

**A CULTURAL RESOURCE INVENTORY OF
PORTIONS OF THE ABIATHAR PRESCRIBED BURN UNIT,
YELLOWSTONE NATIONAL PARK**

By

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Prepared for

National Park Service
Rocky Mountain Region
Denver, Colorado

Submitted by

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REPORT CERTIFICATION

I certify that A Cultural Resource Inventory of Portions of the Abiathar Prescribed Burn Unit, Yellowstone National Park, by Daniel Eakin, 2008 has been reviewed against the criteria contained in 43 CFR Part 7(a) (1) and upon recommendation of the Park Archeologist has been classified as AVAILABLE.

Christa Schmutz for S. Lewis
Superintendent
Yellowstone National Park

02/01/08
Date

Classification Key Words:

"Available"--making the report available to the public meets the criteria of 43 CFR 7.18(a) (1).

"Available (deletions)"--Making the report available with selected information on site locations and/or site characteristics deleted meets the criteria of 43 CFR 7.18(a) (1). A list of pages, maps, paragraphs, etc, that must be deleted for each report in this category is attached.

"Not Available"--Making the report available does not meet the criteria of 43 CFR (a) (1).

ABSTRACT

A cultural resource inventory of portions of the Abiathar Prescribed Burn Unit within Yellowstone National Park was performed by the Office of the Wyoming State Archaeologist during July and August, 2007. The Abiathar Prescribed Burn Unit consists of 1793 acres of mainly timbered, mountainous topography, bounded on the east by Abiathar Peak and on the north and west by Soda Butte Creek. The project inventoried approximately 481 acres (27%) of this area and focused on settings having sufficient ground visibility for surface archaeological site identification. The project resulted in reinvestigation of two previously recorded historic sites (24YE0178, 48YE873), the investigation of one previously unrecorded historic site (the Cooke City Miner's Wagon Road, 48YE1721), and one prehistoric isolate.

Site 24YE0178 is a log bridge abutment. Site 48YE873 is a historic trash and debris scatter. Both sites are considered ineligible for nomination to the National Register of Historic Places. The Cooke City Miner's Wagon Road (48YE1721) functioned as the primary transportation route between the Cooke City/Clarks Fork, Montana/Wyoming mines and the supply centers of the Upper Yellowstone Valley from at least 1877 to 1895. The wagon road is recommended as eligible for nomination to the National Register of Historic Places. Avoidance and additional investigation of the contributing segment is recommended.

ACKNOWLEDGMENTS

The successful completion of this project was expedited by a number of Yellowstone National Park staff, including Dr. Ann Johnson, Mr. Brian Chan, and Mr. John Reynolds. Special thanks goes out to Mr. Bob Flather and Mr. Mike Robinson for their knowledge, interest, and help in the identification, documentation and interpretation of the Cooke City Miner's Wagon Road. Lindsey Lafayette drafted project maps and assisted in other GPS related tasks. Dale Wedel provided several references and his valued opinion concerning several historic artifacts. Lavonne Haskins assembled the final report.

TABLE OF CONTENTS

Abstract	ii
Acknowledgments	iii
List of Figures	v
List of Tables	vii
Survey Report Cover Page	1
Introduction	4
Environmental Setting	4
Project Area Description	6
Field Methods	14
Survey and Site Recording	14
File Search Results	15
Results	17
Previously Recorded Sites -	
24YE0178	17
48YE873	20
Trash Scatter	20
Rubble Pile	20
Machinery	20
Newly Recorded Sites -	
48YE1721	23
Wagon Road	23
Stream Ford Intersection and Detours	28
Stone Quarry	32
Benchmark Tree	32
Food Can Scatter and Dump	32
Stone Rubble Piles	35
Cribbed Log Bridge Pier	35
Isolated Artifacts	38
Blaze Trees and Axe-Trimmed Branches	41
Isolated Resources	46
Isolated Resource 1	46
Management Summary	48
References Cited	49

LIST OF FIGURES

1.	Map of Yellowstone National Park showing location of Abiathar Prescribed Burn Unit	5
2.	USGS Topographic Map showing project boundaries, areas surveyed, and cultural resource sites	7
3.	Project area photographs	9
4.	Project area photographs	11
5.	Project area photographs	12
6.	Project area photographs	13
7.	Map of site 24YE0178	18
8.	Photographs of 24YE0178	19
9.	Maps of 48YE873	21
10.	Photographs of 48YE873	22
11.	Map of site 48YE1721, The Cooke City Miner's Wagon Road	24
12.	Photographs of site 48YE1721	25
13.	Photographs of site 48YE1721	26
14.	Photographs of site 48YE1721	27
15.	Inset map of 48YE1721 showing locations of the stone quarry, benchmark tree, food can scatter and dump, and stream ford intersections	29
16.	Photographs of site 48YE1721	30
17.	Inset map of 48YE1721 showing detours 1 and 2 and associated features	31
18.	Photographs of site 48YE1721	33
19.	Photographs of site 48YE1721	34
20.	Photographs of site 48YE1721	36
21.	Photographs of crib log bridge pier at site 48YE1721	37

LIST OF FIGURES

22.	Photographs of isolated artifacts at site 48YE1721	39
23.	Photographs of isolated artifacts at site 48YE1721	40
24.	Photographs of blaze tree and axe-limbed tree	42
25.	USGS Map showing northeast corner of "Canyon Sheet" and location of Cooke City Miner's Wagon Road (48YE1721). Area surveyed in 1884-1885 (from Hague et al. 1896)	44
26.	USGS photograph, Soda Butte Creek, view west toward Barronette Peak, circa 1890 (from Hague et al. 1899. J.P. Iddings photographs)	45
27.	Photographs of Isolated Resource 1	47

LIST OF TABLES

1. Summary of sites in file search 15

2. Artifacts recorded in trash scatter, 48YE873 20

3. Food can scatter and dump at 48YE1721 35

4. Isolated artifacts observed at 48YE1721 38

SURVEY REPORT COVER PAGE

Consultant Project No: WY-18-07	Agency No: UWY-71
Review and Compliance No:	Cultural Records Office No: 55599

AUTHOR(S): **Daniel H. Eakin**

REPORT TITLE (include client name, undertaking name, survey project type, and report number): **A CULTURAL RESOURCE INVENTORY OF PORTIONS OF THE ABIATHAR PRESCRIBED BURN UNIT, YELLOWSTONE NATIONAL PARK.**

DATE OF REPORT: (MO/DY/YR) **February 14, 2008**

LEAD AGENCY (e.g., BLM ADMINISTRATIVE UNIT): **National Park Service, Rocky Mountain Region**

SURVEY ORGANIZATION/NAME: **Office Wyoming State Archaeologist**

FEDERAL PERMIT NO. (e.g., BLM CULTURAL RESOURCE USE PERMIT): **National Park Service Research Permit Number YELL-2002-SCI-1850**

DESCRIPTION OF UNDERTAKING: **Fuels Reduction**

SURVEY METHODS:

Standard 30 Meter Transects Non-Standard (Describe in body of report)
Survey Width (Linear Projects Only):

COUNTY(IES): **Park**

USGS QUAD MAPS (NAME, DATE): **Abiathar Peak Quadrangle (1991), Cutoff Mountain Quadrangle (1987)**

LANDOWNER: * BLM BuREC USFS NPS PRIVATE STATE USFWS
 OTHER (Specify): **Yellowstone National Park**

LEGAL DESCRIPTION (T/R/Sec):

T58N R109W; E½/E½/SE, Section 20; most of Section 21; W½, W½NE, W½NW/SE, Section 22; NW, N½NW/SW, Section 27; NW, NE, SW, N½SE, Section 28; E½NE, E½SW/NE, SE, Section 29; N½N½NE, NE/NE/NW, Section 32; NW/NW/NW Section 33.

T9S R14E; SE/SE/SW/SE, Section 31

Federal Surface	Block: 481	Linear:	Total: 481	
Non-Federal Surface	Block:	Linear:	Total:	Total: 481

FILE SEARCH DATE(S): **6/27/07**

FIELD WORK DATE(S) (MO/DY/YR): **7/16-25, 8/29/07**

FIELD PERSONNEL: + **D. Eakin, J. Eakin, M. Robinson**

Survey Results: No cultural Material; **1** Isolated Resource(s); **3** Site(s)

+ **attach continuation sheets for additional data * check all that pertain**

SITE SUMMARY TABLE (Field Agent Use)

Smithsonian Number	24YE0178	48YE873	48YE1721	48YE1721
Brief Site/Isolate Type	Bridge Abutment	Historic Trash Dump	Historic Wagon Road Segment 1	Historic Wagon Road Segment 2
Previously recorded (Y/N)?	Y (NU-001, 48YE873)	Y	Y (48YE821)	N
Previous Eligibility	U	U	U	
Previous SHPO Concurrence (Y/N)?	NA	N	Y	
Current Eligibility	NE	NE	E	E
NRHP Criteria (A,B,C, or D)			A, C	A, C
Contributing Portion (Y/N)?	N		No	Yes
Current Project Effect?	U	No	None	Yes
Proposed Mitigation	None		None	Avoid
Land Owner	NPS	NPS	NPS	NPS
Township	9S	58N	58N	58N
Range	14E	109W	109W	109W
Section	31	22	29	20, 21, 22
1/4' s	SE/SE/SW/SE	NE/NW/NE/NW, NW/NE/NE/NW	E $\frac{1}{2}$ NW/NE/NE, SW/NE/NE, SE/SE/NW/NE, E $\frac{1}{2}$ NE/SW/NE, SE/SW/NE, SE/SW/SW/NE, W $\frac{1}{2}$ NW/SE Anchor NE	SE/NE/SE/SE, SE/SE/SE S.20 Anchor SE; N $\frac{1}{2}$ NE/NE, NW/SW/NE/NE, S $\frac{1}{2}$ NW/NE, NW/SW/NE, SE/NE/SE/NW, SE/SE/NW, NE/NE/NE/SW, W $\frac{1}{2}$ NE/SW, S $\frac{1}{2}$ NW/SW, E $\frac{1}{2}$ NW/SW/SW S.21 Anchor NE; N $\frac{1}{2}$ SW/NE/NW, NE/SE/NW/NW, N $\frac{1}{2}$ NW/NW S. 22 Anchor NW.
Comments				
*User may add additional optional attributes from this point				

National Register of Historic Places eligibility: E (Eligible); NE (Not eligible); U (Unevaluated)

Previous Eligibility (Determination): R-Listed on NRHP Register; K-Eligible by Keeper; C-Eligible-SHPO/Agency concurrence; A-Eligible Agency; E-Eligible-Consultant U-Eligibility Unknown; N-Not Eligible

Effect: NO for sites with no effect; NAE for site with no adverse effects; E for sites with adverse effect; U for Unknown

Proposed mitigation: e.g. data recovery, avoidance, fencing, sign, etc.

***ATTACH CONTINUATION SHEETS AS NEEDED/EXPAND, ADD OR DELETE INDIVIDUAL SITE COLUMNS AS NECESSARY;**

Please list sites in alphabetical/numeric order first and isolates after sites.

Note: Information about location, character, or ownership of historic properties in the report may not be disclosed to the public unless authorized by the appropriate federal agency and/or the Wyoming State Historic Preservation Office.

