

SAN JUAN COUNTY, COLORADO
BOARD OF COMMISSIONERS MEETING AGENDA

May 10, 2023

San Juan County meetings will be conducted in a hybrid virtual/in-person format. All persons including Board Members, Staff and those with appointments scheduled on the agenda may meet in person or via zoom. The information necessary to connect to the public meeting is listed below.

CALL TO ORDER: 8:30 A.M.

OLD BUSINESS:

Consider Bills and Authorize Warrants

BOCC Regular Meeting Minutes for April 26, 2023

APPOINTMENTS:

8:40 A.M. - Becky Joyce, Public Health Director

9:00 A.M. - Martha Johnson, Social Services Director

9:30 A.M. - Jim Donovan, Emergency Management

10:00 A.M. - Kirsten Brown, DRMS

10:30 A.M. - Jon Kaminsky-BLM

11:00 A.M. - Klem Branner – Silverton Single Track Society

11:30 A.M. - Julie and Todd Sams Proposed Plat Amendment Lot 1, Cole Ranch Subdivision

Lunch – Location to be determined

3:00 P.M. - Joint Town/County Meeting Location - Town Hall

Zoom Connection: <https://us02web.zoom.us/j/88637487127>

CORRESPONDENCE:

Interior Board of Land Appeals

NEW BUSINESS:

Memorandum of Understanding (MOU) Between San Juan County, Colorado and Silverton-San Juan County Ambulance Association, Inc. Regarding Search and Rescue Operations

CORE Mountain Enterprises – Liquor License Renewal

Treasure's Report

Sales Tax Update

Public Comment

Commissioner and Staff Reports

OTHER:

ADJOURN: Next Regular Meeting – 6:30 PM, Wednesday May 24, 2023

Join Zoom Meeting

<https://zoom.us/j/92136473203>

Meeting ID: 921 3647 3203

One tap mobile

+16699006833,,92136473203# US (San Jose)

+12532158782,,92136473203# US (Tacoma)

Dial by your location

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

Meeting ID: 921 3647 3203

SAN JUAN COUNTY BOARD OF COMMISSIONERS MET MAY 10, 2023
AND THE FOLLOWING BILLS WERE APPROVED FOR PAYMENT.

24356 ANGELES CONSTRUCTION	MARCH 23 SHOVELING	1908.75
24357 DEANNE GALLEGOS	MARCH 23 NURSE PAY	165.00
24358 ANTHEM BLUE CROSS	MAY 23 INSURANCE PAYMENT	13448.27
24359 IRON WOMAN CONSTRUCTION	PHASE 1	1900.00
24360 SOUTHWEST APPLIANCE	DIAGNOSTICS & TRIP SUPPLIES	615.44
24361 BANK OF THE SAN JUANS	FIREHOUSE PAYMENT	12838.70
24362 EVANS CONSTRUCTION	UNCLOG KITCHEN SINK DRAIN	75.00
DD ABIGAL H. ARMISTEAD	SHERIFF DEPUTY WAGES	3607.13
DD AMIE R. BIOCCHI	SHERIFF -NURSE WAGES	3038.21
DD ANTHONY D. EDWARDS	COMMUNICATIONS WAGES	4326.53
DD ARTHUR J. DONOVAN	EPD WAGES	4491.57
DD AUSTIN P. LASHLEY	COMMISSIONERS WAGES	2273.98
DD BRUCE T. CONRAD	SHERIFF WAGES	4293.07
DD DEANNA M. JARAMILLO	TREASURERS WAGES	3567.96
DD JOHN A. JACOBS	SHERIFF DEPUTY WAGES	2115.33
DD KERI METZLER	CORONER WAGES	993.02
DD KIMBERLY A. BUCK	ASSESSORS WAGES	4234.99
DD KRISTINA L. RHOADES	SOCIAL SERVICE WAGES	2179.00
DD LADONNA L. JARAMILLO	COUNTY CLERK WAGES	3620.77
DD LINSLEY SWEET	DEPTY CLERK WAGES	2026.34
DD PETER C. MAISEL	COMMISSIONERS WAGES	2182.02
DD REBECCA B. JOYCE	COUNTY NURSE WAGES	5054.54
DD REBECCA J. RHOADES	CUSTODIAN WAGES	1189.07
DD SARAH B. FRIDEN	SENIOR SHOVELING	1625.08
DD STEPHEN W. LOWRANCE	UNDERSHERIFF WAGES	4055.33
24363 FRED W. CANFIELD	SENIOR SHOVELING	608.05
24364 SCOTT L. FETCHENHIER	COMMISSIONERS WAGES	2138.02
24365 TOMMY WIPF	VETS OFFICER WAGES	356.40
24366 WILLIAM A. TOOKEY	ADMINISTRATOR WAGES	4738.36
24367 CITIZENS STATE BANK	FEDERAL TAXES WITHHELD	21366.92
24368 CITIZENS STATE BANK	STATE TAXES WITHHELD	3384.00
24369 GREAT-WEST LIFE	GROUP RETIREMENT	5884.22
24370 CITIZENS STATE BANK	H S A SAVINGS	1600.00
24371 KANSAS CITY LIFE	DENTAL & LIFE INSURANCE	885.63
24372 VOID		
24373 AFLAC	INDIVIDUAL INSURANCE	177.10
24374 SILVERTON LP GAS	HOSPITAL TANK FILL UP	186.75
24375 SPRUCE ELECTRICAL SERVICES	LIGHTS FIXED ANVIL APT	1610.00
24376 CITIZENS STATE BANK	ANVIL PAYMENT	5558.98
24377 DR. JOEL, INC.	TROUBLE SHOOT SS PHONE	522.50
24378 AMWINS GROUP BENEFITS	VISION INSURANCE	180.19
24379 LA PLATA COUNTY	SHERIFFS NEW VEHICLE	9000.00
24380 KLINKE & LEW CONTRACTORS	EXCAVATING, TRENCHING	12500.00
24381 SAN MIGUEL POWER	BILLS	4099.25

24382 VISA	BILLS	4079.16
24383 LINSLEY SWEET	REIMB SUPPLEMENTAL	164.90
24384 SILVERTON CLINIC	REIMB LOIS MACKENZIE PAY	1483.78
24385 SILVERTON GROCERY	NURSE BILL	731.48
24386 IMAGE NET CONSULTING	SHERIFFS BILL	114.54
24387 WEX BANK	SHERIFFS FUEL	1077.98
24388 DENNIS R. GOLBRICHT	APRIL 23 SERVICES	3120.00
24389 LA PLATA COUNTY	END 22 FIRST 23 SERVICES	12801.07
24390 BEST CLEANING & DISASTER	ANVIL DUCT CLEANING	875.00
24391 SILVERTON AMBULANCE	SALES TAX MONTHLY PAYMENT	41933.33
24392 SILVERTON AMBULANCE	MONTHLY PAYMENT	7200.00
24393 SILVERTON STANDARD	LEGALS	177.60
24394 SILVERTON LP GAS	COURTHOUSE-FD TANK FILLS	4165.25
24395 SILVERTON HARDWARE	CUST-SHERIFF BILLS	274.97
24396 VERO	BILLS	1151.59
24397 SILVERTON GROCERY	NURSES BILLS	200.72
24398 ROCK ENVIRONMENTAL SERVICES	BILL	1638.94
24399 SILVERTON CLINIC	REIMB AUDREY RATHEY	516.72
24400 BRUCE E. HARING M.A., L.P.C.	MENTAL HEALTH PAY	4942.00
24401 DAYNA KRANKER	APRIL 23 NURSE PAY	2707.50
24402 DAYNA KRANKER	REIMB BILLS	115.23
24403 VAXCARE, LLC	NURSE BILL	20.00
24404 COLORADO PUBLIC ASSOC	NURSE MEMBERSHIP RENEWAL	55.00
24405 SAUL'S CREEK ENGINEERING	ASSESSORS BILL	80.00
24406 VERIZON	SHERIFFS BILL	122.01
24407 ESRI	ASSESSORS BILL	2310.00
24408 IMAGE NET CONSULTING	SHERIFFS BILL	114.54
24409 CENTURY LINK	ELEVATOR ROOM BILL	88.47
24410 SAN JUAN BASIN HEALTH	NURSES BILLS	10374.00
24411 NATALIE STREETER	CLEAN BASEMENT APARTMENT	103.50
24412 AR&T MOBILITY	SHERIFFS BILL	574.73
24413 CENTURY LINK	SHERIFFS BILL	72.22
24414 SILVERTON STANDARD	2022 ELECTION BILL	17.92
24415 CO CORONERS ASSOCIATION	DEATH INVESTIGATION CONF	450.00
24416 SILVERTON STANDARD	LEGALS & EPD BILLS	485.20
24417 VISA	COMMUNICATIONS BILL	404.81
TOTAL GENERAL		265365.63

ROAD

7088 SAN MIGUEL POWER	PAYMENT	177.00
7089 ANTHEM BLUE CROSS	MEDICAL INSURANCE PAYMENT	2982.54
DD DAVID L. ANDREWS	ROAD FOREMAN WAGES	3755.66
DD LOUIS K. GIRODO	ROAD OVERSEER WAGES	4602.46
DD RUSTY D. MELCHER	ROAD OPERATOR WAGES	3680.94
7090 CITIZENS STATE BANK	STATE TAXES WITHHELD	664.00
7091 GREAT-WEST LIFE	GROUP RETIREMENT	685.48
7092 CITIZENS STATE BANK	FEDERAL TAXES WITHHELD	4437.92
7093 KANSAS CITY LIFE	DENTAL \$ LIFE INSURANCE	56.77
7094 BLOWN AWAY	SNOW REMOVAL 1-16-23-4-16-23	4200.00
7095 CITIZENS STATE BANK	H S A SAVINGS	200.00
7096 AMWINS GROUP BENEFITS	VISION INSURANCE	17.29
7097 JOHN DEERE FINANCIAL	PAYMENT	247.80
7098 SAN MIGUEL POWER	BILLS	202.57
7099 VISA	BILL	183.61
7100 DAVID L. ANDREWS	REIMB SUPPLIES	208.38
7101 SILVERTON LP GAS	TANK FILL UP	1148.27
7102 WHISTLESTOP	FUEL	9138.29
7103 SILVERTON HARDWARE	SUPPLIES	27.98
7104 FOUR CORNERS WELDING	KOX-MAC	45.00
7105 HONNEN EQUIPMENT	SUPPLIES	1176.86
7106 RUSTY MELCHER	REIMB CLOTHING ALLOWANCE	200.00
7107 ALSCO	BILL	74.00
7108 LAWSON PRODUCTS	SUPPLIES	1057.34
7109 CATERPILLAR FINANCE	D6TVP/WES00376	5274.36
TOTAL ROAD		44444.52

GENERAL	265365.63
ROAD	44444.52
TOTAL ALL FUNDS	309810.15

WERE ALLOWED SETTLEMENT IN FULL BY ORDER OF SAN JUAN COUNTY COMMISSIONERS.

AUSTIN ASHLEY, CHAIRMAN

SCOTT L. FETCHENHIER, COMMISSIONER

PETER C. MAISLE, COMMISSIONER

LADONNA L. JARAMILLO, CLERK

SAN JUAN COUNTY BOARD OF COMMISSIONERS
REGULAR MEETING WEDNESDAY, April 26, 2023
AT 6:30 P.M.

The Board of Health met at 4:00 PM for a training session. Also present for the training was County Administrator Tookey and Public Health Director Joyce.

Call to Order: The meeting was called to order by Chairman Austin Lashley. Present were Commissioners Scott Fetchenhier and Pete Maisel, County Attorney Dennis Golbright and Administrator William Tookey.

Minutes: Commissioner Fetchenhier moved to approve the minutes of April 12, 2023. Commissioner Maisel seconded the motion. The motion passed unanimously.

Marylin Wagner of CTSI was present via Zoom the CTSI 5 Year Loss Analysis and Pool Update.

A Public Hearing was held to receive comment concerning San Juan County's participation in an appeal to the United States Department of the Interior Board of Land Appeals of the the BLM Travel Management Plan allowing the construction of a motorized single-track trail in Minnie Gulch. Upon completion of the Public Hearing Commissioner Maisel moved to withdraw San Juan County from this Appeal, to continue working with our Federal partners to manage the Travel Plan to best serve the interests of the County and to recognize the importance and respects the input of impacted tribal entities on these matters. Commissioner Lashley seconded the motion. The motion passed with Maisel and Lashley voting yes and Fetchenhier voting no.

Charlie Smith was present to update the Commissioners on water issues that may concern San Juan County and to discuss San Juan County's water rights.

A Public Hearing was held to receive comment concerning Resolution 2023-02 to Amend the Zoning and Land Use Regulations Section 10-103.4. Upon completion of the Public Hearing Commissioner Fetchenhier moved to approve Resolution 2023-02 as presented. Commissioner Lashley seconded the motion. The motion passed unanimously.

Having no further business, the meeting adjourned at 9:35 P.M.

Austin Lashley, Chairman

Ladonna L. Jaramillo, County Clerk



Department of Social Services
Phone 970-387-5631 * Fax 970-387-5326
Martha Johnson, Director
3/31/2023

Date 4/25/2023
Transmittal No. 3

Vendor	Date	Num	Amount
La Plata County	03/31/2023	11641	\$ 3,110.05
San Juan Cty	03/31/2023	11642	\$ 5,034.48
TOTAL			\$ 8,144.53

I, MARTHA JOHNSON, Director of Social Services of San Juan County of Colorado, hereby certify that the payments listed above are available for inspection and have been paid to the payees listed.

Martha Johnson
MARTHA JOHNSON

5-8-2023

I, Austin Lashley, Chairman of the San Juan County Board of Commissioners, hereby certify that the payments as set forth above have this date been approved and warrants in payment thereof issued upon the Social Services Fund.

Austin Lashley

**San Juan County Social Services
Profit & Loss Budget vs. Actual
January through December 2023**

				TOTAL	
	Jan 23	Feb 23	Mar 23	Jan - Dec 23	Budget
Ordinary Income/Expense					
Income					
400.001 REVENUE-State Alloc	5,837.77	5,834.67	6,106.69	17,779.13	140,272.00
400.010 Property Tax Current	0.00	1,589.26	3,112.96	4,702.22	15,100.00
400.020 Specific Ownership tax	102.95	89.02	77.69	269.66	1,505.00
400.040 Penalties/Int on Tax	0.00	0.00	0.00	0.00	72.00
400.145 REVENUE-CSGB Grant	999.11	0.00	0.00	999.11	1,000.00
400.180 REVENUE-EOC	37.50	0.00	0.00	37.50	480.00
400.220 REVENUE-Program Refunds	200.00	300.00	300.00	800.00	0.00
Total Income	7,177.33	7,812.95	9,597.34	24,587.62	158,429.00
Expense					
500.100 EXPENSE-Administration	4,868.71	5,049.60	5,891.11	15,809.42	71,000.00
500.110 EXPENSE-Adult Protectio	0.00	0.00	0.00	0.00	1,440.00
500.120 EXPENSE-Child Care	26.61	0.00	0.00	26.61	600.00
500.130 EXPENSE-Child Support	74.19	41.28	34.53	150.00	324.00
500.140 EXPENSE-Child Welfare	0.00	0.00	0.00	0.00	1,000.00
500.145 EXPENSE-CSGB Grant	0.00	0.00	0.00	0.00	1,000.00
500.150 EXPENSE-Colorado Works	0.00	0.00	0.00	0.00	67,000.00
500.160 EXPENSE-Core Services	2,000.00	2,000.00	2,000.00	6,000.00	24,000.00
500.200 EXPENSE-LEAP	564.44	297.85	218.89	1,081.18	1,200.00
500.210 EXPENSE-OAP	0.00	0.00	0.00	0.00	24.00
Total Expense	7,533.95	7,388.73	8,144.53	23,067.21	167,588.00
Net Income	-356.62	424.22	1,452.81	1,520.41	-9,159.00

San Juan County
CDHS Allocation and Expenditures report
For State Fiscal Year 2022-23
3/31/2023

FIPS

111

<u>Program</u>	<u>Allocation</u>	<u>Expenditures</u>	<u>Remaining</u>	<u>% Remaining</u>	<u>% of Fiscal Year Remaining</u>
CDHS County Admin	77,281	14,768	62,513	80.89%	25.00%
CDHS ARPA (F302.4013)	828	0	828	100.00%	25.00%
HCPF Regular	23,781	6,545	17,236	72.48%	25.00%
HCPF Enhanced	48,465	1,412	47,053	97.09%	25.00%
APS Admin	1,460	2,100	-640	-43.83%	25.00%
APS Client	2,000	0	2,000	100.00%	25.00%
Child Care	7,303	1,752	5,551	76.01%	25.00%
CARE CRSSA Funding	1,052	-60	1,112	105.68%	25.00%
CARE CRSSA Funding Expan	3,968	-52	4,020	101.30%	25.00%
Colorado Works	42,546	16,326	26,220	61.63%	25.00%
Colorado Works HB 22-1259 ARPA	2,504	72	2,433	97.13%	25.00%
Child Welfare 80/20	25,528	21,836	3,692	14.46%	25.00%
Child Welfare 100%	2,209	467	1,742	78.84%	25.00%
Child Welfare PRTF	1,151	0	1,151	100.00%	25.00%
CORE 80/20	8,724	4,000	4,724	54.15%	25.00%
CORE 100%	16,276	14,000	2,276	13.98%	25.00%
SEAP	374	0	374	100.00%	25.00%
LEAP outreach	244	0	244	100.00%	50.00%
LEAP outreach incentive	26,000	1,927	24,073	92.59%	25.00%
Locked-in PHE Enhanc	2,239	0	2,239	100.00%	25.00%
SNAP	97	97	0	0.00%	25.00%
Total	294,030	85,189	208,841		



Office of Emergency Management
1557 GREENE STREET, P.O. BOX 184
SILVERTON, COLORADO 81433
PH: 970-387-9984
Email: gem@sanjuancountycolorado.us

5/10/2023

To: San Juan County Board Of County Commissioners

RE: Update on the Office of Emergency Management Activities for the first quarter of 2023.

I am providing the Board of County Commissioners an update on the activities of the Office of Emergency Management for the first quarter of 2023. Please let me know if you have any questions. For 2023, grant amounts have increased for the Emergency Management Performance Grant (EMPG) through the Colorado Department of Homeland Security (DHSEM) and the Emergency Preparedness and Response Grant through the Colorado Department of Public Health (CDPHE).

Projects:

Memorandum of Understanding (MOU) with Silverton Medical Rescue and San Juan County.

- See attached MOU.

Accountability/Credentialing

- Continue to expand the credentialing database for first responders and County employees.

FirstNet

- Started account with the ATT/FirstNet project. This is a nationwide network built for first responder telecommunications assets. Being on FirstNet provides users priority access on the network. The FirstNet program enables San Juan County to request advanced telecommunications equipment during disasters.

EPA

- Providing feedback on the the EPA Alert and Warning Plan (AWP) which is updated annually. A drill will be conducted to test the plan.

COVID-19

- Charting out demobilization plan, transition plan and moving from Response to Recovery. The recovery plan will be completed by early June. In coordination with Public Health.

Training

- Threat Liaison Officer (TLO), July '22. OEM receives threat information from the Colorado Information Analysis Center (CIAC) and distributes as appropriate to public safety personnel.
- FEMA ICS Instructor (certified federally and with the State of CO); required testing and evaluation by FEMA instructors; only 2 in the SW region. Can deliver advanced courses

Memorandum of Understanding (MOU)
Between San Juan County, Colorado and Silverton-San Juan County Ambulance
Association, Inc. Regarding Search and Rescue Operations

WHEREAS, Silverton-San Juan County Ambulance Association, Inc. d/b/a Silverton Medical Rescue, is a nonprofit organization having as its primary purposes: 1) the operation of an ambulance service, providing certain emergency medical services and transport; and 2) search for and rescue of lost or injured persons and the provision of search and rescue volunteers when the need arises and when called upon to do so; and

WHEREAS, the Sheriff of San Juan County, Colorado (the "Sheriff"), has the responsibility, and therefore the concomitant authority, for coordination of all search and rescue operations within San Juan County, Colorado (the "County"), pursuant to Section 24-32-2107(10); and

WHEREAS, regardless of being licensed by the County, the ambulance service, including all medical services operations of Silverton Medical Rescue are independent of the County and not subject to this MOU or direct oversight by the Sheriff or the County; and

WHEREAS, the services provided by Silverton Medical Rescue which are the subject matter of this MOU, are the search for and rescue of lost or injured persons and the provision of search and rescue volunteers when the need arises and when called upon to do so; and

WHEREAS, such services of Silverton Medical Rescue are of benefit to the County, its residents and visitors, and the Sheriff; and

WHEREAS, Silverton Medical Rescue has assumed the responsibility as the primary response team for search and rescue in the County; and

WHEREAS, the Sheriff frequently requests said search and rescue services provided by Silverton Medical Rescue; and

WHEREAS, Silverton Medical Rescue, and the Sheriff and the County, desire to clarify their relationship regarding search and rescue operations and/or missions; and

NOW, THEREFORE, be it understood by and between the parties as follows:

- 1) The Sheriff has the ultimate responsibility and authority for the coordination of all search and rescue operations and missions within the County.
- 2) Silverton Medical Rescue, its members, as well as other search and rescue units Silverton Medical Rescue requests to assist it, and their members, will participate in search and rescue operations and missions only at the request of and subject to the control of the Sheriff.
- 3) Nothing in this MOU shall be construed to prevent the Sheriff or the County, from establishing, formally or informally, standard procedures for reporting directly to Silverton Medical Rescue, incidents which are or potentially could culminate in a search and rescue operation or mission, or providing for the automatic response of Silverton Medical Rescue to search and rescue operations or missions within the County. Any such procedure shall require prompt notification to the Sheriff of such incidents and that an automatic response has been initiated.
- 4) Nothing in this MOU is intended to alter or control the independent role and/or duties of Silverton Medical Rescue as an ambulance service, providing certain emergency medical services and transport. Further, neither the Sheriff nor the County is by this MOU or by its actions, assuming any oversight, control, or liability over said operations of Silverton

Medical Rescue as an ambulance service, providing certain emergency medical services and transport.

- 5) In the event that search and rescue operations and ambulance service operations are being conducted by Silverton Medical Rescue related to the same incident, the actions being taken at any particular time shall dictate whether volunteers are operating as County Search and Rescue volunteers or volunteers or employees of Silverton Medical Rescue. For example, when rendering or administering medical services or treatment beyond that of first-aid, such volunteer is acting as a volunteer or employee of Silverton Medical Rescue and not as a volunteer of the County.
- 6) Silverton Medical Rescue performing the functions of Search and Rescue and Emergency Medical Services will coordinate with the Office of Emergency Management on emergency planning. Additionally, the Office of Emergency Management shall function as the liaison between the County and Search and Rescue and EMS, including as to any human resources issues with County volunteer management. Search and Rescue, and EMS will develop a written operations plan that will be reviewed, updated and revised on a three year cycle in coordination with the Office of Emergency Management. The plan will be an annex to the County Emergency Operations Plan.
- 7) Silverton Medical Rescue shall from time to time define the roles of its volunteers, through policies and procedures, as it relates to the ambulance services provided and the operations of Search and Rescue, as well as general standard operating procedures, including as to incident command. Annual training programs shall be proposed by Silverton Medical Rescue and approved by the Sheriff.
- 8) Silverton Medical Rescue shall retain all records of search and rescue operations and provide those records to the County upon termination of this MOU or upon request of the County.
- 9) All vehicles and equipment owned by the County, but utilized by Silverton Medical Rescue, shall be inventoried and kept by Silverton Medical Rescue in a reasonable manner. Said vehicles and equipment shall be used for Search and Rescue purposes only, unless also authorized by the County for ancillary emergency ambulance service activities. Any damage to vehicles or equipment shall be promptly reported to the County.
- 10) Attached hereto and incorporated herein by this reference is a list of those members of Silverton Medical Rescue, effective as of the date of this MOU, who will, from time to time, be participants in search and rescue operations or missions for the benefit of the County and at the request of and subject to the control of the Sheriff. In performing such operations or missions, the persons whose names appear on the list are authorized volunteers of the County. Names may be added to the list upon agreement of Silverton Medical Rescue and the Sheriff and names may be deleted from the list by the Sheriff or by Silverton Medical Rescue upon written notice to the other. Silverton Medical Rescue shall immediately report any incidents, including Human Resource complaints, which may involve said volunteers. All such volunteers shall be physically capable and qualified to perform tasks assigned. Additionally, all such volunteers shall not have a history of, or conduct themselves in such a manner that could create an unreasonable risk of liability to the Sheriff or the County. Upon request by the Sheriff or the County, Silverton Medical Rescue shall provide contact information, as well as written evidence of the qualifications and history of any such volunteers. Said information shall be treated by the County as personnel records. County volunteers may be required to complete necessary forms and/or comply with County Human Resource rules and regulations as applicable.

11) Nothing herein shall be deemed a waiver by the County of immunity or statutory limits of liability.

12) This MOU is not intended to create third-party-beneficiaries.

WHEREFORE, the parties hereto have executed this Memorandum of Understanding this _____ day of _____.

Austin Lashley, Chairman, Board of County Commissioners

Silverton Medical Rescue

By:

Its:

San Juan County Sheriff

TRAIL CHART

LEGEND

CONTEXT

ROADS

BLM PA

PRIVATE PARCEL BOUNDARIES

VIEW POINT

PROPOSED

SKILLS DEVELOPMENT TRAIL

MORE DIFFICULT MOUNTAIN BIKE OPTIMIZED TRAIL

MORE DIFFICULT TRADITIONAL TRAIL

EASIER TRADITIONAL TRAILS

CONCEPTUAL TRAIL ALIGNMENTS

P **PARKING AREA**

Prepared by:

Prepared for

North 

Note: This map is intended for planning purposes only. Property boundaries are approximate. Do not use for driveway development or construction estimates.

SUMMER 2021

MEMORANDUM

May 10, 2023

TO: San Juan County Commissioners

FR: William A. Tookey

RE: Proposed Sams Residence Lot 1, Cole Ranch Subdivision

Julie and Todd Sams own Lot 1 of the Cole Ranch Subdivision. Lot 1 has a building envelope that was approved during the Subdivision Process for a single-family dwelling. The building envelope is located on the east side of CR 2 and adjacent to the Forest Queen Mine. The Sams had previously met with the Commissioners and requested that they approve an amendment to the Cole Ranch Subdivision Plat to allow for the building envelope to be located on the west side of CR 2. Their request for the amendment was in part to minimize potential environmental health impacts due to the proximity of the Forest Queen Mine.

It was the consensus of the Commissioner to table the matter until the Sams hired an environmental consultant to determine if there are in fact environmental health concerns at the approved building envelop and if the health concerns would be minimized at the proposed building site.

A Human Health Risk Analysis was prepared by Karmen King, Toxicologist Grayling LLC. Her recommendation is that the Sams be allowed to construct on the west building envelope. She will be available viz Zoom to answer any questions the Commissioners might have. The Sams will be represented by Nick Anessi.

The construction of a single-family dwelling on Lot 1 was approved during the subdivision process. As long as it is in compliance with the subdivision approval and County Land Use Regulations it is subject only to Administrative Review. Because they what to build outside of the approved building envelope an amendment to the Subdivision Plat would be needed and would require Commissioner's approval. If you believe the applicant has provided a compelling argument that constructing on the west side of CR 2 would minimize the environmental health impact then a motion to allow the applicant to proceed with an amendment to the Cole Ranch Subdivision would be appropriate. If you do not believe that the applicant has made a case for moving the building envelope, then a motion to deny proceeding with the plat amendment should be made. If you should approve the request the applicant would be required to have a surveyor amend the Subdivision Final Plat to identify the new location of the building envelope and delete the current building envelope.

ANESI LAW FIRM
835 EAST SECOND AVE., SUITE 220
DURANGO, COLORADO 81301
T: 970.247.9246
F: 970.259.2793
Email: nick@ljanesi.com

April 24, 2023

Sent Via Email only to: Willy Tookey <admin@sanjuancolorado.us>

San Juan County
ATTN: Willy Tookey
1360 Greene Street
Silverton, Colorado 81433

RE: Building Site Application / Julie and Todd Sams

Dear Mr. Tookey and County Commissioners:

I am writing this letter on behalf of Mr. and Mrs. Todd Sams (the "Applicants") in connection with their request to relocate their building envelope at Lot 1, Cole Ranch Subdivision, San Juan County (the "Property"). The Applicants are tentatively scheduled to appear at the May 10, 2023, County Commissioner meeting at which time a request will be made to move the location of the Applicant's building envelope from the east side of the Property to the west side. A prior request to relocate the building envelope was put on hold after the County raised concern about a toxicology report previously submitted by the Applicant.

BACKGROUND

The Applicant appeared before this Board in September of 2020 and the Planning Commission in February of 2021. After obtaining a favorable recommendation from the Planning Commission, the Applicant went before this Board on October 3, 2021. During the October 3rd meeting, the Applicant's application was tabled because the County required further clarification regarding the Human Health Risk Analysis (the "Report") prepared by Karmen King.

Ms. King analyzed the Property to determine whether it is safer to build on the west side, or the existing / approved east side. The Report, attached hereto as Exhibit 1, provides a detailed analysis which, apparently, created some confusion / uncertainty as to its findings and its methodology. Specific concern was raised about the location of Ms. King's data extraction (i.e., where on the Property Ms. King took her samples). The purpose of this letter is to provide further clarification to the questions raised and give a cursory analysis of the Applicant's proposal.

SUMMARY ANALYSIS

The west side is a more suitable building location from perspective of health and safety. The east side's proximity to the Forest Queen Mine increases health risks associated with toxic materials. Building a home on the east side will likely result in increased dust exposure from County Road 2 (as it directly abuts the east side building envelope). According to the Report, road traffic results in air born particulates from Forest Queen tailings which may be hazardous via inhalation and dermal absorption. Additionally, there is potential exposure to hazardous contaminants via ingestion of soil, groundwater and bioaccumulation in the food chain. Building on the west side, however, mitigates the levels of hazardous materials and likelihood of exposure by moving farther from the most contaminated area of the Property (*See* Report findings).

The Report explains a series of methods and data sources which are relied upon to reach the above stated conclusion. Such methodology and data sources include, but are not limited to, review of historic studies, on-site exposure pathway analysis and correspondence with area regulatory agencies reviewing the Forest Queen Mine and surrounding area. The on-site data collection is illustrated in Exhibit 2, attached hereto. Exhibit 2 shows six areas where Ms. King took her data samples. -Samples were taken from three sampling locations on the west side of the Property (labeled "A B and C") and additional samples were taken from three locations on the east side of the Property (labeled "1, 2 and 3")¹

There appears to be adequate evidence and scientifically sound methodology to support Ms. King's conclusion that the west side is a safer building location for the Applicant's home. As an added precaution, the Applicants conferred with regional representatives from the EPA, CO DRMS, CDPHE, BLM, et al, to ensure all foreseeable safety measures are adequately addressed. Supporting documentation from regional agency representatives is included within the Applicants' original application. Finally, the Applicants acknowledge that there are potential risks associated with building a home anywhere near the Forest Queen Mine, however, their proposal is specifically designed to mitigate such risks as much as possible.

REQUEST FOR APPROVAL

The Applicants request that this Board permit the building envelope to be relocated to the west side of the Property as shown on Exhibit 2. Ms. King and I will be available on May 10, 2023, to answer any additional questions about the Report and the Applicants' general position. Please let me know if you have any additional questions in the meantime.

Very truly yours,
Nicholas F. Anesi
Nicholas F. Anesi

cc: Client, Karmen King

Attachments:

Exhibit 1, Human Health Risk Analysis
Exhibit 2, Sample location map

¹ Samples taken from sampling locations are not single grab samples, but 'composites by area' (i.e., areas 1,2,3 or A,B,C).

Human Health Risk Analysis

Lot 1, Cole Ranch Subdivision, Silverton CO. 81433

Parcel #: 47730300051000

Prepared for: **Julie and Todd Sams**

Prepared by: **Karmen King/Toxicologist/Grayling LLC**
18032 Rd G, Cortez CO. 81321

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Figure:

'New Construction of: The Sams Residence' Lot 1 Cole Ranch Subdivision. Project # 20-02; created by: Mountain grain architecture, Durango CO. Sheet #: F.

Tables

- Table 1. EAST AREA Soil Sample Results.
- Table 2. WEST AREA Soil Sample Results
- Table 3. Forest Queen Water Sample Results.
- Table 4. Forest Queen Sludge/Sediment Sample Results.

Attachment A:

Lot 1 Sample Analysis Data Report (2021 Evergreen Analytical, collected by Grayling LLC).

Attachment B:

Forest Queen Historic Water Quality Results (XXX - YYY)

Attachment C:

Agency Correspondence

1.0 Introduction

The following summarizes the potential human health risk attributable to environmental contaminant exposure associated with Lot 1, Cole Ranch Subdivision, Silverton CO (referred to as Lot #1 – Cole Ranch, or the Sams' Lot). The owners (Julie and Todd Sams) wish to identify the most suitable building location within their Lot that will result in the least risk attributable to environmental contaminant exposure.

Their Lot is closely associated to the **Forest Queen**; a mine site encompassed by the Bonita Peaks Superfund Site, and they are concerned that historic and ongoing contamination associated with this mine site may pose a risk to their health. To address this concern, the Sams' requested this risk analysis of their property, and identify the most suitable area to build their future home.

The **Attached Figure "THE SAMS RESIDENCE"** shows the location and portions of Lot #1 – Cole Ranch in relation to County Road 2 (CR2), the Forest Queen Mine, and the potential BLM locations of forest queen staging area and debris/equipment storage. As shown on this Figure, there are two areas within Lot #1 that are suitable in size for a residential building. These areas are referred to as:

- 1 **the East area (on the East side of County Road 2 [CR2]):** this area is the closest to the Forest Queen Mine (approximately 800 ft.), and
- 2 **the West area (on the West side of CR2)** that occurs in the Animas River valley bottom (that occurs approximately 1,200 ft away from the Forest Queen).

1.1 Purpose

The purpose of this document is to determine the human health risk associated with a residence located on either the East or the West areas of Lot 1, Cole Ranch Subdivision, Silverton CO.

Karmen King/Sole Proprietor of Grayling LLC prepared this document. Ms. King is a Toxicologist and sole owner of Grayling LLC who lives part-time in Silverton and Cortez, Colorado. Ms. King has worked as a professional toxicologist consultant for over 33 years and has worked on over 200 different Superfund (CERCLA) and Resource Conservation and Recovery Act (RCRA) Facility contaminated sites. Karmen has been held responsible for the risk analysis of complex watershed scale Superfund Sites including Operable Unit 3 of the Rocky Flats Environmental Technology Site (RFETS), Operable Units 2, 11 and 12 of the California Gulch Superfund Site, the entire Barker Hughesville Superfund Site and the Nelson Tunnel Site (Creede, CO). A complete resume listing project experience can be made available upon request.

This document relies upon several lines of evidence to determine the cumulative or combined risk in the two building site areas within the Lot #1 – Cole Ranch. An evaluation of the potential risk was determined by reviewing existing records and studies completed by agencies and others (USGS, EPA, BLM etc.) (Section 2.1) by conducting an exposure analysis (Section 2.2) , and by coordination/conversation with agencies and other points of contact who are currently working with the Forest Queen property (Section 1.3).

1.2 Forest Queen – Site Location and History

The Forest Queen abandoned mine site (abandoned mined lands [AMI] site #156) is located 4.2 miles northeast of Silverton with a legal description of T42N R6W sec. 30 SE ¼ New Mexico Principal Meridian, with coordinates of 37° 51' 58" N Latitude, 107° 33' 54" W longitude.

The site consists of a collapsed adit and historic waste rock pile (now buried, or moved and a part of the road base of CR2). Historically mine drainage flowed across the adjacent two-track CR2 into a small retention pond which then overflowed into a wetland adjacent to the Animas River. Flow ranges from 1-2 gallons per minute. There are no buildings, mining equipment or other structures at the site and the site covers approximately 0.5 acres. The site is not fenced and is accessible to the public. The site lies within public lands managed by the Bureau of Land Management (BLM) (BLM, 1996; 1997 and 2007).

The adit lies on the Empire No. 1 claim that was originally located by The Treasure Mountain Gold Mines & Power Company in 1919 and recorded in 1928. The Forest Queen operated sometime between 1928 and 1984. The site was surveyed and approved in 1930, but never patented. A series of owners were associated with the site until claim rental was ceased in 1993 after fees became delinquent. There is no historical data on mining production (BLM, 2007).

2.0 Methods

To determine the environmental contaminant exposure risk to the human health within the Sam's property, several lines of evidence were evaluated including the:

- review of existing records (Section 2.1),
- the analysis of human health exposure to potentially contaminated media (soils, dust, groundwater etc.) with the collection and risk analysis of soil samples collected throughout the two building sites (Section 2.2), and
- correspondence with area regulatory points of contact to understand the conditions of the Forest Queen (Section 2.3).

A summary of the methods applied for each line of evidence is provided below.

2.1 Existing Records Reviewed

The Forest Queen has been the subject of intense study by a variety of entities due to the presence of a flowing mine portal discharge. This discharge is heavily laden with iron and yields an intense rust orange precipitate that poses an aesthetic concern as well as a loading/contaminant release issue to receiving surface water systems. The Sams and myself have been able to locate an abundance of records through internet resources, the local BLM Field office, the current EPA Bonita Peaks Superfund Site Profile and other EPA points of contact, and from the community. A summary of the types of records obtained include;

- Existing and historic records describing the Forest Queen contaminant conditions including sampling and analysis results of surface water, mine portal water, sediments and soil,
- Existing and historic records describing the Forest Queen reclamation efforts completed by the Bureau of Land Management, and monitored by the Division of Reclamation and Mine Safety, and
- Existing records of any sampling and analysis completed by the Environmental Protection Agency, Colorado Department of Public Health and Safety, US Geological Survey, Colorado Geologic Survey and others.

A list of the documents reviewed are provided in **Section 5.0 References Cited**.

2.2 Lot 1; East vs. West Area Exposure Analysis

The Forest Queen has been studied by a number of agencies and determined to be releasing contaminants to the environment. These contaminants include metals and acidic water. The contaminants have affected the immediate and surrounding area by contributing elevated concentrations of metals associated with portal water flows and accumulated sludges from the portal, as well as elevated metals in adjacent area soils. The contaminated portal water may connect with underlying groundwater. The contaminated soils can impact air quality with the release of dust.

As a result of this contamination, there are several routes by which the Sams can become exposed to environmental contaminants. Given the types of contaminated media that are present, the potential exposure pathways by which the Sams could be affected by Forest Queen impacted media (dust and ambient air, soils, water and sediments/sludges, and groundwater) include;

- Inhalation of dust and ambient air,
- Incidental ingestion of soil,
- Ingestion of groundwater as potable water,
- Ingestion of bioaccumulated contaminants through the food chain from soil contaminant uptake, and
- Dermal contact of contaminated soil and groundwater

Upon review of the site setting characteristics and the proposed future land use of residential occupation; it was determined that the two predominant exposure media of potential concern would include surface soil and groundwater. The construction of the Sams' residence may also reveal subsurface soil as an exposure media, but this exposure would be brief in duration as compared to the exposure to surface soil.

Surface soil sampling was conducted in both the East and West areas within the Sams' Lot that encompass the two possible building sites. Sampling grids were established and overlain on each of the two areas. Three composite surface soil samples were taken from areas within the grids where the surface soil would remain undisturbed after residence construction. Composites were collected following standard USGS and EPA protocols for the collection of homogenous surface media settings. Three composite samples were acquired for each building area in order to be able to generate simple summary statistics for the metals results. Samples were submitted to Evergreen Analytical Laboratory in Durango, Colorado for analysis of bulk total metals content for aluminum, arsenic, cadmium, copper, chromium, lead, and zinc. These are the primary contaminants of concern associated with the Bonita Peaks Superfund Site, and for the Forest Queen. Analytical results are provided in **Attachment A, Tables 1 and 2** below summarize the soil results.

Groundwater will ultimately be relied upon as the Sams' potable supply. However, the installation of a groundwater well and sampling of this media is beyond the scope of this evaluation. Groundwater quality was inferred from analysis results from portal water and sludges collected at the time of the surface soil sampling described above. Results are provided in **Tables 3 and 4**.

2.3 Agency Correspondence

Since the Sams' purchased their property in 2013, they have been actively completing environmental due diligence of their property, the ongoing activities associated with the Forest Queen mine site and the Bonita Peaks Superfund Site. The Sams have corresponded routinely with regional representatives from the EPA, CO DRMS, CDPHE, BIM and others.

3.0 Results

Several lines of evidence were compiled in order to complete a thorough risk analysis of the Sam's property. These lines of evidence include;

1. Review of historic studies completed by others including the BLM, EPA, USGS, Colorado Department of Reclamation and Mine Safety (Section 3.1),
2. On-site exposure pathway analysis based on existing conditions (Section 3.2), and
3. Correspondence with area regulatory agencies who are addressing issues surrounding the Forest Queen mine site (Section 3.3).

3.1 Results from Historic Studies

It is important to understand the recent history associated with the Forest Queen since it has been well studied and the site itself has undergone several phases of remedy activity by the BLM. A brief chronology of relevant Forest Queen activities are as follows;

- 1994, July: The site was inventoried by the U.S. Bureau of Mines (USBM) during an inventory of abandoned mines in the upper Animas watershed. Based on the data collected, the site was identified as needing further testing and water sampling.
- 1995, USBM sampled and analyzed soils and sediment samples taken from the Forest Queen. The soils were taken above and below the adit. Results include: arsenic 4-6 mg/kg, cadmium, 0.5 – 7 mg/kg, copper 46 – 50 mg/kg, lead 214 – 304 mg/kg, manganese 645 – 1585 mg/kg, mercury <1 – 1 mg/kg and zinc 130 – 472 (BLM, no date).
- 1994 – 1996: BLM compiled data from water samples taken at the site five times during this period. A range of values includes: pH 5.01 – 5.5, specific conductance 767 – 995, flow 5 – 15 gpm, aluminum 1.7 – 2.09 mg/l, cadmium <0.01 – 11 mg/l, iron 23 – 25 mg/l, manganese 2.4 – 2.49 mg/l, and zinc 0.53 – 0.75 mg/l. These values exceeded aquatic life criteria and human health criteria for the protection of drinking water uses. A review by a BLM soil scientist for soil samples, determined that they contain high enough concentrations of Ce, Mn, Mo, Pb and Zn that they might be toxic to plants. The BLM concluded "since heavy metals occur in the surface water and the transfer of contamination between the surface water and groundwater occurs in areas of substantial surface-ground water exchange such as in the wetlands adjacent to the adit, this may indicate a possible pathway for contamination". The BLM concluded that "a removal action is appropriate for the Forest Queen mine site and an Engineering evaluation/Cost Analysis (EE/CA) is recommended (BLM, 1996).
- 1995: USBM conducted additional water sampling through 1996.
- 1997 through 2002 – unknown: The treatment systems and wetland areas surrounding the Forest Queen were routinely sampled and studied to determine the effectiveness of the sulfate

reducing bioreactor (i.e. MSE Technology Applications Inc., 1997; CSM, 1998; Wildeman et al., 2002 and others). Observations were dependent on flows. The treatment system retained odors of hydrogen sulfide gas. Water quality appeared to be positively affected by the treatment system.

- 1998: Colorado School of Mines conducted an in-depth evaluation of the water quality effects attributable to the wetland capturing Forest Queen flows. Conclusions indicated that the wetland was functioning well in removing numerous metals. However the wetland may also have been absorbing zinc from additional solid sources. Certain metals were not meeting standards protective of water quality including sulfur, cadmium, lead and zinc. It was also concluded that the wetland is gradually accumulating an increasing quantity of contaminants at some point the wetland will become saturated with a resultant cessation or drastic impairment in treatment ability (CSM, 1998).
- 1999: The BLM constructs a sulfate reducing bioreactor to address flows from the Forest Queen. The installed bioreactor 'was undertaken by the BLM as a technology demonstration project' (Nash, and Fey, 2007 from Professional Paper 1651).
- 1999 - 2007+: BLM and others conduct sampling and analysis to determine if the bioreactor is working sufficiently and/or requires amendment. For instance, in 2007 the BLM reviewed a series of possible amendments to assist with the aeration of the bioreactor effluent (BLM, 2007).
- 2000: the Forest Queen was measured and sampled at least 21 times by Mast and others who recorded pH values in the range of 3.7-6.6, during a 4-year period (Mast et al. 2000a and 2000b; Nash, 1999; Fey et al., 2000; Pavlik et al., 1999). In August 1997 the mine-adit drainage at the collapsed portal had a pH of 5.1 and high concentrations of cadmium, iron and zinc. Concentrations of dissolved zinc ranged from 355 to 709 ug/L. Passive leach studies of the mine waste taken from two samples yielded similar results with a high score for acid generation and a very low score for metal release (Nash, and Fey, 2007 from Professional Paper 1651).
- 2007: the USGS published a compilation of mine site inventories and environmental studies throughout the Animas River Watershed (Church, S.E. et al., 2007; including Chapters E5, E6 from Volume 1, and E25 from Volume 2). The Forest Queen was studied and described in several chapters using data collected by USGS and others. Studies of 'pre- and post' remediation were completed. Results include: discharge at the Forest Queen pre-remediation ranged from 0.022 -- 0.077 ft³/s during 1997 and was highest in June and July following peak snow-melt. Mine water had high concentrations of sulfate, manganese and zinc. Post-remediation sampling in 1998 demonstrated more uniform flows with less snow-melt influences (Church, S.E. et al., Chapter E5 of the Professional Paper 1951). Stanton, M.R. et al., (2007; Chapter E25, Volume 2

of Professional Paper 1651) studied the wetland area outside of the Forest Queen portal to determine metals assimilative capacity and other environmental characteristics. They observed enriched subsurface material that was likely deposited waste rock or ore; outside of the portal. The wetland was found to provide considerable buffering capacity to reduce metals load and pH influences to the Animas River (Pavlik et al., 1999).

- 2019 (true date unknown): The 1999 bioreactor was eventually dismantled and buried on-site adjacent to CR2, within 400 feet of the Sams' property. There were no records found in the BLM office repository that describe the bioreactor dismantling. Currently an 'iron terrace' system is in place that oxidizes the Forest Queen portal discharge allowing for iron to precipitate out of solution. This terrace system contains logs placed in a series of benches that provide the surface area for the precipitation to occur. There were records found in the BLM repository that describe the construction specifications, or efficacy of this terrace system. Given the fact that 'logs' provide the surface area media for the iron terrace reaction, it is likely they need to be maintained by replacement on a routine basis. It is unknown where the spent logs are taken and disposed of.

