



now



October 11, 2022

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Mr. Lawson Reif  
Outdoor Recreation Manager  
Office of Outdoor Recreation  
Town of Mammoth Lakes  
P.O. Box 1609  
Mammoth Lakes, CA 93546

**Subject: Request for Proposal—Cultural Resource Surveys for the Town of Mammoth Lakes' Sherwin Trails Project on the Inyo National Forest**

Dear Ms. Stark:

Cardno, now Stantec (Cardno), is pleased to submit this proposal and cost estimate to the Town of Mammoth Lakes (TOML) for cultural resources surveys within the area of potential effect (APE) for the Sherwin Trails Project (Project) on the Inyo National Forest (INF or Forest). We have assembled an experienced archaeological team with an Archaeological Principal Investigator and Field Director who both meet the Secretary of Interior's (SOI's) Archeology and Historic Preservation Professional Qualifications Standards.

The Cardno team will be led by **Project Manager/Senior Consultant Crystal West**, whose focus will be to provide exceptional project delivery and cultural resource management and to build upon her existing relationship with TOML and the Forest Heritage Program Manager (Forest HPM). **Katie Ross-Smith**, PhD, who has more than 23 years of technical expertise, will serve as the **Principal-in-Charge**. Dr. Ross-Smith has a strong interdisciplinary background in riparian vegetation, floodplain fluvial geomorphic processes, and aquatic ecology with extensive field, analytical and technical writing expertise, specifically related to the Sierra Nevada region.

The Cardno team will be supported by the ASM Affiliates (ASM) team led by **Director/ Principal Investigator Peter Carey, MA, RPA**, who has more than 14 years of specialized archaeological experience in California and in the Great Basin. Mr. Carey, located in Bishop, California, will oversee the archaeological field crews consisting of Cardno staff and ASM's staff from their Reno and Tehachapi Offices. Since 1977, ASM has specialized in providing cultural resource studies to state and federal agencies throughout the western United States. ASM provides a full range of services that include archaeology, historic preservation, and Geographic Information System (GIS) studies, including the completion of surveys, site recordation, and monitoring. ASM has successfully completed more than 5,500 cultural resource studies in its 45-year history. Among these are numerous studies similar in size and scope to the proposed project. ASM's inventory of equipment includes all tools and technology needed to perform both traditional and innovative types of studies to fulfill regulatory requirements and provide the types of documentation required.

The Project will be managed and staffed from Cardno's Bishop Field Office, which has local technical experts in biological and cultural resources and civil engineering and design, and these staff have lived and worked in the Eastern Sierra for many years and are familiar with local land management visions (governmental and non-governmental).

## PROJECT UNDERSTANDING

### Purpose

Section 106 of the National Historic Preservation Act of 1966 (NHPA, 36 Code of Federal Regulations Part 800) requires federal agencies to take into account the effects of proposed undertakings on historic properties. The INF has determined that the Project is an undertaking with respect to the NHPA. TOML has requested that Cardno prepare this scope of work and cost estimate for cultural resource surveys within the APE as part of the Inventory and Identification Phase of the undertaking.

### Background and Purpose and Need

Recreation use in the Sherwin area to south of the town of Mammoth Lakes is currently enjoyed year-round by locals and visitors pursuing quiet and reflective natural experiences, including hiking, horseback riding, mountain bike riding, trail running, and winter sports such as cross-country skiing, fat tire biking, snowmobiling, backcountry skiing and snowboarding. Few formal trailheads with infrastructure such as an information kiosk, parking, and vault toilets exist, and many trails have been user created.

TOML proposes to develop a system of multi-use trails according to US Department of Agriculture, Forest Service (USDA-FS) design standards. The Project will involve using USDA-FS approved best management practices to construct trailhead infrastructure such as USDA-FS–approved trailhead information kiosks, vault toilets, bear-proof trash containers, and additional parking. The purpose of this Project is to provide recreational facilities and trails to serve an increased demand for public trails in the urban interface between the town of Mammoth Lakes and designated wilderness areas on the INF.

