ENVIRONS MINING LEGACY ASSESSMENT PROJECT

a. Project Description

Project Summary

The **Environs Mining Legacy Assessment Project** is an effort to complete an assessment of mining relics on the Nevada City Environs property, and to begin permitting for cleanup. The project has two main objectives: 1. Reduce the quantity of legacy heavy metals entering Deer Creek; and 2. Protect the public from potential exposure resulting from abandoned mine lands in a newly developed recreational trail area close to Nevada City. The project is offered by Sierra Streams Institute in partnership with the City of Nevada City, owners of the project parcel.

The Nevada City Environs is a densely forested 38 acre parcel owned by the City of Nevada City since 1985. The property is located approximately one mile downstream of downtown and offers much-needed open space close to town. The area includes the site of the abandoned Providence Mine, one of the largest and most productive gold mines in the Sierra. The property has been the subject of extensive restoration and recreational development over the past four years.

Efforts are underway to clean up the contamination left by a century of industrial gold mining, with three US EPA Brownfields grants awarded for assessment and cleanup of the Providence Mine site in the northwest corner of the Nevada City Environs property. Further funding for the next phase of cleanup is under consideration by SNC. The goal of the cleanup is to safeguard public health in light of greatly increased recreational use resulting from the development of a new trail system in the Environs, funded by SNC. The Environs Trail will connect to the Tribute Trail on the south side of Deer Creek via a new pedestrian bridge scheduled to be completed in May 2014. Finally a FEMA-funded effort is underway in the area to manage the forest in a manner that decreases the threat of catastrophic wildfire.

In the course of developing the Environs Trail, previously unknown legacy mine features along Deer Creek were identified including a drain tunnel and a discharge pipe coming from long-abandoned mineshafts, probably connected to the Providence Mine. The location of the drain tunnel was unknown until its recent discovery in the course of developing the Environs Trail because of the steeply sloping and densely forested nature of the Environs. The drain tunnel is located just above the level of the creek and drains by way of a small streambed directly into Deer Creek roughly twenty feet away. This tunnel is likely the Providence Mine drain tunnel documented in literature. In screening level grab samples collected at the drainage pipe, heavy metals arsenic, cadmium and lead were present in excess of EPA Maximum Contamination Levels (MCL). Lead was the highest at 35.9 ppb (MCL is 5.0ppb), while cadmium was 11.1 ppb (MCL 5.0 ppb) and arsenic 16.1 ppb (MCL 10.0 ppb). Although the sampling is limited, these levels are of concern because of the proximity of the discharge to Deer Creek. The second discharge pipe extends from a collapsed apparent mine tunnel located on an overgrown benched area upslope

of Deer Creek and downslope of the Environs Trail. Discharge from the pipe is highly discolored and has created a small pool approximately six feet in diameter which is seeping into a mine waste rock surface. Stockpiles of mine waste extend downslope from the collapsed tunnel and from a second smaller mine tunnel located nearby, with roughly 500 cubic yards of mine waste extending downslope to the edge of the Deer Creek stream channel. While the second drain pipe and waste rock have not been sampled, the waste water and soil have characteristics similar to other mine material with heavy metals in the area that has been cleanup by SSI.

The overall **goal** of the Environs Mining Legacy Assessment Project is to protect Deer Creek by identifying and evaluating sources of heavy metals resulting from historic gold mining practices, and planning for their remediation, with resulting water quality improvements that extend to downstream waterways.

Specific **goals** of the project are as follows:

1. Characterization of mine waste and mine drain water in the Nevada City Environs

2. Water quality improvements: Develop a plan to mitigate potential sources of heavy metals including lead, cadmium and arsenic

3. Recreational Benefits: Through characterization protect recreational users of the area from incidental exposure to lead, arsenic and cadmium, by isolation or removal of historic mine waste

4. Economic Benefits: 1. Enhance Nevada City's recreational appeal by restoring the Environs; 2. Increase hiking opportunities in the vicinity of tourism-dependent downtown Nevada City; 3. Increase pedestrian traffic for businesses in the downtown area.

5. Alignment with SNC Program Goals: The project clearly aligns with SNC's mission and addresses SNC's "triple bottom line" of environmental, economic and social well-being, by protecting Deer Creek, which is a local source of drinking water, while enhancing recreational and tourism opportunities. Specific SNC program areas addressed by the project are: 1. Provide increased opportunities for tourism and recreation by planning for the restoration of public open space close to downtown Nevada City; 2. Protect, conserve and restore the region's physical and living resources by improving water quality; 3. Protect and improve water quality by identifying and planning for the remediation of impacts to Deer Creek; 4. Undertake efforts to enhance public use and enjoyment of lands owned by the public by reducing risk of legacy mining exposure for recreational users of city-owned open space by characterizing mine waste materials and removing/isolating material as necessary.

6. Consistency with Prop 84 goals: The project directly supports the goals of Proposition 84 by contributing to the protection and restoration of rivers, streams, their watersheds and associated land, water, and other natural resources. The project targets Deer Creek and provides for its protection by assessing and planning for the remediation of impacts to the creek resulting from

historic gold mining.

7. Contribution to SNC Action Plan items: The project fulfills an action plan item identified in the 2013-14 Action Plan, by improving water quality through the assessment and remediation of historic abandoned mine features adjacent to Deer Creek.

Location: The Environs site is a 38 acre property owned by the city of Nevada City, which comprises APN 05-100-87. The site is located to the north and east of Providence Mine Road along the south side of Deer Creek, approximately one mile downstream of downtown Nevada City, California.

Scope: The property is adjacent to Providence Mine brownfields cleanup site, which is currently under consideration for additional cleanup funding by Sierra Nevada Conservancy. In this proposal, Sierra Nevada Conservancy funding is requested to i) conduct a field environmental survey of the entire Environs parcel; ii) develop a sampling plan; iii) sample in two mine waste piles, a mine drain tunnel and a discharge pipe from a second shaft, both originating from the nearby Providence Mine; iv) draft an assessment report and remediation plan; v) collaborate and communicate with appropriate regulatory agencies and determine a lead agency; and vi) prepare a list of studies and data needed for permits and CEQA.

b. Workplan and Schedule Narrative

A complete characterization of the drain tunnel discharge will likely require a full year of monthly monitoring of the discharge volume and heavy metal concentrations. Once the sampling and monitoring have been completed and the results analyzed, we will develop an investigation report and, if appropriate, a remediation plan. Following lead agency approval of the remediation plan we will begin necessary permitting and CEQA compliance consistent with the limits of the grant award. Based on recent consultation with regulatory agencies, supporting surveys and CEQA documents currently being finalized for the nearby Providence Mine Cleanup project will likely be applicable for the Environs project. This could streamline CEQA compliance for the project and result in significant cost savings.

