

Final Comprehensive Land Use Plan Report

For

**Bread Springs Chapter
Bread Springs, New Mexico**

And

Navajo Housing Authority

Through

**Office of Navajo Government Development
Window Rock, Arizona**

Prepared By:

**Miller, Arviso & Associates, Inc.
Albuquerque, New Mexico**

March 1, 2001

Final Report

Table of Contents

- I. Executive Summary**
- II. Phase I - Community Assessment**
- III. Phase II - Land Suitability Analysis**
- IV. Phase III - Infrastructure Analysis**
- V. Phase IV - General Land Use Plan & Maps**
- VI. Phase V - Recommendations**

Land Use and Housing Planning Project Executive Summary Bread Springs Chapter

Miller, Arviso and Associates, Inc., an Indian-owned company, was contracted by the Navajo Nation, Navajo Nation Housing Authority (Project Number 31-600), for the period starting November 1, 1999 and ending November 30, 2000, to develop community-based land use plans, consistent with the Navajo Nation Local Governance Act and expressed community values. The land use plan is an eligible activity under funding through the Native American Housing Assistance and Self-Determination Act of 1996, which recognizes "the special role of the United States in helping Tribes and their members to improve their housing conditions and socioeconomic status" by aiding low-income "families and individuals seeking affordable homes in safe and healthy environments..." and by furthering "economic and community development for Tribes and their members." Planning "infrastructure resources" (water, sewer, telecommunications, roads) as part of housing planning is also an objective of the Native American Assistance and Self-Determination Act.

The objective of the professional services provided by Miller, Arviso and Associates, Inc., was to identify land available for the development of affordable housing. Affordable housing "means housing that complies with the requirements for affordable housing under title II" and "includes permanent housing for homeless persons who are persons with disabilities, transitional housing, and single room occupancy housing." The Chapter land use and housing plan is in the category of "Model Activities," defined in Section 202 of the Native American Housing Assistance and Self-Determination Act. The primary purpose of the land use plan is to identify sites suitable for affordable housing. Under "Model Activities," other areas of community development may be addressed as well. These include community facilities, economic development, and the environment. Miller, Arviso and Associates, Inc., was contracted to provide these services, as well as to plan and coordinate infrastructure

development to support specific project requirements, to four Chapters, of which Bread Springs was one.

The Bread Springs Chapter of the Navajo Nation is located approximately 20 miles south of Gallup, New Mexico, in McKinley County. The Cibola National Forest borders the Chapter to the east; the Zuni reservation borders the Chapter on the south. Its land base consists of approximately 49,273 acres on the Colorado Plateau. Bread Springs is in the pine and juniper woodland of the Zuni Mountains. The Puerco River is the major drainage through the area. Bread Springs Wash is a major topographic feature of the Chapter. It carries ephemeral stream flows to the Puerco River. Elevation is greater than 7,100 feet above sea level. The climate can be severe, especially in winter. Soils are highly erosive if disturbed. Bread Springs has very high scenic quality because of its mountainous landforms and forest cover. Livestock grazing and fuel woodcutting are the principal economic uses of the Chapter's natural resources.

The following multi-step process was involved in carrying out the land use planning project for the Bread Springs Chapter:

1. Community Assessment

This step required Miller, Arviso and Associates, Inc., professionals to review the community's existing data, such as land use policy, economic development policy and plans, environmental protection policy and plans, as well as other extensive data. Demographic data was obtained from the 1980 and 1990 U.S. Census, the Navajo Nation's 1996 Chapter Profiles, Chapter Officials, and the Navajo Department of Economic Development.

Also, during this community assessment phase, Miller, Arviso and Associates, Inc., professionals, including Navajo-speaking staff members, met with Tribal staff, Land Use Coordinators, and Chapter members for the purpose of introducing the planning team, providing information, and soliciting community input. The community meetings were conducted with respect for Tribal

customs and traditions, and with the purpose of determining a community's vision of future needs and desires.

2. Land Suitability Analysis

This step involved creating an inventory and photographic record of major natural and built features, as well as reviewing such factors as climate, topography, geology, and drainage and flood control, along with cultural and historic resources.

Consultants reviewed and evaluated Seismic Hazard maps prepared by the United States Geological Services and determined that none of the proposed sites for housing or economic development and general administrative services would be affected by a seismic event.

Consultants reviewed and evaluated topography maps prepared by the United States Geological Services and Flood Hazard Area maps and related data prepared by the Federal Emergency Management Agency. This review was done to determine the potential for flooding on sites chosen for housing, general administrative facilities, and economic development. After careful evaluation it was determined that the designated sites were suitable for the proposed functions and related activities.

The responsibility for identifying soil types and appropriate application of corrective measures for surface flows is vested with the designers.

Culturally Significant Areas

Consultants conducted Class I Surveys of each potential housing site to determine whether any archaeological sites were in the identified areas or vicinity thereof. The specific results of the surveys are documented in Technical Report Number 2000-53.

Specific results and recommendations are contained in the referenced Technical Report Number 2000-53 and not repeated here in order to protect the confidentiality and nature of the archaeological sites.

3. Infrastructure Analysis

Miller Arviso and Associates, Inc. reviewed existing conditions in the built environment to assess the ability for and constraints against future development.

The final analysis or determination for adequacy of water, sewer collection and disposal system, and electrical distribution will be decided, depending on specific sites chosen. The telecommunications system is totally inadequate and will require substantial improvements to guarantee reliable service in the Chapter area.

This multi-step process has resulted in a comprehensive final report, including implementation strategies and supporting maps all of which have been encoded in Geographic Information Systems format. The final report addresses community-based values, which have been the basis, along with feasibility, for Miller, Arviso and Associates, Inc.'s final recommendations on land use, with emphasis on the development of housing and planning implementation strategies.

Land Use and Housing Planning Project Phase I - Community Assessment

(As previously submitted, with minor wording changes)

Bread Springs Chapter

Introduction

The Navajo Nation retained Miller, Arviso and Associates, Inc., to assist the Bread Springs Chapter in preparing a land use plan that is consistent with expressed community values. This land use plan is also consistent with the Navajo Nation Local Governance Act.

The land use plan is an eligible activity under funding through the Native American Housing Assistance and Self-Determination Act of 1996, which recognizes "the special role of the United States in helping Tribes and their members to improve their housing conditions and socioeconomic status" by aiding low-income "families and individuals seeking affordable homes in safe and healthy environments..." and by furthering "economic and community development for Tribes and their members." Planning "infrastructure resources" (water, sewer, telecommunications, roads), as part of housing planning, is also an objective of the Native American Housing Assistance and Self-Determination Act.

Affordable housing "means housing that complies with the requirements for affordable housing under title II" and "includes permanent housing for homeless persons who are persons with disabilities, transitional housing, and single room occupancy housing." The Chapter land use and housing plan is in the category of "Model Activities" defined in Section 202 of the Native American Housing Assistance and Self-Determination Act. The primary purpose of the land use plan is to identify sites suitable for affordable housing. Under "Model Activities," other areas of community development may be addressed as well.

These include community facilities, economic development, and the environment.

The final report consists of four integrated parts: a community needs assessment, a suitability analysis, an infrastructure analysis, and a land use plan. The final report includes implementation recommendations. All supporting maps will be encoded in Geographic Information Systems format.

Public Participation Requirement

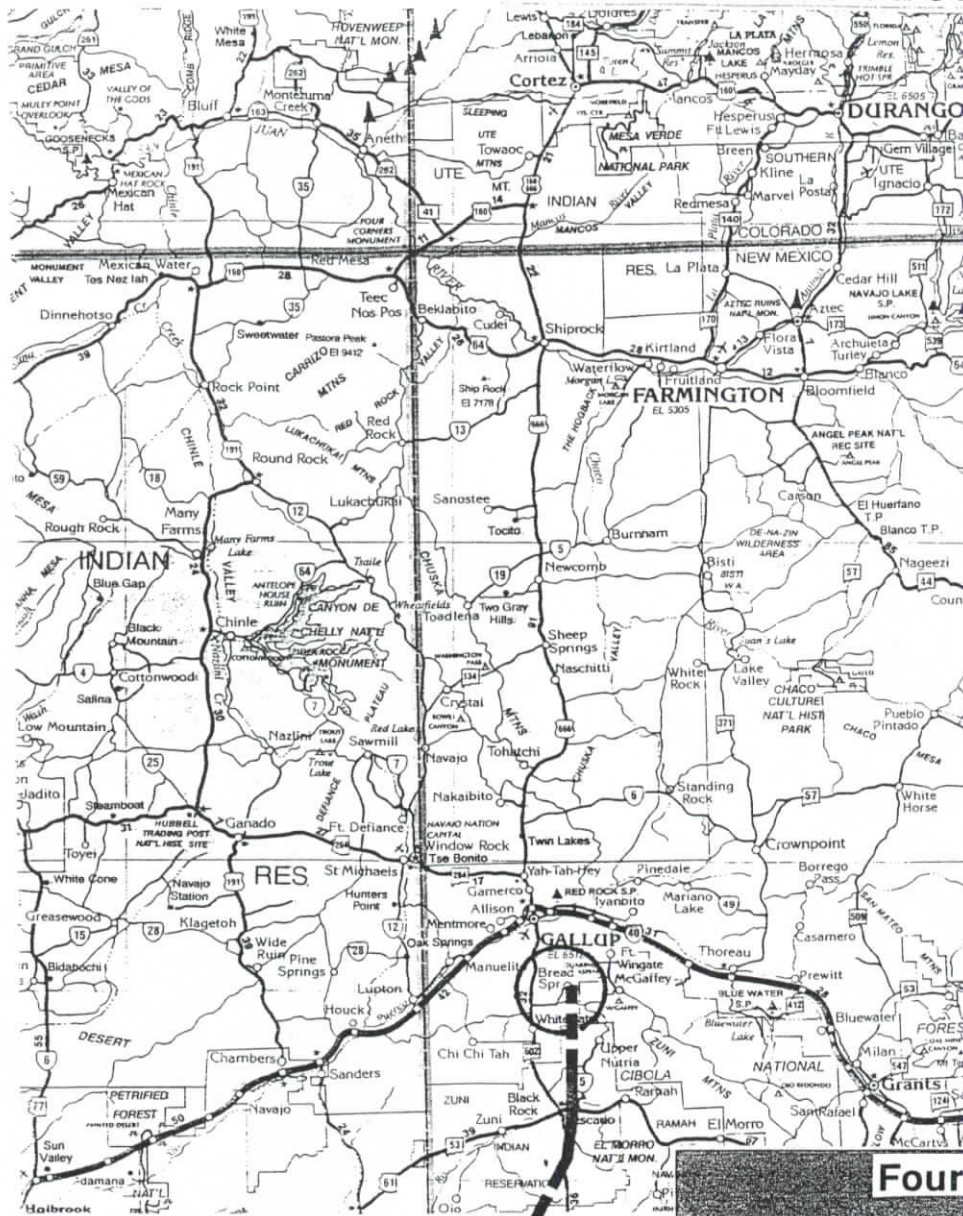
Public participation in the planning process is required to comply with the Native American Housing Assistance and Self-Determination Act. The community's vision and guiding principles for its future development has been solicited through public meetings and in consultation with community staff and officials.

The focus of the Community Assessment is evaluation of housing and demographic data that is to be the basis for predicting housing demand for the next 25 years. This phase of the planning process also contains a summary of the guiding principles and vision regarding local planning and development as expressed by the community.

Bread Springs Chapter

The Bread Springs Chapter of the Navajo Nation is located approximately 20 miles south of Gallup, New Mexico in McKinley County. (See *Figure 1, Vicinity Map*). The Cibola National Forest borders the Chapter to the east; the Zuni reservation borders the Chapter on the south. Its land base consists of approximately 49,273 acres on the Colorado Plateau. Bread Springs is in the pine and juniper woodland of the Zuni Mountains. The Puerco River is the major drainage through the area. Bread Springs Wash is a major topographic feature of the Chapter. It carries ephemeral stream flows to the Puerco River. Elevation is greater than 7,100 feet above sea level. The climate can be severe, especially in winter. Soils are highly erosive if disturbed. Bread Springs has a very high scenic quality because of its mountainous landforms and forest cover. Livestock grazing and cutting wood for fuel are the principal economic uses of the Chapter's natural resources.

Four Corners Area



North 
Not to Scale

Bred Springs Chapter

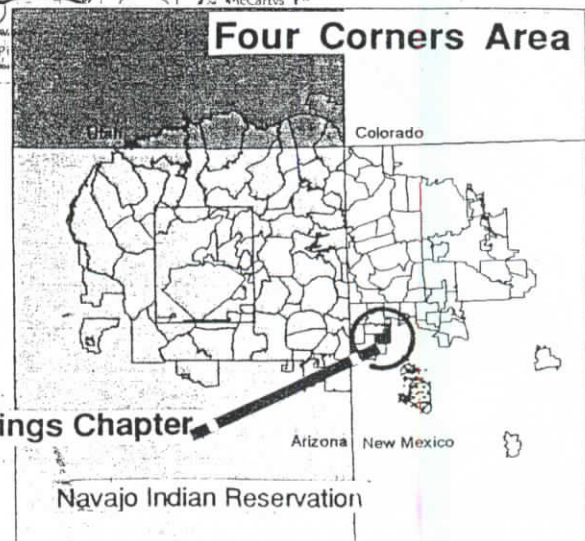


Figure 1: Vicinity Map

Community Assessment

The land use planning process occurred in several phases. The first phase is a Community Assessment, which is the subject of this report. The Community Assessment documents the vision and guiding principles for development that the community has expressed for its Chapter. It also documents demographic data, Chapter land status, housing needs, grazing and agriculture needs, community development needs, and economic development objectives.

