

**Stanka Consulting, LTD**

**A Professional Engineering Company**

# **Special Use Permit**

**Project: 1955 Piute Creek Rd**

**APN 077-310-14**

**January 16, 2023**

**Prepared by:**

**Mark Johnson, P.E.**

**Prepared for:**

**Washoe County**

www.stankaconsulting.com  
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502 E John St Ste B  
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## Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

<b>Project Information</b>		Staff Assigned Case No.: _____	
Project Name: <b>1955 Piute Creek Driveway Grading SUP</b>			
Project Description: Construction of a driveway approximately 1100 feet long. The driveway will serve two of the newly created parcels from parcel map application WTDLP22-0002. Also requests a director's modification for fill slopes at a 2H:1V slope per geotechnical recommendations.			
Project Address: 1955 Piute Creek Rd			
Project Area (acres or square feet): Approximately 0.5 acres			
Project Location (with point of reference to major cross streets <b>AND</b> area locator): Palomino Valley approximately 7.5 miles west of Pyramid Hwy along Piute Creek Rd.			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
077-310-14	136.11		
<b>Indicate any previous Washoe County approvals associated with this application:</b> Case No.(s). WTDLP22-0002			
<b>Applicant Information</b> (attach additional sheets if necessary)			
<b>Property Owner:</b>		<b>Professional Consultant:</b>	
Name: Richard and Corinne Sumner		Name: Mark Johnson, P.E.	
Address: PO Box 874402 Wasilla AK		Address: 502 E John St, Ste B Carson City NV	
Zip: 99687		Zip: 89706	
Phone: 907-232-1874 Fax:		Phone: 775-430-6273 Fax:	
Email: ricksumner@ymail.com		Email: markj@stankaconsulting.com	
Cell: Other:		Cell: Other:	
Contact Person: Rick Sumner		Contact Person: Mark Johnson, PE	
<b>Applicant/Developer:</b>		<b>Other Persons to be Contacted:</b>	
Name: Same as property owner		Name:	
Address:		Address:	
Zip:		Zip:	
Phone: Fax:		Phone: Fax:	
Email:		Email:	
Cell: Other:		Cell: Other:	
Contact Person:		Contact Person:	
<b>For Office Use Only</b>			
Date Received: Initial:		Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

# Special Use Permit Application Supplemental Information

(All required information may be separately attached)

1. What is the project being requested?

Construction of a driveway approximately 1100 ft long.

2. Provide a site plan with all existing and proposed structures (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.)

A site plan is included in Attachment A. However, no structures are proposed for this driveway project.

3. What is the intended phasing schedule for the construction and completion of the project?

The driveway will be completed in one phase, immediately following approval by Washoe County.

4. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

The property is over 136 acres in a minimum 40-acre zoned residential area. The proposed driveway would be over 100ft from the nearest property line and over 300ft from the nearest adjacent house.

5. What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?

The driveway would allow for the development of the property into three lots each over 40 acres. This would conform to the existing zoning for the area. The additional lots would create additional tax revenue for the community. A parcel map has already been submitted.

6. What are the anticipated negative impacts or affect your project will have on adjacent properties? How will you mitigate these impacts?

The only foreseen impact that could be considered negative is the additional traffic from two additional homes planned to be constructed.

7. Provide specific information on landscaping, parking, type of signs and lighting, and all other code requirements pertinent to the type of use being purposed. Show and indicate these requirements on submitted drawings with the application.

Approximately 9900 cubic yards of fill would be required unless additional rockery walls are used if 3H:1V fill slopes are used.

8. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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9. Utilities:

a. Sewer Service	Individual septic systems
b. Electrical Service	NV Energy
c. Telephone Service	AT&T or other
d. LPG or Natural Gas Service	None
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	Charter or other
g. Water Service	Individual wells

For most uses, Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required.

h. Permit #	51002	acre-feet per year	5
i. Certificate #		acre-feet per year	
j. Surface Claim #		acre-feet per year	
k. Other #		acre-feet per year	

Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources).

Richard and Corinne Sumner
----------------------------

10. Community Services (provided and nearest facility):

a. Fire Station	Palomino Valley Volunteer Fire - TMFPD Sta 450
b. Health Care Facility	Renown Medical 202 Los Altos Pkwy
c. Elementary School	Taylor Elementary 252 Egyptian Drive
d. Middle School	Shaw Middle 600 Eagle Canyon Drive
e. High School	Spanish Springs High School 1065 Eagle Canyon Drive
f. Parks	Gator Swamp Park 255 Egyptian Drive
g. Library	Spanish Springs Library 7100 Pyramid Way
h. Citifare Bus Stop	RTC FlexRIDE - Spanish Springs Business Center - Calle De La Plata

**Special Use Permit Application  
for Grading  
Supplemental Information**  
(All required information may be separately attached)

1. What is the purpose of the grading?

To construct a driveway for two single family homes. The other proposed lot to be created by the parcel map will have access off of Piute Creek Rd and not the driveway.

2. How many cubic yards of material are you proposing to excavate on site?

Approximately 9900 cubic yards of fill would be required unless additional rockery walls are used if 3H:1V fill slopes are used.

3. How many square feet of surface of the property are you disturbing?

Approximately 87,400 square feet, which includes the fill area (at a 3H:1V fill slope).

4. How many cubic yards of material are you exporting or importing? If none, how are you managing to balance the work on-site?

Approximately 9.900 cubic yards of import at a 3H:1V slope. Approximately 3,000 cubic yards of fill would be required if the fill slope was at 2H:1V.

5. Is it possible to develop your property without surpassing the grading thresholds requiring a Special Use Permit? (Explain fully your answer.)

No. In order to reach the proposed end point of the driveway, the driveway will need to traverse a hillside with a grade of 30%. Because of the topo of the property, no other route is possible.

6. Has any portion of the grading shown on the plan been done previously? (If yes, explain the circumstances, the year the work was done, and who completed the work.)

No other grading has been done.

7. Have you shown all areas on your site plan that are proposed to be disturbed by grading? (If no, explain your answer.)

All areas proposed to be disturbed have been shown on the site plan.

8. Can the disturbed area be seen from off-site? If yes, from which directions and which properties or roadways?

The driveway can be seen from Piute Creek Rd which is along the northern edge of the subject property. The properties across Piute Creek Rd are currently vacant. The driveway would be visible from 2050 Piute Creek Rd, which is next door to the east.

9. Could neighboring properties also be served by the proposed access/grading requested (i.e. if you are creating a driveway, would it be used for access to additional neighboring properties)?

The driveway will be used as access for two new homes at 1955 Piute Creek Rd. All neighboring properties are accessed off of Piute Creek Rd.

