

# Mail PO Box 5310 Stateline, NV 89449-5310

# Location 128 Market Street Stateline, NV 89449

Contact

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

#### STAFF REPORT

Date: February 24, 2022

To: TRPA Hearings Officer

From: TRPA Staff

Subject Jedlowski Land Capability Challenge; 553 Lantern Court, Washoe County, NV;

APN 125-492-30; TRPA File Number LCAP2021-0306

#### Staff Recommendation:

Staff recommends the TRPA Hearings Officer approve the land capability challenge on the subject parcel. The challenge changes Class 3- 10,019 sq. ft. (100 percent of parcel) to Class 4-7,763 sq. ft. (77 percent of parcel) and Class 6- 2,256 sq. ft. (23 percent of parcel).

#### Required Motion:

In order to approve the proposed land capability challenge, the Hearings Officer must make the following motion, based on the staff report:

1) A motion to approve the proposed land capability challenge.

Staff recommends that the Hearings Officer take the following actions, based on this staff report.

## 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 in the UmE, Umpa very stony sandy loam, 15 to 30 percent slope mapunit. A land capability verification completed in 2005 verified the entire parcel as 1a-Umpa very stony sandy loam, 15 to 30 percent slope mapunit. The updated Soil Survey of Tahoe Basin Area, California and Nevada (NRCS, 2007) maps this parcel as mapunit 7151- Jorge very cobbly fine sandy loam, 5 to 15 percent slopes and 7152- Jorge very cobbly fine sandy loam, 15 to 30 percent slopes. This parcel has a geomorphic mapping of D2 for Streamcut volcanic flowlands, Headlands (Moderate hazard lands). The Umpa soils formed in colluvium and residuum over andesitic bedrock. Umpa soils have a very stony sandy loam A-horizon, with gravelly sandy loam subsurface textures in the upper 40 inches. Hard, fractured andesite is typically encountered between 20 and 40 inches below ground surface. The Jorge soils formed in colluvium and residuum over andesitic bedrock. Jorge soils have a stony sandy loam Ahorizon, with gravelly sandy loam or very gravelly sandy loam subsurface textures in the upper 50 inches. An argillic horizon is present at 33 inches to a depth of 50 inches, where a C horizon is present. Depth to weathered andesitic bedrock is below 60 inches.

This land capability challenge was filed by Gary R. Taylor on behalf of the landowners Richard and Sabrina Jedlowski on September 28, 2021. Davis 2 Consulting Earth Scientists developed a land capability report for this challenge. TRPA consultant, Marchel Munnecke, visited the site on October 21, 2021 with Mr. Taylor. Two soil pits were excavated by backhoe and described by Mr. Davis, and later reviewed by Ms. Munnecke.

#### Findings:

Two soil pits were excavated by backhoe to 60 and 52 inches. Site 1 was located approximately 40 feet south of the residence and Stop 2 was located approximately 10 feet west of the back deck. These soils formed in colluvium and residuum from volcanic parent material. The soil at Stop 1 is characterized by a gravelly sandy loam surface texture, with gravelly sandy clay loam, and very gravelly sandy clay loam subsurface textures. Hard or weathered bedrock was not encountered in the pit. This soil is skeletal with argillic horizons beginning at 14 inches This soil is classified as a Loamy-skeletal, mixed, frigid, Ultic Haploxeralfs. This soil is very deep, well drained, and is a member of Soil Hydrologic Group B. The soil at Stop 2 is characterized by a sandy loam surface texture, with sandy loam, and sandy clay loam subsurface textures. Hard or weathered bedrock was not encountered in the pit. This soil is non-skeletal with argillic horizons beginning at 26 inches. This soil is classified as a Fine-loamy, mixed, frigid, Ultic Haploxeralfs. This soil is very deep, well drained, and is a member of Soil Hydrologic Group B. The vegetation is an open Jeffrey pine forest with scattered patches of prostrate ceanothus, greenleaf manzanita, Sierra current, and a couple Scouler's willow in the understory.

