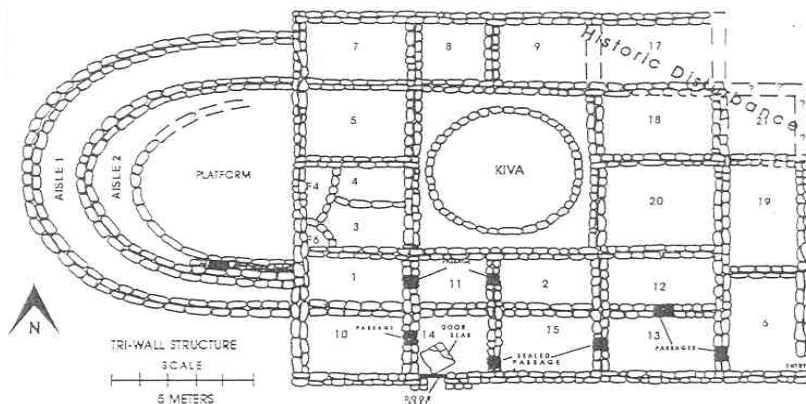


***COLORADO CULTURAL RESOURCE
SURVEY MANUAL***
Guidelines for Identification: History and Archaeology

Volume I: The Steps



**Mitchell Springs Ruin Group
(ca. 800-1250)
Montezuma County**



Nordlund House (1938-9), Denver

Revised 2005

***Colorado Historical Society
Office of Archaeology and Historic Preservation***

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Colorado Historical Society



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Cover Illustrations

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Nordlund House
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Part I INTRODUCTION

The Cultural Resources of Colorado

Colorado's sense of place comes from its diverse peoples and landscapes. The state's dramatic natural settings and the endeavors of its citizens have played an important role in forging both identity and spirit. The legacy of our ancestors is evident everywhere and is entrusted to our care. This past has helped to define who we are as Coloradans. The variety of cultural expressions in the state sparks strong emotional feelings in both residents and visitors. Through historic preservation we develop a vital relationship with our past and gain a richer sense of Colorado's heritage.

Historic preservation is defined as the stewardship of the important places from the past, including buildings, structures, sites, districts, and landscapes. These places comprise the cultural resources of Colorado. Understanding the character of Colorado's cultural resources is essential for their protection. This knowledge provides the basis for effective preservation planning, cultural resource management, and research. Information about the types of resources, their distribution and condition, and the forces threatening them enables sound decision making and provides the basis for appropriate actions to preserve Colorado's rich cultural heritage.

For the purpose of this manual, cultural resource types are defined as follows:

Prehistoric Archaeological Resources

Prehistoric archaeological resources include remains from human activities prior to written records. In Colorado, these sites date to the time before sustained European contact with Native American populations. European contact occurred at different times across the state but generally took place between the early 1700s and approximately 1840. The prehistoric archaeological resources range from large habitation complexes, such as those found at Mesa Verde, to an isolated stone flake on the eastern plains.

Historical Archaeological Resources

It is difficult to clearly define what constitutes a historical archaeological site. In general, a historical archaeological site is a location with remains from the historic period that can be studied using archaeological techniques. These sites often have artifacts and indications of *in situ* subsurface remains. In Colorado the historic period begins with the early European contact with native peoples.

Historical Architectural Resources

Historical architectural resources consist of buildings and structures related to the historical settlement and development of an area. This includes historical houses, cabins, mines, barns, schools, commercial buildings, and factories. Structures such as roads, canals, bridges, and trails are also included in this category. Many of these resources are also considered to be historical archaeological sites.

Traditional Cultural Places

Traditional Cultural Places (TCPs) are defined by their association with significant cultural practices or beliefs of a living community that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community. Examples include ceremonial or spiritual places, locations of specific economic or artistic activities, and places of importance to specific activities of a particular ethnic group.

It is important to remember that there is considerable overlap between these resource types, and many sites will exhibit a combination of attributes. How these sites are recorded, interpreted, and evaluated will depend on the physical remains present, the survey methods used and the professional background of the recorder.

The Purpose and Organization of this Manual

This manual provides guidance for conducting cultural resource surveys in Colorado. It is for individuals who have some background in historic preservation but may not be familiar with cultural resource survey practices in the state. For those who are more familiar with survey practices, the manual serves as an update and reminder of current policies and procedures. It is hoped that this manual will provide useful information to enable both experienced and inexperienced individuals involved with cultural resource management to better identify, document, and preserve Colorado's cultural resources.

The guidelines and standards outlined in this manual must be followed for surveys funded in part by the Colorado Historical Society as part of grants from the federal Historic Preservation Fund, the State Historical Fund, or any other funds administered by the Society. Other survey projects are strongly encouraged to follow these guidelines in order to produce the best possible survey results for both short and long term use.

This manual deals with two types of surveys: historical & architectural and archaeological. Historical & architectural surveys record architectural resources and are generally conducted by historians, architectural historians and historical architects. Archaeological surveys tend to record all cultural resources and are generally conducted by archaeologists specializing in history or prehistory. Similar cultural resources may be identified and recorded during either type of survey. Because each discipline brings to the survey process a slightly different perspective, multi-disciplinary surveys will generally yield the most comprehensive results. Much of the material in this manual is applicable to all types of surveys. Where there are differences in historical & architectural and archaeological surveys, the topics are treated separately.

The manual is organized into two volumes. *Volume I* is primarily organized according to a series of 13 steps necessary to complete a successful cultural resource survey. While the manual may be read from cover to cover, cross references throughout facilitate the use of the manual to answer specific questions related to various types of survey activities. *Volume II* contains the Colorado Cultural Resource Survey forms and instructions.

The manual was written by the staff of the Office of Archaeology and Historic Preservation (OAHP) at the Colorado Historical Society. Additional information concerning OAHP and its programs is located in Part III.

**For more information concerning cultural resource surveys,
please visit the OAHP website (www.coloradohistory-oahp.org)
or contact OAHP at 303-866-3395.**

Part II

MAJOR STEPS FOR CONDUCTING A CULTURAL RESOURCE SURVEY

Introduction to the Steps

There are several basic steps when conducting most cultural resource surveys. Although surveys vary depending on the purpose, location, intensity, and types of resources present, following these major steps will facilitate the successful completion of the survey.

Step 1: Review the Cultural Resource Survey Manual

Step 2: Define the Purpose of the Survey

Step 3: Fund the Survey

Step 4: Select the Project Personnel

Step 5: Plan the Survey

Step 6: Inform and Involve the Public

Step 7: Conduct the Fieldwork

Step 8: Conduct the Office/Lab Work

Step 9: Evaluate the Resources

Step 10: Identify and Record Districts

Step 11: Prepare the Report

Step 12: Present the Findings

Step 13: Use the Findings

Although the steps represent a logical progression, there are occasions when conditions warrant some rearrangement of activities to achieve desired survey goals. The steps should be viewed as a general framework for conducting a cultural resource survey — not all steps pertain to all surveys, and additional steps may be required in some cases.

Step 1

Review the Cultural Resource Survey Manual

This manual provides guidance and standards for individuals with different levels of experience and knowledge. It may be used to complete all kinds of cultural resource surveys, from the initial planning stages to the completion of a refined finished product. Therefore, depending on your level of knowledge and experience, what you intend to survey, the intensity of the proposed survey, and where you are in the process, some sections of this manual will be more useful than others.

OAHP suggests that you start by reviewing this manual from beginning to end. This will familiarize you with all the steps necessary to conduct a successful survey. It will also allow you to identify those areas of the manual that will be most useful. Familiarizing yourself with all the steps prior to beginning will better enable you to accomplish each individual step. For example, an understanding of Step 13, *Use the Findings*, is necessary to complete Step 2, *Define the Purpose of the Survey*. The survey purpose, in turn, will guide the survey planning, the determination of survey intensity, and the presentation of the findings.

Step 2 Define the Purpose of the Survey

Definition of a Cultural Resource Survey

A cultural resource survey is the collection and analysis of information concerning the physical remains that represent our past. The information characterizes both the resources and their location and becomes the basis for evaluation, planning, and management.

Five categories of cultural resources are defined by the National Register guidelines. These categories and definitions are presented below and are discussed in greater detail in the National Register bulletin, *How to Complete the National Register Registration Form*.

Building

A *building*, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. *Building* may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.

Site

A *site* is the location of a significant event, a prehistoric or historical occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historical, cultural, or archaeological value regardless of the value of any existing structure.

Structure

The term *structure* is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter. Examples include bridges, tunnels, dams, railroad grades, railroad cars, roadways, grain elevators, windmills, railroad and trolley cars, and earthworks.

Object

The term *object* is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment. Examples include sculpture, monuments, property boundary markers, and fountains.

District

A *district* possesses a significant concentration, linkage, or continuity of sites, buildings, structures, and/or objects united historically or aesthetically by plan or physical development.

By documenting domestic, commercial, industrial, agricultural, recreational, and spiritual areas we can better understand how people lived, worked, and played; how communities grew; and how our state has changed over time. In short, a survey documents the physical evidence of the past that expresses and contributes to the history and identity of a region. The different types of cultural resources and surveys are discussed in Step 5.

Purpose of a Cultural Resource Survey

A cultural resource survey can be conducted with one specific purpose in mind or with the goal of meeting multiple objectives. These surveys provide tangible and lasting evidence of who we are, how we got here, and how we have changed through time. More importantly, identification, designation, and protection of cultural resources ensure that communities retain their special sense of time and place.

Completed inventories provide the foundation for informed resource management and planning decisions. By considering these non-renewable cultural resources early in the planning stages, it is more likely that the resources can be preserved for future generations. Surveys enable individuals, communities, and businesses to make use of federal funding, licenses, or permits without undue and expensive delays. Preservation planning studies that provide for the management and protection of cultural resources are usually based on the results of cultural resource surveys.

Survey information is also a valuable educational tool for local residents, business owners, and the general public who are interested in learning more about a region. Home and business owners often use the information to help in the appropriate restoration or rehabilitation of their houses and places of business. It can also be used for walking tours or in the general reconstruction of the area's prehistory or history. Information gathered during surveys often becomes the basis for nominations to the National Register of Historic Places (NRHP), the State Register of Historic Properties, or as Local Landmarks.

Project-Specific Goals

Several factors determine or influence the goals of a specific survey. The survey may be done in response to one or several community needs or be required due to local, state or federal regulations. In all these cases, clearly defining the project purpose and goals during the initial planning for the survey will help to assure that the appropriate data is collected in the field and the resulting documents respond to actual needs.

HISTORICAL & ARCHITECTURAL SURVEYS

Although historical & architectural surveys are often done in response to various regulations, they are also frequently initiated by local planning departments or neighborhood organizations to gather information relating to a specific part of their jurisdiction. Often, threatened buildings or sites need documentation to facilitate preservation or data recovery. The survey may occur in response to a neighborhood desire to document its history in anticipation of signage or a district nomination.

ARCHAEOLOGICAL SURVEYS

Archaeological surveys are most often done in response to a proposed undertaking that is regulated by federal, state, or local laws. The goals of each project are designed to respond to the nature and extent of the undertaking with a frequent goal of providing management recommendations for each recorded resource. The information collected during archaeological surveys can also be used for research and educational purposes.

Step 3 Fund the Survey

Survey Funding Overview

Survey funding may be provided by various public and private sources. Mandated surveys, which are often in response to provisions in Section 106 of the National Historic Preservation Act or required by various state or local municipalities, are generally spurred by a proposed change in the status or condition of a structure or ground surface. Funds for these surveys may be supplied by the agency, company, institution, or individual proposing the undertaking.

Funding for non-Section 106 related cultural resource surveys is available through a variety of sources. Surveys may be funded by municipalities or agencies seeking additional information about the cultural resources in their regions. Because most funding programs have deadlines, and because specific programs and requirements frequently change, it is a good idea to begin looking for financial help as soon as possible.

The following information summarizes the major sources of survey funding. Additional funding options are available through local communities as noted in the *Colorado Grants Guide*. The Guide lists numerous funding agencies and is available from the Community Resource Center (303-623-1540; www.crcamerica.org). The State Historical Fund maintains a list of private foundations that fund preservation-related activities.

Section 106 of the National Historic Preservation Act

The National Historic Preservation Act of 1966 (and subsequent amendments) is the nation's primary historic preservation law. The Act encourages preservation and wise use of historic resources by setting national policy, creating the National Register of Historic Places and Certified Local Government (CLG) programs, establishing the State Historic Preservation Officer (SHPO) position and the Advisory Council on Historic Preservation, and establishing federal agency responsibilities.

A major portion of these responsibilities and procedures is defined in Section 106 of the Act. Section 106 applies both to properties listed in the National Register of Historic Places and properties determined to be eligible for inclusion in the Register. Five steps are involved in the process:

1. Initiate the Section 106 process
2. Identify historic properties
3. Assess adverse effects
4. Resolve adverse effects.

Additional information concerning Section 106 is available through OAHF or through the National Park Service.

Certified Local Governments (CLGs)

The CLG program was created in 1980 by amendments to the National Historic Preservation Act. The program's purpose is to expand the federal, state, and public preservation partnership by:

- ◆ Involving local governments in the process of identifying and nominating buildings and districts to the National Register
- ◆ Fostering local preservation activities
- ◆ Networking local preservation agencies

Communities that have historic preservation commissions to enforce appropriate laws, maintain an inventory of historic resources, and involve the public in the preservation process are eligible to become CLGs. A current list of CLGs in Colorado is available on the OAHF website.

Ten percent of Colorado's annual apportionment to OAHF from the National Park Service is designated for funding CLG projects. Local governments with CLG status can request Historic Preservation Fund (HPF) financial assistance for the following types of projects: survey, preservation planning, National Register nominations, context development, public education programs, preservation activities or publications, and the development of innovative preservation methods, tools, or technologies.

State Historical Fund (SHF)

The State Historical Fund was created by the constitutional amendment allowing limited gaming in the towns of Cripple Creek, Central City, and Black Hawk. The amendment directs that a portion of the gaming taxes be used for historic preservation throughout the state. The SHF assists in a wide variety of preservation projects including restoration and rehabilitation of historic buildings, architectural assessments, archaeological excavations, designation and interpretation of historic places, preservation planning studies, and educational and training programs. Assessment grants for both archaeological and architectural resources are also available and provide a valuable tool for identification, evaluation and planning.

Approximately \$10 million is available for distribution annually and funds are distributed through a competitive process. All projects must demonstrate strong public benefit and community support. Grant award amounts vary depending on the type and size of the proposed project. For additional information contact the SHF at 303-866-2825.

National Park Service Matching Grants-in-Aid

The Historic Preservation Fund (HPF) periodically provides matching grants-in-aid to the States, Territories, and Indian Tribes to assist in their efforts to protect and preserve properties listed in the National Register of Historic Places (NRHP). In each state, the State Historic Preservation Officer (SHPO), appointed by the Governor, nominates properties to the NRHP and selects properties for financial assistance. States carry out preservation activities directly, as well as through subgrants and contracts with public and private agencies, non-profit organizations, higher educational institutions, and individuals. Requests for survey grants may not represent more than fifty percent of the total project cost and must be matched with cash or donated services.

Community Development Block Grants (CDBG)

These grants, from the U.S. Department of Housing and Urban Development, supply federal funds directly to communities for a wide range of projects that will improve urban living conditions through housing and environmental change. The money is allocated by a formula, with the majority going to core areas in cities, qualified urban counties, and other units of government within metropolitan areas. Some funds are reserved for rural areas, and a certain amount of discretionary money is available for special projects.

Step 4 Select the Project Personnel

The Role of the Sponsoring Organization or Lead Agency

Cultural resource surveys should be coordinated with local or regional planning agencies in conjunction with OAHP. This facilitates the integration of the survey information into the local planning network as well as the centralized state files and database, thereby building local expertise in preservation planning and contributing to regional knowledge.

Once the decision has been made to conduct a historical & architectural survey, a survey coordinator should be appointed to manage the overall operation. The survey coordinator is generally a staff member of the agency or organization sponsoring the project and is responsible for securing the services of a qualified surveyor, seeking funding, managing the financial data, and acting as a liaison between the individuals and organizations involved.

Archaeological surveys are often coordinated by a cultural resource specialist on staff at a land-holding agency. As with the historical & architectural survey, information gathered during the survey will be integrated into the agency's database as well as at OAHP.

The Use of Consultants

The usefulness of the survey as a planning tool depends on its overall accuracy and quality. It is essential that a professional skilled in cultural resource identification and recording oversee the survey. A *Directory of Cultural Resource Management Agencies, Consultants, and Personnel for Colorado* is available for purchase from OAHP in hardcopy and also online through the OAHP website. The directory is updated several times a year and individuals who are working in Colorado may ask to be added. Note that inclusion in the directory does not constitute a recommendation or referral from OAHP.

The Secretary of the Interior's Professional Qualification Standards

The sponsoring organization or lead governmental agency may require that those conducting the survey meet specific professional qualifications. Most federal projects require the surveyor to meet The Secretary of the Interior's Professional Qualification Standards. The Standards, as defined in the Code of Federal Regulations, 36 CFR Part 61, are as follows:

History

The minimum professional qualifications are a graduate degree in history or a closely related field; or a bachelor's degree in history or a closely related field plus one of the following: (1) at least 2 years of full-time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historical organization or agency, museum, or other professional institution; or (2) substantial contribution through research and publication to the body of scholarly knowledge in the field of history.

Archaeology

The minimum professional qualifications are a graduate degree in archaeology, anthropology,

or closely related field plus (1) at least 1 year of full-time professional experience or equivalent specialized training in archaeological research, administration, or management; (2) at least 4 months of supervised field and analytic experience in general North American Archaeology; and (3) demonstrated ability to carry research to its completion. In addition to these minimum qualifications, a professional in prehistoric archaeology shall have at least 1 year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archaeology shall have at least 1 year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period.

Architectural History

The minimum professional qualifications are a graduate degree in architectural history, art history, historic preservation, or a closely related field; with course work in American architectural history, art history, historic preservation, or a closely related field plus one of the following: (1) at least 2 years of full-time experience in research, writing or teaching in American architectural history; or a bachelor's degree in architectural history, or restoration architecture with an academic institution, historical organization or agency, museum, or other professional institution; or (2) substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

Architecture

The minimum professional qualifications in architecture are a professional degree in architecture plus at least two years of full-time experience in architecture or a State license to practice architecture.

Historic Architecture

The minimum professional qualifications are a professional degree in architecture or a State license to practice architecture, plus one of the following: (1) at least 1 year of graduate study in architectural preservation, American architectural history, preservation planning, or a closely related field; at least 1 year of full-time professional experience on historic preservation projects. Such graduate study or experience shall include detailed investigations of historic structures, preparation of historic structures research reports, and preparation of plans and specifications for preservation projects.

The Secretary of the Interior does not have official standards for such preservation-related professions as landscape architecture and cultural anthropology. Although proposed revisions to the guidelines were released in 1997 and include standards for several additional professions, these revisions were not adopted and serve only as additional guidance. In reviewing the qualifications of such professionals, approximate equivalencies to the qualifications listed above should be sought, the 1997 proposed guidelines can be referenced, and professional organizations in the specialties involved should be consulted.

