


SANTA FE COUNTY OPEN SPACE AND TRAILS PROGRAM

MADRID OPEN SPACE MANAGEMENT PLAN APPENDICES

APRIL 2017



SANTA FE COUNTY
OPEN SPACE & TRAILS

surroundings

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MADRID OPEN SPACE MANAGEMENT PLAN - APPENDICES

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Overview of Management Activities Matrix Madrid Open Space

APPENDIX A

Overview of Management Activities Matrix Madrid Open Space

This matrix is a comprehensive overview of maintenance activities, proposed projects, planning activities and community stewardship activities for the Madrid Open Space. Projects and activities are clustered by type of activity Planning/Maintenance/Improvements. Then, the projects are prioritized in each cluster based on Short, Mid and Long Term using an numbering system.

Short Term = 1.0 Series numbers
Mid-Term = 2.0 Series numbers
Long-Term = 3.0 Series numbers

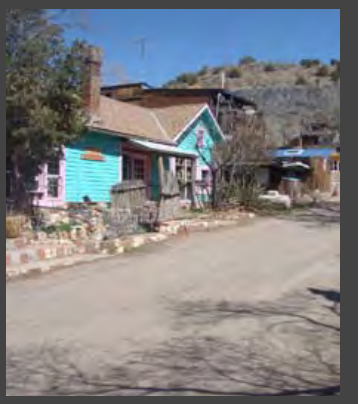
Madrid OS	# (Term and Priority)	Project or Management Activity	Objective or Purpose	Location Code (See TMU Codes)	Actor	Timeline Short=ST Mid=MT Long=LT	Recurring (R) or Not Recurring (NR)	Labor and Cost Estimates	Funding Source
Planning	1.1	Develop and implement protocols for maintenance work, team coordination, and ongoing fund identification and acquisition	All management goals (effective management)	Entire property	Planning staff	ST-MT-LT	R	TBD (20 h/y)	GF
	1.2	Plan and implement Madrid stewardship structure and activities on debris and vegetation management in floodway	Holistic & Inclusive / Education / Ecological Health	Entire property	Planning / Community Services / SFC M (Crew)	ST-MT-LT	R	TBD (80 h/y)	GF
	1.3	Develop collaboration group for comprehensive floodplain management plan Include: Madrid enties, State or Federal agencies	Access Management / Ecological Health / Public Safety	Entirel property	Planning & Projects staff	ST-MT	NR	TBD (60 h/y)	CIP/GF
	1.4	Contract for updating of floodway assessment and engineering.	All management goals (effective management)	Entire property	Planning staff	ST	NR	TBD (60 h/y)	CIP /GF
	1.5	Develop a detailed erosion monitoring plan and gather base-line data	All management goals (effective management)	Entire property	Planning staff	ST	NR	TBD (60 h/y)	GF
	1.6	Negotiate access agreement or MOU for Wilderness.	Access Management / Ecological Health / Public Safety	Wilderness	Planning staff	ST	NR	TBD (20 h/y)	GF
	1.7	Develop park entry sign, site management signage and bulletin board for Greenbelt and Wilderness	Holistic & Inclusive / Public Safety / Education	Access points	Planning & Projects staff	ST	NR	TBD (25 h/y)	GF
	1.8	Develop cultural resource monitoring and protection plan	Cultural Resources / Public Safety	Entire property	Planning	ST-MT	NR	TBD (20 h/y)	CIP/Grants/ GF
	2.1	Identify, fund and design prioritized erosion control improvements	Access Management / Ecological Health / Public Safety	TBD	Planning & Projects staff	MT-LT	NR	TBD (80 h/y)	CIP/Grants/ GF
	2.2	Plan and implement interpretive education plan and improvements	Holistic & Inclusive / Education /	Entire property	Planning &	MT-LT	NR	TBD (60 h/y)	CIP/GF
	3.1	Continue design of erosion control and floodway improvements	Access Management / Ecological Health / Public Safety	TBD	Planning & Projects staff	MT-LT	NR	TBD (60 h/y)	CIP/Grants/ GF

Madrid OS	# (Term and Priority)	Project or Management Activity	Objective or Purpose	Location Code (See TMU Codes)	Actor	Timeline Short=ST Mid=MT Long=LT	Recurring (R) or Not Recurring (NR)	Labor and Cost Estimates	Funding Source
Maintenance	1.1	Communication & outreach with neighbors and stakeholders; integrate feedback in planning	Holistic & Inclusive Management	Entire property	SFC-M (Crew) and Planning staff	ST-MT-LT	R	Annually (or more often)	GF
	1.2	Review Cave Road crossing culverts with easement holders and encourage clearing as needed by easement holders	Public Safety / Ecological Health	Cave Road	SFC-M (Crew) and Planing Staff	ST-MT-LT	R	Twice annually: 4 hr for 2 people (8 hr/yr)	GF
	1.3	Monitoring of erosion points as per a detailed erosion monitoring plan	Public Safety / Ecological Health	Entire property	SFC-M (Crew) and volunteers	ST-MT-LT	R	Twice annually: 2 days for 2 people (32 hr/y)	GF
	1.4	Monitor debris and vegetation buildup in floodway for collaborative maintenance with community entities	Ecological Health / Public Safety / Access Management	Floodway	SFC-M (Crew) and Planing Staff	ST-MT-LT	R	Twice annually: 2 days for 2 people (32 hr/y)	GF
	1.3	Monitoring walking trails with communities entities for collaborative management activities	Public Safety / Ecological Health	Entire property	SFC-M (Crew) and volunteers	ST-MT-LT	R	Twice annually: 2 days for 2 people (32 hr/y)	GF
	1.5	Inspect pedestrian bridge for materials soundness and safety	Public Safety / Access Management	Pedestrian bridge	SFC-M (Crew)	ST-MT-LT	R	1 h for 4 person (4 h/y)	GF
	1.6	Inspection and repair of boundary markers, gates, and site signs	Public Safety / Access Management	Entire property	SFC-M (Crew)	ST-MT-LT	R	Annualy, up to 1 days for 2 people (16 h/y) + supplies TBD	GF
	2.1	Continue maintenance as per above	Ecological Health/ Public Safety / Access Management	Entire property	SFC-M (Crew) or volunteers	MT-LT	R	Annually	GF, VOL
	2.2	Monitor and repair as needed erosion and floodway improvements	Ecological Health/ Public Safety / Access Management	Entire property	SFC-M (Crew) or volunteers	MT-LT	R	Annually	GF, VOL
	3.1	Continue maintenance as per above	Ecological Health/ Public Safety / Access Management	Entire property	SFC-M (Crew), Volunteers	MT-LT	R	Annually	GF, VOL
Improvements	1.1	Install park sign, site management signs and bulletin board	Public Safety / Access Management / Ecological Health	Greenbelt & Wilderness access points	SFC-M (Crew) or contractor	ST	NR	TBD, based on plan and bid	CIP
	1.2	Implement prioritized erosion and floodway improvements identified in comprehensive floodway management plan	Public Safety / Access Management / Ecological Health	Entire property, along boundaries	SFC-M (Crew) or contractor	ST-MT-LT	NR	TBD, based on plan and bid	CIP, grant
	2..1	Install interpretive education improvements	Education / Access Management / Ecological Health	Entire property	Contractor	ST-MT	NR	TBD, based on plan and bid	CIP, grant
	2.2	Continue to implement prioritized erosion and floodway improvements identified in comprehensive floodway management plan	Public Safety / Access Management / Ecological Health	Entire property	SFC-M (Crew) or contractor	ST-MT-LT	NR	TBD, based on plan and bid	CIP, grant
	3.1	Continue to Implement prioritized erosion and floodway improvements identified in comprehensive floodway management plan	Public Safety / Access Management / Ecological Health	Entire property	SFC-M (Crew) or contractor	ST-MT-LT	NR	TBD, based on plan and bid	CIP, grant

APPENDIX B

New Mexico Abandoned Mine Lands
Madrid's Mining Landscape
Reports + Weblinks

APPENDIX B



MADRID'S MINING LANDSCAPE

REPORTS + WEBLINKS

New Mexico Abandoned Mine Landscapes

Madrid's Mining Landscapes

Reports + Weblinks

The Madrid Mining Landscape Project that was initiated by the New Mexico Abandoned Mines Land Program (AML). This project helped to identify many of the central concerns regarding drainage and floodplain issues in the Madrid Open Space. The Madrid community participated heavily in this process. The community expressed during the Madrid Open Space Management Plan process strong disappointment that improvements in that plan were not achieved. They felt the AML plan did capture their community hopes. The AML reports are important background reference for any future planning of erosion and flood plain improvements in the Madrid Open Space.

DESCRIPTION OF MADRID MINING LANDSCAPES REPORTS + WEBLINKS

AML undertook the Madrid Mining Landscapes project to address the legacy of coal mining in Madrid. AML created a community-based plan to comprehensively address the environmental impacts of coal mining on Madrid's landscape. Over an eighteen month period in 2010 and 2011, a plan was articulated. Three reports resulted from that process.

