

Location 128 Market Street Stateline, NV 89449

Phone: 775-588-4547 Fax: 775-588-4527 www.trpa.gov

#### MEMORANDUM

Date:	August 24, 2023
То:	TRPA Hearings Officer
From:	TRPA Staff
Subject	Strauss Land Capability Challenge; 910 Snowshoe Road, Placer County, California APN: 083-032-006, TRPA File #: LCAP2022-0749

#### 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 3- 11,329 sq. ft. (100 percent of parcel) to Class 4- 11,329 sq. ft. (100 percent of parcel).

## Background:

The subject parcel is shown as Class 3 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 primarily TeE- Tallac gravelly coarse sandy loam, 15 to 30 percent mapunit. A land capability verification has not been completed for this parcel. The updated *Soil Survey of Tahoe Basin Area, California and Nevada* (NRCS, 2007) maps this parcel as 7182- Paige medial sandy loam, 15 to 30 percent slopes. This parcel has a geomorphic mapping of E1 for Moraine land, Undifferentiated (Moderate hazard lands). The Tallac soils have a gravelly coarse sandy loam surface texture. Subsurface textures are gravelly coarse sandy loam and very cobbly sandy loam. They are skeletal soils (greater than 35% rock fragments in the particle control section) and do not have argillic soil development. A weakly silica-cemented duripan occurs at depths of 40 to 70 inches.

A land capability challenge (LCAP2023-0749) was filed by Gary Furumoto on behalf of the owner Heidi Strauss on December 12, 2023. TRPA contractor Marchel Munnecke visited the site on June 12, 2023, and described one soil pit.

#### Findings:

One soil pit was excavated by a backhoe to 56 inches. The pit was in the southwest portion of the parcel, approximately 30 feet southwest of the southwest corner of the residence. The soil formed in volcanic colluvium and residuum over weathered volcanic bedrock. This soil is characterized by a sandy loam surface texture, with gravelly sandy loam, very gravelly sandy clay loam sand subsurface textures. Weathered bedrock is present

below 51 inches. A silica cemented horizon was not observed in the pit. This soil is classified as a Loamy-skeletal, isotic, frigid Andic Haploxeralfs. This soil is deep, well drained, and is a member of Soil Hydrologic Group B. The vegetation on this parcel is a white fir and Jeffrey pine forest with an understory of mixed montane shrubs including huckleberry oak, snowberry, mountain whitethorn, Sierra wax current, and prostrate ceanothus.

In the *Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974), the Tallac soil is described as having a root restrictive silica cemented layer between 40 to 60 inches. A silica cemented layer was not observed in this soil. This soil has argillic soil development and has weathered bedrock below 51 inches. The Tallac soil does not have argillic soil development, forms in glacial outwash, and does not have bedrock near the surface. Mapunit MxF, Meiss cobbly loam, 30 to 60 percent slope is mapped to the east of this parcel. The Meiss soil is a shallow soil (10 to 20 inches deep) over hard bedrock. The presence of bedrock is similar to this soil, but this soil is deeper (51 inches to weathered bedrock) and has argillic soil development. This soil falls into the range and characteristics of the Jorge soil. The 2007 soil survey maps the soils in this area as Andisols. Laboratory analysis is required to determine if this soil is an Andisol. In the absence of lab data, this soil is determined to be the Jorge soil, and based on slopes, places in the JwE, Jorge-Tahoma very stony sandy loam, 2 to 15 percent slopes mapunit.

This soil is dissimilar to the Paige soil mapped on this parcel in the 2007 Soil Survey because it formed in colluvium and residuum from volcanic bedrock rather than in glacial outwash and moraine material. This soil has more rock fragments than the Paige soil and does not have a dense till layer.

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

Land Capability District	Area (sq. ft.) 1974 Soil Survey	Area (sq. ft.) 2023 LCC
Class 3 (TeE, 15 to 30 % slopes)	11,329	0
Class 4 (JwE, 15 to 30 % slopes)	0	11,329
Total Parcel Area	11,329	11,329

This memorandum was jointly 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 <u>iroll@trpa.gov</u>.