ISOLATED RESOURCE SUMMARY TABLE (Field Agent Use)

Isolated Find Number	IR #1
Brief Site/Isolate Type	Tertiary Flake
Previously recorded (Y/N)?	N
Previous Eligibility	N
Previous SHPO Concurrence (Y/N)?	N
Current Eligibility	N
NRHP Criteria (A,B,C, or D)	
Contributing Portion (Y/N)?	N
Current Project Effect?	N
Proposed Mitigation	N
Land Owner	NPS
Township	58N
Range	109W
Section	20
1/4' s	NW/NW/NE/SE/SE
Comments	Recommend post-Burn Locality Check
*User may add additional optional attributes from this point	

National Register of Historic Places eligibility: E(Eligible); NE (Not eligible); U (Unevaluated)

Previous Eligibility (Determination): R-Listed on NRHP Register; K-Eligible by Keeper; C-Eligible-SHPO/Agency concurrence; A-Eligible Agency; E-Eligible-Consultant U-Eligibility Unknown; N-Not Eligible

Effect: NO for sites with no effect; NAE for site with no adverse effects; E for sites with adverse effect; U for Unknown

Proposed mitigation: e.g. data recovery, avoidance, fencing, sign, etc.

***ATTACH CONTINUATION SHEETS AS NEEDED/EXPAND, ADD OR DELETE INDIVIDUAL SITE COLUMNS AS NECESSARY;**
Please list sites in alphabetical/numeric order first and isolates after sites.

Note: Information about location, character, or ownership of historic properties in the report may not be disclosed to the public unless authorized by the appropriate federal agency and/or the Wyoming State Historic Preservation Office.

INTRODUCTION

This report details an archaeological reconnaissance in northeast Yellowstone National Park. The project is an outgrowth of a cooperative agreement between the National Park Service, Rocky Mountain Region, the Rocky Mountain Cooperative Ecosystem Studies Unit (RM-CESU Cooperative Agreement Number H1200040001) and the University of Wyoming. Office of the Wyoming State Archaeologist (OWSA) involvement is made possible through a Memorandum of Understanding and subcontract between the University of Wyoming and OWSA, Laramie, Wyoming. OWSA project personnel included David G. Eckles (principal investigator), Daniel H. Eakin (Project Director), and Julie R. Eakin (project technician). Bob Flather and Mike Robinson (NPS Volunteers) participated in the August 29 on-site and field check. Fieldwork was conducted from July 16-25, and August 29, 2007.

As outlined in the scope of work for this project (Johnson 2007), a section 110 reconnaissance and pedestrian archaeological inventory was to be conducted within the Abiathar Prescribed Burn Unit and adjacent areas if time permitted. The purpose of this work was to obtain a sample of archaeological resources within the environmental zones contained within the Abiathar Prescribed Burn Unit, and incorporate the archaeological site data for preliminary modeling and input into future high altitude work, and for future compliance with NEPA and the National Historic Preservation act, as amended, for a possible fuels reduction program in the Soda Butte Creek drainage. It was anticipated that archaeological sites would be absent or not visible in heavily forested settings.

ENVIRONMENTAL SETTING

The Abiathar Prescribed Burn Unit is located in the northeast corner of Yellowstone National Park, along the western margins of the Absaroka Range (Figure 1). The Absaroka Range is located in northwestern Wyoming and south-central Montana and is the erosional remnant of a volcanic plateau formed from volcanic eruptions during the middle Eocene, 38-53 million years ago (mya). The range is characterized by rugged, mountainous terrain covering about 23,310 square km (9000 sq mi) and varying from 1830 m (6000 ft) to 4006 m (13,140 ft) in elevation. The Absaroka Range is bordered on the east by the Bighorn Basin, on the northeast by the Beartooth Mountains, on the northwest by the Gallatin Range, on the west by the Yellowstone Plateau, on the southwest by Jackson Hole, and on the south by the Washakie and Owl Creek uplifts (Sundell 1993).

Andesitic lava and fused volcanoclastics of the Washburn and Sunlight groups comprise the dominant

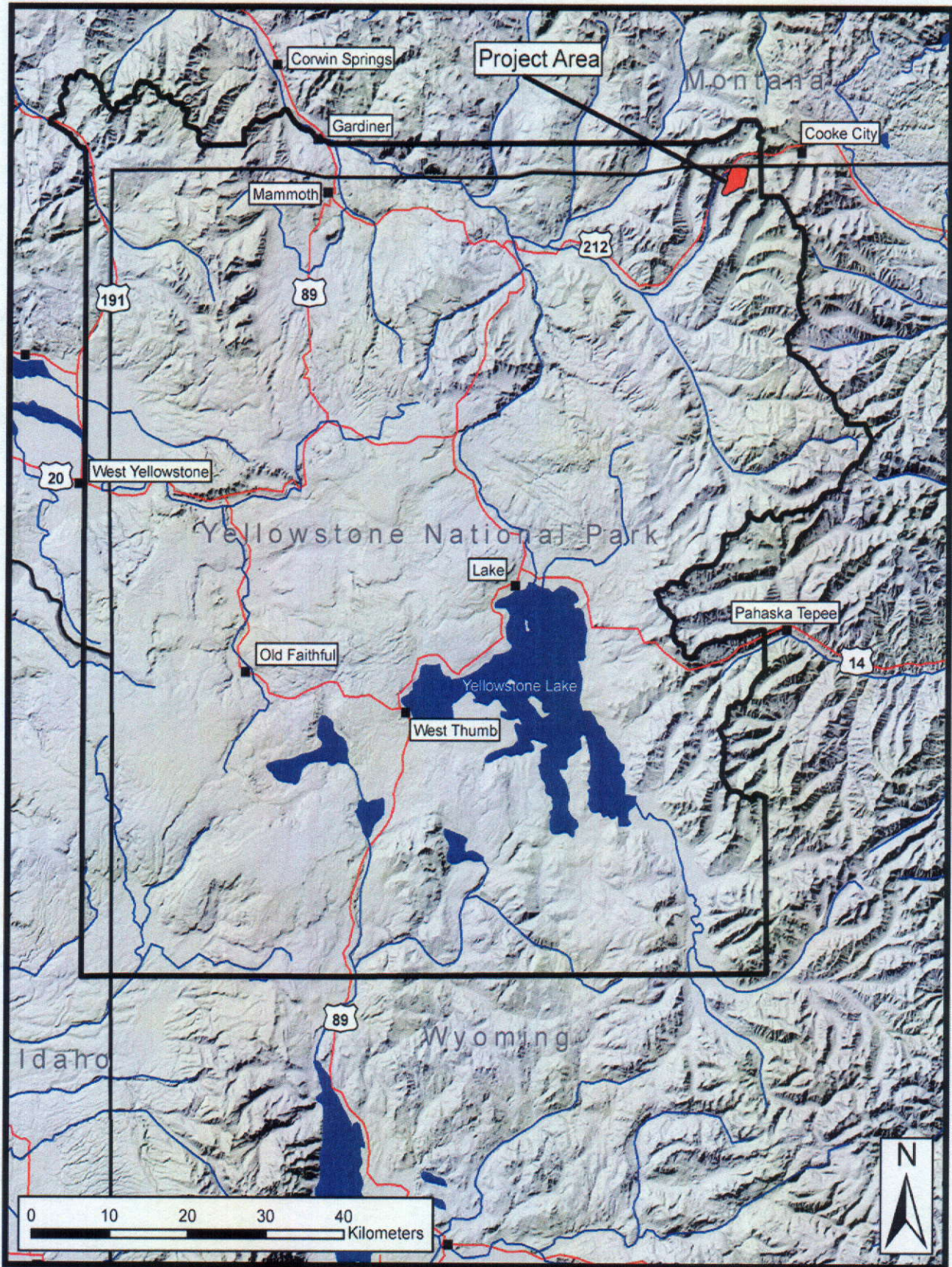


Figure 1. Map of Yellowstone National Park showing location of Abiathar Prescribed Burn Unit.

rock type in the project area (Love and Christiansen 1985). These rocks form a visible lithologic contact with earlier Paleozoic rocks exposed on the western flanks of Abiathar Peak. The topographic relationships and exposed contact zones reflect Laramide orogenic events of the Late Cretaceous and earliest Tertiary, the Eocene events forming the Absaroka Volcanic Plateau, Miocene epeirogenic uplift, and Pleistocene glaciation (Mears 1993).

Prior to Absaroka volcanism, Laramide mountain building, characterized by low angle reverse faulting and broad, Precambrian-cored, flat-topped anticlinal folds, formed the primary orogenic features in what is today northwest Wyoming and south-central Montana (Blackstone 1988). The anticlines extended upward from, at or near sea level and deformed mainly Precambrian, Paleozoic, and Mesozoic rock. Locally, the Beartooth, Gallatin, Rattlesnake, and Owl Creek uplifts outlined much of the Absaroka Basin. These uplifts would later form the margins of the Absaroka volcanic field, where such exposures today reveal various contact zones between the Eocene volcanics, collectively termed the Absaroka Volcanic Supergroup (Smedes and Prostka 1972) and the earlier, usually sedimentary rock.

Much later in time the worldwide climatic period known as the Pleistocene (2 mya-12,000 B.P.) resulted in widespread down-cutting and regional erosion in the Middle Rocky Mountains (Mears 1974). During this period the area that is today Yellowstone National Park and the surrounding region experienced repeated glaciation (Pierce 1979). The present landscape of the project, characterized by a combination of both Paleozoic sedimentary rock, Eocene volcanoclastics, high, jagged peaks, deeply incised canyons, well defined summit and sub-summit surfaces, as well as numerous glacial land forms, are a product of these glacial cycles. The Soda Butte Creek bottoms, as well as tributary streams, are floored by Quaternary Alluvium and glacial deposits (Love and Christiansen 1985). Though not mapped, both glacial erratics and Quaternary landslide deposits were encountered off the north and west flanks of Abiathar Peak.

Project Area Description

The Abiathar Prescribed Burn Unit is located within the northeast corner of Yellowstone National Park, on the northern and western flanks of Abiathar Peak (Figure 2). To the east, the project is bound by a north-flowing, unnamed drainage that heads along the rugged and steep north flank of Abiathar Peak (3330 m, 10,928 ft) at elevations approaching 2834 m (9300 ft), and flows into Soda Butte Creek on the Wyoming/Montana state line at an elevation of 2219 m (7280 ft). From the Soda Butte Creek confluence the north project boundary extends westward along the state line until its juncture with the Northeast Entrance Road (US Highway 212). The highway then forms the west project boundary for a distance of approximately 3.5 km (2.2 mi) southwest, to where the Northeast Entrance Road crosses another unnamed tributary of Soda Butte Creek. This unnamed drainage marks the south project boundary and has cut a deep,