10. What is the slope (horizontal/vertical) of the cut and fill areas proposed to be? What methods will be used to prevent erosion until the revegetation is established?

The cut and fill areas will all have a 3H:1V slope. Mechanical stabilization is proposed for certain areas where runoff is channeled.

11. Are you planning any berms?

Yes	NoX	If yes, how tall is the berm at its highest?
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12. If your property slopes and you are leveling a pad for a building, are retaining walls going to be required? If so, how high will the walls be and what is their construction (i.e. rockery, concrete, timber, manufactured block)?

Rockery walls will be required for parts of the driveway. The highest wall is expected +

13. What are you proposing for visual mitigation of the work?

The use of rockery walls and fill to match the native soils.

14. Will the grading proposed require removal of any trees? If so, what species, how many and of what size?

All trees in the driveway easement have been killed by a previous wildfire.

15. What type of revegetation seed mix are you planning to use and how many pounds per acre do you intend to broadcast? Will you use mulch and, if so, what type?

A native grass and shrub mix will be applied at a rate of 30 lbs per acre.

16. How are you providing temporary irrigation to the disturbed area?

It is proposed that the seeding be done during the early spring when chances of precipitation are greatest and temperatures are still low.

17. Have you reviewed the revegetation plan with the Washoe Storey Conservation District? If yes, have you incorporated their suggestions?

Not at this time.

18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit the requested grading?

Yes	No <input checked="" type="checkbox"/>	If yes, please attach a copy.
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## Director's Modification of Standards Supplemental Information

(All required information may be separately attached)

1. What modification or deviation are you requesting? **Be specific.**

Approximately 9900 cubic yards of fill would be required unless additional rockery walls are used if 3H:1V fill slopes are used.

2. Why is the modification or deviation necessary to the success of the project/development? **Be specific.** Are there any extenuating circumstances or physical conditions on the proposed project/development site?

Due to the slope of the existing hillside, a 3:1 slope will result in excessive amount of fill that will daylight more than 200 ft from the proposed driveway in certain sections. Walls needed to reduce the fill would be more than 6 ft in height in places.

3. Are you proposing to mitigate the effect of the modification or reduction?

Per the preliminary geotechnical report, a 2:1 fill slope would be stable per the geotechnical investigation. All geotechnical recommendations would be followed to allow 2:1 fill slopes.

4. What section of code are you requesting to modify or deviate? **Be specific.** List the code section and if there are specific requirements for the modification, provide detailed information. For deviation, provide the percentage of the deviation.

Section 110.438.45(a) is specially requested for modification to standards.

5. For Minor Deviation request; list what properties/parcels are affected by the deviation? Explain if there will be any impacts to the affected neighboring properties. (At a minimum, affected property owners are those owners of parcels that immediately abut the location of the proposed minor deviation.)

This modifications to standards request affects only APN 077-310-14, 1955 Piute Creek Road, the property upon which the driveway is proposed. The modification to standards is to allow a 2H:1V fill slope from the driveway. No adjacent properties will be affected by this modification. The fill slopes are a minimum 100 ft from the nearest adjacent property.



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31 January 2023

This document will provide the additional narrative required for the SUP application and request to modify standards to Washoe County grading standards for the driveway project proposed at 1955 Piute Creek Rd in Palomino Valley.

## **Project Location:**

The subject property is located at 1955 Piute Creek Rd in Palomino Valley. The APN is 077-310-14. The property is 136.11 acres in size. The owner has received approval for a tentative parcel map with Case No. WTDLP22-0002. The property is approximately 7.4 miles east of Pyramid Lake Hwy, SR 445. The vicinity map below shows the location of the property within Palomino Valley.

Sumner



January 17, 2023

1:36,112  
0 0.425 0.85 1.7 mi  
0 0.5 1 2 km

Washoe County GIS  
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

This information for illustrative purposes only. Not to be used for boundary resolution or location and not intended to be used for measurement, replication, or duplication.

Washoe County Technology Services - Regional Services Division, 1001 E. 5th St. Building C-200, Reno, NV 89512 www.washobecounty.us/gis (775) 328-2345

The SUP application is a request for grading at the subject property, 1955 Piute Creek Rd. The grading would construct a driveway that would allow access for two of the

proposed parcels created as a part of tentative parcel map WTDLP22-0002. The driveway would be constructed according to the applicable Washoe County Development Standards. The site plan included in Attachment A details the design of the proposed driveway in a 3H:1V and 2H:1V fill slope configurations. This project exceeds the thresholds for a major grading permit in three areas:

1. Proposed cut exceeds 1,000 cubic yards on slopes greater than 15%.
2. Proposed fill exceeds 1,000 cubic yards (in both the 3H:1V and 2H:1V slope designs configurations) on slopes greater than 15%.
3. The driveway traverses a hillside slope greater than 30 percent.

This SUP includes a request to modify standards under Section 110.438.45(a) which states that grading shall not result in slopes in excess of, or steeper than, three horizontal to one vertical (3:1). This SUP is requesting a fill slope downhill of the proposed driveway of 2:1. All cut slopes would remain at 3:1. In addition, the fill slope in the vicinity of Sta 4+50 would remain at 3:1. This request is made on the basis of recommendations made by the geotechnical engineer as part of his report. An email from the geotechnical engineer dated January 9, 2023, stated that “In the slope stability section of the report, I’m including the recommendations/conclusions that the fill slopes will be stable at 2:1 ratio...”. The complete report is included with this application. It was prepared by Corestone Engineering, dated February 3, 2023. See page 10 of the geotechnical report regarding the 2:1 slope recommendation. A 2:1 slope would allow a reduction in the amount of fill of almost 70% from the 3:1 fill slope configuration. It would also reduce the distance the fill would extend from the driveway from almost 200 ft in some sections to no more than 75 ft in the 2:1 design configuration. This reduction would significantly reduce the visual impact of the driveway to any neighbors and those driving on Piute Creek Rd. The reduction in the fill would also reduce the import of fill and the corresponding truck traffic required for the project. Dust generation on Piute Creek Rd from truck traffic would also be reduced if imported fill is required. In addition, there are a number of rock outcroppings in the area that have been observed. They may indicate a shallow bedrock which could allow for a greater fill slope. The final geotechnical report addresses this on page 5 of the report. The final geotechnical report is included as Attachment F. No runoff from the proposed driveway will cross any existing property lines and would be directed towards Piute Creek, its current terminus. In the Tree Preservation Plan section below, the number of live trees that would need to be removed as a result of the project would decrease from four trees to only one tree if the 2:1 fill slope request was approved. Attachment B contains the Treasurer’s report stating all property tax payments are up to date.

