TAHOE REGIONAL PLANNING AGENCY

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STAFF REPORT

Date: November 2, 2023

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Nelson Land Capability Challenge
5647 Rhodesia Road, Placer County, CA
APN: 116-210-024, TRPA File #: LCAP2023-0121

Proposed Action:
Hearings Officer review and approve the proposed Land Capability Challenge.

Staff Recommendation:
Staff recommends the TRPA Hearings Officer approve the land capability challenge on the subject parcel. The challenge changes Class 1c- 12,690 sq. ft. (100 percent of parcel) to Class 6- 12,690 sq. ft. (100 percent of parcel).

Background:
The subject parcel is shown as Class 1c on TRPA Land Capability Overlay Maps (aka Bailey Land Capability maps). The Soil Conservation Service *Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974) places the subject parcel in the Sm- Stony colluvial land mapunit. A land capability verification was completed January 16, 2023, and verified the parcel as 1c. The updated *Soil Survey of Tahoe Basin Area, California and Nevada* (NRCS, 2007) maps this parcel as mapunit 7154- Jorge very cobbly loam, 0 to 15 percent slopes. This parcel has a geomorphic mapping of D1 for Streamcut volcanic flowlands, Toe slope lands (Low hazard lands). The stony colluvial land (Sm) soils are described as occurring in colluvium from granitic, metamorphic, and volcanic rock and from highly fractured volcanic flow. Large cobblestones, stones and boulders cover 50 to 90 percent of the surface, and rock fragments in the subsoil are typically greater than 50 percent of the volume. Depth to bedrock can range from 30 to greater than 60 inches. These soils are somewhat excessively drained. The Jorge soils formed in colluvium and residuum over andesitic bedrock. Jorge soils have a stony sandy loam texture in the surface horizon, with gravelly sandy loam or very gravelly sandy loam subsurface textures. They have greater than 35 percent rock fragments in the particle control section. An argillic horizon is present at 33 inches to a depth of 50 inches. Depth to weathered andesitic bedrock is greater than 60 inches. The Tahoma soils have a stony sandy loam texture in the surface horizon, with gravelly sandy loam, gravelly loam, gravelly clay loam, and clay loam subsurface textures. They have less than 35 percent rock fragments in the particle control section. Argillic horizons begin at 19 inches, and extend to the hard, latite, bedrock which occurs at depths of 43 to greater than 60 inches.

A land capability challenge (LCAP2023-0121) was filed by the owner Jay Nelson on July 5th, 2023. TRPA consultant, Marchel Munnecke visited the site on September 13, 2023. One soil pit was described.

Findings:
One soil pit was excavated by backhoe to 75 inches. The pit was located northeast of the residence, approximately 15 feet north of the driveway. The soil is characterized by a sandy loam surface texture, with gravelly sandy loam, sandy clay loam, and gravelly sandy clay loam, subsurface textures. Hard, weathered bedrock was present at 62 inches. This soil formed in volcanic colluvium over residuum from volcanic mud flows. This soil has less than 35 percent rock fragments in the particle control section, and classifies as Finel-loamy, isotic, frigid, Ultic Haploxeralfs. This soil is very deep, well drained, and is a member of Hydrologic Soil Group B. The vegetation is a white fir and Jeffrey pine forest with huckleberry oak, antelope bitterbrush, creeping snowberry, and greenleaf manzanita occasional in the understory. The forb and grass layers are very sparse, with pine and fir needles covering the surface.

This soil is dissimilar to the Sm soils as mapped on this site in 1974 because it lacks the high cover of large cobblestones, stones and boulders (50 to 90 percent) on the surface and in the subsurface (greater than 50 percent of the volume).

The soil on this parcel is within the range and characteristics of the Tahoma soil as described in the Soil Conservation Service *Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974). It is very deep, has less than 35% rock fragments, has argillic soil development and fine textures. The Tahoma soil with 7 percent slopes is mapped as JwD, Jorge- Tahoma very stony sandy loam, 2 to 15 percent slopes (Class 6).

The table below summarizes the changes in land capability as concluded by this land capability challenge.

