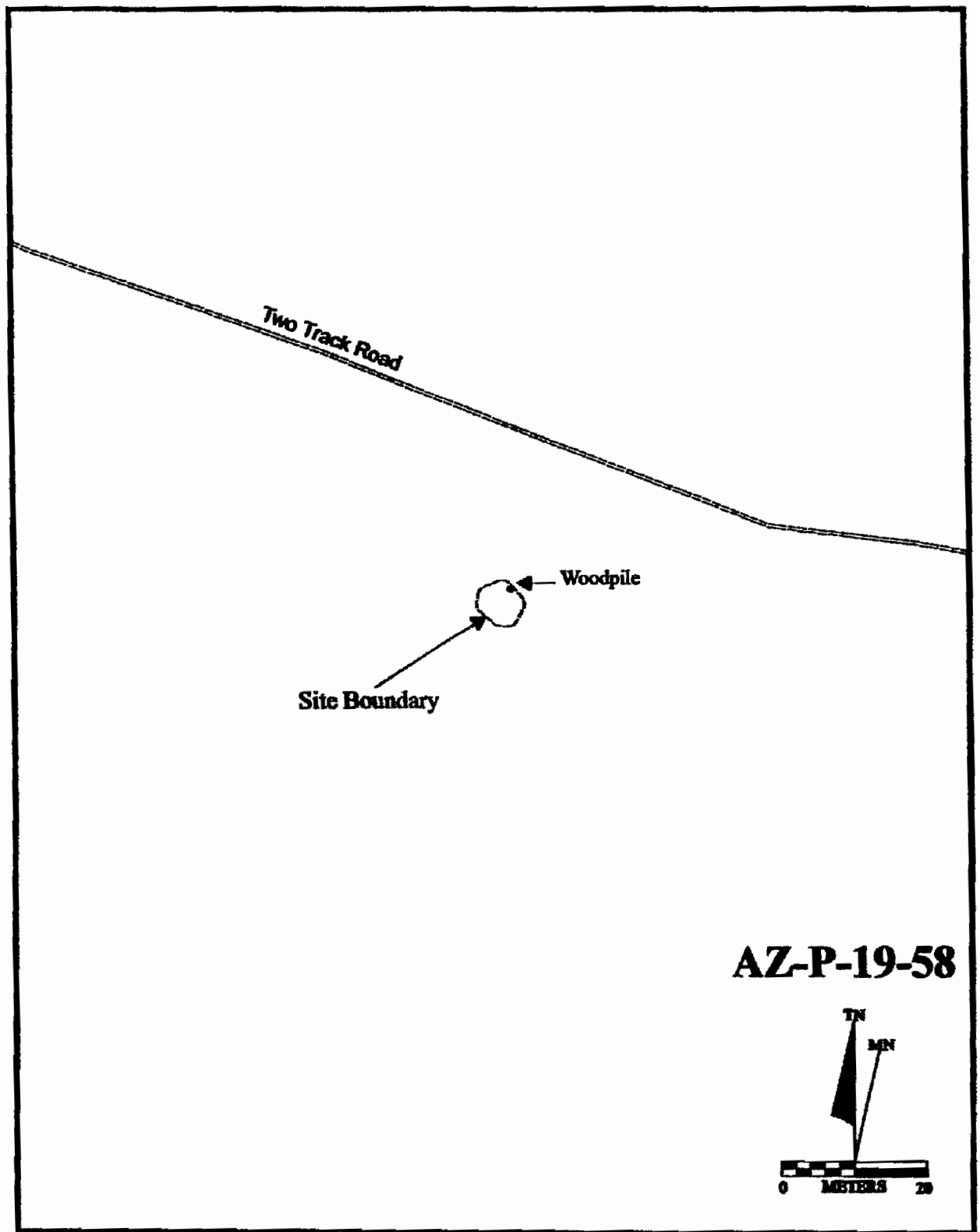


Figure 3. General plan map of Site AZ-P-19-58 (NNAD 09-332).

Site Number: AZ-P-19-59 (Figure 4)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953078 Northing, 622154 Easting (NAD 27 Datum)  
Zone 12; 3953278 Northing, 622091 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Pueblo I (A.D. 700-900)/Specialized Activity Area (SAA)—Artifact Scatter

Site Size: 38 m by 30 m (895 sq. m)—area of oval

**Site Setting:** The site is situated on the northern side of a low ridge. This area is located within the open valley containing Pueblo Colorado Wash. Small unnamed drainages flowing south were noted to the east and west of the site. Pueblo Colorado Wash is located about 12,535 feet (2.37 miles) south of the site. The elevation in the site area is about 6267 feet (1911 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

**Site Description:** Site AZ-P-19-59 consists of an Anasazi specialized activity area—artifact scatter. No features were observed on this site. The artifact assemblage on this site was low consisting of less than 50 artifacts in all. The ceramic (sherds) artifacts observed on this site consisted of 10 plain gray ware sherds, 11 indented corrugated sherds, 5 plain gray ware sherds, 10 decorated black-on-white ware sherds, and 3 plain white ware sherds. The decorated black-on-white ware sherds Kana'a style Black-on-white ware sherds. These vessels were bowl fragments. The utility gray ware sherds (indented corrugated sherds and plain gray wares) were jar vessels. The lithic artifacts observed on this site consisted of less than five artifacts. These artifacts included two secondary flakes and three tertiary flakes. These artifacts were of chalcedony and chert material.

Overall the condition of the site is good with disturbance occurring from aeolian activity. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area—artifact scatter which may have been associated with prehistoric farming activities in the surrounding area. Based upon the ceramic artifacts noted on the site, this site appears to be affiliated with a late Pueblo I temporal affiliation dating from A.D. 700 to 900.

Site Number: AZ-P-19-60 (Figure 5)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953122 Northing, 622011 Easting (NAD 27 Datum)  
Zone 12; 3953322 Northing, 621948 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Navajo/1994/Enemy Way ('Ana'i Ndáá) Ceremony Area

Site Size: 130 m by 24 m (248 sq. m)—area of oval

**Site Setting:** The site is situated within an open grassland area. This area is located within a valley containing Pueblo Colorado Wash. The site area is drained by small unnamed drainages flowing to the site. These drainages are located to the east and west of the site. Pueblo Colorado Wash is located about 12,285 feet (2.33 miles) south of the site. The elevation in the site area is about 6271 feet (1912 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

**Site Description:** Site AZ-P-19-60 consists of a Navajo Enemy Way ceremonial area ('Ana'i Ndáá) that was used in 1994. This site contains five features. Two of these five features are located on the eastern portion of

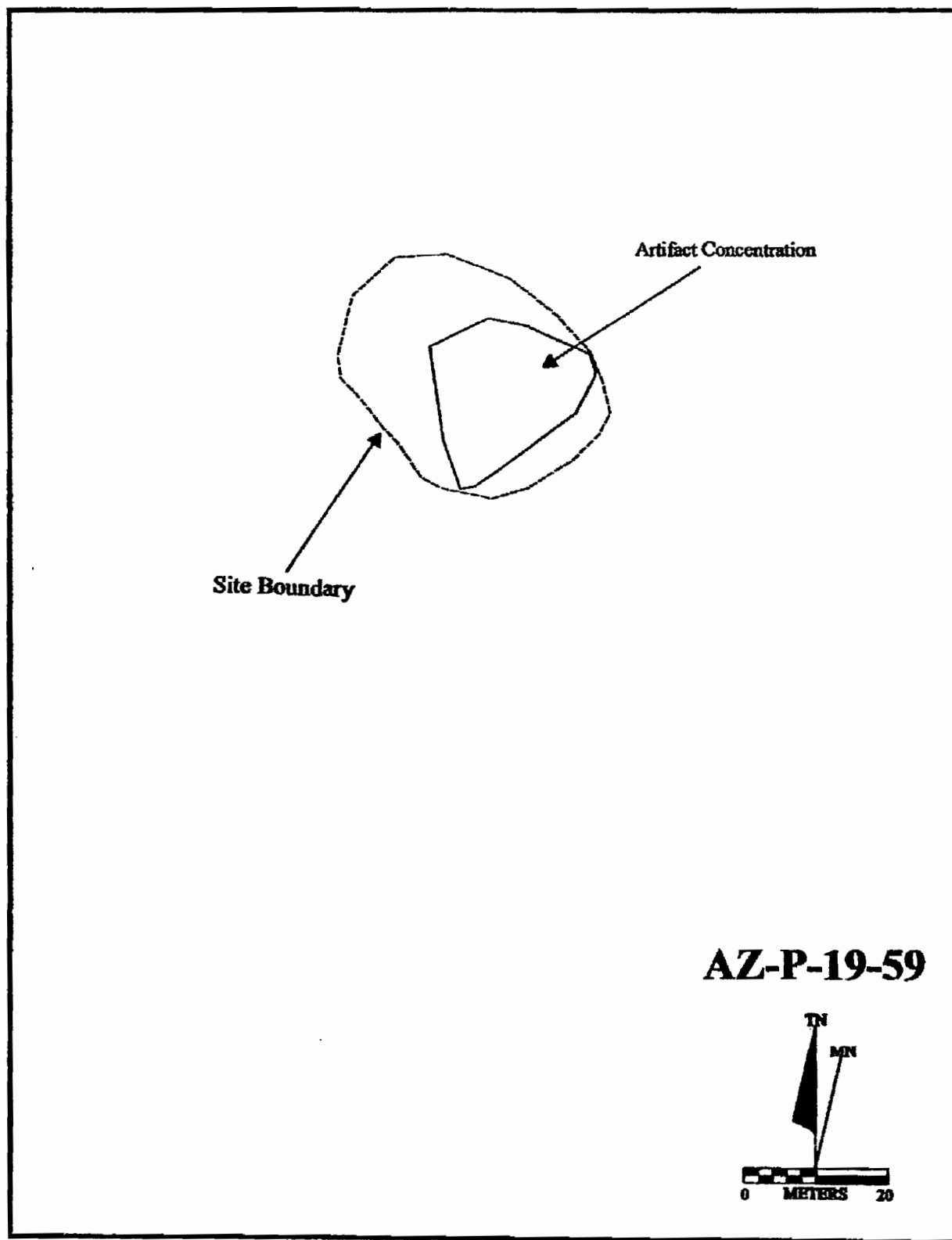


Figure 4. General plan map of Site AZ-P-19-59 (NNAD 09-332).

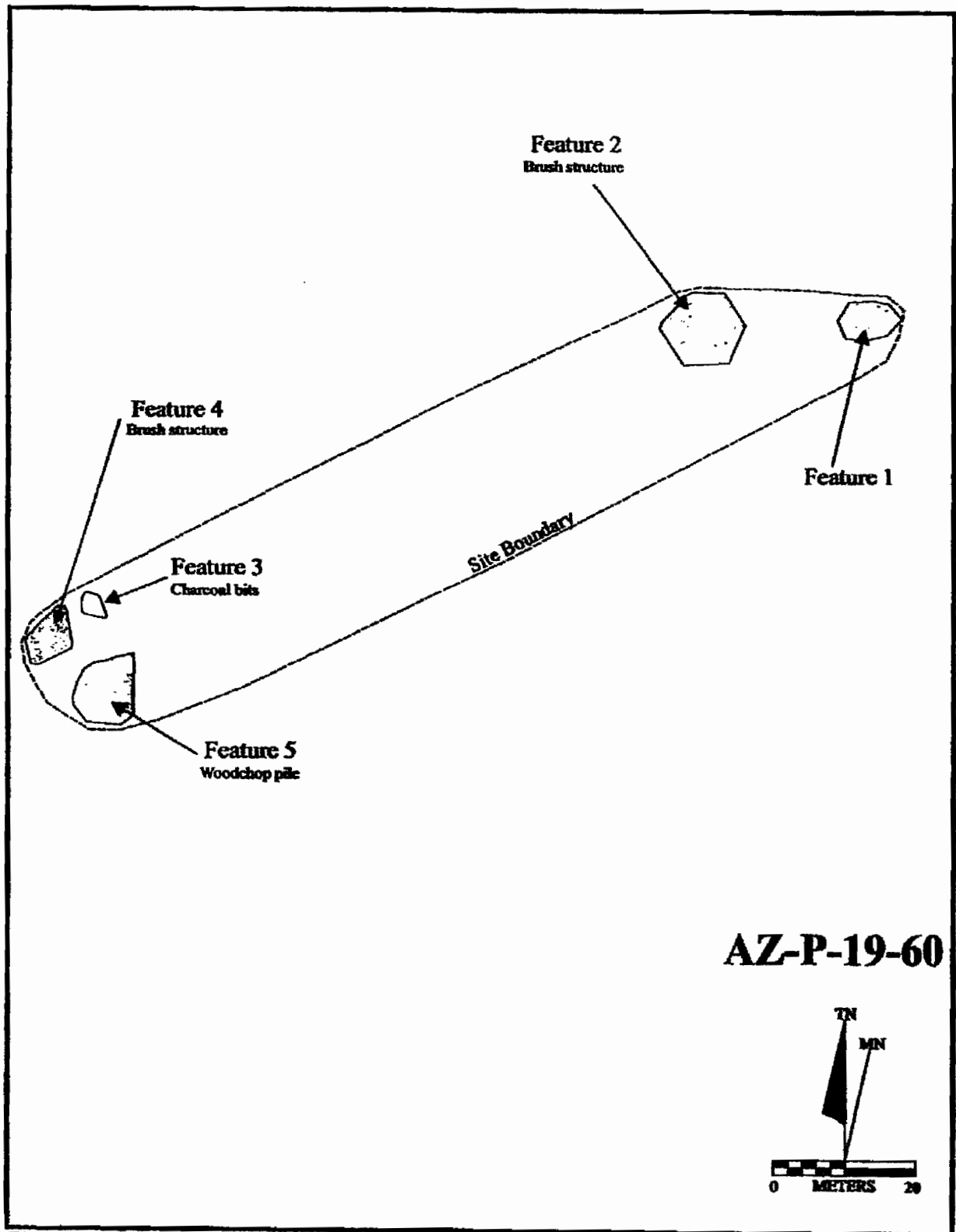


Figure 5. General plan map of Site AZ-P-19-60 (NNAD 09-332).

the site. The remaining three features are located on the western portion of the site. Both the eastern and western portions of the site contain brush structures.

Feature 1 consists of a concentration of charcoal bits that is the remains of a hearth area. The charcoal bits noted in this feature were scattered throughout an 8 m by 5 m area. This feature is also located on the eastern side of the project area.

Feature 2 is also located on the eastern side of the site. This feature consists of a brush structure with about eleven vertical posts positioned to outline a circular area. Within the interior of the feature are about 50 or more scattered brush and tree branches lying on the ground surface. The vertical posts stand from 30 cm to 1 m in height. This feature measures about 10 m by 10 m. The artifacts noted near Features 1 and 2 include one clear soda bottle, smashed aluminum cans, burned aluminum cans, one aluminum rectangular meat can (Spam), clear glass fragments, a green soda bottle, and a "Pepsi" soda bottle (embossed with "Not To Be Refilled").

Feature 3 is located on the western side of the site. This feature contains a charcoal pile located within a 4 m by 3 m area and appears to have been a hearth.

Feature 4 is also located on the western portion of the site. This feature contains a scatter of brush lying within a 9 m by 6 m area. Feature 4 may have also been a brush structure.

Located to the southwest of Feature 4 is Feature 5, a wood-chopping pile. This feature measures 9 m by 8 m. The artifacts observed within the western portion of the site consist of aluminum cans and a coffee can.

The condition of the site is poor with disturbance resulting from erosion. Further, the site appears to lack buried cultural material.

According to ethnographic information, the site appears to have functioned as an Enemy Way (*Ana'i Ndaa*) ceremony area with the ceremony occurring in 1994.

Site Number: AZ-P-19-61 (Figure 6)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3952896 Northing, 621820 Easting (NAD 27 Datum)  
Zone 12; 3953096 Northing, 621757 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Late Pueblo I-Pueblo II (A.D. 850-1050)/SAA—Resource Processing Area

Site Size: 30 m by 23 m (542 sq. m)—area of oval

Site Setting: The site is situated on a low rise located within an open grassland area. This area is also located in an open valley containing Pueblo Colorado Wash to the south. The site area is drained by small unnamed drainages flowing south. These drainages area located to the east and west of the site area. Pueblo Colorado Wash is located about 11,219 feet (2.12 miles) south of the site. The elevation in the site area is about 6264 feet (1910 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, sagebrush, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-61 consists of an Anasazi specialized activity area resource processing area. The site contains an artifact scatter and a slight depression area that may contain a possible buried structure.

Feature 1 contains a slight oval-shaped depression area that measures about 10 m by 8 m by a depth of 10 cm at the center of the depression. No artifacts were noted directly within the depression area; however, the artifacts noted on this site were scattered around the perimeter of this feature.

The artifact assemblage on this site was low consisting of 31 ceramic (sherds) artifacts and 7 lithic artifacts. The lithic artifacts observed on this site consisted of 1 secondary flake (rhyolite material), 1 tertiary flake



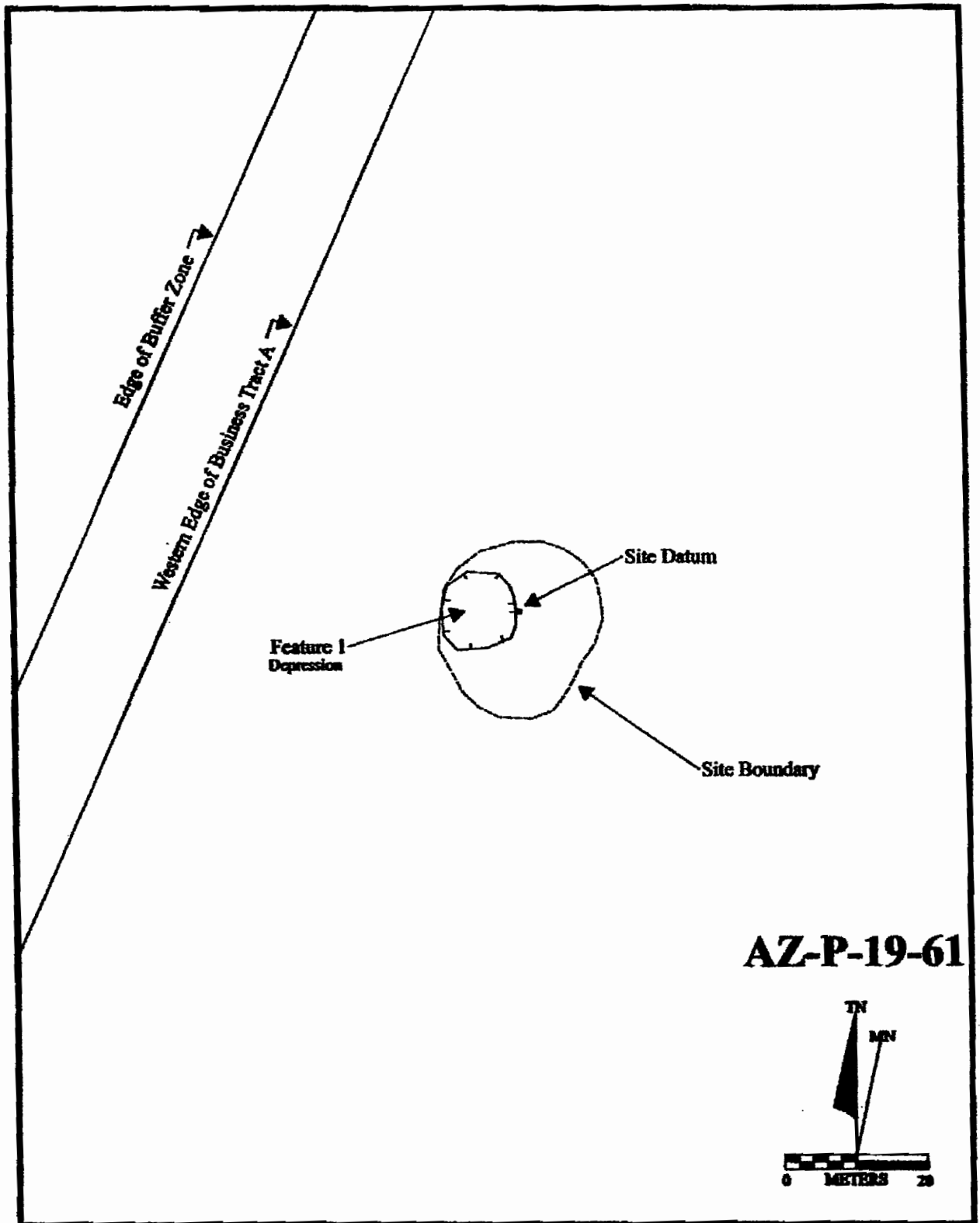


Figure 6. General plan map of Site AZ-P-19-61 (NNAD 09-332).

(rhyolite material), 4 tertiary flakes (chalcedony material), and 1 piece of angular debris (chalcedony material). The ceramic assemblage consisted of 31 ceramics including 10 indented corrugated sherds, 9 plain gray ware sherds, 3 plain white ware sherds, and 9 decorated black-on-white ware sherds. The decorated sherds contained mineral and carbon paint designs with several of the sherds identified to type as Red Mesa Black-on-white, Kiatuthlanna Black-on-white, and Flagstaff Black-on-white.

The site is in good condition with the only disturbance occurring from aeolian activity. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area—resource processing area or it may be the remains of a possible habitation, as the depression area on this site may be the remains of a buried structure such as a pit house. This site also appears to have been associated with prehistoric farming activities in the surrounding area. Based upon the ceramic artifacts noted on the site, this site appears to be affiliated with a late Pueblo I to Pueblo II temporal affiliation dating from A.D. 850 to 1050.

Site Number: AZ-P-19-62 (Figure 7)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3952747 Northing, 621953 Easting (NAD 27 Datum)  
Zone 12; 3952947 Northing, 621890 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Late Pueblo I-Pueblo II (A.D. 825-1050)/SAA—Resource Processing Area

Site Size: 54 m by 27 m (116 sq. m)—area of oval

Site Setting: The site is situated within a rolling grassland area. This area is situated within a valley containing Pueblo Colorado Wash to the east. An unnamed tributary of Colorado Wash is located about 400 feet (122 m) east of the site. The elevation in the site area is about 6255 feet (1907 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, bunch grass, Russian thistle, prickly pear cactus, rabbitbrush, and narrowleaf yucca.

Site Description: Site AZ-P-19-62 consists of an Anasazi specialized activity area—resource processing area. The site contains an artifact concentration and a scatter of lithic and ceramic artifacts. No features associated with this site were observed. The site is situated within an open valley area west of Pueblo Colorado Wash.

Artifact Concentration 1 is located on the southern edge of the site. This concentration measures 9 m by 5 m and contains about 75 lithic artifacts ceramic artifacts. Also noted within the concentration area was a slight layer of ashy soil.

The lithic artifacts observed on this site consisted of secondary flakes, tertiary flakes, and microflakes. Also noted on this within the lithic assemblage were unidirectional cores and pieces of angular debris. One projectile point/drill was also noted on this site. The drill was of an obsidian material. The drill contained expanded base with a side notches. The drill measured 1.8 mm by 0.9 mm by 0.2 mm thick. The ceramic artifacts observed on this site consisted of less than 40 ceramic artifacts. An inventory on 26 of the ceramics was conducted. The ceramic assemblage consisted of 5 black-on-white sherds (2 sherds with mineral paint and 3 sherds with carbon paint), 11 plain gray ware sherds, 8 indented corrugated sherds, and 1 plain white ware sherd. Several of the decorated sherds were identified to type as Holbrook Black-on-white.

The site is in relatively good condition with natural erosion in the form of aeolian activity within the site. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

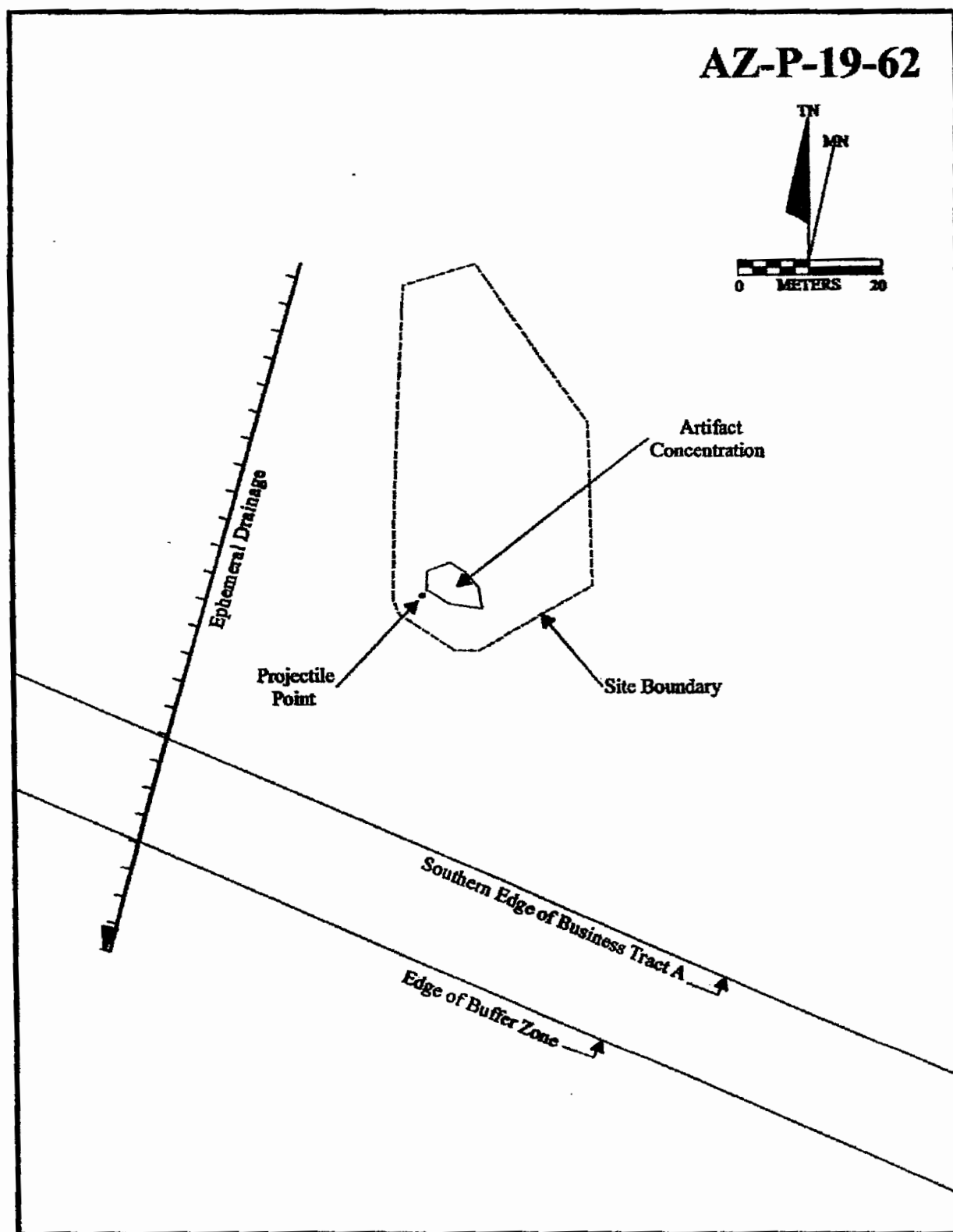


Figure 7. General plan map of Site AZ-P-19-62 (NNAD 09-332).

This site appears to have functioned as a specialized activity area—resource processing area that may have been associated with prehistoric farming activities in the surrounding area. The site appears to be affiliated with a late Pueblo I to Pueblo II temporal affiliation.

### Isolated Occurrences

Twenty-two isolated occurrences (IOs 09-332-1 through 15, and 15A through 21) were located within the project area. The IOs consist of isolated prehistoric ceramic (sherds) and lithic artifacts. One of the IOs was also identified as an isolated historic trash pile. Table 3 provides a summary description of these resources.

Table 2. Isolated Occurrences Encountered during the Inventory (UTM Zone 12)

IO No.	Summary Description	NAD 27 Datum		NAD 83 Datum	
		Northing	Easting	Northing	Easting
IO 09-332-1	1 black-on-white sherd	3953490	622072	3953690	622009
IO 09-332-2	2 small ground stone fragments	3953593	622213	3953793	622150
IO 09-332-3	1 plain gray ware sherd	3953410	622100	3953610	622037
IO 09-332-4	1 trash pile	3953368	622044	3953568	621981
IO 09-332-5	1 plain gray ware sherd	3953341	622148	3953541	622085
IO 09-332-6	1 indented corrugated sherd	3953300	622112	3953500	622049
IO 09-332-7	2 Sosi-style Black-on-white sherds	3953345	622052	3953545	621989
IO 09-332-8	1 Sosi-style Black-on-white sherd	3953325	622043	3953525	621980
IO 09-332-9	1 plain gray ware sherd	3953327	622000	3953527	621937
IO 09-332-10	1 plain gray ware sherd	3953252	621982	3953452	621919
IO 09-332-11	1 plain gray ware sherd	3953217	622129	3953417	622066
IO 09-332-12	1 indented corrugated sherd	3953180	622285	3963380	622222
IO 09-332-13	1 plain gray ware sherd	3953229	622084	3953429	622021
IO 09-332-14	1 black-on-white ware sherd	3953195	622080	3953395	622017
IO 09-332-15	1 plain gray ware ceramic ladle fragment	3953181	622127	3953381	622063
IO 09-332-15A	1 ladle ceramic fragment	3953053	622187	3953253	622124
IO 09-332-16	1 plain white ware sherd	3952952	622352	3953152	622289
IO 09-332-17	1 indented corrugated sherd	3952938	621920	3953138	621857
IO 09-332-18	1 plain white ware sherd	3952846	622164	3953046	622101
IO 09-332-19	1 secondary chert flake	3952829	622261	3953029	622198
IO 09-332-20	1 black-on-white sherd	3952715	622098	3952915	622035
IO 09-332-21	2 plain gray ware sherds	3952612	622129	3953381	622064

IO denotes Isolated Occurrence.

### Evaluation of Significance

Under 36 CFR Part 60.4, cultural resources may be eligible for nomination to the National Register of Historic Places if they "...possess integrity of location, design, setting, materials, workmanship, feeling, and association..." and if the resources in question are resources:

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history.

As defined in 36 CFR 60.4, ordinarily cemeteries, birthplaces or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historical buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within categories a-g.

Under Bulletin 38 "Guidelines for Evaluation and Documenting Traditional Cultural Properties," properties are eligible for nomination to the National Register of Historic Places if they retain integrity of location, setting, materials, workmanship, feeling or association. This document explains that in considering the integrity of TCPs there are two fundamental questions: (1) Does the property have an integral relationship to traditional practices or beliefs (2) Is the condition of the property such that the relevant relationships survive? Even if a property has lost its integrity as a possible TCP, it may retain integrity with reference to another aspect of significance. For example, it may still contain archaeological deposits, making it eligible under criterion "d".

Bulletin 38 admits to eligibility under criterion "a" those properties associated with events significant in our history, even when those events are associated with the mythopoetic past. Similarly, properties are eligible under criterion "b" if they are associated with persons significant to our history, even when those persons are associated with the mythopoetic past.

Although ownership by a religious group or use for religious purposes would normally make a property ineligible, Bulletin 38 cautions against ethnocentrism in evaluating cultural significance. Parker and King (1992:13) state that "The fact that traditional history and culture may be discussed in religious terms does not make it less historical or less significant to culture, nor does it make properties associated with traditional history and culture ineligible for inclusion in the National Register".

Concerning the Archaeological Resource Protection Act (ARPA) of 1979 (43 CFR Part 7), the Act has two fundamental purposes:

- 1) to protect irreplaceable archaeological resources on public lands and Indian lands from unauthorized excavation, removal, damage, alteration, or defacement; and
- 2) to increase communication and exchange of information among government authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data which were obtained prior to enactment of the Act.

In completing the assessment under 43 CFR Part 7 there are two concerns that need to be addressed. Under ARPA, in order for a resource to be considered an archaeological resource and thus merit protection, it must both be greater than 100 years in age and be of archaeological interest.

The American Indian Religious Freedom Act (AIRFA [P.L. 95-341]) is a resolution of Congress to the effect that American Indians shall have the right of freedom to believe, express and exercise their traditional religions and have access to sites, use and possession of sacred objects, and freedom of worship through ceremonies and rites. Therefore, any site or place (prehistoric or historic) having religious, ceremonial or sacred aspects or components needs to be dealt with light of this law. Anasazi sites with Navajo figurines present qualify for protection, for instance, as do Enemy way sites, sweat lodges, blessed hogans, and other blessed sites or buildings. It is also very important to realize that many places that lack any material cultural component also qualify, such as sacred landmarks and mineral or vegetal extraction areas.

### Archaeological Sites

Site AZ-P-19-58 lacks integrity. It is probably not eligible for nomination to the National Register under criteria a, b, c, or d. The logs within the site appear to be over 50-years old, therefore, the site does meet the 50-year eligibility guideline; however, AZ-P-19-58 does not appear to be a Register-eligible property. The site is no longer of archaeological interest and it does not appear to meet the 100-year age requirement necessary

for classification as an archaeological resource under ARPA. Thus, the site does not appear to merit protection under ARPA. The site does not appear to retain qualities or characteristics that would make it eligible for protection under AIRFA.

Site AZ-P-19-60 possesses integrity of location. The site does not appear to be eligible for nomination to the National Register under criteria a, b, c, or d. The site also does not appear to be over 50-years old and it, therefore, does not meet the 50-year eligibility guideline. The site is no longer of archaeological interest and it does not meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA. Therefore, the site does not appear to merit protection under ARPA. Although the site was utilized as a ceremonial area, the site is no longer considered to retain qualities or characteristics that would make it eligible for protection under AIRFA. The person who was the participant in the ceremony has given his consent for the proposed undertaking in the area of the site and the chanter who assisted in the ceremony indicated that the site is not considered a sacred place or of traditional concerns.

Sites AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62 retain integrity. The sites do not appear to be eligible for nomination to the National Register under criteria a, b, or c. They may, however, be eligible under criterion d because they possess research potential. The sites are over 50-years old; therefore, they do appear to be Register-eligible properties. The sites are of archaeological interest and they do meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA. Thus, the sites do appear to merit protection under ARPA. The sites do not retain qualities or characteristics that would make them eligible for protection under AIRFA.

#### Isolated Occurrences

The IOs lack integrity. The IOs do not appear to be eligible for nomination to the National Register of Historic Places under criteria a through d. All of the IOs except IO 09-332-4 meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA; however, the IOs are not of archaeological interest. Thus, the IOs do not appear to merit protection under ARPA. The IOs do not retain qualities or characteristics that would make them eligible for protection under AIRFA.

#### Recommendations

##### Archaeological Sites

Site AZ-P-19-58 does not appear to be a Register-eligible property nor does it appear to merit consideration under AIRFA; therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site without further stipulations.

Site AZ-P-19-59 may be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet (15.24 m) of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

Site AZ-P-19-60 does not appear to be a Register-eligible property nor does it appear to merit consideration under AIRFA; therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities without further stipulations.

Site AZ-P-19-61 appears to be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction

activities within 50 feet of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

Site AZ-P-19-62 appears to be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

#### Isolated Occurrences

A determination of no historic properties affected is recommended for the proposed undertaking in the area of the IOs since they are not considered significant resources. No further stipulations concerning the proposed undertaking in the area of the IOs is recommended.

#### Summary

A determination of no historic properties affected is recommended for the proposed development activities to occur in the areas containing the three sites that appear to be Register-eligible properties provided the stipulations addressed in the report concerning these resources are adhered to. Finally, a determination of no historic properties affected is recommended for the project areas containing the remaining two sites (AZ-P-19-58 and AZ-P-19-60) and the isolated occurrences without further stipulations.

### References Cited

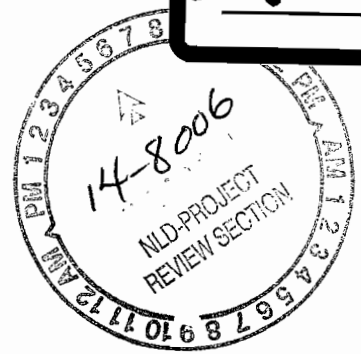
Begay, Richard M.

- 1991 *Sunrise Trading Post. A Reconnaissance on the Destruction of the Compound Lower Greasewood Chapter, Arizona.* NNHPD Report 91-096. Navajo Nation Historic Preservation Department, Window Rock, Arizona.

Van Valkenburgh, Richard F.

- 1974 Navajo Sacred Places. In *Navajo Indians III*, edited by Clyde Kluckhohn, pp. 9-199. Garland Publishing, New York, New York.





## Cornfields Chapter

### Deer Point Development Parcel



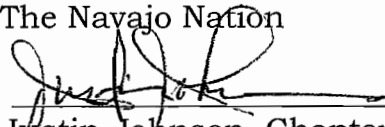


# CORNFIELDS CHAPTER

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Email: [cornfields@navajochapters.org](mailto:cornfields@navajochapters.org) Website: [cornfields.nndes.org](http://cornfields.nndes.org)

TO : Land Administration  
The Navajo Nation

FROM :   
Justin Johnson, Chapter President  
Cornfields Chapter

DATE : March 10, 2014

RE : Letter of Intent to Withdraw Land for Commercial, Public  
Housing and Public Facilities

This is a letter of intent by Cornfields Chapter to withdraw land for Commercial, Public Housing and Public Facilities. The Cornfields Chapter, a LGA-certified chapter, has identified a need for public housing, public facilities, as well as a need for economic development. The community has designated three sites for development and the Community Land Use Planning Committee has been working to comply with the requirements for land withdrawal.

Attached are the required documents for the Deer Point Development Parcel for your review. If you should have any questions, please call the Chapter Manager at (928)755-5911, or 5912.

Thank you.

*Justin Johnson, Chapter President – Jimmie Taliman, Sr, Chapter V-President – Linda Youvella, Sec/Treasurer  
- Elizabeth Johnson, Chapter Manager – Alfreda Earle, Acct. Tech. – Marilyn T. Begay, Office Specialist - Alton  
Joe Shepherd, Council Delegate*

## TABLE OF CONTENTS

CHAPTER RESOLUTIONS	A
CONSENT FORMS	B
SURVEY & LAND DESCRIPTIONS	C
ARCHAEOLOGICAL/CULTURAL RESOURCE INVENTORY REPORT	D
ENVIRONMENTAL ASSESSMENT	E
OTHER SUPPORTING DOCUMENTS	F

A

RESOLUTION OF THE CORNFIELDS CHAPTER

Reaffirming Resolution #CF/APRIL10-30 Supporting and Approval of the Community Land Use Planning (CLUP) Committee's Request to the Navajo Nation Land Administration to Withdraw Land for Three (3) Sites Within Cornfields Chapter Designated for Business Development

WHEREAS:

1. The Cornfields Chapter is a duly certified local governing entity recognized by the Navajo Nation Council to address the needs of the Chapter residents and the economic development of the chapter for primary benefit of the local people, and to facilitate communications between and among the local people with agencies of the Navajo Nation, the United States, and where appropriate, the State of Arizona; and
2. The Cornfields Chapter approved Resolution #CF/APRIL10-30 that supports and approves the CLUP Committee's request to Navajo Nation Land Administration to withdraw land for three (3) sites within Cornfields Chapter designated for business development; and
3. The Cornfields Chapter with CLUP Committee completed and identified the three (3) business sites, which are:
  - a. Former Sunrise Trading Post
  - b. Intersection of Route 15 and Route 151
  - c. Deer Point Business Development
4. The Cornfields Chapter believes it is in the best interest of the community to support and approve CLUP Committee's request for withdraw of land for the three (3) designated business sites.

NOW THEREFORE BE IT RESOLVED THAT:

Cornfields Chapter reaffirms and supports and approval of the Community Land Use Planning (CLUP) Committee's request the Navajo Nation Land Administration to withdraw land for three (3) sites within Cornfields Chapter designated for business development.

CERTIFICATION

We hereby certify that the foregoing Resolution was considered at a duly called regular meeting of the Cornfields Chapter at Cornfields, Navajo Nation, Arizona at which a quorum was present, and that the same was passed by a vote of 35 in favor, 0 opposed, and 1 abstained this 9<sup>th</sup> day of February 2014.

  
Presiding President

Motion: Cecelia White  
Second: Alban Yazzie

## RESOLUTION OF THE CORNFIELDS CHAPTER

Reaffirming their support and approval of the Community Land Use Planning (CLUP) Committee's request to the Navajo Nation Land Administration to withdraw land for three (3) sites within Cornfields Chapter designated for business development.

### WHEREAS:

1. Pursuant to 26 N.N.C, Section3 (A), the Cornfields Chapter is a duly recognized chapter of the Navajo Nation Government, as listed at 11 N.N.C., part 1, Section 10, and
2. Pursuant to 26 N.N.C., Section 1 (B), Cornfields Chapter is vested with the authority to review all matters affecting the community and to make appropriate correction when necessary and to make recommendations to the Navajo Nation and other local agencies for appropriate action; and
3. The Cornfields Chapter, in coordination with the local Community Land Use Planning Committee, has completed the Comprehensive Land Use Plan that identifies areas for development; and
4. At the June 17, 2003 meeting between the Cornfields Chapter CLUP Committee and the affected Grazing Permit Holders, three of the potential sites being studied were approved for land withdrawal through a unanimous verbal support as well as by signing of consent forms by the Grazing Permit Holders. The three sites are:
  - a. Former Sunrise Trading Post – approximately 25 acres
  - b. The Intersection of Route 15 and Route 151 – approximately 25 acres
  - c. A parcel of 100 acres 2 miles south of Burnside Junction on Highway N15.
5. Cornfields Chapter believes it is in the best interest of the community to support and approve the CLUP Committee's request to withdraw land for the three designated business sites.

### NOW THEREFORE BE IT RESOLVED THAT:

1. The Cornfields Chapter hereby reaffirms and approves the CLUP Committee's request to the Navajo Land Administration to consider and approve the withdrawal of land for three (3) sites within Cornfields Chapter which are designated for business development.
2. Further, Cornfields Chapter requests the Resource Committee , the Economic Development Committee of the Navajo Nation and the Navajo Nation Council to acknowledge, consider and approve the withdrawal of designated parcels of land within the Cornfields Chapter boundary for the purpose of development for community facilities and commerce.

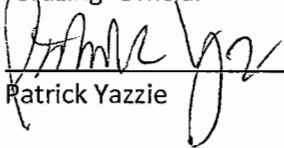
C E R T I F I C A T I O N

We, hereby, certify that the foregoing resolution was duly considered by the Cornfields Chapter of the Navajo Nation at a duly called regular chapter meeting at the Cornfields Chapter, (Arizona) at which a quorum was present and that same was passed by a vote of 29 in favor, 0 opposed, and 3 abstention(s) on this 18<sup>th</sup> day of April 2010.

Motion: Thomas Singer

Second : Sally Thomas

Grazing Official

  
Patrick Yazzie

Presiding President,

  
Jimmie Taliman, Sr.

## RESOLUTION OF THE CORNFIELDS CHAPTER

Reaffirm and supporting the Community Land Use Planning (CLUP) Committee of the Cornfields Chapter for their request to the Navajo Nation Land Administration for technical assistance to seeks funds and identify funds to cover Land Studies and Land Clearance for the sites designated for development of Community Facilities and Economic Development within the Cornfields Chapter.

## WHEREAS:

- 1) The Cornfields Chapter is a certified governing entity recognized by the Navajo Nation Council, and vested with the authority to plan and implement developments that are in the best interest of the people and community; and
- 2) The Cornfields Chapter and in conjunction with the local Community Land Use Planning Committee (CLUPC) have completed the Comprehensive Land Use Plans that identified areas for development; and
- 3) The Cornfields Chapter and the community members have participated in the public meetings including surveys and have appealed for improvements in living conditions and development in several areas, among these Economic Development, and public service facilities; and
- 4) The Cornfields Chapter is also aware that there is no funding available at the Chapter to begin the preliminary studies, including archeological clearance, environmental assessment, and other related land studies.

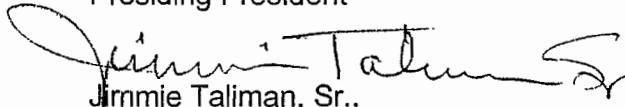
## NOW, THEREFORE IT BE RESOLVED THAT:

- 1) The Cornfields Chapter hereby reaffirms the supports and approves the local Community Land Use Planning (CLUP) Committee's requests to the Navajo Nation Land Administration to seek and assist for funds to cover land studies, land clearance for the sites designated and withdrawn for the Community Facilities and Economic Development for the community members of Cornfields Chapter.

## CERTIFICATION

I, hereby certify that the foregoing resolution was duly considered by the Cornfields Chapter of the Navajo Nation at a duly called regular chapter meeting at the Cornfields Chapter, (Arizona) at which a quorum was present and that same was passed by a vote of 29 in favor and 00 opposed, 01 abstain on this 09<sup>th</sup> day of November 2005.

Presiding President

  
Jirmie Taliman, Sr.,  
Chapter President  
CORNFIELDS CHAPTER



## RESOLUTION OF THE CORNFIELDS CHAPTER

Approving and supporting the Community Land Use Planning Committees of the Cornfields Chapter for their request to the Navajo Nation Land Administration for technical assistance to seeks funds and identify funds to cover Land Studies and Land Clearance for the sites designated land withdrawn for development of Community Facilities and Economic Development within the Cornfields Chapter.

## WHEREAS:

- 1) The Cornfields Chapter is a certified governing entity recognized by the Navajo Nation Council vested with the authority to plan and implement developments that are in the best interest of the people and community; and
- 2) The Cornfields Chapter and in conjunction with the local Community Land Use Planning Committees (CLUPC) have completed the Comprehensive Land Use Plans that identified areas for land withdrawals development; and
- 3) The Cornfields Chapter and the community members have participated in the public meetings and surveys appealed for improvements in living conditions and development in several areas, which were identified for improvements with the understanding that the Economic Development and Senior Citizens housing were considered important; and
- 4) The Cornfields Chapter is also aware that there are no funding available at the Chapter to begin the preliminary studies, including archeological clearance, environmental assessment, and other related land studies.

## NOW, THEREFORE IT BE RESOLVED THAT:

- 1) The Cornfields Chapter hereby approves and supports the local CLUP Committee's requests to the Navajo Nation Land Administration to seek and assist for funds to cover land studies, land clearance for the sites designated and withdrawn for the Community Facilities and Economic Development for the community members of Cornfields Chapter.