Step 5 Plan the Survey

The Importance of Planning

A well-planned survey assures not only the quality and completeness of the field work but also the usefulness of the results. By spending the time up front to carefully plan the survey you may avoid costly mistakes and unnecessary delays. Although each survey has specific circumstances and needs that influence the pre-project planning, the activities noted below tend to be common elements in all surveys.

Establish Survey Boundaries

HISTORICAL & ARCHITECTURAL SURVEYS

For historical & architectural surveys, city or county limits often help define the survey area. In other cases, consideration about what part of a community to survey may be based on areas slated for development or areas with recognized development potential. A basic lack of historical information about the settlement and development of a particular section of a city or county may also determine survey priorities.

ARCHAEOLOGICAL SURVEYS

Archaeological surveys are often prompted by proposed projects involving ground disturbance, changes in land ownership, or changes in land use. In these cases, the survey boundary will reflect the extent of the proposed undertaking and sometimes include the area of potential effect or an additional buffer. Survey boundaries may be based on the possible distribution of a specific site type or the desire to understand the prehistory in a particular region.

Prepare a Research Design

A statement of objectives or a research design should be prepared before the actual survey is performed. The purposes of the research design are to describe the scope of the survey and to define a set of expectations based on the background research of the study area. The research design should clearly define the area to be surveyed and the amount and kinds of information to be gathered about properties in the survey area. A discussion of the types of archival research materials to be used along with their nature and limitations should be included for historical & architectural surveys. For archaeological surveys, include specific information concerning how the ground surface will be examined and how resources will be recorded. Expectations about the kind, number, location, character, and condition of cultural resources, based on the existing contexts and previous knowledge or background research on the area, should be clearly outlined.

The complexity and size of the survey, along with the methods, will greatly influence the scope of the research design. The topics discussed below summarize the key elements of survey planning and research designs. Please refer to the section concerning the *Statement of Objectives/Research Design* for Archaeological Survey Reports (Step 11) for additional information.

Choose the Type of Survey

HISTORICAL & ARCHITECTURAL SURVEYS

After determining the purpose and use of the survey information and setting the geographic survey limits, the inclusiveness and intensity of the survey must be established. Inclusiveness

refers to the percentage of resources within the survey area that will be recorded. In a comprehensive survey, all cultural resources within the survey area will be recorded, regardless of age, location, size, condition, or association. In a selective survey, only selected resources meeting certain predetermined criteria are recorded. These criteria might include age, condition, use, or perceived historical association.

Intensity refers to the amount of information that will be recorded about each resource. Some surveys only record information obtained at the site through visual observation. Such information might include street address, site and architectural description, current use, and condition (not to be confused with integrity, which is the ability of a property to convey its significance). More intensive surveys would include historical and architectural research on each property. Such information would include construction date, designer and/or builder, changes over time, past owners and their histories, and the role of the building in the larger community history. This level of recording allows for an assessment of historical and architectural significance and an evaluation of resource integrity.

The inclusiveness and intensity of the survey should fit the overall survey goals. Generally speaking, the more comprehensive the survey, the more useful the information is in future planning decisions.

The survey types below combine different levels of inclusiveness and intensity.

Reconnaissance Survey

Reconnaissance surveys are visual or predictive surveys that identify the general distribution, location, and nature of cultural resources within a given area. These surveys are generally of low intensity and record only selective resources. The only resources recorded may be those of a specific architectural style or material, those exhibiting a single use or association of uses, or properties related to a historical theme. In some cases, the reconnaissance survey may attempt to provide a minimal level of information regarding all cultural resource groups within the survey area.

Specific resource documentation in a reconnaissance survey rarely exceeds property address, observational information on architectural style and features, and minimal photographic recording.

Reconnaissance surveys often are conducted to establish the boundaries for more inclusive and intensive surveys to follow.

A reconnaissance survey should document:

- ◆ Boundaries of the survey area
- ◆ Kinds of properties present in the survey area
- ◆ Method of recording specific resources
- ◆ Specific resources surveyed
- ◆ Recommendations for additional survey activity

Reconnaissance surveys may or may not produce survey forms for each individual resource. A survey report summarizing and analyzing the information obtained and offering recommendations related to the survey goals should be prepared for all reconnaissance surveys.

Intensive Surveys

Intensive surveys are designed to fully record each resource. These surveys provide detailed architectural and historical information about many or all of the resources in the survey area. Intensive surveys always generate survey forms for each site surveyed. Precise locational information is required. Each resource is described and photographed. The historical associations of each building and structure are researched and the construction history tracked.

An intensive survey should document:

- ◆ Boundaries of the survey area
- ◆ Kinds of properties present in the survey area
- ◆ Method of recording specific resources
- ◆ Resources in the survey area
- ◆ Assessment of individual eligibility for National and State Register and local historic designation
- ◆ In the case of comprehensive surveys, an assessment of eligible historic districts for National and State Register and local historic designation
- ◆ Recommendations for additional survey activity

When completed, the level of information should be such that each property may be evaluated for eligibility for National and State Register listing and as a local landmark if a local landmarking program exists in the community. The information collected during an intensive survey can be incorporated into a National or State Register nomination or integrated into the local landmark designation process. In the case of communities with design review as part of their landmark program, the intensive level of documentation will provide a good baseline of property design and materials. There are two primary types of Intensive Survey:

Comprehensive surveys

Comprehensive surveys record every resource in the survey area. This provides the greatest amount of survey information but is also the most time-consuming and the most expensive. A comprehensive survey is an excellent way to establish a baseline of information regarding a community's cultural resources. A comprehensive survey provides the benchmark for future survey and planning activities.

Comprehensive surveys also provide the level of information necessary to determine the existence of eligible National, State, or local landmark historic districts.

Selective surveys

Selective surveys differ from comprehensive surveys in that only selected resources within the survey area are recorded at the intensive level. Specific resources may be selected based on age, use, design, or other criteria. A selective survey permits

determinations of individual National and State Register eligibility, but district eligibility assessments are generally not possible due to the geographic scattering of the surveyed resources.

ARCHAEOLOGICAL SURVEYS

Archaeological surveys may include the recording of prehistoric resources, historic resources, traditional cultural places (TCPs), or any combination of the above. Generally, archaeological surveys document all cultural remains over 50 years of age. Many factors, including project purpose and budget, the nature and destiny of expected resources, and the topography of the project area, will help determine the intensity of survey that is appropriate. Three primary classes of survey intensity are used for archaeological surveys:

Class I

A Class I survey involves the thorough review and synthesis of the existing literature concerning a survey area. Often this is done as a planning tool or feasibility study in anticipation of a proposed large project. Generally Class I surveys involve little or no fieldwork and do not result in the recording of resources.

Class II

Any type of sample survey that involves less than a 100 percent survey of a project area is considered a Class II survey. The purpose of a sample survey may be to survey those areas with a high probability of cultural resources or to identify those areas possessing a high probability for locating cultural resources. The sample survey area may be specifically selected, random, or stratified and may include any percentage of the project area.

Class III

A Class III or intensive survey involves 100 percent pedestrian coverage of a project area. Generally this involves walking transects at a set interval or coverage of the area along contour lines.

The methods chosen for archaeological projects should be the most effective, least destructive, and most efficient/economical means of obtaining needed information. An emphasis should be placed on non-destructive methods whenever deemed appropriate.

Conduct a File Search

The purpose of a cultural resource file search is to review the type and location of any previously recorded resources and to gather information concerning past surveys. Many local agencies maintain excellent cultural resource files and databases which should be checked in addition to the centralized database at OAHP. For additional information concerning file search procedures and fees, please refer to the OAHP website. NOTE: A review of records in the on-line cultural resource database *Compass* is **not** an adequate substitute for an official file search.

In some instances, past surveys may have focused on one particular type of resource at the expense of another, or one specific area may have been adequately covered while another was overlooked. It is important to understand the survey method that was employed to understand how complete the results might be.

File search results are available in hardcopy or a variety of digital formats and can be delivered using traditional or electronic methods. Information concerning site locations and the majority of survey locations is also available in a format that can be transferred to a GIS (Geographical Information System). Please contact OAHP staff for additional information (303-866-3395).

Background Research of the Survey Area

Becoming acquainted with the natural and cultural developmental forces that shaped the area is a logical early step of any survey. The purpose of conducting background research of a study area is to acquaint project personnel with the known history of the area, to identify properties or sites with documented histories, and to identify themes and contexts relevant to the study area.

Several lines of evidence are important when gathering information concerning the human use of an area or the background of specific properties, buildings, or sites. This information provides a basis for resource interpretation and lays the groundwork for evaluations of significance.

Important background information may include:

HISTORICAL & ARCHITECTURAL SURVEYS

- ◆ Geography and environment
- ◆ Nature and results of past cultural resource work
- ◆ Dates of early land surveys, land acquisitions, and settlements
- ◆ Transportation routes
- ◆ Commercial and industrial development
- ◆ Important cultural groups and individuals
- ◆ Residential settlement and growth, annexations, and subdivisions
- ◆ Types and changes in land use

ARCHAEOLOGICAL SURVEYS

- ◆ Geography and environment
- ◆ Nature and results of past cultural resource work
- ◆ General overviews of the culture history
- ◆ History of land use and disturbance
- ◆ Review of ethnographic literature
- ◆ Local artifact collections or amateur archaeologists in the region

Sources of background information for cultural resource surveys include:

HISTORICAL & ARCHITECTURAL SURVEYS

- ◆ Early survey reports, including General Land Office (GLO) maps and notes
- ◆ General histories of the town or county
- ◆ People living in the area
- ◆ Local historical societies
- ◆ Anniversary editions of local newspapers
- ◆ Chamber of Commerce reports and brochures
- ◆ Some or all of the sources listed below concerning archaeological surveys

ARCHAEOLOGICAL SURVEYS

- ◆ OAHP site and document files
- ◆ Cultural resource files at the landholding agency
- ◆ Cultural resource consultants and contractors who have worked in the area
- ◆ People living in the area
- ◆ Professional journals and books

Identify Themes and Contexts

The purpose of identifying themes and contexts is to define and characterize the important background of a community or region. The survey process identifies buildings, structures, sites, objects, and districts associated with the contexts.

Themes are defined as the broad patterns of history or prehistory. The terms *context* and *theme* are often used interchangeably, but context is composed of three factors: a theme, a place, and a time. A theme might be *railroad transportation* while a context might be *railroad transportation in the Pueblo area from 1870 through 1940*.

The information gathered during the background research may suggest new themes which may eventually become new contexts. These contexts will then be used to evaluate resources and identify special relationships existing among individual resources or groups of resources. OAHP has many context documents that may be purchased in hardcopy. More are available through the OAHP website. Five contexts concerning the prehistory of Colorado, published in 1999 by the Colorado Council of Professional Archaeologists, are available through the University of Utah Press (www.upress.utah.edu/Subject/Colorado.html). Additional information is available in recent survey reports.

Define Survey Methods

The survey methods should reflect the most efficient way to accomplish the purpose of the survey.

A clear explanation of the size and location of the project area and, if different, the size and location of the survey area, should be provided and illustrated by detailed maps. The methods section of a report should state how resources will be located (drive through neighborhoods, walk 20 meter transects, walk down each side of specific streets, etc.), and how they will be recorded.

Recording information includes the basic procedures and the types of forms, maps, and photographs that will result. Definition of key words, such as *site* and *isolated find*, should also be included.

Documenting Historical Features

Although cultural resources over 50 years of age are recorded during most surveys, in some cases historical features need not be fully documented. It is not necessary to fully document features such as dirt roads, stock ponds, soil berms, fence lines, small irrigation ditches, pastures, or fields unless:

- They are part of a larger site, for example, a historic farm
- They are known to be significant or are named (based on field or archival evidence)
- The project methodology requires their recording

If the resources are not fully documented, they should be generally described in the survey report ("A scattering of soil berms on the north slopes in the SW quarter of Section 16" or "A dirt road extending from the NW quarter of Section 25 and running eastward toward Greeley"). Please contact the lead agency for the project if there are questions concerning the documenting of these features.

Establish Survey Time Schedule

A clear and comprehensive schedule of activity dates, product deliverables, and deadlines should be established as early as possible. This keeps the project on track and assures that the tasks are done in a logical order. It is also a valuable communication tool for project personnel and the community.

Secure Necessary Permits/Permission from Landowners

It is important to obtain permission from private landowners if you wish to enter their property. If the project is on state or federal land it may be necessary to obtain a special permit from the landholding agency. This process can take considerable time due to out-of-town property owners and busy government staff, so begin the process as soon as possible.

Permits for archaeological work on State land can be obtained through OAHP. Permits for cultural resource work on federal or tribal lands should be secured from the specific agency or tribe. In most cases, curation agreements are required as a part of the permit process if artifact collection is a part of the project. For additional information concerning curation, contact the lead agency or OAHP.

Conduct a Visual Review of the Survey Area

It is usually helpful to walk or drive through the survey area prior to beginning the formal survey. The purpose of such an overview is to assess the big picture and the surrounding region as opposed to the specific resources. The goal is to familiarize the researcher with the larger themes represented in an area and the relationships between the man-made and natural elements. The following observations are important when conducting the review of the survey area:

HISTORICAL & ARCHITECTURAL SURVEYS

- ◆ How resources or groups of resources relate to their natural environment
- ◆ Continuity or discontinuity of architectural styles and shapes
- ◆ Property uses and patterns of development

ARCHAEOLOGICAL SURVEYS

- ◆ Natural features of the environment
- ◆ Topographic elements
- ◆ Access to various parts of the survey area
- ◆ Location/extent of disturbed areas
- ◆ Review of possible access strategies

Step 6

Inform and Involve the Public

A wide range of public and private involvement is encouraged. The majority of cultural resources in Colorado are privately owned, and the preservation and protection of significant cultural resources is often contingent upon public awareness and pride. Although some surveys, particularly those involving small projects done under Section 106 of the National Historic Preservation Act, may not warrant the involvement of the general public, many projects benefit from public awareness and participation.

Public meetings provide an excellent opportunity to enlist local support for survey activities while addressing concerns regarding the use of the survey data. Early in the survey planning process, an informational public meeting can be held to inform citizens about the survey. Citizens attending such meetings often are willing to volunteer their time and experience to help with survey activities. Their familiarity with and knowledge about the community can be of great value in locating important historical documents and photographs. Throughout the survey process, local media should be updated regularly to keep the public informed. The creation of a website, if the project is of sufficient importance or duration, is also a wonderful opportunity for public involvement.

Existing local historical or landmark commissions might act as a survey review board, or a specially selected group of individuals may be appointed for the duration of the survey. A board can provide technical and professional assistance to the surveyor and certify the accuracy and sufficiency of the completed survey information. Membership should include professionals in history, architectural history, and archaeology. Citizens with occupations, cultural backgrounds, or interests that would be of particular value in evaluating survey results and integrating them into local planning objectives should also be included. Full community representation will ensure that all aspects of the cultural development of an area are considered.

After the survey is completed, presenting the findings to the community may be the first step toward promoting local preservation efforts and resource protection. This can be accomplished in a variety of ways. For example, some communities have chosen to produce publications of the survey results to make local citizens and visitors aware of the area's more significant historical resources. Many communities have used survey data to produce walking tour brochures describing significant buildings and neighborhoods. One county created a photographic exhibit of its significant historical buildings, structures, and sites. When appropriate, copies of the survey forms and results should be placed on file in local libraries and planning offices. Please refer to Steps 12 and 13 for more ideas about presenting and using survey results.

Step 7 Conduct the Fieldwork

Fieldwork Tasks

Completing an accurate recording of cultural resources is essential to any successful project. Unless a site is re-evaluated, the original field recording serves as the sole source of information about that cultural resource. If the original documentation is inaccurate or incomplete it is very difficult to perform a re-evaluation. Clearly, the quality of recorded information affects the management and protection of cultural resources long after the survey is finished.

When a cultural resource is recorded in the field, that information is eventually integrated into a statewide database housed at OAHP. The hard copies of the survey forms and associated documentation are also filed at OAHP. The database and survey forms are used extensively by cultural resource professionals as well as academicians for research. In addition, evaluations of eligibility for the State or National Registers of Historic Places are based on information contained in these forms.

Recording cultural resources consists of both fieldwork and office/laboratory work. Tasks involved in the fieldwork portion are discussed below; those included in the office/laboratory portion of a survey are reviewed in Step 8. Although variations are to be expected depending on the type, scale, and location of your particular survey, the tasks are discussed in the logical flow for most surveys.

Cultural Resource Survey Forms

The survey forms and instructions (see *Volume II*) facilitate data collection concerning archaeological sites, historic buildings and structures, and historic districts. The forms provide prompts and guidelines to ensure that data is collected in a uniform and thorough manner. The forms include descriptive, environmental, background, and management information needed to adequately assess the potential significance and integrity of sites, buildings, structures, and districts. The information is used by a variety of federal, state, local, and private entities for research, education, management, and planning. Generally, one set of the forms is maintained by the sponsoring organization or lead agency and one set is sent to OAHP. Information from the OAHP forms is incorporated into the State's computerized cultural resource database.

Different inventory forms are used depending on the survey methods and the resource type. The following table summarizes cultural resource types and the appropriate form(s) to be completed. Depending on the survey methods and resource, more than one form may be required.

Which Form to Use When

Cultural Resource Survey Forms	Resource Type	Architectural Inventory Form (1403)	Management Data Form (1400)	Historic Architectural Component Form (1402)	Historic Archaeological Component Form (1404)	Prehistoric Archaeological Component Form (1401)	Rock Art Panel Supplement (1407)	Linear Component Form (1418)	Paleontological Component Form (1409)	Vandalism Record Form (1406)	Cultural Resource Reevaluation Form (1405)	Isolated Find Record (1408)
Historic Architecture (for use when recording historical properties when archaeological remains are <u>not</u> recorded or evaluated)		X										
Historic Architecture (for use when recording historical properties when archaeological remains are <u>recorded</u> or evaluated)			X	X	X							
Non-Architectural Historic Archaeological Site			X		X							
Prehistoric Archaeological Site			X			X						
Rock Art Component			X			X	X					
Linear Feature			X					X				
Paleontological Site			X						X			
Vandalized Site			X							X		
Revisited Site											X	
Isolated Find												X

NOTE: Additional component forms should be completed as appropriate (see Volume II). Examples of completed forms are available at OAHHP. If the original site form is incomplete or over 10 years old, a complete new standard form(s) is required. If a new form is completed, a re-evaluation form is not needed.

The forms and their accompanying instructions are located in *Volume II*. They are also available on disk from OAHP or on the OAHP website. However, OAHP requires hard copies of all forms — digital files cannot be accepted in place of the hardcopy.

The following elements are particularly important to successful fieldwork and are highlighted here for emphasis and clarification. Additional information is available through the instructions associated with each of the individual cultural resource survey forms.

Determining and Describing Boundaries

The purpose of establishing a boundary and writing a boundary description is to identify the observed physical extent of the property. A unique and carefully defined boundary must be determined for all properties and sites regardless of their type or size. The boundary description does not need to be complicated or lengthy but it should clearly describe the limits of the resources. For many resources, appropriate boundaries can be determined immediately. For others, the extent of a site or property may be difficult to ascertain and considerable professional judgment is necessary. See National Register Bulletin *Defining Boundaries for National Register Properties* for additional information.