### BAILEY LAND CAPABILITY CHALLENGE FINDINGS

Site Information		
Assessor's Parcel Numbers: (APN)	083-032-006	
TRPA File No. / Submittal Date:	LCAP2022-0749/ 12/12/2022	
Owner or Applicant:	Heidi Strauss	
Address:	278 Milan Hill Road, Rhinecliff, NY 12574	

Environmental Setting		
Bailey Soil Mapping Unit <sup>1</sup> /	TeE, gravelly coarse sandy loam, 15 to 30 percent	
Hydrologic Soil Group (HSG) / Land	mapunit / HSG B/ E1- Moraine lands (Moderate	
Class / Geomorphic Hazard Unit	hazard lands)	
Soil Parent Material	Volcanic colluvium and residuum over weathered volcanic bedrock.	
Clause and Aspect		
Slopes and Aspect	16 to 25 percent slopes; facing to the south southeast.	
Elevation and Datum	6,756 to 6,798, Webb Land Surveying, Inc, 10-21-22	
Rock Outcrops and Surface	There is no rock outcrop exposed on the parcel.	
Configuration		
SEZ and Hydrology Source	The nearest mapped SEZ is a stream approximately	
	500 feet northeast of the parcel. There is no SEZ on	
	this parcel.	
Vegetation	The vegetation on this parcel is a white fir and Jeffrey	
	pine forest with an understory of mixed montane	
	shrubs including huckleberry oak, snowberry,	
	mountain whitethorn, Sierra wax current, and	
	prostrate ceanothus	
Ground Cover Condition	Good (vegetation 65 %, duff/mulch 75% cover)	
Site Features	Residence, AC parking area, concrete pad, walkways,	
	desks, stairs.	

<sup>&</sup>lt;sup>1</sup> TRPA currently relies upon the <u>Soil Survey of Tahoe Basin, California-Nevada</u> (Rogers and Soil Conservation Service, 1974), which the Bailey Land Capability system is predicated upon.

Field Investigation and Procedures		
Consultant and Address	Marchel Munnecke	
	PO Box 1015	
	Twin Bridges, CA 95735	
TRPA Staff Field Dates	June 12, 2023	
SEZ Mapping / NRCS Hydric Soil	No SEZ on this parcel	
Number of Soil Pits or Auger Holes	1 pit excavated by backhoe to 56 inches.	
and Description Depth		
Additional or Repetitive TRPA	NA	
Sample Locations		
Representative Soil Profile	See attachment B- Soil Description	
Descriptions		
Areas Not Examined	Residence, AC parking area, concrete pad, walkways,	
	desks, and stairs.	