## C E R T I F I C A T I O N

I, hereby certify that the foregoing resolution was duly considered by the Cornfields Chapter of the Navajo Nation at a duly called regular chapter meeting at the Cornfields Chapter, (Arizona) at which a quorum was present and that same was passed by a vote of \_\_\_\_ in favor and \_\_\_\_ opposed, on this 15<sup>th</sup> day of May 2005.

Presiding President

Jimmie Taliman, Sr.,  
Chapter President  
CORNFIELDS CHAPTER

RECOMMENDING TO THE CORNFIELDS CHAPTER THAT IT REQUESTS THE NAVAJO NATION DIVISION OF COMMUNITY DEVELOPMENT TO APPLY ON BEHALF OF CORNFIELDS CHAPTER FOR GOVERNMENT GRANTS AND FUNDS AVAILABLE FOR NATIVE AMERICAN ECONOMIC DEVELOPMENT FOR THE PURPOSE OF SECURING FUNDS TO COVER LAND STUDIES AND CLEARANCES FOR 50 ACRES OF LAND WITHDRAWN ALONG HIGHWAY 15 AT CORNFIELDS CHAPTER

WHEREAS:

1. Cornfields Chapter is a recognized chapter of the Navajo Nation, and
2. The Community Land Use Planning Committee of Cornfields Chapter is currently preparing a Land Use Plan that will identify areas for development, and
3. The Cornfields community people who participated in the public meeting and surveys appealed for improvements in living conditions and development in several areas. Among these, the second most important issue to them was economic development, and
4. The Cornfields Chapter has passed a resolution withdrawing several acres of land designated for business development along Highway 15 and
5. At this time, there are no funds available at the Chapter to begin preliminary studies, including legal survey & description of the land, archeological clearance, environmental assessment, and other related studies.

NOW THEREFORE BE IT RESOLVED THAT:

The Cornfields Chapter CLUP Committee recommends to Cornfields Chapter that is requests the Navajo Nation Division of Community Development to apply on behalf of Cornfields Chapter for Governments Grants & Funds available for Native American Economic Development and secure these funds to cover land studies and clearance for 50 acres of land withdrawn for business development along highway 15 at Cornfields Chapter.

CERTIFICATION

I hereby certify that the foregoing recommendation was duly considered by the Cornfields Chapter CLUP committee at a duly called meeting at the Cornfields Chapter, Navajo Nation(AZ), at present and the same was passed by a vote of 3 in favor, 0 opposed and 1 abstention, this 16<sup>th</sup> day of November 2004.

## RESOLUTION OF THE CORNFIELDS CHAPTER

Reaffirming the request and recommendation to enter into a three-year commitment to the Navajo Nation Tourism Department for their assistance in Development of visitor related facilities, i.e., Hotel Accommodation, Scenic byways, Restaurants or a visitor welcome center to the located at old Sunrise T.P. (Cornfields community)

## WHEREAS:

1. The Cornfields Chapter is a governing entity recognized by the Navajo Nation Chapter vested with the authority to plan and implement developments that are in the best interest of the people and community; and
2. The Cornfields Chapter in conjunction with the local Community Land Use Planning Committee (CLUPC) have completed the comprehensive Land Use Plans that identified areas for land withdrawals and development; and
3. The Cornfields Chapter and the community people who participated in the public meetings. And surveyed and have appealed for improvements in living conditions and development in several areas. Among these, the second highest important issue to them was Economic Development; and
4. The Cornfields Chapter is aware that the Community Land Use Planning Committee designated 25 acres of land at the old Sunrise Trading Post for Tourism Development area; and
5. The Cornfields Chapter is aware that the Navajo Nation Tourism Department made a presentation before the CLUP Committee, showing their interest to assist the Chapter in Tourism Development through planning, feasibility studies, design and construction.

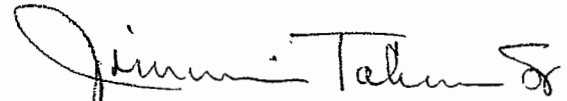
## THEREFORE BE IT RESOLVED THAT:

1. The Cornfields Chapter hereby reaffirming the request and recommendation to enter into a three-year commitment to the Navajo Nation Tourism Department for their assistance in Development of visitor related facilities, i.e., hotel accommodation, scenic byways, restaurants or a visitor welcome center to the located at old Sunrise T.P. (Cornfields community)

## CERTIFICATION

I, hereby certify that the foregoing resolution was duly considered by the Cornfields Chapter of the Navajo Nation at a duly called regular chapter meeting at the Cornfields Chapter, (Arizona) at which a quorum was present and that same was passed by a vote of 28 in favor and 00 opposed, 03 abstain on this 09<sup>th</sup> day of November 2005.

Presiding President

A handwritten signature in cursive script, appearing to read "Jimmie Taliman Sr.", written in dark ink.

Jimmie Taliman, Sr.,  
CORNFIELDS CHAPTER

RESOLUTION OF THE CORNFIELDS CHAPTER

Reaffirming the request and recommendation to enter into a three-year commitment to the Navajo Nation Tourism Department for their assistance in Development of visitor related facilities, i.e., Hotel Accommodation, Scenic byways, Restaurants or a visitor welcome center to the located at old Sunrise T.P. (Cornfields community)

WHEREAS:

1. The Cornfields Chapter is a governing entity recognized by the Navajo Nation Chapter vested with the authority to plan and implement developments that are in the best interest of the people and community; and
2. The Cornfields Chapter in conjunction with the local Community Land Use Planning Committee (CLUPC) have completed the comprehensive Land Use Plans that identified areas for land withdrawals and development; and
3. The Cornfields Chapter and the community people, who participated in the public meetings, surveyed and have appealed for improvements in living conditions and development in several areas. Among these, the second highest important issue to them was Economic Development; and
4. The Cornfields Chapter is aware that the Community Land Use Planning Committee designated 25 acres of land at the old Sunrise Trading Post for Tourism Development area; and
5. The Cornfields Chapter is aware that the Navajo Nation Tourism Department made a presentation before the CLUP Committee, showing their interest to assist the Chapter in Tourism Development through planning, feasibility studies, design and construction.

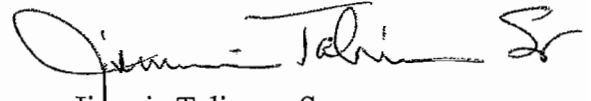
THEREFORE BE IT RESOLVED THAT:

1. The Cornfields Chapter hereby reaffirming the request and recommendation to enter into a three-year commitment to the Navajo Nation Tourism Department for their assistance in Development of visitor related facilities, i.e., hotel accommodation, scenic byways, restaurants or a visitor welcome center to the located at old Sunrise T.P. (Cornfields community)

## CERTIFICATION

I, hereby certify that the foregoing resolution was duly considered by the Cornfields Chapter of the Navajo Nation at a duly called regular chapter meeting at the Cornfields Chapter, (Arizona) at which a quorum was present and that same was passed by a vote of 28 in favor and 00 opposed, 03 abstain on this 09<sup>th</sup> day of November 2005.

Presiding President

A handwritten signature in black ink, appearing to read "Jimmie Taliman Sr.", written in a cursive style.

Jimmie Taliman, Sr.,  
CORNFIELDS CHAPTER

**RESOLUTION OF THE CORNFIELDS CHAPTER**

Approving and requesting to the the Navajo Nation President and Vice President, of the Navajo Nation and the Navajo Nation Council, the State of Arizona and Congress of the United States to appropriate funds for the proposed Construction of a new hospital and staff Housing for the Navajo Health Foundation/Sage Memorial Hospital which include the approval of building of 100 acres land set aside at milepost 101 and 102 along hi-way N-15, Cornfields community.

**WHEREAS:**

1. The Cornfields Chapter is a certified Chapter of the Navajo Nation pursuant to NNC § 4001 and 11 NNC part 1, Section 10, and is a duly certified chapter of the Navajo Nation governance with the authority to address and explore the local needs and concerns of the chapter residents through participation in community planning; and
2. The Cornfields Chapter has the responsibility for considering and approving action for the benefit of the chapter residents and to make recommendation to the Navajo Nation or such federal, state and local agencies; and
3. The Cornfields Chapter residents received vital medical services through the Navajo Health Foundation/Sage Memorial Hospital. The hospital have provided medical services to Cornfields residents for the past 102 years and is recognized for its quality efficient services for its residents; and
4. The Cornfields Chapter has equal representation on the board of directors by electing one chapter representative to reside on the board and provide guidance for the care needs of the Cornfields residents; and
5. The Cornfields Chapter is further aware that the Navajo Health Foundation/Sage Memorial Hospital established the Ganado New Hospital Steering Committee (GNHSC) to assist in the planning, designing and building of new hospital facility and staff housing complex. The GNHSC membership is composed of residents residing within District #17 and Staff of the Navajo Health Foundation; and
6. On April 10, 2003 the Cornfield Chapter passed resolution CF-APR2003-259 supporting the Navajo Health Foundation/Sage Memorial Hospital to request and seek a federal governmental contract pursuant to the Indian Self-Determination Act to provide health care services and programs to District# 17, including Cornfields Chapter; and

7. The Cornfields Chapter recognizes the need to replace the current hospital facilities and to update and modernize the hospital, its equipment and enhance health care services for residents utilizing the hospital. The Cornfield Chapter believing the construction of a new hospital will be in the best interest of the Navajo Health Foundation/Sage Hospital, the chapter, patients residing in the service delivery area and the Navajo Nation duly support the effects of the Ganado New Hospital Steering Committee.

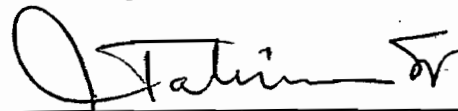
**NOW THEREFORE BE IT RESOLVED:**

1. The Cornfields Chapter hereby approves to withdraw 100 acres of land to be set aside at milepost 101 and 102 along high-way N-15.
2. The Cornfields Chapter further supports the construction of a new hospital and staff Housing for the Navajo Health Foundation /Sage Memorial Hospital and requests the Navajo Nation Council, the Navajo Nation President/Vice President, the State of Arizona and Congress of the United States to appropriate funds to assist in the building of new hospital complex for residents served by the hospital.
3. The Cornfields Chapter directs the Chapter officials to do all things necessary and Proper to assist the Ganado New Hospital Steering Committee and Navajo Health Foundation/Sage Memorial Hospital INC. to realize the new hospital

**CERTIFICATION**

I, hereby certify that the foregoing resolution was considered by the Cornfields Community Members at a duly called meeting at Cornfields Chapter, Navajo Nation (Arizona) at which a quorum was present and passed by a vote of 34 in favor, 00 opposed and 00 abstained, this 15<sup>th</sup> day of September, 2004.

Presiding President



Jimmie Taliman, Sr.

CORNFIELDS CHAPTER



**B**

CONSENT FORM - 3

(Waiver of compensation for damages)

CONSENT TO USE  
NAVAJO TRIBAL LANDS

TO WHOM IT MAY CONCERN:

I, Elaine Curtis, hereby grant consent to the  
Navajo Tribe and the Bureau of Indian Affairs to permit Sage Memorial Hospital  
of Ganado, Arizona to use a portion of my land use area for the  
following purpose (s): Infrastructure Development of New Hospital

as shown on the map showing the location of the proposed project on the back of  
this consent form.

I hereby waive any rights I may have to compensation for the diminish-  
ment in value of my land use rights as a result of the above-referenced project  
as proposed.

REMARKS: Cornfields Chapter and the landowners consent for the intent of the  
Infrastructure development of new hospital.

10/13/04 Elaine Curtis 609065 17-23-99  
Date Land User Signature (or thumbprint) Census No. Permit No.

WITNESS:

10/13/04 Pete Yappi 17-3  
Date Grazing Committee or Land Board Member District No.

Acknowledgement of Field Agent

I acknowledge that the contents of this consent form was read// or fully  
explained// to the land user in Navajo// or English// (check where applicable).

Field Agent Signature

CONSENT FORM - 3

(Waiver of compensation for damages)

CONSENT TO USE  
NAVAJO TRIBAL LANDS

TO WHOM IT MAY CONCERN:

I, Paul Cornfields, hereby grant consent to the  
Sage Memorial Hospital  
Navajo Tribe and the Bureau of Indian Affairs to permit \_\_\_\_\_  
of Ganado, Arizona to use a portion of my land use area for the  
following purpose (s): Infrastructure Development of New Hospital

as shown on the map showing the location of the proposed project on the back of  
this consent form.

I hereby waive any rights I may have to compensation for the diminish-  
ment in value of my land use rights as a result of the above-referenced project  
as proposed.

Cornfields Chapter and the landowners consent for the intent of the

REMARKS: Infrastructure development of new hospital.

10/12/04

Date

Paul Cornfields

Land User Signature (or thumbprint)

127-354

Census No.

17-33-89

Permit No.

WITNESS:

10/12/04

Date

Frank Y. [Signature]

Grazing Committee or Land Board Member

17-3

District No.

Acknowledgement of Field Agent

I acknowledge that the contents of this consent form was read// or fully  
explained// to the land user in Navajo// or English// (check where applicable).

Field Agent Signature: \_\_\_\_\_

(Waiver of compensation for damages)

CONSENT TO USE  
NAVAJO TRIBAL LANDS

TO WHOM IT MAY CONCERN:

I, Janice Keyonnie, hereby grant consent to the  
Navajo Tribe and the Bureau of Indian Affairs to permit Sage Memorial Hospital  
of Ganado, Arizona to use a portion of my land use area for the  
following purpose (s): Infrastructure Development of New Hospital

as shown on the map showing the location of the proposed project on the back of  
this consent form.

I hereby waive any rights I may have to compensation for the diminish-  
ment in value of my land use rights as a result of the above-referenced project  
as proposed.

REMARKS: Cornfields Chapter and the landowners consent for the intent of the

Infrastructure development of new hospital.

10-12-04 Janice Keyonnie 1622565 17-24-01  
Date Land User Signature (or thumbprint) Census No. Permit No.

WITNESS:

10-12-04 [Signature] 1-2-3  
Date Grazing Committee or Land Board Member District No.

Acknowledgement of Field Agent

I acknowledge that the contents of this consent form was read// or fully  
explained// to the land user in Navajo// or English// (check where applicable).

Field Agent Signature

(Waiver of compensation for damages)

CONSENT TO USE  
NAVAJO TRIBAL LANDS

TO WHOM IT MAY CONCERN:

Johnson R. Kee

I, \_\_\_\_\_, hereby grant consent to the Navajo Tribe and the Bureau of Indian Affairs to permit Sage Memorial Hospital

of Ganado, Arizona to use a portion of my land use area for the following purpose (s): Infrastructure Development of New Hospital

as shown on the map showing the location of the proposed project on the back of this consent form.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed, and the Bureau of Indian Affairs is hereby authorized to

Cornfields Chapter and the landowners consent for the intent of the

REMARKS:

Infrastructure development of new hospital.

10-12-04

Date

John R. Kee  
Land User Signature (or thumbprint)

605,895  
Census No.

17-24-01  
Permit No.

WITNESS:

10-12-04

Date

[Signature]  
Grazing Committee or Land Board Member

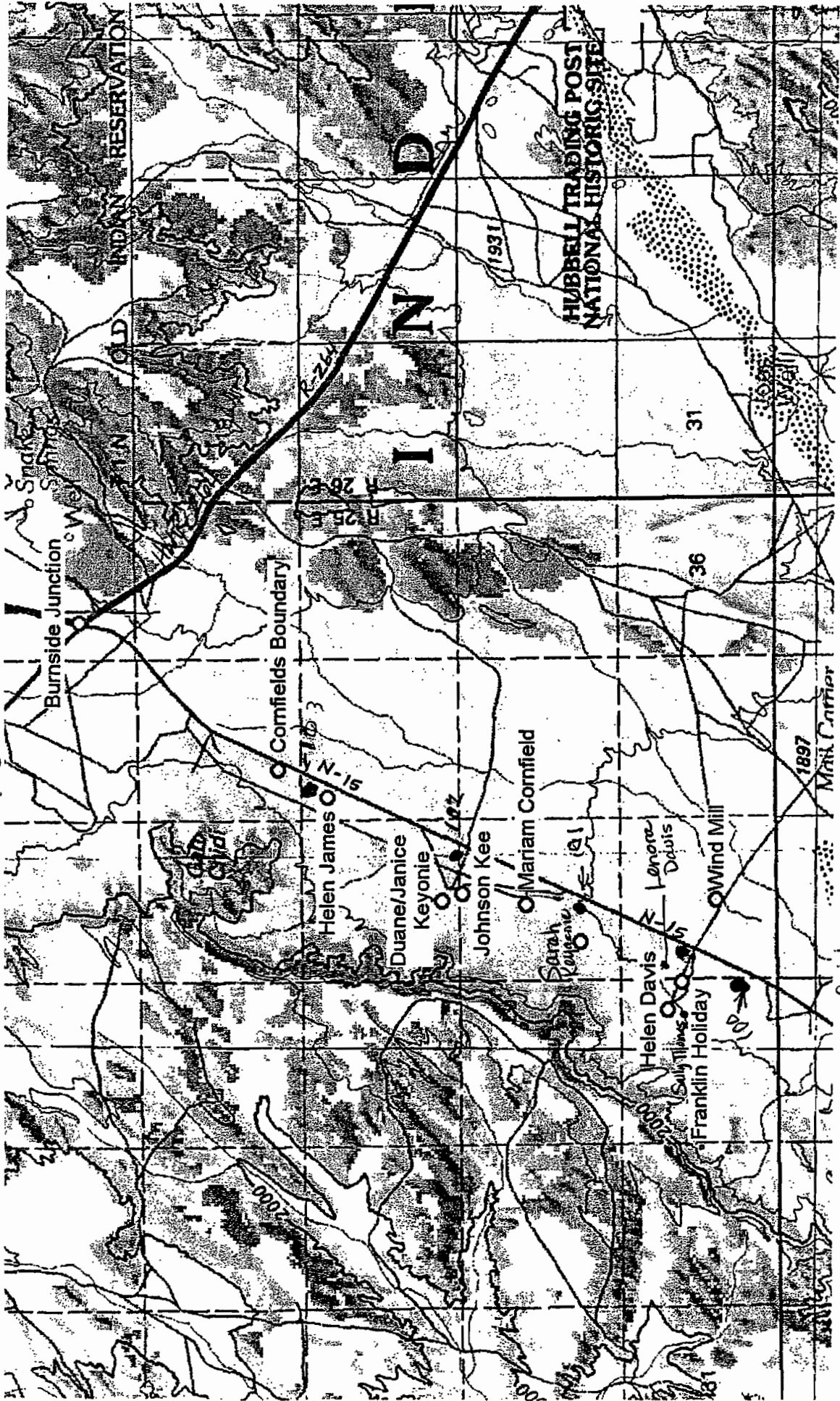
17-3  
District No.

Acknowledgement of Field Agent

I acknowledge that the contents of this consent form was read// or fully explained// to the land user in Navajo// or English// (check where applicable).

Field Agent Signature

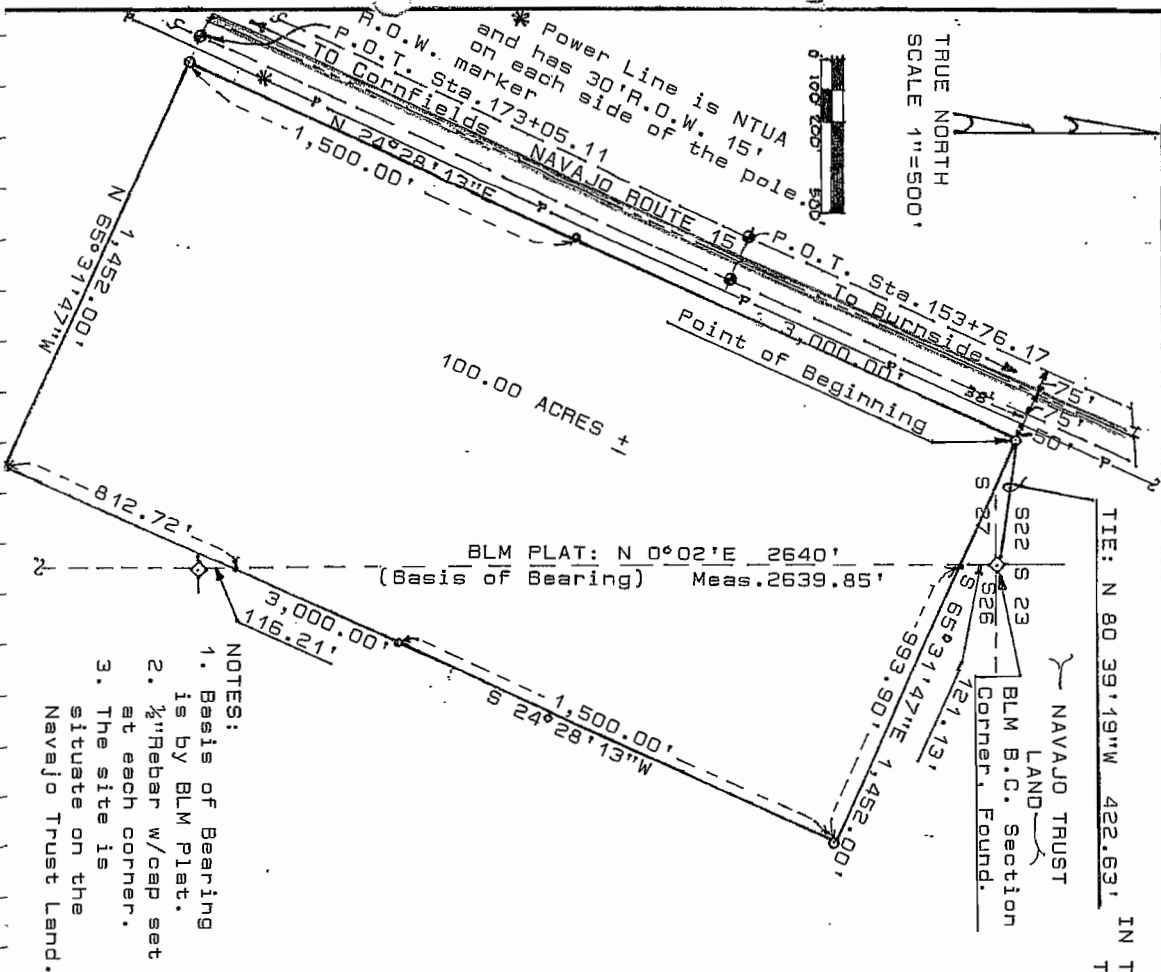
To Steamboat To Chinle



Cornfields  
Sun rise  
Greasewood Spring

W. Post

C



**NOTES:**

1. Basis of Bearing is by BLM Plat.
2. 3/4" Rebar w/cap set at each corner.
3. The site is situate on the Navajo Trust Land.

**CORNFIELDS MULTIPURPOSE TRACT**  
 IN THE SE¼ OF SEC. 22, THE NW¼ OF SEC. 26, &  
 THE NE¼ OF SEC. 27, T27N, R25E, S85RM  
 CORNFIELDS, APACHE COUNTY, ARIZONA  
 OCTOBER 03, 2007  
**LEGAL DESCRIPTION**

A CERTAIN TRACT OF LAND SITUATE IN THE SOUTHEAST QUARTER (SE¼) OF SECTION 22, THE NORTHWEST QUARTER (NW¼) OF SECTION 26, AND THE NORTHEAST QUARTER (NE¼) OF SECTION 27, TOWNSHIP 27 NORTH, RANGE 25 EAST, GILA & SALT RIVER MERIDIAN IN THE NORTHERLY VICINITY OF CORNFIELDS COMMUNITY CHAPTER HOUSE, IN CORNFIELDS, APACHE COUNTY, ARIZONA MORE PARTICULARLY DESCRIBED AS FOLLOWS:

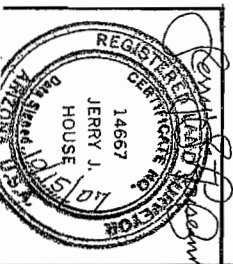
COMMENCING at a BLM Brass Cap, the northeast corner of said Section 27, thence run N 80°39'19"W a distance of 422.63 feet to the northwest corner and the point of beginning of the herein described tract of land:  
 Thence S 65°31'47"E a distance of 1452.00 feet to the NE corner;  
 Thence S 24°28'13"W a distance of 3000.00 feet to the SE corner;  
 Thence N 65°31'47"W a distance of 1452.00 feet to the SW corner;  
 Thence paralleling the existing power line along the east R.O.W. line of Navajo Route 15 Highway, N 24°28'13"E a distance of 3000.00 feet to the point of beginning.  
 The enclosed described area comprises of 100.00 acres more or less.  
 Subject to any and all existing underground utility easements.

**SURVEYOR'S CERTIFICATION**

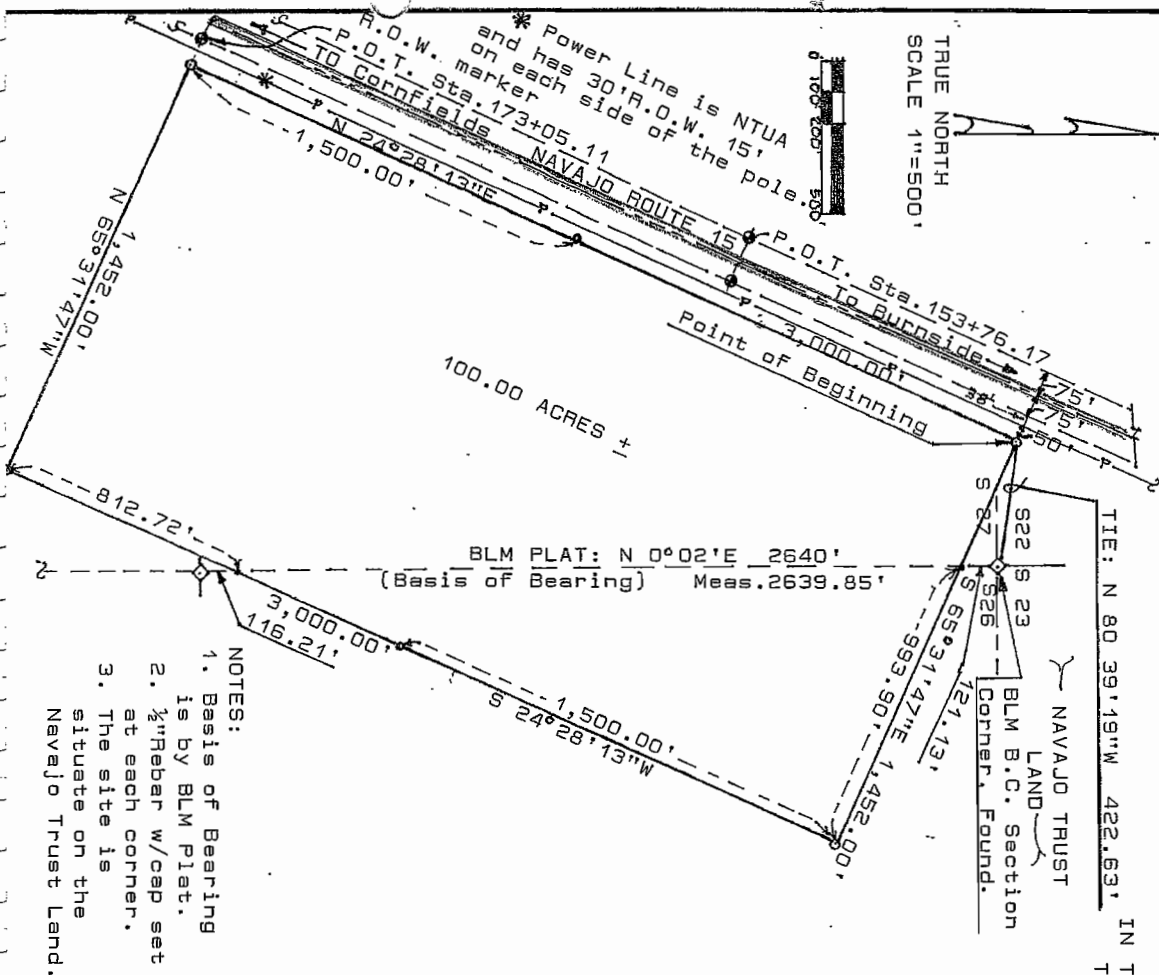
I, Jerry J. HOUSE, a duly qualified Registered Land Surveyor under the laws of the State of Arizona, do hereby certify that this survey and the plat as shown hereon were prepared from the actual survey by me or under my direct supervision and that they are true and correct to the best of my knowledge and belief.

October 15, 2007

*Jerry J. House*  
 Jerry J. House  
 Registered Land Surveyor  
 Arizona Certification No. 14667  
 Post Office Box 3334  
 Gallup, New Mexico, 87305







CORNFIELDS MULTIPURPOSE TRACT  
IN THE SE¼ OF SEC. 22, THE NW¼ OF SEC. 26, &  
THE NE¼ OF SEC. 27, T27N, R25E, G8SRM  
CORNFIELDS, APACHE COUNTY, ARIZONA  
OCTOBER 03, 2007  
LEGAL DESCRIPTION

A CERTAIN TRACT OF LAND SITUATE IN THE SOUTHEAST QUARTER (SE¼) OF SECTION 22, THE NORTHWEST QUARTER (NW¼) OF SECTION 26, AND THE NORTHEAST QUARTER (NE¼) OF SECTION 27, TOWNSHIP 27 NORTH, RANGE 25 EAST, GILA & SALT RIVER MERIDIAN IN THE NORTHERLY VICINITY OF CORNFIELDS COMMUNITY CHAPTER HOUSE, IN CORNFIELDS, APACHE COUNTY, ARIZONA MORE PARTICULARLY DESCRIBED AS FOLLOWS:

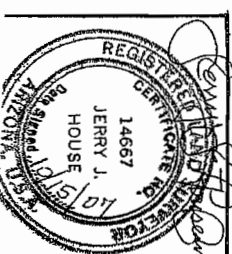
COMMENCING at a BLM Brass Cap, the northeast corner of said Section 27, thence run N 80°39'19"W a distance of 422.63 feet to the northwest corner and the point of beginning of the herein described tract of land;  
Thence S 65°31'47"E a distance of 1452.00 feet to the NE corner;  
Thence S 24°28'13"W a distance of 3000.00 feet to the SE corner;  
Thence N 65°31'47"W a distance of 1452.00 feet to the SW corner;  
Thence paralleling the existing power line along the east R.O.W. line of Navajo Route 15 Highway, N 24°28'13"E a distance of 3000.00 feet to the point of beginning.  
The enclosed described area comprises of 100.00 acres more or less.

SURVEYOR'S CERTIFICATION

I, Jerry J. HOUSE, a duly qualified Registered Land Surveyor under the laws of the State of Arizona, do hereby certify that this survey and the plat as shown hereon were prepared from the actual survey by me or under my direct supervision and that they are true and correct to the best of my knowledge and belief.

October 15, 2007

*Jerry J. House*  
Jerry J. House  
Registered Land Surveyor  
Arizona Certification No. 14667  
Post Office Box 3334  
Gallup, New Mexico, 87305



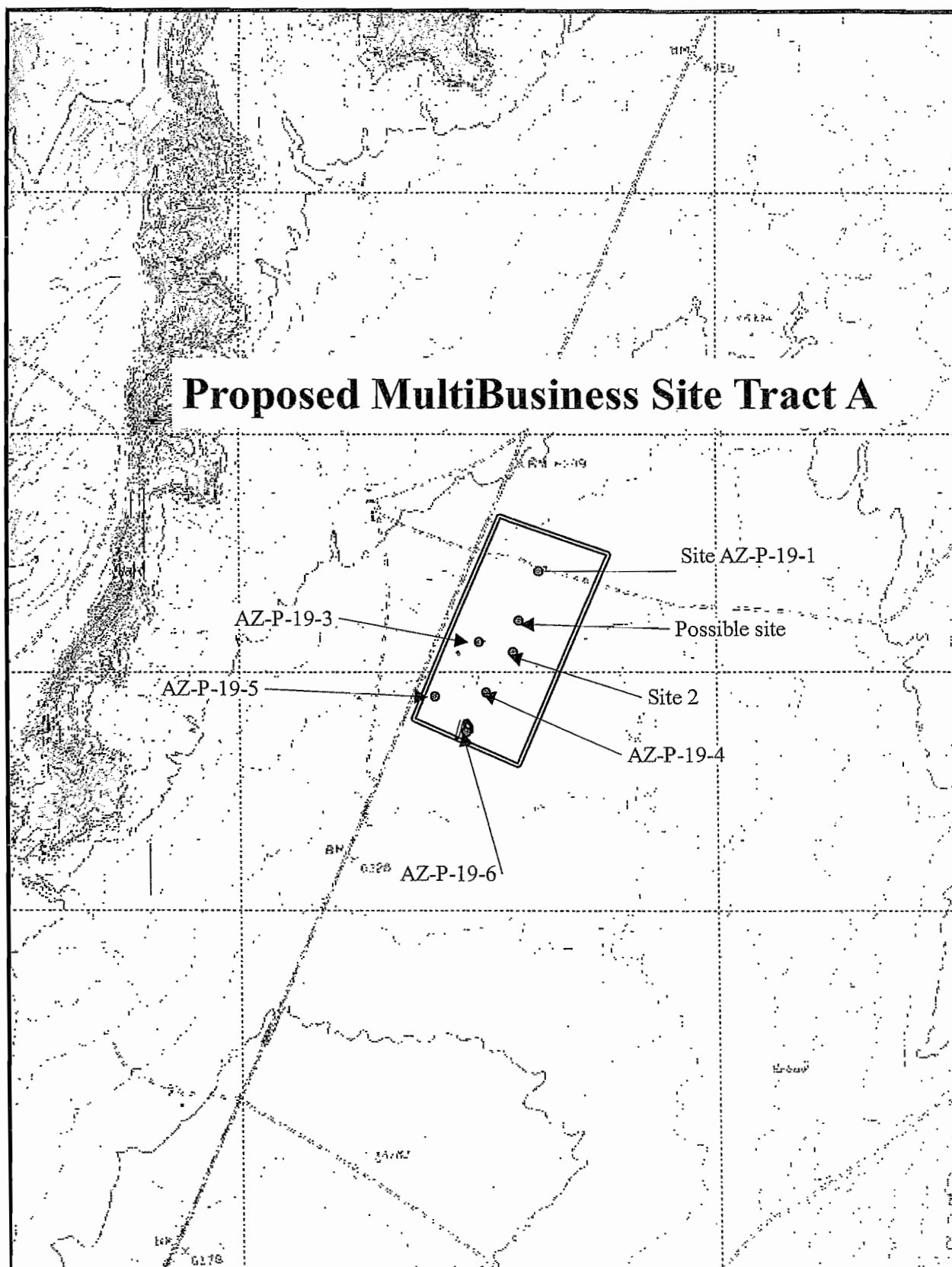


Figure 2. Location map showing project area and identified cultural resources. Sunrise Spring, Ariz., 1973, 7.5' series USGS map; T.25N and T.26N, R.24E, GSRPM (NNAD 09-334).

**D**



# THE NAVAJO NATION

NNAD Navajo College  
P.O. Box 580  
Shiprock, New Mexico 87420  
Phone: 505-368-1214  
Fax: 505-368-1215  
Email: [ecmason@frontiernet.net](mailto:ecmason@frontiernet.net)



October 5, 2010

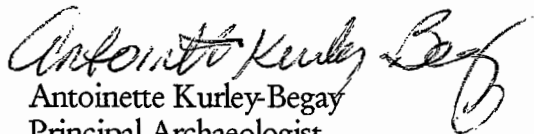
Elizabeth Johnson,  
Community Services Coordinator  
Cornfields Chapter  
P. O. Box 478  
Ganado, AZ 86505

Dear Ms. Johnson:

Enclosed for you is a copy of the Navajo Nation Archaeology Department's report NNAD 09-332 concerning a cultural resource inventory of the proposed 100-acre parcel of land for business development. The archaeological inventory was conducted at the request of the Cornfields Chapter. During the inventory five archaeological sites and twenty-two isolated occurrences (IOs) were identified. These resources are evaluated under pertinent legislation and specific recommendations are made within the report concerning each resource.

Please review the attached report. This report has been submitted to Navajo Historic Preservation Department for approval until after you have completed your review and any required changes have been made by this office or you have notified us to submit the report as is. If you have any questions regarding the report, please call me or Elaine Cleveland-Mason at (505) 368-1214.

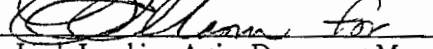
Sincerely,

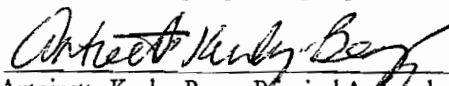
  
Antoinette Kurley-Begay  
Principal Archaeologist

Enclosure

ARCHAEOLOGICAL INVENTORY REPORT DOCUMENTATION PAGE (HPD JAN/91)

1. HPD REPORT NO.	2. (FOR HPD USE ONLY)	3. RECIPIENTS ACCESSION NO.								
4. TITLE OF REPORT: A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona  AUTHOR: Antoinette Kurley-Begay		5. FIELDWORK DATES August 3 and 6, 2009								
7. CONSULTANT NAME AND ADDRESS: Gen'l Charge: Linda Laughing, ASO Org. Name: Navajo Nation Archaeology Department Org. Address: P. O. Box 689 Window Rock, Arizona 86515  Phone: (928) 871-6540		6. REPORT DATE October 5, 2010								
10. SPONSOR NAME AND ADDRESS: Ind. Responsible: Elizabeth Johnson, Community Services Coordinator Org. Name: Cornfields Chapter Org. Address: P.O. Box 478 Ganado, Arizona 86505  Mobile Phone: (928) 755-5911		8. Permit No. NTC								
		9. Consultant Report No. NNAD 09-332								
		11. SPONSOR PROJECT NO. N/A								
		12. AREA OF EFFECT: 100.00 acres (30.49 ha) AREA SURVEYED: 118.67 acres (47.49 ha)								
13. LOCATION (MAP ATTACHED):										
<table border="0"> <tr> <td>a. Chapter: Cornfields</td> <td>e. Land Status: Tribal Trust</td> </tr> <tr> <td>b. Agency: Fort Defiance</td> <td>f. UTM Center: See Report</td> </tr> <tr> <td>c. County: Apache</td> <td>g. Area: T.27N, R.25E, SE ¼, Sec. 22; and NW ¼, Sec. 26; and NE ¼, Sec. 27; G&amp;SRPM (Derived from survey plat)</td> </tr> <tr> <td>d. State: Arizona</td> <td>h. 7.5' Map Name(s): Cornfields, Ariz., 1972, 7.5' series</td> </tr> </table>			a. Chapter: Cornfields	e. Land Status: Tribal Trust	b. Agency: Fort Defiance	f. UTM Center: See Report	c. County: Apache	g. Area: T.27N, R.25E, SE ¼, Sec. 22; and NW ¼, Sec. 26; and NE ¼, Sec. 27; G&SRPM (Derived from survey plat)	d. State: Arizona	h. 7.5' Map Name(s): Cornfields, Ariz., 1972, 7.5' series
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d. State: Arizona	h. 7.5' Map Name(s): Cornfields, Ariz., 1972, 7.5' series									
14. REPORT /X/ OR SUMMARY (REPORT ATTACHED) / /										
<p>a. Description of Undertaking: The Cornfields Chapter proposes to utilize the parcel of land for a proposed multi-business site lease. The parcel of land will be used to construct business buildings and associated facilities within the 100-acre business site. The area of potential effect within this parcel of land measures 993.30 feet (302.84 m) by 1,500 feet (457.32 m) by 1,452 feet (442.68 m) by 1,500 feet (457.32 m). Ground disturbance, both surface and subsurface, will be extensive. The lead federal agency for this proposed undertaking is the Bureau of Indian Affairs.</p> <p>b. Existing Data Review: Prior to the fieldwork, a records check using both NNAD Shiprock office files and the Navajo Nation Historic Preservation Department (NNHPD) files in Window Rock, Arizona was conducted to identify previous projects and recorded sites within a 500-foot (152-m) radius of the project area. These two sets of files contained one previously recorded sites located within a 500-foot radius of the project area. This project is NNHPD 03-1036 which entailed the inventory on Navajo Route 15.</p> <p>c. Area Environmental &amp; Cultural Setting: The project is located in the Cornfields Chapter. The nearest water source is the Pueblo Colorado Wash located to the east of the project area at a distance of about 1.89 miles (9,979 feet; 3042.38 m). The elevation of the project area is 6264 feet (1910 m). Vegetation consists of snakeweed, rabbitbrush, Russian thistle, Indian ricegrass, narrowleaf yucca, and prickly pear cactus. Soils in the project area consist of aeolian sand and silt. The cultural setting is rural with development consisting of the scattered homes, fallow cornfields, Navajo Route 15, power lines, and water lines.</p> <p>d. Field Methods: See Supplemental Sheet</p>										
15. CULTURAL RESOURCE FINDINGS:										
<p>a. Location/Identification of Each Resource: Five archaeological sites; AZ-P-19-58, AZ-P-19-59, AZ-P-19-60, AZ-P-19-61, and AZ-P-19-62, and 22 isolated occurrences were identified during the inventory.</p> <p>b. Evaluation of Significance of Each Resource (above): Three of the five sites appear to be Register-eligible properties. These sites are AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62. The remaining two sites do not appear to be Register-eligible properties.</p>										
16. MANAGEMENT SUMMARY (RECOMMENDATIONS): A determination of no historic properties affected is recommended for the project undertaking provided that the potential Register-eligible properties are avoided.										

17. CERTIFICATION: SIGNATURE:  DATE: 10/5/10  
General Charge Name: Linda Laughing, Acting Department Manager

SIGNATURE:  DATE: October 5, 2010  
Direct Charge: Antoinette Kurley-Begay, Principal Archaeologist

**A Cultural Resource Inventory of Proposed Multipurpose Tract A  
for the Cornfields Chapter, Apache County, Arizona**

**NNAD 09-332**



**Prepared by  
Antoinette Kurley-Begay**

**Submitted by  
Linda Laughing; ASO, Acting Department Manager  
Navajo Nation Archaeology Department  
P.O. Box 689  
Window Rock, Arizona 86515**

**Tribal Permit No. NTC**

**Submitted to  
Alan S. Downer, Ph.D., Department Manager III  
Navajo Nation Historic Preservation Department  
P.O. Box 4950  
Window Rock, Arizona 86515**

**Prepared for  
Elizabeth Johnson, Community Services Coordinator  
Cornfields Chapter  
P.O. Box 478  
Ganado, Arizona 86505**

**Submitted October 5, 2010**

## Abstract

The following report is submitted to the Navajo Nation Historic Preservation Department (NNHPD) as part of the Section 106 archaeological compliance process. The report, entitled *A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona* (NNAD 09-332) details the results of the project. The archaeological inventory was conducted for the Cornfields Chapter. Under this project, the Cornfields Chapter proposes to develop the 100-acre tract of land for businesses and facilities for the Cornfields community in Cornfields, Apache County, Arizona. The types of ground disturbances expected will include blading and/or earthmoving activities to level the land and construction of buildings and facilities such as water lines, power lines, sewage systems, roads, parking lots, and telephone lines. Vehicular traffic will be required throughout the 100-acre tract. Access to the proposed project locations will occur from an existing two-track dirt road and from Navajo Route 15 which is located to the west of the project area. The project area is located on Navajo Tribal Trust lands. The legal descriptions for the project areas are Townships 27 North, Range 25 East; G&SRPM. The project area can be found on the Cornfields, Ariz., 1972, 7.5-minute series USGS map. The total number of acres inventoried under this project is approximately 118.67 acres (47.49 ha). In all, 5 new archaeological sites and 22 isolated occurrences were identified during the course of the inventory. Three of the five sites (AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62) are prehistoric Anasazi specialized activity areas affiliated with a Pueblo I to Pueblo II temporal component. The fourth site, AZ-P-19-58, contains the logs of a dismantled hogan which have been placed in a secondary context. The fifth site, AZ-P-19-60, contains the remains of an Enemy Way ceremonial area. The isolated occurrences consist predominately of isolated prehistoric ceramic and lithic artifacts, and in one case, a recent Navajo trash dump. The three Anasazi sites, AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62 are evaluated as potentially eligible for nomination to the National Register of Historic Places. Although, one of the two Navajo sites (AZ-P-19-60) was affiliated with a Navajo ceremony, information obtained during this project indicated that this site is not considered sacred or of religious importance. Further, AZ-P-19-60 and AZ-P-19-58 are not considered to be potentially Register-eligible properties. A determination of no historic properties affected is recommended for the proposed development activities to occur in the areas containing the three sites that appear to be Register-eligible properties provided the stipulations addressed in the report concerning these resources are adhered to. Finally, a determination of no historic properties affected is recommended for the project areas containing the remaining two sites (AZ-P-19-58 and AZ-P-19-60) and the isolated occurrences without further stipulations

## TABLE OF CONTENTS

Abstract.....	iii
LIST OF FIGURES .....	vii
LIST OF TABLES.....	ix
Introduction .....	1
Description of Undertaking.....	1
Location.....	1
Area Environmental and Cultural Setting .....	4
Existing Data Review.....	4
Field Methods .....	4
Cultural Resource Findings.....	5
Archaeological Sites .....	5
Isolated Occurrences .....	14
Evaluation of Significance.....	14
Archaeological Sites .....	15
Isolated Occurrences .....	16
Recommendations.....	16
Archaeological Sites .....	16
Isolated Occurrences .....	17
Summary.....	17
References Cited.....	18

APPENDIX A: NNAD Site Survey Management Form and USGS Map Locations



## LIST OF FIGURES

Figure 1. Vicinity map showing the general project area. Indian County Regional Map (NNAD 09-332) .....	2
Figure 2. Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, G&SRPM (NNAD 09-332) .....	3
Figure 3. General plan map of Site AZ-P-19-58 (NNAD 09-332) .....	6
Figure 4. General plan map of Site AZ-P-19-59 (NNAD 09-332) .....	8
Figure 5. General plan map of Site AZ-P-19-60 (NNAD 09-332) .....	9
Figure 6. General plan map of Site AZ-P-19-61 (NNAD 09-332) .....	11
Figure 7. General plan map of Site AZ-P-19-62 (NNAD 09-332) .....	13

## LIST OF TABLES

Table 1. Legal Descriptions and UTM Coordinates for the Project Area (Zone 12).....	1
Table 2. Isolated Occurrences Encountered During the Inventory.....	14

## Introduction

On August 3 and 6, 2009, archaeologists with the Navajo Nation Archaeology Department (NNAD), conducted a cultural resource inventory of a 100-acre tract of land for the proposed multipurpose business development activities. The project area is located in the vicinity of Cornfields, Apache County, Arizona. The Cornfields Chapter proposes to develop the 100-acre tract of land for businesses to serve the Navajo community of Cornfields and the surrounding area. Five archaeological sites and 22 isolated occurrences were identified as a result of the archaeological inventory. The purpose of the archaeological inventory was to locate, evaluate, and make recommendations regarding cultural resources in within the project area in accordance with the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act (ARPA), and the American Indian Religious Freedom Act (AIRFA). Detailed information regarding the project area, the identified cultural resources, and the recommendations concerning the identified cultural resources are summarized in this report.