The Animas River Stakeholders Group compiled available, existing water, sediment and soil quality information for mine sites throughout the Silverton area. **Attachment B** provides a concise summary of the water quality information that was compiled for the Forest Queen. As shown in this attachment, several agencies (USGS, BLM, EPA, CDPHE and others) have studied the mine site. Studies summarized in **Attachment B** span from 1994 through 1999.

The formation of the Bonita Peaks Superfund Site has been iterative, cooperative process. Numerous studies and remedial actions have been completed. While the site-wide remedial investigation is ongoing, mining-related sources in the Site were identified where contaminant migration issues could be addressed through interim remedial actions. EPA issued a proposed plan for these actions on June 14, 2018, for public comment. The proposed plan identified a preferred alternative for each of five types of contaminant migration issues and compared it to the "no action" alternative. The Forest Queen remains a mine site of interest captured within the Site boundaries.

3.2 Results from the Lot 1; East vs. West Exposure Analysis

Results from the surface soil samples from the East and West areas of the Sams' Lot are provide in **Tables 1 and 2**. Results from samples from Forest Queen media portal water and sediment/sludges are provided in **Tables 3 and 4**. Results from the surface soils samples taken from the East area (Table 1) and the West area (Table 2) reveal *elevated levels of metals in soils taken from the East area*. The highest observed concentrations of aluminum, copper, iron, lead, manganese and zinc were all observed in the East area. These results indicate that the East area of Lot 1 may demonstrate impacts from the historic influence of the Forest Queen mine. Results from the water and sediment/sludge samples show elevated concentrations of metals including iron and manganese.

The possible exposure routes by which the Sams' could be affected by Forest Queen mine contaminated materials were summarized in Section 2.2. The most significant sources of exposure were considered to be soil and groundwater. A discussion of the exposure pathway analysis of these two sources is summarized as follows;

Surface soils exposure: Surface soils have likely been impacted by Forest Queen portal surface water and sediment/sludge releases, as well as the management of forest queen materials over the historic reclamation activities. This mine is historic and has been releasing impacted water and sediment/sludges since the 1800s. In addition, the mine has seen several episodes of reclamation activity that caused disturbance of site materials. The mine continues to release metals (and pH) impacted water and sediments/sludges. Historic waste rock remains on site adjacent and underneath CR 2. All of these media have directly and indirectly impacted soils within the Sams' property. Due to the East area being in closest proximity to the Forest Queen, the East area exhibits the highest impact.

Analysis of surface soils taken from the Sams' property in the reveal elevated levels of metals in soils in the East area. These results are comparable to soils samples collected by the USBM from around the Forest Queen mine (refer to footnote summary for Table 1). The Sams could become exposed to these soils via exposure pathways of direct contact, inhalation and dermal absorption. *Of particular concern is inhalation of surface soils as dust.* CR2 bisects the historic Forest Queen mine footprint. The road now occurs on top of historic mine materials. Dust is a constant nuisance from the road due to the persistent traffic created by ATVs and other vehicles. As of 2022, the ATV traffic in the entire valley will be focused in the Howardsville to Animas Forks area which encompasses CR2. At the time of the surface soil sampling (2021), over 56 ATV vehicles passed the Sams' East area property within one hour in June 2021. This amount of traffic will likely increase given the promotion of ATV traffic in the lower valley.

Groundwater exposure: Groundwater has likely been impacted by the Forest Queen. As previously mentioned, the mine has been releasing portal water and sediment/sludges since the 1800s. Currently the portal water is routed through an iron terracing bioreactor into a receiving wetland. These features will ultimately communicate with the underlying groundwater. Given the valley form in this area, the groundwater that is most likely to be impacted by the Forest Queen would occur in the East Area of Lot 1. The West Area of Lot 1 occurs in the alluvial terraces of the Animas River. The groundwater in the West area is likely a reflection of the character of the alluvium and the Animas River water quality. Alluvium is very porous and transmissible. It is less likely that a groundwater well in the West area would be affected by the Forest Queen.

Surrounding land use impacts to the groundwater movement needs to be considered. Recent development of Lot 2 (George Riley) to the South of the Sams' East area is ongoing. A residence with a potable well is being constructed. The potable well will draw from the groundwater underlying the Sams' Lot (1). Since this well is located in a 'downgradient' area to the Sams' East

area, it could create a '***cone of depression***' in the groundwater table that would draw Forest Queen influenced water towards the Sams' East Area.

Table 1. EAST AREA Soil Sample Results.

Analyte	Units	Sample Results			Average
		R1	R2	R3	
Aluminum	mg/kg dry	15,700.00	16,400.00	16,900.00	16,333.33
Cadmium	mg/kg dry	ND	ND	ND	ND
Chromium	mg/kg dry	6.21	6.49	6.96	6.55
Copper	mg/kg dry	59.70	59.70	65.90	61.77
Iron	mg/kg dry	36,700.00	40,500.00	43,900.00	40,366.67
Lead	mg/kg dry	159.00	146.00	204.00	169.67
Manganese	mg/kg dry	1,450.00	1,440.00	1,780.00	1,556.67
Nickel	mg/kg dry	8.30	8.54	8.37	8.40
Zinc	mg/kg dry	249.00	230.00	296.00	258.33
Arsenic	mg/kg dry	12.00	11.30	11.40	11.57

- USBM Results: Arsenic 4 – 6 mg/kg, Cadmium 0.5 – 7, Copper 46 – 50, Lead 214 – 304, Manganese 645 – 1585, Mercury <1 – 1 and Zinc 130 – 472.

Table 2. WEST AREA Soil Sample Results.

Analyte	Units	Sample Results			Average
		RA	RB	RC	
Aluminum	mg/kg dry	14,500.00	15,900.00	14,200.00	14,866.67
Cadmium	mg/kg dry	ND	ND	ND	ND
Chromium	mg/kg dry	6.03	6.12	5.75	5.97
Copper	mg/kg dry	57.80	60.90	55.50	58.07
Iron	mg/kg dry	38,300.00	30,900.00	33,300.00	34,166.67
Lead	mg/kg dry	128.00	165.00	121.00	138.00
Manganese	mg/kg dry	1,360.00	1,260.00	1,230.00	1,283.33
Nickel	mg/kg dry	7.56	8.29	7.46	7.77
Zinc	mg/kg dry	183.00	258.00	176.00	205.67
Arsenic	mg/kg dry	11.70	12.70	11.30	11.90

Table 3. Forest Queen Water Sample Results.

Analyte	Results	Units	Drinking Water Criteria
Aluminum	1.21	mg/l	20
Iron	20.3	mg/l	14
Arsenic	0.0011	mg/l	0.01
Cadmium	0.0008	mg/L	
Chromium	ND	mg/l	
Copper	ND	mg/L	
Lead	0.0019	mg/L	0.015
Manganese	1.7	mg/L	0.43
Nickel	0.0159	mg/L	
Zinc	0.231	mg/L	6

Table 4. Forest Queen Sludge/Sediment Sample Results.

ANALYTE	SED 1 Results	SED 2 Results	Units	Risk Based Soil SSL
Aluminum	1,910.00	13,300.00	mg/kg dry	77,000.00
Cadmium	5.72	5.04	mg/kg dry	71.00
Chromium	ND	ND	mg/kg dry	
Copper	105.00	84.20	mg/kg dry	3,100.00
Iron	383,000.00	148,000.00	mg/kg dry	55,000.00
Lead	44.10	117.00	mg/kg dry	400.00
Manganese	93.00	579.00	mg/kg dry	1,800.00
Nickel	ND	6.24	mg/kg dry	1,500.00
Zinc	59.50	472.00	mg/kg dry	23,000.00
Arsenic	42.10	38.60	mg/kg dry	0.68

3.3 Results from the Correspondence with Area Regulatory Agencies

Since the Gold King mine site release, CoDRMS in coordination with the EPA, BLM and others, have been taking a critical inventory of all known historic mine features that have potential water releases associated with it. The Forest Queen has been inventoried by DRMS for years. The 2016 'Draining Mine Inventory Field Form' completed by CoDRMS was reviewed and provided summary descriptions of site features including; waste pile composition: orange, iron stained, coarse to fine waste rock with very little mineralization, feature discharge infiltrates into a pond built out of waste(?), discharge piped and channeled, pipes to sulfate reducing bioreactor are clogged in several places. These observations, in addition to observations of an existing seep that appears to be routing water from the adit (and not being captured by the piping to the iron terrace), the sulfate reducing bioreactor; indicate that the existing reclamation features will likely require ongoing maintenance and possible amendment. Of particular concern (as noticed by agency personnel during a 2021 site visit) the existing adit control features (underground) may not be operating as intended. There is a noted seep that exists adjacent to the adit that routes water away from the piping that routes adit water to the iron terrace system.

The historic collapse was bolstered and addressed by the BLM in 1999. There is current concern that the remedied underground features may require amendment in the future. In the event that the Forest Queen portal is to be amended, there is a potential for the East area of the Sams' property to be affected. ***As shown on the attached Figure, there are several support areas identified for Forest Queen maintenance that occur immediately adjacent to the East area of Lot 1.*** Forest queen reclamation activities will introduce traffic, management of materials and waste and transport of materials and waste within close proximity to the Sams' East area.

The BLM has already expressed concern for the Sam's well-being by scheduling their 2021 reclamation efforts (to remove the historic bioreactor) while the Sam's were away from their property. The future of the installed iron terracing is uncertain. The future of the underground portal reclamation is uncertain. If the Forest Queen exhibits any compromised integrity, the BLM (and DRMS) will likely design a remedial action to address any potential threat. If the Sams were to be in residence to the East Area of their Lot (which lies immediately adjacent to the Forest Queen), they will likely be impacted.

The Bonita Peaks Superfund Site is a 'watershed' scale Site that will require "multi decadal remedial actions" to address (refer to Silverton Standard, Volume 147, Issue 32, March 3, 2022, Page 1). The focus of this Site is to address the cumulative contamination contributed by multiple sources (mine sites, smelters, and other mine-related sources) in the watershed. The EPA, BLM, USFS, DRMS and others have been collecting monitoring data for years. The ability to identify all of the contributing sources to a watershed is dependent upon gathering and interpreting years of data throughout the watershed. Ultimately, the success of achieving the end goals of the Superfund Site will be measured by the water quality within the receiving drainages of the Animas River, Cement Creek, Mineral Creek and others. Through the course of the remedy action process, remedy efforts will 'evolve' to address any new contamination issue etc. As such, the work within the Superfund Site is to be long term and iterative. The Forest Queen will receive continued attention, study, access and remedy development for years to come. Every additional physical disturbance effort (amended remedy of the Forest Queen, or maintenance of the iron terracing) yields a possible opportunity for the Sams' property to be affected.

4.0 Conclusions and Recommendations

In conclusion, this document summarized three lines of evidence to determine the potential human health risk to the Sams' if they build on the East area or the West area of their Lot. This document evaluated the possible risk to the Sams' as a result of their property's proximity the Forest Queen mine site. The three lines of evidence evaluated included an evaluation of existing studies and records that characterize the Forest Queen mine, an evaluation of the potential exposure pathways to the Sams' that occur at the East vs. the West areas of their property, and evaluation of findings from correspondence with area agency representatives who are currently addressing environmental contaminant concerns with the Forest Queen mine. A summary of conclusions are;

1. Historic records indicate that the environmental contaminant conditions associated with the Forest Queen have been substantial enough to warrant a preliminary action on the behalf of the BLM (with the construction of a bioreactor to address mine adit releases in 1999). Initial studies dating back to 1970s – 1980s preliminary investigations by the USGS, USBM, CDPHE, BLM, EPA and others all identified the concerns associated with the Forest Queen. The BLM has made significant strides to address these concerns, however the installed remedy continues to change. Review of current site investigation records, and due to the fact that the Forest Queen site has been included as a mine feature to address within the Bonita Peaks Superfund Site; it has been demonstrated that there are existing, current concerns surrounding the Forest Queen. Agencies involved with the Superfund Site continue to monitor and evaluate the best approach to address ongoing Forest Queen effects to the Animas Watershed. In conclusion, the Forest Queen continues to present a possible source of contamination of potential concern to the Sams.
2. An exposure evaluation of the East vs West areas of the Sams' Lot identified the East area as a higher risk concern. The surface soil metals concentrations were determined from a field sampling effort in 2021. The results demonstrated elevated concentrations in the East area as compared to the West area. Furthermore, due to the proximity of the East area to CR2, the Sams' will also be affected by road dust which may contain waste rock from the Forest Queen. In addition, the possible groundwater/potable supply on the East area is more likely to be impacted by the Forest Queen due to its close proximity, and the possible influences of draw down (cone of depression) created by additional residential consumption upgradient of the Sams. These combined exposure pathways of concern on the East Area lend to the conclusion that building on the East Area of the Lot would pose a higher risk to the Sams as compared to the West area.
3. Correspondence with area agency representatives has lead to the understanding that further study and possible disturbance to the Forest Queen is likely to occur in the future as a result of ongoing Superfund Site strategies. Communication with agency representatives indicates that they are in agreement with the Sams' – that building their residence on the West Area would be more prudent and yield less risk to the Sams (refer to letters – correspondence provided by Mark Rudolph/CDPHE Project Manager – Bonita Peaks Superfund Site in **Attachment C**).

In summary, all of the lines of evidence pursued in this assessment yielded the same results indicating that the human health risk to the Sams' is a concern on the East area of their property; due to the presence of Forest Queen mine site issues. Therefore, it is recommended that the Sams be able to construct their residence on the West area in order to minimize the risk concerns associated with the Forest Queen.

5.0 References

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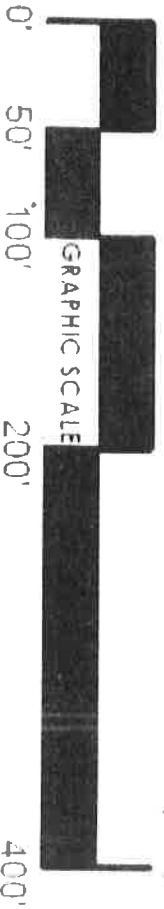
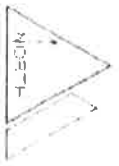
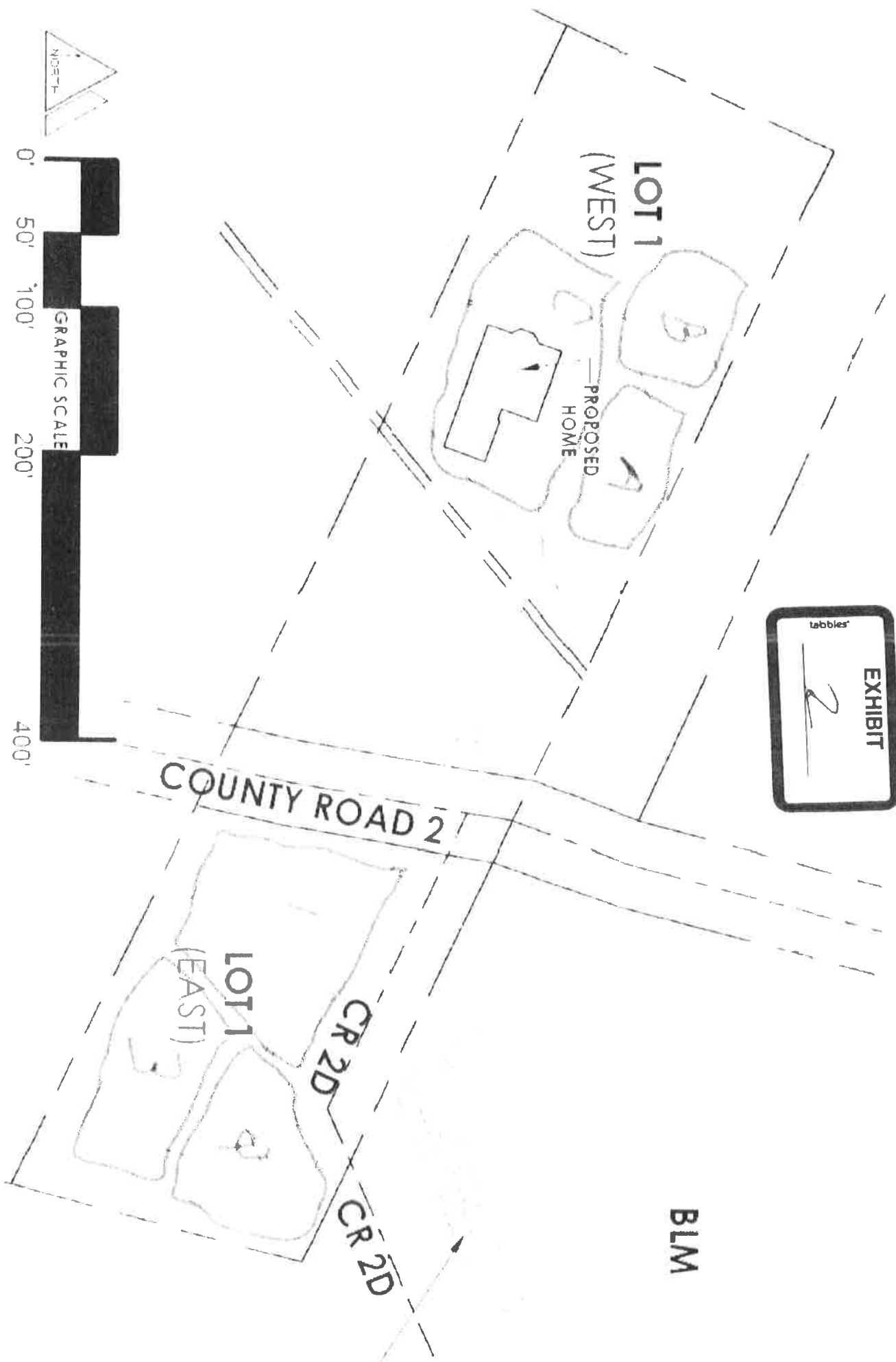
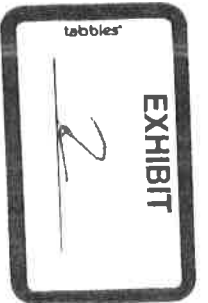
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19 August 2021

Karmen King
Karmen King Grayling LLC
18032 Rd G
Cortez, CO 81321
RE: Metals

Enclosed are the results of analyses for samples received by the laboratory on 08/06/21 15:30.
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads 'Debbie Zufelt'.

Debbie Zufelt
Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.
TNI Certificate Number: T104704514-21-12.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-21-14

Attachment A:

**Lot 1 Sample Analysis Data Report (2021 Evergreen
Analytical, collected by Grayling LLC).**



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Karmen King Grayling LLC
18032 Rd G
Cortez CO, 81321

Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
R A	2108071-01	Solid	08/05/21 00:00	08/06/21 15:30	
R B	2108071-02	Solid	08/05/21 00:00	08/06/21 15:30	
R C	2108071-03	Solid	08/05/21 00:00	08/06/21 15:30	
R I	2108071-04	Solid	08/05/21 00:00	08/06/21 15:30	
R I DUP	2108071-05	Solid	08/05/21 00:00	08/06/21 15:30	
R 2	2108071-06	Solid	08/05/21 00:00	08/06/21 15:30	
R 3	2108071-07	Solid	08/05/21 00:00	08/06/21 15:30	
Forest Queen H2O	2108071-08	Water	08/05/21 00:00	08/06/21 15:30	Q1, Q3
Sed 1	2108071-09	Solid	08/05/21 00:00	08/06/21 15:30	
Sed 2	2108071-10	Solid	08/05/21 00:00	08/06/21 15:30	

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Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

RA

2108071-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	14500	5.00	2.40	mg/kg dry	100	08/18/21 12:59	6010B		AES
Cadmium	< 5.00	5.00	1.10	mg/kg dry	100	08/18/21 12:59	6010B		AES
Chromium	6.03	5.00	0.400	mg/kg drv	100	08/18/21 12:59	6010B		AES
Copper	57.8	5.00	2.39	mg/kg dry	100	08/18/21 12:59	6010B		AES
Iron	38300	100	43.0	mg/kg dry	1000	08/19/21 10:56	6010B		AES
Lead	128	10.0	0.906	mg/kg dry	100	08/18/21 12:59	6010B		AES
Manganese	1360	50.0	4.16	mg/kg dry	1000	08/19/21 10:56	6010B		AES
Nickel	7.56	5.00	0.874	mg/kg dry	100	08/18/21 12:59	6010B		AES
Zinc	183	10.0	1.71	mg/kg drv	100	08/18/21 12:59	6010B		AES
Total Metals by ICPMS									
Arsenic	11.7	1.00	0.0950	mg/kg dry	1000	08/18/21 13:40	6020A		AES

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Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

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08/19/21 17:14

R B

2108071-02 (Soil)

Analyte	Result	REL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	15900	5.00	2.40	mg/kg dry	100	08/18/21 13:11	6010B		AES
Cadmium	< 5.00	5.00	1.10	mg/kg dry	100	08/18/21 13:11	6010B		AES
Chromium	6.12	5.00	0.400	mg/kg dry	100	08/18/21 13:11	6010B		AES
Copper	60.9	5.00	2.39	mg/kg dry	100	08/18/21 13:11	6010B		AES
Iron	30900	100	43.0	mg/kg dry	1000	08/19/21 11:02	6010B		AES
Lead	165	10.0	0.906	mg/kg dry	100	08/18/21 13:11	6010B		AES
Manganese	1260	50.0	4.16	mg/kg dry	1000	08/19/21 11:02	6010B		AES
Nickel	8.29	5.00	0.874	mg/kg dry	100	08/18/21 13:11	6010B		AES
Zinc	258	10.0	1.71	mg/kg dry	100	08/18/21 13:11	6010B		AES
Total Metals by ICPMS									
Arsenic	12.7	1.00	0.0950	mg/kg dry	1000	08/18/21 13:44	6070A		AES

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Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

RC

2108071-03 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	14200	5.00	2.40	mg/kg dry	100	08/18/21 13:26	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	08/18/21 13:26	6010B		AES
Chromium	5.75	5.00	0.400	mg/kg dry	100	08/18/21 13:26	6010B		AES
Copper	55.5	5.00	2.39	mg/kg dry	100	08/18/21 13:26	6010B		AES
Iron	33300	100	43.0	mg/kg dry	1000	08/19/21 11:11	6010B		AES
Lead	121	10.0	0.906	mg/kg dry	100	08/18/21 13:26	6010B		AES
Manganese	1230	50.0	4.16	mg/kg dry	1000	08/19/21 11:11	6010B		AES
Nickel	7.46	5.00	0.874	mg/kg dry	100	08/18/21 13:26	6010B		AES
Zinc	176	10.0	1.71	mg/kg dry	100	08/18/21 13:26	6010B		AES
Total Metals by ICPMS									
Arsenic	11.3	1.00	0.0950	mg/kg dry	1000	08/18/21 13:54	6020A		AES

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Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

R 1

2108071-04 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	15700	5.00	2.40	mg/kg dry	100	08/18/21 13:30	6010B		AES
Cadmium	< 5.00	5.00	1.10	mg/kg dry	100	08/18/21 13:30	6010B		AES
Chromium	6.21	5.00	0.400	mg/kg dry	100	08/18/21 13:30	6010B		AES
Copper	59.7	5.00	2.39	mg/kg dry	100	08/18/21 13:30	6010B		AES
Iron	36700	100	43.0	mg/kg dry	1000	08/19/21 11:13	6010B		AES
Lead	159	10.0	0.906	mg/kg dry	100	08/18/21 13:30	6010B		AES
Manganese	1450	50.0	4.16	mg/kg dry	1000	08/19/21 11:13	6010B		AES
Nickel	8.30	5.00	0.874	mg/kg dry	100	08/18/21 13:30	6010B		AES
Zinc	249	10.0	1.71	mg/kg dry	100	08/18/21 13:30	6010B		AES
Total Metals by ICPMS									
Arsenic	12.0	1.00	0.0950	mg/kg dry	1000	08/18/21 11:04	6020A		AES

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Project Manager: Karmen King

Reported:
08/19/21 17:14

R 1 DUP

2108071-05 (Soll)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	15700	5.00	2.40	mg/kg dry	100	08/18/21 13:34	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	08/18/21 13:34	6010B		AES
Chromium	6.00	5.00	0.400	mg/kg dry	100	08/18/21 13:34	6010B		AES
Copper	58.8	5.00	2.39	mg/kg dry	100	08/18/21 13:34	6010B		AES
Iron	35600	100	43.0	mg/kg dry	1000	08/19/21 11:14	6010B		AES
Lead	164	10.0	0.906	mg/kg dry	100	08/18/21 13:34	6010B		AES
Manganese	1460	50.0	4.16	mg/kg dry	1000	08/19/21 11:14	6010B		AES
Nickel	7.87	5.00	0.874	mg/kg dry	100	08/18/21 13:34	6010B		AES
Zinc	248	10.0	1.71	mg/kg dry	100	08/18/21 13:34	6010B		AES
Total Metals by ICPMS									
Arsenic	11.9	1.00	0.0950	mg/kg dry	1000	08/18/21 14:15	6020A		AES

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Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

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R 2

2108071-06 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	16400	5.00	2.40	mg/kg dry	100	08/18/21 13:38	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	08/18/21 13:38	6010B		AES
Chromium	6.49	5.00	0.400	mg/kg dry	100	08/18/21 13:38	6010B		AES
Copper	59.7	5.00	2.39	mg/kg dry	100	08/18/21 13:38	6010B		AES
Iron	40500	100	43.0	mg/kg dry	1000	08/19/21 11:16	6010B		AES
Lead	146	10.0	0.906	mg/kg dry	100	08/18/21 13:38	6010B		AES
Manganese	1440	50.0	4.16	mg/kg dry	1000	08/19/21 11:16	6010B		AES
Nickel	8.54	5.00	0.874	mg/kg dry	100	08/18/21 13:38	6010B		AES
Zinc	230	10.0	1.71	mg/kg dry	100	08/18/21 13:38	6010B		AES
Total Metals by ICPMS									
Arsenic	11.3	1.00	0.0950	mg/kg dry	1000	08/18/21 14:18	6020A		AES

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Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

R 3

2108071-07 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	16900	5.00	2.40	mg/kg dry	100	08/18/21 13:41	6010B		AES
Cadmium	<5.00	5.00	1.10	mg/kg dry	100	08/18/21 13:42	6010B		AES
Chromium	6.96	5.00	0.400	mg/kg dry	100	08/18/21 13:42	6010B		AES
Copper	65.9	5.00	2.39	mg/kg dry	100	08/18/21 13:42	6010B		AES
Iron	43900	100	43.0	mg/kg dry	1000	08/19/21 11:18	6010B		AES
Lead	204	10.0	0.906	mg/kg dry	100	08/18/21 13:42	6010B		AES
Manganese	1780	50.0	4.16	mg/kg dry	1000	08/19/21 11:18	6010B		AES
Nickel	8.37	5.00	0.874	mg/kg dry	100	08/18/21 13:42	6010B		AES
Zinc	296	10.0	1.71	mg/kg dry	100	08/18/21 13:42	6010B		AES
Total Metals by ICPMS									
Arsenic	11.4	1.00	0.0950	mg/kg dry	1000	08/18/21 14:21	6020A		AES

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Debbie Zufelt, Reports Manager

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d:\tech\green\mail\test\comp\050\171220\05001714\22775\Sonoma Sheet Durango, CO 81303

www.GreenAnalytical.com

Karmen King Grayling LLC
18032 Rd G
Cortez CO, 81321

Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

Forest Queen H2O

2108071-08 (Surface Water)

Analyte	Result	RI	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Recoverable Metals by ICP (E200.7)									
Aluminum*	1.21	0.050	0.019	mg/L	1	08/18/21 12:16	EPA200.7		AES
Iron*	20.3	0.050	0.017	mg/L	1	08/18/21 12:16	EPA200.7		AES
Total Recoverable Metals by IC PMS (E200.8)									
Arsenic*	0.0011	0.0010	0.0003	mg/L	1	08/11/21 11:53	EPA200.8		AES
Cadmium*	0.0008	0.0005	0.00003	mg/L	1	08/11/21 11:53	EPA200.8		AES
Chromium*	<0.0020	0.0020	0.0003	mg/L	1	08/11/21 11:53	EPA200.8		AES
Copper*	<0.0005	0.0005	0.0001	mg/L	1	08/11/21 11:53	EPA200.8		AES
Lead*	0.0019	0.0005	0.00003	mg/L	1	08/11/21 11:53	EPA200.8		AES
Manganese*	1.70	0.0020	0.0001	mg/L	1	08/11/21 11:53	EPA200.8		AES
Nickel*	0.0159	0.0005	0.00004	mg/L	1	08/11/21 11:53	EPA200.8		AES
Zinc*	0.231	0.0100	0.0009	mg/L	1	08/11/21 11:53	EPA200.8		AES

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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d:\zulfelt\greenanalytical\comp\97071\2108071-09-01474-001\Sattle Street Durango CO 81303

www.GreenAnalytical.com

Karmen King Grayling LLC
18032 Rd G
Cortez CO, 81321

Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

Sed 1

2108071-09 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	1910	5.00	2.40	mg/kg dry	100	08/18/21 13:45	6010B		AES
Cadmium	5.72	5.00	1.10	mg/kg dry	100	08/18/21 13:46	6010B		AES
Chromium	<5.00	5.00	0.400	mg/kg dry	100	08/18/21 13:46	6010B		AES
Copper	105	5.00	2.39	mg/kg dry	100	08/18/21 13:46	6010B		AES
Iron	383000	1000	430	mg/kg dry	10000	08/19/21 11:20	6010B		AES
Lead	44.1	10.0	0.906	mg/kg dry	100	08/18/21 13:46	6010B		AES
Manganese	93.0	5.00	0.416	mg/kg dry	100	08/18/21 13:45	6010B		AES
Nickel	<5.00	5.00	0.874	mg/kg dry	100	08/18/21 13:46	6010B		AES
Zinc	59.5	10.0	1.71	mg/kg dry	100	08/18/21 13:46	6010B		AES
Total Metals by ICPMS									
Arsenic	42.1	1.00	0.0950	mg/kg dry	1000	08/18/21 14:25	6020A		AES

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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42401027 greenanalytical.com 970-311-1300 1-800-311-1300 75 South Street Durango, CO 81303

www.GreenAnalytical.com

Karmen King Grayling LLC
18032 Rd G
Cortez CO, 81321

Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

Sed 2

2108071-10 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Total Metals by ICP									
Aluminum	13300	5.00	2.40	mg/kg dry	100	08/18/21 13:49	6010B		AES
Cadmium	5.04	5.00	1.10	mg/kg dry	100	08/18/21 13:49	6010B		AES
Chromium	<5.00	5.00	0.400	mg/kg dry	100	08/18/21 13:49	6010B		AES
Copper	84.2	5.00	2.39	mg/kg dry	100	08/18/21 13:49	6010B		AES
Iron	148000	1000	430	mg/kg dry	10000	08/19/21 11:21	6010B		AES
Lead	117	10.0	0.906	mg/kg dry	100	08/18/21 13:49	6010B		AES
Manganese	579	5.00	0.416	mg/kg dry	100	08/18/21 13:49	6010B		AES
Nickel	6.24	5.00	0.874	mg/kg dry	100	08/18/21 13:49	6010B		AES
Zinc	472	10.0	1.71	mg/kg dry	100	08/18/21 13:49	6010B		AES
Total Metals by ICPMS									
Arsenic	38.6	1.00	0.0950	mg/kg dry	1000	08/18/21 14:35	6020A		AES

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Debbie Zufelt

Debbie Zufelt, Reports Manager

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don@greenanalytical.com p: 970-211-1000 f: 970-211-1007 28 South Street Durango, CO 81303

www.GreenAnalytical.com

Karmen King Grayling LLC
18032 Rd G
Cortez CO, 81321

Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

Total Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B211887 - EPA 3050

Blank (B211887-BLK1)

Prepared: 08/17/21 Analyzed: 08/18/21

Aluminum	ND	5.00	mg/kg dry
Cadmium	ND	5.00	mg/kg dry
Chromium	ND	5.00	mg/kg dry
Copper	ND	5.00	mg/kg dry
Iron	ND	10.0	mg/kg dry
Lead	ND	10.0	mg/kg dry
Manganese	ND	5.00	mg/kg dry
Nickel	ND	5.00	mg/kg dry
Zinc	ND	10.0	mg/kg dry

LCS (B211887-BL1)

Prepared: 08/17/21 Analyzed: 08/18/21

Aluminum	389	5.00	mg/kg dry	400	97.4	80-120
Cadmium	183	5.00	mg/kg dry	200	91.3	80-120
Chromium	195	5.00	mg/kg dry	200	97.5	80-120
Copper	403	5.00	mg/kg dry	400	101	80-120
Iron	398	10.0	mg/kg dry	400	99.0	80-120
Lead	189	10.0	mg/kg dry	200	94.3	80-120
Manganese	199	5.00	mg/kg dry	200	99.7	80-120
Nickel	187	5.00	mg/kg dry	200	93.6	80-120
Zinc	180	10.0	mg/kg dry	200	89.8	80-120

LCS Dup (B211887-BSD1)

Prepared: 08/17/21 Analyzed: 08/18/21

Aluminum	392	5.00	mg/kg dry	400	97.9	80-120	0.575	20
Cadmium	177	5.00	mg/kg dry	200	88.5	80-120	3.06	20
Chromium	190	5.00	mg/kg dry	200	95.0	80-120	2.57	20
Copper	394	5.00	mg/kg dry	400	98.6	80-120	2.16	20
Iron	389	10.0	mg/kg dry	400	97.3	80-120	2.28	20
Lead	186	10.0	mg/kg dry	200	92.8	80-120	1.61	20
Manganese	201	5.00	mg/kg dry	200	101	80-120	0.921	20
Nickel	184	5.00	mg/kg dry	200	92.0	80-120	1.63	20
Zinc	176	10.0	mg/kg dry	200	87.9	80-120	2.10	20

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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Karmen King Grayling LLC
18032 Rd G
Cortez CO, 81321

Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

Total Recoverable Metals by ICP (E200.7) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B211811 - Total Rec. 200.7/200.8/200.2

Blank (B211811-BLK1)

Prepared: 08/09/21 Analyzed: 08/18/21

Aluminum	ND	0.050	mg/l
Fluoride	ND	0.050	mg/l

LC'S (B211811-BS1)

Prepared: 08/09/21 Analyzed: 08/18/21

Aluminum	4.12	0.050	mg/L	4.00	103	85.115
Iron	4.12	0.050	mg/l	4.00	103	85.115

LCS Dup (B211811-BSD1)

Prepared 08/09/21 Analyzed: 08/18/21

Aluminium	4.01	0.050	mg/L	4.00	100	85-115	2.65	20
Iron	4.04	0.050	mg/L	4.00	101	85-115	1.97	20

Total Metals by ICPMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%R1'C	%R1'C Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	-------	--------------	-----	-----------	-------

Batch B211888 - EPA 3050M

Blank (B211888-BLK1)

Prepared: 08/17/21 Analyzed: 08/18/21

Arsenic	ND	0.100 mg/kg dry
---------	----	-----------------

LCS (B241888-B51)

Prepared: 08/17/21 Analyzed: 08/18/21

Arsenic	5.22	0.100	mg/kg dry	5.00	104	80-120
---------	------	-------	-----------	------	-----	--------

LCS Dup (B211888-BSD1)

Prepared: 08/17/21 Analyzed: 08/18/21

Arsenic	5.05	0.100 mg/kg dry	5.00	101	80-120	3.24	20
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Green Analytical Laboratories

Deline Zupelt

Debbie Zufelt, Reports Manager

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Karmen King Grayling LLC
18032 Rd G
Cortez CO, 81321

Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

Total Recoverable Metals by ICPMS (E200.8) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B211812 - Total Rec. 200.7/200.8/200.2

Blank (B211812-BLK1)

Prepared: 08/09/21 Analyzed: 08/11/21

Arsenic	ND	0.0010	mg/L
Cadmium	ND	0.0005	mg/L
Chromium	ND	0.0020	mg/L
Copper	ND	0.0005	mg/L
Lead	ND	0.0005	mg/L
Manganese	ND	0.0020	mg/L
Nickel	ND	0.0005	mg/L
Zinc	ND	0.0100	mg/L

LCS (B211812-BS1)

Prepared: 08/09/21 Analyzed: 08/11/21

Arsenic	0.0504	0.0010	mg/L	0.0500	101	85-115
Cadmium	0.0499	0.0005	mg/L	0.0500	99.8	85-115
Chromium	0.0456	0.0020	mg/L	0.0500	91.2	85-115
Copper	0.0456	0.0005	mg/L	0.0500	91.2	85-115
Lead	0.0500	0.0005	mg/L	0.0500	99.9	85-115
Manganese	0.0505	0.0020	mg/L	0.0500	101	85-115
Nickel	0.0478	0.0005	mg/L	0.0500	95.6	85-115
Zinc	0.0467	0.0100	mg/L	0.0500	93.5	85-115

LCS Dup (B211812-BSD1)

Prepared: 08/09/21 Analyzed: 08/11/21

Arsenic	0.0510	0.0010	mg/L	0.0500	102	85-115	1.10	20
Cadmium	0.0495	0.0005	mg/L	0.0500	99.0	85-115	0.749	20
Chromium	0.0458	0.0020	mg/L	0.0500	91.6	85-115	0.479	20
Copper	0.0459	0.0005	mg/L	0.0500	91.7	85-115	0.616	20
Lead	0.0498	0.0005	mg/L	0.0500	99.6	85-115	0.305	20
Manganese	0.0500	0.0020	mg/L	0.0500	100	85-115	0.992	20
Nickel	0.0480	0.0005	mg/L	0.0500	96.0	85-115	0.435	20
Zinc	0.0490	0.0100	mg/L	0.0500	98.1	85-115	4.83	20

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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Green Analytical Laboratories, Inc. 10000 1st Street, Suite 100, San Diego, CA 92108-1000

www.GreenAnalytical.com

Karmen King Grayling LLC
18032 Rd G
Cortez CO, 81321

Project: Metals
Project Name / Number: Sam's Property
Project Manager: Karmen King

Reported:
08/19/21 17:14

Notes and Definitions

Q3	Sample received without proper chemical preservation as requested by the method of analysis
Q1	Sample received outside of acceptable temperature range for analyses requiring cold storage
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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(570) 247-4220
Fax (570) 247-4227

www.gal-analytical.com
75 Suttle St. Allentown, PA 18103

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

FORM-006

COC - Revision 5.0

Company or Client Address City Phone # Contact Person Email Report to Sampler Name (Print)		State: Zip Date Collected Time Collected Matrix # of Containers		ANALYSIS REQUEST															
For Lab Use		Sample Name or Location		Date		Time		Matrix		# of Containers		<div style="text-align: center; font-size: 2em;">Listed bottles</div>							
210807H-01 -02 -03 -04 -05 -06 -07 -08 -09 -10		P.A. P.P. B.L. R.L. P.L.S.P. R.L. R.L. T. West Co. by H.H. Red L. Sed L.		8/19/21															
Relinquished By <i>Kenneth</i>		Date 8/19/21		Time 12:52		Matrix 08-Powder into lab bottles.		01.03.08		12.52		<div style="text-align: center;">  Robert #3 onlce </div>							

GAL cannot always accept verbal changes. Please fax or email written change requests.
Chain of Custody must be signed in "Relinquished By" as an acceptance of services and all applicable charges.



Analytical Services Quotation

Envirosource Corp. DBA Green Analytical Laboratories
75 Suttle St Durango CO 81301 (970)247-4220 jeremy.allen@greenanalytical.com

Soil Metals
Aquatox
Karmen Elaine King

Bid Date: 07/20/21
Bid Expires: 12/31/21

Matrix	Parameters	Method	#	TAT (days)	Unit Price	Extended Price
Solid	Aluminum Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Arsenic Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Cadmium Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Chromium Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Copper Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Iron Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Lead Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Manganese Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Nickel Total by ICP	6010B	1	10	\$13.00	\$13.00
Solid	Zinc Total by ICP	6010B	1	10	\$13.00	\$13.00

\$130.00

Water MS except Al, Fe
Soil As MS

3050 Digest: \$20.00
Subtotal: \$150.00
Discount: \$30.00
**Estimated Cost per Sample: \$120.00

**Estimated cost based on Qty of 10 samples.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region8



March 23, 2022

Ref: SEM-RB-B

Todd and Julie Sams
102 Hidden Lane
Red Oak, Texas 75154

Re: Cole Ranch Lot 1, adjacent to Forest Queen Mine, Bonita Peak Mining District Superfund Site

Dear Mr. and Mrs. Sams:

The purpose of this letter is to provide information about the status of the Superfund cleanup activities at the Forest Queen mine, located near Cole Ranch Lot 1 (Property).

The Forest Queen Mine is a listed source area of the Bonita Peak Mining District Superfund Site that is situated entirely on BLM land. The Property in question is adjacent to the Forest Queen Mine. Based on available data, the EPA is not aware of a release or threatened release of hazardous substances at the Property.

The final remedy at the Forest Queen mine has yet to be determined. It is anticipated that cleanup efforts will be ongoing and access to the site will be necessary for years to come both to implement and maintain the remedy as well as conduct mandatory five-year reviews. The BLM will be responsible for remedy maintenance into the future.

The EPA has provided all data requested and will continue to provide data collected from the monitoring well on your property. These data may be useful to supplement any data that are collected by an environmental consultant performing a risk assessment for you.

Sincerely,

Athena Jones
Remedial Project Manager
US EPA Region 8

cc: Willy Tookey, San Juan County Administrator



COLORADO

Hazardous Materials
& Waste Management Division

Department of Public Health & Environment



August 9, 2022

Willy Tookey
San Juan County Administrator
1557 Greene Street
Silverton, Colorado 81433

RE: Cole Ranch Lot 1
CDPHE Summary Recommendation
Bonita Peak Superfund Site, Silverton, San Juan County, Colorado

Dear Mr. Tookey:

The Colorado Department of Public Health and Environment (CDPHE) has been working closely with various property owners in San Juan County pertaining to Environmental Use Ordinance 2020-01 by assisting the property owner and recommending steps for a successful development which does not impact or impede past or future site remedial efforts.

I have been meeting with the property owners at Cole Ranch Lot 1 since early 2021 regarding their unique case. As you know, the building permit footprint area of the 4 acre site is less than 100 yards from the Forest Queen site (BLM owned and listed on the BPMD site). While I am unable to speak for the BLM, the front area of the platted building footprint has been heavily used by the BLM for various passive mine water treatment pilots at the Forest Queen site. Additionally, the BLM uses the open area as storage and helicopter shuttle staging of equipment to and from higher elevation reclamation work sites. The helicopter staging and loading area is less than 100 yards off the existing mobile home residence and proposed front porch of the building footprint area on the 4 acre Cole Ranch Lot 1.

Surface soils and residual precipitates from the Forest Queen Mine are elevated in arsenic, iron and manganese and pose a potential inhalation and direct contact exposure threat. Long term and ongoing construction at the Forest Queen Mine as well as intermittent helicopter usage would exacerbate exposures for the immediate adjacent area to be used as a residence.

The Iron Terrace water treatment pilot is the 2nd attempt at treating the Forest Queen adit discharge and provides a good opportunity and location to pilot various treatment technologies. The current iteration of an Iron Terrace was installed in 2020 and currently appears to be at capacity of metals precipitates in the terrace, as well as what appears to be significant pipe scaling, resulting in significant seepage due to clogging of internal plumbing in the conveyance system. I foresee future work at the Forest Queen adit discharge to be an ongoing perpetual maintenance issue that will bring numerous treatment iterations over multiple decades.

The seepage emanating from the area surrounding the collapsed adit indicate lateral groundwater movement and pose potential health threat to domestic water use by a resident in this area. Groundwater from the alluvial aquifer, north of CR2 and closer to the Animas River would likely alleviate this potential health threat.

