AN HISTORICAL INVENTORY OF THE PROPOSED U. S. 287 LAMAR BYPASS IN PROWERS COUNTY, COLORADO

Prepared by

Cara C. Muniz, Steven F. Mehls, and Collette C. Chambellan

Western Cultural Resource Management, Inc.
P.O. Box 2326
Boulder, Colorado 80306

Thomas J. Lennon
Principal Investigator

Prepared for

CH2MHill
9193 South Jamaica Street, South Building
Englewood, CO 80112

Colorado Department of Transportation
4201 E. Arkansas Ave.
Denver, Colorado 80222

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ABSTRACT

Between May 13-15, 2003, Western Cultural Resource Management, Inc. (WCRM) conducted an historic survey of approximately 1067 acres in Prowers, Colorado for CH2MHill. The survey was of the proposed route of the U. S. Highway 287 Bypass located east, north and south of Lamar, Colorado The survey was along the U. S. Highway 287 located east and west of Lamar, Colorado and the lead state agency was the Colorado Department of Transportation (CDOT). The northern end of the survey area is generally 1200 feet wide, while the southern end is generally 600 feet wide. The right-of-way will be directly impacted by the construction of the Lamar Bypass; the preferred alternative extends nine miles from the southern end near County Road (C-C) and connects to State Highway 196 on the north side of Lamar. The inventory was conducted in order to identify and document cultural resources with regard to the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) of 1966 as amended, its provisions and policies including the Section 106 process.

Previously recorded historic sites had not been documented within the Project Area. Five new historic resources were located and recorded within the Project Area. These resources include: two segments of the Lamar Canal (5PW191.1, 5PW191.2), on segment of the Fort Bent Canal (5PW192.1), one segment of the Vista del Rio Ditch (5PW193.1), one segment of the Hyde Canal (5PW194.1), and one segment of the Atchison, Topeka and Santa Fe Railroad Line (5PW152.5). The Fort Bent and Hyde Canal segments are recommended eligible for inclusion in the National Register of Historic Places (NRHP). The other resources are recommended not eligible and do not require any further work.

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Colorado Historical Society - Office of Archaeology and Historic Preservation

COLORADO CULTURAL RESOURCE SURVEY

Cultural Resource Survey Management Information Form

Please complete this form and attach a copy behind the Table of Contents of each standard survey report.

I. PROJECT SIZE

Total federal acres in project:	0	Acres surveyed:	0
Total state acres in project:	22	Acres surveyed:	22
Total private acres of project:	833	Acres surveyed:	820
Other Prowers County:	225	Acres surveyed:	225

Total acres surveyed: 1,067

* The private lands were either heavily developed by modern (1990s-2000s) activities or access permission was not secured from the landowners.

II. PROJECT LOCATION

County: Prowers County Principal Meridian: 6th

USGS Quad map name(s) and date(s): Lamar East, Colo. (1953, Pr 1979), Lamar West (1952, Pr 1979).

NOTE: The legal location information below is meant to summarize the location of the survey and does not need to be precise.

Township: 22S Range: 46W Sec: 19, 20, 21, 28, 29, 30, 33, 34

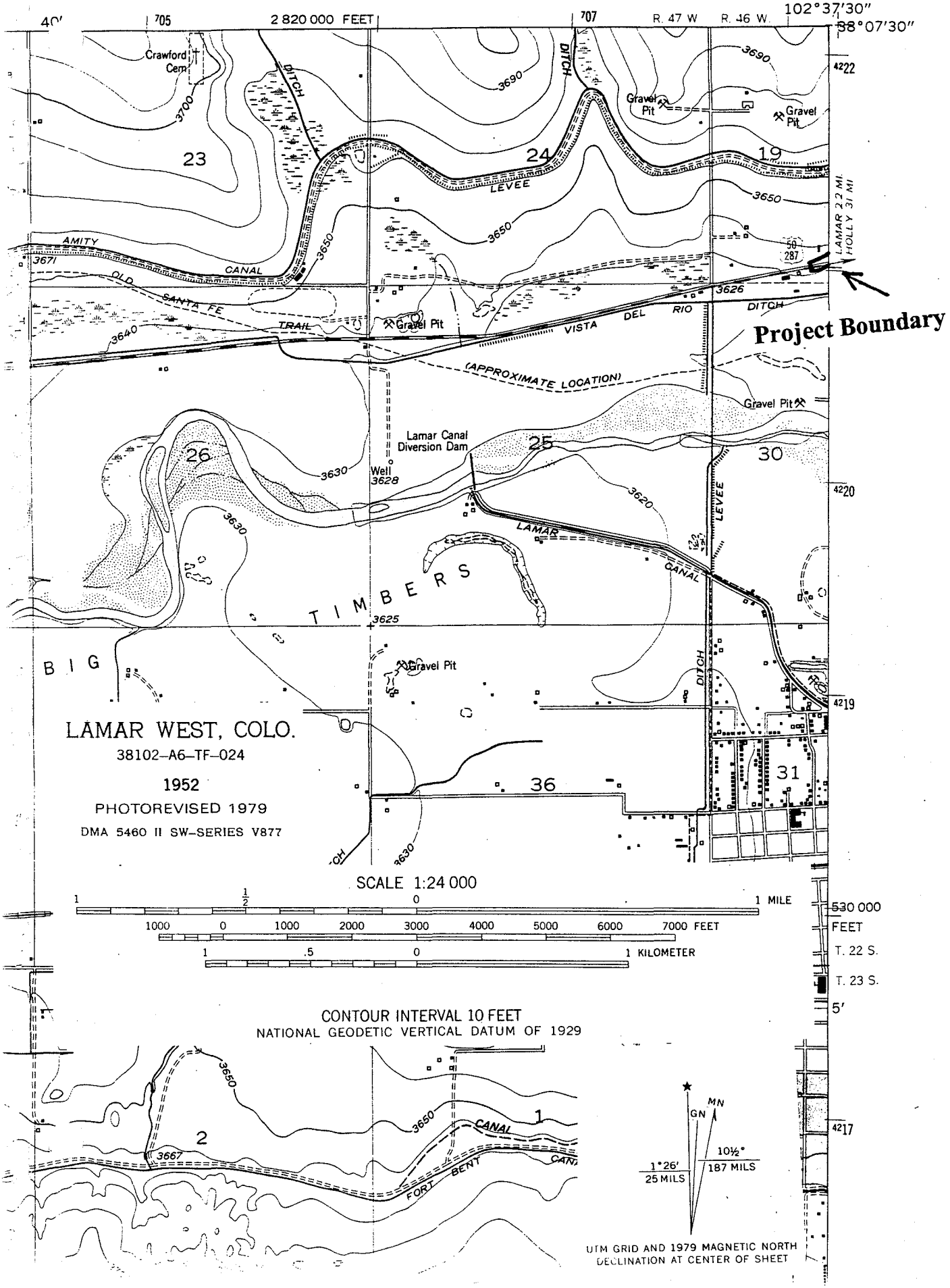
Township: 23S Range: 46W Sec: 4, 8, 9, 16, 17, 19, 20, 21, 28, 29, 30, 31, 32

III. SITES

Smithsonian Number Research	Resource Type				Eligibility				Management Recommendations						Other
	Prehistoric	Historical	Paleontological	Unknown	Eligible	Not Eligible	Need Data	Contributes to NRHP District	No Further Work	Preserve/ Avoid	Monitor	Test	Excavate	Archival	
5PW152.5		X				X			X						
5PW191.1		X				X			X						
5PW191.2		X				X			X						
5PW192.1		X			X					X					avoid or photo document
5PW193.1		X				X			X						
5PW194.1		X			X					X					avoid or photo document

LAMAR WEST QUADRANGLE
COLORADO
7.5 MINUTE SERIES (TOPOGRAPHIC)

5460 II NE (MAY VALLEY)



LAMAR WEST, COLO.

38102–A6–TF–024

1952

PHOTOREVISED 1979

DMA 5460 II SW–SERIES V877

SCALE 1:24 000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

CONTOUR INTERVAL 10 FEET

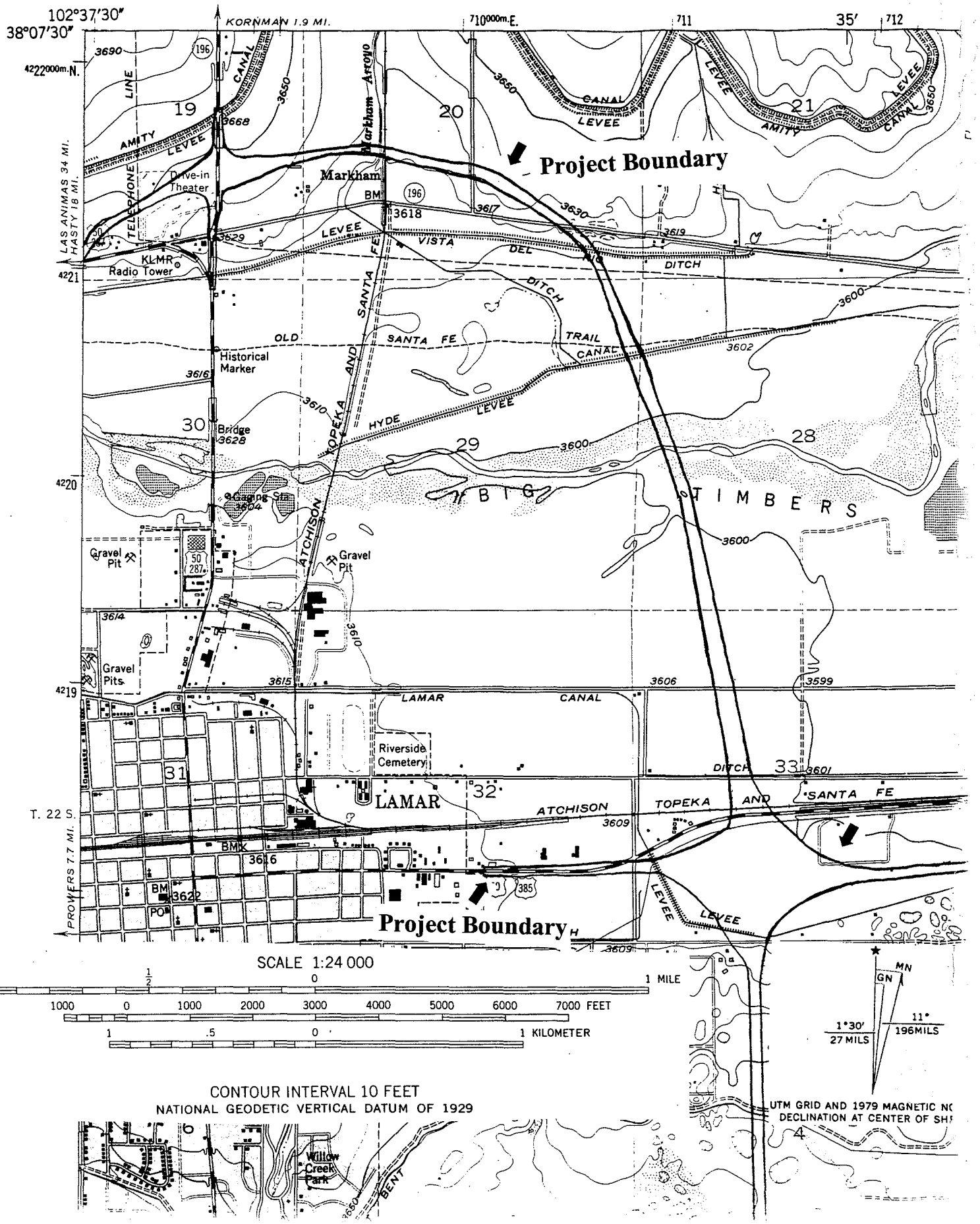
NATIONAL GEODETIC VERTICAL DATUM OF 1929

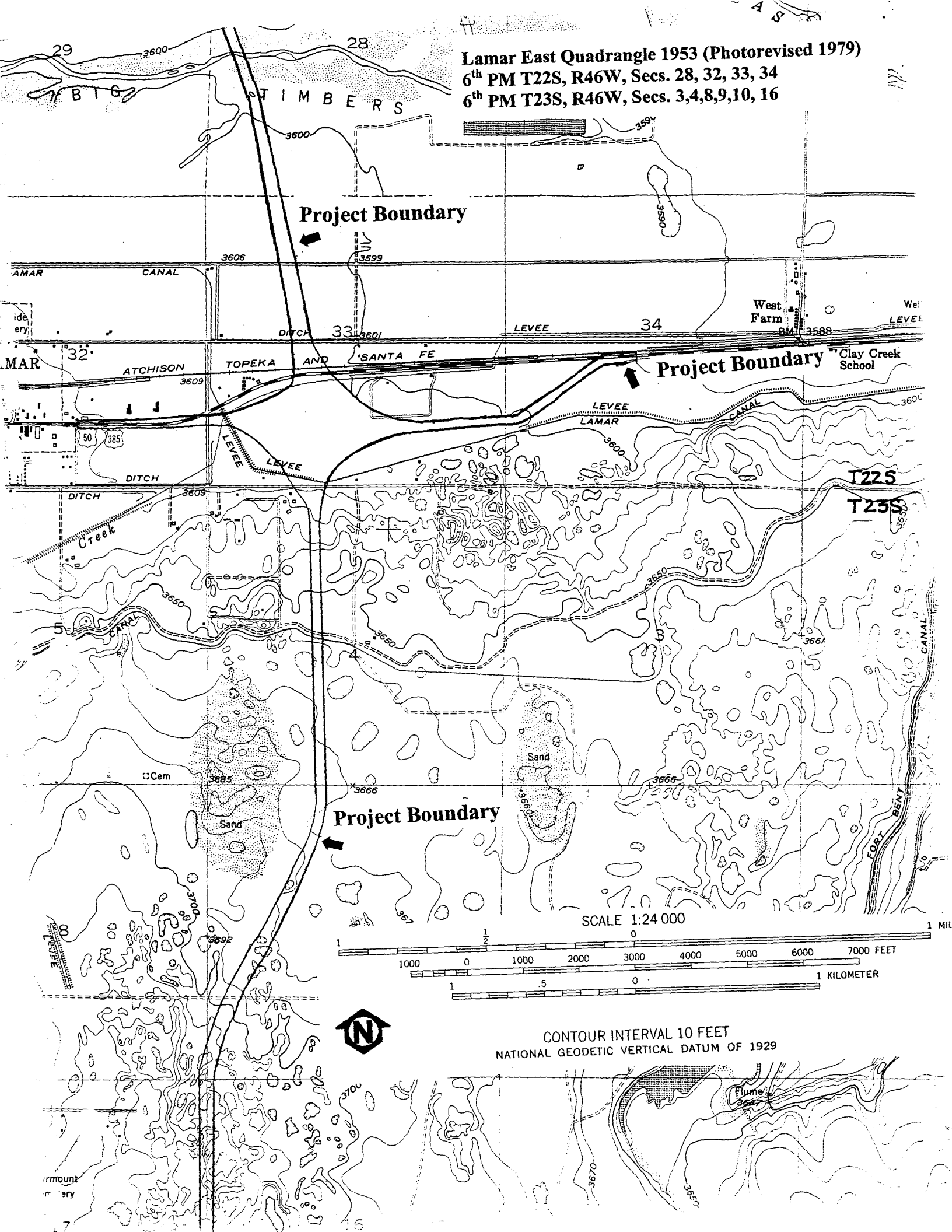
UTM GRID AND 1979 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

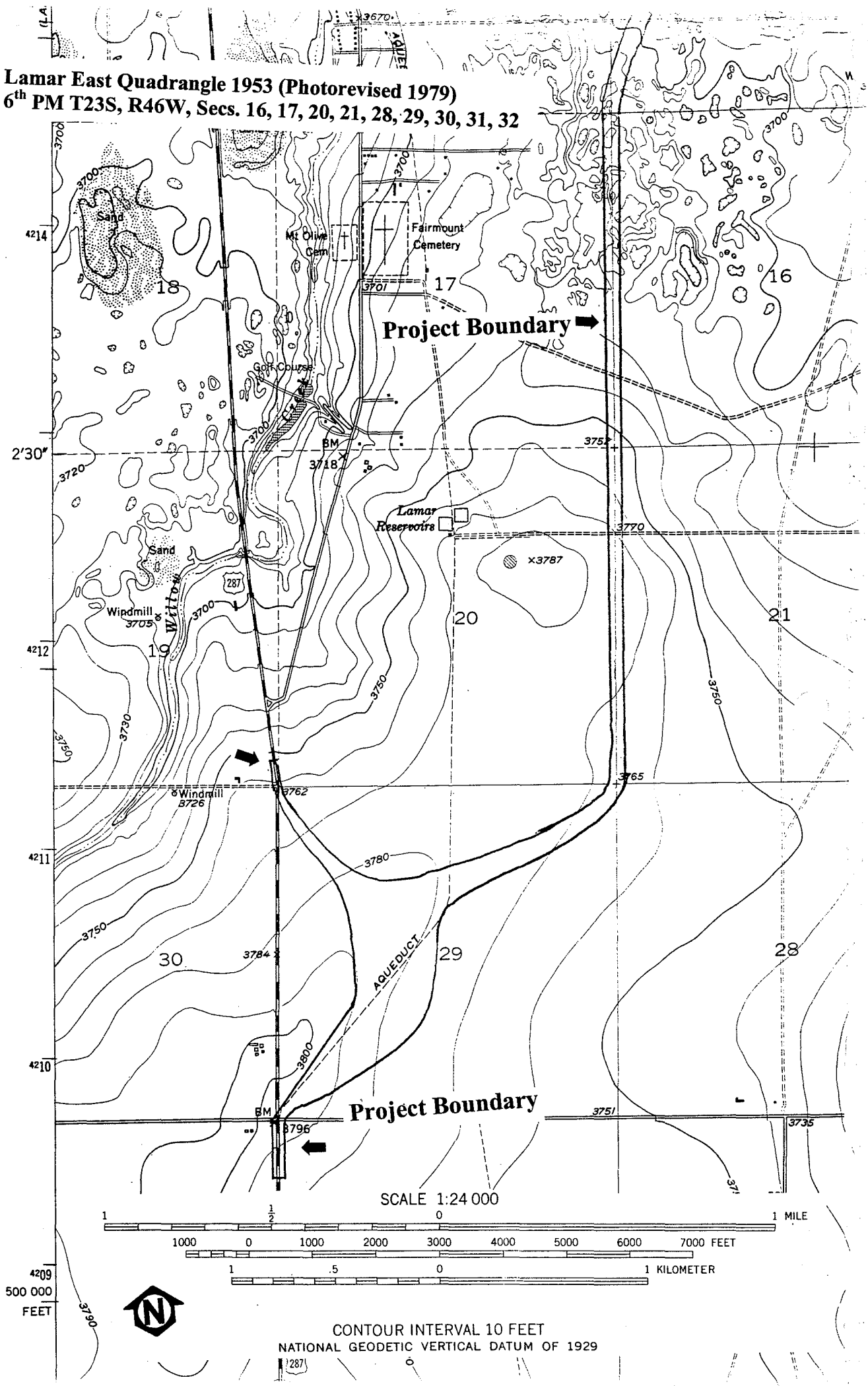
5460 II NW (WILEY)

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T22S, R46W, Secs. 19, 20, 28, 29, 32, 33




Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T22S, R46W, Secs. 28, 32, 33, 34
6th PM T23S, R46W, Secs. 3,4,8,9,10, 16
Project Boundary
Project Boundary
Project Boundary
T22S
T23S
LAMAR CANAL
ATCHISON TOPEKA AND SANTA FE
LEVEE
DITCH
Clay Creek School
West Farm
Sand
Cem
FORT BENT CANAL
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929


Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T23S, R46W, Secs. 16, 17, 20, 21, 28, 29, 30, 31, 32
Project Boundary
Project Boundary
Sand
Mt Olive Cem
Fairmount Cemetery
Golf Course
BM 3718
Lamar Reservoirs
x3787
Sand
Windmill 3705
Willow
Windmill 3726
BM 3796
AQUEDUCT
18
17
16
20
21
19
30
29
28
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
500 000 FEET

INTRODUCTION

Between May 13-15, 2003, Western Cultural Resource Management, Inc. (WCRM) conducted an historical cultural resources inventory of approximately 1067 acres in Prowers, Colorado (see USGS quadrangles located in the front matter). The inventory of the U. S. 287 Lamar Bypass Project was conducted at the request of CH2MHill and the Colorado Department of Transportation (CDOT). The Bypass is intended to improve traffic safety by reducing the volume of truck traffic along the main street through Lamar. The objective of the inventory was to document all historic cultural resources within the Project Area and to evaluate their significance and eligibility with regard to the National Register of Historic Places (NRHP) meeting the requirements as set forth in the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) of 1966 including the Section 106 process.

As per Gantt et al. (2003:1),

> "The preferred corridor, located on the east side of Lamar, extends approximately 9 miles from the southern end near County Road (C-C), north across the Arkansas River, and connects to State Highway (SH) 196 on the north side of Lamar."

The width of the right-of-way has changed since the original archaeological survey of the Project Area by Gantt et al. (2003:1). At the north end of the current corridor the width ranges between 180 and 610 feet, and at the southern end it ranges between 225 and 800 feet. The average width is 250 feet with a maximum width of 1,800 feet.

The entire Project Area will be directly impacted by road reconstruction, improvement, and new road construction activities along U.S. 287. The location of the Project Area is as follows: T22S, R46W, Sections 19, 20, 21, 28, 29, 30, 33, 34 and T23S, R46W, Sections 4, 8, 9, 16, 17, 19, 20, 21, 28, 29, 30, 31, 32. The fieldwork was conducted by Cara Muniz of WCRM, and Thomas J. Lennon served as Principal Investigator.

No historic resources had been previously recorded within the Project Area. Five new historic

resources were recorded during the course of the pedestrian survey. They include: one segment of the Atchison, Topeka and Santa Fe Railroad Line (5PW152.5), two segments of the Lamar Canal (5PW191.1, 5PW191.2), on segment of the Fort Bent Canal (5PW192.1), one segment of the Vista del Rio Ditch (5PW193.1), and one segment of the Hyde Canal (5PW194.1). The Fort Bent and Hyde Canal segments are recommended eligible for inclusion in the National Register of Historic Places (NRHP). The other resources are recommended not eligible and do not require any further work.

EFFECTIVE ENVIRONMENT

PROJECT SETTING

The Proposed U.S. 287 Lamar Bypass Project Area is located in northwestern Prowers County, Colorado. The Corridor is located on the Lamar East and Lamar West 7.5' USGS quadrangle maps (see USGS map locations in front matter). The majority of the land within the Bypass corridor is private; however both State of Colorado and Prowers County lands are crossed. Land use within the Project Area includes: residential lots, urban commercial lots, irrigated and non-irrigated farmland, rangeland and natural areas along the Arkansas River (Gantt et al. 2003:6). The area is part of the Colorado Piedmont Section of the Great Plains Division. The Piedmont is one of Colorado's three major physiographic divisions (Fenneman 1931). The Project Area is located within the Arkansas River Drainage system. Elevations within the Project Area range from 3630 to 3800 feet above sea level. Project Area topography generally consists of flat terrain. The environmental setting of the U.S. 287 Lamar Bypass Project Area is detailed below.

PHYSIOGRAPHY AND HYDROLOGY

As mentioned above, the Project Area is located in the Arkansas River Valley. The climate is dry with low humidity, low rainfall, moderate to high winds and wide ranging temperatures. As per Gantt et al. (2003:6), "Average precipitation in the are is about 15.1 inches per year," and temperatures range from above 90°F in summer to below 32°F in the winter. Winds, an important environmental variable, are strongest in April (Siemer 1977:12). They are generally from the west, east-southeast, east and north (USFS 1993:3-3).

The Arkansas River is the major water source in and near the Project Area include. Other water sources in the immediate vicinity include both the Willow Creek and Clay Creek drainages. According to Gantt et al. (2003:6), the average precipitation is about 15.1 inches per year. Precipitation may be in the form of rain or hail in the summer and snow in the winter. Precipitation is greatest during April and May (Zier and Kalasz 1999:9).

GEOMORPHOLOGY AND GEOLOGY

According to Gantt et al. (2003:7), the lower valley of the Arkansas River is flanked by Upper Cretaceous age rocks. The Niobrara Formation is to the north and consists of shales and limestones. In the south the Carlile Shale, Greenhorn Limestone and Graneros Shale dominate. Quaternary dunes border the inner valley on the south side of the river. The river currently cuts across Holocene alluvial deposits (Tweto 1979).

SOILS

Two cycles of eolian deposition have occurred along the Arkansas River in the John Martin Reservoir area west of Lamar (Holliday 1981). The first occurred between 6,000 and 3,000 years ago and is characterized by soils with cambic horizons. A more recent event began after 3,000 years B. P. and is characterized by clusters of active dunes (weak A horizons). Madole (1994, 1995) has identified seven areas of deposition in the Arkansas River Basin. These eolian deposits are composed of approximately 30% sand and 70% loess. Alluvial stratigraphy at the John Martin Reservoir (Holliday 1981) consists of late Quaternary sediments (Arkansas River alluvial terraces and eolian deposits). The oldest terrace is the Caddoa terrace consisting of well-rounded quartzite, sandstone and igneous cobbles. A second, more recent terrace, the Hospital terrace, is composed of alluvial gravel and sand, sand and silt loam. Next, the Las Animas surface is the modern flood plain of the Arkansas River.

FLORA AND FAUNA

Vegetation within the Project Area include prairie grasslands and riparian woodlands (USFS 1993:3-11). Grassland are shortgrass and midgrass prairie and include blue grama, buffalograss, western wheatgrass, sand dropseed, sand bluestem and needle-and-thread. Sagebrush, yucca and prickly pear cactus are also dominant plants within the Project Area. Along the Arkansas River, deciduous trees and bushes can also be found. Agricultural practices have heavily impacted the native vegetative communities in some portions of the Project Area. Further information on flora within the Project Area can be found in Gantt et al. (2003).

Grassland and riparian fauna range within the Project Area. Fauna typical of the grassland habitats of today consists of the black-tailed prairie dog, long-billed curlew, ferruginous hawk, burrowing owl, lesser prairie chicken, mountain plover and Casins sparrow (USFS 1993:3-10). Other species include the pronghorn antelope, badger, skunk, swift and red foxes, coyote, pocket mouse, pocket gopher, ground squirrel, shrew, eastern mole, western small-footed myotis bat, and cottontail and jack rabbits (Zier and Kalasz 1999:10). In the riparian habitat along the Arkansas River, a number of fish are still present and include: the white sucker, flathead chub, sand shiner, fathead minnow, longnose dace, stoneroller, and plains killfish (Colorado Division of Wildlife 1982; USFS 1993:3-11). Amphibians, reptiles and birds from these two habitats are also present within the U.S. 287 Project Area.

In historic times, the Project Area would have been within the range of grizzly bears, gray wolves, mountain lions and bison (Craighead and Mitchell 1990; Dixon 1990; Fitzgerald et al. 1994)

ENVIRONMENTAL CONSTRAINTS

The major environmental constraint has been the flooding of the Arkansas River. Well documented floods occurred in 1921 and 1965. These floods destroyed historic resources and flood control efforts such as levee construction have also impacted historic resources.

CULTURE HISTORY AND PREVIOUS WORK

A Class III cultural resource inventory of the archaeological resources of the proposed corridor was conducted by Centennial Archaeology, Inc. in February of 2003 (Gantt et al. 2003). One historic site (5PW189) and one historic isolate (5PW188) were recorded during this inventory. The subsequent inventory of historic resources (non-archaeological) conducted by WCRM, is the subject of the current study.

HISTORIC OVERVIEW

The history of Lamar and the Arkansas Valley region tends to reflect the history of the southeastern Colorado plains. The Euro-American influences on the area's history begin with the early exploration efforts that continued for well over a century. The explorations, especially those of the early nineteenth century, made much more knowledge of the area available. This eventually led to increased immigration and utilization of the area's natural resources. As explorers, trappers and traders used the Arkansas River, it became an established route to and through the Project Area. During the 1600s and 1700s, Colorado was part of the Spanish empire administered and controlled from New Spain (Mexico). While Spain claimed a large area of North America, the reality was that Spanish borders went only as far north as the army could protect and enforce. The Spanish claims in North America were part of a larger international rivalry as European countries attempted to exert their control over the Americas during the 1500s and 1600s. The predominant political ideology supported empire and efforts to convert native peoples to Christianity. A large colonial empire increased the prestige and diplomatic power of the mother country. These factors all fueled the imperial rivalries during the 17th and 18th centuries that Spain was an active participant in the search for empire. While the Arkansas River was important to Spain, they could do very little to explore or control the River and its Valley (Abbott 1976:33-35; Ubbelohde et al. 1972: 18-19).

By the early 19th century a border issue had developed between Spain and the then new power in

North America, the United States. In 1819 when the Adams-Onis treaty determined that a line west along the Red River, north on the 100th meridian, west on the Arkansas River, north from its source to the 42nd parallel and west to the Pacific Ocean would be the official boundary between the two countries. As a result the Project Area was divided between two countries. The area south of the Arkansas remained with Spain and the lands north became part of the United States. This led to the first well documented exploration of the Arkansas River when Major Stephen Long located the headwaters of the Platte River and returned east via the Arkansas and Red Rivers. Botanist Dr. Edwin James accompanied Long and became one of the key members of the party, cataloging the natural wonders of the plains and the Rockies in 1820. After dividing his party, Long continued south and eventually located the Canadian River while the rest of the party followed the Arkansas River east (Goetzmann 1966: 51-52).