The Project will rely on existing documents such as the Town of Mammoth Lakes Trail System Master Plan, Sherwin Area Recreation Plan, and the subsequent Programmatic Environmental Impact Report for the Project design, which will include the following types of trail development (see **Figure 1** for details):

- > Construction of formal trailheads (2) at Mill City and Sherwin Trailhead Expansion including information kiosks, parking, and vault toilets
- > Construction of multiple new multi-use, non-motorized, soft-surface trails in 18-inch tread
- > Construction of multiple new multi-use, non-motorized, permeable-surface trails in 60-inch tread
- > Rehabilitation of selected user-created trails to serve as multi-use, non-motorized, soft-surface trails in 18-inch tread
- > Decommission of selected user-created trails that are redundant, are not sustainable, or present resource concerns
- > Development and placement of approved signage at various locations within the trail system

Because the location of ground-disturbing activities has not yet been specified by TOML, the INF is requesting an archaeological block survey of a larger APE that will encompass all proposed trail activities and any alternatives proposed during the Project design. This area covers approximately 1,350 acres surrounding the proposed trail developments shown in **Figure 1**. The APE consists of areas where proposed Project activities may occur including,

but not limited to, trail construction, rehabilitation, decommissioning, trailhead development, and development of signage that may have direct and indirect effects on properties eligible for inclusion in the National Register of Historic Places (NRHP). The APE may be adjusted in consultation with the INF during Project planning, design, and implementation if information changes.

## **SCOPE OF WORK**

### **Phase 1: Project Description, APE Development, and Field Preparation**

#### ***Task 1.1: Project Description, APE Development, and Field Preparation***

##### **Project Description and APE Development**

Cardno will assist TOML with the development of the Project description, planning and design for inclusion in the INF archaeological permit and survey strategy. Cardno may also assist TOML with Project planning with the INF.

##### **Assumptions:**

- > Cost includes time for Cardno's Senior Consultant and Archaeological Field Director to assist TOML with Project description, APE development, and survey strategy.
- > Cost includes a 1-hour meeting with the INF.

##### **Field Preparation: Records Search**

Archaeological studies and site records on file at the INF and the California Historical Resources Information System (CHRIS) and other pertinent sources of information (e.g., mineral and land ownership records, historical maps, and local museum collections) will be consulted prior to starting fieldwork. In addition to the record search, Cardno will submit a Sacred Lands File request to the Native American Heritage Commission. Previous survey work will be critically reviewed to determine whether reliable coverage is provided for any portion of the APE. The Cardno team will consider survey age, methodology, changes in field conditions, thoroughness of documentation, and/or other indications of reliability. The study area for the record search will be within 0.5 mile of the Project APE.

##### **Assumptions:**

- > GIS shapefiles of the Project APE will be provided to Cardno for its records search
- > Cardno will conduct one site visit to the INF Supervisor's Office in Bishop, California, to conduct the records search.
- > Cardno will request a Sacred Lands File search from the Native American Heritage Commission.
- > Cost includes fees associated with digital record search request at the CHRIS, Eastern Information Center (EIC), University of California—Riverside, California.
- > Cardno will remain in close communication with TOML staff and the Forest HPM (or delegate) to review and finalize Project work site data and the APE prior to initiating surveys.
- > Prior to starting fieldwork, Cardno will consult with the Forest HPM regarding recommendations for areas exempted from new surveys.
- > The INF will conduct Tribal consultation regarding the Project and communicate to Cardno any Tribal Resources that may need to be considered during fieldwork.

### **Field Preparation: Archaeological Survey Permit**

The Cardno team will obtain an archaeological study permit from the INF prior to starting work.

Cardno will notify the TOML and the INF (1) about dates of fieldwork; (2) about any changes to schedule and reasons for any changes in fieldwork activities (e.g., inclement weather); and (3) upon completion of the field activities.

#### **Assumptions:**

- > The INF will provide the Cardno team with an archaeological study permit prior to the fieldwork.

