# EXHIBIT 5.1
# ARCHAEOLOGICAL SURVEY REPORT (ASR) FORMAT AND CONTENT GUIDE

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# EXHIBIT 5.1: ARCHAEOLOGICAL SURVEY REPORT (ASR) FORMAT AND CONTENT GUIDE

## ARCHAEOLOGICAL SURVEY REPORT (ASR) FORMAT

Caltrans uses the Archaeological Survey Report (ASR) to present results of identification efforts conducted for a project. It documents both positive and negative archaeological survey results; it does not evaluate sites. The ASR is in text format only; *there is no longer a short-form ("Negative") version of this document*. The ASR demonstrates that Caltrans has made a reasonable level of effort to identify archaeological properties, commensurate with the scale and scope of the undertaking. Accordingly, the level of detail included in the ASR is highly variable. A small project with no sites may result in a three-page document while a long linear project through several ethnographic areas with sites may be a 50-page document (or longer).

**ASR FORMAT**
- Title page
- Table of Contents
- Summary of Findings
- Introduction
- Highway Project Location and Description
- Sources Consulted
- Background
- Field Methods
- Study Findings and Conclusions
- References Cited
- Maps
- Other Figures
- Site Records

***Don't forget the transmittal memo!***

Append the ASR to the Historic Property Survey Report (see Exhibit 2.8) for federal undertakings and to the Historical Resources Compliance Report (Exhibit 2.15) for state-only projects. Built-environment resources, however, are not reported in the ASR but in another type of document, the Historical Resources Evaluation Report (HRER); see Exhibit 6.2. Resources that may be Traditional Cultural Properties can be mentioned in the ASR, but their evaluation should be included in an HRER or Archaeological Evaluation Report (AER), see Exhibit 5.5. Properties that meet the criteria for Section 106 PA Attachment 4, "Properties Exempt from Evaluation," may be discussed in the ASR, but be sure to state that such properties, as a category are not eligible for inclusion in the National Register of Historic Places (National Register). The known National Register status of properties is identified explicitly in the ASR, but the evaluation or re-evaluation of sites belongs in subsequent documents, and are not addressed in the ASR.

### Title Page

- In the title, identify the type of study (archaeological survey), type of highway project (e.g. "Proposed Truck Passing Lane"), and general location of the study (e.g. "near Los Baños, Merced County, California").

- Below the title, identify the highway project by district, county, route, post miles, , and expenditure authorization (e.g. "03-SAC-29, P.M. 28.7/31.5, K.P. 46.2/50.7, E.A. 03-096110").
- Provide the name, title, Professionally Qualified Staff (PQS) level as described in Section 106 PA Attachment 1, and location of the person who prepared the report. This person signs the title page of the final report. If the report has a large number of authors, all should be listed by name, but only the senior author's name, title, location, and signature are needed.
- Provide the name, title, and location of the District Environmental Branch Chief (EBC) for whom the report was prepared. The EBC approves the report by signing the title page in his/her signature block.
- If a governmental permit for the survey was issued, provide the name of the permitting agency and the permit number.
- List the USGS topographic quadrangle(s) depicting the study area.
- List the approximate acreage included in the study. (To calculate: miles in length *times* width in feet *times* 0.1212 *equals* acres; acres *times* 0.405 *equals* hectares.)
- List primary numbers, trinomials, and other permanent designations of all cultural resources identified in the report.
- List the month and year of completion of the report at the bottom of the page.

## Table of Contents

If the report is large enough to make it helpful, provide a Table of Contents, listing the major report sections subheadings, appendices, tables, and figures, with page numbers.

## Summary of Findings

Provide an abstract of the intent, methods, scope, and results of the survey. Describe briefly:

- Proposed undertaking
- Purpose and scope of the survey
- Any constraints to the survey effort
- Number and types of identified archaeological resources and their relation to the proposed project's limits (i.e., within or adjacent).
- Include the following statement:

  It is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if the site[s] cannot be avoided by the project. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the project changes to include areas not previously surveyed.

## Introduction

- Present the date(s) and location of the survey (e.g. on Route 49 in Mariposa County).
- Reference the Study Vicinity Map, Study Location Map, and Study Coverage Map appended to the report.
- Provide the names and general qualifications of the surveyors (PQS level, or relevant educational background, number of years and general geographical location of field experience).