Along with the government explorers, fur trappers, traders and mountain men also came to Colorado. These rugged individuals did much to find out the details of the region, its resources and they led to the establishment outposts, including along the Arkansas River that would directly impact the eventual settlement of the Project Area. Between 1830 and 1856 many trading posts developed to serve the immigrants heading west and to take advantage of buffalo hunting and the lucrative Taos and Santa Fe markets. Often the first permanent settlement came with these trading posts. Colorado posts included Gantt's Fort near the mouth of the Purgatory River built in 1832 (near modern LaJunta). This post was in a strategic location for trading because it was in Mexican territory and provided an easy point of contact for the New Mexicans, the Native Americans and the Americans. Bent, St. Vrain and & Company's picket post stockade on the north side of the Arkansas River, nine miles below the mouth of Fountain Creek, became the most famous trading post. It confirmed the role of the Arkansas River as a major east-west route (Hafen 1965). One of the most famous early explorers in the region who stopped at the fort was John C. Fremont who frequented the Arkansas River on his trips to Rockies and Far West during the 1840s.

In 1846, the United States went to war with Mexico over American allegations that Mexico

invaded Texas. As part of the American effort, New Mexico was captured by Steven Watts Kearny's military expedition in 1846. Charles Bent was named governor and Kit Carson became Lt. Governor of the conquered lands. In 1848, the Mexican War ended with Mexico's surrender and the peace Treaty of Guadalupe-Hidalgo. The Treaty increased the size of the United States and provided that all lands west of Louisiana, including the entire Project Area, became part of the United States. By 1850, the lands that would become Colorado, previously under Spanish, then French, then Mexican sovereignty were finally under United States control (Goetzman, 1966: 256-75).

The next major influence on the region came with the Colorado Gold Rush of 1859. The rush led to the permanent settlement of Colorado after a decade of growing pains from a number of factors. The mining industry had many early problems; the Native Americans remained a threat on the Plains until the late 1860s, and adequate, speedy transportation remained as key issues. By the early 1870s this situation changed with the end of the Civil War, the development of the open range ranching industry and the western extension of railroads across the Great Plains.

During the years after the Civil War, the cattle industry on the Colorado plains experienced a tremendous boom. The growth of cities and America's industrialization provided an expanding market for the stock raisers. The transcontinental railroads provided an easier means of moving produce around the country and a national agricultural market developed. The most notable early local cattle raiser was John Wesley Prowers. He ranched along the Arkansas River and used the thousands of acres of public lands surrounding his ranch as pasture for his shorthorn herefords. By 1881, he had about 40 miles of Arkansas River frontage and more than 400,000 acres with about 10,000 head of cattle. Books such Baron von Richtofen's, *Cattle Raising on the Plains of North America*, and James S. Brisbin's, *The Beef Bonanza or How to Get Rich off the Plains,* promoted the industry. The authors touted how easy it was to raise cattle because the land was free, water supplies seemed adequate and cattle were inexpensive. The authors optimistically forecast that a rancher could buy a cow for $10; graze on the public lands at no cost, and then sell it in a couple of years later for $40. These authors and others promoted the value of using public

lands. The public land system of the period did nothing to regulate the use of the lands except after formal claims were filed. This way of doing business flourished for approximately 20 years until over-grazing and severe winters brought a halt to the open range days. The industry did establish the roots of one segment of the region's economy (Atherton, 1976: 170-92; Kesler 1986:5-6).

As the early cattlemen were establishing themselves in the Arkansas Valley transportation planners and builders were also looking at the River as a rail route to the West. The early 19th-century travel methods and routes in this part of Colorado was dominated by trail travel and most goods moved by wagon. One example of this can be found in the Santa Fe Trail. The Trail had two routes, the trail through the Project Area was called the Mountain Branch or route. The Trail went as far west as approximately modern Pueblo before turning south toward New Mexico along the base of the Rockies (Kesler 1986: 63-4; Neuhaus 1928). The Trail was heavily used, but by the years after the Civil War many were dissatisfied and sought rail connections. The first railroad completed to a Colorado city was the Denver Pacific, opened in 1870, beginning a decade of rapid railroad growth in the soon to be state (1876). Key to the current Project Area, during the 1860s to 1870s period, Midwestern entrepreneurs organized the Atchison Topeka & Santa Fe (AT&SF or Santa Fe) to build west from Kansas to Colorado and beyond. The Santa Fe used the Atlantic & Pacific line before they absorbed that company. The company reached Granada, Colorado in 1873 and Lamar and west two years later (Bryant 1975; Kesler 1986: 64-5). The Santa Fe built west across Kansas and into Colorado, roughly following the old Santa Fe Trail. During the 20th century the railroad remained a key component of the local transportation picture, but introduction of the automobile and the building of good roads and highways would eventually lead to decreasing importance for the Santa Fe line.

At first, especially during the opening years of the 20th century, auto owners generally resided in the cities. However, by the end of the 1910s, cars and later trucks began to appear on farms and ranches. Autos offered speed, flexibility and a sense of modernity - all attractive to potential users. The increased demands of the urban autoists and the rural residents changed the role of

county road departments as they were expected to do more than occasionally fix bridges. By 1910 the curious and the brave were trying cross-country car trips. They experienced innumerable problems along the way. Difficulties ranged from a lack of clear directions and signs to impassable roads of dirt and mud. These problems led to the founding of organizations to support the construction and improvement of highways in the United States including the Lincoln Highway Association, the Midland Trail Highway Association and many others. In 1912, automotive industry leaders and others vocally expressed their interest in developing coast to coast highways connecting the Atlantic and Pacific shores. Politicians, listening to public opinion, added their voices in support of the building of new highways and roads for the automobile (Hokanson 1988: 2-5; The Lincoln Highway Association 1935).

These years proved to be ones of rapid change on the national level that soon would be reflected in the Lamar region, including the passage of the first Federal Highway Act in 1916. This law provided for federal matching funds for states that supported road building if highway commissions and departments directed and managed the programs. Colorado's legislature responded quickly and the revenue sharing proved to be invaluable for funding roads in Colorado (Athearn 1976: 256-7; ACRE 2002: 5-20- 5-28). About the time of the Federal highway Act the key highways into Lamar and the region was well connected by highway to the rest of the nation.

The early 20th century also witnessed key changes in other areas. One of the important developments in Colorado agriculture, including the Project Area, was large-scale irrigated farming in the Arkansas Valley. The early ditches in the region, including the Hyde Canal and the Lamar Canal, were built during the 1880s as settlers moved in on the heels of the early ranchers and the founding of the town of Lamar (May, 1886). However, during the early 20th century the numbers of farms and farmers rapidly increased. This was due to both expanded water supplies and systems and the development of new crops, especially sugar beets, that were both labor intensive and cash-generating crops. The beet farming led to the construction of a sugar factory in Lamar in 1904. The new sugar plant was only one of the spin-offs for the town

of the increased farming active in the region. The town thrived and prospered, based on the successes of the farmers around the community. The beets were processed for sugar, as well as pulped for use as a livestock food supplement (Kesler 1986: 7, 22-28).

To cope with the limited water resources available away from the major ditches Colorado farmers started to experiment with new crops, especially new types of wheat, to use in dryland (non-irrigated) areas. Many of these new pioneers tended to combine cattle and sheep raising with farming. They were aided by the 1909 passage of the Enlarged Homestead Act (320 acres) and the 1916 Stock Raising Homestead Act (640 acres). The new act provided for 320 acre homestead in arid regions. In 1916 Congress passed the Act allowing up to 640 acres in arid climates for stock raisers. The new farmers began to re-attack the issue of farming the lands in the arid climate. Leadership in dryland farming came from Professor Hardy W. Campbell of the University of Nebraska. Campbell's theories held that to increase the water retaining ability of the soils through cyclic field use followed by fallow periods. Adequate moisture would accumulate for successful crop planting during the fallow years. Beyond Campbell's work, others, including the State Agricultural College (now Colorado State University), experimented with new drought resistant crops. Additionally, state schools and private companies introduced many new and different machines to help farmers. All this led to rapid growth in agricultural output in and near the Project Area during the first two decades of the twentieth century (Steinel 1926: 283-310). The changes, especially in labor saving machinery, meant that fewer people could cultivate more land effectively. World War I led to an increase in the acreage being dryland farmed to meet the demand.

After the war ended Colorado's farmers found their livelihood threatened by a lack of demand. Soon there were more crops than buyers. In southeastern Colorado many farmers switched to ranching as cattle prices remained high. Another major event that drastically impacted parts of the Project Area during the 1920s and after was the Arkansas River flood of June 3, 1921. This flood devastated Pueblo and many other towns and cities along the river and led to a concerted effort to control the flow of the river for both flood protection and to better conserve and use the

water resource it represented that continued on for decades. As late as 1965 Lamar suffered from devastating floods. To further the problems faced by farmers and others in the 1920s crop prices rose slightly during the late 1920s, but hopes for prosperity were dashed on October 23, 1929 with the New York Stock Market crash and ensuing Great Depression began (Athearn 1976: 272-273).

The early 1930's also witnessed decreasing rain fall. The Great American Desert became just that. The ability to grow crops on the dryland acres was almost completely wiped out. Wind storms and erosion peaked and the "Dust Bowl" became common by the early 1930s. With changing price structures and weather problems, farmers were unable to continue to survive on these marginal lands. The U.S. government geographically defined the "Dust Bowl" to include southeastern Colorado. One evidence of the changing problem was the increase in farm tenancy in Colorado. The rate of farm tenancy increased in the state from 23% to 39% in the years 1920-1935 (Athearn 1976: 233-5; Worster 1979: 10-25).

World War II and the end of the Great Depression caused many of Colorado's farmers to return to their land, and their trade. The stable economy and the return to wetter weather lead to a rise in agriculture, especially crop raising in the area. Cattle and sheep returned as well to find a new happier environment despite controlled prices. The World War II years were ones of general prosperity but after the war the familiar cycle of declining crop prices began to be felt in the area. Recession became part of the immediate post-World War II picture for farmers and ranchers in the region and much of Colorado. The number of operators declined and those who remained tended to have larger operations as land holdings were consolidated. This has also impacted the town as the formerly agriculturally based economy found it had to diversify and find new employment sources to maintain itself. Thus, by the 1960s and 70s the local leaders were actively seeking new manufacturing and other businesses (Kesler 1986).

PREVIOUS WORK IN THE PROJECT AREA

A Class III archaeological survey of the proposed U.S. 287 Lamar Bypass was conducted by

Centennial Archaeology, Inc. in February of 2003 (Gantt et al.). At that time, a file search of the Project Area was conducted at the OAHP. Four cultural resource surveys had been previously conducted within the Project Area (Angulski 1985; Buckles 1980; Hand 1998; Wallace 1984). Only one historic building, the Big Timbers Museum (5PW58), and one historic isolate (5PW188) had been previously been recorded within the Project Area. A subsequent adjustment of the boundaries of the Proposed U.S. 287 Lamar Bypass avoids the Big Timbers Museum.

STATEMENT OF OBJECTIVES AND RESEARCH DESIGN

The objective of the cultural resource inventory was to identify and evaluate all cultural resources within the Project Area for their National Register of Historic Places (NRHP) eligibility potential and to formulate appropriate management recommendations. To facilitate the evaluation process with regard to resources, historic research designs were developed to allow for a understanding of human occupation of the area and to properly place the resources recorded into a broader perspective. Along with the research design, appropriate research questions can be formulated and comprehensive evaluations of resources under the NRHP Criteria *a*, *b*, and *c* can be made at the appropriate level of significance. Finally, based on the level of significance of the resource, management recommendations can be proposed, if needed.

The historic context, as defined by the National Register of Historic Places (NRHP), contains three elements and serves two essential functions in the cultural resource management decision making process. The three elements are time, place, and theme. The time element is a parameter that defines, or is related to, a chronological period encompassed by the activity discussed in the stated theme and serves as the period of significance. Place is the specific geographic area at which activities associated with the theme took place. The NRHP recognizes that place can be defined by a variety of methods such as political subdivisions, planning areas, or land management units. Place also is very useful in helping determine a resource's level of significance as the resource is associated to the larger geographic areas.

PROPERTY TYPES AND THEIR ROLE AS A LINK IN THE EVALUATION PROCESS

Linkages between the historic context and the resources are formed through property types. Property types share either physical or associative characteristics or both. The property types offer the first level of analysis of resources recorded in field surveys because they are defined in ways that reflect the known or expected characteristics of the field resources. Beyond that, property types also describe the physical characteristics and associative values that a resource

must possess to be considered eligible to the National Register as a representative of the property type. Thus, the historic context and its associated property types function systemically to support the decision-making process in cultural resources management. The context functions as: 1) a vehicle to provide consistent resource evaluation, and 2) a guidance document for the types and quantities of data needed to support archaeological research in the Project Area. Below are descriptions of the key property types applicable to the U.S. Highway 287 corridor historic period resources.

Property Type I: Transportation Resources, 1840-1955

The transportation resources under consideration in this project pose one interesting problem from the regulatory perspective, however, not necessarily from the interpretive perspective. The majority of the linear resources extant today are related to transportation to and from the eastern plains of Colorado and the Midwest and Pueblo along the Arkansas River and north-south connections between the communities of the high plains and across state lines, thus they must be looked at as segments of larger systems.

The Colorado OAHP identified and developed general guidelines for the study of the trails, roads, and railroads at given levels in the RP3 process for the Colorado Southern Frontier Plains (Mehls and Carter 1984). For railroads the Preservation Office has continued with the Railroads in Colorado Multiple Property Listing and recently The Colorado Department of Transportation recently has completed a study of Colorado's highways (ACRE 2002; Fraser Design 1997). These documents identify general guidelines and considerations for the evaluation of transportation resources and were incorporated into this study as appropriate.

In looking at the transportation resources of the U.S. Highway 287 Project Area, three major resource categories have been identified associated with transportation property type: 1) trails and wagon roads; 2) railroads; and 3) automobile highways and roads. All of these share certain characteristics that lend to a group discussion. They are engineered structures. All these resources are considered to be potentially significant under either Criterion *a* or Criterion *c* with

their areas of significance being transportation or engineering (U.S. Department of the Interior, National Park Service1991). Some of the resources are potentially eligible under Criterion *b*. Except for the bridges, the resources were linear features and as such it was determined that to be considered eligible the road, trail, highway or railroad had to exhibit some type of architectural or engineering features clearly associated with engineering and construction techniques that were in general use at the time of their construction. Identifying the time, either the year or span of years, when the resource was built is very important to determine whether or not the existing resource still represents the period or time of construction.

The roads, trails, highways and railroads of the study area had materials that included asphalt (black top), dirt and gravel, steel, and use of concrete. The routes tended to be determined either by the local topography, such as the presence of creeks and drainages, or adaptations of the section line road route practice common in the Midwest. The transportation properties include both active and inactive transportation systems with ancillary features.

Even though less than complete, a description of the built roads, trails and ancillary features can be found in the historic record at various archives and photograph collections. Those sources are very helpful. This includes vernacular usage roads and trails designed and built before the formal roads were established, those built by residents without an engineering survey, surveyed county roads and highways. Generally, under County administration, roads have not been surfaced or are surfaced with gravel, one or two lanes wide without extensive signage for safety. State and US highways are more developed, have wider shoulders and more stringent signage requirements. Ancillary features generally are limited to retaining walls, culvert faces or bridges. Features were relatively small with retaining walls and bridges. Culverts are often steel pipes with or without faces. Thus, culverts are not considered bridges. Bridges here are defined as any type of structure that allows the transportation route to cross over something, either a natural feature such as a creek or a man-made feature such as another road. Secondly, the bridge must have discernable abutments. These roads, trails, highways and railroads existed to move people, vehicles or livestock through the area in an efficient manner.

A very useful system for understanding the complexities of transportation systems is the model Keith Myhrer developed for the study of those systems in Nevada (Myhrer 1994). Myhrer's model for classifying and evaluating transportation systems incorporates the diachronic and synchronic complexities of such systems. The model was produced for southern Nevada and tends to focus on major transportation routes, but is easily adaptable to other areas and systems of local transportation. The basic points of the Myhrer model are:

1. A transportation system is defined as the total of the linear alignment and transportation components. The components include road beds, highway pavement, artifact clusters, roadside debris, construction and maintenance camps, bridges, culverts, and any other features associated with the construction, use and possible abandonment of the system.
2. Transportation systems usually follow corridors of least resistance. Many components tend to be grouped in a single corridor.
3. Regional transportation systems designate points of origin and destination (supply centers). Subcenters, such as towns or villages, may be located between the primary supply centers. Myhrer's examples of supply centers are major cities and towns while his subcenters are smaller cities and towns, but the concept can be applied to almost any transportation system. Which entities are defined as supply centers and which as subcenters will depend on the size and complexity of the transportation system. A given entity may change designations if the transportation system is redefined. For example, if the transportation system under consideration is defined as the road network in a rural agricultural county, the supply center of destination would be the local town while the surrounding farms would be the supply centers of origin. If, however, the regional transportation system was defined as the entire state, this same small town likely would be considered a subcenter between two larger cities.
4. Transportation systems pass through a number of phases including the exploration phase, construction phase, use/maintenance phase and often the abandonment/reuse phase.
5. Transportation systems are hierarchical. Although Myhrer was primarily concerned

with the hierarchies within a single transportation corridor leading from Salt Lake City to Los Angeles, the model can be scaled to meet individual research concerns. At the grandest scale, there is the world transportation system with its innumerable components. The world system can be subdivided into various regional, national and local transportation systems as needed. Configuration of transportation systems within a region can take more than one shape. For instance, one could use a major transportation corridor system concept as conceived by Myhrer, a state transportation system concept, a county transportation system concept, a system that incorporates only major transportation arteries, a railroad system, etc. For purposes of cultural resource management the concept of a transportation system hierarchy consisting of a main road with branching feeders is very useful for recording and evaluating historic routes.

6. Transportation systems or components within a system evolve and devolve as technology and needs of a region change. Later systems often are built on or parallel to earlier systems, such as U.S. Highway 50 next to the Santa Fe Railroad next to the Santa Fe Trail in and around the Project Area.
7. Research into transportation systems can be both diachronic and synchronic. Diachronic research focuses on changes in a transportation system over time or how one system evolves into another. Synchronic research focuses on interactions between components of a system and the similarities and differences between the components. Separate systems or components of separate systems can also be compared.

Eligibility Considerations

Criterion *a*:

1. Is the resource a segment of one of the main transportation routes through the region, or is it a segment of feeder road of major local significance?
   A. Is the resource representative of one of the above mentioned roads?
   B. How much of the original road survives? Do longer or more representative segments remain elsewhere?

C. Is the resource an outstanding example of the routes of the particular era that are not preserved elsewhere in the region?

2. Is the property associated with an event important to local or regional history?

Criterion *b*:

3. Is the resource associated with an individual who was important in the development or use of the transportation system in the locality or region?

Criterion *c*:

4. Are the resources representative of transportation structures or landscape features, such as freight stations, road cuts, bridges, rock retaining walls, etc.?
5. Is the property architecturally significant? Does it have significance in the history of civil engineering or another engineering significance?

In addition to having significance as outlined in the previous section, the transportation system or its components must also retain essential characteristics and physical features that convey its historical identity. The National Register identifies seven (7) elements of integrity including: location, design, setting, materials, workmanship, feeling, and association. These elements of integrity are very broad brush. To make them easier to use with the following descriptions have been developed.

A modern transportation facility may overlay a historic route/resource. For example, if the character and feeling of the original or historic rail line has been lost by construction of a modern, high speed railroad on the same route, then, while the overall railroad system may be significant, the historic railroad segment is not, due to a loss of integrity. Similarly, if a stream was once crossed by a bridge, but the crossing has been replaced by a fill and culvert then the bridge is no longer extant and cannot be considered significant. Precise location will likely have varied over time, but if the railroad stayed in the general area, for example, along the stream or ridge, then locational integrity will be considered extant. In all cases, drastic rerouting such as from one drainage bottom to another, integrity of location will have been lost. Closely associated

with location is the element of setting. Minor rerouting, such as a rail line at drainage bottom that moves from one side of a drainage to the other shall be considered to have integrity of setting. Those, for example, that have been removed from the drainage to a different locale shall have lost setting integrity. Association of the transportation resource to its immediate natural surroundings will be the measure of integrity of location and setting.

To determine if a resource retains integrity from naturally occurring processes a different test may be used to determine the presence of historic fabric and function. The measure of this requirement shall be passage. Routes that remain passable by the same method of transportation for which they were originally built shall be considered to have maintained their design and workmanship integrity elements. If, however the passage test is failed other tests may be applied. For example, rail lines that have been abandoned and the tracks removed no longer remain passable by trains. However, if the roadbed remains reasonably intact and due to general size, profile and grade remains clearly discernable as once having been a railroad, then the segment shall be considered to have integrity as a railroad. However, if the remaining roadbed has been heavily impacted by either man or nature and it no longer conveys the sense of its fabric or historic function/purpose then it shall be considered to have lost its integrity. Equally, if once extant features, such as railway stations, are no longer present, those portions of the route shall be considered to have lost their historic, functional integrity.

Property Type II: Agricultural and Irrigation Resources, 1860-1955/Property Type IIa: Ranches and Farms, 1859-1950

The Colorado OAHP identified and developed general guidelines for the study of farms and ranches in the region in the RP3 process, the Southern Frontier Historic Context (Mehls and Carter 1984). The Preservation Office has developed other, more detailed agricultural studies for other parts of Colorado and some of the concepts from those studies can be adapted for use in the U.S. Highway 287 Lamar region. Collectively these documents identify general guidelines and considerations for the evaluation of agriculturally related resources. As a related subset irrigation resources are considered to be part of this property type as well. Within the NRHP areas of

significance scheme the Project Area is associated with the Areas of Significance of Agriculture, Exploration and Settlement, and Industry (USDI, National Park Service 1991:40-1).

In examining the significance of agriculture in the study area, what becomes apparent is that many of the major trends in western agriculture are present. Parts of the study area region are dominated by ranching, other parts have a heritage tied to dry land farming, and other parts of the area have been farmed and ranched under irrigation. Thus, in a microcosm, the study area represents the agricultural heritage of the state and much of the Rocky Mountain West of the past 140 or so years. The heritage of farming and ranching in and around the study area dates to the 1860s and 1870s as prospectors who failed to strike it rich turned to farming, others arrived in the area to supply the mining markets and still others came simply to take advantage of the Federal land policies and make a new start. Since those early years the local ranchers and farmers have experienced many fluctuations, but agriculture remains one of the mainstays of the regional economy.

Ranches or farmsteads can occur either as individual clusters of buildings, features and/or objects (ranch/ranch complex/farmstead/farm) or as part of a functionally based agricultural historic district. The difference between farm and ranch properties is what the site produces. Farms typically produce a row or other crops with supplemental livestock production. Livestock grazing characterizes ranching. Each of the three main types of agriculture (irrigated farming, dryland farming, ranching) have certain characteristics in their built environments and operational schemes that differentiate them from one another. Irrigated farms usually can be found on a major ditch or lateral with water distribution features including spreader and field ditches, flumes, headgates and other small structures to supply water to the fields. Because many of these farms started as comparatively small land holdings (40 to 80 acres), evidences of the associated property boundaries may be found. Equally, remnants of the older, smaller farmsteads also may be found in building clusters or landscaping without a viable residence. Such a situation became common after land holdings were consolidated.

Another type of farming practiced in portions of the region is and has been dryland farming. At

these farms the land holdings and fields are generally noticeably larger to allow use of the fallow - production alternating cycle. Another common difference is the types of crops grown. Often, the crops found on dryland farms will be drought resistant small grains such as wheat. Equally, the built environment will tend to have more features, structures or buildings devoted to grain storage than found on irrigated farms.

Finally, the ranches of the region may have had a different presence than the aforementioned farms. Ranches may include irrigated fields and pasture areas, but the purpose of the fields and irrigation is to produce winter feed or grazing plants for animal consumption rather than crops for market. As with the dryland farms, the size of the land holdings will be substantial, often measured in sections rather than acres. Equally, the built environment will have an emphasis on shelters for animals and buildings or structures, such as a loafing sheds, to store winter feed. In summary, while many of the "places" may look alike at first glance, substantial differences can be found reflective of the particular agricultural pursuits of the owner or tenant.

Eligibility Considerations for Ranches, Farms and Related Sites

Criterion *a*:

1. Is the resource a main ranch or farm headquarters in Prowers County? Is it a relatively complete example of a time period or trend in local agricultural development?
   A. How much of the original ranch or farmstead survives? Do more representative examples remain elsewhere?
   B. Is the resource an outstanding example of farm or ranch architecture of a particular era that are not preserved elsewhere in the region?
2. Is the property associated with an event important to local or state history?

Criterion *b*:

3. Is the resource associated with an individual who was important in the development of ranching or farming in the locality, region or nation?

Criterion *c*:

4. Is the property architecturally significant? Is the site an identifiable grouping or collection that has significance as a collection of buildings, features and structures?

For ranches and farms to be considered as having integrity the houses and the outbuildings must be a vernacular style and of appropriate materials (wood, stucco, brick, tile, stone, or concrete) and the individual ranch or farm must have enough of the outbuildings, fields, and pastures present to convey the historic feeling of a ranch or farm during the period significance and to make the function of the site and its components readily apparent. The buildings and related features also must have some indication of how the farm or ranch was supplied with water. For example, the ranch may have been near a creek or the farm may have had an irrigation system. If those elements have been obliterated, then the buildings and complex may no longer have integrity of location. The individual buildings and structures must have the integrity qualities described above to be considered eligible. If the individual buildings, structures, or objects have lost any of their ability to convey either their design, materials, workmanship or character and function within the ranch through natural deterioration or the activities of man and during or after the period significance, then those specific resources shall be considered to be not eligible. For outlying complexes, such as corrals or shearing pens the same considerations apply. Specifically, the resource must convey its historic function and modern repairs, additions and maintenance activities must not have impaired the historic fabric and character of the resource. For features and structures such as fields or pastures, attempts to recontour, fill in or otherwise obliterated part of feature shall be considered to have destroyed the design, setting, workmanship, and association of that feature making it specifically not eligible. Given the critical nature of water, the same considerations apply to the water supply features whether they were natural or man-made.

For districts made up of ranches or farms slightly different considerations apply. The first consideration or requirement is that the district be historically associated with an important trend identified in the overview for the area or from other sources. That is, it must contain a number of

ranches, farms or farm buildings that date to the period of significance and be part of an identifiable social or economic pattern, such as the sugar beet or dryland farming booms of the early 20th. century. The district also must exhibit some of the typical settlement patterns associated with the trend pattern. The second requirement is that the physical characteristics of ranch, farm or rural community must be present, specifically that the setting and feeling, as they were during the period of significance, should be conveyed by the district. The setting should show evidence of a settlement or a land-use scheme and/or distinguishable settlement patterns giving continuity to the district. The district also must convey the spatial associations and relationships of the various ranches, farms or other elements and features within the district to each other. This may be critical to establishing the relation of the district to the theme or pattern for which it is significant. Other elements that distinguish the overall design, setting, and feeling for the district are the definable lines of communication/transportation that cemented the community or district together during the period of significance. In potential historic districts served by water diversion/irrigation systems, elements of that system must remain. If these various elements are not present or modern intrusions should have over powered the historic character, setting, and feeling of the district then the district will not be considered to have sufficient integrity for National Register listing.

Property Type IIb: Irrigation System Resources, 1880-1955

The significance of irrigation in the study area stems from the relationships of the resources to many of the major trends and laws relevant to western irrigation. Not all types of irrigation features are represented by resources in and near the present study area. For example, the study area contains large, major regional systems while elements of smaller systems are lacking. The entire project area's agricultural heritage is tied to the availability of water for use in growing forage and crops. Thus, like the farming and ranching property type, the irrigation system properties are intimately tied to and representative of the study area's agricultural heritage of the past 120 or so years. This Property Type is associated with the RP3 study listed above as well as the Engineering Context theme of Irrigation (King 1984).

The significance of irrigation in the study area stems from the relationships of the resources to many of the major trends and laws relevant to western irrigation. Not all types of irrigation features are represented by resources in and near the present study area. For example, the study area contains remains of small, ranching related irrigation systems; in other parts of the area large, initially speculative, irrigation projects can be found. The entire Project Area's agricultural heritage is tied to the availability of water for use in growing forage and crops. Thus, like the farming and ranching property type, the irrigation system properties are intimately tied to and representative of the study area's agricultural heritage of the past 120 or so years. This Property Type is associated with the RP3 study listed above as well as the Engineering Context theme of Irrigation (King 1984).

Irrigation resources should be viewed as parts of a system. Specifically, the individual resources, as parts of a system, should be interpretable as to their function, purpose and their role within the larger system.

Eligibility Considerations for Irrigation Systems

Criterion *a*:

1. Is the resource a main ditch system or other, smaller system in Prowers County? Is it a relatively complete example of a specific time period or trend in local irrigation development?
   A. How much of the original ditch system survives? Do more representative examples remain elsewhere?
   B. Is the resource an outstanding example of irrigation engineering of a particular era that are not preserved elsewhere in the region?
2. Is the property associated with an event important to local or state history?

Criterion *b*:

3. Is the resource associated with an individual who was important in the development of irrigation, ranching or farming in the locality, region or nation?

Criterion *c*:

4. Is the property architecturally significant or significant for its engineering?

Because the irrigation system resources include a variety of resource types it is somewhat difficult to make sweeping statements regarding their necessary integrity. However, certain groupings can be made and those groups addressed. For example, for the ditch, canal, lateral, and other water transmission features these integrity concerns apply:

- These features should be clearly evident, not filled in or substantially modified and accurately dated. The typically associated agricultural irrigation systems features should be present. Many of these related to the equitable distribution and storage of water by its users. Ranchers and farmers had to assure delivery of the water to their various fields and pastures, generally requiring more complicated engineering and facilities.