### **Tree Preservation Plan:**

According to Section 110.412.25 (c) – Preservation of Significant Trees, any tree removed will need to be replaced with a tree/trees of the same species at a 1:1 caliper ratio. The majority of the trees that would need to be removed as a result of this project

are already dead as a result of a wildfire. There are, however approximately four living trees that would need to be removed under the 3:1 slope configuration. It is anticipated that they could be replaced with trees planted in the vicinity of Piute Creek since this would allow for stabilization of the soils in the vicinity of the creek (nearly all the trees in the vicinity of the creek on the subject property have been killed by wildfire). There may be the need to remove additional dead trees in the vicinity of the proposed planting that would otherwise not need to be removed as a result of the driveway construction. This would allow for more room for the newly planted trees.

In the 2:1 slope configuration, only one live tree would need to be removed. One other live tree would require some protection from the fill slope since it appears to be located right at the edge of the fill slope. It appears the live trees are Pinyon Pines (*pinus monophylla*). All replacement trees would be of the same species.

### **Hillside Ordinance Review:**

Section 110.424.05 of the Hillside Ordinance applies to all development that meets the following criteria:

- 1) Properties containing slopes in excess of fifteen (15) percent or greater on 20 percent or more of the site.

The subject property contains 136.11 acres. Of that, approximately 132 acres exceed 15 percent or greater slope. The subject property meets that threshold. The requirements of the ordinance are outlined in Section 110.424.00 a – h and are presented below:

110.424.00(a): *Minimizing use of slopes subject to instability, erosion, landslide, flood hazards or drainage problems:*

The current hillside over which the driveway would traverse shows no signs of recent instability, erosion, or drainage problems. The pinyon pines, along with the brush understory, provide stabilization to the slope. The drainage area over which the driveway would traverse is small, no more than a few acres, which would minimize the impacts of storm runoff.

110.424.00(b): *Minimizing the careless alteration of and disruption to the natural topography and landscape;*

The area was surveyed to a 1ft contour resolution. The driveway has been drawn using bearing and distances that would be used to create a constructable and viable project. All diligence will be used in construction of the driveway.

110.424.00(c): *Providing safe and adequate vehicular and pedestrian access to and within hillside areas, including emergency access;*

The driveway has a proposed width of minimum 12 ft for the middle 350 ft; the remaining driveway width would be 20 ft. The 20ft width is a requirement of the TMFPD. At approximately the center of the 12 ft

driveway section, there is a 20 ft wide pullout for emergency vehicle use. This layout is per discussions with TMFPD. No pedestrian use of the driveway is anticipated.

110.424.00(d): *Establishing stormwater runoff and erosion control techniques to minimize adverse water quality impacts resulting from non-point runoff;* Existing runoff from the hillside uphill of the proposed driveway would be captured by drainage swales along the uphill cut slopes or retaining or rockery walls. Runoff would then be conveyed to either a culvert at approximately Sta 3+60 or to Piute Creek. The runoff from the culvert at Sta 3+60 is conveyed to an existing drainage depression/swale in the hillside which empties into Piute Creek.

Best management practices (BMPs) would be employed during construction. This would include a silt fence along the uphill side of Piute Creek from the proposed driveway to the existing driveway. Fiber rolls or equivalent would be used along the banks of Piute Creek and at various low sections in the hillside which naturally collect runoff from the hillside. See the attached Proposed Site Plan.

110.424.00(e): *Encouraging innovative grading techniques and building design which respond to the hillside terrain and natural contours of the land;* The use of rockery or retaining walls are planned to be used in locations where their height would be up to six feet (see the Geotechnical Report, pg 2) and to minimize fill in other locations. The construction of the 12 ft wide section of driveway would also contribute to minimizing retaining or rockery walls and fill.

110.424.00(f): *Minimizing impacts on existing trees and vegetation which reduce erosion, stabilize steep hillsides, enhance visual quality, protect water quality and preserve critical watershed recharge areas;* The driveway route has been determined so that it mostly impact trees already killed by wildfire. The 2:1 slope configuration option would impact only one live tree. The current hillside over which the driveway would traverse shows no signs of recent instability, erosion, or drainage problems. The driveway is proposed to be constructed so that fill and rockery/retaining wall color and make-up are in accord with the surrounding hillsides. Runoff from the hillsides uphill of the proposed driveway will be conveyed directly to Piute Creek and will not cross any asphalt or oiled surface which would impact water quality. Drainage swales on the uphill side of the driveway will likely have rip-rap to stabilize the swales and minimize sediment transport from the swales into Piute Creek. Piute Creek appears to be within the Truckee River watershed; however, the creek does not reach any other waterway and disperses onto the Palomino Valley ground surface approximately 5.5 miles east of Pyramid Hwy, SR 445.

110.424.00(g): *Encouraging the transfer of density to avoid hazardous areas and to protect environmentally sensitive and open space areas; and*  
 No hazardous areas, including fault zones, are located within or in the vicinity of the subject property. No environmentally sensitive or open space areas are known to exist within the subject property.

110.424.00(h): *Minimizing impacts on prominent ridgelines, significant viewsheds, canyons and visually prominent rock outcroppings which reflect the visual value and scenic character of hillside areas.*

The proposed location of the driveway will not impact any ridgelines. While there are some rock outcroppings visible along the driveway hillside, none of them are visually prominent and it is not anticipated that any of them will be impacted by the proposed driveway.

In addition, the requirements of Section 110.424.15 shall be met. They are listed below:

- a) *Site Analysis. A site analysis, prepared by a qualified engineer, planner, landscape architect or architect shall be submitted. This analysis shall provide the basis for assessing the opportunities and constraints of the site for development and shall be in the form of design standards handbook incorporating both textual and graphical representations of the requested action. At a minimum, a site analysis shall indicate:*

Please see the Design Handbook accompanying this application.