Most properties are complex in nature and require consideration of a combination of factors to establish site boundaries. These factors include the spatial extent of cultural or culturally related features and artifacts, topographic features, and major ground-disturbing alterations. If a cultural property or part of a property is inaccessible, boundaries can be estimated based on similar site types or extrapolated from observed boundaries. It is important to remember that cultural deposits may extend below the ground far deeper than what is visible on the surface. In cases where the acreage of a site or property is particularly large, or if its boundaries are irregular, boundaries can be estimated as long as the criteria are clearly stated. The following are discussions and examples of different boundary delineations.

Topographic Features

Topography is the general configuration of the land including its relief and the position of natural and cultural features. *Relief* refers to variations in height and slope and/or to irregularities within the land surface.

Example: “The property lies within the valley floor. The northern and southern boundaries are at the margins of the valley and correspond to the 7500’ contour line. The eastern boundary corresponds to the edge of a swampy area and the western edge is marked by the edge of the Platte River. See attached contour map.”

Example: “The site lies within the 1200’ contour lines on its north, east and south boundaries; the west boundary corresponds to the rocky ledge overlooking the stream. See attached contour map.”

Uses

The continuous physical use of the land influences the integrity of site and the setting with which a historic resource is associated. If the significance of a property is tied to the use of its land, such as in agriculture, conservation, or recreation, boundaries may be drawn to

include all of the property under current or past ownership associated with that use. If the use of part of the land has been substantially changed so that it no longer contributes to the integrity or significance, it should not be included unless the significance is tied to an understanding of the changing use (or adaptive strategies) for a property.

Example: “This farm has been in continuous agrarian use since settlement. The parcel includes all of the land owned by an early settler, except for a small tract now subdivided for housing and under multiple ownership. The boundaries include the land owned by the farmer but do not include the subdivision because the latter use is not consistent with the property’s significance.”

Extent of Cultural Material

Site boundaries can be based on the extent of cultural material, including both artifacts and features. It is important to keep in mind that cultural material may be buried and therefore not visible on the ground surface.

Example: “The boundaries of the Windy Ridge site are based on the extent of cultural materials.”

Historic Associations

An association with a historic theme or context may define boundaries.

Example: “The resource boundary includes all of the land defined in the 1893 patent: the five structures, the pasture, and the 30 acre wheat field to the north of the pasture.”

Property Lines

Property lines may denote historic ownership patterns and appropriate site boundaries. The boundary of a particular property may be indicated on an existing base map. Base maps which indicate streets, rights-of-way, property lines, and, in some instances, building outlines are generally available from local planning agencies or tax assessors. When a base map is available, a boundary line should be drawn on it to clearly identify the extent of the property in question. A simple reference to this line on the map is sufficient for a narrative boundary description.

Example: “The boundary of the Holly Grange is shown as the dark line on the accompanying map entitled *Holly Grange Sketch Map, 1953.*”

If the boundary of the property replicates a legally recorded boundary, a reference to the legal description of the property is sufficient. A general physical description using approximate property dimensions is also acceptable.

It is advised that centerlines of streets or highways not be used as boundary edges. Master plans or development proposals use either edges of the rights-of-way or the curblines of streets. It is therefore recommended that the boundaries of properties be delineated by such edges.

Example: “The property comprises Lots 76 and 77 of Block 3 in the original plat of the city and is approximately 80 feet by 400 feet in size.”

Example: “The east boundary of the property is 246.5 feet at 67° 27’ from the south section line or approximately 250 feet northeast of the south section line.”

Visual Qualities

If the significance of a property is strongly related to the visual qualities of the site, boundaries should include, within reason, the resource and the space around the resource that contributes to its aesthetic significance. A boundary may be a natural edge such as a bluff or a man-made edge such as a hedgerow. If visual elements integrally related to the location of the site are still present, they should be included within the boundaries.

Example: “This farmhouse historically had a visual link to the nearby Blue River. The construction of the house on a bluff was strongly influenced by the dramatic vista to and from the river. The boundary is therefore drawn to include the farmhouse and that portion of the river visible from the house.”

Research Value

Research value generally refers to historic and prehistoric archaeological resources with the potential to explain and understand culturally patterned behavior through the material record.

Other disciplines possibly benefiting from research value include engineering, geomorphology, floral and faunal analysis, and paleopathology. In all cases, boundaries should include the complete extent of features possibly yielding research value.

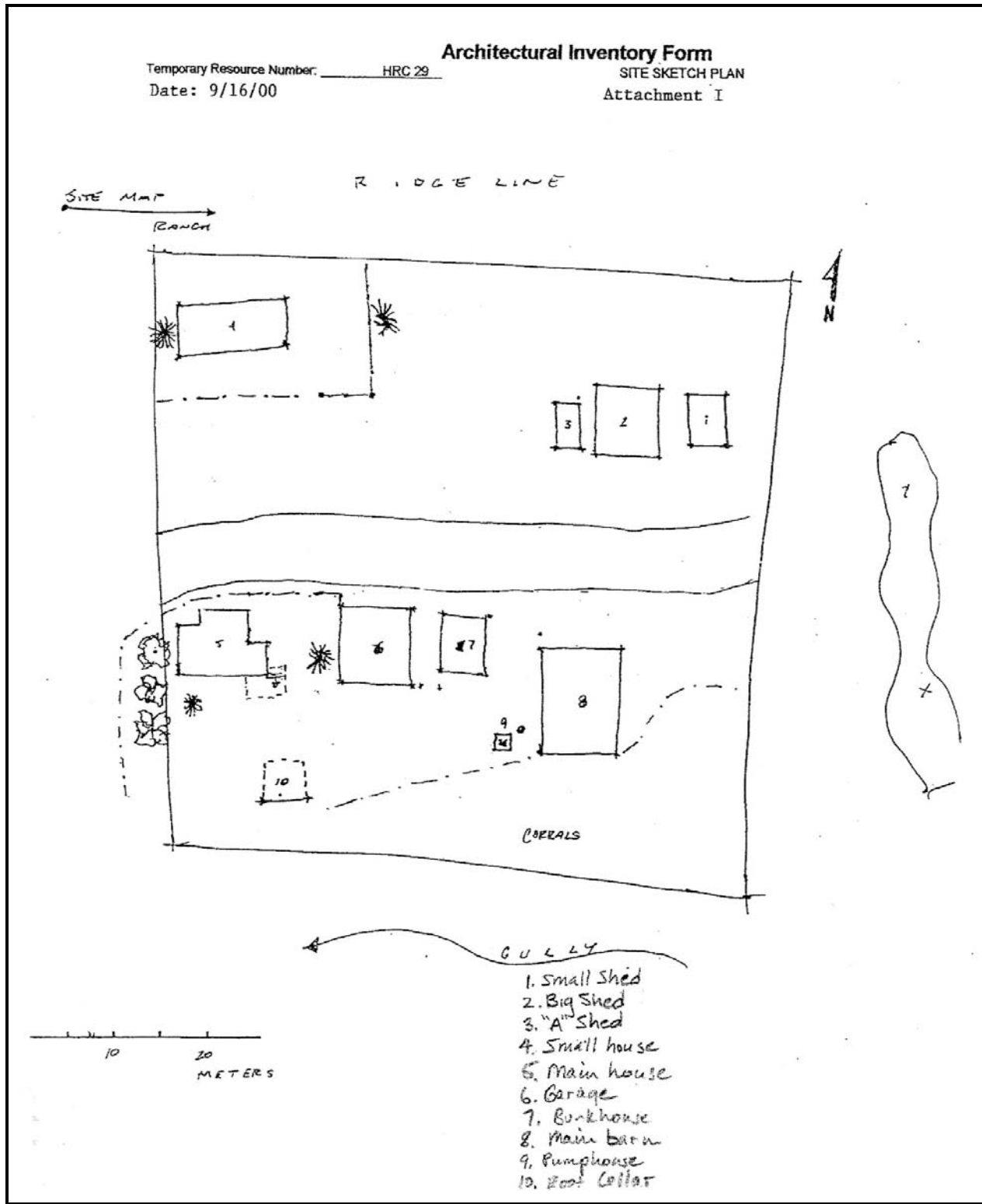
Example: “Although no artifacts are visible on the surface, the rockshelter adjacent to the site is included within the boundaries because it is likely to yield additional information pertinent to the understanding of the site’s occupational history.”

Sketch Map

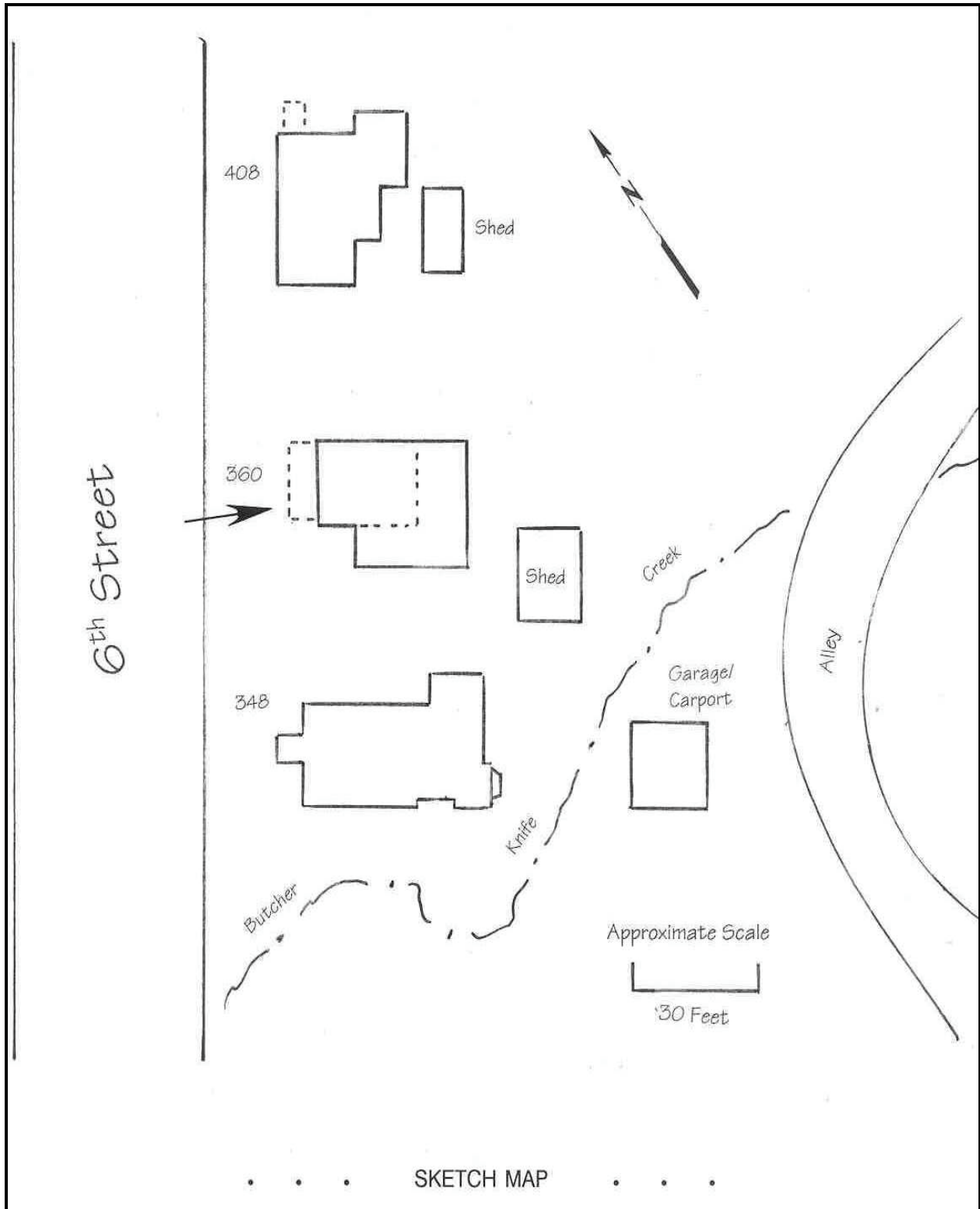
A site sketch map must accompany most survey forms. The purpose of a site or property map is to graphically depict the resource, the relationship of the natural and cultural components to one another, the location of site features, the boundaries of the resource, and the relative scale of the components. The map may be manually drafted or created through a computerized program. An acceptable sketch map should include the following elements:

- ◆ Resource name and number
- ◆ Cultural features, including the site datum
- ◆ Site boundary
- ◆ Major topographic and natural features within the site and in the vicinity, with names if known (e.g., knolls, trees, cliffs, etc.)
- ◆ If appropriate, relationship of site to project area – such as a pipeline, well pad, etc.
- ◆ Vegetation zones as appropriate (used for rural locations)
- ◆ Street names and addresses if known
- ◆ Arrows indicating camera direction with photo number
- ◆ A complete key, including scale, north arrow, symbol codes, name of mapper, and date of map
- ◆ Maps of archaeological sites often indicate the location of individual artifacts with numbers keyed to a field specimen list
- ◆ Maps of districts should clearly indicate contributing versus noncontributing elements as defined by the guidelines for the National Register of Historic Places

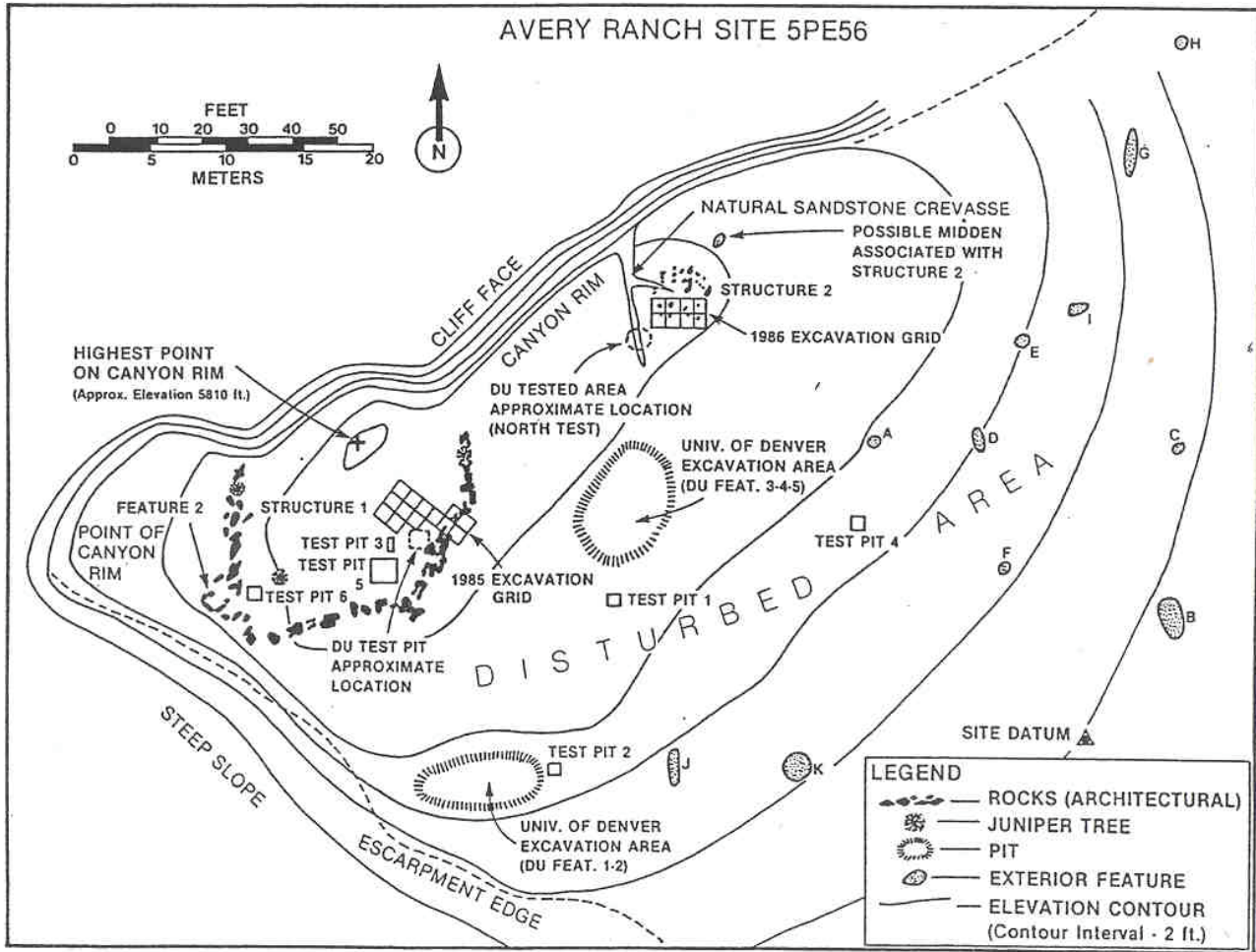
Sample Historical & Architectural Sketch Map for a Rural Property:



Sample Historical & Architectural Sketch Map for an Urban Property:



Sample Archaeological Sketch Map:



Resource Locations

Accurate locational information is essential when recording cultural resources. The location is a key factor in the understanding and analysis of the resource as well as the basis for integrating the information into planning processes. Because it is not unusual for OAHF to receive a form with contradicting or incorrect locational information, multiple types of locational information are needed to allow for cross checking the information. For all resources, a location based on the PLSS (Public Land Survey System: Township, Range and Section), and a location based on a UTM (Universal Transverse Mercator) calculation must be submitted. If available, the street address and legal location (lot, block and addition) must also be supplied. If the resource is over 10 acres, the actual boundaries should be drawn on the map, otherwise a single point will be sufficient. District boundaries should also be mapped, as should individual resources within a district. Resource and survey locations on these maps should be shown at the map's original scale.

The standard map used for plotting all cultural resources, whether in hardcopy or electronically, is based on the 7.5 minute United States Geological Survey (USGS) quadrangle maps. The USGS has mapped the entire state of Colorado with approximately 1,900 topographic maps referred to as quadrangles or quads. Quadrangles cover 7.5 minutes of latitude and longitude at a scale of 1:24,000. Each map is named, usually after a prominent natural or cultural feature, and the names of adjoining quads appear in the margins. The date of the map (and date of revision, if applicable) is located in the lower right corner. The maps illustrate topographic features including relief, hydrology, and vegetation, in addition to constructed features such as buildings, towns, roads, and mines.

Quad topographic maps are available from the U.S. Geological Survey Map Center or online (www.topomaps.usgs.gov/ordering_maps). Quad maps are also available at some sporting goods and map stores. To order quad maps or instruction booklets from the USGS, contact:

Map Center, U.S. Geological Survey
Box 25286
Denver Federal Center, Bldg. 810
Denver, CO 80225
(303) 202-4700

In Colorado, two of the grid systems on the USGS quads are used to describe resource location. These two grid systems and how to use them are described below.

Public Land Survey System (PLSS)

The PLSS grid consists of numbered north/south lines (Townships) and east/west lines (Ranges). These enclose a six-mile by six-mile area forming 36 square miles. The square miles are referred to as sections and they are numbered 1 through 36.