The Task One Report summarized the process and strategy for implementing a community plan. It also presented precedent projects in other communities that could be useful to developing solutions in Madrid. The Task Two Report focused on the results of the three community meetings held in 2010. The Task Three Report has four parts:

1. Introduction – Overall summary of the project's goals and objectives
2. Community Outreach – Summary of the results of the community input and meetings
3. Proposed Projects – Detailed discussion of two watershed restoration/stormwater management projects including existing conditions, objectives and reclamation strategies
4. Implementation Steps – General overview of the community and agency roles and responsibilities for successful completion of the proposed projects.

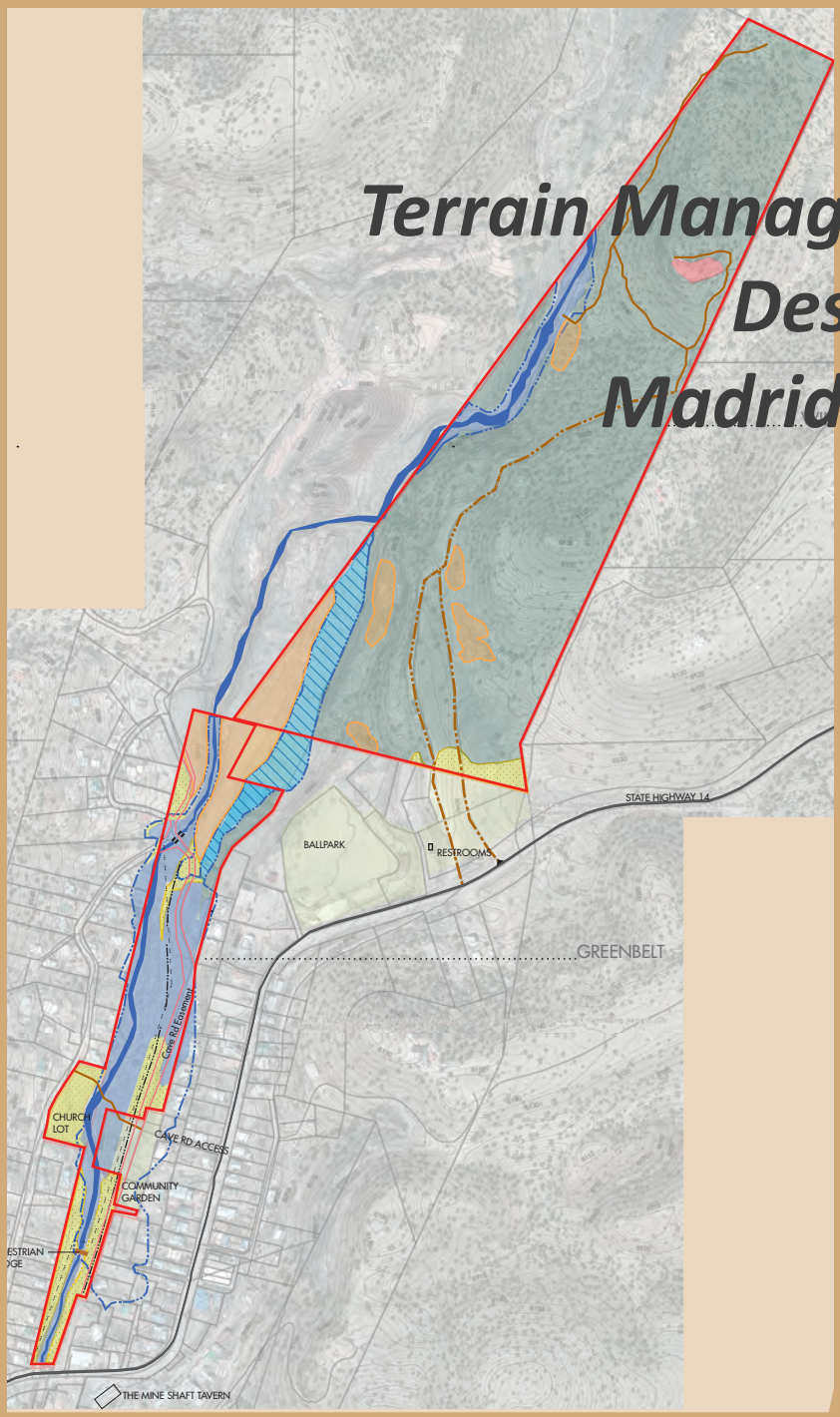
Copies of these reports can be accessed at: *http://www.madridmininglandscape.org/projects.html*

APPENDIX C

Santa Fe County Open Space Management Terrain Management Units Descriptions for Madrid Open Space

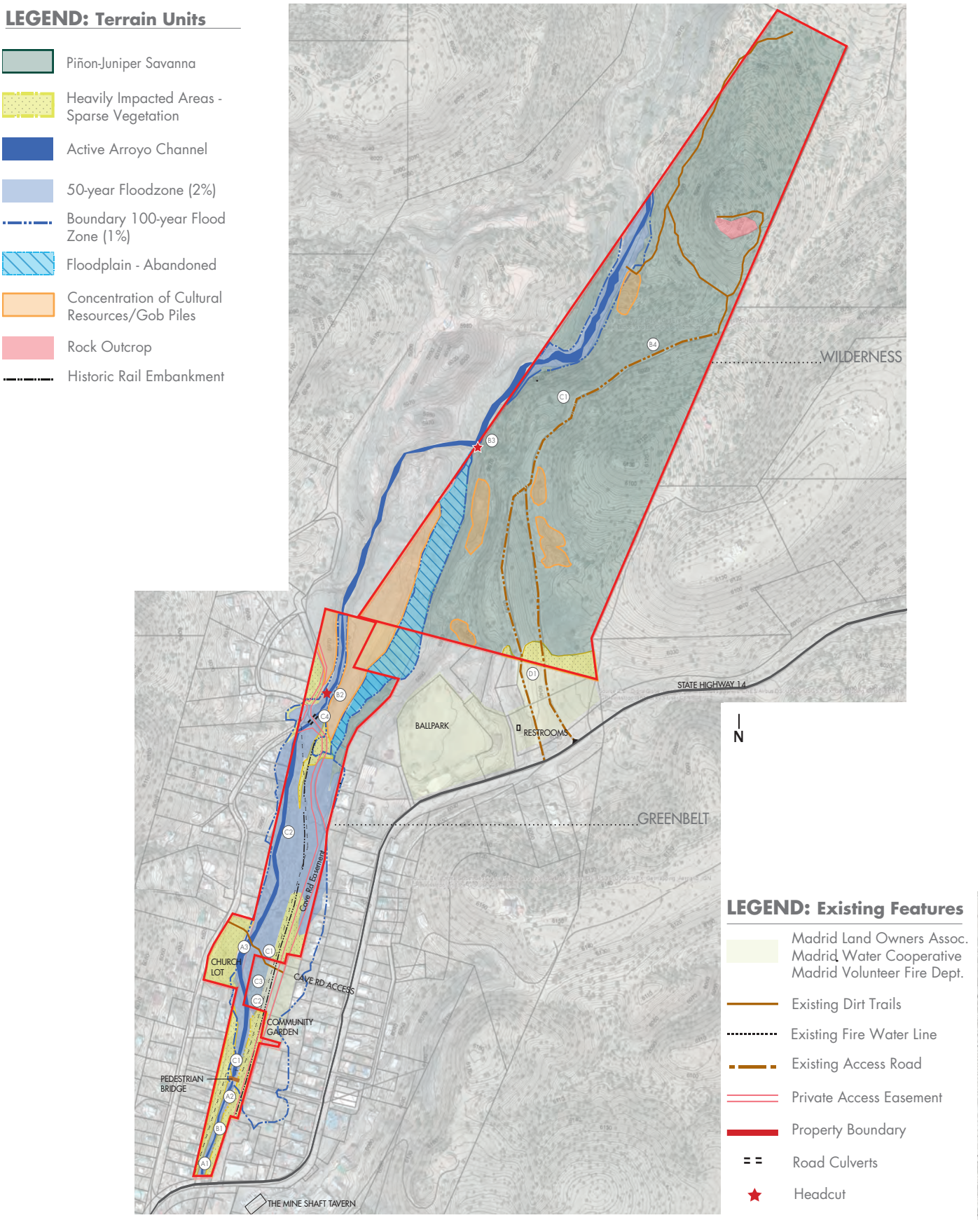
August 2016

Santa Fe County Open Space Management



Terrain Management Units Descriptions for Madrid Open Space

August 2016


LEGEND: Terrain Units
Piñon-Juniper Savanna
Heavily Impacted Areas - Sparse Vegetation
Active Arroyo Channel
50-year Floodzone (2%)
Boundary 100-year Flood Zone (1%)
Floodplain - Abandoned
Concentration of Cultural Resources/Gob Piles
Rock Outcrop
Historic Rail Embankment
WILDERNESS
GREENBELT
STATE HIGHWAY 14
BALLPARK
RESTROOMS
CHURCH LOT
CAVE RD ACCESS
COMMUNITY GARDEN
PEDESTRIAN BRIDGE
THE MINE SHAFT TAVERN
Cave Rd Easement
N
LEGEND: Existing Features
Madrid Land Owners Assoc.
Madrid Water Cooperative
Madrid Volunteer Fire Dept.
Existing Dirt Trails
Existing Fire Water Line
Existing Access Road
Private Access Easement
Property Boundary
Road Culverts
Headcut

MADRID OPEN SPACE
TERRAIN MANAGEMENT UNIT DESCRIPTIONS
August 16, 2016

Terrain Units delineated for Madrid Open Space are areas that share characteristics of drainage, vegetation, soils that are observable or have unique assets or uses. On the following pages are descriptions of each Terrain Unit.