Please do not hesitate to call or email with any questions.
Sincerely,

Mark Rudolph
CDPHE Bonita Peaks Superfund Site Manager
Hazardous Materials and Waste Management Division
cc: Todd and Julie Sams, Owners Cole Ranch Lot 1



Attachment B:

Forest Queen Historic Water Quality Results

UPPER ANIMAS DATA		FOREST QUEEN		Aluminum		Cadmium		Iron		Manganese		Lead		Zinc	
NEW SITE DESCRIPTION	DATE	AGENCY	PH	DIS	TOT	DIS	TCT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
Forest Queen	07/23/94	BLM	9.8	2000.0	5.00	5.00	24000.0	25000.0	2500.0	2400.0	-1.00	<1	560.0	<1	560.0
Forest Queen	07/23/94	BLM	9.8	2000.0	5.00	5.00	23000.0	25000.0	2500.0	2400.0	-1.00	<1	550.0	<1	550.0
Forest Queen Wtl	07/23/94	BLM	7.2	1000.0	2.00	2.00	5000.00	5000.00	2900.0	2800.0	250.0	260.0	420.0	260.0	480.0
Forest Queen Well #10	06/29/04	BOR	5.5	290.0		4.50		<30		63.00		26.00		1680.0	0
Forest Queen Well #10	05/17/2006	BOR	6.1	68	2.3			<30		662		27		733	
Forest Queen	11/06/96	USGS	4.6	2148.1	5.59	8.28	24278.7	25323.9	2366.4	2463.9	<30	44.08	626.5	44.08	641.22
Forest Queen	12/11/96	USGS	4.6	2067.3	6.15	5.42	23616.3	24500.9	2345.6	2390.0	<30	40.09	614.5	40.09	598.93
Forest Queen	01/22/97	USGS	4.8	2375.0	5.37	3.32	24892.9	28128.6	2440.9	2743.3	<30	<30	651.5	<30	709.31
Forest Queen	02/12/97	USGS	4.4	2049.7	5.55	8.39	23991.8	24293.0	2326.0	2394.2	<30	<30	591.9	<30	603.58
Forest Queen	03/13/97	USGS	4.7	2063.0	3.47	5.37	23995.6	23229.0	2324.3	2270.3	<30	<30	577.1	<30	568.56
Forest Queen	04/24/97	USGS	4.5	2064.4	<2	2.89	<30	25547.4	<3	2503.1	<30	<30	<20	634.18	
Forest Queen	05/22/97	USGS	4.4	2134.3	6.13	<2	25071.1	25207.2	2477.1	2505.9	<30	<30	618.0	<30	612.97
Forest Queen	06/05/97	USGS	3.7	1894.0	5.14	4.27	24327.6	23991.4	2434.2	2421.6	<30	<30	642.5	<30	598.48
Forest Queen	06/19/97	USGS	5.0	1576.0	2.79	<2	25595.8	21134.5	2494.0	2116.2	<30	<30	601.2	<30	538.22
Forest Queen	07/18/97	USGS	4.9	1922.5	4.85	3.77	24259.4	24339.3	2312.2	2354.2	<30	<30	582.9	<30	587.69
Forest Queen	08/18/97	USGS	5.0	1824.5	7.14	8.65	22888.3	23668.9	2190.3	2265.0	<30	<30	538.1	<30	566.90

		5			7.47	8.02	3	3	2	3	2	3	9	
Forest Queen	09/11/97	USGS	4.6	1961.0	7.47	8.02	22273.0	24414.2	2042.9	2331.3	2042.9	2331.3	<30	526.3
			4				2	7	6	8	6	8	1	604.75
Forest Queen	08/11/98	USGS	6.6	305.1	42.9	<2	42678.3	10929.5	2479.9	2245.0	2479.9	2245.0	<30	585.3
			5		5		5	5	2	3	2	3	7	349.11
Forest Queen	07/29/99	USGS	5.8	1449.0		112.1		2383.26		2413.1		2413.1	<30	828.12
			3			6				0		0		
Forest Queen	08/03/99	USGS	6.2	539.9		84.82		10155.8		2551.5		2551.5	<30	484.62
			7					6		6		6		
Forest Queen	08/13/99	USGS	6.2	704.8		85.99		12068.9		2832.9		2832.9	<30	477.28
			0					5		1		1		
Forest Queen	08/20/99	USGS	6.0	241.3		37.05		11531.8		2708.5		2708.5	<30	354.59
			7					9		1		1		
Forest Queen	08/25/99	USGS	5.6	244.0		32.22		11394.0		2863.2		2863.2	<30	386.34
			5					6		9		9		
Forest Queen	09/01/99	USGS	5.6	523.1		23.68		10489.9		2604.6		2604.6	<0.03	337.35
			9					2		2		2	0	
Forest Queen	09/01/99	USGS	7.3	249.1		<2		747.34		2305.1		2305.1	<0.03	<20
			1							5		5	0	
Forest Queen	09/16/99	USGS	5.9	600.9		39.22		10379.7		2590.8		2590.8	<0.03	392.58
			2					5		8		8	0	
Forest Queen bel.	07/29/99	USGS	6.9	771.1		<2		5333.72		1827.8		1827.8	<30	<20
Treatment System			5							0		0		
Forest Queen bel.	07/29/99	USGS		<40		<2		<30		<3		<3	<30	<20
Treatment System														
Forest Queen bel.	08/03/99	USGS	7.0	855.0		<2		2339.50		1914.7		1914.7	<30	<20
Treatment System			4							9		9		
Forest Queen bel.	08/20/99	USGS	7.1	249.0		<2		1147.48		1778.2		1778.2	<30	<20
Treatment System			0							7		7		
Forest Queen bel.	08/25/99	USGS	7.3	<40		<2		338.23		1943.9		1943.9	<30	<20
Treatment System			4							7		7		
Forest Queen bel.	09/09/99	USGS	5.8	1122.0		70.69		8607.71		2450.5		2450.5	<0.03	545.20
Treatment System			0							6		6	0	
Forest Queen bel.	09/09/99	USGS	6.6	262.8		<2		210.03		1865.8		1865.8	<0.03	<20
Treatment System			5							5		5	0	
Forest Queen bel.	09/16/99	USGS	7.4	212.5		<2		110.79		1881.8		1881.8	<0.03	<20
Treatment System			0							7		7	0	
Forest Queen bel.	08/13/99	USGS	7.1	2921.8		<2		11756.7		8566.6		8566.6	<30	<20
Treatment System			3					4		5		5		

Site Name Forest Queen



Bonita Peak Mining District – Stabilize Source Areas and Minimize Unplanned Releases Site Form

GENERAL INFORMATION

Site Name: Forest Queen Date & Time of Site Visit: 8/5/21
Name(s) of On-Site Evaluator(s): Kirstin Brown, Jessica Miller, Mark Rudolph, Rory Cowie, Athena Jones, Karmen King, Sam's - neighbor
How many photos were taken of the site: _____ Who took the photos and on what device: Kirstin's phone
Location Coordinates:
Latitude 37.865723 Longitude -107.544204 Datum WGS84 Altitude 9,816
Type of Access (circle one): no trail, foot trail, 4wd jeep road, gravel road, paved road, locked road
Describe Site/Construction Access: gravel road off CR2

SAMPLING Duplicate sample at this site: ☐ (note if it is a new site below – by writing new next to name) **Fill out logbook**

Mine Drainage Water Quality sample taken ☒ Name: SW-A41-N-210805 Date: 8/5/21 Time: 16:30
Mine Drainage Precipitate Sediment (TRM) sample taken ☒ Name: SE-A41-N-210805 Date: 8/5/21 Time: 16:30
Mine Waste sample taken (TRM, SPLP, ABA): ☐ Name: _____ Date: _____ Time: _____
Pond Water Quality sample taken: ☐ Name: _____ Date: _____ Time: _____
Pond Sediment (TRM) sample taken: ☐ Name: _____ Date: _____ Time: _____

MINE DRAINAGE

Draining Portal on site ☒ (Please check Yes for a seasonally draining portal) (Continue with the section if there is a draining portal, if not, go to next section) Mine Drainage Sample Name: SW-A41-N-210805 Mine Precipitate Sample Name: SE-A41-N-210805

Impounded Mine Drainage ☒ Describe what is impounding the water: An engineered afterdrainer other (see BLM designs)

Complete Portal Collapse at Surface ☒ Flow control structure built from BLM
Point of Emanation of Mine Drainage:

Location Coordinates: Latitude _____ Longitude _____ Datum _____ Altitude _____

How high is the mine drainage emanating from in relation to the estimated/observed floor of the mine: _____ (ft)

Describe how the original engineered floor of the mine was estimated or observed: estimated at 4ft off floor?

look on BLM design drawings
Mine Drainage Flow (measure) 158.7 (GPM) How was flow measured: bucket + stopwatch

Flume Used: ☐ Type of Flume: _____ (Baski 4" or 1") Ha _____ Hb _____

pH: 5.23 (s.u.) Conductivity 1,420 (µs/cm) Water Temperature 9.5 (°C)

Dissolved Oxygen _____ (mg/L) Dissolved Oxygen 16.6 (% saturation) ORP 156.5 mV

Meter Type and Serial # 7746 Calibration Date 8/5/21

Color of Mine Drainage Water: clear

Color of the Mine Drainage Precipitates: dark orange, white in the pipe at exit point

Describe the Precipitates in the Mine Drainage (hard, crusty, fluffy, thickness in inches) precipitates at this site have always been hard, crusty and darker orange

Where is the flow?

Site Name Forest Queen

MINE DRAINAGE (Continued)

How much precipitate is formed from the mine drainage (none, low, ~~medium~~, high amount) high because pipes
Is sludge damming possible at this portal? Y ☒ N Describe: always clogging

Is there evidence of sludge damming or surge events visible? Y ☒ N Describe: _____

Is it possible to measure the water level in the mine workings? ☒ Y ☐ N Describe: with a transducer - maybe?
not sure

Other Need to look in the vault

Don't know elevation of the floor - see if we can research this
If the pipe coming from adit is full we might have pressure
Look at photo of when the mine released during construction

PONDS

Pond (or similar) on-site: Y ☒ N Pond Sample Name: _____ (Continue with the section if there is a pond, if not, go to next section)

Pond Location Coordinates: Latitude _____ Longitude _____ Datum _____ Altitude _____

Constructed Pond: Y / N Areal Size of the Pond: _____ (ft²) Depth of the pond: _____ (ft)

Flow of Pond (measure): _____ (GPM) How was flow measured: _____

Flume Used: ☐ Type of Flume: _____ (Baski 4" or 1") Ha _____ Hb _____

pH: _____ (s.u.) Conductivity: _____ (μs/cm) Water Temperature: _____ (°C)

Dissolved Oxygen _____ (mg/L) Dissolved Oxygen _____ (% saturation) ORP _____ mV

How thick are the precipitates in the pond: _____ (ft) Volume Estimate of precipitates in pond: _____ (CY)

How much freeboard does the pond have: _____ (ft) and Describe freeboard: _____

Pond lined: Y / N Pond has a secondary spillway: Y / N Pond has pipes: Y / N Pond has a culvert: Y / N

Pond set into the ground: Y / N Pond have a raised dam: Y / N Is the pond holding mine drainage: Y / N

Does the pond receive surface water in addition to mine drainage: Y / N

Describe the construction of the pond: _____

Does the pond level fluctuate: Y / N, describe fluctuation: _____

Describe the ability of the pond to handle surge flows: _____

Describe how water discharges from the pond: _____

ENVIRONMENTAL

Would a future unplanned release of water physically harm a residence, infrastructure, or camping area: Y ☒ N because

Would a future unplanned release transport mine waste down gradient: Y ☒ N Describe: _____

Describe the effects down gradient of a potential unplanned release: An unplanned release would flood
the wetland area, maybe discolor the Animas

Are there beavers damming water on the site? ☒ Y ☐ N Describe: they are in the wetland below the site

Is there beaver activity within ¼ mile of the site? ☒ Y ☐ N Describe: _____

Are there any chemicals on site: Y ☒ N Describe: _____

Site Name Forest Queen

MINE WORKINGS

Number of adits on site: 1 Number of shafts on site: 0 Number of stopes on site: 0

How many elevational levels are associated with the mine: 1

Does this site have a mine safety closure: Y ☒ N ☐ Does the site need a mine safety closure or maintenance: Y ☒ N ☐

Does the site have an engineered bulkhead in the mine workings: Y ☒ N ☐ - flow control structure

Are there trespassing issue into underground workings at the site, Y ☒ N ☐ Describe: _____

What is the condition of the portal (circle one): open, partially collapsed, Totally collapsed. Describe the condition of the portal(s): Totally backfilled with pipes Areal extent of collapsed portal (ft²): _____

How is the portal constructed (e.g.; timbered, steel sets, portal shed, culvert, other), Describe: UNKNOWN

How stable is the portal opening (stable, unstable, rock-fall roof issues, unstable colluvium/talus above portal, collapsing timbers, subsidence), Describe: _____

Is the portal located in an avalanche path: Y ☒ N ☐ Describe: But adjacent within 10ft of the path

What is the opening constructed in (bedrock, colluvium, talus) and describe the stability of the materials): _____

If the site is constructed in talus or colluvium, how thick is it? 30 ft (ft horizontally)

Estimated or known size of opening(s) in feet: 5 x 7

Is there any infrastructure located underground? Y ☒ N ☐ Describe (pipes, coffer dams): coffer dam

Is an underground survey of the workings needed? Y ☒ N ☐ Describe: _____

How interconnected are the mine workings, describe in detail: very simple 1 level workings

Does it appear that surface water is being captured into the mine workings: Y ☒ N ☐ Describe: _____

Describe the potential for drilling into the mine workings (access and degree of difficulty): Is it necessary?

You could build a road above portal

Describe the airflow at the portal: NA

What is the temperature of the air underground (measure if safe, degrees F): NA

%O₂ 10 feet inside the portal: NA Does ice form underground: Y ☒ N ☐ Would an air door be beneficial Y ☒ N ☐

Describe why an air door might be beneficial: _____

Other: BLM is looking for more mine maps

Recommendations to BLM of how to prevent pipes from clogging. You could get water build up in the mine.

Re-opening the mine could be difficult in the future

Beetle Kill could destabilize the slope above the portal.
Avalanche path could easily widen due to beetle kill

Site Name Forest Queen

WASTE ROCK

Waste Rock on-site: Y/N Waste Rock Sample Name: _____ (Continue with the section if there is waste rock, if not, go to next section)

Waste Location Coordinates: Latitude _____ Longitude _____ Datum _____ Altitude _____

How many distinct waste rock piles are on site: _____ Areal Extent of Waste Rock: _____ (ft²)

Estimated average waste rock depth: _____ (ft) Estimated waste rock volume: _____ (CY)

Slope of the waste rock pile (steepest sides): _____ (degrees) Color of waste rock _____

Is the surface of the waste rock cemented: Y / N, Describe _____

What minerals are present in the waste rock: _____

Does mine drainage flow across waste rock: Y / N Does surface water flow across waste rock: Y / N

Is there potential for water to start flowing onto waste rock pile: Y / N Is the waste rock being undercut: Y / N

Describe the water flowing onto the waste pile: _____

Is there past evidence of saturation of the waste rock, Describe: _____

Are there seeps/springs at the toe of the waste rock pile: Y / N Describe: _____

Is there potential to direct water off of or around the waste rock: Y / N Describe: _____

What is the degree of erosion of the waste rock pile (mass wasting, mass movement, undercutting, rills, gullies) _____

What is the erosion of the waste rock caused by: _____

Vegetation present on waste rock pile: Y / N Kill zone below waste rock: Y / N Areal size of kill zone: _____ (ft²)

Describe the kill zone: _____

Is the waste rock pile in an avalanche path: Y / N, Describe: _____

Other the waste rock was located on site and covered - gave
ask BLM where it is and get specific location

PIPES

Pipes or culverts on-site: Y/N (Continue with the section if there are pipes or culverts)

What are the pipes conveying (circle one): mine drainage ^A road drainage ^B run-on surface water ^C pond discharge

How many pipes are on site: 3 Length of pipes (ft) ~20 ft ^{15 ft} ^{30 ft} ^{30 ft}

ID measurements of pipes (in) A = Unknown B = _____ C = 10 in

How much scale is in each pipe (in) _____ Estimate % blockage of pipe(s) A = unk B = 0% C = 50%

What are the pipes made out of: A = unk B = steel C = smooth HDPE D = 5 in.

Where are the pipes located: pipe coming from behind flow control structure in adit = A

What is the estimated slope of the pipes? B is vertical 5 ft down

Are there pipe access points or clean-outs: Y/N, Describe you could clean them

Do the pipes on site need maintenance: Y/N Describe: yearly - dragging happens quickly

Other Pipe C = culvert is receiving sediment and road drainage also

Spring run-off impacts the culvert every year

STAFF REPORT FOR THE BOARD OF COUNTY COMMISSIONERS

PROPOSED AMENDMENT TO AN EXISTING SUBDIVISION PLAT SAMS RESIDENCE, LOT 1 COLE RANCH

REPORT DATE: SEPTEMBER 20, 2020.

MEETING DATE: SEPTEMBER 23, 2020.

FROM: PLANNING DIRECTOR.

Public Hearing: Proposed Amendment to an Existing Subdivision Plat, Lot 1, Cole Ranch Subdivision.

Project: Proposed Sams Residence and Associated Improvements, Lot 1, Cole Ranch Subdivision, located on A Portion of the French Placer, County Road 2, San Juan County, Colorado.

Applicants/Owners: Julie & Todd Sams.

Applicants' Consultants: Architect Chris Clemmons of Mountain Grain LLC in Durango, Septic Designer Chad Engelhardt of Engelhardt Environmental LLC in Durango, Ken Schaaf of Southwest Land Services in Delta, Tom Harrison PE of Trautner Geotech in Durango.

Application Type and Process:

(1) Proposed Amendment to an Existing Subdivision Plat.

On September 23, the County Commissioners will hold a Public Hearing to consider approval or denial of a Proposed Amendment to an existing, previously-approved Subdivision Plat.

(2) Improvement Permit Application.

An Improvement Permit Application is required to construct a proposed residence on this site, which is an approved lot within an existing Subdivision. After the County Commissioners vote on the Proposed Amendment to the Subdivision Plat, then the Planning Department will start reviewing the Improvement Permit Application.

Proposed Amendment to the Subdivision Plat: The Proposed Amendment to the existing Subdivision Plat is a request from the Applicants to allow construction of their proposed residence on the west side of County Road 2, instead of the east side of County Road 2. This Subdivision was approved with the Lot 1 Residential Building Envelope to be located on the east side of County Road 2. On the west side of County Road 2, only proposed outbuildings were to be permitted. The 2001 Subdivision Plat Notes state: "There shall be no structures other than small storage sheds on that portion of Lots 1, 2, 3, and 4 lying west of County Road 2, without the express permission of the Board of County Commissioners."

Reason for this Request: Directly adjacent to the previously-approved Residential Building Envelope, the BLM land has an existing mine waste storage facility. The facility currently includes mine waste piles, surface water drainage, apparent contamination testing of soils/water/animals, some mine remediation work, equipment/supplies staging/storage area, sulfur odor. There are existing potential health and safety issues associated with the existing BLM mine waste storage facility. The possible increased use of the facility in the future is unknown. The origins, ingredients, and volume of mine wastes that may be stored at present and in the future by the BLM and/or EPA are unknown. Increasing traffic impacts (on County Roads 2 & 2D), including dust, pedestrian safety/vehicle conflicts, air quality, noise (and some visibility/screening issues) also exist

STAFF REPORT FOR BOCC, SAMS RESIDENCE LOT 1 COLE RANCH, SEPT. 20, 2020.

at the previously approved Residential Building Envelope. For multiple reasons, primarily related to health and safety, the Applicants are requesting to revise the Residential Building Envelope, to allow for a home, and the proposed water well, on the west side of CR 2.

SUMMARY: The Planning Director recommends that the County Commissioners should consider approving this Proposed Amendment to an Existing Subdivision Plat. Approval will allow the proposed Lot 1 residence to be built on the west side of County Road 2. Due to several existing health and safety concerns, which could potentially change or increase in the future, site layout issues affecting proposed potable water well quality, septic system location, and traffic hazards, and the unknowns associated with the mine waste storage facility, which is located adjacent to the existing Residential Building Envelope, as well as visibility issues for the travelling public, the Planning Director recommends that the Commissioners should consider approving this Plat Amendment request. Approving the request will move the proposed Residential Building Envelope and proposed domestic water well further from the existing mine waste storage facility, which could be expected to reduce overall health and safety concerns. Approving this request will also reduce health and safety hazards associated with the increasing CR 2 traffic, and conversely will reduce the visibility of the future structure as viewed by the travelling public on CR 2.

Subdivision Location: The Cole Ranch Subdivision is located along County Road 2, between Minnie Gulch and the platted Eureka Townsite.

Lot Location: The project site is Lot 1, located on County Road 2. Lot 1 is the northernmost lot in the Cole Ranch Subdivision. Lot 1 is the lot located closest to Eureka. The Eureka Townsite is located directly northwest of Lot 1. To the north and east of Lot 1 is Public Lands administered by the BLM. The BLM land directly adjacent to the previously approved Lot 1 Residential Building Envelope currently includes a mine waste storage facility. County Road 2D is located on the project site, on the previously approved Lot 1 Residential Building Envelope. County Road 2D provides access to the Forest Queen Mine. To the south of Lot 1 is the Cole Ranch Subdivision Lots 2 & 3 (two lots which are currently owned by a single landowner, named Wendt). West of Lot 1 is the Animas River.

Parcel Shape and Acreage: Lot 1 is a rectangle, consisting of approximately 4 acres.

Legal Access: The site has legal written access from County Road 2.

Existing Improvements: The site currently has the following improvements on the west side of County Road 2: an existing two track road from CR 2 to the Animas River, an existing San Miguel Power Association (SMPA) overhead electric line with poles and easement, an existing gravel abandoned railroad bed and easement, existing trees and vegetation. The site currently has the following improvements on the eastern side of County Road 2: County Road 2 and easement, existing County Road 2D (to the Forest Queen Mine) which was relocated, some existing trees and vegetation.

Proposed Improvements: This project includes a Proposed Amendment to the Subdivision Plat (being reviewed by the County Commissioners), followed by an Improvement Permit Application (to be reviewed by the Planning Director after the County Commissioner approval or denial of the Proposed Plat Amendment). The following amendment and improvements are proposed:

STAFF REPORT FOR BOCC, SAMS RESIDENCE LOT 1 COLE RANCH, SEPT. 20, 2020.

- (1) Proposed Amendment to the Subdivision Plat - consisting of a request for the County Commissioners' permission to construct the proposed residence in a location other than the location which was specified on the 2001 Subdivision Plat.
- (2) Proposed single family residence - One structure total is proposed.
- (3) Proposed utilities – proposed water well, proposed “engineered” septic system.

Submittal Documents: The application binder is **attached** for your review. The attached documents are two-fold. The attached documents include information on both the Proposed Amendment to a Subdivision Plat, as well as a subsequent Improvement Permit Application.

Subdivision History: The project site is an approved lot, in an approved Subdivision. The County approved the Cole Ranch Subdivision, with six lots, for proposed single-family residential use, in 2001. The County's 2001 approval included certain requirements. Those County requirements are described in the following documents: the 2001 Cole Ranch Subdivision Survey Plat, the Plat Notes on the 2001 Survey Plat, 2001 Deed Restrictions, and 2001 Codes Covenants & Restrictions (CC&Rs).

Lot 1 History: A 2013 Amended Plat for Lot 1 is included in the submittal binder. It appears that the Amended Plat was prepared when County Road 2D (to the Forest Queen Mine) was relocated. County Road 2D used to exist right through the middle of the Lot 1 Residential Building Envelope. County Road 2D was apparently relocated alongside of the Lot 1 Residential Building Envelope.

Proposed Residence Location: In 2001, when the Cole Ranch Subdivision was approved, it was intended that the proposed single family residence on this project site (Lot 1) would be constructed on the east side of County Road 2. Lots 1, 2, 3, 4, and 5 were all approved for proposed residences on the east side of County Road 2. Only Lot 6 had an approval to build a residence on the west side of County Road 2. The Lot 1 Applicants are currently proposing to construct their single family residence on the west side of CR 2. That is why the County Commissioners are reviewing this request, which is considered a “Proposed Amendment to an Existing Subdivision Plat.”

Plat Note Requiring Commissioner Review: One of the 2001 Subdivision Plat Notes states the following: “There shall be no structures other than small storage sheds on that portion of Lots 1, 2, 3, and 4 lying west of County Road 2, without the express permission of the Board of County Commissioners.” The Applicants are requesting permission to construct their proposed residence on the west side of County Road 2, so they are seeking the “express permission of the Board of County Commissioners.” To proceed with the residence where proposed, the Applicants are requesting the “express permission of the Board of County Commissioners.”

Proposed Outbuildings: None - no proposed outbuildings are shown. One structure is proposed. The one proposed structure includes a single family residence with an attached garage.

Adjacent Land Owner Information: 13 private adjacent land owners, with land within 1500 feet of the project site, were notified by mail by the Planning Department. The Application was posted on the County website for public and neighbor viewing. No neighbor or citizen comments, negative, positive, or neutral, have been received, at the time of writing this report. The attached submittal includes a letter from an adjacent land owner, Sandra Ippolite, indicating no opposition to a proposed residence in 2005 being located on the Lot 1 west side of County Road 2.

STAFF REPORT FOR BOCC, SAMS RESIDENCE LOT 1 COLE RANCH, SEPT. 20, 2020.

Legal Notice: A Legal Notice for this Public Hearing was published in the local newspaper more than ten days in advance of the September 23 Public Hearing.

Master Plan: This is an approved lot, located in a Subdivision that the County approved in 2001. The site is located within the County's Development Corridor. Both the existing Subdivision and the proposed Amendment to the Subdivision Plat comply with the Master Plan.

Geohazards: The proposed Residential Building Envelope appears to be thoroughly researched with information included in the attached submittal indicating that it is located outside of potential hazard areas, such as avalanche zones and floodplain.

Visibility of Proposed Structure: It appears that allowing this Proposed Plat Amendment will decrease the visibility of the proposed structure for the travelling public as viewed from County Road 2. In comparing the previously approved Residential Building Envelope with the proposed Residential Building Envelope, it appears that the denser trees and the increased distance from County Road 2, will reduce the visibility of the structure from County Road 2, if this Proposed Plat Amendment is approved.

Screening: Screening should be required for the proposed structure regardless of location, in order to block the view of the structure from any adjacent County Roads, public trails, and public lands. Screening, consisting of existing trees combined with potentially planting some proposed imported trees/vegetation, is required in the County regulations. It appears that the structure would be much less visible from the public view on County Road 2, if the Proposed Plat Amendment is approved.

Driveway: The driveway will cross the historic abandoned gravel railroad bed if the Proposed Plat Amendment is approved. The attached submittal contains a letter, prepared long ago by the County's Historic Impact Review Committee, regarding how to carefully turn the existing two track access road into a driveway, in particular where it would cross the abandoned gravel railroad bed on Lot 1. The Applicants shall follow with the recommendations contained within that letter, with the exception that a shared driveway with the adjacent Lots 2-3 was a suggestion but not a requirement.

Water Well: A proposed water well, to be used for the Lot 1 domestic potable drinking water, would be best located further away from the existing BLM mine waste storage facility. There could be potential water quality health and safety concerns associated with a water well in proximity to the mine waste. The BLM is testing the site soils, water, and animals for potential contamination. The presence of any existing or future contamination is unknown. Approving the Proposed Plat Amendment would facilitate the location of the proposed water well being drilled further from the existing mine waste site.

Septic System: It appears, based on the submitted information, that the septic designer is encouraging the County to allow the Applicants to amend the existing Subdivision Plat, and that by approving the Proposed Plat Amendment, the County would facilitate the use of the most suitable area for the proposed septic leachfield.

Subsequent Improvement Permit Application: After the County Commissioners make a decision on the Proposed Plat Amendment, then the Planning Director will review the Improvement Permit Application, to see if that the proposed improvements do or do not comply with the County's

STAFF REPORT FOR BOCC, SAMS RESIDENCE LOT 1 COLE RANCH, SEPT. 20, 2020.

“original” 2001 Subdivision requirements. If all of the “original” Subdivision requirements are met, then the Improvement Permit Application can be reviewed “administratively,” since this is an “approved lot in an approved Subdivision.” If there are any proposed improvements that do not comply with the original Subdivision requirements, then the Improvement Permit Application would be presented to the Planning Commission and the County Commissioners for their review.

County Commissioner Options: After discussing this Plat Amendment with the Applicants, and considering any public comments made during the Public Hearing, here are actions that the County Commissioners may decide to take during the September 23 Public Hearing:

- The County Commissioners can **approve** the Proposed Amendment to the Existing Subdivision Plat, thereby allowing the owners of Lot 1 to relocate the proposed Residential Building Envelope to the west side of County Road 2.
- The County Commissioners can **deny** the Proposed Amendment to the Existing Subdivision Plat.
- The County Commissioners could request the San Juan Regional **Planning Commission** to review this Proposed Plat Amendment and develop recommendations.
- The County Commissioners could **“table”** this project, because they are missing a critical piece of information needed to make a decision (if so, please specify what submittal item is needed).
- The County Commissioners may decide to approve this Subdivision Plat Amendment with **Condition(s) of Approval**. If the Commissioners happen to have some unresolved concern(s) on September 23, then a Condition of Approval to consider for this Proposed Plat Amendment, would be a requirement that the Planning Commission and County Commissioners review the details of the Improvement Permit Application.

Staff Recommendation: The recommendation from the Planning Director is that the Proposed Amendment to an Existing Subdivision Plat, for Lot 1 in the Cole Ranch Subdivision, should be approved by the County Commissioners. There are existing health and safety concerns, there is an unknown potential for a future increase in those health and safety concerns, there are some visual impacts for the travelling public, and there are septic and water well issues, all associated with constructing the residence in the previously approved Residential Building Envelope. Due to the potential health and safety issues, growing traffic issues along CR 2, and the “unknowns” regarding the existing/future mine waste storage facility, the Planning Director encourages the County Commissioners to consider approving the Proposed Plat Amendment. Approving the Plat Amendment would increase the separation distance between the proposed residence and water well and the existing BLM mine waste storage site, which could be expected to somewhat reduce the potential health and safety concerns. Due to several potential health and safety issues, the Planning Director would encourage the Commissioners to consider this proposal as an exception to the rule or an “Exemption,” by approving the Applicants’ request for a Proposed Plat Amendment.

Prepared By: Lisa Adair PE
Town & County Planning Director
Town of Silverton & San Juan County Colorado



PO Box 250
Silverton, CO 81433



SAN JUAN COUNTY

PO Box 466
Silverton, CO 81433

September 11, 2020

Regarding: Proposed Amendment to an Existing Subdivision Plat, and County Improvement Permit Application, Proposed **Sams Residence**, Lot 1 Cole Ranch Subdivision, located on a Portion of the French Placer, County Road 2, San Juan County, Colorado.

Dear Property Owner:

San Juan County, Colorado has received an Application for a Proposed Amendment to an Existing Subdivision Plat, and a County Improvement Permit Application. The project site is located on County Road 2, near property that you own. The Application was submitted by Julie & Todd Sams, the owners of Lot 1, in the Cole Ranch Subdivision.

The purpose of the dual application is to obtain County permission to revise the previously approved Building Envelope, and to construct a proposed single-family residence.

The application is being posted onto the San Juan County, Colorado website, under "County Government" – "Building & Planning" – "Proposed Additions." If you cannot locate the application online, you can contact the Planning Director for a copy of the site plan.

The Board of County Commissioners will discuss this project on September 23, in a Public Hearing. The County Commissioners are meeting virtually, via free Zoom videoconference software. The meeting begins at 6:30 PM. The County Commissioners Zoom Meeting ID Number is 921 3647 3203. Meeting agendas, and additional Zoom/phone instructions, are posted on the County website. Neighbors and citizens may submit written and/or verbal comments at any time before and/or during the meetings.

If you have any questions, you can contact the Town & County Planning Director Lisa Adair.
Call or text work cell phone number: 970-946-9408
Home-office landline phone number: 970-387-0500
Email address to use for the fastest response: mackie@gobrainstorm.net
(Town Hall landline phone number: 970-387-5522)
(Town Hall email address: ladair@silverton.co.us)

Thank you,

Lisa M. Adair PE

Town & County Planning Director
Office Located at Silverton Town Hall
PO Box 250, 1360 Greene Street, Silverton, CO 81433
Phone: Office (970) 387-5522, Work cell (970) 946-9408
Email: ladair@silverton.co.us

LAND USE PERMIT

San Juan County, Colorado

Applicant: BLM Abandoned Mine Land	Permit No. _____
Program: Silverton Field Station	
Address: 1428 Greene St.	
City and State: Silverton CO 81433	Telephone: Lisa Merrill 970-769-5363

Description of Use: BLM is installing an iron terrace at **Forest Queen Mine** Adit near the confluence of Minnie Gulch and the Animas River. This is a passive remedy for the discharge before adit water joins with other waters. Northwind is our contractor and will be on site from Sept. 1- Oct. 17, 2020. There will be a 320 CAT excavator, mini-ex, bobcat, and haul truck with 2-4 work trucks and trailers on site throughout duration of job. 2-5 workers will be on site during workdays. Adit ownership is shared with SJC. Commissioners and especially Administrator Tonkey has been kept in the loop re: activities. Discharge is routed fully onto BLM. Julie and Todd Sams is other adjacent neighbor. BLM (Merrill) has been in touch with Sams regarding activities. Sunnyside Gold is downstream neighbor and has also been made aware of project through Pal Maley. SJC Roadcrew has been made aware of project also.

Dates and Times of Use: Sept. 1-Oct. 17, 2020; 7am-5:30pm Monday through Friday and occasional Saturdays.

Location of Use: Forest Queen Mine is located 7.5 miles north of Silverton 3000' past the Minnie Gulch intersection on the SE side of CR 2 on the edge of where the mountainside meets the welland. See attached image.

Areas of Concern: Applicant should provide attachments for each relevant area
 Land Use Administrator will initial approval if appropriate

Property Ownership _____	Permission of Property Owner _____
Vicinity Map _____	Plans and Drawings _____
Natural Hazards _____	Zoning Compatibility _____
Sanitation _____	Environmental Impacts _____
Building Permit _____	Federal and/or State Permits _____
Security _____	Emergency Services _____
Parking _____	insurance Coverage _____
Clean Up _____	County Road Impact _____
Other _____	Other _____

Date Application Submitted _____	By (signature): _____
Date Permit Issued _____	By (signature): _____
Conditions	
Acceptance of Conditions _____	By (signature): _____

LOT 1 COLE RANCH
RECEIVED
9/23/20
ama

Please see responses below in red from applicant/architect.

To the County Commissioners:

Owning adjacent property, we appreciate the opportunity to provide comment on the proposed Cole Ranch Lot 1 Improvement Permit Application. We are not in favor of moving the building envelope to the west of the road.

1. For the most part, our concerns about repositioning the building envelope to the west of CR 2 are the same as they were last spring with the Riley application:

- *regarding repositioning the Building Envelope to the west of CR 2 - will the other Cole Ranch lot owners have the opportunity to do the same, and what is then the cumulative impact on Scenic Quality?"*

This is ultimately up to the county, not the owners of Lot 1. Given the rural nature of the area, the original, very compact building envelope layout of the subdivision actually has a more detrimental impact on Scenic Quality and is more out of touch with the dispersed housing of the area. In principle, we truly hope to improve the outcome of the full buildout in the Cole Ranch subdivision. **That being said, this particular request for an Exemption to the original building envelope is being proposed predominately for health and wellbeing reasons as applied to this lot only. If the Exemption is made for this reason, then this should not necessarily apply to neighboring lots that are not adjacent the Superfund site.**

- *It appears that Cole Ranch Lots 1-4 have about 250 yards of total river frontage. Please consider the precedent that would be set by allowing a new Building Envelope and structure on the west end of the property. There are 3 additional lots to the north of this property. Will each of them then have the same opportunity to build a similar structure? Using the Application's photo of the View North from the proposed structure, imagine the Scenic Quality impact of not just one, but 4 structures.*

The properties to the **South** should be looked at on an individual basis, similar to the approach for this Lot. Lot 6 has already been approved to build adjacent the river, so this stance is not entirely warranted (or uniform) to preserve views from lots across the river. Further, if the owner of Lot 6 were to build a mansion near the river and the owners of Lots 1-5 build substantial homes lined up and towering over the east side of CR 2, the outcome would be far from desirable or aesthetically pleasing. This could vastly diminish the overall scenic quality from all viewpoints, especially from the county roads and trails, simply due to poor planning and a lack of vision for the subdivision.

2. The application focuses on the impact on Scenic Quality as viewed from CR 2. It does not focus on the impact on Scenic Quality from the river.

- A structure built on the west side of the road, in the proposed envelope does compromise Scenic Quality of adjacent public and private lands and trails.

Looking at the bigger picture, we feel that placing the cabin further from the road and placing proper screening trees is all-around better for the scenic quality as applied to the greater community, i.e. from the road and other adjacent properties. Further, there are other neighboring lots even closer that we must also keep in mind. The proposed location is lower and screened far better from these neighbors as well as CR 2. We believe any homes built within the subdivision will be visible from higher adjacent lots, and the lower and more dispersed the homes are, the less the visual impact. Additional vegetative screening adjacent the home on the river side can be included if required.

- This includes the view in the river corridor and the projected Arrastra>Eureka Loop in the Silverton Area Trails Plan.

3. Of the 8 concerns the applicants give for proposing a change in the building envelope, the majority of those have not changed since the lot was purchased 7 years ago (trees, size of the envelope, need for septic lines, dust, historic value). The building envelope was clearly marked.

The foremost concern with the original building envelope pertains to the adjacent mining reclamation project, which was not known to be a concern at the time of purchase. In 2016, it was deemed a Superfund site and is now a major concern for health and safety, particularly in the original envelope. This is the primary reason for the Exemption request.

Very little in nature is stagnant and unchanging, including wildlife patterns and environmental hazards. It would not be prudent to ignore these issues simply because one individual may not prefer an adjustment to a home's siting.

Please also note that the original plat was created and subsequently approved with information that we have learned through additional sitework and consultation to be overly restricting, impossible to accomplish or contradictory. The developer appears to have not done enough due diligence to create buildable lots (i.e. a plat note reads "No portion of any sewer system will encroach in/or across County Road 2." Yet, it is not physically possible to place a home and the onsite water treatment system on the east side of the road where the original envelope was designated. There is simply not enough room. Thus, an alternate site layout must be created in order to build on this lot.) These items could be viewed as a misrepresentation of the buildability of the subdivision lots. However, providing the requested variance or Exemption is an appropriate solution to these types of issues.

4. We do feel for the owners and the concerns about the work being done related to the Forest Queen, but would like to note -

- the original Cole Ranch plans include this Note next to Lot 1: "There is an ongoing Mined Land Reclamation project in this area. There will be no attempt to restrict or inhibit additional reclamation. Ingress or egress to area is by the existing driveway across Lots 1 and 2."

Moving the building envelope will only help in providing easier ingress and egress to the reclamation project. The original note does not describe in any detail the possible side effects or detrimental impact of the project on Cole Ranch lots.

- we don't know if moving the building envelope a few hundred yards will mitigate the concerns about the smell or the water quality.

We are not 100% certain but it is best practice to take as much precaution as possible to preserve human life and safety. Contaminated water can be a huge life safety hazard, so we hope to do our best to mitigate this risk.

- we hope this is a temporary situation.

We hope it is temporary as well, but we have not been given any indication that this could end anytime soon and could very likely become a much larger concern. The project could go on for a very long time considering it was acknowledged on the original plat from 2000, became a Superfund site in 2016, and has just recently become a more active project.

Thank you again for your consideration.

Elaine Hintz & Pauline Hintz

Please remember that it is the intention of the client, the architect and all consultants involved to create the best possible solution for the client and community. Any structure built at any location on this lot (and any lot) is going to be seen by someone. Our goal is to impact the least amount of people, which is exactly what we have done. Also, please remember that structures become part of the landscape, and we intend to construct a beautiful home that is in keeping with the vernacular of the area. Though there is no Cole Ranch design review board or SJC historic review board reviewing all new construction (which would be a far stronger tactic than simply restricting building envelopes), we fully intend to *improve* the lot and scenery with this cabin-style home.

Lastly, please consider an alternative scenario as it pertains to Scenic Quality (all other issues aside):

Under the previously approved plat, covenants, and restrictions, Lots 1-4 are required to build a 2,500 sf minimum home on the east side of CR 2 in a fairly compact building envelope. These lot owners are also already approved to build additional outbuildings up to 1,200 sf each on the west side of the road totaling a cumulative 1,500 sf. This could result in a 30'x40' outbuilding on the west side of the road, and if capped with a 12:12 roof on a 10' plate height, could result in a 25' to 30' tall building. This building, as I understand, does not require additional county approval beyond building permitting.

On top of this, the envelope on the east side of the road is by far the narrowest part of the property due to the adjusted location of CR 2D and the subsequent right-of-way and setbacks. Building a home here that meets the subdivision minimum area requirements would likely result in a three story structure, which could then require a variance to the 35' county height restriction.

The overly restrictive, yet ill-designed combination in this original (and very likely) construction scenario would have an enormously negative impact on the rural, beautiful, open and free feel of the area. This would be a far worse precedent for Lots 1-4 yet seems to be the original plat's intention, or neglect at minimum.

Please know that we believe every impacted person and property owner's opinion is important, and we have looked at the issues and possibilities from many angles. Our proposal is the result of what we feel is the absolute best scenario for constructing a home on Lot 1.

Application for Improvement Permit

Sketch Plan Submittal

Proposed Sams Residence

4760 County Road 2
Silverton, Colorado 81433
Cole Ranch Subdivision – Lot 1
Part of the John H French Placer
Recorded Reception #149440



Applicant:
Todd and Julie Sams
P.O. Box 215
Oologah, OK 74053
(918) 606-0558

Prepared By:
Chris Clemmons
Mountain Grain, LLC
Architecture Studio
1389 CR 240
Durango, Colorado 81301
(970) 515-7882

*See Attached Application PDF File. You
Can Also View this Application on the
County Website Under Building & Planning
Proposed Additions. Since 10/22/20*

Julie and Todd Sams
102 Hidden Lane
Red Oak, Texas 75154

San Juan County
Board of County Commissioners
C/O County Planner Lisa Adair
1557 Greene (PO Box 596)
Silverton, CO 81433

Re: The Forest Queen Building Site Application
(Supporting Documentation)

SJCBOCC and Planner Adair,

The documentation we have included with this correspondence supports reviewing our request to develop on the west side of our property (Parcel #: 47730300051000) which is bifurcated by County Road 2 and request that our application be re-opened for review. More specifically, we are requesting San Juan County approve our request to develop on the west side of Lot 1, Cole Ranch Subdivision, Silverton CO (referred to as Lot #1 – Cole Ranch. You will find attached a Human Health Analysis (Exhibit 1), a Site Specific Field Sheet (Exhibit 2), EPA Correspondence (Exhibit 3), and CDPHF Correspondence (Exhibit 4). Upon reviewing the correspondence, San Juan County representatives will recognize that development on the west side of Lot 1, is the safest place to develop the property.

The information provided supports our application to develop our property. Some highlights we think our important for you to consider include:

- The toxicologist concluded *"In summary, all of the lines of evidence pursued in this assessment yielded the same results indicating that the human health risk to the Sams' is a concern on the East area of their property; due to the presence of Forest Queen mine site issues. Therefore, it is recommended that the Sams be able to construct their residence on the West area in order to minimize the risk concerns associated with the Forest Queen."* (Human Health Risk Analysis, Exhibit 1, p. 15);
- An unplanned release would flood the wetland area.. (BPMD Forest Queen Field Sheets, Exhibit 2, p.2);
- Yearly-clogging happens quickly. (BPMD Forest Queen Field Sheets, Exhibit 2, p.3);
- The final remedy at the Forest Queen mine has yet to be determined. It is anticipated that cleanup efforts will be ongoing and access to the site will be necessary for years to come both to implement and maintain the remedy as well as conduct mandatory five-year reviews. The BLM will be responsible for remedy maintenance into the future. (Exhibit 3); and
- *Surface soils and residual precipitates from the Forest Queen Mine are elevated in arsenic, iron and manganese and pose a potential inhalation and direct contact exposure threat. Long term and ongoing construction at the Forest Queen Mine as well as intermittent helicopter usage would exacerbate exposures for the immediate adjacent area to be used as a residence. The Iron Terrace water treatment pilot is the 2nd attempt at treating the Forest Queen adit discharge and provides a good opportunity and location to pilot various treatment technologies. The current*

iteration of an Iron Terrace was installed in 2020 and currently appears to be at capacity of metals precipitates in the terrace, as well as what appears to be significant pipe scaling, resulting in significant seepage due to clogging of internal plumbing in the conveyance system. I foresee future work at the Forest Queen adit discharge to be an ongoing perpetual maintenance issue that will bring numerous treatment iterations over multiple decades. The seepage emanating from the area surrounding the collapsed adit indicate lateral groundwater movement and pose potential health threat to domestic water use by a resident in this area. Groundwater from the alluvial aquifer, north of CR2 and closer to the Animas River would likely alleviate this potential health threat. (CDHPE Correspondence, Exhibit 4).

We appreciate your consideration in allowing us to build in safe place on our property and look forward to meeting with you in this matter. Finally, upon making your final decision we request that put your determination and findings in writing and let us know if you have any question prior to rendering a final decision on our application.

Best,

A handwritten signature in cursive script, appearing to read "Julie + Todd Sams", written in dark ink.

Julie and Todd Sams

Application for Improvement Permit

Sketch Plan Submittal

Proposed Sams Residence

4760 County Road 2
Silverton, Colorado 81433
Cole Ranch Subdivision – Lot 1
Part of the John H French Placer
Recorded Reception #149440



Applicant:
Todd and Julie Sams
P.O. Box 215
Oologah, OK 74053
(918) 606-0558

Prepared By:
Chris Clemmons
Mountain Grain, LLC
Architecture Studio
1389 CR 240
Durango, Colorado 81301
(970) 515-7882

September 2, 2020

San Juan County
Attn: Lisa Adair, Planning Director
1360 Greene St
Silverton, Colorado 81433

Subject: Application for Improvement Permit – Sketch Plan Review

Proposed Sams Residence, located at 4760 County Rd 2, Lot 1 of the Cole Ranch Subdivision, located in part of the John H French Placer, near Middleton, San Juan County, Colorado.

Dear Lisa Adair and Commissioners,

This submittal has been prepared to describe the proposed amended plat and improvements on Lot 4 of the Cole Ranch Subdivision, owned by Todd and Julie Sams. Cole Ranch is an approved Subdivision which was established for residential use in 2001.

The attached documents have been prepared for a San Juan County Application for Improvement Permit as a "Sketch Plan Review". The Applicant requests review of this project by the County Commissioners at their meeting on September 23, 2020, and to consider approval contingent upon receiving supporting documentation of deferred items listed in the Table of Contents.

The proposed amended plat consists of a relocated building envelope and redistributed open space, which is now larger than the approved plat's open space. The improvements include a single-family residence along with associated road access and utility connections. The new building envelope on the west side of County Road 2 will adhere to all San Juan County setback requirements and will be further setback and more appropriately screened from the road. The property is located within San Juan County's Future Land Use Plan "Economic Corridor", which is designated to be suitable for residential development because of its moderately sloping terrain and year-round access.

The applicant has provided a letter, which follows, to describe in detail the hardships associated with locating the home in the previously approved building envelope on the east site of County Road 2 and the benefits of approving the homesite location proposed in this application.

Please contact Mountain Grain, LLC if you have any questions.

Sincerely,



Christopher M. Clemmons
Mountain Grain, LLC
Architecture Studio

To whom it may concern:

We are Todd and Julie Sams as well as our daughter Shiloh Sams. We have been blessed for 25+ years of vacationing in and around Silverton. Over the years we have frequented Fetch's Store, been on the tour with Ernie at the Old 100, visited the wonderful museum and of course rode the train numerous times. On one of our many trips around the Alpine Loop we noticed "Cole Ranch" properties and the old worn out "For Sale" sign on the ground. We inquired about the property and thanks to Steve at Silverton Realty, we were the new owners of Lot 1. Now it's finally time to make our dreams come true and make Silverton our permanent home.

Over the past 7 years we have slowly been doing a little clean up to the property getting it ready for our home. Then the mess of last year happened and it unfortunately gave us a few new concerns. With the avalanches, flooding of County Road 2, and the heavy detoured traffic on County Road 2D (which we personally moved a few years ago) it was eye opening. We even cut our vacation short due to the increased amount of traffic and the dust. In fact, we couldn't even walk the dogs without fear of being hit by a jeep or 4-wheeler driving way too fast. Louie from the county maintenance dept. put up additional speed signs trying to slow traffic down but we still called the sheriff's department multiple times to stop the insane behavior. So now we have spent the past winter months reconsidering if we truly want to build in the assigned building envelope and subject ourselves to the possibility of more unnecessary chaos.

In 2017, while on vacation on our property, we were visited by several individuals doing research on the adjacent land. Those individuals included Lisa Richardson from Bureau of Land Management, County Commissioner Scott Fetchenhier, members of the EPA and a few others. We were informed they were taking soil samples and doing other research regarding the Forest Queen mine. We were told we would be kept in the loop about the findings, but we never heard anything else. This June when we arrived at our property we were surprised to discover work had been started on the Forest Queen mine site and the adjacent property was now being used as a staging area for all of the other projects being done in that area. I met with Lisa Richardson who educated me on what was currently happening with the project and what could take place in the future when work resumed in September. Lisa did tell me that Bureau of Land Management could tidy up the area if we wanted them to but that area would continue to be the staging area. I also was informed that the EPA has listed this area as a Super Fund Site Study. I reached out to the EPA's Kathrine Jenkins by email on June 22 and spoke to her by telephone on June 26, but have not heard back from her again to find out what is actually taking place with that property. We are very concerned at all of the unknowns and what the future brings regarding this area.