For objects and machinery the following considerations apply:

- The machinery remains should disclose function, be accurately datable and preferably on or near the original usage site. These items are considered objects under National Register definitions. They may be eligible to the National Register under Criterion C as representing the tools needed to build or maintain a water diversion system. Beyond that, the object must be associated with a ditch that is among the earliest in a given drainage or water shed by its date of appropriation or enlargement. The machinery may have been maintained regularly, the alterations and changes, particularly substitution of inappropriate materials will be considered to have cost an object its historic fabric in feeling and thus the equipment will be considered as not eligible.

For architectural features, such as ditch rider's shacks, the following integrity considerations are applicable:

- These architectural features should be in their original location, discernible as clearly associated with the irrigation or water system, and properly dated. The structure should not be substantially modified or altered. The resources may be eligible under Criteria *a* or

c. It must be clearly associated with the ditch or other water diversion features. Each feature must retain its fabric and feeling to be considered as a contributing resource.

FIELD METHODS

In May of 2003, five historic resources were recorded and evaluated by Cara C. Muniz of WCRM, Inc. An historic survey and recordation of sites was determined by examination of aerial photos. Ground visibility over the entire Project Area ranged from 0-40 percent. Vegetation included sparse bunch grasses in formerly cultivated fields to thick grasses, weeds, trees and shrubs in the developed areas.

All cultural resources were recorded on appropriate Colorado inventory forms as per State Historic Preservation Office (SHPO) guidelines. Sites were photographed using black and white film. Individual site features were also photographed to provide more detail to the site record. Site sketch maps were prepared, and all newly recorded cultural resources were plotted on the appropriate USGS 7.5 minute quadrangle. No artifacts were collected during this survey. The recommendations made by WCRM are based on the field inventory and archival research. All records and photographs are on file at WCRM's Boulder office.

INVENTORY RESULTS

No previously recorded historic sites were located within the Project Area. Newly recorded historic sites included a segment of the Atchison, Topeka and Sante Fe Railroad (5PW152.5), two segments of the Lamar Canal (5PW191.1, 5PW191.2), one segment of the Fort Bent Canal (5PW192.1), one segment of the Vista del Rio Ditch (5PW193.1), and one segment of the Hyde Canal (5PW194.1).

SITES

5PW152.5

This site is an abandoned spur segment of the Atchison, Topeka and Santa Fe Railroad (ATSFRR) located on the northern flood plain of the Arkansas River. At this location the recorded segment measures approximately 67 meters north-south and 11 meters east-west. The tracks and ties of the line have been removed and the rail bed is currently used as a two-track for accessing agricultural fields to the east. Constructed in 1875 by the Colorado and New Mexico Railroad Company when the line was completed between Granada and a point opposite Bent's New Fort. Between the 1920s-1940s the ATSFRR ran between six and eight passenger trains daily through Lamar; freight trains were about the same number (Kesler 1986:65).

5PW191.1 and 5PW191.2

This portion of the Lamar Canal has two segments. The canal is crossed by the footprint of the current Project Area in two locations separated by 500 meters. The Lamar Canal is located on the southern flood plain of the Arkansas River and was constructed in 1875 by A.R. Black to carry water from Lamar to the McMillan Ranch. At this location the canal prism (Feature 1) ranges between 20-25 meters in width at the top of the banks and narrows to about 5 meters wide at the prism base. The canal measures approximately 6 meters in depth. Water was flowing in the canal at the time of recording. An improved ditch rider's road (Feature 2) parallels the canal on the north side, and is set about 10-12 meters north of the canal's north bank. Two piles containing

several tons of concrete chunk debris (Features 3 and 4) have been left along the north bank edge at this location. These concrete chunks will be used as bank stabilizers along the canal walls; some are already present in the canal. Although the water was fairly low at the time of recording (less than 50 cm deep) it is clear that large amounts of water have rushed through this area; brush and grasses are caught in the bridge supports, located at least 5 meters above the current water level.

5PW192.1

This site is a segment of the Fort Bent Canal. The Fort Bent Canal was first known as the Colorado and Kansas Ditch. Part of Colorado Water District Number 67, the largest in the state, the Fort Bent canal was built in the 1880s by the Koen brothers. This canal ran from the mouth of Muddy Creek to a point eight miles southeast of Coolidge, Kansas (Kesler 1986:57). At this location the canal is approximately 2 meters deep and 7 meters wide. It is bisected at this location by a county road, which was constructed sometime after 1979 (county road does not appear on Lamar East 7.5' quadrangle 1953, Photo revised in 1979). It is believed that this road was constructed sometime around 1993, judging from the dates recorded on two bridges that carry this road over the Lamar Canal, approximately ½ mile north of this location. Traces of an old two-track road (Feature 2) are present, paralleling the canal to the south. A more recent two-track road parallels the canal to the north - this road leads to a feed lot to the west and to a private residence to the
east.

5PW193.1

This site is a segment of the Vista del Rio Ditch located on the northern flood plain of the Arkansas River.. At this location the recorded segment measures approximately 100 meters east-west and 27 meters north-south, and is located to the south of, and roughly paralleling, State Highway 196. The ditch was not holding water when recorded, and is located in a field utilized for cattle grazing. The ditch prism has a flat bottom and measures approximately 10 meters wide and approximately 50 centimeters in depth. Low levee berms (Features 2 and 3) run east-west

along both edges of the canal. Feature 2 is located to the north of the ditch and rises approximately 2 meters from the ditch prism. Feature 2 is constructed from earth excavated from the ditch and is discontinuous (see site map), apparently from natural erosion exacerbated by cattle trampling. Feature 3 is located to the south of the ditch and rises approximately 1 meter from the ditch prism; this feature shows greater erosion and less constructed form than Feature 2, and may not have ever been as high as Feature 2.

5PW194.1

This site is a segment of the Hyde Canal located on the northern flood plain of the Arkansas River. The Hyde canal is reported to have been constructed originally by a colony of persons from Switzerland who abandoned the project prior to its completion; the canal was completed by a German named Eberhard Hyde. A decree granted to Hyde in 1887 was for the irrigation of 1,000 acres (Kesler 1986:57-58). At this location the recorded segment measures approximately 89 meters east-west and 31 meters north-south. The canal was holding water when recorded, and is located in a field utilized for cattle grazing; cattle were observed walking and lying in the canal at the time of this recording. The canal prism has a flat bottom and measures approximately 6 meters wide and approximately 70 centimeters in depth. Low levee berms (Features 2 and 3) run east-west along both edges of the canal. Feature 2 is located to the north of the canal and rises approximately 2 meters from the canal prism. Feature 3 is located to the south of the canal and rises approximately 3 meters from the canal prism. Features 2 and 3 are constructed from earth excavated from the canal.

DOWNTOWN LAMAR RECONNAISSANCE

Modernization has diminished the integrity of downtown Lamar (Main Street/US287) by changing the streetscape and building facades to a great degree. The central downtown area encompasses blocks south of Maple Street and north of the Oak Street intersection with Main. Only two historic resources located on Main Street have been recorded. These sites are listed on the National Register and include the Davies Hotel (5PW25) and the Prowers County Courthouse

(5PW27). Unfortunately, these two resources are separated by five blocks, and there is no historic integrity to those blocks in between that would support a National Historic District.

Figure 1, below, shows a view of Main Street, Lamar as it appeared between 1920 and 1930. Note the sense of continuity and consistency in architecture present in these buildings. Currently, many of the older buildings have apparently been razed and others constructed in their place, or the facades have been significantly altered, masking their historical appearance and diminishing their integrity. Not one block has been spared, and it is rare to find more than two buildings in a row that do not show signs of the modernization process. Most historic façade pieces have been removed, and many buildings are currently fronted with aluminum siding, adobe, and/or and cedar shingles. Many older businesses, such as the First National Bank of Lamar, have relocated to more modern establishments, contributing to the loss of historical integrity in the downtown area. The following photographs document this loss.

Figure 1: View north of Main Street, Lamar, Colorado, c.1920-1930. Masonic Temple building, with pediment on the roof cornice, is to right corner. Note covered walkway along east side of Main Street. Photo courtesy of Colorado Historical Society, Denver (Accession number 2000.129.626).

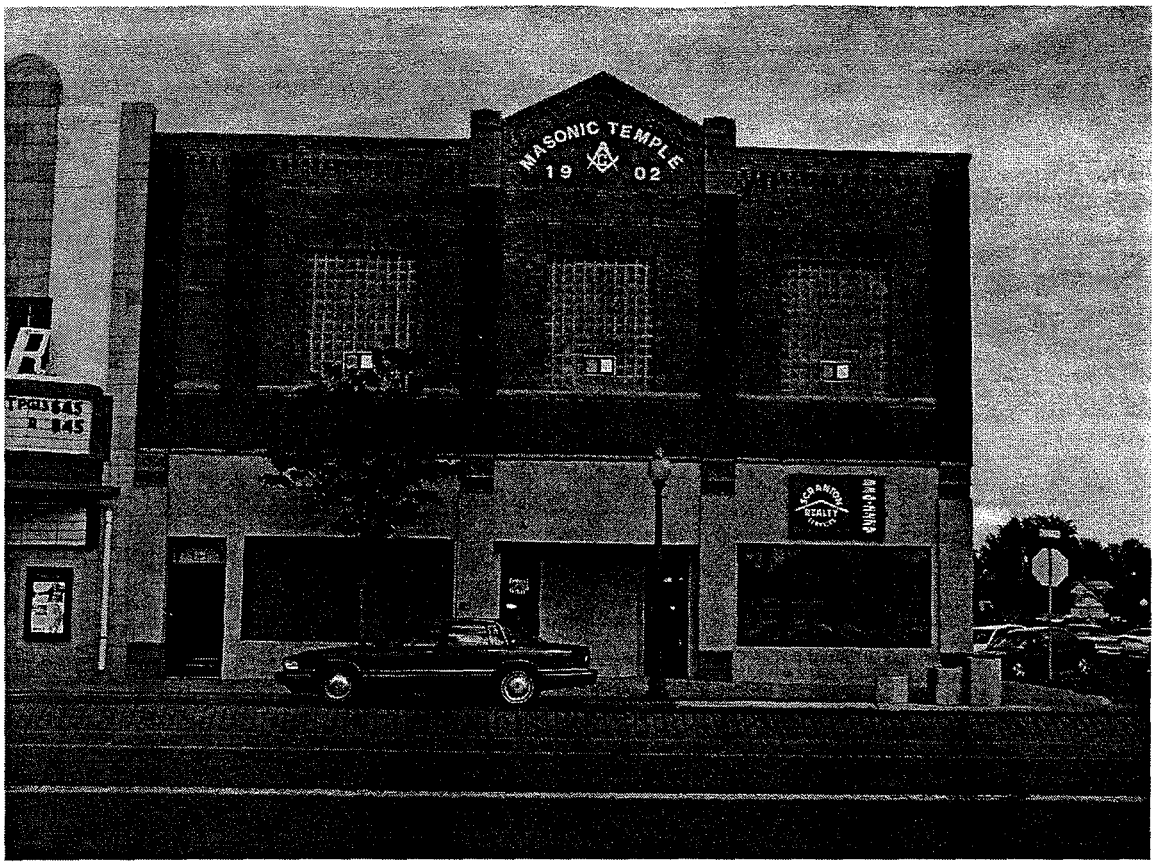


Figure 2: View east of Masonic Temple at NE corner of Elm and Main Street, Lamar. Photo taken on May 15, 2003. Note removal of covered walkway and construction of Lamar Theater to left (north) of Masonic Temple. Also note that Main Street has been converted to a boulevard.

Figure 3: View east at Lamar Theater. Photo taken on May 15, 2003. Masonic Temple building is to right (south).

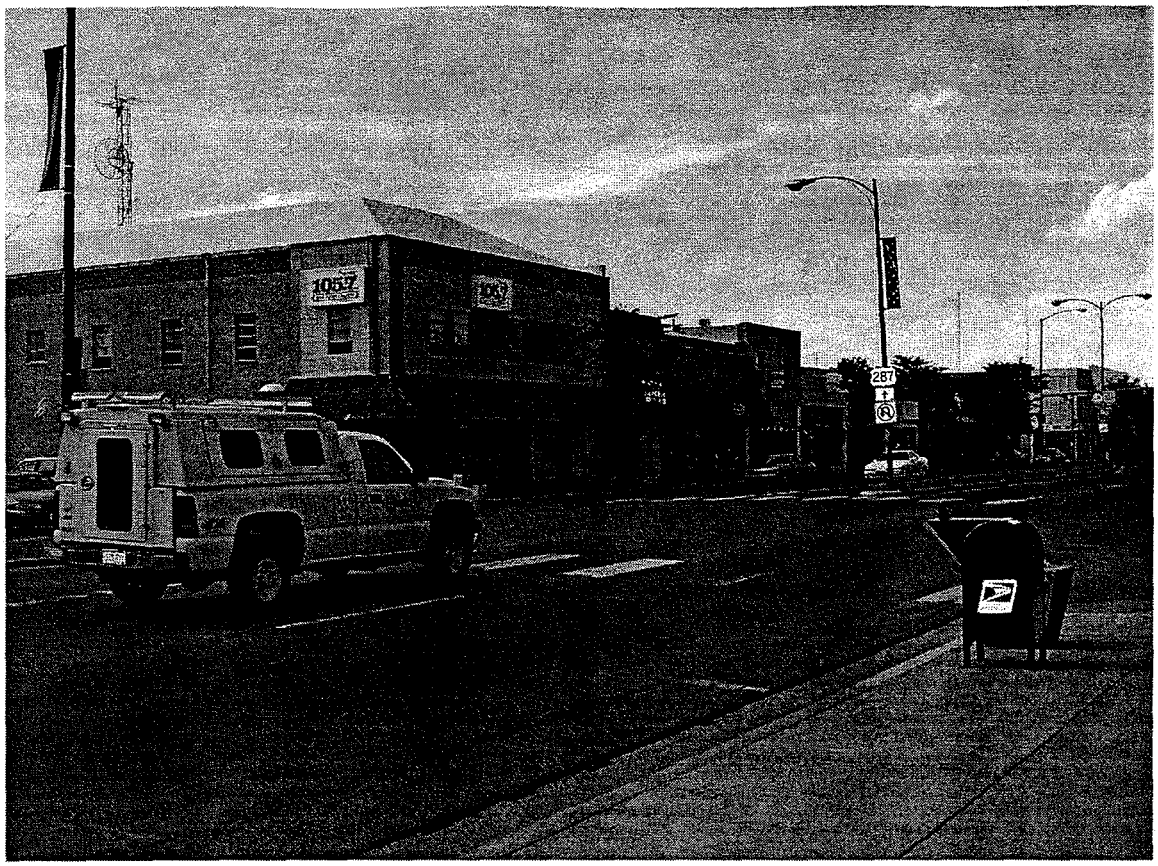


Figure 4: View north-northwest at the NW corner of Elm and Main Street. Photo taken on May 15, 2003. Building housing radio station lies directly across street (west) from Masonic Temple. Note that Main Street has been converted to a boulevard.

Figure 5: View east-southeast at the east side of Main Street between Poplar (north) and Hickory Streets (south). Photo taken on May 15, 2003.

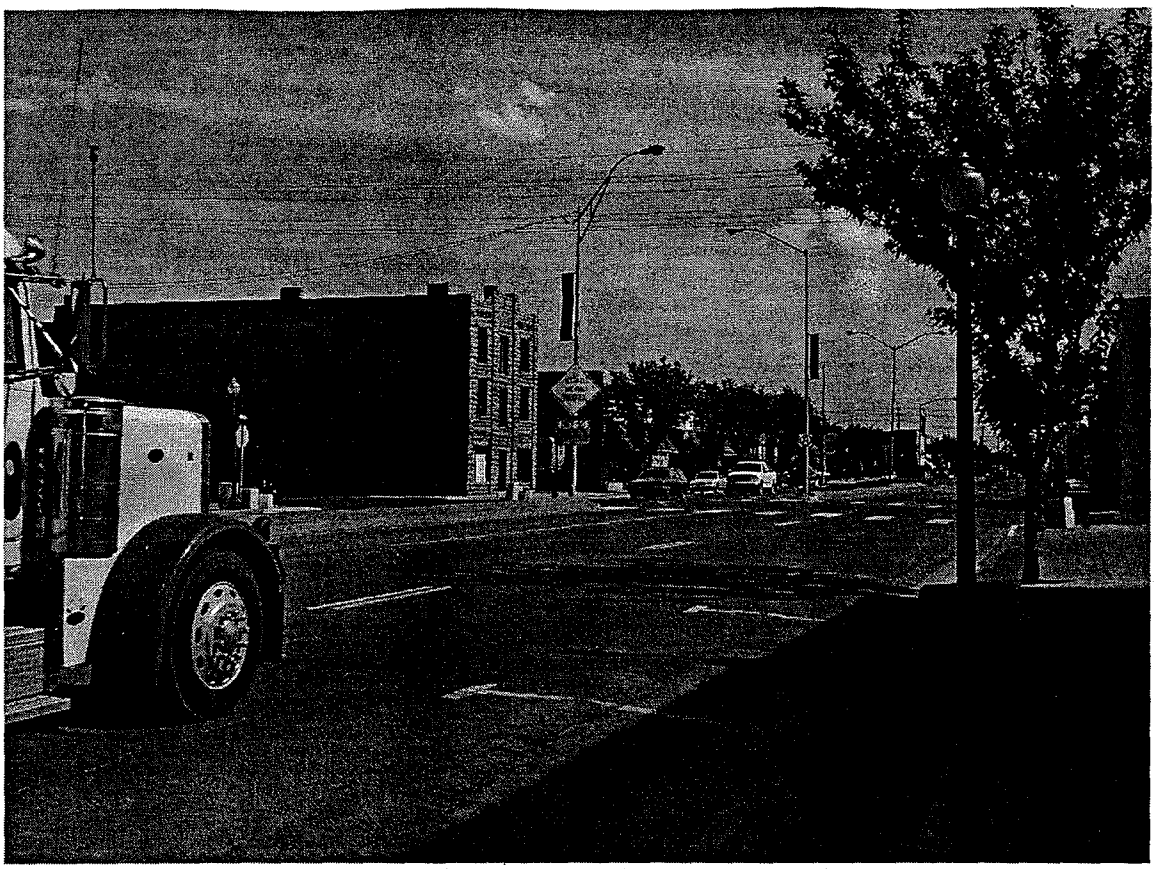


Figure 6: View south-southeast at intersection of Poplar and Main Street. Davies Hotel, 5PW25, a National Register property, is located at the SE corner of this intersection.

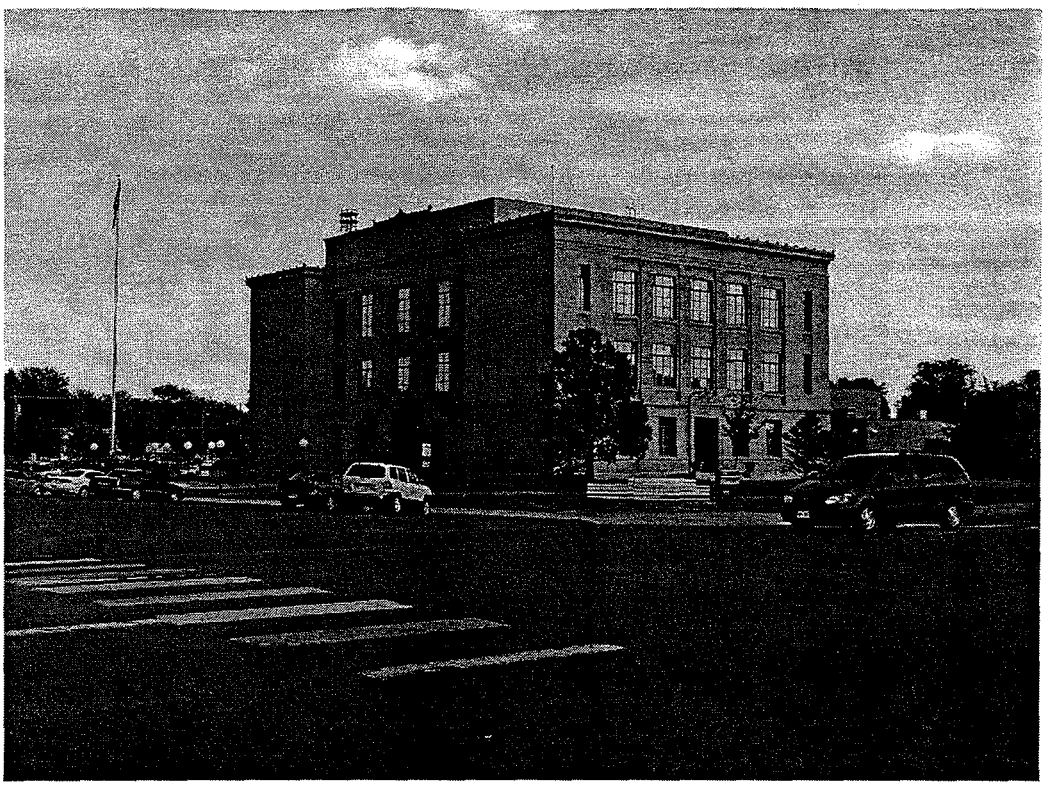


Figure 7: View southeast at the Prowers County Courthouse, 5PW27, a National Register property.

Figure 8: View east at the east side of Main Street between Beech Street (north) and Olive Street (south). Photo taken May 15, 2003. Note discontinuity in architecture and loss of historic integrity.

EVALUATION AND RECOMMENDATIONS

Five newly recorded historic resources were documented within the Project Area. Evaluations and recommendations for individual sites are discussed below.

5PW152.5 - Segment of the Atchison, Topeka and Santa Fe Railroad

This railroad segment does not retain the integrity necessary for it to be considered eligible to the NRHP. The tracks and ties have been removed.

Management Recommendations: No further work.

5PW191.1 and 5PW191.2 - Two Segments of the Lamar Canal

The two segments of the Lamar Canal located within the Project Area do not retain the integrity necessary for them to be considered eligible to the NRHP. Modern improvements including the construction of a county road and bridge (erected in 1993) have compromised their integrity, as have efforts to stabilize the canal banks. This resource does not retain the feel of an historic canal at these locations.

Management Recommendations: No further work.

5PW192.1 - Segment of the Fort Bent Canal

The Fort Bent Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion *a*. The canal may also have significance under Criterion *c* in other areas, but there is nothing of engineering significance in the current Project Area.

Management Recommendations: It is recommended that this segment be avoided, however, if avoidance is not possible, it is recommended that detailed photo-documentation occur prior to impact.

5PW193.1 - Segment of the Vista del Rio Ditch

This segment of the canal has not modified by modern construction and still retains the feel of an historic ditch; however, the ditch is estimated to be only approximately 60 years old and does not have sufficient associations to be considered eligible under Criteria *a* or *b* or the engineering characteristics and features to be considered eligible under Criterion *c*.

Management Recommendations: No further work.

5PW194.1 -Segment of the Hyde Canal

The Hyde Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion *a*. The canal may also have significance under Criterion *c* in other areas, but this segment of the canal does not demonstrate any unique engineering features.

Management Recommendations: It is recommended that this segment be avoided, however, if avoidance is not possible, it is recommended that detailed photo-documentation occur prior to impact.

CONCLUSIONS

An historical inventory of approximately 1,067acres of land within the Proposed U.S. 287 Lamar Bypass was conducted by WCRM, Inc. between May 13 and 15, 2003. The Project Area is located on state and private lands situated along the proposed U.S. 287 Lamar Bypass and extending from approximately nine miles from the southern end, near County Road (C-C), north across the Arkansas River and connecting to State Highway (SH) 196 on the north side of Lamar. All lands within the Project Area will be directly affected by the construction and improvement of the proposed U.S. 287 Bypass. The historic inventory was conducted so that NRHP evaluations and recommendations could be made with regard to cultural resources located within the Project Area.

Newly recorded resources included five historic sites: one segment of the Atchison, Topeka and Santa Fe Railroad Line (5PW152.5), two segments of the Lamar Canal (5PW191.1, 5PW191.2), on segment of the Fort Bent Canal (5PW192.1), one segment of the Vista del Rio Ditch (5PW193.1), and one segment of the Hyde Canal (5PW194.1). The segments of the Fort Bent Canal and the Hyde Canal are recommended as eligible for inclusion in the NRHP under Criterion *a*. It is recommended that these resources be avoided, however, if avoidance is not possible, it is recommended that a thorough photo-documentation following BLM standards (Level II) be completed prior to impact. The Atchison, Topeka and Santa Fe Railroad segment and the Lamar Canal segments (5PW191.1, 5PW191.2) have been modified to such an extent that they lack integrity; they are not recommended eligible. The segment of the Vista del Rio Ditch is intact, but it lacks the historical significance to be recommended eligible; no further work is necessary with regard to this resource.

REFERENCES CITED

Abbott, Carl.
1976 *Colorado: A History of the Centennial State.* Colorado Associated University Press, Boulder, CO.

Angulski, Debra
1985 *Archaeological Clearance for Highway Project BRF 050-5(26), 0.2 Miles North of Lamar (Arkansas River), Prowers County.* Colorado Department of Highways, Denver.

Associated Cultural Resource Experts (ACRE)
2002 *Highways to the Sky: A Context and History of Colorado's Highway System.* Colorado Department of Transportation, Denver, CO.

Athearn, Robert G.
1976 *The Coloradans.* University of New Mexico Press, Albuquerque.

Atherton, Lewis.
1972 *The Cattle Kings.*: University of Nebraska Press, Lincoln, NE.

Bryant, Keith L., Jr.,
1975 *History of the Atchison, Topeka and Santa Fe Railway.* , MacMillan Co., New York, New York.

Buckles, William G.
1980 *Bioconversion Facility for Lamar Utilities.* Department of Anthropology, University of Southern Colorado, Pueblo.

Colorado Division of Wildlife
1982 Arkansas River Threatened Fishes Survey. *Performance Report* SE-8-1. Nongame Program, Denver.

Craighead, John J., and John A. Mitchell
1990 Grizzly Bear. In *Wild Mammals of North America; Biology, Management, and Economics*, edited by J. A. Chapman and G. A. Feldhamer, pp. 515-556. 4th ed. Johns Hopkins University Press, Baltimore, Maryland.

Dixon, Kenneth R.
1990 Mountain Lion. In *Wild Mammals of North America; Biology, Management, and Economics*, edited by J. A. Chapman and G. A. Feldhamer, pp. 711-727. 4th ed. Johns Hopkins University Press, Baltimore, Maryland.

Fenneman, Neville M.
1931 *Physiography of the Western United States*. McGraw-Hill Company, New York.

Fitzgerald, James P., Carron A. Meaney, and David M. Armstrong
1994 *Mammals of Colorado*. University Press of Colorado, Niwot, Colorado.

Fraser Design
1997 *Railroads in Colorado, 1858-1948; National Register of Historic Places, Multiple Property Listing,* Colorado Historical Society, Denver, CO.

Gantt, Erik M., Scott A. Slessman, and Christian J. Zier
2003 An Archaeological Inventory of the Proposed U.S. 287 Lamar Bypass in Prowers County, Colorado. Unpublished manuscript on file with the Colorado Office of Archaeology and Historic Preservation, Denver.

Goetzmann, William H.
1966 *Exploration and Empire.* Alfred A. Knopf, New York.

Hafen, LeRoy R., Ed.
1965 *The Mountain Men and the Fur Trade in the Far West.*: The Arthur H. Clark Co., Glendale, CA.

Hand, OD
1998 *An Intensive Cultural Resource Inventory Along U.S. Highway 50 Between Lamar and Wiley Junction, Prowers County, Colorado (C2871-026).* Colorado Department of Transportation, Denver.

Hokanson, Drake.
1988 *The Lincoln Highway, Main Street Across America.* University of Iowa Press, Iowa City, IA.

Holliday, Vance T.
1981 Surficial Geology at the John Martin Reservoir. In *A Cultural Resource Inventory of the John Martin Reservoir, Colorado*, by F. W. Eddy, P. D. Friedman, R. E. Oberlin, T. R. Farmer, D. L. Dahms, J. J. Reining, and B. Leichtman, pp. 379-396. Prepared for Corps of Engineers, Albuquerque District, by Science Applications, Inc., Golden, Colorado.

Kesler, H.H.
1986 *Lamar, Colorado–Its First Hundred Years, 1886-1986.* Kes-Print, Shawnee Mission, KS.

King, Joseph E.
1984 *Colorado Engineering Context.* Colorado Historical Society: Denver.

Madole, Richard F.
1994 Stratigraphic Evidence of Desertification in the West-Central Great Plains within the Past 1000 Years. *Geology* 22:483-486.

1995 Spatial and Temporal Patterns of Late Quaternary Eolian Deposition, Eastern Colorado, U.S.A *Quaternary Science Reviews* 14:155-177.

Mehls, Steven F., and Carter C. J.
1984 *Colorado Southern Frontier Historic Context.* Colorado Historical Society: Denver.

Myhrer, Keith.
1994 "Viewing Transportation Features in Time and Space: A Regional Historic Transportation Systems Model," *Nevada Archaeologist* 11.

Neuhaus, Carla Elizabeth.
1928 "Transportation to Colorado, 1858-1869." M.A. Thesis, University of Colorado.

Siemer, Eugene G.
1977 *Colorado Climate.* Colorado Experiment Station, Colorado State University, Fort Collins, Colorado.

Steinel, Alvin T.
1926 *History of Agriculture in Colorado.* State Board of Agriculture, Denver, CO .

The Lincoln Highway Association.
1935 *The Lincoln Highway: The Story of a Crusade that Made Transportation History.* Dodd, Mead, New York, NY.

Tweto, Ogden.
1979 *Geologic Map of Colorado.* United States Geological Survey Map G77115. United States Geological Survey, Reston, Va.

Ubbelohde, Carl, Benson, Maxine and Smith, Duane.
1972 *A Colorado History.* Pruett Publishing Company, Boulder, CO.