The archaeological inventory was requested by Elizabeth Johnson, Cornfields Chapter Community Services Coordinator. The NNAD performs archaeological inventories on Navajo Nation land under the authorization of the Navajo Nation Cultural Resources Protection Act (CMY-19-88). The lead federal agency for the undertaking is the Bureau of Indian Affairs (BIA).

## Description of Undertaking

The Cornfields Chapter proposes to develop a 100-acre parcel of land for business and facilities which will serve the Navajo people within the Cornfields Chapter and surrounding area. Construction activities associated with the development activities will entail blading and leveling the ground surface with heavy equipment, construction of buildings and associated facilities, as well as the placement of underground water/sewage systems and overhead power lines. In addition, parking areas and road will be constructed within the 100-acre tract of land. Surface and subsurface disturbance will be extensive within the 100-acre area of effect.

The 100-acre tract of land or area of effect measures 993.30 feet (302.84 m) by 1,500 feet (457.32 m) by 1,452 feet (442.68 m) by 1,500 feet (457.32 m). The total area of potential effect for the project area is 100.00 acres (40.50 ha).

## Location

The project area is located on Navajo Tribal Trust land within the Cornfields Chapter, in Apache County, Arizona. The project area is under the jurisdiction of the Fort Defiance Agency of the BIA.

The project areas can be located on the Cornfields, Ariz., 1972, 7.5-minute series USGS quadrangle map. The legal descriptions for the project areas are: Township 27 North, Range 25 East; G&SRPM. Table 1 provides legal descriptions and UTM coordinates for the project area. Figure 1 provides an overview of the general project areas. Figure 2 shows the specific project area.

Table 1. Legal Descriptions and UTM Coordinates for the Project Area (Zone 12)

Project Areas	NAD 27 Datum		NAD 83 Datum		Township	Range	Section	Principal Meridian
	Northing	Easting	Northing	Easting				
Northwest Corner	3953644	622105	3953844	622042	27N	25E	22	G&SRPM
Northeast Corner	3953489	622543	3953689	622480	27N	25E	26	G&SRPM
Southwest Corner	3952803	621737	3953003	621674	27N	25E	27	G&SRPM
Southeast Corner	3952617	622169	3952817	622106	27N	25E	27	G&SRPM

Township and Range projected from Ganado, Ariz.-N.Mex., 1984, 1:100,000 scale USGS map.

Figure 1. Vicinity map showing the general project area. Indian County Regional Map, n.d., (NNAD 09-332).

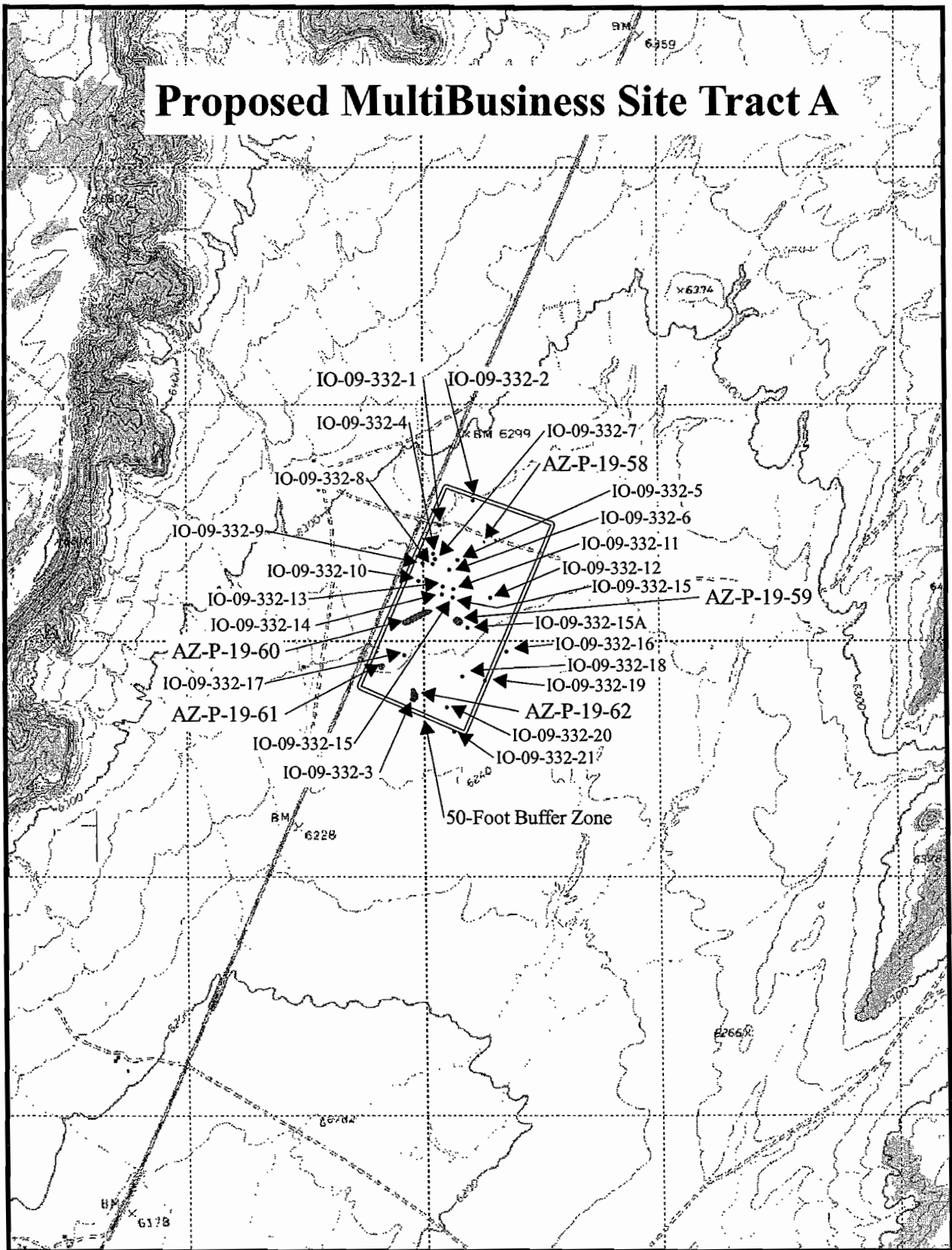


Figure 2. Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, GSRPM (NNAD 09-332).

## Area Environmental and Cultural Setting

The project area is situated in the south-central portion of the Navajo Reservation and in the east-central portion of Arizona. The project area is situated at an elevations ranging from 6250 feet (1905 m) to 6275 feet (1913 m) above sea level. Pueblo Colorado Wash is the main water source in the project area; however, numerous unnamed tributaries, wells, and springs were also noted within the general project area. Geologically, the project area is within an open valley situated between a broad mesa to the west, and the Pueblo Colorado Wash to the east. The project area is situated within the Upper Chinle Formation. The soils within the project area consist of aeolian sand and alluvial gravels. The major species noted in the project area are snakeweed, blue grama grass, Russian thistle, prickly pear cactus, muhly, wolfberry, and a piñon tree.

Development near the project area includes fallow cornfields, homesteads, utility services, dirt roads, and Navajo Route 15 located directly west of the project area.

## Existing Data Review

Prior to the fieldwork, a records check using both NNAD Shiprock office files and the Navajo Nation Historic Preservation Department (NNHPD) files in Window Rock, Arizona was conducted to identify previous projects and recorded sites within a 500-foot (152-m) radius of the project area. These two sets of files contained one previously recorded site located within a 500-foot radius of the project area. This project is NNHPD 03-1036 which entailed the inventory on Navajo Route 15.

A check of Van Valkenburgh (1974) indicates that nearest recognized sacred place in the vicinity of the project area is Buell Park (*Tsé zhin hodóo klizh*— Black Rock in a Blue Area) located approximately 50 miles (31 km) northwest of the project area.

## Field Methods

On August 3 and 6, 2009, NNAD archaeologist Antoinette Kurley-Begay, assisted by Aleda Myerson, Matthew Pettigrew, Alviera Lee, Benson Belone, and Bethany Smith conducted a Class III pedestrian archaeological inventory for the proposed business tract. Prior to the inventory, the archaeologists met with Cornfields Chapter President, Jimmie Taliman, who showed the archaeologists the project area. Although several of the stakes indicating the corners of the project area were not relocated, the NNAD archaeologists had produced data providing the location of the project area in a Geographic Information System (GIS) file. UTM coordinates from the GIS file were compiled using a Garmin Global Positioning System (GPS) unit prior to the field and were utilized to identify the unmarked project corners prior to the inventory.

A total inventory area of 118.67 acres (47.49 ha) of land was examined on the proposed business site. The total inventory area included the 100-acre (40.5-ha) area of effect (right-of-way) with a 50-foot (15.24-m) wide buffer zone located along the entire right-of-way perimeter.

The archaeological Class III pedestrian inventory of the project area was performed by the archaeologists walking a series of parallel linear transects spaced about 7 m (22.96 feet) apart throughout the entire project area. The parallel transects were orientated in east-west directions.

During the course of the inventory, 5 archaeological sites and 22 isolated occurrences (IOs) were identified. Locational information concerning the sites and the IOs were collected using a hand-held GPS. Once in-house, the data obtained with the use of the GPS in the field was downloaded utilizing the GIS ArcView software for map preparation and report presentation. Additionally, this data was also utilized to prepare the archaeological site maps.

Additionally, ethnographic interviews with local Navajo residents and/or chapter personnel were conducted to obtain information on potential traditional cultural properties (TCPs—herb gathering places, blessed and/or sacred places), burials, and archaeological sites in the area. Ethnographic information pertaining to the project area was obtained from local residents, Johnson Kee and Gilbert (last name withheld), and the Cornfields Chapter President Jimmie Taliman, by Mrs. Kurley-Begay. The interviews were conducted in the English languages by the archaeologist.

NNAD Site Survey and Management Forms were filled out upon completion of the fieldwork. Navajo Nation site numbers were assigned to the sites in-house upon completion of the fieldwork.

### Cultural Resource Findings

During the course of the cultural resource inventory 5 archaeological sites and 22 isolated occurrences were identified. Descriptions for these sites are provided in the following sections and completed NNAD Site Survey and Management Forms are contained in Appendix A. The locations of these resources are shown on Figures 3 through 7.

#### Archaeological Sites

A total of five archaeological sites was identified in conjunction with this project.. Three of the five sites (AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62) are prehistoric Anasazi specialized activity areas affiliated with a Pueblo I to Pueblo II temporal component. The fourth site, AZ-P-19-58, contains the logs of a dismantled hogan which have been placed in a secondary context. The fifth site, AZ-P-19-60, contains the remains of an Enemy Way ceremonial area. Information on all five sites is provided in the following section.

Site Number: AZ-P-19-58 (Figure 3)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953421 Northing, 622262 Easting (NAD 27 Datum)  
Zone 12; 3953621 Northing, 622199 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Navajo/Pre-1960/Logs to a dismantled hogan

Site Size: 5 m by 5 m (19.64 sq. m)— area of oval

Site Setting: The site is situated within an open grassland area west of the Pueblo Colorado Wash. Small unnamed drags flowing in a southern direction were noted to the east and west of the site. Pueblo Colorado Wash is located about 1,045 feet (2.66 miles) south of the site. The elevation in the site area is about 6271 feet (1912 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-58 consists of a pile of wood that apparently was used for a hogan located in another location to the west of the project area. Feature 1 contains 15 axe-cut logs piled in a 5 m by 5 m area. No artifacts were noted in association with the log pile. According to an ethnographic interview with nearby local residents of the area, the woodpile was placed at this location years ago; however, the actual date is unknown. Apparently, the logs were used for a hogan that had been dismantled. The location of the hogan could not be located at the time of the fieldwork, but it was suggested that it may have been located about 1,500 feet to the west of where the woodpile currently is placed. It appears that the wood may have been transported to this location which is located immediately south of an east-west-trending road. No artifacts were noted in association with the site.

The logs are in secondary context and the condition of the site is considered to be poor. Thus, the site appears to lack deposition.

According to ethnographic information, the logs within this site appear to have been affiliated with a hogan that had been dismantled. Apparently, the logs were from a hogan that was used over 50 years ago. Further, the location of this hogan could not be located since it appeared to be located out of the current project area.

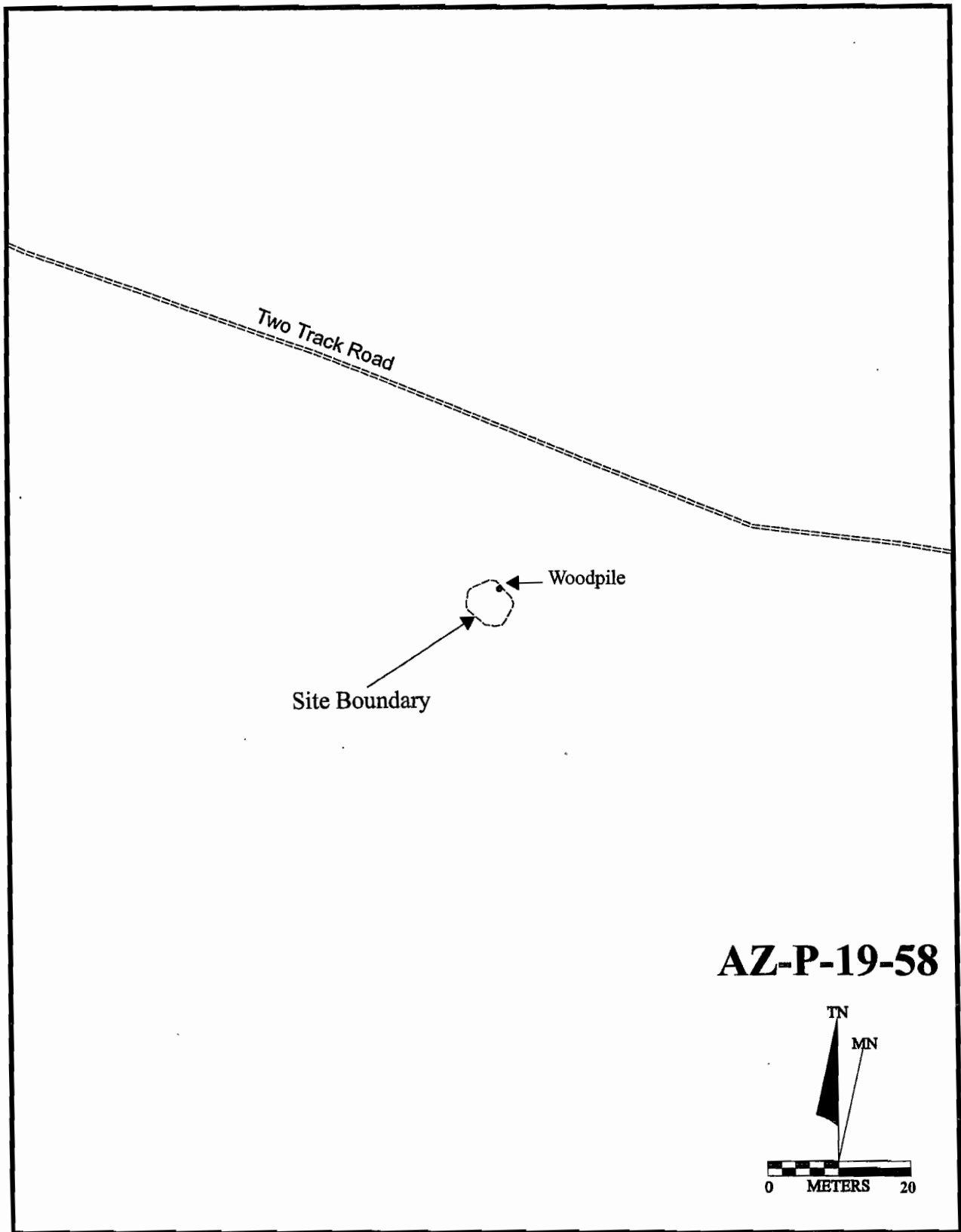


Figure 3. General plan map of Site AZ-P-19-58 (NNAD 09-332).



Site Number: AZ-P-19-59 (Figure 4)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953078 Northing, 622154 Easting (NAD 27 Datum)  
Zone 12; 3953278 Northing, 622091 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Pueblo I (A.D. 700-900)/Specialized Activity Area (SAA)—Artifact Scatter

Site Size: 38 m by 30 m (895 sq. m)—area of oval

Site Setting: The site is situated on the northern side of a low ridge. This area is located within the open valley containing Pueblo Colorado Wash. Small unnamed drainages flowing south were noted to the east and west of the site. Pueblo Colorado Wash is located about 12,535 feet (2.37 miles) south of the site. The elevation in the site area is about 6267 feet (1911 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-59 consists of an Anasazi specialized activity area—artifact scatter. No features were observed on this site. The artifact assemblage on this site was low consisting of less than 50 artifacts in all. The ceramic (sherds) artifacts observed on this site consisted of 10 plain gray ware sherds, 11 indented corrugated sherds, 5 plain gray ware sherds, 10 decorated black-on-white ware sherds, and 3 plain white ware sherds. The decorated black-on-white ware sherds Kana'a style Black-on-white ware sherds. These vessels were bowl fragments. The utility gray ware sherds (indented corrugated sherds and plain gray wares) were jar vessels. The lithic artifacts observed on this site consisted of less than five artifacts. These artifacts included two secondary flakes and three tertiary flakes. These artifacts were of chalcedony and chert material.

Overall the condition of the site is good with disturbance occurring from aeolian activity. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area—artifact scatter which may have been associated with prehistoric farming activities in the surrounding area. Based upon the ceramic artifacts noted on the site, this site appears to be affiliated with a late Pueblo I temporal affiliation dating from A.D. 700 to 900.

Site Number: AZ-P-19-60 (Figure 5)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953122 Northing, 622011 Easting (NAD 27 Datum)  
Zone 12; 3953322 Northing, 621948 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Navajo/1994/Enemy Way (*'Ana'í Ndáá*) Ceremony Area

Site Size: 130 m by 24 m (248 sq. m)—area of oval

Site Setting: The site is situated within an open grassland area. This area is located within a valley containing Pueblo Colorado Wash. The site area is drained by small unnamed drainages flowing to the site. These drainages are located to the east and west of the site. Pueblo Colorado Wash is located about 12,285 feet (2.33 miles) south of the site. The elevation in the site area is about 6271 feet (1912 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-60 consists of a Navajo Enemy Way ceremonial area (*'Ana'í Ndáá*) that was used in 1994. This site contains five features. Two of these five features are located on the eastern portion of

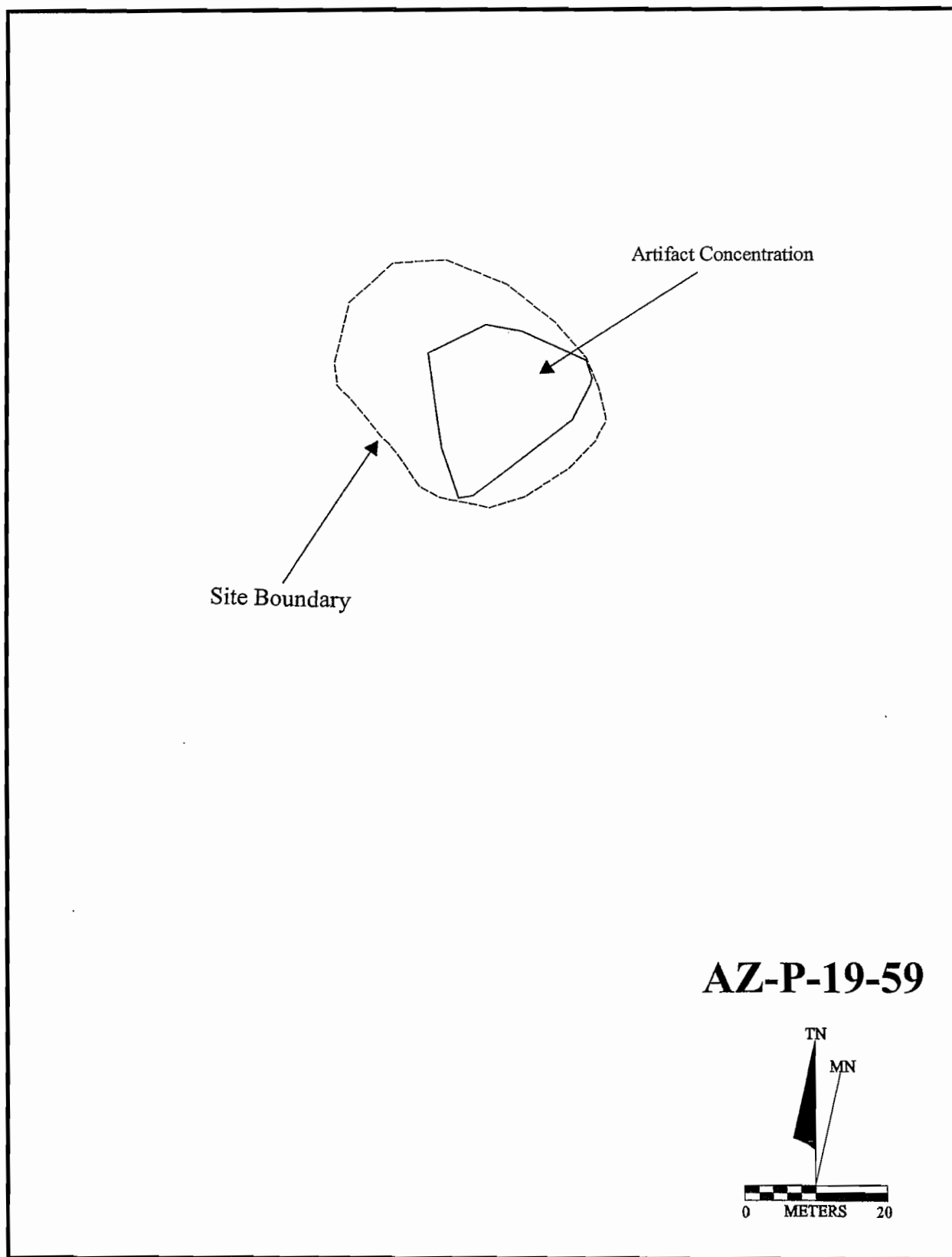


Figure 4. General plan map of Site AZ-P-19-59 (NNAD 09-332).

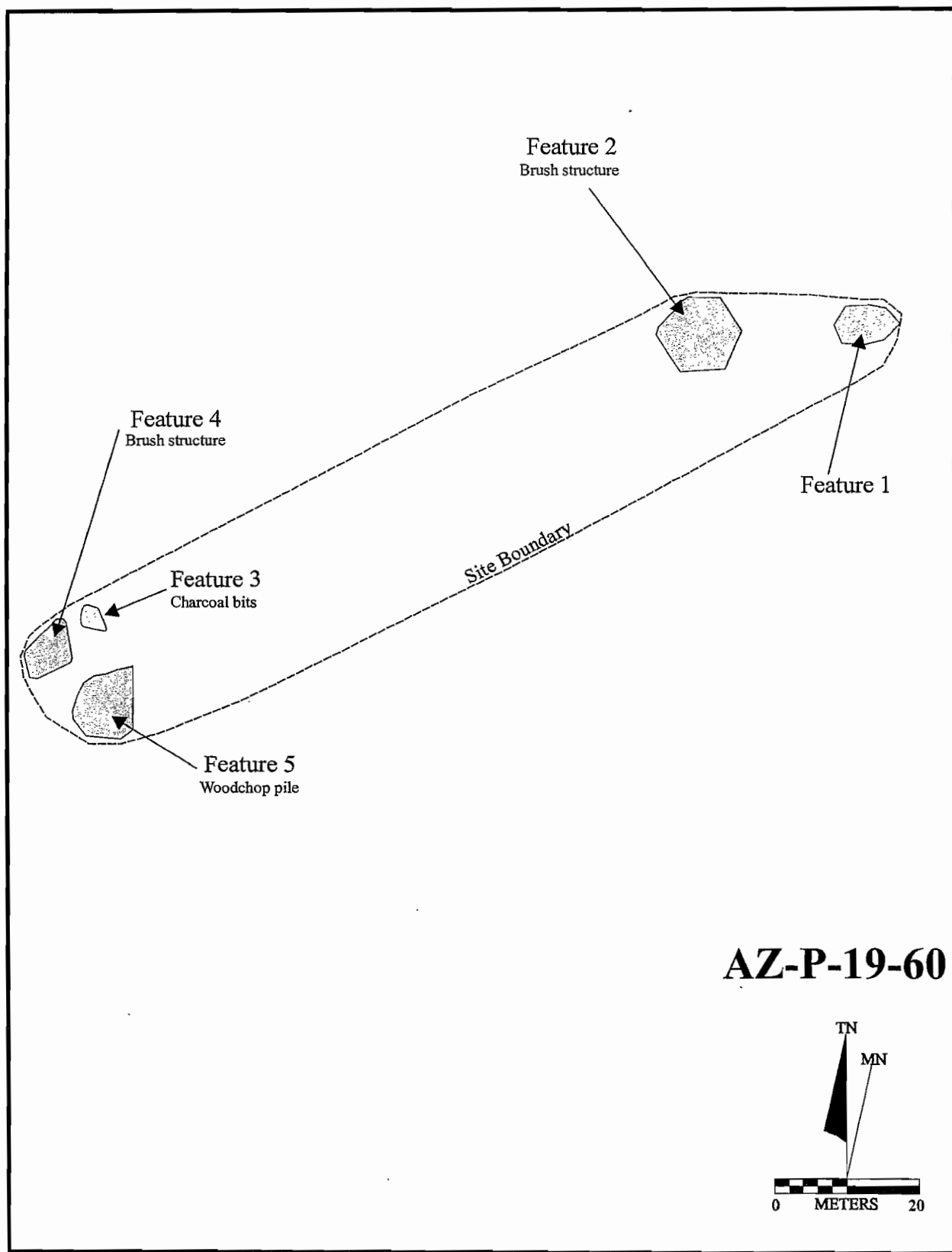


Figure 5. General plan map of Site AZ-P-19-60 (NNAD 09-332).

the site. The remaining three features are located on the western portion of the site. Both the eastern and western portions of the site contain brush structures.

Feature 1 consists of a concentration of charcoal bits that is the remains of a hearth area. The charcoal bits noted in this feature were scattered throughout an 8 m by 5 m area. This feature is also located on the eastern side of the project area.

Feature 2 is also located on the eastern side of the site. This feature consists of a brush structure with about eleven vertical posts positioned to outline a circular area. Within the interior of the feature are about 50 or more scattered brush and tree branches lying on the ground surface. The vertical posts stand from 30 cm to 1 m in height. This feature measures about 10 m by 10 m. The artifacts noted near Features 1 and 2 include one clear soda bottle, smashed aluminum cans, burned aluminum cans, one aluminum rectangular meat can (Spam), clear glass fragments, a green soda bottle, and a "Pepsi" soda bottle (embossed with "Not To Be Refilled").

Feature 3 is located on the western side of the site. This feature contains a charcoal pile located within a 4 m by 3 m area and appears to have been a hearth.

Feature 4 is also located on the western portion of the site. This feature contains a scatter of brush lying within a 9 m by 6 m area. Feature 4 may have also been a brush structure.

Located to the southwest of Feature 4 is Feature 5, a wood-chopping pile. This feature measures 9 m by 8 m. The artifacts observed within the western portion of the site consist of aluminum cans and a coffee can.

The condition of the site is poor with disturbance resulting from erosion. Further, the site appears to lack buried cultural material.

According to ethnographic information, the site appears to have functioned as an Enemy Way (*'Ana'i Ndáá*) ceremony area with the ceremony occurring in 1994.

Site Number: AZ-P-19-61 (Figure 6)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3952896 Northing, 621820 Easting (NAD 27 Datum)  
Zone 12; 3953096 Northing, 621757 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Late Pueblo I-Pueblo II (A.D. 850-1050)/SAA— Resource Processing Area

Site Size: 30 m by 23 m (542 sq. m)— area of oval

Site Setting: The site is situated on a low rise located within an open grassland area. This area is also located in an open valley containing Pueblo Colorado Wash to the south. The site area is drained by small unnamed drainages flowing south. These drainages are located to the east and west of the site area. Pueblo Colorado Wash is located about 11,219 feet (2.12 miles) south of the site. The elevation in the site area is about 6264 feet (1910 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, sagebrush, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-61 consists of an Anasazi specialized activity area resource processing area. The site contains an artifact scatter and a slight depression area that may contain a possible buried structure.

Feature 1 contains a slight oval-shaped depression area that measures about 10 m by 8 m by a depth of 10 cm at the center of the depression. No artifacts were noted directly within the depression area; however, the artifacts noted on this site were scattered around the perimeter of this feature.

The artifact assemblage on this site was low consisting of 31 ceramic (sherds) artifacts and 7 lithic artifacts. The lithic artifacts observed on this site consisted of 1 secondary flake (rhyolite material), 1 tertiary flake

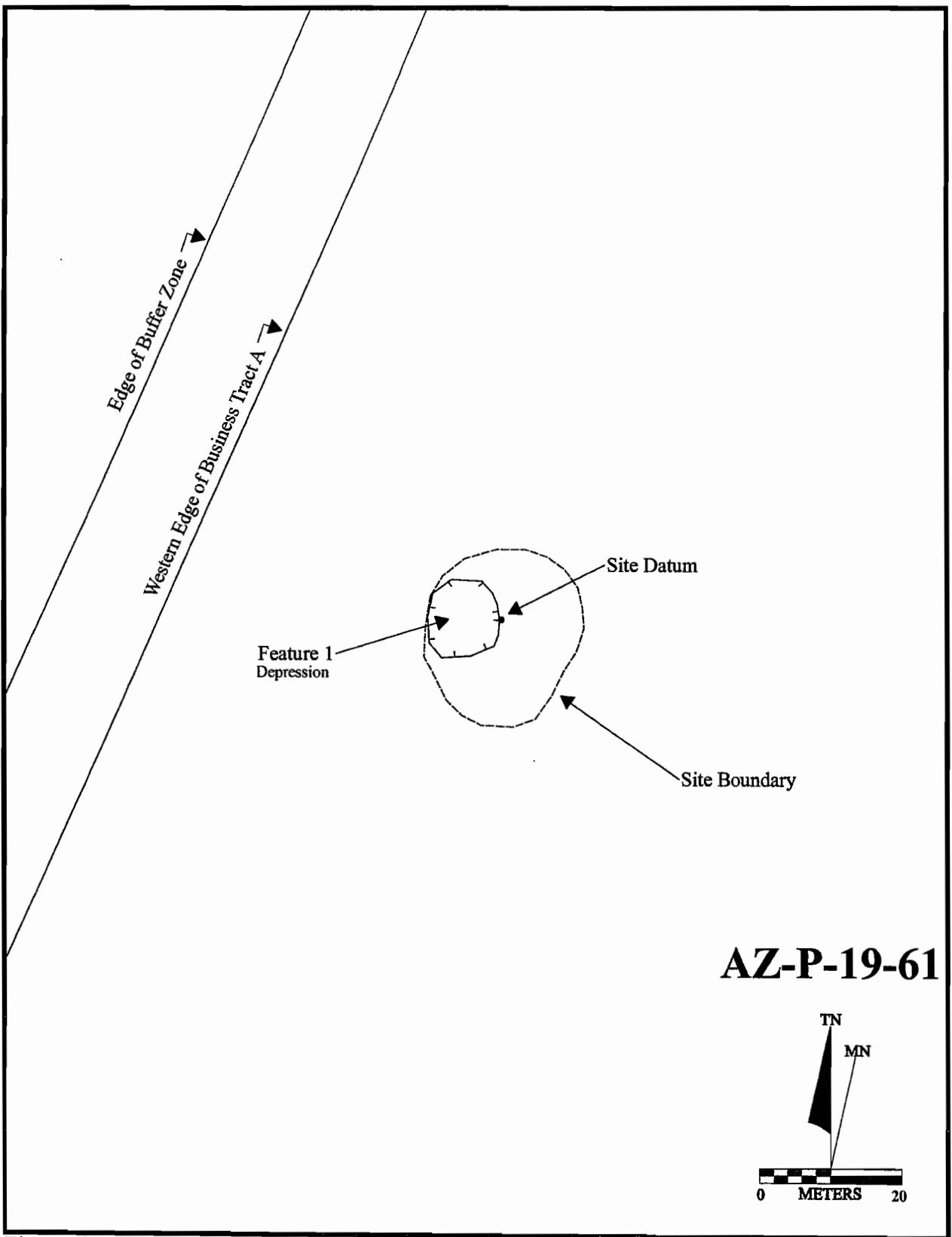


Figure 6. General plan map of Site AZ-P-19-61 (NNAD 09-332).

(rhyolite material), 4 tertiary flakes (chalcedony material), and 1 piece of angular debris (chalcedony material). The ceramic assemblage consisted of 31 ceramics including 10 indented corrugated sherds, 9 plain gray ware sherds, 3 plain white ware sherds, and 9 decorated black-on-white ware sherds. The decorated sherds contained mineral and carbon paint designs with several of the sherds identified to type as Red Mesa Black-on-white, Kiatuthlanna Black-on-white, and Flagstaff Black-on-white.

The site is in good condition with the only disturbance occurring from aeolian activity. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area—resource processing area or it may be the remains of a possible habitation, as the depression area on this site may be the remains of a buried structure such as a pit house. This site also appears to have been associated with prehistoric farming activities in the surrounding area. Based upon the ceramic artifacts noted on the site, this site appears to be affiliated with a late Pueblo I to Pueblo II temporal affiliation dating from A.D. 850 to 1050.

Site Number: AZ-P-19-62 (Figure 7)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3952747 Northing, 621953 Easting (NAD 27 Datum)  
Zone 12; 3952947 Northing, 621890 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Late Pueblo I-Pueblo II (A.D. 825-1050)/SAA—Resource Processing Area

Site Size: 54 m by 27 m (116 sq. m)—area of oval

Site Setting: The site is situated within a rolling grassland area. This area is situated within a valley containing Pueblo Colorado Wash to the east. An unnamed tributary of Colorado Wash is located about 400 feet (122 m) east of the site. The elevation in the site area is about 6255 feet (1907 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, bunch grass, Russian thistle, prickly pear cactus, rabbitbrush, and narrowleaf yucca.

Site Description: Site AZ-P-19-62 consists of an Anasazi specialized activity area—resource processing area. The site contains on artifact concentration and a scatter of lithic and ceramic artifacts. No features associated with this site were observed. The site is situated within an open valley area west of Pueblo Colorado Wash.

Artifact Concentration 1 is located on the southern edge of the site. This concentration measures 9 m by 5 m and contains about 75 lithic artifacts ceramic artifacts. Also noted within the concentration area was a slight layer of ashy soil.

The lithic artifacts observed on this site consisted of secondary flakes, tertiary flakes, and microflakes. Also noted on this within the lithic assemblage were unidirectional cores and pieces of angular debris. One projectile point/drill was also noted on this site. The drill was of an obsidian material. The drill contained expanded base with a side notches. The drill measured 1.8 mm by 0.9 mm by 0.2 mm thick. The ceramic artifacts observed on this site consisted of less than 40 ceramic artifacts. An inventory on 26 of the ceramics was conducted. The ceramic assemblage consisted of 5 black-on-white sherds (2 sherds with mineral paint and 3 sherds with carbon paint), 11 plain gray ware sherds, 8 indented corrugated sherds, and 1 plain white ware sherd. Several of the decorated sherds were identified to type as Holbrook Black-on-white.

The site is in relatively good condition with natural erosion in the form of aeolian activity within the site. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

AZ-P-19-62

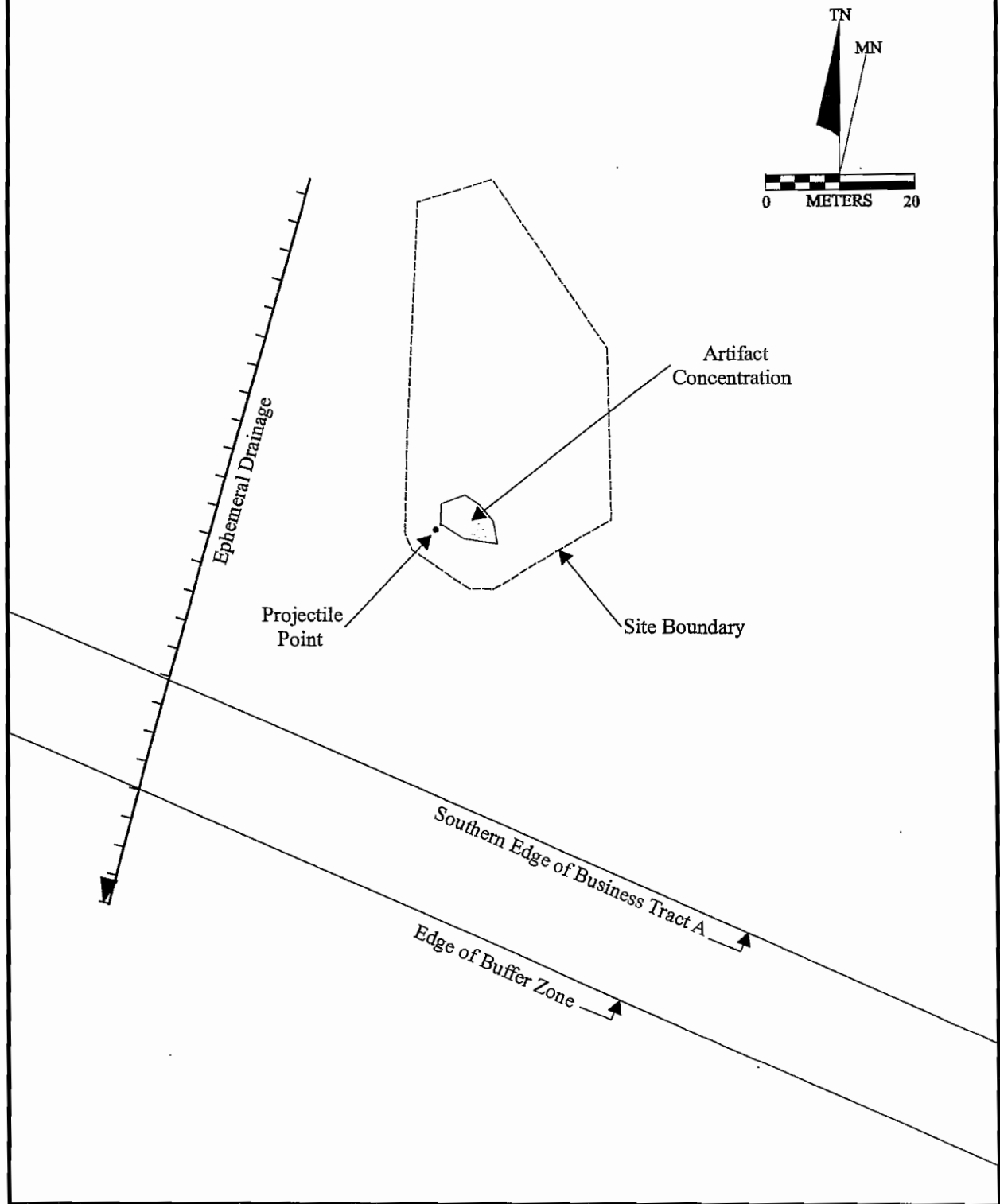


Figure 7. General plan map of Site AZ-P-19-62 (NNAD 09-332).

This site appears to have functioned as a specialized activity area— resource processing area that may have been associated with prehistoric farming activities in the surrounding area. The site appears to be affiliated with a late Pueblo I to Pueblo II temporal affiliation.

### Isolated Occurrences

Twenty-two isolated occurrences (IOs 09-332-1 through 15, and 15A through 21) were located within the project area. The IOs consist of isolated prehistoric ceramic (sherds) and lithic artifacts. One of the IOs was also identified as an isolated historic trash pile. Table 3 provides a summary description of these resources.

Table 2. Isolated Occurrences Encountered during the Inventory (UTM Zone 12)

IO No.	Summary Description	NAD 27 Datum		NAD 83 Datum	
		Northing	Easting	Northing	Easting
IO 09-332-1	1 black-on-white sherd	3953490	622072	3953690	622009
IO 09-332-2	2 small ground stone fragments	3953593	622213	3953793	622150
IO 09-332-3	1 plain gray ware sherd	3953410	622100	3953610	622037
IO 09-332-4	1 trash pile	3953368	622044	3953568	621981
IO 09-332-5	1 plain gray ware sherd	3953341	622148	3953541	622085
IO 09-332-6	1 indented corrugated sherd	3953300	622112	3953500	622049
IO 09-332-7	2 Sosi-style Black-on-white sherds	3953345	622052	3953545	621989
IO 09-332-8	1 Sosi-style Black-on-white sherd	3953325	622043	3953525	621980
IO 09-332-9	1 plain gray ware sherd	3953327	622000	3953527	621937
IO 09-332-10	1 plain gray ware sherd	3953252	621982	3953452	621919
IO 09-332-11	1 plain gray ware sherd	3953217	622129	3953417	622066
IO 09-332-12	1 indented corrugated sherd	3953180	622285	3963380	622222
IO 09-332-13	1 plain gray ware sherd	3953229	622084	3953429	622021
IO 09-332-14	1 black-on-white ware sherd	3953195	622080	3953395	622017
IO 09-332-15	1 plain gray ware ceramic ladle fragment	3953181	622127	3953381	622063
IO 09-332-15A	1 ladle ceramic fragment	3953053	622187	3953253	622124
IO 09-332-16	1 plain white ware sherd	3952952	622352	3953152	622289
IO 09-332-17	1 indented corrugated sherd	3952938	621920	3953138	621857
IO 09-332-18	1 plain white ware sherd	3952846	622164	3953046	622101
IO 09-332-19	1 secondary chert flake	3952829	622261	3953029	622198
IO 09-332-20	1 black-on-white sherd	3952715	622098	3952915	622035
IO 09-332-21	2 plain gray ware sherds	3952612	622129	3953381	622064

IO denotes Isolated Occurrence.

### Evaluation of Significance

Under 36 CFR Part 60.4, cultural resources may be eligible for nomination to the National Register of Historic Places if they "... possess integrity of location, design, setting, materials, workmanship, feeling, and association..." and if the resources in question are resources:

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history.



As defined in 36 CFR 60.4, ordinarily cemeteries, birthplaces or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historical buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within categories a-g.

Under Bulletin 38 "Guidelines for Evaluation and Documenting Traditional Cultural Properties," properties are eligible for nomination to the National Register of Historic Places if they retain integrity of location, setting, materials, workmanship, feeling or association. This document explains that in considering the integrity of TCPs there are two fundamental questions: (1) Does the property have an integral relationship to traditional practices or beliefs (2) Is the condition of the property such that the relevant relationships survive? Even if a property has lost its integrity as a possible TCP, it may retain integrity with reference to another aspect of significance. For example, it may still contain archaeological deposits, making it eligible under criterion "d".

Bulletin 38 admits to eligibility under criterion "a" those properties associated with events significant in our history, even when those events are associated with the mythopoetic past. Similarly, properties are eligible under criterion "b" if they are associated with persons significant to our history, even when those persons are associated with the mythopoetic past.

Although ownership by a religious group or use for religious purposes would normally make a property ineligible, Bulletin 38 cautions against ethnocentrism in evaluating cultural significance. Parker and King (1992:13) state that "The fact that traditional history and culture may be discussed in religious terms does not make it less historical or less significant to culture, nor does it make properties associated with traditional history and culture ineligible for inclusion in the National Register".

Concerning the Archaeological Resource Protection Act (ARPA) of 1979 (43 CFR Part 7), the Act has two fundamental purposes:

- 1) to protect irreplaceable archaeological resources on public lands and Indian lands from unauthorized excavation, removal, damage, alteration, or defacement; and
- 2) to increase communication and exchange of information among government authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data which were obtained prior to enactment of the Act.

In completing the assessment under 43 CFR Part 7 there are two concerns that need to be addressed. Under ARPA, in order for a resource to be considered an archaeological resource and thus merit protection, it must both be greater than 100 years in age and be of archaeological interest.

The American Indian Religious Freedom Act (AIRFA [P.L. 95-341]) is a resolution of Congress to the effect that American Indians shall have the right of freedom to believe, express and exercise their traditional religions and have access to sites, use and possession of sacred objects, and freedom of worship through ceremonies and rites. Therefore, any site or place (prehistoric or historic) having religious, ceremonial or sacred aspects or components needs to be dealt with light of this law. Anasazi sites with Navajo figurines present qualify for protection, for instance, as do Enemy way sites, sweat lodges, blessed hogans, and other blessed sites or buildings. It is also very important to realize that many places that lack any material cultural component also qualify, such as sacred landmarks and mineral or vegetal extraction areas.

### Archaeological Sites

Site AZ-P-19-58 lacks integrity. It is probably not eligible for nomination to the National Register under criteria a, b, c, or d. The logs within the site appear to be over 50-years old, therefore, the site does meet the 50-year eligibility guideline; however, AZ-P-19-58 does not appear to be a Register-eligible property. The site is no longer of archaeological interest and it does not appear to meet the 100-year age requirement necessary

for classification as an archaeological resource under ARPA. Thus, the site does not appear to merit protection under ARPA. The site does not appear to retain qualities or characteristics that would make it eligible for protection under AIRFA.

Site AZ-P-19-60 possesses integrity of location. The site does not appear to be eligible for nomination to the National Register under criteria a, b, c, or d. The site also does not appear to be over 50-years old and it, therefore, does not meet the 50-year eligibility guideline. The site is no longer of archaeological interest and it does not meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA. Therefore, the site does not appear to merit protection under ARPA. Although the site was utilized as a ceremonial area, the site is no longer considered to retain qualities or characteristics that would make it eligible for protection under AIRFA. The person who was the participant in the ceremony has given his consent for the proposed undertaking in the area of the site and the chanter who assisted in the ceremony indicated that the site is not considered a sacred place or of traditional concerns.