Demographic Data

Demographic data includes the population total of Chapter residents, their age, employment, income, educational level, health status, and other factors. Because of the difficulty of conducting a house-by-house survey, the Project Director made a determination to wait until the data from the 2000 U.S. Census becomes available. Census data will be used to refine estimates of demographic data, particularly population counts, when the census enumeration is complete.

Data on per capita income, median age, employment status, and education level is unavailable until completion of the 2000 U.S. Census. However, it is assumed that one-half of the population is under the age of 18. This young population will be the source of new family formation over the next 25 years.

The 1980 U.S. Census counted 1,005 members residing in the Chapter. The population had increased to 1,147 in 1990. This is an increase of approximately 14 percent over the past decade, or 1.4 percent per year. In addition to natural increase from births, Bread Springs has experienced a population increase as persons displaced from disputed Navajo-Hopi lands have settled within the boundary of the Chapter. It is assumed that the natural rate of population increase will remain about the same over the 25-year planning period. New residents displaced from disputed lands represent a one-time increase unlikely to recur during the planning period. Staff estimates the current Chapter population to be 1,600. This population estimate has been used to predict housing and other community needs. The estimated population

represents an increase of 453 people, or 39 percent, between 1990 and 2000.

Community Demographics

Navajo Nation President Kelsey Begaye discussed housing and employment in his April 1999 "State of the Nation Address. Mr. Begaye stated, "Walking in Beauty means that together we will transform this Navajo Nation from a land of too much poverty... to a land of prosperity... from a land of too many inadequate dwellings... to a land where every person has a decent home... from a land where under half our People have a job... to a land of full employment..."

Mr. Begaye continued, "Walking in Beauty means all of us. Some of us are poor and live in homes without water and electricity. Some of us are better off and live in homes with everything we need. Some of us have been gainfully employed all of our lives. Some of us have never been employed... Walking in Beauty means that all of us will move into the 21st Century, hand in hand, proud to be Navajo... ensuring that each Navajo Man, Woman, and Child enjoys the bounties of a decent job, a decent home, water and electricity..."

These concerns were also the subject of one of Mr. Begaye's election issues while running for office. His platform includes a plank on housing, which stated, "The Navajo Nation housing and health related conditions need the direct attention of its government... The development of alternative models and processes of housing finance, planning, construction, maintenance, and development need to be put into motion."

Methodology

The Community Assessment prepared for the Bread Springs Chapter includes compilation of demographic data. Demographic data includes the population total of Chapter residents, their age, employment, income, educational level, health status, and other factors. The Community Assessment also includes a socioeconomic analysis. This information is required to verify that housing projects funded by the U.S. Department of Housing and Urban Development under the Native

American Housing Assistance and Self-Determination Act benefits low and moderate-income persons. Low and moderate-income persons are defined as those whose income is 80 percent or less than the median income of the surrounding community at large, usually taken as the county in which the beneficiaries of U.S. Department of Housing and Urban Development funded projects reside.

Data from the 2000 U.S. Census was not available during the contract term. Therefore Chapter demographic and socioeconomic data was obtained from four reliable sources:

- The 1980 and 1990 U.S. Census;
- Data published in the Navajo Nation's 1996 publication, Chapter Profiles;
- Consultation with Chapter staff, officials and members; and,
- Statistics compiled by the Navajo Department of Economic Development.

It is assumed that one-half of the total population is under the age of 18. Staff in the Navajo Department of Economic Development confirmed this assumption. Chapter staff, officials, and members, including those involved in child education and health care, concurred with this assumption. The youthful nature of the Chapter's population is relevant to predicting household formation, and therefore, future housing demand over the next 25-years.

Data was collected and tabulated for Chapter total population, Chapter employment and unemployment, and Chapter income and per capita income. Data regarding education level was not available, except anecdotally. Chapter staff expressed the opinion that education and skill levels continue to rise, and that many adults under the age of 35 have some high school education. This assertion must be considered in light of a Reservation-wide schools drop out rate estimated to be between 40 and 50 percent.

The 1980 U.S. Census counted 1,005 members residing in Bread Springs. The population had increased to 1,147 in 1990. This is an increase of approximately 14 percent over the decade, or 1.4 percent per year. Population for 1999 was projected to be 1,356. This is an increase of 209, or 18.2 percent over nine years. This converts to an

annual average increase of just more than two percent per year. The growth rate thus increased significantly from the 1980-89 decade to the 1990-1999 decade. It is assumed that the natural rate of increase will remain about the same over the 25-year planning period. Projected over 25-years, the population of Bread Springs would be approximately 1,600 by 2010; 1,888 by 2020; and 2,058 in 2025.

Chapter staff estimates that current population is approximately 1,600. This estimate is higher than that of the Navajo Department of Economic Development. The Chapter staff estimate includes new residents displaced from disputed lands, which represents a one-time increase unlikely to recur during the planning period. The Chapter staff estimate has been used to predict housing and other community needs.

The unemployment rate in Bread Springs is high, exceeding 87 percent. The per capita income is \$818.49, which is significantly higher than for the other Chapters included in this Community Assessment, but extremely low when compared to off Reservation income, which is approximately \$7,500 per capita in Arizona, for example.

Chapter Land Status

Land within the Chapter is almost entirely tied up in 99-year grazing leases. Land has been withdrawn for community use in the vicinity of the old Chapter House, located on the east side of the Bureau of Indian Affairs 71, and the new Chapter House, approximately two miles to the northeast on the same road. Additional land has been withdrawn for a planned 160-acre subdivision located on Pinehaven Road approximately one-half mile east of Highway 602.

The Bread Springs area has some private landholdings commingled with Tribal land. Pinehaven is the non-Indian community to the south of Bread Springs. In addition, there are parcels of State of New Mexico land, and National Forest land in the area. Fort Wingate, a Federal reserve, abuts Chapter land to the east.

To develop new housing, community facilities, and commercial sites would require land withdrawal.

Existing and Future Housing Demand

Bread Springs has a wide variety of housing stock. Traditional hogans built of notched logs are still in use, and may be located in a family encampment, which also has more modern wood frame houses and mobile homes.

Housing demand was assessed for a 25-year period. There are four categories of housing demand:

- Replacement housing because much of the existing stock has reached or exceeded its useful life;
- New housing for new families predicted to form over the next 25 years;
- New housing for off-reservation members who would return to Bread Springs; and,
- Emergency shelter for families who suffer loss of their home from fire or other damage.

Replacement housing is an urgent need. Much of the Chapter's housing is 30 or more years old. The number of replacement units is undetermined. Accompanying replacement, or provision, of water, sewer, electricity, and telephone would be required. For example, houses built under an energy dislocation program in the Sundance Mine area are 20 or more years old and need replacing.

The number of housing units needed to satisfy new families, which will form as young members of the Chapter mature, is undetermined.

The need to create space for members without allotments was identified, but the number of home sites that would be needed is unknown.

Housing for returning Chapter members is estimated at 100 units.

Emergency shelter is an unmet need. City and County resources are presently the only alternative; the old traditional network of the community meeting the needs of its own members has broken down. An estimated 10 units under Chapter control would meet the needs of the homeless and others. Shelter would be temporary, with stay limits set, based on circumstances.

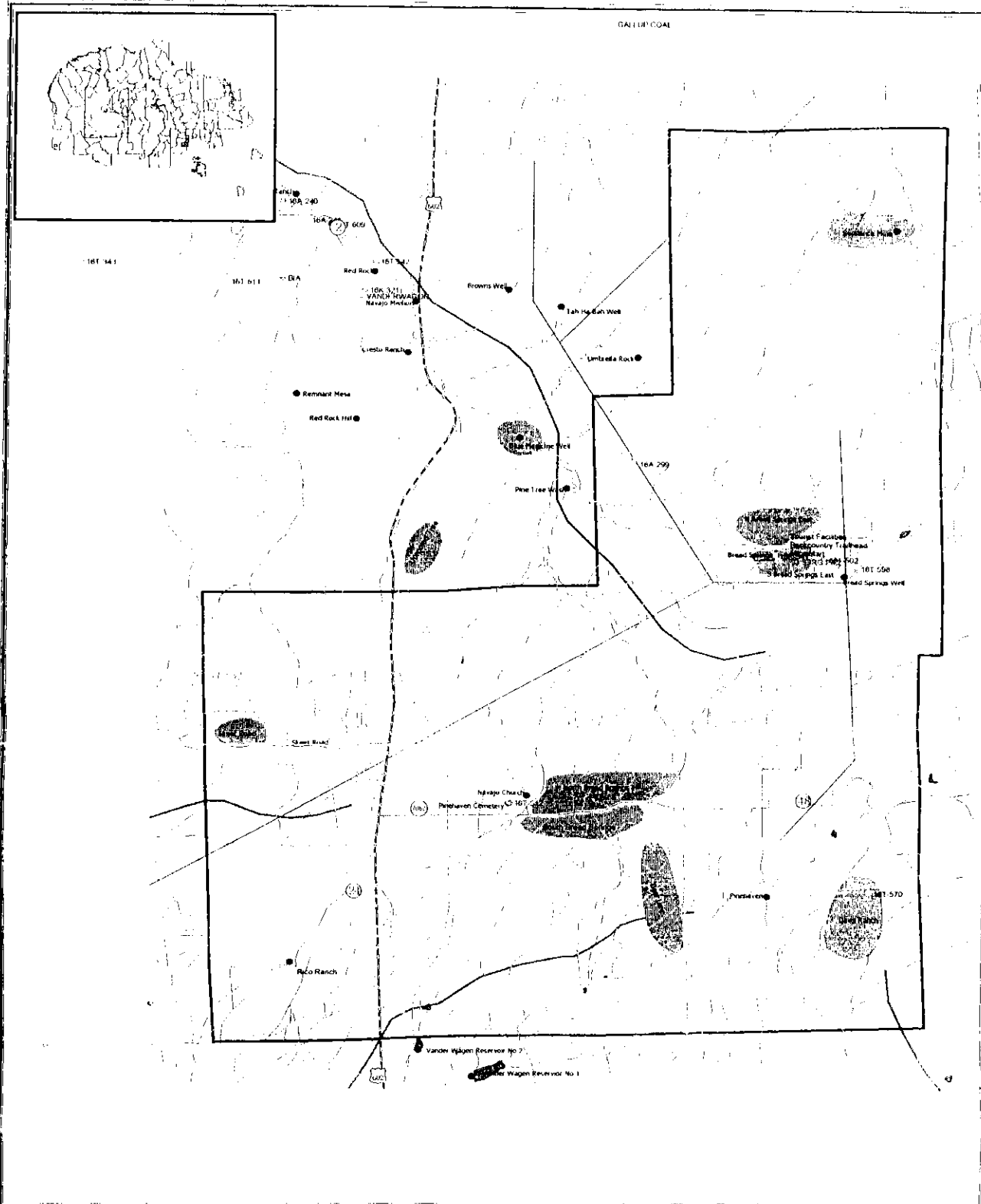
One house for a Chapter Custodian is also needed.

Housing Types

Single-family one-story houses would be the main type of housing needed. Some kind of multigenerational housing should also be developed, perhaps two-story with a central kitchen and separate sleeping areas.

Housing Sites

Several potential home site areas were identified through consultation with Chapter staff, officials, and community members. The sites were subsequently reviewed during a public meeting. None were deleted or added as a result of public review. All of the sites on the following list, therefore, will be carried into the next phase of planning for suitability and infrastructure analysis (*See Figure 2, Potential Housing Sites*).



ACCURACY STATEMENT:

The information compiled on this map has been obtained from third parties deemed to be reliable. While GIS Southwest Inc. has attempted to verify all information received, we assume no responsibility for its accuracy.

Data compiled and map composed by:

GIS Southwest Inc.
 8601 N. Black Canyon Highway
 Suite 215
 Phoenix, AZ 85021
 (602) 964-1928
 www.gisgsw.com



The existing and potential housing sites are:

- 160 acres along the north side of the entry road into the Chapter for 1-acre home sites. This location is already in the planning stage. Community facilities are also proposed for this area;
- Blue Medicine Well;
- Bread Springs North and Bread Springs South, on each side of Bread Springs Wash near the Chapter House;
- Along BIA Road 7602;
- Skeet Road (near the Mustang gas station);
- Uprooted Tree;
- Davis Ranch (Tiger Lane); and,
- Sundance Coal Mine, near Rehoboth, separated from other areas by a big mountain, with a long unpaved road as its only access.