Land Capability District	**Area (sq. ft.) 2023 LCV**	**Area (sq. ft.) 2023 LCC**
Class 1c (Sm)	12,690	0
Class 6 (JwD, 2 to 15% slopes)	0	12,690
Total Parcel Area	12,690	12,690

This memorandum was prepared by Senior Planner, Julie Roll. If you have questions on this Hearings Officer item, please contact Julie Roll, 775-589-5247, or email at jroll@trpa.gov.

To submit a written public comment, email publiccomment@trpa.gov with the appropriate agenda item in the subject line. Written comments received by 4 p.m. the day before a scheduled public meeting will be distributed and posted to the TRPA website before the meeting begins. TRPA does not guarantee written comments received after 4 p.m. the day before a meeting will be distributed and posted in time for the meeting.

BAILEY LAND CAPABILITY CHALLENGE FINDINGS

Site Information	
Assessor's Parcel Numbers: (APN)	116-210-024
TRPA File No. / Submittal Date:	LCAP2021-0121 / 7/5/2023
Owner or Applicant:	Jay Nelson
Address:	225 Los Angeles Blvd., San Anselmo, CA 94960

Environmental Setting	
Bailey Soil Mapping Unit[1] / Hydrologic Soil Group (HSG) / Land Class / Geomorphic Hazard Unit	Sm- Stony Colluvial land/ HSG C/ D1- Streamcut volcanic flowlands; Toe lands (Low hazard lands).
Soil Parent Material	Colluvium over volcanic mudflow
Slopes and Aspect	2 to 7 percent; sloping southwest
Elevation and Datum	6,323 to 6,313 feet, Google Earth
Rock Outcrops and Surface Configuration	This parcel is nearly linear across the slope with gentle slopes that lack rock outcrop features.
SEZ and Hydrology Source	There is no SEZ on the parcel.
Vegetation	The vegetation is a white fir and Jeffrey pine forest with huckleberry oak, antelope bitterbrush, creeping snowberry, and greenleaf manzanita occasional in the understory. The forb and grass layers are very sparse, with pine and fir needles covering the surface.
Ground Cover Condition	Good (vegetation 55%, duff/mulch 60% cover)
Site Features	Residence, deck and A/C driveway.

Field Investigation and Procedures	
Consultant and Address	TRPA Consultant Marchel Munnecke PO Box 1015 Twin Bridges, CA 95735
TRPA Staff Field Dates	September 23, 2023
SEZ Mapping / NRCS Hydric Soil	No SEZ
Number of Soil Pits or Auger Holes and Description Depth	1 backhoe pit to 75 inches.
Additional or Repetitive TRPA Sample Locations	NA
Representative Soil Profile Descriptions	See soil descriptions in Attachment B.
Areas Not Examined	Residence, deck, and A/C driveway.