While we were in town this past June I not only spoke with Lisa Richardson, but also William Tookey, Lisa Adair and Scott Fetchenhier. To my dismay, not one single person could give an answer as to what is going to take place with the area that I am supposed to build my house on. There are too many variables with this situation, including multiple agencies with multiple ideas, but no one with definite plans to give me an idea of how to proceed. We are very concerned of what could come from living near a Super Fund Site and what this means to our health. What will we be breathing from the pile of old mining debris that has been piled right next to my property? Not to mention how close we are to what is now labeled as "Hot" water, which could possibly have an effect my well water, what could we be drinking? For my family this property isn't going to be an occasional vacation spot, this is going to be our home.

One we plan to enjoy for generations to come. So all these concerns are not only for the immediate future, but for the long term effects to our family.

With the property sectioned off like it is, we do have other options for the location of our home.

Although our largest concern is the above topic but other reasons would be:

- 1) If we build our home on the East side which is the approved building site, we will have 1 tree that will be in front of the house, otherwise there is NO screening of the house, this will make our home totally visible from the County Road 2 & 2D. On the West side we have a cluster of trees and the railroad berm that will help with the obviousness of a house in the area. This will help to protect the untouched natural vibe of the area and not obscure the views.
- 2) There is the issue of the size of the house comparably with the size of the existing building envelope. The building envelope leaves little to no room for a yard or any possibilities of further growth of vegetation in the area. The building envelope also leaves no room for all the septic system components (which Willie Tookey was aware of per our conversation). This means the septic lines will have to be routed underneath County Road 2 to the other side of our property, which would cause us to lose some of the trees that run parallel with County Road 2 on both sides of the road. I would assume this would mean some road closures for a period of time, as well as possible disruption and maintenance issues years down the road?
- 3) Due to the size of the property on the East side the house would be extremely close to the tree line (which is becoming more beetle kill than live trees). This is an extreme fire hazard. On the other hand, the trees on the West side have not been affected by the beetles at this point and we have more room to distance the house from these trees and certainly the rest of the forest.
- 4) If the house is on the East side, the dust is a larger factor than on the West side. Visibility issues are always a concern during the peak dry season. This was a large factor last summer when the out-of-control drivers were throwing so much dust they had virtually no visibility of the road. The drivers could not see well enough and were driving off the road and onto our property, nearly causing our daughter and dogs to be hit on an afternoon walk.
- 5) One of our biggest assets to the property, aside from the incredible views, is the historical value of the area. This includes the railroad bed that runs through our property. Our plan is to do minimal damage if any, to the rail bed, as only to provide a driveway crossing it. We wish to preserve as much of the surrounding area as we can.
- 6) In the past couple of years, the moose have become prominent in the area across from the existing building envelope. By moving across the road, we will be less intrusive in their habitat and give more of a quiet area to graze. Bears have also been seen more on the East side of the property, so we would be less disturbing to their habitat by not building there. According to Lisa Richardson she would like to eventually see a wildlife sanctuary become of the BLM area. She also stated at this point a few different animals have been dissected to see if any damage has been done to them by the so called "Hot" water and vegetation they are consuming in this area.

They also believe the animals are not solely living in or eating/drinking from that area, so the findings are not completely accurate at this time.

- 7) The smell of the Forrest Queen as we all know has at times given off a Hydrogen Sulfide smell. There is a possibility with the work being done this might not happen anymore, but we do not know that for sure. '
- 8) Overall, in conversation with Lisa Richardson, we have discussed the fact that there are no immediate or future concerns from the BLM for the west side of the property.

We are really looking forward to starting the building process soon but need clarification on the building envelope in order to get on contractors' schedules for next year. We are trying to use as many local contractors as possible to help with the local economy as well as using their expertise in building in the area.

Thanks for considering our move to the West side of County Road 2.

Todd & Julie Sams

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3. Current Plat Information
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12. San Juan County Relationship to County Road and State Highway Systems Forms
13. San Juan County Driveway and Road Access Permit Forms
14. Scenic Quality Report

NOTE:

The following materials will be completed and submitted to the County pending approval of the adjusted home location, as these items are dependent upon the final home siting.

- I. Well Permit Application
- II. Full Septic Design and Permitting
- III. Complete Wetlands Investigation (Prelim. analysis suggests no wetlands present)

Application for Improvement Permit

		APPROVAL CHECKLIST		Initial	Date
Applicant	Name	Todd A. Sams			
	Address	PO Box 215			
		Oologah Ok 74053 9186405447 Phone			
Owner	Name	Todd & Julie Sams			
	Address	PO Box 215			
		Oologah Ok 74053 9186060558 Phone			
Contractor	Name	N/A			
	Address				
	Phone				
Legal Description of Property:		Land Use Administrator			
Lot 1 Cole Ranch Subdivision Amended Plat #1, located in Part of the John H French Placer Recorded Reception # 149440 March 14, 2014. Tax Parcel # 47730300051000 Township 42 N. Range 6 W, Section 30		Ownership of Surface			
		Ownership of Minerals			
		Vicinity Map			
		Certified Survey Plat			
		Monumentation			
		Basic Plan Map			
		Plans and Drawings			
		Road System Relationship			
		Zoning Compatibility			
		State Mining Permit			
Owner Notification					
Avalanche Hazard					
Geologic Hazard					
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Watershed Gearance					
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Adequate Water Source					
Well Permit					
Central Water Distribution					
U.S. Forest Service/BLM					
Land Use Zone:		Mountain zone			
Applicant Signature		Todd A. Sams			
Date Application Requested					
Date Submitted for Permit					
Date Permit Issued					
Date Permit Denied					
Reason for Denial					



Special Warranty Deed
(Pursuant to 38-30-115 C.R.S.)

State Documentary Fee
Date: August 22, 2013
\$ 3.80

THIS DEED, made on August 22, 2013 by BANK OF THE WEST Grantor(s), of the County of _____ and State of CALIFORNIA for the consideration of (\$38,000.00) *** Thirty Eight Thousand and 00/100 *** dollars in hand paid, hereby sells and conveys to TODD ALAN SAMS AND JULIE ANN SAMS Grantee(s), as Joint Tenants whose street address is P.O. BOX 215 OOLOGAH, OK 74053, County of _____, and State of OKLAHOMA, the following real property in the County of San Juan and State of Colorado, to wit:

LOT 1, COLE RANCH SUBDIVISION, COUNTY OF SAN JUAN, STATE OF COLORADO.

AKA _____ by street address: 4750 COUNTY ROAD 2 SILVERTON CO. 81433

Grantor(s) warrants and warrants the title against all persons claiming under the Grantor(s)

BANK OF THE WEST

BY John A. Metcalfe Vice President

State Nebraska)
County of Douglas) ss.

The foregoing instrument was acknowledged before me on this day of August 20, 2013 by John A. Metcalfe Vice President OF BANK OF THE WEST

Witness my hand and official seal
My Commission Expires 5-5-14

WALTER R. HESS
General Notary
State of Nebraska
My Commission Expires May 5, 2014

Notary Public

When Recorded Return to: TODD ALAN SAMS AND JULIE ANN SAMS
P.O. BOX 215 OOLOGAH, OK 74053

FOREIGN INVESTMENT IN REAL PROPERTY TAX ACT OF 1980
(26 U.S.C. 1445) ("FIRPTA")

CERTIFICATION BY TRANSFEROR (ENTITY)

(Pursuant to Regulation C.F.R. 1.1445-2(b)(2)(i))

To: TODD ALAN SAMS AND JULIE ANN SAMS, (hereinafter referred to as the "Transferee"),

Section 1445 of the Internal Revenue Code provides that a transferee of a U.S. real property interest must withhold tax if the transferor is a foreign person. For U.S. tax purposes (including Section 1445), the owner of a disregarded entity (which has legal title to a U.S. real property interest under local law) will be the transferor of the property and not the disregarded entity.

To inform the transferee that withholding of tax is not required upon the disposition of a U.S. real property interest by **BANK OF THE WEST**, hereinafter referred to as the transferor, the undersigned hereby certifies the following on behalf of the transferor:

1. The transferor is not a foreign corporation, foreign partnership, foreign trust, or foreign estate (as those terms are defined in the Internal Revenue Code and Income Tax Regulations);
2. The transferor is not a disregarded entity as defined in Section 1345-2(b)(2)(i);
3. The transferor's U.S. taxpayer identification number is [REDACTED];
4. The transferor's office address is: [REDACTED]

5. The transferor understands that this certification will be disclosed to the Internal Revenue Service, the transferee and that any false statement furnished by him is a misdemeanor or both.
6. Under penalty of perjury, I declare that I have examined this certification and, to the best of my knowledge and belief, it is true, correct and complete, and I further declare to partner if a partnership, by a trustee or equivalent fiduciary of the owner of a trust or estate.

BANK OF THE WEST

Date: August 27, 2013

John A. Matyszek
John A. Matyszek, Vice President

All information required to be obtained in connection with document has been obtained from information supplied by the transferor to Land Title Guarantee Company. For privacy and security reasons, Land Title will retain this information. In the event you are contacted by the Internal Revenue Service concerning FIRPTA, please contact the Company immediately for a copy of the Affidavit which discloses the transferor's Tax Identification Number.

State of NebraskaCounty of DouglasSworn to before me on this day of August 20, 2013 by John A. MatyszekMy Commission expires: 5-5-14

Witness my hand and official seal

Notary Public

WALTER R. HESS
General Notary
State of Nebraska

OF BANK OF THE WEST
Commission Expires May 5, 2014

Note:

1. If you have any questions or concerns arising from your obligation as transferor in regard to this tax, it is suggested that you immediately contact your local Internal Revenue Service office, attorney or a accountant if you do not fully understand these regulations. More information, including the regulations promulgated under FIRPTA, is available at the website for the Internal Revenue Service, www.irs.gov/businesses/small/international.
2. The transferee is required to retain this certification until the end of the fifth taxable year following the taxable year in which the transfer takes place. The transferee must make this certification available to the Internal Revenue Service when requested in accordance with the requirements of 26 U.S.C. 6001 and regulations thereunder.

**CULB RANCH SUBDIVISION
DEED INSTRUCTIONS**

1. Structural foundations shall be designed by a professional structural and/or geotechnical engineers to determine the amount and variability of the load bearing capacity and expansive nature of the debris fan deposits.
2. The portions of lots 1-3 lying west of County Road 2 are limited to outbuildings with an aggregate of 1500 square feet per lot.
3. An erosion control plan shall be required as a condition of any improvements or use permit issued by San Juan County.
4. Structures shall be constructed within the building envelope. Only one residential unit can be constructed per lot.
5. Site grading and drainage shall be designed to move water away from structures and should be performed in a manner that does not substantially change existing natural drainage patterns.
6. No buildings shall be constructed within 30 feet of the centerline of Minnie Gulch Creek.
7. A satellite phone, or operable cellular phone must be available at each home site until a landline is available.
8. Trees shall not be removed within 25 feet of the base of the slope.
9. All driveways shall require access permits to be issued by San Juan County.

Merlin Schaefer

Sandra Ippolite

STATE OF COLORADO)
)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2001 by Merlin Schaefer and by Sandra Ippolite.

Witness my hand and official seal.

Notary Public

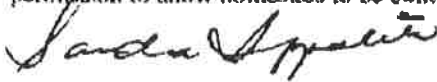
My Commission Expires: _____

Rebecca Smith

Nov. 25, 2005

To whom it may concern,

As 50% owner of Cole Ranch Subdivision, by this letter I am hereby giving my permission to allow homesites to be built by the river on Lots 1 and 3.

A handwritten signature in cursive script, appearing to read "Sandra Ippolite".

Sandra Ippolite
1687 Floyd St.
Sarasota, FL 34239
941-362-3924

List of Adjacent Landowners

Sams Residence, Cole Ranch Subdivision

Adjacent Landowners:

School of the Ozarks
PO Box 17
Point Lookout, MO 65726

Elaine Hintz
4015 W 93 Terrace Apt 110
Prairie Village, KS 66207

Houghton Unlimited LLC
4936 S Fillmore Ct
Englewood, CO 80113

Keefe Family Revocable Trust
6219 Saddletree Ln
Yorba Linda, CA 92886

Jay & Janet Scherer
230 River Front Rd
Durango, CO 81303

Dr Builders LLC
721 Pike Dr
Pagosa Springs, CO 81147

Joseph Jepson
PO Box 729
Silverton, CO 81433

Jack & Barbara Clark
PO Box 767
Silverton, CO 81433

Derek & Megan Wendt
PO Box 504
Cheyenne Wells, CO 80810

List of Adjacent Landowners (cont.)

Sams Residence, Cole Ranch Subdivision

Adjacent Landowners:

George & Anna Riley
5 Road 5221
Bloomfield, NM 87413

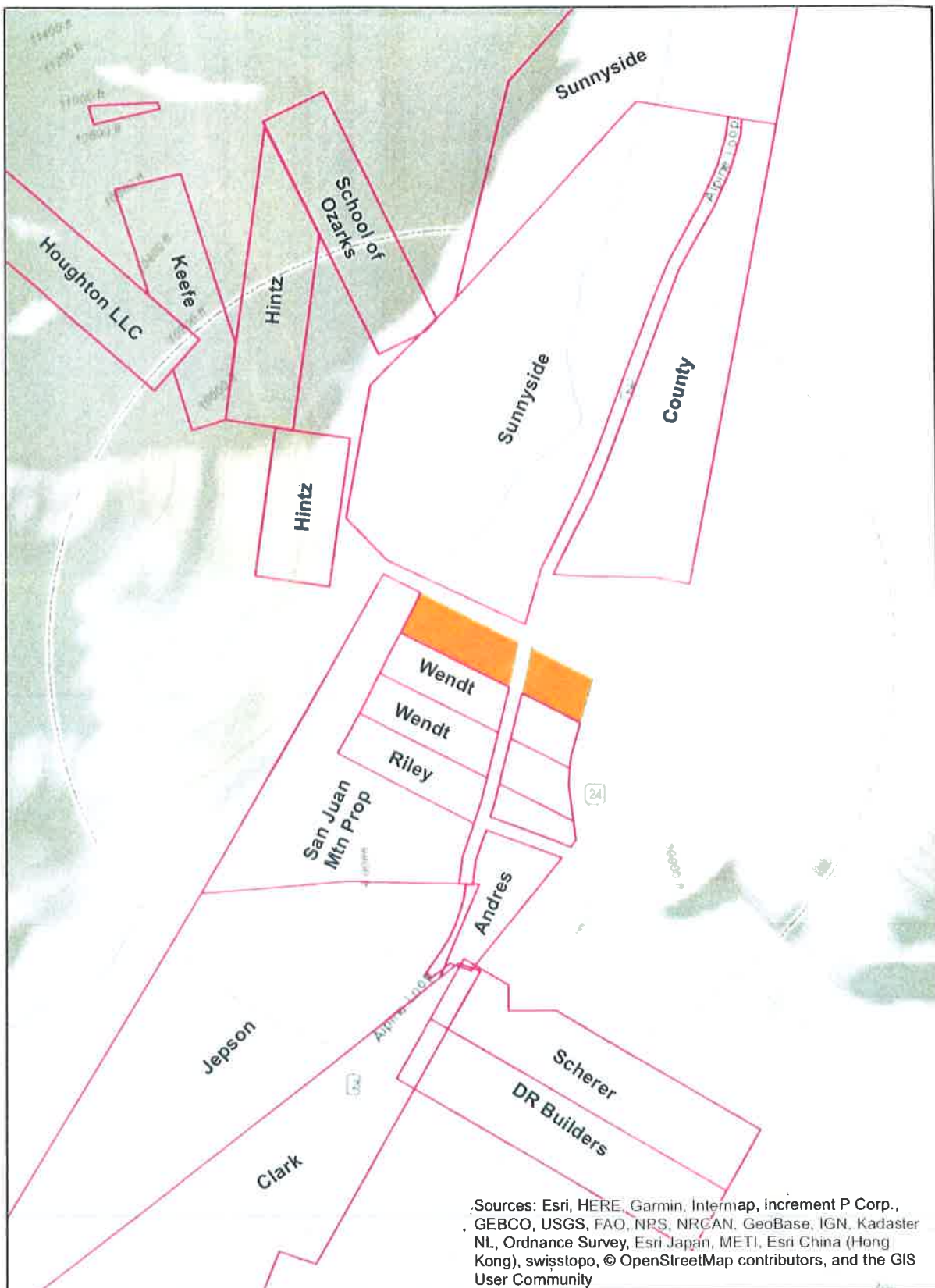
San Juan Mountain Properties LLC
7592 Aguila Dr
Sarasota, FL 34240

John & Annette Andres
7996 Peter Hoover Rd
New Albany, OH 43054

Sunnyside Gold Corp
PO Box 177
Silverton, CO 81433

San Juan County
PO Box 466
Silverton, CO 81433





Project Narrative

Sams Residence, Cole Ranch Subdivision

Applicant Name and Address:

Todd and Julie Sams
P.O. Box 215
Oologah, OK 74053
(918) 606-0558

Project Location:

Cole Ranch Subdivision – Lot 1
4760 County Road 2
Silverton, Colorado 81433

Legal Description

Located in part of the John H. French Placer Mineral Survey No. 45, Mining District No. 7, Sec. 30, T 42 N, R 6 W, N.M.P.M., Eureka Mining District, San Juan County, Colorado

Proposed Development:

One single-family residence of approximately 2,600 sf. The Applicant is requesting approval of a new building envelope and general home location within this envelope on the west side of County Road 2, which will adhere to all San Juan County setback requirements and hazard restrictions. Although this location is outside the original approved building envelope, there are many reasons for this proposal, which the Applicant has described in the Cover Letter. A proposed plat amendment has been included with the sketch plans.

Zoning:

Mountain Zoning District

Acreage:

3.98 acres

Water Service:

The Applicant plans to construct a new well near the west corner of the proposed residence. The proposed well will be an ordinary household use inside one single-family dwelling. The well will be constructed by a Colorado licensed well driller in

accordance with the Colorado Division of Water Resources regulations. The well permit will be processed once the home location has been approved.

Sewer Service:

An onsite septic system is proposed for the residence and will be located approximately where shown on the site plan. Septic test pits have been dug and analyzed on-site, and a septic designer has created recommendations for septic system siting, which is included in this application in letter form. The system will be engineered by a Colorado Licensed Professional Engineer in accordance with the San Juan Basin Health Department regulations. The septic permit will be processed once approval is granted for the proposed home location.

Power:

The Applicant plans to tie into the existing overhead electric line that runs across the western section of the property. The proposed line will be an underground service line.

Phone:

The nearby existing phone line located on the east side of County Road 2 will be used for phone service.

Access:

The site is accessed via County Road 2, which bisects the property. One driveway is being proposed to access the home on the west side of CR 2. The driveway will include a culvert, as well as any additional requirements of the County Road and Bridge Department Supervisor. A driveway permit form has been submitted to the Road and Bridge Supervisor.

Heating:

A forced air system will be used as the primary source of heat for the residence and a pellet/wood stove will be used as supplemental heat when necessary.

Exterior Lighting:

Minimal exterior lighting will be incorporated for safety and screened lighting under the deck. Exterior lighting will be in conformance with San Juan County requirements.

Solid Waste Management:

The Applicant will be responsible for bi-weekly trash disposal provided by Bruin Waste Management. On-site trash will be contained within the provided dumpster at all times until removal to the transfer station.

Landscaping:

Landscaping is to consist of raking and removal of combustible ground cover near the residence as recommended by the Colorado State Forest Service Firewise Practices, to develop adequate defensible space. Revegetation and screening will be provided by the Applicant in accordance with the requirements of San Juan County.

Surveying:

An amended survey plat for this lot was prepared by Robert A. Larson of Monadnock Mineral Services. A copy of this survey plat is included with this application submittal for your review. A revised plat will be recorded upon approval of this application.

Subsurface Conditions:

Subsurface conditions have been tested and recorded by Trautner Geotech LLC. A copy of the report is included with this application.

Building Envelope and Siting:

The lot is divided by County Road 2. The portion of the project site west of CR 2 contains a moderately sloped grassy meadow sloping gradually toward the Animas River with pine and aspens dispersed about the site and clustered adjacent the abandoned railroad bed. The proposed location for the home was chosen for several reasons, which are addressed in the Applicant's cover letter. These include geologic hazards, health concerns, septic fit/design, and proper screening from CR 2, among other justifications.

County Avalanche Map:

The Sketch Plan for this project has been overlaid onto the County Avalanche Map, which is included with this application submittal for your review. According to the County Avalanche Map, the site does not appear to be within a potential avalanche area.

County Geohazards Map:

The Sketch Plan for this project has been overlaid onto the County Geohazards Map, which is included with this application submittal for your review. According to the County Geohazards Map, the proposed building location appears to be in an area of physiographic floodplain (pf). However, per visual inspection and FEMA panel review, it has been determined that the proposed building envelope is not in a floodplain, and there is no actual floodplain hazard. A letter recording this determination has been included with this application.

Foundation:

The foundation of the residence will include concrete stem walls and spread footings that will extend below frost depth and 12" minimum below native grade if backfill is used at any locations. The garage will be slab-on-grade with frost-protected spread footings. The deck will include wood posts with concrete spot footings that will extend below frost depth.

Elevation at Structure:

The floor elevation of the proposed residence is approximately 9,787 ft, which is below 11,000 feet elevation, where the County has limits on cabin square footage.

Residence Size and Height:

The residence will be two stories and will be approximately 40'x44' with a 7' deep wraparound covered porch and additional 30'x30' attached garage. The plan utilizes a smaller second story footprint, which results in a lower, more integrated roof design. The conditioned home area will be approximately 2,600 sf and the garage will be 900 sf.

The maximum height of the residence, which is measured from the lowest adjacent native grade up to the ridge of the 8:12 primary gable roof, is approximately 32'-0", which is below the County height limit of 35 feet. This height is approximate as the plans are schematic and will be confirmed during the building permit process.

Building Plans:

Preliminary building plans for the proposed residence are included in the following section of this package.

Residence Style:

The design of the home will reflect the log cabin style seen throughout the San Juan Mountains.

Building Materials:

An image of the proposed building materials and design vernacular is included in the Scenic Quality Report for your review. The proposed materials consist of the following:

- Log siding with a medium, natural stain.
- Rough sawn wood accents with a medium, natural stain.
- Slate color standing seam metal roof with matching trim.
- Stacked river stone used at the column bases.



PROJECT #:
20-02
ASSESSOR'S
PARCEL #:
4730300051000

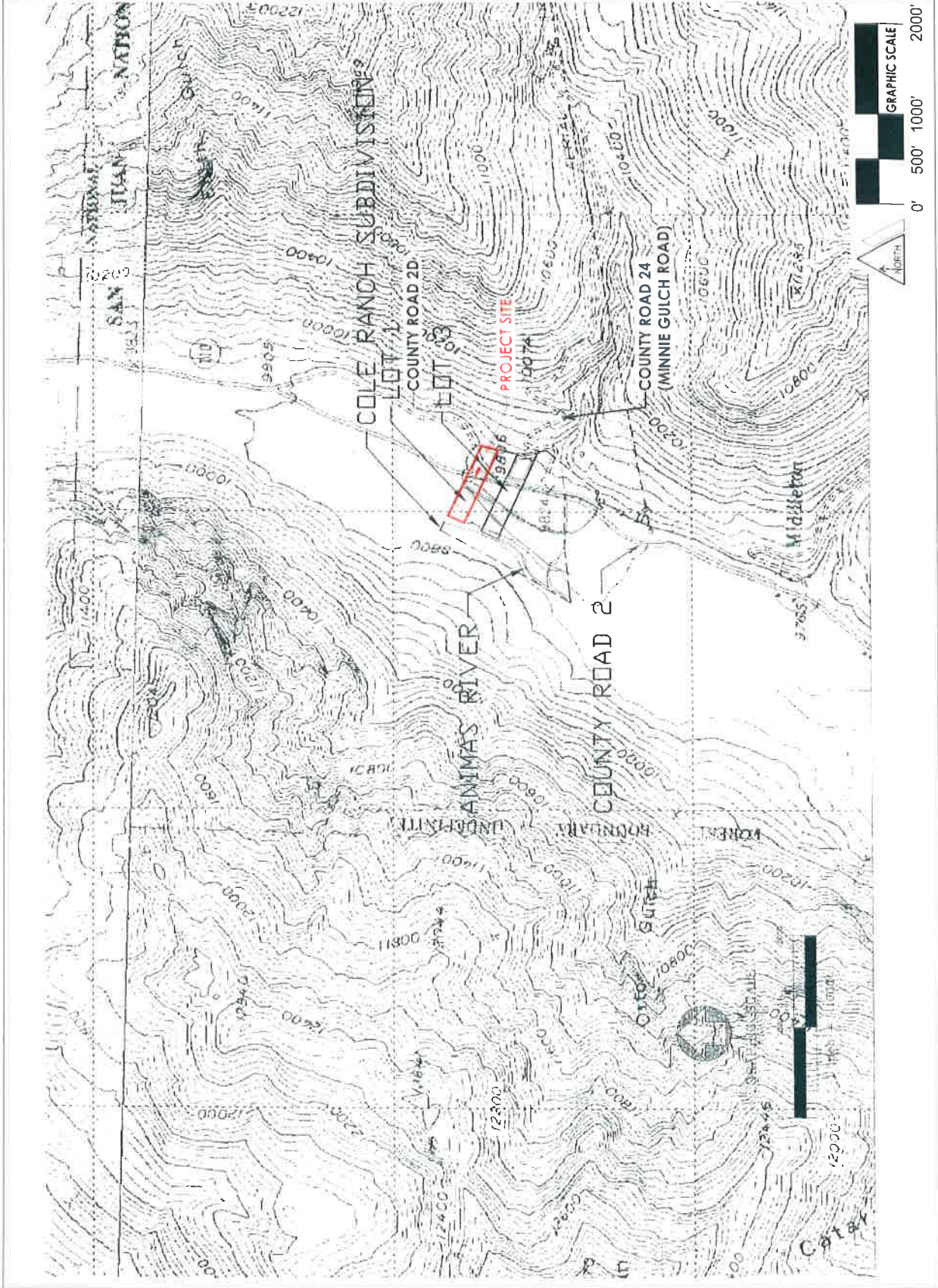
NEW CONSTRUCTION OF:
THE SAMS RESIDENCE
LOT 1
COLE RANCH SUBDIVISION
SILVERTON, CO 81433

APPLICATION FOR IMPROVEMENT PERMIT | 09.02.2020

VICINITY MAP

SHEET #
A

SCALE: 1" = 1000'



Amended Plat No. 1 - Lots 1 & 2

Cole Ranch Subdivision
 Located in Part of the John H French Placer
 Mineral Survey No. 37 Mining District No. 7
 Suspended Sec. 30, T42N, R6W, N.M.P.M.
 Eureka Mining District
 San Juan County, Colorado

North



Scale 1"=60'



NOTE: ITEMS DRAWN IN RED REPRESENT A PROPOSED AMENDMENT TO THE PREVIOUSLY APPROVED PLAT FOR LOT 1 DATED AUGUST 1, 2013. THESE MODIFICATIONS INCLUDE A MOVED BUILDING ENVELOPE AND ADJUSTED OPEN SPACE. THE RESULTANT OPEN SPACE IS 2.92 ACRES WHICH IS 0.58 ACRE LARGER THAN THE ORIGINAL OPEN SPACE AREA. IF APPROVED, A FINALIZED PLAT WILL BE SUBMITTED BY THE SURVEYOR.

THE SAMS RESIDENCE

PRELIMINARY

PROPOSED PLAT AMENDMENT

B



PROPOSED PLAT AMENDMENT
 08-1-2018

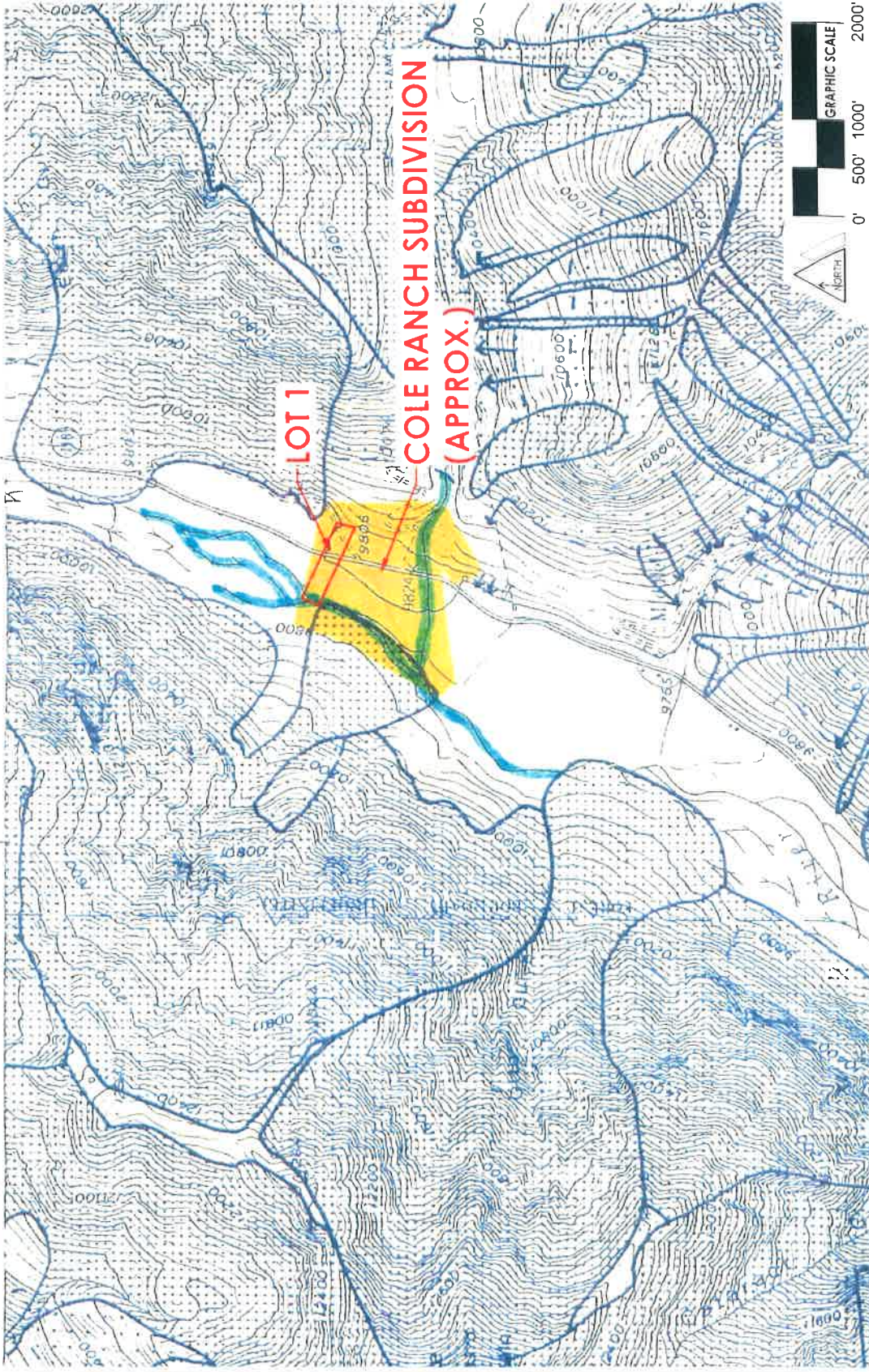
COUNTY AVALANCHE
HAZARD
MAP

COLE RANCH
2/25/20 dma



PROJECT #:	20-02
ASSESSOR'S	PARCEL #:
4730300051000	
NEW CONSTRUCTION OF:	
THE SAMS RESIDENCE	
LOT 1	
COLE RANCH SUBDIVISION	
SILVERTON, CO 81433	
APPLICATION FOR IMPROVEMENT PERMIT 09.02.2020	

SKETCH PLAN & COUNTY AVALANCHE MAP	SHEET TITLE
C	
SCALE: 1" = 1000'	

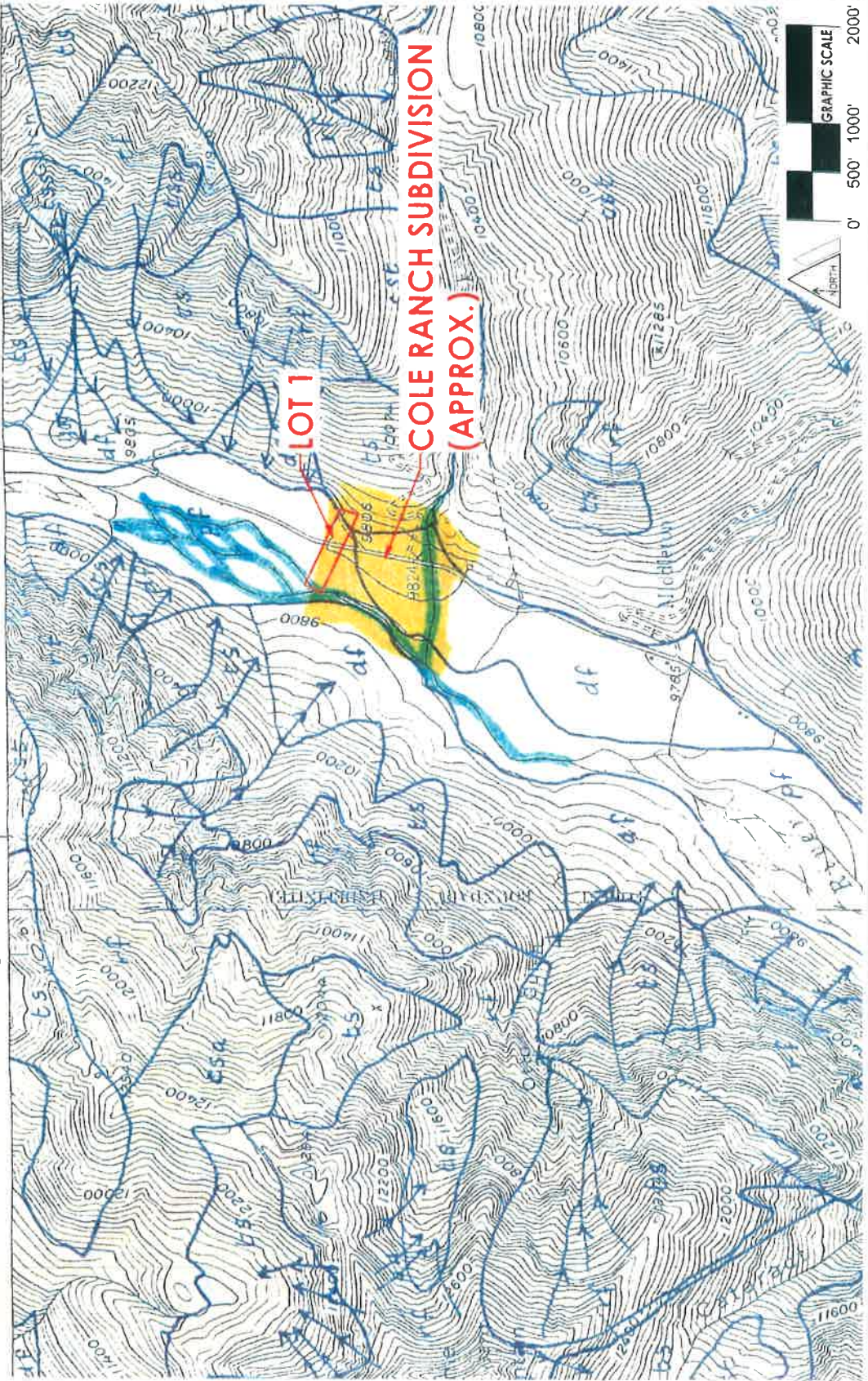


COUNTY GEOHAZARD
MAP

COLE RANCH
2/25/20 dma

35

OURAY (9 MI. IHANDIES PEAK)



PROJECT #:
20-02

ASSESSORS
PARCEL #:
4730300051000

NEW CONSTRUCTION OF:
THE SAMS RESIDENCE
LOT 1
COLE RANCH SUBDIVISION
SILVERTON, CO 81433

APPLICATION FOR IMPROVEMENT PERMIT | 09.02.2020

SKETCH PLAN
& COUNTY
GEOHAZARD
MAP

SHEET #
D

SCALE: 1" = 1000'



PROJECT #:
20-02

ASSESSORS
PARCEL #
4773030051000

NEW CONSTRUCTION OF:
THE SAMS RESIDENCE

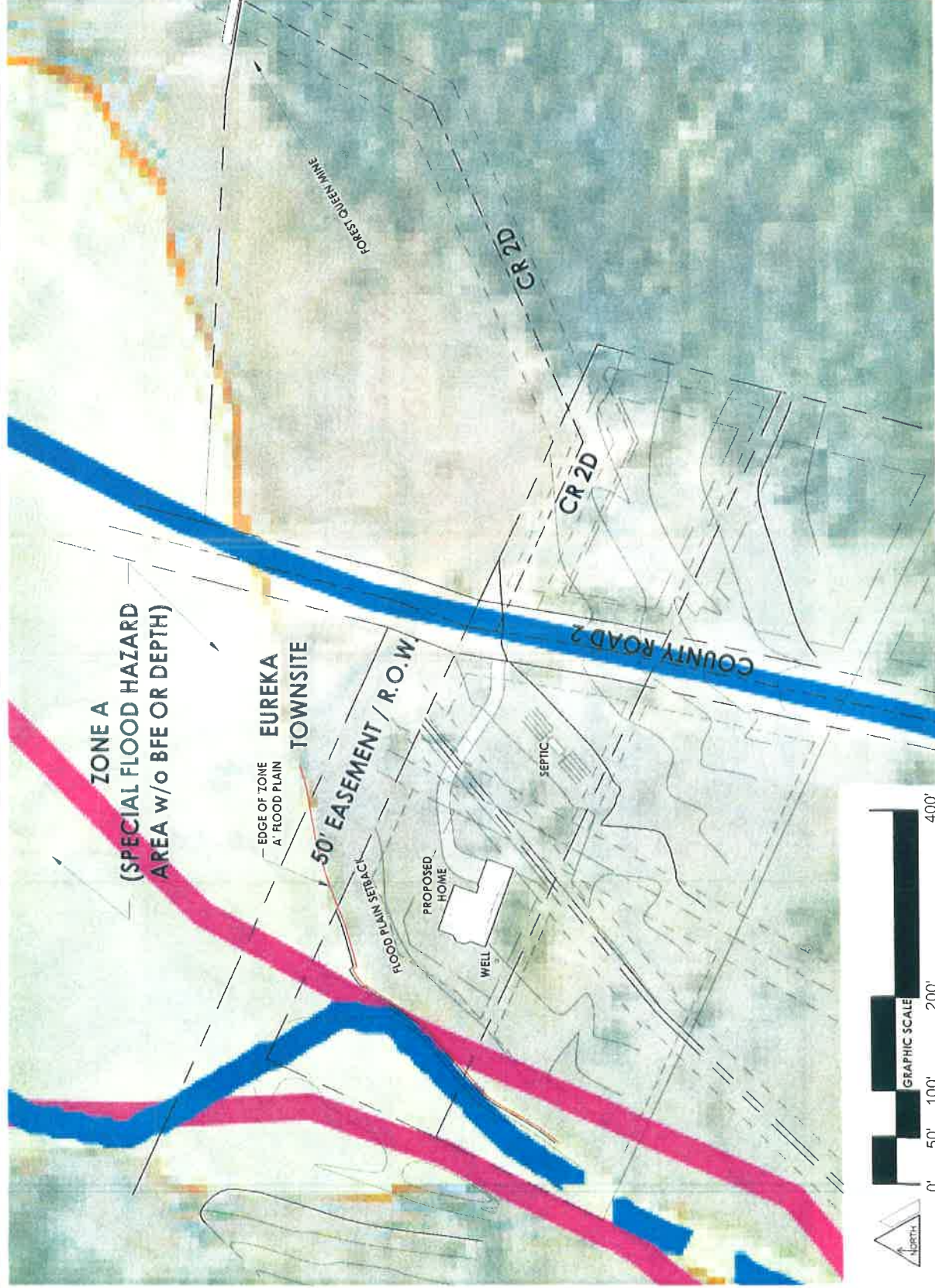
LOT 1
COLE RANCH SUBDIVISION
SILVERTON, CO 81433

SHEET TITLE
SKETCH PLAN
WITH FLOOD
HAZARD MAP

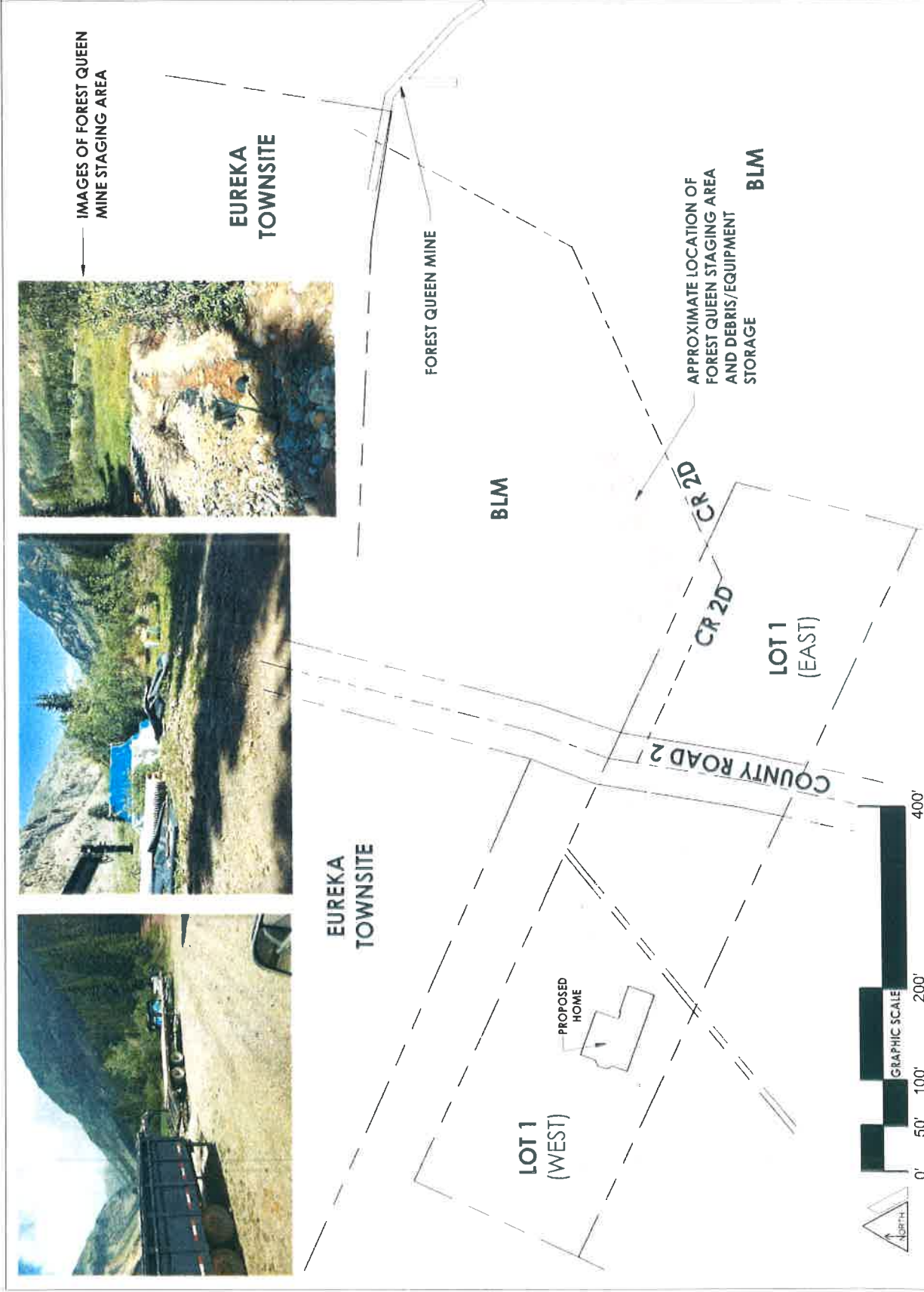
SHEET #
E

SCALE: 1" = 100'-0"

APPLICATION FOR IMPROVEMENT PERMIT | 09.02.2020



THE SAMS RESIDENCE NEW CONSTRUCTION OF LOT 1 COLE RANCH SUBDIVISION SILVERTON, CO 81433		PROJECT #: 20-02 ASSESSOR'S PARCEL #: 47730300051000	 MOUNTAIN grain ARCHITECTURE LEBANON, CO 81410 970.441.1144 info@mountaingrain.com www.mountaingrain.com
SKETCH PLAN WITH MINE HAZARDS		SHEET # F	SCALE: 1" = 100'-0"



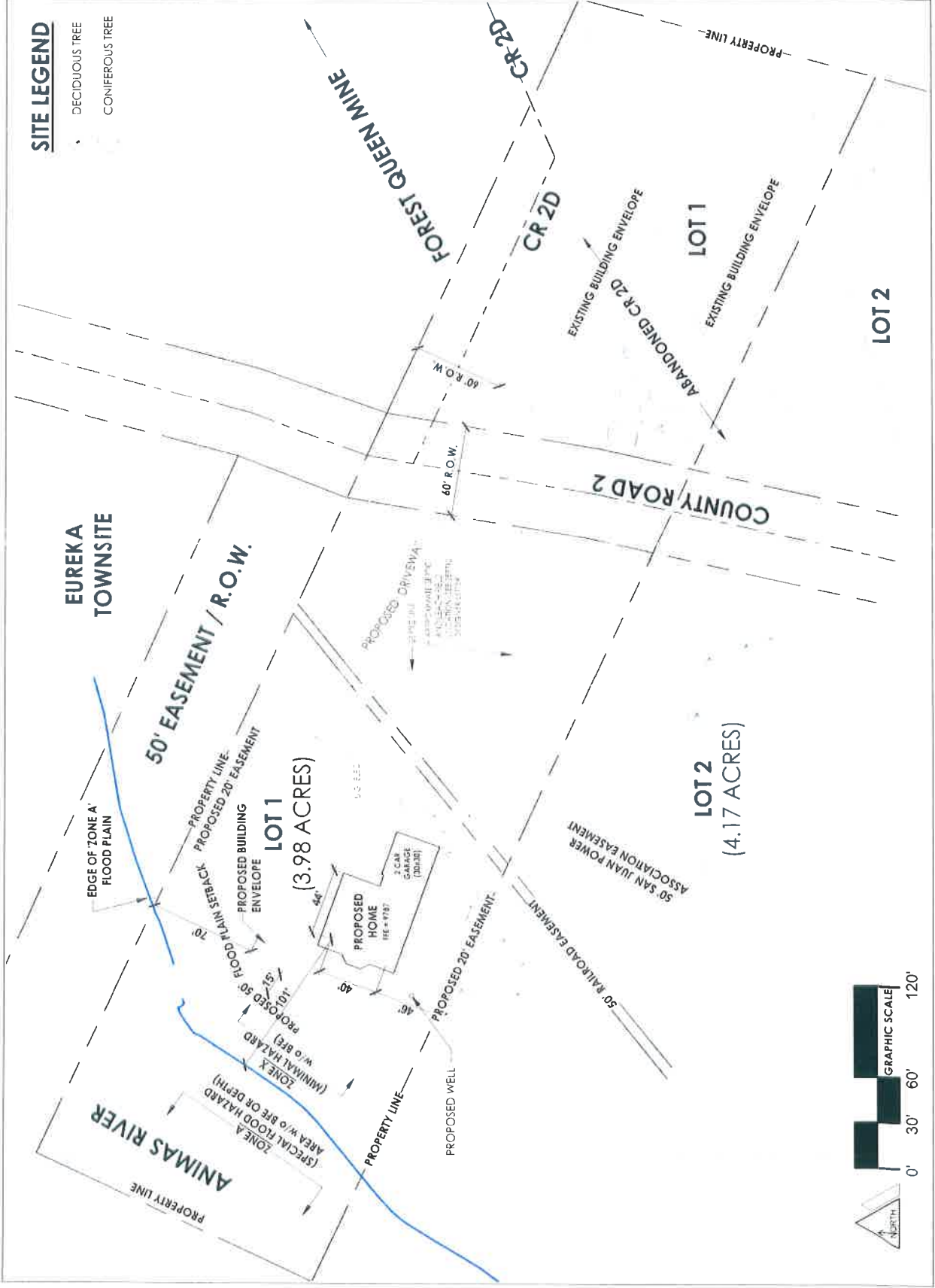


PROJECT #	20-02
ASSESSOR'S PARCEL #	47730300051000
LOT 1	COLE RANCH SUBDIVISION SILVERTON, CO 81433
NEW CONSTRUCTION OF:	THE SAMS RESIDENCE