Summary of Predicted Housing Needs Are 450:

- 200 New home sites
- 140 Replacement homes
- 100 Homes for returning members
- 10 Homes to serve as emergency shelters

Existing and Future Grazing and Agriculture

Grazing continues to decline in importance as traditional lifestyles compete with other means of livelihood. Cattle, sheep, and horses are the dominant livestock. Animals may graze for part of the year, and receive supplemental feed from purchased hay for the remainder of the year.

Agriculture is a minor economic activity. Family camps may have home gardens for fresh produce. Where suitable land exists, corn may be planted as a supplemental livestock feed. Cornfields are small, typically an acre or two in size. They are not irrigated, and the practice of dry land farming results in wide variations in productivity, depending on precipitation during the growing season. After the corn is harvested, the remaining stalks and stubble are used for grazing, so that both grain and fodder are produced from the one crop.

Existing grazing and agricultural areas appear adequate to meet the demands of livestock owners. Bread Springs is primarily forest land and is not as suited to grazing and agriculture as other areas of the reservation which have open grasslands and water sources developed for irrigation.

Existing and Future Community and Public Facilities

Community Development Needs

Community development includes facilities needed to support a safe and healthy living environment, and the condition of the natural environment, which surrounds the community. The Bread Springs Chapter has expressed desire for new or improved facilities, and several concerns regarding environmental conditions. There is also a community need to develop a better information system. (See Figure 3, *Photographs of some community development concerns*).

Erosion Control

Gullies near the Chapter House are deepening and eroding. Bread Springs Wash, in particular, could erode to the point where it would take out part of the Chapter House parking area. Flooding is also a possibility. Bread Springs Wash will require stabilization to protect the development of community facilities planned for the area surrounding the Chapter House. The erosion and associated flood hazard need to be corrected before additional housing could be built on the north and south sides of Bread Springs Wash west of the Chapter House.

Water Quality

Well #16T-582 near the Chapter House needs water quality testing. Drilled in 1958, its depth is unknown. Water haulers use it for domestic and livestock purposes. A lateral could be constructed from the existing site to a level area where dispensing would be easier, and a concrete slab could be constructed to eliminate ruts and mud in the filling area. This would eliminate potential damage to vehicles.

Water Supply

Davis Ranch residents have to haul water a long way. A feasibility study for water line extension to this area of the Chapter should be conducted.



Clockwise from top left:

- Entry road to Chapter House, which should be upgraded to an all-weather road.
- Knoll overlooking planned housing development, which is potential site for community facilities such as a nursing home.
- Bread Springs Wash, showing erosion.
- Community well which needs routine water quality testing and improvements for water haulers.
- 160 acre housing site along entry road to Chapter. Community cemetery is located near the left edge of the photo. Recreation areas could be included with the housing.

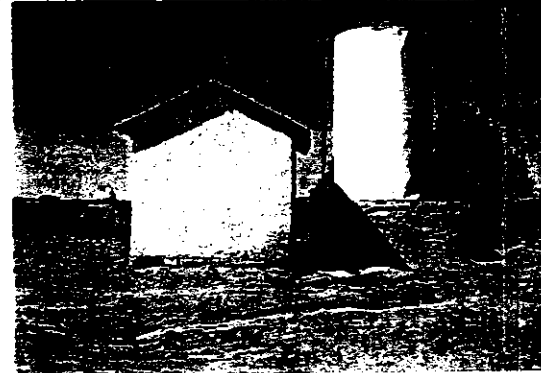


Figure 3: Bread Springs Chapter

Illegal dumping

Waste dumping is an ongoing problem in Bread Springs. The Chapter has requested help from Navajo Environmental Protection Agency, but no one has ever come to assess the situation. Bread Springs is beginning to work with neighboring Chapters to control new dumping and remove existing material. The problem is principally one of solid waste dumping. The extent of hazardous materials, if any, which may have been dumped, is not known.

Rural Addressing

McKinley County prepared a rural addressing map for emergency response, but it is seriously outdated. Bread Springs lost a community member when emergency vehicles could not locate his house in time to provide medical aid. Areas, which have grown rapidly in the Chapter, such as the Davis Ranch area, are not mapped and emergency response would be severely handicapped, especially in the isolated camps that have been built by Navajo people who have relocated to the Chapter area.

Rural addressing needs to be correlated with the Geographic Information Systems mapping for the Chapter. Addressing could be coordinated with the two neighboring Chapters.

Ceremonial Grounds

A designated area for nondenominational religious ceremonies should be made. A site near the Chapter House, or one on a hill near the Pinehaven Mission, was suggested. A designated ceremonial ground would eliminate some conflicts with residents when informal sites near their homes are used in trespass, and would provide a more orderly situation in which health and spiritual practices could occur. The need for a ceremonial area will increase as young adults are trained as practitioners. A corollary need to protect areas where ceremonial and medicinal herbs can be collected was identified.

Office Space

New Chapter office space will be needed for Chapter staff increases as the Chapter assumes both Tribal and Federal programs. Space needs are estimated at 10,000 to 12,000 square feet to provide lease space to the Bureau of Indian Affairs, State, and other Federal Agencies.

Recreation Facilities

Recreation facilities are desired as part of new housing complexes. Play areas, appropriate to youth of all age groups, are needed. Special facilities for elder recreation were also noted.

Day Care Center

A central day care center to serve Bread Springs and two neighboring Chapters was identified as a community need. The day care center should be readily accessible to members of the three Chapters. Therefore, it would probably best be situated within the 160-acre housing development in planning near Highway 160.

Nursing Home

The Chapter desires a nursing home with 80 beds to serve Bread Springs, Red Rock, and Zuni. The facility would have to be centrally located, probably near Highway 160. A hilltop overlooking the 160-acre housing parcel along the entry road to the Chapter has been suggested as a possible location. A local nursing home would eliminate long trips to Gallup, and would allow the presence of family members in a supportive community environment. A nursing home would also create jobs.

High School

A community high school serving Bread Springs and surrounding Chapters is a community goal. Currently, all children of high school age attend school in Gallup. The nearest high school has a student body, which is 89 percent Navajo. There are conflicts with students from off reservation schools. Community members believe that eliminating the long ride to Gallup, and having a community centered high school, would be a positive step in combating drug use and gang membership, as well as enhancing the Navajo language and culture. A new high school would be centrally located, probably adjacent to Highway 160. A local school would create jobs.

Second Head Start School

A second Head Start facility is needed to meet the increase in pre-school population. The facility would be located near the Chapter House.

Fire Stations

A fire station at Pinehaven, and one at Chapter Headquarters, would improve public safety.

Cemetery Improvements

The existing community cemetery has physical constraints because it is located in an area with shallow soil over bedrock. Imported soil, plus a retaining wall, would resolve the problem.

Davis Ranch Water Supply

Davis Ranch residents are not served by a water line. A study to determine capacity and routing of a new water line is requested by the Chapter. Construction of a new water line would affect the feasibility of building additional housing in the Davis Ranch area, as well.

Non-Denominational Church

The Chapter would like to have a non-denominational church, available to all community members, constructed near the Chapter House.

Paved Roads

Dust is a nuisance and health hazard throughout the Chapter. Paved roads to control dust in residential areas is desired. A paved road from Highway 160 to the Chapter House would be necessary to carry traffic to additional community facilities, housing, and economic development activities. The Chapter submitted a request to McKinley County to pave two miles of roads in the Pine Tree Wash and Umbrella Canyon area, but funding has been delayed.

Existing and Future Commercial and Industrial Development

Existing Development

Existing commercial development is limited to off-reservation enterprises located along Highway 602. There is a convenience store with gas station on the west side of the Highway near Pinehaven Road. Chapter members go to Gallup for the great majority of their purchases, and for many other services. No commercial or industrial development exists within the Chapter.

Future Economic Development

- Tourist-related facilities to take advantage of Bread Springs' beautiful natural environment, such as a picnic area, horseback tours, hiking and biking trails. The Chapter House could be the hub for tourist activities;
- Food and crafts concession area near the rodeo grounds;
- Improved rodeo grounds; and,
- A mini-convenience store. Staff suggested that there may be enough demand to support a mini-convenience store within the Chapter that would provide the "bare necessities" (coffee, flour, milk, bread, soup, soap, toilet tissue, pet food, etc.) for people who can't get to Gallup, or during times of heavy snow. Its location would be adjacent to the Chapter House. A Laundromat might be included.

(See attached map of Future Economic Development Area)

Implementation

Housing Rehabilitation

The Chapter Service Representative requested information on the Native American Housing Assistance and Self-Determination Act, especially those sections relating to rehabilitation. Rehabilitation of housing falls under the category, "Funding For Public Housing Operation and Modernization." Eligible activities and program guidelines have been requested from the U.S. Department of Housing and Urban Development Phoenix Office of Native American Programs and will be appended to the forthcoming Phase II planning project report. A copy of the Native American Housing Assistance and Self-Determination Act legislation has been provided to the Chapter Service Representative.

Erosion Control

Grants for erosion control of Bread Springs Wash may be available through agencies like the Bureau of Indian Affairs, the U.S. Department of Agricultural Natural Resource Conservation Service, or the New Mexico Department of Agriculture. A Federal Emergency Management Administration flood hazard map should be prepared to determine those areas of the Chapter, which are subject to 100-year floods. This determination is essential to housing and other community facilities development.

Solid Waste Dumping

A Phase One Environmental Site Assessment to determine the presence of hazardous materials, if any, should be conducted for areas subject to solid waste dumping.

Private Community Development Grants

Private foundation grants to fund various needs was discussed. Consultants will provide, at no cost to the contract, as part of the Community Assessment deliverable, information on pertinent philanthropic organizations and website addresses. As Bread Springs assumes functions and responsibilities currently vested in the Navajo Nation, under the Local Governance Act, the Chapter may be eligible to apply for private grants support. The Chapter has a grants writer, but private funding sources have not been explored.

Infrastructure Grants and Loans

The community requested assistance in identifying possible sources of funding for infrastructure. The U.S. Department of Agriculture has grants and loan programs to develop water, wastewater treatment, telecommunications, and other infrastructure in eligible rural communities. Information on the U.S. Department of Agriculture Rural Development grants and loan program appears as Appendix A of this report.

Water Quality

The lack of routine testing of water from the Chapter House well was identified as a public health concern. The Indian Health Service could provide water quality monitoring for the Chapter House well. This agency could also design and construct the desired improvements to the well site.

The U.S. Environmental Protection Agency has grants for wellhead protection. Application for such grants may be appropriate to protect the Chapter House well from contamination.

Rural Addressing

McKinley County completed a rural addressing system in the 1980's, which is seriously out of date. An updated rural addressing system could be created using a satellite-linked Geographic Positioning System to accurately locate every residence and public building in the Chapter.

Data from the Geographic Positioning System field location could be entered into a Geographic Information System that would record in map and text format the location of buildings and appropriate information, such as name or special health status of residents.

Implementation could be done fairly quickly and cheaply by using Geographic Positioning System to locate the spatial coordinates of each house and transmit the data digitally for Geographic Information System input. Existing staff using rented Geographic Positioning System equipment could accomplish the task. Free classes in Geographic Positioning System use are available from major survey equipment suppliers (such as Holman's in Albuquerque), or through the local community colleges. If Chapter staff is not available for this task, a youth group such as the 4-H could be trained to do the work and could complete the Geographic Positioning System data collection as a community service project. Using the Geographic Positioning System would be an excellent opportunity to learn marketable technology skills.

It is recommended that Chapter staff contact McKinley County regarding a rural addressing update. The recently announced grant from the Bill Gates Foundation to the Navajo Nation might also fund and update the rural addressing system. Chapter staff should contact the Nation's Office of Telecommunications to initiate application for funding.

(See attached Future Economic Development Area Map)

APPENDIX A

US Department of Agriculture
Rural Development Loans

RURAL DEVELOPMENT RURAL UTILITIES SERVICE Water and Waste Disposal

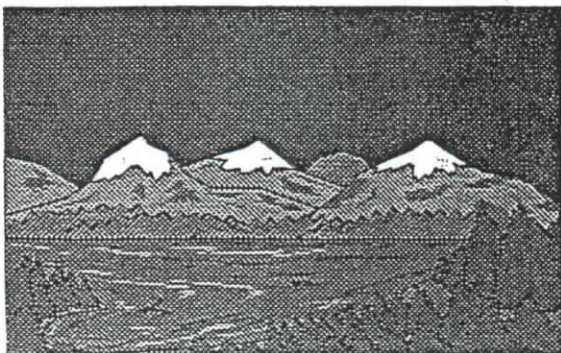
The Rural Utilities Service (RUS) of the U.S. Department of Agriculture Rural Development is authorized to provide financial assistance for water and waste disposal facilities in rural areas and towns of up to 10,000 people.

WHO MAY RECEIVE ASSISTANCE?