In the Soil Conservation Service *Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974), the Umpa soils are moderately deep (20-40 inches over hard bedrock). The soils at this site are deeper than 40 inches to weathered bedrock (volcanic mudflow material). The soil at Stop 1 is within the range and characteristic of the Jorge soil and the soil at Stop 2 is within the range and characteristics of the Tahoma soil. The main difference between the Jorge and Tahoma soils is the amount of rock fragments. The Jorge soils have greater than 35 percent rock fragments in the particle control section and the Tahoma soils have less than 35 percent rock fragments. Based on soils and slopes, this parcel is mapped as JwD- Jorge-Tahoma very stony sandy loams, 2 to 15 percent slopes and JwE- Jorge-Tahoma very stony sandy loams, 15 to 30 percent slopes.

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

Land Capability District	Area (sq. ft.) 2005 LCV	Area (sq. ft.) 2022 LCC
Class 1a (UmE, 15 to 30% slopes)	10,019	0
Class 4 (JwE, 16 to 30 % slopes)	0	7,763
Class 6 (JwD, 0 to 16 % slopes)	0	2,256
Total Parcel Area	10,019	10,019

# **Contact Information:**

This staff report 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 <a href="mailto:jroll@trpa.gov">jroll@trpa.gov</a>.

# **BAILEY LAND CAPABILITY CHALLENGE FINDINGS**

	Site Information
Assessor's Parcel Numbers: (APN)	125-492-30
TRPA File No. / Submittal Date:	LCAP2021-0306/ 9/28/2021
Owner or Applicant:	Gary Taylor
Address:	18124 Wedge Parkway, PMB #420,
	Reno, NV 89511

En	vironmental Setting
Bailey Soil Mapping Unit <sup>1</sup> /	UmE (Umpa very stony sandy loam, 15 to 30 percent
Hydrologic Soil Group (HSG) / Land	slopes/ HSG C/ D2- Streamcut volcanic flow lands,
Class / Geomorphic Hazard Unit	Headlands (Moderate hazard lands)
Soil Parent Material	Colluvium over residuum from volcanic rock
Slopes and Aspect	12 to 25 percent; sloping south.
Elevation and Datum	6,770 to 6,810 feet, Welsh Hagan Associates, 1/22/21
Rock Outcrops and Surface	Slightly concave slope. No rock out crops exposed.
Configuration	
SEZ and Hydrology Source	NA
Vegetation	The vegetation is Jeffrey pine forest with scattered
	patches of prostrate ceanothus, greenleaf manzanita,
	Sierra current, and a couple Scouler's willow in the
	understory.
<b>Ground Cover Condition</b>	Fair (vegetation 50 %, duff/mulch 60% cover)
Site Features	Residence, pavers, entry stairs, wood walkways, wood
	deck, concrete deck, A/C parking off road.

Field Investigation and Procedures	
Consultant and Address	Davis 2 Consulting Earth Scientist
	PO Box 734
	Georgetown, CA 95634
TRPA Staff Field Dates	October 21, 2021
SEZ Mapping / NRCS Hydric Soil	None present
Number of Soil Pits or Auger Holes	2 pits excavated by backhoe to 60 and 52 inches.
and Description Depth	

<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.

Additional or Repetitive TRPA	NA
Sample Locations	
Representative Soil Profile	Land Capability Report, 553 Lantern Court, Incline
Descriptions	Village, Nevada (APN 125-492-30)
Areas Not Examined	Residence, pavers, entry stairs, wood walkways, wood
	deck, concrete deck, A/C parking off road.