**Grading Calculations:**

The following summarizes the disturbed area and volumes that would result from the preliminary grading plan. The summary is divided between total grading amounts and amounts that are to be considered under the SUP application request:

<b>GRADING SUMMARY</b>					
<b>3:1 Fill Slopes</b>			<b>2:1 Fill Slopes</b>		
<b>Total:</b>			<b>Total:</b>		
Disturbed area	2.01	ac	Disturbed area	1.01	ac
Cut	1,194	CY	Cut	1,194	CY
Fill	11,178	CY	Fill	4,218	CY
Net	9,984	CY	Net	3,024	CY
Max depth of cut	4.7	ft	Max depth of cut	4.7	ft
Max depth of fill	4.4	ft	Max depth of fill	4.4	ft

<b>GRADING SUMMARY</b>					
<b>Applicable to SUP</b>					
<b>3:1 Fill Slopes</b>			<b>2:1 Fill Slopes</b>		
<b>Total:</b>				<b>Total:</b>	
Disturbed area	0.01	ac	Disturbed area	-	ac
Cut	194	CY	Cut	194	CY
Fill	10,178	CY	Fill	3,218	CY
Net	9,984	CY	Net	3,024	CY
Max depth of cut	-	ft	Max depth of cut	-	ft
Max depth of fill	-	ft	Max depth of fill	-	ft

**Master Plan and Zoning:**

The subject property is zoned General Rural Agricultural (GRA) and is master planned Rural. No changes to those designations are sought by this SUP application. The subject property and the proposed lots under the tentative parcel map meet the minimum lot size under the GRA designation which is 40 acres.

**Proposed Culverts:**

Two 30-inch diameter RCP or CMP culverts are proposed for the crossing of Piute Creek by the driveway. This is based on estimated peak Q<sub>25</sub> flows through Piute Creek. No flow data exists for Piute Creek with either Washoe County or the USGS. The flow used to size the culvert crossing was based on flow estimated using National Streamflow Statistics (NSS) software. The program requires the estimated drainage area, elevation and Flood Region number based on a Flood Region map located in United States Geological Survey Water-Supply Paper 2433 published in 1994 (pg 22). The drainage area was estimated based on review of the USGS 7.5-minute series topo map NV-Moses Rock. Based on these inputs, the peak 25-yr flow for Piute Creek was calculated at 223 cfs. The printout of the NSS computation box is included in Attachment C. Water level at 223 cfs was calculated using an online stream level calculator. The calculator is located at [Free Online Manning Irregular Channel Calculator \(hawsedc.com\)](http://hawsedc.com). Based on an n value of 0.05, and the stream profile at the driveway centerline, the water level is at 5401.3 ft, or approximately 2.1 ft above the bottom of the creek. The printout of the water level calculator is located in Attachment D. At a water level depth in the pipe of 1.9 ft, capacity of the two pipes is 224 cfs with a slope of 6.2%. Peak capacity of the two pipes is 258 cfs. Appropriate rip-rap will be located at the inlet and outlet of the culverts. A plan and profile sheet showing the driveway at Piute Creek Rd is included in Attachment E. The sheet also specifies the culvert construction at Piute Creek.

**View:**

The driveway would be constructed in the far northern portion of the subject property starting at the north property line. At that point, the driveway would extend from an elevation of approximately 5400 ft to 5470 ft. The northern property line of the subject property lies along Piute Creek Rd which follows Piute Creek along the bottom of a narrow canyon-like depression through the hills. This geography limits the number of

neighboring properties that would be able to view the driveway, especially considering the 40-acre minimum lot size in the area.

The applicant would like to request that the two existing building pads be exempt from any revegetation requirement. The pads have existed since the construction of the original house in approximately 1980. The pads have been there, therefore, over 40 years. They could be seen as a part of the natural environment. In addition, attempting to revegetate or re-slope the land could introduce the possible instability and erosion potential that does not exist now. Also, the future owners of the proposed lots could decide to place their homes on those existing pads.

Attachment A – Special Use Permit Application Site Plan Drawing  
Set



REVISIONS:	BY:

ENGINEER'S STAMP:

**TITLE SHEET**

Project: Summer Parcel Map Driveway  
 Owner: Richard & Corinne Summer 1955 Plute Creek Rd  
 (Washoe County, NV)  
 APN 077-310-14

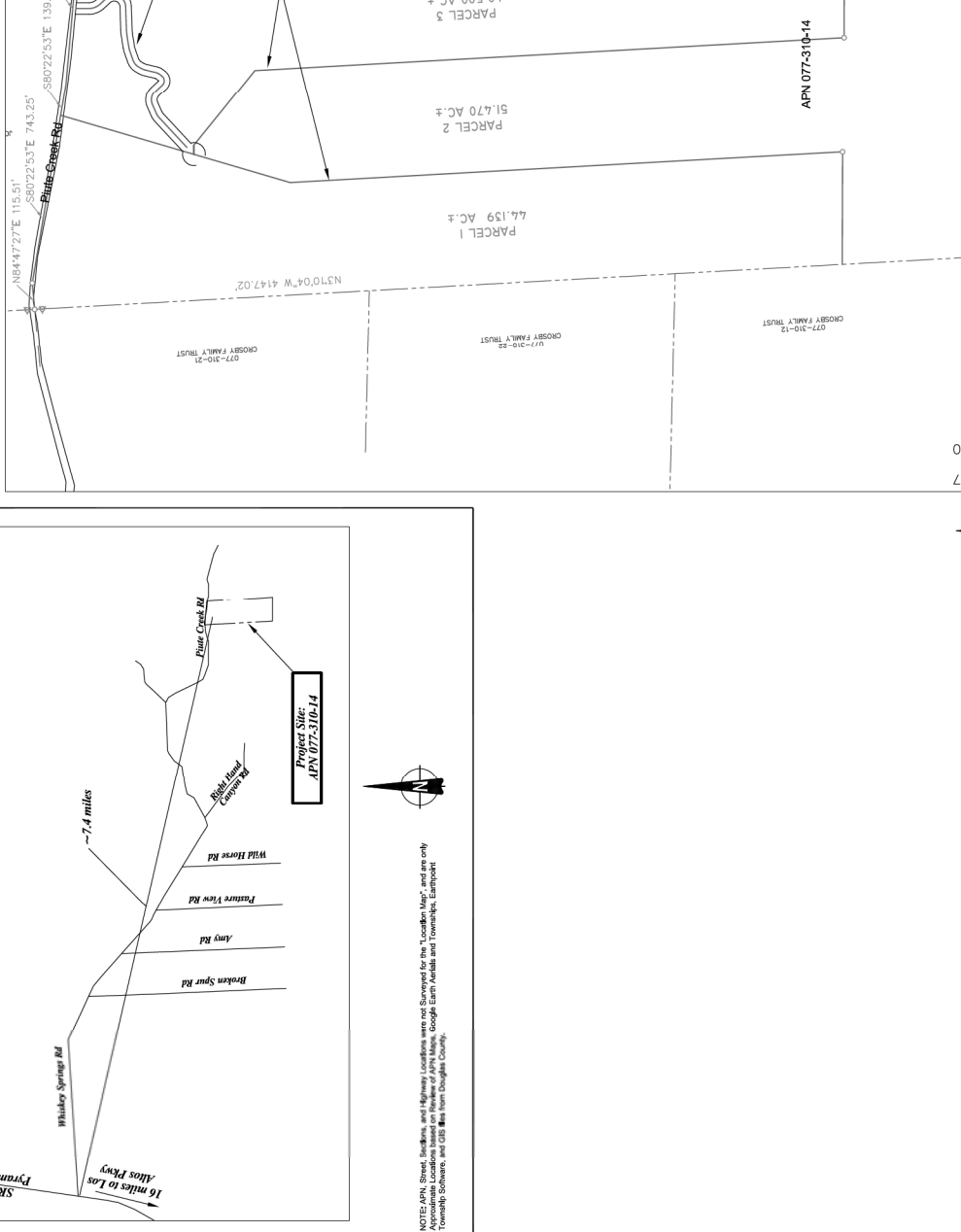
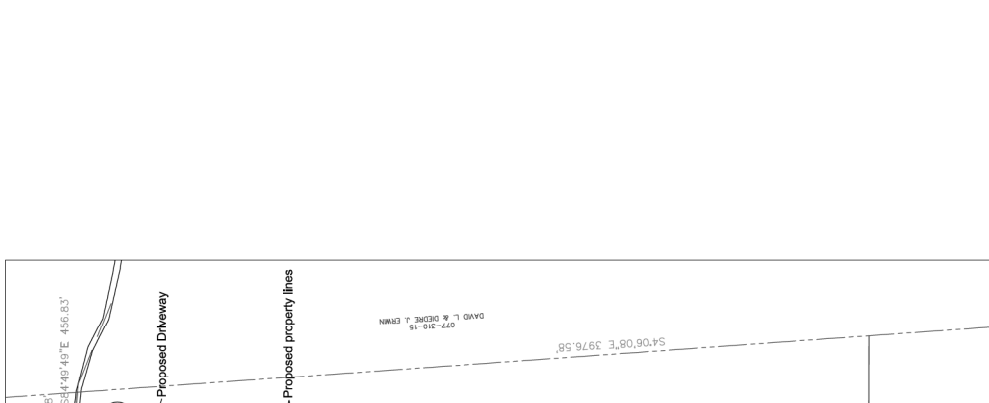
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 markj@stankiconsulting.com  
 www.stankiconsulting.com