U.S. Department of the Interior, National Park Service.
1991 *National Register Bulletin 16.* Government Printing Office, Washington, D.C.

U.S. Forest Service
1993 *Diamond Shamrock Colorado Springs Pipeline Project: Final Environmental Assessment.* Prepared by L. W. Reed Consultants, Inc. for the USDA Forest Service, Comanche National Grasslands, Springfield, Colorado.

Wallace, Steven M.
1984 *Highway Department Cultural Resource Negative Reports, January to December 1984.* Colorado Department of Highways, Denver.

Worster, Donald.
1979 *The Dust Bowl.* Oxford Press, New York, NY.

Zier, Christian J., and Stephen M. Kalasz
1999 *Colorado Prehistory: A Context for the Arkansas River Basin.* Colorado Council of Professional Archaeologists. Denver, Colorado.

APPENDIX: CULTURAL RESOURCE DOCUMENTATION

COLORADO CULTURAL RESOURCE SURVEY

Management Data Form

(page 1 of 4)

OAHP1400
Rev. 9/98

The *Management Data Form* should be completed for each cultural resource recorded during an archaeological survey. Exceptions to this are isolated finds and re-evaluations, neither of which require a *Management Data Form*. Please attach the appropriate component forms and use continuation pages if necessary.

1. Resource Number: 5PW152.5 2. Temporary Resource Number: LAM-10

3. Attachments (check as many as apply)
   - ___ Prehistoric Archaeological Component
   - ___ Historic Archaeological Component
   - ___ Historic Architectural Component Form
   - X Sketch/Instrument Map (required)
   - X U.S.G.S. Map Photocopy (required)
   - X Photograph(s)

   Other, specify: Linear Component Form

4. Official determination (OAHP use only)
   - _____ Determined
   - _____ Determined Not Eligible
   - _____ Nominated
   - _____ Need Data
   - _____ Contributing to NR Dist.
   - _____ Not Contributing to NR Dist.

I. IDENTIFICATION

5. Resource Name: Atchison, Topeka and Santa Fe Railroad spur segment
6. Project Name/Number: CM2M-287 / 03-B-002
7. Government Involvement: Local_____ State x Federal_____

   Agency: Colorado Department of Transportation
8. Site Categories: Check as many as apply

   Prehistoric: archaeological site_____ paleontological site_____

   in existing National Register District? yes_____ no_____ name_____

   Historic: archaeology site_____ building(s)_____ structure(s) X object(s)_____

   in existing National Register District? yes_____ no x name_____
9. Owner(s)'s Name and Address: Paul Pierson, 8275 Highway 196, Lamar, Colorado 81052
10. Boundary Description and Justification: Extent of railroad bed present within project area.
11. Site/Property Dimensions: 67 m x 11 m Area: 737 m^2 (.4047) 0.18 acres

    Area was calculated as: Length x Width X (rectangle/square) OR (length X width) X .785 _____ (ellipse)

II. LOCATION

12. Legal Location

    PM 6 Township 22S Range 46W Section 20 NE 1/2 of SE 1/4 of NW 1/4 of SW 1/4

    PM 6 Township 22S Range 46W Section 20 SE 1/2 of NE 1/4 of NW 1/4 of SW 1/4

    if section is irregular, explain alignment method:_____

Resource Number: 5PW152.5
Temporary Resource Number: LAM-10

Management Data Form
(page 2 of 4)

13. USGS Quad: Lamar East 7.5' X 15' _ Date(s): 1953 (1979) (attach photocopy)

14. County: Prowers 15. Other Maps: _____

16. UTM Reference:

A. 1 3 ; 7 0 9 6 4 0 mE 4 2 2 1 5 5 0 mN south end

B. 1 3 ; 7 0 9 6 4 0 mE 4 2 2 1 6 1 7 mN north end

17. Address: _____ Lot____ Block____ Addition_____

18. Location/Access: From the junction of Highway 297 and Highway 196 north of Lamar, take Hwy 196 east for 0.5 miles. Turn left (north) onto two-track road. This road is the old rail bed. Follow two-track approximately 800 meters north to this site location.

III. NATURAL ENVIRONMENT

19. Topographic Feature(s)

___ mountain	___ ledge	___ playa
___ hill	___ terrace/bench	___ talus slope
___ tableland/mesa	___ canyon	___ alluvial fan
___ ridge	___ valley	___ plain
___ saddle/pass	___ basin	___ dune
___ alcove/rockshelter	X floodplain	___ _____
___ cliff	___ cutbank	___ _____
___ slope	___ arroyo/gully	___ _____

20. Site Topographic Description (mention named landforms): Located on the northern floodplain of the Arkansas River and east of Markham Arroyo.

21. Site Elevation: 3620 feet = (x .3048) 1103 meters 22. Aspect: open

23. Degree of Slope on Site: 0-1 degree 24. Soil Depth: 100 + cm

25. Soil Description (character and color): Light brown silty loam beneath rail bed

26. Depositional Environment:

x Aeolian	___ Colluvial	X Residual
___ Alluvial	___ Moraine	___ None

___ Other, specify; _____

27. Nearest Water: name/nature: Markham Arroyo / intermittent distance: 5 m 16 ft. To W

28. Nearest Permanent Water: name: Arkansas River distance: 1600 m 5250 ft. To s

29. Vegetation on Site (list predominant species): grasses, mustard and morning glory growing along slope of rail bed

30. Vegetation Associations/Communities Surrounding Site: Riparian community along Markham Arroyo to northwest and along Arkansas River to south.

Resource Number: 5PW152.5
Temporary Resource Number: LAM-10

Management Data Form
(page 3 of 4)

IV. NATIONAL/STATE REGISTER ELIGIBILITY ASSESSMENT

31. Context or Theme: Railroads in Colorado and Colorado Plains RP3 - Development and Expansion of the Rail Network

32. Applicable National Register Criteria:
_X_ Does not meet any of the below National Register criteria

___ A. Associated with events that have made a significant contribution to the broad pattern of our history; or

___ B. Associated with the lives of persons significant in our past; or

___ C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

___ D. Has yielded, or may be likely to yield, information important in history or prehistory; or

___ Qualifies under exceptions A through G.

Level of Significance: National_____ State_____ Local_____

33. Condition

a. Architectural/Structural	b. Archaeological/Paleontological
_____ Excellent	_____ Undisturbed
_____ Good	_____ Light disturbance
_____ Fair	_____ Moderate disturbance
_X_ Deteriorated	_x_ Heavy disturbance
_____ Ruins	_____ Total disturbance

34. Describe condition: Tracks and ties have been removed, rail line abandoned and currently used as two-track for farming agricultural fields to the east.

35. Vandalism: yes_____ no_x_ describe: _____

36. National Register Eligibility Field Assessment:
Eligible___ Not Eligible_x_ Need Data___
Statement of Significance/N.R.H.P. Justification: Segment 5PW152.5 does not retain the integrity necessary for it to be considered eligible to the NRHP. The tracks and ties have been removed and it no longer clearly conveys the railroad heritage. The Santa Fe Railroad, however, is considered significant for its contributions to the history of southeastern Colorado and the West.

37. Status in an Existing National Register District: N/A
Contributing_____ Non-Contributing_____

38. National Register District Potential yes_____ no_x_ discuss: This is an isolated linear feature that has been heavily compromised by the removal of the tracks and ties and its subsequent reuse as a farm road.

Resource Number: 5PW152.5
Temporary Resource Number: LAM-10

Management Data Form
(page 4 of 4)

V. MANAGEMENT AND ADMINISTRATIVE DATA

39. Threats to Resource: Water erosion x Wind erosion____ Grazing____ Neglect ____
Vandalism___ Recreation____ Construction x___ Other (specify): ____
comments: Site located within current ROW for proposed 287 bypass.

40. Existing Protection: None x___ Marked____ Fenced____ Patrolled____ Access controlled ___
other (specify): ____

41. Local landmark designation: N/A 42. Easement: N/A

43. Management Recommendations: No further work is recommended for this project.

VI. DOCUMENTATION

44. Previous Actions Accomplished at the site: none known
a. Excavations: Test_____ Partial_____ Complete_____ Date(s): ____
b. Stabilization: Date(s): ____
c. HABS/HAER Documentation: Date(s) & Numbers: ____
d. Other: ____

45. Known collections/reports/interviews and other references (list): Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas. Manuscript on file at Denver Public Library, Western History Department.

46. Primary Location of Additional Data: WCRM, Inc., Boulder office

47. State or Federal Permit Number: State #2003-32; BLM C-40308 Collection Authorized: yes___ no_x
Artifact Collection: Yes_____ No__X__ Artifact Repository: ____
Collection Method: Diagnostics____ Grab Sample_____ Random Sample____ Transect____
Other (specify): ____

48. Photograph Numbers: Roll CH2M-2, exp.18-19 Negatives filed at: WCRM, Inc., Boulder

49. Report Title:An Historical Inventory of the Proposed U.S. 287 Lamar Bypass in Prowers County, Colorado

50. Recorder(s): C. Muniz Date(s): May 14, 2003

51. Recorder Affiliation: WCRM, Inc., PO Box 2326, Boulder, CO 80306
Phone Number: 303-449-1151

NOTE: Please attach a sketch map, a photocopy of the USGS quad. map indicating resource location, and photographs.

Resource Number: 5PW152.5
Temporary Resource Number: LAM-10, Feature 1

Linear Component Form

III. RESEARCH INFORMATION

12. Architect/Engineer: Atchison, Topeka and Santa Fe (Colorado and New Mexico Railroad Company)
Source of information/justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 64-65. Manuscript on file at Denver Public Library, Western History Department

13. Architect/Engineer: Atchison, Topeka and Santa Fe (Colorado and New Mexico Railroad Company)
Source of information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 64-65. MS on file at DPL, Western History Dept.

14. Date of Construction/Date Range: 1875
Source of information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 64-65. MS on file at DPL, Western History Dept.

15. Historical/Archival Data: Constructed in 1875 by the Colorado and New Mexico Railroad Company when the line was completed between Granada and a point opposite Bent's New Fort. Between the 1920s-1940s the ATSFRR ran between six and eight passenger trains daily through Lamar; freight trains were about the same number (Kesler 1986:65).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:
Eligible X Not eligible ____ Need data ____
Is this an official (OAHP) determination? Yes ____ No X Date ____
Is this a field determination? Yes x No ____
Remarks/justification: The overall rail line is considered significant to the hisotry of southeastern Colorado and the American West, however, the segment recorded here is abandoned and no longer retains the integrity necessary for it to be considered eligible to the NRHP. The tracks and ties have been removed.

18. Eligibility of the segment being recorded:
Contributing ____ Non-contributing x Not applicable ____
Remarks/justification: This segment does not retain the integrity necessary for it to be considered eligible to the NRHP.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

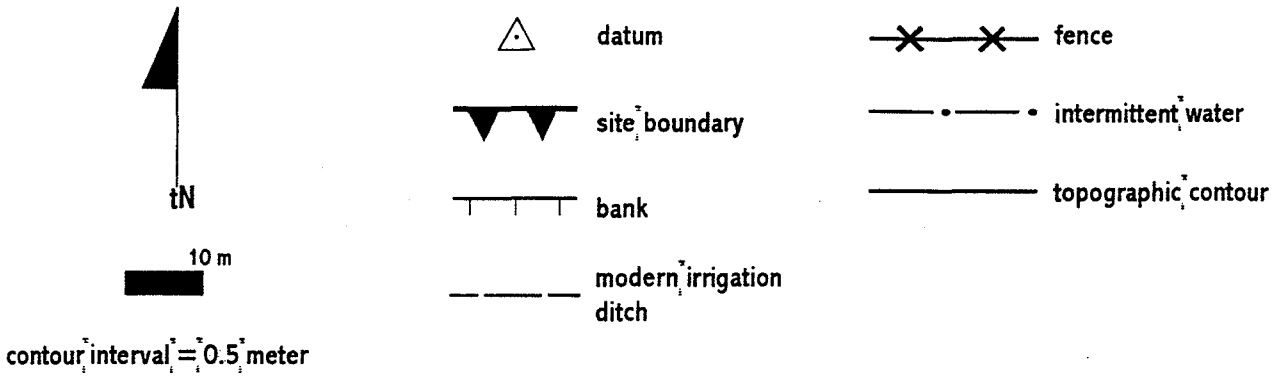
I. RESOURCE IDENTIFICATION

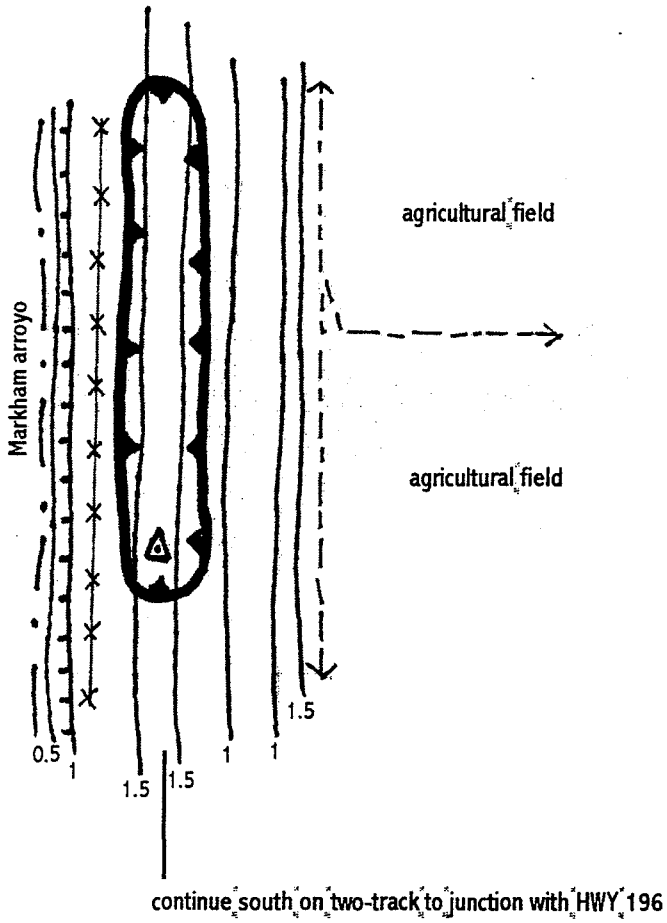
1. Resource Number: (include point number, if applicable): 5PW152.5
2. Temporary Resource Number: LAM-10, Feature 1
3. Resource Name: Atchison, Topeka and Santa Fe Railroad spur segment
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad X Ditch/Canal_____ Trail_____
   Other (specify): _____
6. Resource Description: 5PW152.5 is an abandoned spur segment of the Atchison, Topeka and Santa Fe Railroad (ATSFRR) located on the northern floodplain of the Arkansas River. At this location the recorded segment measures approximately 67 meters north-south and 11 meters east-west. The tracks and ties of the line have been removed and the rail bed is currently used as a two-track for accessing agricultural fields to the east.
7. Original use: Transportation
   Current use: Abandoned
8. Modifications (describe): Tracks and ties removed, now used to access agricultural fields.
9. Extent of Resource: Rail bed continues to the north and south, where it is crossed by Highway 196 approximately 800 meters south of the site. Tracks and ties have been removed in this entire area.
10. Associated Artifacts: none
11. Associated Features or Resources: none

5PW152.5 Atchison, Topeka, and Santa Fe RR spur segment

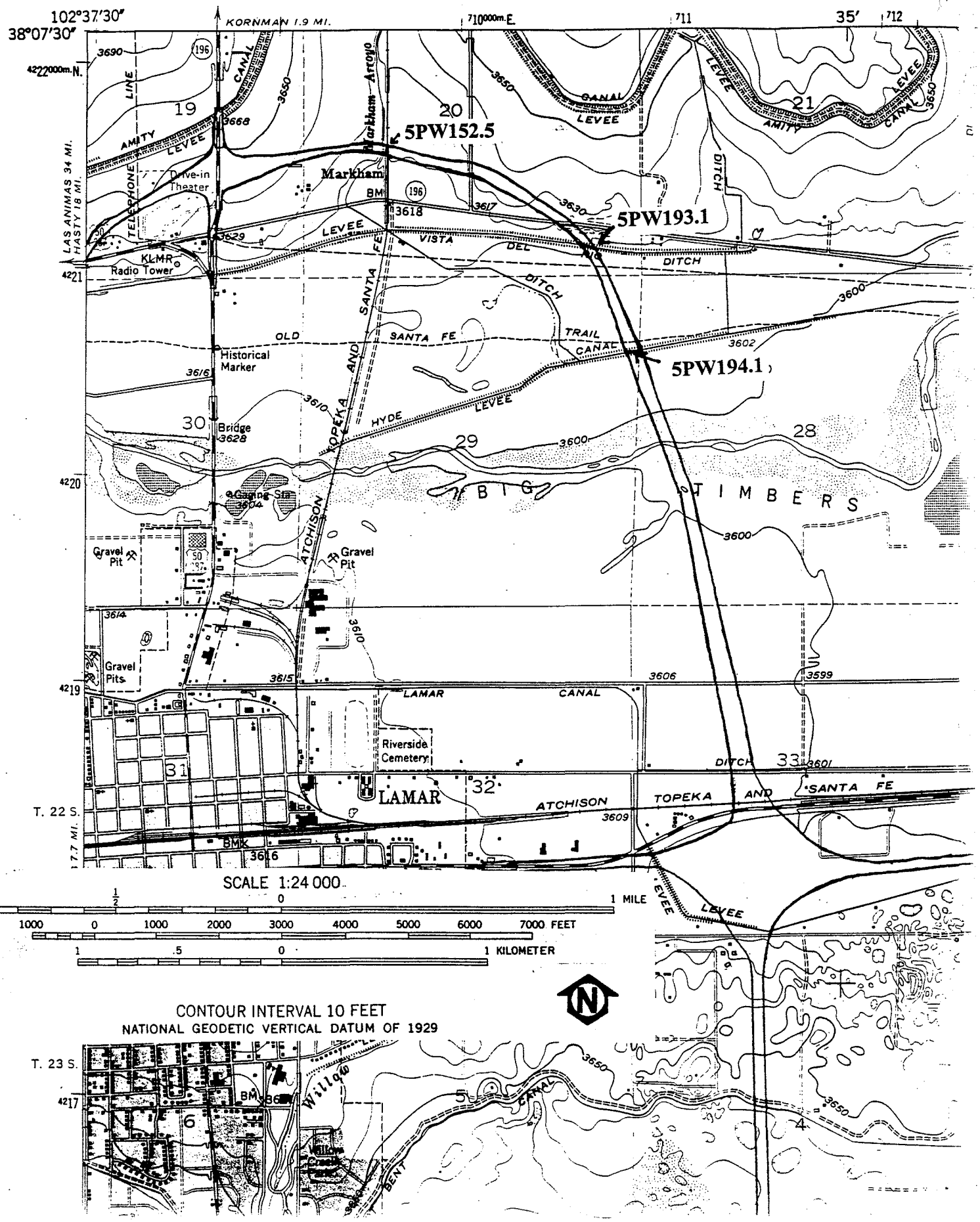




5460 II NW
(WILEY)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T22S, R46W, Secs. 19, 20, 28, 29, 32, 33



5PW152.5 Atchinson, Topeka and Santa Fe Railroad, abandoned spur segment.
View north of Feature 1.

5PW152.5 Atchinson, Topeka and Santa Fe Railroad, abandoned spur segment.
View south of Feature 1.

COLORADO CULTURAL RESOURCE SURVEY

Management Data Form

(page 1 of 4)

OAHP1400
Rev. 9/98

The *Management Data Form* should be completed for each cultural resource recorded during an archaeological survey. Exceptions to this are isolated finds and re-evaluations, neither of which require a *Management Data Form*. Please attach the appropriate component forms and use continuation pages if necessary.

1. Resource Number: 5PW191.1 2. Temporary Resource Number: LAM-2

3. Attachments (check as many as apply)
   - ___ Prehistoric Archaeological Component
   - ___ Historic Archaeological Component
   - ___ Historic Architectural Component Form
   - X Sketch/Instrument Map (required)
   - X U.S.G.S. Map Photocopy (required)
   - X Photograph(s)

   Other, specify: Linear Component Form

4. Official determination (OAHP use only)
   - _____ Determined
   - _____ Determined Not Eligible
   - _____ Nominated
   - _____ Need Data
   - _____ Contributing to NR Dist.
   - _____ Not Contributing to NR Dist.

I. IDENTIFICATION

5. Resource Name: Lamar Canal segment
6. Project Name/Number: CM2M-287 / 03-B-002
7. Government Involvement: Local_____ State x Federal_____

   Agency: Colorado Department of Transportation
8. Site Categories: Check as many as apply

   Prehistoric: archaeological site_____ paleontological site_____

   in existing National Register District? yes_____ no_____ name_____

   Historic: archaeology site_____ building(s)_____ structure(s) X object(s)_____

   in existing National Register District? yes_____ no x name_____
9. Owner(s)'s Name and Address: City of Lamar, CO
10. Boundary Description and Justification: Extent of canal present within project area.
11. Site/Property Dimensions: 200 m x 65 m Area: 13,000 m^2 (,4047) 3.2 acres

    Area was calculated as: Length x Width X (rectangle/square) OR (length X width) X .785 _____ (ellipse)

II. LOCATION

12. Legal Location

    PM 6 Township 22S Range 46W Section 33 SE 1/4 of SW 1/4 of SE 1/4 of SW 1/4

    if section is irregular, explain alignment method:_____

Resource Number: 5PW191.1
Temporary Resource Number: LAM-2

Management Data Form
(page 2 of 4)

13. USGS Quad: Lamar East 7.5' X 15' _ Date(s): 1953 (1979) (attach photocopy)
14. County: Prowers 15. Other Maps: _____
16. UTM Reference:
    A. 1 3 ; 7 1 1 5 8 0 mE 4 2 1 7 8 7 5 mN east end
    B. 1 3 ; 7 1 1 3 8 0 mE 4 2 1 7 8 9 0 mN west end

17. Address: N/A Lot___ Block___ Addition_____
18. Location/Access: From the junction of Highway 297 (Main St) and Highway 50 (Olive St) in Lamar, take Hwy 50 east for 1.7 miles. Turn right (south) onto county road, crossing a recent entrenchment of Willow Creek. Travel south 0.3 miles on county road to this site.

III. NATURAL ENVIRONMENT

19. Topographic Feature(s)

___ mountain	___ ledge	___ playa
___ hill	___ terrace/bench	___ talus slope
___ tableland/mesa	___ canyon	___ alluvial fan
___ ridge	___ valley	___ plain
___ saddle/pass	___ basin	___ dune
___ alcove/rockshelter	X floodplain	___ _____
___ cliff	___ cutbank	___ _____
___ slope	___ arroyo/gully	___ _____

20. Site Topographic Description (mention named landforms): Located on the southern floodplain of the Arkansas River and east of Willow Creek.
21. Site Elevation: 3610 feet = (x .3048) 1100 meters 22. Aspect: open
23. Degree of Slope on Site: 0-10 degrees 24. Soil Depth: 100 + cm
25. Soil Description (character and color): Light brown silty loam
26. Depositional Environment:

___ Aeolian	___ Colluvial	___ Residual
X Alluvial	___ Moraine	___ None
___ Other, specify; _____		

27. Nearest Water: name/nature: Lamar Canal distance: 0 m 0 ft.
28. Nearest Permanent Water: name: Arkansas River distance: 2300 m 7546 ft.
29. Vegetation on Site (list predominant species): grasses planted along bank for stabilization
30. Vegetation Associations/Communities Surrounding Site: Riparian community along canal to east and along Arkansas River.

Resource Number: 5PW191.1
Temporary Resource Number: LAM-2

Management Data Form
(page 3 of 4)

IV. NATIONAL/STATE REGISTER ELIGIBILITY ASSESSMENT

31. Context or Theme: Southern Frontier Agricultural Development; Engineering: Irrigation

32. Applicable National Register Criteria:

_X_ Does not meet any of the below National Register criteria

___ A. Associated with events that have made a significant contribution to the broad pattern of our history; or

___ B. Associated with the lives of persons significant in our past; or

___ C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

___ D. Has yielded, or may be likely to yield, information important in history or prehistory; or

___ Qualifies under exceptions A through G.

Level of Significance: National_____ State_____ Local_____

33. Condition

a. Architectural/Structural	b. Archaeological/Paleontological
_____ Excellent	_____ Undisturbed
_x_ Good	_____ Light disturbance
_____ Fair	_X_ Moderate disturbance
_____ Deteriorated	_x_ Heavy disturbance
_____ Ruins	_____ Total disturbance

34. Describe condition: Canal condition is good, although recent stabilization efforts are apparent. Chunks of concrete have been laid along the banks for stabilization and recent work has impacted the canal - in April 1993 a bridge was built at this location (see site map), probably at the same time the county road was constructed.

35. Vandalism: yes____ no_x_ describe: _____

36. National Register Eligibility Field Assessment:

Eligible___ Not Eligible_x_ Need Data___

Statement of Significance/N.R.H.P. Justification: Site 5PW191.1 does not retain the integrity necessary for eligibility to the NRHP. Modern improvements including the construction of a county road and bridge (erected in 1993) have compromised the site's integrity, as have efforts to stabilize the canal banks. This site does not retain the feel of an historic canal at this location.

37. Status in an Existing National Register District: N/A

Contributing_____ Non-Contributing_____

38. National Register District Potential yes_____ no_x_ discuss: This is an isolated linear feature.

Resource Number: 5PW191.1
Temporary Resource Number: LAM-2

Management Data Form
(page 4 of 4)

V. MANAGEMENT AND ADMINISTRATIVE DATA

39. Threats to Resource: Water erosion x Wind erosion____ Grazing____ Neglect ____
Vandalism___ Recreation____ Construction x___ Other (specify): ____
comments: Site located within current ROW for proposed 287 bypass.

40. Existing Protection: None x___ Marked____ Fenced____ Patrolled____ Access controlled ___
other (specify): ____

41. Local landmark designation: N/A 42. Easement: N/A

43. Management Recommendations: No further work is recommended for this project.

VI. DOCUMENTATION

44. Previous Actions Accomplished at the site: none known
a. Excavations: Test____ Partial____ Complete____ Date(s): ____
b. Stabilization: Date(s): ____
c. HABS/HAER Documentation: Date(s) & Numbers: ____
d. Other: ____

45. Known collections/reports/interviews and other references (list): Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas. Manuscript on file at Denver Public Library, Western History Department.

46. Primary Location of Additional Data: WCRM, Inc., Boulder office

47. State or Federal Permit Number: State #2003-32; BLM C-40308 Collection Authorized: yes__ no x
Artifact Collection: Yes____ No X Artifact Repository: ____
Collection Method: Diagnostics____ Grab Sample____ Random Sample____ Transect____
Other (specify): ____

48. Photograph Numbers: Roll CH2M-1, exp.5-8 Negatives filed at: WCRM, Inc., Boulder

49. Report Title:An Historical Inventory of the Proposed U.S. 287 Lamar Bypass in Prowers County, Colorado

50. Recorder(s): C. Muniz Date(s): May 13, 2003

51. Recorder Affiliation: WCRM, Inc., PO Box 2326, Boulder, CO 80306
Phone Number: 303-449-1151

NOTE: Please attach a sketch map, a photocopy of the USGS quad. map indicating resource location, and photographs.

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW191.1
2. Temporary Resource Number: LAM-2, Feature 1
3. Resource Name: Lamar Canal segment
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal x Trail_____
   Other (specify): _____
6. Resource Description: The Lamar Canal is crossed by the footprint of the current project area in two locations separated by 500 meters (5PW191.1 and 5PW191.2). The Lamar Canal is located on the southern floodplain of the Arkansas River and was constructed in 1875 by A.R. Black to carry water from Lamar to the McMillan Ranch. At this location the canal prism (Feature 1) ranges between 20-25 meters in width at the top of the banks and narrows to about 5 meters wide at the prism base. The canal measures approximately 6 meters in depth. Water was flowing in the canal at the time of recording. An improved ditch rider's road (Feature 2) parallels the canal on the north side, and is set about 10-12 meters north of the canal's north bank. Two piles containing several tons of concrete chunk debris (Features 3 and 4) have been left along the north bank edge at this location. These concrete chunks will be used as bank stabilizers along the canal walls; some are already present in the canal. Although the water was fairly low at the time of recording (less than 50 cm deep) it is clear that large amounts of water have rushed through this area; brush and grasses are caught in the bridge supports, located at least 5 meters above the current water level.
7. Original use: Agricultural irrigation Current use: Agricultural irrigation
8. Modifications (describe): Much of the canal and associated features were likely rebuilt at least once after the 1965 Lamar flood. More recently, a county road and bridge have been constructed through this site. Bridge (Serial # 431, span 40 ft, width 28 ft 3 in) was manufactured in April 1993. It is presumed that the county road was constructed at this same time, as it does not appear on the Lamar East 7.5' quadrangle, photorevised in 1979. Agricultural fields are located immediately north of the canal, and the unimproved dirt road that is presumed to be the ditch rider's road (Feature 2)is heavily utilized by farming traffic.
9. Extent of Resource: Canal continues to east and west beyond the boundary of the current project area.
10. Associated Artifacts: none
11. Associated Features or Resources: Feature 2 = presumed ditch rider's road paralleling the canal to the north. Features 3 and 4 are piles of broken up concrete chunks brought to this site to be used as bank sstabilizers within the canal.

Resource Number: 5PW191.1

Temporary Resource Number: LAM-2, Feature 1

Linear Component Form

(page 2 of 2)

III. RESEARCH INFORMATION

12. Architect/Engineer: A.R. Black

Source of Information/Justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: A.R. Black

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p. 57. Ms. On file at DPL, Western History Department.

14. Date of Construction/Date Range: AD 1875

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p. 57. Ms. on file at DPL, Western History Department.