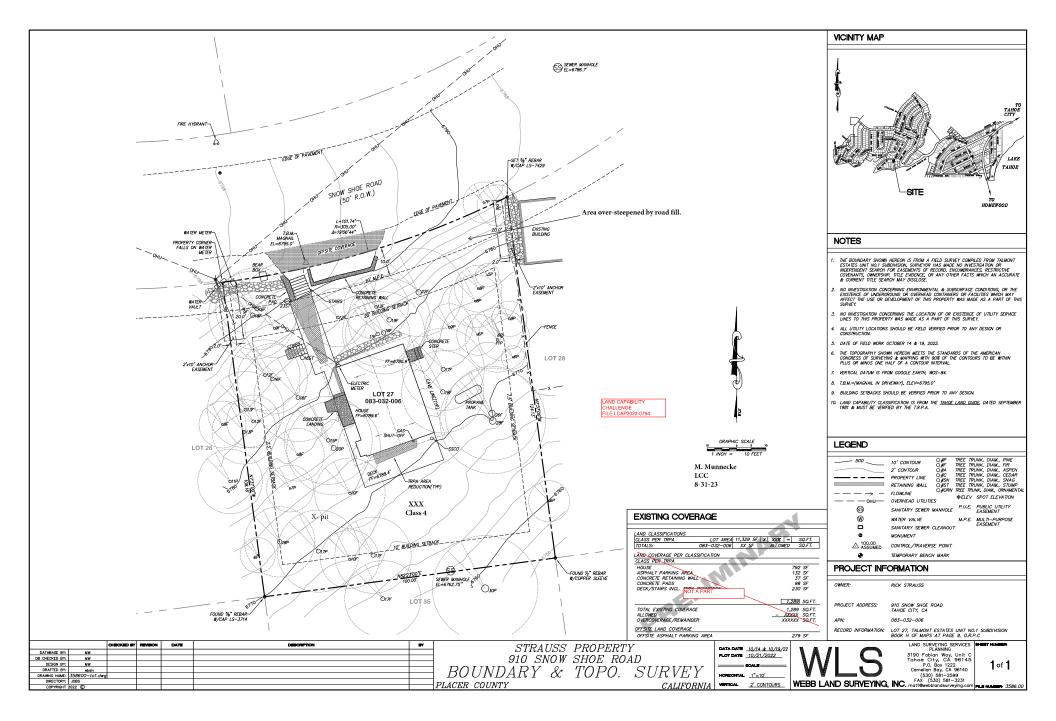
TRPA Findings	
2006 Soil Survey Map Unit	7182- Paige medial sandy loam, 15 to 30 percent slopes.
Consultant Soil Mapping Determination and Rationale	This parcel was determined to be Class 4- JwE- Jorge- Tahoma very stony sandy loam.
	In the <i>Soil Survey of Tahoe Basin Area, California-</i> <i>Nevada</i> (Rogers, 1974), the Tallac soil is described as having a root restrictive silica cemented layer between 40 to 60 inches. A silica cemented layer was not observed in this soil. This soil has argillic soil development and has weathered bedrock below 51 inches. The Tallac soil does not have argillic soil development, forms in glacial outwash, and does not have bedrock near the surface. This soil falls into the range and characteristics of the Jorge soil. The 2007 soil survey maps the soils in this area as Andisols. Laboratory analysis is required to determine if this soil is an Andisol. In the absence of lab data, this soil is determined to be the Jorge soil, and based on slopes places in the JwE, Jorge-Tahoma very stony sandy loam, 2 to 15 percent slopes mapunit.
	This soil is dissimilar to the Paige soil mapped on this parcel in the 2007 Soil Survey because it formed in colluvium and residuum from volcanic bedrock rather than in glacial outwash and moraine material. This soil
	has more rock fragments than the Paige soil and does not have a dense till layer.
Slope Determination	16 to 25 percent slopes.

TRPA Conclusion(s)	TRPA concurs with consultants' determination and
	rationale above.
Applicable Area	See site topo for soil delineations.

## Attachments:

- A. Parcel Map with Soil Map Units Delineated
- B. Soil Description
- C. Site Photographs

Attachment A Parcel Map with Soil Map Units Delineated



AGENDA ITEM NO. V. A.

Attachment B Soil Description Heidi Strauss Land Capability Challenge August 31, 2023, Hearing Officer Meeting

910 Snowshoe Road, Tahoe City, Placer County, CA 96145 APN 083-032-006, LCAP2022-0749.

Soil Profile Descriptions Marchel Munnecke Field Date: 6-12-2023



## Pit 083-032-006:

**Soil Classification:** Loamy-skeletal, isotic, frigid Andic Haploxeralfs. A laboratory test would be needed to verify if this soil has enough volcanic ash to be an Andisol. If so, the taxonomy would be medial, mixed, frigid, Humic Vitrixerands. Soils in this area in the 2007 Soil Survey were mapped as andisols.

Soil Series: JwE- 15 to 30 percent slopes, Capability Class 4.

Drainage Class: Well drained

## Hydrologic Group: B

Parent Material: Colluvium and residuum from volcanic parent material over volcanic bedrock.Slope: 25 %Aspect: South- Southeast

## **Description:**

- Oi 0 to 3 inches; shrub leaves and pine needles; clear smooth boundary.
- A 3 to 10 inches; gravelly sandy loam, dark brown (7.5YR 3/2) moist; strong medium granular structure; soft, very friable, nonsticky and nonplastic; many very fine to fine roots; many very fine to fine irregular pores; 10 percent gravels; gradual, smooth boundary.
- Bt1 10 to 20 inches; gravelly sandy loam, dark brown (7.5YR 3/3) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine to coarse roots; many very fine to fine irregular pores; 20 percent gravel and 10 percent cobles; gradual wavy boundary.
- Bt2 20 to 39 inches; very gravelly sandy loam, brown (7.5YR 4/3) moist; moderate medium subangular blocky structure; soft, very friable; slightly sticky and slightly plastic; many very fine to coarse roots; many very fine and fine irregular pores; 40 percent gravel and 5 percent cobbles; gradual wavy boundary.
- Bt2 39 to 51 inches; very gravelly sandy clay loam, brown (10YR 4/3) moist; moderate medium angular blocky structure; soft, very friable, moderately sticky and moderately plastic; common fine to medium roots; many very fine and fine irregular pores; 45 percent gravel; gradual wavy boundary.
- Cr 51 to 58+ inches; weathered volcanic bedrock, with few fine roots.