## Highway Project Location and Description

- State the district, county, route, post miles, and expenditure authorization.
- Describe the project location as to its rural or urban setting and relation to communities or other major regional landmarks.
- Describe concisely the nature and scope of the proposed project and its potential to affect historic properties.
- Indicate whether new right of way is required.
- For the Area of Potential Effects (APE), describe horizontal and vertical extent of anticipated ground-disturbing activities (Direct APE) within the APE. Reference the APE map, if it is available. If the APE has not been formally defined, reference specific engineering plans, etc.

## Sources Consulted

### Summary of methods and results

Summarize the methods and results of the records search at the appropriate California Historical Resources Information System (CHRIS) Information Center. Include the following:

- State the date of the records search.
- Identify who conducted the records search, and his/her affiliation.
- Describe the range of materials consulted during the records search (National Register of Historic Places, California Register of Historical Resources, California Inventory of Historic Resources, California Historical Landmarks, historical mapping, etc.).
- Define the area for which the records search was conducted (e.g., "a ½-mile radius") and provide an explanation for the size and scope of the records search area. This area may vary depending on the environmental setting of the project area (e.g., research up and down a river rather than a half-mile diameter circle).
- Identify how much of the APE and surrounding areas previously has been surveyed.

- If previously recorded sites are present within the record search area, briefly describe sites that are within or close to the APE, or that are directly relevant for assessing the sensitivity of the APE.
- Append to the ASR any documentation of the records search, including any maps that were created.

**Summary of others who were consulted**

Identify any other institutions or agencies (e.g., U.S. Forest Service, Native American Heritage Commission) or individuals that were consulted for site records or other information, and describe the results.

**Summary of Native American consultation**

Summarize the methods and results of Native American consultation with all California Indian Tribes and/or individuals contacted, making sure to include the following:

- Identify methods of consultation (e.g., written letters, telephone calls, face-to-face meetings) and provide dates or refer to the appended contact log.
- Summarize any comments, issues and/or concerns expressed relating to resources within the project area, while respecting the confidentiality of specific information.
- Append to the ASR documentation of consultation (e.g., a copy of letters sent with recipients identified, correspondence received, contact logs, records of conversation, correspondence to and from Native American Heritage Commission). Include information given in confidence in a clearly labeled, separate appendix.

## Background

The background section provides pertinent information to demonstrate a familiarity with the region under study and to provide context for the archaeological resources identified. The intent of the background section is to demonstrate that the author(s) of the ASR have conducted research on the project area and understand the environment, ethnography, prehistory, and history of the project area.

> The detail in the background sections should be commensurate with the scale and scope of the undertaking, and with the abundance and significance of resources identified.

Research conducted for the background section should be limited. It is permissible to paraphrase and cite relevant discussions from previous works in the area. Original research should be limited to those projects that are in areas where no previous research has been conducted. As a document that reports on identification efforts, *the ASR is not the appropriate venue for exhaustive primary research*. If the ASR is an addendum to a previous ASR, the background discussion in the original ASR may be referenced, and the addendum ASR need only discuss any additional relevant background information.

**Environment**

- Present a concise description of the local environment, in order to provide a sense of place.
- Emphasize factors that may have affected use of the area by prehistoric and historic occupants, such as elevation, food or material resources, and proximity to water.
- Include relevant paleoenvironmental conditions, to the extent that they are known.
- Discuss environmental factors that may have limited the survival or visibility of archaeological remains, such as alluviation, erosion, or modern disturbance.
- Based on the information above, discuss the likelihood of discovering archaeological deposits, including buried archaeological deposits.

**Ethnography**

- Identify the ethnographic inhabitants of the study area.
- If the ethnographic affiliations are unclear in the area within which the study was conducted, list the various groups that may have been associated with it.
- Briefly note major ethnographic elements that may have shaped the local archaeological record, such as subsistence foci, settlement systems, social organization, and material culture.
- Cite key ethnographic references.

**Prehistory**

- Outline a standard prehistoric chronology for the region.
- Sketch the history of archaeological investigations in the region, with particular reference to studies close to the study area or concerning prehistoric sites similar to those identified in the study.
- The level of detail in this section should be commensurate with the scope of the project and with the abundance and types of resources found.

**History**

- Outline the historical chronology of the region, with particular reference to events close to the study area or themes related to historical archaeological site types identified in the study.
- The level of detail in this section should be commensurate with the scope of the project and with the abundance and types of resources found.

## Field Methods

- Describe transect types and spacing, size of crew, and techniques used to ensure survey coverage.
- Discuss factors affecting lateral and ground surface visibility.
- Identify specific areas where coverage may have varied.
- Discuss techniques used to record sites and the methods used to define site limits and assess constituents.
- Include a survey coverage map in the maps section (discussed below).

