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CULTURAL RESOURCES INVESTIGATIONS IN THE VICINITY OF
CARLO CREEK, NENANA RIVER VALLEY

By

R.O. Stern

Alaska Division of
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794 University Avenue, Basement
Fairbanks, Alaska 99701

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ABSTRACT AND MANAGEMENT SUMMARY

From July 18 to 20, 1983, a cultural resources survey was conducted at three Alaska Department of Transportation and Public Facilities (DOT/PF) material sources. M.S. 52-2-048-2 and M.S. 52-2-063-2 are located at Mile 223.5 of the Parks Highway, and M.S. 52-2-064-2 is located at Mile 224, Parks Highway. A total of approximately six work-days were spent making a visual surface examination of the three material sources, and placing sub-surface shovel test probes at selected locations. Cultural resources located included contemporary beverage containers, plastic, and other litter, abandoned vehicle trails, a school bus and dog-yard, and the remains of an abandoned latrine. None of these cultural resources qualify for inclusion on the National Register of Historic Places. The principal investigator recommends that the State Historic Preservation Officer review this report, and that the three material sources be considered clear of cultural materials.

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INTRODUCTION

On Monday through Wednesday, July 18 through 20, 1983, Richard O. Stern archaeologist, (and principal investigator) Lucy Wold, and Eleanor Segard, student interns conducted archaeological investigations, including limited testing, at several material sources along the Parks Highway in the vicinity of Carlo Creek. The archaeology survey was conducted by staff of the Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys, (DNR/DGGS) under the authority of the U.S. Department of the Interior Antiquities Act Permit number 80-AK-126 (Control Number 102-AK/80-270). This is a preliminary report of the results of that survey. A final report may be issued in the future. All field notes, photographs, correspondence and other materials relating to this survey are on file with the Alaska Department of Natural Resources, Division of Geological & Geophysical Surveys, 3601 "C" Street, Suite 800, Anchorage, Alaska 99510. They are available for inspection upon request. No artifactual material or samples were collected during this investigation.

The archaeology survey was performed under the terms of a Reimbursable Services Agreement (RSA) between the Alaska Department of Natural

Resources, Division of Geological & Geophysical Surveys and the Alaska Department of Transportation and Public Facilities (DOT/PF). The survey was performed because a review of proposed material sources by the State Historic Preservation Officer (SHPO) had recommended a survey of certain material sources near Carlo Creek. These material sources were evaluated as having a high probability of containing cultural materials because of their proximity to the Carlo Creek archaeological site (Alaska Heritage Resources Survey number 49-HEA-31). The purpose of the archaeological survey was to conduct a visual reconnaissance of the material sites, and to perform limited subsurface testing to see whether or not archaeological, paleontological, or historical remains existed at the material sources. If any cultural resources were found, the criteria for eligibility for the National Register of Historical Places would be applied to recommend them as eligible or ineligible to the DOT/PF and the SHPO.

The most significant pieces of federal legislation authorizing this investigation are the Antiquities Act of 1906, the Historic Sites Act of 1935, the Federal Aid Highway Act of 1956, the Reservoir Salvage Act of 1960, the National Historic Preservation Act of 1966, the National Environmental Policy Act of 1969, the Preservation of Historical and Archaeological Data Act of 1974, the 1976 Amendments to the Land and Water Conservation Act of 1966, and the Archaeological Resources Protection Act of 1979. Related state legislation governing historic preservation and archaeological sites is found in the Alaska Historic Preservation Act of 1971 (as amended in 1974) and its implementing regulations (11 AAC 16).

PROJECT LOCATION AND DESCRIPTION

The Carlo Creek material sources are only three of several dozen material sources used by DOT/PF in maintenance and upgrading of the Parks Highway between **Cantwell** and Healy. M.S. 52-2-064-2 is located in the south half of Section 36, T. 15 S., R. 7 W., Fairbanks Meridian north of Carlo Creek. It is located on the west side of the Parks Highway, at approximately mile 224. The other two material sources examined are contiguous, located at approximately mile 223.5, south of Carlo Creek.

M.S. 52-2-048-2 lies partly in the section described above, but mostly in the northern half of Section 1, T. 16 S., R. 7 W., Fairbanks Meridian. M.S. ~~52-2--63-2~~ lies immediately south of this material source. Both of them are located immediately to the west of the Parks Highway. The material sources are all within the Healy C-4 quadrangle of the U.S. Geological Survey's 1:63,360 scale topographic maps, (see figures 1 and 3).