Possible remediation actions include sealing the drain tunnel or rerouting the waste water coming from the drain tunnel and discharge pipe via a pipe upstream to the nearby Nevada City wastewater treatment plant, and constructing barriers to prevent public access to the two waste rock piles. It is important to characterize the drain water and waste rock to evaluate what remedial action may be needed. Characterization and appropriate cleanup will protect Deer Creek and public health in an area that is more frequented since development of the public trails, and will become much more so when access to the area is improved upon completion of the pedestrian bridge connecting the Environs Trail to the Tribute Trail in May 2014.

Project activities are as follows:

Task
1. Grant management including progress and financial reporting
2. Conduct a thorough field survey of known features in the Environs property and identify any additional remaining mining impacts
3. Identify and communicate with appropriate regulatory agencies
4. Prepare maps and waste volume estimates for all mine features on the property
5. Prepare sampling and monitoring plan with regulatory agency consultation
6. Implement the Sampling and Monitoring Plan
7. Prepare draft Investigation Report and Remediation Plan (assuming remediation is needed)
8. Submit Remediation Plan for agency review and finalize plan
9. Initiate CEQA process and identify appropriate required studies
TOTAL

Detailed Project Deliverables	Timeline
Task 1: Project Management	
Finalized workplan and budget	November 2014
Finalized subcontracts/grants	November 2014
Financial and performance reports to SNC	May 2015, November 2015, May 2016, November 2016, May 2017
Draft Final Report	September 2017
Final Report	November 2017
Task 2: Site Survey	
Site reconnaissance/ field mapping	January 2015
Task 3: Agency Collaboration	
Lead Agency Determination	April 2016
Task 4: Sampling and Monitoring Plan Development	
Draft Monitoring Plan	January 2015
Final Monitoring Plan	February 2015
Task 5: Sampling and Monitoring Plan Implementation	

Monitoring Field reports (email update)	April 2015, July 2015, October 2015, January 2016
Task 6: Remediation Plan Development	
Interim Soil Report	May 2015
Water Sample Report/Draft Remediation Plan	April 2016
Task 7: Remediation Plan Review	
Draft Remediation Plan to Lead Agency	April 2016
Response to agency comments	June 2016
Final Remediation Plan	August 2016
Task 8: CEQA and Permitting	
CEQA Lead Agency Selection	August 2016
CEQA/permitting quarterly updates	November 2016, February 2017, May 2017, August 2017

c. Restrictions, Technical/Environmental Documents and Agreements Narrative

There are no known property restrictions or encumbrances that could adversely impact project completion.

The property is owned by the city of Nevada City, and is restricted to open space use. Our project supports this restriction. There are no other known restrictions, easements or mineral rights.

d. Organizational Capacity Narrative

Project partners have the experience, expertise and capacity to complete the proposed project. **Sierra Streams Institute** (SSI) is a non-profit watershed science organization, founded in 1996 as Friends of Deer Creek to monitor Deer Creek on behalf of Nevada City during the construction of a road bridge over the creek. Since our founding, we have collected 13 years of monthly water quality monitoring data and have implemented numerous projects that address the issues affecting the creek, successfully working within time and budget constraints. We have successfully completed several assessment and remediation efforts throughout the watershed, including abandoned mine assessment of city owned properties, restoration of Stiles Mill abandoned mine site, ongoing planning for the restoration of the Providence Mine site, numerous revegetation projects and gravel augmentation for restoration of salmon habitat. SSI staff includes biologists, a botanist, geologist, hydrologist and chemist, all with considerable expertise in project management. Among SSI's board members and volunteers are a microbiologist, hydrogeologist, former agency head at the State Water Quality Control Board, and the former manager of Nevada City's wastewater treatment plant. The proposed project will

be managed by Kyle Leach, Professional Geologist, who has managed the cleanup of Stiles Mill mine site in Nevada City, developed the Removal Action Workplan for Providence Mine, and is project manager for the US EPA-funded cleanup of Providence Mine. Mr. Leach brings twenty years of assessment and remediation experience in a variety of environmental geology and abandoned mine land projects.

Project partner **Nevada City** is a small city that enjoys successful working relationships with local non-profits to complete projects. The City has over 150 years of experience managing projects for the public. Sierra Streams Institute has partnered with the city on many projects over the course of eighteen years, including abandoned mine assessment and remediation projects, watershed restoration, trail development, and extensive water quality monitoring.

e. Cooperation and Community Support Narrative

The project was developed as a collaborative partnership with the **City of Nevada City**, the owners of the Environs property. Throughout the cleanup of the nearby Providence Mine site, the community has been engaged in the project through frequent public meetings at City Hall. There is widespread support of efforts to assess and remediate our mining legacy. Project progress will be communicated by media releases, updates at city council meetings, and communication through the **Tribute Trail Forum,** an organization of stakeholders that meets quarterly to discuss issues related to the Deer Creek Tribute Trail.

We have consulted with **The Sierra Fund** on methodology employed in their mining reclamation work, with a guided site visit to their Humbug Diggins project. We have also engaged the services of local engineering firm **Holdrege and Kull,** who have prepared geotechnical recommendations and a Human Health Risk Assessment for the Providence Mine site.

Abandoned mine land remediation in the Deer Creek watershed was identified as a key priority of the Deer Creek Restoration Plan (2011), developed by **SSI, The Sierra Fund**, and **the Maidu**, with SNC funding.

Sierra Nevada AmeriCorps Partnership provides service members to our organization each year, and fully supports the conservation and restoration goals of this project. AmeriCorps members will be assist with restoration tasks.

The local community has been involved since the project's inception in 2005 with the proposed reuse of the Environs as a recreational interpretive trail. Trail construction was accomplished in part with volunteer labor organized under the Tribute Trail Association. Trail development has required many neighborhood meetings throughout the project planning and implementation stages, and heavy media coverage in the local and regional media.

The Nisenan tribe is a project partner on the Sierra Nevada Conservancy-funded Tribute Trail project, which targets the left bank of Deer Creek including the Environs. The role of the tribe in

this project is to develop interpretive signage that educates trail users on the ten thousand year history of the tribe in the Deer Creek watershed. The tribe has identified the remediation of its ancestral lands as its highest priority.

f. Long term Management and Sustainability Narrative

The long term management plan will be established after site remediation is established and would likely include a Land Use Covenant (Deed Restriction) to limit future land use to recreational or open space uses, and an Operation and Maintenance Agreement which would include yearly inspection reports documenting the continuing integrity of the remediation efforts. The site is located on the city-owned Environs property which is zoned open space. Permitted land use includes open space and recreation. Accordingly, the city Parks and Recreation Department has oversight of the property in perpetuity, with an interest in protecting the value of the resources. Sierra Streams Institute will continue monitoring water quality in Deer Creek upstream and downstream of the project site in perpetuity, with thirteen years of monthly data collected to date.