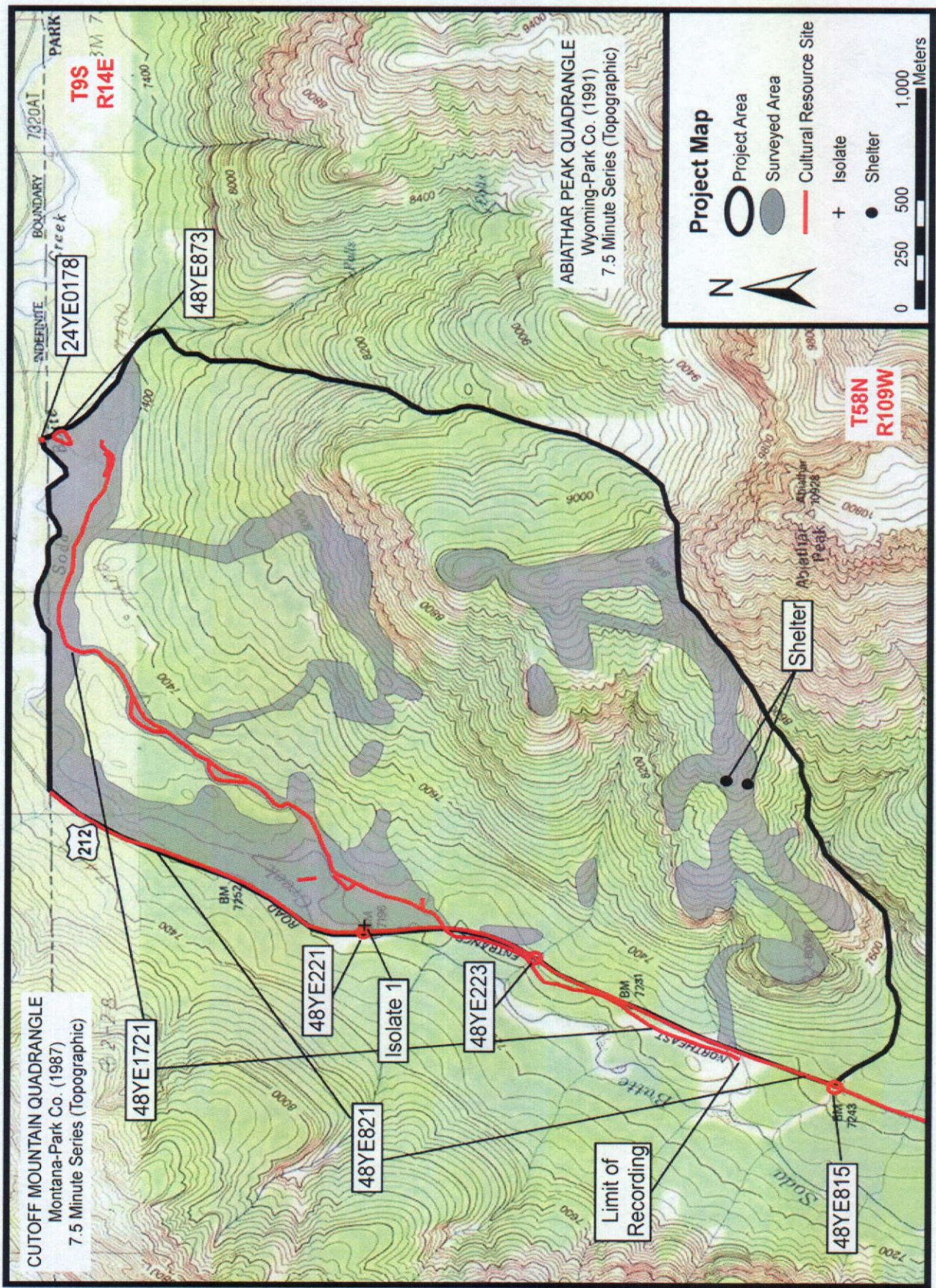


Figure 2. USGS Topographic Map showing project boundaries, areas surveyed, and cultural resource sites.

northeast trending canyon that extends up the steep and rugged west flank of Abiathar Peak to head at 2804 m (9200 ft). The project boundary then crosses a dividing ridge at an elevation of 2865 m (9400 ft) to the head of the previously mentioned un-named drainage, which then flows to its confluence with Soda Butte Creek on the Wyoming/Montana state line.

The project area is within the Soda Butte Creek Valley. Soda Butte Creek and its tributaries drain a portion of the northeast corner of Yellowstone National Park. Soda Butte Creek flows into the Lamar River, a major tributary of the Upper Yellowstone, approximately 19 km (11.5 mi) down-valley from the project. The project area includes several distinct environmental zones which provide habitat for a number of species. Deer (*Odocoileus hemionus*), elk (*Cervus elaphus*), moose (*Alces alces shirasi*), mountain goat (*Oreamnos americanus*), bison (*Bison bison*), black bear (*Ursus americanus*), grizzly bear (*Ursus arctos*), gray wolf (*Canis lupus*), coyote (*Canis latrans*), mountain lion (*Felis concolor*), beaver (*Castor canadensis*), and pica (*Ochotona princeps*), as well as a variety of other wildlife species currently inhabit the project.

A narrow strip of the north and northwest portion of the project lies within the Soda Butte Creek bottoms. The majority of this flood plain ecotone is composed of boggy substrate and mesic adapted species such as willow (*Salix* sp.), sedge (*Carex* spp.), horsetail (*Equisetum* spp.), water birch (*Betula* sp.), and spruce (*Picea* sp.) along with various grasses and shrubs (Figure 3). Some sagebrush (*Artemisia* sp.) steppe and evergreen forest covers better-drained surfaces although these settings are relatively uncommon. Except for the few instances of sagebrush, visibility was poor. Marginal flood plain settings are also present, though are usually more xeric and support limited stands of sagebrush (*Artemisia* sp.) along with various grasses including Idaho fescue (*Festuca idahoensis*) and wheatgrass (*Agropyron* sp) and some lodgepole pine (*Pinus* sp.) on alluvial fans.

One high-elevation talus field situated beneath the vertical cliffs on the west flank of Abiathar Peak was inspected for this project (Figure 2). Access to the talus field was determined by consulting the 7.5' quadrangle and following what appeared to be the least difficult terrain with necessary adjustments made en route. The ingress and egress routes crossed steep landslide deposits characterized by spruce-fir forest (*Picea engelmannii*, *Pseudotsuga menziesii*) and large Paleozoic limestone or dolomite blocks calved from the cliff scarps on western flanks of Abiathar Peak. The porosity associated with this substrate has given rise to springs that feed isolated meadows, bogs, and ponds and host a diversity of unique micro-habitats often associated with a fern and sphagnum moss covered floor, or mesic vegetative communities similar to those along Soda Butte Creek (Figure 3). Several deer and moose were observed in and around these areas, as well as sign of bear and small predators. Several situations were observed along the route where large blocks of Paleozoic rock mimic rock shelter settings, but none of these localities were associated with cultural remains.



Soda Butte Creek bottoms.



Landslide slope microhabitat.

Figure 3. Project area photographs.

As predicted, ground visibility was poor (0%) in the timbered settings and in boggy areas, but improved in meadows and the few areas containing sagebrush (30%). Very little terrain suitable for habitation was present over the route. The northern arm of this route crossed through a 1970s or early 1980s burn.

The talus field is largely devoid of vegetation and is composed of angular to sub-angular rock clasts (Figure 4) that radiate from a series of coalescing cones situated at the base of chutes worn into the overlying cliffs. The field resides on or about the same elevation (8200 ft) as outcrops of upper Cambrian (i.e., Gallatin, Gros Venture) age, although these were largely hidden from view by debris. Immediately above the talus field, Ordovician Bighorn Dolomite, Missippian Madison limestone, and Pennsylvanian Amsden shale formations are in plain view, with the Eocene volcanic contact visible near the top of the sequence (Figure 4). Unmodified chert nodules were observed infrequently in the talus field (Figure 5). The nodules probably originated in either the Bighorn or Madison formations. Even though toolstone quarries have been noted on the opposite side of the Soda Butte Creek Valley in rock of similar age (Ann Johnson, Archaeologist, Yellowstone National Park, Personal Communication), no evidence of quarrying or use of the naturally occurring cherts was observed in this area. Several rock shelter localities were located at the base of the vertical cliffs, although these were in exceedingly dry, exposed, and relatively harsh settings (Figure 5). No evidence for any human activity was observed in or around the talus field. No sites of any kind were found.

In addition to the talus field, several high-elevation ridges were inspected (Figure 6). Both the talus field and the ridges share certain topographic and environmental characteristics with other areas in Wyoming where native groups practiced the construction and use of high elevation animal traps (see Frison et al. 1990, Eakin 2007). Access was attained by following a series of interconnecting, non-timbered ridges beginning at the southern end of the project and ending at the cliff edge directly overlooking the talus field discussed above. Engelmann spruce, lodgepole pine (*Pinus contorta*), Douglas fir and whitebark pine (*Pinus albicaulis*) predominated on higher slopes and extend to the highest elevations of the project. The high elevation ridges and hill slopes were relatively desiccated at the time of fieldwork. These open areas supported grasses, shrubs and lichen. Desiccated medium-sized ungulate droppings indicate the area functions as winter range. Ground visibility in these areas was good (40-60%). No artifacts or archaeological sites of any kind were observed along these high ridges. Several potential rock shelter sites were found (Figure 6). These were associated with Eocene volcanic rock and situated along rock faces and shallow overhangs south of the main ridge at an elevation around 2743 m (9000 ft). No artifacts, hearths, or other indication of a human presence was observed on shelter floors or in association with drip-line sediments.



Talus field, view NE.



Paleozoic sequence above talus field.

Figure 4. Project area photographs.

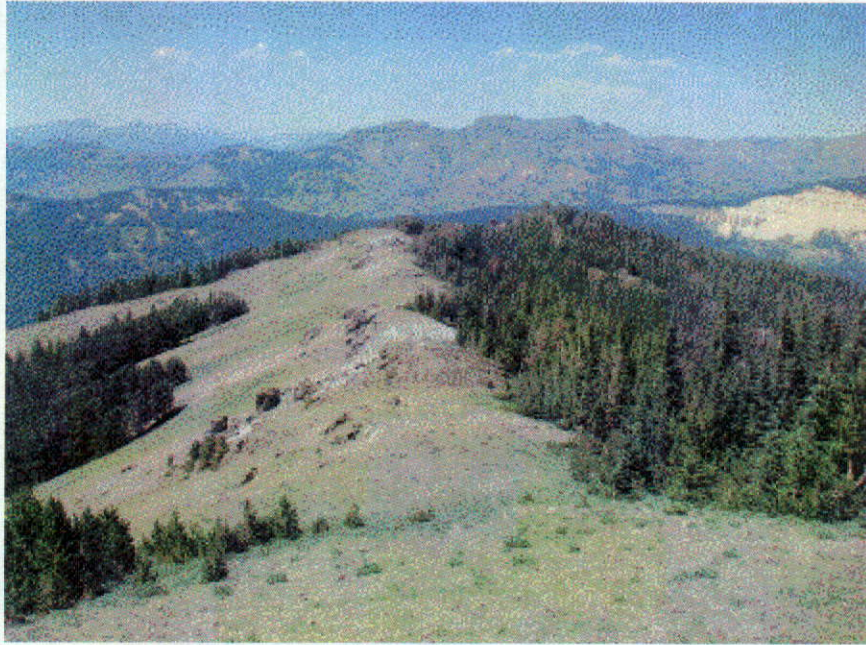


Chert nodule.

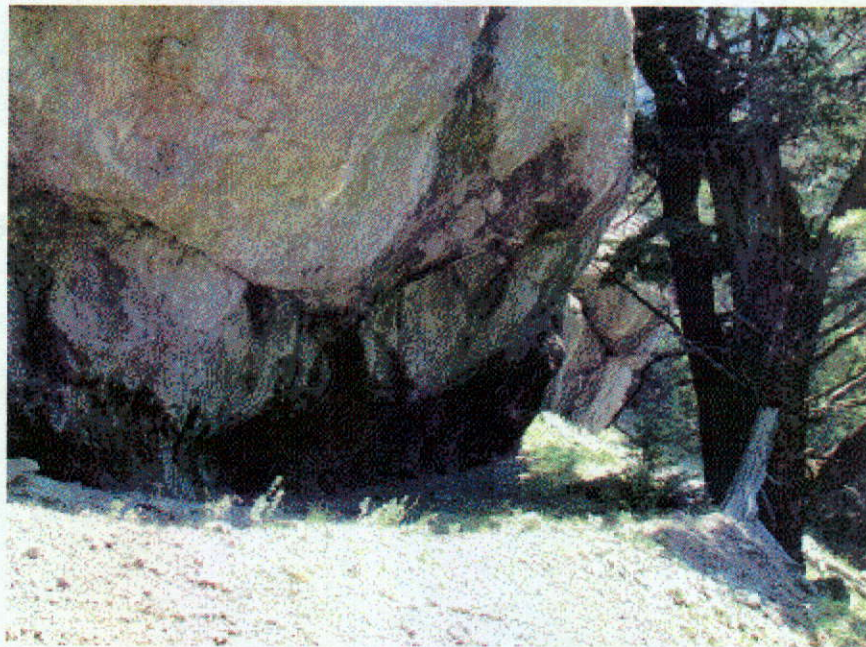


Shelter setting in Paleozoic rock.