The DOT/PF has utilized both of these material sources for gravel in the past. They were initially opened up in the mid-1960's when the Parks Highway was extended northward from **Cantwell** to link Denali National Park and Preserve (then McKinley National Park) with the road system south to Anchorage, and north to Fairbanks. All of the material sources are in various states of being cleared, grubbed, and/or stripped.

M.S. 52-2-064-2 is part of an old **outwash** terrace at the 750 meters (2100 feet) above sea level elevation (figure 3). This places it

approximately 80 meters (250 feet) above the Carlo Creek site, some one-half mile (0.8 kilometers) to the south. Previous gravel extraction activities have cut heavily into the face of the original terrace, removing approximately 50% of it within the boundaries of the material source.

A large flat pad area has been levelled off, and was used as the base for the asphalt plant by Green Construction Company, when the Parks Highway was paved (M. Tinker, p.c.). The remaining terrace is approximately 50 to 60 feet above the floor of the gravel source, the floor is slightly above the level of the highway.

M.S. 52-2-048-2 and M.S. 52-2-063-2 have been entirely cleared and stripped in the areas above the 10 foot terrace line at approximately 2,000 feet above sea level. In addition, M.S. 52-2-048-2 has been cleared and stripped except for a buffer of spruce trees and low shrubs along the west side of the material source adjacent to the Parks Highway, the north side, and the western edge. Overburden has been stored along the western side of the material source to a depth of some three to five feet (1m to 1.5m) above the original ground level. Fireweed, alder and willow have revegetated this overburden, although some bare gravel and sod clumps are also visible. An access road has been left connecting the two material sources at the southern boundary, indicated by the contour line in figure 1.

Most of the northwestern corner of M.S. 52-2-063-2 lies below the rest of the material source some five to eight feet (1.5m to 2.5m).

Reconstruction of the original surface topography is difficult because an extensive berm has been pushed up onto the original terrace line, obscuring its location, and height. Low, wet ground, and small stunted black spruce characterize this corner of the material source. On the southern edge of the material source, a very different vegetation dominates the landscape. Spruce trees with large numbers of burls and ground covered with horse-tail (Equussetum spp.) typify this part of the material source. A thick tangle of willows has grown up on the disturbed berm pile of the southern boundary of the m.s. where the topsoil has been dozered over the edge of the original 10 foot terrace (see figure 1).

ENVIRONMENT

The dominant physiographic feature in the vicinity of the Carlo Creek material sources is the Nenana River valley and its tributary streams. The Nenana flows northward out of the southern flanks of the Alaska Range through a narrow deep canyon where "it cuts a deep U-shaped valley through 15 to 20 km of the core of the Alaska Range" (Bowers 1980:26). The Carlo Creek site is located on terrace alluvial sediments on the eastern side of the Nenana River valley. The complex late Pleistocene and early Holocene glacial history of the area has carved out the glacial and post-glacial features which mark the contemporary landscape.

The floral communities in the region are of two major types: taiga, or areas occupied by trees; and, tundra, or areas generally occupied by low shrubs, grasses, and lichens. Four ecosystems within these two biomes

can be delimited: (1) bottomland spruce-poplar forests; (2) upland spruce-hardwood forests; (3) high brush; and, (4) alpine tundra (Bowers 1980:28; after USDI 1976). The animals that inhabit these various ecosystems move seasonally both through the area, and **altitudinally** through the various ecosystems. Though depauperate by temperate standards, a variety of faunal resources existed during the late Pleistocene, including now extinct megafauna. The early Holocene and contemporary species includes moose, barren ground caribou, Dall sheep, black and brown bears, as well as smaller mammals such as ground squirrels, marmot, porcupine, and wolverine. Though by no means a complete list, it shows considerable variety in species potentially available for human utilization.

BACKGROUND RESEARCH AND FIELD METHODS

For the purpose of this report, a cultural resource site is defined as a bounded area containing physical evidence of past or present human activities which can be detected through surficial observation and/or archaeological techniques. A site can be prehistoric, historic, or contemporary in age. Sites are considered to be separate loci of human activity (different sites) when 30 meters (93 feet) separates individual artifacts, structures, buildings or objects. Sites reported only through oral tradition, historical records, or which cannot otherwise be identified with in situ physical evidence of human activities are not considered to be sites in this report. Such "sites" are not entered onto the Alaska Heritage Resources Survey (AHRS) under current Division of Geological and Geophysical Surveys policy. The term "site type" is

employed as a concept embodying groupings of sites according to function, age, location, artifact contents or features, or other combinations of discrete or continuous variables. An object (artifact) is defined as a material thing of functional, aesthetic, cultural, historical, or scientific value that may be, by nature or design, movable.