Restrictions/Agreements

There are no property restrictions and/or encumbrances that could adversely impact project completion.

City of Nevada City

April 1, 2014

Joanne Hild, Executive Director
Sierra Streams Institute
431 Uren Street Suite C
Nevada City, CA 95959

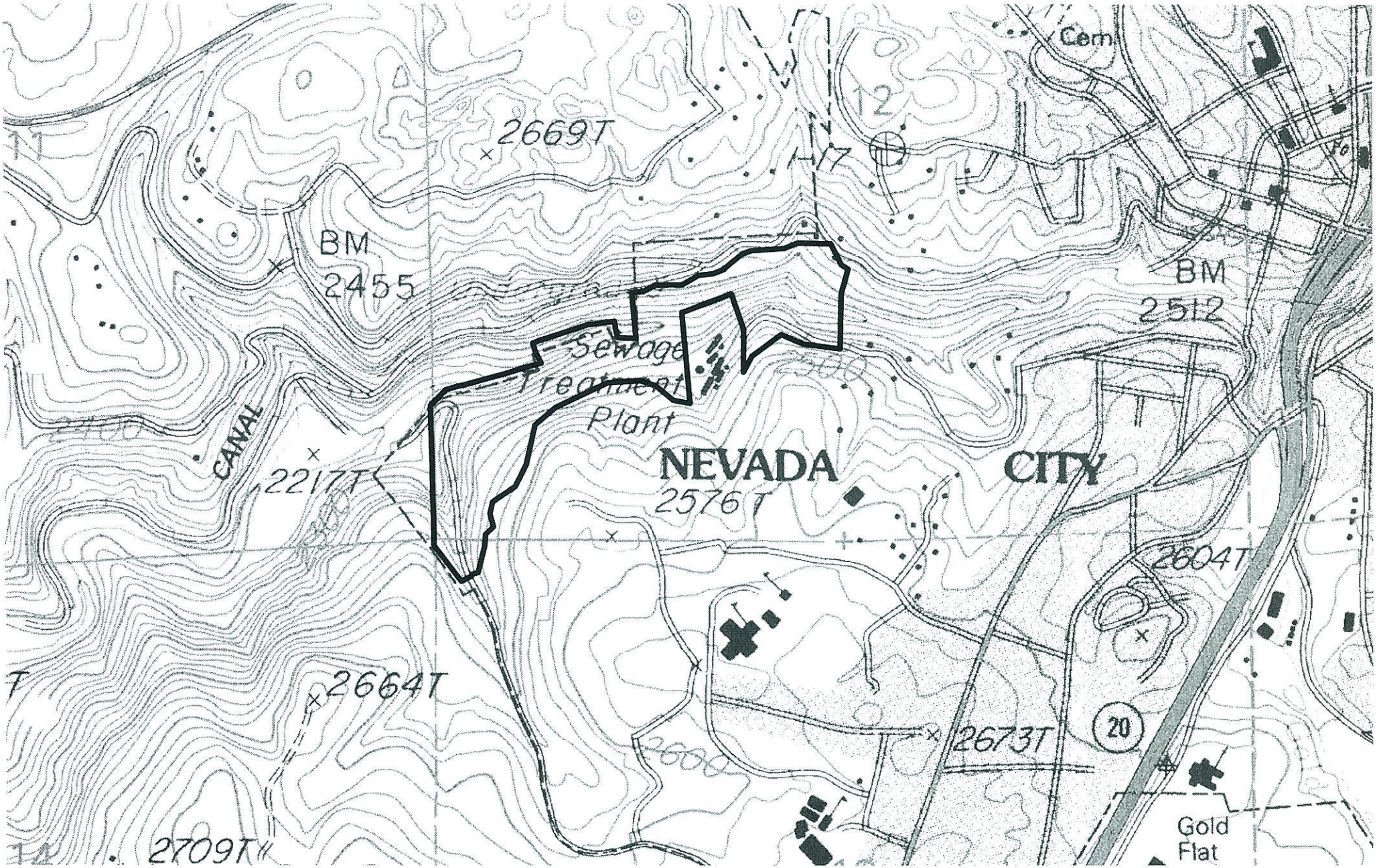
Dear Joanne,

Thank you for pursuing funding to address legacy mining contamination in the Nevada City Environs (APN 5-100-87). I understand that you are developing a proposal to the Sierra Nevada Conservancy to conduct a survey of mining impacts in the Environs and an assessment of two newly identified mine drainages and two waste rock piles. Upon completion of the survey and assessment, you will begin planning and permitting for remediation of the assessed sites.
I have been granted the authority by the City Council to review and approve assessment and restoration projects in the Nevada City Environs, and am pleased to offer my support on behalf of the city for the proposed effort. The City of Nevada City will provide Sierra Streams Institute access to City-owned land in the Environs property for the purpose of conducting the proposed assessment and subsequent remediation and restoration, and for post-project monitoring for a minimum of ten years after the completion of the project.

Sincerely,

David Brennan

David Brennan
City Manager


Cem
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CITY
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2604T
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2673T
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Gold
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2704T

PTN. SEC'S 11, 12 & 13, T. 16 N., R. 8 E., M.D.B. & M.