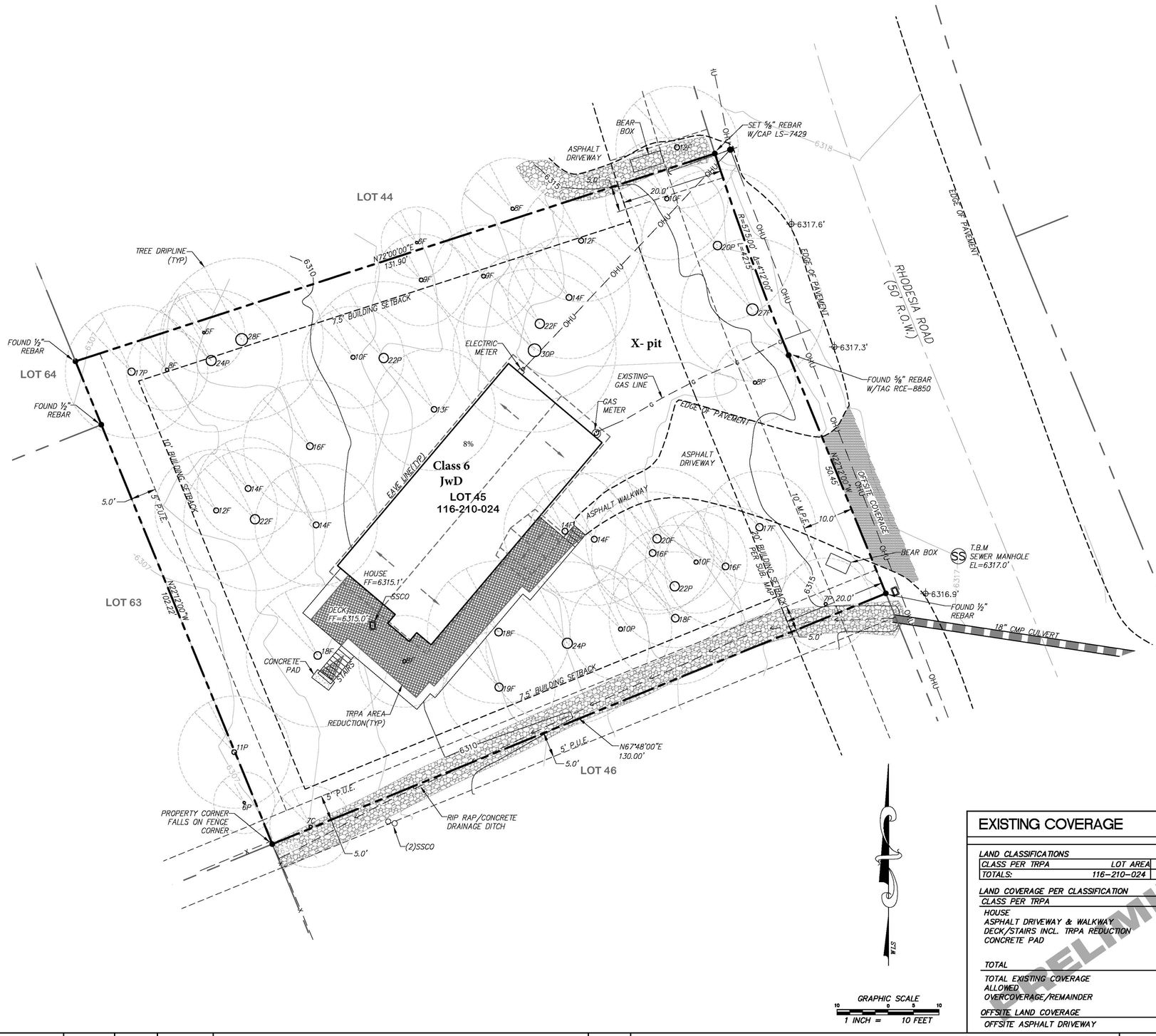
[1] TRPA currently relies upon the Soil Survey of Tahoe Basin, California-Nevada (Rogers and Soil Conservation Service, 1974), which the Bailey Land Capability system is predicated upon.

TRPA Findings	
2006 Soil Survey Map Unit	7154- Jorge very cobbly loam, 0 to 15 percent slopes (Class 6 based on slopes).
Consultant Soil Mapping Determination and Rationale	Based on slopes, this parcel is mapped as Class 6- JwD 2-15 percent slopes. This soil is dissimilar to the Sm soils as mapped on this site in 1974 because it lacks the high cover of large cobblestones, stones and boulders (50 to 90 percent) on the surface and in the subsurface (greater than 50 percent of the volume). The soil on this parcel is within the range and characteristics of the Tahoma soil as described in the Soil Conservation Service Soil Survey of Tahoe Basin Area, California-Nevada (Rogers, 1974). It is very deep, has less than 35% rock fragments, has argillic soil development and fine textures. The Tahoma soil with 2 to 7 percent slopes is mapped as JwD, Jorge-Tahoma very stony sandy loam, 2 to 15 percent slopes (Class 6). This parcel is mapped as 7154- Jorge very cobbly loam, 0 to 15 percent slopes in the 2007 Soil Survey.
Slope Determination	2 to 7 percent slopes.
TRPA Conclusion(s)	TRPA concurs with consultants' determination and rationale above.
Applicable Area	See Attachment A.