Sites AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62 retain integrity. The sites do not appear to be eligible for nomination to the National Register under criteria a, b, or c. They may, however, be eligible under criterion d because they possess research potential. The sites are over 50-years old; therefore, they do appear to be Register-eligible properties. The sites are of archaeological interest and they do meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA. Thus, the sites do appear to merit protection under ARPA. The sites do not retain qualities or characteristics that would make them eligible for protection under AIRFA.

### Isolated Occurrences

The IOs lack integrity. The IOs do not appear to be eligible for nomination to the National Register of Historic Places under criteria a through d. All of the IOs except IO 09-332-4 meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA; however, the IOs are not of archaeological interest. Thus, the IOs do not appear to merit protection under ARPA. The IOs do not retain qualities or characteristics that would make them eligible for protection under AIRFA.

## Recommendations

### Archaeological Sites

Site AZ-P-19-58 does not appear to be a Register-eligible property nor does it appear to merit consideration under AIRFA; therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site without further stipulations.

Site AZ-P-19-59 may be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet (15.24 m) of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

Site AZ-P-19-60 does not appear to be a Register-eligible property nor does it appear to merit consideration under AIRFA; therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities without further stipulations.

Site AZ-P-19-61 appears to be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction

activities within 50 feet of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

Site AZ-P-19-62 appears to be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

#### Isolated Occurrences

A determination of no historic properties affected is recommended for the proposed undertaking in the area of the IOs since they are not considered significant resources. No further stipulations concerning the proposed undertaking in the area of the IOs is recommended.

#### Summary

A determination of no historic properties affected is recommended for the proposed development activities to occur in the areas containing the three sites that appear to be Register-eligible properties provided the stipulations addressed in the report concerning these resources are adhered to. Finally, a determination of no historic properties affected is recommended for the project areas containing the remaining two sites (AZ-P-19-58 and AZ-P-19-60) and the isolated occurrences without further stipulations.

### References Cited

Begay, Richard M.

- 1991 *Sunrise Trading Post. A Reconnaissance on the Destruction of the Compound Lower Greasewood Chapter, Arizona.* NNHPD Report 91-096. Navajo Nation Historic Preservation Department, Window Rock, Arizona.

Van Valkenburgh, Richard F.

- 1974 Navajo Sacred Places. In *Navajo Indians III*, edited by Clyde Kluckhohn, pp. 9-199. Garland Publishing, New York, New York.

**APPENDIX A**

**NNAD Site Survey Management Form and USGS Map Locations**

# NAVAJO NATION ARCHAEOLOGY DEPARTMENT

## Site Survey and Management Form

SITE NO.: AZ-P-19-58

FIELD OR OTHER NAME: Site 1

DATE RECORDED: 8-6-09

PROJECT NUMBER & NAME: NNAD 09-332— A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona.

ORGANIZATION: NNAD

ARCHAEOLOGIST(S): Antoinette Kurley-Begay, Aleda Myerson, Alviera Lee, and Matthew Pettigrew

USGS MAP REFERENCE: Cornfields, Ariz., 1972, 7.5' series

LEGAL LOCATION: Unplatted Section, T.27N, R.25E; G&SRPM

UTM: Zone 12; Northing 3953421, Easting 622262 (NAD 27 Datum); Northing 3953621, Easting 622199 (NAD 83 Datum)

STATE: Arizona

COUNTY: Apache

CHAPTER: Cornfields

LAND STATUS: Navajo Tribal Trust

GROUND VISIBILITY: Kind and extent of cover? Ground visibility 98%, vegetation coverage 2%

TOPOGRAPHY: The site is situated within a open flat grassland area situated west of the Pueblo Colorado Wash.

DRAINAGE: Small unnamed drainages flowing south were noted to the east and west of the site. Pueblo Colorado Wash is located about 1,045 feet (2.66 miles) south of the site.

ELEVATION (ft/m): 6271'/1912 m

SLOPE & DIRECTION: Less than 2° sloping east

SOIL TYPE: Sand

OTHER: Silt

VEGETATION PRESENT: Snakeweed, blue grama, Russian thistle, prickly pear cactus, and muhly.

CULTURAL AFFILIATION: Navajo

SITE TYPE: Logs to a dismantled hogan

PERIOD(S) OF OCCUPATION (Date, if known): Pre-1960

HOW DATED: Ethnographic interview

DIMENSIONS OF SITE (l x w): 5 m by 5 m

TOTAL AREA (sq. m): 19.64 sq. m—area of an oval

How Determined: Measured with GIS software.

ARCHITECTURE PRESENT? No

ARTIFACTS OBSERVED/COUNTED: None

COLLECTIONS MADE? No

PHOTOS TAKEN: No

SITE DESCRIPTION: The site consists of a pile of wood that apparently was used for a hogan located in another location to the west of the project area. Feature 1 contains 15 axe-cut logs piled in a 5 m by 5 m area. No artifacts were noted in association with the log pile. According to an ethnographic interview with nearby local residents of the area, the woodpile was placed at this location years ago; however, the actual date is unknown. Apparently, the logs were used for a hogan that had been dismantled. The location of the hogan could not be located at the time of the fieldwork, but it was suggested that it may have been located about 1,500 feet to the west of where the woodpile currently is placed. It appears that the wood may have been transported to this location which is located immediately south of an east-west-trending road. No artifacts were noted in association with the site.

The logs are in secondary context and the condition of the site is considered to be poor. Thus, the site appears to lack deposition.

According to ethnographic information, the logs within this site appear to have been affiliated with a hogan that had been dismantled. Apparently, the logs were from a hogan that was used over 50 years ago. Further, the location of this hogan could not be located since it appeared to be located out of the current project area.

CONDITION OF SITE: Poor

Causes of disturbance: Natural erosion

LOCATION OF SITE RELATIVE TO PROJECT AREA: The site is located near the mid north-central portion of the proposed 100-acre business tract.

EXTENT OF INVESTIGATION TO DATE: Survey records including site form, sketch map, and photographs.

RESEARCH POTENTIAL: The site does not appear to retain additional information. Further the site recordation and mapping of this site as well as the collection of information through ethnographic information appears to have exhausted the sites research potential. Thus, the site lacks research potential.

RECOMMENDATIONS: The site does not appear to be a Register-eligible property nor does it appear to merit consideration under AIRFA; therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site without further stipulations.

SITE ASSESSMENT UNDER 36 CFR 60.4 (National Register):

INTEGRITY: The site lacks integrity. The qualities of location, design, setting, feeling, materials, association, and workmanship do not appear to apply.

and CRITERIA a-d: The site does not appear to represent a property which is potentially eligible for inclusion on the National Register of Historic Places under criteria a, b, c, or d.

EXCLUSIONS: The site does not appear to fall into categories a-g, thus it does not qualify as an exclusion. The site does meet the 50-year guideline.

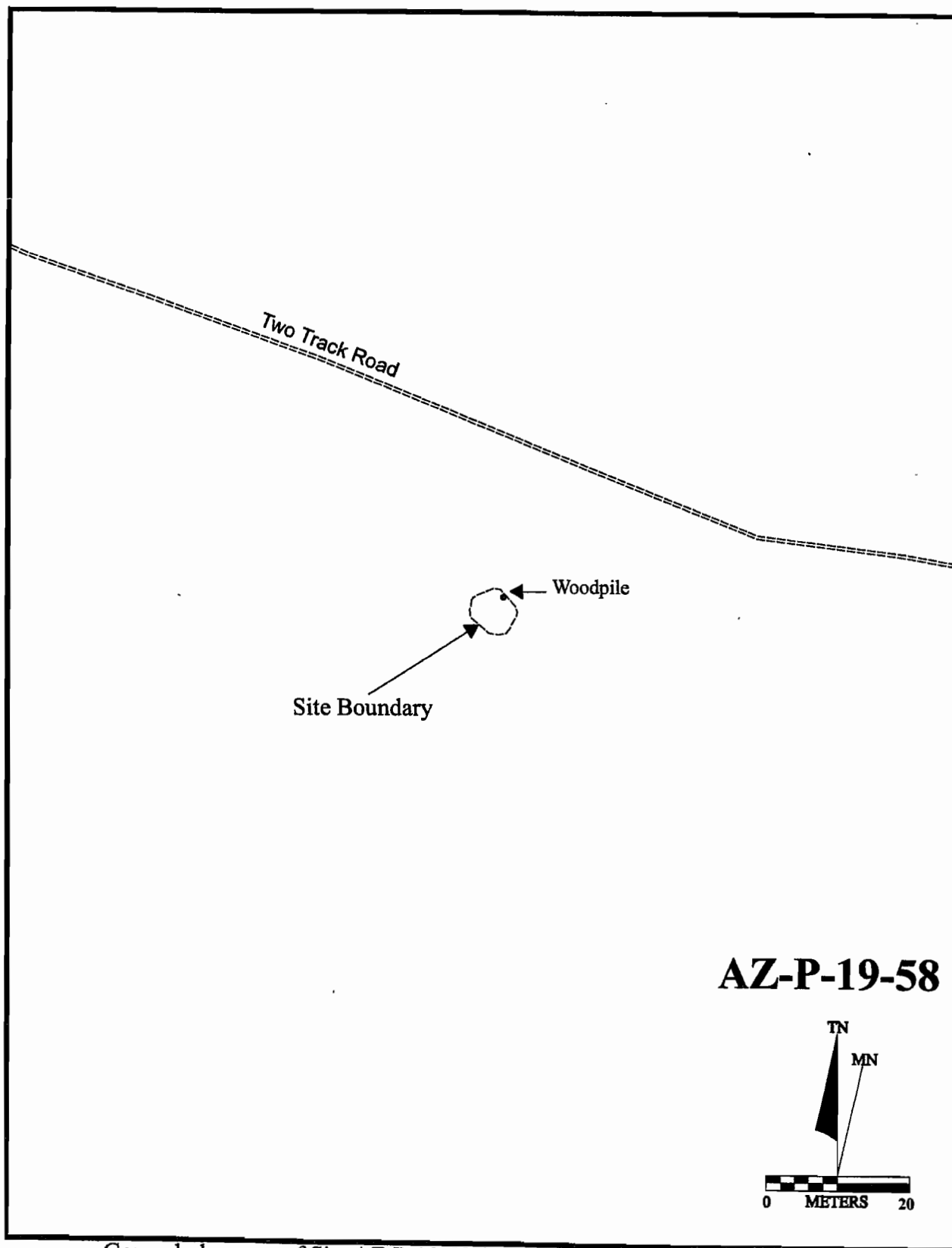
SITE ASSESSMENT UNDER 43 CFR 7.3 (Archaeological Resources Protection Act): The site is no longer of archaeological interest. It does not meet the 100-year age requirement. Therefore, it does not appear to merit protection under ARPA.

SITE ASSESSMENT UNDER AIRFA (American Indian Religious Freedom Act): Since the logs are only a portion of the hogan and the logs to the hogan are in secondary context, the site does not appear to retain the qualities and characteristics that would merit protection under AIRFA. Thus, the site does not appear to merit consideration under the provisions of AIRFA.

PROVIDE A SITE MAP (including site designation, north arrow, scale, recognizable features, landmarks, and relationship to project area).

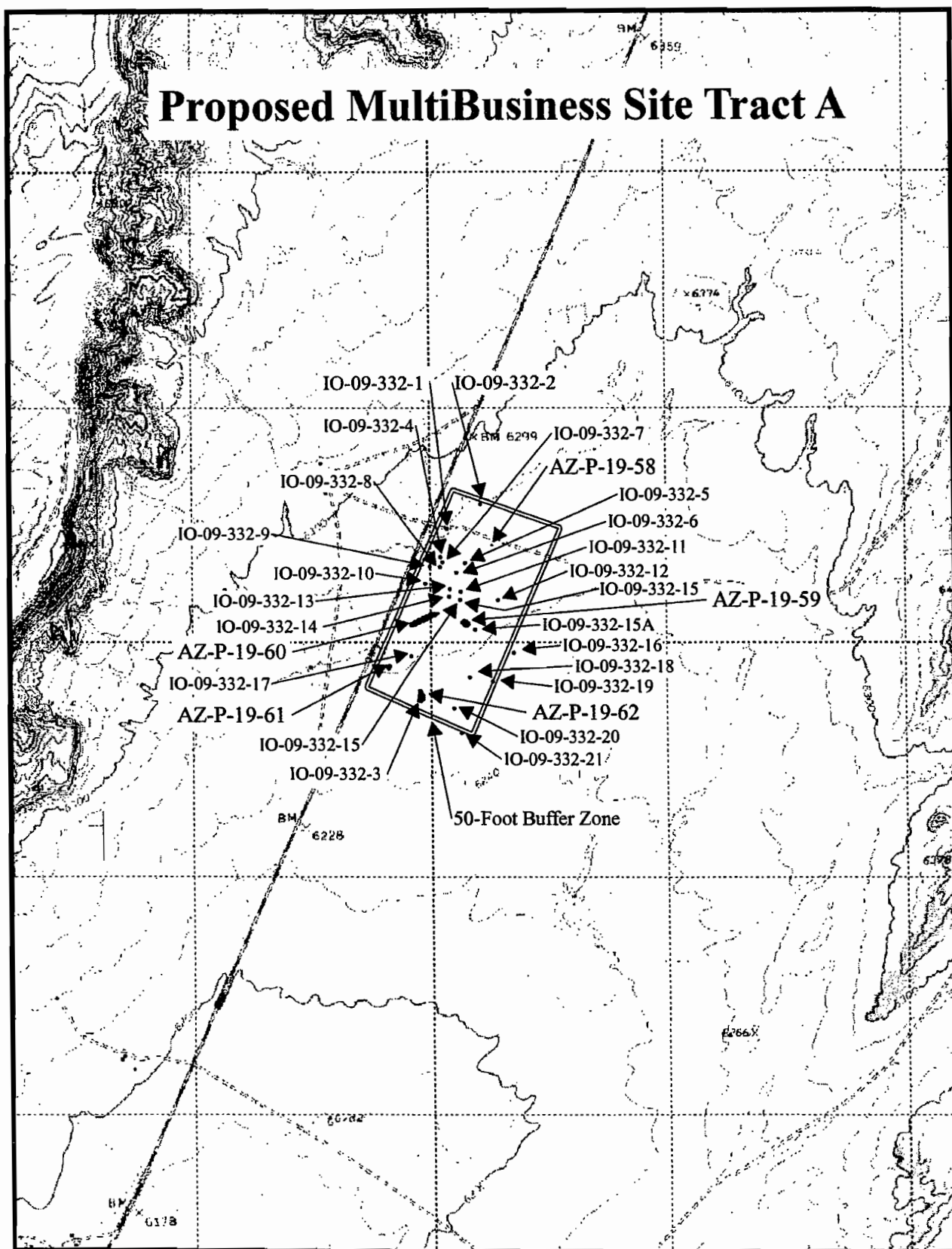
HOW CAN THE SITE BE REACHED? (See attached USGS map.)

OTHER COMMENTS (Ethnographic data, etc.): According to an ethnographic interview with Johnson Kee, who resides at a residence west of the site, the logs were from a hogan that had been dismantled over 50 years ago. The informant indicated that he did not know the exact location of the hogan. Mr. Kee is the nephew of Marian Cornfield who has the grazing permit to the surrounding area including the project area.



General plan map of Site AZ-P-19-58 (NNAD 09-332).





Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, GSRPM (NNAD 09-332).

# NAVAJO NATION ARCHAEOLOGY DEPARTMENT

## Site Survey and Management Form

SITE NO.: AZ-P-19-59

FIELD OR OTHER NAME: Site 2

DATE RECORDED: 8-6-09

PROJECT NUMBER & NAME: NNAD 09-332— A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona.

ORGANIZATION: NNAD ARCHAEOLOGIST(S): Antoinette Kurley-Begay, Aleda Myerson, Alviera Lee, and Matthew Pettigrew

USGS MAP REFERENCE: Cornfields, Ariz., 1972, 7.5' series

LEGAL LOCATION: Unplatted Section, T.27N, R.25E; G&SRPM

UTM: Zone 12; Northing 3953078, Easting 622154 (NAD 27 Datum); Northing 3953278, Easting 622091 (NAD 83 Datum)

STATE: Arizona

COUNTY: Apache

CHAPTER: Cornfields

LAND STATUS: Navajo Tribal Trust

GROUND VISIBILITY: Kind and extent of cover? Ground visibility 98%, vegetation coverage 2%

TOPOGRAPHY: The site is situated on the northern side of a low ridge located within the open valley containing Pueblo Colorado Wash to the south and east.

DRAINAGE: Small unnamed drainages flowing south were noted to the east and west of the site. Pueblo Colorado Wash, which is located about 12,535 feet (2.37 miles) south of the site.

ELEVATION (ft/m): 6267'/1911 m

SLOPE & DIRECTION: 3° sloping south and east

SOIL TYPE: Sand

OTHER: Silt

VEGETATION PRESENT: Snakeweed, blue grama, Russian thistle, prickly pear cactus, and muhly.

CULTURAL AFFILIATION: Anasazi

SITE TYPE: Specialized Activity Area— Artifact scatter

PERIOD(S) OF OCCUPATION (Date, if known): Pueblo I (A.D. 700-900)

HOW DATED: Ceramic typology

DIMENSIONS OF SITE (l x w): 38 m by 30 m

TOTAL AREA (sq. m): 895 sq. m—area of an oval

How Determined: Measured with GIS software.

ARCHITECTURE PRESENT? No

ARTIFACTS OBSERVED/COUNTED: Counted— 36 ceramic artifacts and 5 lithic artifacts.

COLLECTIONS MADE? No

PHOTOS TAKEN: None

SITE DESCRIPTION: The site consists of an Anasazi specialized activity area— artifact scatter. No features were observed on this site. The artifact assemblage on this site was low consisting of less than 50 artifacts in all. The ceramic (sherds) artifacts observed on this site consisted of 10 plain gray ware sherds, 11 indented corrugated sherds, 5 plain gray ware sherds, 10 decorated black-on-white ware sherds, and 3 plain white ware sherds. The decorated black-on-white ware sherds Kana'a style Black-on-white ware sherds. These vessels were bowl fragments. The utility gray ware sherds (indented corrugated sherds and plain gray wares) were jar vessels. The lithic artifacts observed on this site consisted of less than five artifacts. These artifacts included two secondary flakes and three tertiary flakes. These artifacts were of chalcedony and chert material.

Overall the condition of the site is good with disturbance occurring from aeolian activity. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area— artifact scatter which may have been associated with prehistoric farming activities in the surrounding area. Based upon the ceramic artifacts noted on the site, this site appears to be affiliated with a late Pueblo I temporal affiliation dating from A.D. 700 to 900.

CONDITION OF SITE: Good Causes of disturbance: Natural erosion

LOCATION OF SITE RELATIVE TO PROJECT AREA: The site is located near the center of the proposed 100-acre business tract.

EXTENT OF INVESTIGATION TO DATE: Survey records including site form, sketch map, and photographs.

RESEARCH POTENTIAL: The site may retain additional information pertaining to prehistoric farming and land use in the surrounding area.

RECOMMENDATIONS: The site may be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet (15.24 m) of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

SITE ASSESSMENT UNDER 36 CFR 60.4 (National Register):

INTEGRITY: The site possesses integrity of location and association. The qualities of design, setting, feeling, materials, and workmanship do not appear to apply.

and CRITERIA a-d: The site does not appear to represent a property which is potentially eligible for inclusion on the National Register of Historic Places under criteria a, b, or c. It may, however, be eligible under criterion d since the site does appear to retain research potential.

EXCLUSIONS: The site does not appear to fall into categories a-g, thus it does not qualify as an exclusion. The site does meet the 50-year guideline.

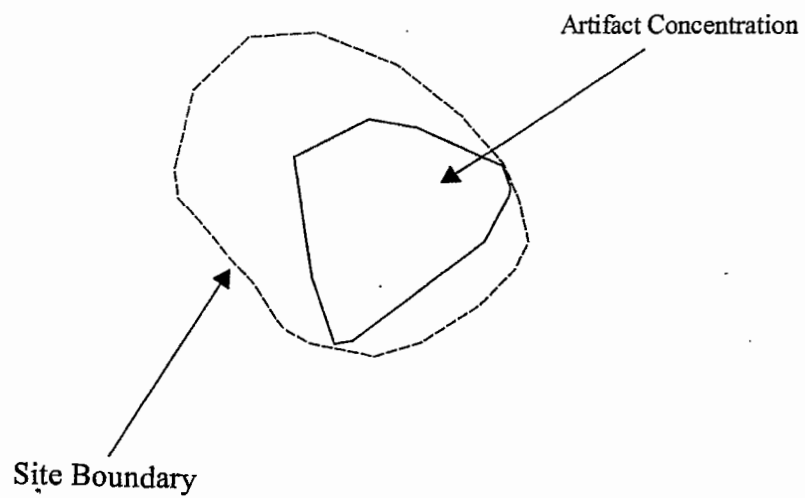
SITE ASSESSMENT UNDER 43 CFR 7.3 (Archaeological Resources Protection Act): The site is of archaeological interest. It does meet the 100-year age requirement; therefore, it does appear to merit protection under ARPA.

SITE ASSESSMENT UNDER AIRFA (American Indian Religious Freedom Act): The site does not appear to merit consideration under the provisions of AIRFA.

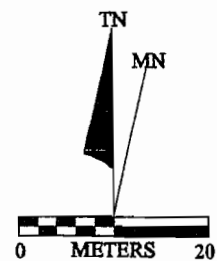
PROVIDE A SITE MAP (including site designation, north arrow, scale, recognizable features, landmarks, and relationship to project area).

HOW CAN THE SITE BE REACHED? (See attached USGS map.)

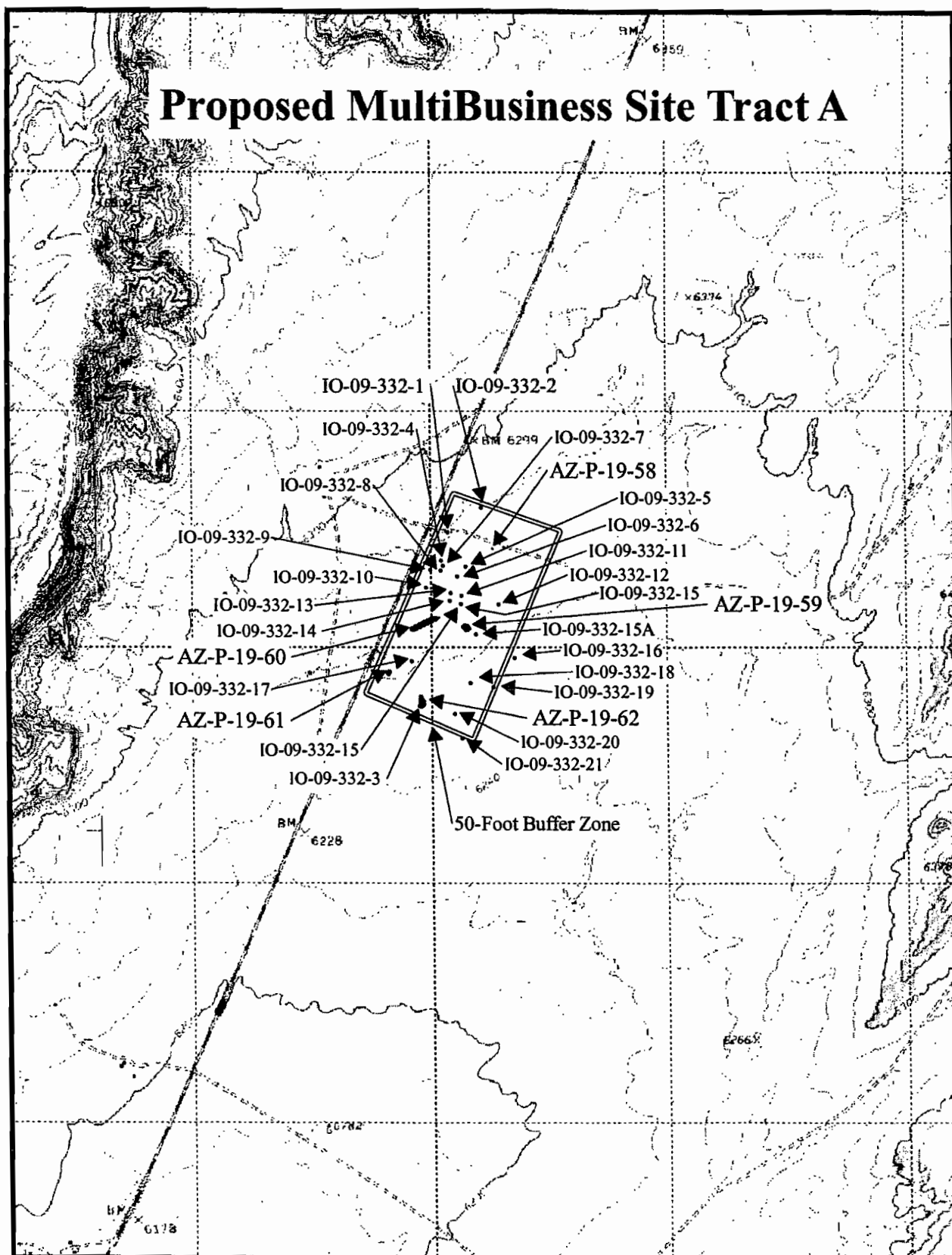
OTHER COMMENTS (Ethnographic data, etc.): None



**AZ-P-19-59**



General plan map of Site AZ-P-19-59 (NNAD 09-332).



Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, GSRPM (NNAD 09-332).

# NAVAJO NATION ARCHAEOLOGY DEPARTMENT

## Site Survey and Management Form

SITE NO.: AZ-P-19-60

FIELD OR OTHER NAME: Site 3

DATE RECORDED: 8-6-09

PROJECT NUMBER & NAME: NNAD 09-332— A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona.

ORGANIZATION: NNAD ARCHAEOLOGIST(S): Antoinette Kurley-Begay, Aleda Myerson, Alviera Lee, and Matthew Pettigrew

USGS MAP REFERENCE: Cornfields, Ariz., 1972, 7.5' series

LEGAL LOCATION: Unplatted Section, T.27N, R.25E; G&SRPM

UTM: Zone 12; Northing 3953122, Easting 622011 (NAD 27 Datum); Northing 3953322, Easting 621948 (NAD 83 Datum)

STATE: Arizona

COUNTY: Apache

CHAPTER: Cornfields

LAND STATUS: Navajo Tribal Trust

GROUND VISIBILITY: Kind and extent of cover? Ground visibility 98%, vegetation coverage 2%

TOPOGRAPHY: The site is situated within a open flat grassland area positioned to the north and west of Pueblo Colorado Wash.

DRAINAGE: Small unnamed drainages flowing south were noted to the east and west of the site. Pueblo Colorado Wash is located about 12,285 feet (2.33 miles) south of the site.

ELEVATION (ft/m): 6271'/1912 m

SLOPE & DIRECTION: Less than 2° sloping east

SOIL TYPE: Sand

OTHER: Silt

VEGETATION PRESENT: Snakeweed, blue grama, Russian thistle, prickly pear cactus, and muhly.

CULTURAL AFFILIATION: Navajo

SITE TYPE: Enemy Way ('Ana'i Ndáá') Ceremony Area

PERIOD(S) OF OCCUPATION (Date, if known): 1994

HOW DATED: Ethnographic interview

DIMENSIONS OF SITE (lkw): 130 m by 24 m

TOTAL AREA (sq. m): 248 sq. m—area of an oval

How Determined: Measured with GIS software.

ARCHITECTURE PRESENT? Yes Describe: Two brush structures

ARTIFACTS OBSERVED/COUNTED: Observed—burned aluminum beverage cans, clear broken glass fragments, green beverage glass fragments, and 1 Pepsi soda bottle.

COLLECTIONS MADE? No

PHOTOS TAKEN: No

SITE DESCRIPTION: The site consists of a Navajo Enemy Way ceremonial area ('Ana'i Ndáá') that was used in 1994. This site contains five features. Two of these five features are located on the eastern portion of the site. The remaining three features are located on the western portion of the site. Both the eastern and western portions of the site contain brush structures.

Feature 1 consists of a concentration of charcoal bits that is the remains of a hearth area. The charcoal bits noted in this feature were scattered throughout an 8 m by 5 m area. This feature is also located on the eastern side of the project area.

Feature 2 is also located on the eastern side of the site. This feature consists of a brush structure with about eleven vertical posts positioned to outline a circular area. Within the interior of the feature are about 50 or more scattered brush and tree branches lying on the ground surface. The vertical posts stand from 30 cm to 1 m in height. This feature measures about 10 m by 10 m. The artifacts noted near Features 1 and 2 include one clear soda bottle, smashed aluminum cans, burned aluminum cans, one aluminum rectangular meat can (Spam), clear glass fragments, a green soda bottle, and a "Pepsi" soda bottle (embossed with "Not To Be Refilled").

Feature 3 is located on the western side of the site. This feature contains a charcoal pile located within a 4 m by 3 m area and appears to have been a hearth.

Feature 4 is also located on the western portion of the site. This feature contains a scatter of brush lying within a 9 m by 6 m area. Feature 4 may have also been a brush structure.

Located to the southwest of Feature 4 is Feature 5, a wood-chopping pile. This feature measures 9 m by 8 m. The artifacts observed within the western portion of the site consist of aluminum cans and a coffee can.

The condition of the site is poor with disturbance resulting from erosion. Further, the site appears to lack buried cultural material.

According to ethnographic information, the site appears to have functioned as an Enemy Way ('Ana'i Ndáá') ceremony area with the ceremony occurring in 1994.

CONDITION OF SITE: Poor      Causes of disturbance: Natural erosion

LOCATION OF SITE RELATIVE TO PROJECT AREA: The site is located near the west-central portion of the proposed 100-acre business tract.

EXTENT OF INVESTIGATION TO DATE: Survey records including site form, sketch map, and photographs.

RESEARCH POTENTIAL: The site does not appear to retain additional information. Further the site recordation and mapping of this site as well as the collection of information through ethnographic information, and from additional information obtained from a Cornfields Chapter's Community Land Use Planning Committee appears to have exhausted the site's research potential. Thus, the site lacks research potential.

RECOMMENDATIONS: The site does not appear to be a Register-eligible property nor does it appear to merit consideration under AIRFA. Therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities without further stipulations.

SITE ASSESSMENT UNDER 36 CFR 60.4 (National Register):

INTEGRITY: The site possesses integrity of location. The qualities of design, setting, feeling, materials, association, and workmanship do not appear to apply.

and CRITERIA a-d: The site does not appear to represent a property which is potentially eligible for inclusion on the National Register of Historic Places under criteria a, b, c, or d.

EXCLUSIONS: The site does not appear to fall into categories a-g, thus it does not qualify as an exclusion. The site does not meet the 50-year guideline.

SITE ASSESSMENT UNDER 43 CFR 7.3 (Archaeological Resources Protection Act): The site is no longer of archaeological interest. It does not meet the 100-year age requirement; therefore, it does not appear to merit protection under ARPA.

SITE ASSESSMENT UNDER AIRFA (American Indian Religious Freedom Act): Based upon the ethnographic interview with the patient who utilized the site, Johnson Kee, and the information obtained from the medicine man, Henry Albert Yazzie, the site does not appear to merit consideration under the provisions of AIRFA.

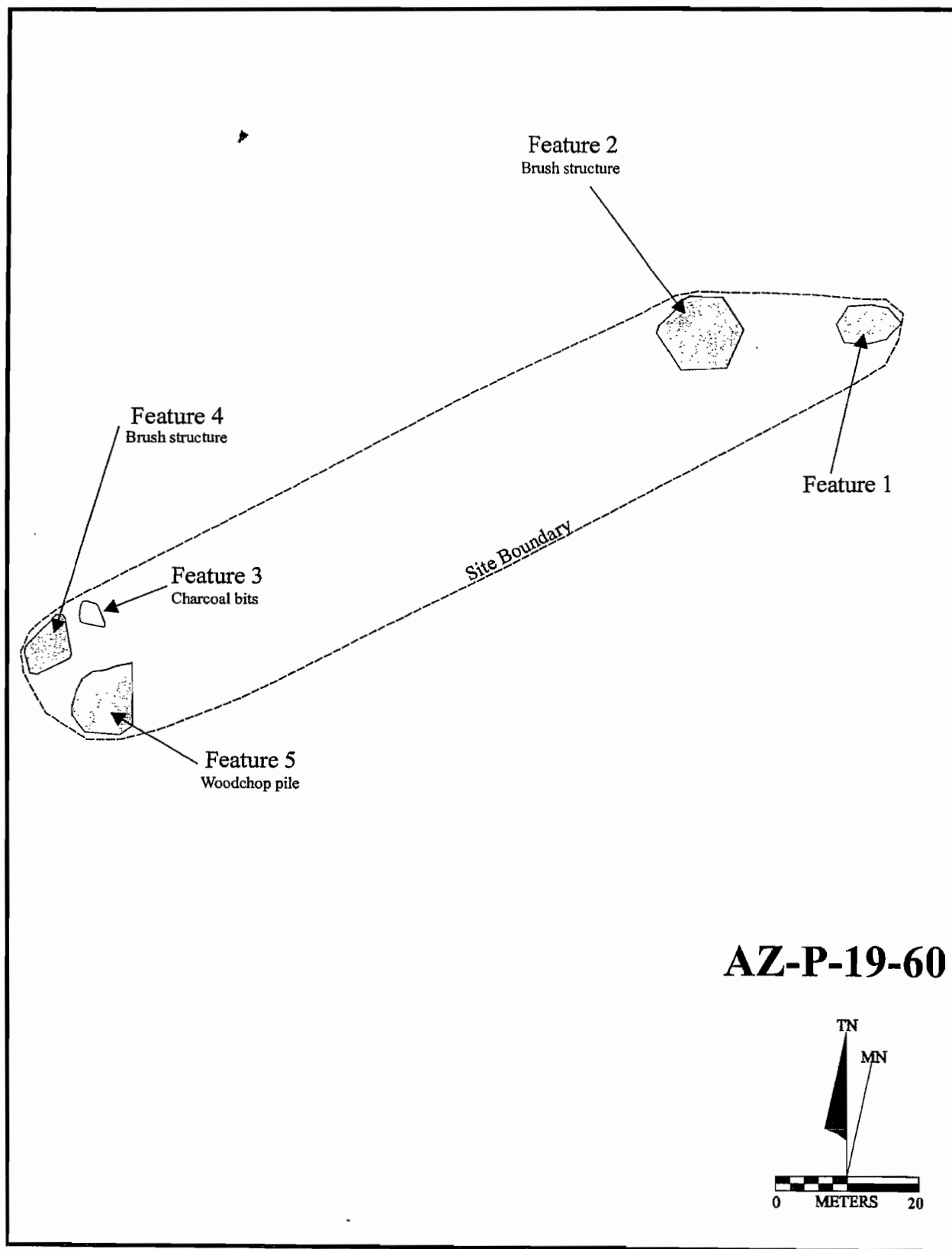
PROVIDE A SITE MAP (including site designation, north arrow, scale, recognizable features, landmarks, and relationship to project area).

HOW CAN THE SITE BE REACHED? (See attached USGS map.)

OTHER COMMENTS (Ethnographic data, etc.): An ethnographic interview with Johnson Kee, who resides at a residence west of the site, was conducted after the site was recorded. Mr. Kee is the nephew of Marian Cornfield who has the grazing permit to the surrounding area including the project area. According to the interview with Mr. Kee, the ceremony was held in the late 1980s or in the 1990s. A relative of Mr. Kee, Gilbert (last name unknown), recalled that the ceremony was held in 1994 and Mr. Kee confirmed this date. The informant indicated that he was the patient in the Enemy Way Ceremony (*'A na'í Ndáá*) at this site. The patient, Mr. Kee, did not consider the site sacred and he gave his approval for the business tract. However, his relative, Gilbert, did not want the business tract at this location and said it should not be disturbed since it was a ceremony area. Therefore, a meeting was held on February 16, 2010, by the Cornfields Chapter Community Land Use Planning Committee (CLUPM) to determine if the site was considered sacred even though the patient that had the ceremony at the site did not consider it sacred.

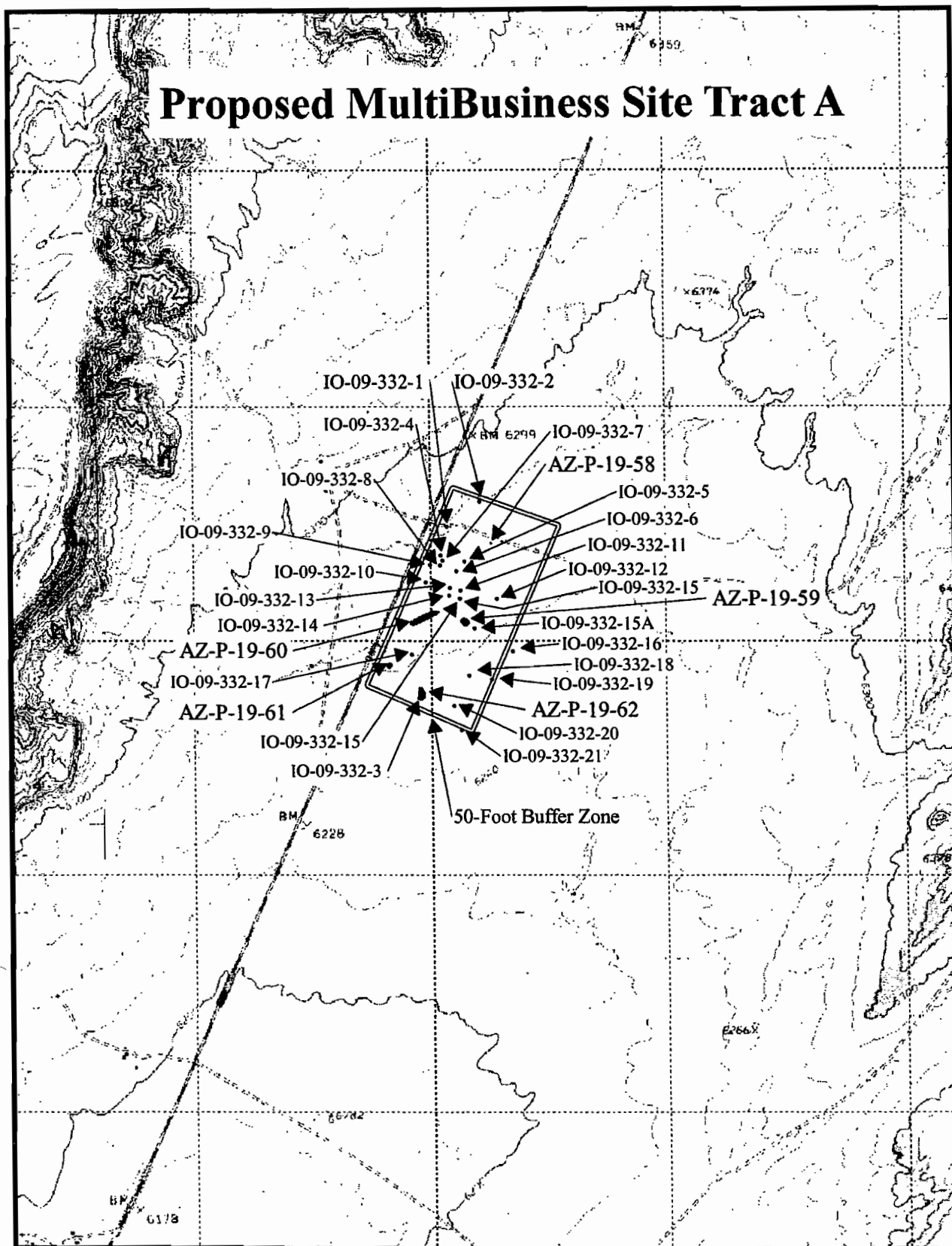
The following information was taken from the CLUPM agenda held on February 16, 2010:

Mr. Henry Albert Yazzie, a certified Navajo medicine man talked about the NiDaah ceremony which was held in Burnside in which he assisted Naie James, who was the medicine man at that NiDaah ceremony which was across from Marian Cornfield's residence. "It was an Enemy Way ceremony and whatever was put there was very small and is assumed to be gone along with the problem that bothered the patient. Mr. Yazzie said no offerings were made that were left in the area of the NiDaah. The NiDaah paraphernalia used throughout the ceremony was placed in another area by the person having the ceremony. Mr. Yazzie said in his opinion the plan for the business site will not cause harm to the patient or affect him in any ways. I believe the committee can continue to work on the development plans for that site."



General plan map of Site AZ-P-19-60 (NNAD 09-332).





Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, GSRPM (NNAD 09-332).

# NAVAJO NATION ARCHAEOLOGY DEPARTMENT

## Site Survey and Management Form

SITE NO.: AZ-P-19-61

FIELD OR OTHER NAME: Site 5

DATE RECORDED: 8-6-09

PROJECT NUMBER & NAME: NNAD 09-332— A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona.

ORGANIZATION: NNAD ARCHAEOLOGIST(S): Antoinette Kurley-Begay, Aleda Myerson, Alviera Lee, and Matthew Pettigrew

USGS MAP REFERENCE: Cornfields, Ariz., 1972, 7.5' series

LEGAL LOCATION: Unplatted Section, T.27N, R.25E; G&SRPM

UTM: Zone 12; Northing 3952896, Easting 621820 (NAD 27 Datum); Northing 3953096, Easting 621757 (NAD 83 Datum)

STATE: Arizona

COUNTY: Apache

CHAPTER: Cornfields

LAND STATUS: Navajo Tribal Trust

GROUND VISIBILITY: Kind and extent of cover? Ground visibility 98%, vegetation coverage 2%

TOPOGRAPHY: The site is situated on a low rise within an open grassland area. This area is also located within the open valley containing Pueblo Colorado Wash to the south.

DRAINAGE: Small unnamed drainages flowing south were noted to the east and west of the site. Pueblo Colorado Wash is located about 11,219 feet (2.12 miles) south of the site.

ELEVATION (ft/m): 6264'/1910 m

SLOPE & DIRECTION: 2° sloping south and east

SOIL TYPE: Sand

OTHER: Silt

VEGETATION PRESENT: Snakeweed, blue grama, Russian thistle, sagebrush, prickly pear cactus, and muhly.

CULTURAL AFFILIATION: Anasazi

SITE TYPE: Specialized Activity Area— Resource processing area

PERIOD(S) OF OCCUPATION (Date, if known): Late Pueblo I to Pueblo II (A.D. 850-1050)

HOW DATED: Ceramic typology

DIMENSIONS OF SITE (l x w): 33 m by 23 m

TOTAL AREA (sq. m): 542 sq. m—area of an oval

How Determined: Measured with GIS software.

ARCHITECTURE PRESENT? Possibly yes Describe: a possible pit house delineated by the oval-shaped depression area

ARTIFACTS OBSERVED/COUNTED: Counted—31 ceramic artifacts and 7 lithic artifacts

COLLECTIONS MADE? No

PHOTOS TAKEN: Yes

COLOR: Roll (SR) 09-332a; Frame 41

SITE DESCRIPTION: The site consists of an Anasazi specialized activity area resource processing area. The site contains an artifact scatter and a slight depression area that may contain a possible buried structure.

Feature 1 contains a slight oval-shaped depression area that measures about 10 m by 8 m by a depth of 10 cm at the center of the depression. No artifacts were noted directly within the depression area; however, the artifacts noted on this site were scattered around the perimeter of this feature.

The artifact assemblage on this site was low consisting of 31 ceramic (sherds) artifacts and 7 lithic artifacts. The lithic artifacts observed on this site consisted of 1 secondary flake (ryholite material), 1 tertiary flake (ryholite material), 4 tertiary flakes (chalcedony material), and 1 piece of angular debris (chalcedony material). The ceramic assemblage consisted of 31 ceramics including 10 indented corrugated sherds, 9 plain gray ware sherds, 3 plain white ware sherds, and 9 decorated black-on-white ware sherds. The decorated sherds contained mineral and carbon paint designs with several of the sherds identified to type as Red Mesa Black-on-white, Kiatuthlanna Black-on-white, and Flagstaff Black-on-white.

The site is in good condition with the only disturbance occurring from aeolian activity. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area— resource processing area or it may be the remains of a possible habitation, as the depression area on this site may be the remains of a buried structure such as a pit house. This site also appears to have been associated with prehistoric farming activities in the surrounding area. Based upon the ceramic artifacts noted on the site, this site appears to be affiliated with a late Pueblo I to Pueblo II temporal affiliation dating from A.D. 850 to 1050.

CONDITION OF SITE: Good Causes of disturbance: Natural erosion

LOCATION OF SITE RELATIVE TO PROJECT AREA: The site is located along near the southwestern corner of the proposed 100-acre business tract.

EXTENT OF INVESTIGATION TO DATE: Survey records including site form, sketch map, and photographs.

RESEARCH POTENTIAL: The site may retain additional information pertaining to prehistoric farming and land use in the surrounding area.

RECOMMENDATIONS: Site AZ-P-19-61 appears to be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet (15.24 m) of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

SITE ASSESSMENT UNDER 36 CFR 60.4 (National Register):

INTEGRITY: The site possesses integrity of location, setting, and association. The qualities of design, feeling, materials, and workmanship do not appear to apply.

and CRITERIA a-d: The site does not appear to represent a property which is potentially eligible for inclusion on the National Register of Historic Places under criteria a, b, or c. It may however, be eligible under criterion d since the site does appear to retain research potential.

EXCLUSIONS: The site does not appear to fall into categories a-g, thus it does not qualify as an exclusion. The site does meet the 50-year guideline.