Tax Area Code
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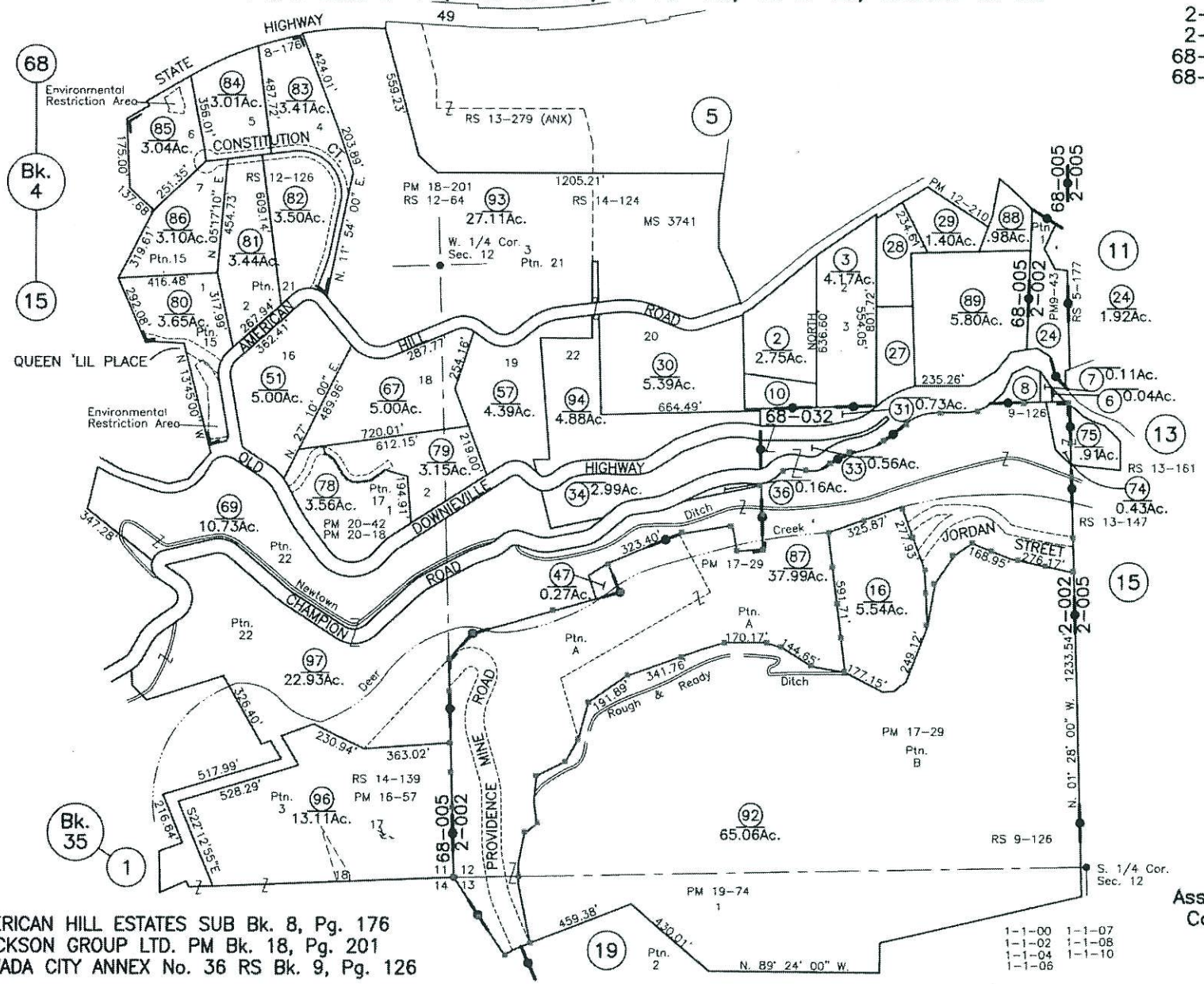
2-005
68-005
68-032

5-10



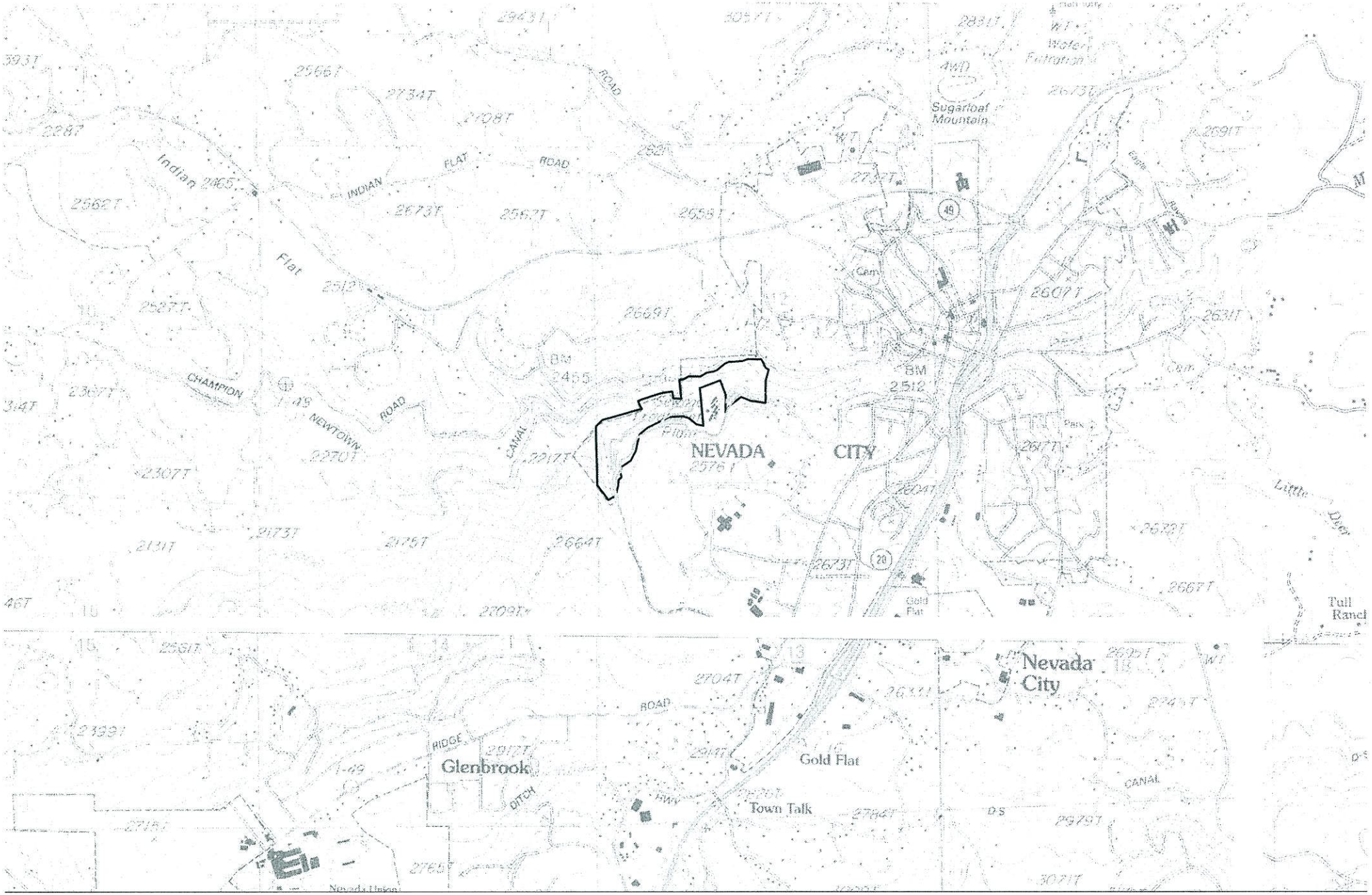
AMERICAN HILL ESTATES SUB Bk. 8, Pg. 176
ERICKSON GROUP LTD. PM Bk. 18, Pg. 201
NEVADA CITY ANNEX No. 36 RS Bk. 9, Pg. 126

1-1-00 1-1-07
1-1-02 1-1-08
1-1-04 1-1-10
1-1-06

ASSESSOR'S PARCEL MAP
This map was prepared for assessment purposes only. No liability is assumed for the accuracy of data shown. Assessor's parcels may not comply with local lot-split or building site ordinances.