15. Historical/Archival Data: The Lamar Canal was the second ditch built by A. R. Black and was constructed in 1875. It carried water from Lamar to the McMillan Ranch. (Kesler 1986:57).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:

Eligible _____ Not eligible _x_ Need data _____

Is this an official (OAHP) determination? Yes _____ No _X_ Date _____

Is this a field determination?. Yes _x_ No _____

Remarks/justification: This site does not retain the integrity necessary for it to be considered eligible to the NRHP. Modern improvements including the construction of a county road and bridge (erected in 1993) have compromised the site's integrity, as have efforts to stabilize the canal banks. This site does not retain the feel of an historic canal at this location.

18. Eligibility of the segment being recorded:

Contributing _____ Non-contributing _x_ Not applicable _____

Remarks/justification: The site is not considered to be eligible and thus this segment would not be considered eligible.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW191.1
2. Temporary Resource Number: LAM-2, Feature 2
3. Resource Name: Lamar Canal segment
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road x Railroad_____ Ditch/Canal____ Trail_____
   Other (specify): _____
6. Resource Description: An improved ditch rider's road (Feature 2) parallels the Lamar Canal on the north side, and is set about 10-12 meters north of the canal's north bank and measures 8 meters in width. This road currently is used by local farming traffic.
7. Original use: Transportation Current use: Transportation
8. Modifications (describe): Much of the canal and associated features were likely rebuilt at least once after the 1965 Lamar flood. More recently, a county road and bridge have been constructed through this site. Bridge (Serial # 431, span 40 ft, width 28 ft 3 in) was manufactured in April 1993. It is presumed that the county road was constructed at this same time, as it does not appear on the Lamar East 7.5' quadrangle, photorevised in 1979. Agricultural fields are located immediately north of the canal, and (Feature 2)is heavily utilized by farming traffic.
9. Extent of Resource: Canal continues to east and west beyond the boundary of the current project area.
10. Associated Artifacts: none
11. Associated Features or Resources: Feature 1=canal prism. Features 3 and 4 are piles of broken up concrete chunks brought to this site to be used as bank stabilizers within the canal.

Resource Number: 5PW191.1

Temporary Resource Number: LAM-2, Feature 2

Linear Component Form

(page 2 of 2)

III. RESEARCH INFORMATION

12. Architect/Engineer: A.R. Black

Source of Information/Justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: A.R. Black

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p. 57. Ms. On file at DPL, Western History Department.

14. Date of Construction/Date Range: AD 1875

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p. 57. Ms. on file at DPL, Western History Department.

15. Historical/Archival Data: The Lamar Canal was the second ditch built by A. R. Black and was constructed in 1875. It carried water from Lamar to the McMillan Ranch. (Kesler 1986:57).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:

Eligible _____ Not eligible x Need data _____

Is this an official (OAHP) determination? Yes _____ No X Date _____

Is this a field determination? Yes x No _____

Remarks/justification: This site does not retain the integrity necessary for it to be considered eligible to the NRHP. Modern improvements including the construction of a county road and bridge (erected in 1993) have compromised the site's integrity, as have efforts to stabilize the canal banks. This site does not retain the feel of an historic canal at this location.

18. Eligibility of the segment being recorded:

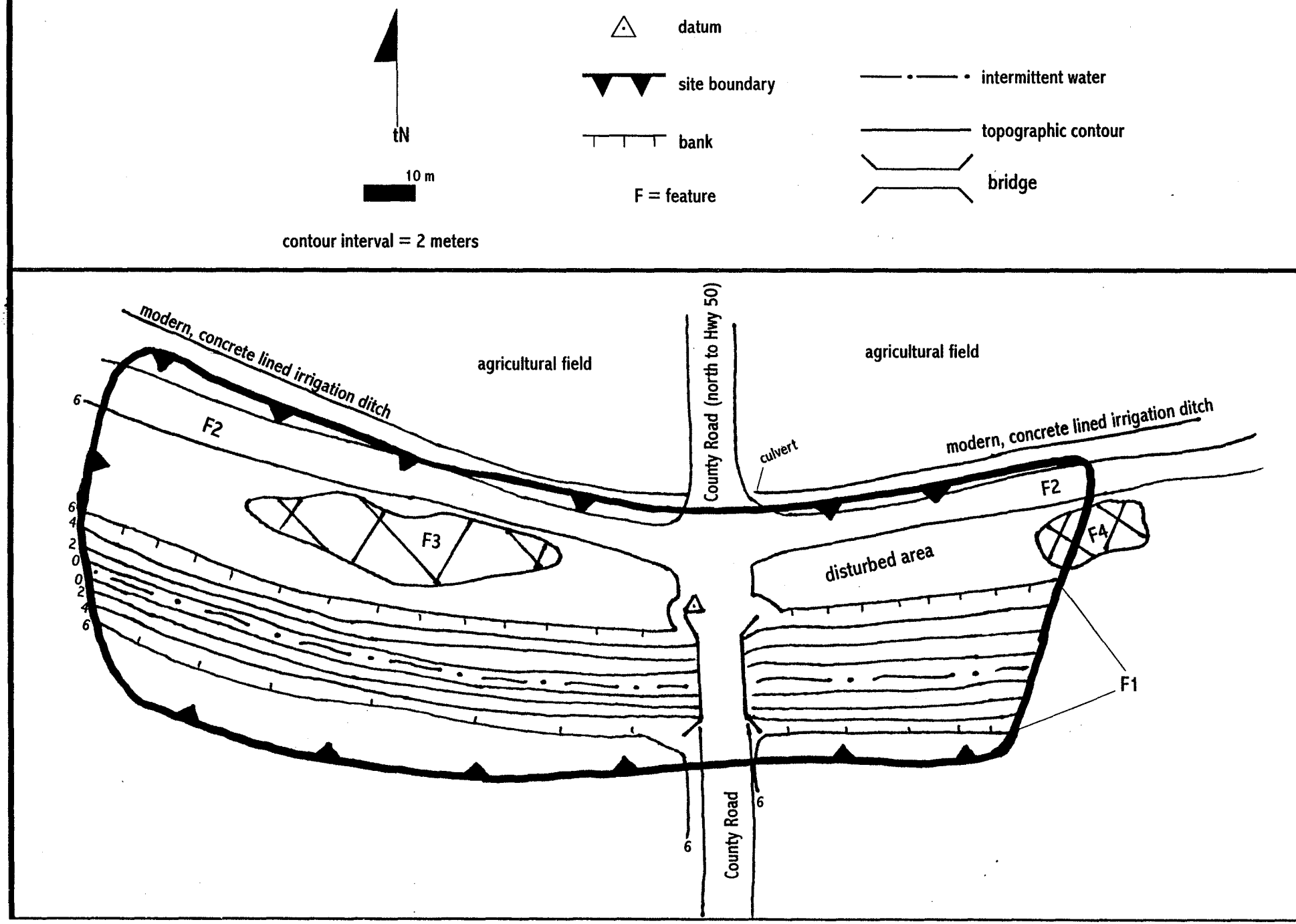
Contributing _____ Non-contributing x Not applicable _____

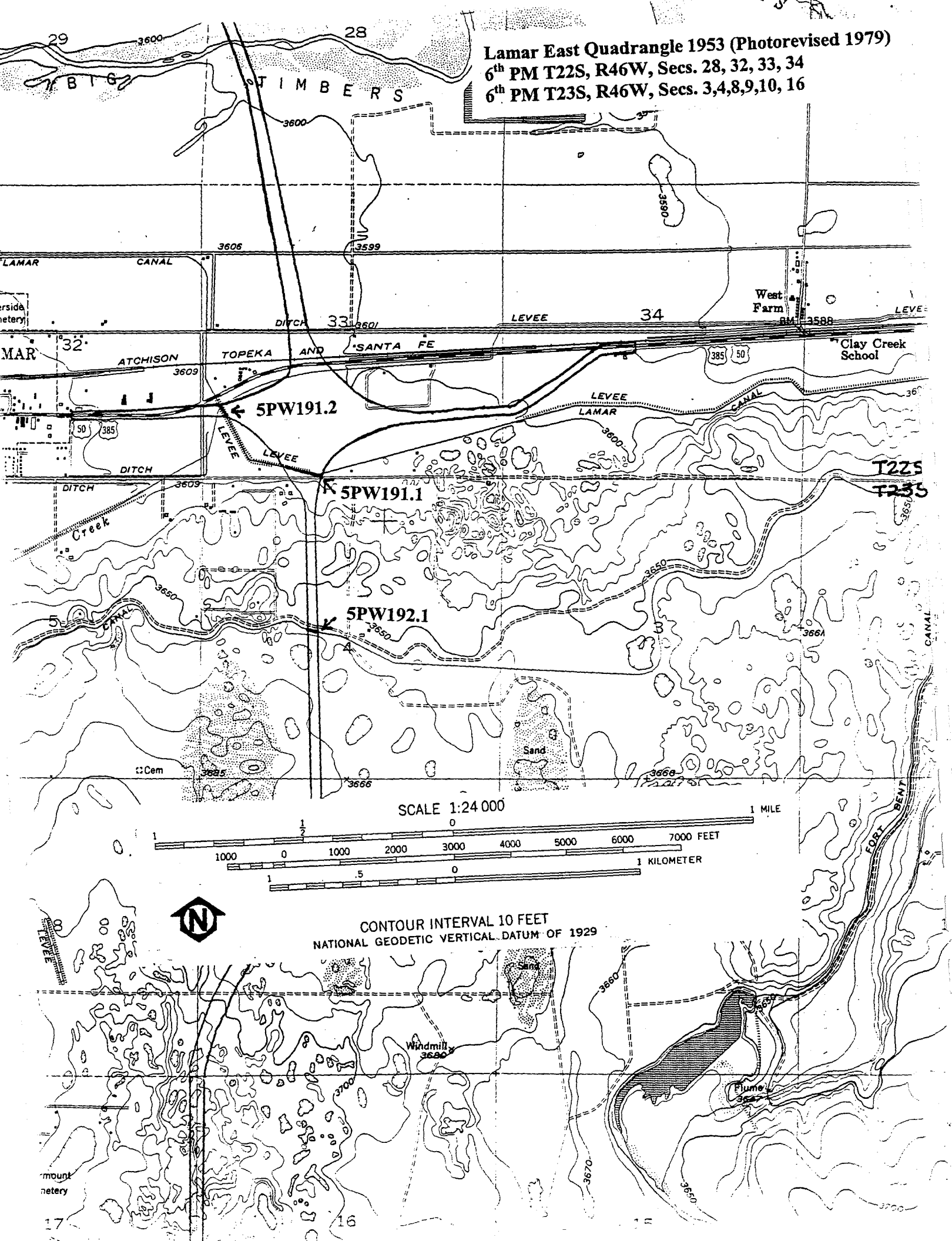
Remarks/justification: The site is not considered to be eligible and thus this feature would not be considered eligible.

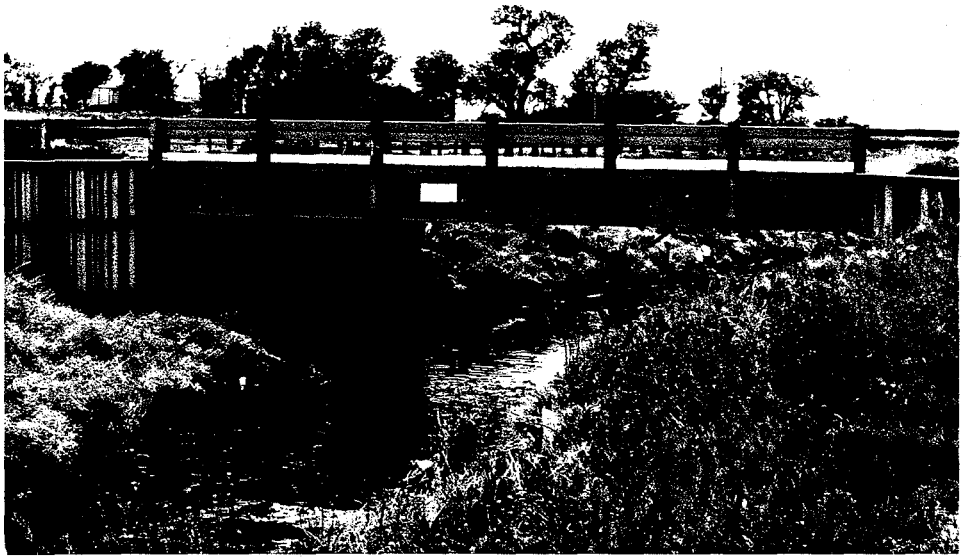
19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

5PW191.1 Lamar Canal segment

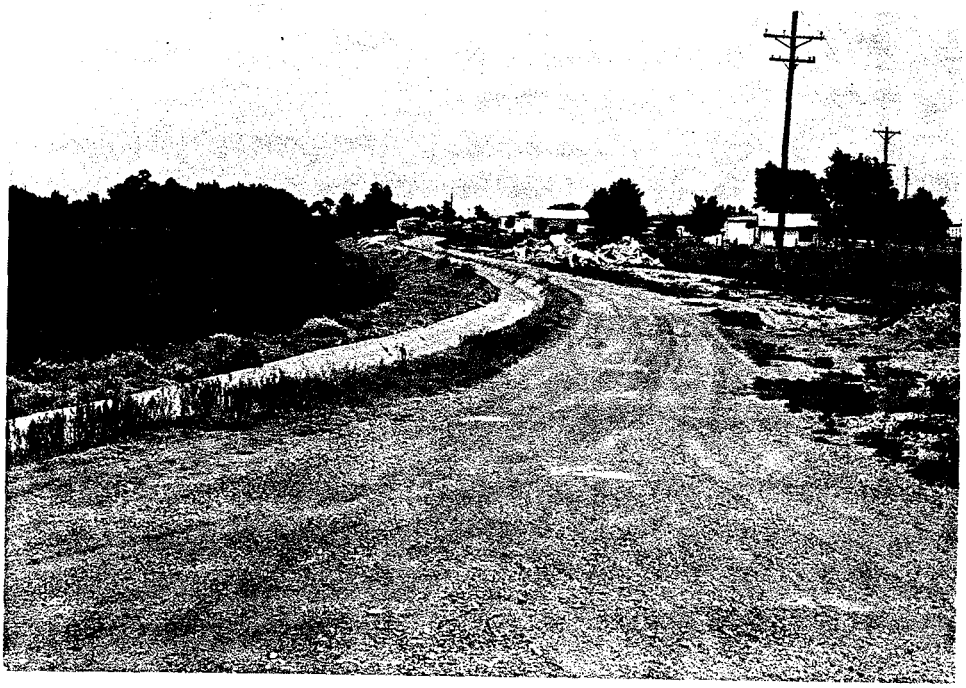



Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T22S, R46W, Secs. 28, 32, 33, 34
6th PM T23S, R46W, Secs. 3,4,8,9,10, 16
5PW191.2
5PW191.1
5PW192.1
T22S
T23S
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
LAMAR CANAL
ATCHISON TOPEKA AND SANTA FE
LEVEE
DITCH
West Farm
Clay Creek School
Windmill
Flume
Sand
Cem
FORT BENT CANAL



5PW191.1 View west-southwest of recently constructed bridge (c.1993) carrying county road over Lamar Canal.

5PW191.1 View west of Feature 3, debris pile (L) and Feature 2, ditch rider's road (R).



5PW191.1 Lamar Canal, Feature 2, view east.

5PW191.1 Lamar Canal, Feature 1, view west from county road.
Feature 3, debris pile, to right frame.

5PW191.1 Lamar Canal, Feature 1, view east from county road.

COLORADO CULTURAL RESOURCE SURVEY

Management Data Form

(page 1 of 4)

OAHP1400
Rev. 9/98

The *Management Data Form* should be completed for each cultural resource recorded during an archaeological survey. Exceptions to this are isolated finds and re-evaluations, neither of which require a *Management Data Form*. Please attach the appropriate component forms and use continuation pages if necessary.

1. Resource Number: 5PW191.2
2. Temporary Resource Number: LAM-4

3. Attachments (check as many as apply)
   - ___ Prehistoric Archaeological Component
   - ___ Historic Archaeological Component
   - ___ Historic Architectural Component Form
   - X Sketch/Instrument Map (required)
   - X U.S.G.S. Map Photocopy (required)
   - X Photograph(s)
   - Other, specify: Linear Component Form

4. Official determination (OAHP use only)
   - _____ Determined
   - _____ Determined Not Eligible
   - _____ Nominated
   - _____ Need Data
   - _____ Contributing to NR Dist.
   - _____ Not Contributing to NR Dist.

I. IDENTIFICATION

5. Resource Name: Lamar Canal segment
6. Project Name/Number: CM2M-287 / 03-B-002
7. Government Involvement: Local_____ State x Federal_____

   Agency: Colorado Department of Transportation
8. Site Categories: Check as many as apply

   Prehistoric: archaeological site_____ paleontological site_____

   in existing National Register District? yes_____ no_____ name_____

   Historic: archaeology site_____ building(s)_____ structure(s) X object(s)_____

   in existing National Register District? yes_____ no x name_____
9. Owner(s)'s Name and Address: City of Lamar, CO
10. Boundary Description and Justification: Extent of canal present within project area.
11. Site/Property Dimensions: 137 m x 85 m Area: 19,141 m^2 (,4047) 2.26 acres

    Area was calculated as: Length x Width _____ (rectangle/square) OR (length X width) X .785 X (ellipse)

II. LOCATION

12. Legal Location

    PM 6 Township 22S Range 46W Section 33 N 1/2 of NW 1/4 of SW 1/4 of SW 1/4

    PM_____ Township_____ Range_____ Section_____ ____1/4 of ____1/4 of ____1/4 of ____1/4

    if section is irregular, explain alignment method:_____

Resource Number: 5PW191.2
Temporary Resource Number: LAM-4

Management Data Form
(page 2 of 4)

13. USGS Quad: Lamar East 7.5' X 15' _ Date(s): 1953 (1979) (attach photocopy)

14. County: Prowers 15. Other Maps: _____

16. UTM Reference:

A. 1 3 ; 7 1 1 0 2 5 mE 4 2 1 8 2 2 7 mN NW end

B. 1 3 ; 7 1 1 0 7 8 mE 4 2 1 8 1 4 0 mN SE end

17. Address: _____ Lot___ Block___ Addition_____

18. Location/Access: From the junction of Highway 297 (Main St) and Highway 50 (Olive St) in Lamar, take Hwy 50 east for 1.7 miles. Turn right (south) onto county road, crossing the entrenched Willow Creek. After crossing creek turn immediately right (west) onto dirt road that parallels the canal (Feature 2). Follow this road for 0.25 mile to the junction of two canal segments (this site).

III. NATURAL ENVIRONMENT

19. Topographic Feature(s)

___ mountain	___ ledge	___ playa
___ hill	___ terrace/bench	___ talus slope
___ tableland/mesa	___ canyon	___ alluvial fan
___ ridge	___ valley	___ plain
___ saddle/pass	___ basin	___ dune
___ alcove/rockshelter	X floodplain	___ _____
___ cliff	___ cutbank	___ _____
___ slope	___ arroyo/gully	___ _____

20. Site Topographic Description (mention named landforms): Located on the southern floodplain of the Arkansas River and along Willow Creek.

21. Site Elevation: 3610 feet =(x .3048) 1100 meters 22. Aspect: open

23. Degree of Slope on Site: 0-10 degrees 24. Soil Depth: 100 + cm

25. Soil Description (character and color): Light brown silty loam

26. Depositional Environment:

x Aeolian	___ Colluvial	___ Residual
X Alluvial	___ Moraine	___ None
___ Other, specify; _____		

27. Nearest Water: name/nature: Willow Creek / Lamar Canal distance: 0 m 0 ft.

28. Nearest Permanent Water: name: Arkansas River distance: 1900 m 6234 ft. To N

29. Vegetation on Site (list predominant species): grasses and vetch planted along bank for stabilization - very sparse in this area.

30. Vegetation Associations/Communities Surrounding Site: Riparian community along Willow Creek to west and along Arkansas River to north (Big Timbers).

Resource Number: 5PW191.2
Temporary Resource Number: LAM-4

Management Data Form
(page 3 of 4)

IV. NATIONAL/STATE REGISTER ELIGIBILITY ASSESSMENT

31. Context or Theme: Southern Frontier Agricultural Development; Engineering: Irrigation

32. Applicable National Register Criteria:
_X_ Does not meet any of the below National Register criteria

___ A. Associated with events that have made a significant contribution to the broad pattern of our history; or

___ B. Associated with the lives of persons significant in our past; or

___ C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

___ D. Has yielded, or may be likely to yield, information important in history or prehistory; or

___ Qualifies under exceptions A through G.

Level of Significance: National_____ State_____ Local_____

33. Condition

a. Architectural/Structural	b. Archaeological/Paleontological
_____ Excellent	_____ Undisturbed
_x_ Good	_____ Light disturbance
_____ Fair	_X_ Moderate disturbance
_____ Deteriorated	_x_ Heavy disturbance
_____ Ruins	_____ Total disturbance

34. Describe condition: Canal condition is good, although recent stabilization efforts are apparent. Chunks of concrete have been laid along the banks for stabilization and recent work has impacted the canal. Portions of the canal gates were rebuilt or improved in 1995 ("3-10-1995, Herb Morlan" scratched in concrete before it dried).

35. Vandalism: yes____ no_x_ describe: _____

36. National Register Eligibility Field Assessment:
Eligible___ Not Eligible_x_ Need Data___
Statement of Significance/N.R.H.P. Justification: Site 5PW191.2 does not retain the integrity necessary for eligibility to the NRHP. Modern improvements have compromised the site's integrity, as have efforts to stabilize the canal banks. This site does not retain the feel of an historic canal at this location. It does have significance under Criterion a, but its lack of integrity precludes consideration as an eligible resource.

37. Status in an Existing National Register District: N/A
Contributing_____ Non-Contributing_____

38. National Register District Potential yes_____ no_x_ discuss: This is an isolated linear feature.

Resource Number: 5PW191.2
Temporary Resource Number: LAM-4

Management Data Form
(page 4 of 4)

V. MANAGEMENT AND ADMINISTRATIVE DATA

39. Threats to Resource: Water erosion x Wind erosion____ Grazing____ Neglect _____
Vandalism___ Recreation____ Construction x___ Other (specify): _____
comments: Site located within current ROW for proposed 287 bypass.

40. Existing Protection: None x___ Marked____ Fenced____ Patrolled____ Access controlled ___
other (specify): _____

41. Local landmark designation: N/A 42. Easement: N/A

43. Management Recommendations: No further work is recommended for this project.

VI. DOCUMENTATION

44. Previous Actions Accomplished at the site: none known
a. Excavations: Test_____ Partial_____ Complete_____ Date(s): _____
b. Stabilization: Date(s): _____
c. HABS/HAER Documentation: Date(s) & Numbers: _____
d. Other: _____

45. Known collections/reports/interviews and other references (list): Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas. Manuscript on file at Denve Public Library, Western History Department.

46. Primary Location of Additional Data: WCRM, Inc., Boulder office

47. State or Federal Permit Number: State #2003-32; BLM C-40308 Collection Authorized: yes no x
Artifact Collection: Yes___ No X Artifact Repository: _____
Collection Method: Diagnostics____ Grab Sample_____ Random Sample____ Transect____
Other (specify): _____

48. Photograph Numbers: Roll CH2M-1, exp.22-23, 28-30 Negatives filed at: WCRM, Inc., Boulder

49. Report Title:An Historical Inventory of the Proposed U.S. 287 Lamar Bypass in Prowers County, Colorado

50. Recorder(s): C. Muniz Date(s): May 14, 2003

51. Recorder Affiliation: WCRM, Inc.
Phone Number: 303-449-1151

NOTE: Please attach a sketch map, a photocopy of the USGS quad. map indicating resource location, and photographs.

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW191.2
2. Temporary Resource Number: LAM-4, Feature 1
3. Resource Name: Lamar Canal segment
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal x Trail_____
   Other (specify): _____
6. Resource Description: The Lamar Canal is crossed by the footprint of the current project area in two locations separated by 500 meters (5PW191.2, 5PW191.1). The Lamar Canal is located on the southern flood plain of the Arkansas River and was constructed in 1875 by A.R. Black to carry water from Lamar to the McMillan Ranch. At this location the canal prism (Feature 1) measures about 17 meters in width at the top of the banks and narrows to about 5 meters wide at the prism base. The canal measures approximately 5 meters in depth. Water was flowing in the canal at the time of recording. An improved ditch rider's road (Feature 2) parallels the canal on the east side. Feature 2 is set about 2 meters east of the canal's east bank.
7. Original use: Agricultural irrigation
   Current use: Agricultural irrigation
8. Modifications (describe): Much of the canal and associated features were likely rebuilt at least once after the 1965 Lamar flood. Chunks of concrete have been laid along the banks for stabilization and recent work has impacted the canal. Portions of the canal gates and concrete retaining wall were rebuilt in 1995 ("3-10-1995, Herb Morlan" scratched in concrete before it dried, see attached photos). Agricultural fields are located immediately east and west of the canal, and the unimproved dirt road that is presumed to be the ditch rider's road (Feature 2)is heavily utilized by farming traffic. A recent concrete-lined irrigation ditch lies east of this site. A modern utility station is located just NE of the site boundary.
9. Extent of Resource: Canal continues to the southeast beyond the boundary of the current project area.
10. Associated Artifacts: none
11. Associated Features or Resources: Feature 2 = presumed ditch rider's road paralleling the canal to the east.

Resource Number: 5PW191.2
Temporary Resource Number: LAM-4, Feature 1

Linear Component Form

III. RESEARCH INFORMATION

12. Architect/Engineer: A.R. Black
Source of Information/Justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: A.R. Black
Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p. 57. Ms. On file at DPL, Western History Department.

14. Date of Construction/Date Range: AD 1875
Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p. 57. Ms. on file at DPL, Western History Department.

15. Historical/Archival Data: The Lamar Canal was the second ditch built by A. R. Black and was constructed in 1875. It carried water from Lamar to the McMillan Ranch. (Kesler 1986:57).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:
Eligible _____ Not eligible x Need data _____
Is this an official (OAHP) determination? Yes _____ No X Date _____
Is this a field determination? Yes x No _____
Remarks/justification: This site does not retain the integrity necessary for it to be considered eligible to the NRHP. Modern improvements have compromised the site's historic fabric and feeling. Further, efforts to stabilize the canal banks have also changed the materials and workmanship of the historic canal. This site does not retain the feel of an historic canal at this location.

18. Eligibility of the segment being recorded:
Contributing _____ Non-contributing x Not applicable _____
Remarks/justification: The site is not considered to be eligible and thus this segment would not be considered eligible.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

COLORADO CULTURAL RESOURCE SURVEY OAHP1418
Linear Component Form Rev. 9/98
(page 1 of 2)

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW191.2
2. Temporary Resource Number: LAM-4, Feature 2
3. Resource Name: Lamar Canal segment
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road x Railroad _____ Ditch/Canal _____ Trail _____
   Other (specify): _____
6. Resource Description: An improved ditch rider's road (Feature 2) parallels the Lamar Canal on the east side, and is set about 2 meters east of the canal's east bank and measures 8 meters in width. This road currently is used by local farming traffic.
7. Original use: Transportation
   Current use: Transportation
8. Modifications (describe): Much of the canal and associated features were likely rebuilt at least once after the 1965 Lamar flood. Chunks of concrete have been laid along the banks for stabilization and recent work has impacted the canal. Portions of the canal gates and concrete retaining wall were rebuilt in 1995 ("3-10-1995, Herb Morlan" scratched in concrete before it dried, see attached photos). Agricultural fields are located immediately east and west of the canal, and Feature 2 is heavily utilized by farming traffic. A recent concrete-lined irrigation ditch lies east of this site. A modern utility station is located just NE of the site boundary; Feature 2 is also undoubtedly used by City of Lamar utility workers.
9. Extent of Resource: Road continues to south beyond the boundary of the current project area.
10. Associated Artifacts: none
11. Associated Features or Resources: Feature 1 = canal prism.

Resource Number: 5PW191.2

Temporary Resource Number: LAM-4, Feature 2

Linear Component Form

(page 2 of 2)

III. RESEARCH INFORMATION

12. Architect/Engineer: A.R. Black

Source of Information/Justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: A.R. Black

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p. 57. Ms. On file at DPL, Western History Department.

14. Date of Construction/Date Range: AD 1875

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p. 57. Ms. on file at DPL, Western History Department.

15. Historical/Archival Data: The Lamar Canal was the second ditch built by A. R. Black and was constructed in 1875. It carried water from Lamar to the McMillan Ranch. (Kesler 1986:57).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:

Eligible _____ Not eligible _x_ Need data _____

Is this an official (OAHP) determination? Yes _____ No _X_ Date _____

Is this a field determination? Yes _x_ No _____

Remarks/justification: This site does not retain the integrity necessary for it to be considered eligible to the NRHP. Modern improvements have compromised the site's fabric and feeling, as have efforts to stabilize the canal banks.