Figure 5. Project area photographs.



High elevation ridge.



Shelter setting in Eocene volcanic rock.

Figure 6. Project area photographs.

FIELD METHODS

Survey and Site Recording

For areas identified as having archaeological potential, survey methods followed standard archaeological inventory procedures accepted by SHPO and NPS. These consist of personnel walking within a given survey area while maintaining a maximum spacing of 30 m. Given the visibility and terrain limitations encountered during this project, non-timbered areas, natural and man-made cutbanks, rodent-burrow backdirt piles, anthills, and any area possessing less than the common density of surface vegetation or duff were sought out and inspected.

When an artifact was located, an intensive surface survey of the surrounding area was begun in order to locate other artifacts. Prehistoric sites were identified as 15 or more artifacts or features within 30 m of one another. No prehistoric sites were found. Isolates are defined as localities having less than 15 artifacts. One prehistoric isolate was found. Historic sites were defined as fifty or more historic artifacts within 30 m of one another. Artifacts and features less than 50 years old were not recorded. All artifacts located during a search were marked with pin flags to identify spatial arrangement and site boundaries. A primary vertical and horizontal datum was established within, or just outside, a site area to provide a primary reference station from which site boundaries, shovel tests, and other desired mapping points could be recorded. The site datum consists of a ground-anchored steel spike, with an attached and appropriately labeled metal tag. The tag lists the temporary site number, date, organization, and project director's initials. A small pile of stones was placed over each datum for re-location purposes. Site boundaries were plotted on a USGS topographic map. Individual artifacts were point-plotted and assigned Field Specimen (FS) numbers. Sites were mapped using a Brunton compass, a Bushnell Yardage-pro 500 laser range-finder, and a Garmin 12XL GPS set to NAD 83. Sites were recorded using a Wyoming Cultural Properties Form. Site maps include the site boundary, artifact concentrations, diagnostic artifacts or field specimen, and local topography.

Artifact definitions for materials analyzed in the field consist of a combination of morphologically and technologically derived categories. Debitage is the waste material created during the manufacture of stone tools and is readily identified by the presence of one or more of the following attributes: a striking platform, dorsal and ventral surfaces, or a bulb of percussion. These artifacts are divided into four categories based on the amount of cortex remaining on the outer surface and include: primary flakes (100-75% cortex), secondary flakes (74-1% cortex), and tertiary flakes (no cortex). In addition, shatter, broken flakes and flake fragments may possess traits that identify them as chipped stone while lacking the necessary attributes to classify them as primary, secondary, or tertiary flakes. Lithic raw materials used as toolstone include

obsidian. Several obsidian sources occur in and around Yellowstone National Park. No attempt was made to source the single obsidian artifact located during this project. No shovel testing was conducted during this project. No prehistoric artifacts were collected during this project as no diagnostic artifacts or formal tools were found.

Historic artifacts were described as to class, material type, and function. Makers marks and other potential chronological indicators were described and recorded when appropriate. Historic features, such as trails and structures, were described, measured, photographed, and mapped, as well as plotted on a 7.5' quadrangle. Modifications to the local environment such as blaze marks on trees, removal of obstructing limbs, drilling of rock for cutting/dynamiting, fill/reinforcement of trail sections were noted in the field. No historic artifacts were collected during this project. No identifiable faunal remains were found at any of the sites discussed in this report. All field notes, photographs, maps etc. are housed at the Office of the Wyoming State Archaeologist, Laramie.

File Search Results

On June 27, 2007, a file search (SHPO # 19949) was conducted for the current project to ascertain the history of cultural resource investigations. One accessioned project and three non-accessioned sites are listed in the file search as having been recorded in the area (Table 1). Project 9511630 was a linear survey conducted in 1995 by the Office of the Wyoming State Archaeologist for National Park Service improvements along the Northeast Entrance Road.

None of the previously recorded sites listed in the file search are associated with the above mentioned accessioned project. Two additional sites are shown on various maps but are not listed on the file search. These sites are summarized in Table 1 and shown in Figure 2. All of the sites listed in Table 1, except for the two discussed below, are outside the current project and will not be affected.

Table 1. Summary of sites in file search.

Site #	Site Type	Recorded By	NRHP Eligibility	Proximity	Figure
48YE821	Transportation Corridor/ Historic District	Park Service	Eligible	Out	2
48YE815	Bridge	Park Service	Eligible	Out	2
48YE223	Bridge	Park Service	Eligible	Out	2
48YE221	Bridge	Park Service	Eligible	Out	2
48YE873	Abutment/Trash Scatter	Park Service	Not Eligible	In	2

Two previously recorded sites are within the current project. A bridge abutment, originally recorded by the Midwest Archaeological Center (NU-001) and subsequently listed as part of 48YE873, was found to be located in Montana. The abutment has been given an appropriate site number (24YE0178). Site 48YE873 is a historic trash scatter and associated debris. Both sites were re-recorded during the present project and are discussed in the **Results** section. Site 48YE821 is the Northeast Entrance Road Historic District and consists of various abandoned road segments and other features within the travel corridor between Tower Junction and the Northeast Entrance that date from the 1870s through the 1930s (Culpin 1994). Included in the historic district are sections of the Cooke City Miner's Wagon Road. An intact, though previously unrecorded, segment of the Cooke City Miner's Wagon Road was documented for the current project. This site has been assigned a separate site number (48YE1721) and is discussed in the **Results** section.

RESULTS

Two previously recorded sites as well as an intact section of the original Cooke City Miner's Wagon Road are located in the present project. The three sites are discussed below.

Previously Recorded Sites

SITE: 24YE0178 (NU-001) (Figures 2, 7)

DESCRIPTION: Site 24YE0178 is a single bridge abutment only, with no observable remains of a bridge deck, superstructure, or approach embankment (Figure 8). The abutment lies at the mouth of an un-named tributary stream on the south (left) bank of Soda Butte Creek. The abutment is about 27 ft wide and is constructed from 8-12 inch diameter, full-round, square-ended logs. All logs are rotted. At the time of recording (23 July, 2007) the upstream corner of the abutment was concealed by alluvium while the downstream corner projected about 1 m above the water level. A large, horizontally-laid base log extended into the mud at the base of the abutment. No rubble or concrete foundation was visible. Although no pilings were observed in Soda Butte Creek, logs that could represent additional timbers were noted below the waterline at mid-channel. At the time of recording the tributary stream flowed over the abutment and much of the abutment was visible. Upon revisiting the site (29 August, 2007), the abutment had been buried and concealed by alluvial fan debris.

A road (Warm Springs Picnic Area Road) with an assumed bridge (which 24YE0178 represents) are shown on the 1961 USGS Base Map for Yellowstone National Park (USGS 1961). The road led to a maintenance station shown as #226 on the Landscape Alterations Map (NPS-YNP 1967) located on the south (left) bank of Soda Butte Creek. No maintenance station structural remains were found during investigations for the current project.

NATIONAL REGISTER STATUS: The 24YE0178 abutment is a poorly preserved bridge remnant and does not retain unique characteristics important to the history of the area. The site is recommended as not eligible for nomination to the National Register of Historic Places.

IMPACTS: Present impacts are severe stream erosion and debris-flow inundation. Future impacts are a prescribed burn.

RECOMMENDATIONS: No further work.

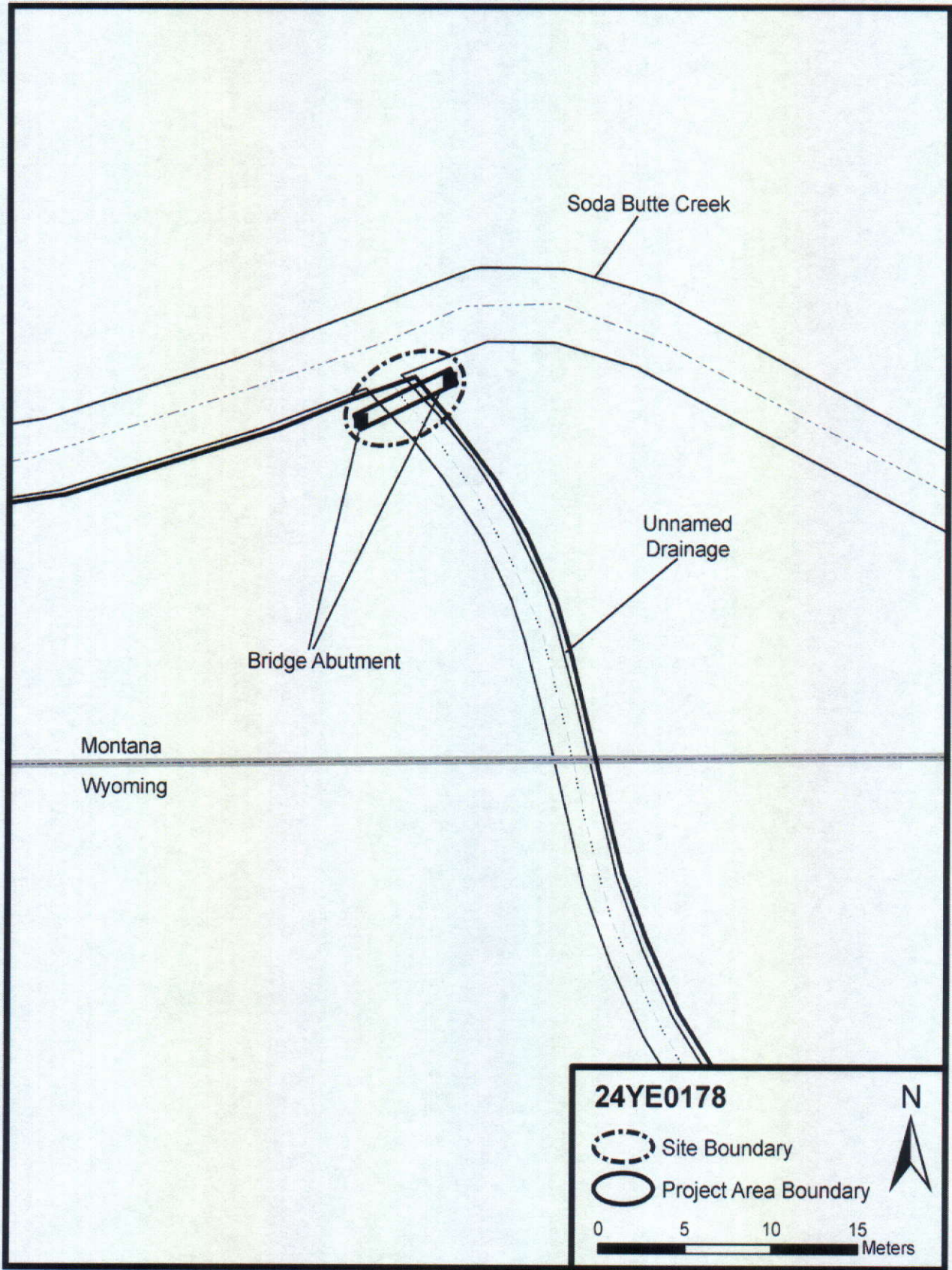


Figure 7. Map of site 24YE0178.