Recommendations for general elements for monitoring for each TMU are noted. A detailed erosion and habitat monitoring plan will be developed for the Madrid Open Space with the comprehensive erosion management and improvements plan.

For monitoring and maintenance recommendations.
*) Asterisk means: Monitoring could be done with volunteers

PIÑON JUNIPER SAVANNA UNIT (M-WOO)
The Piñon-Juniper Savanna Unit consists of moderate (5% to 25%) to steep slopes (up to 55%) that fall mostly in the Wilderness area on the northern portion of the Open Space with exception of a small strip of land west of the Ballpark. The soils of this unit are very gravelly and sandy with a shallow profile of 2 inches or less before reaching bedrock on the mesas, hills and ridges. There are also a few areas of deeper soils interspersed that include loamy soils. Stormwater runoff rates vary from low to moderately high with a few rock outcrop areas that have low permeability. Soil erosion potential is very high in areas that are disturbed by off-road vehicles, have poorly designed and/or maintained roads and trails, and where the gravel component of the soils gets removed. A steep trail leading to the Rock Outcrop unit demonstrates how high soil erosion rates occur when trails are built directly up hillslopes. The grassland plants consist primarily of galleta, blue and sideoats grama, Indian ricegrass and sand dropseed. The tree and shrub component is dominated by One-seed juniper. Piñon trees can be found on cooler, north-facing slopes. Piñon are probably becoming less common with climate change. Cholla, pricklypear cactus and four-wing saltbush occur in patches, often in areas that have been disturbed. Common wildlife sightings include birds such as curve-billed thrasher, western and mountain bluebirds, and piñon jay. Bobcat, coyote, and mule deer can also be found.

The present land use is for conservation and non-vehicular traffic on trails. There is an unpaved maintenance road through the property and some good examples of erosion control in the fill slope of the road where small rills and gullies have developed. Any new trails need to avoid steep slopes and be constructed to prevent erosion.

Monitoring:
- Inspect trails (especially the one leading to the rock outcrop area) for hazardous soil erosion and an uneven tread.*
- Look for indications of illegal waste dumping and off-road vehicle use.*
- Wildlife and plant species richness*

Maintenance:
- Construction of fence and gate access to the Wilderness area on the south side of the unit to prevent unwanted vehicular access and illegal dumping.
- Maintain and add erosion control structures to the fill slope along the existing road to prevent erosion.*

ROCK OUTCROP (M-ROC)

The Rock Outcrop area consists entirely of bedrock material of sedimentary rock. The soils are thin to non-existent. Runoff rates are very high. Vegetation is composed of sparse juniper and varieties of grama grasses, galleta, and Indian ricegrass. The primary land use is conservation and pedestrian access for the great view. The land is suitable for limited non-motorized vehicle access on the maintained trail.

Monitoring:

- Inspect the trail segment to the top of the rock outcrop for soil erosion and uneven treads.*
- Wildlife and plant species richness*

Maintenance:

- Maintain or reroute trail segment to the top of the rock outcrop to prevent and avoid erosion.

CONCENTRATION OF CULTURAL RESOURCES (M-CUL)

Lands in this unit consist of historic artifacts and coal gob piles which consist of low grade coal waste mounds. Runoff from the gob piles tends to be acidic, though the higher pH of the native soils tend to neutralize the acidic runoff so that impacts tend to be localized. Vegetation cover in the gob piles are very sparse or non-existent because the soil temperatures can get very hot and the lack of organic matter prevents water retention for recruiting new plants. The primary land use is conservation and archaeological values.

Monitoring:

- Observe existing historic dump areas do not grow because of contemporary illegal dumping.*

Maintenance:

- The gob piles on the Open Space are histroic features of the site and are to be protected in situ with no active management.

HEAVILY IMPACTED AREAS – SPARSE VEGETATION – (M-IMP)

The heavily impacted unit consists of lands in the Greenbelt area with significant disturbance from roads, historic railbeds, and on-going foot and vehicle traffic. One area of less disturbance is located in the Church lot. The soils consist of alluvium that are well drained and are coarse-to-medium textured with slopes of 1 to 5 percent. Runoff rates are high in areas where the soils are compacted by roads or trails except in the Church lot where the soil compaction and runoff are low. Soil erosion is a concern in some areas where roads and trails come close to steep banks of the Madrid floodway. Areas of particular concern for soil erosion are the dirt road west of the arroyo road crossing on Cave Road and the roads on both sides of the Madrid arroyo at the south side of the property near the Highway 14 crossing. Trees and shrubs found include four-wing saltbush, few junipers, algerita, chamisa, cholla and pricklypear cactus. Grasses include blue and sideoats grama, needlegrass, sand dropseed, and galleta. Non-native and invasive plants can also be found including Siberian elm and kochia.

The present land use is focused on vehicle traffic and trails. Undesirable land uses include motorcycle and ATV recreational uses of trails and roads and dumping of yard waste and garbage. The unit has suitable for limited recreational trails.

Monitoring:

- Monitor for larger invasive plants such as Siberian elm and remove them if needed.*
- Observe to make sure yard waste and garbage does not get dumped in the area.*
- Watch for major erosion patterns coming from roads and trails and causing arroyo bank erosion or flooding hazards. *
- Wildlife and plant species richness*

Maintenance:

- Identification, avoidance, or cleanup of scattered historical artifacts that may constitute a safety hazard (rusty metal, etc.)

ACTIVE ARROYO CHANNEL (M-ARR)

The active arroyo unit makes up the land inside the channel that typically floods several times each year. The soils consist of moderately to rapidly draining alluvium with coarse gravels and medium textured sands. The slope of the channel is 1-2 percent overall with a very steep section immediately below the Cave Road crossing. Several poorly-sited levees have been installed which constrain the ability of the arroyo to disperse stormwater flows into appropriate areas and this has led to bank erosion, particularly in the west river bank by the Church lot. The floodplain access is very narrow for most of the property which leads to high erosion rates on the arroyo banks and causes excessive force by the stormwater on the channel bed. The exception to generally narrow floodplain access occurs in the stream segment downstream of the pedestrian footbridge and upstream of the Cave Road crossing where the active channel can go overbank into adjacent areas. The two culverts for the Cave Road crossing are undersized for the magnitude of floods and one of the culverts is currently clogged. The trees that can be found include Siberian elm, chamisa, and some four-wing saltbush. Grasses and forbs include yellow sweet clover, kochia, and Canadian wildrye. Dense growth of woody vegetation inside the active channel, particularly Siberian elm, is undesirable as soil erosion in the arroyo banks and flooding increases when the channel becomes filled with trees.

The present land use is for conservation and conveying stormwater flows. The unit is suitable primarily for floodplain protection and very limited recreation. The active channel is suitable for informal trails crossings over the arroyo from one side of the floodplain to the other side.