The Division of Geological and Geophysical Surveys RSA unit generally uses the following research methods. After consulting with the State Historic Preservation Officer and the AHRS file, written sources, both published and unpublished, are examined. The location and scope of a specific project often determine how much data are available since some of the regions of the state have had more research conducted in them than have others. Following this literature search, oral and written contact is made with appropriate individuals and agencies, including archaeologists and historians with expertise in the region. The next step in the research process is an on-the-ground field examination of the project area. The entire project right-of-way or primary impact area is walked. Test pits are made using shovels or trowels, as the survey team judges to be appropriate. Obvious surface and subsurface features are noted, and photographs are taken. Architectural information, with measurements, is collected where appropriate. Material sources, when known, are examined. Finally, oral interviews with local residents may be conducted, both informally and formally, to gather additional information about known sites, about people and events associated with those sites, and about previously unknown sites in or adjacent to the project area.

EXISTING DATA AND LITERATURE REVIEW

The Carlo Creek material sources were recommended for a cultural resources survey because of their proximity to the important Carlo Creek archaeological site (49-HEA-031). Of all the known early Holocene sites in interior Alaska, only Carlo Creek contained well-preserved faunal remains which were unambiguously indicative of human exploitation of caribou, sheep, and ground squirrels. In the lowermost of two cultural horizons, percussion-flaked elongate bifaces, a large prismatic blade-like flake, biface fragments, several possible bone tools, retouched flakes and more than 8,000 waste flakes were recovered. Two hearth areas in the lower level yielded charcoal specimens that have been radiocarbon dated to approximately 8,500 years B.P. (8400 $\pm$ 200, WSU 1700 and 8690 $\pm$ 330, GX 5132). Based on modern-day faunal distributions, and ethnographic analogy with the known aboriginal subsistence patterns, Bowers (1980) inferred a late summer or fall occupation of the site. Human activities there included butchering the animals transported in from kill sites elsewhere, marrow extraction, and possible heat treating of some of the locally procured lithics for the manufacture of stone tools.

Component II of the site contained an undiagnostic assemblage of waste flakes. It was situated one meter above the basal Component I, and was dated to between about 6,500 and 7,500 years old. The presence of a freshwater spring, raw lithic materials, and its strategic mid-Nenana River valley location all served as attractions for the utilization of the site in the past. The site was originally discovered in 1975 while

geologists were investigating newly exposed road cuts along the just-completed highway from Cantwell to Healy.

There is a remarkable lack of detail available in the historical and ethnographic literature concerning the upper Nenana River valley. Early explorers made their way through the pass accompanied by Indian guides who frequently refused to travel further than the Cantwell area because of the tribal boundaries which existed at the time. Yanert (1900) and Van Schoonhoven (1900) both had this experience. They observed that the area was rich with game. Athapaskan groups on both sides of the Alaska Range utilized the area for fall sheep and caribou hunting, especially during the seasonal migrations of animals through the uplands. Winter and spring were seasons when people relied on their cached food supplies from the summer and fall activities. If the fish runs or hunts had been less productive than usual, late winter and spring could be a time of scarcity and starvation. The return of migratory waterfowl in the springtime may have afforded some relief from the scarcity of late winter. Fishing was the predominant summer activity, with fish camps located along the major salmon-spawning rivers. Moose were hunted in the summer and early fall. This is an extremely generalized description of the aboriginal seasonal round, condensed from the works of McKennan (1959) on the upper Tanana, Osgood (1971) on the Tanaina of the Cook Inlet drainage, VanStone (1974) on the Athapaskans in general, and deLaguna and McClellan (1982) on the Ahtna of the Copper River and adjacent drainages.