JOB NUMBER: MTJ  
 CHECKED BY:  
 DATE: 1-17-2023  
 SHEET NO. C1  
 OF 3 SHEETS

**SHEET INDEX**

SHEET C1 - TITLE SHEET  
 SHEET C2 - SITE LAYOUT WITH 2% TO 4% SLOPE  
 SHEET C3 - SITE LAYOUT WITH 2% TO 4% SLOPE  
 THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE WASHOE COUNTY DEVELOPMENT CODE.

**LOCATION MAP N.T.S.**



**VICINITY MAP**

APN 077-310-14

SCALE  
 1 inch = 250 ft.  
 1000 FEET

18 19 20

SPECIAL USE PERMIT APPLICATION SET

REVISIONS:	BY:

ENGINEER'S STAMP

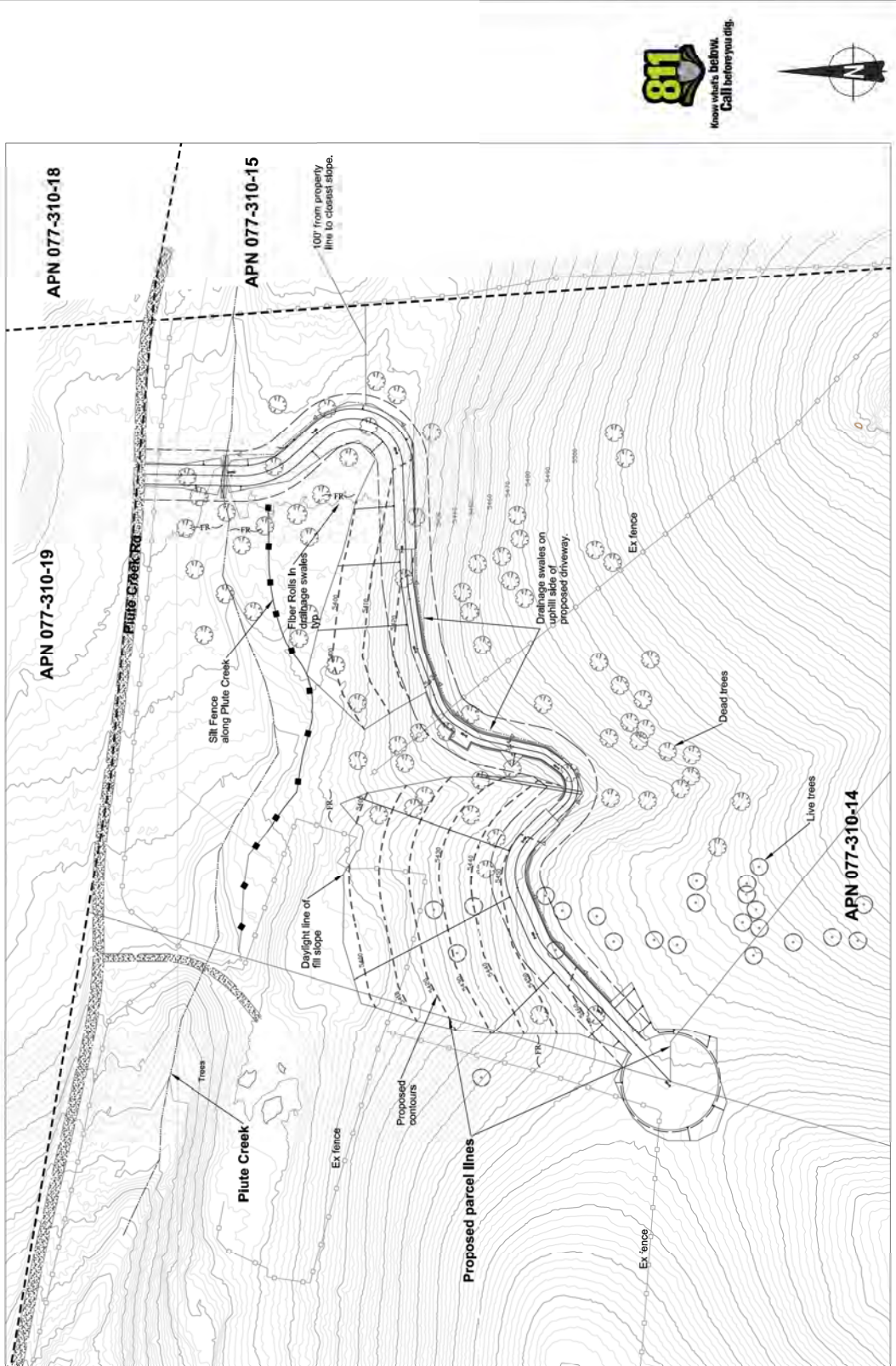
**SITE LAYOUT WITH 3H:1V SLOPE**

Project: Summer Parcel Map Driveway  
 Owner: Richard & Corinne Sumner 1955 Plute Creek Rd  
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 mark@stankacounting.com  
 www.stankacounting.com

JOB NUMBER: MTJ  
 DRAWN BY: [blank]  
 DATE: 1-17-2023  
 SHEET NO. 3 OF 3



**811**  
 Know what's Below. Call before you dig.

North arrow pointing up.