Monitoring:

- Keep an eye out for undesirable stands of Siberian elms particularly in the areas with narrow floodplain access such as the Highway 14 and Cave Road crossings.*
- Watch for major erosion patterns cutting into stream banks and for vertical soil erosion cutting down into the active channel.*
- Observe to make sure yard waste and garbage does not get dumped and gets removed. *
- Wildlife and plant species richness*

Maintenance:

- Develop a long-term floodplain maintenance plan.
- Regularly observe and remove debris from the Cave Road culverts.*
- Cut back the profile of a stormwater culvert to match the bank profile on the east side of the arroyo just downstream of Highway 14 crossing to reduce soil erosion problems downstream.
- Remove Siberian elms growing directly in active channel as needed.*

50-YEAR FLOODZONE (M-50Y)

This unit makes up nearly the entire Greenbelt area and includes a significant portion of land on the east side of Madrid that is adjacent to the Open Space. The soils are made up of coarse to fine textured materials with slopes of 1 to 5 percent. Historically the entire area was in or near the active floodplain so the soils consist mostly of alluvium that are well drained. Runoff rates are high in areas where the soils are compacted by roads or trails, otherwise the stormwater runoff is moderate in less impacted areas. Hydrologically this area is projected to flood every 50 years but future flooding may occur more often since weather projections during climate change suggest that storms may bring more intense rainfall in the coming years. Levees have been built in response to flooding in 2013 in several locations and these have caused erosion problems and may cause flooding damage to adjacent properties and built infrastructure. Two stands of white poplar (sometimes confused with cottonwoods) grow just downstream of the Highway 14 crossing and just east of the Cave Road crossing. Non-native trees and grasses include Siberian elm, tamarisk or salt cedar and cheatgrass. Native shrubs include algerita, chamisa, four-wing saltbush, and American currant. Grasses include blue and sideoats grama, sand dropseed, galleta, and Indian ricegrass. Common wildlife sightings include birds such as curve-billed thrasher, western and mountain bluebirds, and piñon jay. Bobcat, coyote, and mule deer can also be found. Great Horned Owls have been noted as nest

Historic land uses include the railway to carry coal for processing and dumping of mining waste. Current land uses include vehicular traffic on Cave Road, trails, dog walking, and access to the Community Garden. Undesirable land uses include dumping of yard waste, off-road vehicle use and poorly managed/coordinated construction of levees. The land is suitable for trails for non-vehicular traffic and conservation, particularly to convey flood flows and protect the floodplain from residential or commercial development.

Monitoring:

- Observe to make sure yard waste and garbage does not get dumped in area and act to remove. *
- Watch for major erosion patterns cutting into stream banks.*
- Monitor for construction of any new floodplain earthworks that could lead to soil erosion and flooding problems.
- Wildlife and plant species richness.*

APPENDIX D

Recommendation for Drainage Assessment + Preliminary Plan Scope for Madrid Open Space

APPENDIX D

Recommendation for

Drainage Assessment + Preliminary Plan Scope

for Madrid Open Space

RECOMMENDATION DRAINAGE ASSESSMENT AND PRELIMINARY PLAN SCOPE FOR MADRID OPEN SPACE

Project Objectives

The project includes assessment and preliminary design services for the Santa Fe County Open Space parcels located within Madrid, NM. The assessment and preliminary design will focus on the Madrid Gulch arroyo channel and associated floodplain corridor. The main objectives of the project are to develop a holistic plan to improve channel and floodplain function, improve public safety, and improve property protection along the corridor, while maintaining the distinct character of the community of Madrid.

Project Scope Outline

A formal scope of work will be developed after consultant selection. The consultant contract for assessment and preliminary engineering is expected to include the following elements:

- Literature Review & Field Inventory
  - Compile and review existing studies completed by AML, the County, and their consultants.
  - Complete a detailed supplementary survey of the project reach corridor to augment the existing County topographic dataset and develop a contour basemap for design.
  - Complete a stream inventory of the arroyo, as required, to characterize stream morphology, to evaluate stream channel stability, and to determine stream potential. Stream inventory may include geomorphic surveys (dimension, pattern, & profile), pebble count and bar sample collection, and the collection of stream stability indices (vegetation, flow regime, Pfankuch stability rating, etc.).
- Geomorphic and Hydraulic Analysis of the Channel
  - Complete Bank Assessment for the Non-point source Consequences of Sediment (BANCS) model to predict streambank erosion rates and quantities.
  - Complete stream channel succession predictions.
  - Complete a hydraulic assessment of the existing and proposed channel to determine velocity, shear stress, and stream power relationships.
  - Complete sediment modeling to determine competence, entrainment, and transport capacity for the existing and proposed channels.
  - Develop channel improvement plans using an appropriate combination of analog, empirical, and analytical methodologies.
- Hydraulic Analysis of the Floodplain
  - Evaluate the existing conditions flood extents for a range of flows including effective discharge/ bankfull, 2, 5, 10, 25, 50, and 100 year flows.
  - Evaluate the proposed conditions flood extents including channel and floodplain improvements for the same range of flows. Floodplain improvements may include the strategic removal and or/ relocation of floodplain impediments such as berms or historical artifacts, the construction of flood protection embankments on the edge of the floodplain, and/or the creation of flood relief diversions to an abandoned/historic reach of the arroyo located along the east side of the project area.

- Other Analysis
  - Culvert/road crossing improvement.
  - Pedestrian access.
  - Integrated low impact drainage design for stormwater entering the open space from offsite.
  - Utility design coordination.
  - Invasive species management and native re-vegetation potential.
- Feasibility-Level Design and Community Outreach
  - Based on field inventory and analysis, complete feasibility level plans and costs.
  - Feasible alternatives will be evaluated during the preliminary design process and will be presented to the community for review as part of collaborative process lead by the County.
- Preliminary Design and Community Outreach
  - Based on feedback from the County and community, develop an integrated, holistic preliminary plan and present to the community.
- Other Work Elements
  - Identify all Local Agency, State and Federal permits that will be required as well as right of way needs.
  - Identify Potential Funding Sources
  - Aid the County in developing a phased implementation plan to complete the final design and construction for the entire corridor.

The consultant is to address the many challenges in working in this sensitive historic area. Such issues and constraints include Madrid's listing on the National Register of Historic Places and the prevalence of culturally significant objects within the study corridor, proximity of public and private property to the active channel and floodplain; and private and public access. It is expected that the consultant will need to provide creative solutions to these issues to meet the project objectives.

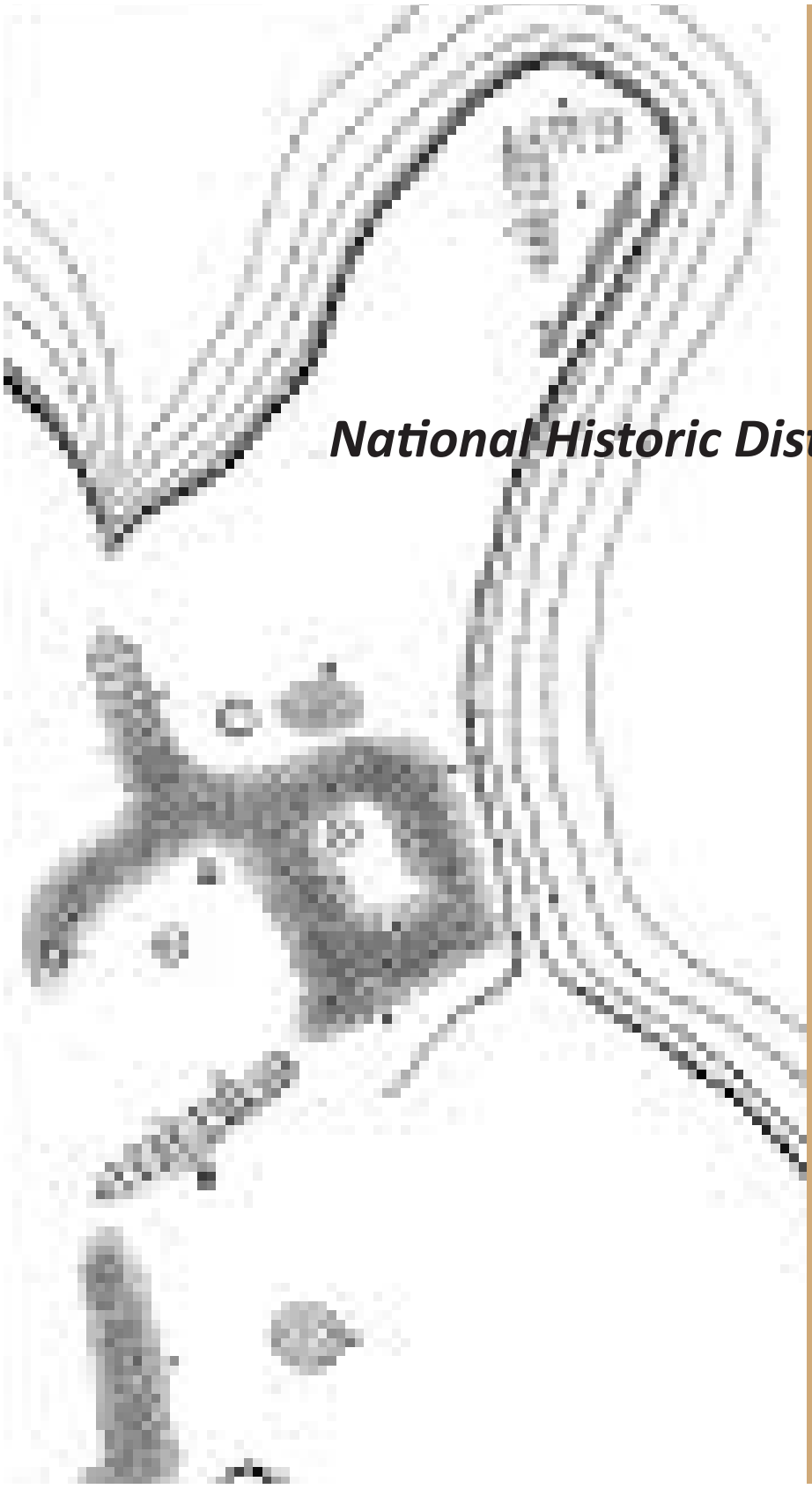
Qualifications
This project will require the firm to have the following qualifications:

- Five (5) or more years of related experience.
- Experience working with municipal and regulatory entities.
- Familiarity with the Madrid community dynamics.
- Extensive experience working with public outreach including effective communication with private property owners, special interest groups and other stakeholders.
- Experience with Low Impact Development (LID) and Natural Channel Design (NCD) practices.