Attachment C Site Photographs



Mail PO Box 5310 Stateline, NV 89449-5310 Location 128 Market Street Stateline, NV 89449 Contact

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## PHOTOGRAPHS (Addendum to APN 083-032-006, August 31, 2023, Staff Summary)

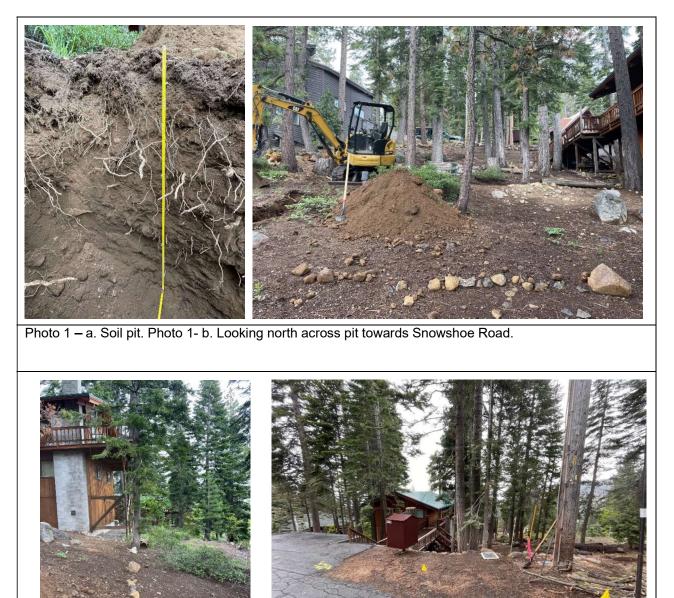
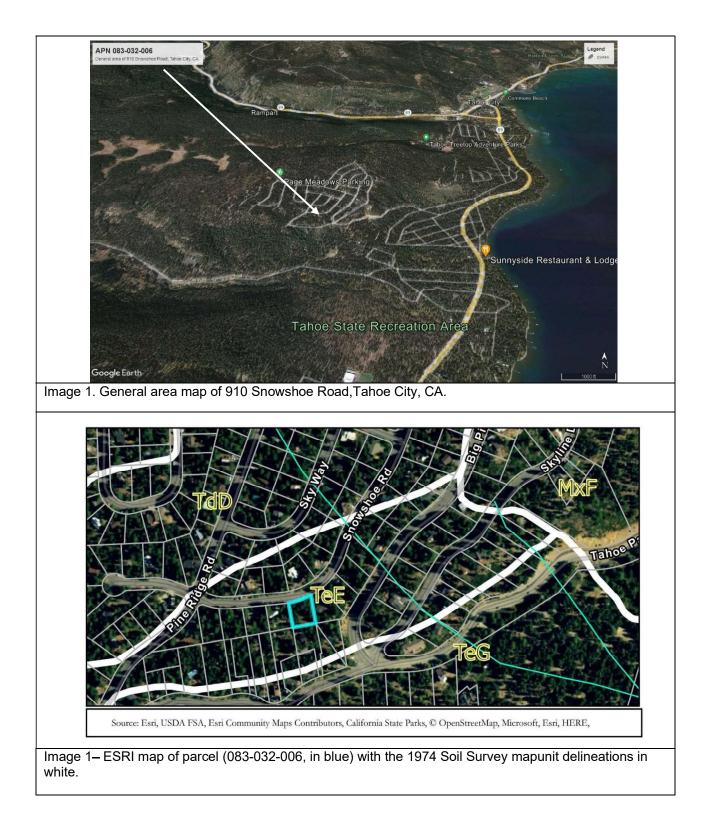


Photo 2 – a. View of rear deck looking east. Photo 2-b. View of front of parcel and residence.

# imagine. plan. achieve.



# imagine. plan. achieve.

AGENDA ITEM NO. V. A.