The Alaska Railroad was constructed through the area in the early 1920s. With its completion in 1923 from Seward to Nenana, the area was easily accessible for the first time throughout the year. Healy, located some 28 miles north of the study area, was first established as a coal mining camp in 1905. Healy later became a supply point on the Alaska Railroad, and continues today as a coal mining town. The village of Cantwell was established as a railroad construction town, and the starting-off point for gold mining and exploration activities in the Valdez Creek area of the southern Alaska Range (Dessauer and Harvey 1980). Cantwell is composed largely of Ahtna Indians from the Copper River drainages and their descendants who had utilized the region seasonally before migrating into the area more or less permanently to work at Valdez Creek and the Alaska Railroad (Reckord 1983). The U.S. Department of the Interior reported that the Carlo Creek locality had a population of six in the mid-1970s (USDI 1976:42). Present day inhabitants of the area include year-round settlers who migrate seasonally out of the area in search of employment, and summer residents who depend largely upon summer tourism-related employment to be able to afford to live in the area year-round. The increase in tourism associated in particular with the Denali National Park and Preserve (formerly Mt. McKinley National Park) has spurred the development of campgrounds, restaurants, guided outdoor experiences, and an infrastructure of transportation, power, and social services to support the expanding population.

Based upon the existence of the Carlo Creek site and the known historic activities in the region, it was anticipated that cultural resources might be found at the Carlo Creek material sources that covered

virtually the entire known span of human occupation in Alaska. Anything from early Holocene archaeological sites to historic activities associated with modern day settlement were anticipated by the cultural resources field investigation team.

The most recent edition of the National Register of Historic Places was consulted (48 FR 41 1983) as was the listing of National Register and National Register eligible sites maintained by the Alaska State Historic Preservation Officer. No sites are listed on, or are eligible for the National Register in the vicinity of the three material sources.

RESULTS OF THE FIELD SURVEY

Despite the expectation of finding cultural resources of some significance at the material sites, the field survey team was disappointed in its search efforts. Over fifty test pits were dug at M.S. 52-2-064-2 without finding a single piece of cultural material in any of them (figure 4). While stratigraphy varied slightly for test pit to test pit, in general the following description of soils holds true for the material source.

GENERALIZED SOIL PROFILE

0 - 10 cms	0 horizon, lots of roots of the surface vegetation, which includes variously spruce, birch, dwarf birch, blueberry, crowberry, grasses, and other small plants
10 - 20 cms	A horizon, mottled, yellow to brown, roots, and root hairs extending throughout, small pebbles (less than 4 cms) scattered throughout.
20 50 cms	B horizon, brown colored, boundary clear between A and B, rounded rocks (6 to 12 cms in size),
50 cms +	stratified sands, with occasional rounded pebbles (less than 5 cms in size). This sand layer(s) were often permanently frozen, at depths varying from as little as 40 cms to over 1.0 meters in depth.

In some test pits, the B horizon was streaked with layers of clay, sands, charcoal (presumably from forest fires, and not of human origin), and other intrusions of red-brown to brownish soil lenses. The more complex stratigraphy in some test pits derives from natural causes, such as periglacial and alluvial processes, tree-throws, or animal burrowing, rather than from cultural causes.

Other cultural features noted at M.S. 52-2-064-2 included two overgrown, but recognizable winter haul roads. These two roads were cut through stands of spruce trees in the western half, and along the southern portion of the material source (see figure 4.) They appear to be abandoned, as there are small spruce trees, scrub alder, and other plants growing up in them. Their original purpose, origin, and destination remain unknown. Literature of the region notes that the valley was a travel route during the historic period, so these two trails could be from almost any period of time between ten and 70 years ago. On the western edge of the highway right-of-way, within the area cleared adjacent to the asphalt, there is a buried telephone box with a warning sign attached. The sign indicates that there are buried phone cables in the vicinity and cautions people not to begin digging before checking with the telephone company.

At the southeastern corner of the material source, there is an old access road into the pit. The road crosses what is designated as the waste area (figure 3), then turns northward at the base of the present terrace, and joins the floor of the working material source. Partly

overgrown, this access road is suitable for four-wheeled vehicles, but the primary access road is the one further north, depicted in figure 3.

At various parts of the material source, pieces of paper, aluminium foil, beverage containers, 12 and 20 gauge shotgun shells, and other pieces of historic trash (litter) were noted.

At the other two material sources, M.S. 52-2-048-2 and M.S. 52-2-063-2 similar pieces of historic trash (litter) were noted scattered throughout the general vicinity of the site. Wooden lathe marking the northern limits of the material sources were found, as were pieces of lathe marking the southwestern and southeastern corners.