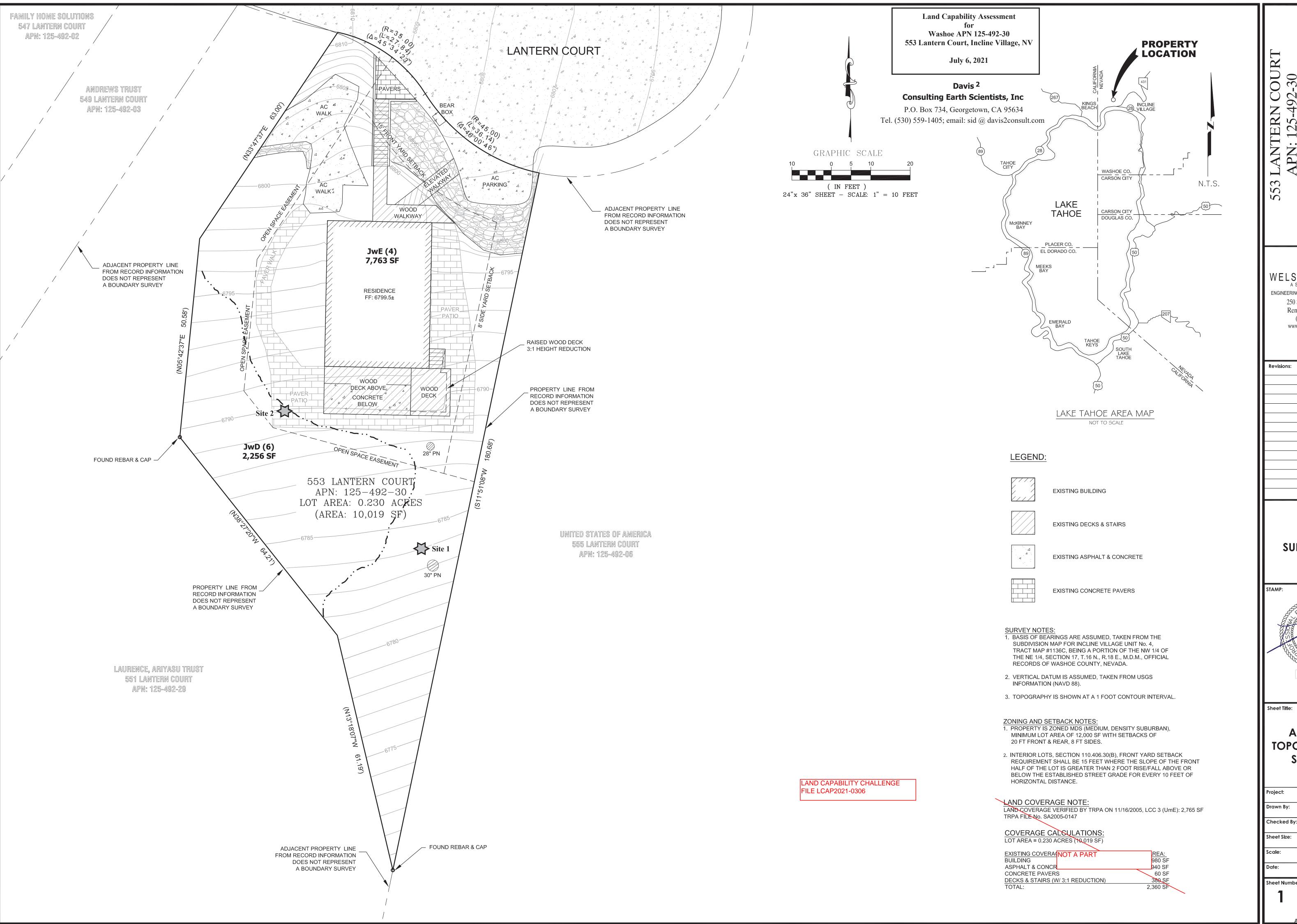
2006 Soil Survey Map Unit  7151- Jorge very cobbly fine sandy loam, 5 to 15 percent slopes and 7152- Jorge very cobbly fine sandy loam, 15 to 30 percent slopes (Class 6 and Class 4 respectively).  Class 6, JwD- Jorge-Tahoma very stony sandy loams, 2 to 15 percent slopes and Class 4, JwE- Jorge-Tahoma very stony sandy loams, 15 to 30 percent slopes.  In the Soil Conservation Service Soil Survey of Tahoe Basin Area, California-Nevada (Rogers, 1974), the Umpa soils are moderately deep (20-40 inches over hard bedrock). The soils at this site are deeper than 40 inches to weathered bedrock (volcanic mudflow material). The soil at Stop 1 is within the range and characteristic of the Jorge soil and the soil at Stop 2 is within the range and characteristics of the Tahoma
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soil. The main difference between the Jorge and
Tahoma soils is the amount of rock fragments. The
Jorge soils have greater than 35 percent rock
fragments in the particle control section and the
Tahoma soils have less than 35 percent rock
fragments. Based on soils and slopes, this parcel is
mapped as JwD- Jorge-Tahoma very stony sandy loams, 2 to 15 percent slopes and JwE- Jorge-Tahoma
very stony sandy loams, 15 to 30 percent slopes.
Slope Determination 12 to 25 percent slopes.
TRPA Conclusion(s)  TRPA concurs with consultant's determination and
rationale above.
Applicable Area See site plan for soil delineations.