## **Phase 2: Cultural Resources Survey**

### ***Task 2.1: Cultural Resources Survey***

#### **Field Survey**

The Cardno field team consisting of an SOI-Qualified Archaeological Field Director and five archaeological field staff will systematically survey the approximately 1,000 acres of the APE. It is assumed that 25 percent of the total 1,350 acres of the APE have been adequately surveyed and will not need to be resurveyed. Surface intensive coverage of the APE will be performed using parallel adjacent pedestrian transects spaced no more than 15 to 20 meters apart within the practical limits of safety, topography, vegetation, water, or other constraints. Transects do not need to be straight lines but should meander opportunistically to take advantage of soil exposures and topographic probabilities to facilitate the examination of suspected cultural resources. Survey of unnavigable steep terrain (>30 degree slopes) will emphasize pedestrian and/or visual examination of likely or suspected site locations as practical (e.g., rock shelters, quarries, game drives, hunting blinds, mining adits, trails, roads, and logging features). Proposed adaptations to the survey strategy will be discussed with the Forest HPM prior to their implementation. The cultural resources inventory report will accurately depict and describe precise methodologies employed, including reasons for not surveying areas in the APE (e.g., impenetrable brush, wetlands, and cliffs).

#### **Field Site Recordation**

All previously documented NRHP-eligible and unevaluated cultural resource sites in and adjacent to the APE not visited in the past 10 years will be inspected and updated according to the following provisions and per the INF archaeological study permit:

- > Inspected sites will be completely examined, with at least broad-scale observations made for portions of the site extending beyond the survey area, unless otherwise negotiated with the Forest HPM (or delegate).
- > If existing site records meet current documentation standards, and no appreciable changes or significant new information is found, then a concise site update containing only pertinent information to supplement the existing record will be needed (e.g., information about current condition, additional diagnostic artifacts or features located, current photographs, information related to the assessment of effect or protection recommendations, adjusted shapefiles, and additional sketches or maps). If these conditions are not met, comprehensive site documentation will occur.
- > A Global Positioning System (GPS) unit (Trimble) with sub-meter accuracy (Datum NAD 83, UTM Zone 11) will be used to record resources. Other types of handheld GPS units or iPad devices may be used to record transect data.
- > All artifacts will be documented in the field, not collected.

- > No archaeological testing will occur.
- > Cultural resources recorded or updated within the past 10 years will be inspected only if current documentation does not meet standards, new information or data are found, or information for assessing effects of the current undertaking is lacking.
- > Sites previously determined to be ineligible for listing in the NRHP will be examined and updated only if reconsideration of previous determinations is required based on new information or changed conditions.
- > All newly identified sites, including portions outside the APE, will be completely documented. In the case of historic roads or trails, documentation will extend at least to the nearest intersection with a paved road, an intersection with another road or trail, or the National Forest boundary.
- > Alternative documentation methods may be negotiated with the Forest HPM for sites that extend over 100 meters beyond the APE.

#### **Assumptions:**

- > Fieldwork will consist of a 10-day fieldwork rotation and 8-hour workdays to survey approximately 1,000 acres.
- > Cost includes a half day of travel time (4 hours) on either end of the 10-day fieldwork rotation.
- > Crew will consist of six (n=6) people total: one Cardno Bishop Archaeological Field Director, two Cardno archaeological staff, and three ASM archaeological staff.
- > Cost includes recordation of 10 new archaeological resources and 10 site record updates.
- > Cost includes Mammoth Lakes' General Services Administration (GSA) meals per diem of \$70 per day per person for five non-local staff.
- > Cost includes Mammoth Lakes GSA lodging per diem of \$138 per night person for five non-local staff.
- > Cost includes rental cost of \$75 per day for the GPS unit (Trimble) with sub-meter accuracy.
- > Cost includes rental cost of \$25 per day for ASM's GPS unit.
- > Cost includes mileage from Cardno's Bishop Office to the Project (10 roundtrips) and travel time for Cardno's Archaeological Bishop Field Director.
- > Cost includes mileage from Cardno's Bishop Office to the Project (2 roundtrips) and travel time for ASM's Principal Investigator.
- > Cardno will notify the TOML and the INF via email when the surveys have been completed.