In the southwestern portion of M.S. 52-2-063-2, there is an abandoned yellow school bus. The bus lies at the end of a road which leads one directly from the present access road to the bus and its associated features. The bus is in very good condition, with some of the tires remaining inflated, and very few of the windows broken by vandals, or thoughtless marksmen. The interior has had the seats removed, and tables and beds built into the floor. A wood-burning stove and chimney pipe have been added. To the southwest of the bus, there are poles stuck in the ground surrounded by chicken wire to construct a dog pen. Chainsaw cut tree stumps throughout the area probably represent wood-gathering efforts for the stove in the bus. The ground is largely covered with horse-tail vegetation, making it difficult to discover other features or artifacts lying close to the ground.

In the southeastern portion of the material source, there is an old wooden "Danger" sign lying flat on the ground, covering a large hole. Nearby a wooden pallet has been laid across some wet-lying ground, and a partly overgrown trail leads northward towards the access road from this area. Red plastic flagging is hanging in the trees nearby. Tentatively, this feature is identified as an abandoned outhouse hole, covered over after the completion of gravel excavations at the material source.

EVALUATION OF CULTURAL RESOURCES DISCOVERED

None of the cultural resources discovered during the course of these field investigations appear eligible for the National Register of Historic Places. They do not meet the requirements of sufficient age, integrity, structure, or association with people or events that are significant to local, state, regional or national history. There were no prehistoric cultural resources discovered during the course of the cultural resources survey (36 CFR 60).

The area has the moderate potential of yielding cultural resources of prehistoric age. Since none were found during the field investigations, it does not mean that they might not exist at the material sources. Shovel test probes and visual examination of exposures does not preclude the existence of deeply buried archaeological sites. Consequently, DOT/PF and its contractors should be aware of the potential for such sites while extracting gravel from the material sources.

RECOMMENDATIONS

The principal investigator recommends that the SHPO be allowed an opportunity to review this report and to comment upon its contents and conclusions. At the present time, the three material sources should be considered free of cultural resources that are on or eligible for the National Register of Historic Places. However, the supervisory engineer should be alert to the possibility of buried cultural resources during extraction operations. If any materials are found, the engineer should halt operations in the vicinity of the remains, and contact the Office of History and Archaeology, Alaska Division of Parks to consult about the proper course of action to take.

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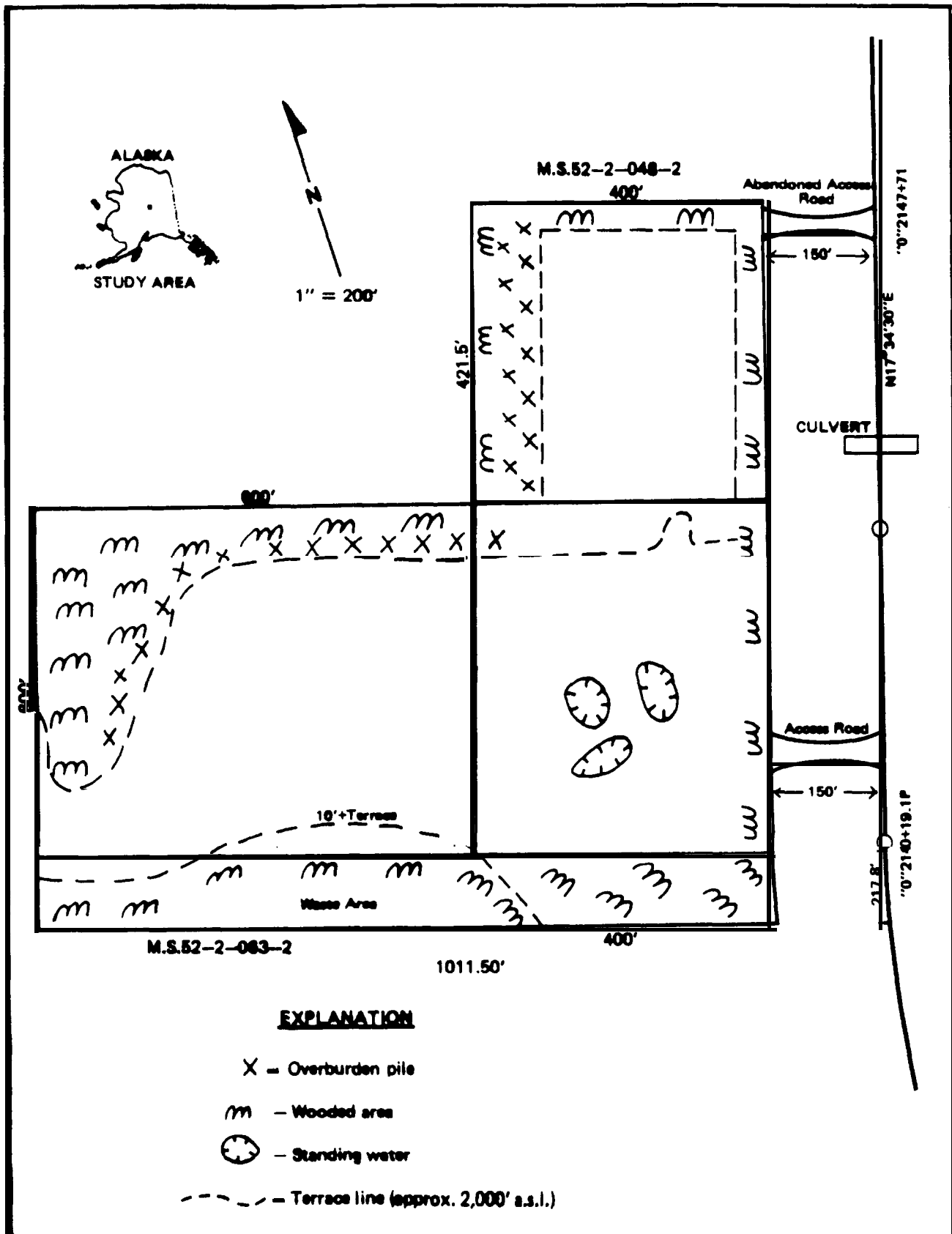