APPENDIX E

National Historic District Registration
Madrid District
Santa Fe County, New Mexico

APPENDIX E



National Historic District Registration
Madrid District
Santa Fe County, New Mexico

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED DEC 16 1976
DATE ENTERED NOV 9 1977

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC
Madrid Historic District

FILE COPY 356

AND/OR COMMON

2 LOCATION

STREET & NUMBER Approximately 25 miles southwest of Santa Fe, New Mexico on State Highway #14.

__NOT FOR PUBLICATION

CITY, TOWN
Madrid __ VICINITY OF

CONGRESSIONAL DISTRICT
#1

STATE
New Mexico

CODE
35

COUNTY
Santa Fe

CODE
049

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
X DISTRICT	__PUBLIC	X OCCUPIED	__AGRICULTURE	X MUSEUM
__BUILDING(S)	X PRIVATE	__UNOCCUPIED	X COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	X PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	X YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	__YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	__OTHER:

4 OWNER OF PROPERTY

NAME
Various private property owners

STREET & NUMBER

CITY, TOWN
Madrid __ VICINITY OF

STATE
New Mexico

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.
Santa Fe County Clerk's Office

STREET & NUMBER

CITY, TOWN
Santa Fe

STATE
New Mexico

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
New Mexico State Register of Historic Properties

DATE
December 6, 1974 __FEDERAL X STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS
State Planning Office, 505 Don Gaspar

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
__EXCELLENT	__DETERIORATED	__UNALTERED	X ORIGINAL SITE
X GOOD	__RUINS	X ALTERED	__MOVED DATE_____
__FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Situated in a deep gulch amid the arid, cactus covered foothills of the Ortiz Mountains in central New Mexico, the village of Madrid is an excellent example of a company-owned western coal mining town. The townsite, which is twenty-five miles southwest of Santa Fe and forty miles northeast of Albuquerque, is bisected by New Mexico Highway #14 which runs along the bottom of the gulch and is also the community's main street where the buildings which housed the coal company offices, general store and more impressive residences are located. Running parallel to Main or Front Street and across the railroad right of way to the west is Back Street, the town's other thoroughfare on which most of the miners' houses still stand. Besides the townsite, the Madrid Historic District also includes the tipples, breakers, mine shafts, powder houses and auxiliary structures erected on both sides of the gulch when the mines were in production.

Except for some small operations which continued into the 1960's, the mines have been closed since 1954 and the town has been all but abandoned for twenty years. The years of disuse and neglect have taken their toll, and it is largely due to the dry climate that the structures have been preserved. There has been considerable settling of the buildings, but they are still in relatively good structural condition and are generally reparable, which is evidence of the quality of the original construction. Recently many of them have been sold and the new owners are undertaking extensive rehabilitations.

During the early years, the few miners conducting independent operations in the gulch constructed small stone and adobe houses whose foundations can still be seen on the hillsides outside the Historic District. Although Madrid became a town on its present location with the advent of the railroad spur into the gulch in 1892, it was not until control of the mines passed to the Colorado Fuel and Iron Company in 1896 that the community began its long history of monolithic company control. Dominated by the Rockefeller interests, CF&I was not known for generous treatment of its employees and life was primitive and difficult for the miners in Madrid.

The tree lined Main Street was the one redeeming feature of the otherwise typically drab coal mining town in the early 1900's. The company store, mine offices and tavern were set among simple two-story frame houses of five rooms which had been moved in by the CF&I from Carthage, another coal mining town southeast of Socorro, New Mexico. It is said that each house was cut into three pieces, transported to Madrid by flatcar and then reassembled. At this time, the houses rented for two dollars for each room per month. They were badly in need of repair and paint, only those along the main street had running water and none had bath tubs or inside toilet facilities. One of the three boarding houses had showers in the basement for the miners. The buildings were of frame construction with board and batten siding finished inside with tongue and groove paneling and oak floors. The ceilings of the recreation hall and other company buildings were covered with pressed metal. The company buildings and offices and the boarding houses had electric lights but the miners' houses were lighted by oil lamps or candles and were heated by coal-burning stoves. There were no telephones except those in the mine office and they were used only for company business.

(See Continuation Sheet Page 1)

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
HISTORIC	_ARCHEOLOGY-PREHISTORIC	X COMMUNITY PLANNING	_LANDSCAPE ARCHITECTURE	_RELIGION
_1400-1499	_ARCHEOLOGY-HISTORIC	_CONSERVATION	_LAW	_SCIENCE
_1500-1599	_AGRICULTURE	_ECONOMICS	_LITERATURE	_SCULPTURE
_1600-1699	X ARCHITECTURE	_EDUCATION	_MILITARY	_SOCIAL/HUMANITARIAN
_1700-1799	_ART	_ENGINEERING	_MUSIC	_THEATER
X 1800-1899	X COMMERCE	_EXPLORATION/SETTLEMENT	_PHILOSOPHY	X TRANSPORTATION
X 1900-	_COMMUNICATIONS	X INDUSTRY	_POLITICS/GOVERNMENT	_OTHER (SPECIFY)
		_INVENTION		

SPECIFIC DATES

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

The Madrid Historic District, which includes the entire village of Madrid, New Mexico is part of one of the oldest mining areas in the western United States where turquoise, gold and finally coal were extracted at various times. Situated in the rugged hills on the north slope of the Ortiz Mountains, it is approximately five miles southwest of Mount Chalchihuitl where Pueblo Indians worked extensive turquoise diggings circa 900-1100 A.D. Most important in later years as a coal producing district, it is unique in that both anthracite and bituminous beds are found in close proximity and at one time were taken from the same shaft. Although there was some settlement in the area as early as 1869, Madrid did not become an established community until 1892 when subsidiaries of the Atchison, Topeka and Santa Fe Railroad built a "company town" to exploit the mineral deposits there. During the 1950's economic conditions forced the closing of the mines and since then Madrid has been in decline. For many years the whole town was offered for sale as a unit but because this approach was unsuccessful, the lots and houses still standing in 1975 were offered piecemeal which resulted in extensive sales. Individual ownership has given the community a new sense of purpose which may prevent further deterioration and destruction of the remaining structures.

A brief 1828 gold strike in the Ortiz Mountains during Mexican sovereignty in New Mexico led to the first use of coal from the Madrid district. By the 1830's Mexican miners in the area, using primitive carts powered by mules or simple windlasses were digging the small amounts necessary to fire the crude vassos (furnaces) in which the gold bearing ore was then refined. With U.S. occupation of New Mexico in 1846 there was some demand for fuel at army posts such as Fort Marcy in Santa Fe and Fort Union north of Las Vegas, but it was not until after the arrival of the railroad in 1880 that a significant market developed. The deposits in Miller Gulch and Waldo Gulch just south of the Santa Fe right of way were the first to be exploited but following discovery of the size and quality of the coal fields at Madrid three miles further south, the older mines were abandoned.

Because the town's location lies within an area claimed by two conflicting Spanish and Mexican land grants, the Ortiz Mine Grant to the south and the Mesita de Juana Lopez to the north, extensive litigation was necessary before the Cerrillos Coal and Iron Company was able to establish title to 26000 acres in 1884-5. In 1892 a Santa Fe subsidiary, the Cerrillos Coal Railroad, contracted for all mining rights in the area, built a six mile standard gauge spur from Waldo on the main line and erected the town of Madrid on its present site. At first the greatest demand was for

(See Continuation Sheet Page 3)

Territorial Archives of New Mexico, State Records Center and Archives, Santa Fe, New Mexico.
Records of the Secretary of the Territory, 1851-1911, Records of Incorporations.
Santa Fe County Records, Santa Fe County Courthouse, Santa Fe, New Mexico. Deed Record Books J, N, X, J-1, N-1, 40.
(See Continuation Sheet Page 5)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY Approx. 200 acres.