Public entities such as municipalities, counties, special purpose districts, Indian tribes, and corporations not operated for profit. Priority will be given to public entities in areas smaller than 5,500 people to restore a deteriorating water supply, or to improve, enlarge, or modify a water facility or an inadequate waste facility. Preference will also be given to requests which involve the merging of small facilities and those serving low-income communities.

In addition, applicants must:

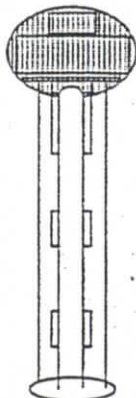
- Be unable to obtain needed funds from other sources at reasonable rates and terms.
- Have legal capacity to borrow and repay loans, to pledge security for loans, and to operate the facilities or services.
- Be financially sound and able to manage the facility effectively.
- Have a financially sound facility based on taxes, assessments, revenues, fees or other satisfactory sources of income to pay all facility costs including operation and maintenance, and to retire the indebtedness and maintain a reserve.



HOW MAY FUNDS BE USED?

Loan and grant funds may be used to do the following:

- Construct, repair, improve, expand, or otherwise modify rural water supply and distribution facilities including reservoirs, pipelines, wells, and pumping stations.
- Acquire a water supply or a water right. Construct, repair, improve, expand, or otherwise modify waste collection, pumping, treatment, or other disposal facilities. Facilities to be financed may include such items as sewer lines, treatment plants, including stabilization ponds, storm sewer facilities, sanitary landfills, incinerators, and necessary equipment.
- Pay necessary fees such as legal and engineering connected with development of facilities.
- Pay other costs related to the development of the facility including the acquisition of rights-of-way and easements, and the relocation of roads and utilities.
- Finance facilities in conjunction with funds from other agencies or those provided by the applicant.



WHAT ARE THE TERMS?

The maximum term on all loans is 40 years. However, no repayment period will exceed any statutory limitation on the organization's borrowing authority nor the useful life of the improvement or facility to be financed.

WHAT IS THE INTEREST RATE?

Interest rates will be set periodically and be based on current market yields for municipal obligations. Certain loans may be made at a lower rate. The current rates may be obtained from any RUS office.

WHERE AND HOW ARE APPLICATIONS MADE?

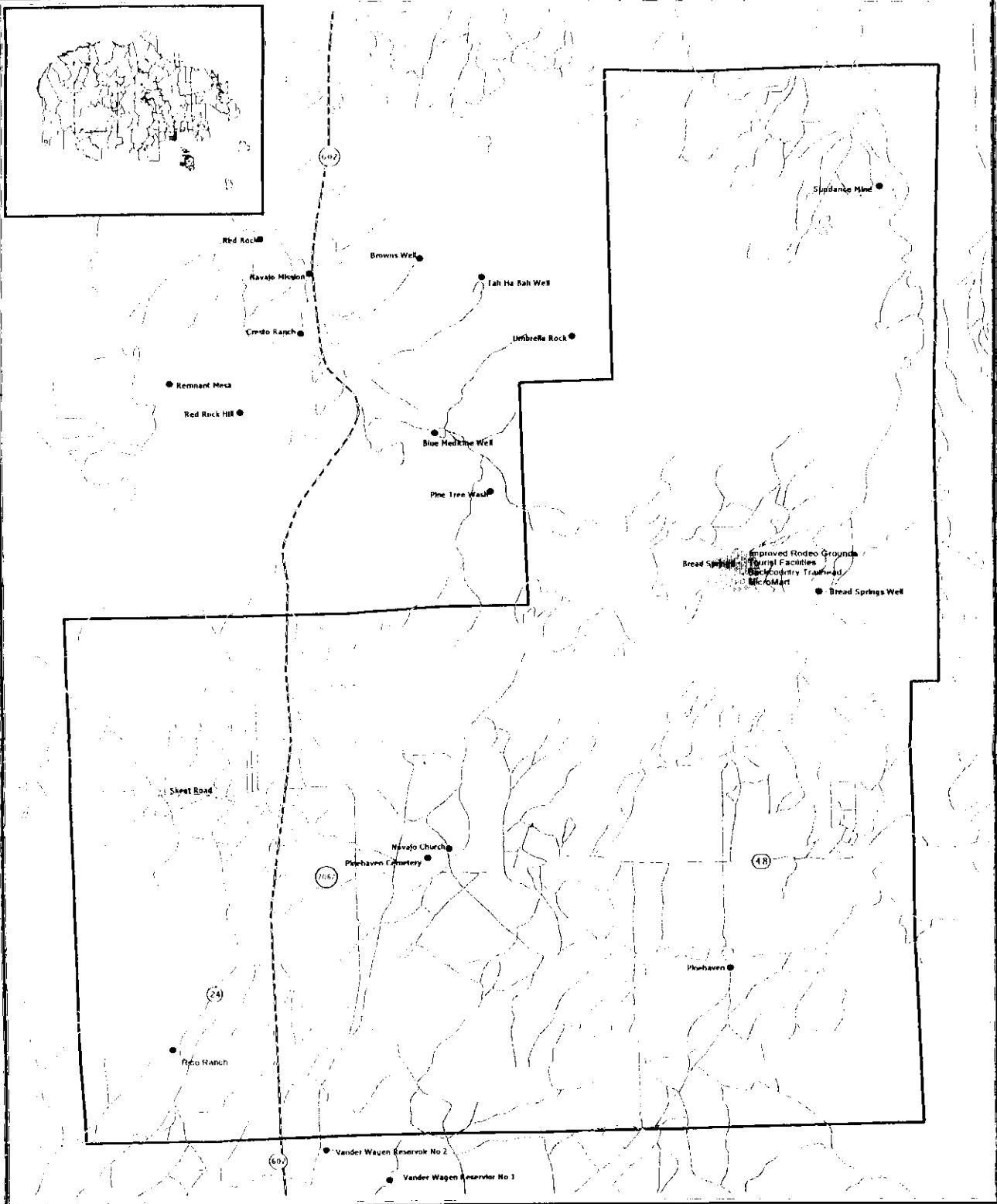
Applications for financial assistance are made at area or state offices of the Rural Utilities Service.

WHAT SECURITY IS REQUIRED?

All loans will be secured to adequately protect the interest of the Government. Bonds or notes pledging taxes, assessment, or revenues may be accepted as security if they meet statutory requirements. A mortgage may also be taken on the organization's facilities when State laws permit.

GRANTS

Funds may be available for up to 75 percent of eligible facility development costs.



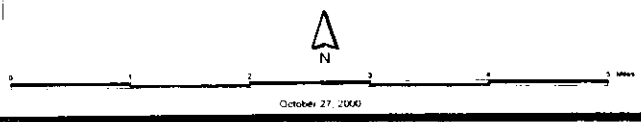
- Economic Development
- Place names
- ▲ State Highway
- ▲ Local Highway
- ▲ Dirt Roads
- Chapter Boundary

Future Economic Development Area
Bread Springs Chapter
Navajo Nation Chapter Planning
Miller, Arviso and Associates, Inc.

ACCURACY STATEMENT:
 The information compiled on this map has been obtained from third parties deemed to be reliable. While GIS Southwest Inc. has attempted to verify all information received, we assume no responsibility for its accuracy.

Data compiled and map composed by:
 GIS Southwest Inc.
 8501 N. Black Canyon Highway
 Suite 211
 Phoenix, AZ 85021
 (602) 864-1928
www.gisphd.com

hallock/gross inc.
 planning • land design • environmental • construction
 107 West University Drive • Tempe, Arizona 85281



October 27, 2000

Phase II – Land Suitability Analysis **Bread Springs Chapter**

Earthquake/Seismic Analysis

The sites chosen are not in an earthquake prone zone. This information was gleaned from the U.S. Geological Seismic Hazard Maps, based on probabilistic ground motion values at the nearest grid point, which encompassed the designated sites.

Reference materials: National Seismic Hazard Mapping Project. U.S. Geological Survey, Central Region, Golden, Colorado.

The aforementioned data is deemed reliable through November 14, 2000, but periodic seismic events may naturally occur over time, therefore all or some of the sites chosen for housing or economic development purposes will require an analysis by the designer, prior to the preparation of plans, specifications and construction drawings.

Flood Hazards

Consultants have reviewed the maps prepared by the Federal Emergency Management Agency and determined that the areas chosen for home, community center, and administrative office complex would not be effected.

Arroyo flow and minor waterways can be addressed during the design for a particular project site.

Soils Analysis

The soils in the Bread Springs Chapter varies very slightly from one location to another, therefore, several sites may be combined as follows. It should be noted that expansive clay is found throughout the reservation.

Sites 1, 2, 3, 4, 5, 6, 7, and 8

The soils at these sites are predominantly alluvial material derived from sandstone and shale, with slopes varying 1 – 8 percent. Typically the landform consists of ridges and dip-slope on Cuesta and Mesa.

Vegetation

The potential vegetation consist of Gambel's Oak, antelope bitterbrush, banana yucca, big sagebrush, blue grama, bottlebrush squirrel tail, broom snake weed, eriogonum, mutton grass, one seed juniper, prairie June grass, two needle pinon and western wheat grass.

Annual Precipitation

The annual precipitation varies between 13 – 16 inches per year.

Permeability

Permeability of the soil varies from moderately slow to slow.

Wildlife Habitat

Habitat for rangeland wildlife is considered limited. Wildlife attracted to this area include deer, coyote, jackrabbit, hawks, occasionally elk and ground squirrels. The potential as habitat for these sites for housing is extremely poor. There are no known protected species under the Navajo Nation or Federal Endangered Species Act or Wildlife Laws known to be in these areas.

Environmental

These sites will require application of an environmental assessment. In early spring, windblown dust is common to the area, but the pinon junipers and other vegetation served as partial barriers.

Disclaimer – Engineering

According to the Soil Conservation Service, the aforementioned technical information is not site specific and does not eliminate the need for onsite investigation of soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Culturally Significant Areas

The Consultants conducted Class I Surveys of each potential housing site to determine whether any archaeological sites were in the identified areas, or vicinity thereof. The specific results of the surveys are documented in Technical Report Number 2000-53.

Specific results and recommendations are contained in the referenced Technical Report Number 2000-53 and not repeated here to protect the confidentiality and nature of the archaeological sites.

Chapter Officials, community leaders and community members have affirmed that the potential sites chosen for housing have not been used in the past for traditional purposes, for gathering of herbs for medicinal uses, or ceremonial activities, such as Squaw Dances, religious and related sacred uses.

Land classified as Sacred Sites or archaeological purposes are identified under the Class I Survey Technical Report.

Landfill

There are no known landfill operations in the sites chosen for development.

A program should be designed and implemented for the collection and disposal of trash and hazardous materials in the Chapter Area. Chapter Officials, accompanied by a map specifying each location for collection boxes/dumpsters, should mandate designated Collection Sites.

Class I Survey of Potential Housing Sites for the
Bread Springs Chapter of the Navajo Nation in
New Mexico

Prepared by
Morgan Rieder, RPA

Technical Report No. 2000-53
October 25, 2000

ABSTRACT

This report presents the results of a Class I survey of potential housing sites for the Bread Springs Chapter of the Navajo Nation conducted by Aztlan Archaeology, Inc. (AAI), at the Navajo Nation Historic Preservation Department. The lead agency for the project is the Navajo Housing Authority.

TABLE OF CONTENTS

ABSTRACT	ii
INTRODUCTION	1
PROJECT LOCATION	1
RESULTS AND RECOMMENDATIONS	1
Potential Housing Site 1	1
Potential Housing Site 2	1
Potential Housing Site 3	9
Potential Housing Site 4	9
Potential Housing Site 5	9
Potential Housing Site 6	9
Potential Housing Site 7	9
Potential Housing Site 8	9

LIST OF FIGURES

1. Bread Springs Chapter and potential housing sites	2
2. Potential Housing Sites 1 (Blue Medicine Well) and 5 (Uprooted Tree); archaeological surveys are indicated by NNHPD survey numbers. USGS 7.5-minute quadrangles: Bread Springs 1995 and Twin Buttes 1963 (1979); scale 1:24,000	3
3. Potential Housing Site 2 (on Bread Springs Wash by Chapter House); archaeological surveys are indicated by NNHPD survey numbers. USGS 7.5-minute quadrangle: Bread Springs 1995; scale 1:24,000	4
4. Potential Housing Sites 3 (on BIA Road 7602) and 7 (Tiger Lane); archaeological surveys are indicated by NNHPD survey numbers. USGS 7.5-minute quadrangle: Pinehaven 1995; scale 1:24,000	5
5. Potential Housing Site 4 (on Skeet Road); archaeological surveys are indicated by NNHPD survey numbers. USGS 7.5-minute quadrangle: Vanderwagen 1963 (1979); scale 1:24,000	6
6. Potential Housing Site 6 (Davis Ranch); archaeological surveys are indicated by NNHPD survey numbers. USGS 7.5-minute quadrangle: Pinehaven 1995; scale 1:24,000	7
7. Potential Housing Site 8 (Sundance Coal Mine); archaeological surveys are indicated by NNHPD survey numbers. USGS 7.5-minute quadrangle: Bread Springs 1995; scale 1:24,000	8

INTRODUCTION

The Navajo Housing Authority proposes to provide new housing for the Sheep Springs Chapter of the Navajo Nation and has contracted Miller, Arviso and Associates, Inc., as project planner. Hallock/Gross, Inc., has been contracted to perform the environmental and cultural resource studies required to comply with Federal and Navajo Nation regulations and has requested Aztlan Archaeology, Inc. (AAI), to conduct a cultural resources records search—a Class I survey—of the potential housing sites. The records search was conducted in October, 2000, at the Navajo Nation Historic Preservation Department (NNHPD) by Morgan Rieder, AAI Senior Archaeologist.