Bridge abutment setting.



West corner bridge abutment.

Figure 8. Photographs of 24YE0178.

SITE: 48YE873, (Figures 2, 9)

DESCRIPTION: This site is 75 m by 50 m (2451 sq m) and consists of a trash scatter, along with several pieces of lumber, a rubble pile, and machinery part (Figure 10). The site is located along an unnamed tributary of Soda Butte Creek. The trash scatter is at stream level and has been inundated by high water. Much of the trash is exposed in an over-bank channel segment suggesting the landform was exploited as a dump. Surface trash occurs downstream and adjacent to this feature, indicating fluvial transport; consequently all trash is grouped together.

Trash Scatter

A total of 68 historic artifacts were recorded in the trash scatter (Table 2, Figure 10). These include domestic items, items associated with construction activities, as well as some associated with automobile usage. None of the items appeared temporally diagnostic beyond an association with the mid- 20th century.

Table 2. Artifacts recorded in trash scatter, 48YE873.

Artifact	Count	Artifact	Count
Sanitary Food Can	21	Unidentified Metal	3
Milk Can	3	Window Glass	20
Meat Can	2	Owens Corning Clear Bottle Base	1
Texaco Oil Can	2	Clear Bottle Fragments	2
Five gallon steel bucket	1	Brown Bottle Fragments	1
1" Steel Pipe	2	10" Bridge Spikes	3
Badly Rusted Tire Chain	1	White Porcelain Tea Cup	1
Steel Wire	3	Milled Lumber with Wire Nails	2
Unknown machinery	1		

Rubble Pile

A rubble pile was recorded up-stream from the trash scatter (Figure 10). The rubble pile is 3.3 m x 1.8 m x .5 m in size. The rubble pile consists of native stone with cement adhering to about 50% of the pieces. Some cement remnants possess a slick surface indicating they were either finished or in contact with form-boards. The rubble pile is covered with moss and partially buried by recent fluvial sediment.

Machinery

A badly rusted and partially buried piece of an unknown machinery part is located south of the main trash scatter. The part is made from several pieces of bolted, heavy gauge metal. Several edges of the part have been cut with an oxy-acetylene torch.

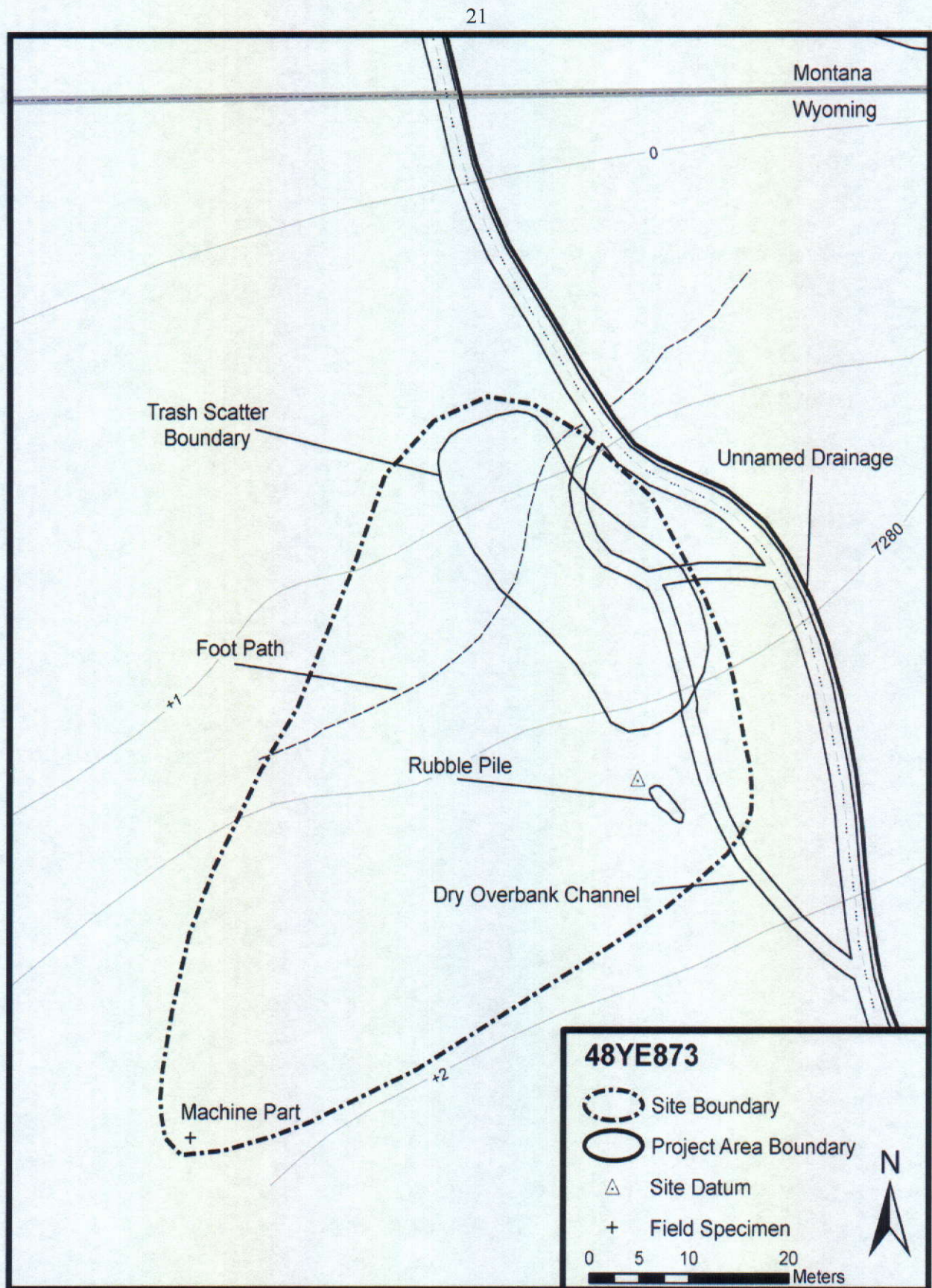
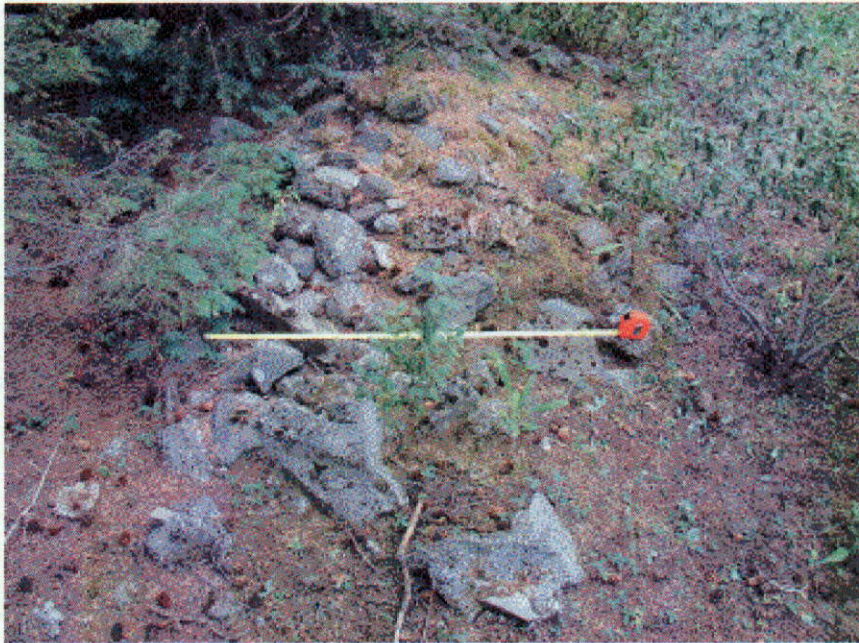


Figure 9. Map of site 48YE873.



Trash scatter area, view SE.



Rubble pile.

Figure 10. Photographs of 48YE873.

NATIONAL REGISTER STATUS: The site consists of an eroded trash dump, rubble pile, and machinery part. The site does not possess unique historic artifacts. The site may be related to a maintenance area (#226) shown on the Landscape Alterations Map (NPS-YNP 1967). No evidence of a structure was observed in the project area. The site has little potential to yield any significant scientific information regarding the history of the area or region. The site is recommended as not eligible for nomination to the National Register of Historic Places.

IMPACTS: Present impacts are stream erosion. Future impacts are a prescribed burn.

RECOMMENDATIONS: No further work.

Newly Recorded Sites

SITE: 48YE1721, Cooke City Miner's Wagon Road (Figures 2, 11)

DESCRIPTION: This 4.5 km (2.82 mi) long segment of the Cooke City Miner's Wagon Road represents a site complex located on the south (left) bank of Soda Butte Creek between Barronette Meadows and the northeastern project boundary. The Cooke City Miner's Wagon Road was the precursor to the Northeast Entrance Road (48YE821) and was in use between about 1877 and 1895. The general route was in existence as a pack trail as early as 1871 and connected the Upper Yellowstone Valley settlements with the mines around Cooke City and the Upper Clarks Fork valley. The segment of road within the present project parallels the modern highway. It was evidently abandoned around 1895 when the road section between Barronette Meadows and the Northeast Gate was relocated to the north (right) bank of Soda Butte Creek (Culpin 1994).

Wagon Road

This two-track wagon road varies in appearance across the landscape. In meadows it is characterized by a shallow swale varying from about 1.4 to 2 m wide and from a few cm to 10 cm in depth (Figure 12). Distinct ruts were not observed in open-meadow settings. The wagon road is usually more distinct in timbered settings and is often marked by a thick, linear growth of evergreen saplings (Figure 13). Double wheel-ruts are often visible, with outside rut-to-rut width about 1.7 m, with depth often as much as 15 cm. The full, outside width of the road ranges from about 2.4 to 3 m. Corridors cut through timber can be as wide as 5 m. Construction-related modifications include "cut-fill" sections, built-up with either fine sediments and/or limestone rubble, rubble berms (Figure 14), as well as linear boulder piles, probably accumulated through road clearing activities. Blasting of large boulders may have occurred at certain points of the road. One spur and three detours were also noted (see below). The spur apparently dead-ended after fording Soda Butte Creek. The three detours were not as apparent on the landscape as what is considered the main wagon