SKETCH PLAN WITH TOPOGRAPHY	G
SCALE: 1" = 60'-0"	

SITE LEGEND

- DECIDUOUS TREE
- CONIFEROUS TREE



COVERED EXTERIOR

1204 SF

CONDITIONED

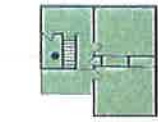
1855 SF

UNCONDITIONED

900 SF

CONDITIONED

829 SF

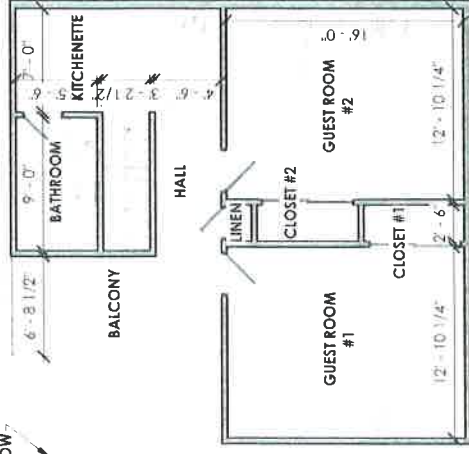


1ST FLR AREA

1/32" = 1'-0"

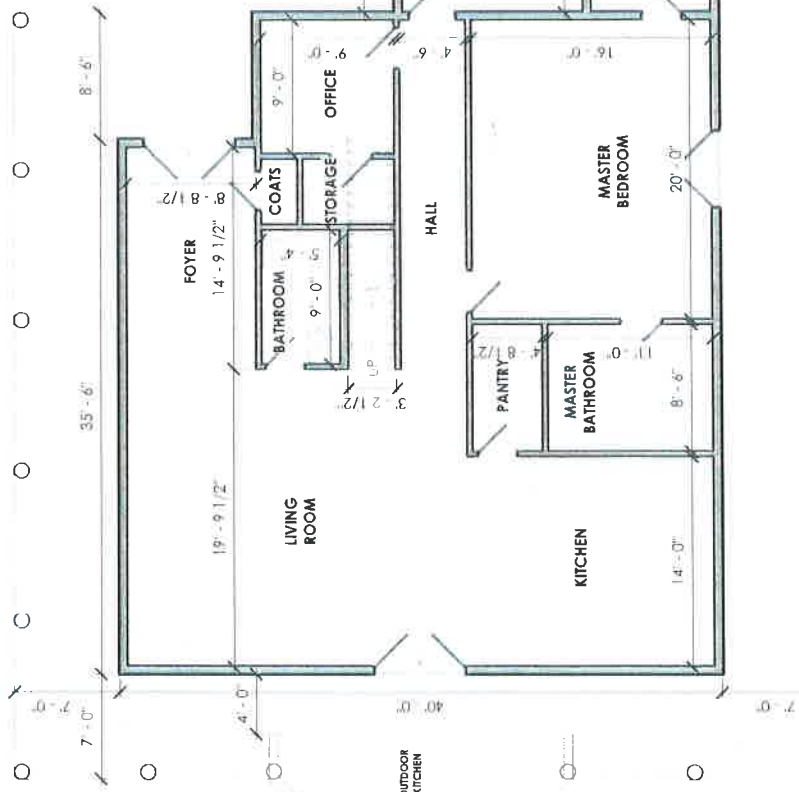
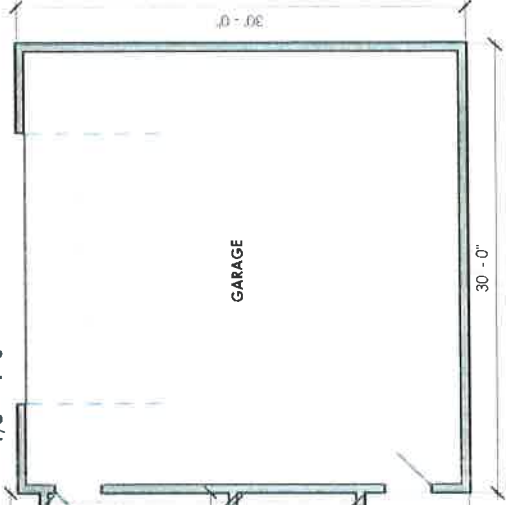
2ND FLR AREA

1/32" = 1'-0"



SECOND FLOOR PLAN

1/8" = 1'-0"



FIRST FLOOR PLAN

1/8" = 1'-0"



PROJECT #:
20-02
ASSESSOR'S
PARCEL #:
47730300051000

THE SAMS RESIDENCE

NEW CONSTRUCTION OF:

LOT 1
COLE RANCH SUBDIVISION
SILVERTON, CO 81433

APPLICATION FOR IMPROVEMENT PERMIT | 09.02.2020

DRAFT FLOOR
PLANS

SHEET #:
1
SCALES indicated

Christopher Clemmons

From: Chad Engelhardt <engelhardtenvironmental@gmail.com>
Sent: Friday, July 31, 2020 2:22 PM
To: Christopher Clemmons
Cc: animaspines@gmail.com; sds@durango.net
Subject: RE: Cole Ranch Lot 1
Attachments: OWTS Site Plan.pdf

Chris,

With regard to the possible OWTS (on-site wastewater treatment system) options for the Sams' property at Lot 1 of the Cole Ranch Subdivision in Silverton, CO, I submit the following:

On June 4, 2020, I conducted a site and soil evaluation to determine the most suitable OWTS location respective to the proposed building envelope, among other limiting factors; please refer to the attached OWTS site plan. At the proposed OWTS location, I believe that conditions are the most conducive for OWTS construction. In this scenario, grade is such that a pressurized OWTS would be required and I would recommend placing the force main in alignment with the proposed driveway, where there is already a cut in the old railroad bed. The desired building envelope overlaps the alternate OWTS location, and it is for this reason, deemed "alternate". However, at the alternate OWTS location, I would characterize the soils as more suitable for effluent treatment than that of the proposed OWTS location.

On July 17, 2020, I returned to the property to evaluate the viability of placing the OWTS and all other improvements on the east side of County Road 2. Given the available area, among other limiting factors, it is my opinion that placing all of the proposed improvements may not be possible. If placing the building envelope on the east side of County Road 2 is subsequently desired, it may be possible to trench the sewer line to the west, beneath County Road 2, and construct the OWTS at the aforementioned proposed or alternate locations.


Please let me know if you have any questions or need anything further from me at this time.

Thank you.

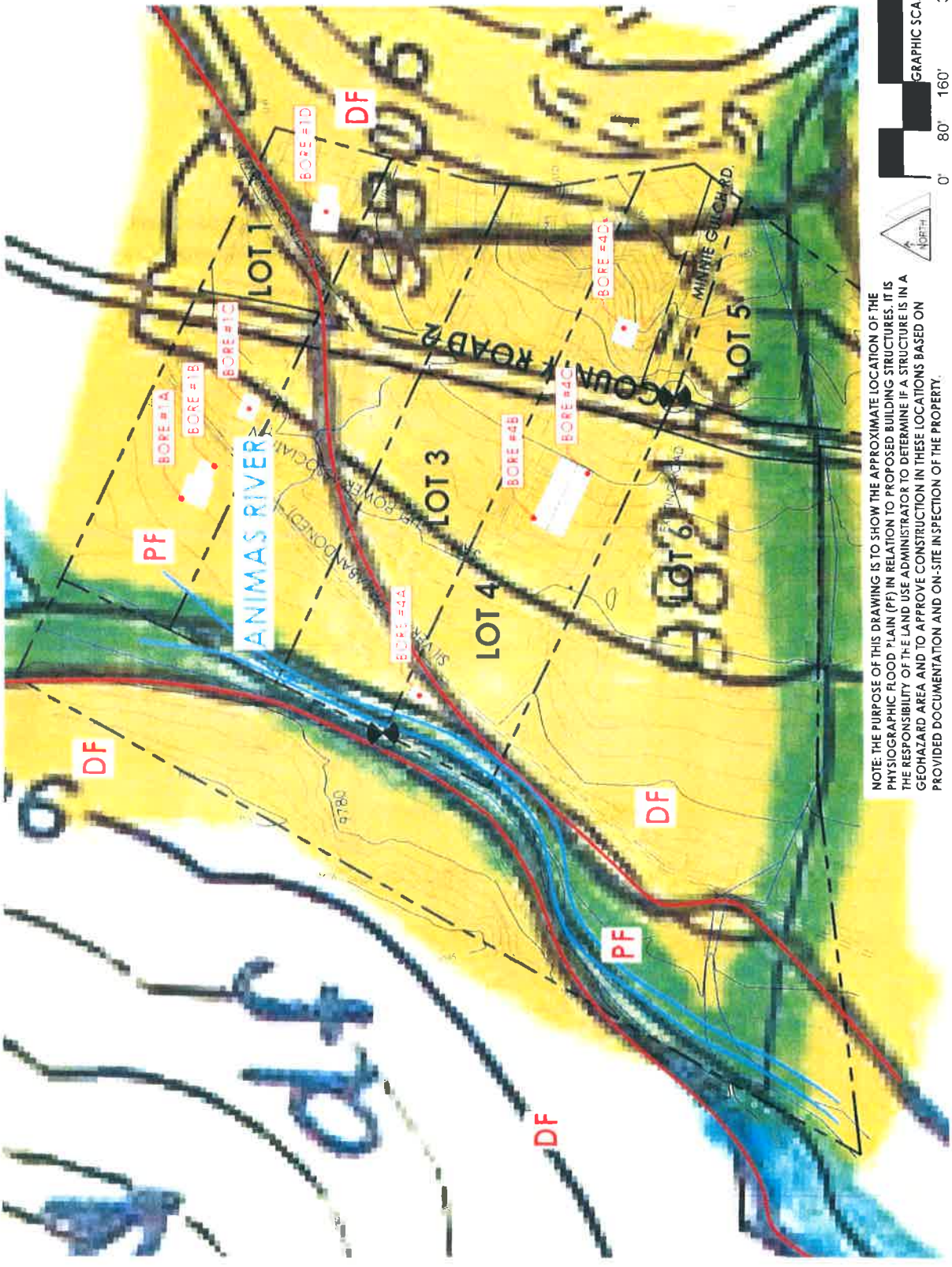
Chad Engelhardt
Engelhardt Environmental, LLC.
engelhardt.environmental@gmail.com
970.946.8657

To whom it may concern:

The bore holes on Lots 1 and 4 of the Cole ranch Subdivision, located in San Juan County, Colorado, as shown on the enlarged Geohazard Map sheet G as provided by Mountain Grain Architecture, does not fall in the Flood Plain.



Kenneth E. Schaaf PLS 38114



NOTE: THE PURPOSE OF THIS DRAWING IS TO SHOW THE APPROXIMATE LOCATION OF THE PHYSIOGRAPHIC FLOOD PLAIN (PF) IN RELATION TO PROPOSED BUILDING STRUCTURES. IT IS THE RESPONSIBILITY OF THE LAND USE ADMINISTRATOR TO DETERMINE IF A STRUCTURE IS IN A GEOHAZARD AREA AND TO APPROVE CONSTRUCTION IN THESE LOCATIONS BASED ON PROVIDED DOCUMENTATION AND ON-SITE INSPECTION OF THE PROPERTY.

**San Juan County Historic Impact Review Committee
Silverton, CO 81433**

Re: Lots 1 & 2 Cole Ranch Subdivision – Merlin Schaefer, Applicant

Date: January 24, 2006

The Historic Impact Review Committee reviewed the above project at the request of the county planner. Present were Bill Jones, Steve Fearn, and Scott Fetchenheir. David Singer met earlier with Bill Jones to give his input.

No site visit was performed due to winter snow conditions. The site maps prepared by Engineer Mountain were reviewed, and specific details of the site and project were obtained from Lisa Adair and Beverly Kaiser by telephone. The principal historic site under review is the Silverton Northern Railroad grade crossing the site. This right of way has previously been determined by San Juan County to be an historic site.

The principal impact to site is potential crossing by driveways to access proposed building envelopes. The grade is in a cut where it enters the northerly sideline of lot 1 and this cut diminishes to the south. No ties are said to remain on the grade, which is otherwise very intact and shows good historic integrity. A 20 foot setback on each side of the grade center line has already been established by plat survey. The Impact Committee deems the grade a significant historic site and should be preserved intact. The committee has the following recommendations:

1. Any road crossing shall be made at the grade of the existing roadbed, to preserve the existing railroad grade elevation. If crossed where the railroad grade lies in a cut the cut's sides should be excavated and re-graded to bring the new road down to the railroad grade elevation. The historic grade and cut shall not be filled. If crossed where the historic grade is elevated from the adjacent topography, the new road should be filled to the top of the existing railroad grade elevation, not cut through.
2. Spoil from cut and fill operations should not be placed within the 40 foot railroad right of way.
3. The new road(s) should be limited to a roadway width of 10 to 12 feet to prevent excessive cut and fill work and subsequent excessive impact to the railroad grade.
4. The driveway for lots 1 and 3 should be located along the south side boundary line to minimize cuts needed to reach grade as the topography in this area is less. In addition locating the driveways here would permit them to be used in future to access lots 2 and 4. The committee recommends keeping crossings of the historic railroad grade to a minimum. Two crossings could potentially access four lots.
5. The 20 foot set back from the railroad grade center line should be maintained as a minimum for all construction on the site.
6. If site conditions in the spring show different conditions than assumed above, a site visit should be requested for further review. If conditions are essentially as described above, no additional site visit is necessary.

Sincerely,

San Juan County Historic Impact Review Committee



By: William R Jones

Copy: Engineer Mountain

GEOTECHNICAL ENGINEERING STUDY

SAMS RESIDENCE

LOT 1 COLE RANCH

SILVERTON, COLORADO

JULY 9, 2020

PREPARED FOR:
Todd and Julie Sams
c/o Christopher Clemmons, RA, NCARB
Mountain Grain Architecture
PROJECT NO. 56082GE

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1.0 REPORT INTRODUCTION

This report presents our geotechnical engineering recommendations for the proposed Sams residence and shop structure located on Lot 1 Cole Ranch, Silverton, San Juan County, Colorado. This report was requested by Christopher Clemmons, RA, NCARB, Mountain Grain Architecture, on behalf of Todd and Julie Sams, and was prepared in accordance with our proposal dated May 22, 2020, Proposal No. 20128P.

As outlined within our proposal for services for this project the client is responsible for appropriate distribution of this report to other design professionals and/or governmental agencies unless specific arrangements have been made with us for distribution.

Geotechnical engineering is a discipline which provides insight into natural conditions and site characteristics such as; subsurface soil and water conditions, soil strength, swell (expansion) potential, consolidation (settlement) potential, and often slope stability considerations. The information provided by the geotechnical engineer is utilized by many people including the project owner, architect or designer, structural engineer, civil engineer, the project builder and others. The information is used to help develop a design and subsequently implement construction strategies that are appropriate for the subsurface soil and water conditions, and slope stability considerations. We are available to discuss any aspect of this report with those who are unfamiliar with the recommendations, concepts, and techniques provided below.

This geotechnical engineering report is the beginning of a process involving the geotechnical engineering consultant on any project. It is imperative that the geotechnical engineer be consulted throughout the design and construction process to verify the implementation of the geotechnical engineering recommendations provided in this report. Often the design has not been started or has only been initiated at the time of the preparation of the geotechnical engineering study. Changes in the proposed design must be communicated to the geotechnical engineer so that we have the opportunity to tailor our recommendations as needed based on the proposed site development and structure design.

The following outline provides a synopsis of the various portions of this report;

- ❖ Sections 1.0 provides an introduction and an establishment of our scope of service.
- ❖ Sections 2.0 and 3.0 of this report present our geotechnical engineering field and laboratory studies
- ❖ Sections 4.0 through 7.0 presents our geotechnical engineering design parameters and recommendations which are based on our engineering analysis of the data obtained.
- ❖ Section 8.0 provides a brief discussion of construction sequencing and strategies which may influence the geotechnical engineering characteristics of the site. Ancillary information such as some background information regarding soil corrosion and radon considerations is also presented as general reference.
- ❖ Section 9.0 provides our general construction monitoring and testing recommendations.
- ❖ Section 10.0 provides our conclusions and limitations.

The data used to generate our recommendations are presented throughout this report and in the attached figures.

Project No. 56082GE
July 9, 2020

All recommendations provided throughout within this report must be followed in order to achieve the intended performance of the foundation system and other components that are supported by the site soil.

1.1 Proposed Construction

We understand the proposed construction will consist of a new single-family residential structure and shop structure. We assume the proposed structures will likely be a wood framed structure supported by a steel reinforced concrete foundation system. Grading for the structure is assumed to be relatively minor with cuts of approximately 3 to 8 feet below the adjacent ground surface. We assume relatively light foundation loadings, typical of the proposed type of construction.

When final building location, grading and loading information have been developed, we should be notified to re-evaluate the recommendations presented in this report.

2.0 FIELD STUDY

2.1 Site Description and Geomorphology

The approximate 3.98 acre property is currently vacant. The ground surface is relatively flat within the proposed building locations. The Animas River borders the lot to the west and an old railroad easement and CR 2 and 2D transects and borders the property. Vegetation consists primarily of coniferous and deciduous trees and grasses.

2.2 Subsurface Soil and Water Conditions

We advanced a total of four test borings in the vicinity of the proposed structures. A schematic showing the approximate boring locations is provided below as Figure 1. The logs of the soils encountered in our test borings are presented in Appendix A.

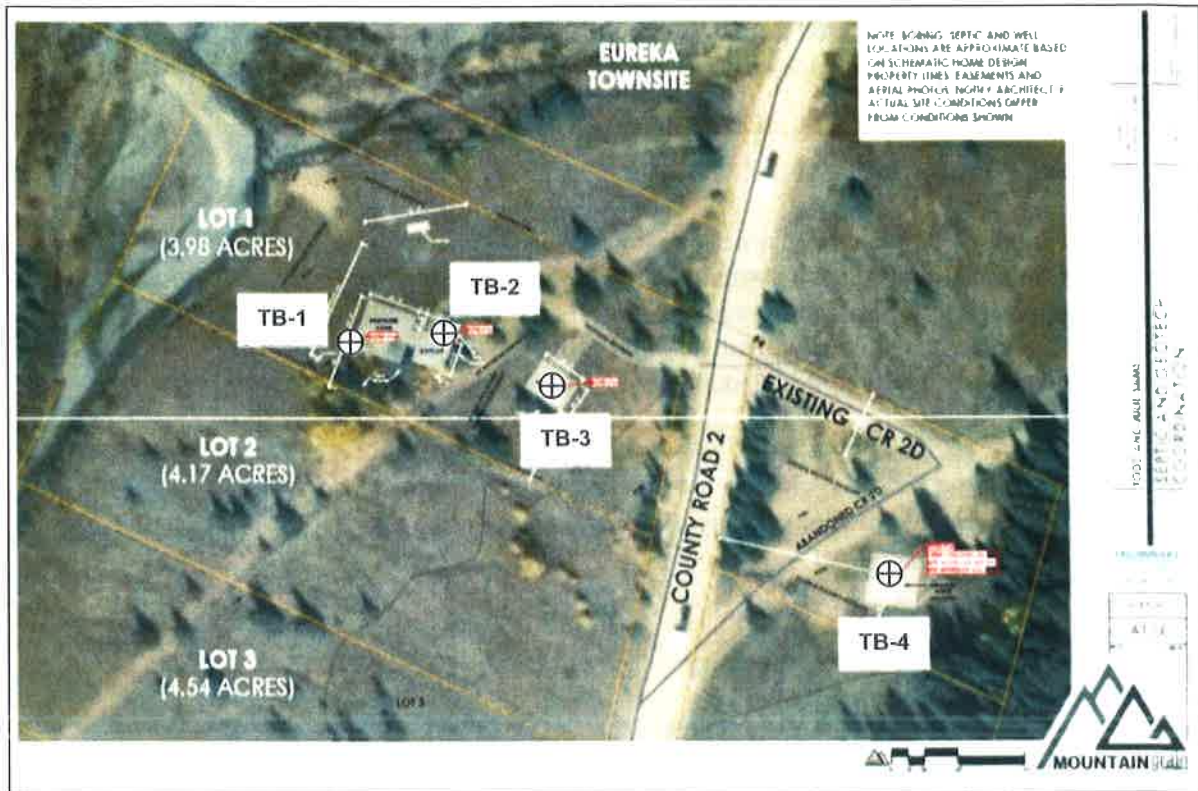


Figure 1: Locations of Exploratory Borings. Adapted from a Mountain Grain site plan dated June 4, 2020.

The schematic presented above was prepared using notes and field measurements obtained during our field exploration and is intended to show the approximate test boring locations for reference purposes only.

The subsurface conditions encountered in our test borings consisted of poorly graded gravel and cobbles with silt and sand and few boulders (GP-GM). Practical auger drilling refusal was encountered on cobble/small boulder size material at depths ranging from 3.5 to 5 feet.

We did not encounter free subsurface water in our test borings at the time of the advancement of our test borings at the project site. We suspect that the subsurface water elevation and soil moisture conditions will be influenced by snow melt and/or precipitation and local irrigation.

The logs of the subsurface soil conditions encountered in our test borings are presented in Appendix A. The logs present our interpretation of the subsurface conditions encountered exposed in the test borings at the time of our field work. Subsurface soil and water conditions are often variable across relatively short distances. It is likely that variable subsurface soil and water conditions will be encountered during construction. Laboratory soil classifications of samples obtained may differ from field classifications.

3.0 LABORATORY STUDY

The laboratory study included tests to estimate the strength, swell and consolidation potential of the soils tested. We performed the following tests on select samples obtained from the test

borings.

- Moisture Content and Dry Density
- Sieve Analysis (Gradation)
- Atterberg Limits, Liquid Limit, Plastic Limit and Plasticity Index
- Swell Consolidation Tests

A synopsis of some of our laboratory data for some of the samples tested is tabulated below.

Sample Designation	Percent Passing #200 Sieve	Atterberg Limits LL/PI	Moisture Content (percent)	Dry Density (PCF)	Measured Swell Pressure (PSF)	Swell or Consolidation Potential
TB-1 @ 0-4'	-	-	10.3	104.2	1,680*	0.8 (% under 500 psf load)
TB-2 @ 0-3 1/2'	5	34/8	4.1	-	-	-
TB-3 @ 2'	-	-	6.9	106.3	0*	-0.2% (% under 500 psf load)

*NOTES:

1. We determine the swell pressure as measured in our laboratory using the constant volume method. The graphically estimated load-back swell pressure may be different from that measured in the laboratory.
2. * - Swell-Consolidation test performed on remolded sample due to rock content. Test results should be considered an estimate only of the swell or consolidation potential at the density and moisture content indicated.

4.0 FOUNDATION RECOMMENDATIONS

There are two general types of foundation system concepts, "deep" and "shallow", with the designation being based on the depth of support of the system. We have provided a discussion viable foundation system concepts for this project below. The choice of the appropriate foundation system for the project is best made by the project structural engineer or project architect. We should be contacted once the design choice has been made to provide consultation regarding implementation of our design parameters.

Deep foundations will provide for the least likelihood of post-construction movement of the structure. Deep foundation system design concepts may be viable for this project; however, we anticipate that only a shallow foundation system design is being considered at this time. We are available to develop deep foundation design parameters if desired.

4.1 Shallow Foundation System Concepts

Subsurface data indicate that GP-GM soils will likely be encountered beneath shallow foundations. Based on the laboratory analysis, the soils encountered in our borings were found to have a low swell potential of 1,680 pounds per square foot (psf) and a magnitude of 0.8 percent under a 500 psf surcharge load and a low consolidation potential. The anticipated soils at the foundation level are considered good for shallow foundation support.

There are numerous types of shallow foundation systems and variants of each type. Shallow foundation system concepts discussed below include:

- Spread Footings (continuous and isolated) and stem walls
- Mat or Raft Foundations

The integrity and long-term performance of each type of system is influenced by the quality of workmanship which is implemented during construction. It is imperative that all excavation and fill placement operations be conducted by qualified personnel using appropriate equipment and techniques to provide suitable support conditions for the foundation system.

4.1.1 Spread Footings

A spread footing foundation system consists of a footing which dissipates, or spreads, the loads imposed from the stem wall (or beam) from the structure above. We recommend that the footings be supported by a layer of moisture conditioned and compacted natural soil which is overlain by a layer of compacted structural fill material. This concept is outlined below:

- The foundation excavation should be excavated to at least six (6) inches below the proposed footing support elevation.
- The natural soils exposed in the bottom of the excavation should be scarified to a depth of about 6 to 8 inches
- The scarified soil should be thoroughly moisture conditioned to about 2 percent above the laboratory determined optimum moisture content and then compacted.
- After completion of the compaction of the moisture conditioned natural soil a six (6) inch thick layer of granular aggregate base course structural fill material should be placed, moisture conditioned and compacted.
- The moisture conditioned natural soil material and the granular soils should be compacted as discussed under the Compaction Recommendations portion of this report below.

Scattered boulders were encountered in our test borings and large boulders are known to be present throughout the vicinity. Due to the size of the boulders encountered in the vicinity, if encountered, they may be difficult to remove using conventional excavation techniques and equipment. Removal of large boulders can also create a void of loose soil beneath structural components, which may require additional removal of loose soil and replacement with structural fill. In some instances, it may be preferable to leave boulders in place. Reduction in the thickness of the recommended structural fill beneath footings and slabs may also be prudent to limit disturbance to the bearing soils. If large boulders are encountered in the building footprint, a representative of the geotechnical engineer can provide field observations and provide additional recommendations for subgrade preparation.

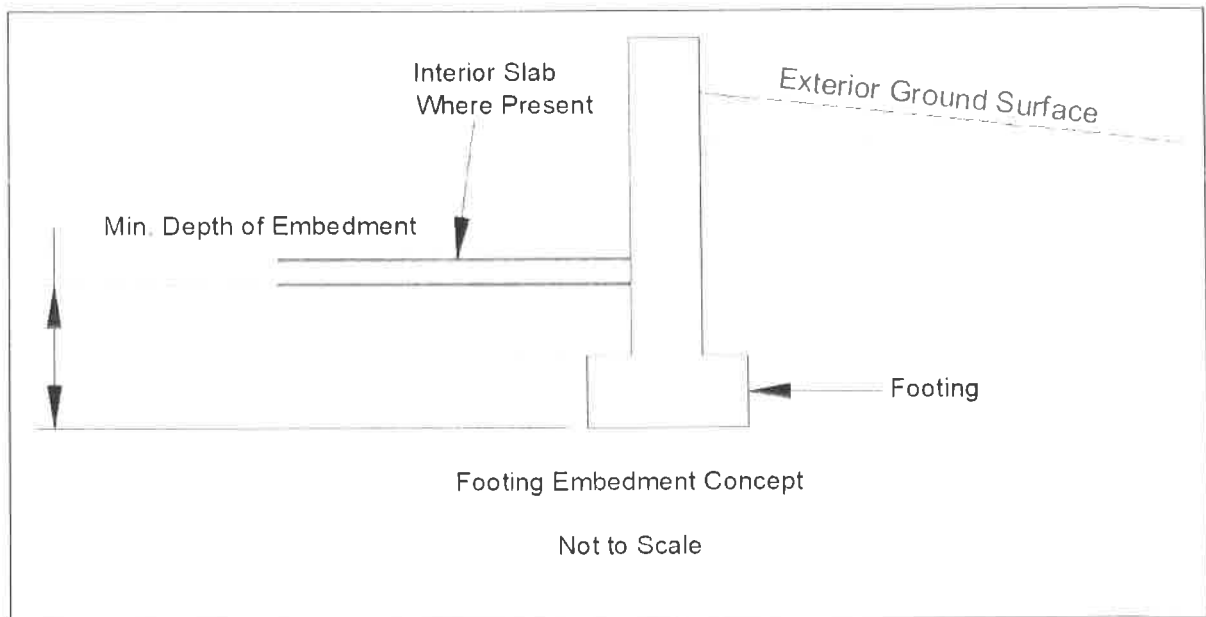
We recommend that particular attention and detail be given to the following aspects of the project construction for this lot;

- A subsurface drain system should be installed adjacent to the residential structure foundation system. Recommendations for a subsurface drain system concepts are presented in Section 5.0 of this report.
- The exterior foundation backfill must be well compacted and moisture conditioned to above optimum moisture content. Recommendations for exterior foundation backfill are provided later in this report.

We recommend below-grade construction, such as retaining walls, crawlspace and basement areas, be protected from wetting and hydrostatic pressure buildup by an underdrain and wall drain system. Topographic conditions on the site may influence the ability to install a subsurface drain system which promotes water flow away from the foundation system. The subsurface drain system concept is discussed under the Subsurface Drain System section of this report below.

The footing embedment is a relatively critical, yet often overlooked, aspect of foundation construction. The embedment helps develop the soil bearing capacity, increases resistance of the footing to lateral movement and decreases the potential for rapid moisture changes in the footing support soils, particularly in crawl space areas. Interior footing embedment reduces the exposure of the crawl space support soils to dry crawl space air. Reduction in drying of the support soil helps reduce downward movement of interior footings due to soil shrinkage.

All footings should have a minimum depth of embedment of at least one 1 foot. The embedment concept is shown below.



Spread footings located away from sloped areas may be designed using the bearing capacity information tabulated below.

Minimum Depth of Embedment (Feet)	Continuous Footing Design Capacity (psf)	Isolated Footing Design Capacity (psf)
1	2,000	2,500
2	2,500	3,000
3	3,000	3,500

The bearing capacity values tabulated above may be increased by 20 percent for transient conditions associated with wind and seismic loads. Snow loads are not transient loads.

The bearing capacity values above were based on footing placed directly on the natural soils and on a continuous spread footing width of 1 ½ feet and an isolated footing width of 3 ½ feet. Larger footings and/or footings placed on a blanket of compacted structural fill will have a higher design soil bearing capacity. Development of the final footing design width is usually an iterative process based on evaluation of design pressures, footing widths and the thickness of compacted structural fill beneath the footings. We should be contacted as the design process continues to re-evaluate the design capacities above based on the actual proposed footing geometry.

The settlement of the spread footing foundation system will be influenced by the footing size and the imposed loads. We estimated the total post construction settlement of the footings based on our laboratory consolidation data, the type and size of the footing. Our analysis below assumed that the highest bearing capacity value tabulated above was used in the design of the footings. The amount of post construction settlement may be reduced by placing the footings on a blanket of compacted structural fill material.

The estimated settlement for continuous footing with a nominal width of about 1 ½ to 2 ½ feet are tabulated below

Thickness of Compacted Structural Fill (feet)	Estimated Settlement (inches)
0	½ - ¾
B/2	¼ - ½
B	About ¼

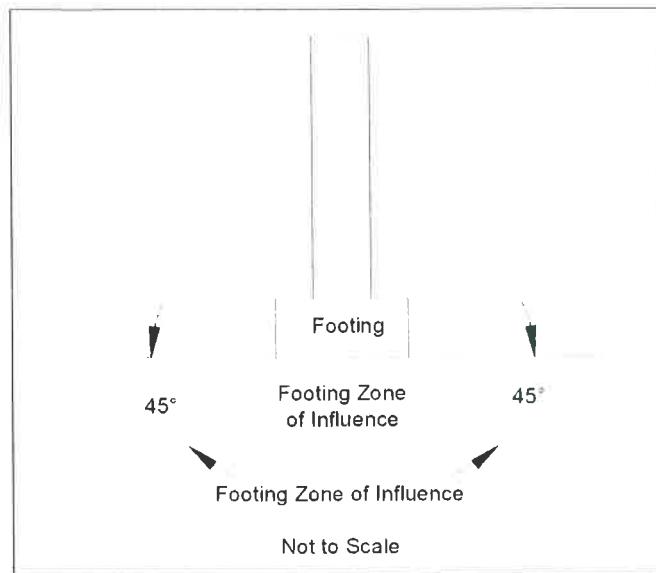
B is the footing width

The estimated settlement for isolated pad footings with a nominal square dimension of about 2 to 3 feet are tabulated below.

Thickness of Compacted Structural Fill (feet)	Estimated Settlement (inches)
0	¾ - 1
B/4	½ - ¾
B/2	¼ - ½
3B/4	About ¼

B is the footing width

The compacted structural fill should be placed and compacted as discussed in the Construction Considerations, "Fill Placement Recommendations" section of this report, below. The zone of influence of the footing (at elevations close to the bottom of the footing) is often approximated as being between two lines subtended at 45 degree angles from each bottom corner of the footing. The compacted structural fill should extend beyond the zone of influence of the footing as shown in the sketch below.



A general and simple rule to apply to the geometry of the compacted structural fill blanket is that it should extend beyond each edge of the footing a distance which is equal to the fill thickness.

We estimate that the differential settlement may be about $\frac{1}{2}$ inch. We estimate that the footings designed and constructed above will have a total post construction settlement of less than 1 inch.

All footings should be support at an elevation deeper than the maximum depth of frost penetration for the area. This recommendation includes exterior isolated footings and column supports. Please contact the local building department for specific frost depth requirements.

The post construction differential settlement may be reduced by designing footings that will apply relatively uniform loads on the support soils. Concentrated loads should be supported by footings that have been designed to impose similar loads as those imposed by adjacent footings.

Under no circumstances should any footing be supported by more than 3 feet of compacted structural fill material unless we are contacted to review the specific conditions supporting these footing locations.

The design concepts and parameters presented above are based on the soil conditions encountered in our test borings. We should be contacted during the initial phases of the foundation excavation at the site to assess the soil support conditions and to verify our recommendations.

4.1.2 General Shallow Foundation Considerations

Some movement and settlement of any shallow foundation system will occur after construction. Movement associated with swelling soils also occurs occasionally. Utility line connections through and foundation or structural component should be appropriately sleeved to reduce the potential for damage to the utility line. Flexible utility line connections will further reduce the potential for damage associated with movement of the structure.

5.0 RETAINING STRUCTURES

We anticipate that laterally loaded walls may be needed for project design. Lateral loads will be imposed on the retaining structures by the adjacent soils and, in some cases, surcharge loads on the retained soils. The loads imposed by the soil are commonly referred to as lateral earth pressures. The magnitude of the lateral earth pressure forces is partially dependent on the soil strength characteristics, the geometry of the ground surface adjacent to the retaining structure, the subsurface water conditions and on surcharge loads.

The retaining structures may be designed using the values tabulated below.

Lateral Earth Pressure Values		
Type of Lateral Earth Pressure	Level Native Soil Backfill (pounds per cubic foot/foot)*	Level Granular Soil Backfill (pounds per cubic foot/foot)
Active	45	35
At-rest	65	55
Passive	340	460
Allowable Coefficient of Friction	0.33	0.45

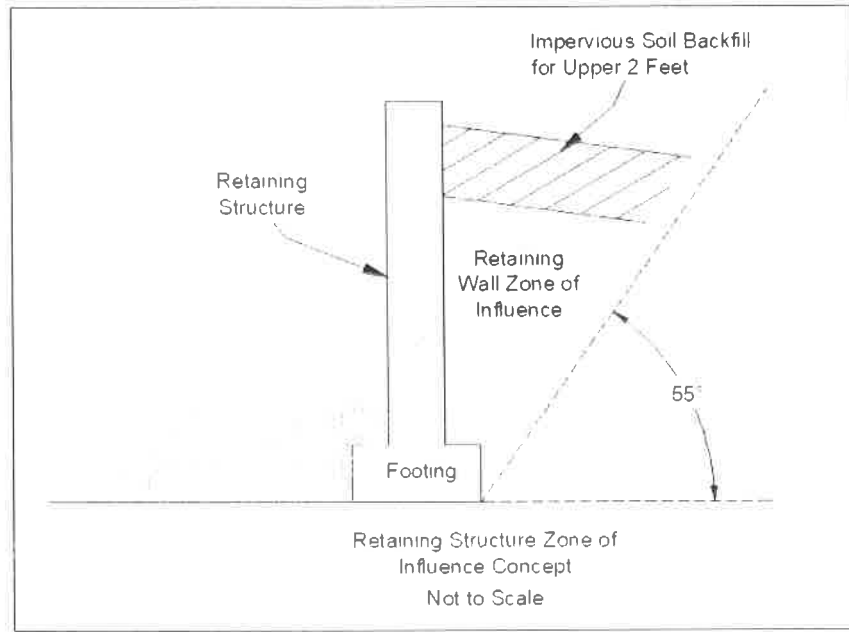
The site soils have a measured swell pressure of 1,680 pounds per square foot which may be exerted on the retaining wall should the backfill soils become moistened. If the site clay soils are used as backfill they must be moisture conditioned to above optimum moisture content during the backfill placement. The retaining wall should be designed to resist forces associated with swelling of the soils used as backfill adjacent to the retaining walls.

The site soils have a measured swell pressure of 1,680 pounds per square foot. A 1,680 pound per square foot swell pressure may exert approximately 13,440 pounds of force per lineal foot for a wall that retains eight (8) feet of soil. The forces from the swelling soil may be treated as a uniformly distributed load for structural design purposes.

The granular soil that is used for the retaining wall backfill may be permeable and may allow water migration to the foundation support soils. There are several options available to help reduce water migration to the foundation soils, two of which are discussed here. An impervious geotextile layer and shallow drain system may be incorporated into the backfill, as discussed in Section 9.5, Landscaping Considerations, below. A second option is to place a geotextile filter material on top of the granular soils and above that place about 1½ to 2 feet of moisture conditioned and compacted site clay soils. It should be noted that if the site clay soils are used volume changes may occur which will influence the performance of overlying concrete flatwork or structural components.

The values tabulated above are for well drained backfill soils. The values provided above do not include any forces due to adjacent surcharge loads or sloped soils. If the backfill soils become saturated the imposed lateral earth pressures will be significantly higher than those tabulated above.

The granular imported soil backfill values tabulated above are appropriate for material with an angle of internal friction of 35 degrees, or greater. The granular backfill must be placed within the retaining structure zone of influence as shown below in order for the lateral earth pressure values tabulated above for the granular material to be appropriate.



If an open graded, permeable, granular backfill is chosen it should not extend to the ground surface. Some granular soils allow ready water migration which may result in increased water access to the foundation soils. The upper few feet of the backfill should be constructed using an impervious soil such as silty-clay and clay soils from the project site, if these soils are available. The 55 degree angle shown in the figure above is approximately correct for most clay soils. The angle is defined by $45 + (\phi/2)$ where " ϕ " is the angle of internal friction of the soil.

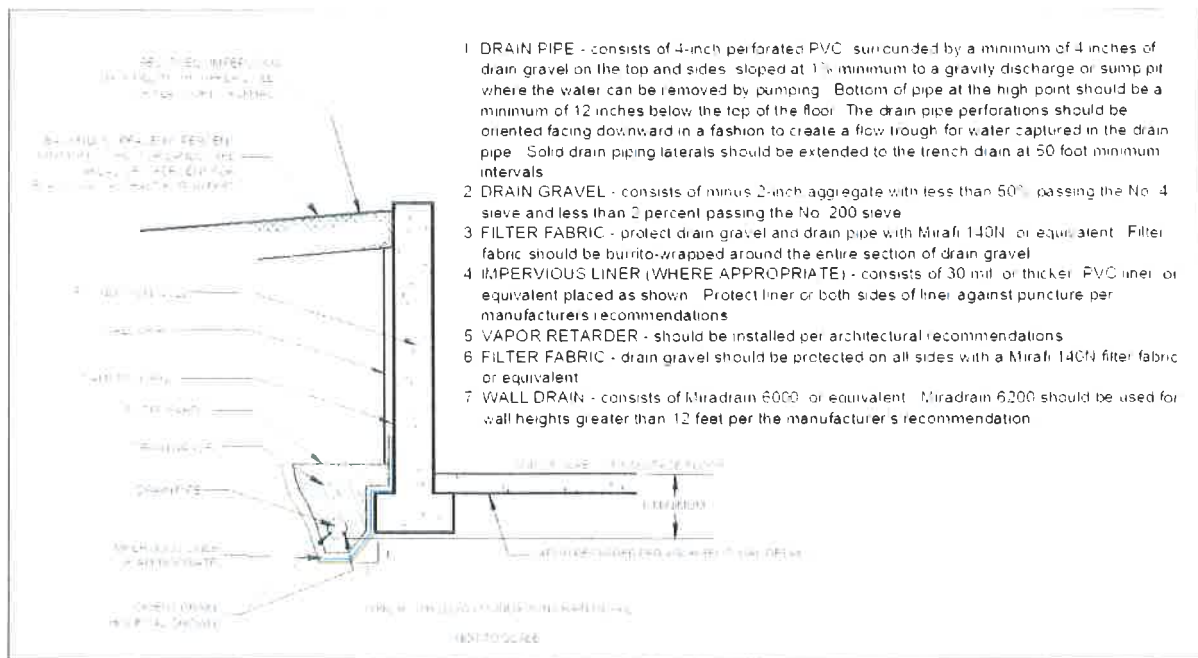
Backfill should not be placed and compacted behind the retaining structure unless approved by the project structural engineer. Backfill placed prior to construction of all appropriate structural members such as floors, or prior to appropriate curing of the retaining wall concrete, may result in severe damage and/or failure of the retaining structure.

6.0 SUBSURFACE DRAIN SYSTEM

We recommend below-grade construction, such as retaining walls, crawlspace and basement areas, be protected from wetting and hydrostatic pressure buildup by an underdrain and wall drain system. Exterior retaining structures may be constructed with weep holes to allow subsurface water migration through the retaining structures. Topographic conditions on the site may influence the ability to install a subsurface drain system which promotes water flow away from the foundation system. The subsurface drain system concept is discussed under the Subsurface Drain System section of this report below.

A drain system constructed with a free draining aggregate material and a 4 inch minimum diameter perforated drain pipe should be constructed adjacent to retaining structures and/or adjacent to foundation walls. The drain pipe perforations should be oriented facing downward. The system should be protected from fine soil migration by a fabric-wrapped aggregate which surrounds a rigid perforated pipe. We do not recommend use of flexible corrugated perforated pipe since it is not possible to establish a uniform gradient of the flexible pipe throughout the drain system alignment. Corrugated drain tile is perforated throughout the entire circumference of the pipe and therefore water can escape from the perforations at undesirable locations after being collected. The nature of the perforations of the corrugated material further decreases its effectiveness as a subsurface drain conduit.

The drain should be placed at each level of excavation and at least 12 inches below lowest adjacent finish floor or crawlspace grade. The drain system pipe should be graded to surface outlets or a sump vault. The drain system should be sloped at a minimum gradient of about 2 percent, but site geometry and topography may influence the actual installed pipe gradient. Water must not be allowed to pool along any portion of the subsurface drain system. An improperly constructed subsurface drain system may promote water infiltration to undesirable locations. The drain system pipe should be surrounded by about 2 to 4 cubic feet per lineal foot of free draining aggregate. If a sump vault and pump are incorporated into the subsurface drain system, care should be taken so that the water pumped from the vault does not recirculate through pervious soils and obtain access to the basement or crawl space areas. An impervious membrane should be included in the drain construction for grade beam and pier systems or other foundation systems such as interrupted footings where a free pathway for water beneath the structure exists. A generalized subsurface drain system concept is shown below.



There are often aspects of each site and structure which require some tailoring of the subsurface drain system to meet the needs of individual projects. Drain systems that are placed adjacent to void forms must include provisions to protect and support the impervious liner adjacent to the void form. We are available to provide consultation for the subsurface drain system for this project, if desired.

Water often will migrate along utility trench excavations. If the utility trench extends from areas above the site, this trench may be a source for subsurface water within a crawl space or basement. We suggest that the utility trench backfill be thoroughly compacted to help reduce the amount of water migration. The subsurface drain system should be designed to collect subsurface water from the utility trench and fractures within the formational material and direct it to surface discharge points.

7.0 CONCRETE FLATWORK

We anticipate that both interior and exterior concrete flatwork will be considered in the project design. Concrete flatwork is typically lightly loaded and has a limited capability to resist shear forces associated with uplift from swelling soils and/or frost heave. It is prudent for the design and construction of concrete flatwork on this project to be able to accommodate some movement associated with swelling soil conditions, if possible.

The soil samples tested have a measured swell pressure of about 1,680 pounds per square foot and a magnitude swell potential of about 0.8 percent under a 500 pound per square foot surcharge load. Due to the measured swell potential and swell pressure, interior floors supported over a crawl space are less likely to experience movement than are concrete slabs support on grade. The following recommendations are appropriate for garage floor slabs and for interior floor slabs if the owner is willing to accept the risk of potential movement beyond normal tolerances.