# Attachments:

- A. Site Plan
- B. Land Capability Report
- C. Site photographs

# Attachment A

Site Plan

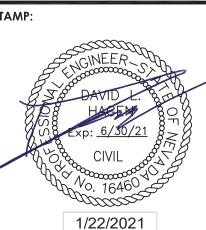


RICHARD CT NV 89451

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**TRPA** SUBMITTAL



# **AS-BUILT TOPOGRAPHIC SURVEY**

**553 LANTERN** Drawn By: **BAMF** Checked By: DLH

24"x36" AS NOTED

Sheet Number:

AGENDA ITEM NO. V.B

**JAN 2021** 

# Attachment B

Land Capability Report

# DAVIS<sup>2</sup>

#### **CONSULTING EARTH SCIENTISTS**

P.O. Box 734 · Georgetown, CA 95634 · Tel. (530) 559-1405; davis2consulting@sbcglobal.net

# Land Capability Report 553 Lantern Court, Incline Village, Nevada (APN 125-492-30)

July 17, 2021

#### INTRODUCTION

A soil investigation was conducted on the parcel on June 28, 2021. The objective of the study was to identify soils and other features and relate them to Land Capability, which is administered by the Tahoe Regional Planning Agency (TRPA) for the purpose impervious coverage regulation, by Chapter 30 of the Code of Ordinances.

The parcel supports an existing single-family residential dwelling on 0.23 acres of land, located at 553 Lantern Court, Incline Village, Nevada. This work is advanced at the request of Mr. Richard and Mrs. Sabrina Jedlowski.

Soil information contained in this report is for the strict use of land capability and it should not be used for building foundation design, slope stability, hazard waste assessment or seismic analyses.

#### **ENVIRONMENTAL SETTING**

The site is located at 553 Lantern Court, Incline Village, Nevada. Vegetation consists of Jeffrey pine and Ribes, species. Slopes range between 12 and 25 percent on a southern aspect. There are no stream environment zones (SEZ) influencing this parcel.

Soils are shown on TRPA map sheet G3 as UmE (Umpa very stony sandy loam, 15 to 30 percent slopes). Geology (Mathews, 1968) is characterized as Tv<sup>a</sup> (Andesite). Bailey's (1974) geomorphic analysis shows the parcel within D<sub>1</sub> (Toe slope lands).