Attachments:

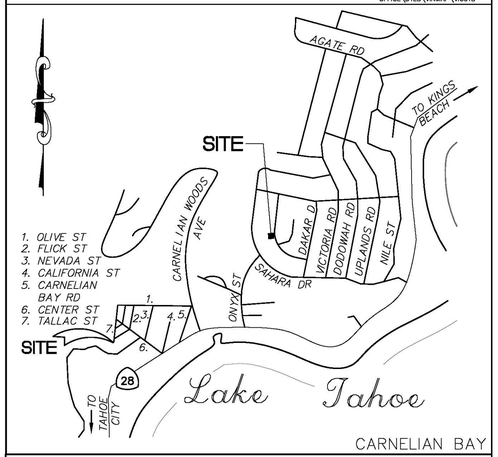
A. Site Plan with Land Capability Delineations
B. Soil Description
C. Photographs

Attachment A
Site Plan with Land Capability Delineations



VICINITY MAP

OFFICE\DTLS\VINMAP\VIC018



NOTES

1. THE BOUNDARY SHOWN HEREON IS FROM A FIELD SURVEY COMPILED FROM AGATE BAY VISTA UNIT NO.3 SUBDIVISION, SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP, TITLE EVIDENCE, OR ANY OTHER FACTS WHICH AN ACCURATE & CURRENT TITLE SEARCH MAY DISCLOSE.
2. NO INVESTIGATION CONCERNING ENVIRONMENTAL & SUBSURFACE CONDITIONS, OR THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES WHICH MAY AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY WAS MADE AS A PART OF THIS SURVEY.
3. NO INVESTIGATION CONCERNING THE LOCATION OF OR EXISTENCE OF UTILITY SERVICE LINES TO THIS PROPERTY WAS MADE AS A PART OF THIS SURVEY.
4. ALL UTILITY LOCATIONS SHOULD BE FIELD VERIFIED PRIOR TO ANY DESIGN OR CONSTRUCTION.
5. DATE OF FIELD WORK AUGUST 8, 2022.
6. THE TOPOGRAPHY SHOWN HEREON MEETS THE STANDARDS OF THE AMERICAN CONGRESS OF SURVEYING & MAPPING WITH 90% OF THE CONTOURS TO BE WITHIN PLUS OR MINUS ONE HALF OF A CONTOUR INTERVAL.
7. VERTICAL DATUM IS FROM GOOGLE EARTH, WGS-84.
8. T.B.M.=(SEWER MANHOLE IN RHODESIA ROAD), ELEV=6317.0'
9. BUILDING SETBACKS SHOULD BE VERIFIED PRIOR TO ANY DESIGN.
10. LAND CAPABILITY CLASSIFICATION IS FROM THE TAHOE LAND GUIDE, DATED SEPTEMBER 1981 & MUST BE VERIFIED BY THE T.R.P.A.

LEGEND

500	5' CONTOUR	#P	TREE TRUNK, DIAM., PINE
	1' CONTOUR	#F	TREE TRUNK, DIAM., FIR
	PROPERTY LINE	#A	TREE TRUNK, DIAM., ASPEN
	RETAINING WALL	#C	TREE TRUNK, DIAM., CEDAR
	FLOWLINE	#SN	TREE TRUNK, DIAM., SNAG
OHU	OVERHEAD UTILITIES	#ST	TREE TRUNK, DIAM., STUMP
SS	SANITARY SEWER MANHOLE	#ORN	TREE TRUNK, DIAM., ORNAMENTAL
W	WATER VALVE	ELEV	SPOT ELEVATION
	SANITARY SEWER CLEANOUT	P.U.E.	PUBLIC UTILITY EASEMENT
	MONUMENT	M.P.E.	MULTI-PURPOSE EASEMENT
100.00 ASSUMED	CONTROL/TRAVERSE POINT		
	TEMPORARY BENCH MARK		

EXISTING COVERAGE

PRELIMINARY

LAND CLASSIFICATIONS

CLASS PER TRPA	LOT AREA	12,690 SF	X	XX%	=	SQ.FT.
TOTALS:	116-210-024	XX SF		ALLOWED		SQ.FT.

LAND COVERAGE PER CLASSIFICATION

CLASS PER TRPA

HOUSE	1,261 SF
ASPHALT DRIVEWAY & WALKWAY	780 SF
DECK/STAIRS INCL. TRPA REDUCTION	497 SF
CONCRETE PAD	8 SF
TOTAL	2,546 SQ.FT.
TOTAL EXISTING COVERAGE	2,546 SQ.FT.
ALLOWED	- XXXXX SQ.FT.
OVERCOVERAGE/REMAINDER	XXXXXX SQ.FT.