PROJECT LOCATION

The Bread Springs Chapter is located McKinley County, New Mexico. Eight potential housing sites have been identified; their locations are shown in Figure 1 and in the following table. At this time, the configuration and size of these sites are only general.

Site No.	Description	Township*	Range	Sections
1	Blue Medicine Well	14N	18W	22, 23, 27, 28
2	on Bread Springs Wash By Chapter House	14N	17W	31, 32
3	on BIA Road 7602	13N	18W	13, 14, 32, 24
4	on Skeet Road			
5	Uprooted Tree	14N	18W	27, 28, 33, 34
6	Davis Ranch	13N	17W	28, 29, 33
7	Tiger Lane	13N	18W	24, 25
8	Sundance Coal Mine	14N	17W	8, 9, 10

*New Mexico Prime Meridian

RESULTS AND RECOMMENDATIONS

Archaeological surveys that have been conducted within and in the vicinity of the potential housing sites are shown in Figures 2 through 7, together with archaeological sites that have been recorded in the area. Archaeological surveys are indicated by NNHPD survey numbers.

Potential Housing Site 1 (Figure 2). This is located at Blue Medicine Well. The area has been subjected to several surveys; two archaeological sites have been recorded in the vicinity. Site 1 is recommended as viable, with limited additional survey.

Potential Housing Site 2 (Figure 3). This is located at Bread Springs, north and south of Bread Springs Wash. The area has been subjected to several surveys; four archaeological sites have been recorded within Site 2 and six have been recorded in the vicinity. Site 2 is not recommended because of archaeological site density.

Potential Housing Site 3 (Figure 4). This is located on BIA Road 7602. The area has been subjected to several surveys; no archaeological sites have been recorded within the potential housing or in the immediate vicinity. Site 3 is recommended as viable, with limited additional survey.

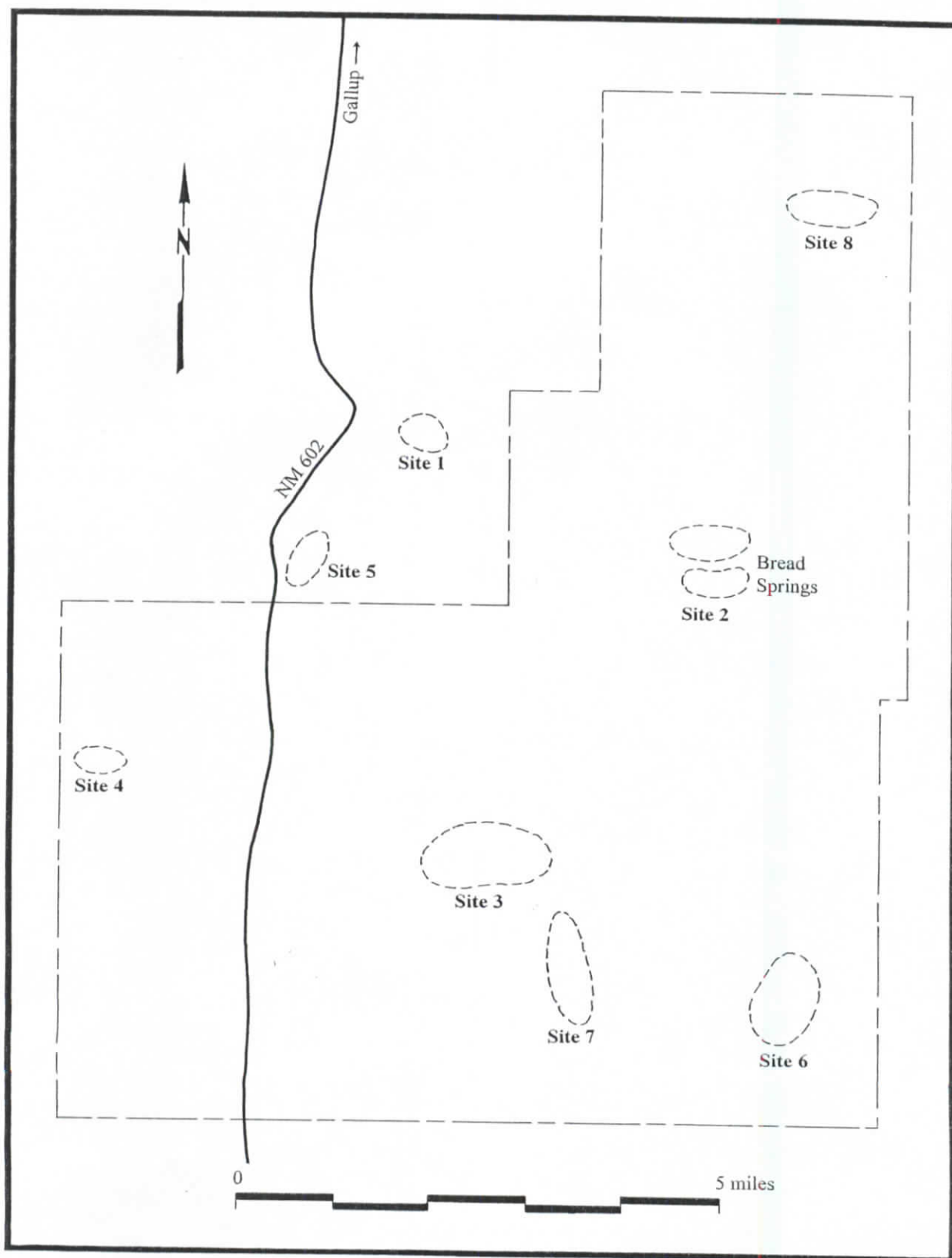
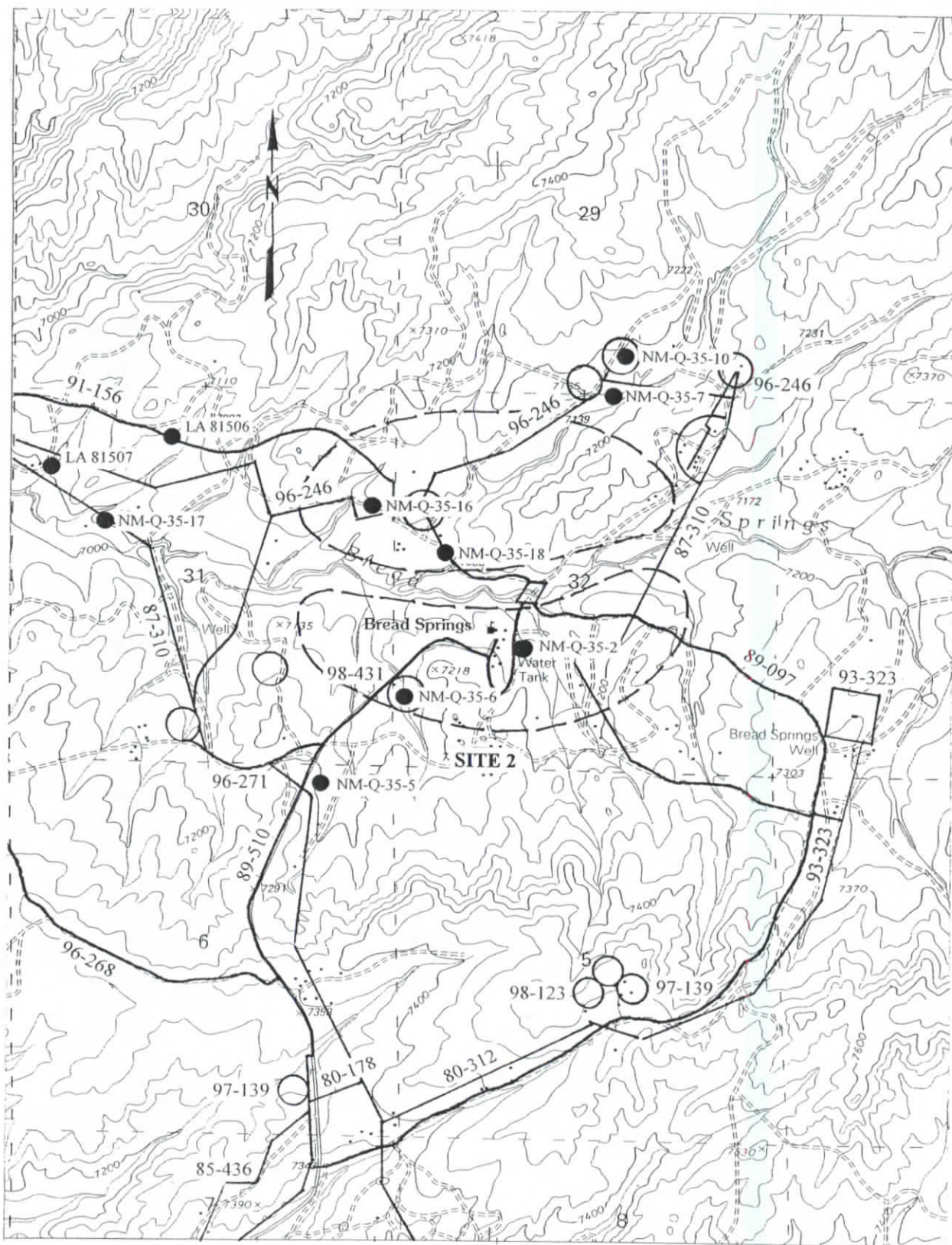


Figure 1. Bread Springs Chapter and proposed housing sites.



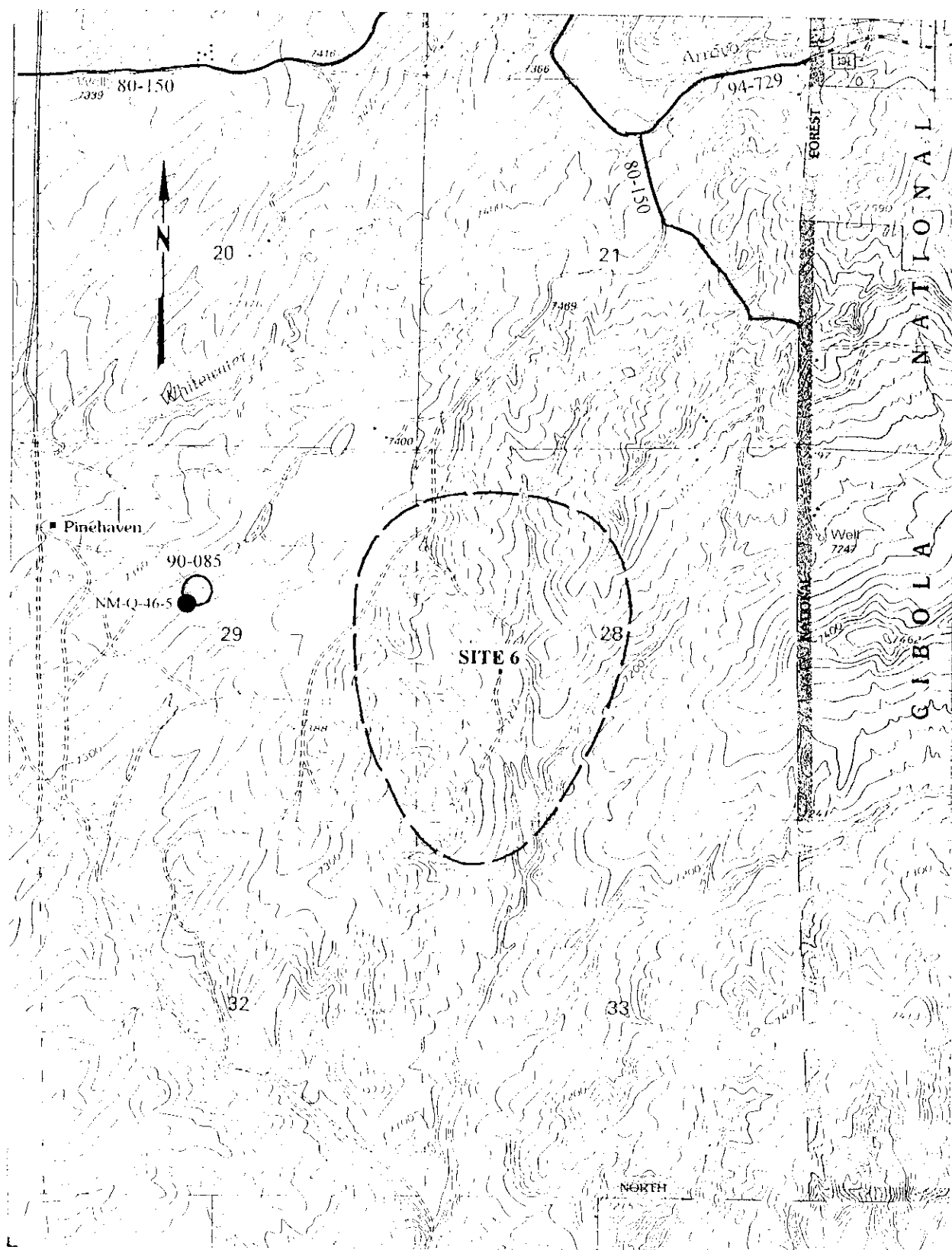


Figure 6. Proposed Housing Site 6 (Davis Ranch); archaeological surveys are indicated by NNHPD survey numbers. USGS 7.5-minute quadrangle: Pinchaven 1995; scale 1:24,000.