A more specific location within each of these sections can be referred to by quarter sections, which are always listed from smallest to largest. For example, “the NW quarter of the SE quarter of the NW quarter of the SW quarter.” This process is referred to as the “quarter quarters” and can be abbreviated as “NW SE NW SW.”

Within Colorado, there are three different principal meridians that dictate the gridding of the townships. Most of the state is in the 6th Principal Meridian, a large part of the southwestern quarter of the state is in the New Mexico Principal Meridian, and very small portions of Delta and Mesa Counties are located in the Ute Principal Meridian.

An accurate map location must contain the following elements:

- ◆ Principal Meridian
- ◆ Township, Range, and Section
- ◆ Four quarter quarters
- ◆ USGS quad name and date

UTMs

The Universal Transverse Mercator (UTM) grid covers the earth and is divided into 60 zones running north/south, each six degrees of longitude wide. The United States includes zones

10-19 and Colorado contains portions of zones 12 and 13. Any point in a zone may be referred to by citing its zone number, its distance in meters from a north/south reference line (“easting”), and its distance in meters from the equator (“northing”). When calculating UTM coordinates it is important to clearly note which North American Datum is being used: *NAD27* or *NAD83*. OAHP and most federal agencies either require or strongly suggest that you use *NAD27*.

In the quad margins there are blue tick marks indicating the location of the UTM grid. A UTM coordinate is calculated by connecting the tick marks with a straight edge and using a template specifically developed to measure the spaces between the marks. Newer quads have the lines drawn on the maps. Templates are available at OAHP for \$5.00 each.

UTMs can also be calculated using various online mapping services such as TopoZone (www.topozone.com). Please reference the website or software source if a digital system is used to calculate the UTM coordinates.

UTMs may be calculated using a Global Positioning System (GPS) but specific guidelines may be required. Additional information concerning these guidelines is available through OAHP or from the lead agency.

Photographs

Photographs often provide the most useful and versatile documentation of a resource. They can illustrate the general setting and surrounding environment of a resource or capture an important detail. Taken over many years, photographs can help us understand changes to the resource through time and help determine appropriate preservation measures.

In the last few decades, changing technologies have allowed for the capture and printing of images using a variety of new methods and materials that are radically different from the traditional film and chemical processing techniques. Second-generation images, including photocopies and prints of scanned photographs, are increasingly used with varying degrees of success. Whereas these new options allow for more versatility, ease of use, and variability of applications, they also create a whole new range of preservation problems.

The following information and standards are designed to address the issues concerning image capture and processing. For details on the labeling and storage of photographs, see Step 8. These guidelines are expected to change frequently as new products and methods become available. Because the specific photographic standards are different for historical & architectural surveys versus archaeological surveys, both sets of standards are summarized below.

Three primary types of images-- digital images, chemically processed photographs, and slides-- are currently used to record cultural resources and to supplement survey documents.

Digital Images

Among the many recent changes in the survey process, digital photography has offered some of the biggest opportunities and challenges. Not since Edwin Land introduced his self-

developing film system has photography taken such a major turn. Like the Polaroid camera, digital photography brings the surveyor the benefit of seeing instant results. The ability to view an image while still in front of the resource(s) allows the surveyor to verify the quality of the survey images while at the site or project area. This can significantly improve the quality of the final product while eliminating a costly site revisit for additional photographs.

Digitally captured images offer a tremendous level of flexibility. The images may be stored in a computer with related survey data as the survey is underway. Upon completion of the survey, the images may be easily embedded into the hardcopy survey forms as a final product. Additionally, the images may be embedded into survey reports and other summary publications, in planning documents, incorporated into PowerPoint programs for public presentations, and used on websites. All of these applications make digital photography an appealing choice for surveys.

Despite these advantages of digital images, there are also considerations based on both the short-term and long-term uses of survey data. In the short-term, survey findings are used to establish the National Register eligibility and management recommendations for cultural resources within a project area. This may be the result of impending actions involving a federal agency. A survey may also be commissioned by a local community as part of local planning, establishment of a local landmarking program, or the creation and/or administration of design guidelines. These processes tend to be relatively fast — often within a year — and for these immediate uses, a digital image may be sufficient (assuming the resolution is high enough to provide the necessary details of the site, especially for architectural sites).

Questions begin to arise when we consider the long-term use of survey data. The information obtained through the survey process provides not only a crucial aid in understanding the site, but also a baseline against which change may be observed and measured. The accumulation of survey data in a computer database allows the researcher and planner to establish a greater understanding of a broad body of resources, spread over time, geography, and use. For such long-term uses it is critical to assure that the photographic images be archivally stable.

The long-term stability of digital images, whether hardcopy or stored electronically, is questionable and unproven. There are many factors that influence the stability of a printed digital image, including ink type, paper type, and storage environment. Because the technology is relatively new and constantly changing, the longevity of hardcopy printouts of digital images is difficult to determine. Although black and white images digitally printed on acid-free paper and stored in a controlled environment offer the greatest potential for long-term preservation, images produced by most ink jet printers are more unstable than traditional black and white prints.

Digital images stored on CDs are not totally stable. CD data breaks down over time. The images (and text) on CDs must be migrated on a regular basis both to address stability issues and to keep the images accessible by constantly updated software and hardware. Digital images may be stored in a server, but large collections require massive storage capabilities. Constant backup must be maintained.

Chemically Processed Photographs

Chemically processed photographs, both black and white and color, are the most frequently used to document individual sites and to supplement cultural resource documents. The preservation of traditional 35mm photographs, which by their very nature are unstable and highly susceptible to deterioration, is a challenge. For long-term uses, it is critical to assure that the photographic images will be archivally stable. Black and white photographs, processed using the proper chemicals and paper and stored in favorable conditions, offer the greatest likelihood of long-term image preservation.

Chemically processed color photographs, printed with care on archival paper and stored properly, can be stable for well over 100 years. As with the images printed from digital files, paper type and storage environments are major influences affecting print stability. Preliminary research indicates that images produced through dye-sublimation have a similar life expectancy to silver halide photographic prints.

Slides

Photographic slides have been used to document archaeological projects for decades but are of limited use. The slides have generally been used for presentations and were not submitted as part of the site or project documentation. Most presentations now rely on submitted color digital images, either prints or files on CDs, instead of slides.

HISTORICAL & ARCHITECTURAL SURVEY

Considering the above information regarding photographs, the following standards apply to all historical & architectural surveys:

Intensive Level Survey Photography

Changes to the National Park Service photodocumentation standards, the increasing popularity of digital photography, the limited number of labs able to provide black and white prints on true black and white paper, and the dramatic increase in the cost of such traditional prints have necessitated a reconsideration of the standards for historical & architectural survey photography. Rapid developments in technology and products in relation to print making and print longevity mean these standards are subject to frequent changes. Individuals completing historical & architectural surveys should make sure they have consulted the OAHP website (www.coloradohistory-oahp.org/crforms/crforms1.htm) for the latest photographic standards prior to the submission of inventory forms.

Reconnaissance Level Survey Photography

Photographs for reconnaissance level surveys may be digital. Individual site forms are not required in reconnaissance level surveys and, if forms are produced, they are bound with the survey report (see *Additional Report Considerations* in Step 11). In these situations, digital images embedded in the report produce a single, manageable survey product.

OAHP and the State Historical Fund encourage the use of dual photographic recording in survey projects. In the past, this has generally meant the use of black and white print film and color slide film. Increasingly, digital photography is replacing the use of color slides. Increasingly, digital

photography is replacing the use of color slides. OAHP and SHF will be supportive of survey scopes of work and project budgets that include dual photographic recording.

Choosing the appropriate photographic subject and taking the photograph in such a way as to best capture that subject is often a challenge. Below are some suggestions for successful survey photographs:

Suggestions for Photograph Subjects

- ◆ The front of the building
- ◆ Corner shot views of a building
- ◆ Photographs of architectural details or specific features
- ◆ Aerial photography or a photograph taken from a high point for an overview
- ◆ District boundaries or edges
- ◆ Representative contributing and noncontributing properties in a district
- ◆ Streetscape or landscape photographs showing the relationships of the resources and the overall character of a district

Hints for Taking Good Photographs

- ◆ Try to photograph a building from an angle that has the least amount of foliage obscuring architectural details.
- ◆ If at all possible, include only one site or property per photograph.
- ◆ If the sun is behind the subject, try shifting position to place the sun more to the side of the view. You may need to return to the site when the lighting conditions are more favorable.
- ◆ Set film exposure to the front of the building or site area being photographed as opposed to a bright background sky or white foreground. An eighteen percent gray card may also be used to even out the exposure. Take the same photograph using different exposures to provide options when choosing the photograph for the survey form or document.
- ◆ Try to use a shutter speed of 1/125th second or faster to obtain clear pictures, or use a tripod for additional stability.
- ◆ Additional suggestions for improved photography may be found in the National Register Bulletin, *How to Improve the Quality of Photographs for National Register Nominations* (see www.cr.nps.gov/nr/publications/bulletins.htm).

ARCHAEOLOGICAL SURVEYS

Images provide an important part of the documentation of archaeological resources. They help us understand the nature of the sites and the character of the surrounding environment. Images also serve as a crucial record of site conditions and provide invaluable guidance when relocating sites.

Considering the above information regarding photographs, the following standards apply to all archaeological site forms submitted to OAHP. Images in documents should include project overviews and, as appropriate, individual sites or specific aspects of the project area. Document images may be digital images printed on a standard printer, although the use of original photographs and/or archival paper is strongly encouraged.

Image Capture

- ◆ At least one 4 x 6 inch photograph showing a site overview must be submitted with each site form. Photographs are optional with Isolated Find forms. Additional photographs of the environmental setting, features, and artifacts are encouraged.
- ◆ Images submitted to OAHHP may be taken with any type of imaging equipment except Polaroid. Images taken with traditional 35mm cameras, as well as digital cameras will be accepted.
- ◆ Images that are unclear, pixilated, or captured at low resolutions will not be accepted.
- ◆ If the site is a probable candidate for the National or State Register you may wish to take several black and white photographs.

Processing

- ◆ All imagery submitted with site forms must be chemically processed on archival paper such as Fujicolor Crystal Archive or Kodak Ektacolor Edge 8, brands that are readily available at a variety of photographic labs.
- ◆ Polaroid images, slides, electronic files or compact discs will not be accepted as a substitute for the requirements noted above.
- ◆ Digital images on CDs may be submitted in addition to photographs. These digital images may be posted on *Compass* along with the associated site information.

Artifact Collection

For archaeological surveys, the fieldwork often includes locating, plotting, describing, and sometimes collecting artifacts. An artifact is a portable object manufactured or modified by humans. A central goal of artifact analysis is to understand a culture by observing and analyzing its physical components in detail (its material culture).

Regardless if they are collected or not, when practical, all artifacts should be inventoried. Diagnostic (those that are characteristic of a specific time period and/or culture) or unique artifacts should be described and photographed or illustrated.

Artifact collection strategies vary according to the research design, the scope of the project, and the scale of the resource. In some cases all of the observed artifacts are collected, and in others none of the artifacts are collected. The collection of a sample of the site assemblage (e.g., only diagnostic artifacts, artifacts along an established transect, or a random sample) is often used. Drawings or photography of uncollected artifacts can often supplement the descriptive information.

Step 8 Conduct the Office/Lab Work

Office/Lab Tasks

Following the completion of the fieldwork portion of the survey, office and/or laboratory duties are of primary concern. During this step, the information and documentation collected during the fieldwork are assembled and supplemented with any available additional information. Generally speaking, at least one day should be budgeted for office work for each day spent in the field.

Tasks often include:

- ◆ Collecting additional resource-specific information (archival research or artifact analysis)
- ◆ Labeling photographs and matching them with cultural resource forms
- ◆ Verifying and correcting errors in the information collected in the field
- ◆ Evaluating National Register and local eligibility for individual resources and districts (Step 9)
- ◆ Producing completed cultural resource forms
- ◆ Drafting maps or drawings
- ◆ Preparing the survey report (Step 11)

These activities are discussed briefly below. Examples of cultural resource forms, survey documents, maps and photographs may be viewed at OAHP.

Collecting Additional Information

HISTORICAL & ARCHITECTURAL SURVEY

Unlike the general project-area research that was done prior to the fieldwork (Step 5), this research involves gathering information on specific buildings, structures, or properties encountered during survey.

Historical information includes owners' or occupants' names, their occupations, and the nature of activities that took place in the building. Architectural information includes the designer and builder, the date of construction, important features, and changes to the building over time. Some of this information may have already been gleaned from research conducted for the background and developmental history of the survey area.

Research opportunities will be limited if fire, floods, or other disasters have destroyed records. Records may have been purposefully discarded due to lack of storage space or lack of understanding regarding the importance of archival materials to future researchers. Buildings that have been moved can be difficult to document, although unmatched foundation walls can indicate that a move has occurred.

When conducting historic research on a specific property, it is important to explore all possible avenues of research. Several sources of information are summarized below, and additional information is available in the National Register Bulletin *Researching a Historic Property*.

Municipal Records

Building departments often retain or have access to original building permits. Water

departments can provide the date of the first water connection. The tax assessor's records can be used to trace the approximate dates of improvements on a property. Title searches, generally done at the county courthouse, can provide excellent information but may be very time consuming. As a general rule, title searches should be reserved for buildings of architectural importance about which no other information can be found.

Insurance Maps and Atlases

In larger towns and cities, fire insurance maps (i.e., Sanborn maps and Baist maps) and atlases can be used to trace physical improvements, alterations, and approximate dates of construction. These maps and atlases are often available at libraries and historical societies.

Business Directories

City and business directories, although not reliable sources for construction dates, can be used to identify an approximate period of occupancy. It is necessary, however, to be aware of street name and number changes.

Property Owners

Typically, homeowners know more about their property than owners of commercial establishments. In rural areas, property owners of long standing may have good information about other landowners in an area.

Living Descendants

If possible, discussions with the descendants of people who were associated with the property should be pursued and documented. These individuals may have not only a special insight into the history of the property and its inhabitants, but also the history of the neighborhood, community or town. They may also have photographs of the property from when their ancestors lived there.

Directories/Census Data

Directories and general census data may tell you who lived in a particular building and possibly their occupations. Census data are more extensive and include ethnic origin, number of occupants and family relationships, and the value of real and personal property.

Land Patents

In rural areas, land patents are usually the best source of information for original ownership and date of issuance or occupancy, sizes and location of patented tracts, amounts paid for tracts, and designation of cash, homestead, or stock-raising homestead entry status of the tracts. Mineral survey records contain mining patent information. Patent records also include information about the number and type of buildings and structures or improvements on a property and cultivated acreage. Land patent information generally cannot provide information about exact dates or builders of specific improvements, but can provide a range of dates and the identity of the original patent holder and original intended use of the land.

Land patent information may be obtained from the Land Patent Office of the Bureau of Land Management, Colorado State Office, or from the Land Patent Search website (www.glorerecords.blm.gov/PatentSearch/Default.asp).

ARCHAEOLOGICAL SURVEYS

Following the fieldwork, several sources of information can help to further understand and evaluate archaeological sites. Perhaps foremost among these is the analysis of the artifacts. The level of detail used in artifact analysis depends on the research design and the nature of the cultural resources. For example, it would be cumbersome to attempt to analyze all chipped stone artifacts from a quarry site, so a representative sample might instead be analyzed. On the other hand, if only a few glass fragments and nails are present on the site of a historic homestead, all artifacts can be summarized. Artifact analysis may include:

- ◆ Summary description of artifacts and artifact classes (e.g., ground stone, glassware)
- ◆ Identification of materials (e.g., Edwards chert, sandstone, porcelain)
- ◆ Establishment of cultural/temporal affiliation based on diagnostic artifacts
- ◆ Spatial or contextual relationship of artifacts to each other and to associated cultural and natural features.

Other important information concerning the site may be available from landowners or local artifact collectors, other archaeologists that have worked in the region, and tribal experts. Often these individuals are helpful in providing information not only on a specific site but also on the archaeological resources in the general region.

Smithsonian Trinomial Numbers

All recorded cultural resources, including isolated finds, receive a Smithsonian trinomial number. All cultural remains on that piece of ground, regardless of their nature, time period or eligibility, are included under this number. The number includes a state numerical designation (Colorado is #5), a two-letter designation for the county, and a sequential number for the site. For example, the first recorded site in Rio Blanco County is 5RB1. Site numbers are assigned by calling OAHP (303-866-5216) or e-mailing (lovella.learnedkennedy@chs.state.co.us). DO NOT assign a new site number to previously recorded sites that have existing site numbers. Please contact the OAHP staff to determine the correct site number if a structure has been moved or if new construction connects two previously separate properties. Remember that site numbers are assigned to a defined location on the ground, not to the building, structure, objects, or features within that site. That site number refers to all cultural remains within that defined location, regardless of their nature, eligibility, or age.

Completion of Cultural Resource Forms

The completion of survey forms includes integrating field, research, and analysis information; finalizing maps; labeling photographs; and attaching appropriate additional documentation. The forms and instructions are located in *Volume II*. To complete the forms, refer to Step 9 for assistance in determining the significance, integrity, and eligibility of the cultural resource.

Processing Photographs

Photographs should be labeled to allow them to be matched to the correct survey form while also avoiding long-term damage to the photographic image. Ink, particularly water-soluble varieties, will migrate through photographic paper over time. The glue on many computer-generated labels will also migrate through the photographic paper. The glue tends to break down over an extended period and the labels may come loose from the photograph. Labeling photographs on the back with a blunt, very soft lead pencil is the only truly archival technique.

For survey projects involving more than a handful of properties, pencil labeling is generally time prohibitive. In those cases, acid-free “archival” labels, available from archival product suppliers, may be used on survey photographs. The best type is foil-backed, as these will prevent ink migration. Do not use mailing labels from an office supply store, as these are not archival quality. Contact OAHP if you have difficulty finding appropriate labels (303-866-3395).

The back of each photograph should be labeled with the site number, date the photograph was taken and, if applicable, both the film roll and exposure number and the CLG or SHF project number. Additional information should be placed in a photo log keyed to the exposure numbers. The photo log should be included in the survey report and a copy stored with the survey negatives.

Photographs should be placed in archival sleeves and attached to the survey form. In the past OAHP provided photograph sleeves for survey forms that were going to be submitted to the office, but that is no longer possible. Survey projects should build the cost of photo sleeves into the budget.

Archival photo sleeves or pages are often available from local stationery, drug, or discount stores. Sleeves may also be ordered from archival material suppliers’ websites. Be sure to get archival quality pages (i.e., polypropylene) — do not use PVC or “sticky-back” album pages. Sleeves that hold multiple photographs per page are the best. Photographs should be placed one to a pocket. Contact OAHP if you have any questions.

Negatives are generally the most stable of all photographic mediums and should be stored in archival sleeves filed in three-ring notebooks. A copy of the survey log should be included in each notebook. Negatives are an important part of the survey materials and need to be archived appropriately. Ideally, negatives and photographs should not be stored in proximity to each other to avoid the loss of both in a flood, fire or other disaster. OAHP can archive survey negatives at its Lowry storage facility for organizations lacking appropriate storage facilities. Digital photography does not produce traditional negatives. See www.coloradohistory-oahp.org/crforms/crforms1.htm for the latest policy on how to store and label CDs containing digital image files.