### **METHODOLOGY**

The parcel was surveyed as well as areas nearby. A site considered representative of the landform was chosen and an excavation was placed to open and examine the soil profile in detail. Standards of the National Cooperative Soil Survey were used to describe and interpret soil physical properties. Information gathered at the site was compared to the *Soil Survey of the Lake Tahoe Basin, California-Nevada* (Rogers et al, 1974) and to the *Land-Capability Classification of the Lake Tahoe Basin, California-Nevada* (Bailey, 1974) for proper placement in the appropriate land capability class. A detailed topographic base map supplied by Welsh-Hagan Associates was available in the field for ground control and slope analysis. Information pertaining to land capability districts is shown on the base map (attached)

.

#### **FINDINGS**

Soils are found to be deep and well drained, members of Soil Hydrologic Group B. Two different soils are seen, each mapped as a soil mapping unit complex of Jorge and Tahoma series soils.

Jorge series soils can be characterized having topsoil approximately 14 thick consisting of dark brown gravelly sandy loam dark brown very stony sandy clay loam subsoil to 60 inches depth. The andesite parent material have weathered to saprolite at depth, roots explore all depths in the profile (Stop 1).

Tahoma soil is described at Stop 2. This profile is beneath pavers adjacent to the residence. It has a thick dark brown gravelly sandy loam topsoil approximately 14 inches thick over a dark brown gravelly sandy clay loam subsoil to 52 inches depth.

These soils differ from the Umpa series as currently shown on the TRPA overlays, which is moderately deep (20 to 40 inches) over hard andesite. Soils found more appropriately place in JwD (Jorge-Tahoma very gravelly sandy loam, 2 to 15 percent slope.) and JwE (Jorge-Tahoma gravelly sandy loam, 15 to 30 percent slopes).

#### CONCLUSIONS AND RECOMMENDATIONS

Soils found are Jorge and Tahoma series and place in Land Capability Classes 6 (JwD) and 4 (JeE), depending on slope. JwD is assigned 30 percent impervious coverage and JwE receives 20 percent impervious coverage.

Please refer to the following soil profile descriptions that support the findings and the attached map showing the spatial distribution of the appropriate land capability classes on the parcel.

Respectfully submitted.

Sidney W. Davis, CPSS /SC No. 1031

Representative Soil Profile Descriptions

Stop No. 1

A 0-4 inches, brown (10YR 4/3) gravelly sandy loam near sandy clay loam, dark brown (10YR 3/3) moist; moderate fine granular grading to moderate medium platy structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many very fine and fine interstitial pores; slightly acid; fifteen percent gravel; clear smooth boundary

DAVIS<sup>2</sup> CONSULTING EARTH SCIENTISTS, Inc. • Georgetown, California

- AB 4 14 inches, pale brown (10YR 6/3) gravelly sandy clay loam, dark brown (7.5YR 3/3) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; many very fine and fine common medium roots; common very fine and fine interstitial and common medium tubular pores; medium acid; twenty percent gravel; gradual smooth boundary.
- Bt 14 24 inches, pale brown (10YR 6/3) very gravelly sandy clay loam, dark brown (7.5YR 3/3) moist; strong medium subangular blocky structure; hard, firm, sticky and plastic; many fine medium coarse roots; common very fine and fine interstitial and common medium tubular pores; common moderately thick clay films on face of peds and line pores; medium acid; thirty percent gravel and ten percent stones; gradual wavy boundary.
- Bt2 24 34 inches, pale brown (10YR 6/3) very gravelly sandy clay loam, dark brown (7.5YR 3/4) moist; strong medium subangular blocky structure; hard, firm, sticky and plastic; many fine medium coarse roots; common very fine and fine interstitial and common medium tubular pores; common moderately thick clay films on face of peds and line pores; slightly acid; thirty-five percent gravel and ten percent stones; gradual irregular boundary.
- BCt 34 60 inches, dark yellowish brown (10YR 4/4) variegated with dark yellowish brown (10 YR 4/6) moist; very stony; massive parting to moderate medium subangular blocky structure; hard, friable, sticky and plastic; common fine medium and few coarse roots; common medium thick clay films line tubular or interstitial pores, slightly acid; thirty percent gravel and forty percent stones.