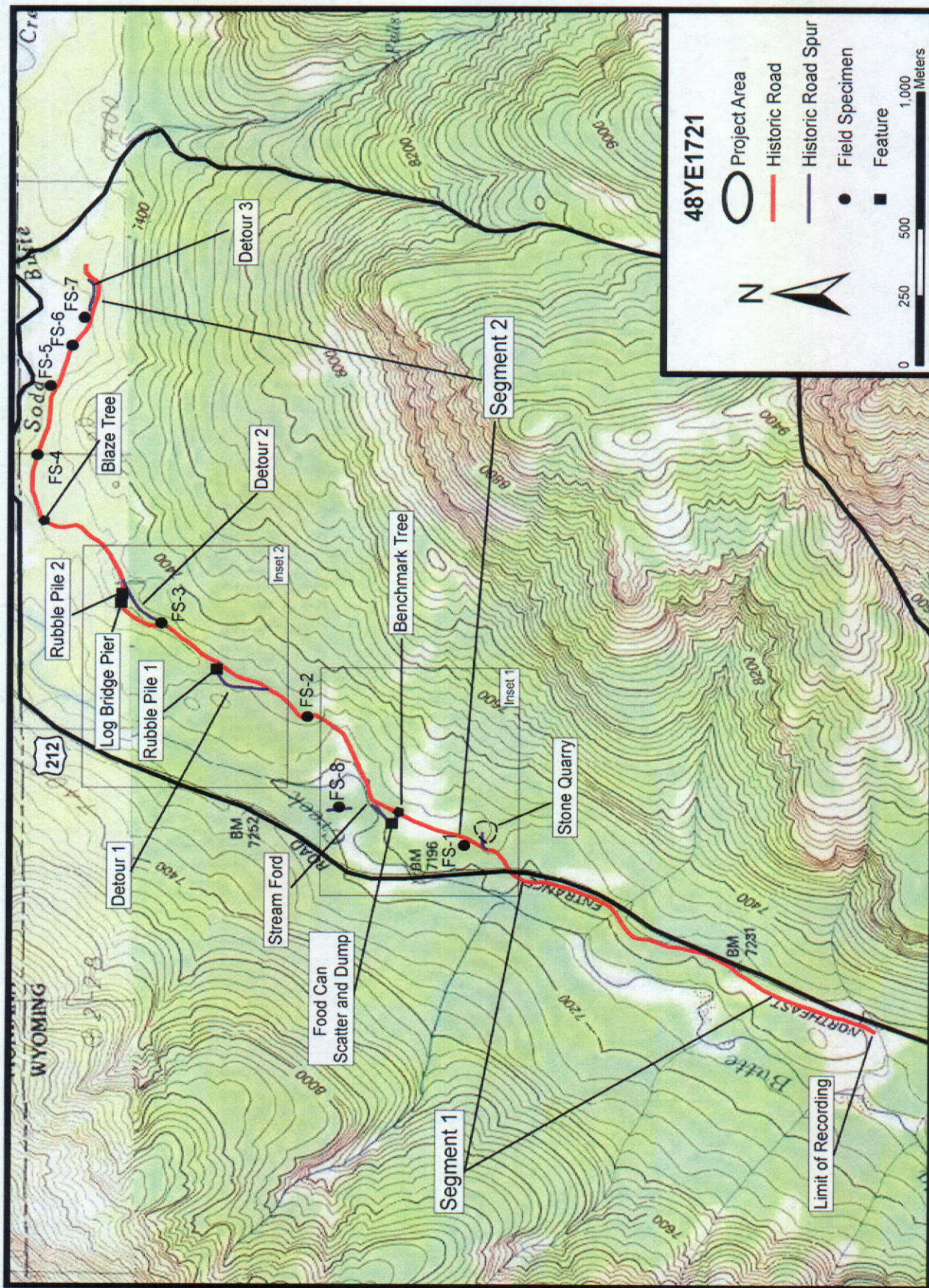


Figure 11. Map of site 48YE1721, the Cooke City Miner's Wagon Road.



Wagon road section in meadow, road goes between trees.



Wagon road section in meadow.

Figure 12. Photographs of site 48YE1721.



Wagon road cut in timbered setting.



Wagon road cut in timbered setting, note evergreen saplings favoring wagon ruts.

Figure 13. Photographs of site 48YE1721.



Linear rock berm on downslope side of wagon road.



Linear rock pile (on left edge of road) probably resulting from road clearing.

Figure 14. Photographs of site 48YE1721.

track. The detours connect with and run parallel to the main wagon road and may represent seasonally alternate routes or pull-outs.

Segment 1 is entirely outside the present project area and for this reason was only GPSd (Figure 11). The mapped portion of Segment 1 begins near the south end of Barronette Meadows and extends approximately 1381 m (.86 mi) northeast, to the point where it has been obliterated by the Northeast Entrance Road. The wagon road in Barronette Meadows is a well defined swale and probably continues farther southwest, past the recording limit shown in Figure 11. North of the meadows, the wagon road is predominately in timbered settings adjacent to the modern highway. Portions of Segment 1, as well as additional segments farther down valley, were recorded by Sanders et al. (1996). No artifacts, features or ground modifications beyond shallow cut-fills were observed in Segment 1.

Segment 2 is entirely within the project area (Figure 11). It begins at the crossing point of the Northeast Entrance Road and extends 3151 m (1.96 mi) northeast, where it becomes invisible after crossing on to an active alluvial fan near the north end of the project. The road is intact and well preserved along the entirety of this segment. Segment 2 includes an associated creek ford, three detours, a stone quarry, benchmark tree, food can scatter and dump, two rubble piles, remains of a probable cribbed-log bridge pier, several associated historic artifacts, numerous "blaze trees," as well as others possessing axe-trimmed lower limbs.

Stream Ford Intersection and Detours

The trail intersection leading to the stream ford is located in Segment 2 approximately 430 m north of the Northeast Entrance Road (Figure 15). The intersection is situated at the north end of a meadow and forms a distinct T. The route trends northwest, through a heavily wooded area, to the terrace edge (approximately 45 m) overlooking Soda Butte Creek where it descends to the left bank of the modern flood plain by way of a cut-fill ramp (Figure 16). A 10 x 10 m area of exposed river-cobbles on the opposite (right) bank of Soda Butte Creek probably marks the ford. No trace of the road was observed on the right-bank flood plain, but a road section approximately 100 m long was documented in a timbered area on the opposing slope, just above the flood plain. The west end of this section terminated in heavy timber and could not be further identified.

The three detours are physically similar to the wagon road and parallel it for relatively short distances (Figure 11). Detour 1 is located in a timbered setting approximately 1127 m north of the Northeast Entrance Road and is about 226 m long (Figure 17). Detour 2 is located approximately 1538 m north of the Northeast Entrance Road and is about 260 m long. Part of Detour 2 goes through an open meadow area (Figure 16). The degree of alteration associated with the detour is noticeably less than that noted for the main road track

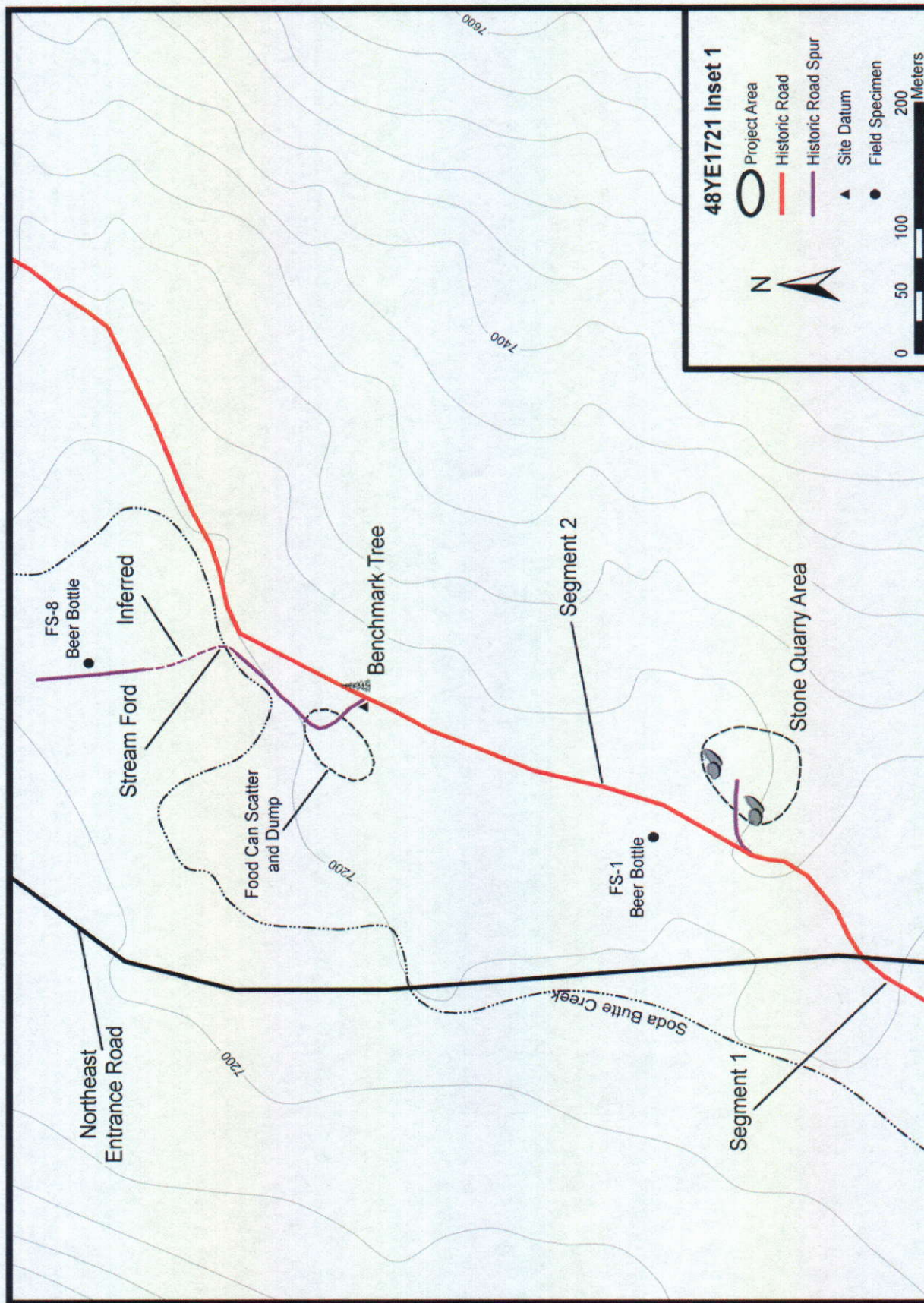


Figure 15. Inset map of 48YE1721 showing locations of the stone quarry, benchmark tree, food can scatter and dump, and stream ford intersection.



Cut-fill ramp descending to Soda Butte Creek ford.



Portion of Detour 2.

Figure 16. Photographs of site 48YE1721.