## Study Findings and Conclusions

Briefly describe and discuss each archaeological site in the study area, whether previously recorded or newly identified. Making sure to reference the survey coverage map and attached site records, address the following items, as appropriate:

- Location, with particular reference to the proposed project area and to an adjacent highway
- Areal extent, and the criteria used to determine the site limits
- Estimated areal density of cultural material (specifying how the measure was taken; e.g. "a maximum density of about 0.5 flake per square meter in any 5-meter-square area")
- Types, distribution, and estimated quantities of cultural materials, in particular chronologically sensitive artifacts (e.g., projectile points, beads, cans, bottles)
- Estimated depth of the cultural deposit, and the basis for the estimate (e.g., rodent holes, previous excavations)
- Types and distributions of surface features (e.g., bedrock mortars, house pits)
- Types and extent of disturbance
- Chronological and functional interpretations of the site
- Existing status of the site with respect to the National Register and other listings (for sites with previous National Register determinations, their status should be documented by appending to the report copies of National Register listing and/or previous SHPO concurrence regarding National Register status).

## Other Resources

- If resources that were previously reported or anticipated were not found, discuss the possible environmental and cultural factors that may have hidden or destroyed those resource(s).
- Identify any non-archaeological resources that were encountered, and note whether they may require evaluation.

- Properties that meet the criteria in Section 106 PA Attachment 4, "Properties Exempt from Evaluation," may be discussed if necessary at this point and dismissed from further consideration.

**Unidentified cultural materials**

Include the following statement: If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

## References Cited

- Include only those references cited within the body of the report.
- Bibliographic format follows the most recent style guide for *American Antiquity*.

## Maps

All maps are labeled with the district, county, route, post miles, and expenditure authorization for the project, and should feature a north arrow and a graphic scale. The following maps are attached to the report:

- *Study Vicinity Map*: Depict the location of the study on a county or district map.
- *Study Location Map*: Depict survey limits on the portion of the appropriate USGS topographic map. Make sure to identify the topographic map by name, type (e.g., 7.5-minute), and date of latest revision. While the Survey Coverage Map will serve as the map of record for the project, the Study Location Map meets CHRIS Information Center guidelines and is important in guaranteeing that the survey coverage can be added to the CHRIS database.
- *Survey Coverage Map*: The base for this map may be a topographic or planimetric map or an aerial photograph. It may or may not include project information (e.g., APE, highway footprint). Most importantly, the map must be at a scale (e.g., 1": 200', 1": 100') that is sufficient to document clearly the limits of the area surveyed and the spatial relationship between sites and the study area.

Depending on the scale and scope of the project and/or the number and complexity of the properties located within or near the project area, it may be appropriate to include additional maps (e.g., a records search map).

## Other Figures

Photographs are typically used to document archaeological sites but also can be extremely effective in depicting the environmental setting of the study area and/or the spatial relationship between archaeological sites and existing transportation facilities. Original or digital prints are likely to be more useful than photocopies, and digital prints have the additional advantage of being easily labeled and enhanced using imaging software such as Adobe Photoshop or Microsoft PowerPoint.

### Site Records

A primary record, a site record, and feature records, as appropriate, should be appended to the ASR for all sites identified within the survey area. For previously recorded sites, all previous site records should be included, in addition to any current updates. It is not necessary to include site records for all sites identified during the records search (i.e., within the whole search radius), only for those sites that have the potential to be affected by the project or that are crucial in understanding the archaeological sensitivity of the study area.

## PEER REVIEW AND APPROVAL

Caltrans PQS certified at the Co-Principal Investigator level or higher must peer review the draft ASR following the guidelines in Exhibit 2.14: Guidelines for Peer Review of Cultural Resources Reports. Peer reviewers' names should be kept on record and comments retained in the project files. Chapter 2 Section 2-5.5 and Exhibit 2.11 Table C contain additional guidance on peer reviews and reviews for approvals.

Only Caltrans PQS may review ASRs for approval, which the EBC approves. The Caltrans PQS or consultant who prepares the ASR signs, dates and includes his/her discipline, PQS level (as applicable) and District/Headquarters or affiliation. The Caltrans PQS at the Co-Principal Investigator level or higher reviewing the ASR for approval likewise signs, dates, and includes his/her PQS discipline, level and District. Finally, the EBC approves the ASR by signing and dating the document. See Chapter 5 Section 5-2.6 for more detailed information.