18. Eligibility of the segment being recorded:

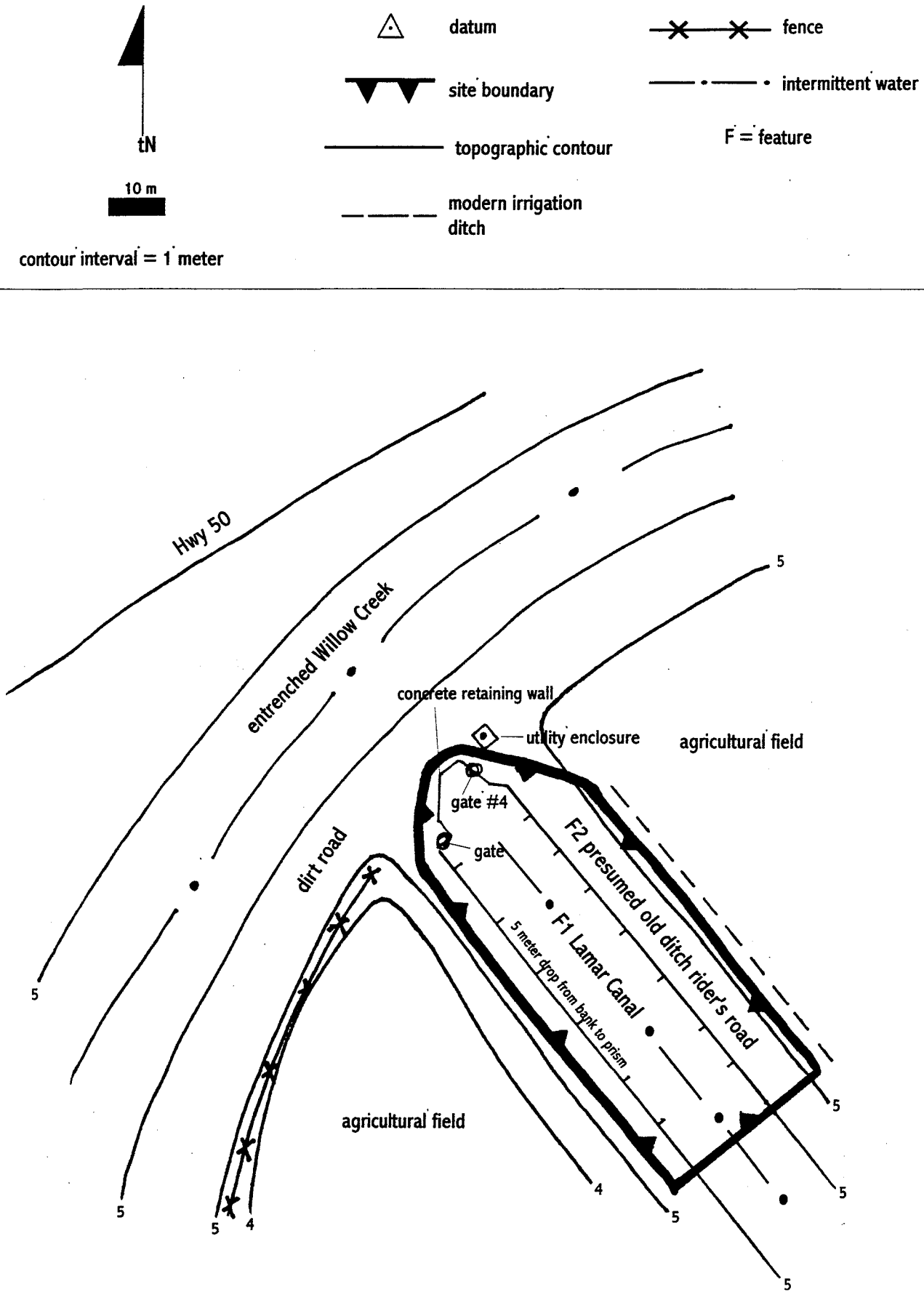
Contributing _____ Non-contributing _x_ Not applicable _____

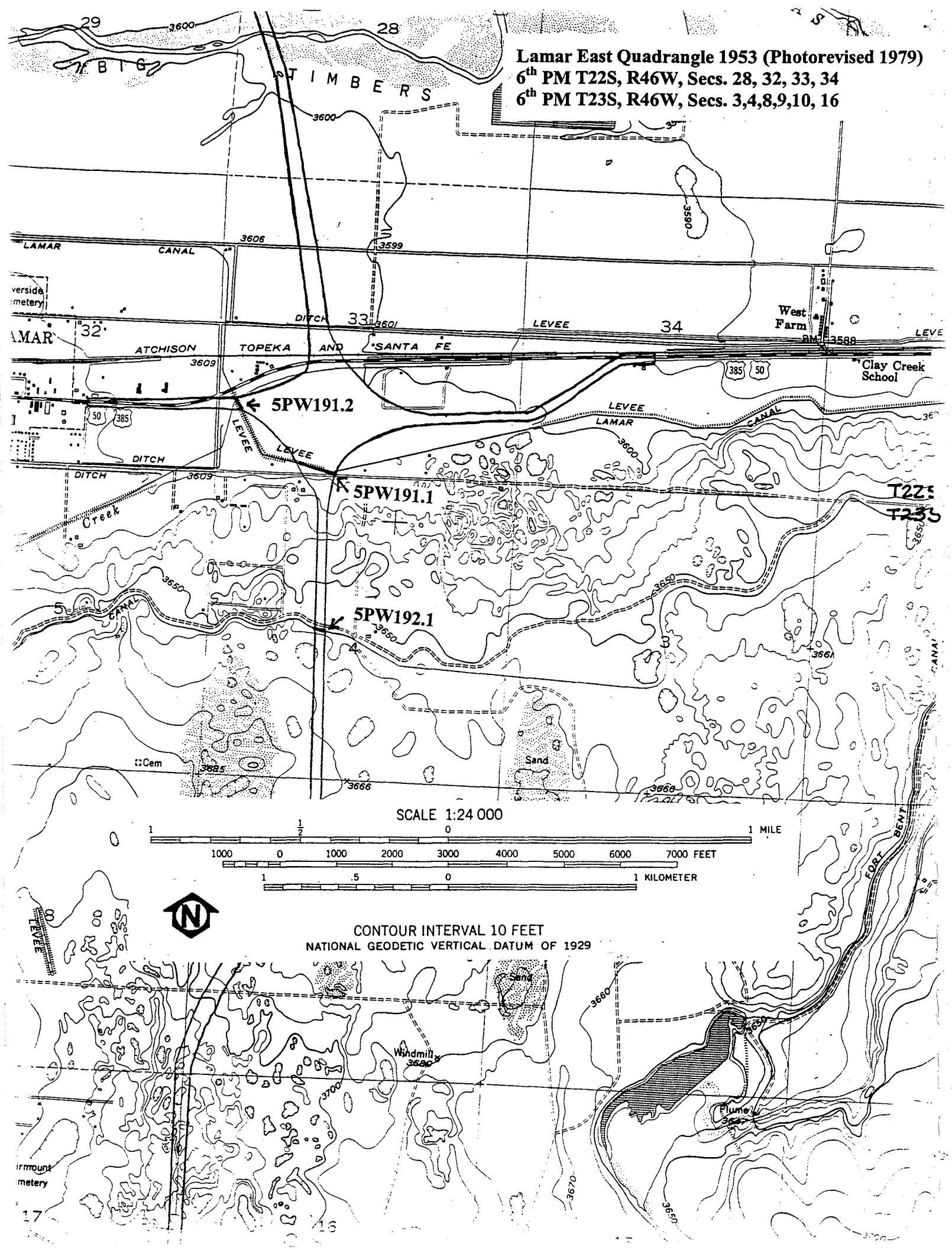
Remarks/justification: The site is not considered to be eligible and thus this feature would not be considered eligible.

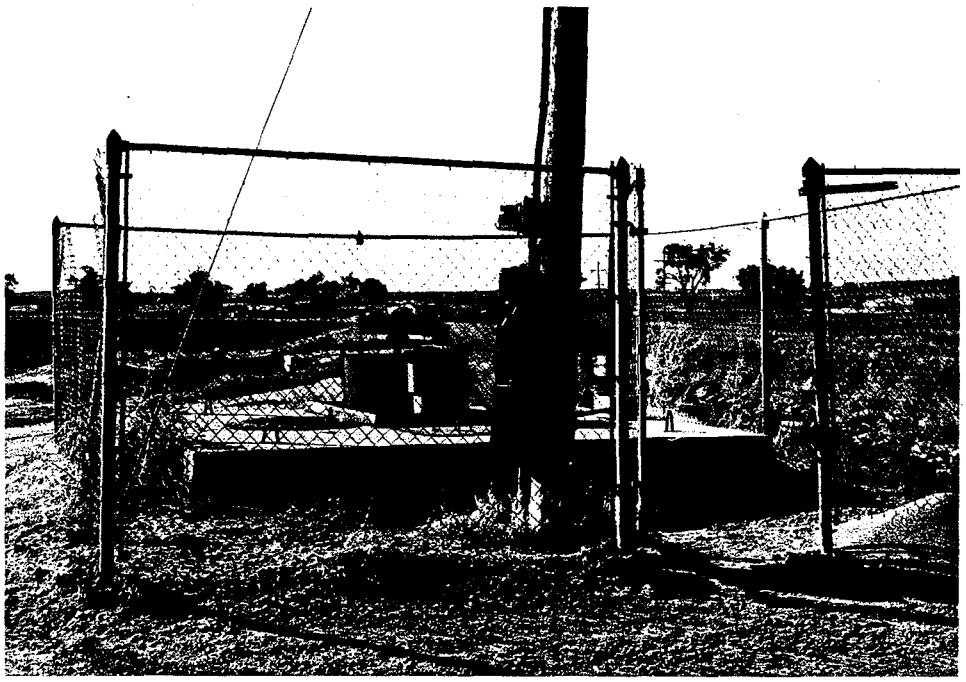
19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

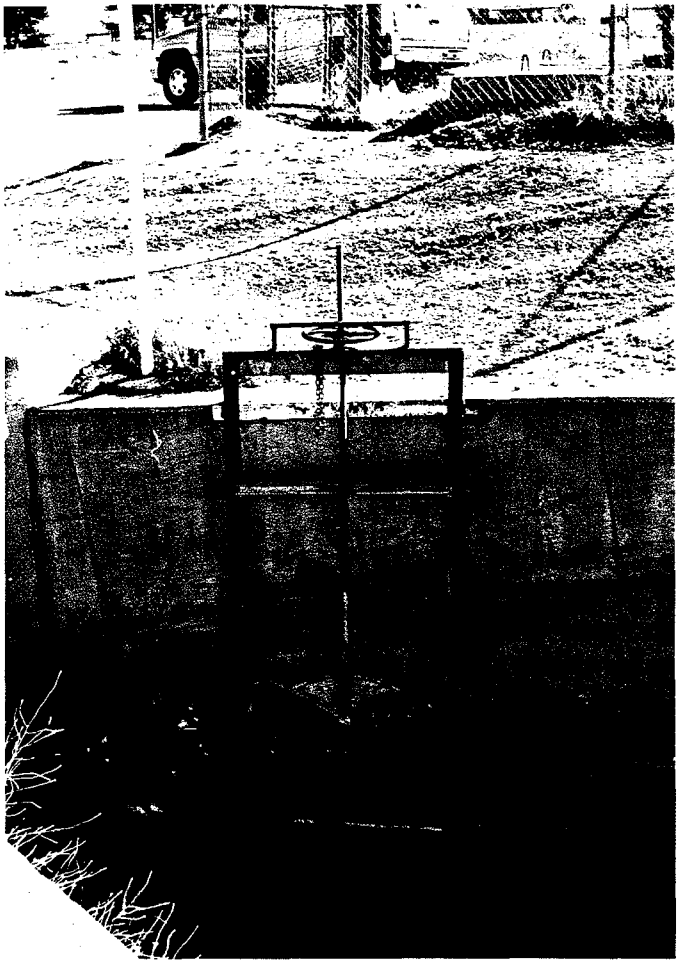
5PW191.2 Lamar canal segment




Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T22S, R46W, Secs. 28, 32, 33, 34
6th PM T23S, R46W, Secs. 3,4,8,9,10, 16
5PW191.2
5PW191.1
5PW192.1
LAMAR CANAL
ATCHISON TOPEKA AND SANTA FE
LEVEE
DITCH
West Farm
Clay Creek School
Windmill
Sand
Cem
Flume
FORT BENT
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

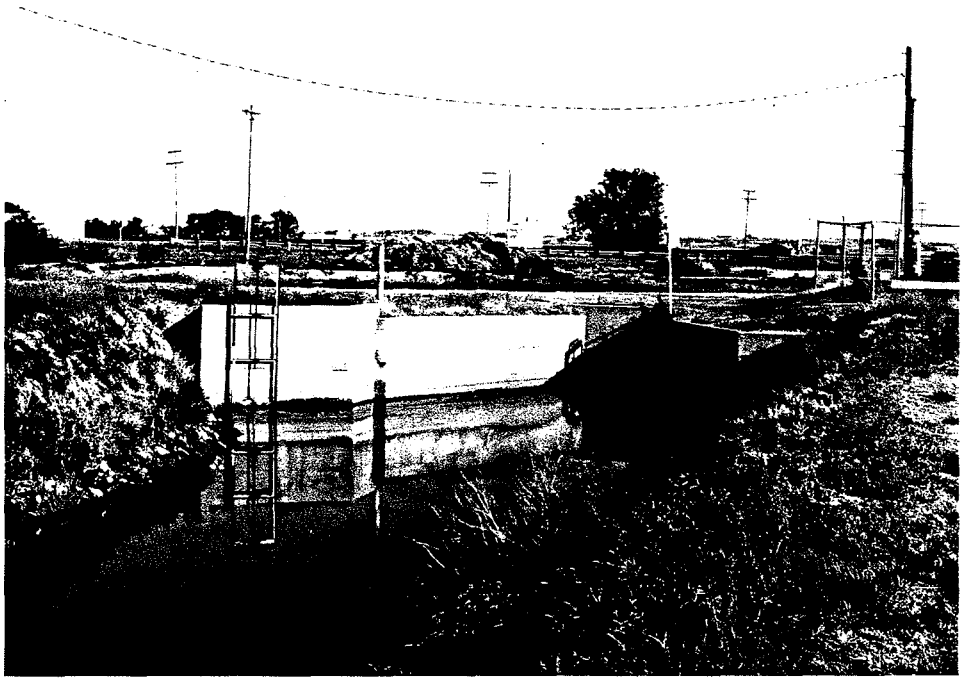


5PW191.2 View SSE at modern utility station just outside NE site boundary. Feature 1 (Lamar Canal) to right background.



5PW191.2 Gate #4 in recently upgraded concrete retaining wall (c.1995).

5PW191.2 "3-10-1995 Herb Morlan" scratched in upgraded concrete retaining wall.



5PW191.2 Lamar Canal, view northwest of northern extent of Feature 1 and concrete retaining wall (c.1995).

5PW191.2 Feature 2, presumed old ditch rider's road, view north. Most likely rebuilt after 1965 flood. Feature 1 to left.

COLORADO CULTURAL RESOURCE SURVEY

Management Data Form

(page 1 of 4)

OAHP1400
Rev. 9/98

The *Management Data Form* should be completed for each cultural resource recorded during an archaeological survey. Exceptions to this are isolated finds and re-evaluations, neither of which require a *Management Data Form*. Please attach the appropriate component forms and use continuation pages if necessary.

1. Resource Number: 5PW192.1
2. Temporary Resource Number: LAM-3

3. Attachments (check as many as apply)
   - ___ Prehistoric Archaeological Component
   - ___ Historic Archaeological Component
   - ___ Historic Architectural Component Form
   - X Sketch/Instrument Map (required)
   - X U.S.G.S. Map Photocopy (required)
   - X Photograph(s)

   Other, specify: Linear Component Forms

4. Official determination (OAHP use only)
   - _____ Determined
   - _____ Determined Not Eligible
   - _____ Nominated
   - _____ Need Data
   - _____ Contributing to NR Dist.
   - _____ Not Contributing to NR Dist.

I. IDENTIFICATION

5. Resource Name: Fort Bent Canal segment
6. Project Name/Number: CM2M-287 / 03-B-002
7. Government Involvement: Local_____ State x Federal_____

   Agency: Colorado Department of Transportation
8. Site Categories: Check as many as apply

   Prehistoric: archaeological site_____ paleontological site_____

   in existing National Register District? yes____ no____ name_____

   Historic: archaeology site_____ building(s)_____ structure(s) X object(s)_____

   in existing National Register District? yes____ no x name_____
9. Owner(s)'s Name and Address: Joe Spitz, Four States Feedyard, Inc., 9122 County Road HH, Lamar, Colorado 81052
10. Boundary Description and Justification: Extent of canal present within project area.
11. Site/Property Dimensions: 81 m x 22 m Area: 1,782 m^2 (.4047) 0.44 acres

    Area was calculated as: Length x Width ____X____ (rectangle/square) OR (length X width) X .785 _____ (ellipse)

II. LOCATION

12. Legal Location

    PM 6 Township 23S Range 46W Section 4 SE 1/4 of SW 1/4 of SE 1/4 of NW 1/4

    PM_____ Township_____ Range_____ Section_____ ____1/4 of ____1/4 of ____1/4 of ____1/4

    if section is irregular, explain alignment method: Aligned from the SW corner of Section 4 along southern boundary.

Resource Number: 5PW192.1
Temporary Resource Number: LAM-3

Management Data Form
(page 2 of 4)

13. USGS Quad: Lamar East 7.5' X 15' _ Date(s): 1953 (1979) (attach photocopy)
14. County: Prowers 15. Other Maps: _____
16. UTM Reference:
    A. 1 3 ; 7 1 1 6 3 4 mE 4 2 1 7 0 1 0 mN
    B. ___ ___; ___ ___ ___ ___ ___ ___mE ___ ___ ___ ___ ___ ___ ___mN
17. Address: _____ Lot___ Block___ Addition_____
18. Location/Access: From the junction of Highway 297 (Main St) and Highway 50 (Olive St) in Lamar, take Hwy 50 east for 1.7 miles. Turn right (south) onto county road, crossing another segment of the Lamar ditch (LAM-5). Travel south 0.8 miles on county road to where it crosses the Fort Bent canal.

III. NATURAL ENVIRONMENT

19. Topographic Feature(s)

___ mountain	___ ledge	___ playa
___ hill	___ terrace/bench	___ talus slope
___ tableland/mesa	___ canyon	___ alluvial fan
___ ridge	___ valley	___ plain
___ saddle/pass	___ basin	___ dune
___ alcove/rockshelter	X floodplain	___ _____
___ cliff	___ cutbank	___ _____
___ slope	___ arroyo/gully	___ _____

20. Site Topographic Description (mention named landforms): Located east of Willow Creek and west of Clay Creek.
21. Site Elevation: 3660 feet = (x .3048) 1116 meters 22. Aspect: open
23. Degree of Slope on Site: 0-8 degrees 24. Soil Depth: 100 + cm
25. Soil Description (character and color): Light brown silty loam
26. Depositional Environment:

x Aeolian	___ Colluvial	___ Residual
X Alluvial	___ Moraine	___ None
___ Other, specify; _____		

27. Nearest Water: name/nature: Willow Creek distance: 1800 m 5906 ft. To WNW
28. Nearest Permanent Water: name: Arkansas River distance: 3200 m 10,499 ft. To N
29. Vegetation on Site (list predominant species): grasses, sage
30. Vegetation Associations/Communities Surrounding Site: Riparian community along Willow Creek and Clay Creek drainages.

Resource Number: 5PW192.1
Temporary Resource Number: LAM-3

Management Data Form
(page 3 of 4)

IV. NATIONAL/STATE REGISTER ELIGIBILITY ASSESSMENT

31. Context or Theme: Southern Frontier Agricultural Development; Engineering: Irrigation

32. Applicable National Register Criteria:

___ Does not meet any of the below National Register criteria

_X_ A. Associated with events that have made a significant contribution to the broad pattern of our history; or

___ B. Associated with the lives of persons significant in our past; or

___ C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

___ D. Has yielded, or may be likely to yield, information important in history or prehistory; or

___ Qualifies under exceptions A through G.

Level of Significance: National_____ State_____ Local_x_

33. Condition

a. Architectural/Structural	b. Archaeological/Paleontological
_____ Excellent	_____ Undisturbed
_x_ Good	_____ Light disturbance
_____ Fair	_X_ Moderate disturbance
_____ Deteriorated	_____ Heavy disturbance
_____ Ruins	_____ Total disturbance

34. Describe condition: Canal condition at 5PW192.1 is good and banks appear stable. There was no water in the canal at time of recording. Construction of county road has impacted the site.

35. Vandalism: yes_____ no_x_ describe: _____

36. National Register Eligibility Field Assessment:

Eligible_x_ Not Eligible_____ Need Data___

Statement of Significance/N.R.H.P. Justification: The Fort Bent Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion a. The canal may also have significance under Criterion c in other areas, but there is nothing of engineering significance in the current project area.

37. Status in an Existing National Register District: N/A

Contributing_____ Non-Contributing_____

38. National Register District Potential yes_____ no_x_ discuss: This is an isolated linear feature.

Resource Number: 5PW192.1
Temporary Resource Number: LAM-3

Management Data Form
(page 4 of 4)

V. MANAGEMENT AND ADMINISTRATIVE DATA

39. Threats to Resource: Water erosion x Wind erosion____ Grazing____ Neglect ____
Vandalism___ Recreation____ Construction x Other (specify): ____
comments: Site located within current ROW for proposed 287 bypass.

40. Existing Protection: None___ Marked____ Fenced x Patrolled____ Access controlled ___
other (specify): ____

41. Local landmark designation: N/A 42. Easement: N/A

43. Management Recommendations: If the resource is to be impacted by this project it is suggested that it be photo-documented prior to disturbance if it can not be avoided

VI. DOCUMENTATION

44. Previous Actions Accomplished at the site: none known
    a. Excavations: Test_____ Partial_____ Complete_____ Date(s): ____
    b. Stabilization: Date(s): ____
    c. HABS/HAER Documentation: Date(s) & Numbers: ____
    d. Other: ____

45. Known collections/reports/interviews and other references (list): Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, p.57. Manuscript on file at Denver Public Library, Western History Department.

46. Primary Location of Additional Data: WCRM, Inc., Boulder office

47. State or Federal Permit Number: State #2003-32; BLM C-40308 Collection Authorized: yes__ no x
Artifact Collection: Yes____ No X Artifact Repository: ____
Collection Method: Diagnostics____ Grab Sample_____ Random Sample____ Transect____
Other (specify): ____

48. Photograph Numbers: Roll CH2M-1, exp. 12-16 Negatives filed at: WCRM, Inc., Boulder

49. Report Title:An Historical Inventory of the Proposed U.S. 287 Lamar Bypass in Prowers County, Colorado

50. Recorder(s): C. Muniz Date(s): May 13, 2003

51. Recorder Affiliation: WCRM, Inc., PO Box 2326, Boulder, CO 80306
Phone Number: 303-449-1151

NOTE: Please attach a sketch map, a photocopy of the USGS quad. map indicating resource location, and photographs.

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW192.1
2. Temporary Resource Number: LAM-3, Feature 1
3. Resource Name: Fort Bent Canal
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal x Trail_____
   Other (specify): _____
6. Resource Description: Site 5PW192.1 is a segment of the Fort Bent Canal. The Fort Bent Canal was first known as the Colorado and Kansas Ditch. Part of Colorado Water District Number 67, the largest in the state, the Fort Bent canal was built in the 1880s by the Koen brothers. This canal ran from the mouth of Muddy Creek to a point eight miles southeast of Coolidge, Kansas (Kesler 1986:57). At this location the canal is approximately 2 meters deep and 7 meters wide. It is bisected at this location by a county road, which was constructed sometime after 1979 (county road does not appear on Lamar East 7.5' quadrangle 1953, Photorevised in 1979). It is believed that this road was constructed sometime around 1993, judging from the dates recorded on two bridges that carry this road over the Lamar Canal, approximately ½ mile north of this location. Traces of an old two-track road (Feature 2) are present, paralleling the canal to the south. A more recent two-track road parallels the canal to the north - this road leads to a feed lot to the west and to a private residence to the east.
7. Original use: Agricultural irrigation
   Current use: Agricultural irrigation ? Difficult to tell if still in use - no water at time of recording
8. Modifications (describe): County road and bridge constructed over the canal sometime after 1979.
9. Extent of Resource: Canal continues to the east and west for an unknown distance. Only the portion of the canal present in the project area was recorded at this time.
10. Associated Artifacts: none
11. Associated Features or Resources: Feature 2 = old ditch rider's road, parallels canal to the south.

Resource Number: 5PW192.1
Temporary Resource Number: LAM-3, Feature 1

Linear Component Form
(page 2 of 2)

III. RESEARCH INFORMATION

12. Architect/Engineer: Koen brothers

Source of information/justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: Koen brothers

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

14. Date of Construction/Date Range: Late 19th century, 1880s

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

15. Historical/Archival Data: The Fort Bent Canal was first known as the Colorado and Kansas Ditch and was built by the Koen brothers from the mouth of Muddy Creek to a point eight miles southeast of Coolidge, Kansas. The decree was for 228.51 second feet (Kesler 1986:57).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:

Eligible x Not eligible _____ Need data _____

Is this an official (OAHP) determination? Yes _____ No X Date _____

Is this a field determination? Yes x No _____

Remarks/justification: The Fort Bent Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion a.

18. Eligibility of the segment being recorded:

Contributing x Non-contributing _____ Not applicable _____

Remarks/justification: Other segments of the Fort Bent Canal in Bent County have been determined officially eligible to the NRHP. This portion of the canal has good integrity and shares the Criterion a significance with the remainder of the canal.

19. Recorder(s): C. Muniz 20. Date(s): May 13, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW192.1
2. Temporary Resource Number: LAM-3, Feature 2
3. Resource Name: Fort Bent Canal segment, old ditch rider's road
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road x Railroad_____ Ditch/Canal_____ Trail_____
   Other (specify): _____
6. Resource Description: Feature 2 is an old two-track road paralleling the canal to the south. The road is mostly grown over with grasses but faint ruts are still visible. The road measures approximately 2-3 meters wide and is bisected by the recently constructed (post-1979) county road.

7. Original use: Transportation
   Current use: Abandoned
8. Modifications (describe): County road and bridge constructed over the canal and road sometime after 1979.

9. Extent of Resource: Traces of the road continue to the east and west for an unknown distance. Only the portion of the two-track present in the project area was recorded at this time.

10. Associated Artifacts: none

11. Associated Features or Resources: Feature 1 = Fort Bent Canal segment.

Resource Number: 5PW192.1
Temporary Resource Number: LAM-3, Feature 2

Linear Component Form
(page 2 of 2)

III. RESEARCH INFORMATION

12. Architect/Engineer: Koen brothers

Source of information/justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: Koen brothers

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

14. Date of Construction/Date Range: Late 19th century, 1880s

Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, page 57. Manuscript on file at Denver Public Library, Western History Department.

15. Historical/Archival Data: The Fort Bent Canal was first known as the Colorado and Kansas Ditch and was built by the Koen brothers from the mouth of Muddy Creek to a point eight miles southeast of Coolidge, Kansas. The decree was for 228.51 second feet (Kesler 1986:57).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:

Eligible x Not eligible _____ Need data _____

Is this an official (OAHP) determination? Yes _____ No X Date _____

Is this a field determination? Yes x No _____

Remarks/justification: The Fort Bent Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion a.

18. Eligibility of the segment being recorded:

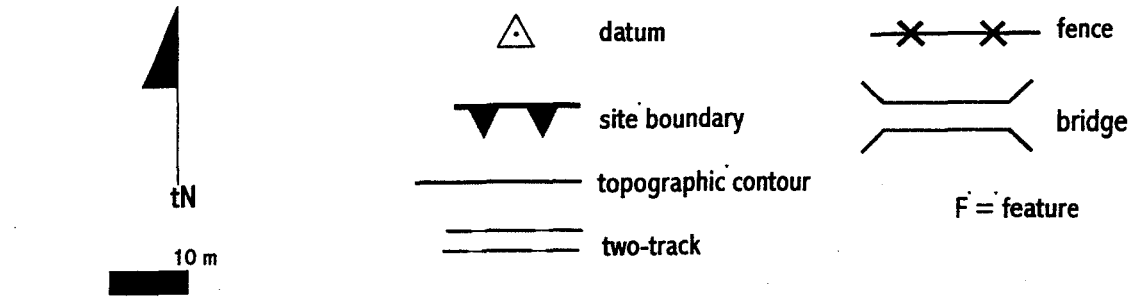
Contributing x Non-contributing _____ Not applicable _____

Remarks/justification: Other segments of the Fort Bent Canal in Bent County have been determined officially eligible to the NRHP. This portion of the canal has good integrity and shares the Criterion a significance with the remainder of the canal.