UTM REFERENCES

	ZONE	EASTING	NORTHING
A	13	395 800	3919 300
B	13	395 700	3919 750
C	13	395 200	3919 700
D	13	394 750	3919 850

VERBAL BOUNDARY DESCRIPTION

E 13 395 ~~035~~ 350 3919 ~~035~~ 360

The boundary of the Madrid Historic Historic District begins at a point on the north side of the village of Madrid at the intersection of the entrance to the baseball park from State Highway #14. It extends 350 yards in a northerly direction to a point on the cliff directly (west) of the north tipple at the bottom of the gulch; thence in a westerly direction to a point at the top of the first level of hills west of the tipple; thence in a southerly

(See Continuation Sheet Page 6)

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

	STATE	CODE	COUNTY	CODE
(A) Lon = -106° 18' 52" Lat = 35° 24' 42"				
(C) Lon = -106° 09' 14" Lat = 35° 23' 49"				
(B) Lon = -106° 08' 55" Lat = 35° 24' 24"				
(D) Long = 106° 09' 32" Lat = 35° 23' 54"				
(E) Long = -106° 09' 09" Lat = 35° 24' 43"				

FORM PREPARED BY

NAME / TITLE John O. Baxter, Archivist, State Records Center and Archives; Sylvia Cook, Architectural Historian, State Planning Office

ORGANIZATION

DATE December 3, 1976

STREET & NUMBER 404 Montezuma

TELEPHONE 827-2321 (505)

CITY OR TOWN Santa Fe

STATE New Mexico

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL X STATE ___ LOCAL ___

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE Thomas E. Chávez

TITLE State Historic Preservation Officer DATE 12-9-76

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

KEEPER OF THE NATIONAL REGISTER

ATTEST: Sylvia Cook DATE 1-7-77

UTM = Universal Transverse Mercator grid
http://mwiewdsc.cv.uss.gov

Form No. 10-300a
Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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In 1906, after control of the mines and the town was taken over by George A. Kaseman's newly formed Albuquerque and Cerrillos Coal Company, living conditions began to improve in Madrid whose population had grown to approximately 1200. Employing the electrician gang from the mines, the houses were wired for electricity and then had a single light bulb hanging from a drop cord in the center of the ceiling of each room. At this time a Catholic Church was built and a priest came from the nearby town of Cerrillos to celebrate Mass. The church, a simple, rectangular building with a gabled roof and central bell tower still stands on the hillside at the western edge of town, although services are no longer held there. There was a Protestant Sunday School and for a short time a Baptist Church conducted services. A tract of land was donated to the Methodist Episcopal Church for a church and rectory but this was never used. A recreation hall was maintained on the first floor of a large frame building. The company store supplied the miners with general merchandise and the post office was located in the mine office. The company employed a doctor who treated the miners and their families. The first four grades of school were taught in one-story frame building.

When Oscar Huber became superintendent of the mines in 1919, additional improvements were made. Houses were repaired, modernized and painted, and a number of new one-story ones with varying floor plans were built by carpenter gangs and other crews from the mines. One group was rectangular in plan, others were rectangular with a porch at the center of the house sheltering the front door, and a third group was symmetrical with one room projecting towards the front with a porch in the resulting corner. The houses typically had two bedrooms, kitchen and living room. Of frame construction on pier foundations, the houses were sided with vertical board and batten, a builders' design known as "Stick Style" which had reached its zenith of popularity in the East in the last half of the nineteenth century. Finished inside with lathe and plaster walls, the exteriors were painted a "light, harsh blue" and were topped by roofs of red or green composition shingles.

The houses on Front Street had running water but those on Back Street had only outdoor faucets. There were two separate water systems: one recycled water previously used in the mines for the yards and gardens; the other piped drinking water to the houses after it had been transported by railroad tank car from the siding at Waldo six miles north. The town did not have its own well until 1967.

During the 1920's Front Street was paved. The first four grades of school were moved to a larger two-story building adjoining the recreation hall. Grades five through eight were taught on the second floor of the recreation hall, which also housed the motion picture theatre. In 1929 a

(See Continuation Sheet Page 2)

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a frame and stucco elementary school was built and nine years later a stone high school was erected next to it.

By the late 1920's, when coal production was at its peak, the town had a population of 2500. The last houses built in Madrid were constructed during this period. They were substantial, comfortable bungalows erected for company officials and foremen along Front Street, in some cases replacing older frame houses. Unlike the earlier buildings, the new bungalows were stuccoed. Rooms and indoor plumbing were added to the older houses as the miners' families grew with materials supplied by the company and labor by the miners.

Fire was a constant danger at Madrid both in the mines and the town. Many buildings were destroyed including the largest boarding house which burned down in 1929. It was immediately rebuilt and later converted into apartments for couples without children. The hospital burned more recently. One group of houses at the north end of town, which was called "Hollywood" has been destroyed by various fires over the years.

The company town was probably inevitable in the development of the coal industry. There was little incentive for home ownership near the mines, since there was no assurance that they would not someday close. Many miners arrived in the coal fields practically penniless and the system offered credit in the company store and a place to live. Manager-owner Oscar Huber explains the economic situation thus:

> It would have been difficult to operate the property other than as a company town. . . Many men came to work thru the instigation of friends and came direct from Italy, Czechoslovakia, etc. to Madrid and in most instances with practically no funds whatever. If the mines were to work this was about the only class of help that was available so somebody had to provide a place for them to live and finance them until such time as they produced coal. . . If anyone would have suggested at this time that a miner purchase his own home the miner would have thought it ridiculous, and the company, of course, wanted to maintain the town as a unit which they controlled.

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bituminous coal to fuel the Santa Fe's locomotives but a market soon developed both in New Mexico and adjoining states for the anthracite, which was of extremely high quality, as a home heating fuel. After finding that some of the bituminous coal was of coking quality, ovens were built at Waldo and the coke was sold to smelters in Pueblo and El Paso. The coal mines at Madrid and other New Mexico locations developed rapidly and as one author has noted "by the end of the century this relatively unromantic, little prospected, industrial mineral became the leading product of New Mexico mining" due to high demand for coal and the collapse of silver prices in 1893.

Extensive production of coal and impressive sales did not guarantee profits, however, and because the mines and town were intimately associated with the fortunes of the Santa Fe and other national corporations, their early history is characterized by frequent changes in ownership and management. Following a reorganization of the Santa Fe in 1895 the mines were leased to the Colorado Fuel and Iron Company of Pueblo who operated them for ten years. At that time George A. Kaseman, a rising Albuquerque businessman, who had been conducting a large wholesale and retail coal business in that city as president of W. H. Hahn and Company, formed the Albuquerque and Cerrillos Coal Company to take over the CF&I leases at Madrid. In 1919 Kaseman selected one of his salesman, Oscar Huber, to be superintendent of the mines and it was Huber who dominated Madrid's history for the next forty years. Following Kaseman's death in an oil well explosion in 1938, Huber arranged to continue the leases until 1948 when he purchased both the mines and the entire town from the Cherokee and Pittsburg Coal and Mining Company, another subsidiary of the Santa Fe.

Throughout its history Madrid has been owned and operated as a company town in which the corporation or individual who ran the mines also controlled every aspect of life in the town. The company allocated housing, provided all municipal services and owned all commercial enterprises including the local garage, bar and general store. In lieu of credit the company issued its own coinage or scrip in various denominations from one cent to five dollars which could be used by employees at all company businesses. If a miner who was deeply in debt failed to report for work, a company representative was dispatched to find out why he was not on the job. Those workers who were known to be making substantial earnings were encouraged to purchase automobiles or major appliances, all through the company store, of course. The company provided and controlled all medical and recreational facilities. It also sponsored a semi-professional baseball team which was a source of great pride in the community.

Descriptions of life in Madrid vary considerably depending on whether the author is sympathetic to the company or to the miners. Although rents were

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low ($8.90 to $17.80 per month during the thirties) deductions for living costs incurred during summer lay-offs plus expenses for miners' lamps, powder and fuse and medical fees eroded monthly pay checks which for many men were no more that $50 during this period. A local of the United Mine Workers, #6920, was organized in Madrid in 1934 but was not recognized as an official bargaining agent for ten years and was never particularly effective. Following the defense buildup prior to World War II many miners left Madrid permanently seeking positions offering not only higher pay but more personal freedom.

Between the two World Wars Madrid was best known for the large and elaborate Christmas displays erected annually by the townspeople. Beginning in about 1922 with simple electric lights and small trees in front of individual miner's houses, the concept was soon taken up by the company and the decorations grew rapidly in both complexity and notoriety. During the 1930's they covered not only Madrid itself but also featured large illuminated tableaux of the Nativity, angels and similar scenes which were placed on the steep hillsides flanking the town. During this era it is estimated that the display was seen by 100,000 visitors each year and was so popular that airline pilots detoured their flights so that the passengers could enjoy the view.

Although the display was enthusiastically supported by the Madrid Employees Association, some of the miners resented the check-off which was used to purchase the decorations and the fact that they were required to put up the display on their own time without pay. In addition, the employees were charged $1.25 each for the small evergreens which decorated their houses even though the surrounding hills were covered with them. The program was ended in 1941 because of problems associated with World War II and was not resumed when peace was restored.