Notes: Variegation 16 - 24 due to differential weathering of gravels. Variegation in the BC, weathered andesite, saprolite textures to gravelly sandy clay loam.

Soil Series: Jorge

Soil Classification: Loamy-skeletal, mixed, frigid, Ultic Haploxeralfs

Soil Drainage Class: Well drained

Hydrologic Soil Group: B



Figure 1- Stop 1 (Jorge series).

# Stop No. 2

- A1 0 6 inches, brown (7.5YR 4/2) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, loose, nonsticky and nonplastic; common fine medium roots; many very fine interstitial pores; ten percent gravel; clear smooth boundary.
- Bw1 6 14 inches, brown (7.5YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many very fine and fine medium and few coarse roots; many fine interstitial pores; twenty percent gravel; gradual wavy boundary.
- Bw2 14 26 inches, brown (10YR 5/3) sandy loam near loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; many fine medium coarse roots; many fine medium tubular and common coarse tubular pores; twenty percent gravel and ten percent stones; gradual wavy boundary.
- Bt1 26 40 inches, brown (7.5YR 5/4) sandy clay loam near sandy loam, dark brown (7.5YR 3/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; many fine medium and few coarse roots; common fine

medium tubular pores; few clay films on face of peds and line pores; twenty percent gravel; gradual wavy boundary.

Bt2 40 – 52 inches, dark yellowish brown (10YR 3/4) sandy clay loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic, few very fine and common fine medium roots; common very fine and fine interstitial pores; few clay films on face of peds and line pores; fifteen percent gravel.

Notes: Non-skeletal pit. Covered by paving stones.