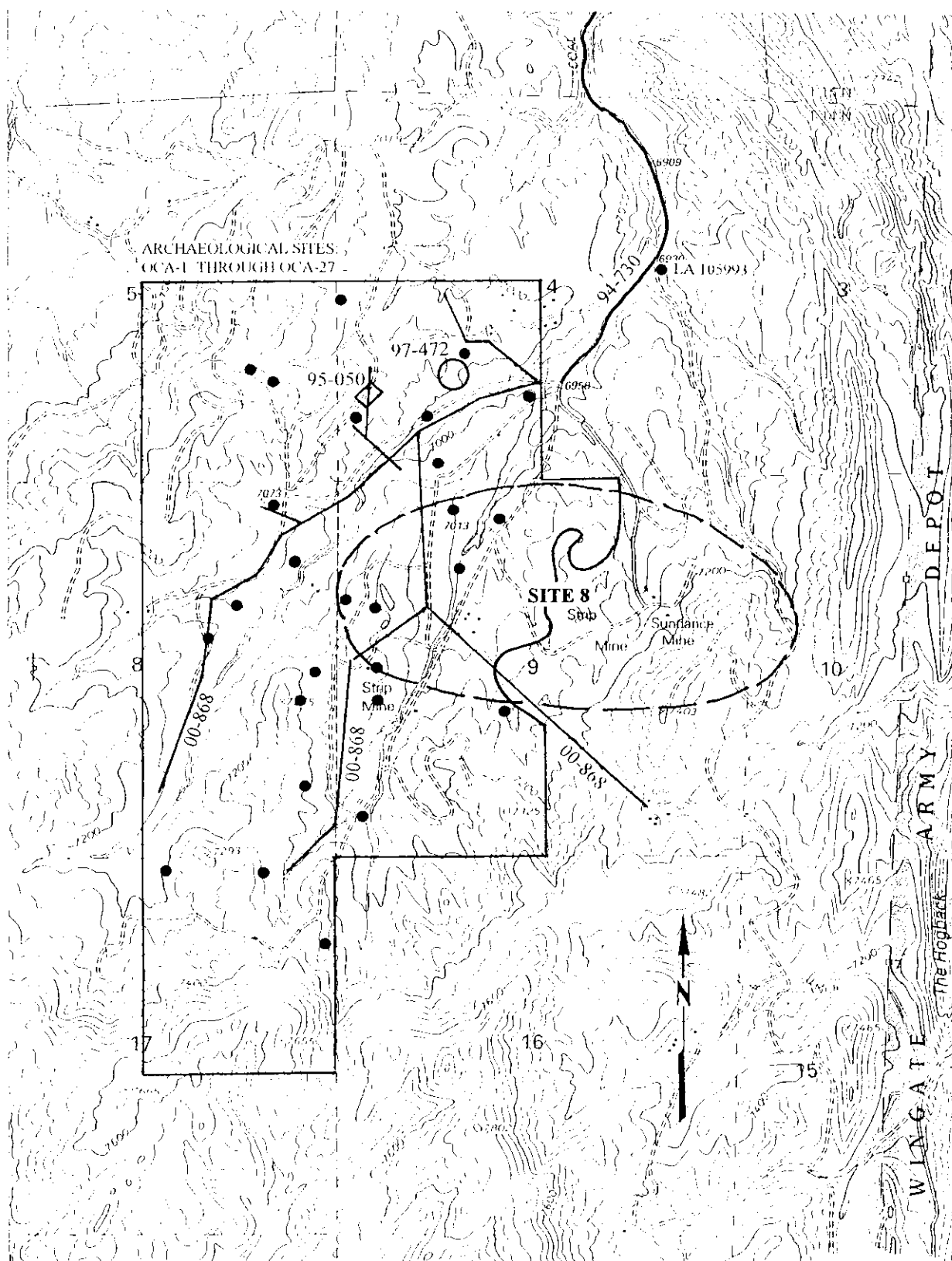


Figure 7. Proposed Housing Site 8 (Sundance Coal Mine); archaeological surveys are indicated by NNHPD survey numbers. USGS 7.5-minute quadrangle: Bread Springs 1995; scale 1:24,000.

Potential Housing Site 4 (Figure 5). This is located on Skeet Road. The area has been subjected to several surveys; one archaeological site has been recorded in the vicinity. Site 4 is recommended as viable, with limited additional survey.

Potential Housing Site 5 (Figure 2). This is the area known as Uprooted Tree. No surveys have been conducted in this area. Viability of Site 5 as a housing site would have to be determined by extensive survey.

Potential Housing Site 6 (Figure 6). This is the area known as Davis Ranch. No surveys have been conducted in this area. Viability of Site 6 as a housing site would have to be determined by extensive survey.

Potential Housing Site 7 (Figure 4). This is the area known as Tiger Lane. Limited survey has been done in this area; one archaeological site has been recorded in the immediate vicinity. Viability of Site 7 as a housing site would have to be determined by extensive survey.

Potential Housing Site 8 (Figure 7). This is located at Sundance Coal Mine. The area has been subjected to several surveys; six archaeological sites have been recorded within Site 8 and 28 have been recorded in the vicinity. Site 8 is not recommended because of archaeological site density.

Phase III - Infrastructure Analysis

Bread Springs Chapter

Electrical Distribution System

The existing electrical distributional system is controlled and operated by the Continental Divide Electrical Cooperative, Inc., located in Gallup, New Mexico.

With the exception of the Chapter area, new or improved distribution systems will be required to provide adequate service to the other sites chosen for development.

Sewer Collection System

Current System

The current system is a collection of sewer lagoons, individual septic units and outhouses.

Most of the scattered houses use outhouses. The effects on the ground water in the immediate area should be tested periodically to make certain that the deposit does not enter into the gradient flow toward existing wells or springs.

Proposed Sewer Collection System

An all-new sewer system should be connected to a central collection system and operated in accordance with applicable Tribal, Federal and State laws, rules and regulations and operational guidelines.

Water System

The existing central water dispensing system in the vicinity of the Chapter House requires improvement. At present, the site is unpaved and poses a potential for damage to vehicles and is a safety hazard to Community Members. In addition, the people in the area should add another dispenser to facilitate multi-filling. Reserved standby pump(s)

and electrical generator should be installed to provide reliable services when breakdown or interruption to the electricity occurs.

The service area should be enlarged and paved in conjunction with improvement to the access road and parking lot adjacent to the Chapter House.

All of the sites chosen for housing, community facilities and economic development will require development of a new water delivery system. Improvement and enlargement to the existing system in the vicinity of the Chapter House (Administrative Area) will be required to support inclusion of additional housing, Senior care facilities, Head Start Learning Center, Health Center, Emergency response activities, and recreational facilities.

(See attached Water System Map)

Communication System

Telephone systems outside of the immediate center of commerce are unreliable and/or non-existent. The Federal Communications Commission recognizes that there is a digital divide between developed areas and Tribal lands. It has initiated studies to determine what is required to improve or provide new services to outlying areas. (See attachment: *National Tribal Nations Link-Up Telecommunications Workshop*).

All of the sites chosen for economic development and central housing will require the installation of a new system in order to provide reliable services.

The cost to provide telephone service to scattered housing may not be cost effective; however, it may be possible to install an emergency telephone at strategic locations. Such installations would enhance response to emergencies in the community.

Roads

New all weather roads to the proposed sites will be required. The existing access road to the Chapter House administrative area should be improved for the safety, health, and welfare of the Chapter Members and the general public.

Assistance should be sought from the Federal Highway Administration, the U.S. Department of Interior, the Bureau of Indian Affairs Division of Roads, the State of New Mexico Highway Department, and the McKinley County, Division Roads and Highways.

New Sites

All of the sites identified for housing, economic development, and administrative facilities may require the design, construction, or extension of existing infrastructure.

Potential Housing Site 1 (Blue Medicine Well)

Electrical Service

Electrical service in the area is provided by the Continental Divide Electric Cooperative, Incorporated. A power line is in the immediate vicinity of this site.

Road Accessibility

Access to this site is via a dirt road. The distance to the site from N.M. Highway 602 is approximately one (1) mile.

Water System

An existing water distribution system and well (16A-299) is approximately one (1) mile East/Northeast of this site.

Telephone System

Maps furnished from Continental Divide Electrical Cooperative, Incorporated, indicates that there is a 4-wire telephone line that parallels N.M. State Road 602.

Sewer System

This site, if used, will require the design and construction of an entire new sewer collection and disposal system.

Natural Gas Service

No service exists in the vicinity of this site. However, propane gas is the energy supply commonly used at remote locations.

Potential Housing Site 2 (On Bread Springs Wash in the Area of the Chapter House)

Electrical Service

Electrical service in the area is provided by Continental Divide Electrical Cooperative, Incorporated, which operates a power line to the immediate area.

Road Accessibility

Accessibility to this site is via an un-numbered dirt road off BIA 7062 and N.M. Highway 48.

Water System

An existing water system is providing service to the existing Chapter House area and can be extended to accommodate new development.

Telephone System

There is existing service to the Chapter House and related facilities.

Sewer System

The existing system servicing this development is a lagoon and will have to be enlarged.

Natural Gas Service

No service exists in the vicinity of this site. However, propane gas is the energy supply commonly used at remote locations.

Potential Housing Site 3 (BIA Road 7062 - North and South of Bread Springs)

Electrical Service

Electrical service in the area is provided by the Continental Divide Electric Cooperative, Incorporated. A power line traverses along N.M. Highway 7062.

Road Accessibility

The property is located on the North and South side of Highways BIA 7062 and N.M. Highway 48.

Water System

The nearest well (16T-342) is ½ mile West/Northwest of this site.

Telephone System

A 4-wire telephone line parallels the main access road and also provides service to Bread Springs Chapter House and other facilities in the area.

Sewer System

This site, if used, will require the design and construction of an entire new sewer collection and disposal system.

Natural Gas Service

No service exists in the vicinity of this site. However, propane gas is the energy supply commonly used at remote locations.

Potential Housing Site 4 (Skeet Road)

Electrical Services

Electrical services are immediately adjacent to the site and are provided by the Continental Divide Electric Cooperative, Incorporated.

Road Accessibility

Access to this site is via Skeet Road. The site is contiguous to Skeet Road.

Water System

There is an existing well (16T-510) that is located North West of this site. In addition, a major water line is less than one and three-fourths mile North of this site.

Telephone System

Based on maps furnished by the Continental Divide Electrical Cooperative, Incorporated, a telephone line parallels Skeet Road.

Sewer System

This site, if used, will require the design and construction of an entire new sewer collection and disposal system.

Natural Gas Service

No service exists in the vicinity of this site. However, propane gas is the energy supply commonly used at remote locations.

Potential Housing Site 5 (Uprooted Tree)

Electrical Service

Electrical service is not currently available at this site. The nearest electrical power line parallels N.M. State Road 602 and would require an extension to the site for a distance of approximately a mile.

Road Accessibility

Access to this site will be to the East off N.M. State Road 602. The distance to the site is approximately one half mile.

Water System

The nearest water distribution system to this site is approximately two (2) miles. It may be possible to tap into the aquifer in this vicinity to obtain a reliable water supply.

Telephone System

There is telephone service along N.M. State Road 602 and within 500 feet of this site.

Sewer System

This site, if used, will require the design and construction of an entire new sewer collection and disposal system.

Natural Gas Service

No service exists in the vicinity of this site. However, propane gas is the energy supply commonly used at remote locations.

Potential Housing Site 6 (Davis Ranch)

Electrical Service

The nearest electrical services to this site is approximately 2000 feet. This system is operated by the Continental Divide Electric Cooperative, Incorporated.

Road Accessibility

Access to this site is by a local paved highway (N.M. 48), then South on another unnumbered local highway and by a dirt road to this site.

Water System

There is an existing well (16T-570) that is operated by the Navajo Tribe at the North East corner of this site.

Telephone System

There is no service to this area.

Sewer System

This site, if used, will require the design and construction of an entire new sewer collection and disposal system.