### **Phase 3: Cultural Resources Reporting**

#### ***Task 3.1: Site Records and Cultural Resources Report***

##### **Site Records**

All newly identified resources and existing resources will be recorded according to the INF cultural resources definitions and warranting updated documentation on the appropriate California Department of Parks and Recreation Series 523 forms. All updates will include a new primary record and/or archaeological site record unless the existing site record has a current and accurate primary record in which case a continuation sheet will be sufficient. Location maps will be updated with current GPS locational data, unless the previous record's location map is accurate, on the most current topographic map at a 1:24,000 scale. Any impacts from recreation use or

other disturbances will be documented in the site record and on site maps. Photographs will be included in the new and updated records for each site.

### **Cultural Resources Inventory Report**

The cultural resource inventory report will meet National Forest (Forest Service Manual 2363.16) and the California Office of Historic Preservation's *Archaeological Resource Management Report Recommended Contents and Format* (1990). It will include background research, historic contexts, oral histories, survey design, field methods, cultural resource findings, NRHP-eligibility recommendations, Project effect recommendations, maps, site forms, photographs, and collection logs as applicable.

- > A preliminary fieldwork summary will be submitted to the TOML and the INF within 1 week of completing a fieldwork tour.
- > A draft cultural resources report will be submitted to the Forest HPM using a secure file sharing system to protect confidential cultural resources information for a 30-day review period.
- > The report will be submitted in accordance with provisions of the archaeological study permit.
- > Forest report and site numbers will be assigned by the Forest HPM during the draft review and this information will be included in the final report.
- > The Forest HPM will provide one round of consolidated review comments on the draft report.
- > The final submitted package will include an unbound original color copy of the report, electronic files (Microsoft Word and Adobe PDF), applicable shapefiles (e.g., APE, survey area, and cultural resource locations), digital photographs and photo logs, and other logs (as applicable).

### **Confidentiality of Information**

The Cardno team will ensure the confidentiality of legally protected site location information on public lands pursuant to the NHPA, Archeological Resources Protection Act, and other statutes. No legally protected information will be held or shared (1) with any third party not identified as a qualified professional in the archaeological study permit, (2) with external Project proponent, (3) with contract administrator, or (4) without express consent of the Forest HPM.

### **Assumptions:**

- > Cardno will provide general NRHP-eligibility recommendations in the report and site records based on background research and surface surveys. This work will not include extensive NRHP-eligibility research, context development, or subsurface testing.
- > Cardno will submit the final report and site records to the EIC on behalf of the INF.

### Deliverables/ Schedule

The following table presents the deliverables and schedule for the proposed Project.

Deliverable	Schedule	Recipient
Submit fieldwork summary	1 week after completion of fieldwork	TOML and Forest HPM
Submit draft report and draft site records	45 days after completion of fieldwork	Forest HPM
Submit final report and site records	30 days after receiving INF comments	Forest HPM and EIC

### Phase 4: Project Coordination

As project manager, Ms. West will maintain responsibility for client service with the TOML and Forest HPM contract terms, invoicing, budget tracking, commitment of staff resources, and quality control for the overall contract. A project coordinator will assist Ms. West with invoicing and budget tracking.

### COST

This proposal is a Time and Materials Not-To-Exceed (T&M NTE) quote. Our efforts to provide the identified services is estimated to be **\$117,143.50** as detailed below.

Phase / Task	Cost
Phase 1: Project Description, APE Development, and Field Preparation	
Task 1.1: Project Description, APE Development and Field Preparation	\$8,380.00
Phase 2: Cultural Resources Survey	
Task 2.1: Cultural Resources Survey	\$78,833.50
Phase 3: Cultural Resources Reporting	
Task 3.1: Site Records and Cultural Resources Report	\$27,970.00
Phase 4: Project Coordination	\$1,960.00
<b>Total Cost</b>	<b>\$117,143.50</b>

Town of Mammoth Lakes  
October 11, 2022

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If you have any questions or require additional information, please contact Crystal West at the information provided below. We look forward to working with you on this exciting project.

Sincerely,

A handwritten signature in black ink that reads "Crystal West".