Assessor's Map Bk. 5 -Pg. 10
County of Nevada, Calif.
1999
LAST UPDATE 1-13-11

NW 10/99



Sierra Streams Institute
Sierra Nevada Conservancy Grant Application
Environs Mining Legacy Assessment Project
Topographic Map

Nevada City Quadrangle

Legend

- Environs Trail
- Nevada City Environs Property
- Providence Mine Road

N

1:24,000

1 inch equals 2,000 feet

Miles

0 0.1 0.2 0.4

DSCN8472 : Kyle collecting sample of drainage water, entrance to shaft is above him, drainage water flows down to right & then enters creek.

DSCN8473: Location where mine drainage is entering Deer Creek

DSCN8474: Stream of mine drainage water (orange color) exiting shaft towards creek

DSCN8479: Seen from shaft opening, mine drainage flows out & to the left, entering Deer Creek at moss-covered boulders on left side of photo, orange sediment in creek is deposited from flow of mine drainage into creek

DSCN8483: Shaft and drainage (orange color) seen from entrance

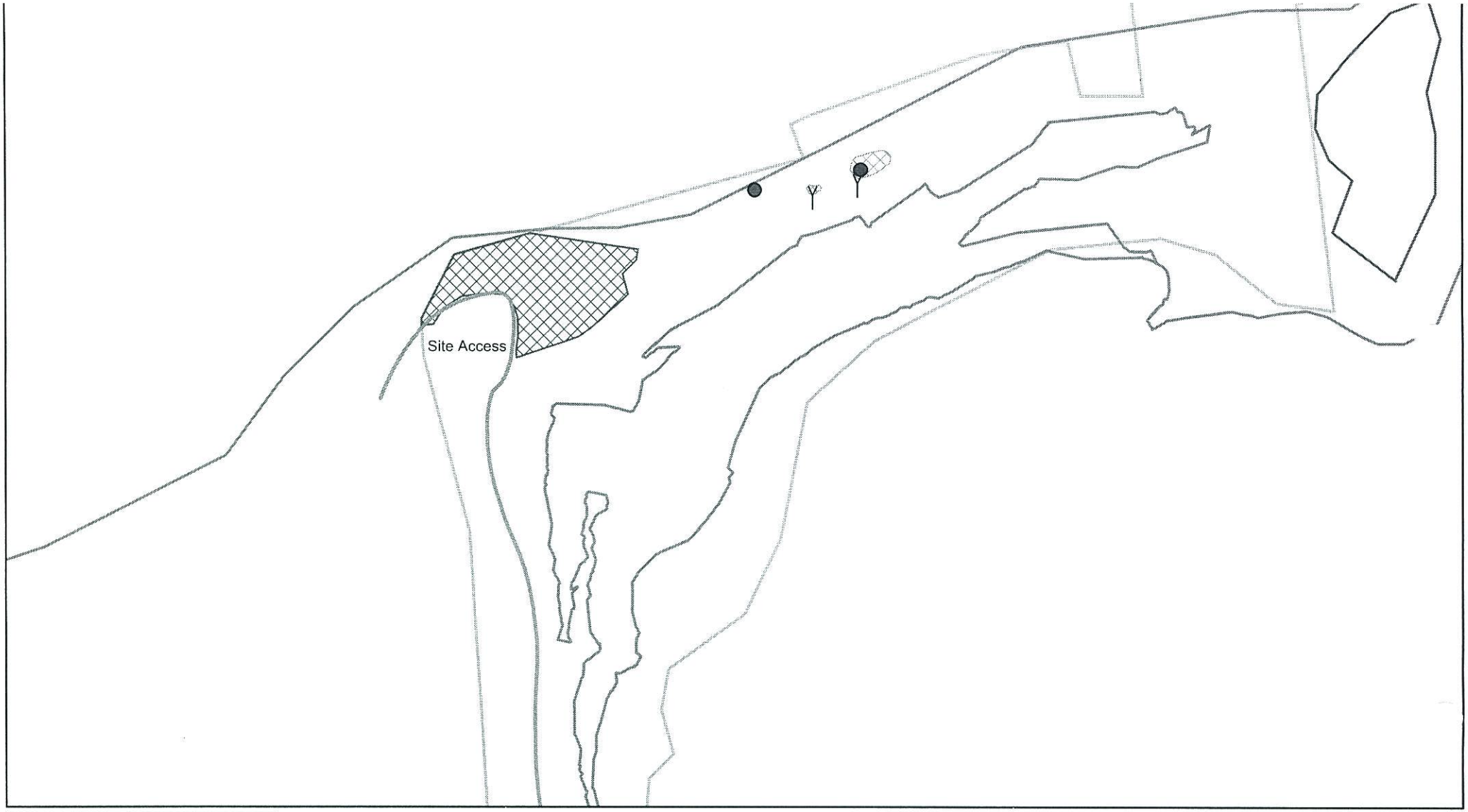
DSCN8484: Remnant anchor bolt at entrance to mine shaft

DSCN8490: Remnant mining pipe on top of tailings pile

DSCN8495: Pipe on top of large tailings pile with active flow from mine, pool of water is approximately 5 ft across

DSCN8504: Close-up of pipe on top of large tailings pile with active flow from mine, pool of water is approximately 5 ft across. Edge of tailings pile seen at middle of picture, steep drop down to Deer Creek.

DSCN8514: Large tailings pile (center of picture) with actively draining pipe is easily seen when standing on Environs Trail, Deer Creek is downhill & in the background of picture



Legend

- Drain Tunnel
- Pipe
- Mine Tunnel
- Deer Creek
- Environs Trail
- Providence Mine Road
- Providence Mine Brownfield Site
- Mine Waste Pile
- Environs Parcel
- Waste Water Treatment Facility

Sierra Streams Institute
Environs Mining Legacy Assessment Project
Site Plan

Nevada City Quadrangle
T16N; R9E; Sec 11, 12, 13

N

1 inch = 261 feet

Miles
0 0.025 0.05 0.1

APN: 5-100-35 + 5

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL TO

Name THE CITY OF NEVADA CITY
Street Address City Hall
317 Broad Street
City & State Nevada City, California 95959

OFFICIAL RECORDS
RECORDED BY
85 16963 DEPT. PUBLIC WORKS

1985 JUL 26 PM 2:15

JOYCE C. ROLINGER
NEVADA COUNTY
RECORDER

M/T

SPACE ABOVE THIS LINE FOR RECORDER'S USE

MAIL TAX STATEMENTS TO

Name SAME AS ABOVE
Street Address
City & State

APN: 5-100-35, 31, 33 & 38

DOCUMENTARY TRANSFER TAX $ -0-
COMPUTED ON FULL VALUE OF PROPERTY CONVEYED, OR
COMPUTED ON FULL VALUE LESS LIENS AND ENCUMBRANCES REMAINING THEREON AT TIME OF SALE
Signature of Declarant or Agent determining tax. Firm Name

ITC-12A-6-72

Corporation Grant Deed

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
THE GRASS VALLEY GROUP, INC., a California corporation
a corporation organized under the laws of the state of
hereby GRANTS to
THE CITY OF NEVADA CITY

the following described real property in the City of Nevada
County of Nevada, State of California:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF FOR LEGAL DESCRIPTION

"This land is granted subject to a restriction that said property be used solely for Public purposes and further the burden and benefit of said restriction shall run with land."