Figure 1. Vicinity map, M.S.52-2-048-2, M.S.52-063-2 mile 223.5 Parks Highway.

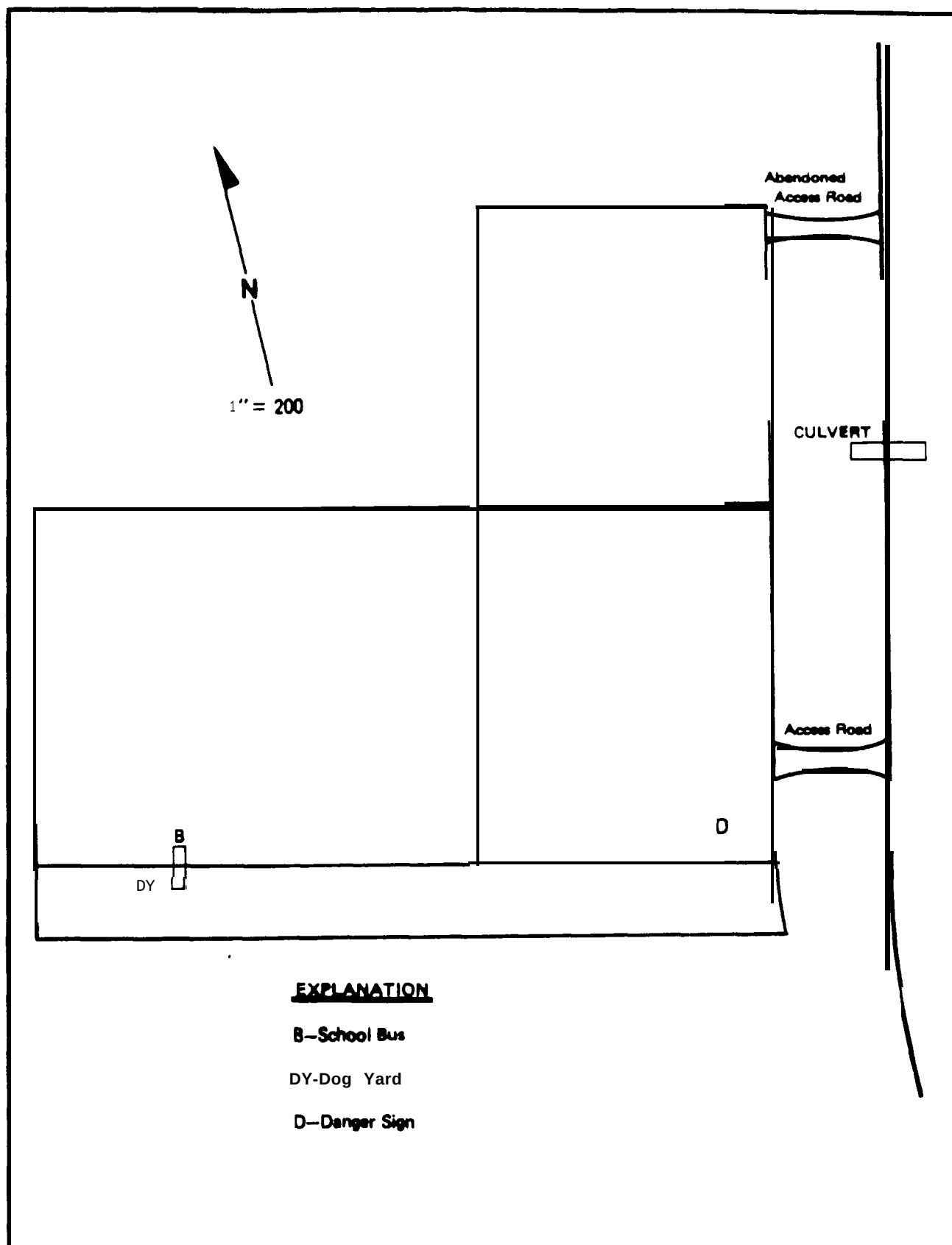


Figure 2. Cultural features