Crystal West  
Project Manager  
for Cardno  
Direct Line +1 760 920 1464  
Email: [crystal.west@cardno.com](mailto:crystal.west@cardno.com)

A handwritten signature in black ink that reads "Katie Ross-Smith".

Katie Ross-Smith, PhD  
Principal-in-Charge  
for Cardno  
Direct Line +1 209 418 9240  
Email: [katie.ross-smith@cardno.com](mailto:katie.ross-smith@cardno.com)



## ATTACHMENT

### 2022 Schedule of Fees for Professional Services Science and Environment Division, Natural Resources Area Prepared for TOML Office of Outdoor Recreation

Field Technician/Specialist	\$75
Field Technician/ Native American Monitor	\$130
Project Coordinator	105
Senior Project Coordinator	115
Production Specialist	140
Technical Editor	95
Senior Technical Editor	150
CADD/Drafting/GIS Consultant	115
Assistant Staff Consultant	90
Staff Consultant 1	95
Staff Consultant 2	105
Senior Staff Consultant 1	115
Senior Staff Consultant 2	130
Project Consultant 1	145
Project Consultant 2	155
Senior Project Consultant 1	165
Senior Project Consultant 2	185
Senior Consultant 1	200
Senior Consultant 2	225
Director	275

Effective through December 31, 2022

#### Expenses

Use of a personal vehicle will be at the current IRS allowable rate. Subconsultant fees and all other costs identifiable to an assignment will be charged at cost plus ten percent (10%).

#### Payment

Cardno invoices will be submitted monthly. Payment is due on or before the thirtieth (30th) day following the date of the invoice. Invoices paid more than thirty (30) days after the invoice date are subject to a finance charge of one percent (1%) per month.

#### Conditions

Cardno specifies that our services are performed, within the limits prescribed by our clients, with the usual thoroughness and competence of the environmental consulting profession. No other warranty or representation, either expressed or implied, is included or intended in our proposals, contracts, or reports.

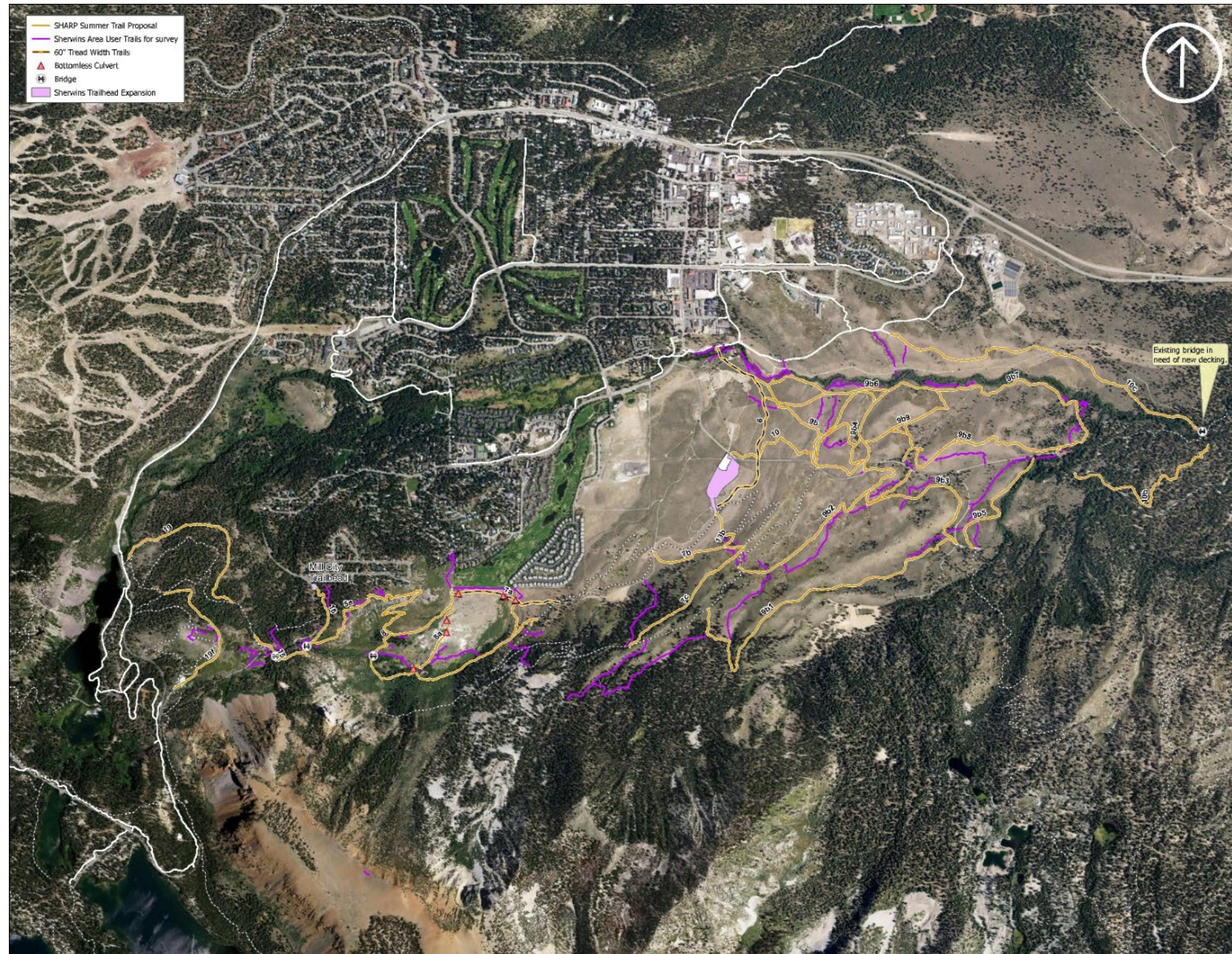
**ASM AFFILIATES, INC.**  
*STANDARD BILLING RATES*