The benefit of this restriction is appurtenant to property of the grantor described as Parcel "B" of Parcel Map No. 85-01.

Dated: May 16, 1985

THE GRASS VALLEY GROUP, INC.

By Daniel G. Wright Executive Vice President

By N. Eric Jorgensen Secretary

STATE OF CALIFORNIA
COUNTY OF NEVADA } ss.

On May 24, 1985 before me, the undersigned, a Notary Public in and for said State, personally appeared Daniel G. Wright, known to me to be the Executive Vice President, and _____ known to me to be Secretary of the Corporation that executed the within Instrument, known to me to be the persons who executed the within Instrument on behalf of the Corporation therein named, and acknowledged to me that such Corporation executed the within Instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Signature Helen MacMillen

Helen MacMillen
Name (Typed or Printed)

OFFICIAL SEAL
HELEN MACMILLEN
NOTARY PUBLIC-CALIFORNIA
Nevada County
My Commission Expires April 3, 1988

(This area for official notarial seal)

Title Order No. _____ Escrow or Loan No. _____

MAIL TAX STATEMENTS AS DIRECTED ABOVE

85 16963

EXHIBIT "A"

PARCEL A, as shown on the Parcel Map and Lot Line Adjustment No. 85-01 for The Grass Valley Group, being a portion of Parcel One of that certain Parcel Map filed in Book 16 of Parcel Maps, Page 57, filed in the office of the Recorder, County of Nevada, State of California, on JUL 30 1985, in Book 17 of Parcel Maps, Page 29.

RESERVING THEREFROM, unto the grantor herein, all of the minerals, mineral matter, and rock lying beneath the surface of said land, together with the right to work to extract the same without disturbing the surface thereof.

85 16963

RESOLUTION NO. 85 - 19

RESOLUTION ACCEPTING FROM GRASS VALLEY GROUP A DEED FOR RECORDING

The City Council of Nevada City Does Resolve as Follows:

The City Council accepts the Corporation Grant Deed received from the Grass Valley Group regarding approximately forty (40) acres of property known as the Dear Creek Environs, including the limitation of use contained in said deed and authorizes the recording of said deed at the Nevada County Recorder's Office.

Passed and Adopted by the City Council of Nevada City at its regularly scheduled meeting of May 28, 1985 by the following votes:

Yes: Worth, Zanone, Matson, Tobiassen

No: None

Abstain: Barnes

Paul J. Matson
MAYOR

ATTEST:

Maureen Ryan
CITY CLERK

I, Maureen Ryan, City Clerk of the City of Nevada City, California, do hereby certify that this is a true and correct copy of Resolution No. 85-19, duly passed and adopted by the City Council of said City on the 28th day of May, 1985.

Maureen Ryan

85 16963

CONSENT TO RECORDING OF DEED

PAUL MATSON, Mayor of Nevada City, pursuant to Resolution No. 85 -19 hereby consents to the recording of the attached Corporation Grant Deed from the Grass Valley Group regarding a forty (40) acre parcel known as the Deer Creek Environs.

Dated: 7-25-1985

Paul J. Matson
MAYOR

ATTEST:

Kathleen Ryan
City Clerk

STATE OF CALIFORNIA
COUNTY OF NEVADA

On this 25th day of July in the year one thousand nine hundred and eighty-five, before me, Laurie Halvarson a Notary Public, State of California, duly commissioned and sworn, personally appeared PAUL J. MATSON, personally known to me (or proved to me on the basis of satisfactory evidence) Known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal in the County of Nevada the day and year in this certificate first above written.

OFFICIAL SEAL
LAURIE HALVARSON
NOTARY PUBLIC-CALIFORNIA
Principal Office in NEVADA County
My Commission Expires Mar. 17, 1989

Laurie Halvarson
Notary Public, State of California

My commission expires 3-17-89

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Cowdery's Form No. 32 — Acknowledgement — General (C. C. Sec. 1190a)

END OF DOCUMENT

SIERRA NEVADA CONSERVANCY
PROPOSITION 84 - DETAILED BUDGET FORM

Environs Mining Legacy Assessment Project

Sierra Streams Institute

SECTION ONE DIRECT COSTS	**Year One**	**Year Two**	**Year Three**	**Year Four**	**Year Five**	**Total**
Staff	$17,600.00	$17,600.00	$9,000.00			$44,200.00
Contractors	$2,000.00	$4,500.00	$1,000.00			$7,500.00
CEQA and permitting fees	$0.00	$500.00	$2,000.00			$2,500.00
						$0.00
						$0.00
						$0.00
						$0.00
DIRECT COSTS SUBTOTAL:	$19,600.00	$22,600.00	$12,000.00	$0.00	$0.00	$54,200.00

SECTION TWO INDIRECT COSTS	**Year One**	**Year Two**	**Year Three**	**Year Four**	**Year Five**	**Total**
Laboratory	$7,000.00	$3,000.00	$0.00			$10,000.00
Mileage	$140.00	$40.00	$20.00			$200.00
Supplies	$480.00	$240.00	$80.00			$800.00
						$0.00
INDIRECT COSTS SUBTOTAL:	$7,620.00	$3,280.00	$100.00	$0.00	$0.00	$11,000.00
PROJECT TOTAL:	$27,220.00	$25,880.00	$12,100.00	$0.00	$0.00	$65,200.00

SECTION THREE Administrative Costs (Costs may not *to exceed 15% of total Project Cost*) :						**Total**
Overhead 15%	$4,083.00	$3,882.00	$1,815.00			$9,780.00
						$0.00
						$0.00
						$0.00
						$0.00
ADMINISTRATIVE TOTAL:	$4,083.00	$3,882.00	$1,815.00	$0.00	$0.00	$9,780.00
SNC TOTAL GRANT REQUEST:	$31,303.00	$29,762.00	$13,915.00	$0.00	$0.00	$74,980.00

SECTION FOUR OTHER PROJECT CONTRIBUTIONS	**Year One**	**Year Two**	**Year Three**	**Year Four**	**Year Five**	**Total**
List other funding or in-kind contibutors to project (i.e. Sierra Business Council, Department of Water Resources, etc.)						
SSI Volunteer Monitors	$4,000.00	$4,000.00	$4,000.00			$12,000.00
US EPA	$35,000.00	$10,000.00				$45,000.00
FEMA	$4,000.00					$4,000.00
						$0.00
						$0.00
						$0.00
Total Other Contributions:	$43,000.00	$14,000.00	$4,000.00	$0.00	$0.00	$61,000.00

NOTE: The categories listed on this form are examples and may or may not be an expense related to the project. Rows may be added or deleted on the form as needed. Applicants should contact the SNC if questions arise.