at M.S.52-2-048-2 and M.S.52-2-063-2.

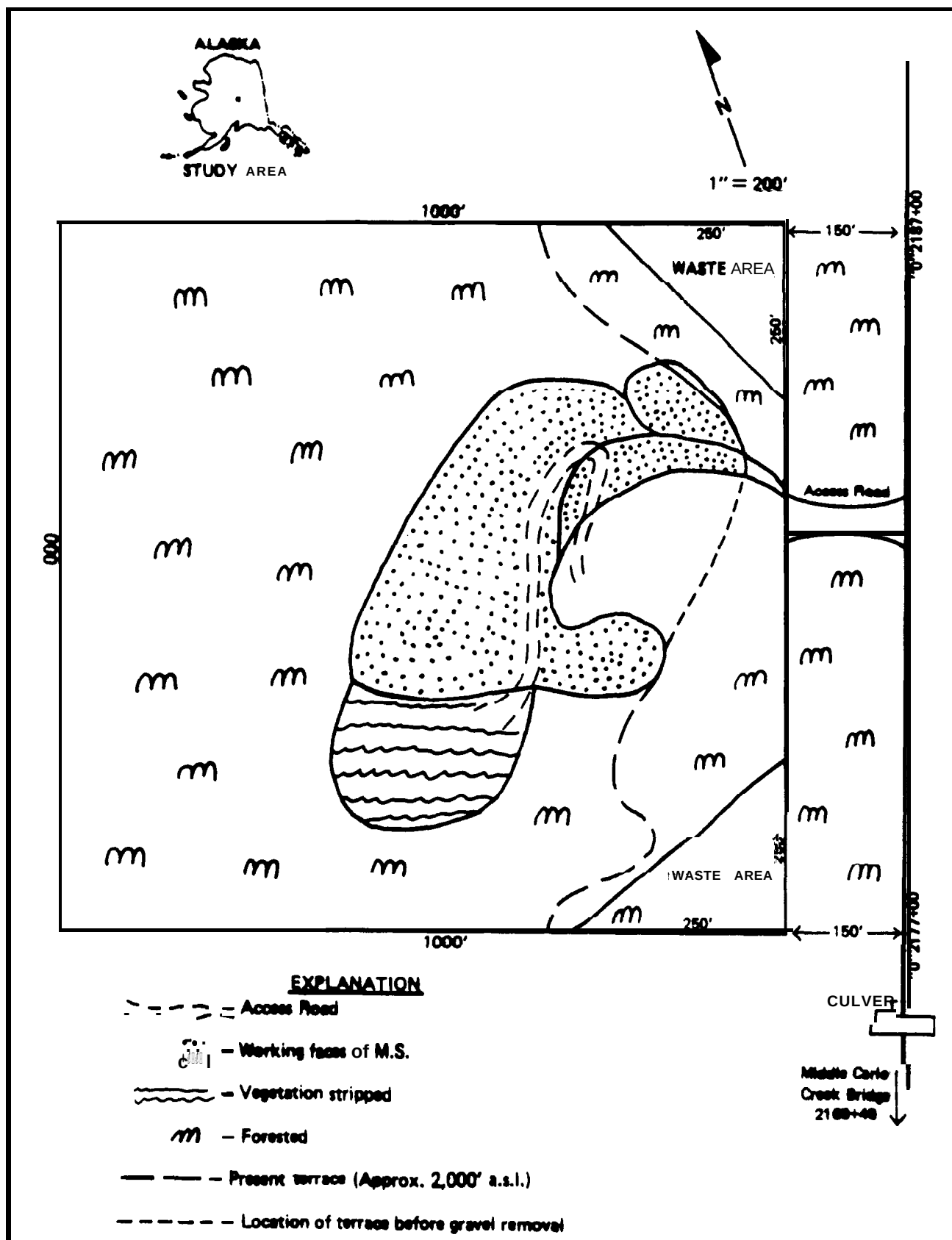


Figure 3. Vicinity map US. 52-2-064-2 Mile 224 Parks Highway.