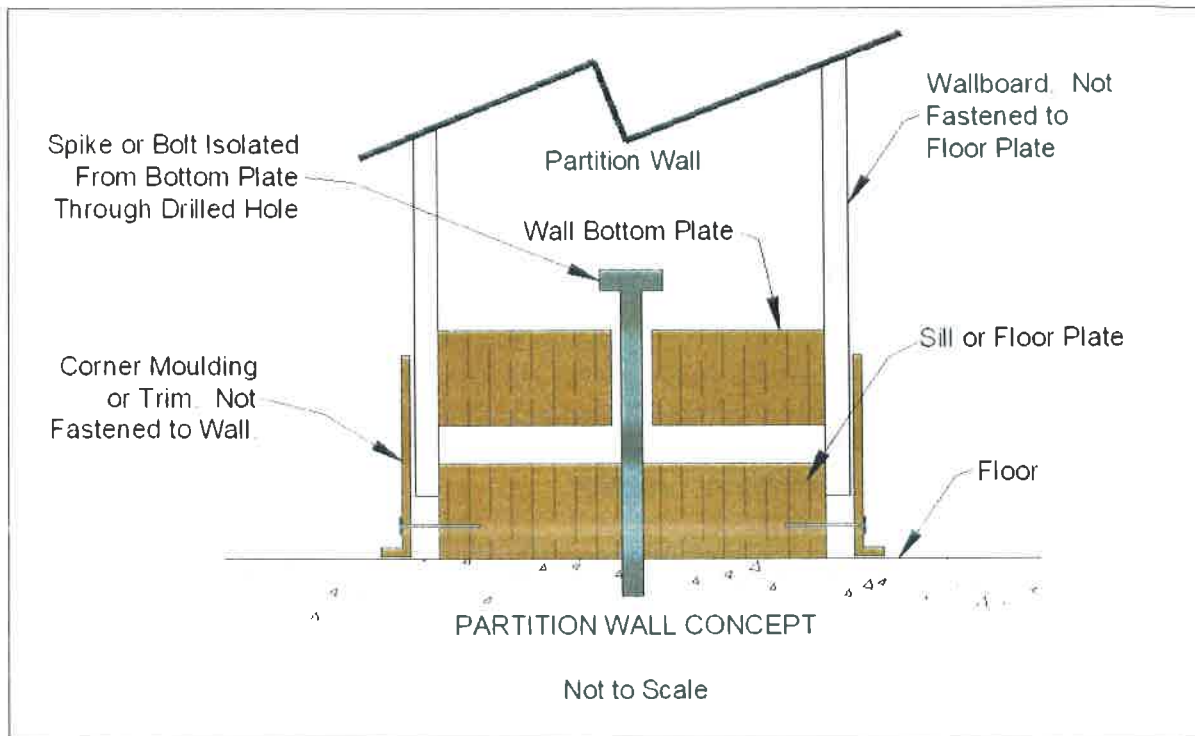
7.1 Interior Concrete Slab-on-Grade Floors

A primary goal in the design and construction of concrete slab-on-grade floors is to reduce the amount of post construction uplift associated with swelling soils, or downward movement due to consolidation of soft soils. A parallel goal is to reduce the potential for damage to the structure associated with any movement of the slab-on-grade which may occur. There are limited options available to help mitigate the influence of volume changes in the support soil for concrete slab-on-grade floors, these include:

- Preconstruction scarification, moisture conditioning and re-compaction of the natural soils in areas proposed for support of concrete flatwork, and/or,
- Placement and compaction of granular compacted structural fill material

Damage associated with movement of interior concrete slab-on-grade floor can be reduced by designing the floors as “floating” slabs. The concrete slabs should not be structurally tied to the foundations or the overlying structure. Interior walls or columns should not be supported on the interior floor slabs. Movement of interior walls or columns due to uplift of the floor slab can cause severe damage throughout the structure. Interior walls may be structurally supported from

framing above the floor, or interior walls and support columns may be supported on interior portions of the foundation system. Partition walls should be designed and constructed with voids above, and/or below, to allow independent movement of the floor slab. This concept is shown below.



The sketch above provides a concept. If the plans include isolation of the partition walls from the floor slab, the project architect or structural engineer should be contacted to provide specific details and design of the desired system.

If the owner chooses to construct the residence with concrete slab-on-grade floors, the floors should be supported by a layer of granular structural fill overlying the processed, moisture conditioned and compacted natural soils. Interior concrete flatwork, or concrete slab-on-grade floors, should be underlain by 6 inch minimum layer of compacted structural fill that is placed and compacted as discussed in the Construction Considerations, "Fill Placement Recommendations" section of this report, below.

The above recommendations will not prevent slab heave if the expansive soils underlying slabs-on-grade become wet. However, the recommendations will reduce the effects if slab heave occurs. All plumbing lines should be pressure tested before backfilling to help reduce the potential for wetting. The only means to completely mitigate the influence of volume changes on the performance of interior floors is to structurally support the floors over a void space. Floors that are suspended by the foundation system will not be influenced by volume changes in the site soils. The suggestions and recommendations presented below are intended to help reduce the influence of swelling soils on the performance of the concrete slab-on-grade floors.

7.1.1 Capillary and Vapor Moisture Rise

Capillary and vapor moisture rise through the slab support soil may provide a source for moisture in the concrete slab-on-grade floor. This moisture may promote development of mold or mildew in poorly ventilated areas and may influence the performance of floor coverings and mastic placed directly on the floor slabs. The type of floor covering, adhesives used, and other considerations that are not related to the geotechnical engineering practice will influence the design. The architect, builder and particularly the floor covering/adhesive manufacturer should be contacted regarding the appropriate level of protection required for their products.

Comments for Reduction of Capillary Rise

One option to reduce the potential for capillary rise through the floor slab is to place a layer of clean aggregate material, such as washed concrete aggregate for the upper 4 to 6 inches of fill material supporting the concrete slabs.

Comments for Reduction of Vapor Rise

To reduce vapor rise through the floor slab, a moisture barrier such as a 6 mil (or thicker) plastic, or similar impervious geotextile material is often placed below the floor slab. The material used should be protected from punctures that will occur during the construction process.

There are proprietary barriers that are puncture resistant that may not need the underlying layer of protective material. Some of these barriers are robust material that may be placed below the compacted structural fill layer. We do not recommend placement of the concrete directly on a moisture barrier unless the concrete contractor has had previous experience with curing of concrete placed in this manner. As mentioned above, the architect, builder and particularly the floor covering/adhesive manufacturer should be contacted regarding the appropriate level of moisture and vapor protection required for their products.

7.1.2 Slab Reinforcement Considerations

The project structural engineer should be contacted to provide steel reinforcement design considerations for the proposed floor slabs. Any steel reinforcement placed in the slab should be placed at the appropriate elevations to allow for proper interaction of the reinforcement with tensile stresses in the slab. Reinforcement steel that is allowed to cure at the bottom of the slab will not provide adequate reinforcement.

7.2 Exterior Concrete Flatwork Considerations

Exterior concrete flatwork includes concrete driveway slabs, aprons, patios, and walkways. The desired performance of exterior flatwork typically varies depending on the proposed use of the site and each owner's individual expectations. As with interior flatwork, exterior flatwork is particularly prone to movement and potential damage due to movement of the support soils. This movement and associated damage may be reduced by following the recommendations discussed under interior flatwork, above. Unlike interior flatwork, exterior flatwork may be exposed to frost heave, particularly on sites where the bearing soils have a high silt content. It

may be prudent to remove silt soils from exterior flatwork support areas where movement of exterior flatwork will adversely affect the project, such as near the interface between the driveway and the interior garage floor slab. If silt soils are encountered, they should be removed to the maximum depth of frost penetration for the area where movement of exterior flatwork is undesirable.

If some movement of exterior flatwork is acceptable, we suggest that the support areas be prepared by scarification, moisture conditioning and re-compaction of about 6 inches of the natural soils followed by placement of at least 6 inches of compacted granular fill material. The scarified material and granular fill materials should be placed as discussed under the Construction Considerations, "Fill Placement Recommendations" section of this report, below.

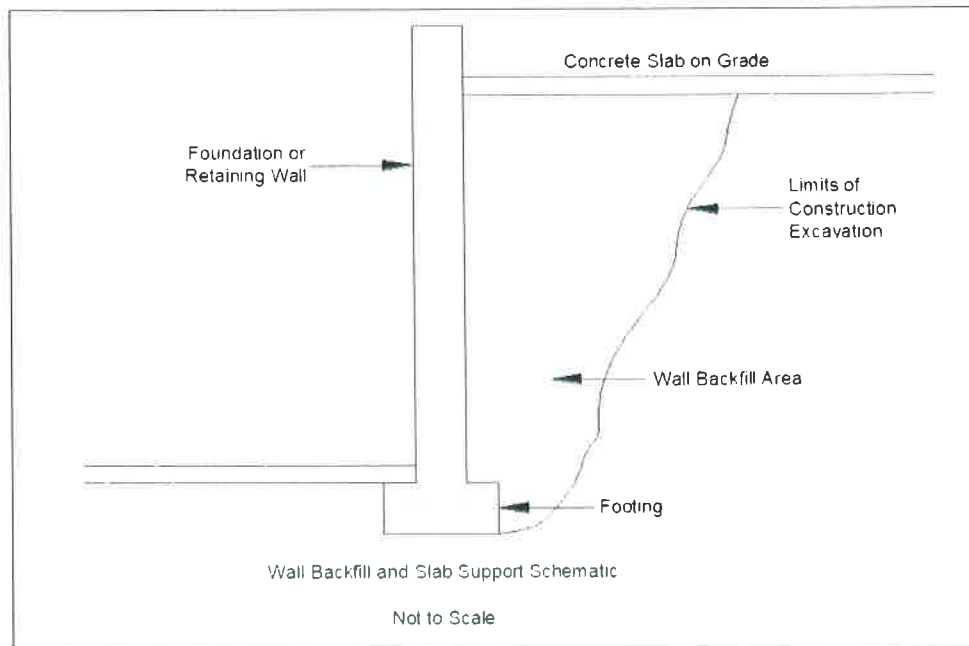
It is important that exterior flatwork be separated from exterior column supports, masonry veneer, finishes and siding. No support columns, for the structure or exterior decks, should be placed on exterior concrete unless movement of the columns will not adversely affect the supported structural components. Movement of exterior flatwork may cause damage if it is in contact with portions of the structure exterior.

It should be noted that silt and silty sand soils located near the ground surface are particularly prone to frost heave. Soils with high silt content have the ability to retain significant moisture. The ability for the soils to accumulate moisture combined with a relatively shallow source of subsurface water and the fact that the winter temperatures in the area often very cold all contribute to a high potential for frost heave of exterior structural components. We recommend that silty soils be removed from the support areas of exterior components that are sensitive to movement associated with frost heave. These soils should be replaced with a material that is not susceptible to frost heave. Aggregate road base and similar materials retain less water than fine-grained soils and are therefore less prone to frost heave. We are available to discuss this concept with you as the plans progress.

Exterior flatwork should not be placed on soils prepared for support of landscaping vegetation. Cultivated soils will not provide suitable support for concrete flatwork.

7.3 General Concrete Flatwork Comments

It is relatively common that both interior and exterior concrete flatwork is supported by areas of fill adjacent to either shallow foundation walls or basement retaining walls. A typical sketch of this condition is shown below.



Settlement of the backfill shown above will create a void and lack of soil support for the portions of the slab over the backfill. Settlement of the fill supporting the concrete flatwork is likely to cause damage to the slab-on-grade. Settlement and associated damage to the concrete flatwork may occur when the backfill is relatively deep, even if the backfill is compacted.

If this condition is likely to exist on this site it may be prudent to design the slab to be structurally supported on the retaining or foundation wall and designed to span to areas away from the backfill area as designed by the project structural engineer. We are available to discuss this with you upon request.

8.0 CONSTRUCTION CONSIDERATIONS

This section of the report provides comments, considerations and recommendations for aspects of the site construction which may influence, or be influenced by the geotechnical engineering considerations discussed above. The information presented below is not intended to discuss all aspects of the site construction conditions and considerations that may be encountered as the project progresses. If any questions arise as a result of our recommendations presented above, or if unexpected subsurface conditions are encountered during construction we should be contacted immediately.

8.1 Fill Placement Recommendations

There are several references throughout this report regarding both natural soil and compacted structural fill recommendations. The recommendations presented below are appropriate for the fill placement considerations discussed throughout the report above.

All areas to receive fill, structural components, or other site improvements should be properly prepared and grubbed at the initiation of the project construction. The grubbing operations should include scarification and removal of organic material and soil. No fill material or concrete should be placed in areas where existing vegetation or fill material exist.

8.1.1 Natural Soil Fill

Any natural soil used for any fill purpose should be free of all deleterious material, such as organic material and construction debris. Natural soil fill includes excavated and replaced material or in-place scarified material. Due to the expansive characteristics of the natural soil we do not recommend that it be used as fill material for direct support of structural components. The natural soils may be used to establish general site elevation. Our recommendations for placement of natural soil fill are provided below.

- The natural soils should be moisture conditioned, either by addition of water to dry soils, or by processing to allow drying of wet soils. The proposed fill materials should be moisture conditioned to between about optimum and about 2 percent above optimum soil moisture content. This moisture content can be estimated in the field by squeezing a sample of the soil in the palm of the hand. If the material easily makes a cast of soil which remains in-tact, and a minor amount of surface moisture develops on the cast, the material is close to the desired moisture content. Material testing during construction is the best means to assess the soil moisture content.
- Moisture conditioning of clay or silt soils may require many hours of processing. If possible, water should be added and thoroughly mixed into fine grained soil such as clay or silt the day prior to use of the material. This technique will allow for development of a more uniform moisture content and will allow for better compaction of the moisture conditioned materials.
- The moisture conditioned soil should be placed in lifts that do not exceed the capabilities of the compaction equipment used and compacted to at least 90 percent of maximum dry density as defined by ASTM D1557, modified Proctor test.
- We typically recommend a maximum fill lift thickness of 6 inches for hand operated equipment and 8 to 10 inches for larger equipment.
- Care should be exercised in placement of utility trench backfill so that the compaction operations do not damage underlying utilities.
- The maximum recommended lift thickness is about 6 to 8 inches; therefore, the maximum allowable rock size for natural soil fill is about 4 inches. If smaller compaction equipment is being used, such as walk behind compactors in trenches, the maximum rock size should be less than 3 inches. This may require on-site screening or crushing if larger rocks are present.

8.1.2 Granular Compacted Structural Fill

Granular compacted structural fill is referenced in numerous locations throughout the text of this report. Granular compacted structural fill should be constructed using an imported commercially produced rock product such as aggregate road base. Many products other than road base, such as clean aggregate or select crusher fines may be suitable, depending on the intended use. If a specification is needed by the design professional for development of project

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specifications, a material conforming to the Colorado Department of Transportation (CDOT) "Class 6" aggregate road base material can be specified. This specification can include an option for testing and approval in the event the contractor's desired material does not conform to the Class 6 aggregate specifications. We have provided the CDOT Specifications for Class 6 material below

Grading of CDOT Class 6 Aggregate Base-Course Material	
Sieve Size	Percent Passing Each Sieve
¾ inch	100
#4	30 – 65
#8	25 – 55
#200	3 – 12

Liquid Limit less than 30

All compacted structural fill should be moisture conditioned and compacted to at least 90 percent of maximum dry density as defined by ASTM D1557, modified Proctor test. Areas where the structural fill will support traffic loads under concrete slabs or asphalt concrete should be compacted to at least 95 percent of maximum dry density as defined by ASTM D1557, modified Proctor test.

Although clean-screened or washed aggregate may be suitable for use as structural fill on sites with sand or non-expansive silt soils, or on sites where shallow subsurface water is present, clean aggregate materials must not be used on any site where expansive soils exist due to the potential for water to accumulate in the voids of the clean aggregate materials.

Clean aggregate fill, if appropriate for the site soil conditions, must not be placed in lifts exceeding 8 inches and each lift should be thoroughly vibrated, preferably with a plate-type vibratory compactor prior to placing overlying lifts of material or structural components. We should be contacted prior to the use of clean aggregate fill materials to evaluate their suitability for use on this project.

8.1.3 Deep Fill Considerations

Deep fills, in excess of approximately 3 feet, should be avoided where possible. Fill soils will settle over time, even when placed properly per the recommendations contained in this report. Natural soil fill or engineered structural fills placed to our minimum recommended requirements will tend to settle an estimated 1 to 3 percent; therefore, a 3 foot thick fill may settle up to approximately 1 inch over time. A 10 foot thick fill may settle up to approximately 3½ inches even when properly placed. Fill settlement will result in distress and damage to the structures they are intended to support. There are methods to reduce the effects of deep fill settlement such as surcharge loading and surveyed monitoring programs; however, there is a significant time period of monitoring required for this to be successful. A more reliable method is to support structural components with deep foundation systems bearing below the fill envelope. We can provide additional guidance regarding deep fills up on request.

8.2 Excavation Considerations

Unless a specific classification is performed, the site soils should be considered as an Occupational Safety and Health Administration (OSHA) Type C soil and should be sloped and/or benched according to the current OSHA regulations. Excavations should be sloped and benched to prevent wall collapse. Any soil can release suddenly and cave unexpectedly from excavation walls, particularly if the soils is very moist, or if fractures within the soil are present. Daily observations of the excavations should be conducted by OSHA competent site personnel to assess safety considerations.

Scattered boulders were encountered in our test borings and large boulders are known to be present throughout the vicinity. Due to the size of the boulders encountered in the vicinity, if encountered, they may be difficult to remove using conventional excavation techniques and equipment. Removal of large boulders can also create a void of loose soil beneath structural components, which may require additional removal of loose soil and replacement with structural fill. In some instances, it may be preferable to leave boulders in place. Reduction in the thickness of the recommended structural fill beneath footings and slabs may also be prudent to limit disturbance to the bearing soils. If large boulders are encountered in the building footprint, a representative of the geotechnical engineer can provide field observations and provide additional recommendations for subgrade preparation.

If possible, excavations should be constructed to allow for water flow from the excavation the event of precipitation during construction. If this is not possible it may be necessary to remove water from snowmelt or precipitation from the foundation excavations to help reduce the influence of this water on the soil support conditions and the site construction characteristics.

8.2.1 Excavation Cut Slopes

We anticipate that some permanent excavation cut slopes may be included in the site development. Temporary cut slopes should not exceed 5 feet in height and should not be steeper than about 1:1 (horizontal to vertical) for most soils. Permanent cut slopes greater than 5 feet or steeper than 2½:1 must be analyzed on a site specific basis.

We did not observe evidence of existing unstable slope areas influencing the site, but due to the steepness and extent of the slopes in the area we suggest that the magnitude of the proposed excavation slopes be minimized and/or supported by retaining structures.

8.3 Utility Considerations

Subsurface utility trenches will be constructed as part of the site development. Utility line backfill often becomes a conduit for post construction water migration. If utility line trenches approach the proposed project site from above, water migrating along the utility line and/or backfill may have direct access to the portions of the proposed structure where the utility line penetrations are made through the foundation system. The foundation soils in the vicinity of the utility line penetration may be influenced by the additional subsurface water. There are a few options to help mitigate water migration along utility line backfill. Backfill bulkheads constructed with high clay content soils and/or placement of subsurface drains to promote utility

line water discharge away from the foundation support soil.

Some movement of all structural components is normal and expected. The amount of movement may be greater on sites with problematic soil conditions. Utility line penetrations through any walls or floor slabs should be sleeved so that movement of the walls or slabs does not induce movement or stress in the utility line. Utility connections should be flexible to allow for some movement of the floor slab.

If utility line trenches are excavated using blasting techniques it is relatively common for surface and subsurface water to migrate along the fractures in the rock that may be created by blasting. If this water gains access to a utility line trench that has a gradient down toward the structure the water may gain access to the foundation support materials and/or subsurface portions of the proposed structure. Provisions should be made in the project construction plans to create an impervious barrier to prevent water from migrating into undesirable locations.

8.4 Exterior Grading and Drainage Comments

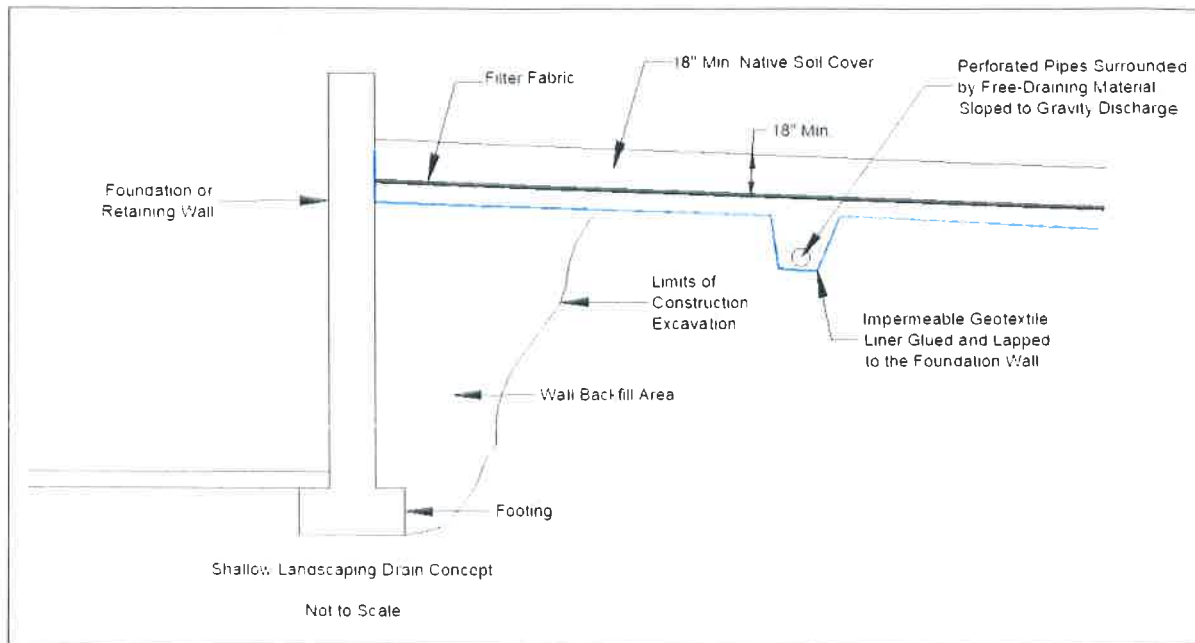
The following recommendations should be following during construction and maintained for the life of the structure with regards to exterior grading and surface drainage.

- The ground surface adjacent to the structure should be sloped to promote water flow away from the foundation system and flatwork.
- Snow storage areas should not be located in areas which will allow for snowmelt water access to support soils for the foundation system or flatwork.
- The project civil engineer, architect or builder should develop a drainage scheme for the site. We typically recommend the ground surface surrounding the exterior of the building be sloped to drain away from the foundation in all directions. We recommend a minimum slope of 12 inches in the first 10 feet in unpaved areas and a minimum slope of 3 inches in the first 10 feet in paved areas.
- Water flow from the roof of the structure should be captured and directed away from the structure. If the roof water is collected in an eave gutter system, or similar, the discharge points of the system must be located away from areas where the water will have access to the foundation backfill or any structure support soils. If downspouts are used, provisions should be made to either collect or direct the water away from the structure.
- Care should be taken to not direct water onto adjacent property or to areas that would negatively influence existing structures or improvements.

8.5 Landscaping Considerations

We recommend against construction of landscaping which requires excessive irrigation. Generally landscaping which uses abundant water requires that the landscaping contractor install topsoil which will retain moisture. The topsoil is often placed in flattened areas near the structure to further trap water and reduce water migration from away from the landscaped areas. Unfortunately, almost all aspects of landscape construction and development of lush vegetation are contrary to the establishment of a relatively dry area adjacent to the foundation walls. Excess water from landscaped areas near the structure can migrate to the foundation system or flatwork support soils, which can result in volume changes in these soils.

A relatively common concept used to collect and subsequently reduce the amount of excess irrigation water is to glue or attach an impermeable geotextile fabric or heavy mill plastic to the foundation wall and extend it below the topsoil which is used to establish the landscape vegetation. A thin layer of sand can be placed on top of the geotextile material to both protect the geotextile from punctures and to serve as a medium to promote water migration to the collection trench and perforated pipe. The landscape architect or contractor should be contacted for additional information regarding specific construction considerations for this concept which is shown in the sketch below.



A free draining aggregate or sand may be placed in the collection trench around the perforated pipe. The perforated pipe should be graded to allow for positive flow of excess irrigation water away from the structure or other area where additional subsurface water is undesired. Preferably the geotextile material should extend at least 10 or more feet from the foundation system.

Care should be taken to not place exterior flatwork such as sidewalks or driveways on soils that have been tilled and prepared for landscaping. Tilled soils will settle which can cause damage to the overlying flatwork. Tilled soils placed on sloped areas often “creep” down-slope. Any structure or structural component placed on this material will move down-slope with the tilled soil and may become damaged.

The landscape drain system concept provided above is optional for this site and provided only if there is a desire to reduce the potential for subsurface water migration to below grade finished areas or crawl space areas. Often this concept is implemented only on the northern sides of structures and/or where snow may accumulate and melt water may migrate toward subsurface areas under the structure.

8.6 Soil Sulfate and Corrosion Issues

The requested scope of our services did not include assessment of the chemical constituents of corrosion potential of the site soils. Most soils in southwest Colorado are not typically corrosive to concrete. There has not been a history of damage to concrete due to sulfate corrosion in the area.

We are available to perform soluble sulfate content tests to assess the corrosion potential of the soils on concrete if desired.

8.7 Radon Issues

The requested scope of service of this report did not include assessment of the site soils for radon production. Many soils and formational materials in western Colorado produce Radon gas. The structure should be appropriately ventilated to reduce the accumulation of Radon gas in the structure. Several Federal Government agencies including the Environmental Protection Agency (EPA) have information and guidelines available for Radon considerations and home construction. If a radon survey of the site soils is desired, please contact us.

8.8 Mold and Other Biological Contaminants

Our services do not include determining the presence, prevention or possibility of mold or other biological contaminants developing in the future. If the client is concerned about mold or other biological contaminants, a professional in this special field of practice should be consulted.

9.0 CONSTRUCTION MONITORING AND TESTING

Engineering observation of subgrade bearing conditions, compaction testing of fill material and testing of foundation concrete are equally important tasks that should be performed by the geotechnical engineering consultant during construction. We should be contacted during the construction phase of the project and/or if any questions or comments arise as a result of the information presented below. It is common for unforeseen, or otherwise variable subsurface soil and water conditions to be encountered during construction. As discussed in our proposal for our services, it is imperative that we be contacted during the foundation excavation stage of the project to verify that the conditions encountered in our field exploration were representative of those encountered during construction. Our general recommendations for construction monitoring and testing are provided below.

- Consultation with design professionals during the design phases: This is important to ensure that the intentions of our recommendations are properly incorporated in the design, and that any changes in the design concept properly consider geotechnical aspects.
- Grading Plan Review: A grading plan was not available for our review at the time of this report. A grading plan with finished floor elevations for the proposed construction should be prepared by a civil engineer licensed in the State of Colorado. Trautner Geotech should be provided with grading plans once they are complete to determine if

- our recommendations based on the assumed bearing elevations are appropriate.
- Observation and monitoring during construction: A representative of the Geotechnical engineer from our firm should observe the foundation excavation, earthwork, and foundation phases of the work to determine that subsurface conditions are compatible with those used in the analysis and design and our recommendations have been properly implemented. Placement of backfill should be observed and tested to judge whether the proper placement conditions have been achieved. Compaction tests should be performed on each lift of material placed in areas proposed for support of structural components.
- We recommend a representative of the geotechnical engineer observe the drain and dampproofing phases of the work to judge whether our recommendations have been properly implemented.
- If asphaltic concrete is placed for driveways or aprons near the structure, we are available to provide testing of these materials during placement.

10.0 CONCLUSIONS

While we feel that it is feasible to develop this site as planned using relatively conventional techniques to the area, we feel that it is prudent for us to be part of the continuing design of this project to review and provide consultation in regard to the proposed development scheme as the project progresses to aid in the proper interpretation and implementation of the recommendations presented in this report. This consultation should be incorporated in the project development prior to construction at the site.

We recommend that we be contacted during the design and construction phase of this project to aid in the implementation of our recommendations. Please contact us immediately if you have any questions, or if any of the information presented above is not appropriate for the proposed site construction.

11.0 LIMITATIONS

This study has been conducted based on the geotechnical engineering standards of care in this area at the time this report was prepared. We make no warranty as to the recommendations contained in this report, either expressed or implied. The information presented in this report is based on our understanding of the proposed construction that was provided to us and on the data obtained from our field and laboratory studies. Our recommendations are based on limited field and laboratory sampling and testing. Unexpected subsurface conditions encountered during construction may alter our recommendations. We should be contacted during construction to observe the exposed subsurface soil conditions to provide comments and verification of our recommendations.

The recommendations presented above are intended to be used only for this project site and the proposed construction which was provided to us. The recommendations presented above are not suitable for adjacent project sites, or for proposed construction that is different than that outlined for this study.

Project No. 56082GE
July 9, 2020

This report provides geotechnical engineering design parameters, but does not provide foundation design or design of structure components. The project architect, designer or structural engineer must be contacted to provide a design based on the information presented in this report.

This report does not provide an environmental assessment nor does it provide environmental recommendations such as those relating to Radon or mold considerations. If recommendation relative to these or other environmental topics are needed and environmental specialist should be contacted.

The findings of this report are valid as of the present date. However, changes in the conditions of the property can occur with the passage of time. The changes may be due to natural processes or to the works of man, on the project site or adjacent properties. In addition, changes in applicable or appropriate standards can occur, whether they result from legislation or the broadening of knowledge. Therefore, the recommendations presented in this report should not be relied upon after a period of two years from the issue date without our review.

We are available to review and tailor our recommendations as the project progresses and additional information which may influence our recommendations becomes available.

Please contact us if you have any questions, or if we may be of additional service.

Respectfully,
TRAUTNER GEOTECH



Tom R. Harrison, P.E.
Geotechnical Engineer

APPENDIX A

Field Study Results



Field Engineer : T. Harrison
 Hole Diameter : 4" Solid
 Drilling Method : Continuous Flight Auger
 Sampling Method : Mod. California Sampler
 Date Drilled : 06/08/2020
 Total Depth (approx.) : 4.5 feet
 Location : See Figure in Report

LOG OF BORING TB-1

Lot 1 Cole Ranch Silverton, Colorado
 Todd and Julie Sams
 Mountain Grain Architecture
 c/o Christopher Clemmons, RA, NCARB

Project Number: 56082 GE

Depth in feet	Sample Type	Water Level	USCS	GRAPHIC	Samples	Blow Count	Water Level	REMARKS
	<div>■ Mod. California Sampler</div> <div>▨ Standard Split Spoon</div> <div>▩ Bag Sample</div>	<div>▼ Water Level During Drilling</div> <div>▽ Water Level After Drilling</div>						
DESCRIPTION								
0	SILTY GRAVEL WITH SAND, organics, medium dense to dense, moist, brown		GM					Observed organics in top 6 inches.
1								
2	POORLY GRADED GRAVEL WITH SAND, dense to very dense, slightly moist, brown		GP			5/6		
3						12/6		
4						22/6		
Auger refusal on cobble at 4.5 feet								
5								

06-29-2020 T:\Current GE\56000GE thru 56099GE\56082GE Lot 1 Cole Ranch Silverton COLogs of Test Borings\Lot 1 Cole Ranch_TB-1 bor



Field Engineer : T. Harrison
Hole Diameter : 4" Solid
Drilling Method : Continuous Flight Auger
Sampling Method : Mod. California Sampler
Date Drilled : 06/08/2020
Total Depth (approx.) : 3.5 feet
Location : See Figure in Report

LOG OF BORING TB-2

Lot 1 Cole Ranch Silverton, Colorado
Todd and Julie Sams
Mountain Grain Architecture
c/o Christopher Clemmons, RA, NCARB

Project Number: 56082 GE

Depth in feet	Sample Type	Water Level	USCS	GRAPHIC	Samples	Blow Count	Water Level	REMARKS
	<div>Mod. California Sampler</div> <div>Standard Split Spoon</div> <div>Bag Sample</div>	<div>Water Level During Drilling</div> <div>Water Level After Drilling</div>						
DESCRIPTION								
0	POORLY GRADED GRAVEL WITH SILT AND SAND, dense to very dense, moist, brown		GP-GM					Organics observed in top 6"
1								
2								
3								
4	Auger refusal on cobble at 3.5 feet							

Field Engineer : T. Harrison
Hole Diameter : 4" Solid
Drilling Method : Continuous Flight Auger
Sampling Method : Mod. California Sampler
Date Drilled : 06/08/2020
Total Depth (approx) : 4.5 feet
Location : See Figure in Report

LOG OF BORING TB-3

Lot 1 Cole Ranch Silverton, Colorado
Todd and Julie Sams
Mountain Grain Architecture
c/o Christopher Clemmons, RA, NCARB

Project Number: 56082 GE

Depth in feet	Sample Type	Water Level	USCS	GRAPHIC	Samples	Blow Count	Water Level	REMARKS
	<div><div></div> Mod. California Sampler</div> <div><div></div> Standard Split Spoon</div> <div><div></div> Bag Sample</div>	<div><div>▼</div> Water Level During Drilling</div> <div><div>▽</div> Water Level After Drilling</div>						
DESCRIPTION								
0	POORLY GRADED GRAVEL WITH SILT AND SAND, medium dense to very dense, moist, brown			GP-GM		8/6 16/6 10/4		Observed organics in top 6 inches.
1								
2								
3								
4								
Auger refusal on cobble at 4.5 feet								
5								



Field Engineer : T. Harrison
Hole Diameter : 4" Solid
Drilling Method : Continuous Flight Auger
Sampling Method : Mod. California Sampler
Date Drilled : 06/08/2020
Total Depth (approx.) : 5 feet
Location : See Figure in Report

LOG OF BORING TB-4

Lot 1 Cole Ranch Silverton, Colorado
Todd and Julie Sams
Mountain Grain Architecture
c/o Christopher Clemmons, RA, NCARB

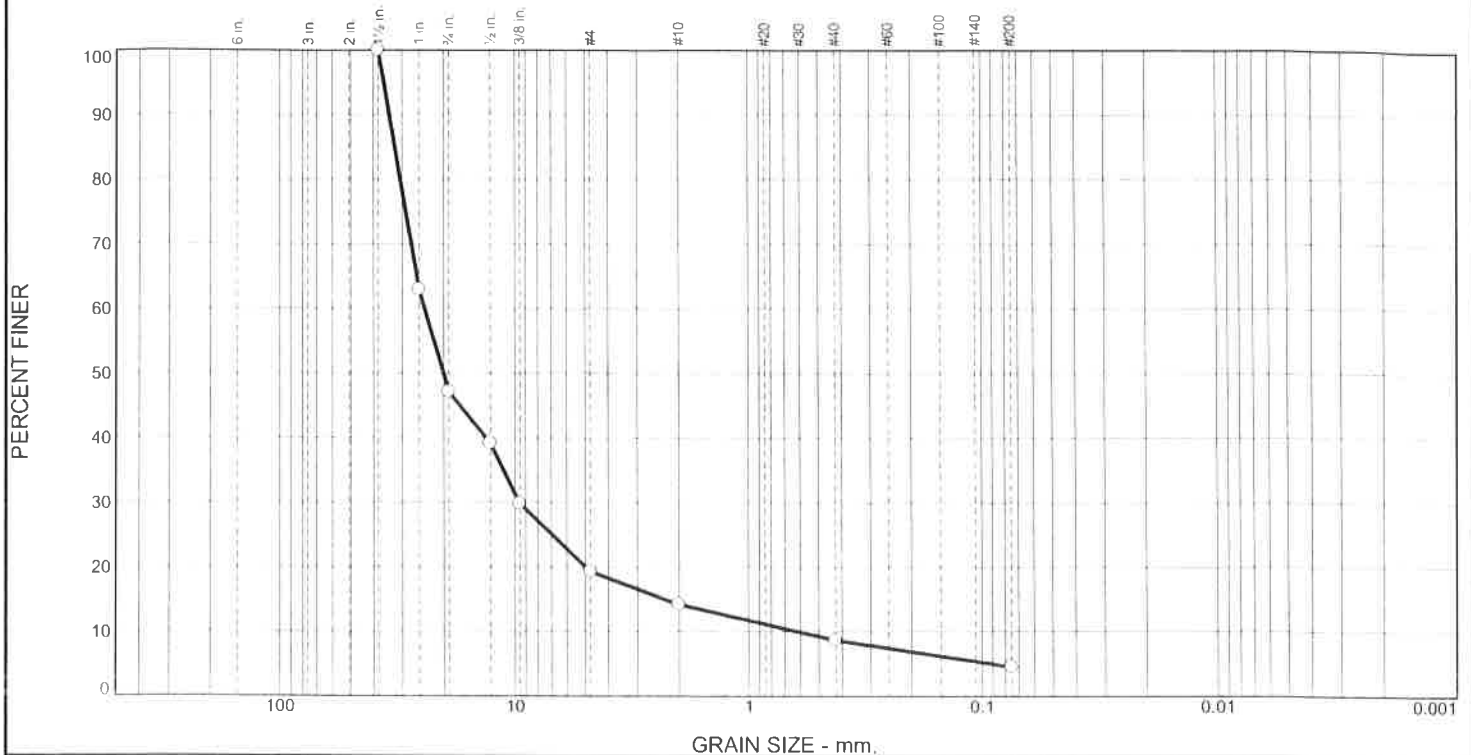
Project Number: 56082 GE

Depth in feet	Sample Type	Water Level	USCS	GRAPHIC	Samples	Blow Count	Water Level	REMARKS
	<div>Mod California Sampler</div> <div>Standard Split Spoon</div> <div>Bag Sample</div>	<div>Water Level During Drilling</div> <div>Water Level After Drilling</div>						
DESCRIPTION								
0	POORLY GRADED GRAVEL WITH SILT AND SAND, medium dense to very dense, moist, brown			GP-GM				Observed organics in top 6 inches.
1								
2								
3								
4								
5	Auger refusal on cobble at 5 feet							

APPENDIX B

Laboratory Test Results

Particle Size Distribution Report



% +3"
0

% Gravel
Coarse 53
Fine 28

% Sand
Coarse 5
Medium 5
Fine 4

% Fines
Silt 5
Clay

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1-1/2"	100		
1"	63		
3/4"	47		
1/2"	39		
3/8"	30		
#4	19		
#10	14		
#40	9		
#200	5		

(no specification provided)

Material Description

GP-GM-Poorly Graded Gravel with Silt and Sand

PL= 26

Atterberg Limits
LL= 34

PI= 8

D₉₀= 34.1494
D₅₀= 20.0694
D₁₀= 0.6137

Coefficients
D₈₅= 32.3305
D₃₀= 9.5732
C_u= 39.22

D₆₀= 24.0693
D₁₅= 2.2799
C_c= 6.20

USCS= GP-GM

Classification

AASHTO= A-2-4(0)

Remarks

Location: Test Boring 2
Sample Number: 12405-B

Depth: 0'-3 1/2'

Date: 6-8-20

TRAUTNER

Client: Mr. Christopher Clemmons RA
Project: Lot 1 Cole Ranch, Silverton CO

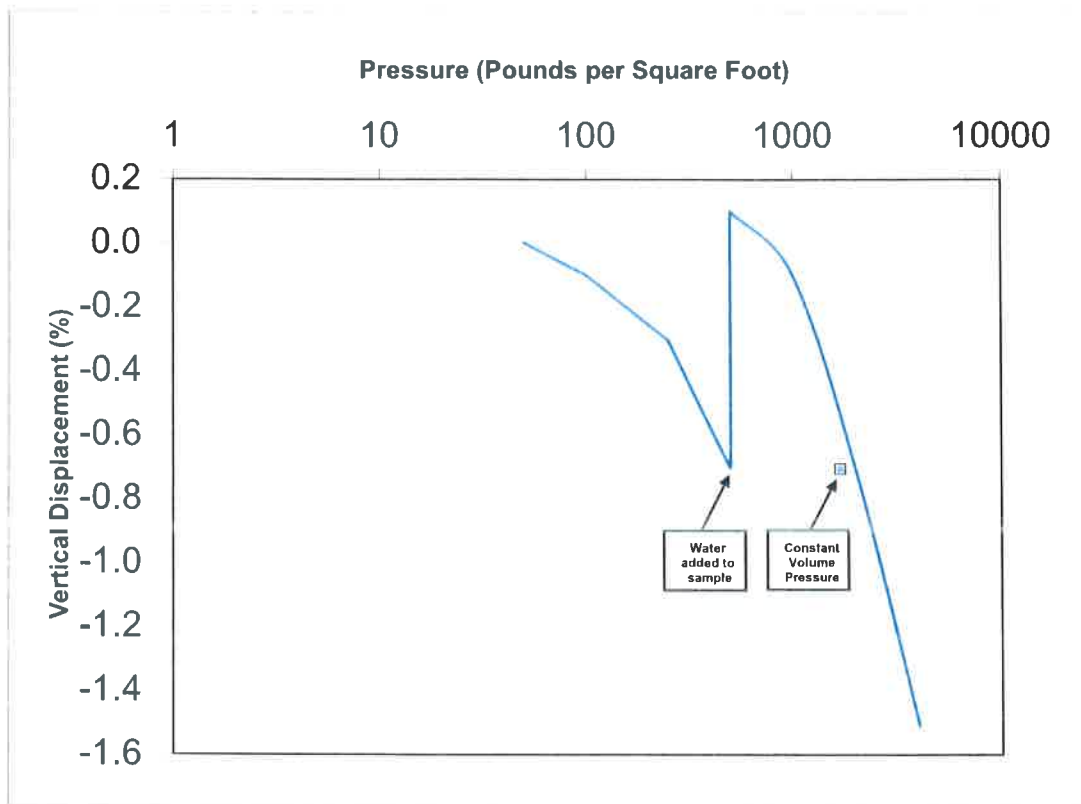
Project No: 56082GE

Figure 4.1

Tested By: B. Kunz & G. Jadrych

Checked By: C. DeLeon

SWELL - CONSOLIDATION TEST

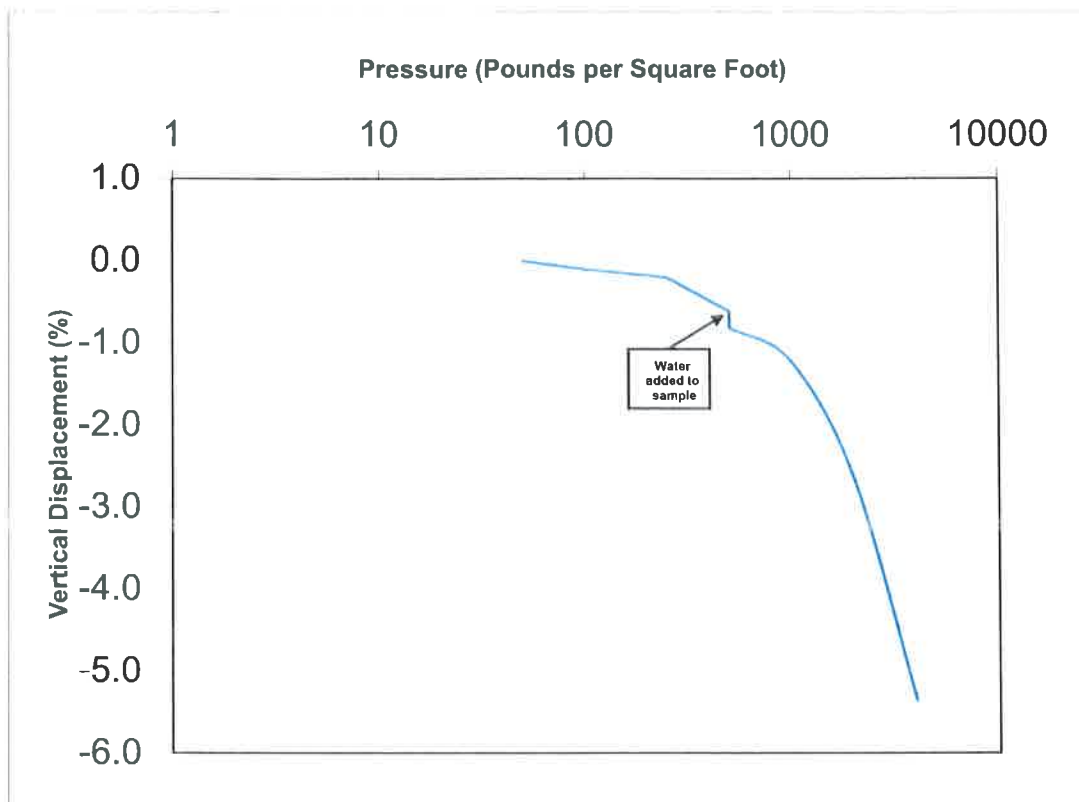


SUMMARY OF TEST RESULTS		
Sample Source:	TB-1 0'-4'	
Visual Soil Description:	GC	
Swell Potential (%)	0.8%	
Constant Volume Swell Pressure (lb/ft ²):	1,680	
	Initial	Final
Moisture Content (%):	10.3	21.0
Dry Density (lb/ft ³):	104.2	106.2
Height (in.):	0.991	0.976
Diameter (in.):	1.94	1.94

Note: Remolded Sample; Molded from the portion of sample passing a #10 sieve. Consolidated under 500 PSF prior to initiating load sequence and wetting. Initial values represent the conditions under 50 PSF following the pre-consolidation under 500 PSF.

Project Number:	56082 GE
Sample ID:	12405-A
Figure:	4.2

SWELL - CONSOLIDATION TEST



SUMMARY OF TEST RESULTS		
Sample Source:	TB-3 @ 2'	
Visual Soil Description:	GC	
Swell Potential (%)	-0.2%	
Constant Volume Swell Pressure (lb/ft ²):	0	
	Initial	Final
Moisture Content (%):	6.9	20.6
Dry Density (lb/ft ³):	106.3	109.9
Height (in.):	0.990	0.937
Diameter (in.):	1.94	1.94

Note: Remolded Sample; Molded from the portion of sample passing a #10 sieve. Consolidated under 500 PSF prior to initiating load sequence and wetting. Initial values represent the conditions under 50 PSF following the pre-consolidation under 500 PSF.

Project Number:	56082GE
Sample ID:	12405-C
Figure:	4.3

BOARD OF COUNTY COMMISSIONERS

San Juan County

P.O. Box 466

Silverton, Colorado 81433

970-387-5671

RELATIONSHIP OF PROPERTY TO COUNTY ROAD AND STATE HIGHWAY SYSTEMS

I, the undersigned, applicant engaged in the processing of Application for Improvement Permit No. _____, San Juan County, Colorado, do hereby acknowledge the following facts:

1. The real property' which is the subject of said application is on this date located approximately **ZERO FEET** from County Road No. **2**, the nearest designated and publicly maintained county road.
2. Said County Road No. **2** is on this date maintained on an **YEAR-ROUND** basis by San Juan County.
3. The real property which is the subject of said application is on this date located approximately **7 1/2 MILES** from Colorado State Highway No. **550**, the nearest designated state or federal highway.
4. Said Colorado State Highway No. **550** is on this date maintained on a year-round basis by either San Juan County or the Colorado Division of Highways.
5. A Driveway Permit will be necessary for any private access or egress relating to said real property which intersects any designated Colorado State Highway or Federal Highway.