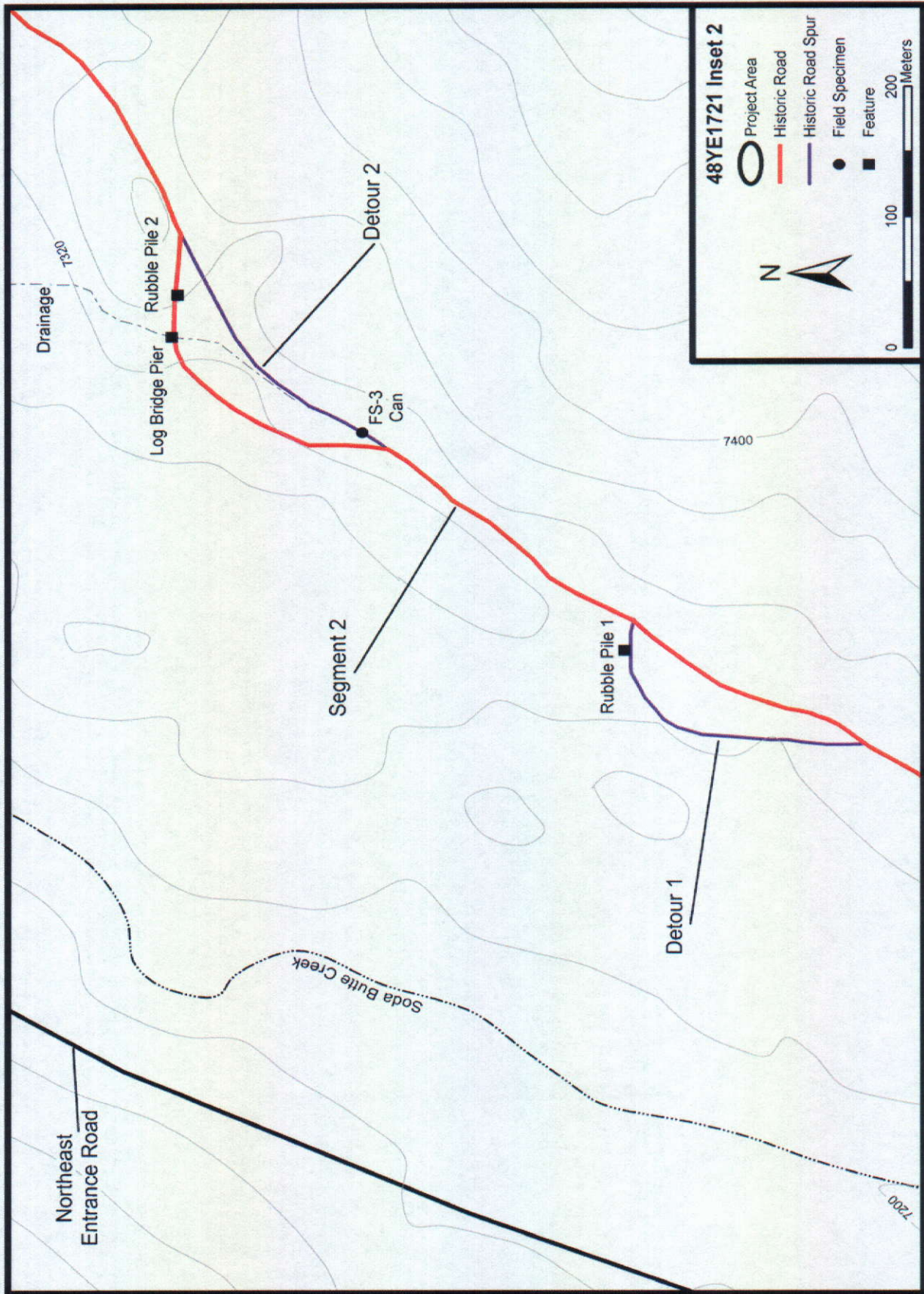


Figure 17. Inset map of 48YE1721 showing detours 1 and 2 and associated features.

(Figure 18); thus the detour route may have only been used at times when the ground was sufficiently dry or frozen to permit passage. This is also suggested by the remains of a probable cribbed-log bridge pier (see below) associated with the nearby main road track.

Detour 3 is located approximately 2982 m north of the Northeast Entrance Road at the up-slope end of the cut-fill ramp connecting the wagon road with the alluvial fan near the north end of the project (Figure 11). The detour is about 119 m long and slightly offset from the main track by about five to ten meters. No features were observed in association with Detour 3.

Stone Quarry

A stone quarry is located in a heavily overgrown area approximately 120 m north of the Northeast Entrance Road in Segment 2 (Figure 15). The quarry is approximately 50 x 80 m in extent. A secondary road approximately 40 m in length splits off from the main track and leads down-slope to an area where at least two large Paleozoic limestone or dolomite blocks appear to have been drilled, possibly blasted, and cut (Figure 18). One piece of cut limestone was observed on the ground surface as well as at least one rubble pile. At least one tree was observed with scars at an appropriate height (2 ft) for a wagon wheel hub (Spivey 1979). No other features, structural remains or artifacts were observed in the quarry area.

Benchmark Tree

A lodgepole pine benchmark tree was found adjacent to the wagon road, a short distance north of the stream ford intersection (Figure 15). The tree is approximately 40 cm in diameter. An inscription reading "BM ? 27 86" is present on the north side of the tree approximately 1.3 - 1.7 m (4.5 - 5.5 ft) above the ground (Figure 19). The inscription is carved or chiseled onto a scar resulting from either fire, or deliberate preparation, possibly with a draw knife or similar tool. The scar surface and inscription are partially engulfed by new growth and the inscription symbol or symbols to the farthest left are partially obscured. The "BM" probably indicates that it is a benchmark tree for a Yellowstone National Park Survey. According to Mike Ross (Ranger, Yellowstone National Park, Personal Communication, 2007), the inscription may be a date (in which case it was evidently inscribed on the 27th of an unknown month of the year 1886), or it could have another meaning, depending on the type of survey for which it was used.

Food Can Scatter and Dump

A surface scatter of ten food cans and a partially buried food can dump were observed in the timbered area west of the stream ford intersection (Table 3). Fifteen cans were observed on the surface at the can dump with an unknown number lying immediately below surface (Figure 19). Probing with a pin flag revealed that additional subsurface cans occupy an area about 1.5 x .8 m in extent.



Drilled boulder in quarry area.



Main "cut and bermed" wagon track west of Detour 2.

Figure 18. Photographs of site 48YE1721.



Benchmark tree.



Food can dump.

Figure 19. Photographs of site 48YE1721.

Table 3. Food can scatter and dump at 48YE1721.

SURFACE FOOD CAN SCATTER		
Can Type	Count	Provenience
Solder-Patch- Solder Side Seam	3	Surface
Solder Patch, Crimped Side Seam	6	Surface
Solder Patch Milk Can	1	Surface
FOOD CAN DUMP		
Can Type	Count	Provenience
Solder-Patch- Solder Side Seam	2	Surface
Solder Patch, Crimped Side Seam	7	Surface
Unknown Solder Patch	4	Surface
Unknown/Crushed	2	Surface

Several solder-patch, soldered side-seam food cans were noted. Solder side seam food cans were used prior to the 1888 adoption of the solder-patch crimped side seam food can (Rock 1984). Solder-patch crimped side seam food cans continued to be made until about 1920 (Gillio et al. 1980). No sanitary cans were documented in the assemblage. Sanitary cans were introduced in 1897, and dominated the market by 1911 (Horn 1994). Thus the food can scatter and food can dump appear to date from the 1880s and 1890s.

Stone Rubble Piles

Stone rubble piles are located at the north ends of detours 1 and 2 (Figure 17, 20). Rubble pile 1 is 1.2 x 3 m in size and is located near the north point of intersection of Detour 1. No other artifacts or features were associated with Detour 1. Rubble pile 2 is approximately 1 m x 3 m in size and is located near the north point of intersection of Detour 2. Several pieces of limestone in the rubble pile appear to have been cut.

Cribbed Log Bridge Pier

This feature consists of a deteriorated log structure located in a spring-fed gully that heads in the open meadow through which Detour 2 passes (Figure 17). The rough dimensions of the structure are 6' wide, 14' 6" long and 4' 6" high (Figure 21). The structure is made of saw-cut round logs with saw and axe-cut saddle-notched joints. No nails were observed. At least two log courses extend below the waterline and rest on what appears to be a limestone rubble foundation. Several timbers formerly spanning the structure have rotted through and collapsed into the structure's interior. This configuration indicates the structure may be remains of a cribbed-log bridge piling with the collapsed timbers being remnants of decking. The positioning of the structure in a gully, along the main road segment would support this assessment (Bob Flather, Yellowstone National Park Archivist, Personal Communication).



Rubble pile associated with Detour 2.



Rubble pile associated with Detour 1.

Figure 20. Photographs of site 48YE1721.



Crib log pier with possible collapsed deck remnant.



Crib log pier side wall view.

Figure 21. Photographs of crib log bridge pier at 48YE1721.

Isolated Artifacts

A total of ten isolated artifacts were observed in association with the road bed (Figure 11, Table 4).

Table 4. Isolated artifacts observed at site 48YE1721.

FS #	Artifact	Comments
1	Beer Bottle	'M 8' Unknown maker; Probably 1880s-mid1890s (Herskovitz 1978).
2	Beer Bottle	'WOOSTER 8'; Wooster Glass Company, Wooster, Ohio, ca. 1900-1904 (Toulouse 1971:543).
3	Solder Patch Food Can	Crushed; probably 19 th century
4	Square Fuel Can	Solder Side Seam, bail is missing.
5	Beer Bottle	'W&Co'; Thomas Wightman & Co., Pittsburgh, Pa., Late 1880s (Toulouse 1971:533).
6	Leather	Riveted leather fragment, possible harness part.
7	two partial wooden-hub wagon wheels, one wheel rim fragment.	Late 19 th early 20 th century
8	Beer Bottle	'M 8' Unknown maker; Probably 1880s-mid1890s (Herskovitz 1978).

Field specimens 1, 2, 5, and 8 are export beer bottles having three different basemarks. Two bottles were complete, two were missing the finish portion (Figure 22). Neither of the complete bottles possess a crown finish, adopted by the beer industry in the early 1900s (Lockhart 2007). Field specimens 1 and 8 possess an 'M 8' makers mark. Toulouse (1971) associates this mark with a post 1916 date, interpreted here as too recent. Herskovitz (1978) recovered a high number of beer bottles at Fort Bowie, in Arizona, having the 'M' basemark with mold designations 1-8. Fort Bowie was occupied from 1862 to 1894, and beer was not available in bottles prior to 1873 (Lockhart 2007). Therefore this type may date at least as late as 1894. Field specimen 2 possesses the 'WOOSTER 8' basemark, again with the 8 being a probable mold designation. Toulouse (1971) assigns this basemark a date of circa 1900-1904. Field specimen 5 possesses a 'W&Co' basemark, which Toulouse (1971) assigns a late 1880s association.

Field specimen 3 is a crushed solder patch food can found on the wagon road (not photographed). The side seam was not visible. Field specimen 4 was found on the wagon road and is a mostly intact, square fuel can having a tapered spout and solder side seam (Figure 22). A scar is visible at the top of the can where a bail was probably attached. Field specimen 6 is a piece of riveted leather found on the wagon road (Figure 23). In its desiccated condition the specimen is about 39 cm (15 in) long and 5 cm (2 in) wide.

Field specimen 7 includes two partial wooden-hub wagon wheels and a portion of a wagon wheel rim. The two partial wagon wheels were found adjacent to one another immediately below the wagon road



FS#5, export beer bottle.



FS#4, fuel can.

Figure 22. Photographs of site 48YE1721.



FS#6, riveted leather.



FS#7, wagon wheel.

Figure 23. Photographs of site 48YE1721.

in the high grass of a boggy area on the Soda Butte Creek flood plain (Figure 23). An additional fragment of an outer, wooden wheel rim was found on the slope midway between the wagon road and the wheels. Much of the hub/spoke/rim portions of both wheels are buried in muck and covered by moss. The better preserved wheel retains most of its spokes (still seated in the hub) and at least fifty percent of the outer, wooden rim. The outside diameter of the wheel is 54" (4' 6") with a 3.5" diameter opening for the axle. The other wheel is of the same or similar size although most remaining spokes have pulled away from the hub and most of the outer wooden rim is missing. Neither wheel is associated with an iron rim or tire. This type of wheel was commonly used on freight wagons, carts, and coaches well into the 20th century (Spivey 1979). Their presence just off the wagon road is consistent with its continued use in the late 19th century.

Blaze Trees and Axe-Trimmed Branches

A number of blaze and axe-trimmed trees were observed along the wagon road. As these were relatively ubiquitous, no attempt was made to document all of them. The blaze trees have had their outer bark removed, probably with an axe, presumably to mark the preferred wagon road route (Figure 24). Many of the scars are being engulfed by new tree growth. If the precise history of the Cooke City Miner's Wagon Road were ever to be researched, blaze marks on still living trees might be the best source for concise dendrochronological dating.