<u>Classification</u>	<u>Hourly Rate</u>
Project Manager III/Principal III	\$160.00
Project Manager II/Principal II	\$140.00
Senior Archaeologist II	\$125.00
Senior Archaeologist I	\$105.00
Senior Historian II	\$110.00
Associate Archaeologist II	\$95.00
Associate Archaeologist I	\$80.00
Assistant Archaeologist/Technician	\$75.00
GIS Administrator II	\$125.00
GIS Administrator I	\$95.00
Accountant	\$90.00
Admin Associate II	\$73.00
Records/Title Search	At Cost
Artifact Curation	At Cost
GPS Units	\$25/day
GPR Rental	\$500/day

**General Terms**

1. Labor rates are effective from January 1, 2022 through December 31, 2022.
2. Travel, records searches, reproduction, blueprinting, telephone, supplies, fees, and other non-labor direct costs are billed at cost. Per diem charges are based on reasonable and actual costs. Mileage will be charged at standard Internal Revenue Service rate. Rental of off-road vehicles will be billed at \$40 per day plus \$0.64 per mile. Sub-consultants are billed at cost plus 5% for administrative and management oversight.
3. Billing invoices will be prepared monthly and will contain charges of the previously ended month and prior for work in progress unless otherwise agreed. Invoices are to be paid to ASM Affiliates, Inc., 2034 Corte del Nogal, Carlsbad, California 92011, within 90 days after invoice date. Any invoices not paid in 90 days are subject to a service charge of 1.5% per month on the unpaid balance.
4. Invoice must be accepted or rejected by CLIENT within 10 days of its receipt and communicated to ASM's Accounting Department (Accounts Receivable: [accountsreceivable@asmaffiliates.com](mailto:accountsreceivable@asmaffiliates.com)) in writing (email, letter, etc.). CLIENT will then issue a payment to ASM within 10 days of receipt of payment from the PRIMARY CLIENT or within 120 days from the date of the accepted invoice, whichever is sooner.
5. Payment of ASM Affiliates' invoices for services performed will not be contingent upon the client's receipt of payment from other parties. Client agrees to pay legal costs, including attorney's fees, incurred by ASM Affiliates in collecting any amounts past due and owing to client's account.





**Figure 1**      **Proposed Trail Developments**