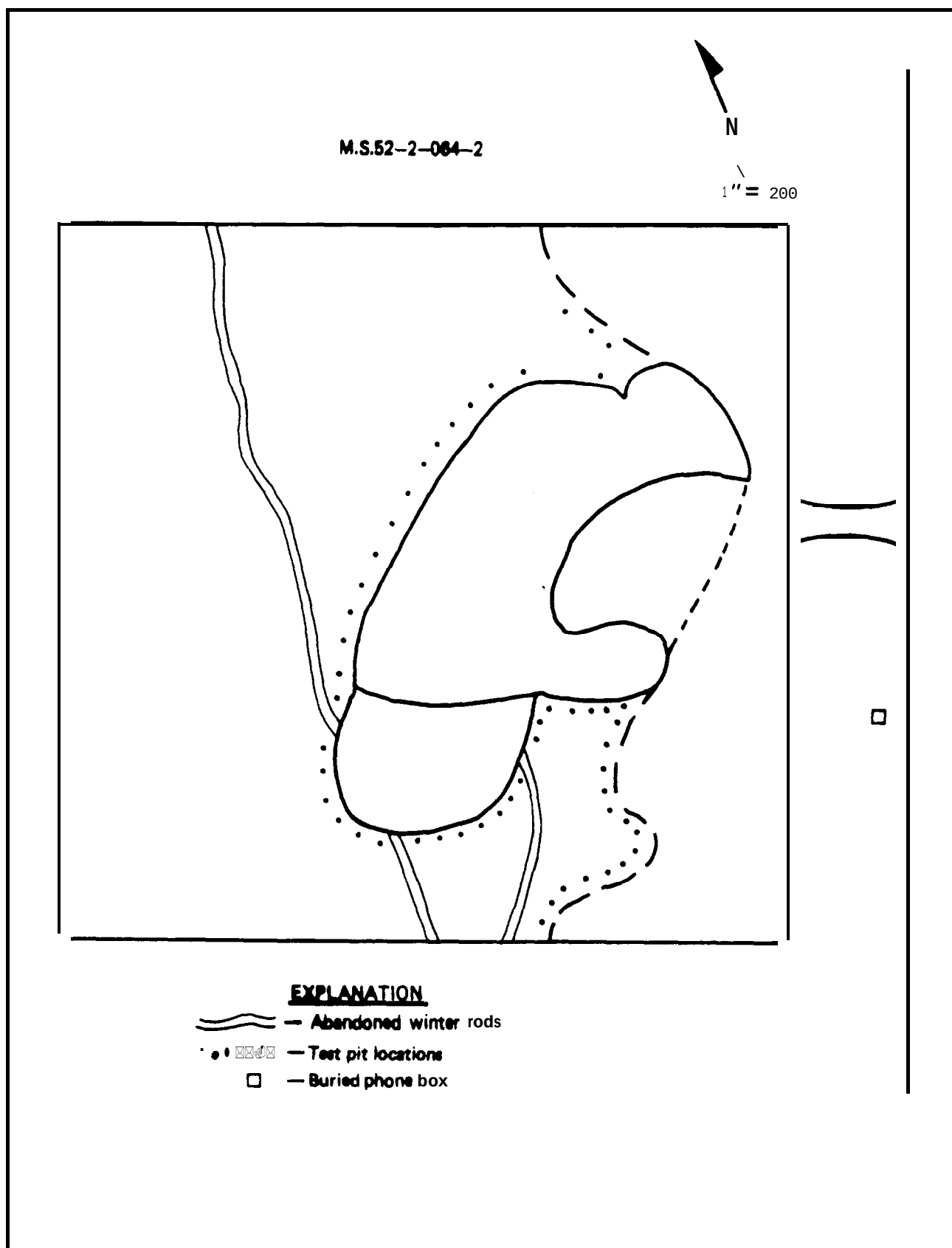


Figure 4. Cultural features at M.S.52-2-064-2