Use of OAHP Photographic Collections

OAHP photograph collections are available to researchers for personal and scholarly use. Images from these collections may not be published or reproduced, except that copies may be obtained under fair use exception of the U.S. copyright code. For additional information, see the OAHP *Dissemination of Cultural Resource Information: Policy and Procedures* in Appendix II.

Step 9 Evaluate the Resources

Determination of Eligibility

The evaluation of cultural resources includes defining significance, assessing integrity, and evaluating National Register, State Register, and local landmark eligibility. Significance and integrity both must be evaluated to make an informed judgment regarding eligibility. Additional information concerning the National or State Register program may be obtained through OAHP. Information concerning local eligibility criteria should be obtained from the appropriate county or municipality.

OAHP recognizes two broad categories of eligibility determinations: *field* and *official*. Field determinations are generally made by the site recorder and are based on a combination of field observations, archival information, and, if applicable, artifact analysis. Official determinations are made by SHPO staff and are most often based on information provided on the site forms and/or the survey document. Both of these determinations are subject to change as new information is available or site conditions change.

Significance

The significance of a resource can be defined and explained through evaluation within its prehistoric or historic context. Nothing in history occurs in a vacuum. Everything is a part of larger trends or patterns. Prehistoric or historic contexts define those patterns, themes, or trends by which a specific event, property, or site is understood and its meaning made clear.

When considered within its historic context, a resource is evaluated against a set of eligibility criteria. The National Register uses four criteria:

- A. It is associated with events that have made a significant contribution to the broad patterns of our history; or
- B. It is associated with the lives of persons significant in our past; or
- C. It embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or
- D. It has yielded, or may be likely to yield, information important in prehistory or history.

More information concerning the National Register criteria may be found in the National Register Bulletin *How to Apply the National Register Criteria for Evaluation*. Similar criteria exist for the State Register. For more information see the State Register Bulletin *How to Apply the Nomination Criteria for the Colorado State Register of Historic Properties*.

The criteria for local landmark eligibility vary among communities. Check with the local preservation commission or board for additional information. A list of communities with preservation ordinances is available on the OAHP website.

Integrity

Integrity is the ability of a resource or a group of resources to convey significance. Resources may be significant under more than one criterion and in more than one chronological period of significance. If significance has been established, it is necessary to determine if the resource retains the integrity for which it is significant.

The evaluation of integrity is often subjective, but it must always be grounded in an understanding of a resource's physical features and how they relate to its significance. Resources that have been substantially altered after the period of significance may not retain sufficient integrity to reflect their original character. A single major change and/or the cumulative effect of numerous minor changes may diminish integrity. Integrity is always evaluated in respect to the significance of the resource and the period of significance. For example, in the case of a potential historic district believed to be significant for its association with late 19th century commercial development, the original buildings may have been substantially altered over time and/or construction within the last 40 years may have altered the original character to the point where the area no longer conveys a sense of its past.

Seven aspects or qualities in various combinations define integrity. A resource that retains its integrity will possess several, and usually most, of the following:

Location

Refers to the place where the historic resource was constructed or the specific place where the historic event took place. It involves relationships that exist between the resource and place.

Setting

Refers to the physical environment of a historic property. It relates to the character of the place in which the resource played its historical role.

Design

Refers to the combination of elements that create the form, plan, space, structure, and style of a property.

Materials

Refers to the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property (a site, building, structure, object, or district).

Workmanship

Refers to the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling

Refers to the property's expression of the aesthetic or historic sense of a particular period of time.

Association

Refers to the direct link between an important historic event or person and a historic property.

For additional information on assessing integrity see the National Register bulletin *How to Apply the National Register Criteria for Evaluation*.

Criteria Considerations

Certain kinds of properties are not usually considered for listing in the National Register: religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties achieving significance within the last fifty years. These properties can be eligible for listing under the following conditions:

- A. A religious property is eligible if it derives its primary significance from architectural or artistic distinction or historical importance.
- B. A property removed from its original or historically significant location can be eligible if it is significant primarily for architectural value or it is the surviving property most importantly associated with a historic person or event.
- C. A birthplace or grave of a historical figure is eligible if the person is of outstanding importance and if there is no other appropriate site or building directly associated with his or her productive life.
- D. A cemetery is eligible if it derives its primary significance from graves of persons of transcendent importance, from age, from distinctive features, or from association with historic events.
- E. A reconstructed property is eligible when it is accurately executed in a suitable environment *and* presented in a dignified manner as part of a restoration master plan *and* when no other building or structure with the same associations has survived. All three of these requirements must be met.
- F. A property primarily commemorative in intent can be eligible if design, age, tradition, or symbolic value has invested it with its own exceptional significance.
- G. A property achieving significance within the past fifty years is eligible if it is *of exceptional importance*.

For further information on how to evaluate the significance, integrity, and eligibility of a property consult the National Register Bulletin *How to Apply the National Register Criteria for Evaluation*, and the State Register Bulletin *How to Apply the Nomination Criteria for the Colorado State Register of Historic Places*.

Properties Younger than 50 Years of Age

Listing in the National Register is generally reserved for resources that are more than 50 years of age. Often surveys will only record properties over 50 years old although more recent properties may be eligible for inclusion in the National Register under a higher level of scrutiny. It is also important to record newer resources to establish a community's baseline cultural resource information, to facilitate long-term preservation planning, and to assist in future preservation and restoration activities. Keep in mind that the State Register does not include an age requirement and local preservation ordinances may not specify an age restriction.

Step 10

Identify and Record Districts

Definition of a District

Districts are defined as groups of sites, buildings, structures, or objects that are significant as a single, identifiable entity although their individual components may lack distinction or merit. After the survey has been completed and the individual resources have been recorded, the resources and their geographic distribution should be assessed for district potential. The resources within a district have related characteristics — visual, geographical, or historical — that link them together as related resources. Historic districts may be downtown commercial areas, residential neighborhoods, rural agricultural areas, whole towns, or a grouping of archaeological sites.

District Boundaries

When evaluating district eligibility within a surveyed area, one of the first tasks is to determine approximate boundaries. Boundaries may be refined as more information is gleaned from researching individual resources and the development of the district itself. District boundaries may be based on a variety of considerations including:

Historic

Example: resources associated with the development of a tourism-related property.

Visual Edge

Example: resources associated with a railroad corridor.

Topographic Feature

Example: resources surrounding a rock formation.

Change in Character of the Area

Example: resources clearly delineated by later development or discontinuity of use.

Political or Ownership Borders

Example: resources associated with a historic ranch.

See National Register Bulletin *Defining Boundaries for National Register Properties* for additional guidance.

Contributing and Noncontributing Resources

Individual resources within the potential district must be examined to determine if they are *contributing* or *noncontributing* resources. Consideration must be given to the relative number, size, scale, design, and location of the elements that do not contribute to the district's significance. Contributing and noncontributing elements must be clearly indicated on a sketch map.

Contributing resources add to the historical associations, architectural qualities, or archaeological values for which the district is significant when they meet all three of the following criteria:

- ◆ they were present during the period of significance
- ◆ they relate to the documented significance of the district
- ◆ and they possess sufficient integrity

Resources are considered non-contributing when they do not add to the historical, architectural, or archaeological values of the district and meet at least one of the following criteria:

- ◆ they were not present during the period of significance
- ◆ they do not relate to the significance of the district
- ◆ or they do not possess sufficient integrity due to alterations, additions, disturbances, or other changes

Step 11 Prepare the Report

Purpose of Cultural Resource Survey Reports

The cultural resource survey report should respond to the survey purpose and goals as defined in Step 2. The needs of the funding organization, the local community, and the professional cultural resource researcher should be addressed in a comprehensive, well organized, and timely document.

Cultural resource surveys vary in purpose, size, and results as do the reports that document the surveys. Because of this there are five sets of guidelines that shape the content and organization of cultural resource reports in Colorado. One of these guidelines is intended for use with historical & architectural surveys and the other four are for use with various types of archaeological surveys. These guidelines are presented below and should be closely followed when preparing survey reports.

Report Guidelines

HISTORICAL & ARCHITECTURAL SURVEYS

The following components should be included in the historical & architectural survey report. Additional information may be needed depending on the goals and the type of survey. These guidelines are intended to facilitate the reporting of survey information in a logical and complete package. Following these guidelines should also assure the report meets the *Secretary of the Interior's Standards for Identification*.

Title Page

Include the name of the project, report author, author's affiliation, and report date. Also include the name of the sponsoring organization or agency.

Table of Contents

List major report sections with page numbers.

Introduction

This section should include a summary of the purpose of the survey (Step 2), the funding source(s) (Step 3), a brief summary of the project, those involved, the project dates, and the results. In the case of surveys funded by grants from the State Historical Fund or the federal Historic Preservation Fund, a specific acknowledgment statement is required. Check with OAHP for the appropriate wording.

Project Area

Describe the general area and provide a verbal description of the survey area boundaries. Include the PLSS location (Township, Range, Section, Quarters and the USGS Quadrangle name) and, in the case of intensive level surveys, give the total number of acres surveyed. Also include the relevant portion(s) of 7.5 minute USGS topographic quad maps showing the survey boundaries. Label the map with the quad name, date, township and range. The map segment should be bound into the report and measure 8½ x 11 inches or be neatly folded down to this size.

Research Design and Methods

Indicate the survey objectives and scope of work. Summarize the OAHP file search results and previous work in the area. Describe the survey methods, why they were selected, and the expected results. Include the survey type (reconnaissance, intensive-comprehensive or intensive-selective), dates when the survey was conducted and by whom, and a discussion of the methods employed to identify and record the resources. Indicate if archaeological potential will be considered.

Historic Context

Summarize the historic development of the area. Include a description of the natural and topographical features that may have affected the historic development. The context for a particular survey area may include more than one theme and time period. Themes may be related to history, architecture, and/or engineering. The development of the historic contexts is often an important part of a historical & architectural survey.

Results

Present and explain the findings in relation to the survey goals. The results should include the number of sites recorded, a list of recorded sites with addresses and site numbers, an assessment of National and State Register eligibility, and, if such a program exists, an assessment of local landmark eligibility.

Summaries of survey data can be presented in table fashion. Every survey report should have a table that lists all properties by address and includes the property name and OAHP site number. A second table should provide this same information but be presented in site number order rather than address order. At least one of these tables should include the individual National Register eligibility of each property, stating the relevant eligibility criteria, and a similar evaluation of local landmark eligibility, if such a program exists in that subject community. See the examples of table formats on pages 47 and 48. Although it is not required, tables and narrative sections related to the survey results may also address State Register eligibility. For additional information on assessing State Register eligibility, see the State Register Bulletin *How to Apply the Nomination Criteria for the Colorado State Register of Historic Properties*. Additional tables may be appropriate to convey information regarding architectural styles, materials, or architects within the survey area.

If a National Register and/or local landmark eligible district has been identified, the report should describe the applicable criteria and period of significance, indicate the district boundaries, and provide a list of all sites within the eligible district, indicating their contributing or noncontributing status. A separate table should be generated that contains only those properties within the district. If more than one eligible district is identified, a separate table for each should be created. If a National Register and a local landmark eligible district are identified, the associated properties may be listed on a single table. However, if the boundaries of the eligible National Register and local landmark districts are not identical, then the districts should be presented in separate tables. See the example on page 48.

In the case of urban surveys, a city plat or planning map should be included with the survey boundaries marked (see page 49 for example). Each recorded site should be identified on the map by address and/or site number. If an eligible district has been identified, the district boundaries should be shown and each site keyed to show its contributing or noncontributing status.

The key idea here is that survey reports generally need to contain more than one map and one table. The text, tables, maps, charts, and photographs should all work in concert to convey the survey results and address the survey goals. Survey reports often have multiple audiences and the presentation should be designed to be understandable and usable by each audience. The hard work that goes into the survey is wasted unless the results are presented clearly and accurately.

Recommendations

This section of the survey report offers guidance on how the survey findings may be used and is often closely related to not only the purpose of the survey but also future preservation priorities. Recommendations might include ideas for sharing the survey findings with the public or suggestions for future projects such as design guidelines, interpretive plaques or further survey projects based upon the survey results. The recommendations section is particularly important in survey reports for reconnaissance surveys because it provides information about which areas of the community warrant further intensive survey.

Bibliography

Provide a list of all sources consulted during the project; use a standard bibliographic format.

Survey Log

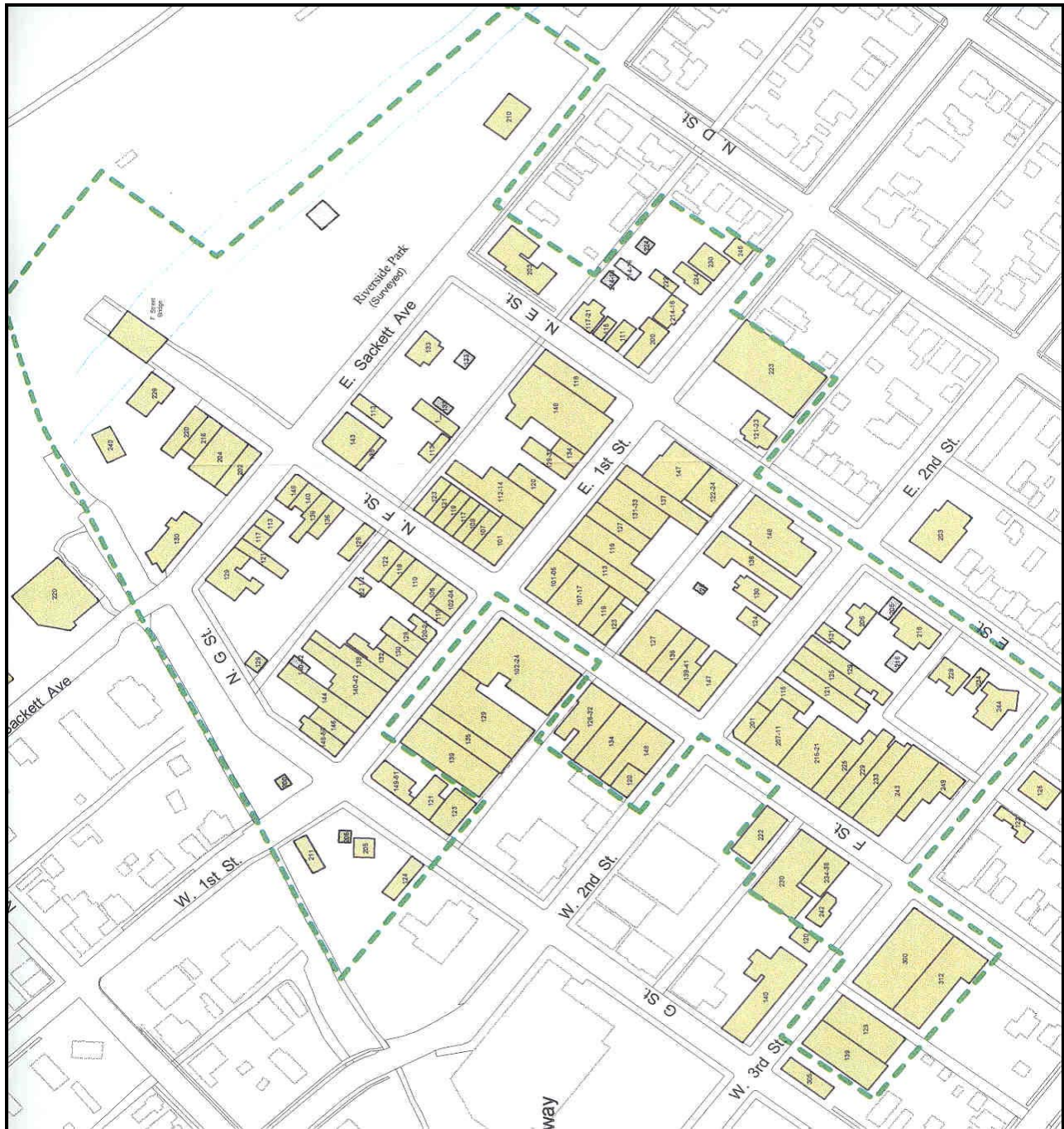
A copy of a survey log should be included in the survey report and a second copy should accompany the inventory forms. This log is a list of all the resources recorded during a particular survey. The minimum information includes site numbers, addresses and/or property names, and a field assessment of National Register eligibility. It may be helpful to include other information on this list, such as the date of construction or architectural style, depending upon the specific needs.

Survey Log for Mapleville, Colorado, Historical & Architectural Survey: Surveyed Properties by Street Address				
Address	Property Name	Site No.	National Register Eligibility	Landmark Eligibility
3456 S. Grant Pl.	Marty Graw House	5AB1234		
3458 S. Grant Pl.	Tom Foolery House	5AB1235	A	A
3460 S. Grant Pl.	Art Deco House	5AB105	A, B	A, B
3465 S. Grant Pl.	Rusty Nail House	5AB27		A
123 W. Lee Ave.	Dan Druff House	5AB1236		
124 W. Lee Ave.	Heidi Ho House	5AB1237	C	C
(etc.)				

Survey Log for Mapleville, Colorado, Historical & Architectural Survey: Surveyed Properties by Site Number				
Site No.	Address	Property Name	National Register Eligibility	Landmark Eligibility
5AB27	3465 S. Grant Pl.	Rusty Nail House		
5AB105	3460 S. Grant Pl.	Art Deco House	A, B	A, B
5AB200	126 W. Lee Ave.	L. Repute House		
5AB1235	3458 S. Grant Pl.	Tom Foolery House	A	A
5AB1236	124 W. Lee Ave.	Dan Druff House		
5AB1237	123 W. Lee Ave.	Heidi Ho House	C	C
5AB1238	125 W. Lee Ave.	B. Rick Out House	A	A, C

Survey Log for Mapleville, Colorado, Historical & Architectural Survey: Properties in the National Register and Local Landmark Eligible Dingy Diner District				
Address	Site No.	Property Name	Contributing to National Register District	Contributing to Landmark District
123 Sherman Dr.	5AB148	Doggy Diner	Contributing	Contributing
127 Sherman Dr.	5AB149	Dirty Fork Diner	Noncontributing	Contributing
131 Sherman Dr.	5AB151	S. Cargo Bistro	Noncontributing	Noncontributing
400 Beaugard Blvd.	5AB710	Blue Plate Special Diner	Contributing	Contributing
401 Beaugard Blvd.	5AB27	Cup A Java Diner	Contributing	Contributing
410 Beaugard Blvd.	5AB711	Ding-A-Ling Diner	Noncontributing	Contributing
413 Beaugard Blvd.	5AB712	Eat'n Run Diner	Contributing	Contributing
416 Beaugard Blvd.	5AB713	Kay O. Pectate Diner	Noncontributing	Noncontributing

Survey Log for Mapleville, Colorado, Historical & Architectural Survey: Surveyed Properties by Architect/Designer			
Architect/Designer	Address	Property Name	Site No.
Arthur "Art" Deco	3456 S. Grant Pl.	Marty Graw House	5AB1234
	126 W. Lee Ave.	L. Repute House	5AB200
	125 W. Lee Ave.	B. Rick Out House	5AB1238
Harold Lloyd Wright	3458 S. Grant Pl.	Tom Foolery House	5AB1235
	3460 S. Grant Pl.	Art Deco House	5AB105
	124 W. Lee Ave.	Dan Druff House	5AB1236
Buckminster Fuller Brushmann	3465 S. Grant Pl.	Rusty Nail House	5AB27
	123 W. Lee Ave.	Heidi Ho House	5AB1237
	134 W. Lee Ave.	Chester Chicken House	5AB1406

Sample Historical & Architectural Survey City Plat Map:

NOTE: On this map the survey area boundary has been marked with a heavy dashed line, the surveyed buildings are shaded and each surveyed property is labeled with its address. All relevant information appears in the map key (not shown).