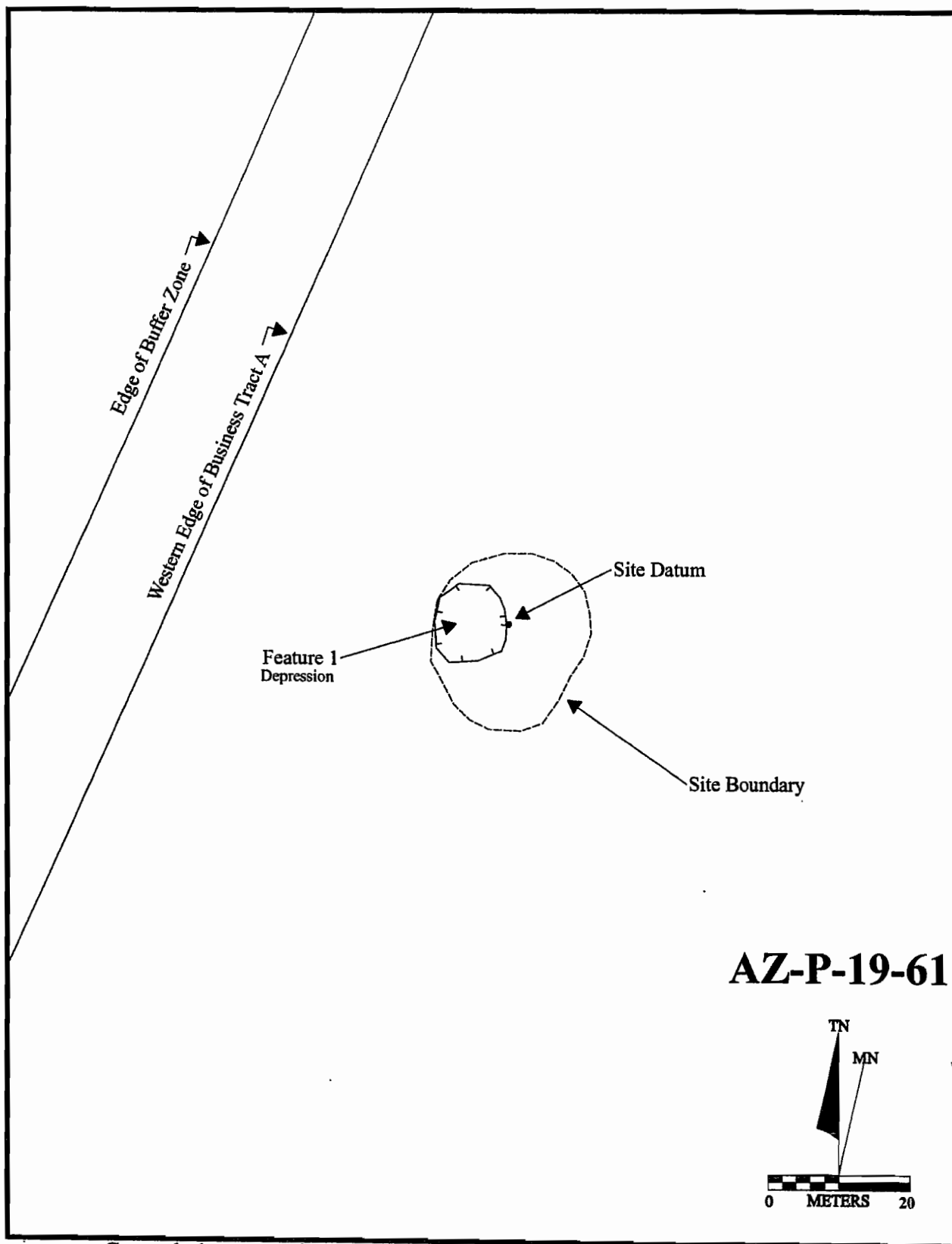
SITE ASSESSMENT UNDER 43 CFR 7.3 (Archaeological Resources Protection Act): The site is of archaeological interest. It does meet the 100-year age requirement. Therefore, it does appear to merit protection under ARPA.

SITE ASSESSMENT UNDER AIRFA (American Indian Religious Freedom Act): The site does not appear to merit consideration under the provisions of AIRFA.

PROVIDE A SITE MAP (including site designation, north arrow, scale, recognizable features, landmarks, and relationship to project area).

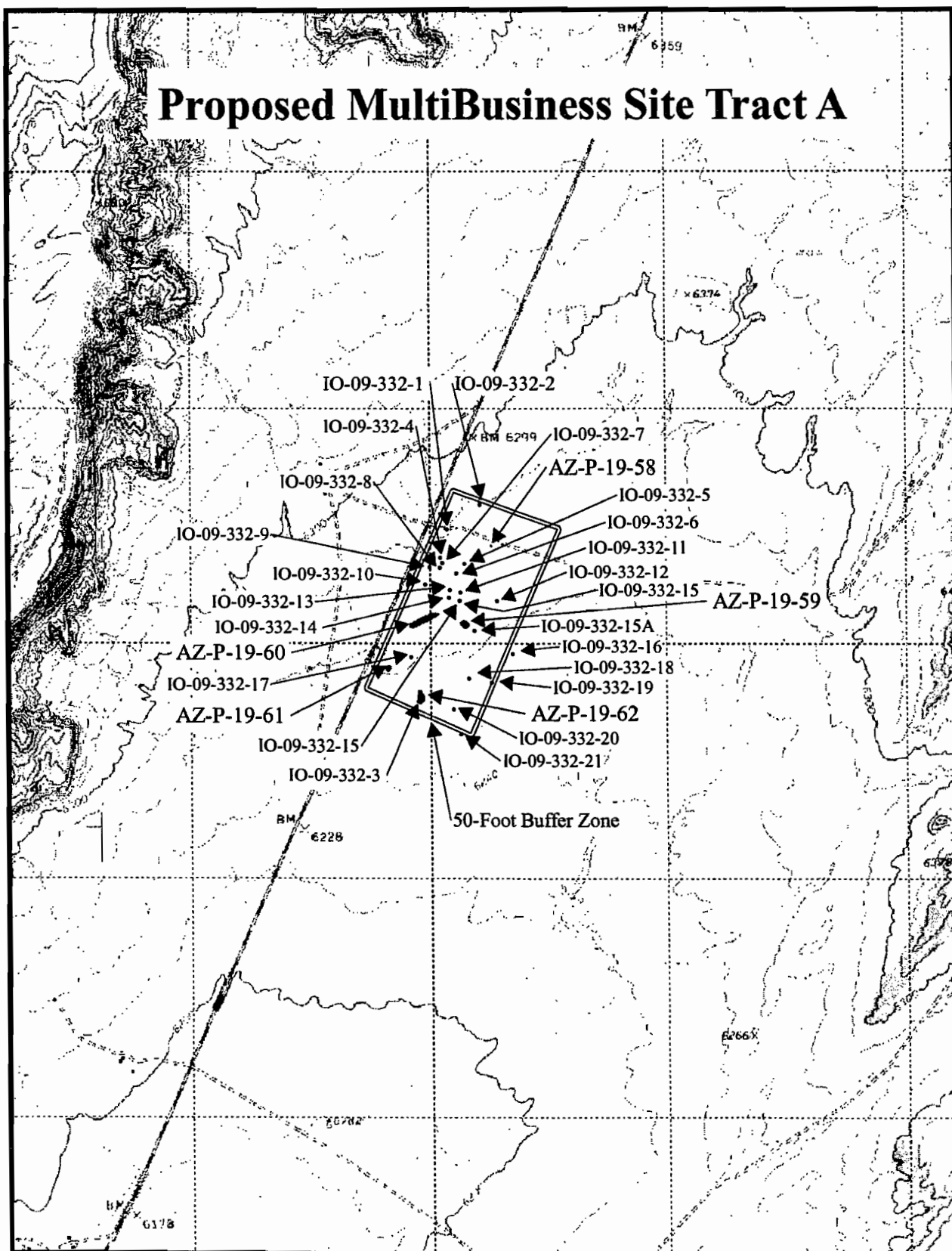
HOW CAN THE SITE BE REACHED? (See attached USGS map.)

OTHER COMMENTS (Ethnographic data, etc.): None



**AZ-P-19-61**

General plan map of Site AZ-P-19-61 (NNAD 09-332).



Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, GSRPM (NNAD 09-332).

# NAVAJO NATION ARCHAEOLOGY DEPARTMENT

## Site Survey and Management Form

SITE NO.: AZ-P-19-62

FIELD OR OTHER NAME: Site 6

DATE RECORDED: 8-6-09

PROJECT NUMBER & NAME: NNAD 09-332— A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona.

ORGANIZATION: NNAD ARCHAEOLOGIST(S): Antoinette Kurley-Begay, Aleda Myerson, Alviera Lee, and Matthew Pettigrew

USGS MAP REFERENCE: Cornfields, Ariz., 1972, 7.5' series

LEGAL LOCATION: Unplatted Section, T.27N, R.25E; G&SRPM

UTM: Zone 12; Northing 3952747, Easting 621953 (NAD 27 Datum); Northing 3952947, Easting 621890 (NAD 83 Datum)

STATE: Arizona

COUNTY: Apache

CHAPTER: Cornfields

LAND STATUS: Navajo Tribal Trust

GROUND VISIBILITY: Kind and extent of cover? Ground visibility 95%, vegetation coverage 5%

TOPOGRAPHY: The site is situated within rolling grassland located within the open valley containing Pueblo Colorado Wash to the east.

DRAINAGE: An unnamed tributary of Pueblo Colorado Wash is located about 400 feet (122 m) east of the site.

ELEVATION (ft/m): 6255'/1907 m

SLOPE & DIRECTION: Less than 2° sloping east

SOIL TYPE: Sand

OTHER: Silt

VEGETATION PRESENT: Snakeweed, bunch grass, Russian thistle, rabbitbrush, narrowleaf yucca, and prickly pear cactus.

CULTURAL AFFILIATION: Anasazi

SITE TYPE: Specialized Activity Area— Resource processing area

PERIOD(S) OF OCCUPATION (Date, if known): Late Pueblo I to Pueblo II (A.D. 825-1050)

HOW DATED: Ceramic typology

DIMENSIONS OF SITE (lkw): 54 m by 27 m

TOTAL AREA (sq. m): 116 sq. m—area of an oval

How Determined: Measured with GIS software.

ARCHITECTURE PRESENT? No

ARTIFACTS OBSERVED/COUNTED: Observed— less than 50 ceramic artifacts and over 100 lithic artifacts

COLLECTIONS MADE? No

PHOTOS TAKEN: Yes

COLOR: Roll (SR) 09-332; Frames 1010083 and 1010084

SITE DESCRIPTION: The site consists of an Anasazi specialized activity area— resource processing area. The site contains on artifact concentration and a scatter of lithic and ceramic artifacts. No features associated with this site were observed. The site is situated within an open valley area west of Pueblo Colorado Wash.

Artifact Concentration 1 is located on the southern edge of the site. This concentration measures 9 m by 5 m and contains about 75 lithic artifacts ceramic artifacts. Also noted within the concentration area was a slight layer of ashly soil.

The lithic artifacts observed on this site consisted of secondary flakes, tertiary flakes, and microflakes. Also noted on this within the lithic assemblage were unidirectional cores and pieces of angular debris. One projectile point/drill was also noted on this site. The drill was of an obsidian material. The drill contained expanded base with a side notches. The drill measured 1.8 mm by 0.9 mm by 0.2 mm thick. The ceramic artifacts observed on this site consisted of less than 40 ceramic artifacts. An inventory on 26 of the ceramics was conducted. The ceramic assemblage consisted of 5 black-on-white sherds (2 sherds with mineral paint and 3 sherds with carbon paint), 11 plain gray ware sherds, 8 indented corrugated sherds, and 1 plain white ware sherd. Several of the decorated sherds were identified to type as Holbrook Black-on-white.

The site is in relatively good condition with natural erosion in the form of aeolian activity within the site. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area— resource processing area that may have been associated with prehistoric farming activities in the surrounding area. The site appears to be affiliated with a late Pueblo I to Pueblo II temporal affiliation.

CONDITION OF SITE: Fair

Causes of disturbance: Natural erosion

LOCATION OF SITE RELATIVE TO PROJECT AREA: The site is located along the south-central edge of the proposed 100-acre business tract.

EXTENT OF INVESTIGATION TO DATE: Survey records including site form, sketch map, and photographs.

RESEARCH POTENTIAL: The site may retain additional information pertaining to prehistoric farming and land use in the surrounding area.

RECOMMENDATIONS: Site AZ-P-19-62 appears to be a Register-eligible property; therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet (15.24 m) of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

SITE ASSESSMENT UNDER 36 CFR 60.4 (National Register):

INTEGRITY: The site possesses integrity of location and association. The qualities of setting, design, feeling, materials, and workmanship do not appear to apply.

and CRITERIA a-d: The site does not appear to represent a property which is potentially eligible for inclusion on the National Register of Historic Places under criteria a, b, or c. It may, however, be eligible under criterion d since the site does appear to retain research potential.

EXCLUSIONS: The site does not appear to fall into categories a-g, thus it does not qualify as an exclusion. The site does meet the 50-year guideline.

SITE ASSESSMENT UNDER 43 CFR 7.3 (Archaeological Resources Protection Act): The site is of archaeological interest. It does meet the 100-year age requirement; therefore, it does appear to merit protection under ARPA.

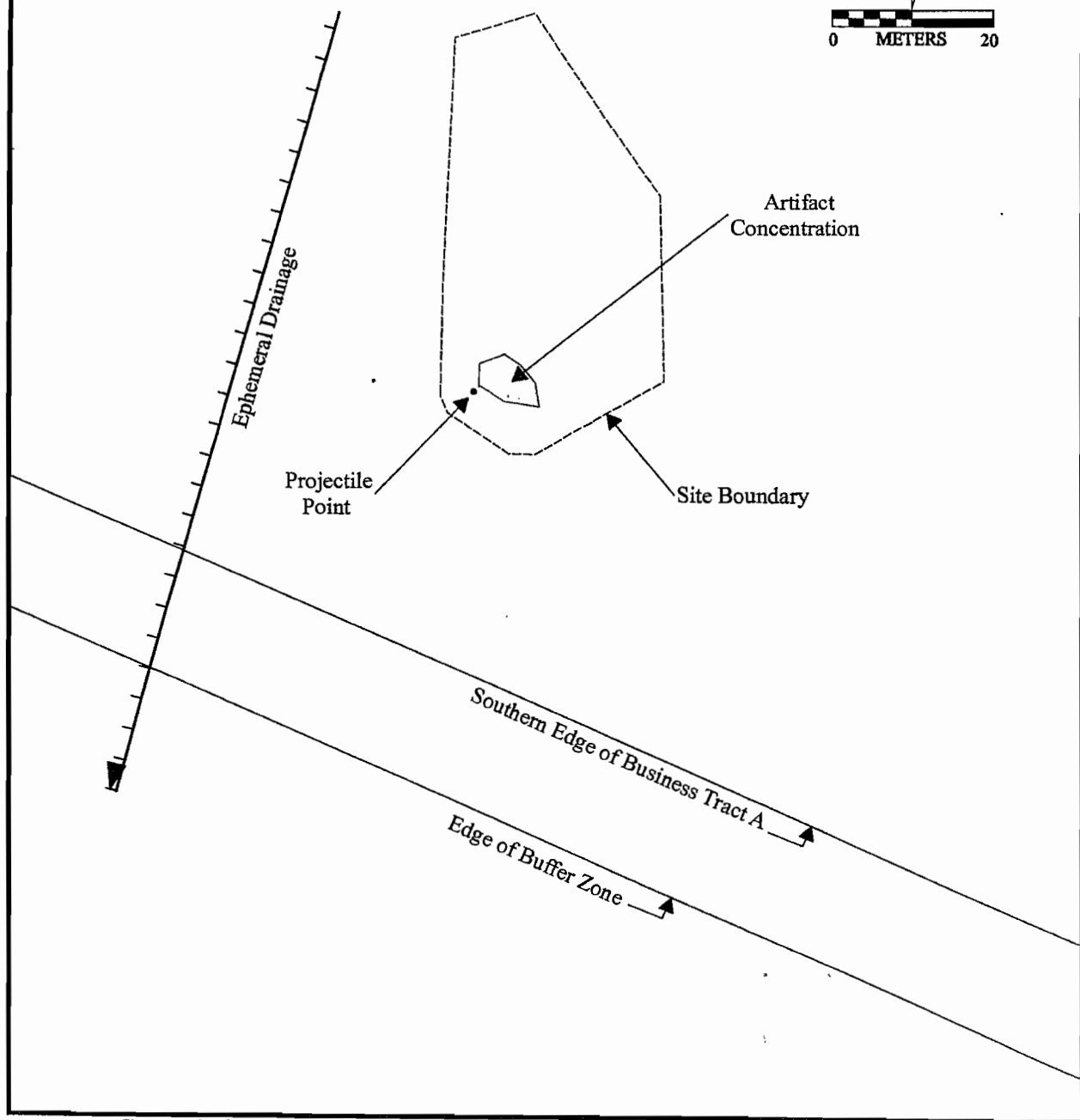
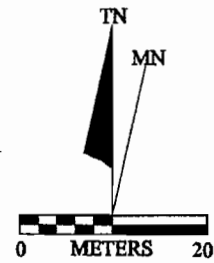
SITE ASSESSMENT UNDER AIRFA (American Indian Religious Freedom Act): The site does not appear to merit consideration under the provisions of AIRFA.

PROVIDE A SITE MAP (including site designation, north arrow, scale, recognizable features, landmarks, and relationship to project area).

HOW CAN THE SITE BE REACHED? (See attached USGS map.)

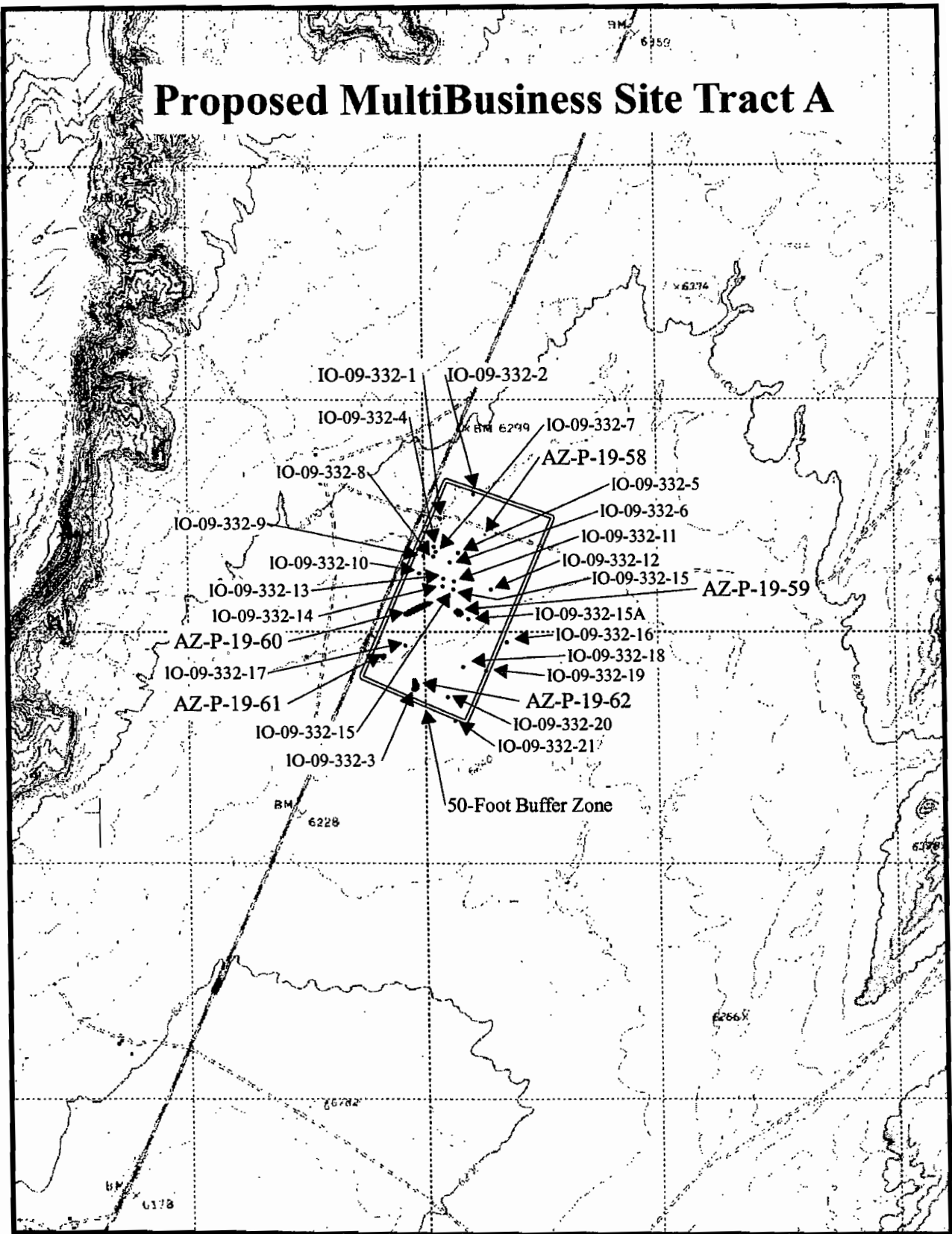
OTHER COMMENTS (Ethnographic data, etc.): None

AZ-P-19-62



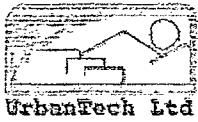
General plan map of Site AZ-P-19-62 (NNAD 09-332).





Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, GSRPM (NNAD 09-332).

**E**

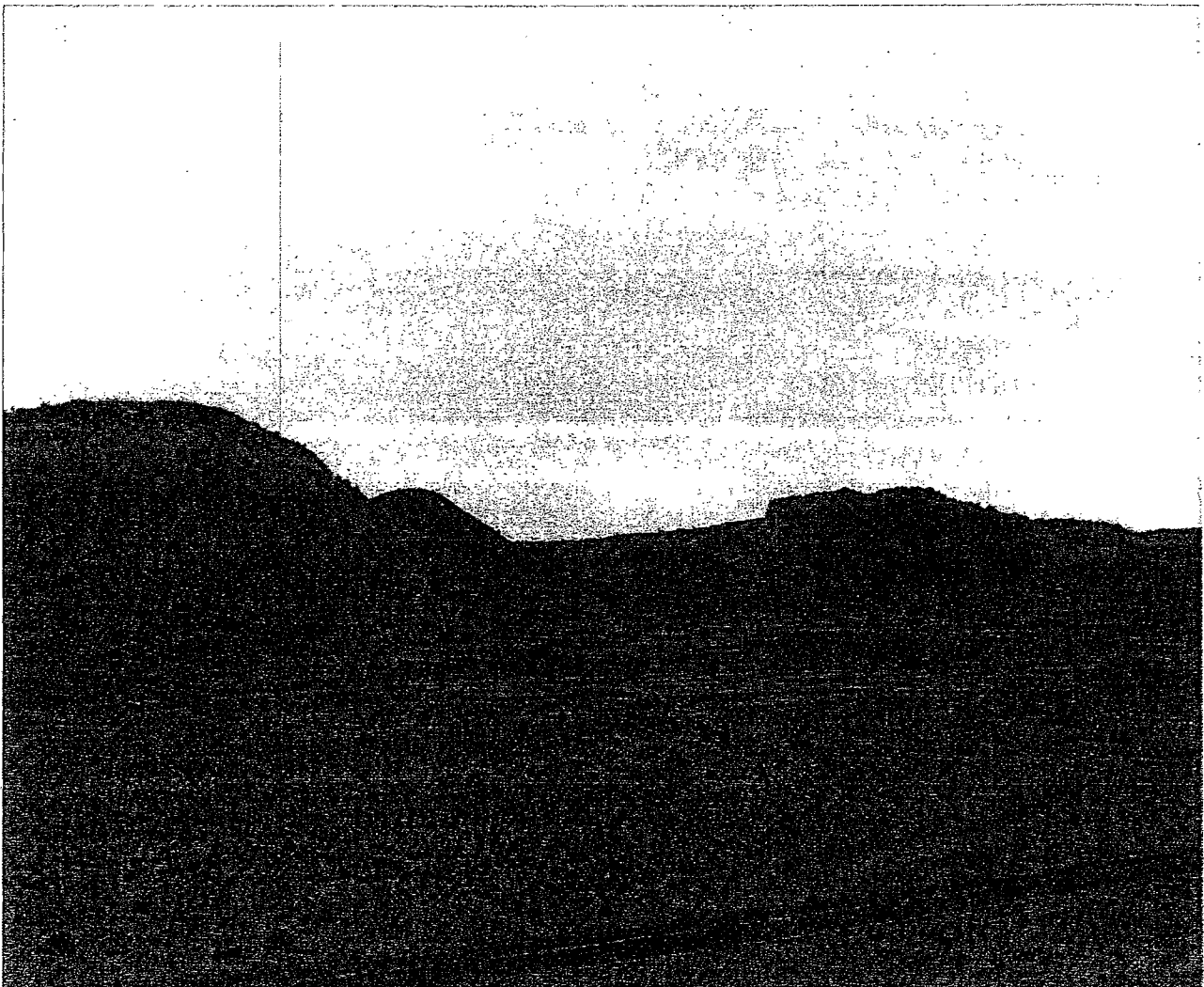


## Cornfields Chapter

January 2014  
Draft #3; Rev. #2

### Deer Point Development Parcel Environmental Assessment

In association with:



**Cornfields Chapter: Deer Point Property  
Environmental Assessment  
January 2014)**

**~~Project: Deer Point Site Development~~**

**Prepared for: Cornfields Chapter  
Navajo Nation  
P.O. Box 478  
Ganado, Arizona 86505**

**Prepared by:**

**UrbanTech Ltd.  
16845 N. 29<sup>th</sup> Ave.; Suite 1-348  
Phoenix, Arizona 85053**

**In association with:**

**Arcadis US  
410 N 44th St #1000  
Phoenix, Arizona 85008**

**Contact: Philip J. Entz AICP, Pres.  
UrbanTech Ltd.  
Tel: 602-678-0533**

## **TABLE OF CONTENTS**

### **1 – INTRODUCTION**

- 1.1 Project Background
- 1.2 Project Location and Description
- 1.3 Purpose and Need

### **2 – PROPOSED ACTION AND ALTERNATIVES**

---

- 2.1 Proposed Action
- 2.2. No-Action Alternative
- 2.3 Alternatives Considered but Eliminated

### **3 – AFFECTED ENVIRONMENT**

- 3.1 Land Resources
  - 3.1.1 Topography
  - 3.1.2 Soils
  - 3.1.3 Geology Setting, Mineral, and Paleontological Resources
- 3.2 Water Resources
  - 3.2.1 Groundwater and Surface Water
  - 3.2.2 Floodplains
  - 3.2.3 Wetlands, Riparian Areas, and Wild and Scenic Rivers
- 3.3 Air Quality
  - 3.3.1 Quality/Visibility
  - 3.3.2 Climate/Meteorology
- 3.4 Living Resources
  - 3.4.1 Vegetation
  - 3.4.2 Wildlife
  - 3.4.3 Federally Listed Threatened and Endangered Species
  - 3.4.4 Agriculture/Farmland
- 3.5 Cultural Resources
- 3.6 Socioeconomic Conditions
  - 3.6.1 Employment and Income
  - 3.6.2 Population and Demographic Trends
  - 3.6.3 Lifestyle and Cultural Values
  - 3.6.4 Community Infrastructure
- 3.7 Environmental Justice
- 3.8 Indian Trust Assets
- 3.9 Hazardous Materials
  - 3.9.1 RCRA Sites
  - 3.9.2 RCRA Subtitle I Sites
  - 3.9.3 Toxic Substances
- 3.10 Resource Use Patterns
  - 3.10.1 Transportation Corridors
  - 3.10.2 Agriculture
  - 3.10.3 Land Use Plans

### 3.11 Other Values

#### 3.11.1 Wilderness Areas

#### 3.11.2 Noise and Light

#### 3.11.3 Visual

#### 3.11.4 Public Health and Safety

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## 4 – ENVIRONMENTAL CONSEQUENCES

### 4.1 Land Resources

#### 4.1.1 Topography

#### 4.1.2 Soils

#### 4.1.3 Geology Setting, Mineral, and Paleontological Resources

### 4.2 Water Resources

#### 4.2.1 Groundwater and Surface Water

#### 4.2.2 Floodplains

#### 4.2.3 Wetlands, Riparian Areas, and Wild and Scenic Rivers

### 4.3 Air Quality

#### 4.3.1 Quality/Visibility

#### 4.3.2 Climate/Meteorology

### 4.4 Living Resources

#### 4.4.1 Vegetation

#### 4.4.2 Wildlife

#### 4.4.3 Federally Listed Threatened and Endangered Species

#### 4.4.4 Agriculture/Farmland

### 4.5 Cultural Resources

### 4.6 Socioeconomic Conditions

#### 4.6.1 Employment and Income

#### 4.6.2 Population and Demographic Trends

#### 4.6.3 Lifestyle and Cultural Values

#### 4.6.4 Community Infrastructure

### 4.7 Environmental Justice

### 4.8 Indian Trust Assets

### 4.9 Hazardous Materials

### 4.10 Resource Use Patterns

#### 4.10.1 Transportation Corridors

#### 4.10.2 Agriculture

#### 4.10.3 Land Use Plans

### 4.11 Other Values

#### 4.11.1 Wilderness Areas

#### 4.11.2 Noise and Light

#### 4.11.3 Visual

#### 4.11.4 Public Health and Safety

5 – LIST OF PREPARERS AND CONTRIBUTORS

6 – CONSULTATION AND COORDINATION

7 – DOCUMENT PREPARER'S SIGNATURE

8 - REFERENCES

#### **APPENDICES**

APPENDIX A Property Survey

APPENDIX B Proposed Development Plan

APPENDIX C Apache County USFWS Species List

APPENDIX D Cultural Resources Compliance

#### **LIST OF FIGURES**

FIGURE 1 Project Area Map

FIGURE 2 Project Area Aerial

FIGURE 3 Topographic Map

#### **LIST OF TABLES**

TABLE 1 Habitat Suitability Assessment for Sensitive Species

## **1 – INTRODUCTION**

### **1.1 Project Background**

The Cornfields Chapter of the Navajo Nation proposes to implement physical economic development on a 100-Acre site that runs along the eastern frontage of Navajo Route 15 near Burnside Junction, AZ. Strategic Planning, a Feasibility Study, preliminary Development Planning and other actions have been completed in preparation for the proposed development of the site. The development of the site will require approvals from the Navajo Nation and the Bureau of Indian Affairs (BIA). The federal action triggers the National Environmental Policy Act (NEPA) process. This environmental assessment documents the potential impacts of the development of the Cornfields Junction Site on the human and natural surroundings.

### **1.2 Project Location and Description**

The Cornfields Chapter is one of 110 recognized chapters of the Navajo Nation and is located in the southeastern portion of the Navajo Nation, within Apache County. The community of Cornfields has an estimated population of 1600 people. The development site is approximately 100-acres and is designated for economic development. The property is within the Cornfields Quadrangle, Arizona-Apache Co., 7.5-Minute Series USGS Topographic Map (2001). Figure A (following page) illustrates the nature of the site.

The currently proposed Project consists of the development of several site improvements on a portion of the 100-acre site, including:

- Grocery with inside Bank and Pharmacy
- For-Lease Retail Shops with an Internet Café
- Hardware Store
- Medical Office Lease Space with a Dialysis Center and attached Trauma Center
- Fast Food Restaurant (Different Menu than existing Burger King)
- Sit Down Restaurant with a capacity of 60 for dining.
- 24-Room Motel
- 20-space RV Park associated with the Motel

Parking, walkways and landscaping associated with the project are contemplated, along with necessary on-site utility development.

### **1.3 Purpose and Need**

The Deer Point Property is one of three economic development parcels available to the Cornfields Chapter of the Navajo Nation. The purpose and need for the project is to provide locally accessible retail opportunities and services, as well as to provide business opportunities and employment for local Tribal Members. Further, the Deer Point property, by location, can



serve the adjacent communities of Burnside and Ganado, in addition to tourists accessing Canyon de Chelly and Chinle, which are accessed via a nearby highway junction. Nearby existing development includes neighborhoods, schools and an event pavilion that can supply additional users to the site.

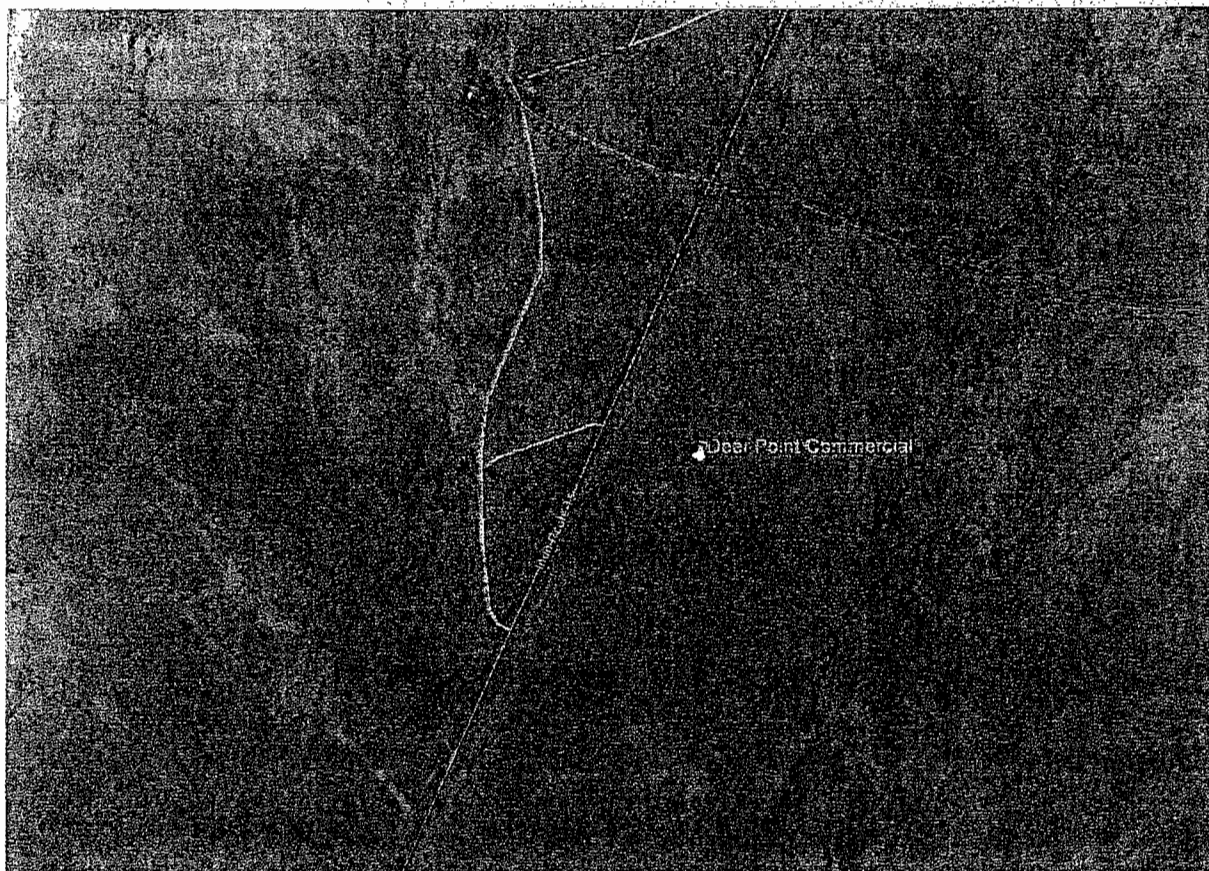


Figure 1: Aerial of Deer Point Area

## **2 – PROPOSED ACTION AND ALTERNATIVES**

### **2.1 Proposed Action**

Under the proposed action, the Cornfields Chapter would implement a phased development program for the Deer Point Property (See proposed Development Plan in Appendix B). The plan would be developed over a period of approximately five-to-ten years, including final project design, obtaining funding and construction of the Project. The plan would include several economic development components that would be developed in a phased plan.

## **2.2. No-Action Alternative**

Under the no-action alternative, the proposed project would not be constructed. No economic development would occur and the Cornfields Chapter would continue to lack local employment and business opportunities. No increases in local resident or governmental income would be achieved.

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## **2.3 Alternatives Considered but Eliminated**

During the planning phases of the project, various types of development and various arrangements of elements of site development were considered. The proposed action reflects the development elements determined to be most feasible and related to the property's location adjacent to the heart of the Cornfields Chapter populated area. Other uses were removed from the plans and proposed for development on alternative sites (Sunrise Trading Post and Cornfields Junction) that are being separately studied.

## **3 – AFFECTED ENVIRONMENT**

*This Chapter describes the existing conditions both within and surrounding the subject site. This data is then used to evaluate the impacts that are discussed in Chapter 4.*

### **3.1 Land Resources [Physical characteristics of the site geography and soils]**

#### **3.1.1 Topography**

The general topography of the site consists of a flat area with very gentle slopes. Elevations range from 6230 to 6270 feet ASL in the immediate area, generally sloping to the south and east. Figure 2, next page, illustrates the local topography.

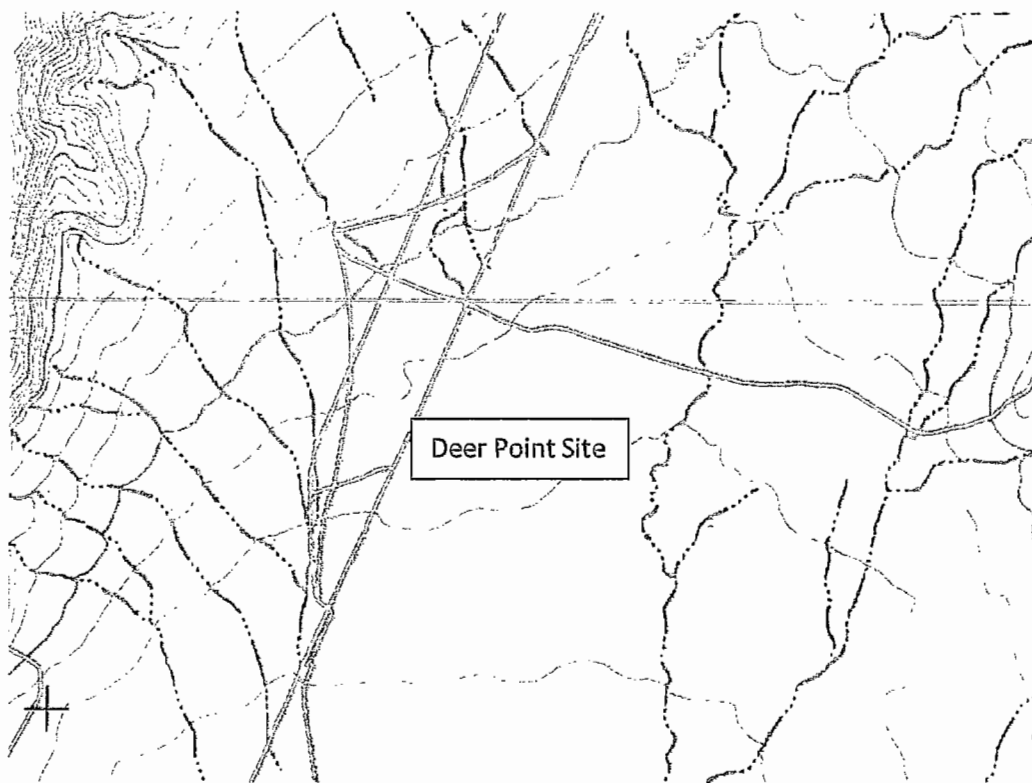


Figure 2

### 3.1.2 Soils

Soils in the Cornfields Junction area have been mapped in *Soil Survey of Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona, and McKinley and San Juan Counties, New Mexico* (NRCS) in 2007. The soils are identified as Zia sandy loam. This is comprised of Zia and similar soils at 85 percent, and other minor components at 15 percent, including Riverwash, Radnik, and Pinavetes family. Parent materials are eolian deposits and stream alluvium derived from sandstone and shale. Zia sandy loam is well drained, has moderately rapid permeability (2.0 to 6.0 in/hr), has low shrink-swell potential (about 2.0 percent), and has negligible flooding or ponding hazards.

### 3.1.3 Geology Setting, Mineral, and Paleontological Resources

The Navajo Nation is situated in the south-central region of the Colorado Plateau, an area that has remained relatively tectonically stable since late Precambrian time and only moderately unstable by the orogeny of Late Cretaceous and early Tertiary time (Cooley et.al 1969).

The reservation has been divided into several hydrogeologic subdivisions on the basis of differences in the exposed sedimentary rocks, structure and physiography (Cooley et. al 1969). The project site lies in the Chinle Valley subdivision, underlain by easily eroded Triassic sediments. It is a lowland between the scarred sandstone slopes on the Defiance Plateau and

the imposing eastern escarpment of Black Mesa. In general, the area consists of gentle slopes underlain with bedrock and alluvium.

### **3.2 Water Resources *[Surface water, Groundwater, Floodplains and created conditions]***

#### **3.2.1 Groundwater and Surface Water**

Surface water generally drains on the site to the southeast to access the Pueblo Colorado Wash. The drainage on the site is principally sheet flow with a few shallow braided channels where drainage passing in structures along Navajo Route 15 has created erosion. The predominant form of drainage is sheet flow throughout the property.

Ground water is at a reasonably shallow depth in the alluvium (300'), but increases further in depth where Sandstone and Shinarump occur in the Chinle Valley multiple-aquifer system. The overall system dips westward and northwestward. The subject site is among the highest portions of the aquifer system (shallowest depth to water) [Cooley et. al.].

#### **3.2.2 Floodplains**

Based on a general definition of floodplains, the project site is not located within a floodplain. A floodplain has been defined as "lowland and relatively flat areas adjoining inland and coastal waters...." and "a nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially", by Presidential Executive Order 11988-Floodplain Management and the U.S. Department of Agriculture, respectively.

#### **3.2.3 Wetlands, Riparian Areas, and Wild and Scenic Rivers**

There are no wetlands or riparian areas on or near the subject site. There are no "Wild & Scenic Rivers" designated anywhere on the Navajo Reservation. Solely Fossil Creek and the Upper Verde River in Arizona have that designation.

### **3.3 Air Quality *[characteristics of the air and the air quality in the area]***

#### **3.3.1 Quality/Visibility**

The National Ambient Air Quality Standards (NAAQS) establish limits for pollutants considered harmful to public health and the environment. Under the NAAQS, there are six principal pollutants which are called "criteria" pollutants. They include carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter and sulfur dioxide. Air quality trends show air pollution concentrations in the southwest have improved since the standards were established. Maps posted at the U.S. EPA website ([www.epa.gov/region9/air](http://www.epa.gov/region9/air), May 2013) indicate that air quality of the Navajo Nation is within the NAAQS.

### 3.3.2 Climate/Meteorology

The project region experiences relatively cold winters with temperatures averaging near 10-degrees Fahrenheit. Snow depths however are minimal and snows are irregular throughout December, January and February. Precipitation averages a relatively low 9.5" annually and rains are scattered throughout the year. The average maximum temperature (early August) is 84.7° Fahrenheit but can peak in the 90's. The average minimum temperature (mid-January) is 10.1-degrees Fahrenheit (Wunderground.com Historical Data (Ganado, AZ). Prevailing winter winds are from the northwest and summer winds are generally from the southwest. Winds are light to moderate, averaging 10 miles-per-hour or less.

### 3.4 Living Resources *[vegetation and wildlife of the area, included protected species and their likelihood to occur (field investigation conducted 6/4/13)]*

#### 3.4.1 Vegetation

The project site is within an area defined as Great Basin Desert Scrub (Brown 1994). The area is associated with Upland Sonoran Desert Scrub and Great Basin Pinyon-Juniper Woodland vegetation. Species diversity is low with dominant shrubs occupying vast tracts of land. Characteristic vegetation is low growing, widely spaced hemispherical, non-sprouting shrubs with widely-spaced bunchgrasses. Dominant shrubs include big sagebrush, black sagebrush, Bigelow sagebrush, shadscale, fourwing saltbush, rabbitbrush, winterfat, hopsage, horsebrush, blackbrush, and greasewood. Associated grasses may include blue gramma, galleta grass, Indian ricegrass, western wheatgrass, Junegrass, and several muhleys or dropseeds. Forbs include several gilia, buckwheat, penstemon, lupine, and globemallow species. Cacti number and species in Great Basin Desertscrub are relatively few in comparison to those found in warm deserts. Cactus plants are small in stature or prostrate and include several species of prickly pear, hedge hog, and cholla. The Deer Point site is covered in grasses. No major vegetation occurs within the site boundaries.

#### 3.4.2 Wildlife

During the field survey of the Deer Point Site, no wildlife was observed.

#### 3.4.3 Federally Listed Threatened and Endangered Species

A biological evaluation was conducted to assess potential impacts to threatened and endangered and sensitive species. The evaluation was based on a list of TES species provided by US Fish and Wildlife Service (USFWS) that are known to occur or have potential to occur on or near the project site. The list was supplemented by information contained in the "Navajo Nation Endangered Species List; Species Accounts; Version 3.08; August 2008". The effects are discussed in Section 4.4.2. A chart illustrating the results follows:

**Federally Listed Species Potentially Occurring in Apache County, Arizona**  
**(USF&W Listing 1/31/13 - current on 7/8/13 and**  
**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<i>Common Name (Species Name)</i>	<i>Status</i>	<i>Range or Habitat Requirements</i>	<i>Potential for Occurrence in Project Area</i>	<i>Determination of Effect</i>
Apache trout (Arizona) (Oncorhynchus gilae apache)	USFWS Threatened  NESL RCS-41-08 Not Listed	Streams and rivers generally above 6,000 ft. elevation with adequate stream flow and shading; temperatures below 77 degrees F; and substrate composed of boulders, rocks, gravel and some sand and silt.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.
Black-footed ferret (Mustela nigripes)	USFWS Endangered  NESL RCS-41-08 Group 2	Grassland plains generally found in association with prairie dogs. Elevation less than 10,500 ft.	Unlikely to occur. No wild populations of this species are currently known to exist in Arizona. Reintroduced population exists in Aubrey Valley (Coconino County), Arizona.	No Effect.
California condor (Gymnogyps californianus)	USFWS Endangered  NESL RCS-41-08 Group 4	High desert canyons and plateaus. Elevation varies.	Recovery program has reintroduced condors to Northern Arizona, but in Coconino County. The subject site does not include nesting habitat.	No Effect.