Throughout the war years demand for Madrid's coal exceeded the capabilities of the diminished labor force to dig it. This situation was accentuated by the high priority needs of the nearby Los Alamos laboratories where the federal government was conducting the atomic bomb experiments. Filling these government contracts often meant that regular customers were neglected. In the late 1940's and 1950's, however, coal markets rapidly dwindled following the dieselization of most railroads and the growing use of natural gas and fuel oil for home heating. In early 1954, sales had declined so much that the main mining operation was closed and the population of Madrid rapidly drifted away although production continued on a limited scale until 1961 when Huber was badly injured in an automobile accident. On June 17, 1954 the following advertisement appeared in the Real Estate for Sale column of the Wall Street Journal:

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CONTINUATION SHEET ITEM NUMBER 8 & 9 PAGE 5

Entire Town

200 houses, grade and high school, power house, general store, tavern, machine shop, mineral rights, 9000 acres, excellent climate, fine industrial location. . .

At various times during the 1960's and early 1970's a number of proposals were advanced for the sale or utilization of Madrid. The residents of the community which by then had reached "ghost town" status consisted primarily of dropouts from conventional life drawn to the area by the rural setting and cheap rents asked for the crumbling houses. When the Huber heirs determined that sale of the entire town was probably not possible, these tenants were given the first opportunity to purchase the rental properties which many of them did. This group has joined other purchasers, many of whom are interested in the community as a location for vacation or retirement homes, in efforts to solve such vexing problems as providing an adequate water supply and acceptable sewage disposal facilities. If these efforts are successful and the small crafts enterprises which now characrize the town's economy are viable, Madrid may enjoy a renascence and again experience the community spirit which characterized the town of its hey-day. Perhaps new mining technology and demand for coal created by present energy shortages will make it economically feasible to resume exploitation of the estimated 50 million tons of coal remaining at Madrid.

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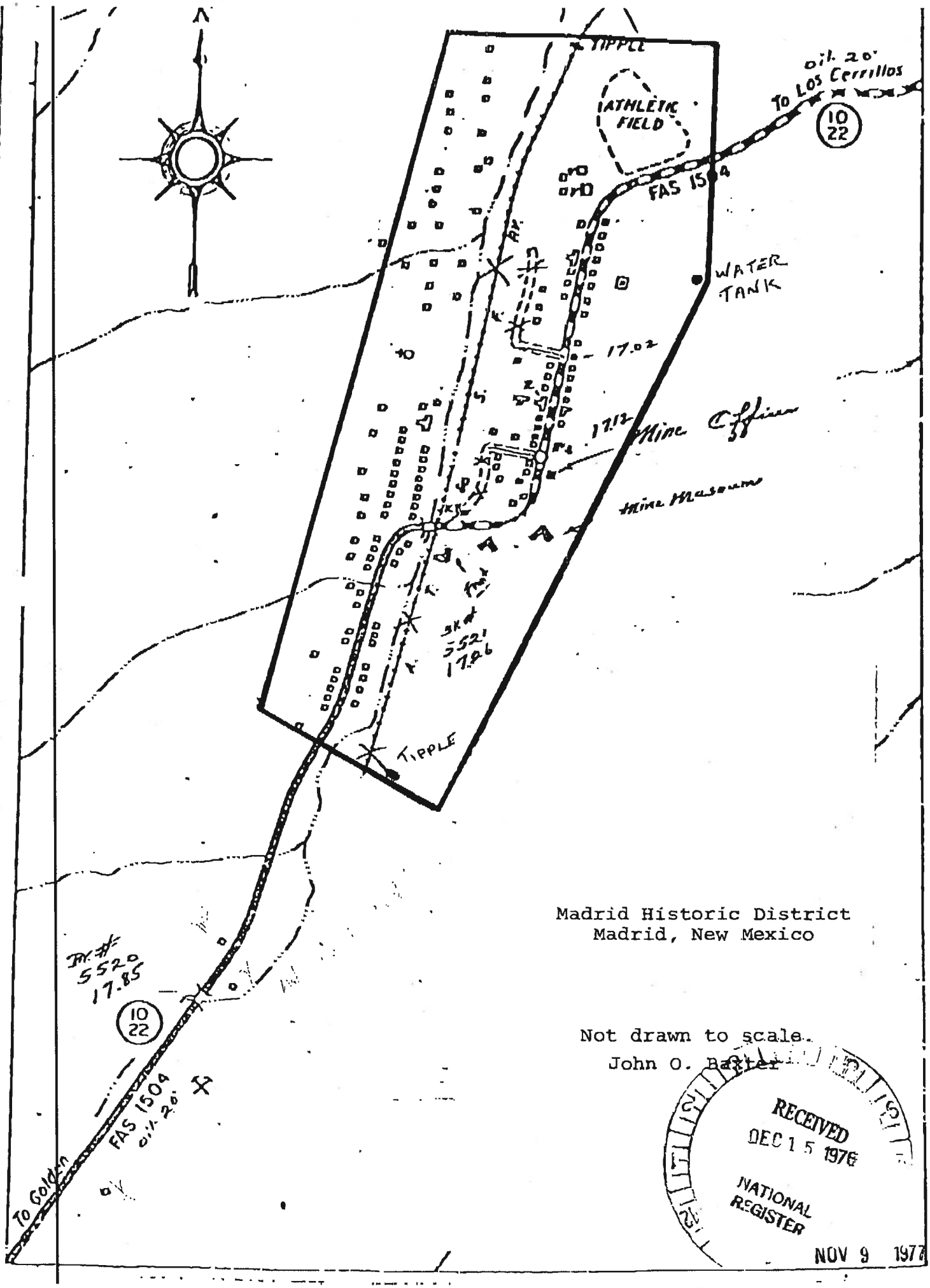
direction approximately 2000 yards; thence in a southeasterly direction across State Hisghway #14 passing to the south of the hoist engine house and the south tipple up the slope to the highest level of the old road bed of the mine railway; thence in a northeasterly direction approximately 1400 yards follwing the road bed around the contour of the hills to the water storage tank; thence in a northerly direction to the point of beginning.