Additional Report Considerations

- ◆ The decreasing cost and general availability of color printers has resulted in the growing use of color in report charts, graphs, and maps. Color graphics can be an effective way to convey information. However, many survey reports are copied in whole or in part by means of black and white photocopying. The loss of the color may prevent report graphics from conveying their information. Consider using a format that will translate well into black and white.
- ◆ Whenever possible, use both sides of the paper and avoid blank pages. This will reduce reproduction costs, conserve paper, and save library space.
- ◆ Do not staple or bind intensive level survey forms to the survey report. Intensive level forms are filed separately from the reports. In the case of reconnaissance surveys, survey forms, if generated, should be bound with the report. Reconnaissance forms are not filed separately from the report. Reconnaissance forms are not entered into the OAHPS sites database because of the limited information they provide, particularly in regard to specific locational information.
- ◆ The current historical & architectural survey forms do not require an assessment of eligibility to the Colorado State Register of Historic Properties. However, this information may be added to the inventory forms; consult staff for the best method and placement. State Register eligibility should also be addressed in the results section of the survey report. Resources eligible for the National Register are also eligible for the State Register. Properties eligible for the State Register do not require the type of agency project review that occurs for National Register eligible resources. For additional information on assessing State Register eligibility, see the State Register Bulletin *How to Apply the Nomination Criteria for the Colorado State Register of Historic Properties*.
- ◆ Reconnaissance level survey reports should follow the general report outline. The limited information generated in a reconnaissance level survey will also limit the scope of the associated report.

ARCHAEOLOGICAL SURVEYS

The archaeological survey forms and guidelines include:

- ◆ Guidelines for Standard Archaeological Cultural Resource Survey Reports
- ◆ Guidelines for Archaeological Testing and Excavation Reports
- ◆ Cultural Resource Survey Management Information Form
- ◆ Limited-Results Cultural Resource Survey Form

These guidelines and forms are intended to facilitate the collection and reporting of comprehensive and uniform information for each project. They also ensure that reports meet the *Secretary of the Interior's Standards for Identification*.

The OAHP *Guidelines for Standard Cultural Resource Survey Reports* and *Guidelines for Cultural Resource Testing or Excavation Reports* should be viewed as flexible, with the complexity of the project determining appropriate usage. Considerations for project complexity include acreage, site density, and investigative procedures. Individual lead or sponsoring agencies may have additional requirements. In general, these guidelines present a checklist of basic information necessary for report acceptance by the OAHP.

Two forms were designed to streamline the reporting of basic data. The required *Cultural Resource Survey Management Information Form* is to be completed and attached behind the Table of Contents for all standard survey reports. *The Limited-Results Cultural Resource Survey Form* may be used in lieu of the standard survey report for all surveys under 160 acres and not exceeding four linear miles with no sites and a maximum of four isolated finds. A *Cultural Resource Survey Management Information Form* is not needed if the *Limited-Results Cultural Resource Survey Form* is being used.

The forms and guidelines are available in hardcopy, electronically, or on the OAHP website. The format of the forms may be adjusted to better suit individual database needs. If so, OAHP asks that you maintain the questions in the same order and that OAHP review the format prior to use.

Important Considerations

- ◆ Site and IF (Isolated Find) forms should be individually stapled and the set clipped to the back of the report. Please *do not* staple or bind the forms to the reports and do not include multiple copies. This will be of great help to OAHP as site forms are not filed with the reports at OAHP or in the offices of most lead agencies.
- ◆ Please include a clearly labeled photocopy of the quad map indicating site/IF location with each site/IF form. Do not reduce or enlarge the map.
- ◆ Whenever possible, use both sides of the paper and avoid blank or mostly blank pages. This will conserve paper, reduce photocopying costs, and save space in libraries.
- ◆ If possible, and consistent with the needs of the lead agency, combine several small similar regional projects into one report. The projects should be in proximity to each other (within a few miles), in a similar geographic location (along the same ridge, in an open plain, etc.), and be similar in nature (well pads, access roads, check dams, etc.).
- ◆ Monitoring reports should be done as brief addenda to the original survey reports unless cultural remains are uncovered. In that case, follow the *Guidelines for Archaeological Testing and Excavation Reports*. If monitoring on a known site location, document the disturbance's effect on the site.

- ◆ Remote sensing techniques, including aerial imagery and geophysics, may be the most effective way to discover sites, map sites, locate and confirm the presence of predicted sites, and define features within sites. An educational handout, *Guidelines for Incorporating Remote Sensing Methods in Archaeology Projects*, is available through OAHP (303-866-3395).
- ◆ Definitions of survey types (Class I, Class II, and Class III) are discussed in Step 5. Please refer to these definitions and use them appropriately.

Guidelines for Standard Archaeological Cultural Resource Survey Reports

A completed *Cultural Resource Survey Management Information Form* (available in *Volume II*) must accompany the report and should be placed directly behind the Table of Contents.

I. Title Page

A. Report Title

1. Project name
2. Type of investigation (Class I, Class II, Class III)
3. Nature of the project (access road, timber sale, reservoir construction, etc.)
4. County/State

B. Author(s)

C. Lead Agency or Organization Information

1. Name of agency/organization
EXAMPLES: Routt National Forest, University of Colorado, Department of Energy, Bureau of Land Management–Little Snake Field Office
2. Permit number
3. Contract number / SHF project number if applicable

D. Organization/Company that Conducted the Survey

1. Name
2. Address
3. Principal Investigator

E. Date of the Report

II. Abstract

A. Type of Project/Action

EXAMPLES: road construction, open space inventory, well pad and access, pipeline, timber sale

B. Type of Investigation (reconnaissance, sample, intensive) and total acreage

C. General Project Location

D. Summary of Results and Contributions to Archaeology

III. Table of Contents

NOTE: This should include lists of tables and figures if appropriate.

IV. Management Information

- A. Please complete the *Cultural Resource Survey Management Information Form* and place it in the report behind the Table of Contents.
- B. The page following the form should be a well-labeled, full-sized (not reduced or enlarge) photocopy of the USGS map indicating project location and/or the areas surveyed. The label should include the quad name and date, townships and ranges, principal meridians, and section numbers.

V. Introduction

- A. Description of Proposed Undertaking
1. Type of action
EXAMPLES: road construction, well pad and access, open space inventory, pipeline, timber sale
 2. Nature of Anticipated Disturbance (if any)
EXAMPLES: Removal of the first two feet of soil, road grading, under 5000 feet of water
 3. Size of Project
 - a. Describe the block or irregularly shaped survey area as clearly as possible. Provide the total number of acres in the survey area and the total number of acres in the project area if different than the survey area
EXAMPLES: a well pad that is .20 mile square, an irregular area approximately three miles north/south by .50 mile east/west
 - b. For linear segments provide length and width
- B. Legal/Sponsoring Organization Framework
1. Cite local, state, or federal regulations (if appropriate)
 2. Summarize sponsoring organization's objectives (if appropriate)
- C. Description of Field Operations
1. Organizations involved
 2. Personnel involved
 3. Date(s) of fieldwork

VI. Environment

- A. Present Environment
 - 1. General topographic features
 - 2. General climatic conditions
 - 3. Specifics of the project area
 - a. Geology
 - b. Soils
 - c. Hydrology
 - d. Flora and Fauna
 - 4. Land use patterns
- B. Environmental Constraints
 - 1. Factors that affected the cultural remains
EXAMPLES: fire, heavy erosion, construction, cattle, cultivation
 - 2. Factors that affected the fieldwork
EXAMPLES: heavy undergrowth, steep terrain, pouring rain, killer bees
- C. Paleoenvironment (if applicable)
 - 1. Paleoclimatic conditions
 - 2. Resource utilization potential

VII. Culture History and Previous Work

- A. Summarize the Culture History of the Region
 - 1. Site types located
 - 2. Time periods represented
- B. Summarize Previous Work in the Project Area
NOTE: File search information should be gathered at OAHP and at the appropriate land management agency
 - 1. Location of previous projects
 - 2. Types of projects that have occurred
 - 3. Dates of survey and organizations involved
 - 4. Brief descriptions of sites and site recommendations
 - 5. Contributions of prior investigations
- C. Historic Research (if appropriate)
 - 1. Types of historical records reviewed and where they are stored
 - 2. Names and addresses of individuals contacted
 - 3. A summary, with appropriate citations, of any relevant information
 - 4. Discuss the limitations, accuracy, and biases of the archival research

VIII. Statement of Objectives/Research Design

- A. Objectives of the Identification Activities
EXAMPLES: to gather information to determine which properties in an area are significant, to characterize the range of historic properties in a region, to identify the number of properties associated with a context, to identify properties that may be affected by the undertaking

- B. Expected Results
 - 1. Proposed hypotheses, if any
 - 2. Expectations about the kind, frequency, location, character and condition of properties or sites; discuss implications

IX. Field/Lab Methods

- A. Definitions
 - 1. Site
 - 2. Isolated Find
 - 3. Define other appropriate terms
- B. Extent of Survey Coverage
 - 1. Pedestrian coverage
 - a. Transect width
 - b. Describe other types of coverage
EXAMPLES: walked the contours, examined cutbacks
 - 2. Other types of coverage
EXAMPLE: horseback
 - 3. Discuss, if appropriate, why the area surveyed differs from the project area/area of potential effect
- C. Describe the Following
 - 1. Collection strategy (justify)
 - 2. Photographs taken of the project area
 - 3. Maps available of the undertaking
- D. Describe Laboratory Methods (if appropriate)
- E. Storage of Materials
 - 1. Location of the field notes and photographs
 - 2. Location of the artifacts

X. Results

- A. Describe Field Conditions
 - 1. To what extent did field conditions alter methods?
 - 2. To what extent did field conditions alter results?
- B. Summarize Cultural Resource Findings
EXAMPLE: 23 sites were recorded (19 prehistoric and 4 historic) and 9 IFs were recorded (8 prehistoric, 1 historic). The historic IF and 2 of the prehistoric sites are re-evaluations.
- C. Discuss Distribution of Resources in Project Area

- D. Briefly Describe Each Resource (Please include the Smithsonian Trinomial Number)
 - 1. General topographic location
 - 2. Size
 - 3. Physical remains
 - 4. Cultural affiliation (if known)
 - 5. Condition
 - 6. Assessment of potential threats to the resource
- E. Discuss the potential for unidentified cultural resources

XI. Evaluation and Recommendations

- A. Evaluation Statements with Justifications
 - 1. Discuss site integrity
 - 2. Discuss applicable National Register of Historic Places criteria
NOTE: IFs cannot be eligible and cannot be recommended for further work. Only sites or districts that are eligible or potentially eligible can be recommended for further work (including monitoring and avoidance).
- B. Management Recommendations and Justifications for each site
NOTE: If further work is recommended, be specific about the justification and the recommended actions.

XII. Evaluation of Research

- A. Compare expected results to actual results
- B. Respond to research questions posed in the Statement of Objectives

XIII. Summary and Conclusions

XIV. References Cited

NOTE: Use American Antiquity Style guidelines

XV. Map of Site / IF Locations

- A. Provide a full-sized (not reduced or enlarged) photocopy or digital copy of the USGS Quad map indicating site/IF location. Please minimize distortion as much as possible
Label map with:
 - 1. Principal Meridian, Township(s), Range(s), Section(s)
 - 2. Quad name and date(s)
NOTE: You may want to attach the following statement (or a similar one) to each map: "For Official Use Only. Disclosure of Site Locations is Restricted (36-CFR-296.18)."
- B. Please include a copy of each site and IF form clipped to the report. The forms should be individually stapled, with a labeled photocopy of the USGS quad indicating site/IF location.

DO NOT BIND SITE FORMS TO REPORT

Guidelines for Archaeological Testing or Excavation Reports

Although these guidelines closely resemble the survey report guidelines, they do encourage detail concerning excavation technique and results.

I. Title Page

A. Report Title

1. Project name
2. Type of investigation (excavation or testing). If the investigation involves only a few sites, provide their site numbers and, if applicable, the site names
3. County/State

B. Author(s)

C. Lead Agency or Organization Information

1. Name of agency/organization
EXAMPLES: Routt National Forest, University of Colorado, Department of Energy, Bureau of Land Management–Little Snake Resource Area
2. Permit number
3. Contract number

D. Organization/Company that Conducted the Survey

1. Name
2. Address
3. Principal Investigator
4. Date of the report

II. Abstract

- A. Brief Description of the Site(s)
- B. Reason for the Testing/Excavation
- C. Type of Investigation (testing or excavation)
- D. General Project Location
- E. Summary of Results and Contributions to Archaeology

III. Table of Contents

NOTE: This should include a list of tables, maps, and figures if appropriate.

IV. Introduction

A. Background Knowledge of the Site

1. Previous work at the site
2. Current threats to the site (if any)
EXAMPLES: road construction, well pad and access, vandalism, pipeline, timber sale
3. Nature of anticipated disturbance (if any)
EXAMPLES: Removal of the first two feet of soil, road grading, under 5000 feet of water

B. Description of Archaeological Field Operations

1. Organizations involved
2. Personnel involved
3. Date(s) of fieldwork
4. Plan for professional/public dissemination of information, if any

V. Environment

A. Present Environment

1. General topographic features
2. General climatic conditions
3. Specifics of the project area
 - a. Geology
 - b. Soils
 - c. Hydrology
 - d. Flora
 - c. Fauna
4. Land use patterns

B. Environmental Constraints

1. Factors that affected the cultural remains
EXAMPLES: fire, heavy erosion, construction, cattle, cultivation
2. Factors that affected the fieldwork
EXAMPLES: hard soil, pouring rain, giant squids

C. Paleoenvironment (if applicable)

1. Paleoclimatic conditions
2. Resource utilization potential

VI. Culture History and Previous Work

A. Summarize Culture History of the Region

1. Site types located
2. Time periods represented

B. Summarize Previous Work in the Project Area

NOTE: File search information should be gathered at OAHP and at the appropriate land management agency

1. Location of previous projects
2. Types of projects that have occurred
3. Dates of work and organizations involved
4. Brief descriptions of sites and site recommendations
5. Contributions of prior investigations

C. Historic Research (if appropriate)

1. Types of historical records reviewed and where they are stored
2. Names and addresses of individuals contacted
3. A summary, with appropriate citations, of any relevant information
4. Discuss the limitations, accuracy, and biases of the archival research

VII. Statement of Objectives/Research Design

A. Objectives of the Testing/Excavation Activities

NOTE: Summarize Data Recovery Plan if appropriate

B. Research Questions

VIII. Field/Lab Methods

A. Describe Field Methods

NOTE: These should be selected to best respond to the objectives/research design

B. Describe Laboratory Methods

C. Storage of Materials

1. Location of the field notes and photographs
2. Location of the artifacts

IX. Results

A. Describe Fieldwork

1. Number and size of test/excavation units
2. Depth of test/excavation units
3. Artifact list/log
4. Provide a copy of the site map indicating the location of excavations

B. Describe Field Conditions

1. To what extent did field conditions alter methods?
2. To what extent did field conditions alter results?

X. Evaluation of Research

Respond to research questions posed in the Statement of Objectives/Research Design

XI. Site Evaluation and Recommendations

A. Evaluation Statements with Justifications

1. Discuss site integrity
2. Discuss applicable National Register of Historic Places criteria

B. Management Recommendations and Justifications for each site

NOTE: If further work is recommended, be specific about the justification and the recommended actions

XII. Summary and Conclusions**XIII. References Cited**

NOTE: Use *American Antiquity* Style guidelines

XIV. Map of Site/IF Locations

- A. Provide a full-sized (not reduced or enlarged) photocopy or digital copy of the USGS Quad map indicating site/IF location. Minimize distortion as much as possible. Label map with:
1. Principal Meridian, Township, Range, Section
 2. Quad name and date(s)
- NOTE:* You may want to attach the following statement (or a similar one) to each map: “For Official Use Only. Disclosure of Site Locations is Prohibited (36-CFR-296.18).”
- B. Include a revised copy of each site form clipped to the report. The forms should be individually stapled, with a clearly labeled photocopy of the USGS quad indicating site location.

PLEASE DO NOT BIND SITE FORMS TO THE REPORT

Cultural Resource Survey Management Information Form

This form is intended to summarize critical information concerning the survey size, location, and results. It is a required element in all standard survey reports. The use of this form facilitates the transfer of information to the centralized state cultural resource database. A copy of the form is located in *Volume II*.

Limited Results Cultural Resource Survey Form

This form was created in 1993 in response to a need for an expedient method to relay the results of small surveys with limited results. Although complete sentences and extended prose are not necessary, all blanks should be completed with accurate information. A copy of this form is located in *Volume II*.

Step 12

Present the Findings

Encouraging Public Benefit

At the conclusion of the survey process, the materials generated will be turned over to the sponsoring organization and to other repositories such as the local library, community planning office, nearby college, local historical society, and OAHP. In some instances the individual cultural resource forms and the associated survey report may fully convey the findings of the project to all interested parties. In many cases, it is necessary to present the findings to a number of audiences whose understanding and use of the material will vary greatly. It is best to consider all possible audiences at the start of the survey and to keep this aspect in mind as the project progresses. To be of greatest value, and when restricted information is not a factor, survey results should be widely available and easily understood by the full range of Coloradans.

Sponsor

The sponsor(s) of the survey obviously has the greatest interest in the survey findings. The cultural resource forms and standard survey report should provide much of the information they need. Care should be taken to address all the questions and requirements set forth by the sponsor(s) at the beginning of the survey. An executive summary of the report or an illustrated presentation (slides or PowerPoint) may be the best way to introduce the findings to the sponsors and respond to their questions.

Local Citizens

The more the public can be involved in a community's preservation program, the more likely the program is to succeed. Not only can survey findings contribute to public support by helping the public understand what is important about the community's past, but the survey effort itself can be a powerful stimulus to public involvement.

A public meeting to present survey findings is an effective way of disseminating information to large bodies of interested people and to answer common questions. If the survey project began with a public meeting, it is particularly important to end with a similar gathering in order to report back on what was found, suggest future actions, answer questions, and, most importantly, thank the public for their understanding and support.