SCALE: 1 inch = 50 ft.  
 0 25 50 100 200 FEET

Quantity of fill for 3H:1V fill slope: 9,900 cubic yards  
 Disturbed area for 3H:1V fill slope: 87,400 sq. ft.

Property is currently vacant, no structures are on the property.  
 No Quaternary faults (<1.6 million years old) on property.  
 There are no structures on any adjacent property within 15ft of the subject property's boundary.

SPECIAL USE PERMIT APPLICATION SET

REVISIONS:	BY:

ENGINEER'S STAMP:

**SITE LAYOUT WITH 2H:1V SLOPE**

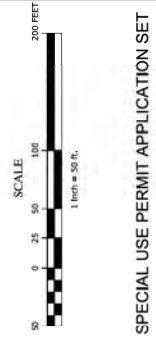
Project: Summer Parcel Map Driveway  
(Washee County, NV)  
APN 077-310-14

Owner: Richard & Corinne Sumner 1955 Plute Creek Rd

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DRAWN BY: MTJ  
CHECKED BY: \_\_\_\_\_  
DATE: 1-31-2023  
SHEET NO: \_\_\_\_\_  
OF 3 SHEETS



This site plan shows the location of the fill slopes for the proposed driveway. The fill slopes are shown in hatched areas. This is subject to the request for director's modifications to the existing standards.

Quantity of fill for 2H:1V fill slope: 3,100 cubic yards

Disturbed area for 2H:1V fill slope: 43,850 sq. ft.

Property is currently vacant, no structures are on the property.

No Quaternary faults (<1.6 million years old) located on property.

There are no structures on any adjacent property within 15ft of the subject property's boundary.

Hatched area represent locations with slope <15%. All other areas contain slopes >15% or 30%

SPECIAL USE PERMIT APPLICATION SET

Attachment E – Culvert Detail at Piute Creek

REVISIONS:	BY:

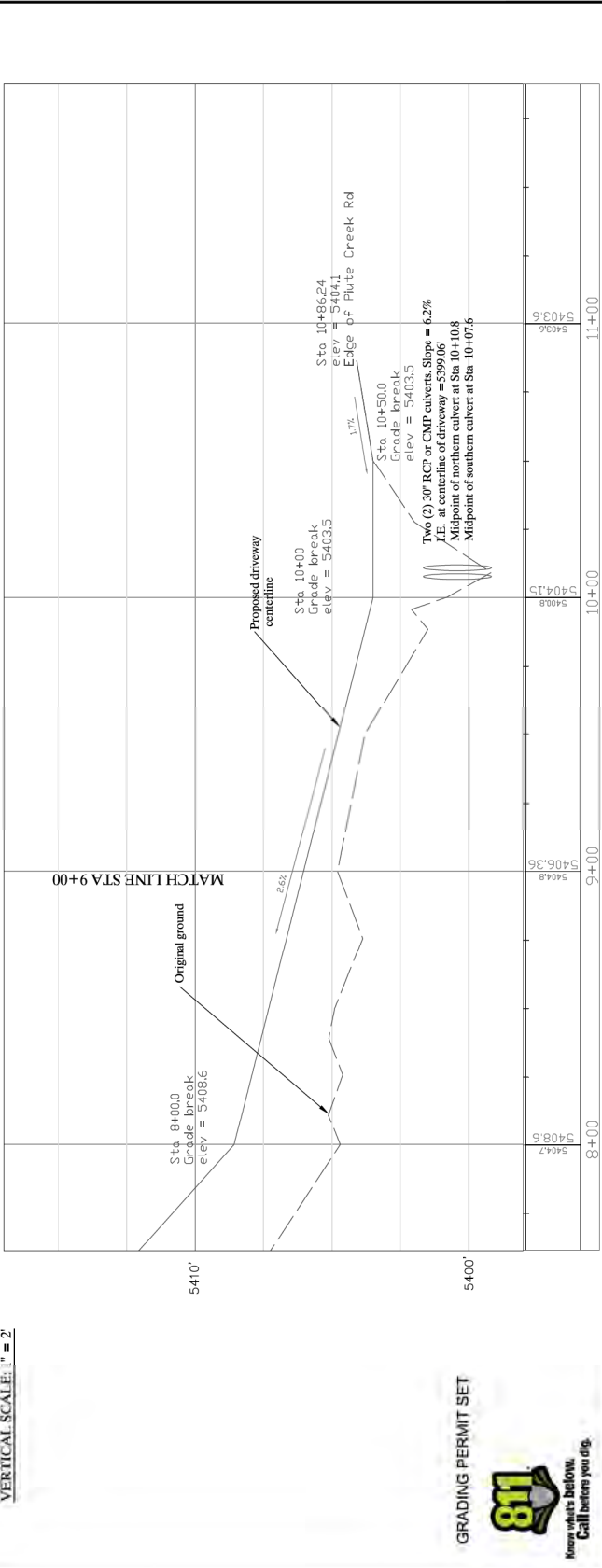
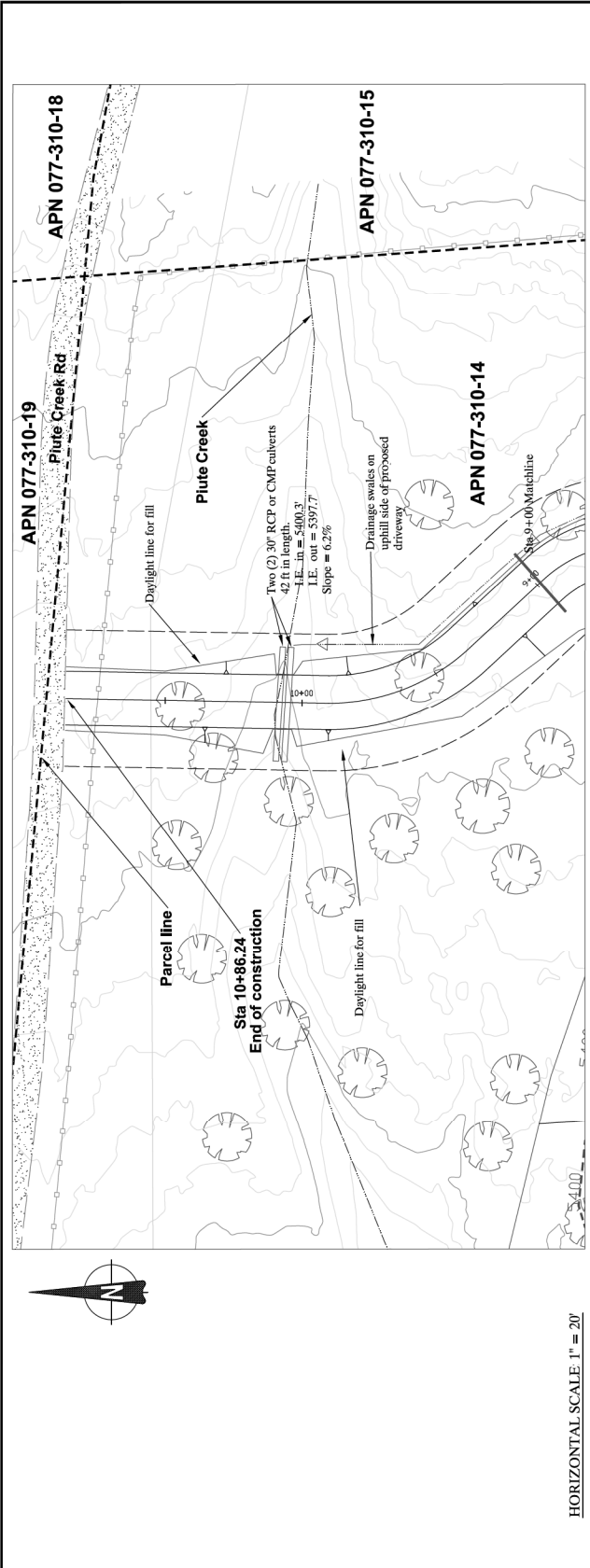
ENGINEER'S STAMP