**Federally Listed Species Potentially Occurring in Apache County, Arizona**  
**(USF&W Listing 1/31/13 - current on 7/8/13 and**  
**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<i>Common Name (Species Name)</i>	<i>Status</i>	<i>Range or Habitat Requirements</i>	<i>Potential for Occurrence in Project Area</i>	<i>Determination of Effect</i>
<b>Chiricahua leopard frog</b> <i>(Lithobates chiricahuensis)</i>	USFWS Endangered  NESL RCS-41-08 Not Listed	Restricted to springs, livestock tanks, and streams in upper portion of watersheds that are free from nonnative predators or where marginal habitat for nonnative predators exists. Elevation of 3,281 – 8,890 ft.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.
<b>Little Colorado spinedace</b> <i>(Lepidomeda vittata)</i>	USFWS Endangered  NESL RCS-41-08 Not Listed	Moderate to small streams; found in pools and riffles with water flowing over fine gravel and silt substrate. Elevation of 4,000 – 8,000 ft.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect
<b>Loach minnow</b> <i>(Tiaroga cobitis)</i>	USFWS Endangered  NESL RCS-41-08 Not Listed	Benthic species of small to large perennial streams with swift shallow water over cobble and gravel. Recurrent flooding and natural hydrograph important. Elev. <8000 ft.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.

**Federally Listed Species Potentially Occurring in Apache County, Arizona  
(USF&W Listing 1/31/13 - current on 7/8/13 and  
NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<i>Common Name (Species Name)</i>	<i>Status</i>	<i>Range or Habitat Requirements</i>	<i>Potential for Occurrence in Project Area</i>	<i>Determination of Effect</i>
<b>Mexican gray wolf (<i>Canis lupus baileyi</i>)</b>	USFWS	Chaparral, woodland, and forested areas. May cross desert areas. Elevation of 4,000 to 12,000 ft.	Unlikely to occur. Generally reintroduced in southern Apache County on the White Mountain Apache Reservation. Critical habitat was established as old-growth forests; none exist in this portion of the Navajo Reservation.	No Effect.
	Endangered			
	NESL RCS-41-08 Not Listed			
<b>Mexican spotted owl (<i>Strix occidentalis lucida</i>)</b>	USFWS	Nest in canyons and dense forests with multi-layered foliage structure. Elev. 4100 - 9000 ft.	Unlikely to occur. There is no habitat in the project area or the surrounding vicinity.	No Effect.
	Threatened			
	NESL RCS-41-08 Group 3			
<b>Navajo sedge (<i>Carex specuicola</i>)</b>	USFWS	Found in silty soils at shady seeps and springs. There is Designated critical habitat on the Navajo Nation near the Inscription House Ruins. Also found at seep springs on vertical cliffs of pink-red Navajo sandstone at elevations of 5,700 – 6,000 ft.	Unlikely to occur. There is no habitat in the project area or the surrounding vicinity. The designated critical habitat is 100-miles northwest of the subject site.	No Effect.
	Threatened			
	NESL RCS-41-08 Group 3			



**Federally Listed Species Potentially Occurring in Apache County, Arizona**  
**(USF&W Listing 1/31/13 - current on 7/8/13 and**  
**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<i>Common Name (Species Name)</i>	<i>Status</i>	<i>Range or Habitat Requirements</i>	<i>Potential for Occurrence in Project Area</i>	<i>Determination of Effect</i>
Southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	USFWS Endangered  NESL RCS-41-08 Group 2	Cottonwood/willow and tamarisk vegetation communities along rivers and streams. Designated habitat in this area of Arizona only includes the Little Colorado River. Elev. < 8500 ft.	Unlikely to occur. There is neither riparian habitat nor tamarisks on-site or in the vicinity.	No Effect.
Three Forks springsnail ( <i>Pyrgulopsis trivialis</i> )	USFWS Endangered  NESL RCS-41-08 Not Listed	Rheocrene springs, seeps, marshes, spring pools, outflows and diverse lotic waters. Distribution limited to Boneyard Creek and Boneyard Bog Spring complexes in the North Fork of the East Fork Black River watershed. Critical habitat is designated for 17.2 acres (77 FR 23060).	Unlikely to occur. The habitat lies in southeastern Apache County, over 100 miles from the subject site.	No Effect
Zuni bluehead sucker ( <i>Catostomus discorbulus yarrowi</i> )	USFWS Proposed Endangered  NESL RCS-41-08 Not Listed	Small streams in low velocity, moderate deep pools, and pool-runs with seasonal dense algae. The fish is found in two drainages on the Navajo Nation (1.) Kinlichee Creek [Little Colorado River] and (2.) Canyon de Chelly [San Juan River]. Elevations over 6,000 ft.	Unlikely to occur. The closest habitat would be Kinlichee Creek, which lies approximately 20-miles east of the subject site.	No Effect.

**Federally Listed Species Potentially Occurring in Apache County, Arizona**  
**(USF&W Listing 1/31/13 - current on 7/8/13 and**  
**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<i>Common Name (Species Name)</i>	<i>Status</i>	<i>Range or Habitat Requirements</i>	<i>Potential for Occurrence in Project Area</i>	<i>Determination of Effect</i>
<b>Zuni fleabane</b> <b>(<i>Erigeron rhizomatus</i>)</b>	USFWS	Selenium-rich red or gray detrital clay soils derived from the Chinle and Baca formations at elevations between 7,300 and 8,000 ft.	Unlikely to occur. The subject site does not contain the correct soils. Site is below habitat elevation.	No Effect.
	Threatened			
	NESL RCS-41-08 Not Listed			
<b>New Mexico meadow jumping mouse (<i>Zapus hudsonius luteus</i>)</b>	USFWS	Nests in dry soils but also uses moist, streamside, dense riparian/wetland vegetation. The New Mexican jumping mouse occurs in 6 populations in the White Mountains, Arizona. An inventory and status assessment throughout its historical range in Arizona is currently being conducted.	Unlikely to occur. There are no springs or riparian habitats in the vicinity. The current habitat analysis shows the populations to be in central and southern Apache County.	No Effect.
	Candidate			
	NESL RCS-41-08 Not Listed			
<b>Northern Mexican Gartersnake</b> <b>(<i>Thamnophis eques megalops</i>)</b>	USFWS	Cienegas, stock tanks, large river riparian woodlands and forest, streamside gallery forests. Elevation range is 130 - 8500 ft.	Unlikely to occur. There is no habitat on site. There are no riparian woodlands or forests in this area of the Reservation. There have been no observations of the species on-site.	No Effect.
	Candidate			
	NESL RCS-41-08 Not Listed			
<b>Roundtail chub</b> <b>(<i>Gila robusta</i>)</b>	USFWS	Cool to warm waters of rivers and streams. Occupy the deepest pools and eddies of streams. Elev. range is 1,000 – 7,500 ft.	Unlikely to occur. There is no permanent aquatic habitat in the vicinity that is similar to that associated with this species.	No Effect.
	Candidate			
	NESL RCS-41-08 Group 2			

**Federally Listed Species Potentially Occurring in Apache County, Arizona**  
**(USF&W Listing 1/31/13 - current on 7/8/13 and**  
**NAVAJO ENDANGERED SPECIES LIST – Sept 10, 2008)**

<i>Common Name (Species Name)</i>	<i>Status</i>	<i>Range or Habitat Requirements</i>	<i>Potential for Occurrence in Project Area</i>	<i>Determination of Effect</i>
<b>Yellow-billed cuckoo</b> <b>(Coccyzus americanus)</b>	USFWS Candidate  NESL RCS-41-08 Group 2	Large blocks or riparian woodlands (cottonwood, willow, or tamarisk galleries). Elev. < 6500 ft.	Unlikely to occur. There is no habitat. There are no riparian woodlands or forests in this area of the Reservation.	No Effect.
<b>Arizona Willow</b>	Conservation Agreement between USFWS, Forest Service and Park Service.  NESL RCS-41-08 Not Listed	Unshaded or partially shaded wet meadows, streamsides and cienegas; typically in or adjacent to perennial water. Known in the vicinity of Mount Baldy, on the Apache-Sitgreaves National Forest, and private land at elevations greater than 8,000 ft.	Unlikely to occur. There is no habitat and the site's elevation (6,500 ft.) is substantially below the species' range.	No Effect.
<b>Gooddings Onion (<i>Allium gooddingii</i>)</b>	Conservation Agreement between USFWS, USFS.  NESL RCS-41-08 Not Listed	Shaded sites on north-trending drainages, on slopes, or in narrow canyons, within mixed conifer and spruce fir forests.	Unlikely to occur. There is no habitat and the site's elevation (6,100 ft.) is substantially below the species' range.	No Effect.

#### **3.4.4 Agriculture/Farmland**

The site has not been in agricultural use. Some localized grazing has been allowed, but the land does not lie within a current livestock permitted area. There are no prime or unique farmlands in the immediate project area.

### **3.5 Cultural Resources** *[The status of Cultural Resource Investigations on the Site]*

The Navajo Nation Historic Preservation Department (NNHPD) conducted a survey of the site reflected in report #HPD-09-1040. The survey was completed by Linda Laughing, ASO of the Navajo Nation Archaeology Department. The results are reflected in report #NNAD 09-332 in Appendix D.

The findings were five archaeological sites; AZ-P-19-58, AZ-P-19-59, AZ-P-19-60, AZ-P-19-61, and AZ-P-19-62. In addition, there were twenty-two isolated occurrences identified during the inventory. Three of the five sites were determined to be Register-eligible properties. The sites are: AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62. The remaining two sites did not appear to be Register-eligible properties.

A determination of no historic properties affected was recommended for the project undertaking provided that the potential Register-eligible properties are avoided.

Also, in the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified.

### **3.6 Socioeconomic Conditions** *[The status of the residents of the area impacted by the proposed action]*

#### **3.6.1 Employment and Income**

According to American Factfinder (Cornfields Chapter Navajo; custom data search), there are 61 people in the Labor Force in the Cornfields Chapter, of which only 37 are employed. The unemployment rate is severe at 23.8%. Per Capita income is low at \$9,399. Primary employment categories include Educational, Recreation, Ranching and Food industries.

#### **3.6.2 Population and Demographic Trends**

According to the U.S. Census 2010 Census Summary File DP-1 for Cornfields, the total population in the census tract is 911, though the extended area served may include as many as 1600 residents. The median age was 35.4 years. The census also shows 355 housing units with 286 of them occupied. The average household size is 3.06 persons. In comparison, the U.S. average is about 2.5 people per household.

### 3.6.3 Lifestyle and Cultural Values

Generally speaking, the communities of the Navajo Nation comprise a variety of people and lifestyles. Residents in Cornfields are generally isolated with the nearest commercial outlet at least ten (10) miles away. Due to the remoteness of the chapter and the community, there is a lack of jobs. A majority of the people still rely on livestock and farming for subsistence, if working locally. The few people who have jobs commute out of the community. Most residents practice the traditional Navajo lifestyle or live a combination of traditional and modern lifestyles. Individual lifestyles reflect cultural values, attitudes, and expectations.

### 3.6.4 Community Infrastructure

The following infrastructure systems are in effect for the Cornfields Chapter area of the Navajo Reservation

- **Water:** Water services in the area are predominately provided for home sites. The Indian Health Services (IHS) designed and provided these existing services for the home sites. There is a six (6") inch main pipeline along Navajo Route 15 with lateral pipelines feeding the homesteads. After a year of operation IHS turns these water services over to NTUA for operations and maintenance. There are water sources in the vicinity of the potential development site.
- **Sewer:** The sewer conveyance piping for a central sewage collection system is not available at the site. The only central collection sewer pond system is at the Chapter House area supporting facilities around the Chapter House and the Navajo Housing Authority (NHA) housing development adjacent to the Chapter House.
- **Power:** Three phase power would be needed for the potential development sites. The subject site has both single-phase and three-phase power available. The overhead line runs adjacent to the NR15 Right-of-way, along the west boundary of the property.
- **Natural Gas:** Natural gas service is not available in the immediate area. The service would have to be piped from Ganado, Arizona. Liquefied Petroleum Gas (LPG) may have to be considered if the development sites are going to require gas service.
- **Telecommunications:** Frontier Communications is the provider for telephone and internet services in the Cornfields Chapter area. The telephone lines and fiber optics cabling are provided adjacent to power line provider lines. This may be aerial lines on existing telephone poles or direct burial cable in the ground.

## 3.7 Environmental Justice

The proposed project is located in Cornfields Chapter where 98% of the population is Native American. Federal agencies are required to evaluate issues related to environmental justice where it is defined as the pursuit of equal justice and equal protection under the law for all

environmental statutes and regulations without discrimination based on race, ethnicity, and/or socioeconomic status. No environmental justice issues were identified.

### **3.8 Indian Trust Assets**

Except for management of allotment lands, no Indian Trust Resources are found in the project area.

### **3.9 Hazardous Materials** *[Primary Research was performed using mapping data at the EPA Envirofacts Warehouse website and the Arizona Department of Environmental Quality website.]*

#### **3.9.1 RCRA Sites**

Based on the EPA data base, there are no Subtitle C or Subtitle D sites involving hazardous waste near the proposed site. The closest RCRA sites are in the Town of Ganado.

#### **3.9.2 RCRA Subtitle I Sites**

No underground storage tanks were evidenced in a site visit and none appear on the RCRA search or in a search of ADEQ records. No underground storage tanks will be installed as part of the proposed project.

#### **3.9.3 Toxic Substances**

Based on site visits and the U.S. EPA Envirofacts website ([www.epa.gov/enviro](http://www.epa.gov/enviro)), no Toxic Substances Control Act sites occur on or near the project area. No toxic substances will be used, generated, handled, or stored on or near the project site as part of the construction or operation of the proposed project.

### **3.10 Resource Use Patterns** *[The following resources or land uses are not found in the project area: hunting, fishing, gathering, timber harvesting, mining, or solid waste dumpsites. However, the following land uses or practices occur in this region: transportation network, land use plans, and agriculture.]*

#### **3.10.1 Transportation Corridors**

The site fronts on Navajo Route 15 near Burnside Junction. NR15 is the principle corridor between Dilkon and Burnside Junction where it intersects Highways 264 and 191 accessing Ganado, Chinle and Canyon de Chelly, among other destination in this area of the Navajo Reservation. NR15 is paved; however, there are no other paved roads within or accessing the Deer Point site.

### **3.10.2 Agriculture**

The 100-acre site is not in agricultural use, as referenced previously in Section 3.4.4. The records research performed by the Archeology Department did not identify previous agricultural uses of the property.

### **3.10.3 Land Use Plans**

Several Land Use Planning exercises have been performed over the years. Documentation includes the following:

- Cornfields Chapter: Community Land Use Plan 2005 (April 29, 2005); [Jones & Stokes]
- Strategic Planning: Cornfields Chapter: Among the Rabbit Brush
- Cornfields 4 Commercial Sites Economic Feasibility Study (June 2013); [Southwest Business Development Consultants]

The proposed project site and the proposed project elements are reflected in the previous Land Use Plans and Strategic Planning that has been performed.

### **3.11 Other Values**

#### **3.11.1 Wilderness Areas**

There are no wilderness areas near the subject Deer Point property.

#### **3.11.2 Noise and Light**

The primary noise generator in the area is traffic on Navajo Route 15. The traffic is not of sufficient levels to create a noise nuisance.

#### **3.11.3 Visual**

The subject site has long-distance views generally to the southeast toward the Pueblo Colorado Wash. No scenic byways or scenic areas protected by law occur in the project area.

#### **3.11.4 Public Health and Safety**

The Cornfields Chapter community is primarily served via services provided out of Ganado Arizona, approximately ½-hour away by Road. Police and Fire Services are from that location. Medical services are provided by Sage Memorial Hospital, a private facility also located in Ganado.

## **4 – ENVIRONMENTAL CONSEQUENCES**

*[This section discusses the impacts on the natural or human environment as a result of the proposed action. The section also lists mitigation measures that reduce or eliminate any impacts that are identified.]*

### **4.1 Land Uses**

#### **4.1.1 Topography**

Since the Deer Point site is principally flat, the existing topography will not substantially be changed. Therefore, no impact on the site's topography is anticipated.

#### **4.1.2 Soils**

Soils will be disturbed during the construction of project elements. The extent of soil erosion will be minimal, not only due to the nature of the soils, but also because the project is designed to conform to the existing topography without appreciably altering drainage patterns.

#### **4.1.3 Geology Setting, Mineral, and Paleontological Resources**

No mining is proposed as a part of this project, so no impact to the geological or mineral resources is contemplated.

### **4.2 Water Resources**

#### **4.2.1 Groundwater and Surface Water**

As described under "4.1.2 Soils previously, no impact on drainage is anticipated. Due to the quantity and depth of groundwater resources in the immediate area, no appreciable impact on groundwater resources are anticipated. Water demand is also limited by the nature of facilities that are planned for the site, most of which are low-impact outdoor uses.

#### **4.2.3 Floodplains**

There are no floodplains in the immediate area of the proposed project; therefore, there will be no impacts.

#### **4.2.4 Wetlands, Riparian Areas, and Wild and Scenic Rivers**

There are no Wetlands, Riparian Areas, or Wild & Scenic Rivers in the area of the proposed project or nearby; therefore, there will be no impacts.



### **4.3 Air Quality**

#### **4.3.1 Quality/Visibility**

The construction of the project will cause some increase in localized particulate matter that can be mitigated by implementing dust control measures during the construction period(s). The impacts will be short term and minor.

**Mitigation:** Minimize fugitive dust during the construction period by applying water to the ground.

#### **4.3.2 Climate/Meteorology**

The surrounding area's climate and meteorology will not be impacted by the proposed project.

### **4.4 Living Resources**

#### **4.4.1 Vegetation**

Removal of any vegetation is limited to removal of some native grasses. Impacts on vegetation in the area will be minimal.

#### **4.4.2 Wildlife**

No wildlife was observed during site visits; therefore no impact on wildlife is anticipated.

#### **4.4.3 Federally Listed Threatened and Endangered Species**

The biological evaluation showed that the site contains no habitat for the majority of species on the Federal and Navajo lists. Individual species may have slight losses of potential habitat, but due to the proposed projects size and type, the impact will be long-term, but negligible.

#### **4.4.4 Agriculture/Farmland**

No agricultural uses exist on-property and the property is not significant as Prime farmland. There will be no impact.

### **4.5 Cultural Resources**

All but three of the sites on the Deer Point property have been determined to be non-eligible for the Register. However three sites may be eligible: AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62. No impact on Cultural Resources is foreseen if those three sites are avoided during development of the property. Construction specifications shall require that any discovery of artifacts be reported.

## **Mitigations:**

- a. Development of the property shall avoid cultural resource sites AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62.
- b. Construction specifications shall state that: "In the event of a discovery ("discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices), all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified."

## **4.6 Socioeconomic Conditions**

### **4.6.1 Employment and Income**

The proposed project should have a positive impact on employment and income, and will be long-term. There is no negative impact anticipated.

### **4.6.2 Population and Demographic Trends**

No impacts on local population or demographic trends are expected to be generated by this Deer Point property project.

### **4.6.3 Lifestyle and Cultural Values**

No impact on lifestyle or cultural values is expected to be generated by this project.

### **4.6.4 Community Infrastructure**

Improvements will be necessary to Community infrastructure in the area. Electric, telecommunications and roadway access are developed. Water and sewer development are expected to be on-site as a portion of the proposed project's development. These will be new systems and will not impact the Community's existing water and wastewater capacities or systems due to the distance of the Deer Point site from the Community's existing facilities.

## **4.7 Environmental Justice**

The Community is comprised of low-income minority residents. Based on the purpose of the project and the nature of the project, only positive benefits are expected from its implementation. No negative impacts are anticipated.

#### **4.8 Indian Trust Assets**

There are no listed Trust Assets in the area; therefore no impact on trust assets is contemplated.

#### **4.9 Hazardous Materials**

There are no RCRA sites in the vicinity and no toxic substance sites, so there is no impact on the proposed project. The proposed project does not include any elements that would generate hazardous or toxic materials; therefore, there is no impact from implementing the proposed project.

#### **4.10 Resource Use Patterns**

##### **4.10.1 Transportation Corridors**

Since the purpose of the project is primarily to capture existing traffic along Navajo Route 15. The property in an area with similar developments and NR15 is of sufficient capacity to serve the property. No major impact is expected on existing traffic corridors.

##### **4.10.2 Agriculture**

There is no agricultural use existing on the property; therefore, there will be no impact.

##### **4.10.3 Land Use Plans**

The proposed project is a continuation of existing studies that have identified the site and the elements of the project on the site. The proposed project is in conformance with previous planning activities.

#### **4.11 Other Values**

##### **4.11.1 Wilderness Areas**

There are no designated wilderness areas in the vicinity; therefore, there will be no impact.

##### **4.11.2 Noise and Light**

There will be a local increase in noise during the construction period. Ambient noise would return to pre-development levels once construction is complete. The proposed project will have no long-term impact to ambient noise levels.

The installation of security lighting will increase light levels in the long-term; however, the use of "Dark Sky" fixtures and photometric design to minimize light-bleeding will contain light level

increases within the project boundaries, minimizing impacts on surrounding property.

**Mitigation:** On-site lighting shall consist of "Dark Sky" fixtures and shall be designed to minimize any light-bleeding into surrounding properties.

#### **4.11.3 Visual**

The project includes development of a portion of the overall Deer Point property with multiple buildings and parking. The buildings are of moderate scale and all are planned as single-story structures. The area surrounding the development property is similarly developed with relatively dense residential and public buildings, including the aforementioned pavilion and high school. While the Deep Point site lies approximately ¼ mile from these, the Burnside Junction area is emerging as a "core" and additional similar development is expected in the surrounding area. The proposed project may accelerate this, which is not anticipated to have a negative impact on the area.

#### **4.11.4 Public Health & Safety**

No negative impact to the Health & Safety of the Cornfields Community is expected to result from the proposed project.

#### **4.12 Cumulative Impacts**

The impacts resulting from project activities are minor in the form of temporary and highly localized surface disturbances. Cumulative impacts result from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency or person undertakes these actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.

No adverse cumulative impacts are anticipated as a result of the proposed project.

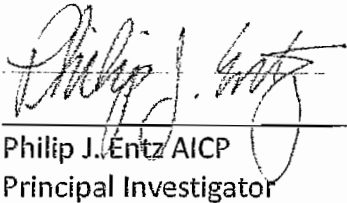
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Antoinette Kurley-Begay Principal Archeologist	Cultural Resource Inventory	Navajo Nation Archeology Department

## 6 – CONSULTATION AND COORDINATION

<b>Name</b>	<b>Title</b>	<b>Company/Agency</b>
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Jimmy Taliman Sr.	Vice President	Cornfields Chapter
Elizabeth Johnson	Chapter Manager	Cornfields Chapter
Cecelia White	Resident	Cornfields Chapter
Joyce Moore	Resident	Cornfields Chapter
Charlie Taliman	Resident	Cornfields Chapter
Gordon Dempsy	Resident	Cornfields Chapter
Bertha Dempsy	Resident	Cornfields Chapter
Kevin S. White	Resident	Cornfields Chapter
Alton Shepherd	Council Delegate	Navajo Nation
Ralph T. Begay	Representative	Ft. Defiance Regional Business Development Office, Division of Economic Development
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Anslem Harney	Representative	CRBDO / FDRBDO

7 - DOCUMENT PREPARER'S SIGNATURE



Philip J. Entz AICP  
Principal Investigator

17 January 2014  
Date

## 8 – REFERENCES

### **LAWS:**

The Clean Air Act as amended (42 USC 7401 et seq.)  
National Historic Preservation Act, as amended (16 USC 470)  
Archaeological and Historic Preservation Act  
Native American Graves Protection and Repatriation Act  
Archaeological Resources Protection Act  
Threatened and Endangered Species Act of 1983, as amended (16 USC 1531 et seq.)  
American Indian Religious Freedom Act of 1978 (42 USC 1996)  
Resource Conservation and Recovery Act of 1976 (43 USC 6901, et seq.)  
Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended (43 USC 9615)  
Clean Water Act of 1977 (33 USC 1251 et seq.)  
Indian Gaming Regulatory Act (25 USC 2701, et seq.)  
Energy Policy Act of 2005

### **EXECUTIVE ORDERS:**

E.O. 12898, Environmental Justice, February 11, 1994  
E.O. 11988, Protection of Floodplains, May 24, 1977  
E.O. 131189, Responsibilities of Federal Agencies to Protect Migratory Bird, January 10, 2001  
E.O. 11990, Protection of Wetlands, May 24, 1977  
E.O. 13007, Indian Sacred Sites, May 24, 1996

### **BIBLIOGRAPHY:**

On-Site Visits: Al Francis BSCM: Arcadis US; Philip J. Entz AICP: UrbanTech Ltd.; Dave Ullrich; ONiell Engineering; Jerry Taliman Sr.; Cornfields Chapter V.P.

Linda Laughing ASO, Navajo Nation Archeology Department. *"A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona: NNAD 09-332"*. October 5, 2010.

Jones & Stokes. *Cornfields Chapter: Community Land Use Plan 2005*. April 29, 2005

GrantExperts. *Strategic Planning: Cornfields Chapter: Among the Rabbit Brush*. 8/27/11 Workshop/Visioning

Southwest Business Development Consultants. *Cornfields 4 Commercial Sites Economic Feasibility Study*. June 2013

Klara Kelley and Harris Francis. *Bibliography for Navajo Land Trading Posts*. Updated Jan. 1, 2010.

David Mikesic & Daniela Roth. *Navajo Nation Endangered Species List*. Version 3.08; August 2008

U.S. Fish & Wildlife; "National Wetlands Inventory; Custom Map".  
<http://www.fws.gov/wetlands/Data/Mapper.html>; 6/10/13

EPA Pacific Southwest Region 9. "24-Hour Particulate Matter (24-Hour PM-2.5) Attainment Designations". [http://www.epa.gov/region09/air/maps/r9\\_pm25.html](http://www.epa.gov/region09/air/maps/r9_pm25.html). 6/10/13

MVD: Arizona Department of Transportation. "Airport Development ~ Airports".  
[http://www.azdot.gov/MPD/Airport\\_Development/airports/airports\\_list.asp?FAA=85V](http://www.azdot.gov/MPD/Airport_Development/airports/airports_list.asp?FAA=85V).  
6/10/13

The University of Arizona, College of Agriculture and Life Sciences. "Upper Colorado River Basin". [ag.arizona.edu/azaqua/watershed/uprcolo.html](http://ag.arizona.edu/azaqua/watershed/uprcolo.html). 6/10/13

EnviroMapper for Envirofacts | US EPA. "Custom Site Maps for: (1.) Air, (2.) Water, (3.) Waste, (4.) land, (5.) Toxins and (6.) Radiation". [www.epa.gov/emefdata/em4ef.html](http://www.epa.gov/emefdata/em4ef.html). 6/10/13

Arizona Department of Environmental Quality. "Custom Site Maps for: (1.) Hydrography, (2.) Water Quality, (3.) Waste Programs [Brownfields, etc.] and (4.) Air Quality".  
[gisweb.azdeq.gov/arcgis/emapsp/Topic=places](http://gisweb.azdeq.gov/arcgis/emapsp/Topic=places). 6/10/13

NOAA Office of Ocean and Coastal Resource Management. "My State" [note: Arizona is not listed]. [coastalmanagement.noaa.gov/mystate/welcome.html](http://coastalmanagement.noaa.gov/mystate/welcome.html). 6/10/13

National Wild and Scenic Rivers System. "Fossil Creek" and "Verde River".  
<http://www.rivers.gov/arizona.php>. 6/10/13

The University of Arizona, College of Agriculture and Life Sciences. "Little Colorado River Basin". [ag.arizona.edu/azaqua/watershed/ltlcolo.html](http://ag.arizona.edu/azaqua/watershed/ltlcolo.html). 6/10/13

The University of Arizona, College of Agriculture and Life Sciences. "Arizona Watershed Information". [ag.arizona.edu/azaqua/watershed/water.html](http://ag.arizona.edu/azaqua/watershed/water.html). 6/10/13

SDWIS Search | Envirofacts | US EPA. "Safe Drinking Water Information System; Apache County". [oaspub.epa.gov/enviro/sdw\\_query\\_v2.get\\_list?](http://oaspub.epa.gov/enviro/sdw_query_v2.get_list?). 6/10/13

Sole Source Aquifer: Ground Water | Region 9: Water | US EPA. "Ground Water; Sole Source Aquifers". [www.epa.gov/region9/water/groundwater/ssa.html](http://www.epa.gov/region9/water/groundwater/ssa.html). 6/10/13

U.S. Fish & Wildlife. "Apache County Endangered Species List; 1/31/13".  
[www.fws.gov/southwest/es/arizona/Documents/CountyLists\\_Apache.pdf](http://www.fws.gov/southwest/es/arizona/Documents/CountyLists_Apache.pdf) (Downloaded 6/10/13)



EPA Pacific Southwest Region 9. "Air Quality Analysis: Sulfur Dioxide (SO<sub>2</sub>) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_so2.html](http://www.epa.gov/region09/air/maps/r9_so2.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Air Quality Analysis: Ozone (O<sub>3</sub>) Attainment Designations in Region 9 (1-hour Standard)". [www.epa.gov/region09/air/maps/r9\\_o3.html](http://www.epa.gov/region09/air/maps/r9_o3.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Ozone (O<sub>3</sub>) Attainment Designations in Region 9 (8-hour 2008 NAAQS)". [www.epa.gov/region09/air/maps/r9\\_o38hr.html](http://www.epa.gov/region09/air/maps/r9_o38hr.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Carbon Monoxide (CO) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_co.html](http://www.epa.gov/region09/air/maps/r9_co.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: 24-Hour Particulate Matter (24-Hour PM-2.5) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_pm25.html](http://www.epa.gov/region09/air/maps/r9_pm25.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Particulate Matter (PM-10) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_pm10.html](http://www.epa.gov/region09/air/maps/r9_pm10.html). 6/10/13

EPA Pacific Southwest Region 9. "Air Quality Analysis: Nitrogen Dioxide (NO<sub>2</sub>) Attainment Designations in Region 9". [www.epa.gov/region09/air/maps/r9\\_no2.html](http://www.epa.gov/region09/air/maps/r9_no2.html). 6/10/13

RCRAInfo Search Results | Envirofacts | US EPA. "RCRA Custom Search by Zip Code 86505: Enforcement Facilities, Hazardous Waste Data". [iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac\\_search](http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search). 6/10/13 (database dated 5/13/13)

Francis, Al. Arcadis-US. "Cornfields Chapter I Economic Development Study; Draft Utility Section: June 14, 2013".

U.S. Census Bureau; American Factfinder. Cornfield CDP Arizona: DP03 – Selected Economic Characteristics. 2007-2011 5-year estimates.

U.S. Census Bureau; American Factfinder. Cornfield CDP Arizona: DP01 - Profile of General Population and Housing Characteristics: 2010

Cornfields Chapter Website at <http://cornfields.navajochapters.org/>

USDA, Natural Resources Conservation Service. *Soil Survey of Fort Defiance Area, Parts of Apache and Navajo Counties, Arizona, and McKinley and San Juan Counties, New Mexico.* (Sheets 51 and 52 of 112). 2008

Federal Emergency Management Agency, 1988. Flood Insurance Rate Map, Maricopa County,

Arizona Unincorporated Areas. Panel 2595 of 4350, Map Number 04013C2595D.

Cooley, M.E. 1967. Geologic Map of Arizona. Arizona Bureau of Geology and Mineral Technology.

Brown, David E., ed. 1994. Biotic Communities: Southwestern United States and Northwestern New Mexico. Salt Lake City: University of Utah Press.

Arizona Geological Services. Geologic Map of Arizona. <http://services.usgin.org/azgs/geologic-map-arizona.htm>

Appendix A  
Property Survey

Registered Land Surveyor  
Arizona Certification No. 14667  
Post Office Box 3334  
Gallup, New Mexico 87301

## Appendix B

# Development Plan

HARDWARE  
12,500 SF

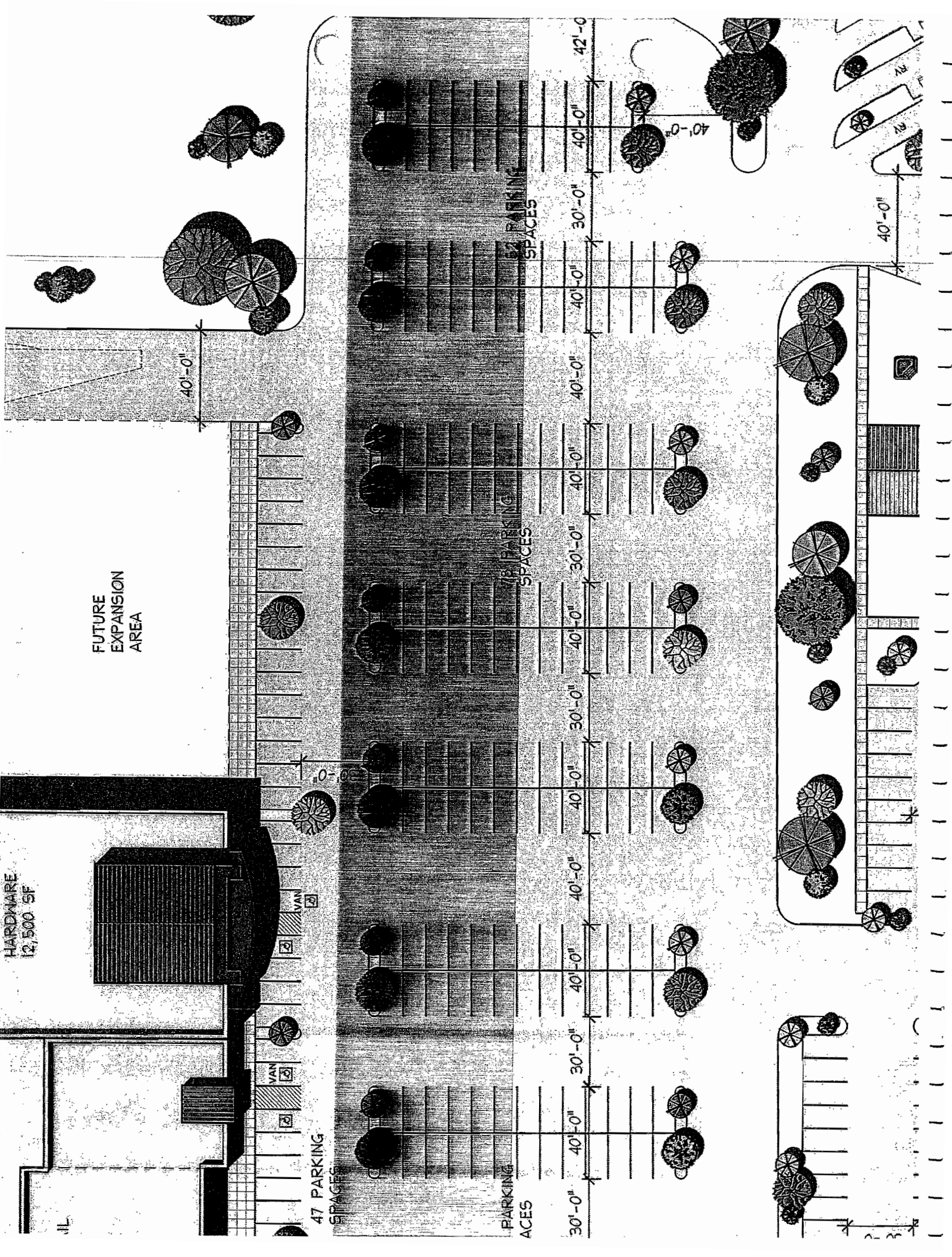
FUTURE  
EXPANSION  
AREA

47 PARKING  
SPACES

PARKING  
ACES

48 PARKING  
SPACES

52 PARKING  
SPACES



Appendix C  
Apache County USFWS Species

# Apache County

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Apache (Arizona) trout	<i>Oncorhynchus gilae apache</i>	Threatened	Yellowish to yellow-olive cutthroat-like trout with large dark spots on body. Dorsal, anal, and caudal fins edged with white. No red lateral band.	Apache, Coconino, Gila, Graham, Greenlee, Navajo	> 5,000 ft	Streams and rivers generally above 6,000 ft. elevation with adequate stream flow and shading; temperatures below 77 degrees F; and substrate composed of boulders, rocks, gravel and some sand and silt.	Presently restricted to drainages in the White Mountains. Hybridization with introduced trout has complicated efforts to maintain the genetic purity of some populations. Special regulations (4d Rule) allow Arizona to manage the species as a sport fish (40 FR 29863).
Black-footed ferret	<i>Mustela nigripes</i>	Endangered	Weasel-like, yellow buff coloration with black on feet, tail tip, and eye mask. It has a blunt light colored nose and is 15-18 inches long and tail length is 5-6 inches.	Apache, Coconino, Navajo, Yavapai	< 10,500 ft	Grassland plains generally found in association with prairie dogs.	Unsurveyed prairie dog towns may be occupied by ferrets or may be appropriate for future reintroduction efforts. The Service developed guidelines for surveying prairie dog towns which are available upon request. No wild populations of this species are currently known to exist in Arizona. Reintroduction population exists in Aubrey Valley (Coconino County), Arizona.
California condor	<i>Gymnogyps californianus</i>	Endangered	Very large vulture (47 in., wingspan to 9 1/2 ft, weight to 22 lbs); adult plumage blackish, immature more brownish; adult wing linings white, immature mottled; head and upper parts of neck bare; yellow-orange in adults, grayish in mature.	Apache, Coconino, Mohave, Navajo, Yavapai	Varies	High desert canyons and plateaus.	Recovery program has reintroduced condors to Northern Arizona, with the first release (6 birds) in December 1996. The release site is located at the Vermillion Cliffs (Coconino County), with an experimental, nonessential area designated for most of Northern Arizona and Southern Utah. The area in Arizona is within a polygon formed by Hwy 191, Interstate 40, and Hwy 93, and extends north of the Arizona-Utah and Nevada borders. Breeding is documented in Arizona.



COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Chiricahua leopard frog	<i>Lithobates chiricahuensis</i>	Threatened	Cream colored tubercles (spots) on a dark background on the rear of the thigh, dorsolateral folds that are interrupted and deflected medially, and a call given out of water distinguish this spotted frog from other leopard frogs.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Navajo, Pima, Santa Cruz, Yavapai	3,281-8,890 ft	Restricted to springs, livestock tanks, and streams in upper portion of watersheds that are free from nonnative predators or where marginal habitat for nonnative predators exists.	Critical habitat is designated for 10,346 acres in Apache, Cochise, Gila, Graham, Greenlee, Pima, Santa Cruz, and Yavapai counties in Arizona; and Catron, Hidalgo, Grant, Sierra, and Socorro counties in New Mexico (77 FR 16324).
Little Colorado spinedace	<i>Lepidomeda vittata</i>	Threatened	Small (<4 inches long) silvery minnow.	Apache, Coconino, Navajo	4,000-8,000 ft	Moderate to small streams; found in pools and riffles with water flowing over fine gravel and silt substrate.	Critical habitat includes 18 miles of East Clear Creek, 8 miles of Chevelon Creek, and 5 miles of Nutricio Creek (52 FR 35034).
Loach minnow	<i>Tiaroga cobitis</i>	Endangered	Small (<3 inches) slender, elongated fish, olive colored with dirty white spots at the base of the dorsal and caudal fins. Breeding males vivid red on mouth and base of fins.	Apache, Cochise, Gila, Graham, Greenlee, Navajo, Pinal, Yavapai	< 8,000 ft	Benthic species of small to large perennial streams with swift shallow water over cobble and gravel. Recurrent flooding and natural hydrograph important.	Presently found in Aravaipa Creek, Deer Creek, Turkey Creek, Blue River, Campbell Blue Creek, Little Blue Creek, San Francisco River, Eagle Creek, North Fork of the East Fork Black River, Boneyard Creek, and White River and East Fork White River in Arizona, and Dry Blue Creek, Pace Creek, Frieborn Creek, the San Francisco River, Tularosa River, Negrito Creek, Whitewater Creek, the East, Middle, and West Forks of the Gila River, mainstem upper Gila River, Bear Creek and Mangas Creek in New Mexico.  Populations have been recently reintroduced in Hot Springs and Redfield canyons in Cochise and Graham counties; Fossil Creek in Gila County; and Bonita Creek in Graham County Arizona. Critical habitat has been designated in Apache, Cochise, Gila, Graham, Greenlee, Pinal, and Yavapai counties, Arizona, as well as in Catron, Grant, and Hidalgo counties in New Mexico (77 FR 10810).

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Mexican gray wolf	<i>Canis lupus baileyi</i>	Endangered	Large dog-like carnivore. Head and feet are large in proportion to rest of body. Coat color varies with mix of brown, rust, black, gray, and white. Distinct white lip line around mouth. Adults weigh between 60-90 pounds.	Apache, Gila, Greenlee, Navajo	4,000-12,000 ft	Chaparral, woodland, and forested areas. May cross desert areas.	In January 1998, Mexican gray wolves were reintroduced as an experimental nonessential section 10(j) population under a program to re-establish the subspecies to a portion of its historical range (63 FR 1752). Wolves are released within the experimental boundary into a designated area known as the "Blue Range Wolf Recovery Area" (BRWRA) located in the Apache National Forest in Apache and Greenlee counties. Mexican gray wolves found outside of the experimental nonessential boundary are considered endangered. In 2002, the White Mountain Apache tribe (WMAT) became one of the lead agencies for the reintroduction and allowed wolves on their lands. This effectively expanded the experimental nonessential population into Apache, Gila, and Navajo counties on WMAT lands.
Mexican spotted owl	<i>Strix occidentalis lucida</i>	Threatened	Medium sized with dark eyes and no ear tufts. Brownish and heavily spotted with white or beige.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai	4,100-9,000 ft	Nests in canyons and dense forests with multi-layered foliage structure.	Generally nest in older forests of mixed conifer or ponderosa pine/gambel oak type, in canyons, and use variety of habitat for foraging. Sites with cool microclimates appear to be of importance or are preferred. Critical habitat was finalized on August 31, 2004 (69 FR 53182) in Arizona in Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Navajo, Pima, Pinal, Santa Cruz, and Yavapai counties.
Navajo sedge	<i>Carex specuicola</i>	Threatened	Perennial forb with triangular stems, elongated rhizomes. Flower: white June and July.	Apache, Coconino, Navajo	5,700-6,000 ft	Silty soils at shady seeps and springs.	Designated critical habitat is on the Navajo Nation near Inscription House Ruins. Found at seep springs on vertical cliffs of pink-red Navajo sandstone (50 FR 19370).

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Southwestern willow flycatcher	<i>Empidonax traillii eximius</i>	Endangered	Small passerine (about 6 inches) grayish-green back and wings, whitish throat, light olive-gray breast and pale yellowish belly. Two wingbars visible. Eye-ring faint or absent.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 8,500 ft	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.	Riparian-obligate bird that occupies migratory/breeding habitat from late April-Sept. Critical habitat was finalized on October 19, 2005 in Apache, Cochise, Gila, Graham, Greenlee, Maricopa, Mohave, Pima, Pinal, and Yavapai counties (70 FR 60886). Revised critical habitat was proposed August 15, 2011 (76 FR 50542) and includes river segments in counties currently designated plus those in La Paz, Santa Cruz, and Yuma counties. The 2005 critical habitat designation remains in effect until the current proposal is finalized. Training seminar/permits required for those conducting call playback surveys.
Three Forks springsnail	<i>Pyrgulopsis trivialis</i>	Endangered	Minute hydrobiid snail; shell ovate to narrowly conic; height 0.05 -0.17 inches; whorls 2.5-5.0	Apache	8,000-8,500 ft	Rheocrene springs, seeps, marshes, spring pools, outflows and diverse lotic waters.	Distribution limited to Boneyard Creek and Boneyard Bog Spring complexes in the North Fork of the East Fork Black River watershed. Critical habitat is designated for 17.2 acres (77 FR 23060).
Zuni bluehead sucker	<i>Catostomus discorobolus yarrowi</i>	Proposed Endangered	Fusiform, slender, with a terminal mouth. Bluish head, silvery tan to dark green above, silvery to yellowish or dirty-white below. Sexually mature bluehead suckers range between 3.5 to 8 inches in length.	Apache	> 6,000 ft	Small streams in low-velocity, moderate deep pools, and pool-runs with seasonal dense algae. Young prefer quieter shallow areas near shoreline.	Found in two drainages on the Navajo Nation (Kinlichee Creek [Little Colorado River] and Canyon de Chelly [San Juan River]) in Arizona and in the Zuni River in New Mexico on lands of the Zuni Pueblo, Forest Service, State of New Mexico, and private lands. Critical habitat is proposed for 475.3 km (291.3 mi) of stream in Apache County, Arizona and Cibola, McKinley, and San Juan counties, New Mexico. Conservation actions for the subspecies are included in the Zuni Bluehead Sucker Recovery Plan (New Mexico Department of Game and Fish) and the Arizona Statewide Conservation Program for Six Native Fish (Arizona Game and Fish Department).