Public Officials

The governmental entity through which the survey was conducted will most likely be interested in the survey findings. These findings may simply be deposited in a planning or administrative office or there may be a desire for some type of formal or informal presentation. An executive summary as part of the survey report is often a useful tool for presenting findings in a summarized and easily understood manner.

Professional Communities

The standard survey report provides the basic information for the use of survey results by professionals in the fields of archaeology, architecture, history, planning, and related disciplines.

The results of surveys are often presented at professional conferences or published in professional journals as individual projects or as part of larger studies of interest to peer groups. Survey reports are kept on file in such central repositories as OAHP. Many organizations, including OAHP, are actively exploring ways to make these reports available to professionals at off-site locations via the Internet.

Students

High school and college students are an often-forgotten group when it comes to accessing survey information. The information generated on specific sites and the general historic contexts developed during the survey process can be of immense value to students in the study and understanding of Colorado's long and diverse cultural heritage. The survey report bibliographies are of particular use to students and other researchers. The responsibility for raising student awareness and use of survey information falls on those archiving the cultural resource forms and reports. OAHP attempts to inform students and teachers about the informational value of cultural resource collections and to provide greater access to the materials both on site and through the Internet.

Step 13 Use the Findings

The Use of Survey Information

The survey project may be over with the presentation of the survey report, but the use of the survey findings has just begun. Surveys are conducted for a variety of reasons and the results can and often are put to a multitude of uses. A survey conducted for one purpose will often be useful to others in a variety of development, planning, research, stewardship, and educational activities. It is important that the survey findings are not only used and integrated into various planning and educational endeavors but also revisited and re-evaluated on a regular basis.

Guide the Planning and Actions for Specific Projects

Often surveys are conducted to assist in the planning and execution of a specific project. The area surveyed and the use of the findings is dictated by the extent of the project and the organizations and agencies involved. However, as mentioned in the previous step, the results of such limited and focused surveys may have additional uses if there is easy access to that information.

Encourage Formal Property Designations

Surveys provide the information necessary to establish the National and State Register and/or local landmark eligibility of the cultural resources in the survey area. The distribution of the research findings is a first step in encouraging the owners of eligible properties to consider seeking local, state, or national historic designation. The basic archaeological, architectural, and historical information produced in the survey creates the nucleus around which the nomination or application is written.

Establish the Basis for a Local Preservation Ordinance

Community-wide historic preservation ordinances are effective ways to ensure that historic properties are considered in community planning as a whole and in the development of different areas of the community.

Theoretically, a historic preservation ordinance could be established based on no information at all about a community's historic resources, but merely on the general agreement that there might be something in the community having historic significance. Actually, a body of information on the community's resources is usually necessary to generate the awareness that there is something to protect. The more survey data available, the better the ordinance that can be drafted to address the community's actual preservation opportunities and constraints.

Historic preservation ordinances typically provide for the existence of a review board of some kind to oversee the preservation program and specifically to make evaluation decisions. Survey data can help define the kinds of expertise that should be represented on the review board. For example, if the community was the site of significant prehistoric development, the presence on the review board of an archaeologist specializing in prehistory might be warranted. However, if it appears that the community contained many buildings representing different schools of design, periods of construction, and architectural styles, the presence of an architectural historian would be appropriate.

Ordinances also spell out the scope of authority assumed by the review body and the preservation program it oversees. Survey data can help define what authorities are needed. If the community contains many historic buildings that may be candidates for adaptive re-use and rehabilitation, but that may also be subjected to insensitive renovation, the preservation program may need to have the authority to review and approve both renovation activities and outright demolition. If the visual qualities of certain streetscapes are likely to be important, the program may need the authority to review alterations to building exteriors. If the community is likely to contain significant subsurface archaeological resources, the program may need the authority to review grading permits or other authorizations for ground disturbance.

Finally, ordinances usually set forth the procedures and standards that will be used by the preservation program in evaluation decisions and approvals or disapprovals of particular kinds of activities affecting historic properties. Survey data can help ensure that such procedures and standards are actually appropriate to the community's resources. For example, if the community's central business district contains many historic buildings suitable for rehabilitation, ordinance drafters may want to pay particular attention to the establishment of standards for rehabilitation and procedures for reviewing renovation projects. If an important historic context is agricultural development in what are now the suburbs of a city, special attention to standards and procedures may be needed for dealing with visual and physical intrusions on surviving farmsteads and agricultural buffers.

Assist in the Establishment of Archaeological Programs

Programs to protect archaeological sites come in several forms. Provisions applicable to other kinds of historic properties can be adapted to archaeological purposes. For example, conservation easements can be used to protect archaeological sites from land disturbance and tax credits can provide for the contribution of funds to archaeological excavation or for the contribution of the artifacts recovered from such excavations to the government or a non-profit corporation. Information gathered during survey may be used to establish a site stewardship program. Preservation ordinances may also require that archaeological salvage excavations be done when a significant site is to be disturbed.

All of these provisions can be best and most sensitively put in place if survey data are in hand. For example, development interests in a community may object strenuously to an ordinance giving a preservation program review authority over all grading permits, but may object less if the authority is restricted to particular areas where survey data indicate the likelihood of significant subsurface resources.

Establish the Basis for Interpretive Programs

Programs that interpret historic properties for the public, and the community's history and architecture in general, can be powerful tools in preservation. They can generate public interest in and sympathy for preservation, and make the objects of preservation understandable to taxpayers, voters, and decision makers. Examples of interpretive programs include development of house museums, sponsorship of walking tours, publication of brochures and books on the community's past, establishment of displays in museums, public buildings, and open spaces, and on-site interpretation of historic buildings, structures, and sites.

Survey data are important to interpretive programs not only for the identification of properties that may be interpreted, but also for the establishment of contexts in which interpretation can be accomplished. An interpretive program will be most meaningful to the public if it presents an integrated view of the community's past, based on significant historic contexts developed in the course of survey work.

Bring Cultural Resources into Economic Development Planning

Historic preservation can be viewed both as an opportunity for community development and as a constraint upon such development. In the past it has largely been viewed as the latter; today it is increasingly seen as the former. Properly understood, historic preservation represents both an opportunity and a constraint.

From the standpoint of constraints, survey data such as the description of historic contexts, predictive maps, and inventories are vital to the identification of conflicts between development planning and local preservation priorities. From the standpoint of opportunities, survey data can be used to identify the historic contexts and their constituent elements — buildings, streetscapes, building uses, cultural activities, and other resources — on which community development can build in order to make the most of the community's special historic qualities. Ideally, development planning should use survey data to identify opportunities for the use of the community's historic character in creating its future, to minimize conflicts between preservation and development, and to provide for the orderly resolution of those conflicts that inevitably will occur.

Survey data are important in the administration of financial incentive programs. The information helps to identify specific historic properties whose owners or developers might be offered incentives. It also gives the community an idea about what kinds of incentives might be appropriate. Historic properties each come with their own set of financial incentives that are an important part of community development. Financial incentives for the preservation, rehabilitation, and adaptive re-use of historic properties can take many forms, some carried out completely at the local level, some featuring a partnership with state and federal agencies. Information and advice on possible financial incentives can be obtained from the OAHP website.

Examples of financial incentives include:

State Historical Fund

Grants from the Colorado Historical Society's State Historical Fund can be used for a variety of planning, preservation, rehabilitation, and educational projects.

Tax incentives

Both State and Federal tax incentives are available for some designated properties. These include federal and state investment tax credits and local exemptions from or reduction of property tax.

Grants

Various types of grants are available from the National Park Service, the Department of Housing and Urban Development, the National Endowment for the Arts and the National Endowment for the Humanities, the National Trust for Historic Preservation, and other public and private agencies.

Subsidies

Subsidies include federal, state, and local funds to assist key businesses and to support low-income housing, thereby helping to stabilize deteriorating commercial areas and neighborhoods. The Department of Housing and Urban Development has published examples of such programs that are worth consideration.

Charitable Contributions

The charitable contributions of partial interest in a historically important land area or certified historic structure can be deducted from taxes.

Revolving Funds/Loans

Revolving funds and low interest loans are used to support such activities as sensitive rehabilitation and facade restoration.

The major point to remember is that survey data can be used at virtually any point in the progress of a survey to provide information useful in development planning. If the survey is well planned, at each step in its progress survey leaders will have some idea of the historic contexts relevant to various parts of the community and, therefore, be able to set goals and priorities for each context. Development planners should take these goals and priorities into account in carrying out their work.

Provide an Important Element in a Community Comprehensive Plan

Ideally, the historic preservation component of a community's general plan should be *comprehensive* — that is, it should deal with all kinds of resources important to understand, appreciate, and experience the community's past. This requires that the community have at least the results of some archival research, and usually some reconnaissance-level survey data, when it begins work on the plan.

Enough should be known to have at least a general idea about such matters as:

- ◆ An initial formulation of historic contexts that may have characterized the community's history;
- ◆ Whether the community is likely to have significant archaeological resources, and in what areas these may be concentrated;
- ◆ The general types of buildings and structures that make up the community's built environment, and what their major important characteristics are;
- ◆ The general locations and boundaries of likely historic districts;

- ◆ The general nature and characteristics of any cultural landscapes; and
- ◆ The social and cultural characteristics of the community and its neighborhoods that may influence preservation decisions.

At the same time, it should be remembered that a survey need not be complete to serve as the basis for development of a preservation plan. Plans can be developed at relatively early stages of a survey, as long as they provide for ongoing survey and evaluation and for adjustments to the plan itself as new survey data are acquired.

Part III

THE OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION

Preservation Programs

The Office of Archaeology and Historic Preservation (OAHP) is located within the Colorado Historical Society. The State Historic Preservation Officer (SHPO), Georgianna Contiguglia, is responsible for administering the program as defined in the National Historic Preservation Act of 1966, as amended. The Colorado State Archaeologist, Susan Collins, has statutory authority defined in Colorado law, and functions as the Deputy State Historic Preservation Officer for archaeology. Mark Wolfe serves as the Deputy State Historic Preservation Officer for history and architecture and the Director of the State Historical Fund.

The mission of OAHP is to assist individuals, communities, and organizations to identify, protect, and preserve the state's cultural resources and to foster widespread appreciation of and respect for Colorado's cultural heritage. This is accomplished by relying on active public support and participation, intergovernmental coordination and cooperation, and supportive legislative mandates and incentives.

To serve its mission, OAHP administers a variety of state and federal preservation programs and provides diverse services to an ever-expanding preservation community. Several of these programs are summarized below. For more information concerning any of the programs below contact OAHP or visit the OAHP website.

Cultural Resource Inventory

Over 150,000 cultural resources with historic, architectural, archaeological, or engineering qualities have been identified in Colorado. Hardcopy files with information relating to these cultural resources, including forms, documents, maps and photographs are housed at OAHP. A computerized database, *Site.Files*, containing a wide variety of cultural resource information, is also maintained by OAHP. Both the files and the database are used extensively by the OAHP staff, state and federal agencies, consultants, local governments, and private organizations.

Statewide Survey

OAHP coordinates a statewide effort to add to the inventory described above through the identification of historic and prehistoric resources. Cultural resource surveys on federal lands are ongoing and State Historical Fund or Certified Local Government grants are available to assist in the completion of neighborhood, community, county, regional, and thematic surveys. Information obtained from the surveys serves as the basis for evaluating the significance of the resources and developing strategies for their long-term protection.

National and State Registers of Historic Places

OAHP is responsible for nominating Colorado's most significant cultural resources to both the National and State Registers of Historic Places — the federal and state honor rolls of buildings, sites, structures, objects, and districts important in history, architecture,

archaeology, engineering, or culture. Colorado currently has over 1,600 listings in the National and State Registers representing only a small percentage of eligible properties statewide.

Although preservation of National and State Register properties is strongly encouraged, listing offers no automatic protection unless federal or state monies are involved (see Intergovernmental Services below). Owners of National or State Register properties may, generally, alter or even demolish these properties without restriction when private funds are used. It is only through the process of local designation with the associated local preservation ordinances that private properties can be truly protected.

Intergovernmental Services

Section 106 of the National Historic Preservation Act directs federal agencies and their designees to consider the impact of their undertakings on significant cultural resources. The State Register Act provides for a similar process for state agency actions that affect State Register properties.

OAHP reviews federally funded, licensed, or assisted projects and comments on the National Register eligibility of effected cultural resources. Where significant cultural resources are affected, the program also reviews the projects to evaluate their impact and to recommend alternatives where necessary to protect the resources. When a state agency action may have an effect on a State Register property, a similar review and evaluation occurs.

Archaeology

The Office of the State Archaeologist is integrated with OAHP. The State Archaeologist's duties and responsibilities are enumerated in state, rather than federal, statutes. Staff archaeologists investigate impacts to archaeological resources and respond to requests for technical and administrative assistance and guidance relating to the identification, documentation, and protection of archaeological resources. The State Archaeologist also issues permits for archaeological and paleontological work on nonfederal lands in the state.

The Program for Avocational Archaeological Certification (PAAC) introduces individuals to Colorado's past, instructing them on archaeological field and laboratory methods and artifact identification. The classes include site recording and report preparation with emphasis on the responsible stewardship of Colorado's cultural resources. Evening and weekend classes are offered across the state based on a schedule designed to meet local requests. These classes are taught by the Assistant State Archaeologist and proficiency certification is available upon successful completion of a program.

Unmarked Human Burials

Under the provisions of state law, the State Archaeologist responds to the discovery of unmarked human burials in the course of archaeological excavations, construction work, or other ground-disturbing activities. Program staff work with citizens to minimize potential conflicts among development, scientific research, and respectful treatment of identified burials.

Certified Local Governments

The National Historic Preservation Act was amended in 1980 to expand the state-federal partnership to the local level through the establishment of a Certified Local Government (CLG) program. Colorado local governments must enact local preservation ordinances and establish preservation commissions to achieve CLG status. It is only through such local preservation ordinances that privately owned properties can be truly protected. There are currently 33 Certified Local Governments in Colorado.

Once certified, CLGs are eligible for an earmarked pool of federal grant funds. They can also participate in the state preservation tax credit program (discussed below) and can receive special assistance from program staff. Workshops and meetings are also available to encourage networking among local governments and to share information on preservation needs and strategies.

Preservation Tax Incentives

Since 1976, federal tax law has provided tax incentives for historic preservation. The federal government now offers a twenty percent investment tax credit for the approved rehabilitation of certified historic buildings for income-producing use.

The state offers a similar twenty percent state income tax credit for \$5,000 or more in approved preservation work on designated properties (whether or not they are income-producing).

OAHF works with property owners, developers, and architects to promote these tax incentives and to provide advice on appropriate preservation and rehabilitation measures. Program staff review applications for tax certification and make recommendations for approval.

Technical Assistance

Upon request, OAHF staff provides technical assistance to all owners of historic properties on proper preservation, rehabilitation, and restoration techniques. The program maintains extensive files of detailed technical information suitable for architects, professional craftsmen, and do-it-yourselfers. Site visits and OAHF office consultations may also be arranged.

State Historical Fund Grants

Although an increase in federal funding is highly unlikely for the foreseeable future, state revenues generated from a tax on the proceeds of limited gaming in Central City, Black Hawk, and Cripple Creek have provided a substantial pool of monies to the State Historical Fund which is distributed in the form of grants. The funds available have ranged from \$2 million to \$15 million annually.

These funds are available to public and non-profit entities on a competitive basis and can be used for a wide variety of preservation-related projects, including actual restoration and rehabilitation work, architectural and archaeological surveys, historic designations, preservation planning studies, and education and training programs. Grant application deadlines are twice a year: April 1 and October 1.

Preservation Education

Preservation education is an ongoing responsibility of OAHP. Public awareness and understanding of archaeology and historic preservation are promoted through brochures, a monthly newsletter, an annual report, conferences and workshops, curriculum development, presentations to schools and other organizations, and audiovisual materials. Program staff will also provide technical assistance on developing grant applications for local educational and outreach projects.

Award Programs

The Colorado Historical Society has several programs that recognize the accomplishments of individuals, organizations, and agencies. Each year the Society presents the Stephen H. Hart awards in recognition of distinguished service in the fields of archaeology and historic preservation. Additionally, in cooperation with the Colorado Department of Agriculture and the Colorado State Fair, the Society annually presents the Centennial Farm Awards honoring working farms and ranches that have remained in the same family ownership for 100 years or more.

Cultural Resource Information at OAHP

Several types of cultural resource information are maintained at OAHP including cultural resource forms and documents, maps and drawings, photographs, and various forms of digital data. Although these are the primary types of data available, numerous other files are maintained. It is the interaction of all these types of data that provides the most complete understanding of Colorado's cultural resources. Public access to some cultural resource data is restricted and is governed by the *Dissemination of Cultural Resource Information: Policy and Procedures* (see Appendix II).

The primary types of cultural resource information available at OAHP are summarized below.

Cultural Resource Forms

Approximately 150,000 cultural resource forms representing sites, buildings, structures, objects, and isolated finds create the backbone of the OAHP database. These forms provide information that has been collected throughout the state over the last 50 years. Information concerning a particular resource can range from a few words to a several page document providing descriptive, locational, historical, and management details. The narrative descriptions, maps, photographs, and drawings accompanying the forms provide information unavailable elsewhere in the system. In several cases, information collected as part of the HABS (Historic American Buildings Survey) or HAER (Historic American Engineering Record) is stored with the cultural resource forms. The standardization of recording techniques during the last decade will assure useful additions to this collection.

Cultural Resource Documents

Approximately 23,000 reports are housed in the OAHP library. This collection consists of survey, excavation, and synthetic reports written over the last 50 years concerning cultural resource identification and analysis in the state. As with the cultural resource forms, there is a tremendous amount of variation in these reports. Many are five to ten page documents concerning well pad or timber sale surveys, whereas others are multi-volume documents concerning large dam or land acquisition projects. The standardization of survey report content in the late 1980s has greatly improved the usefulness of incoming reports.

Maps and Drawings

Several thousand maps and architectural drawings are on file at OAHP. Most are topographic maps indicating the location of individual cultural resources and cultural resource surveys. This information is used by cultural resource staff at various federal and state agencies, as well as private consulting companies, to identify the location of resources and survey activity for a particular project area. Additional types of maps on file at OAHP include geologic maps, municipal maps, environmental attribute maps, and archaeological project maps.

The drawings at OAHP are generally schematic, technical building plans that were generated by numerous programs including the National Register program, the Investment Tax Credit program, HABS/HAER documentation, the Colorado Historical Society's regional properties, and the State Historical Fund. They are used for rehabilitation, planning, and research purposes. Unfortunately, an arson fire destroyed approximately 800 of these in March 1996.

Photographic Collection

In addition to the numerous photographs stored with the cultural resource forms, OAHP maintains an extensive photographic slide collection of historic and prehistoric resources. These images primarily depict individual cultural resources within Colorado and have been collected over several years by the OAHP staff. The collection of approximately 6,000 slides and 3,500 negatives has proven invaluable to both the professional and educational capacities of the Society.

Computerized Database

As the repository of cultural resource data from throughout the state, OAHP receives thousands of cultural resource forms and documents each year. Selected information from these forms and documents is entered into the computerized database, *Site.Files*. This database is used to organize, manipulate, and store cultural resource data. Its primary function is to present data in a quick and efficient manner and, when necessary, to lead individuals to sources of additional data.