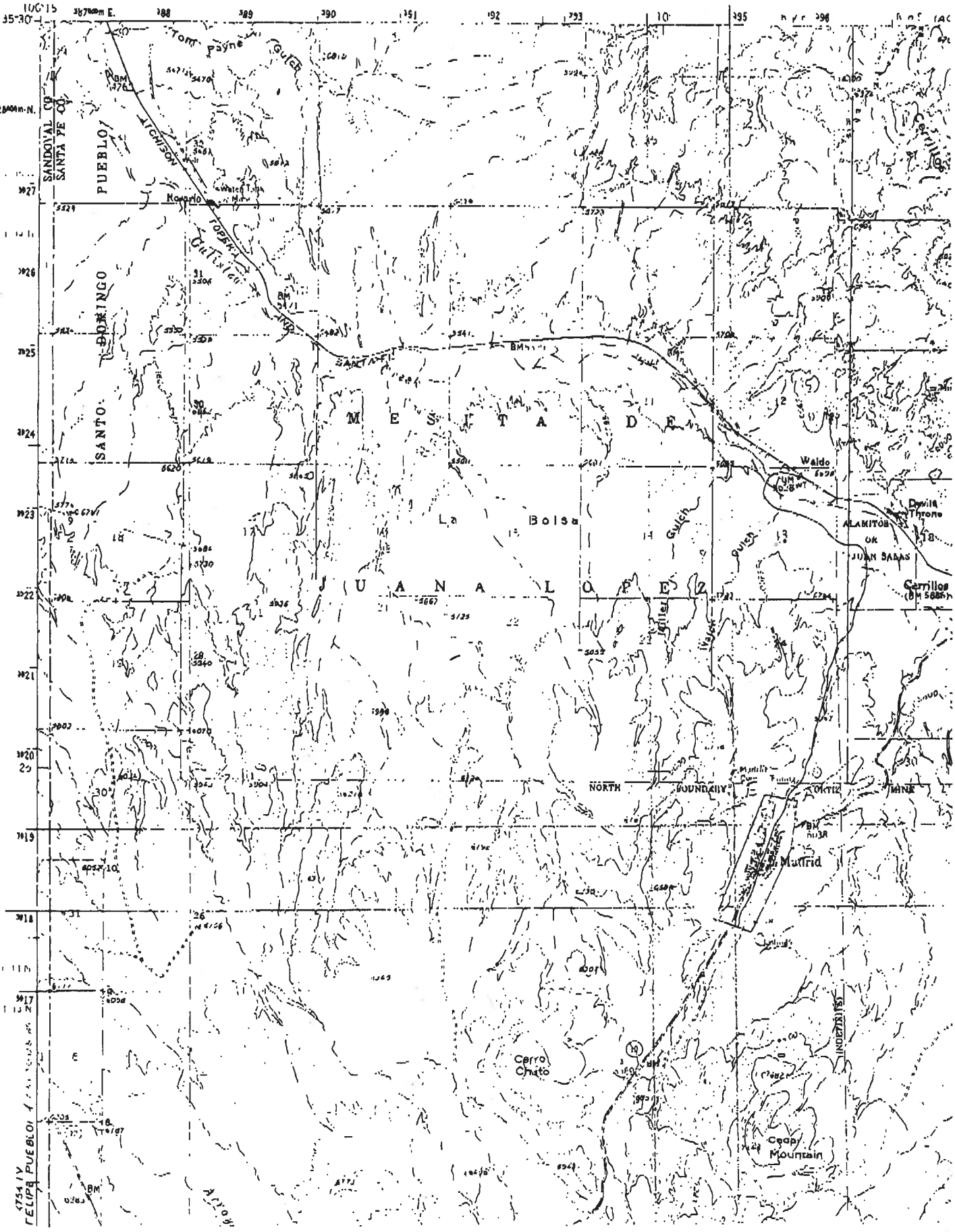


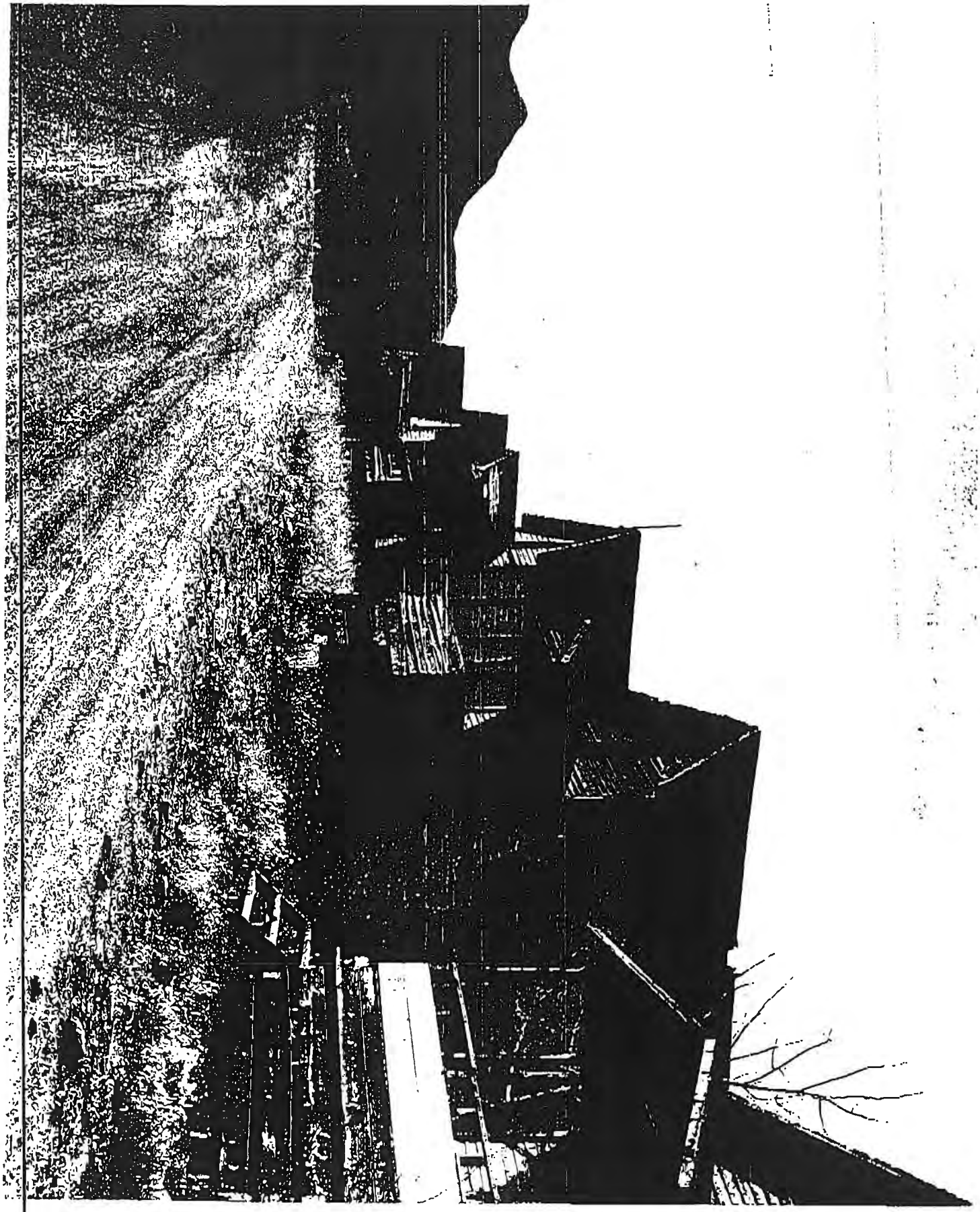
Madrid Historic District
Madrid, New Mexico

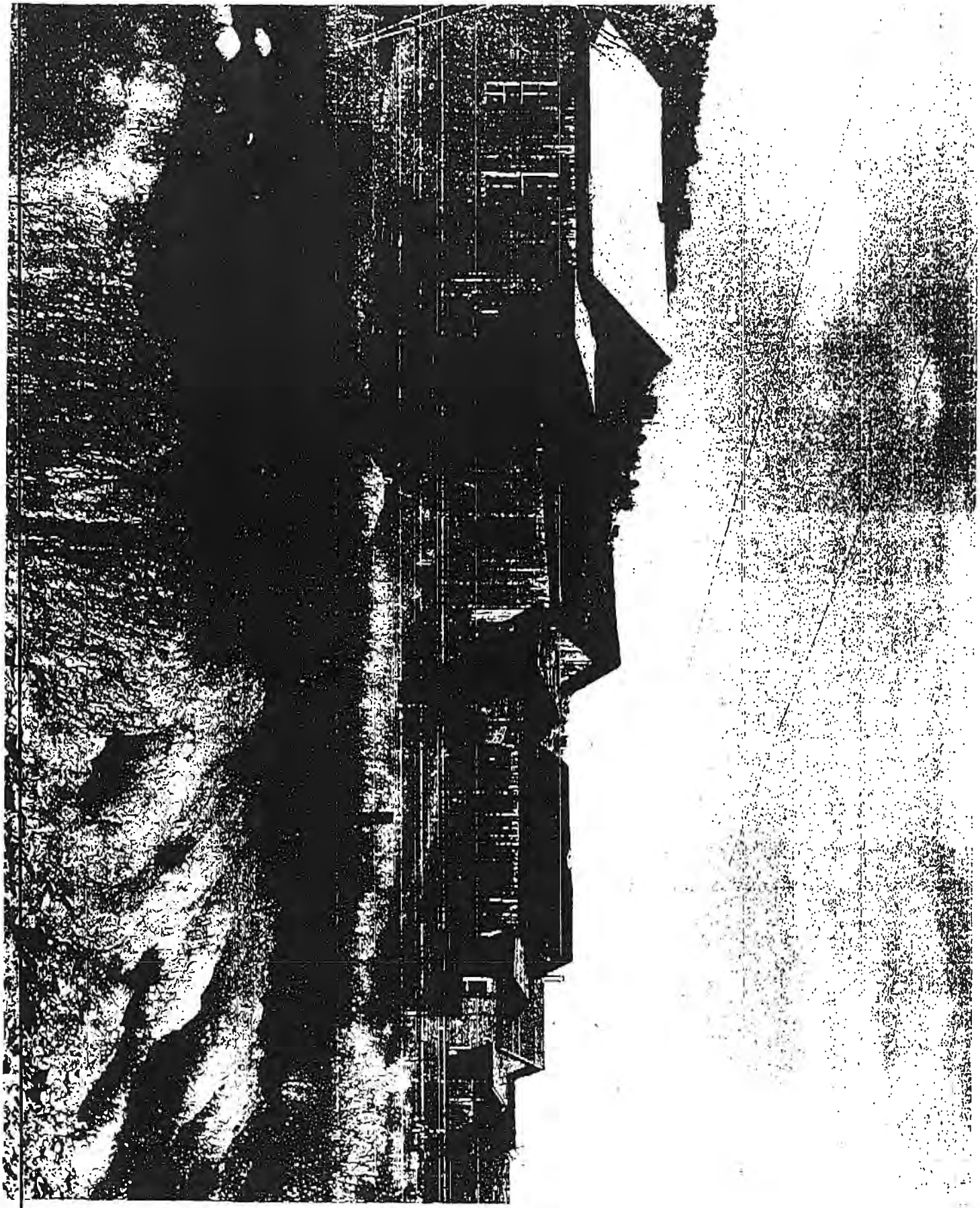
Not drawn to scale.
John O. Baxter

THE MADRID HISTOR
MADRID, NEW M

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY







"Row" House on South side