Soil Series: Tahoma

Soil Classification: Fine-loamy, mixed, frigid, Ultic Haploxeralfs

Soil Drainage Class: Well drained

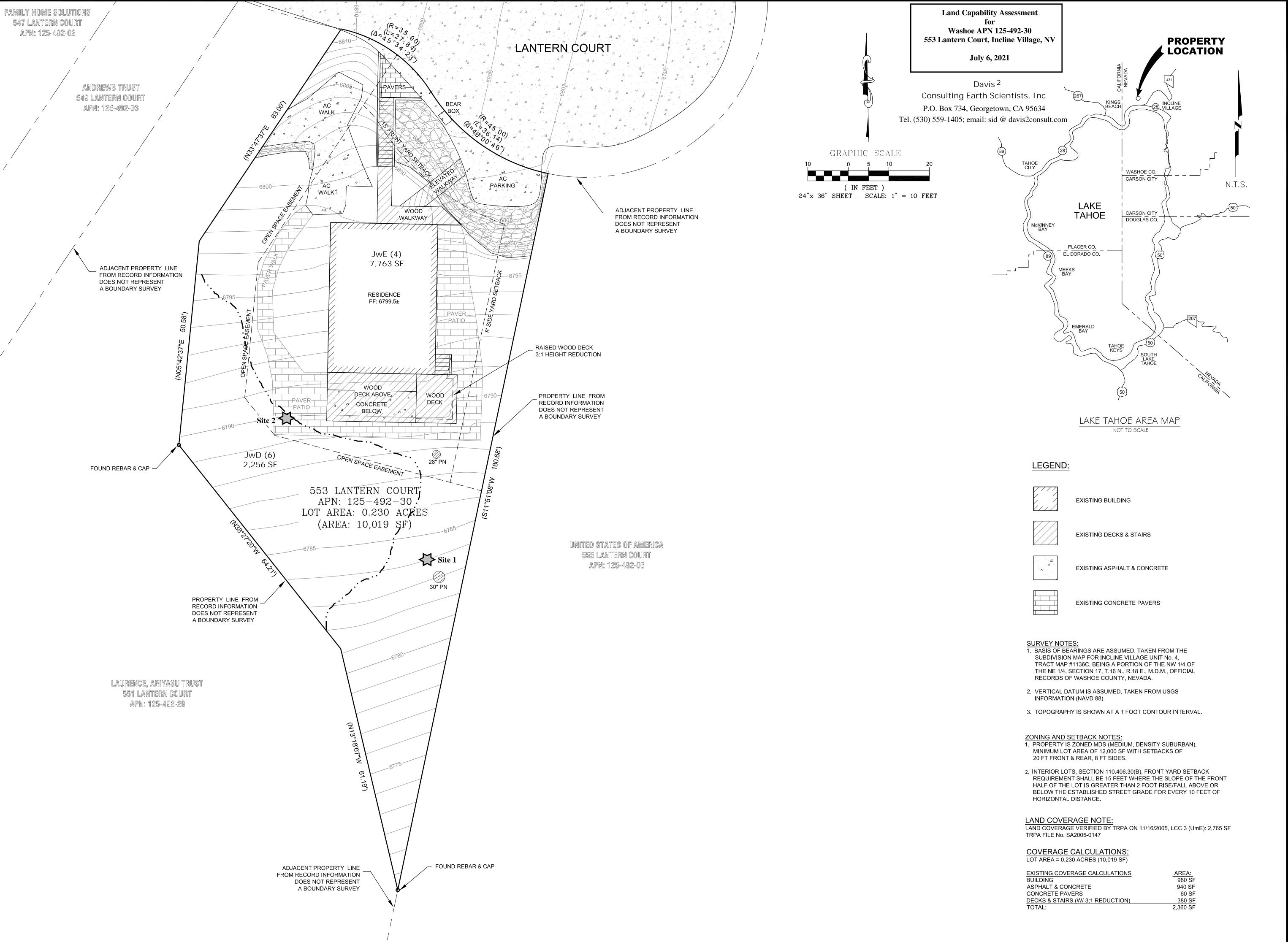
Hydrologic Soil Group: B



Figure 2- Stop 2 (Tahoma series).



Figure 3- Parcel landscape.



APN: 125-492-30
SHOE COUNTY

EDLOWSKI, SABRINA A. & RICHARD W. J
553 LANTERN CT
INCLINE VILLAGE. NV 89451

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Sheet Title:

# AS-BUILT TOPOGRAPHIC SURVEY

Project: 553 LANTERN

Drawn By: BAMF

Checked By: DLH

Sheet Size: 244, 264

cale: 24"x36"

AS NOTED

Sheet Number:

OF 1
AGENDA ITEM NO. V.B

**JAN 2021** 

Attachment C

Site Photographs

# Location 128 Market Street Stateline, NV 89449

## Contact

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

# PHOTOGRAPHS (Addendum to APN 125-492-30, March 3, 2022 Staff Summary)





Photo 1 – a. Stop 1 pit. Photo 1-b. View from south of residence looking east toward Stop 1.

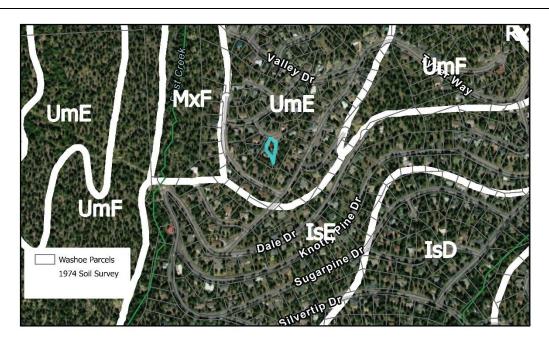




Photo 2 – a. Stop 2 pit. Photo 2 – b View toward Stop 2 from south to north.



Image 3 – Google Earth image of area.



Esri, USDA FSA, Esri Community Maps Contributors, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

Image 4– 1974 Soil Mapping with parcel 125-492-30 shown in blue.