**GRADING PLAN & PROFILE**  
**STA 9+00 TO 10+86.24**  
 Project: Sumner Parcel Map Driveway  
 Owner: Richard & Corinne Sumner 1955 Plute Creek Rd  
 (Washoe County, NV)  
 APN 077-310-14

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GRADING PLANS  
 FOR SUBMITTAL TO WASHOE COUNTY

DATE: 1-24-2023  
 SHEET NO. C1  
 OF 1 SHEETS



HORIZONTAL SCALE: 1" = 20'  
 VERTICAL SCALE: 1" = 2'

GRADING PERMIT SET

**Stanka Consulting, LTD**

**A Professional Engineering Company**

# **Hillside Development Design Standards Handbook**

**per Washoe County Section 110.424.15**

**Project: 1955 Piute Creek Rd**

**APN 077-310-14**

**February 7, 2023**

**Prepared by:**

**Mark Johnson, P.E.**

**Prepared for:**

**Washoe County**

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This handbook will address the requirements for Hillside Development Section 110.424.15 – Application Requirements and Procedures. The subject property is 1955 Piute Creek Road, APN 077-310-14, owned by Richard and Corinne Sumner. The owner is applying for a Special Use Permit for a proposed driveway on the property. The driveway would serve two of the three proposed lots created from the subject property per tentative parcel map WTDLP22-0002. The grading for the proposed driveway would exceed the thresholds outlined in Section 110.438.35. These include fill in excess of 1000 cy on a slope of greater than 15%; cut in excess of 1000 cy on a slope greater than 15%; and the driveway would traverse slopes in excess of 30%.

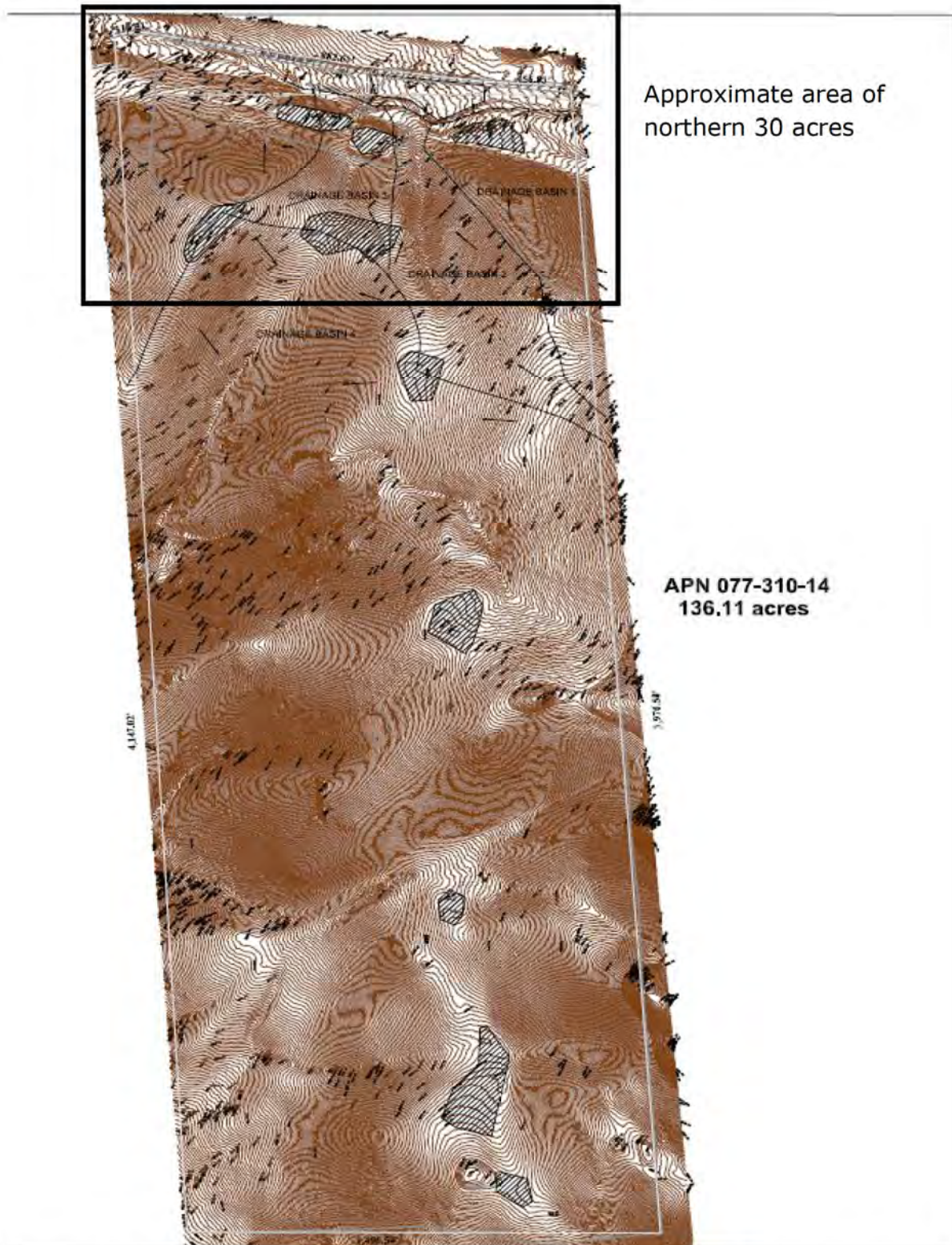
The subject property is 136.11 acres in size. However, approximately only the northeastern 19 acres would be subject to development and disturbance from the driveway construction. Figure 1, on page 4, shows the extent of the property with a 2-ft contour overlay from a survey completed in November, 2022. Hatched areas represent slopes of 15% or less. These lie along the tops of hills or saddle areas between the bottom of adjacent hills. Drainage areas are also noted within the northern portion of the subject property. For the remainder of this report, only the northern 30 acres (as noted in Figure 1) will be shown and discussed. The remainder of the subject property will not be impacted by the project. No construction or disturbance will occur on the remainder of the property.