In 2004 approximately 2,000 requests for searches of the database were made to OAHP from a variety of governmental agencies, consultants, and private interests. A majority of the file searches are requests to identify previously recorded sites within a project area so as to avoid duplication of work during a project. Other inquiries range from details on a specific resource, such as what architect built a particular building, what properties are in the National Register, or, on a lighter note, the location of all buildings with gargoyles.

Colorado Cultural Resource Geographical Information System (GIS) Program

One of the results of a 1998 database user survey was the expressed desire by many of the respondents to have access to a Geographical Information System (GIS). A GIS, with the information stored in data layers, is used to input, store, retrieve, manipulate, analyze, and create geographically referenced data. The data is used to generate specialized computer-generated maps that can be used for planning, evaluation, and research purposes by showing sites and project locations in their geographical context. Because the maps are computer-generated and linked to a powerful database, they are easily updated and revised.

The goal of the *Colorado Cultural Resource GIS Program* is to provide cultural resource survey and site locational information in a GIS format. The cultural resource layers are maintained by OAHP staff and will be made available to qualified individuals, organizations, and agencies through *Compass*, the on-line cultural resource database. Non-sensitive portions of the system will also be made available to the general public through *Compass*, as will scanned images of photographs, maps, drawings, and inventory forms.

The GIS program was designed to incorporate both incoming site and survey locations as well as legacy site and project locations. Legacy data are defined as site and survey information processed prior to the programmatic inclusion of GIS implementation. Although the data necessary to convert site locations to a GIS format (UTMs or addresses) are already stored in the database, corresponding data for survey locations have not been digitized. Because of this and the different degrees of data preparedness in general, a phased approach to GIS implementation was established.

Information from incoming site forms and survey documents is now routinely entered into the GIS. The information from legacy (pre-existing) sites has been transferred into the GIS. The inclusion of comparable information from legacy surveys is being accomplished one county at a time or in accordance with the priorities as outlined by the federal agencies providing the funding. As of August 2005, information from approximately sixty-eight percent of the documents will be updated in the database and, when appropriate, added to the GIS.

Compass: Colorado's Online Database

In August 2002 OAHP released an on-line cultural resource database: *Compass*. This system was developed with a grant from the State Historical Fund and represents a three-year effort to provide website access to qualified individuals for much of the information currently available from the main cultural resource database. The information stored in *Compass* is continually updated and allows the user to perform searches on nearly 198,000 archaeological sites, buildings, and documents based on numerous criteria, including location, building characteristics, artifacts, dates, and management recommendations.

As of April 2005, *Compass* had 26,000 total logins from over 434 users. The users represent a broad range of historic preservation specialists, planners, and researchers from federal agencies, local municipalities, consulting firms, non-profit organizations, and universities. Preservation offices in several other states have requested both access to the system and information concerning its development and implementation.

Appendix I

Sources for Additional Information

Colorado History

Abbott, Carl, Stephen J. Leonard, David McComb

1994 *Colorado: A History of the Centennial State*. Third edition. University Press of Colorado, Niwot.

Explores the growth of Colorado in three broad periods: the era of exploration and settlement, the era of burgeoning economic development, and the emergence of the modern state. The authors give special attention to the economic forces that have shaped Colorado.

Noel, Thomas J., Paul F. Mahoney, Richard E. Stevens

1994 *Historical Atlas of Colorado*. University of Oklahoma Press, Norman.

Organized into three sections (mining, agriculture, and transportation), this series of maps provides a quick understanding of the state's historical development.

Ubbelohde, Carl, Maxine Benson, Duane A. Smith

2003 *A Colorado History*. Eighth edition. Pruett Publishing Company, Boulder.

Begins with the cliff dwellers and proceeds chronologically with accounts of Colorado's role in the frontiers of the fur trade and mining, the Indian wars, cattle ranching and homesteading, and on the political and environmental struggles of the late twentieth century.

Native Americans

Cassells, E. Steve

1997 *The Archaeology of Colorado*. Revised edition. Johnson Books, Boulder.

Perhaps the premier book concerning the archaeology of Colorado. Readable as a text and very useful for reference.

Crum, Sally

1996 *People of the Red Earth: American Indians of Colorado*. Ancient City Press, Santa Fe.

An excellent book that summarizes the prehistory of Colorado but concentrates more on historic and recent customs and events. There are abundant fascinating historic photographs and well done maps.

Fagan, Brian M.

2000 *Ancient North America: the Archaeology of a Continent*. Third edition. Thames and Hudson, London.

A recent and comprehensive review of North American prehistory.

Feder, Kenneth L.

- 1999 *Frauds, Myths, and Mysteries: Science and Pseudoscience in Archaeology*. Third edition. Mayfield Publishing Co., Mountain View, California.

Folsom, Franklin, and Mary Elting Folsom

- 1993 *America's Ancient Treasures*. University of New Mexico Press, Albuquerque.
A guide to archaeological sites and museums in the United States and Canada.

Jennings, Jesse D.

- 1983 *Ancient North Americans*. W.H. Freeman and Company, New York.
A classic book concerning the early peoples of North America. The book is organized by region and provides both overviews and specific examples.

Noble, David Grant

- 2003 *Ancient Colorado: An Archaeological Perspective*. Second edition. Colorado Council of Professional Archaeologists, Denver.
A colorful and very readable summary of prehistory as revealed in the archaeological record.

Stone, Tammy

- 1999 *The Prehistory of Colorado and Adjacent Areas*. The University of Utah Press, Salt Lake City.
An overview of Colorado archaeology that does not go into as much detail as Cassells' book.

Historic Preservation – General

Colorado Historical Society

- 2003 *A Profile of the Cultural Resources of Colorado*. Office of Archaeology and Historic Preservation, Denver.
A summary of the recorded cultural resources in the state. Includes both historic and prehistoric resources with narrative summaries and numerous data tables.

Smith, George S., and John E. Ehrenhard (editors)

- 1991 *Protecting the Past*. CRC Press, Boston.
Thirty-seven articles concerning various aspects of archaeological site protection and public education.

Archaeological Techniques

Conyers, Lawrence B., and Dean Goodman

- 1997 *Ground-Penetrating Radar: An Introduction for Archaeologists*. Alta Mira Press, Walnut Creek, California.

Gamble, Clive

- 2001 *Archaeology: The Basics*. Routledge, New York.

Greene, Kevin

- 2002 *Archaeology: An Introduction*. Fourth edition. University of Pennsylvania Press, Philadelphia.

Fagan, Brian M.

- 2001 *In the Beginning: an Introduction to Archaeology*. Tenth edition. Prentice Hall, Upper Saddle River, New Jersey.
A basic text concerning field and laboratory techniques in archaeology. Tends to emphasize New World examples.

Heimmer, Don H., and Steven L. DeVore

- 1995 *Near-Surface, High Resolution Geophysical Methods for Cultural Resource Management and Archaeological Investigations*. U. S. Department of the Interior, Interagency Archaeological Services, Denver.

Kipfer, Barbara Ann

- 2000 *Encyclopedic Dictionary of Archaeology*. Kluwer Academic/Plenum Publishers, New York.

Renfrew, Colin, and Paul Bahn

- 2000 *Archaeology: Theories, Methods, and Practice*. Third edition. Thames and Hudson, London.
Another comprehensive text concerning field and laboratory techniques in archaeology. Tends to emphasize Old World examples.

American Architecture

Blumenson, John J.G.

- 1995 *Identifying American Architecture: A Pictorial Guide to Styles and Terms: 1600 – 1945*. Second edition. Alta Mira Press, Walnut Creek, California.
This is an easy-to-use book that provides a brief description of each style with photographs. A list of elements that characterize the style is keyed to the photographs.

Carley, Rachel

- 1994 *The Visual Dictionary of American Domestic Architecture*. Henry Holt and Company, New York.
A visual guide to home design in the U.S. More than 500 detailed illustrations show how to identify and describe a house of a given style.

Jester, Thomas C. (editor)

- 1995 *Twentieth-Century Building Materials: History and Conservation*. McGraw-Hill, New York.
The first in-depth survey of important construction materials used since 1900.

Longstreth, Richard

1987 *The Buildings of Main Street*. The Preservation Press: National Trust for Historic Preservation, Washington, D.C.

Presents a classification method for commercial buildings.

McAlester, Virginia, and Lee McAlester

1984 *A Field Guide to American Houses*. Alfred A. Knopf, Inc., New York.

This is a thorough guide, well-illustrated with photographs and drawings. The introductory chapters offer valuable general information on building materials, techniques and forms. A pictorial key and glossary link architectural features to styles.

Phillips, Steven J.

1994 *Old House Dictionary*. The Preservation Press: National Trust for Historic Preservation, Washington, D.C.

A well illustrated easily understood dictionary of domestic architectural terms.

Poppeliers, John, S. Allen Chambers, Jr., Nancy B. Schwartz

2003 *What Style is it: a Guide to American Architecture?* Revised. John Wiley & Sons, Hoboken, New Jersey.

A standard guide to American architectural styles.

Whiffen, Marcus

1992 *American Architecture Since 1780: A Guide to the Styles*. M.I.T. Press, Cambridge.

The classic introduction to American architectural styles.

Colorado Architecture

Brettell, Richard R.

1973 *Historic Denver: The Architects and the Architecture, 1858-1893*. Historic Denver, Inc., Denver.

Brettell provides an analysis of late 19th century architecture in Denver and the prominent architects of the period. Many of these architects practiced statewide.

Jordan, Terry G., Jon T. Kilpinen, Charles F. Gritzner.

1997 *The Mountain West: Interpreting the Folk Landscape*. Johns Hopkins University Press, Baltimore.

The authors examine the log folk architecture of the West. Log dwellings, outbuildings and fence types are discussed along with log carpentry traditions. A chapter is devoted to haymaking and the associated structures.

Noel, Thomas J.

1997 *Buildings of Colorado*. Oxford University Press, New York.

This guidebook, with over 450 photographs and maps, traces the state's architectural development.

Noel, Thomas J., and Barbara S. Norgren

- 1993 *Denver: The City Beautiful and its Architects, 1893-1941*. Historic Denver, Inc., Denver.

Noble, Allen G., and Richard K. Cleek

- 1995 *The Old Barn Book: A Field Guide to North American Barns and Other Farm Structures*. Rutgers University Press, New Brunswick, New Jersey.
This volume examines barn forms and types across the U.S. Line drawings illustrate the examples.

Office of Archaeology and Historic Preservation

- 2003 *A Guide to Colorado's Historic Architecture and Engineering*. Colorado Historical Society, Denver.

This publication focuses on the architectural and engineering styles, types, and forms commonly found in Colorado.

Architectural Dictionaries

All of the following sources provide architectural terminology for use in preparing architectural descriptions and analyses.

Bruden, Ernest

- 1988 *Illustrated Dictionary of Architecture*. McGraw-Hill, New York.

Bucher, Ward, and Christine Madrid, eds.

- 1996 *Dictionary of Building Preservation*. John Wiley & Sons, New York.

Carley, Rachel

- 1994 *Visual Dictionary of American Domestic Architecture*. Henry Holt & Co., New York.

Ching, Frank

- 1995 *A Visual Dictionary of Architecture*. Van Nostram Reinhold, New York.

Crispin, Frederic Swing

- 1942 *Dictionary of Technical Terms*. Bruce Publishing Co., Milwaukee.

Curl, James Stevens

- 1999 *Dictionary of Architecture*. Oxford University Press, New York.

Harris, Cyril, ed.

- 1977 *Historic Architecture Sourcebook*. McGraw Hill, New York.
1983 *Illustrated Dictionary of Historic Architecture*. Dover, New York.
1998 *American Architecture: An Illustrated Encyclopedia*. W.W. Norton, New York.
2000 *Dictionary of Architecture and Construction*. McGraw-Hill, New York.

Maliszewski-Pickart, Margaret

- 1998 *Architecture and Ornament: An Illustrated Dictionary*. McFarland & Co., Jefferson, NC.

Pevsner, Nikolas, John Fleming, Hugh Honour

- 1976 *The Penguin Dictionary of Architecture*. Penguin Books, Baltimore.

Phillips, Stephen

- 1994 *Old House Dictionary*. Preservation Press, Washington, D.C.

State and Federal Publications

- 1985 *Guidelines for Local Surveys: A Basis for Preservation Planning*. National Register Bulletin, National Park Service, Washington, D.C.

- 1997 *Defining Boundaries for National Register Properties*. National Register Bulletin, National Park Service, Washington, D.C.

- 1997 *How to Complete the National Register Registration Form*. National Register Bulletin, National Park Service, Washington, D.C.

- 1997 *The Secretary of the Interior's Historic Preservation Professional Qualification Standards*. Code of Federal Regulations, 36 CFR Part 61.

- 1997 *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin, National Park Service, Washington, D.C.

- 1997 *Guidelines for Identifying, Evaluating and Registering Historic Mining Properties*. National Register Bulletin, National Park Service, Washington, D.C.

- 1998 *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. National Register Bulletin, National Park Service, Washington, D.C.

- 1998 *Guidelines for Evaluating and Nominating Properties that Have Achieved Significance within the Past Fifty Years*. National Register Bulletin, National Park Service, Washington, D.C.

- 1998 *Researching a Historic Property*. National Register Bulletin, National Park Service, Washington, D.C.

- 1999 *Guidelines for Evaluating Rural Historic Landscapes*. National Register Bulletin, National Park Service, Washington, D.C.

- 1999 *How to Complete the National Register Multiple Property Documentation Form*. National Register Bulletin, National Park Service, Washington, D.C.

- 2000 *How to Apply the Nomination Criteria for the Colorado State Register of Historic Properties.* Colorado Historical Society, Denver, Colorado.
- 2000 *Guidelines for Evaluating and Registering Archaeological Properties.* National Register Bulletin, National Park Service, Washington, D.C.

Appendix II

Dissemination of Cultural Resource Information: Policy and Procedures

October 1991 (revised November 2002)

WHEREAS, Sections 106 and 110 of the National Historic Preservation Act set forth federal policy for the preservation of federally owned or federally impacted sites, structures, and objects of historical, architectural, or archaeological significance; and

WHEREAS, the National Historic Preservation Act requires that information relating to the location or character of historic resources be withheld from disclosure to the public when it is determined that the disclosure of such information may create a substantial risk of harm, theft, or destruction to such resources or to the areas or place where such resources are located; and

WHEREAS, the Archaeological Resources Protection Act requires that information concerning the nature and character of certain archaeological resources not be made available to the public unless the disclosure would further the purposes of the Act and not create a risk of harm to such resources or to the site at which such resources are located; and

WHEREAS, the authority to restrict information about historic and archaeological resources applies to inventories that receive federal assistance under the authority of the National Historical Preservation Act, and such inventories include the survey and inventory data of all State Historic Preservation offices; and

WHEREAS, a statutory objective of the state archaeologist is to preserve archaeological resources; and

WHEREAS, it is a misdemeanor to knowingly appropriate, excavate, injure, or destroy any historical, prehistorical, or archaeological resource on land owned by the state or any county, city and county, city, town, district, or any other political subdivision of the state.

THEREFORE, the Colorado Historical Society's Office of Archaeology and Historic Preservation establishes this policy concerning the access and distribution of cultural resource information.

I. Background

It is in the public interest to protect Colorado's cultural resources. The Office of Archaeology and Historic Preservation (OAHP) recognizes this need and therefore restricts access to some cultural resource information. This policy is supported by CRS 24-72-203(1), CRS 24-80-405(2), and the Archaeological Resource Protection Act (ARPA) of 1979 (as amended). Although OAHP reserves the right to restrict access to various types of cultural resource data, OAHP also recognizes the need of scholars, researchers, archaeology and history contractors, and other public citizens to have access to these files in order to perform their jobs relating to the identification and protection of cultural resources.

The purpose of this policy is four-fold:

1. Assure that only qualified users have access to restricted information.
2. Maintain a defensible record of who has viewed specific records.
3. Ensure that the user is aware of the appropriate uses and limitations of the records.
4. Follow consistent procedures for accessing all cultural resource information regardless of the format.

The following guidelines concerning access pertain to all cultural resource records at OAHP, including, but not limited to, forms, documents, maps, images, and digital information. A *File Access Request* must be completed prior to accessing the records. OAHP staff will provide the individual with the requested information based on the guidelines outlined below. Users may not have access to files other than those provided by OAHP staff.

II. Access to Architectural Records

Unless otherwise noted in the records, access to architectural records is unrestricted.

III. Access to Archaeological Records

A. ACCESS BY PROFESSIONAL ARCHAEOLOGISTS

Individuals working as archaeologists on projects meeting at least one of the following criteria may be provided with unrestricted archaeological records:

1. Listed on a current state or federal cultural resource permit.
2. Employed with permanent status under Federal Job Series 193.
3. Employed as an archaeologist for a registered non-profit historic preservation organization.
4. Teaches archaeological classes at a college or university.
5. Graduate student with written justification for access from qualifying faculty — access may be for a limited time.

B. ACCESS BY NON-ARCHAEOLOGISTS

Other individuals may have limited access to archaeological records. The type and extent of data available to these individuals is determined on a case-by-case basis. Information concerning the location of an archaeological site will be provided only in rare cases. Factors influencing the decision to provide information include:

1. The individual's previous archaeological experience.
2. The type of project for which the information is being gathered.
3. The type of information requested.
4. Proposed uses of the data.

C. ACCESS TO DIGITAL INFORMATION

Cultural resource information is available in a digital format to individuals, government agencies, and private organizations. A designated staff member at the organization will be held responsible for the use and distribution of the information. The type and extent of the data provided will be determined on a case-by-case basis with the exact locations of archaeological sites rarely provided. Factors that influence the decision to provide information include:

1. The proposed uses of the requested information.
2. The ability of the agency to restrict access to the information.

IV. Procedures for Access

A. Walk-in Requests

1. All individuals must complete and sign a *File Access Request* before viewing any cultural resource records, including forms, documents, maps, images, and access to Compass.
2. The assisting staff needs to complete the *Request Tracking* and *Information Provided* sections of the form.
3. Architectural information (non-archaeological) is unrestricted, but a *File Access Request* still needs to be completed.
4. Individuals requesting archaeological locational information must provide, if requested, written documentation supporting their qualifications as outlined in *Dissemination of Cultural Resource Information: Policy and Procedures*. Review and acceptance of these qualifications will be done by an OAHF staff archaeologist prior to releasing the restricted information.

B. Database File Searches and Requests for Records to be Sent

1. A *File Access Request* must be completed prior to the release of any cultural resource records. This includes, but is not limited to, computerized searches and requests for information to be sent via mail, fax, or e-mail. The form can be completed by the individual making the request or by the staff member taking down the information from a phone call.
2. The form does not need to be signed if the request excludes exact archaeological site locations or is from an established Colorado archaeologist.
3. Individuals requesting archaeological locational information must provide, if requested, written documentation supporting their qualifications as outlined in *Dissemination of Cultural Resource Information: Policy and Procedures*. Review and acceptance of these qualifications will be done by an OAHF staff archaeologist prior to releasing the restricted information. A *File Access Request Form* may be required.