Axe-trimmed branches on living and dead trees are common along the wagon road (Figure 24). Limbs were evidently trimmed to the necessary height above the ground to allow clear passage of pack animals and wheeled vehicles. Axe-trimmed branches on both living and dead trees can be used as supportive evidence for road positioning in timbered areas.

HISTORIC BACKGROUND: The Cooke City Miner's Wagon Road follows a general route that has probably been used as a travel corridor for thousands of years. The route exploits a low divide (Colter Pass) separating the upper Yellowstone and upper Clarks Fork of the Yellowstone rivers. In historic times this route was popularized by the Bannock Indians (Replogle 1956) as well as a number of early explorers and fur trappers (Haines 1977). The route remained in obscurity until about 1870 when gold and other precious minerals were discovered in the area around what is today Cooke City, Montana. The general route was then used by pack trains to supply the mining areas with goods coming up-valley from Livingston and Gardiner. Wagons did not regularly use the route until around 1880 because the bridge across the Yellowstone River was too narrow to allow passage (Culpin 1994:312-313). By 1885 the Cooke City Wagon Road was connected to the Bighorn Basin and supply sources in Billings via the Red Lodge Freight Road (Eakin 1998).

The Hayden Survey Map of 1878 (U.S. Geological and Geographical Survey 1878) shows the Cooke City Miner's Wagon Road route crossing from the north (right) bank of Soda Butte Creek to the south (left)



Blaze tree.



Axe-limbed tree.

Figure 24. Photographs of site 48YE1721.

bank just upstream from Icebox Canyon, much as does the modern Northeast Entrance Road. Unfortunately the 1878 map cuts off the road in the vicinity of the modern Barronette Peak pull-out. A later USGS map (Figure 25) surveyed in 1884-85 and published in 1896 (Hague et al. 1896) shows the road in essentially the same location as the 1878 map although in this case the road is extended through the area occupied by Segment 2, to the Wyoming-Montana state line. A J.P. Iddings photograph (Hague et al. 1899) taken sometime between 1885 and 1890 shows a portion of Segment 2 approximately 2-300 m up-valley from the benchmark tree (Figure 26).

In 1895 the U.S. Army under Hiram Chittenden, began a series of improvements along the first several miles of road down-valley from the Northeast Gate (Culpin 1994:320-321). This work resulted in the abandonment of Segment 2 after the road was re-routed to the north (right) bank of Soda Butte Creek. The alignment was generally maintained as part of the modern Northeast Entrance Road (48YE821) completed in the 1930s.

NATIONAL REGISTER STATUS: The Cooke City Miner's Wagon Road represents both the Transportation Historic and the Mining Frontier of the Westward Expansion themes, within the Territorial (1868-1889) and Expansion (1890-1919) Historic periods in Park County, Wyoming. The overall period of significance of the wagon road ranges from about 1877 to 1895. Because of these historic associations the site is recommended as eligible for nomination to the National Register of Historic Places.

The Cooke City Miner's Road is considered eligible for nomination to the National Register of Historic Places under criteria A and C (National Park Service 1991). Until about 1885 it was the only road connecting the remote mines of the Cooke City, Montana and upper Clarks Fork Valley, Wyoming area to the distribution points and supply hubs farther down the Yellowstone Valley. It is therefore associated with events that have made a significant contribution to the broad patterns of our history and the history of mining, transportation, and settlement in Yellowstone National Park, Park counties Wyoming and Montana, and the United States of America (Criterion A). Segment 2 of the Cooke City Miner's Road also embodies distinctive characteristics of a type, period, or method of construction (Criterion C). It represents a significant engineering achievement for the later 19th century, especially in the remote Absaroka Mountains of northwest Wyoming, as it was necessary to deal with the problems inherent in crossing steep and difficult terrain in an often inhospitable environment.

With regard to the seven aspects of integrity, most of the surviving segments of the Cooke City Miner's Wagon Road have been incorporated into the modern Northeast Entrance Road Historic District (48YE821) of Culpin (1994:311-338, Sanders et al. 1996). All surviving segments retain integrity of location. With reference to the present project only segments 1 and 2 will be discussed.

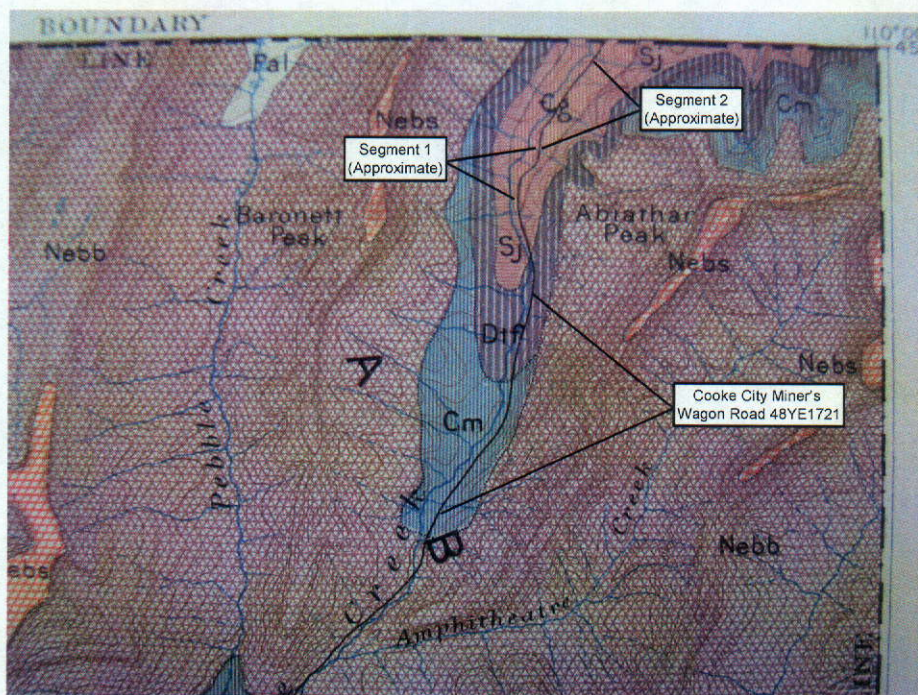


Figure 25. USGS Map showing northeast corner of "Canyon Sheet" and location of Cooke City Miner's Wagon Road (48YE1721). Area Surveyed in 1884-1885. Taken From Hague et al. 1896.

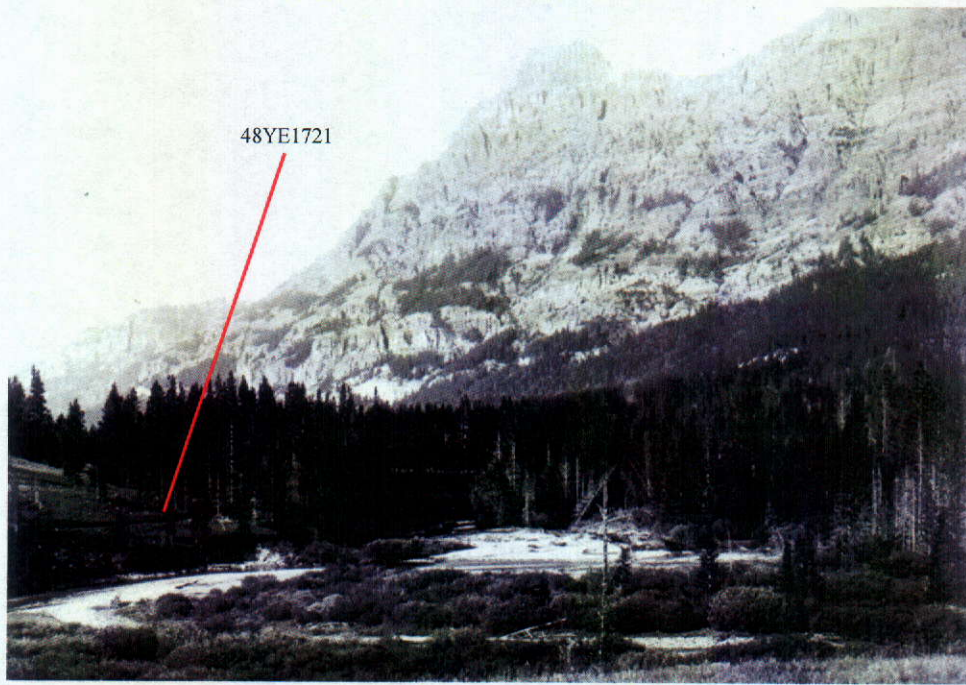


Figure 26. USGS Photograph, Soda Butte Creek, view west toward Barronette Peak, circa 1890; in Hague et al. 1899. J.P. Iddings Photograph.

Though portions of Segment 1 are still relatively intact, there has been considerable modern Northeast Entrance Road intrusion adjacent to this segment. Therefore it no longer retains integrity of setting. Parts of Segment 1 have been physically modified by spillover from shoulder construction of the Northeast Entrance Road. The wagon road profile, though relatively intact in some areas, is difficult to recognize in others. As such, Segment 1 lacks integrity of design, materials, and workmanship. This, along with the lack of integrity of setting, detracts from integrity of feeling and any association with late 19th century pack train or wagon travel. Segment 1 is recommended as non-contributing.

Segment 2 is in an isolated area, with most of its length out of sight and earshot of the modern highway. It apparently has not been improved or physically modified since its abandonment in the 1890s. Many aspects of its original construction and use are preserved. Segment 2 retains integrity of location, setting, design, materials, workmanship, feeling, and association with late 19th century travel through Yellowstone National Park and the Absaroka Range. Segment 2, is recommended as contributing from its point of intersection with the Northeast Entrance Road to where it descends to the alluvial fan near the north end of the project.

IMPACTS: Segment 2 is located in the Abiathar Prescribed Burn Unit. The proposed undertaking could constitute an adverse effect to the Cooke City Miner's Wagon Road (48YE1721) and associated components.

RECOMMENDATIONS: No further work is recommended for Segment 1. Avoidance of Segment 2 is recommended. Additional documentation could be undertaken at 48YE1721 including: a metal detector survey of the road and associated detours, features and related components, further assessment and recording of the wagon road to better understand construction methods and site structure; additional recording of the stone quarry, log structure and area surrounding the can dump as well as collection of both perishable and non-perishable items.

ISOLATED RESOURCES

ISOLATED RESOURCE: IR-1 (Figures 11, 27)

DESCRIPTION: Isolated Resource 1 consists of one obsidian tertiary flake. The artifact is not temporally diagnostic.

NATIONAL REGISTER STATUS: Isolated resource 1 is located in a small (15 x 20 m) clearing on a glacio-fluvial terrace above Soda Butte Creek. This isolated resource is not eligible for nomination to the National Register of Historic Places and no further work is recommended.



Isolated resource setting.



Isolated Resource 1.

Figure 27. Photographs of Isolated Resource 1.

MANAGEMENT SUMMARY

An archaeological inventory of the Abiathar Prescribed Burn Unit was performed by the Office of the Wyoming State Archaeologist. Two previously recorded historic sites (24YE0178, 48YE873), an unrecorded section of the historic Cooke City Miner's Wagon Road (48YE1721), and one isolated resource were recorded. Sites 24YE0178 and 48YE873 are recommended as not eligible for nomination to the National Register of Historic Places. No further work is recommended for either site. Site 48YE1721 is recommended as eligible for nomination to the National Register of Historic Places. Burning of the Abiathar Prescribed Burn Unit may effect the wagon road and associated components. Avoidance of segment 2 is recommended.

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