OFFSITE LAND COVERAGE

OFFSITE ASPHALT DRIVEWAY	226 SF

PROJECT INFORMATION

OWNER:	JAY NELSON
PROJECT ADDRESS:	5647 RHODESIA ROAD CARNELIAN BAY, CA
APN:	116-210-024
RECORD INFORMATION:	LOT 45, AGATE BAY VISTA UNIT NO.3 SUBDIVISION BOOK 1 OF MAPS AT PAGE 55, O.R.P.C

		CHECKED BY	REVISION	DATE	DESCRIPTION	BY
DATABASE BY:	MW					
DB CHECKED BY:	MW					
DESIGN BY:	MW					
DRAFTED BY:	ebaiv					
DRAWING NAME:	351300-to1.dwg					
DIRECTORY:	JOBS					
COPYRIGHT 2022 ©						

NELSON PROPERTY
5647 RHODESIA ROAD
BOUNDARY & TOPO. SURVEY
PLACER COUNTY CALIFORNIA

DATA DATE 8/9/2022
PLOT DATE 8/12/2022
SCALE
HORIZONTAL 1"=10'
VERTICAL 1' CONTOURS

WLS
WEBB LAND SURVEYING, INC.
LAND SURVEYING SERVICES
PLANNING
3190 Fabian Way, Unit C
Tahoe City, CA 96145
P.O. Box 1222
Carnelian Bay, CA 96140
(530) 581-2599
FAX (530) 581-3231
matt@webblandsurveying.com

SHEET NUMBER 1 of 1
FILE NUMBER 3513.00

AGENDA ITEM NO. V. B.

Attachment B
Soil Description

Jay Nelson Land Capability Challenge,
November 9, 2023, TRPA Hearing Officers Meeting

5647 Rhodesia Road
Carnelian Bay, Placer County, CA 96140
APN 116-210-024, LCAP2023-0121

Soil Profile Description
Marchel Munnecke
Field Date: 9-13-2023

Pit 116-210-024:

Soil Classification: Fine-Loamy, isotic, frigid Ultic Haploxeralfs (Some assumptions, made due to lack of lab analysis, based on soils mapped in this area in 2007 Soil Survey of the Tahoe Basin Area, California and Nevada.)
Soil Series: Tahoma soil; JwD- Jorge- Tahoma very stony sandy loam, 2 to 15 percent slope mapunit; Land Capability Class 6
Drainage Class: Well Drained
Hydrologic Group: B
Parent Material: Colluvium and residuum from volcanic parent material over volcanic mudflow.
Slope: 7 % **Aspect:** Southwest

Description:

A1 0 to 2 inches; sandy loam, brown (10YR 4/3), very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; loose, loose, nonsticky and nonplastic; many very fine to very coarse roots; many very fine and fine irregular pores; 10 percent gravels; clear smooth boundary.

A2 2 to 7 inches; gravelly sandy loam, brown (10YR 4/3), dark brown (7.5YR 3/3) moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; many fine to medium roots and common very fine and very coarse roots; many very fine and fine irregular pores; 10 percent gravel and 15 percent cobbles; gradual wavy boundary.

Bw 7 to 24 inches; gravelly sandy loam, yellowish brown (10YR 5/4), brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine to medium roots; many very fine and fine irregular pores; 15 percent gravel, and 5 percent cobbles; gradual wavy boundary.

Bt1 24 to 41 inches; sandy clay loam, brown (10YR 5/3), brown (7.5YR 4/3) moist; strong very thick platy structure; slightly hard, friable, moderately sticky and moderately plastic; many very fine to medium roots; common clay films bridging sand grains; many very fine and fine irregular pores; 10 percent gravels; clear wavy boundary.

Bt2 41 to 62 inches; gravelly sandy clay loam, light brownish gray (10YR 6/2), brown (7.5YR 4/2) moist; strong medium subangular blocky structure; hard, very firm, moderately sticky and moderately plastic; common medium, distinct redox concentrations in the matrix, common fine to medium roots; many clay films on ped faces; common very fine and fine irregular pores; clear wavy boundary.

CR 62 to 75+ inches; Highly weathered volcanic mud flow. Hard, but with effort, breaks up into clayey gravel sided pieces.