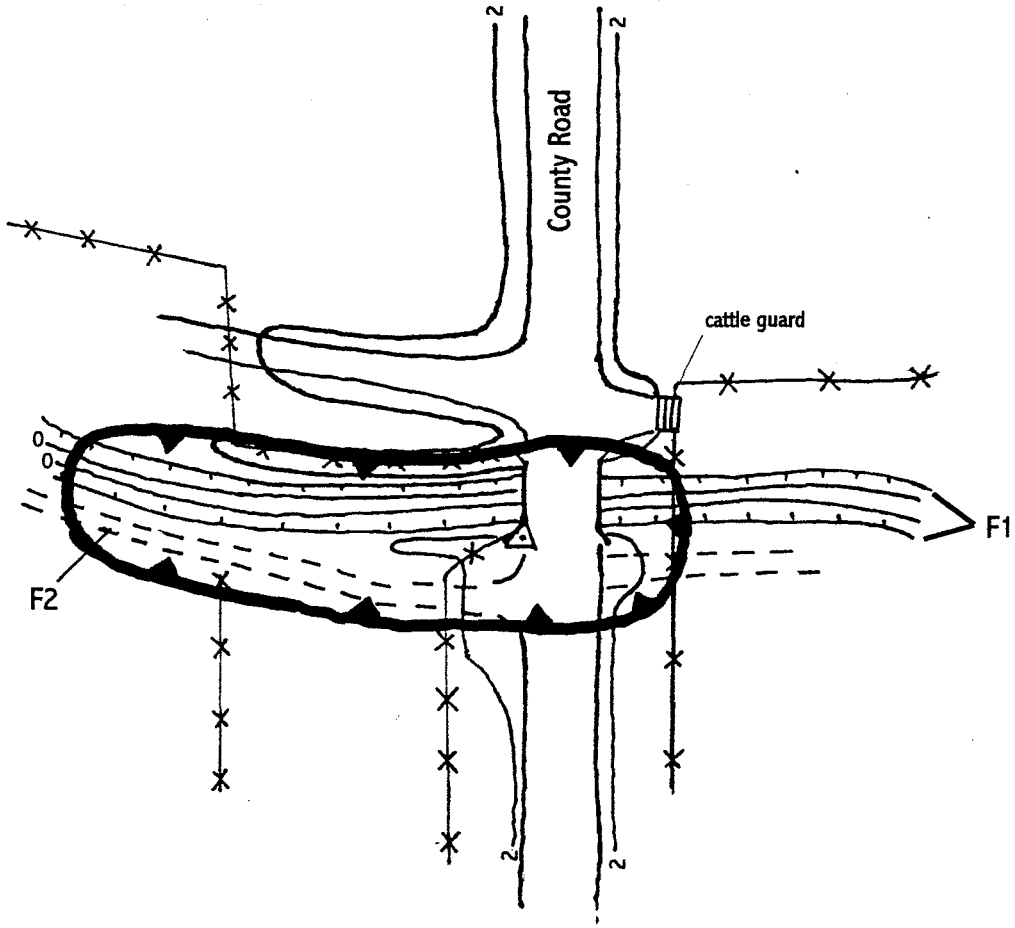
19. Recorder(s): C. Muniz 20. Date(s): May 13, 2003

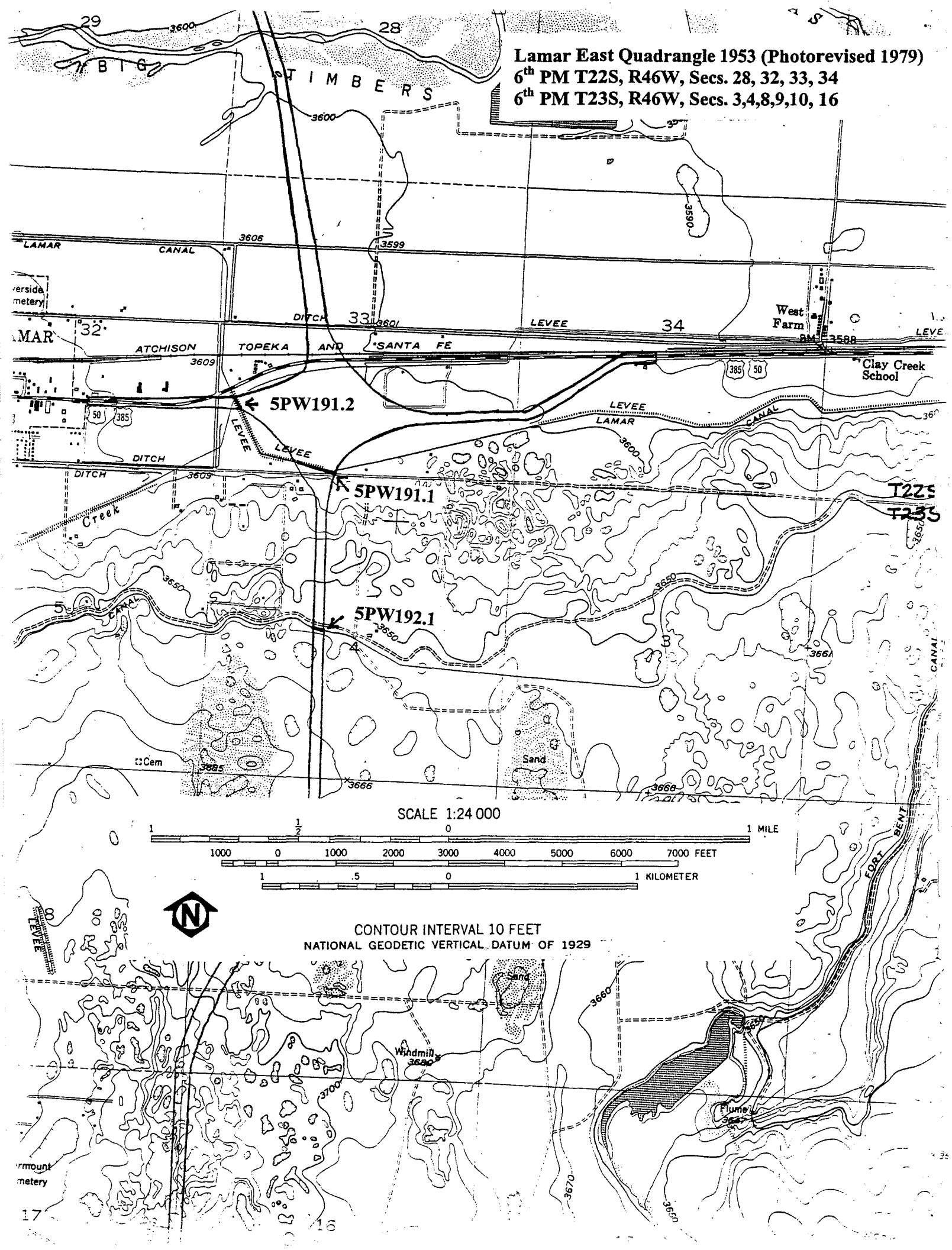
Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

5PW192.1 Fort Bent Canal



contour interval = 2 meters




Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T22S, R46W, Secs. 28, 32, 33, 34
6th PM T23S, R46W, Secs. 3,4,8,9,10, 16
5PW191.2
5PW191.1
5PW192.1
LAMAR CANAL
ATCHISON TOPEKA AND SANTA FE
LEVEE
DITCH
West Farm
Clay Creek School
Windmill
Flume
Sand
Cem
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

5PW192.1 Fort Bent Canal, view east of segment in project area.
Crossed by county road.

5PW192.1 Feature 1, canal. View east from county road.

5PW192.1 Feature 1, canal. View west from county road.

5PW192.1 Feature 2, traces of ditch rider's road paralleling Fort Bent canal to the south. View west from county road.

COLORADO CULTURAL RESOURCE SURVEY

Management Data Form

(page 1 of 4)

OAHP1400
Rev. 9/98

The *Management Data Form* should be completed for each cultural resource recorded during an archaeological survey. Exceptions to this are isolated finds and re-evaluations, neither of which require a *Management Data Form*. Please attach the appropriate component forms and use continuation pages if necessary.

1. Resource Number: 5PW193.1
2. Temporary Resource Number: LAM-7

3. Attachments (check as many as apply)
   - ___ Prehistoric Archaeological Component
   - ___ Historic Archaeological Component
   - ___ Historic Architectural Component Form
   - X Sketch/Instrument Map (required)
   - X U.S.G.S. Map Photocopy (required)
   - X Photograph(s)
   - Other, specify: Linear Component Form

4. Official determination (OAHP use only)
   - _____ Determined
   - _____ Determined Not Eligible
   - _____ Nominated
   - _____ Need Data
   - _____ Contributing to NR Dist.
   - _____ Not Contributing to NR Dist.

I. IDENTIFICATION

5. Resource Name: Vista del Rio Ditch segment
6. Project Name/Number: CM2M-287 / 03-B-002
7. Government Involvement: Local_____ State x Federal_____

   Agency: Colorado Department of Transportation
8. Site Categories: Check as many as apply

   Prehistoric: archaeological site_____ paleontological site_____

   in existing National Register District? yes_____ no_____ name_____

   Historic: archaeology site_____ building(s)_____ structure(s) X object(s)_____

   in existing National Register District? yes_____ no x name_____
9. Owner(s)'s Name and Address: Jack Hall, 45 Mayhew Drive, Lamar, Colorado 81052
10. Boundary Description and Justification: Extent of ditch present within project area.
11. Site/Property Dimensions: 100 m x 27 m Area: 2,700 m^2 (,4047) 0.67 acres

    Area was calculated as: Length x Width X (rectangle/square) OR (length X width) X .785 _____ (ellipse)

II. LOCATION

12. Legal Location

    PM 6 Township 22S Range 46W Section 20 NE 1/4 of SW 1/4 of SE 1/4 of SE 1/4

    PM_____ Township_____ Range_____ Section_____ ____1/4 of ____1/4 of ____1/4 of ____1/4

    if section is irregular, explain alignment method:_____

Resource Number: 5PW193.1
Temporary Resource Number: LAM-7

Management Data Form
(page 2 of 4)

13. USGS Quad: Lamar East 7.5' X 15' _ Date(s): 1953 (1979) (attach photocopy)
14. County: Prowers 15. Other Maps: _____
16. UTM Reference:
    A. 1 3 ; 7 1 0 6 4 0 mE 4 2 2 1 1 4 0 mN
    B. ___ ___; ___ ___ ___ ___ ___ ___mE ___ ___ ___ ___ ___ ___ ___mN
17. Address: _____ Lot___ Block___ Addition_____
18. Location/Access: From the junction of Highway 297 (Main St) and Highway 196 north of Lamar, drive east on Hwy 196 for 1.15 miles. Walk south approximately 70 meters to site. Call landowner prior to visiting site.

III. NATURAL ENVIRONMENT

19. Topographic Feature(s)

___ mountain	___ ledge	___ playa
___ hill	___ terrace/bench	___ talus slope
___ tableland/mesa	___ canyon	___ alluvial fan
___ ridge	___ valley	___ plain
___ saddle/pass	___ basin	___ dune
___ alcove/rockshelter	X floodplain	___ _____
___ cliff	___ cutbank	___ _____
___ slope	___ arroyo/gully	___ _____

20. Site Topographic Description (mention named landforms): Located on the northern floodplain of the Arkansas River.
21. Site Elevation: 3620 feet =(x .3048) 1103 meters 22. Aspect: open
23. Degree of Slope on Site: 0-2 degrees 24. Soil Depth: 100 + cm
25. Soil Description (character and color): Light brown silty loam
26. Depositional Environment:

x Aeolian	___ Colluvial	___ Residual
X Alluvial	___ Moraine	___ None

___ Other, specify; _____

27. Nearest Water: name/nature: unnamed intermittent stream distance: 300 m 984ft. To SW
28. Nearest Permanent Water: name: Arkansas River distance: 1000 m 3,281 ft. To S
29. Vegetation on Site (list predominant species): grasses, sedges, sage, yucca; property currently used as grazing land for cattle
30. Vegetation Associations/Communities Surrounding Site: Riparian community along Arkansas River - Big Timbers area.

Resource Number: 5PW193.1
Temporary Resource Number: LAM-7

Management Data Form
(page 3 of 4)

IV. NATIONAL/STATE REGISTER ELIGIBILITY ASSESSMENT

31. Context or Theme: Southern Frontier Agricultural Development; Engineering: Irrigation

32. Applicable National Register Criteria:
X Does not meet any of the below National Register criteria

___ A. Associated with events that have made a significant contribution to the broad pattern of our history; or

___ B. Associated with the lives of persons significant in our past; or

___ C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

___ D. Has yielded, or may be likely to yield, information important in history or prehistory; or

___ Qualifies under exceptions A through G.

Level of Significance: National_____ State_____ Local_____

33. Condition

a. Architectural/Structural	b. Archaeological/Paleontological
_____ Excellent	_____ Undisturbed
x Good	_____ Light disturbance
_____ Fair	X Moderate disturbance
_____ Deteriorated	_____ Heavy disturbance
_____ Ruins	_____ Total disturbance

34. Describe condition: Site condition is good with moderate impacts due to grazing cattle. No water was present in canal at time of recording.

35. Vandalism: yes_____ no x describe: _____

36. National Register Eligibility Field Assessment:

Eligible x Not Eligible_____ Need Data____

Statement of Significance/N.R.H.P. Justification: Site integrity at 5PW193.1 is good; this canal has not modified by modern construction and still retains the feel of historic ditch. However, the ditch is estimated to be only approximately 60 years old and does not have sufficient associations to be considered eligible under Criterion a or b, or the engineering characteristics and features to be considered eligible under Criterion c.

37. Status in an Existing National Register District: N/A

Contributing_____ Non-Contributing_____

38. National Register District Potential yes_____ no x discuss: This is an isolated linear feature.

Resource Number: 5PW193.1
Temporary Resource Number: LAM-7

Management Data Form
(page 4 of 4)

V. MANAGEMENT AND ADMINISTRATIVE DATA

39. Threats to Resource: Water erosion x Wind erosion x Grazing x Neglect ____
Vandalism ___ Recreation ____ Construction x Other (specify): ____
comments: Site located within current ROW for proposed 287 bypass.

40. Existing Protection: None ___ Marked ____ Fenced x Patrolled ____ Access controlled ___
other (specify): ____

41. Local landmark designation: N/A 42. Easement: N/A

43. Management Recommendations: No further work is recommended for this project.

VI. DOCUMENTATION

44. Previous Actions Accomplished at the site: none known
    a. Excavations: Test ____ Partial ____ Complete ____ Date(s): ____
    b. Stabilization: Date(s): ____
    c. HABS/HAER Documentation: Date(s) & Numbers: ____
    d. Other: ____

45. Known collections/reports/interviews and other references (list): ____

46. Primary Location of Additional Data: WCRM, Inc., Boulder office

47. State or Federal Permit Number: State #2003-32; BLM C-40308 Collection Authorized: yes ___ no x
Artifact Collection: Yes ____ No X Artifact Repository: ____
Collection Method: Diagnostics ____ Grab Sample ____ Random Sample ____ Transect ____
Other (specify): ____

48. Photograph Numbers: Roll CH2M-2, exp. 8-10 Negatives filed at: WCRM, Inc., Boulder

49. Report Title: An Historical Inventory of the Proposed U.S. 287 Lamar Bypass in Prowers County, Colorado

50. Recorder(s): C. Muniz Date(s): May 14, 2003

51. Recorder Affiliation: WCRM, Inc., PO Box 2326, Boulder, CO 80306
Phone Number: 303-449-1151

NOTE: Please attach a sketch map, a photocopy of the USGS quad. map indicating resource location, and photographs.

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW193.1
2. Temporary Resource Number: LAM-7, Feature 1
3. Resource Name: Vista del Rio ditch
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal x Trail_____
   Other (specify): _____
6. Resource Description: 5PW193.1 is a segment of the Vista del Rio Ditch located on the northern floodplain of the Arkansas River. At this location the recorded segment measures approximately 100 meters east-west and 27 meters north-south, and is located to the south of, and roughly paralleling, State Highway 196. The ditch was not holding water when recorded, and is located in a field utilized for cattle grazing. The ditch prism has a flat bottom and measures approximately 10 meters wide and approximately 50 centimeters in depth. Low levee berms (Features 2 and 3) run east-west along both edges of the canal. Feature 2 is located to the north of the ditch and rises approximately 2 meters from the ditch prism. Feature 2 is constructed from earth excavated from the ditch and is discontinuous (see site map), apparently from natural erosion exacerbated by cattle trampling. Feature 3 is located to the south of the ditch and rises approximately 1 meter from the ditch prism; this feature shows greater erosion and less constructed form than Feature 2, and may not have ever been as high as Feature 2.

7. Original use: Agricultural irrigation
   Current use: Agricultural irrigation ? Difficult to tell if still in use - no water at time of recording

8. Modifications (describe): none apparent

9. Extent of Resource: Ditch and levees continue to the east and west for an unknown distance. Only the portions of the ditch and levees present in the project area was recorded at this time.

10. Associated Artifacts: none
11. Associated Features or Resources: Feature 2 = levee, parallels ditch to the north. Feature 3 = levee, parallels ditch to the south.

Resource Number: 5PW193.1

Temporary Resource Number: LAM-7, Feature 1

Linear Component Form

III. RESEARCH INFORMATION

12. Architect/Engineer: Unknown

Source of information/justification:

13. Builder: Unknown

Source of Information:

14. Date of Construction/Date Range: ca. 1930-1953

Source of Information: Comparative map studies

15. Historical/Archival Data: Map data available from Denver Public Library, Western History Department.

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:

Eligible _____ Not eligible X Need data _____

Is this an official (OAHP) determination? Yes _____ No X Date _____

Is this a field determination? Yes x No _____

Remarks/justification: The ditch is estimated to be only approximately 60 years old and does not have sufficient associations to be considered eligible under Criteria a or b, or the engineering characteristics and features to be considered eligible under Criterion c

18. Eligibility of the segment being recorded:

Contributing _____ Non-contributing _____ Not applicable x

Remarks/justification: The site is not considered to be eligible and thus this segment would not be considered eligible.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

COLORADO CULTURAL RESOURCE SURVEY OAHP1418
Linear Component Form Rev. 9/98
(page 1 of 2)

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW193.1
2. Temporary Resource Number: LAM-7, Feature 2
3. Resource Name: Vista del Rio ditch levee
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal_____ Trail_____
   Other (specify): Constructed earthen levee

6. Resource Description: Site 5PW193.1 is a segment of the Vista del Rio Ditch located on the northern floodplain of the Arkansas River. Low levee berms (Features 2 and 3) run east-west along both edges of the canal. Feature 2 is located to the north of the ditch and rises approximately 2 meters from the ditch prism. Feature 2 is approximately 5 meters wide at its base. Feature 2 is constructed from earth excavated from the ditch and is discontinuous (see site map), apparently from natural erosion exacerbated by cattle trampling.

7. Original use: Agricultural irrigation / flood control
   Current use: Not maintained - would do little control flooding today as the levee is discontinuous

8. Modifications (describe): none apparent

9. Extent of Resource: Canal and levee continue to the east and west for an unknown distance. Only the portion of the canal and levee present in the project area was recorded at this time.

10. Associated Artifacts: none
11. Associated Features or Resources: Feature 1 = Vista del Rio ditch. Feature 3 =levee berm, parallels canal to the south.

Resource Number: 5PW193.1

Temporary Resource Number: LAM-7, Feature 2

Linear Component Form

III. RESEARCH INFORMATION

12. Architect/Engineer: Unknown

Source of information/justification:

13. Builder: Unknown

Source of Information:

14. Date of Construction/Date Range: ca. 1930-1953

Source of Information: Comparative map studies

15. Historical/Archival Data: Map data available from Denver Public Library, Western History Department

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:

Eligible _____ Not eligible X Need data _____

Is this an official (OAHP) determination? Yes _____ No X Date _____

Is this a field determination? Yes x No _____

Remarks/justification: The ditch is estimated to be only approximately 60 years old and does not have sufficient associations to be considered eligible under Criteria a or b, or the engineering characteristics and features to be considered eligible under Criterion c

18. Eligibility of the segment being recorded:

Contributing _____ Non-contributing _____ Not applicable x

Remarks/justification: The site is not considered to be eligible and thus this segment would not be considered eligible.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW193.1
2. Temporary Resource Number: LAM-7, Feature 3
3. Resource Name: Vista del Rio ditch levee
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal_____ Trail_____
   Other (specify): Constructed earthen levee
6. Resource Description: 5PW193.1 is a segment of the Vista del Rio Ditch located on the northern floodplain of the Arkansas River. Low levee berms (Features 2 and 3) run east-west along both edges of the canal. Feature 3 is located to the south of the ditch and rises approximately 1 meter from the ditch prism; this feature shows greater erosion and less constructed form than Feature 2, and may not have ever been as high as Feature 2. Feature 3 measures approximately 3 meters wide at its base.

7. Original use: Agricultural irrigation / flood control
   Current use: Not maintained - would do little to control flooding today as Feature 3 is heavily eroded.
8. Modifications (describe): none apparent

9. Extent of Resource: Ditch and levees continue to the east and west for an unknown distance. Only the portions of the ditch and levees present in the project area was recorded at this time.

10. Associated Artifacts: none
11. Associated Features or Resources: Feature 2 = levee, parallels ditch to the north. Feature 1 = Vista del Rio ditch segment.

Resource Number: 5PW193.1

Temporary Resource Number: LAM-7, Feature 3

Linear Component Form

III. RESEARCH INFORMATION

12. Architect/Engineer: Unknown

Source of information/justification:

13. Builder: Unknown

Source of Information:

14. Date of Construction/Date Range: ca. 1930-1953

Source of Information: Comparative map studies

15. Historical/Archival Data: Map data available from Denver Public Library, Western History Department

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:

Eligible _____ Not eligible X Need data _____

Is this an official (OAHP) determination? Yes _____ No X Date _____

Is this a field determination? Yes x No _____

Remarks/justification: The ditch is estimated to be only approximately 60 years old and does not have sufficient associations to be considered eligible under Criteria a or b, or the engineering characteristics and features to be considered eligible under Criterion c

18. Eligibility of the segment being recorded:

Contributing _____ Non-contributing _____ Not applicable x

Remarks/justification: The site is not considered to be eligible and thus this segment would not be considered eligible.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

5PW193.1 Vista del Rio ditch segment

tN

10 m

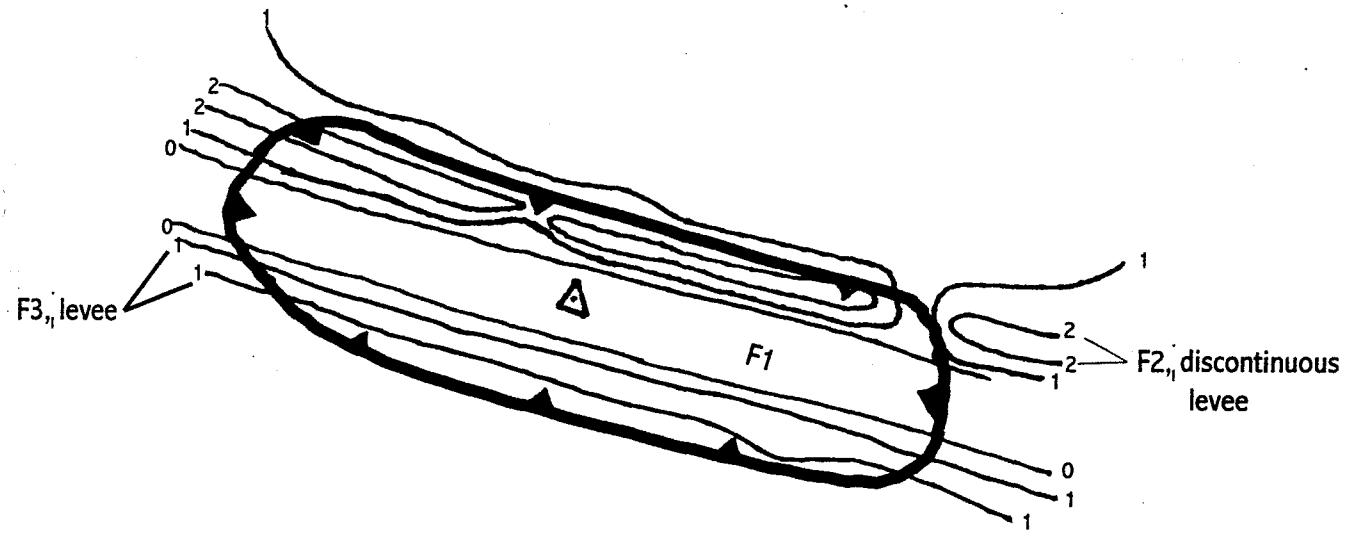
contour interval = 1 meter

datum

site boundary

topographic contour

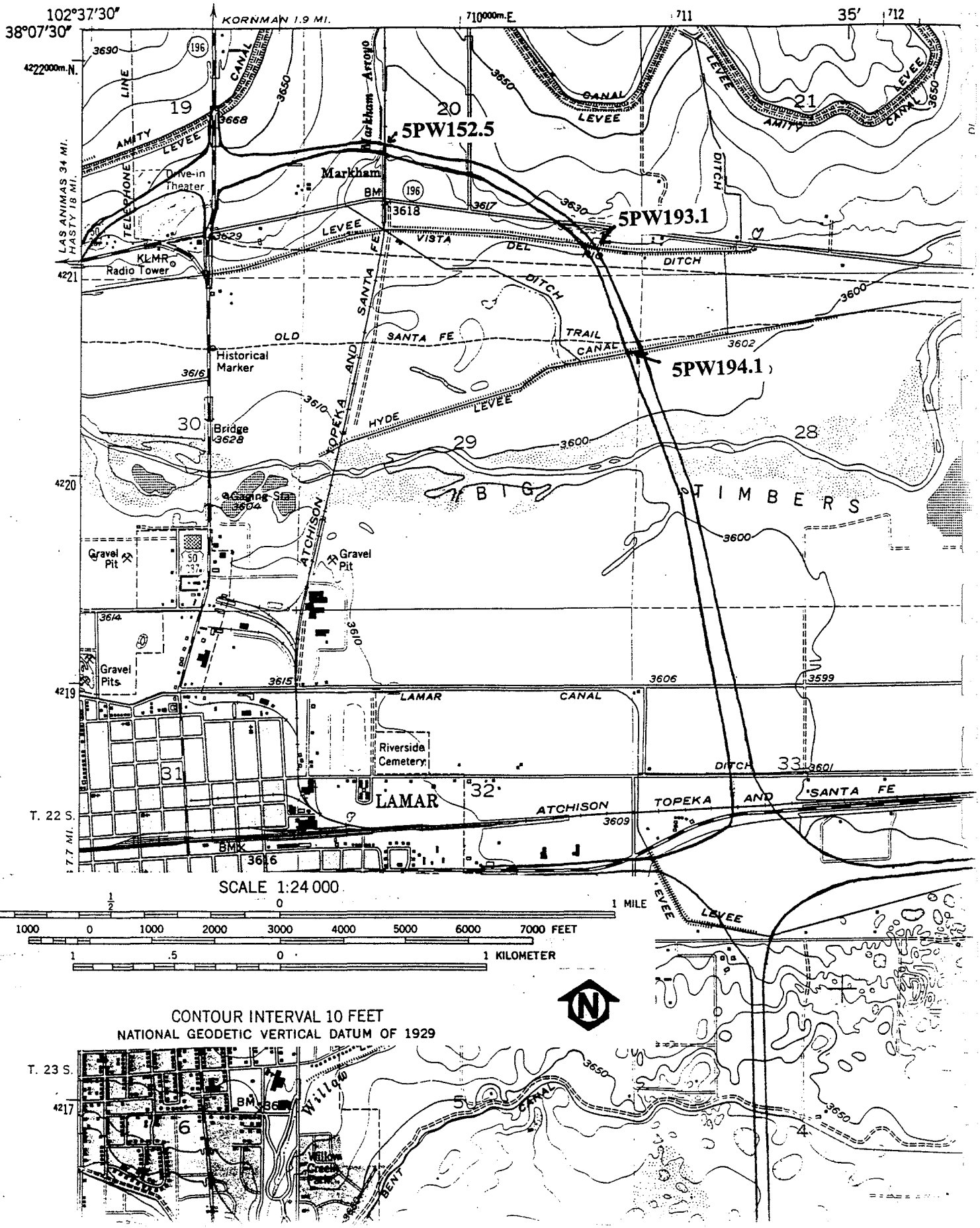
F = feature

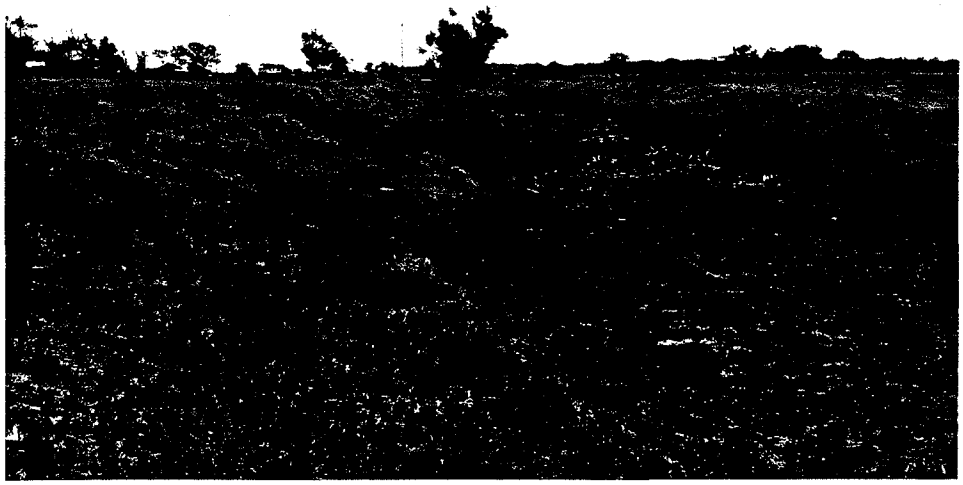


5460 II NW (WILEY)

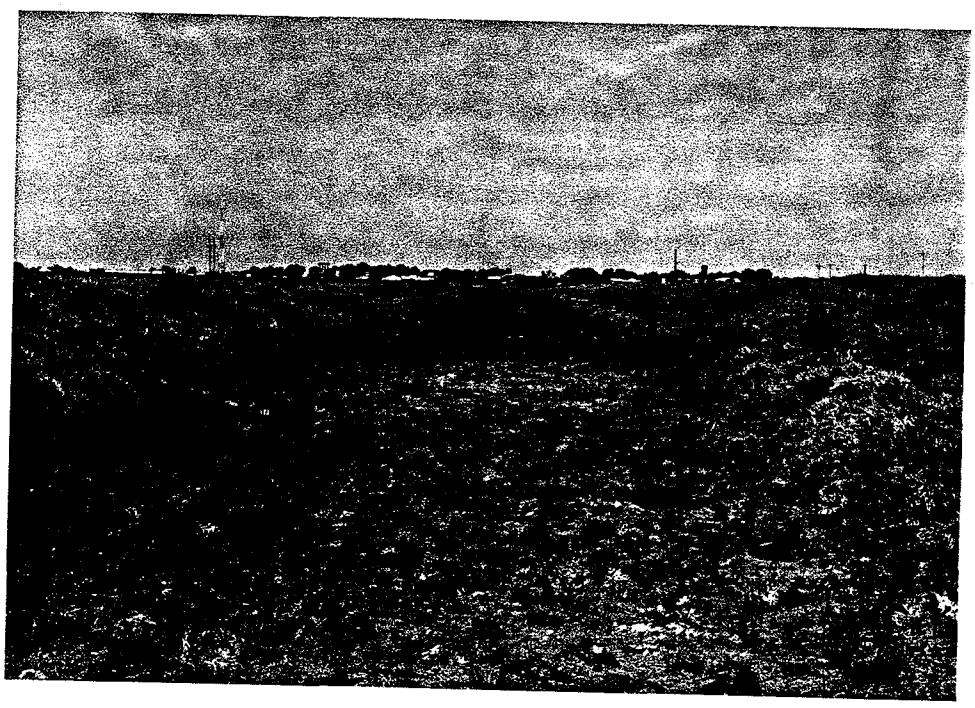
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T22S, R46W, Secs. 19, 20, 28, 29, 32, 33





5PW193.1 Vista del Rio ditch, view east. Feature 1, ditch prism. Feature 2 is to left (north) of F1, Feature 3 is to right (south) of F1.