Signed and dated this **31** day of **JULY**, **2020**.

ATTEST:

Applicant

Position: 

BOARD OF COUNTY COMMISSIONERS

San Juan County

P.O. Box 466

Silverton, Colorado 81433

970-387-5671

RELATIONSHIP OF PROPERTY TO COUNTY ROAD AND STATE HIGHWAY SYSTEMS


I, the undersigned, applicant engaged in the processing of Application for Improvement Permit No. _____, San Juan County, Colorado, do hereby acknowledge the following facts:

1. The real property' which is the subject of said application is on this date located approximately **ZERO FEET** from County Road No. **2D**, the nearest designated and publicly maintained county road.
2. Said County Road No. **2D** is on this date maintained on an **SEASONAL** basis by San Juan County.
3. The real property which is the subject of said application is on this date located approximately **7 1/2 MILES** from Colorado State Highway No. **550**, the nearest designated state or federal highway.
4. Said Colorado State Highway No. **550** is on this date maintained on a year-round basis by either San Juan County or the Colorado Division of Highways.
5. A Driveway Permit will be necessary for any private access or egress relating to said real property which intersects any designated Colorado State Highway or Federal Highway.

Signed and dated this **31** day of **JULY**, **2020**.
day month year

ATTEST:

Applicant



Position:

SAN JUAN COUNTY, COLORADO
DRIVEWAY AND ROAD ACCESS PERMIT

Improvement
Permit No. _____

Applicant: TODD AND JULIE SAMS
P.O. BOX 215
OOLOGAH, OK 74053
(918) 606-0558

Location of Proposed Driveway or Access on County Road No. 2 :

ON THE WEST SIDE OF COUNTY ROAD 2, APPROXIMATELY 40'
FROM THE NORTHERN EDGE OF THE PROPERTY.

Description of Proposed Driveway or Access, including materials to be used:

THE DRIVEWAY WILL SLIGHTLY MEANDER FROM CR 2 TO THE PROPOSED RESIDENCE
LOCATION, IN ORDER TO HINDER DIRECT LINE-OF-SIGHT FROM THE ROAD. THE
DRIVEWAY WILL CROSS THE ABANDONED RAILROAD BED AT THE LOCATION WITH
THE LEAST AMOUNT OF GRADE CHANGE BETWEEN THE BED AND THE ADJACENT
LAND ON EITHER SIDE. THE GRAVEL DRIVEWAY WILL MEET ALL COUNTY STANDARDS,
INCLUDING WIDTH, SLOPE, CROSS SLOPE, CLEARANCE AND MATERIALS. A CULVERT
WILL BE INSTALLED WHERE THE DRIVEWAY MEETS CR 2.

Comment and Recommendations of County Road Supervisor:

Terms and Conditions of Issuance of Permit (or reason for denial):

Permit Approved _____ or Denied _____.

Date: _____

Land Use Administrator: _____

Scenic Quality Report

1. INTRODUCTION AND SITE LOCATION

San Juan County regulations state the following:

All residential development shall be required to submit a Scenic Quality Report at the time of sketch plan submittal.

The following is a Scenic Quality Report for the proposed Sams Residence, located on Lot 1 of the Cole Ranch Subdivision. This subdivision is located between Middleton and Eureka.

The project site is located within San Juan County's Future Land Use Plan "Economic Corridor". These economic corridors are suitable for residential development because of their moderately sloping terrain and year-round access.

A Vicinity Map showing the general project location is included in this submittal for reference.

2. PROJECT SITE AND PROPOSED RESIDENCE LOCATION

County regulations require that this Scenic Quality Report adhere to the following:

The designated view sheds shall include natural and historic features as seen from and toward the site. Provide written descriptions of these view sheds and how they will be preserved. Existing site photos and graphic depictions of the proposed development shall be submitted so that staff, the Planning Commission and the Board of County Commissioners can assess the visual impacts of the project on the view shed and the effectiveness of proposed mitigation measures.

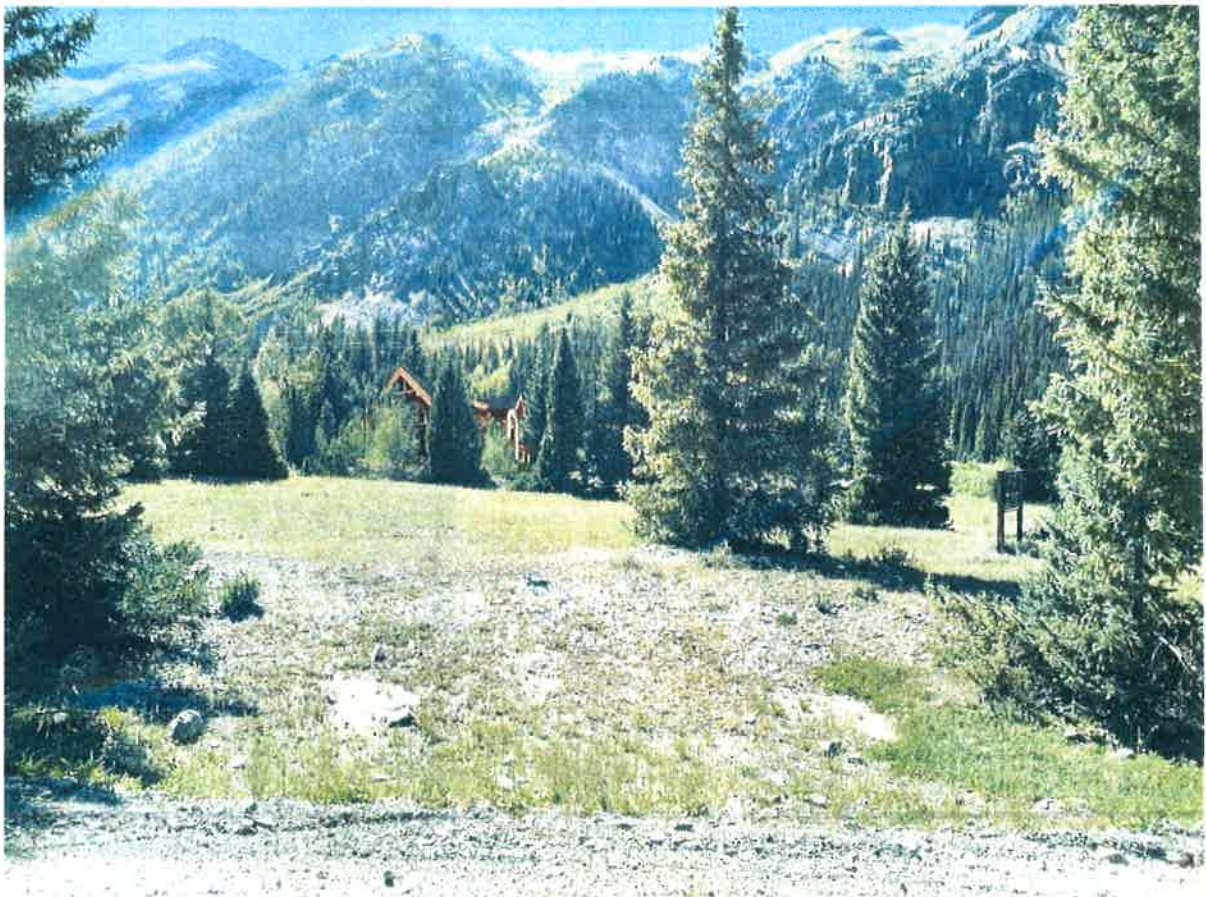
The project site, Lot 1 of Cole Ranch Subdivision, consists of 3.98 acres. The lot is divided by County Road 2. Most of the lot is situated on the west side of County Road 2, which consists of a gently sloping grassy meadow with pine and aspen trees dispersed about the site and clustered adjacent the abandoned railroad bed. The smaller portion of the lot, which is on the east side of County Road 2 consists of less natural screening as well as the abandoned and current CR 2D with 60' R.O.W. The Animas River runs on the westernmost edge of the site.

The proposed location for the residence is on the west side of County Road 2 across the historic railroad bed. The proposed driveway crosses the bed at the area of least grade change to minimize impact on the bed, which will be preserved and/or restored to conditions approvable by the Historic Preservation Society. It is estimated that no visible cut or fill will result from the driveway and utilities crossing the railroad bed. The proposed siting best utilizes the natural topography and the most densely vegetated area to screen the structure, while having little to no impact on scenic views.

3. VISIBILITY OF THE RESIDENCE FROM COUNTY ROAD 2

The proposed residence will be almost entirely screened by natural vegetation when looking west from County Road 2.

The image below shows the proposed residence superimposed onto the site to show approximate scale and visibility from County Road 2.



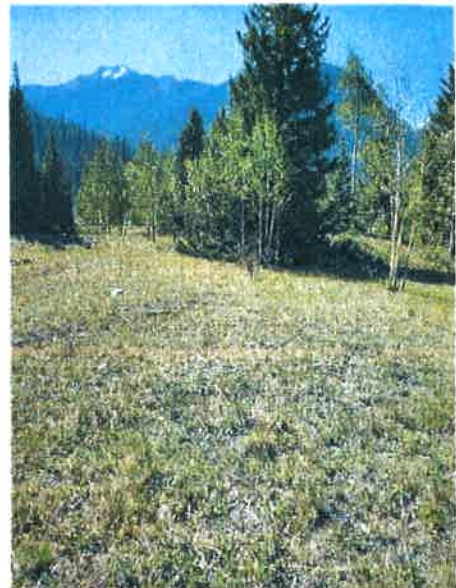
4. VIEWS FROM THE PROPOSED RESIDENCE

In the County Scenic Quality Report regulations, it is requested that information about the view from the building envelope is provided.

Photos are included below that show views from the proposed residence looking approximately towards the north, south, east, and northwest.



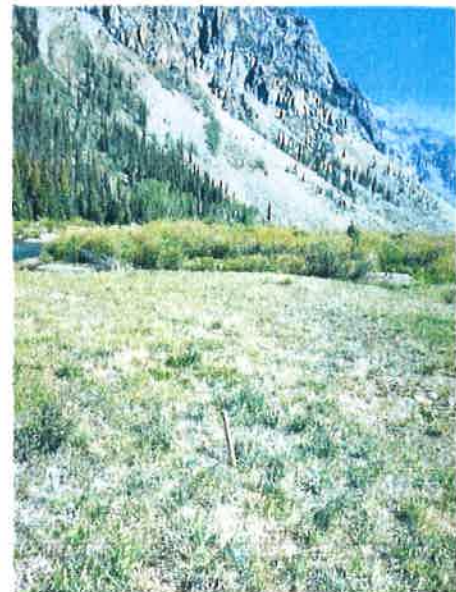
VIEW NORTH



VIEW EAST



VIEW SOUTH



VIEW NORTHWEST

5. LOCATION OF STRUCTURE MINIMIZES VISIBILITY FROM PUBLIC LANDS AND EXISTING TRAILS

The County Scenic Quality regulations require the following information:

Evidence shall be provided to show that the location of the structure is designed to minimize the visual impacts and that it does not detract from the scenic quality of adjacent public lands, existing trails or historic resources.

The location of the residence has been selected to minimize visibility and increase privacy, while also striving to meet the objectives of the subdivision as well as the county. Given the proposed residence is at a lower grade and is screened by natural vegetation, this location should have the least impact on scenic quality and views from public lands, trails, or historic resources.

6. BUILDING DESIGN AND THE NATURAL TOPOGRAPHY AND VEGETATION

County regulations require that the Scenic Quality Report includes information regarding the following:

Evidence to demonstrate that the site improvements are designed and/or oriented in ways that allow them to blend in with and utilize the natural topography and vegetation. The report shall include, but not be limited to, site photos, perspective sketches, photo-simulations and/or three-dimensional models at an appropriate scale.

The proposed residence is sited directly on the backside of a grouping of large evergreens and young aspens and the main floor elevation is approx. 11 feet below CR 2. The proposed design is shown on the Applicant's draft floor plans included in this application.

7. TOPSOIL, UTILITIES, LIGHTING AND DRIVEWAYS

This section describes design features associated with topsoil, location of utilities, exterior lighting, and any proposed driveways.

a) Topsoil

County regulations require that the project should include the following:

Plans to remove and save topsoil, prior to any grading or excavation, and how it will be replaced and reused for re-grading and re-vegetation purposes.

Most of the topsoil removed at the residence area during construction will likely be used as backfill on the west side of the building's foundation to create increased frost protection. Any additional removed topsoil will be used to revitalize the eastern portion of the lot where CR 2 once traversed.

b) Utilities

County regulations require that the project should include the following:

Location and installation of utilities in ways that will minimize impacts to the view shed and natural environment.

The project includes the following proposed utilities: a proposed underground septic system and leach field, a proposed underground water well and associated piping. The Applicant plans to tie into the existing overhead electric line and construct an underground electric service to the home. The septic system location was selected based on existing soils, site conditions and dimensional constraints. The Applicant plans to tie into the existing phone line located on the east side of CR 2. The primary heat source is proposed to be forced air with a supplemental pellet/wood stove. All the utilities will be installed with the least amount of disturbance possible to the natural environment, including vegetation preservation and using existing utilities where possible.

c) Exterior Lighting

County regulations require that the project should include the following:

Exterior lighting shall preserve the Dark Sky environment and view of the stars. Provisions requiring shielding of exterior lighting to prevent direct visibility of light bulbs from off-site, directing of all exterior lighting toward either the ground or the surface of a building and prohibiting high intensity sodium vapor or similar lighting.

The proposed exterior lighting for the project will be the minimum necessary to safely access the residence, as well as additional screened down-lighting at the covered wrap-around deck. All exterior lighting will be fully shielded, will utilize LED bulbs, will be compatible with the rural mountain

character of the area, and will be in conformance with the requirements of San Juan County regulations.

d) Driveways

County regulations require that the project should include the following:

Design and construction plans for roads and associated structures that bear a logical relationship to existing topography to minimize the need for cuts and fills.

One driveway is proposed for this project, which stems off the west side of County Road 2. The driveway location was carefully chosen to minimize disturbance to the abandoned railroad bed and to balance the onsite cut and fill.

8. BUILDING MATERIALS

County regulations require that the Scenic Quality Report includes information regarding the following:

Provide written descriptions and photos of the proposed building materials, colors and textures. Utilizing and integrating elements, colors and textures found naturally in the landscape and prohibition of reflective materials, such as highly reflective glass or metals.

The proposed residence will include the following materials:

- Log siding with a medium, natural stain.
- Rough sawn wood accents with a medium, natural stain.
- Slate color standing seam metal roof with matching trim.
- Stacked river stone used at the column bases.

The image below represents the combination of these materials.



9. CONCLUSION

This project aims to conform to the County Scenic Quality Regulations as shown in this report and is believed to do so as summarized below:

- The Applicant has created a new, more suitable building envelope, which abides by the setback requirements of the county, uses the densest natural vegetation for screening, reduces exposure and proximity to CR 2 and avoids natural and unnatural hazards related to BLM and EPA operations on adjacent lands.
- The residence is a compact two-story home and is downhill from CR 2, which helps to minimize the overall and perceived height.
- The material palette chosen for the residence is in keeping with the mountain log cabin vernacular that is found throughout the region.

Thank you for your review and consideration of the proposed Sams Residence at Cole Ranch. If you have any questions or need additional information please contact Chris Clemmons of Mountain Grain, LLC at 970.515.7882 or Julie Sams at 918.606.0558.

UNITED STATES DEPARTMENT OF THE INTERIOR OFFICE OF HEARINGS
AND APPEALS
BOARD OF LAND APPEALS

BOARD OF COUNTY COMMISSIONERS OF) IBLA Docket No. 2021-16
SAN JUAN COUNTY, COLORADO) **Motion to Withdraw From Appeal**

SAN JUAN COUNTY MOTION TO WITHDRAW FROM APPEAL

The Board of County Commissioners of San Juan County (County) hereby moves to withdraw from this Appeal. The County desires to continue working with travel managers to best serve the interests of the County. The County further states that it recognizes the importance and respects the input of impacted tribal entities on these matters.

Respectfully submitted this 30th day of April 2023.



Dennis R. Golbright
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San Juan County Attorney
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Email: Dennis@animaslaw.com

*FOR: Board of County Commissioners
of San Juan County*

CERTIFICATE OF SERVICE

I certify that on April 30, 2023, I served this Motion to Withdraw Appeal by electronic mail, upon the following:



Dennis R. Golbricht

Interior Board of Land Appeals
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May 4, 2023

IBLA 2021-16)	DOI-BLM-CO-F070-2019-0008-EA
)	
SAN JUAN CITIZENS ALLIANCE)	Travel Management
)	
)	Motion to Withdraw from Appeal
)	Granted

ORDER

The Board of County Commissioners of San Juan County, Colorado, a co-appellant, has moved to withdraw from this appeal. We grant the motion and, as the caption of this Order reflects, we have updated our records consistent with this Order.

STEVEN LECHNER

Digitally signed by STEVEN
LECHNER
Date: 2023.05.04 15:06:57 -04'00'

Steven J. Lechner
Acting Chief Administrative Judge

UNITED STATES DEPARTMENT OF THE INTERIOR
OFFICE OF HEARINGS AND APPEALS
BOARD OF LAND APPEALS

SAN JUAN CITIZENS ALLIANCE)	Docket No. IBLA-2021-0016
)	Response to San Juan County's
)	Motion to Withdraw from Appeal
)	
<hr/>		

Appellant San Juan Citizens Alliance ('SJCA') submits this Response to San Juan County's (the "County") Motion to Withdraw from Appeal ("Motion"), in which SJCA and the County had appealed the Bureau of Land Management's ('BLM') authorization of a new motorized trail through the alpine tundra in Minnie Gulch through the Gunnison Field Office's Silverton Travel Management Plan ("STMP") Decision Record (September 21, 2020).

SJCA takes no position on the County's Motion and agrees with the County that the input of impacted tribes is important and should be respected. SJCA submits this response to provide an illustration of the Southern Ute Indian Tribe's ("Tribe") position on building a motorized trail in Minnie Gulch based on a letter sent by its Chairman to BLM. *See* Ltr. from Melvin J. Baker, Chairman, Southern Ute Indian Tribe to Jon F. Kaminsky, Field Manager, BLM (Oct. 18, 2022) ("Letter") (Attachment A).¹ In the Letter, the Tribe: expresses its "strong objection to motorized vehicles in Minnie Gulch," Letter at 1; states there has "never been consultation with the Tribe on

¹ Although the Letter was not before BLM at the time it issued the STMP Decision Record, "the Board may accept newly submitted information and, to the extent it is deemed reliable and relevant to the issue presented on appeal, consider that information during the Board's review of the appeal." Interior Board of Land Appeals, *Procedures and Practice Manual*, at 4 (Nov. 2021), <https://www.doi.gov/sites/doi.gov/files/ibla-procedures-and-practices-manual-nov-2021.pdf>. The Letter is reliable as it bears the signature of the Tribe's Chairman and is relevant to the issue of BLM's compliance with consultation requirements under the National Historic Preservation Act, an issue which is presented in this appeal.

this issue consistent with federal policy,” *id.*; provides evidence that “BLM intended to proceed with a project regardless of the information obtained during consultation, and treated tribal interests with disrespect,” *id.* at 4; states that the decision to allow motorized use of Minnie Gulch is “in derogation of the Treaty obligations the United States made to the Ute Tribes over a century ago,” *id.* at 4; declares that motorized use “will irreparably impact areas of cultural significance to the Tribe,” including impacts to “ancestral sites and historic Ute trails, leading to disruption of the Tribe’s cultural connection to the area,” *id.* at 5; and states that “[t]o date there has been absolutely no transparency or consultation with the Tribe about the location of this new trail.”

Importantly, the Tribe’s Letter also provides that although BLM has indicated that a new, motorized trail will avoid the Ute Trail and lithic scatter, BLM “ha[s] provided the Tribe no information on how it will ensure there will be no *impact* on these important cultural resources.” *Id.* at 6 (emphasis in original) (citing erosion impacts on the Ute Trail and noise and traffic impacts on cultural resources in the area).

Respectfully submitted this 4th day of May, 2023.

s/ Sarah Judkins
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Sarah C. Judkins, #48406
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*Counsel for San Juan Citizens
Alliance*

CERTIFICATE OF SERVICE

I certify that on May 4, 2023, in accordance with all applicable rules and pursuant to the Board's April 3, 2023 Order, I served this **RESPONSE TO MOTION TO WITHDRAW FROM APPEAL** via electronic mail upon:

Interior Board of Land Appeals
Office of Hearings and Appeals
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s/ Sarah Judkins
Sarah Judkins
Kaplan Kirsch & Rockwell

ATTACHMENT A



SOUTHERN UTE INDIAN TRIBE

October 18, 2022

Jon F. Kaminsky
Field Manager
Department of Interior
Bureau of Land Management
Gunnison Field Office
210 West Spencer Ave., Suite A
Gunnison, CO 81230

Re: 8160 (LLCOS06000) Minnie Gulch Single-Track Motorized Trail Mitigation (Part of the Silverton Travel Management Plan)

Dear Mr. Kaminsky

I am writing in response to your September 22, 2022 letter, received by the Southern Ute Indian Tribe ("Tribe") on September 28, 2022, requesting the Tribe's comments on the proposed mitigation for the planned change in authorized use from single-track mechanized to single-track motorized on the Minnie Gulch Trail, a component of the Silverton Travel Management Plan. On February 18, 2020, we wrote then Acting Field Manager Suzanne Copping expressing our strong objection to motorized vehicles in Minnie Gulch. This letter is to reiterate those objections.

There has never been consultation with the Tribe on this issue consistent with federal policy. On January 26, 2021, President Biden issued a memorandum to the heads of all executive departments and agencies entitled *Tribal Consultation and Strengthening Nation-to-Nation Relationships* ("Memorandum"). In pertinent part, that Memorandum provides as follows:

American Indian and Alaska Native Tribal Nations are sovereign governments recognized under the Constitution of the United States, treaties, statutes, Executive Orders, and court decisions. It is a priority of my Administration to make respect for Tribal sovereignty and self-governance, commitment to fulfilling Federal trust and treaty responsibilities to Tribal Nations, and regular, meaningful, and robust consultation with Tribal Nations cornerstones of Federal Indian policy. The United States has made solemn promises to Tribal Nations for more than two centuries. Honoring those commitments is particularly vital now, as our

Nation faces crises related to health, the economy, racial justice, and climate change — all of which disproportionately harm Native Americans. History demonstrates that we best serve Native American people when Tribal governments are empowered to lead their communities, and when Federal officials speak with and listen to Tribal leaders in formulating Federal policy that affects Tribal Nations.

In response to the President's Memorandum the Bureau of Land Management ("BLM") issued the following statement.

At the Bureau of Land Management, which is a part of the Interior Department, honoring our nation-to-nation relationship with Tribal Nations, strengthening Tribal sovereignty and self-governance, and upholding the trust and treaty responsibilities are paramount to fulfilling our mission. This means going beyond just checking the box to say we talked to Tribal Nations when we take actions that may affect Native American communities.

The meaningful consultation referenced in the President's Memorandum and the BLM policy statement has never occurred with respect to the utilization of motorized vehicles in Minnie Gulch. Moreover, the short 30 day window the BLM has provided to comment on a proposed mitigation plan about which the Tribe has been provided no information is highly insufficient.

Your letter references an alleged government-to-government consultation that took place in July of 2020 with the Tribe. However, at the time of that purported consultation, the decision to build the motorized trail in Minnie Gulch had already been made. That decision was the result of impermissible coordination between BLM staff and motorized recreation advocates.

The Trails Preservation Alliance ("TPA") and San Juan Trail Riders ("SJTR") ("OHV user groups") developed the idea to create a motorized trail through Minnie Gulch, spent years planning the project, prepared a construction plan with a private trail construction contractor, and actively lobbied the BLM to support their proposal. In August 2019 - over a year before the final Environmental Assessment ("EA") and six months before the preliminary EA - these groups surveyed the potential trail with a private contractor, who stated that he was "primarily recommending two (2) adjustments of the existing trail ... once the trail is re-designated for multiple use."¹

After committing extensive resources to the project, the OHV user groups were determined to add this motorized trail to their map. In their view, concerns from Tribes about the legally insufficient consultation on impact to cultural resources were "last minute tactics that are now being initiate[d] by certain anti access groups."² They argued that BLM should consider "[t]he work and money all ready [*sic*] spent in support of the project, and the re hab [*sic*] cost of

¹ Letter from Casey McLellan, McStone Aggregates, to Don Riggle, Trails Preservation Alliance, and Allen Christy, San Juan Trail Riders (Aug. 26, 2019).

² E-mail from Don Riggle, Trails Preservation Alliance, to Suzanne Copping, BLM (Feb. 19, 2020, 06:26 PM).

repairing the Minnie trail” and ignore the concerns from local tribes.³ By the time the final EA was under consideration, TPA members had been working on the Minnie Gulch project for 2 years and questioned why progress was not to their satisfaction.⁴

The extensive communications between BLM and the OHV user groups prior to the release of the EA show a coordinated effort to develop a plan, design a route, and secure access – everything short of committing to the decision in writing. BLM staff relied on the plan generated by the contractor working with the OHV user groups as the starting point for their proposed routing of the Minnie Gulch trail.⁵ BLM staff planned a meeting with representatives of the OHV user groups that they explicitly wanted to be a “small group” because it was “critical that the discussions don’t get out.”⁶ After that meeting, TPA staff informed the BLM that they had secured approval from both landowners that were necessary to allow access.⁷

After BLM re-opened public comment on the preliminary EA, BLM staff personally explained how OHV user groups could help BLM.⁸ The next day, a BLM staff member wrote that “I have been in touch with Don from TPA on this issue almost daily. I am going down to Durango to further discuss it with the San Juan Trail Riders, STJR [*sic*] and TPA are upset but still actively engaged....”⁹

The actions of BLM and the OHV user groups after the EA decision was finalized show collaboration with the goal of creating a motorized trail in Minnie Gulch, where the ultimate decision was a mere formality. Shortly after finalizing the decision, BLM directly requested help from the OHV user groups: “We’ve got a lot of things going on, and with Jim being gone we are down two rec planners. If you guys could GPS and mark some proposed routes that would help a lot.”¹⁰ Less than two weeks later the OHV user groups responded with a report: “The work you requested for a proposed routing of a new Minnie Gulch multi-use trail was completed last Thursday October 8th by our project team. The proposed trail building contractor Mr. Casey McClelland participated as a part of the team. There were 28 working man hours, 8 travel hours, 200 pin flags, 40 stakes and associated flagging utilized to complete the task.”¹¹ Within days of

³ E-mail from Don Riggle, Trails Preservation Alliance, to Suzanne Copping, BLM (Feb. 19, 2020, 06:26 PM), AR 3.06-4.

⁴ E-mail from Don Riggle, Trails Preservation Alliance, to Elijah Waters, Gunnison Field Manager (Aug. 20, 2020, 08:47 AM).

⁵ E-mail from Andrew Welsh, BLM, to Rachel Miller, BLM (Sept. 5, 2019, 09:18 AM)..

⁶ E-mail from Elijah Waters, Gunnison Field Office, to Andrew Welsh and Stuart Schneider, BLM (July 17, 2019, 08:05 AM).

⁷ E-mail from Andrew Welsh, BLM, to Elijah Waters, Gunnison Field Office (July 29, 2019, 12:41 PM).

⁸ E-mail from Andrew Welsh, BLM, to Allen Christy, San Juan Trail Riders (Dec. 4, 2019, 03:30 PM).

⁹ Internal E-mail from Andrew Welsh, BLM (Dec. 5, 2019, 12:55 PM), AR 4.01.10-27.

¹⁰ E-mail from Elijah Waters, Gunnison Field Manager, to Don Riggle, Trail Preservation Alliance (Sept. 29, 2020, 05:15 PM)

¹¹ E-mail from Allen Christy, San Juan Trail Riders, to Kristi Murphy, BLM Outdoor Recreation Planner, and Jim Lovelace, BLM Outdoor Recreation Planner (Oct. 11, 2020 06:28 PM)

the decision, the OHV user groups, along with their contractor, were engaged in field work at the request of BLM staff.

Unfortunately, The circumstances establish that the BLM began coordinating with the OHV user groups and arranged for them to survey proposed motorized vehicle routes in culturally sensitive areas long before ever contacting the Tribe. And by the time any efforts were made to reach out to the Tribe, the decision to approve motorized vehicles in Minnie Gulch had, in effect, been made. This was true despite the fact that the EA provided “[t]he cumulative effects of the change in authorized use from single track mechanized to single track motorized on 2TE (Minnie Gulch Trail) would cause irreversible adverse effects to the [non-renewable] cultural landscape” which “cannot be mitigated.”¹²

By no means is this the “meaningful” or “robust” consultation required by the President’s Memorandum or BLM policy. To the contrary, the BLM was simply “checking the box” by reaching out to the Tribe. This is the type of consultation the Tribe experienced at this time with BLM – where it was evident that the BLM intended to proceed with a project regardless of the information obtained during the consultation, and treated tribal interests with disrespect.

Equally important, the decision to approve motorized vehicles within Minnie Gulch is in derogation of the Treaty obligations the United States made to the Ute Tribes over a century ago. Had the BLM engaged in meaningful consultation, it would have acknowledged the solemn Treaty obligations it owes the Tribe. Minnie Gulch is within the Brunot Treaty Area which Treaty was ratified by Congress in 1874. This Treaty protects the off-reservation hunting rights of the members of the Tribe within the Brunot area. The hunting of elk is an important cultural practice of Tribal members. While you have indicated that motorized vehicles will not impact *access* by Tribal members to the Brunot area, it does not take in to account the *impact* on wildlife for those members seeking to exercise this culturally protected right.

The motorized trail will harm an important elk summer and calving range in the proposed project area. The elk herd in this area (E31) is struggling with very low calf recruitment. Additionally, neighboring data analysis units (“DAU’s”) for E30, E34 and E25 have shown similar decreases in calf recruitment and elk herds. This calf recruitment problem has triggered targeted research projects by the Colorado Parks and Wildlife (“CPW”) as well as extreme reductions in the availability of cow elk hunting permits available to preserve reproductive cows and their future calves. Recently, CPW has taken the unprecedented step of taking E31 and E30 GMUs out of Over The Counter (“OTC”) status for archery elk hunters. This was done because of agency and public concerns about the current and future status of the elk herd.

The Tribe shares cooperative management authority for wildlife in the Brunot Treaty Area with the state of Colorado.¹³ Concomitant to CPW survey efforts, annual tribal aerial big game

¹² *Id.*, at 62.

¹³ Memorandum of Understanding Between the Southern Ute Indian Tribe and State of Colorado Concerning Wildlife Management and Enforcement in the Brunot Area

surveys have recorded the decline of calf elk recruitment on Reservation winter ranges for the past decade. Radio collar studies, facilitated by the Tribe, show that many of the elk that winter on tribal lands east of the Pine River are migratory and summer in the high country of the Upper Rio Grande, spilling over north and west of the Continental Divide into the proposed project area, particularly Minnie Gulch. As such, the Tribe has made a connection between a struggling portion of the elk herd and the proposed project area. The long-term negative impacts to elk, and other wildlife, which will be felt by both consumptive and non-consumptive users alike, far outweighs its recreation benefit to a few in the motorized trail riding community. The planned access by motorized vehicles will be one more adverse impact on the struggling elk herds which, in turn, will impact the ability of Tribal members to exercise their Treaty protected hunting rights in the Brunot area. The mitigation plan identified by BLM has identified no way to protect and preserve this cultural activity of Southern Ute Tribal members that is protected by federal law.

In addition to the impact on the elk hunting, which is integral to Southern Ute culture, the motorized vehicle plan will irreparably impact areas of cultural significance to the Tribe. The federal government has a unique trust obligation to protect the Tribe's cultural sites. The BLM previously met with Alden Naranjo, an elder of the Southern Ute Indian Tribe and then an employee of the Tribe's Cultural Preservation Department, who has since passed on. Mr. Naranjo described to you the impact that motorized vehicles will have on areas of cultural significance within the Brunot Area, particularly at Minnie Gulch. As explained to you by Mr. Naranjo, the proposed development in Minnie Gulch will impact ancestral sites and historic Ute trails, leading to disruption of the Tribe's cultural connection to the area. This is confirmed in BLM's EA, which provides:

The construction of and motorized use of a new route would compromise the integrity of the cultural landscape and setting which would adversely affect the prehistoric linear resource located in the Minnie Gulch valley. The Minnie Gulch trail was verified as a Ute Trail during consultation efforts and concerns brought forth included degradation to the cultural landscape caused by the creation of a new trail, degradation to the soundscape caused by motorized use, and increase in users in the Minnie Gulch valley.¹⁴

Therefore, as the BLM explained in the EA, "[t]he cumulative effects of the change in authorized use from single track mechanized to single track motorized on 2TE (Minnie Gulch Trail) would cause irreversible adverse effects to the [non-renewable] cultural landscape" which "cannot be mitigated."¹⁵

We find it difficult to understand how, in response to the introduction of motorized vehicles into Minnie Gulch, any mitigation plan you have now proposed could possibly correct what your own EA acknowledged would cause "irreversible adverse effects" which "cannot be mitigated." For

¹⁴ EA at 61

¹⁵ *Id.*, at 62.

that reason, any further plans on placing motorized vehicles in Minnie Gulch must be placed on hold until there is full, adequate, and meaningful consultation with the Tribe, which should include a site visit with members of our Cultural Preservation Department. To date there has been absolutely no transparency or consultation with the Tribe about the location of this new trail. The ethnographic study by Anthropological Research, LLC has not been completed and the Tribe has not been consulted in its preparation. The Tribe was not consulted in the survey of cultural resources by ERO Resources. While you indicated that the new motorized trail alignment will *avoid* the Ute Trail and lithic scatter, you have provided the Tribe no information on how it will ensure there will be no *impact* on these important cultural resources. From the limited drawings that have been provided, the planned new motorized trail is only a few hundred feet above the Ute Trail on a steep undisturbed hillside. Rock and debris from a new Trail will erode down onto the Ute Trail, and the noise of motorized vehicles will be clearly heard by anyone on the Ute Trail. Increased traffic will inevitably impact cultural resources in the area.

In light of these important considerations, we request that Minnie Gulch remain a non-motorized trail. We further request the BLM engage the Tribe in actual and meaningful consultation, and to respect the Tribe's Treaty protected rights and cultural resources.

Sincerely,



Melvin J. Baker
Chairman
Southern Ute Indian Tribe

cc. Danielle Schneider dschneider@blm.gov
John Whitney John_Whitney@bennet.senate.gov

Submit to Local Licensing Authority

**CORE MOUNTAIN ENTERPRISES
 PO BOX 654
 Silverton CO 81433**

Fees Due	
Renewal Fee	550.00
Storage Permit \$100 X _____	\$
Sidewalk Service Area \$75.00	\$
Additional Optional Premise Hotel & Restaurant \$100 X _____	\$
Related Facility - Campus Liquor Complex \$160.00 per facility	\$
Amount Due/Paid	\$

Make check payable to Colorado Department of Revenue. The State may convert your check to a one-time electronic banking transaction. Your bank account may be debited as early as the same day received by the State. If converted, your check will not be returned. If your check is rejected due to insufficient or uncollected funds, the Department may collect the payment amount directly from your banking account electronically.

Colorado Beer and Wine License Renewal Application

Please verify & update all information below

Return to city or county licensing authority by due date

Licensee Name CORE MOUNTAIN ENTERPRISES LLC		Doing Business As Name (DBA) CORE MOUNTAIN ENTERPRISES	
Liquor License # 07-64042-0000	License Type Optional Premises (county)		
Sales Tax License Number 07640420000	Expiration Date 08/01/2023	Due Date 06/17/2023	
Business Address 6226 HWY 110 Silverton CO 81433			Phone Number 9707697393
Mailing Address PO BOX 654 Silverton CO 81433		Email sen@silvertonmountain.com	
Operating Manager Auren Brill	Date of Birth	Home Address 811 Greene St, Silverton, CO 81433	Phone Number 970-769-7393
1. Do you have legal possession of the premises at the street address above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Are the premises owned or rented? <input type="checkbox"/> Owned <input checked="" type="checkbox"/> Rented* *If rented, expiration date of lease _____			
2. Are you renewing a storage permit, additional optional premises, sidewalk service area, or related facility? If yes, please see the table in upper right hand corner and include all fees due. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
3a. Are you renewing a takeout and/or delivery permit? (Note: must hold a qualifying license type and be authorized for takeout and/or delivery license privileges) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
3b. If so, which are you renewing? <input type="checkbox"/> Delivery <input type="checkbox"/> Takeout <input type="checkbox"/> Both Takeout and Delivery			
4a. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant, been found in final order of a tax agency to be delinquent in the payment of any state or local taxes, penalties, or interest related to a business? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
4b. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant failed to pay any fees or surcharges imposed pursuant to section 44-3-503, C.R.S.? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
5. Since the date of filing of the last application, has there been any change in financial interest (new notes, loans, owners, etc.) or organizational structure (addition or deletion of officers, directors, managing members or general partners)? If yes, explain in detail and attach a listing of all liquor businesses in which these new lenders, owners (other than licensed financial institutions), officers, directors, managing members, or general partners are materially interested. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
6. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been convicted of a crime? If yes, attach a detailed explanation. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

7. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been denied an alcohol beverage license, had an alcohol beverage license suspended or revoked, or had interest in any entity that had an alcohol beverage license denied, suspended or revoked? If yes, attach a detailed explanation. ☐ Yes ☒ No
8. Does the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) have a direct or indirect interest in any other Colorado liquor license, including loans to or from any licensee or interest in a loan to any licensee? If yes, attach a detailed explanation. ☐ Yes ☒ No

Affirmation & Consent

I declare under penalty of perjury in the second degree that this application and all attachments are true, correct and complete to the best of my knowledge.

Type or Print Name of Applicant/Authorized Agent of Business

Aaron Brill

Signature



Title

Manager

Date

4/26/2023

Report & Approval of City or County Licensing Authority

The foregoing application has been examined and the premises, business conducted and character of the applicant are satisfactory and we do hereby report that such license, if granted, will comply with the provisions of Title 44, Articles 4 and 3 C.R.S., and Liquor Rules

Therefore this application is approved.

Local Licensing Authority For

Date

Signature

Title

Attest

Fund Status Report

Report Selection Criteria:

Selected Fund Type: ALL
Include Encumbrances? NO
Include Pri Yr Liabilities? NO
Printed in Alpha by Fund Name? NO
Exclude Additional Cash? NO

Fiscal Year: 2023
From Period: 4
To Period: 4

From Date: 4/1/2023
Thru Date: 4/30/2023
Option: Period

Selected Funds :

	Beginning Balance	Receipts	Disbursements	Transfers	Ending Balance
General Fund (01)					
010 - COUNTY GENERAL FUND	\$1,040,548.46	\$266,887.79	(\$420,875.85)	\$0.00	\$886,560.40
020 - COUNTY ROAD & BRIDGE	\$161,646.91	\$29,755.49	(\$84,309.12)	\$0.00	\$107,093.28
030 - CONTINGENT FUND	\$54,554.94	\$0.00	\$0.00	\$0.00	\$54,554.94
035 - AMENDMENT 1-EMERGENCY FUN	\$30,000.00	\$0.00	\$0.00	\$0.00	\$30,000.00
040 - SOCIAL SERVICE FUND	\$71,127.80	\$8,508.77	\$0.00	\$0.00	\$79,636.57
045 - AFFORDABLE HOUSING FUND	\$363,568.11	\$13,800.45	\$0.00	\$0.00	\$377,368.56
050 - CONSERVATION TRUST	\$12,284.20	\$32.39	\$0.00	\$0.00	\$12,316.59
051 - LODGING TAX FUND	\$463,805.23	\$68.78	\$0.00	\$0.00	\$463,874.01
052 - TOURISM BOARD FUND	\$12,453.22	\$0.16	(\$904.41)	\$0.00	\$11,548.97
055 - NOXIOUS WEED FUND	\$1,988.18	\$0.00	\$0.00	\$0.00	\$1,988.18
060 - TOWN OF SILVERTON	\$13,834.12	\$26,941.74	(\$26,813.70)	\$0.00	\$13,962.16
070 - DURANGO FIRE PROTECTION DIS	\$0.00	\$11,958.13	(\$11,958.13)	\$0.00	\$0.00
080 - SOUTHWEST WATER CONSERVAT	\$59.60	\$2,260.94	(\$2,260.94)	\$0.00	\$59.60
090 - ADVERTISING FEES	\$10,668.40	\$0.00	\$0.00	\$0.00	\$10,668.40
100 - REDEMPTION	\$312.30	\$191.25	(\$191.25)	\$0.00	\$312.30
110 - SCHOOL GENERAL	\$0.00	\$75,110.88	(\$75,110.88)	\$0.00	\$0.00
116 - SCHOOL BOND	\$0.00	\$8,888.43	(\$8,888.43)	\$0.00	\$0.00
200 - SPECIAL ASSESSMENTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
210 - 911 AUTHORITY	\$62,548.52	\$3,649.26	(\$2,418.44)	\$0.00	\$63,779.34
220 - TREASURER'S FEES	\$18,628.05	\$1,050.00	\$0.00	\$0.00	\$19,678.05
230 - ASSESSOR'S PENALTY	\$5,548.41	\$0.00	\$0.00	\$0.00	\$5,548.41
240 - TREASURER'S DEEDS/FORECLOS	\$11,069.33	\$433.66	(\$149.01)	\$0.00	\$11,353.98
250 - CLERK TECHNOLOGY FEES	\$4,942.40	\$28.00	\$0.00	\$0.00	\$4,970.40
260 - ADMIN FEE	\$2,698.42	\$0.00	\$0.00	\$0.00	\$2,698.42
270 - PEAK INVESTMENTS	\$32,137.92	\$837.70	\$0.00	\$0.00	\$32,975.62
280 - ABATEMENTS	(\$2,333.91)	\$0.00	\$0.00	\$0.00	(\$2,333.91)

Fund Status Report

San Juan County

Report Selection Criteria:

Selected Fund Type: ALL
Include Encumbrances? NO
Include Pri Yr Liabilities? NO
Printed in Alpha by Fund Name? NO
Exclude Additional Cash? NO

Fiscal Year: 2023
From Period: 4
To Period: 4

From Date: 4/1/2023
Thru Date: 4/30/2023
Option: Period

Selected Funds :

	Beginning Balance	Receipts	Disbursements	Transfers	Ending Balance
300 - ESCROW-AMBULANCE	\$82,877.36	\$93.43	\$0.00	\$0.00	\$82,970.79
350 - ESCROW-COMPUTER EQUIP	\$4,203.59	\$18.77	\$0.00	\$0.00	\$4,222.36
360 - ASSESSOR/TREASURER ESCROW	\$3,317.85	\$26.45	\$0.00	\$0.00	\$3,344.30
400 - ESCROW-GRAVEL	\$144,782.00	\$42.24	\$0.00	\$0.00	\$144,824.24
410 - COUNTY BARN ESCROW	\$52,316.38	\$195.82	\$0.00	\$0.00	\$52,512.20
420 - ROAD EQUIP PURCHASE ESCROW	\$72,635.14	\$209.47	\$0.00	\$0.00	\$72,844.61
430 - LOST 4-WHEELERS ESCROW	\$3,983.33	\$14.08	\$0.00	\$0.00	\$3,997.41
440 - SEARCH & RESCUE ESCROW	\$15,054.56	\$62.19	\$0.00	\$0.00	\$15,116.75
450 - COURTHOUSE ESCROW	\$62,299.83	\$1,902.40	\$0.00	\$0.00	\$64,202.23
460 - MSI ESCROW	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
470 - EMERGENCY PREPAREDNESS	\$2,416.11	\$30.29	\$0.00	\$0.00	\$2,446.40
500 - HISTORICAL ARCHIVES ESCROW	\$404.37	\$8.96	\$0.00	\$0.00	\$413.33
550 - ASPHALT ESCROW	\$87,717.18	\$311.44	\$0.00	\$0.00	\$88,028.62
570 - FOREST RESERVE ESCROW	\$125,648.18	\$0.00	\$0.00	\$0.00	\$125,648.18
590 - EMERGENCY SERVICES SALES TA	\$1,522,558.90	\$50,236.76	\$0.00	\$0.00	\$1,572,795.66
600 - FIRE TRUCK FUND	\$87,313.28	\$269.20	\$0.00	\$0.00	\$87,582.48
650 - LAND USE ESCROW	\$60,181.67	\$117.75	\$0.00	\$0.00	\$60,299.42
700 - WORKFORCE HOUSING ESCROW	\$3,035.38	\$65.27	\$0.00	\$0.00	\$3,100.65
750 - ESCROW-SHERIFF VEHICLE	\$43,775.27	\$30.72	\$0.00	\$0.00	\$43,805.99
800 - PUBLIC TRUSTEE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
810 - SPECIFIC OWNERSHIP TAX	\$11,789.10	\$11,124.79	(\$11,789.11)	\$0.00	\$11,124.78
820 - TAX HOLDING FUND	\$225,234.43	\$523,823.20	(\$221,728.29)	\$0.00	\$527,329.34
900 - ADVANCED COLLECTIONS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
950 - WEST SIDE SPECIAL IMP. DISTRIC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
960 - HOSPITAL GRANT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
* Fund Type Total *	\$4,983,634.52	\$1,038,987.05	(\$867,397.56)	\$0.00	\$5,155,224.01

Operator: djaramillo

5/4/2023 9:32:54 AM

Report ID: GLLT85a

Report Selection Criteria:

Selected Fund Type: ALL
Include Encumbrances? NO
Include Pri Yr Liabilities? NO
Printed in Alpha by Fund Name? NO
Exclude Additional Cash? NO

Fiscal Year: 2023
From Period: 4
To Period: 4

From Date: 4/1/2023
Thru Date: 4/30/2023
•Option: Period

Selected Funds :

Beginning Balance	Receipts	Disbursements	Transfers	Ending Balance
* Report Total *	\$4,983,634.52	\$1,038,987.05	(\$867,397.56)	\$0.00
				\$5,155,224.01

San Juan County

Composition of Cash Balances and Investments

As Of: 4/30/2023 Including Account Details

	Cash and Cash Items			Total
	Net Bank Balance	Investments	Cash on Hand/ In Transit	
Cash on Hand	Cash on Hand	\$0.00	\$200.00	\$200.00
Cash on Hand:	Cash on Hand:	\$0.00	\$200.00	\$200.00
Demand and Time Deposits				
Citizens State Bank				
Tourism Fund Checking	\$11,671.36	\$0.00	\$0.00	\$11,671.36
Affordable Housing Checking	\$395,984.99	\$0.00	\$0.00	\$395,984.99
911 Authority Checking Checking	\$64,123.41	\$0.00	\$0.00	\$64,123.41
General Checking Checking	\$2,310,240.60	\$0.00	\$0.00	\$2,310,240.60
Citizens State Bank:	\$2,782,020.36	\$0.00	\$0.00	\$2,782,020.36