Natural Gas Service

No service exists in the vicinity of this site. However, propane gas is the energy supply commonly used at remote locations.

Potential Housing Site 7 (Tiger Lane)

Electrical Service

A power line is operated by the Continental Divide Electric Cooperative, Incorporated and is approximately 750 feet from this site.

Road Accessibility

Access to this site is via a dirt road that can be accessed off of State Highways BIA 7062 and N.M. 48; a distance of approximately one (1) mile South from a paved surface.

Water System

It is possible to drill a well at this site and obtain a reliable water supply, or extend the existing water line located approximately two (2) miles North East to the site.

Telephone System

Telephone lines are not available in this area. The nearest line is approximately one (1) mile away.

Sewer System

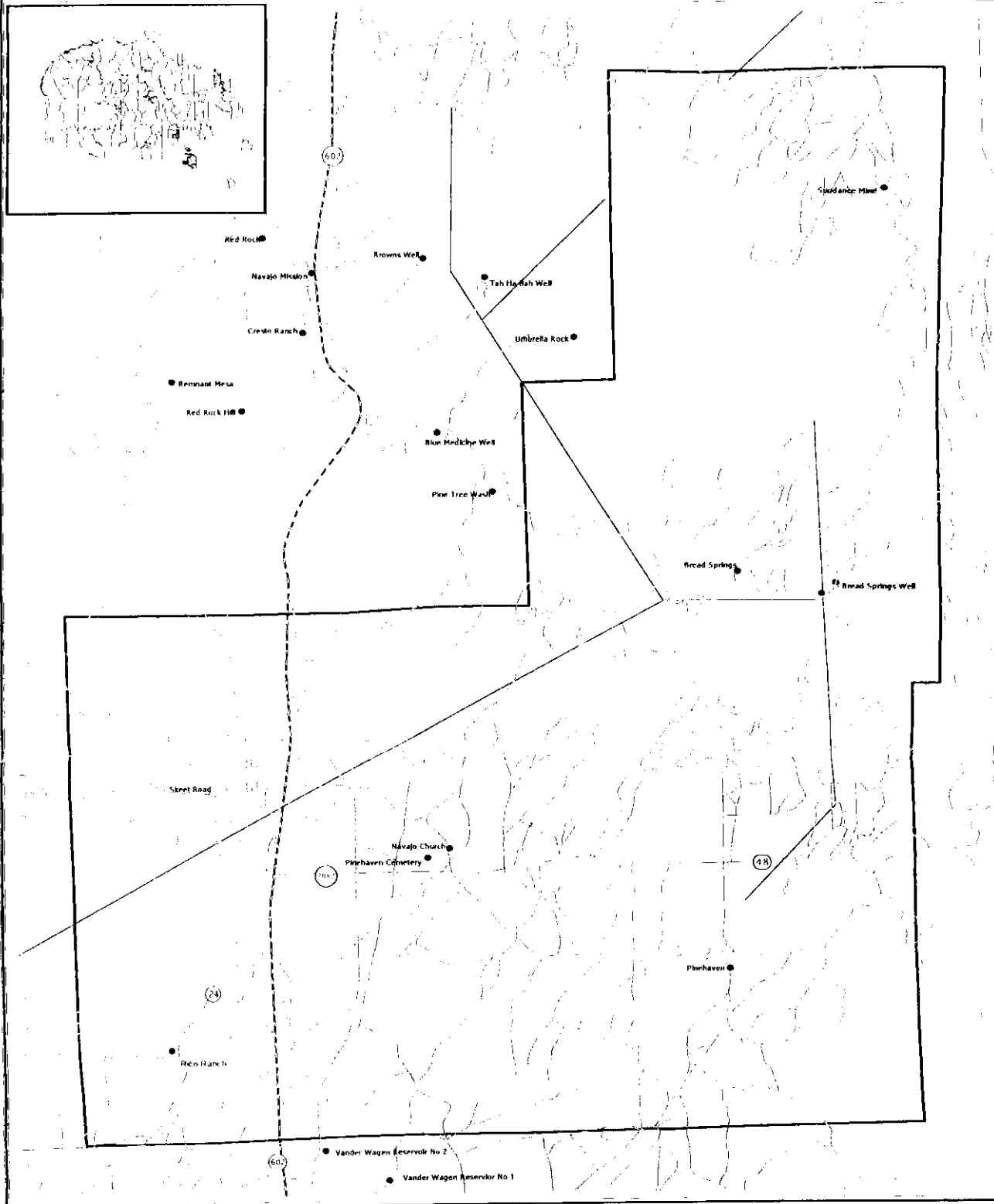
This site, if used, will require the design and construction of an entire new sewer collection and disposal system.

Natural Gas Service

No service exists in the vicinity of this site. However, propane gas is the energy supply commonly used at remote locations.

Potential Housing Site 8 (Sundance Coal Mine)

This site is not recommended for further development (housing) due to archeological density. No further investigation is warranted.



- Wells
- Place names
- - - State Highway
- - - Local Highway
- - - Dirt Roads
- - - Water System
- Chapter Boundary

Existing Water System

Bread Springs Chapter

Navajo Nation Chapter Planning

Miller, Arviso and Associates, Inc.

ACCURACY STATEMENT:
 The information compiled on this map has been obtained from third parties deemed to be reliable. While GIS Southwest, Inc. has attempted to verify all information received, we assume no responsibility for its accuracy.

Date compiled and map composed by:

GIS Southwest Inc.
 1801 N. Black Canyon Highway
 Suite 215
 Phoenix, AZ 85021
 (602) 864-1926
www.gisglobal.com

hallock/gross inc.
 planning • land design • environmental • graphics
 511 West University Drive • Tempe, Arizona 85281

September 28, 2000



Improving Access to Telecommunications on Tribal Lands

**Commissioner Gloria Tristani
Federal Communications Commission**

**National Tribal Nations Link-Up Telecommunications Workshop
January 10, 2000
Albuquerque, New Mexico**

As prepared for delivery

Thank you. It's a pleasure to be with you again. In July 1998, I participated in the first workshop that led to the creation of Tribal Nations Link-Up. I'm very pleased to find that the group has flourished. Today, you are actively engaged in education and facilitating a dialogue about Native American telecommunications issues. You are performing a critical role and I thank you.

I recently heard a tribal leader explain that telephone service among his people is a luxury. In a community where there may be no indoor plumbing and people may heat their homes with wood, perhaps this is not surprising. But it is alarming. Without access to telephones, people are at a tremendous disadvantage. There is no 911 service. Someone must run from home to home in cases of medical emergency or fire. Many are forced to make do, cut off from access to the commercial, educational, medical emergency or fire. Many are forced to make do, cut off from access to the commercial, educational, and medical care opportunities that most of us never think twice about. And without a phone, it's difficult to find a job, let alone develop your own business. All this, and I haven't even mentioned the ever growing importance of the Internet.

During my tenure as an FCC Commissioner, I have been guided by a single principle: ensuring that *all* Americans benefit from the communications revolution. I am very concerned about the need to bridge the Digital Divide, the gap between the information "haves" and "have-nots," and the importance of access by all Americans to advanced communications capability and the Internet. While technology promises the Death of Distance, too many Americans remain on the losing side of the Digital Divide. Nowhere is the more true than in Indian Country.

While Americans on average enjoy a telephone subscribership rate of 94 percent, many communities and areas throughout the country do not fare as well. According to a recent U.S. Department of Commerce report, telephone penetration generally correlates with income. For example, only 78 percent of households with incomes less than \$5,000 have telephones. Other factors play a role as well, including race, education, and age. And Indians living on tribal lands are still the least connected of all. Telephone subscribership rates on tribal lands fall under 50 percent in many instances and even under 30 percent, as in the case of the Navajo reservation. According to the 1990 Census data, just 47 percent of Native Americans had telephones. As part of the FCC's

ongoing proceeding, Western Wireless submitted data indicating that in its 19 state service area, Indian telephone penetration remains below 50 percent.

There is something extremely wrong with this picture. It is our statutory and moral obligation to bring telecommunications to Indian country. In 1996, Congress recognized the important principle of universal service. For the first time in history, federal law says that all Americans should have access to quality telecommunications services. The federal trust relationship between tribal sovereign governments and the federal government suggests that we have an obligation to do even more. Indeed, history, notions of equality, and our Nation's founding principles tell us that it is unconscionable that Indians, the first Americans, remain the last Americans to enjoy the wonders and benefits of the Information Age.

These woeful statistics are not new, and this is not the first time that the federal government and others have taken notice. What is new, however, is that the Federal Communications Commission has not only taken notice, but is now on a path towards concrete action. We have set about to change this picture, to improve these statistics, to facilitate telecom build-out, to increase telephone subscribership, to better the lives of Native Americans.

During the past year, the FCC has taken significant strides to create a dialogue on Native American issues and to find solutions to limited access to telecommunications. We have identified legal and policy issues and sought input on how to improve telephone access on tribal lands. I am pleased with the progress we've made, but our efforts reveal that we have more work to do.

Last year, for the first time in the history of the FCC, we held field hearings to examine the pressing issue of access to telephone service on Indian reservations. Last January, Chairman Bill Kennard and I participated in a hearing held here in Albuquerque at the Indian Pueblo Cultural Center. In March, the Commission held a second field hearing, this time at the Gila River Indian Community in Chandler, Arizona. We also visited several Indian lands, including the Jemez and Picuris Pueblos here in New Mexico.

All told, four of the five FCC Commissioners participated in one or both of the hearings. This is truly unprecedented. These visits provided us with an opportunity to observe firsthand the state of telephone service in these reservations and pueblos and to hear directly from tribal members about their experiences. I'm sure I speak for my colleagues when I say that this experience developed a keen awareness of the fundamental importance that access to telecommunications can have on people's lives. And I came away with several impressions.

First, the hearings began a dialogue among the parties who can bring about the change necessary to improve access to telecommunications in Indian country. My fellow Commissioners and I spoke with representatives of many Indian tribes, with the private sector, with state governments and consumer groups. Together, we hold the keys to identifying obstacles and finding solutions to improving access. We need to promote a

more active involvement by tribes in telecommunications policy matters. I want to thank you for being here today to further our efforts to bring the communications revolution to Indian country.

Second, during the hearings we heard some impassioned and powerful statements asserting the importance of sovereign rights and tribal self-determination. Now, I know many experts in Native American law who have trouble when it comes to analyzing telecommunications law in the context of service to reservations. Yet I believe that the Commission must recognize the sovereign status of Indian tribes, including tribes' rights and responsibilities.

Third, we need to think beyond the traditional approaches and solutions to expanding service and increasing subscribership. Each Indian nation is unique in its land base, environment, economics and social issues. Yet Indian lands are characterized by vast geographic areas with small populations. As a result, it's very expensive to create a ubiquitous telecommunications infrastructure. We need to look into the effectiveness of our existing support mechanisms in Indian country. We need to examine a variety of technologies, including wireless and satellite communications, as solutions to remedy the communications gap on tribal lands.

Finally, I was very disappointed to learn that most of the tribal representatives at the New Mexico hearing were unfamiliar with the FCC's support programs that assist low-income telephone subscribers. The Lifeline program reduces low-income subscribers' monthly bill for basic telephone service. The Link-Up provides assistance with the cost of installation, it is unacceptable that Indians living on reservations are not receiving assistance because of a lack of knowledge of the established Lifeline and Link-Up programs. We need to do a better job of getting the word out, and I am committed to doing so. I am very pleased that we recently created a new Consumer Information Bureau, which should serve as a strong resource for consumer education initiatives.

As the New Mexico hearing, George Arthur, a Council Delegate of the Navajo Nation, made a very simple, straightforward plea. He noted that for several years he represented the Navajo Nation at scores of panel discussions with federal representatives, and that more often than not, little progress resulted from his interactions. He recounted that it often takes years for federal officials to respond, to provide feedback, to propose – let alone adopt – policies to address clear-cut needs. He asked that we at the FCC keep tribes apprised of any proposals or initiatives responding to the panel discussions. Well, I'm not sure if Council Delegate Arthur is with us this morning, but I'm pleased to report that we're back, we've got some proposals, and we want his input!

Following the field hearings, some of our staff at the FCC rolled up their sleeves and went to work. In response to the testimonies and concerns we heard, they identified a series of questions and developed a number of proposals to address the issues that limit telephone service in unserved or underserved areas, especially on tribal lands. In

August, the Commission adopted two items that ask questions and seek comment on proposals to remove regulatory barriers to telephone service on tribal lands.

One of the items looks at some very important issues, including the current levels of telephone subscribership on Indian land, matters of jurisdiction, designation of new entrants to provide service on tribal lands, and possible changes to the federal universal service support mechanisms. The other item focuses on potential wireless and satellite policy initiatives to increase telephone service on tribal lands. Later this morning we'll have the benefit of hearing from members of our FCC staff about these two items, but I would like to say a few words about them.