Note: Bt2 horizon colors described appear to be natural color variation in the weathered parent material.

Attachment C
Photographs

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PHOTOGRAPHS (Addendum to APN 116-210-024, November 9, 2023, Staff Summary)

Photo 1 – a. Pit 1. Photo 1- b. Bottom of pit.

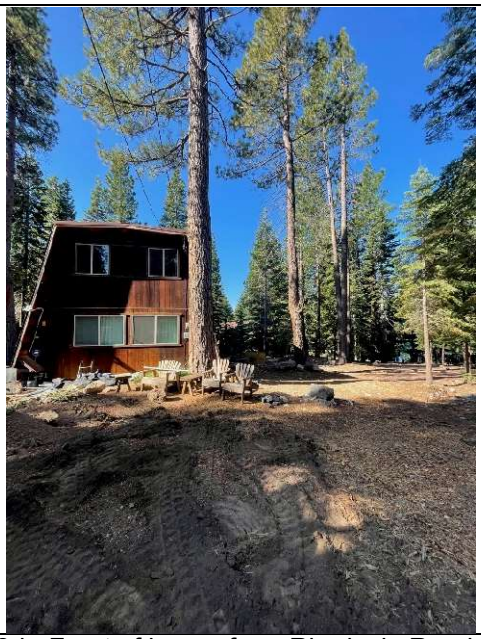

Photo 2. View from north to west/ back of parcel. Photo 2-b. Front of house from Rhodesia Road.

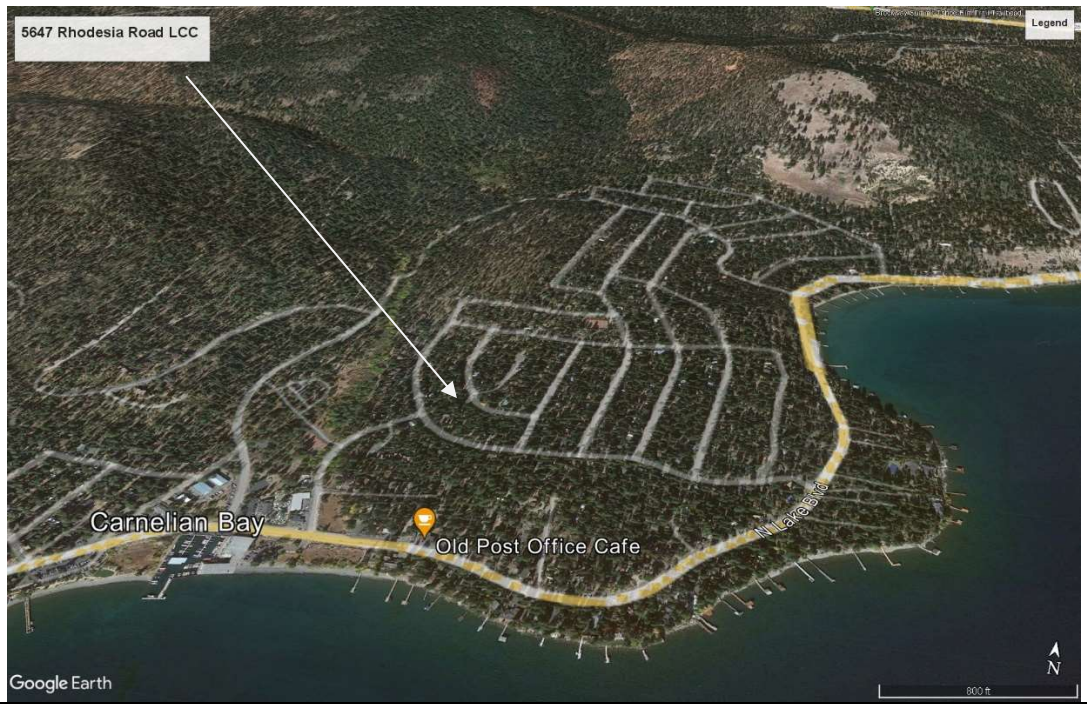

Photo 3– Google Earth map of general area of the parcel.

Image 4 – ArcGIS map of parcel area, showing the 1974 Soil Survey delineations in white (Mapunits labeled in Yellow).