Investment Pool

		Cash on Hand/		
		Net Bank Balance	Investments	In Transit
				Total
Citizens State Bank				
	100120367	\$0.00	\$1,044,361.04	\$0.00
				\$1,044,361.04
Citizens State Bank:		\$0.00	\$1,044,361.04	\$0.00
				\$1,044,361.04
COLOTRUST				
	CO-01-0646-8001	\$0.00	\$1,034,426.09	\$0.00
				\$1,034,426.09
COLOTRUST:		\$0.00	\$1,034,426.09	\$0.00
				\$1,034,426.09
Sigma Financial Corporation				
	GTR-041850	\$0.00	\$294,216.52	\$0.00
				\$294,216.52
Sigma Financial Corporation:		\$0.00	\$294,216.52	\$0.00
				\$294,216.52
		\$2,782,020.36	\$2,373,003.65	\$200.00
				\$5,155,224.01

County Sales Tax

	2018	2019	2020	2021	2022	2023 % Change	5yr. Average	
January	4,970.71	7,799.87	6,854.79	16,723.50	18,815.24	18,426.92	-2.11%	11,032.82
February	13,859.09	12,885.86	22,860.78	19,987.28	25,634.49	29,745.98	13.82%	19,045.50
March	11,861.72	11,246.33	14,595.18	16,402.87	20,922.98	20,542.77	-1.85%	15,005.82
April	10,399.61	8,857.05	15,280.29	15,820.09	26,540.36	21,934.71	-21.00%	15,379.48
May	16,321.32	19,708.91	12,778.47	24,773.54	43,984.48	41,544.42	-5.87%	23,513.34
June	4,601.13	5,827.74	9,946.40	17,549.36	10,146.13		-72.97%	9,614.15
July	5,985.49	6,206.92	17,737.22	13,668.65	21,647.93		36.86%	13,049.24
August	6,568.03	13,486.95	10,921.79	32,028.49	26,943.45		-18.87%	17,989.74
September	9,579.78	22,429.05	21,745.79	30,048.75	29,774.28		-0.92%	22,715.53
October	11,057.45	13,774.16	18,726.14	29,953.36	34,135.62		12.25%	21,529.35
November	11,187.78	15,070.58	17,785.19	29,182.27	30,541.07		4.45%	20,753.38
December	5,273.24	7,547.72	17,476.46	19,698.95	17,991.84		-9.49%	13,597.64
Total	111,665.35	144,841.14	186,708.50	265,837.11	307,077.87	132,194.80	13.43%	203,225.99
Year to Date	57,412.45	60,498.02	72,369.51	93,707.28	135,897.55	132,194.80	-2.80%	

Emergency Services Sales Tax

	2018	2019	2020	2021	2022	2023	% Change	5-Year Ave.
January	5,693.58	22,652.17	22,081.29	35,673.96	42,007.94	38,798.45	(0.08)	32,242.76
February	9,500.78	20,193.73	38,888.47	40,698.37	51,602.55	49,470.71	(0.04)	40,170.77
March	8,924.66	28,148.22	30,899.33	39,142.28	64,129.75	50,505.67	(0.27)	42,565.05
April	22,040.87	52,719.27	32,992.58	39,017.29	54,305.90	50,263.76	(0.08)	45,859.76
May	23,915.42	32,415.46	28,328.62	53,200.16	64,390.89	66,881.55	0.04	49,043.34
June	13,364.73	17,201.80	20,323.77	38,209.24	36,187.24		(0.06)	25,057.36
July	36,977.68	35,279.36	29,408.23	54,965.11	58,069.60		0.05	42,940.00
August	54,297.30	74,723.11	62,795.11	139,369.81	119,039.47		(0.17)	90,044.96
September	100,795.88	126,269.99	120,650.92	164,773.79	154,524.58		(0.07)	133,403.03
October	82,850.46	103,635.85	108,852.60	139,222.51	142,140.85		0.02	115,340.45
November	88,859.04	101,380.60	107,416.93	136,598.38	133,850.03		(0.02)	113,621.00
December	34,697.06	45,399.97	63,130.77	93,550.49	84,746.99		(0.10)	64,305.06
Total	481,917.46	660,019.53	665,768.62	974,421.39	1,004,995.79	255,920.14	0.03	757,424.56
	-	-	-	-	-			
Year to Date	70,075.30	156,128.85	153,190.29	207,732.06	276,437.03	255,920.14	(0.08)	

	Town Sales Tax					2023 % Change	5-Year Ave.
	2018	2019	2020	2021	2022		
January	17,803.62	17,777.51	28,417.92	40,358.55	48,401.82	43,654.63	(0.11)
February	24,144.03	26,379.98	39,259.76	45,122.36	56,934.96	49,412.31	(0.15)
March	23,836.90	33,717.73	34,763.49	46,228.85	81,691.27	56,271.57	(0.45)
April	24,868.07	75,356.86	37,422.14	46,611.62	60,354.74	58,492.54	(0.03)
May	21,945.84	32,071.64	24,839.85	60,352.89	59,047.63	65,473.02	0.10
June	17,527.63	21,650.46	22,518.84	43,589.40	41,669.35		(0.05)
July	53,182.66	50,243.72	29,239.56	74,281.24	71,269.47		(0.04)
August	80,166.62	105,875.94	90,106.11	190,977.70	163,532.09		(0.17)
September	151,431.83	179,274.96	170,982.30	233,606.46	217,481.13		(0.07)
October	121,288.07	151,774.01	155,155.28	192,817.13	193,304.52		0.00
November	130,755.88	146,395.83	153,802.89	189,389.35	183,632.90		(0.03)
December	50,151.94	64,974.75	83,368.79	129,991.56	117,612.17		(0.11)
TOTAL	717,103.10	905,493.39	869,876.93	1,293,327.11	1,294,932.05	273,304.07	0.00
Year to Date	112,598.47	185,303.72	164,703.16	238,674.27	306,430.42	273,304.07	(0.12)

Lodging Tax Revenue

	2018	2019	2020	2021	2022	2023	% Change	5 yr. Average
January	126.80	885.93	3,729.44	543.94	1,034.65	8,688.65	88.09%	2,976.52
February	8,318.23	10,816.00	14,088.47	20,282.97	17,982.00	21,651.33	16.95%	16,964.15
March	3,097.25	145.07	454.00	660.00	11,775.69	5,698.15	-106.66%	3,746.58
April	2,002.98	33.00	-	1,489.56	1,091.00	68.78	-1486.22%	536.47
May	11,375.54	17,612.98	14,069.00	30,651.70	31,766.09	30,512.00	-4.11%	24,922.35
June	1,356.34	952.07	300.40	1,007.32	1,525.85		33.98%	1,028.40
July	2,702.84	170.21	573.00	11,854.90	2,241.00		-429.00%	3,508.39
August	11,477.00	14,372.43	13,978.56	57,659.81	31,076.00		-85.54%	25,712.76
September	7,956.78	2,738.12	139.00	248.50	718.26		65.40%	2,360.13
October	666.79	2,848.73	780.48	1,346.59	1,473.79		8.63%	1,423.28
November	43,574.04	47,263.00	58,396.70	76,493.41	71,800.28		-6.54%	59,505.49
December	2,029.95	1,790.37	1,918.52	3,364.85	2,534.04		-32.79%	2,327.55
Total	\$ 94,684.54	\$ 99,627.91	\$ 108,427.57	\$ 205,603.55	\$ 175,018.65	\$ 66,618.91	-17.48%	136,672.44

Remote Town Sales Tax - Month Collected					
	2019	2020	2021	2022	2023
January	226.94	2,665.41	7,137.41	18,727.85	6,501.09
February	49,386.28	5,252.72	6,744.78	7,164.49	9,212.54
March	894.21	4,049.16	10,221.18	9,734.40	10,861.19
April	852.39	5,391.71	6,870.33	7,026.64	
May	2,696.78	4,983.35	9,701.78	7,962.66	
June	3,444.00	7,827.11	13,826.19	17,869.99	
July	2,981.52	11,801.24	16,736.42	14,542.52	
August	2,652.50	12,441.45	14,756.06	12,933.86	
September	2,286.57	10,544.18	12,717.24	10,280.87	
October	2,018.43	8,487.00	27,347.76	17,708.75	
November	2,827.77	5,994.61	9,195.92	7,803.27	
December	4,688.76	7,310.95	12,788.01	8,628.52	
TOTAL	74,956.15	86,748.89	148,043.08	140,383.82	26,574.82
YTD	50,507.43	11,967.29	24,103.37	35,626.74	26,574.82

Remote County Sales Tax - Month Collected					
	2019	2020	2021	2022	2023
January	41.21	3,806.85	3,628.40	5,753.99	7,165.10
February	84.44	4,410.17	2,876.38	5,470.91	6,625.40
March	398.52	3,236.13	4,696.12	20,226.35	8,333.13
April	151.91	3,304.40	5,449.37	3,221.41	
May	325.95	2,775.50	6,212.46	5,873.38	
June	661.74	2,510.43	7,899.27	7,016.18	
July	861.00	4,350.51	8,226.05	5,981.69	
August	1,050.42	4,023.33	6,509.70	6,176.77	
September	1,028.90	4,221.36	6,365.70	7,226.03	
October	825.95	3,659.87	5,435.83	6,589.09	
November	924.35	2,933.00	7,277.72	7,730.04	
December	9,228.08	4,317.03	6,835.25	8,003.28	
TOTAL	15,582.47	43,548.58	71,412.25	89,269.12	22,123.63
YTD	524.17	11,453.15	11,200.90	31,451.25	22,123.63

Remote Emergency Services Sales Tax - Month Collected					
	2019	2020	2021	2022	2023
January	167.86	4,051.74	6,735.19	15,300.16	8,540.81
February	30,969.48	6,049.12	6,019.09	7,896.61	9,898.07
March	809.27	4,560.71	9,322.30	18,724.25	11,995.67
April	628.71	5,443.90	7,699.31	7,612.23	
May	1,892.28	4,857.16	9,945.76	8,646.96	
June	2,570.26	6,471.47	13,577.53	15,552.84	
July	2,405.48	10,111.26	15,600.53	12,826.79	
August	3,702.92	10,307.22	13,290.24	11,943.37	
September	2,075.54	9,243.47	11,926.06	10,941.10	
October	1,780.63	7,604.14	20,488.41	15,185.16	
November	2,348.89	5,585.20	10,295.36	9,707.69	
December	8,712.17	7,274.58	12,263.74	10,394.20	
TOTAL	58,063.49	81,559.97	137,163.52	144,731.36	30,434.55
YTD	31,946.61	14,661.57	22,076.58	41,921.02	30,434.55

Total Remote Sales Tax - Month Collected					
	2019	2020	2021	2022	2023
January	436.01	10,524.00	17,501.00	39,782.00	22,207.00
February	80,440.20	15,712.01	15,640.25	20,532.01	25,736.01
March	2,102.00	11,846.00	24,239.60	48,685.00	31,189.99
April	1,633.01	14,140.01	20,019.01	17,860.28	
May	4,915.01	12,616.01	25,860.00	22,483.00	
June	6,676.00	16,809.01	35,302.99	40,439.01	
July	6,248.00	26,263.01	40,563.00	33,351.00	
August	7,405.84	26,772.00	34,556.00	31,054.00	
September	5,391.01	24,009.01	31,009.00	28,448.00	
October	4,625.01	19,751.01	53,272.00	39,483.00	
November	6,101.01	14,512.81	26,769.00	25,241.00	
December	22,629.01	18,902.56	31,887.00	27,026.00	
TOTAL	148,602.11	211,857.44	356,618.85	374,384.30	79,133.00
YTD	82,978.21	38,082.01	57,380.85	108,999.01	79,133.00

	County Sales Tax (month collected)																% Change	5yr. Average
	2019			2020			2021			2022			2023					
	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total			
January	11,205.30	41.21	11,246.51	10,788.33	3,806.85	14,595.18	12,774.47	3,628.40	16,402.87	15,168.99	5,753.99	20,922.98	17,377.67	7,165.10	24,542.77	0.17	17,542.06	
February	8,772.61	84.44	8,857.05	10,870.13	4,410.17	15,280.30	12,943.71	2,876.38	15,820.09	21,069.45	5,470.91	26,540.36	15,309.31	6,625.40	21,934.71	(0.17)	17,686.50	
March	19,310.39	398.52	19,708.91	9,542.34	3,236.13	12,778.47	20,077.43	4,696.12	24,773.55	23,758.13	20,226.35	43,984.48	33,211.29	8,333.13	41,544.42	(0.06)	28,557.97	
April	5,675.84	151.91	5,827.75	6,642.00	3,304.40	9,946.40	12,099.99	5,449.37	17,549.36	6,924.72	3,221.41	10,146.13			-	(0.42)	9,270.49	
May	5,876.94	325.95	6,202.89	14,961.72	2,775.50	17,737.22	7,456.19	6,212.46	13,668.65	15,774.55	5,873.38	21,647.93			-	0.58	12,154.08	
June	12,825.21	661.74	13,486.95	8,411.36	2,510.43	10,921.79	24,129.22	7,899.27	32,028.49	19,927.27	7,016.18	26,943.45			-	(0.16)	17,316.37	
July	21,568.05	861.00	22,429.05	17,395.28	4,350.51	21,745.79	21,822.70	8,226.05	30,048.75	23,792.59	5,981.69	29,774.28			-	(0.01)	22,535.43	
August	12,723.74	1,050.42	13,774.16	14,702.81	4,023.33	18,726.14	23,443.66	6,509.70	29,953.36	27,958.85	6,176.77	34,135.62			-	0.14	20,736.02	
September	14,041.68	1,028.90	15,070.58	13,563.83	4,221.36	17,785.19	22,816.57	6,365.70	29,182.27	23,315.04	7,226.03	30,541.07			-	0.05	16,597.35	
October	6,721.34	825.95	7,547.29	13,816.59	3,659.87	17,476.46	14,263.13	5,435.83	19,698.96	11,402.75	6,589.09	17,991.84			-	(0.09)	12,123.07	
November	5,930.45	924.35	6,854.80	13,790.50	2,933.00	16,723.50	11,537.52	7,277.72	18,815.24	10,696.88	7,730.04	18,426.92			-	(0.02)	12,265.17	
December	13,632.71	9,228.08	22,860.79	15,682.24	4,317.03	19,999.27	18,779.24	6,835.25	25,614.49	21,742.70	8,003.28	29,745.98			-	0.16	20,827.58	
Total	138,284.26	15,582.47	153,866.73	150,167.13	43,548.58	193,715.71	202,143.83	71,412.25	273,556.08	221,531.92	89,269.12	310,801.04	65,898.27	22,123.63	88,021.90			
YTD			39,812.47			42,653.95			56,996.51				65,898.27		88,021.90		56,871.21	

Emergency Services Sales Tax (month collected)																				
	2018			2019			2020			2021			2022			2023				
	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	% Change	5-Year Ave			
January	8,924.66	27,980.65	167.86	28,148.51	26,847.59	4,051.74	30,899.33	32,447.80	6,735.19	39,182.99	48,829.59	15,300.16	64,129.75	41,964.86	8,540.81	50,505.67	-21.24%	42,573.25		
February	22,040.87	21,749.81	30,969.48	52,719.29	26,943.46	6,049.12	32,992.58	33,038.78	6,019.09	39,057.87	46,409.30	7,896.61	54,305.91	40,365.69	9,898.07	50,263.76	-7.44%	45,867.88		
March	23,915.42	31,606.19	809.27	32,415.46	18,988.97	4,560.71	23,549.68	43,877.86	9,322.30	53,200.16	45,666.63	18,724.25	64,390.88	54,885.88	11,995.67	66,881.55	3.87%	48,087.55		
April	58,262.95	16,573.10	628.71	17,201.81	14,879.87	5,443.90	20,323.77	30,509.93	7,699.31	38,209.24	28,575.01	7,612.23	36,187.24			-	-5.29%	31,869.18		
May	36,977.68	33,423.78	1,892.28	35,316.06	24,551.07	4,857.16	29,408.23	45,019.35	9,945.76	54,965.11	49,422.64	8,646.96	58,069.60			-	5.65%	38,476.29		
June	54,297.30	72,152.85	2,570.26	74,723.11	56,773.64	6,471.47	63,245.11	125,792.28	13,577.53	139,369.81	103,486.63	15,552.84	119,039.47			-	-14.59%	81,183.95		
July	100,795.88	123,864.51	2,405.48	126,269.99	110,539.66	10,111.26	120,650.92	149,173.26	15,600.53	164,773.79	141,697.79	12,826.79	154,524.58			-	-6.22%	117,244.60		
August	82,850.46	101,317.76	3,702.92	105,020.68	98,545.37	10,307.22	108,852.59	125,932.27	13,290.24	139,222.51	130,197.48	11,943.37	142,140.85			-	2.10%	101,290.19		
September	88,859.04	99,005.06	2,075.54	101,080.60	98,173.46	9,243.47	107,416.93	124,672.32	11,926.06	136,598.38	122,908.93	10,941.10	133,850.03			-	-2.01%	101,308.58		
October	34,697.06	43,619.35	1,780.63	45,399.98	55,526.63	7,604.14	63,130.77	73,062.08	20,488.41	93,550.49	69,561.83	15,185.16	84,746.99			-	-9.41%	58,101.13		
November	22,652.17	19,732.41	2,348.89	22,081.30	30,125.87	5,585.20	35,711.07	31,712.58	10,295.36	42,007.94	29,090.76	9,707.69	38,798.45			-	-7.64%	28,972.64		
December	30,306.85	30,176.30	8,712.17	38,888.47	33,466.13	7,274.58	40,740.71	39,338.81	12,263.74	51,602.55	39,076.51	10,394.20	49,470.71			-	-4.13%	36,324.32		
Total	564,580.34	621,201.77	58,063.49	679,265.26	595,361.72	81,559.97	676,921.69	854,577.32	137,163.52	991,740.84	854,923.10	144,731.36	999,654.46	137,216.43	30,434.55	167,650.98				
Year to Date	54,880.94			113,283.26			87,441.59			131,441.02			182,826.54			167,650.98	-8.30%	136,528.68		

Town Sales Tax (month collected)																		
	2018		2019		2020		2021		2022		2023		% Change	5-Year Ave.				
	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total	Local	Remote	Total						
January	23,836.90	33,491.06	226.94	33,718.00	32,098.08	2,665.41	34,763.49	39,091.44	7,137.41	46,228.85	62,963.42	18,727.85	81,691.27	49,770.48	6,501.09	56,271.57	(0.31)	50,534.64
February	24,868.07	25,970.59	49,386.28	75,356.87	32,169.42	5,252.72	37,422.14	39,866.84	6,744.78	46,611.62	53,190.25	7,164.49	60,354.74	49,280.00	9,212.54	58,492.54	(0.03)	55,647.58
March	21,945.84	31,177.43	894.21	32,071.64	20,790.69	4,049.16	24,839.85	50,131.71	10,221.18	60,352.89	49,313.23	9,734.40	59,047.63	54,611.83	10,861.19	65,473.02	0.11	48,357.01
April	17,527.63	20,798.07	852.39	21,650.46	17,127.14	5,391.71	22,518.85	36,719.07	6,870.33	43,589.40	34,642.71	7,026.64	41,669.35			-	(0.04)	27,475.72
May	53,182.66	47,514.29	2,696.78	50,211.07	24,256.22	4,983.35	29,239.57	64,579.46	9,701.78	74,281.24	63,306.81	7,962.66	71,269.47			-	(0.04)	53,724.17
June	80,166.62	102,431.94	3,444.00	105,875.94	82,279.01	7,827.11	90,106.12	177,151.51	13,826.19	190,977.70	145,662.10	17,869.99	163,532.09			-	(0.14)	122,763.54
July	151,431.83	176,293.44	2,981.52	179,274.96	159,181.07	11,801.24	170,982.31	216,870.04	16,736.42	233,606.46	202,938.61	14,542.52	217,481.13			-	(0.07)	185,508.86
August	121,288.07	149,121.51	2,652.50	151,774.01	142,713.83	12,441.45	155,155.28	178,061.07	14,756.06	192,817.13	180,370.66	12,933.86	193,304.52			-	0.00	155,184.65
September	130,755.88	144,109.26	2,286.57	146,395.83	143,258.72	10,544.18	153,802.90	176,672.11	12,717.24	189,389.35	173,352.03	10,280.87	183,632.90			-	(0.03)	161,238.96
October	50,151.94	62,956.32	2,018.43	64,974.75	74,881.79	8,487.00	83,368.79	102,643.80	27,347.76	129,991.56	99,903.42	17,708.75	117,612.17			-	(0.10)	83,145.00
November	17,777.51	25,590.15	2,827.77	28,417.92	34,363.94	5,994.61	40,358.55	39,205.90	9,195.92	48,401.82	35,851.36	7,803.27	43,654.63			-	(0.10)	32,735.68
December	26,379.98	34,571.00	4,688.76	39,259.76	37,811.41	7,310.95	45,122.36	44,146.95	12,788.01	56,934.96	40,783.79	8,628.52	49,412.31			-	(0.13)	40,208.90
TOTAL	719,312.94	854,025.06	74,956.15	928,981.21	800,931.32	86,748.89	887,680.21	1,165,139.90	148,043.08	1,313,182.98	1,142,278.39	140,383.82	1,282,662.21	153,662.31	26,574.82	180,237.13		-
YTD	70,650.82			141,146.51			97,025.48			153,193.36			201,093.64			180,237.13	(0.10)	154,539.22



Town of Silverton

Public Meeting and Joint Town Trustee and County Commissioners Work Session – Silverton Board of Trustees
Silverton Town Hall – May 10, 2023
Call to Order & Roll Call –Public Meeting @9am Joint Work Session @3pm

ATTENTION: The Town of Silverton Trustee meetings are being conducted in a hybrid virtual/in-person. Instructions for public participation in Town Trustee meetings are as follows:

- Zoom Webinar Link: <https://us02web.zoom.us/j/88637487127>
- By Telephone: Dial 669-900-6833 and enter Webinar ID 886 3748 7127 when prompted.
- YouTube (live and recorded for later viewing, does not support public comment):
www.youtube.com/channel/UCmJgal9lJXK5TZahHugprpQ

If you would like to make a public comment during a specific Agenda Item, please submit a request to the Town Administrator at gkaasch-buerger@silverton.co.us

MEETING PROTOCOLS: Please turn off cell phones; be respectful and take personal conversations into the lobby. The public is invited to attend all regular meetings and work sessions of the Board of Trustees. Please be advised, public comment will not be taken during the work session meetings. Closing Public Comment must be related to an agenda item.

Public Meeting @ 9:00am-10:00am

- 1.) Colorado Department of Housing Meet and Greet (No Zoom/YouTube Option includes a site visit to Anvil)
Adjourn

Joint Work Session with Town Trustees and County Commissioners @3:00pm-4:30pm

- 1.) EPA Sunnyside Contracting Information Session (Zoom/YouTube Option Above)
Adjourn

EPA Public Meeting @6:00-7:00pm

- 1.) Bonita Peak Repository Phase 1 Construction (No Zoom/YouTube Option)

Up-coming Meeting Dates:

- 5.15 @ 9am Finance Committee Meeting
- 5.16 @ 7pm Planning Commission Meeting
- 5.22 @ 7pm Regular Meeting

End of Agenda

Region 9 Economic Development District
Presents

Colorado Division of Housing and Colorado Housing and Finance Authority Tour

With: Shirley Diaz, Southwest Housing Development Specialist
Andrew Atchley, Housing Development Team Manager
Chris Lopez, Southwest Community Relationship Manager

May 10-11, 2023

Staff from DOH and CHFA will be touring Region 9 to gain a better understanding of the communities and housing market in the Region, learn more about the area's unique housing challenges and opportunities, meet with local stakeholders and housing professionals to discuss partnerships, funding opportunities, and other collaborations that could benefit the region.

Wednesday, May 10, 2023

9:00 Silverton Town Hall, 1360 Greene St.

12:00 Ignacio Community Center, 570 Goddard Ave.

3:00 Center of Innovations, FLC 835 Main Ave Suite 225 (2nd Floor Main Mall) Durango

Thursday, May 11, 2023

8:00 Archuleta County Administration Building, 398 Lewis St.

11:30 Montezuma County Annex, 107 North Chestnut St.

2:45 Pioneer Center, 8540 Road 7.2, Dove Creek

5:30 Rico Town Hall 2 North Commercial



COLORADO
Department of Local Affairs



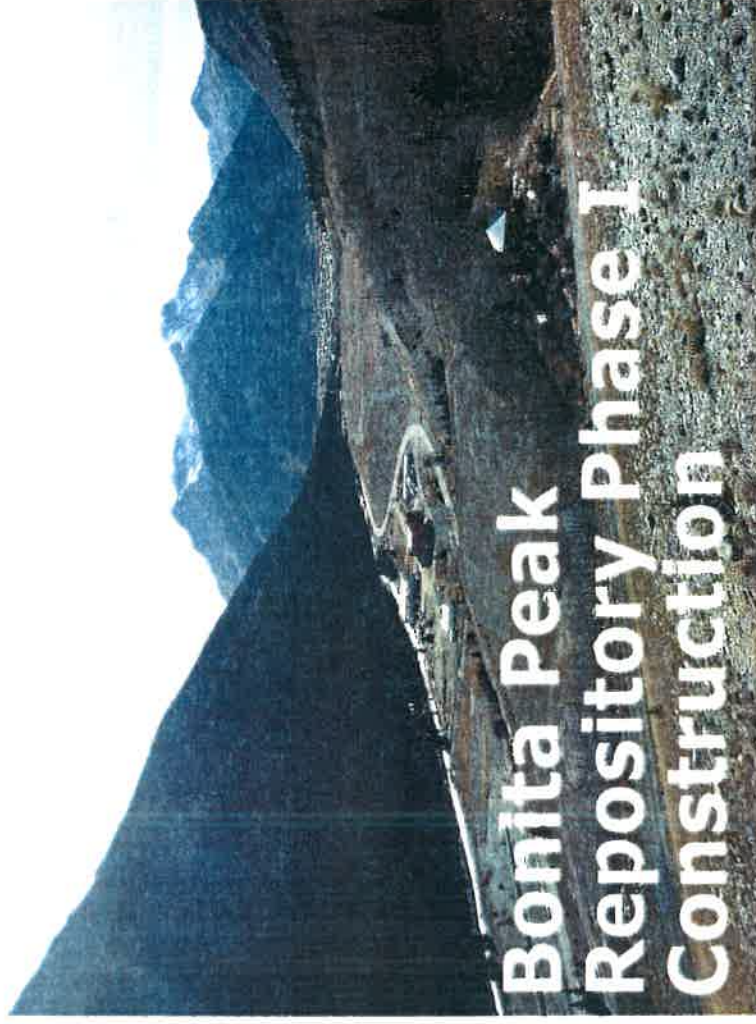


US Army Corps
of Engineers
Omaha District



CDM SMITH PROGRAM CORPORATION

**BONITA PEAK REPOSITORY
REMEDIAL DESIGN - PHASE 1
BONITA PEAK MINING DISTRICT SUPERFUND SITE
SAN JUAN COUNTY, COLORADO**

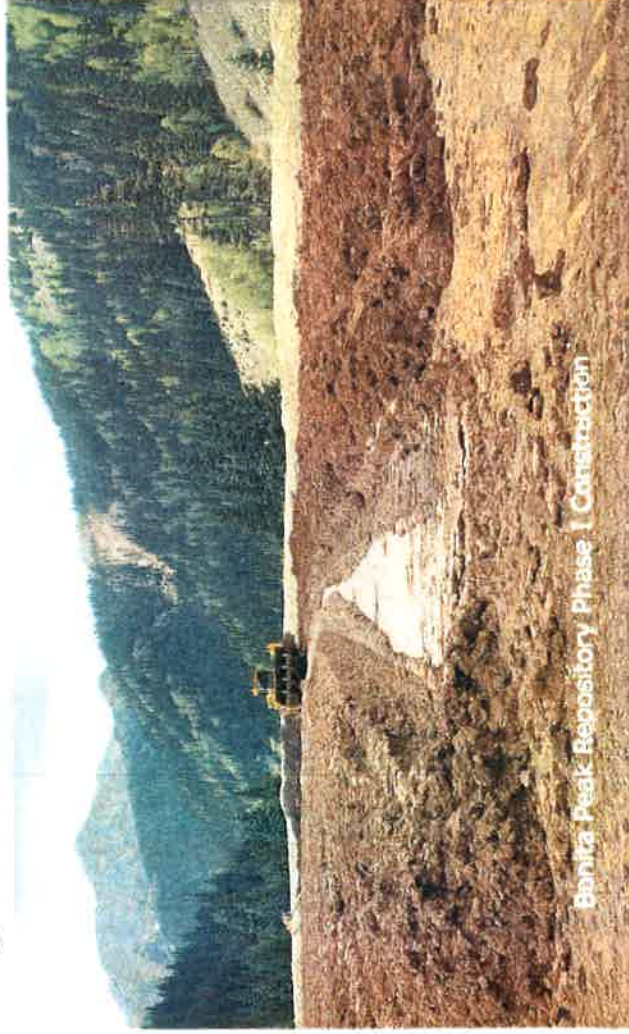


US EPA | REGION 8

Agenda



80









- 2



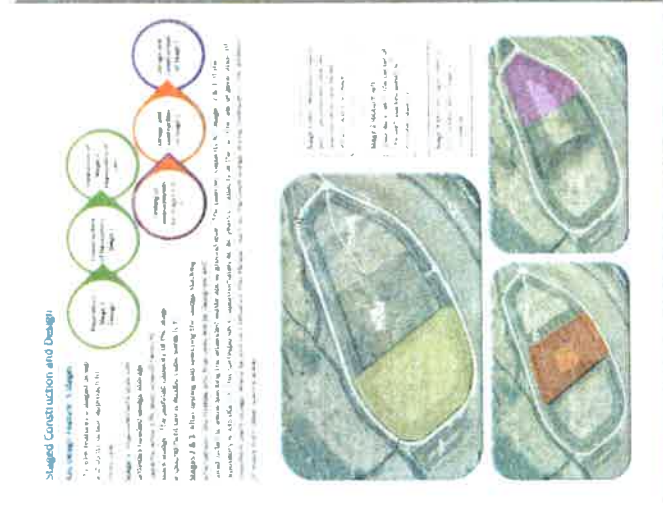
Purpose

THE BPR FACILITY IS TO BE USED TO MANAGE SITE-DERIVED MINE WASTES AND pH-STABILIZED WATER TREATMENT SLUDGE

Roles and Responsibilities

<ul style="list-style-type: none"> • Lead agency • Responsible for successful completion of project • Community Involvement • Point of Contact for project <p>EPA</p> 	<ul style="list-style-type: none"> • Management of HGL contract • Major role in oversight and quality assurance and safety <p>USACE</p> 	<ul style="list-style-type: none"> • Designer of Record • Reviews construction plans • Provides design asst. if changes needed <p>CDM Smith</p> 
<ul style="list-style-type: none"> • Construct the repository safely and efficiently • Manage specialized subcontractors <p>HydroGeoLogic</p> 	<ul style="list-style-type: none"> • Partner with HGL to execute construction of the repository <p>ER LLC</p> 	<ul style="list-style-type: none"> • Provide feedback on project from state perspective • Take over O&M when remedial action is complete <p>CDPHE</p> 

Discussion of Design



[Link to Design Fact Sheet](#)

Discussion of Design



Size Background

The U.S. Environmental Protection Agency (EPA) is a federal agency that is responsible for protecting human health and the environment. The agency is composed of several offices, including the Office of Research and Development, the Office of Policy, the Office of Enforcement, and the Office of Compliance. The agency is also responsible for enforcing federal laws that protect the environment.

Why would we be worried about the Bonita Peak Repository?

The Bonita Peak Repository is a proposed site for the disposal of low-level radioactive waste. The repository is located in the Bonita Peak area, which is a sensitive area for wildlife and plants. The repository is also located near a major water source, the Colorado River. The repository is also located near a major transportation route, the Interstate 70 corridor. The repository is also located near a major population center, the Denver metropolitan area.

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Staged Construction and Design



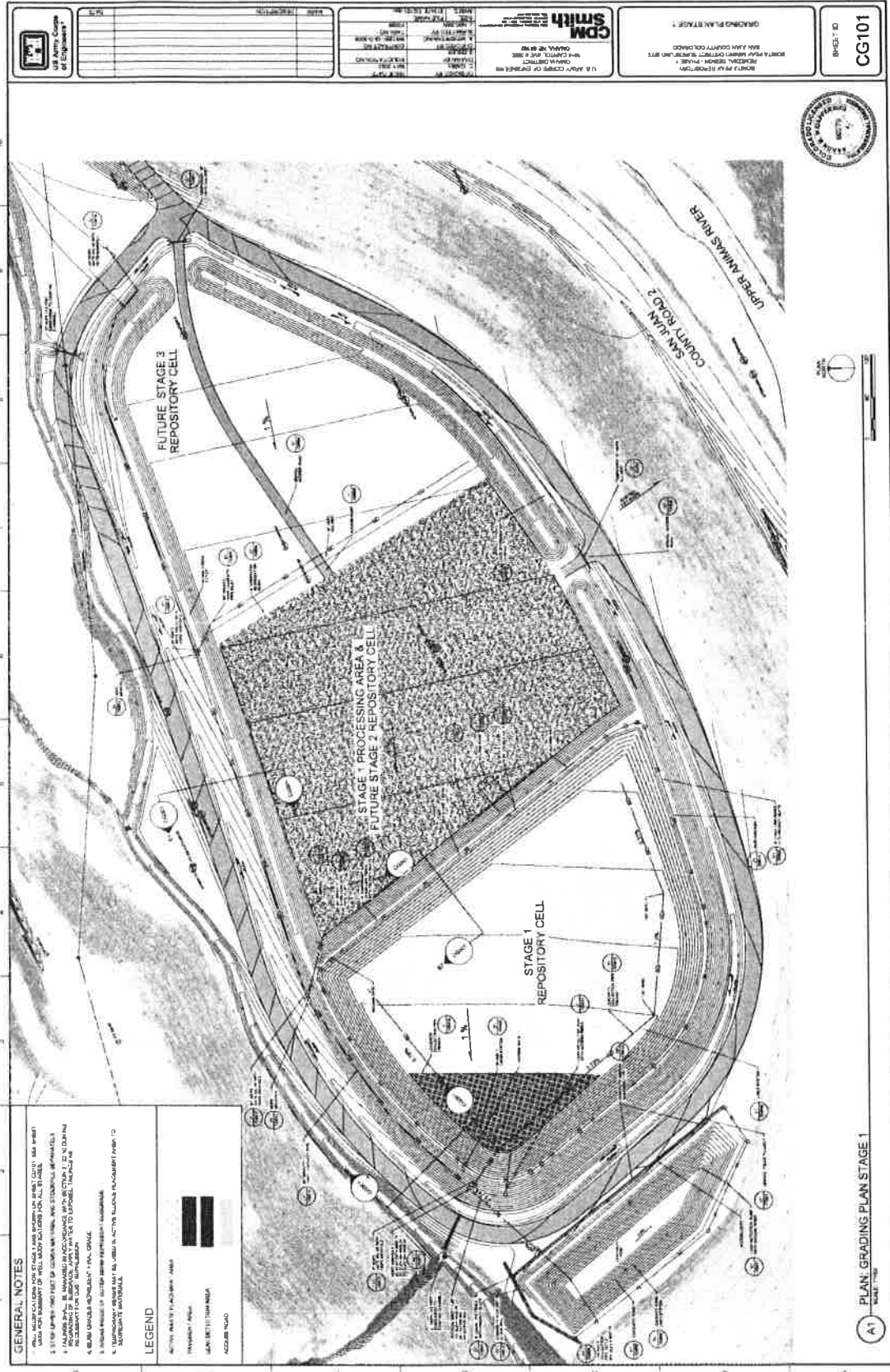
- **Location:** Mayflower Tailings Impoundment 4
- Max capacity, minimum disturbance

- Community input influenced the **phased design** approach
- Future phases include 2 & 3 (landfill-style impoundments)

- **Habitat:** Minimal fencing to allow elk passage and continued use throughout winter
- Fence remains around leachate pond and active cells

- **Water Quality:** protected through leachate collection, stormwater management improvements, leak detection, and groundwater monitoring

[Link to Design Fact Sheet](#)



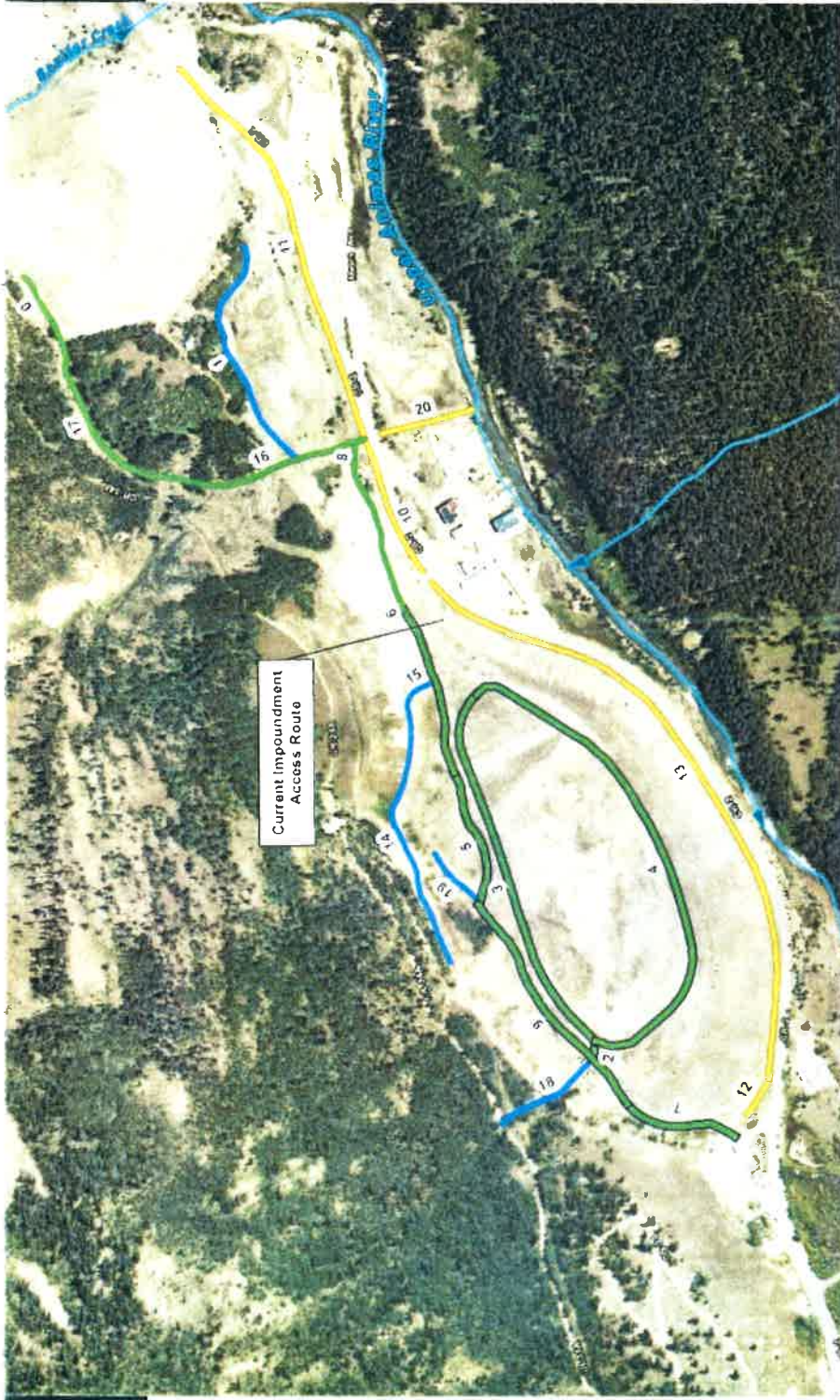
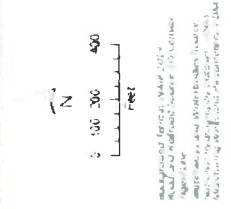


Figure 4-1

Proposed Channel Templates

Bonita Peak Mining District Superfund Site
San Juan County, CO
Bonita Peak Repository - Design Analysis Report

- Channel Type**
- Facility Drainage (Unlined)
 - Facility Drainage (Lined)
 - Roadside Ditch
 - Swale
 - River with Flow Direction



Material Needs



Import



Borrow

Material	Yards ³
Pipe and culvert bedding	650
Channel bedding for rip rap	6,200
Channel aggregate (roadside)	2,400
Rip rap (6, 9, 15 in.)	8,500
Linear protection layer	1,200
Leachate drainage layer (CDOT 4)	7,600
Aggregate base	4,000
Aggregate surface	140
Avalanche and headwall base course	100
Boulders	30
Total needed	30,820 CY

Geotechnical Monitoring

SMPs and DMPs

- Surface Monitoring Points (S)
- Deformation Monitoring Points (D)

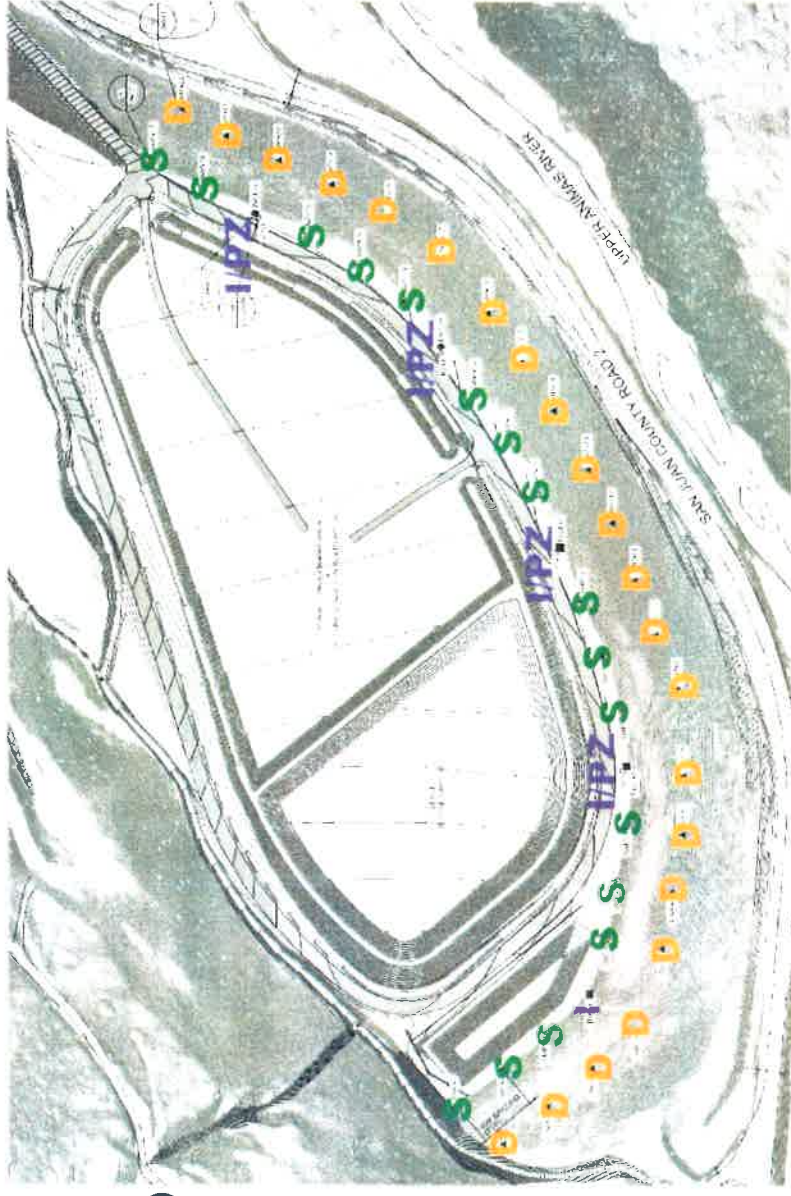
Steel rods driven into the ground
with clearly marked survey on top

Inclinometers (I)

- PVC casing grouted in place
with instrumentation for
monitoring slope changes

Piezometers (PZ)

- Groundwater observation wells



Environmental Response Team (ERT) Air Monitoring

DustTrack Deployment

- ERT to deploy 3 devices to monitor dust near BPR
 - Downhill, uphill, and on top
 - Real-time data sent to EPA

Worker monitoring

- HGL to monitor worker exposure
 - regulates exposure over entire shift, not just high-dust activities
 - particularly important during movement of tails



Schedule Highlights

Soft start to set up facilities between
May 15 - May 26

Geotechnical monitoring points to be
installed throughout May/early June

Environmental Response Team air
monitoring to begin prior to
excavation during week of May 23

Subgrade preparation may start as
early as June 5

Bonita Peak Repository Phase I Construction
April 2023



Continuing Community Involvement



- Understand preferences of community for hauling (times of day, etc)
- Local contractor list was provided to HGL
- Repository Construction Fact Sheet in progress
- On May 10th, EPA will meet with local officials in San Juan County (afternoon) and host a public availability session from 6:00-7:00 pm
- EPA, USACE, CDPHE, and HGL will maintain open communication with stakeholders throughout project
 - Updates through PG and CAG meetings
 - Monthly newsletters
 - Project Communication SOP

⁰¹⁶Resources

- [Bonita Peak Mining District Sitewide Repository Proposal Plan Fact Sheet, July 2020.](#)
- [Proposed Plan for Bonita Peak Repository, July 2020.](#)
- [Interim Record of Decision for Bonita Peak Repository, April 2021.](#)
- [Technical Considerations Report, Remedial Design Bonita Peak Repository Interim Remedial Action Phase 1, April 2021.](#)
- [Remedial Design, Bonita Peak Repository, Phase 1 Design Analysis Report, May 2022](#)
 - [Appendix H: Drawings](#)
 - [Appendix I: Specifications](#)



⁰¹⁷Contacts

Meg Broughton,
Community Involvement Coordinator
Broughton.Meg@epa.gov
(303) 312-6139

Athena Jones,
Remedial Project Manager
Jones.Athena@epa.gov
(720) 926-2015





COLORADO
Department of Public
Health & Environment

Bonita Peak Mining District Superfund Site OPEN HOUSE

Wednesday, May 10, 2023 | 6:00 - 7:00 p.m.
Silverton Town Hall

Come learn about the cleanup of the Bonita Peak Mining District Superfund Site!

6:00-6:15 – EPA presentation on construction of the Bonita Peak Repository

6:15-7:00 – OPEN HOUSE session with the agencies collaborating at the Site: EPA, Colorado Division of Reclamation, Mining, and Safety, Colorado Department of Public Health and the Environment, and the Bureau for Land Management.

For more information, please contact:

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