The items put forward concrete suggestions on how to provide telecom services to Indian country and other unserved and underserved communities. For example, we seek comment on a proposal that the FCC provide an additional portion of the universal service support to increase telecom deployment on tribal lands. We ask if we could expand the consumer qualifications for Lifeline support to ensure that low-income consumers on tribal lands may participate. With regard to wireless and satellite services, we ask whether modifications of technical rules would encourage existing providers to extend service to tribal lands. In making these proposals, our goal is simple: to facilitate deployment of service and increase subscribership on Indian lands. To do so, we need your help.

When we adopted these items, I expressed the hope that parties would provide input in these proceedings. I wish to congratulate the Indian community for your response. We are still accepting comments, but thus far Indian participation in these proceedings has been unprecedented. We have received over 25 separate filings representing tribal interests. And we still have another round of comments to be submitted on the universal service item by January 19. Your participation demonstrates the importance of access to communications, and I encourage you to keep involved in our process. I look forward to reviewing the full record when the comment cycle is complete and acting on these important items.

At the New Mexico hearing last year, Stanley Pino, Chairman of the All Indian Pueblo Council, summed up why we're here today most eloquently. He said, "we want to have our sunsets and make a good living, too. We want to be safe in our homes and be able to give our children every possible advantage. To do so, we need affordable telephone service, adequate lines and serious respect for our cultural identities." I believe we are on the way toward making this plea a reality.

Phase IV- General Land Use Plan and

Maps

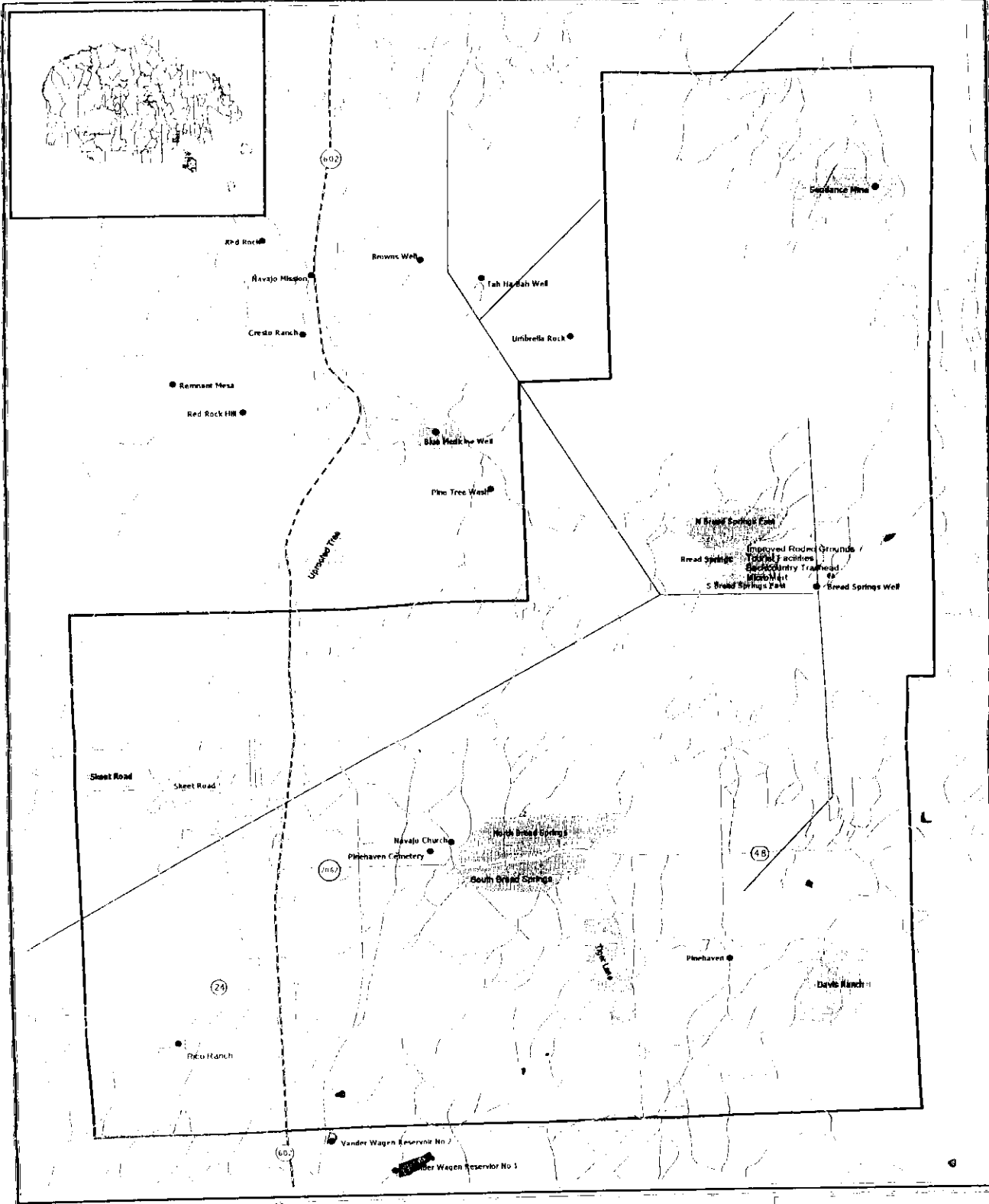
Bread Springs Chapter

Land Status

Current Uses

All of the sites chosen for housing and economic development purposes are under the administrative control of the Chapter's governing body.
(See attached Future Land Use Map)

Additional home site leases are generally available subject to need.



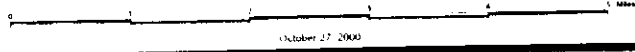
- | | |
|---------------|-------------------------|
| State Highway | Economic Development |
| Local Highway | Potential Housing Sites |
| Dirt Roads | Lakes |
| Water System | Woodland |
| Wells | Chapter Boundary |
| Place names | |

Future Land Use
Bread Springs Chapter
Navajo Nation Chapter Planning
Miller, Arviso and Associates, Inc.

ACCURACY STATEMENT:
 The information compiled on this map has been obtained from third parties deemed to be reliable. While GIS Southwest Inc. has attempted to verify all information received, we assume no responsibility for its accuracy.

Data compiled and map composed by:
 GIS Southwest Inc.
 8601 N. Black Canyon Highway
 Suite 215
 Phoenix, AZ 85021
 (602) 864-1928
www.gis-southwest.com

hallock/gross inc.
 Planning & Land Design in Environment & Society
 132 West University Drive • Tempe, Arizona 85281



October 27, 2000





Bread Springs Chapter Land Status

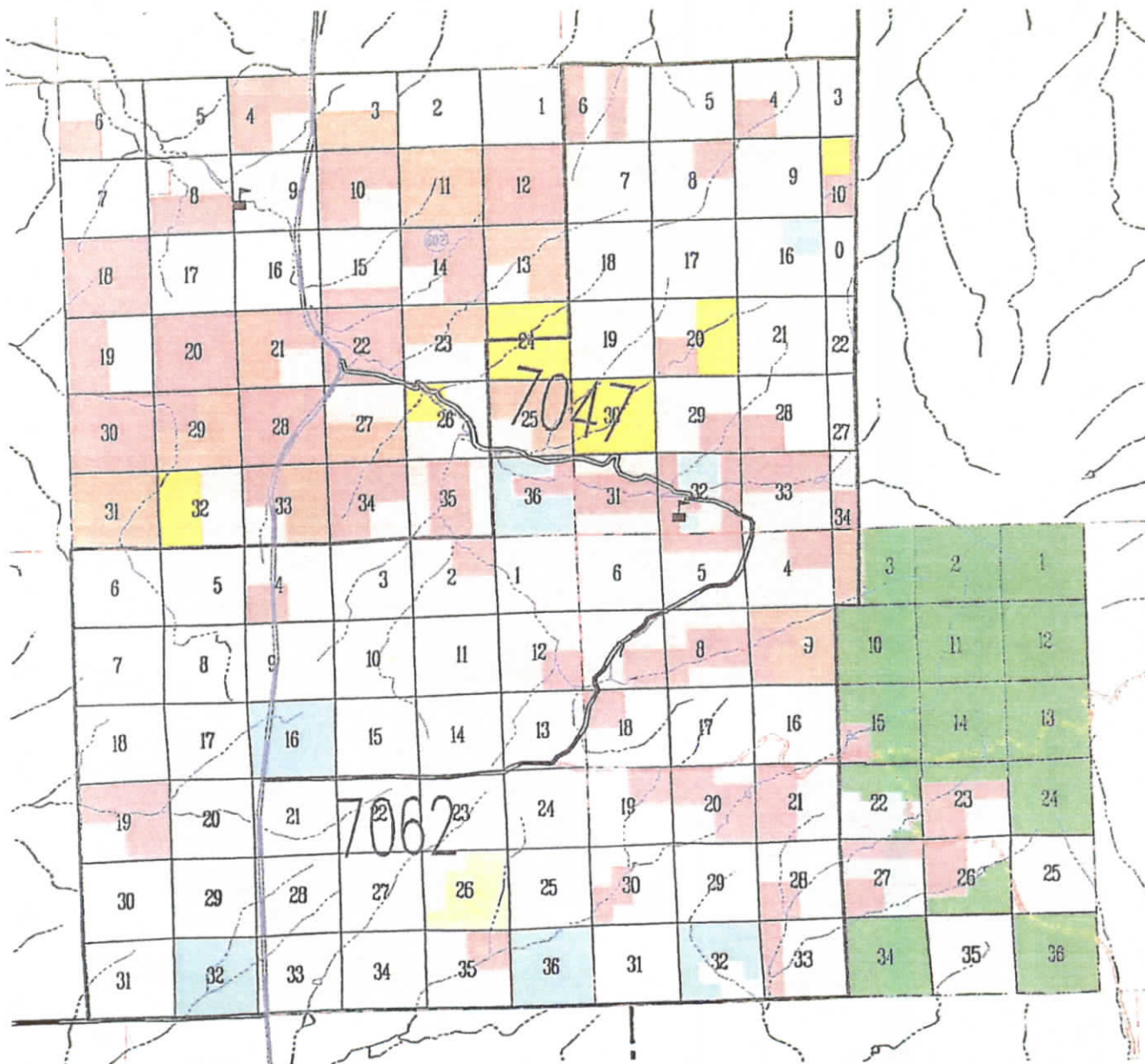


T14N

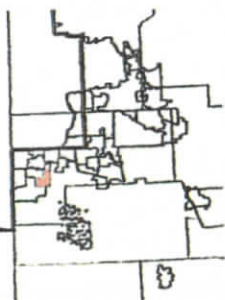
T13N

R18W

R17W



Eastern Navajo Agency



Information provided is still under development but is made available to the requesting party for the purpose of identifying, displaying general information on land status. No warranty, expressed or implied, is made by Navajo Land Dept. as to the accuracy of this data, nor shall the fact of distribution constitute any such warranty, and no such responsibility is assumed by the Navajo Land Department in connection therewith.

October 4, 1999

NAVAJO LAND DEPARTMENT

NAVAJO NATION
NAVAJO LAND DEPARTMENT
GRAPHIC/COMPUTER GRAPHICS SECTION

SCALE 1:126720

0 5 1 2

Phase V – Recommendations

Bread Springs Chapter

General recommendations:

1. The community adopts the proposed land use plan as a guide toward controlling the high and best use of its precious resources.
2. The Navajo Nation legislates a change to current laws, rules and regulations to allow for revocation of grazing permits, abandoned or unused home site leases that interfere with development beneficial to the community and for improvement to the health and welfare and safety of its members.

Specific Recommendations:

1. The Chapter in-concert with the Navajo Nation solicits grants, Federal appropriations, state, local and private monies to construct a paved road to the Chapter House; improve by extension of the existing infrastructures;
2. Chapter Officials prepare a resolution, once certified by the Nation offering local community services, (i.e., emergency health services, Head Start schools, police, fire control and senior services and other usual and customary services); and,
3. Chapter Officials once certified should seek proposals to locate Tribal, Bureau of Indian Affairs, Indian Health Service, other Federal agencies, State, and local government activities in close proximity to service recipients.
4. Chapter elected Officials adopt, by resolution, the Final Comprehensive Land Use Plan.
5. Chapter Officials appoint an Implementation Team to assure that the intent of the plan is carried out.

BREAD SPRINGS

References

1. U.S.G.S. – 1:24,000, Bread Springs Quad Sheet, U.S. Department of Interior
2. Federal Emergency Management – Flood Plain Analysis, Washington, D.C.
3. B.I.A. – Soils Maps and Range Inventory Map, Gallup, NM
4. Groundwater and Surface Water Rights of the Navajo Nation – Water Resources Management, Division of Natural Resources
5. U.S.G.S – Earthquake Analysis, Denver, CO
6. Continental Divide Electric Cooperative Service Maps – Bread Springs
7. Navajo Nation – List of Species of Concern, National Heritage Program
8. Division of Water Resources Management, Navajo Nation
9. Land Administration, Navajo Tribe Land Status Map, Window Rock, AZ
10. Chapter Images: 1996, Profiles of 110 Navajo Nation Chapters