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Zuni fleabane	<i>Erigeron rhizomatus</i>	Threatened	Herbaceous perennial that grows in clusters of numerous erect unbranched stems up to 2.0 feet tall. Flower heads solitary; pale blue ray flowers and yellow disk flowers.	Apache	7,300-8,000 ft	Selenium-rich red or gray detrital clay soils derived from the Chinle and Baca formations.	Only one Arizona location; other 28 sites in Sawtooth Mountains and northwestern part of the Datil Mountains in Catron County, New Mexico. Two sites also on the northwest side of the Zuni Mountains in McKinley County, New Mexico.
New Mexico meadow jumping mouse	<i>Zapus hudsonius luteus</i>	Candidate	Small rodent with extremely long tail and long hind feet. Pelage is coarse with a broad dorsal band of brown or yellowish brown darkened with brownish black hairs; sides paler; under parts white or sometimes suffused with yellowish color. Back of the forefeet and hind feet are grayish white; tail is sparsely haired and distinctly bicolor (dark brown above and yellowish white below). The head is small, narrow, and relatively high crowned. The nose is short and pointed. They are the only mammal with 18 teeth.	Apache, Greenlee	< 8,000 ft	Nests in dry soils but also uses moist, streamside, dense riparian/wetland vegetation.	The New Mexican jumping mouse is diminished to 6 populations in the White Mountains, Arizona. A inventory and status assessment throughout its historical range in Arizona is currently being conducted.
Northern Mexican Gartersnake	<i>Thamnophis eques megalops</i>	Candidate	Background color ranges from olive, olive-brown, to olive-gray. Body has three yellow or light colored stripes running down the length of the body, darker towards tail. Species distinguished from other native gartersnakes by the lateral stripes reaching the 3rd and 4th scale rows. Paired black spots extend along dorsolateral fields.	Apache, Cochise, Coconino, Gila, Graham, Navajo, Pima, Pinal, Santa Cruz, Yavapai	130-8,500 ft	Cienegas, stock tanks, large-river riparian woodlands and forests, streamside gallery forests.	Core population areas in the U.S. include mid/upper Verde River drainage, mid/lower Tonto Creek, and the San Rafael Valley and surrounding area. Status on tribal lands unknown. Distributed south into Mexico along the Sierra Madre Occidental and Mexican Plateau. Strongly associated with the presence of a native prey base including leopard frogs and native fish.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Roundtail chub	<i>Gila robusta</i>	Candidate	Member of the minnow family Cyprinidae and characterized by streamlined body shape. Color usually olive gray with silvery sides and a white belly. Breeding males develop red or orange coloration on the lower half of the cheeks and on the bases of paired fins. Individuals may reach 49.0 cm (19.3 in) but usually average 25-30 cm (9.8 - 11.8 in).	Apache, Coconino, Gila, Graham, La Paz, Maricopa, Mohave, Navajo, Pinal, Yavapai	1,000-7,500 ft.	Cool to warm waters of rivers and streams, often occupy the deepest pools and eddies of large streams.	Historical range of roundtail chub included both the upper and lower Colorado River basins. A 2003 status review determined that the lower Colorado River basin roundtail chub population segment (Arizona and New Mexico) qualifies as a distinct vertebrate population segment (DPS). Populations in the Little Colorado, Bill Williams, and Gila River basins are considered candidate species.
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Candidate	Medium-sized bird with a slender, long-tailed profile, slightly down-curved bill that is blue-black with yellow on the lower half. Plumage is grayish-brown above and white below, with rufous primary flight feathers.	Apache, Cochise, Coconino, Gila, Graham, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 6,500 ft	Large blocks of riparian woodlands (cottonwood, willow, or tamarisk galleries).	Neotropical migrant that winters primarily in South America and breeds primarily in the U.S. (but also in southern Canada and northern Mexico). As a migrant it is rarely detected; can occur outside of riparian areas. Cuckoos are found nesting statewide, mostly below 5,000 feet in central, western, and southeastern Arizona. Concern for cuckoos are primarily focused upon alterations to its nestingland foraging habitat. Nesting cuckoos are associated with relatively dense, wooded, streamside riparian habitat, with varying combinations of Fremont cottonwood, willow, velvet ash, Arizona walnut, mesquite, and tamarisk. Some cuckoos have also been detected nesting in velvet mesquite, netleaf hackberry, Arizona sycamore, Arizona alder, and some exotic neighborhood shade trees.
Arizona willow	<i>Salix arizonica</i>	Conservation Agreement	Woody, perennial shrub reaching up to 8.5 feet tall; grows as a prostrate mat to large hedge or thicket plant; has small, egg-shaped leaves; new branches are yellow-green, previous years branches are bright red.	Apache	> 8,000 ft	Unshaded or partially shaded wet meadows, streambeds and cienegas; typically found in or adjacent to perennial water.	Known in the vicinity of Mount Baldy, on the Apache-Sitgreaves National Forest, and private land. Conservation agreement between the Service, Forest Service, and National Park Service finalized in April 1995.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Gooddings onion	<i>Allium gooddingii</i>	Conservation Agreement	Herbaceous perennial plant; broad, flat, rather blunt leaves; flowering stalk 14-18 inches tall, flattened, and narrowly winged toward apex; fruit is broader than long; seeds are short and thick.	Apache, Greenlee, Pima	7,500-11,250 ft	Shaded sites on north-trending drainages, on slopes, or in narrow canyons, within mixed conifer and spruce fir forests.	Known from the White, Santa Catalina, and Chuska Mountains. Also found in New Mexico on the Lincoln and Gila National Forests. A Conservation Agreement between the Service and the Forest Service signed in February 1998.
American peregrine falcon	<i>Falco peregrinus anatum</i>	Delisted	A crow-sized falcon with slate blue-gray on the back and wings, and white on the underside; a black head with vertical "bandit's mask" pattern over the eyes; long pointed wings; and a long wailing call made during breeding. Very adept flyers and hunters, reaching diving speeds of 200 mph.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	3,500-9,000 ft	Areas with rocky, steep cliffs, primarily near water, where prey (primarily shorebirds, songbirds, and waterfowl) concentrations are high. Nests are found on ledges of cliffs, and sometimes on man-made structures such as office towers and bridge abutments.	Species recovered with over 1,650 breeding birds in the US and Canada.
Bald eagle	<i>Haliaeetus leucocephalus</i>	Delisted	Large, adults have white head and tail. Height 28 to 38 inches; wingspan 66 to 96 inches. Juveniles and subadults are dark brown with varying degrees of white mottling on chest, wings, and head.	Apache, Coconino, Gila, Graham, La Paz, Maricopa, Mohave, Pinal, and Yavapai	Varies	Large trees or cliffs near water (reservoirs, rivers, and streams) with abundant prey.	Native and throughout the State of Arizona, the bald eagle is currently not listed under the Endangered Species Act. On September 30, 2010, the U.S. District Court dissolved an injunction that led to the bald eagle in the Sonoran Desert Area of central Arizona being placed on the Endangered Species list in 2008. This determination is presently (January 2011) under judicial consideration. Bald eagles are protected under the Bald and Golden Eagle Protection Act (Eagle Act) and other Federal and state statutes. The word "disturb" under the Eagle Act was recently clarified, as well as the implementation of new regulations requiring permits to incidentally "take" eagles. Retrieve more information on management and life history at <a href="http://SWBEMC.org">http://SWBEMC.org</a> .

Appendix D  
Cultural Resources Clearance

# CULTURAL RESOURCES COMPLIANCE FORM

THE NAVAJO NATION  
HISTORIC PRESERVATION DEPARTMENT  
PO BOX 4950  
WINDOW ROCK, ARIZONA 86515

ROUTING: COPIES TO

AZ  
XX

SHPO  
REAL PROPERTY MGT/330  
NNAD

NNHPD NO. **HPD-10-958**

OTHER PROJECT NO.

NNAD 09-332

PROJECT TITLE: A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona

LEAD AGENCY: BIA/NR

SPONSOR: Elizabeth Johnson, Community Service Coordinator, Cornfields Chapter, PO Box 478, Ganado, Arizona 86505

PROJECT DESCRIPTION: The Cornfields Chapter is proposing to develop a 100-acres of land for a multi-business site leases. Ground disturbing activities include construction new buildings and associated facilities/utilities. Ground disturbance will be intensive and extensive with the use of heavy equipment.

LAND STATUS: Navajo Tribal Trust

CHAPTER: Cornfields

LOCATION: T.27N, R.25E - Sec. 22, 26 & 27; Cornfields Quadrangle, Apache County, Arizona G&SRPM&B

PROJECT ARCHAEOLOGIST: Antoinette Kurley-Begay

NAVAJO ANTIQUITIES PERMIT NO.: NTC

DATE INSPECTED: 08/03/2009 - 08/06/09

DATE OF REPORT: 10/05/10

TOTAL ACREAGE INSPECTED: 118.67-ac

METHOD OF INVESTIGATION: Class III pedestrian inventory with transects spaced 15 m apart.

LIST OF CULTURAL RESOURCES FOUND:

(5) Sites (AZ-P-19-58, AZ-P-19-59, AZ-P-19-60; AZ-P-19-61, AZ-P-19-62); (22) Isolated Occurrences

LIST OF ELIGIBLE PROPERTIES:

(3) Sites (AZ-P-19-59, AZ-P-19-61, AZ-P-19-62)

LIST OF NON-ELIGIBLE PROPERTIES:

(2) Sites (AZ-P-19-58, AZ-P-19-60), (22) IO

LIST OF ARCHAEOLOGICAL RESOURCES:

(3) Sites (AZ-P-19-59, AZ-P-19-61, AZ-P-19-62)

EFFECT/CONDITIONS OF COMPLIANCE: No Historic Properties will be affected with the following conditions:

Sites AZ-P-19-59, AZ-P-19-61, AZ-P-19-62:

1. Site boundaries will be flagged by a qualified archaeologist prior to any ground disturbing activities.
2. A permanent fence will be erected around the sites to deter unwanted future impacts.
3. Site boundaries will be avoided by all construction activities by a minimum of 50-ft.

Site AZ-P-19-60:

The former patient and medicine man of the ceremony were found and they waive any concerns.

Site AZ-P-19-58: No further work is required.

In the event of a discovery ("discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices), all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 871-7148.

FORM PREPARED BY: Tamara Billie

FINALIZED: November 3, 2010

Notification to

Proceed Recommended:

Yes ☒ No ☐

Conditions:

Yes ☒ No ☐

Jan P. Downer, Navajo Nation  
Historic Preservation Officer

Date

Navajo Region Approval:

Yes ☐ No ☐

Regional Director

Date

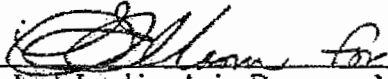
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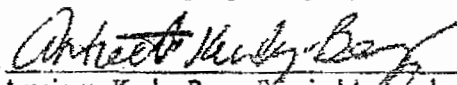
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ARCHAEOLOGICAL INVENTORY REPORT DOCUMENTATION PAGE (HPD JAN/91)

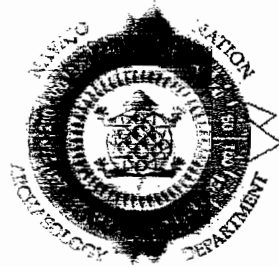
1. HPD REPORT NO.		2. (FOR HPD USE ONLY)	3. RECIPIENTS ACCESSION NO.
4. TITLE OF REPORT: A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona		5. FIELDWORK DATES August 3 and 6, 2009	
AUTHOR: Antoinette Kurley-Begay		6. REPORT DATE October 5, 2010	
7. CONSULTANT NAME AND ADDRESS: Gen'l Charge: Linda Laughing, ASO Org. Name: Navajo Nation Archaeology Department Org. Address: P. O. Box 689 Window Rock, Arizona 86515 Phone: (928) 871-6540		8. Permit No. NTC	
		9. Consultant Report No. NNAD 09-332	
10. SPONSOR NAME AND ADDRESS: Ind. Responsible: Elizabeth Johnson, Community Services Coordinator Org. Name: Cornfields Chapter Org. Address: P.O. Box 478 Ganado, Arizona 86505 Mobile Phone: (928) 755-5911		11. SPONSOR PROJECT NO. N/A	
		12. AREA OF EFFECT: 100.00 acres (30.49 ha) AREA SURVEYED: 118.67 acres (47.49 ha)	
13. LOCATION (MAP ATTACHED):			
a. Chapter: Cornfields		e. Land Status: Tribal Trust	
b. Agency: Fort Defiance		f. UTM Center: See Report	
c. County: Apache		g. Area: T.27N, R.25E, SE ¼, Sec. 22; and NW ¼, Sec. 26; and NE ¼, Sec. 27; G&SRPM (Derived from survey plat)	
d. State: Arizona		h. 7.5' Map Name(s): Cornfields, Ariz., 1972, 7.5' series	
14. REPORT /X/ OR SUMMARY (REPORT ATTACHED) / /			
a. Description of Undertaking: The Cornfields Chapter proposes to utilize the parcel of land for a proposed multi-business site lease. The parcel of land will be used to construct business buildings and associated facilities within the 100-acre business site. The area of potential effect within this parcel of land measures 993.30 feet (302.84 m) by 1,500 feet (457.32 m) by 1,452 feet (442.68 m) by 1,500 feet (457.32 m). Ground disturbance, both surface and subsurface, will be extensive. The lead federal agency for this proposed undertaking is the Bureau of Indian Affairs.			
b. Existing Data Review: Prior to the fieldwork, a records check using both NNAD Shiprock office files and the Navajo Nation Historic Preservation Department (NNHPD) files in Window Rock, Arizona was conducted to identify previous projects and recorded sites within a 500-foot (152-m) radius of the project area. These two sets of files contained one previously recorded sites located within a 500-foot radius of the project area. This project is NNHPD 03-1036 which entailed the inventory on Navajo Route 15.			
c. Area Environmental & Cultural Setting: The project is located in the Cornfields Chapter. The nearest water source is the Pueblo Colorado Wash located to the east of the project area at a distance of about 1.89 miles (9,979 feet; 3042.38 m). The elevation of the project area is 6264 feet (1910 m). Vegetation consists of snakeweed, rabbitbrush, Russian thistle, Indian ricegrass, narrowleaf yucca, and prickly pear cactus. Soils in the project area consist of aeolian sand and silt. The cultural setting is rural with development consisting of the scattered homes, fallow cornfields, Navajo Route 15, power lines, and water lines.			
d. Field Methods: See Supplemental Sheet			
15. CULTURAL RESOURCE FINDINGS:			
a. Location/Identification of Each Resource: Five archaeological sites; AZ-P-19-58, AZ-P-19-59, AZ-P-19-60, AZ-P-19-61, and AZ-P-19-62, and 22 isolated occurrences were identified during the inventory.			
b. Evaluation of Significance of Each Resource (above): Three of the five sites appear to be Register-eligible properties. These sites are AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62. The remaining two sites do not appear to be Register-eligible properties.			
16. MANAGEMENT SUMMARY (RECOMMENDATIONS): A determination of no historic properties affected is recommended for the project undertaking provided that the potential Register-eligible properties are avoided.			

17. CERTIFICATION: SIGNATURE:  DATE: 10/5/10  
General Charge Name: Linda Laughing, Acting Department Manager

SIGNATURE:  DATE: October 5, 2010  
Direct Charge: Antoinette Kurley-Begay, Principal Archaeologist

**A Cultural Resource Inventory of Proposed Multipurpose Tract A  
for the Cornfields Chapter, Apache County, Arizona**

**DINAD 09-832**



**Prepared by  
Antoinette Kurley-Begay**

**Submitted by  
Linda Laughing, ASO, Acting Department Manager  
Navajo Nation Archaeology Department  
P.O. Box 689  
Window Rock, Arizona 86515**

**Tribal Permit No. NTC**

**Submitted to  
Alan S. Downer, Ph.D., Department Manager III  
Navajo Nation Historic Preservation Department  
P.O. Box 4950  
Window Rock, Arizona 86515**

**Prepared for  
Elizabeth Johnson, Community Services Coordinator  
Cornfields Chapter  
P.O. Box 478  
Tanado, Arizona 86505**

**Submitted October 5, 2010**

## Abstract

The following report is submitted to the Navajo Nation Historic Preservation Department (NNHPD) as part of the Section 106 archaeological compliance process. The report, entitled *A Cultural Resource Inventory of Proposed Multipurpose Tract A for the Cornfields Chapter, Apache County, Arizona* (NNAD 09-332) details the results of the project. The archaeological inventory was conducted for the Cornfields Chapter. Under this project, the Cornfields Chapter proposes to develop the 100-acre tract of land for businesses and facilities for the Cornfields community in Cornfields, Apache County, Arizona. The types of ground disturbances expected will include blading and/or earthmoving activities to level the land and construction of buildings and facilities such as water lines, power lines, sewage systems, roads, parking lots, and telephone lines. Vehicular traffic will be required throughout the 100-acre tract. Access to the proposed project locations will occur from an existing two-track dirt road and from Navajo Route 15 which is located to the west of the project area. The project area is located on Navajo Tribal Trust lands. The legal descriptions for the project areas are Townships 27 North, Range 25 East; G&SRPM. The project area can be found on the Cornfields, Ariz., 1972, 7.5-minute series USGS map. The total number of acres inventoried under this project is approximately 118.67 acres (47.49 ha). In all, 5 new archaeological sites and 22 isolated occurrences were identified during the course of the inventory. Three of the five sites (AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62) are prehistoric Anasazi specialized activity areas affiliated with a Pueblo I to Pueblo II temporal component. The fourth site, AZ-P-19-58, contains the logs of a dismantled hogan which have been placed in a secondary context. The fifth site, AZ-P-19-60, contains the remains of an Enemy Way ceremonial area. The isolated occurrences consist predominately of isolated prehistoric ceramic and lithic artifacts, and in one case, a recent Navajo trash dump. The three Anasazi sites, AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62 are evaluated as potentially eligible for nomination to the National Register of Historic Places. Although, one of the two Navajo sites (AZ-P-19-60) was affiliated with a Navajo ceremony, information obtained during this project indicated that this site is not considered sacred or of religious importance. Further, AZ-P-19-60 and AZ-P-19-58 are not considered to be potentially Register-eligible properties. A determination of no historic properties affected is recommended for the proposed development activities to occur in the areas containing the three sites that appear to be Register-eligible properties provided the stipulations addressed in the report concerning these resources are adhered to. Finally, a determination of no historic properties affected is recommended for the project areas containing the remaining two sites (AZ-P-19-58 and AZ-P-19-60) and the isolated occurrences without further stipulations.

## TABLE OF CONTENTS

Abstract .....	iii
LIST OF FIGURES .....	vii
LIST OF TABLES .....	ix
Introduction.....	1
Description of Undertaking .....	1
Location.....	1
Area Environmental and Cultural Setting.....	4
Existing Data Review.....	4
Field Methods.....	4
Cultural Resource Findings .....	5
Archaeological Sites.....	5
Isolated Occurrences.....	14
Evaluation of Significance.....	14
Archaeological Sites.....	15
Isolated Occurrences.....	16
Recommendations .....	16
Archaeological Sites.....	16
Isolated Occurrences.....	17
Summary .....	17
References Cited .....	18

### APPENDIX A: NNAD Site Survey Management Form and USGS Map Locations

## LIST OF FIGURES

Figure 1. Vicinity map showing the general project area. Indian County Regional Map (NNAD 09-332) .....	2
Figure 2. Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, G&SRPM (NNAD 09-332) .....	3
Figure 3. General plan map of Site AZ-P-19-58 (NNAD 09-332) .....	6
Figure 4. General plan map of Site AZ-P-19-59 (NNAD 09-332) .....	8
Figure 5. General plan map of Site AZ-P-19-60 (NNAD 09-332) .....	9
Figure 6. General plan map of Site AZ-P-19-61 (NNAD 09-332) .....	11
Figure 7. General plan map of Site AZ-P-19-62 (NNAD 09-332) .....	13

## LIST OF TABLES

Table 1. Legal Descriptions and UTM Coordinates for the Project Area (Zone 12) .....	1
Table 2. Isolated Occurrences Encountered During the Inventory .....	14

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## Introduction

On August 3 and 6, 2009, archaeologists with the Navajo Nation Archaeology Department (NNAD), conducted a cultural resource inventory of a 100-acre tract of land for the proposed multipurpose business development activities. The project area is located in the vicinity of Cornfields, Apache County, Arizona. The Cornfields Chapter proposes to develop the 100-acre tract of land for businesses to serve the Navajo community of Cornfields and the surrounding area. Five archaeological sites and 22 isolated occurrences were identified as a result of the archaeological inventory. The purpose of the archaeological inventory was to locate, evaluate, and make recommendations regarding cultural resources in within the project area in accordance with the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act (ARPA), and the American Indian Religious Freedom Act (AIRFA). Detailed information regarding the project area, the identified cultural resources, and the recommendations concerning the identified cultural resources are summarized in this report.

The archaeological inventory was requested by Elizabeth Johnson, Cornfields Chapter Community Services Coordinator. The NNAD performs archaeological inventories on Navajo Nation land under the authorization of the Navajo Nation Cultural Resources Protection Act (CMY-19-88). The lead federal agency for the undertaking is the Bureau of Indian Affairs (BIA).

## Description of Undertaking

The Cornfields Chapter proposes to develop a 100-acre parcel of land for business and facilities which will serve the Navajo people within the Cornfields Chapter and surrounding area. Construction activities associated with the development activities will entail blading and leveling the ground surface with heavy equipment, construction of buildings and associated facilities, as well as the placement of underground water/sewage systems and overhead power lines. In addition, parking areas and road will be constructed within the 100-acre tract of land. Surface and subsurface disturbance will be extensive within the 100-acre area of effect.

The 100-acre tract of land or area of effect measures 993.30 feet (302.84 m) by 1,500 feet (457.32 m) by 1,452 feet (442.68 m) by 1,500 feet (457.32 m). The total area of potential effect for the project area is 100.00 acres (40.50 ha).

## Location

The project area is located on Navajo Tribal Trust land within the Cornfields Chapter, in Apache County, Arizona. The project area is under the jurisdiction of the Fort Defiance Agency of the BIA.

The project areas can be located on the Cornfields, Ariz., 1972, 7.5-minute series USGS quadrangle map. The legal descriptions for the project areas are: Township 27 North, Range 25 East; G&SRPM. Table 1 provides legal descriptions and UTM coordinates for the project area. Figure 1 provides an overview of the general project areas. Figure 2 shows the specific project area.

Table 1. Legal Descriptions and UTM Coordinates for the Project Area (Zone 12)

Project Areas	NAD 27 Datum		NAD 83 Datum		Township	Range	Section	Principal Meridian
	Northing	Easting	Northing	Easting				
Northwest Corner	3953644	622105	3953844	622042	27N	25E	22	G&SRPM
Northeast Corner	3953489	622543	3953689	622480	27N	25E	26	G&SRPM
Southwest Corner	3952803	621737	3953003	621674	27N	25E	27	G&SRPM
Southeast Corner	3952617	622169	3952817	622106	27N	25E	27	G&SRPM

Township and Range projected from Ganado, Ariz.-N.Mex., 1984, 1:100,000 scale USGS map.

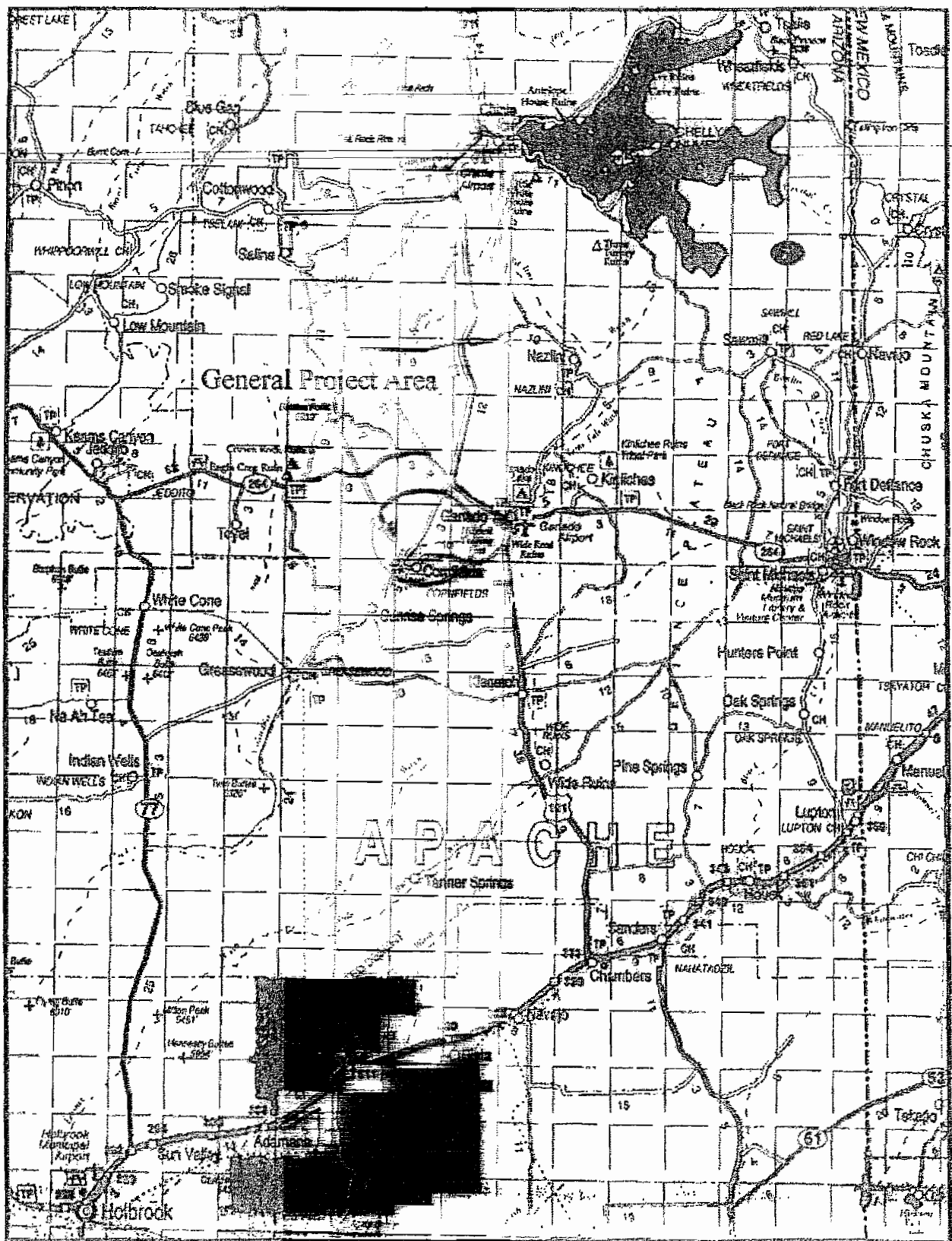


Figure 1. Vicinity map showing the general project area. Indian County Regional Map, n.d., (NNAD 09-332).



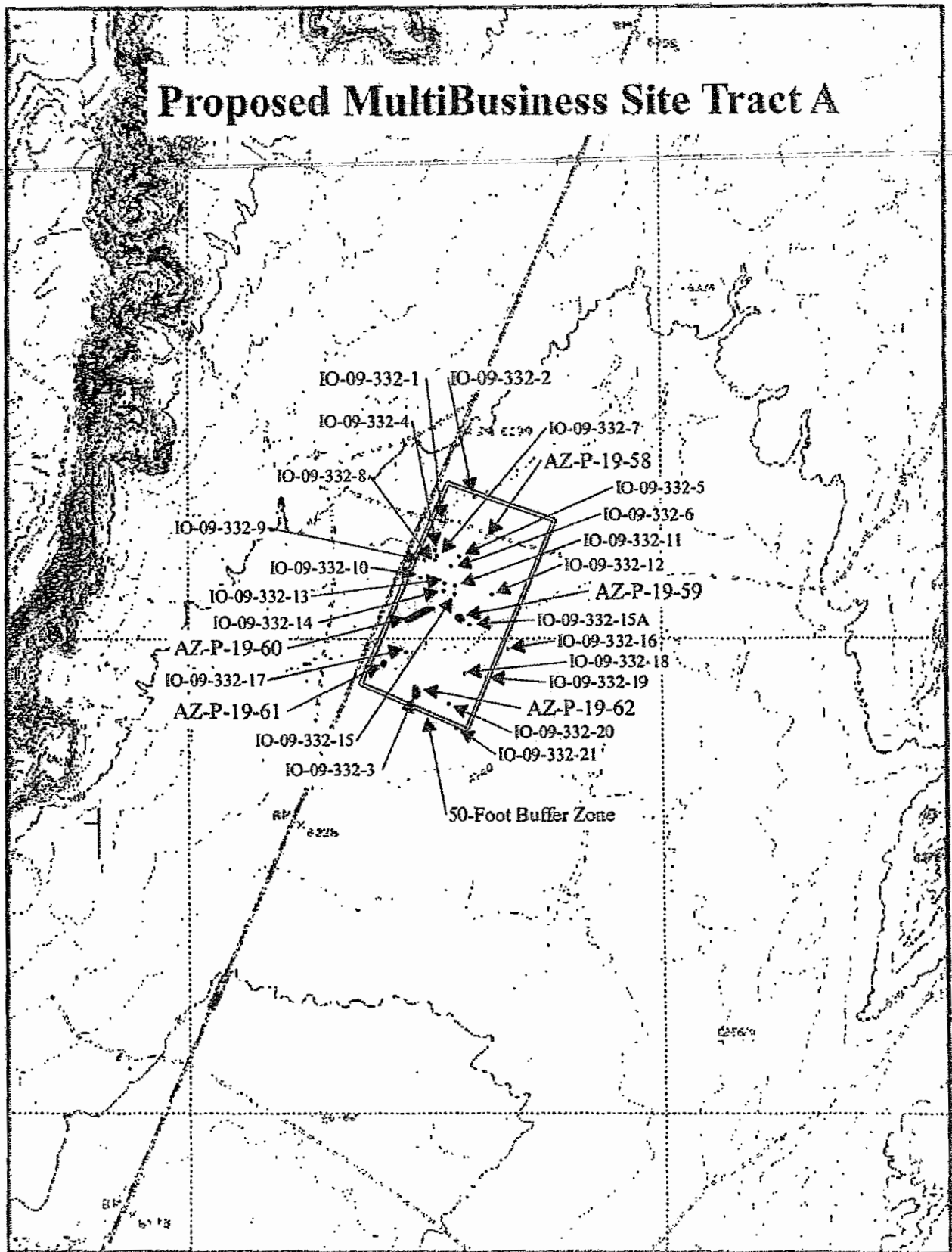


Figure 2. Location map showing project area and identified cultural resources. Cornfields, Ariz., 1972, 7.5' series USGS map; T.27N, R.25E, GSRPM (NNAD 09-332).

## Area Environmental and Cultural Setting

The project area is situated in the south-central portion of the Navajo Reservation and in the east-central portion of Arizona. The project area is situated at elevations ranging from 6250 feet (1905 m) to 6275 feet (1913 m) above sea level. Pueblo Colorado Wash is the main water source in the project area; however, numerous unnamed tributaries, wells, and springs were also noted within the general project area. Geologically, the project area is within an open valley situated between a broad mesa to the west and the Pueblo Colorado Wash to the east. The project area is situated within the Upper Chinle Formation. The soils within the project area consist of aeolian sand and alluvial gravels. The major species noted in the project area are snakeweed, blue grama grass, Russian thistle, prickly pear cactus, muhly, wolfberry, and a piñon tree.

Development near the project area includes fallow cornfields, homesteads, utility services, dirt roads, and Navajo Route 15 located directly west of the project area.

## Existing Data Review

Prior to the fieldwork, a records check using both NNAD Shiprock office files and the Navajo Nation Historic Preservation Department (NNHPD) files in Window Rock, Arizona was conducted to identify previous projects and recorded sites within a 500-foot (152-m) radius of the project area. These two sets of files contained one previously recorded site located within a 500-foot radius of the project area. This project is NNHPD 03-1036 which entailed the inventory on Navajo Route 15.

A check of Van Valkenburgh (1974) indicates that nearest recognized sacred place in the vicinity of the project area is Buell Park (*Tsé zhin bodáo hálizh*—Black Rock in a Blue Area) located approximately 50 miles (31 km) northwest of the project area.

## Field Methods

On August 3 and 6, 2009, NNAD archaeologist Antoinette Kurley-Begay, assisted by Aleda Myerson, Matthew Pettigrew, Alviera Lee, Benson Belone, and Bethany Smith conducted a Class III pedestrian archaeological inventory for the proposed business tract. Prior to the inventory, the archaeologists met with Cornfields Chapter President, Jimmie Taliman, who showed the archaeologists the project area. Although several of the stakes indicating the corners of the project area were not relocated, the NNAD archaeologists had produced data providing the location of the project area in a Geographic Information System (GIS) file. UTM coordinates from the GIS file were compiled using a Garmin Global Positioning System (GPS) unit prior to the field and were utilized to identify the unmarked project corners prior to the inventory.

A total inventory area of 118.67 acres (47.49 ha) of land was examined on the proposed business site. The total inventory area included the 100-acre (40.5-ha) area of effect (right-of-way) with a 50-foot (15.24-m) wide buffer zone located along the entire right-of-way perimeter.

The archaeological Class III pedestrian inventory of the project area was performed by the archaeologists walking a series of parallel linear transects spaced about 7 m (22.96 feet) apart throughout the entire project area. The parallel transects were orientated in east-west directions.

During the course of the inventory, 5 archaeological sites and 22 isolated occurrences (IOs) were identified. Locational information concerning the sites and the IOs were collected using a hand-held GPS. Once in-house, the data obtained with the use of the GPS in the field was downloaded utilizing the GIS ArcView software for map preparation and report presentation. Additionally, this data was also utilized to prepare the archaeological site maps.

Additionally, ethnographic interviews with local Navajo residents and/or chapter personnel were conducted to obtain information on potential traditional cultural properties (ICPs—herb gathering places, blessed and/or sacred places), burials, and archaeological sites in the area. Ethnographic information pertaining to the project area was obtained from local residents, Johnson Kee and Gilbert (last name withheld), and the Cornfields Chapter President Jimmie Taliman, by Mrs. Kurley-Begay. The interviews were conducted in the English languages by the archaeologist.

NNAD Site Survey and Management Forms were filled out upon completion of the fieldwork. Navajo Nation site numbers were assigned to the sites in-house upon completion of the fieldwork.

### Cultural Resource Findings

During the course of the cultural resource inventory 5 archaeological sites and 22 isolated occurrences were identified. Descriptions for these sites are provided in the following sections and completed NNAD Site Survey and Management Forms are contained in Appendix A. The locations of these resources are shown on Figures 3 through 7.

#### Archaeological Sites

A total of five archaeological sites was identified in conjunction with this project. Three of the five sites (AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62) are prehistoric Anasazi specialized activity areas affiliated with a Pueblo I to Pueblo II temporal component. The fourth site, AZ-P-19-58, contains the logs of a dismantled hogan which have been placed in a secondary context. The fifth site, AZ-P-19-60, contains the remains of an Enemy Way ceremonial area. Information on all five sites is provided in the following section.

Site Number: AZ-P-19-58 (Figure 3)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953421 Northing, 622262 Easting (NAD 27 Datum)  
Zone 12; 3953621 Northing, 622199 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Navajo/Pre-1960/Logs to a dismantled hogan

Site Size: 5 m by 5 m (19.64 sq. m)—area of oval

Site Setting: The site is situated within an open grassland area west of the Pueblo Colorado Wash. Small unnamed draws flowing in a southern direction were noted to the east and west of the site. Pueblo Colorado Wash is located about 1,045 feet (2.66 miles) south of the site. The elevation in the site area is about 6271 feet (1912 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-58 consists of a pile of wood that apparently was used for a hogan located in another location to the west of the project area. Feature 1 contains 15 axe-cut logs piled in a 5 m by 5 m area. No artifacts were noted in association with the log pile. According to an ethnographic interview with nearby local residents of the area, the woodpile was placed at this location years ago; however, the actual date is unknown. Apparently, the logs were used for a hogan that had been dismantled. The location of the hogan could not be located at the time of the fieldwork, but it was suggested that it may have been located about 1,500 feet to the west of where the woodpile currently is placed. It appears that the wood may have been transported to this location which is located immediately south of an east-west-trending road. No artifacts were noted in association with the site.

The logs are in secondary context and the condition of the site is considered to be poor. Thus, the site appears to lack deposition.

According to ethnographic information, the logs within this site appear to have been affiliated with a hogan that had been dismantled. Apparently, the logs were from a hogan that was used over 50 years ago. Further, the location of this hogan could not be located since it appeared to be located out of the current project area.

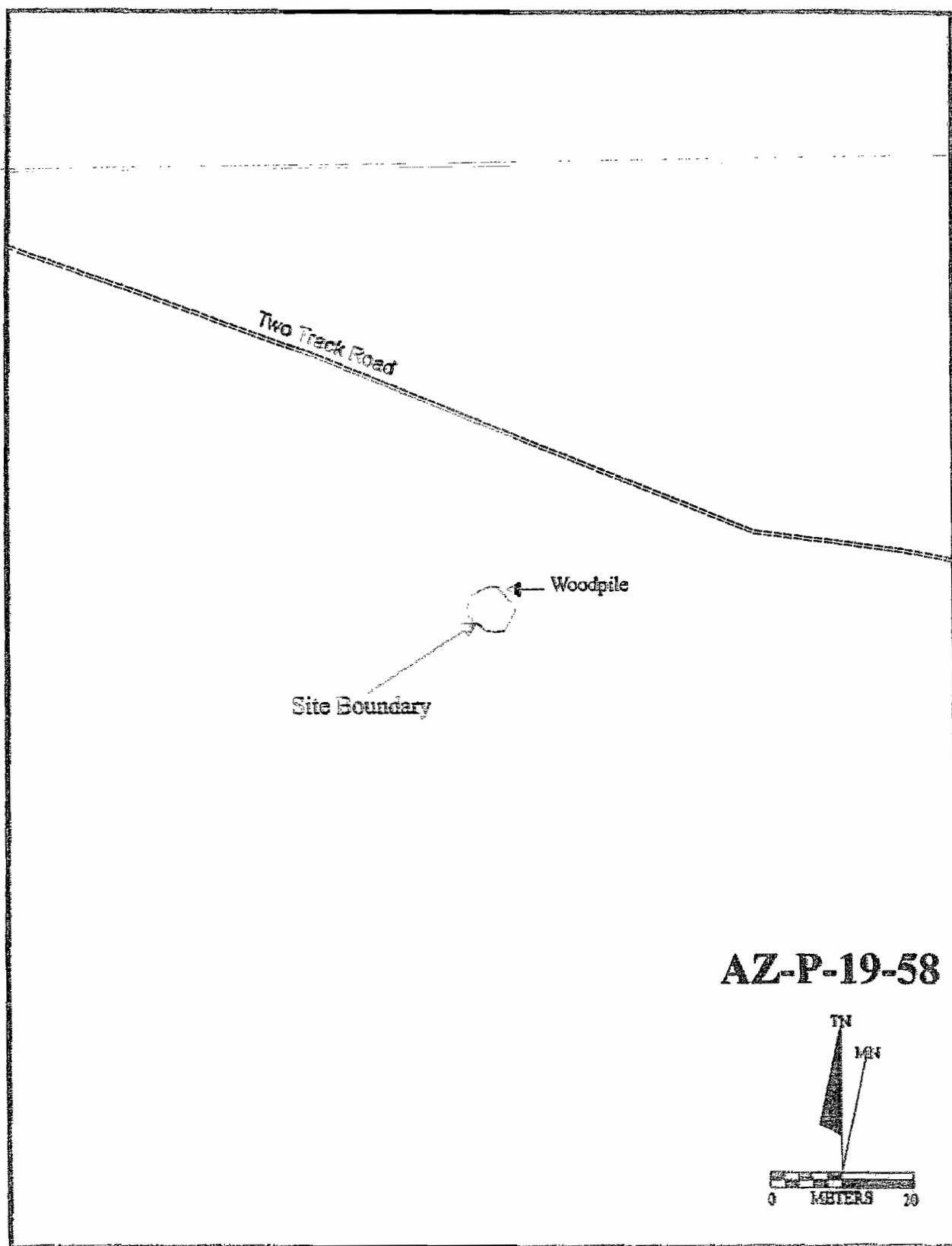


Figure 3. General plan map of Site AZ-P-19-58 (NNAD 09-332).

Site Number: AZ-P-19-59 (Figure 4)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953078 Northing, 622154 Easting (NAD 27 Datum)

Zone 12; 3953278 Northing, 622091 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Pueblo I (A.D. 700-900)/Specialized Activity Area (SAA)—Artifact Scatter

Site Size: 38 m by 30 m (895 sq. m)—area of oval

Site Setting: The site is situated on the northern side of a low ridge. This area is located within the open valley containing Pueblo Colorado Wash. Small unnamed drainages flowing south were noted to the east and west of the site. Pueblo Colorado Wash is located about 12,535 feet (2.37 miles) south of the site. The elevation in the site area is about 6267 feet (1911 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-59 consists of an Anasazi specialized activity area—artifact scatter. No features were observed on this site. The artifact assemblage on this site was low consisting of less than 50 artifacts in all. The ceramic (sherds) artifacts observed on this site consisted of 10 plain gray ware sherds, 11 indented corrugated sherds, 5 plain gray ware sherds, 10 decorated black-on-white ware sherds, and 3 plain white ware sherds. The decorated black-on-white ware sherds Kana'a style Black-on-white ware sherds. These vessels were bowl fragments. The utility gray ware sherds (indented corrugated sherds and plain gray wares) were jar vessels. The lithic artifacts observed on this site consisted of less than five artifacts. These artifacts included two secondary flakes and three tertiary flakes. These artifacts were of chalcedony and chert material.

Overall the condition of the site is good with disturbance occurring from aeolian activity. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area—artifact scatter which may have been associated with prehistoric farming activities in the surrounding area. Based upon the ceramic artifacts noted on the site, this site appears to be affiliated with a late Pueblo I temporal affiliation dating from A.D. 700 to 900.

Site Number: AZ-P-19-60 (Figure 5)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3953122 Northing, 622011 Easting (NAD 27 Datum)

Zone 12; 3953322 Northing, 621948 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Navajo/1994/Enemy Way (*'Ana't Ndáá*) Ceremony Area

Site Size: 130 m by 24 m (248 sq. m)—area of oval

Site Setting: The site is situated within an open grassland area. This area is located within a valley containing Pueblo Colorado Wash. The site area is drained by small unnamed drainages flowing to the site. These drainages are located to the east and west of the site. Pueblo Colorado Wash is located about 12,285 feet (2.33 miles) south of the site. The elevation in the site area is about 6271 feet (1912 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-60 consists of a Navajo Enemy Way ceremonial area (*'Ana't Ndáá*) that was used in 1994. This site contains five features. Two of these five features are located on the eastern portion of

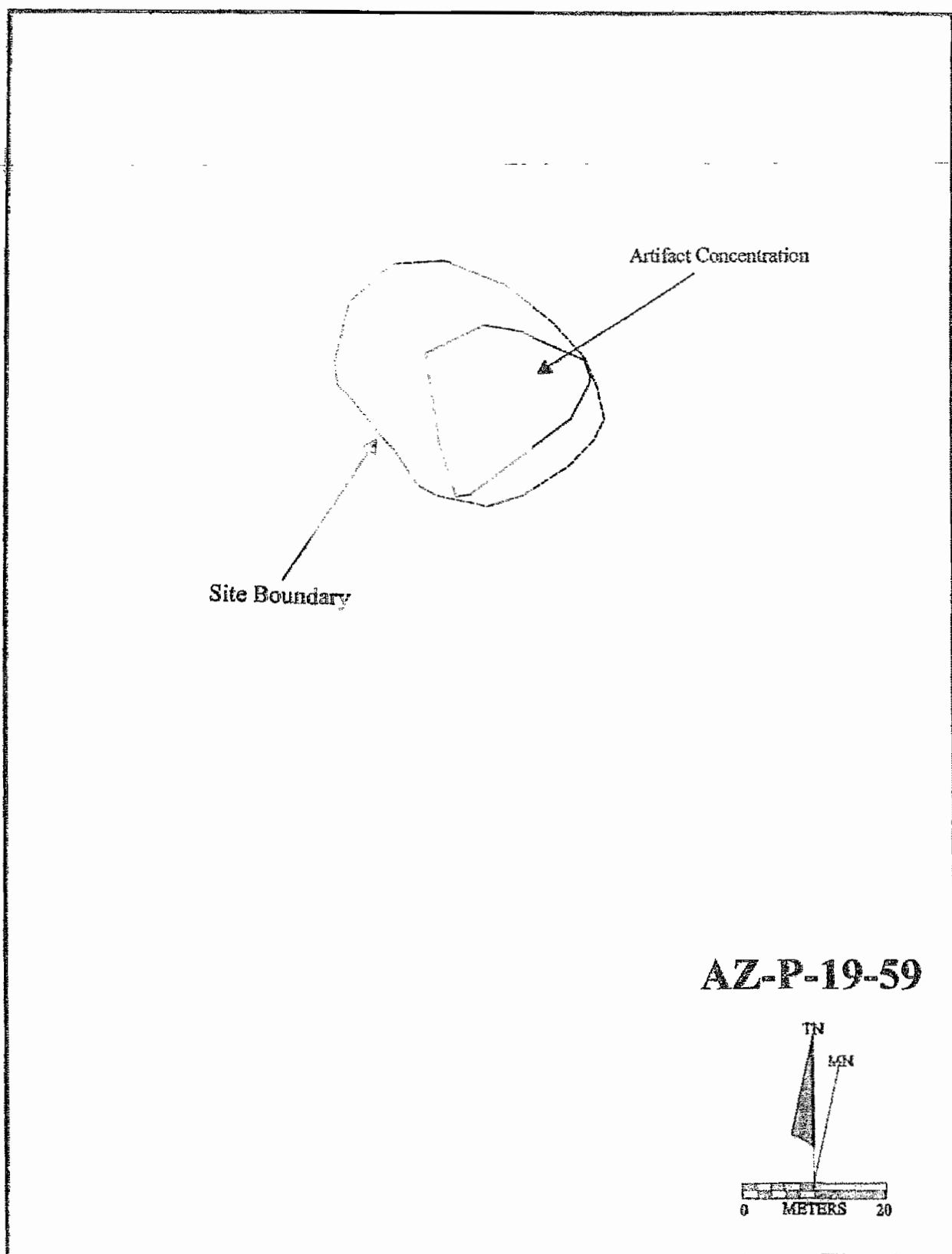


Figure 4. General plan map of Site AZ-P-19-59 (NNAD 09-332).