5PW193.1 Vista del Rio ditch, view west.

5PW193.1 Feature 2, break in levee at NE edge of site. View north.

COLORADO CULTURAL RESOURCE SURVEY OAHP1400

Management Data Form Rev. 9/98

(page 1 of 4)

The *Management Data Form* should be completed for each cultural resource recorded during an archaeological survey. Exceptions to this are isolated finds and re-evaluations, neither of which require a *Management Data Form*. Please attach the appropriate component forms and use continuation pages if necessary.

1. Resource Number: 5PW194.1 2. Temporary Resource Number: LAM-8

3. Attachments (check as many as apply)
   - ___ Prehistoric Archaeological Component
   - ___ Historic Archaeological Component
   - ___ Historic Architectural Component Form
   - X Sketch/Instrument Map (required)
   - X U.S.G.S. Map Photocopy (required)
   - X Photograph(s)

   Other, specify: Linear Component Forms

4. Official determination (OAHP use only)
   - _____ Determined
   - _____ Determined Not Eligible
   - _____ Nominated
   - _____ Need Data
   - _____ Contributing to NR Dist.
   - _____ Not Contributing to NR Dist.

I. IDENTIFICATION

5. Resource Name: Hyde Canal segment

6. Project Name/Number: CM2M-287 / 03-B-002

7. Government Involvement: Local_____ State_x___ Federal_____

   Agency: Colorado Department of Transportation

8. Site Categories: Check as many as apply

   Prehistoric: archaeological site_____ paleontological site_____

   in existing National Register District? yes_____ no_____ name_____

   Historic: archaeology site_____ building(s)_____ structure(s)_X___ object(s)_____

   in existing National Register District? yes____ no_x__ name_____

9. Owner(s)'s Name and Address: Jack Hall, 45 Mayhew Drive, Lamar, Colorado 81052

10. Boundary Description and Justification: Extent of canal present within project area.

11. Site/Property Dimensions: 89 m x 31 m Area: 2,759 m^2 (.4047) 0.68 acres

    Area was calculated as: Length x Width ____X_____ OR (length X width) X .785 _____
    rectangle/square ellipse

II. LOCATION

12. Legal Location

    PM 6 Township 22S Range 46W Section 29 SE 1/4 of SE 1/4 of NE 1/4 of NE 1/4

    PM_____ Township_____ Range_____ Section_____ ____1/4 of ____1/4 of ____1/4 of ____1/4

    if section is irregular, explain alignment method:_____

Resource Number: 5PW194.1
Temporary Resource Number: LAM-8

Management Data Form
(page 2 of 4)

13. USGS Quad: Lamar East 7.5' X 15' _ Date(s): 1953 (1979) (attach photocopy)
14. County: Prowers 15. Other Maps: _____
16. UTM Reference:
    A. 13; 710905 mE 4222065 0 mN east end
    B. 13; 710825 mE 4222064 0 mN west end
17. Address: _____ Lot___ Block___ Addition_____
18. Location/Access: From the junction of Highway 297 (Main St) and Highway 196 north of Lamar, drive east on Hwy 196 for 1.2 miles. Walk south approximately 580 meters to site. Call landowner prior to visiting site.

III. NATURAL ENVIRONMENT

19. Topographic Feature(s)

___ mountain	___ ledge	___ playa
___ hill	___ terrace/bench	___ talus slope
___ tableland/mesa	___ canyon	___ alluvial fan
___ ridge	___ valley	___ plain
___ saddle/pass	___ basin	___ dune
___ alcove/rockshelter	X floodplain	___ _____
___ cliff	___ cutbank	___ _____
___ slope	___ arroyo/gully	___ _____

20. Site Topographic Description (mention named landforms): Located on the northern floodplain of the Arkansas River.
21. Site Elevation: 3600 feet =(x .3048) 1097 meters 22. Aspect: open
23. Degree of Slope on Site: 0-2 degrees 24. Soil Depth: 100 + cm
25. Soil Description (character and color): Light brown silty loam
26. Depositional Environment:

x Aeolian	___ Colluvial	___ Residual
X Alluvial	___ Moraine	___ None
___ Other, specify; _____		

27. Nearest Water: name/nature: Hyde Canal distance: 0 m 0 ft.
28. Nearest Permanent Water: name: Arkansas River distance: 480 m 1,575 ft. To south
29. Vegetation on Site (list predominant species): grasses, sedges, burdock; property currently used as grazing land for cattle
30. Vegetation Associations/Communities Surrounding Site: Riparian community along Arkansas River - Big Timbers area.

Resource Number: 5PW194.1
Temporary Resource Number: LAM-8

Management Data Form
(page 3 of 4)

IV. NATIONAL/STATE REGISTER ELIGIBILITY ASSESSMENT

31. Context or Theme: Southern Frontier Agricultural Development; Engineering: Irrigation

32. Applicable National Register Criteria:

___ Does not meet any of the below National Register criteria

_X_ A. Associated with events that have made a significant contribution to the broad pattern of our history; or

___ B. Associated with the lives of persons significant in our past; or

___ C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

__ D. Has yielded, or may be likely to yield, information important in history or prehistory; or

___ Qualifies under exceptions A through G.

Level of Significance: National_____ State_____ Local__x__

33. Condition

a. Architectural/Structural	b. Archaeological/Paleontological
_____ Excellent	_____ Undisturbed
___x__ Good	___X__ Light disturbance
_____ Fair	_____ Moderate disturbance
_____ Deteriorated	_____ Heavy disturbance
_____ Ruins	_____ Total disturbance

34. Describe condition: Site condition is good with light disturbance due to grazing cattle. Water was present in canal at time of recording.

35. Vandalism: yes_____ no__x__ describe: _____

36. National Register Eligibility Field Assessment:

Eligible__x__ Not Eligible_____ Need Data____

Statement of Significance/N.R.H.P. Justification: The Hyde Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion a. The canal may also have significance under Criterion c in other areas, but there is nothing of engineering significance in the current project area.

37. Status in an Existing National Register District: N/A

Contributing_____ Non-Contributing_____

38. National Register District Potential yes_____ no__x__ discuss: This is an isolated linear feature.

Resource Number: 5PW194.1
Temporary Resource Number: LAM-8

Management Data Form
(page 4 of 4)

V. MANAGEMENT AND ADMINISTRATIVE DATA

39. Threats to Resource: Water erosion x Wind erosion x Grazing x Neglect ____
Vandalism ___ Recreation ____ Construction x Other (specify): ____
comments: Site located within current ROW for proposed 287 bypass.

40. Existing Protection: None ___ Marked ____ Fenced x Patrolled ____ Access controlled ___
other (specify): ____

41. Local landmark designation: N/A 42. Easement: N/A

43. Management Recommendations: If this resource is to be impacted by the proposed project it should be photo-documented in detail before impacts take place.

VI. DOCUMENTATION

44. Previous Actions Accomplished at the site: none known
    a. Excavations: Test ____ Partial ____ Complete ____ Date(s): ____
    b. Stabilization: Date(s): ____
    c. HABS/HAER Documentation: Date(s) & Numbers: ____
    d. Other: ____

45. Known collections/reports/interviews and other references (list): Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas. Manuscript on file at Denver Public Library, Western History Department.

46. Primary Location of Additional Data: WCRM, Inc., Boulder office

47. State or Federal Permit Number: State #2003-32; BLM C-40308 Collection Authorized: yes ___ no x
Artifact Collection: Yes ___ No X Artifact Repository: ____
Collection Method: Diagnostics ___ Grab Sample ____ Random Sample ___ Transect ___
Other (specify): ____

48. Photograph Numbers: Roll CH2M-2, exp. 11-13 Negatives filed at: WCRM, Inc., Boulder

49. Report Title: An Historical Inventory of the Proposed U.S. 287 Lamar Bypass in Prowers County, Colorado

50. Recorder(s): C. Muniz Date(s): May 14, 2003

51. Recorder Affiliation: WCRM, Inc., PO Box 2326, Boulder, CO 80306
Phone Number: 303-449-1151

NOTE: Please attach a sketch map, a photocopy of the USGS quad. map indicating resource location, and photographs.

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW194.1
2. Temporary Resource Number: LAM-8, Feature 1
3. Resource Name: Hyde Canal segment
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal x Trail_____
   Other (specify): _____
6. Resource Description: 5PW194.1 is a segment of the Hyde Canal located on the northern floodplain of the Arkansas River. The Hyde canal is reported to have been constructed originally by a colony of persons from Switzerland who abandoned the project prior to its completion; the canal was completed by a German named Eberhard Hyde. A decree granted to Hyde in 1887 was for the irrigation of 1,000 acres (Kesler 1986:57-58). At this location the recorded segment measures approximately 89 meters east-west and 31 meters north-south. The canal was holding water when recorded, and is located in a field utilized for cattle grazing; cattle were observed walking and lying in the canal at the time of this recording. The canal prism has a flat bottom and measures approximately 6 meters wide and approximately 70 centimeters in depth. Low levee berms (Features 2 and 3) run east-west along both edges of the canal. Feature 2 is located to the north of the canal and rises approximately 2 meters from the canal prism. Feature 3 is located to the south of the canal and rises approximately 3 meters from the canal prism. Features 2 and 3 are constructed from earth excavated from the canal.

7. Original use: Agricultural irrigation
   Current use: Agricultural irrigation
8. Modifications (describe): none apparent
9. Extent of Resource: Canal and levees continue to the east and west for an unknown distance. Only the portions of the canal and levees present in the project area was recorded at this time.
10. Associated Artifacts: none
11. Associated Features or Resources: Feature 2 = levee, parallels canal to the north. Feature 3 = levee, parallels canal to the south.

Resource Number: 5PW194.1
Temporary Resource Number: LAM-8, Feature 1

Linear Component Form
(page 2 of 2)

III. RESEARCH INFORMATION

12. Architect/Engineer: Original construction reported to have been by a colony of persons from Switzerland. Canal completed by a German named Eberhard Hyde (Kesler 1986:57-58).
Source of information/justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: Original construction reported to have been by a colony of persons from Switzerland. Canal completed by a German named Eberhard Hyde (Kesler 1986:57-58).
Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at DPL, Western History Dept.

14. Date of Construction/Date Range: Late 19th century, 1880s
Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at DPL, Western History Dept..

15. Historical/Archival Data: "The Hyde canal is reported to have been by a colony of persons from Switzerland. No date is available. It is possible that this colony was stricken with some disease -- probably smallpox--and the project was abandoned. This project was completed by a German named Eberhard Hyde and others. A decree granted in 1887 was for the irrigation of 1,000 acres" (Kesler 1986:57-58).16.
Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:
Eligible x Not eligible _____ Need data _____
Is this an official (OAHP) determination? Yes _____ No X Date _____
Is this a field determination? Yes x No _____
Remarks/justification: The Hyde Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion a.

18. Eligibility of the segment being recorded:
Contributing x Non-contributing _____ Not applicable _____
Remarks/justification: This portion of the canal has good integrity and shares the Criterion a significance with the remainder of the canal.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW194.1
2. Temporary Resource Number: LAM-8, Feature 2
3. Resource Name: Hyde Canal levee
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal_____ Trail_____
   Other (specify): Constructed earthen levee

6. Resource Description: This is a segment of the Hyde Canal located on the northern floodplain of the Arkansas River. Low levee berms (Features 2 and 3) run east-west along both edges of the canal. Feature 2 is located to the north of the canal and rises approximately 2 meters from the canal prism. Feature 2 is constructed from earth excavated from the canal and measures approximately 8 meters wide at its base.

7. Original use: Agricultural irrigation / flood control
   Current use: Agricultural irrigation / flood control

8. Modifications (describe): none apparent

9. Extent of Resource: Canal and levee continue to the east and west for an unknown distance. Only the portion of the canal and levee present in the project area was recorded at this time.

10. Associated Artifacts: none
11. Associated Features or Resources: Feature 1 = Hyde canal. Feature 3 = levee, parallels canal to the south.

Resource Number: 5PW194.1
Temporary Resource Number: LAM-8, Feature 2

Linear Component Form
(page 2 of 2)

III. RESEARCH INFORMATION

12. Architect/Engineer: Original construction reported to have been by a colony of persons from Switzerland. Canal completed by a German named Eberhard Hyde (Kesler 1986:57-58).
Source of information/justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: Original construction reported to have been by a colony of persons from Switzerland. Canal completed by a German named Eberhard Hyde (Kesler 1986:57-58).
Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at DPL, Western History Dept.

14. Date of Construction/Date Range: Late 19th century, 1880s
Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at DPL, Western History Dept..

15. Historical/Archival Data: "The Hyde canal is reported to have been by a colony of persons from Switzerland. No date is available. It is possible that this colony was stricken with some disease -- probably smallpox--and the project was abandoned. This project was completed by a German named Eberhard Hyde and others. A decree granted in 1887 was for the irrigation of 1,000 acres" (Kesler 1986:57-58).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

17. Eligibility of entire resource:
Eligible x Not eligible _____ Need data _____
Is this an official (OAHP) determination? Yes _____ No X Date _____
Is this a field determination? Yes x No _____
Remarks/justification: The Hyde Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion a.

18. Eligibility of the segment being recorded:
Contributing x Non-contributing _____ Not applicable _____
Remarks/justification: This portion of the canal has good integrity and shares the Criterion a significance with the remainder of the canal.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

This form should be completed for each linear resource or linear segment. Use this form in conjunction with the *Management Data Form*. Call OAHP staff (303-866-5216) prior to assigning a resource number.

I. RESOURCE IDENTIFICATION

1. Resource Number: (include point number, if applicable): 5PW194.1
2. Temporary Resource Number: LAM-8, Feature 3
3. Resource Name: Hyde Canal levee
4. Record of: Entire resource _____ Segment X

II. RESOURCE DESCRIPTION

5. Resource Type: Road_____ Railroad_____ Ditch/Canal_____ Trail_____
   Other (specify): Constructed earthen levee
6. Resource Description: This is a segment of the Hyde Canal located on the northern floodplain of the Arkansas River. Low levee berms (Features 2 and 3) run east-west along both edges of the canal. Feature 3 is located to the south of the canal and rises approximately 3 meters from the canal prism. Feature 3 is constructed from earth excavated from the canal and measures between 12-15 meters wide at its base.
7. Original use: Agricultural irrigation / flood control
   Current use: Agricultural irrigation / flood control
8. Modifications (describe): none apparent
9. Extent of Resource: Ditch and levees continue to the east and west for an unknown distance. Only the portions of the ditch and levees present in the project area was recorded at this time.
10. Associated Artifacts: none
11. Associated Features or Resources: Feature 2 = levee, parallels ditch to the north. Feature 1 = Hyde canal segment.

Resource Number: 5PW194.1
Temporary Resource Number: LAM-8, Feature 3

Linear Component Form
(page 2 of 2)

III. RESEARCH INFORMATION

12. Architect/Engineer: Original construction reported to have been by a colony of persons from Switzerland. Canal completed by a German named Eberhard Hyde (Kesler 1986:57-58).
Source of information/justification: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at Denver Public Library, Western History Department.

13. Builder: Original construction reported to have been by a colony of persons from Switzerland. Canal completed by a German named Eberhard Hyde (Kesler 1986:57-58).
Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at DPL, Western History Dept.

14. Date of Construction/Date Range: Late 19th century, 1880s
Source of Information: Kesler, H.H. (1986) *Lamar, Colorado, 1886-1986, 100 All-American Years*. Kes-Print, Shawnee Mission, Kansas, pp 57-58. Manuscript on file at DPL, Western History Dept..

15. Historical/Archival Data: "The Hyde canal is reported to have been by a colony of persons from Switzerland. No date is available. It is possible that this colony was stricken with some disease -- probably smallpox--and the project was abandoned. This project was completed by a German named Eberhard Hyde and others. A decree granted in 1887 was for the irrigation of 1,000 acres" (Kesler 1986:57-58).

16. Prehistoric Cultural Affiliation: none

IV. MANAGEMENT RECOMMENDATIONS

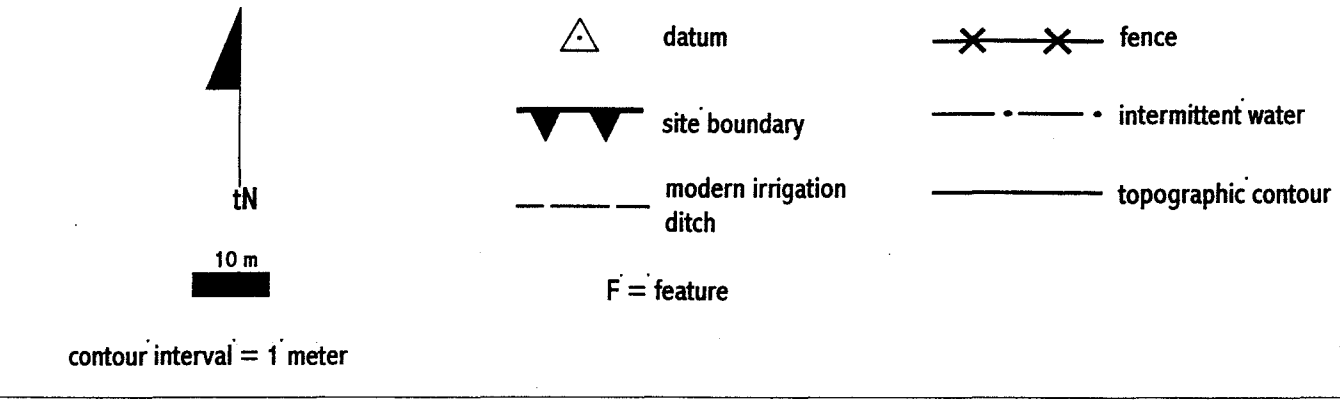
17. Eligibility of entire resource:
Eligible x Not eligible _____ Need data _____
Is this an official (OAHP) determination? Yes _____ No X Date _____
Is this a field determination? Yes x No _____
Remarks/justification: The Hyde Canal has significant associations with the early agricultural development and water resource utilization in the Lamar area and thus is considered eligible under Criterion a.

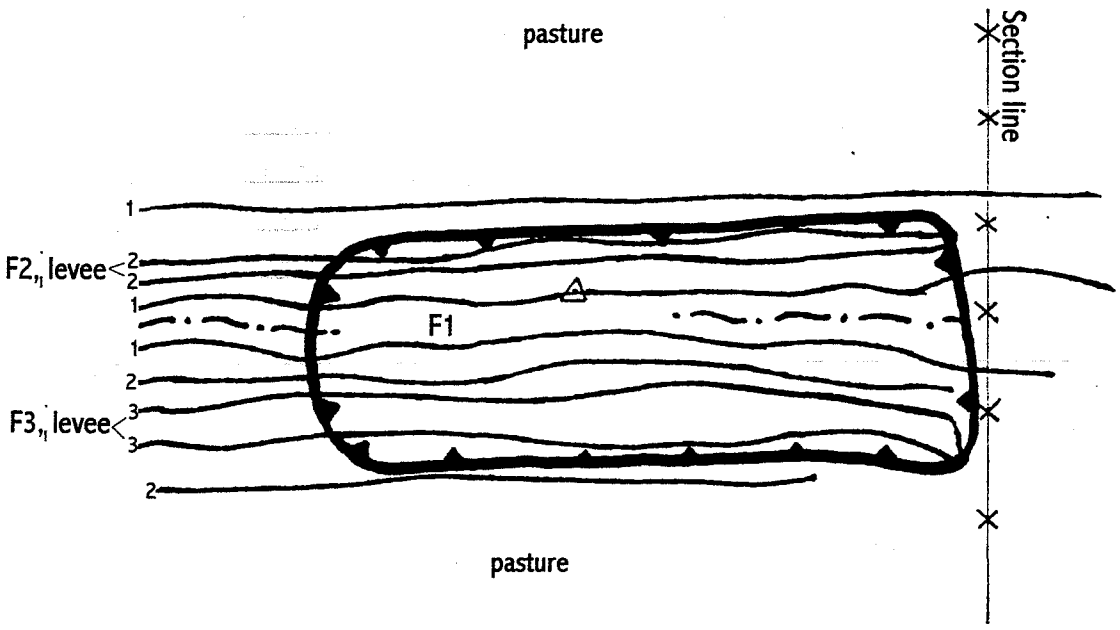
18. Eligibility of the segment being recorded:
Contributing x Non-contributing _____ Not applicable _____
Remarks/justification: This portion of the canal has good integrity and shares the Criterion a significance with the remainder of the canal.

19. Recorder(s): C. Muniz 20. Date(s): May 14, 2003

Colorado Historical Society
Office of Archaeology and Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

5PW194.1 Hyde Canal

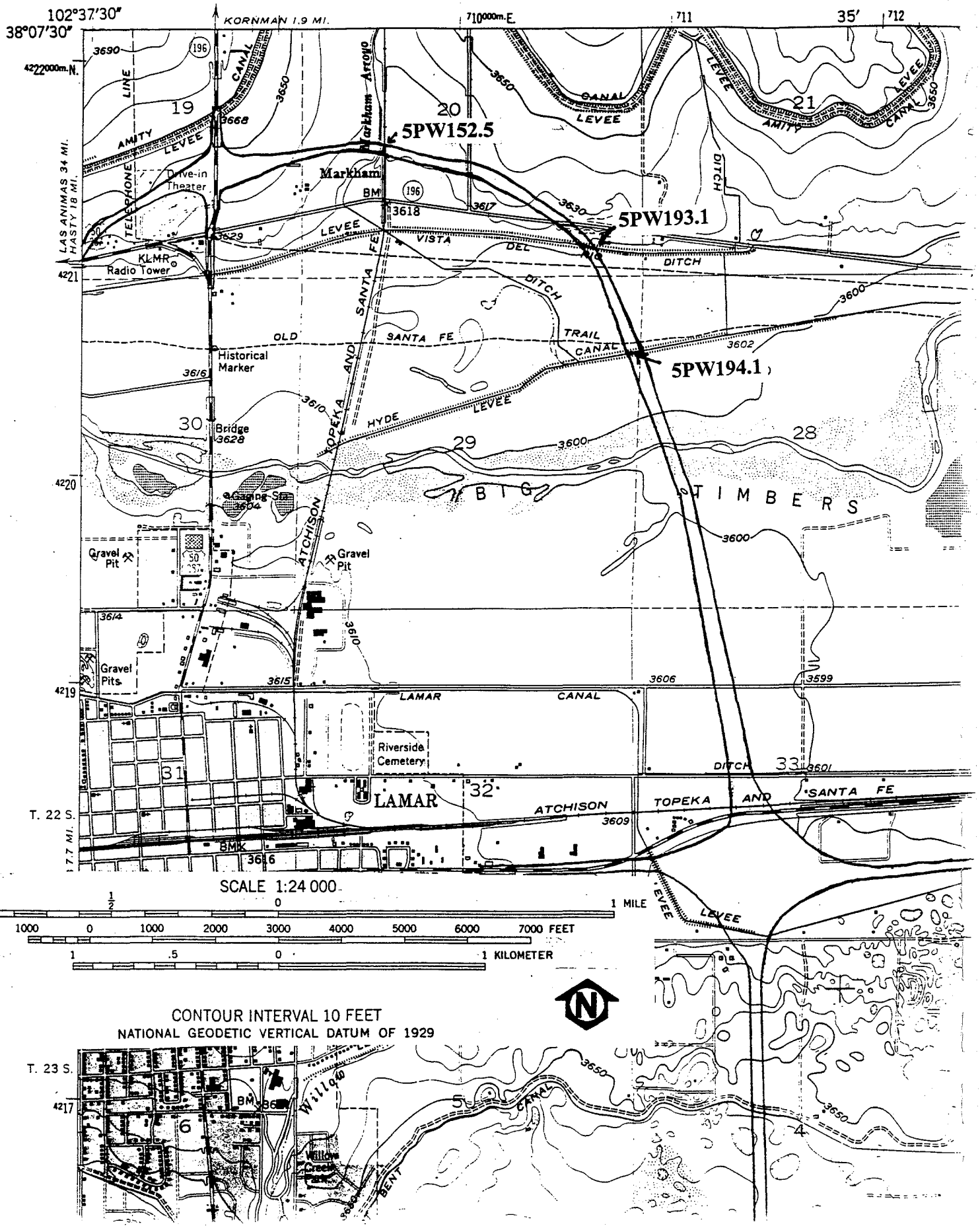




5460 II NW (WILEY)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Lamar East Quadrangle 1953 (Photorevised 1979)
6th PM T22S, R46W, Secs. 19, 20, 28, 29, 32, 33



5PW194.1 Hyde Canal, view east. Feature 1, canal prism, is holding water. Feature 2 is to left (north) of F1, Feature 3 is to right (south) of F1.

5PW194.1 Hyde Canal segment, view west.

5PW194.1 View southeast at Features 2 and 3 (levees), visible across center of photo.

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

Environmental Programs Branch
4201 East Arkansas Ave.
Denver, Colorado 80222
(303) 757-9259

DATE: December 9, 2003

TO: Dick Annand **Attn:** Judy DeHaven

FROM: Dan Jepson

SUBJECT: Addendum Archaeological Clearance, Project C 02871-026, Lamar Bypass EA (11637)

Attached for your files is the addendum archaeological resources inventory report for the project referenced above. In October and November 2003, Centennial Archaeology, Inc. conducted additional field reconnaissance within the Lamar Bypass Area of Potential Effect (APE), surveying those areas not previously walked as a result of landowner access issues and/or expansion of the APE subsequent to the original work.

No archaeological resources were identified during the survey. However, one previously recorded site–a Native American burial (5PW79)–is located on private land south of the Lamar Canal, within the proposed US 50 interchange APE. The site was discovered in 1996 by the landowner during earthmoving activities, and the remains were excavated, analyzed and reburied in the same location by staff from the Colorado Office of Archaeology and Historic Preservation that same year. The Southern Cheyenne Tribe participated in the reburial process. The site was determined not eligible for listing on the National Register of Historic Places, an evaluation with which CDOT concurs. However, the locality remains sacred to the Southern Cheyenne and other regional tribes, and as such avoidance is the recommended alternative during the bypass project. Given its location adjacent to a residence south of the canal, it is my understanding that 5PW79 will be avoided during all phases of bypass construction.

In consultation with the State Historic Preservation Officer, we have determined that there will be no historic properties affected by the project. If engineering plans change such that 5PW79 is endangered, this clearance will need to be revisited. The recommendation for backhoe trenching along the centerline of the proposed bypass in proximity to the Arkansas River, as outlined in the initial March 17, 2003 clearance memo to your office, remains valid and in effect. Otherwise clearance to proceed is recommended.

Attachment

cc: RF/CF
D. Draper (CH2M HILL)

STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION
Environmental Programs Branch
4201 East Arkansas Avenue
Denver, Colorado 80222
(303) 757-9259

December 1, 2003

Ms. Georgianna Contiguglia
State Historic Preservation Officer
Colorado Historical Society
1300 Broadway
Denver, CO 80203

Dear Ms. Contiguglia:

SUBJECT: Addendum Archaeological Survey Report, CDOT Project C 02871-026, Lamar Bypass EA

Enclosed for your review is an addendum archaeological resources survey report for the CDOT project referenced above. Initial work associated with this undertaking was completed last winter, and the results were submitted to you in report form in March 2003. Subsequent to that time the Area of Potential Effect (APE) for the project was substantially enlarged such that additional inventory was required. Centennial Archaeology, Inc., under contract to CDOT, conducted the original survey and also inventoried the additional acreage documented in the accompanying report.

The supplemental inventory, encompassing 1,041 acres, failed to identify any archaeological remains. One known Native American burial site (5PW79) is located within the APE. Excavated by OAHP staff in the mid-1990s and reinterred in nearly the same location, 5PW79 is located adjacent to a private residence that will not be affected by the bypass project. The interested Native American community has been notified of the presence of the site and CDOT's intention to avoid it. The site was not revisited by Centennial personnel during the recent survey. No historic properties will be affected by the proposed US Highway 287 bypass. (Please note that this is specific to archaeological resources, as historic resources will be reported separately.)

We request your concurrence with the "no historic properties affected" recommendation outlined above for 5PW79. If you have questions or require additional information about the project in general or the additional survey specifically, please contact CDOT Staff Archaeologist Dan Jepson at (303)757-9631.

Very truly yours,

for Brad Beckham, Manager
Environmental Programs Branch

Enclosure

cc: RF/CF

I concur* _____ Date Dec. 3, 03
State Historic Preservation Officer

*Conditional concurrence. Please confirm that this gravesite is fenced. In 1996, the landowners (Mr. & Mrs Stegman) were attempting to accomplish this. (Information is on file as OAHP Burial Case 118).