* Operating Costs should be allocated to the pecentage that is applicable to the grant based on your cost allocation methodology and cannot exceed 15% of your total project costs.

Sierra Streams Institute

Cost Allocation Plan

October 2013

Sierra Streams Institute

COST ALLOCATION PLAN

The purpose of this cost allocation plan is to summarize, in writing, the methods and procedures that this organization will use to allocate administrative costs to various programs, grants, contracts and agreements.

Direct costs are those that can be identified specifically with a particular final cost objective. Indirect costs are those that have been incurred for common or joint objectives and cannot be readily identified with a particular final cost objective.

Only costs that are allowable, in accordance with the cost principles, will be allocated to benefiting programs by Sierra Streams Institute.

The general approach of Sierra Streams Institute in allocating costs to particular grants and contracts is as follows:

A. All allowable direct costs are charged directly to programs, grants, activity, etc.
B. Allowable direct costs that can be identified to more than one program are prorated individually as direct costs using a base most appropriate to the particular cost being prorated.
C. All other allowable general and administrative costs (costs that benefit all programs and cannot be identified to a specific program) are allocated to programs, grants, etc. using a base that results in an equitable distribution.

ALLOCATION OF COSTS

The following information summarizes the procedures that will be used by Sierra Streams Institute beginning October 1, 2013:

A. Compensation for Personal Services – Documented with timesheets showing time distribution for all employees and allocated based on time spent on each program or grant. Salaries and wages are charged directly to the program for which work has been done. Costs that benefit more than one program will be allocated to those programs based on the ratio of each program's salaries to the total of such salaries (see Example 1). Costs that benefit all programs will be allocated based on the ratio of each program's salaries to total salaries (see Example 2).
1. Fringe benefits (FICA, UC, and Worker's Compensation) are allocated in the same manner as salaries and wages. Health insurance, dental insurance, life and disability and other fringe benefits are also allocated in the same manner as salaries and wages.
2. Vacation, holiday, and sick pay are allocated in the same manner as salaries and wages.
B. Travel Costs – Allocated based on purpose of travel. All travel costs (local and out-of-town) are charged directly to the program for which the travel was incurred. Travel costs that benefit more than one program will be allocated to those programs based on the ratio of each program's salaries to the total of such salaries (see Example 1). Travel costs that benefit all

programs will be allocated based in the ratio of each program's salaries to total salaries (see Example 2).

C. Professional Services Costs (such as consultants, accounting and auditing services) – Allocated to the program benefitting from the service. All professional service costs are charged directly to the program for which the service was incurred. Costs that benefit more than one program will be allocated to those programs based on the ratio of each program's expenses to the total of such expenses (see Example 3). Costs that benefit all programs will be allocated based on the ratio of each program's expenses to total expenses (see Example 4).

D. Office Expense and Supplies (including office supplies and postage) – Allocated based on usage. Expenses used for a specific program will be charged directly to that program. Postage expenses are charged directly to the extent possible. Costs that benefit more than one program will be allocated to those programs based on the ratio of each program's expenses to the total of such expenses (see Example 3). Costs that benefit all programs will be allocated based on the ratio of each program's expenses to total expenses (see Example 4).

E. Equipment – Sierra Streams Institute depreciates equipment when the initial acquisition costs exceeds $500. Items below $500 are reflected in the supplies category and expensed in the current year. Unless allowed by the awarding agency, equipment purchases are recovered through depreciation. Depreciation costs for allowable equipment used solely by one program are charged directly to the program using the equipment. If more than one program uses the equipment, then an allocation of the depreciation costs will be based on the ratio of each program's expenses to the total of such expenses (see Example 3). Costs that benefit all programs will be allocated based on the ration of each program's expenses to total expenses (see Example 4).

F. Printing (including supplies, maintenance, and repair) – Expenses are charged directly to programs that benefit from the service. Expenses that benefit more than one program are allocated based on the ratio of the costs to total expenses. Costs that benefit more than one program will be allocated to those programs based on the ratio of each program's expenses to the total of such expenses (see Example 3). Costs that benefit all programs will be allocated based on the ratio of each program's expenses to total expenses (see Example 4).

G. Insurance – Insurance needed for a particular program is charged directly to the program requiring the coverage. Other insurance coverage that benefits all programs is allocated based on the ratio of each program's expenses to total expenses.

H. Telephone/Communications – Telephone or communications expenses that benefit more than one program will be allocated to those programs based on the ratio of each program's expenses to the total of such expenses (see Example 3). Costs that benefit all programs will be allocagted based on the ratio of each program's expenses to total expenses (see Example 4).

I. Facilities Expenses – Allocated based upon usable square footage. The ratio of total square footage used by all personnel to total square footage is calculated. Facilities costs related to general and administrative activities are allocated to program based on the ratio of program square footage to total square footage (see example 5).

J. Training/Conferences/Seminars – Allocated to the program benefiting from the training, conference or seminar. Costs that benefit more than one program will be allocated to those

programs based on the ratio of each program's salaries to the total of such salaries (see Example 1). Costs that benefit all programs will be allocated based on the ratio of each program's salaries to total salaries (see Example 2).

K. Other Costs (including dues, licenses, fees, etc.) – Other joint costs will be allocated on a basis determined to be appropriate to the particular costs. (Grantee should describe methodology for applicable costs).

Example 1

Expense Amount = $5,000

Costs that benefit two or more specific programs, but not all programs, are allocated to those programs based on the ratio of each program's personnel costs (salaries & applicable benefits) to the total of such personnel costs, as follows:

Grant	Personnel Costs	Percent	Amount Allocated
A	$ 20,000	20%	$1,000
C	$ 30,000	30%	$1,500
E	$ 50,000	50%	$2,500
TOTAL	**$100,000**	**100%**	**$5,000**

Example 2

Expense amount = $10,000

Costs that benefit **all** programs are allocated based on a ratio of each program's personnel costs (salaries& applicable benefits) to total personnel costs as follows:

Grant	Personnel Costs	Percent	Amount Allocated
A	$ 20,000	10%	$1,000
C	$ 30,000	15%	$1,500
E	$ 50,000	25%	$2,500
All other programs	$ 100,000	50%	$5,000
TOTAL	**$200,000**	**100%**	**$10,000**

Example 3

Expense amount = $4,000

Costs that benefit two or more specific programs, but not all programs, are allocated to those programs based on the ratio of each program's expenses (direct costs other than salaries & benefits) to the total of such expenses, as follows:

Grant	Expenses	Percent	Amount Allocated
A	$ 20,000	20%	$800
C	$ 30,000	30%	$1,200
E	$50,000	50%	$2,000
TOTAL	**$100,000**	**100%**	**$4,000**

Example 4

Expense Amount = $8,000

Costs that benefit all programs will be allocated based on a ratio of each program's salaries to total salaries as follows:

Grant	Salary	Percent	Amount Allocated
A	$ 20,000	10%	$ 800
C	$ 30,000	15%	$ 1,200
E	$ 50,000	25%	$ 2,000
All other programs	$ 100,000	50%	$ 4,000
TOTAL	**$200,000**	**100%**	**$8,000**

Example 5

Facilities Expense Amount = $10,000

Facilities costs are allocated based on square footage. Square footage for each program and general administrative activity is considered in the analysis. General and administrative facilities costs are further allocated to each program based on the square footage of each grant program to the total square footage of all grant programs. The calculation is as follows:

Grant	Personnel Costs	Percent	Amount Allocated
A	$ 20,000	10%	$1,000
C	$ 30,000	15%	$1,500
E	$ 50,000	25%	$2,500
All other programs	$ 100,000	50%	$5,000
TOTAL	**$200,000**	**100%**	**$10,000**

Project Monitoring Plan

Not applicable. The project is an assessment. Development of a sampling and monitoring plan will be a task within the scope of work.

SIERRA Streams INSTITUTE

Resolution Approving the Application for Grant Funds for the Sierra Nevada Conservancy Proposition 84 Grants Program under the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006

WHEREAS, the Legislature and Governor of the State of California have provided Funds for the program shown above; and

WHEREAS, the Sierra Nevada Conservancy (SNC) has been delegated the responsibility for the administration of a portion of these funds through a local assistance grants program, establishing necessary procedures; and

WHEREAS, said procedures established by the Sierra Nevada Conservancy require a resolution certifying the approval of an application by the Applicant's governing board before submission of said application to the SNC; and

WHEREAS, the Applicant, if selected, will enter into an agreement with the SNC to carry out the project; and

WHEREAS, Sierra Streams Institute has identified the Environs Mining Legacy Assessment Project as valuable towards meeting its mission and goals.

BE IT HEREBY RESOLVED by the Board of Directors of Sierra Streams Institute that this Board:

1. Approves the submittal of an application for the Environs Mining Legacy Assessment Project; and
2. Certifies that Applicant understands the assurances and certification requirements in the application; and
3. Certifies that Applicant or title holder will have sufficient funds to operate and maintain the resource(s) consistent with the long-term benefits described in support of the application; or will secure the resources to do so; and
4. Certifies that Applicant will comply with all legal requirements as determined during the application process; and
5. Appoints Executive Director Joanne Hild, or designee, as agent to conduct all negotiations, execute and submit all documents, including but not limited to: applications, agreements, payment requests, and so on, which may be necessary for the completion of the aforementioned project.

PASSED AND ADOPTED by Sierra Streams Institute via e-mail vote this 20th day of May, 2014 by the following vote:

Ayes: _5__ Nays: _0__ Abstain: ___ Absent: _1__

Attested by:

Stephen M. Carlton
President, Board of Directors

431 UREN ST., SUITE C NEVADA CITY, CA 95959 • 530.265.6090

Leases or Agreements

Memorandum of Understanding between Sierra Streams Institute and the City of Nevada City (property owner) is attached. There are no additional leases or agreements not already addressed affecting project lands or the future operation and maintenance thereof.

MEMORANDUM OF UNDERSTANDING

between

The City of Nevada City and Sierra Streams Institute

PURPOSE

The signatories of this Memorandum of Understanding (MOU) recognize the value of working in collaboration to implement projects focused on abandoned mine remediation, forest health, watershed restoration, and water quality monitoring on City-owned land in the Deer Creek watershed.

INTRODUCTION

Sierra Streams Institute is applying for grants from the Sierra Nevada Conservancy (Proposition 84 Grant Program) in the amount of $417,211 to 1) complete the restoration of Providence Mine and the adjacent mine tailings pile along Deer Creek, located within the property known as the Nevada City Environs; and 2) Plan and implement a forest health project in the Deer Creek corridor immediately downstream of Nevada City. The projects will include long term monitoring on City-owned land.

AGREEMENTS

The parties agree to cooperate and coordinate with each other in addressing the concerns in the Deer Creek watershed while respecting the mission, roles, and rights of each entity.

The parties may enter into mutually agreeable supplemental agreements with each other to implement any grant funded projects related to but not specified in this agreement.

The City of Nevada City will provide the legal descriptions and title information to the City-owned lands addressed in this agreement as required for the application for funds from Sierra Nevada Conservancy.

Sierra Streams Institute will seek approval from the City of Nevada City for all project plans prior to implementation, will coordinate all project activities with the City of Nevada City, and will provide annual updates or as requested.

The City of Nevada City will provide access to City-owned land in the Deer Creek watershed, including the Providence Mine site, for the purpose of planning and implementing the proposed assessment, remediation and restoration, and for post-project monitoring for a minimum of ten years after the completion of the project.

IN WITNESS WHEREOF the parties have executed this MOU as of January 23, 2014

NEVADA CITY:

By: David Brennan

David Brennan, City Manager

Date: 1/27/2014

By: Niel Locke

Niel Locke, City Clerk

Date: 1/27/14

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

By: [signature]

Hal DeGraw, City Attorney

Date: 1/27/14

SIERRA STREAMS INSTITUTE:

By: Joanne Hild

Joanne Hild, Executive Director

Date: 1/28/14

Applicable CEQA Documents

Not applicable. Progress towards CEQA compliance will be a task within the scope of work of the project.

Performance Measure	Target
Number of Collaboratively Developed Plans and Assessments	Collaboratively developed plan: *Environs Mining Impacts Remediation Plan*
Number and Diversity of People Reached	Diversity of Participants: General public: 75 Nisenan Tribal Members: 10 Community volunteers: 10 Conservation groups/individuals: 5 Landowner groups/individuals: 30 Resource Professionals: 3 Government officials: 10
Number and Types of Jobs Created	**Professional:** Number of people employed: 4 length of employment: 3 years average # of hours/week: 15 season of employment (winter, spring, summer, fall): All
Number and Value of New, Improved or Preserved Economic Activity	Type(s) of products and services provided: Tourism Total number of new, improved, or preserved products and services: 1 (Trail use) Estimated annual dollar value of new or improved products and services: Not quantifiable until implementation phase
Resources Leveraged for the Sierra Nevada	# of volunteer hours: 455 In-kind contributions: $12,000

Regulatory Requirements/Permits

Not applicable. There are no permits required for the proposed initial assessment.

Identification of permitting agencies and required permits for future remediation is a task within the scope of work of the project.