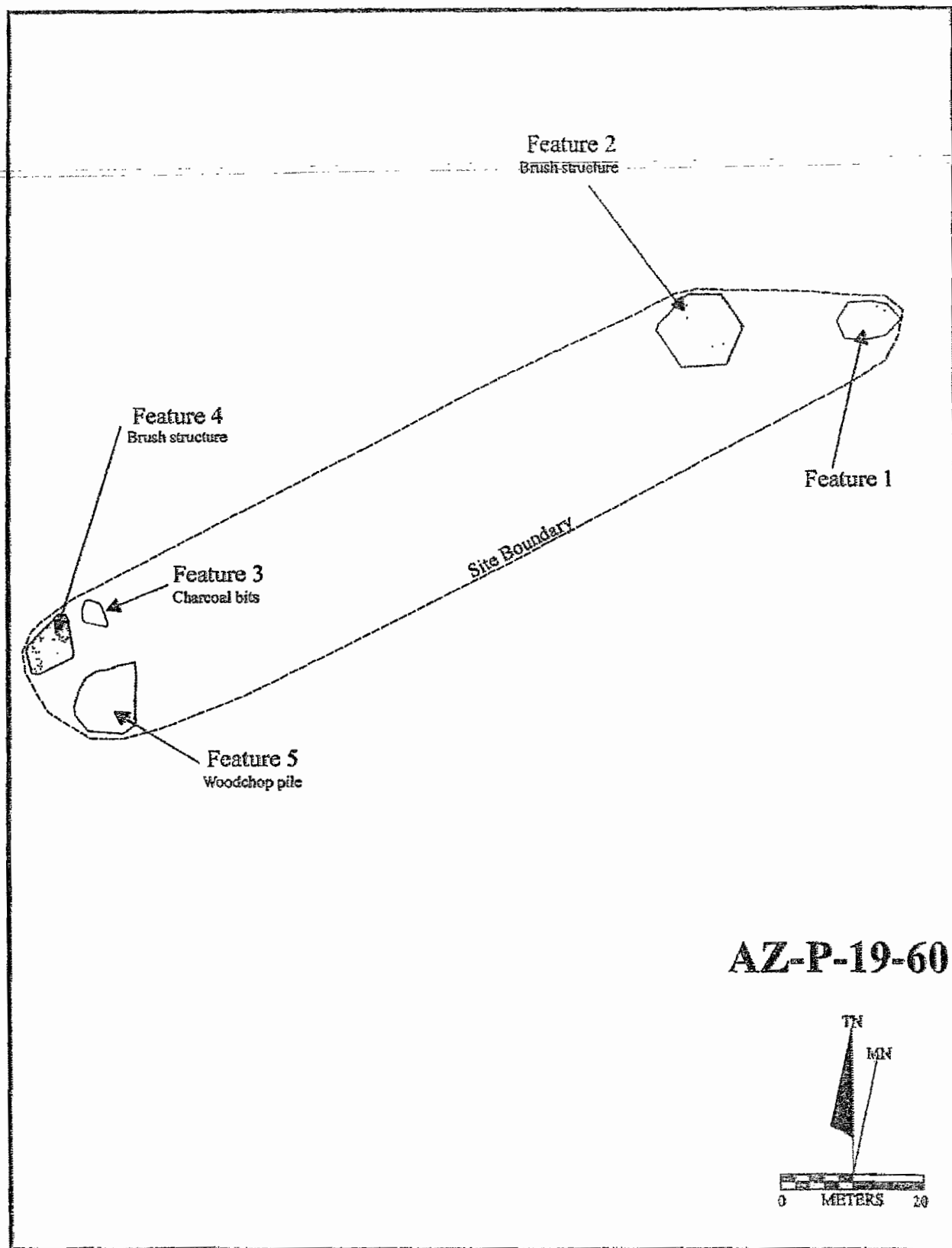


Figure 5. General plan map of Site AZ-P-19-60 (NNAD 09-332).

the site. The remaining three features are located in the western portion of the site. Both the eastern and western portions of the site contain brush structures.

Feature 1 consists of a concentration of charcoal bits that is the remains of a hearth area. The charcoal bits noted in this feature were scattered throughout an 4 m by 5 m area. This feature is also located on the eastern side of the project area.

Feature 2 is also located on the eastern side of the site. This feature consists of a brush structure with about eleven vertical posts positioned to outline a circular area. Within the interior of the feature are about 50 or more scattered brush and tree branches lying on the ground surface. The vertical posts stand from 30 cm to 1 m in height. This feature measures about 10 m by 10 m. The artifacts noted near Features 1 and 2 include one clear soda bottle, smashed aluminum cans, burned aluminum cans, one aluminum rectangular meat can (Spam), clear glass fragments, a green soda bottle, and a "Pepsi" soda bottle (embossed with "Not To Be Refilled").

Feature 3 is located on the western side of the site. This feature contains a charcoal pile located within a 4 m by 3 m area and appears to have been a hearth.

Feature 4 is also located on the western portion of the site. This feature contains a scatter of brush lying within a 9 m by 6 m area. Feature 4 may have also been a brush structure.

Located to the southwest of Feature 4 is Feature 5, a wood-chopping pile. This feature measures 9 m by 8 m. The artifacts observed within the western portion of the site consist of aluminum cans and a coffee can.

The condition of the site is poor with disturbance resulting from erosion. Further, the site appears to lack buried cultural material.

According to ethnographic information, the site appears to have functioned as an Enemy Way (*'Ana't Ndáá*) ceremony area with the ceremony occurring in 1994.

Site Number: AZ-P-19-61 (Figure 6)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3952896 Northing, 621820 Easting (NAD 27 Datum)  
Zone 12; 3953096 Northing, 621757 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Late Pueblo I-Pueblo II (A.D. 350-1050)/SAA—Resource Processing Area

Site Size: 30 m by 23 m (542 sq. m)—area of oval

Site Setting: The site is situated on a low rise located within an open grassland area. This area is also located in an open valley containing Pueblo Colorado Wash to the south. The site area is drained by small unnamed drainages flowing south. These drainages are located to the east and west of the site area. Pueblo Colorado Wash is located about 11,219 feet (2.12 miles) south of the site. The elevation in the site area is about 6264 feet (1910 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, blue grama grass, Russian thistle, sagebrush, prickly pear cactus, and muhly.

Site Description: Site AZ-P-19-61 consists of an Anasazi specialized activity area resource processing area. The site contains an artifact scatter and a slight depression area that may contain a possible buried structure.

Feature 1 contains a slight oval-shaped depression area that measures about 10 m by 8 m by a depth of 10 cm at the center of the depression. No artifacts were noted directly within the depression area; however, the artifacts noted on this site were scattered around the perimeter of this feature.

The artifact assemblage on this site was low consisting of 31 ceramic (sherds) artifacts and 7 lithic artifacts. The lithic artifacts observed on this site consisted of 1 secondary flake (rhyolite material), 1 tertiary flake



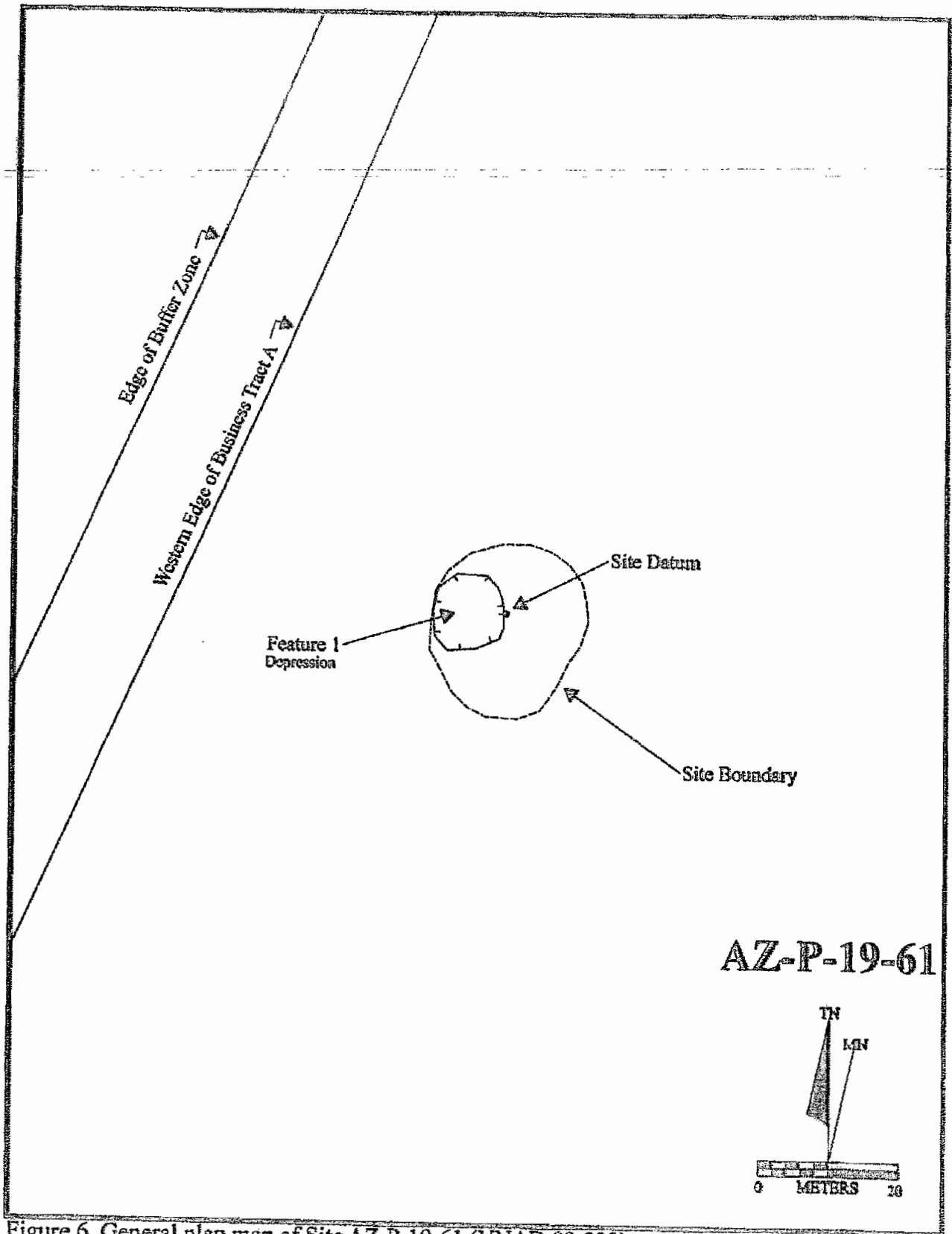


Figure 6. General plan map of Site AZ-P-19-61 (NNAD 09-332).

(rhyolite material), 4 tertiary flakes (chalcedony material), and 1 piece of angular debris (chalcedony material). The ceramic assemblage consisted of 31 ceramics including 10 indented corrugated sherds, 9 plain gray ware sherds, 3 plain white ware sherds, and 9 decorated black-on-white ware sherds. The decorated sherds contained mineral and carbon paint designs with several of the sherds identified to type as Red Mesa Black-on-white, Kiatuthlanna Black-on-white, and Flagstaff Black-on-white.

The site is in good condition with the only disturbance occurring from aeolian activity. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

This site appears to have functioned as a specialized activity area—resource processing area or it may be the remains of a possible habitation, as the depression area on this site may be the remains of a buried structure such as a pit house. This site also appears to have been associated with prehistoric farming activities in the surrounding area. Based upon the ceramic artifacts noted on the site, this site appears to be affiliated with a late Pueblo I to Pueblo II temporal affiliation dating from A.D. 850 to 1050.

Site Number: AZ-P-19-62 (Figure 7)

Map Reference: Cornfields, Ariz., 1972, 7.5' series

Legal Description: Unplatted Section, T.27N, R.25E; G&SRPM

UTM Coordinates: Zone 12; 3952747 Northing, 621953 Easting (NAD 27 Datum)  
Zone 12; 3952947 Northing, 621890 Easting (NAD 83 Datum)

Land Status: Navajo Tribal Trust

Site Type: Anasazi/Late Pueblo I-Pueblo II (A.D. 825-1050)/SAA—Resource Processing Area

Site Size: 54 m by 27 m (116 sq. m)—area of oval

Site Setting: The site is situated within a rolling grassland area. This area is situated within a valley containing Pueblo Colorado Wash to the east. An unnamed tributary of Colorado Wash is located about 400 feet (122 m) east of the site. The elevation in the site area is about 6255 feet (1907 m). The soils in the site area include sand and silt. Vegetation in the site area includes snakeweed, bunch grass, Russian thistle, prickly pear cactus, rabbitbrush, and narrowleaf yucca.

Site Description: Site AZ-P-19-62 consists of an Anasazi specialized activity area—resource processing area. The site contains an artifact concentration and a scatter of lithic and ceramic artifacts. No features associated with this site were observed. The site is situated within an open valley area west of Pueblo Colorado Wash.

Artifact Concentration 1 is located on the southern edge of the site. This concentration measures 9 m by 5 m and contains about 75 lithic artifacts ceramic artifacts. Also noted within the concentration area was a slight layer of ashy soil.

The lithic artifacts observed on this site consisted of secondary flakes, tertiary flakes, and microflakes. Also noted on this within the lithic assemblage were unidirectional cores and pieces of angular debris. One projectile point/drill was also noted on this site. The drill was of an obsidian material. The drill contained expanded base with a side notches. The drill measured 1.8 mm by 0.9 mm by 0.2 mm thick. The ceramic artifacts observed on this site consisted of less than 40 ceramic artifacts. An inventory on 26 of the ceramics was conducted. The ceramic assemblage consisted of 5 black-on-white sherds (2 sherds with mineral paint and 3 sherds with carbon paint), 11 plain gray ware sherds, 3 indented corrugated sherds, and 1 plain white ware sherd. Several of the decorated sherds were identified to type as Holbrook Black-on-white.

The site is in relatively good condition with natural erosion in the form of aeolian activity within the site. The site does appear to retain buried cultural material, however, the depth of these deposits are unknown at this time.

AZ-P-19-62

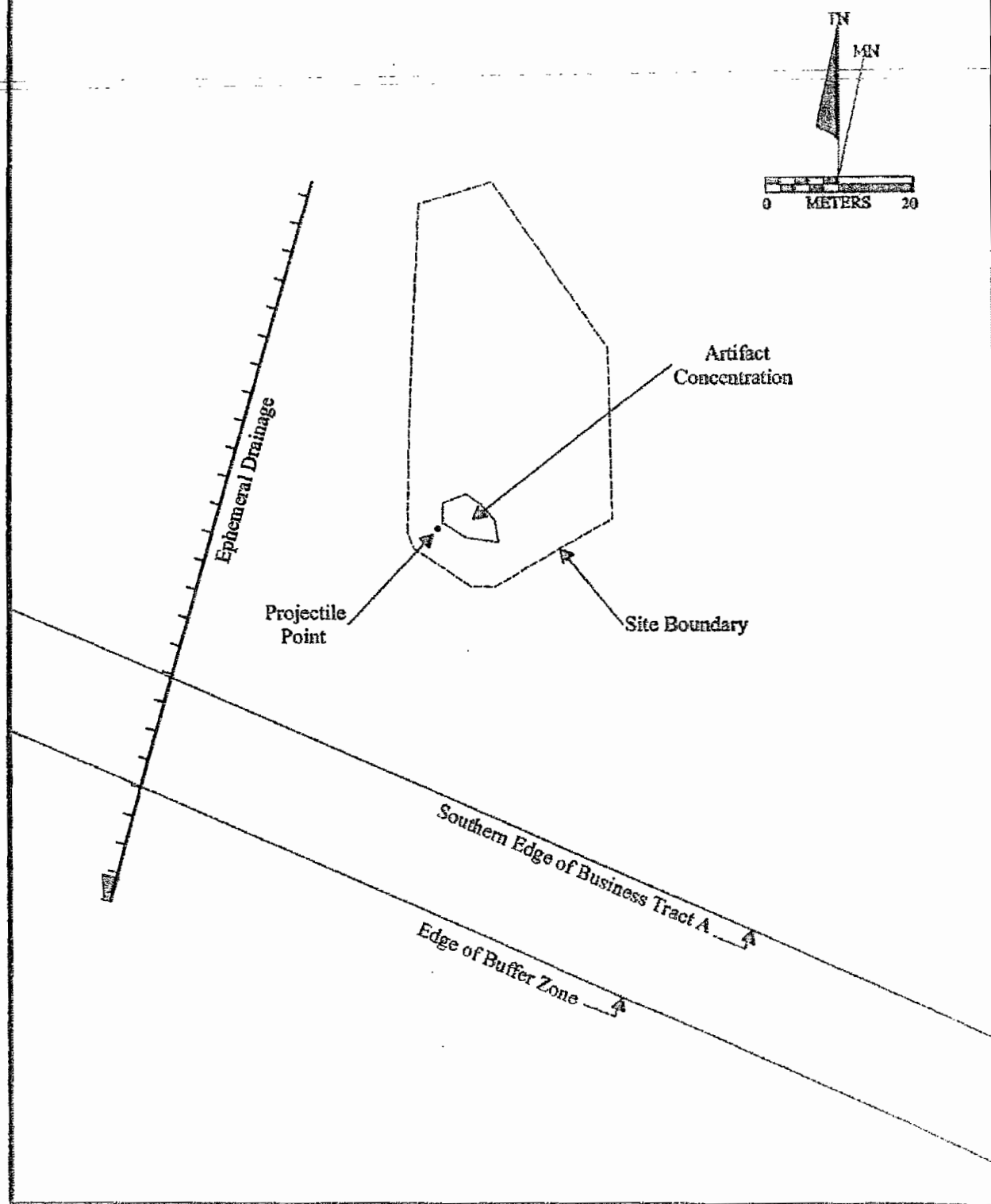


Figure 7. General plan map of Site AZ-P-19-62 (NNAD 09-332).

This site appears to have functioned as a specialized activity area—resource processing area that may have been associated with prehistoric farming activities in the surrounding area. The site appears to be affiliated with a late Pueblo I to Pueblo II temporal affiliation.

#### Isolated Occurrences

Twenty-two isolated occurrences (IOs 09-332-1 through 15, and 15A through 21) were located within the project area. The IOs consist of isolated prehistoric ceramic (sherds) and lithic artifacts. One of the IOs was also identified as an isolated historic trash pile. Table 3 provides a summary description of these resources.

Table 2. Isolated Occurrences Encountered during the Inventory (UTM Zone 12)

IO No.	Summary Description	NAD 27 Datum		NAD 83 Datum	
		Northing	Easting	Northing	Easting
IO 09-332-1	1 black-on-white sherd	3953490	622072	3953690	622009
IO 09-332-2	2 small ground stone fragments	3953593	622213	3953793	622150
IO 09-332-3	1 plain gray ware sherd	3953410	622100	3953610	622037
IO 09-332-4	1 trash pile	3953368	622044	3953568	621981
IO 09-332-5	1 plain gray ware sherd	3953341	622148	3953541	622085
IO 09-332-6	1 indented corrugated sherd	3953300	622112	3953500	622049
IO 09-332-7	2 Sosi-style Black-on-white sherds	3953345	622052	3953545	621989
IO 09-332-8	1 Sosi-style Black-on-white sherd	3953325	622043	3953525	621980
IO 09-332-9	1 plain gray ware sherd	3953327	622000	3953527	621937
IO 09-332-10	1 plain gray ware sherd	3953252	621982	3953452	621919
IO 09-332-11	1 plain gray ware sherd	3953217	622129	3953417	622066
IO 09-332-12	1 indented corrugated sherd	3953180	622285	3963380	622222
IO 09-332-13	1 plain gray ware sherd	3953229	622084	3953429	622021
IO 09-332-14	1 black-on-white ware sherd	3953195	622080	3953395	622017
IO 09-332-15	1 plain gray ware ceramic ladle fragment	3953181	622127	3953381	622063
IO 09-332-15A	1 ladle ceramic fragment	3953053	622187	3953253	622124
IO 09 332-16	1 plain white ware sherd	3952952	622352	3953152	622289
IO 09 332-17	1 indented corrugated sherd	3952938	621920	3953138	621857
IO 09 332-18	1 plain white ware sherd	3952846	622164	3953046	622101
IO 09 332-19	1 secondary chert flake	3952829	622261	3953029	622198
IO 09-332-20	1 black-on-white sherd	3952715	622098	3952915	622035
IO 09-332-21	2 plain gray ware sherds	3952612	622129	3953381	622064

IO denotes Isolated Occurrence.

#### Evaluation of Significance

Under 36 CFR Part 60.4, cultural resources may be eligible for nomination to the National Register of Historic Places if they "...possess integrity of location, design, setting, materials, workmanship, feeling, and association..." and if the resources in question are resources:

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history.

As defined in 36 CFR 60.4, ordinarily cemeteries, birthplaces or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historical buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within categories a-g.

Under Bulletin 38 "Guidelines for Evaluation and Documenting Traditional Cultural Properties," properties are eligible for nomination to the National Register of Historic Places if they retain integrity of location, setting, materials, workmanship, feeling or association. This document explains that in considering the integrity of TCPs there are two fundamental questions: (1) Does the property have an integral relationship to traditional practices or beliefs (2) Is the condition of the property such that the relevant relationships survive? Even if a property has lost its integrity as a possible TCP, it may retain integrity with reference to another aspect of significance. For example, it may still contain archaeological deposits, making it eligible under criterion "d".

Bulletin 38 admits to eligibility under criterion "a" those properties associated with events significant in our history, even when those events are associated with the mythopoetic past. Similarly, properties are eligible under criterion "b" if they are associated with persons significant to our history, even when those persons are associated with the mythopoetic past.

Although ownership by a religious group or use for religious purposes would normally make a property ineligible, Bulletin 38 cautions against ethnocentrism in evaluating cultural significance. Parker and King (1992:13) state that "The fact that traditional history and culture may be discussed in religious terms does not make it less historical or less significant to culture, nor does it make properties associated with traditional history and culture ineligible for inclusion in the National Register".

Concerning the Archaeological Resource Protection Act (ARPA) of 1979 (43 CFR Part 7), the Act has two fundamental purposes:

- 1) to protect irreplaceable archaeological resources on public lands and Indian lands from unauthorized excavation, removal, damage, alteration, or defacement; and
- 2) to increase communication and exchange of information among government authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data which were obtained prior to enactment of the Act.

In completing the assessment under 43 CFR Part 7 there are two concerns that need to be addressed. Under ARPA, in order for a resource to be considered an archaeological resource and thus merit protection, it must both be greater than 100 years in age and be of archaeological interest.

The American Indian Religious Freedom Act (AIRFA [P.L. 95-341]) is a resolution of Congress to the effect that American Indians shall have the right of freedom to believe, express and exercise their traditional religions and have access to sites, use and possession of sacred objects, and freedom of worship through ceremonies and rites. Therefore, any site or place (prehistoric or historic) having religious, ceremonial or sacred aspects or components needs to be dealt with light of this law. Anasazi sites with Navajo figurines present qualify for protection, for instance, as do Enemy way sites, sweat lodges, blessed hogans, and other blessed sites or buildings. It is also very important to realize that many places that lack any material cultural component also qualify, such as sacred landmarks and mineral or vegetal extraction areas.

### Archaeological Sites

Site AZ-P-19-58 lacks integrity. It is probably not eligible for nomination to the National Register under criteria a, b, c, or d. The logs within the site appear to be over 50-years old, therefore, the site does meet the 50-year eligibility guideline; however, AZ-P-19-58 does not appear to be a Register-eligible property. The site is no longer of archaeological interest and it does not appear to meet the 100-year age requirement necessary

for classification as an archaeological resource under ARPA. Thus, the site does not appear to merit protection under ARPA. The site does not appear to retain qualities or characteristics that would make it eligible for protection under AIRFA.

Site AZ-P-19-60 possesses integrity of location. The site does not appear to be eligible for nomination to the National Register under criteria a, b, c, or d. The site also does not appear to be over 50-years old and it, therefore, does not meet the 50-year eligibility guideline. The site is no longer of archaeological interest and it does not meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA. Therefore, the site does not appear to merit protection under ARPA. Although the site was utilized as a ceremonial area, the site is no longer considered to retain qualities or characteristics that would make it eligible for protection under AIRFA. The person who was the participant in the ceremony has given his consent for the proposed undertaking in the area of the site and the chanter who assisted in the ceremony indicated that the site is not considered a sacred place or of traditional concerns.

Sites AZ-P-19-59, AZ-P-19-61, and AZ-P-19-62 retain integrity. The sites do not appear to be eligible for nomination to the National Register under criteria a, b, or c. They may, however, be eligible under criterion d because they possess research potential. The sites are over 50-years old; therefore, they do appear to be Register-eligible properties. The sites are of archaeological interest and they do meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA. Thus, the sites do appear to merit protection under ARPA. The sites do not retain qualities or characteristics that would make them eligible for protection under AIRFA.

#### Isolated Occurrences

The IOs lack integrity. The IOs do not appear to be eligible for nomination to the National Register of Historic Places under criteria a through d. All of the IOs except IO 09-332-4 meet the 100-year age requirement necessary for classification as an archaeological resource under ARPA; however, the IOs are not of archaeological interest. Thus, the IOs do not appear to merit protection under ARPA. The IOs do not retain qualities or characteristics that would make them eligible for protection under AIRFA.

#### Recommendations

##### Archaeological Sites

Site AZ-P-19-58 does not appear to be a Register-eligible property nor does it appear to merit consideration under AIRFA; therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site without further stipulations.

Site AZ-P-19-59 may be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet (15.24 m) of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

Site AZ-P-19-60 does not appear to be a Register-eligible property nor does it appear to merit consideration under AIRFA; therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities without further stipulations.

Site AZ-P-19-61 appears to be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction

activities within 50 feet of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

Site AZ-P-19-62 appears to be a Register-eligible property, therefore, a determination of no historic properties affected is recommended for the proposed 100-acre business tract in the area of the site provided that the site is avoided by the proposed development activities. Avoidance can be accomplished by 1) eliminate this segment of the 100-acre business tract from future development activities; 2) flag the boundaries of the site by a qualified archaeologist before development is initiated; 3) prohibit all construction activities within 50 feet of the site; and 4) construct a fence line or barrier around the perimeter of the site to eliminate potential impacts to the site.

#### Isolated Occurrences

A determination of no historic properties affected is recommended for the proposed undertaking in the area of the IOs since they are not considered significant resources. No further stipulations concerning the proposed undertaking in the area of the IOs is recommended.

#### Summary

A determination of no historic properties affected is recommended for the proposed development activities to occur in the areas containing the three sites that appear to be Register-eligible properties provided the stipulations addressed in the report concerning these resources are adhered to. Finally, a determination of no historic properties affected is recommended for the project areas containing the remaining two sites (AZ-P-19-58 and AZ-P-19-60) and the isolated occurrences without further stipulations.

### References Cited

Begay, Richard M.

- 1991 *Sunrise Trading Post. A Recommendation on the Destruction of the Compound Lower Greasewood Chapter, Arizona.* NNHPD Report 91-096. Navajo Nation Historic Preservation Department, Window Rock, Arizona.


Van Valkenburgh, Richard F.


- 1974 Navajo Sacred Places. In *Navajo Indians III*, edited by Clyde Kluckhohn, pp. 9-199. Garland Publishing, New York, New York.




**FIGURE 12**


Potential Development  
Site - North Route 15


 Cornfields Asserted Boundary


 Census Defined Boundary

 BIA Grazing Boundary


 Minor Stream or Wash

 Tribal Route

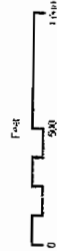
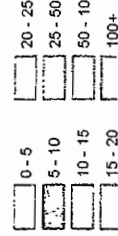
 BIA Route

 Potential Development Site

 Wells

 NTUA Water System

Percent Slope



Map ped by:

**Jones & Stokes**

May 2003

GANADO

Potential  
Ganado  
Development

17.9  
ACRES

422

Cornfields Chapter  
Resolution No. CF-JN2003-5.c.

Soil Code	Soil Type	Associated Slope
422	Zia sandy loam	1-5 % slopes

**FIGURE 10**  
 Potential Development  
 Site - Sunrise

BIA Grazing Boundary  
 Lake or Channel  
 Major Stream or Wash  
 Minor Stream or Wash  
 BIA Route

Potential Development Site  
 Wells  
 NTUA Water System

Percent Slope  
 0 - 5  
 5 - 10  
 10 - 15  
 15 - 20  
 20 - 25  
 25 - 50  
 50 - 100  
 100+



0 50m 100m

Maped by:  
 Jones & Stokes  
 May 2003

Soil Code	Soil Type	Associated Slope
422	Zia sandy loam	1-5 % slopes



**F**

Soil Code	Soil Type	Associated Slope
422	Zia sandy loam	1-5 % slopes

Cornfields Chapter  
Resolution No. CF-JN2003-5.c.

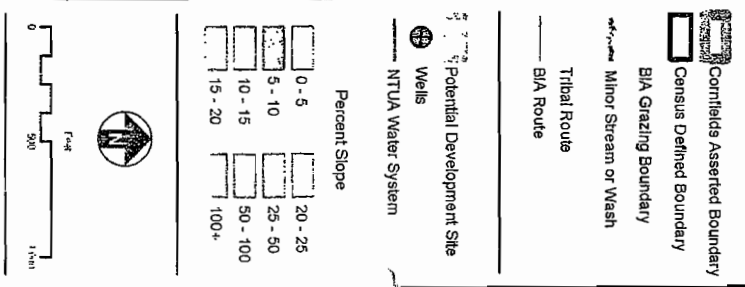
17.9  
Acres

Potential  
Ganado  
Development

GANADO

FIGURE 12

Potential Development  
Site - North Route 15



**FIGURE 10**  
Potential Development  
Site - Sunrise



**Percent Slope**

0 - 5	20 - 25
5 - 10	25 - 50
10 - 15	50 - 100
15 - 20	100+

**Potential Development Site**  
Wells  
NTUA Water System

**Other Features:**  
BIA Grazing Boundary  
Lake or Channel  
Major Stream or Wash  
Minor Stream or Wash  
BIA Route

**Scale:**  
0 50m 100m

**Map by:**  
Jones & Stokes  
May 2003

Soil Code	Soil Type	Associated Slope
422	Zia sandy loam	1-5 % slopes

**EXECUTIVE OFFICIAL REVIEW**Title of Document: DeerPt.BusinessDev.Cornfields ChapterContact Name: DRAPER, HOWARDProgram/Division: DIVISION OF NATURAL RESOURCESEmail: howarddraper@frontiernet.netPhone Number: 928 871-6447☐ **Business Site Lease** Sufficient    Insufficient

- |   |             |   |   |
|---|-------------|---|---|
| 1. Division: _____  | Date: _____ | □ | □ |
| 2. Office of the Controller: _____  | Date: _____ | □ | □ |
| (only if Procurement Clearance is not issued within 30 days of the initiation of the E.O. review) |             |   |   |
| 3. Office of the Attorney General: _____  | Date: _____ | □ | □ |

☐ **Business and Industrial Development Financing, Veteran Loans, (i.e. Loan, Loan Guarantee and Investment) or Delegation of Approving and/or Management Authority of Leasing transactions**

- |  |             |   |   |
|--|-------------|---|---|
| 1. Division: _____                       | Date: _____ | □ | □ |
| 2. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Fund Management Plan, Expenditure Plans, Carry Over Requests, Budget Modifications**

- |   |             |   |   |
|---|-------------|---|---|
| 1. Office of Management and Budget: _____ | Date: _____ | □ | □ |
| 2. Office of the Controller: _____        | Date: _____ | □ | □ |
| 3. Office of the Attorney General: _____  | Date: _____ | □ | □ |

☐ **Navajo Housing Authority Request for Release of Funds**

- |  |             |   |   |
|--|-------------|---|---|
| 1. NNEPA: _____                          | Date: _____ | □ | □ |
| 2. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Lease Purchase Agreements**

- |  |             |   |   |
|--|-------------|---|---|
| 1. Office of the Controller: _____       | Date: _____ | □ | □ |
| (recommendation only)                    |             |   |   |
| 2. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Grant Applications**

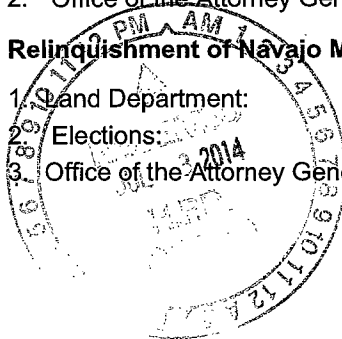
- |   |             |   |   |
|---|-------------|---|---|
| 1. Office of Management and Budget: _____ | Date: _____ | □ | □ |
| 2. Office of the Controller: _____        | Date: _____ | □ | □ |
| 3. Office of the Attorney General: _____  | Date: _____ | □ | □ |

☐ **Five Management Plan of the Local Governance Act, Delegation of an Approving Authority from a Standing Committee, Local Ordinances (Local Government Units), or Plans of Operation/Division Policies Requiring Committee Approval**

- |  |             |   |   |
|--|-------------|---|---|
| 1. Division: _____                       | Date: _____ | □ | □ |
| 2. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Relinquishment of Navajo Membership**

- |  |             |   |   |
|--|-------------|---|---|
| 1. Land Department: _____                | Date: _____ | □ | □ |
| 2. Elections: _____                      | Date: _____ | □ | □ |
| 3. Office of the Attorney General: _____ | Date: _____ | □ | □ |

DIVISION OF  
NATURAL RESOURCES  
OCT 7 2014

☐ Land Withdrawal or Relinquishment for Commercial Purposes

			Sufficient	Insufficient
1. Division:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
2. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>

☐ Land Withdrawals for Non-Commercial Purposes, General Land Leases and Resource Leases

1. NLD	<i>See Ltr of 8/15/14</i>	Date: <i>16 July 14</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. F&W	<i>see Ltr of 8/15/14</i>	Date: <i>8/16/14</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. HPD	<i>see Ltr of 8/15/14</i>	Date: <i>7-28-14</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Minerals	<i>see Ltr of 8/15/14</i>	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
5. NNEPA	<i>see Ltr of 8/15/14</i>	Date: <i>01-20-14</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. DNR	<i>see Ltr of 8/15/14</i>	Date: <i>10/27/14</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. DOJ	<i>(ic)</i>	Date: <i>1/5/15</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

☐ Rights of Way

1. NLD	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
2. F&W	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
3. HPD	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
4. Minerals	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
5. NNEPA	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
6. Office of the Attorney General:	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
7. OPVP	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>

☐ Oil and Gas Prospecting Permits, Drilling and Exploration Permits, Mining Permit, Mining Lease

1. Minerals	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
2. OPVP	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
3. NLD	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>

☐ Assignment of Mineral Lease

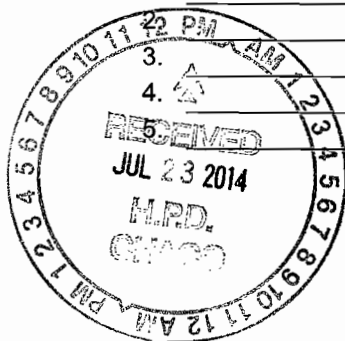
1. Minerals	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
2. DNR	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
3. DOJ	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>

☐ ROW (where there has been no delegation of authority to the Navajo Land Department to grant the Nation's consent to a ROW)

1. NLD	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
2. F&W	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
3. HPD	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
4. Minerals	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
5. NNEPA	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
6. DNR	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
7. DOJ	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
8. OPVP	_____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>

☐ OTHER:

1. _____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
2. _____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
3. _____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
4. _____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>
5. _____	Date: _____	<input type="checkbox"/>	<input type="checkbox"/>



RECEIVED

AUG - 5 2014

MINERALS DEPARTMENT  
NAVAJO NATION



**ENVIRONMENTAL PROTECTION AGENCY**

OFFICE OF EXECUTIVE DIRECTOR/ADMINISTRATION

OFFICE OF ENVIRONMENTAL REVIEW

PO BOX 339 WINDOW ROCK ARIZONA 86515 Office: 928/871-7188 Fax: 928/871-7996

Website: [www.navajonationepa.org](http://www.navajonationepa.org)

**M E M O R A N D U M**

**TO:** Howard P. Draper, Project and Program Specialist  
Project Review Office  
Navajo Land Department  
Division of Natural Resources

**FROM:**

A handwritten signature in black ink, appearing to be "Rita Whitehorse-Larsen".

Rita Whitehorse-Larsen, Senior Environmental Specialist  
Office of Environmental Review  
Office of the Executive Director/Administration  
NNEPA

**DATE:** October 1, 2014

**SUBJECT:** 164 EOR 002258 Deer Point Business Development Cornfields Chapter

The Navajo Nation Environmental Protection Agency (NNEPA) reviewed<sup>1</sup> and recommends ***conditional approval*** for proposed one hundred (100) acres land withdrawal in Cornfields, Apache County, Arizona. The 100-acres land withdrawal is for the following:

- a. Grocery with bank and pharmacy
- b. Retail shops with internet café
- c. Hardware store
- d. Medical office with dialysis center and trauma center
- e. Fast food restaurant
- f. Restaurant
- g. Motel
- h. RV Park

**1. Navajo Nation Clean Water Act:**

- a. **§402 Navajo Pollutant Discharge Elimination System (NPDES):** The proposed action is greater than 1 acre. Cornfields Chapter, contractors including sub-

<sup>1</sup> Arcadis. Cornfields Chapter Deer Point Development Parcel Environmental Assessment. January 2014.



contractors are subject to complete the requirements under the Clean Water Act Section 402. Technical assistance is available with NNEPA Water Quality Staff in Section 402 application, Stormwater Pollution Prevention Plan (SWPPP), Best Management Practices (BMPs) and Notice of Intent (NOI). All should be submitted to USEPA Region 9 and a copy will be provided to Patrick Antonio, Principal Hydrologist with NNEPA Water Quality Program. His office phone is 928/871-7185. The SWPPP template can be found online at the following weblink: <http://cfpub.epa.gov/npdes/stormwater/swppp.cfm#template>.

2. ***Navajo Nation Air Pollution Prevention and Control Act:***

- a. The proposed action is not located in an attainment area.
- b. Visibility is good to excellent.
- c. Dust suppression must be implemented in the Best Management Practice.

3. ***Navajo Nation Safe Drinking Water Act:***

- a. The NNEPA - Public Water Systems Supervision Program (PWSSP) recommends all proposed drinking water projects (extensions, upgrades, new wells, new public water systems, etc.) must also comply with the design review and construction permit of the PWSSP pursuant the Navajo Nation Primary Drinking Water Regulations.
- b. The owner/operator and water utility company are subject to submit the proposed domestic waste water and public drinking water lines to Ms. Yolanda Barney, Program Manager, NNEPA PWSSP, she can be contacted at 928/871-7715 or visit the website at [www.navajopublicwater.org](http://www.navajopublicwater.org).
- c. A construction permit for Safe Drinking Water and Domestic Waste Water is required before commencing construction activities.
- d. Assessing the existing sewer lagoons to ensure the existing lagoon(s) will hold additional waste water and not to exceed the holding capacity of the lagoon(s) will lessen the impacts to the public.
- e. Sewer lines must be tapped into if it is located near the proposed site.
- f. If a need for a septic system, it must be controlled to prevent discharge and prevent ground water/soil contamination.
- g. Cooking grease is required to be properly disposed of outside and should not be released into the indoor plumbing. Disposing food related waste in appropriate containers and not released into the public waste water lines will lessen impacts to the public and environment.

4. ***Navajo Nation's Solid Waste Act:***

- a. Do not allow public to take construction waste, cumulatively NNEPA receives complaints and reports on illegal trash dumpings on rural areas and in the waters of the US and Navajo Nation.
- b. The Cornfields Chapter is subject to control the solid waste bin to reduce injuries or fatalities of merchandise related waste to human, wildlife and domestic animals.

5. ***Navajo Nation Comprehensive, Environmental Response, Compensation and Liability Act (CERLA):***

- a. No hazardous material will be stored, transported, generated and distributed from the proposed 100-acres land withdrawal.
- b. According the Navajo CERCLA, petroleum is considered hazardous material and any spills  $\geq 25$  gallons should be reported to NNEPA Office of Executive

Director/Administration at 928/871-7692.

6. ***Navajo Nation Storage Tank Act (NNSTA)*** (formerly *Underground Storage Tank (UST) Act*; amended February 2012):

- a. No storage tanks are proposed on the 100-acres land withdrawal.
- b. If there are plans to install underground and/or aboveground storage tanks greater than 100 gallons, the plans must meet the design specifications as outlined by NNEPA Storage Tank Program. The specifications must be approved by the Storage Tank Program. Contact Warren Roan, Tanya Yazzie and/or Nathaniel Yazzie at 928/871-7993.
- c. NNEPA Storage Tank Program staff will need to be onsite before installing any above and underground storage tanks.

7. ***Federal Insecticide Fungicide and Rodenticide Act (FIFRA)/NN Pesticide Act:***

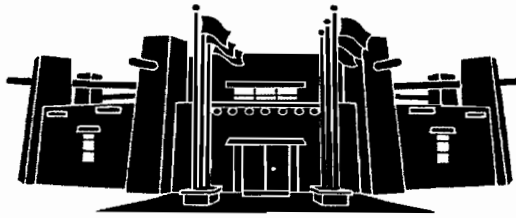
- a. Business owner(s)/land user(s) are subject to control and prevent the spread of invasive and noxious weeds.
- b. Contact the NNEPA Pesticide Program at 928/871-7815/7810 before applying any pesticides and herbicides to control noxious and invasive plant species to ensure the product is in compliance and appropriately applied by a certified and licensed applicator.
- c. Pesticide staff will also may need to be onsite to monitor during pesticide/herbicide application.

8. ***Others To Contact Within Navajo Nation:***

- a. Jack Utter, Division of Natural Resources, Department of Water Resources, Water Code Program at 928/871-6595 to ensure sufficient water is available for the new and proposed Cornfields land withdrawal business development.
- b. Existing public roads will be used for access during the construction activities.

If there are any questions contact Rita Whitehorse-Larsen at 928/871-7188 or email: [rwhitehorsel@navajo-nsn.gov](mailto:rwhitehorsel@navajo-nsn.gov). Thank you.

CC: Cornfields Chapter, PO Box 478, Ganado, Arizona 86505  
Jack Utter, Division of Natural Resources, Dept of Water Resources, Water Code Program  
NNEPA Water Quality, PWSSP; Air Quality, OPP; Pesticides; Superfund; RCRP; Storage Tank Program; Administration chrono file



## MEMORANDUM

TO: Honorable Alton Shepherd  
Jeddito, Cornfields, Ganado, Kinlichee, Steamboat Chapters

FROM: Mariana Kahn  
Mariana Kahn, Attorney  
Office of Legislative Counsel

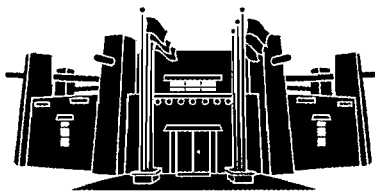
DATE: April 30, 2015

SUBJECT: PROPOSED STANDING COMMITTEE RESOLUTION; AN ACTION RELATING TO RESOURCES AND DEVELOPMENT; APPROVING THE LAND WITHDRAWAL OF 100.00 ACRES, MORE OR LESS, OF NAVAJO NATION TRUST LANDS FOR THE CORNFIELDS CHAPTER DEER POINT BUSINESS DEVELOPMENT TRACT LOCATED IN THE CORNFIELDS CHAPTER VICINITY, NAVAJO NATION (APACHE COUNTY, ARIZONA)

As requested, I have prepared the above-referenced proposed resolution and associated legislative summary sheet pursuant to your request for legislative drafting. Based on existing law and review of documents submitted, the resolution as drafted is legally sufficient. As with any action of government however, it can be subject to review by the courts in the event of proper challenge. Please ensure that this particular resolution request is precisely what you want. You are encouraged to review the proposed resolution to ensure that it is drafted to your satisfaction.

If you are satisfied with the proposed resolution, please sign it as "sponsor" and submit it to the Office of Legislative Services where it will be given a tracking number and sent to the Office of the Speaker for assignment. If the proposed resolution is unacceptable to you, please contact me at the Office of Legislative Counsel and advise me of the changes you would like made to the proposed resolution.

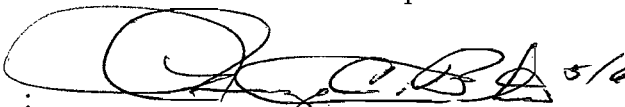
Thank you for your service to the Navajo Nation.



May 4, 2015

**MEMORANDUM**

**TO :** *Honorable Members*  
*Resources and Development Committee*

**FROM :**   
*Hon. LoRenzo C. Bates, Speaker*  
*23<sup>rd</sup> Navajo Nation Council*

**SUBJECT :** **ASSIGNMENT OF LEGISLATION**

---

Pursuant to 2 N.N.C § 164 (A)(4), this memorandum serves to inform and advise you that I assign the following legislation to the Resources and Development Committee;

**Legislation No. 0150-15**

**RELATING TO RESOURCES AND DEVELOPMENT; APPROVING THE LAND WITHDRAWAL OF 100.00 ACRES, MORE OR LESS, OF NAVAJO NATION TRUST LANDS FOR THE CORNFIELDS CHAPTER DEER POINT BUSINESS DEVELOPMENT TRACT LOCATED IN THE CORNFIELDS CHAPTER VICINITY, NAVAJO NATION (APACHE COUNTY, ARIZONA).**

As the Committee assigned to consider the legislation, Legislation No. 0150-15 must be placed on the Resources and Development Committee's agenda at the next regular meeting for final consideration.

ATTACHMENT: Legislation No. 0150-15

xc: Hon. Ben Shelly, *President*  
The Navajo Nation  
Harrison Tsosie, *Attorney General*  
Robert Willie, *Controller*  
Dominic Beyal, *Executive Director, OMB*  
Honorable Alton Joe Shepherd, Council Delegate (*Prime Sponsor*)

THE NAVAJO NATION  
LEGISLATIVE BRANCH  
INTERNET PUBLIC REVIEW PUBLICATION



LEGISLATION NO: \_0150-15\_\_\_\_\_ SPONSOR: Alton Joe Shepherd

**TITLE: An Action Relating To Resources and Development; Approving the Withdrawal of 100.00 Acres, More or Less, of Navajo Nation Trust Lands For Cornfields Chapter Deer Point Business Development Tract Located at Cornfields Chapter Vicinity, Navajo Nation (Apache County)**

***Date posted: May 6, 2015 at 3:55pm***

**Digital comments may be e-mailed to [comments@navajo-nsn.gov](mailto:comments@navajo-nsn.gov)**

**Written comments may be mailed to:**

**Executive Director  
Office of Legislative Services  
P.O. Box 3390  
Window Rock, AZ 86515  
(928) 871-7590**

**Comments may be made in the form of chapter resolutions, letters, position papers, etc. Please include your name, position title, address for written comments; a valid e-mail address is required. Anonymous comments will not be included in the Legislation packet.**

**Please note:** This digital copy is being provided for the benefit of the Navajo Nation chapters and public use. Any political use is prohibited. All written comments received become the property of the Navajo Nation and will be forwarded to the assigned Navajo Nation Council standing committee(s) and/or the Navajo Nation Council for review. Any tampering with public records are punishable by Navajo Nation law pursuant to 17 N.N.C. §374 *et. seq.*

THE NAVAJO NATION  
LEGISLATIVE BRANCH  
INTERNET PUBLIC REVIEW SUMMARY

LEGISLATION NO.: 0150-15

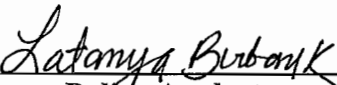
SPONSOR: Honorable Alton Joe Shepherd

TITLE: Relating To Resources And Development; Approving The Withdrawal Of 100.00 Acres, More Or Less, Of Navajo Nation Trust Lands For Cornfields Chapter Deer Point Business Development Tract Located At Cornfields Chapter Vicinity, Navajo Nation (Apache County).

Posted: May 6, 2015 at 3:55 pm

5 DAY Comment Period Ended: May 11, 2015

Digital Comments received: *No comments were received.*

  
\_\_\_\_\_  
Policy Analyst  
Office of Legislative Services

5/12/15      9:07am  
\_\_\_\_\_  
Date/Time