Figure 2, on page 5, shows the northern 30 acres with 2-ft contours. The contour interval is enough that Piute Creek and existing topographic conditions are evident in the figure. No slide areas or faults are evident in the subject property. Fault zones were researched using the Washoe County Regional Mapping System on January 30, 2023. The closest fault line is over one mile from the subject property. Smaller rock outcroppings appear in subject property but none could be defined as a major outcropping. It does not appear any outcroppings would be affected by the proposed construction.

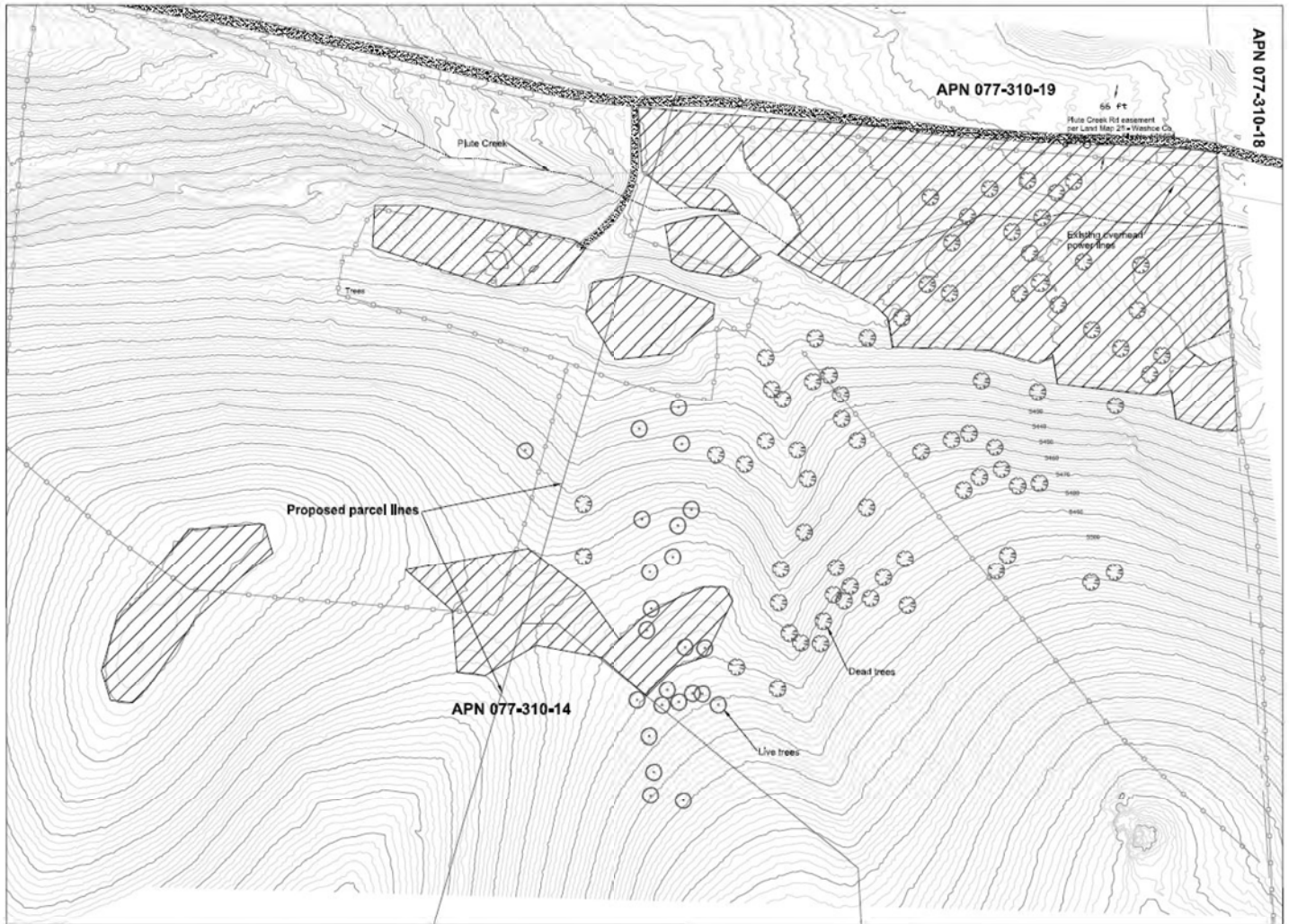
Soil conditions can be reviewed in the soils report accompanying this application by Corestone Engineers dated February 3, 2023. The only significant hydrologic condition existing in the subject property is Piute Creek which flows along the northern edge of the subject property as can be seen in Figure 2. Piute Creek appears to be an intermittent stream, only flowing in reaction to storm events or

snow melt. In addition, its drainage area is approximately 4.2 square miles. No known endangered plant or animal species exist within the subject property. The only significant vegetation exists along the fringes of Piute Creek but only during times of stream flow and for a limited time thereafter.





**Figure 1: 2-ft contours of entire subject property. Hatched areas represent areas with slopes 15% or less.**



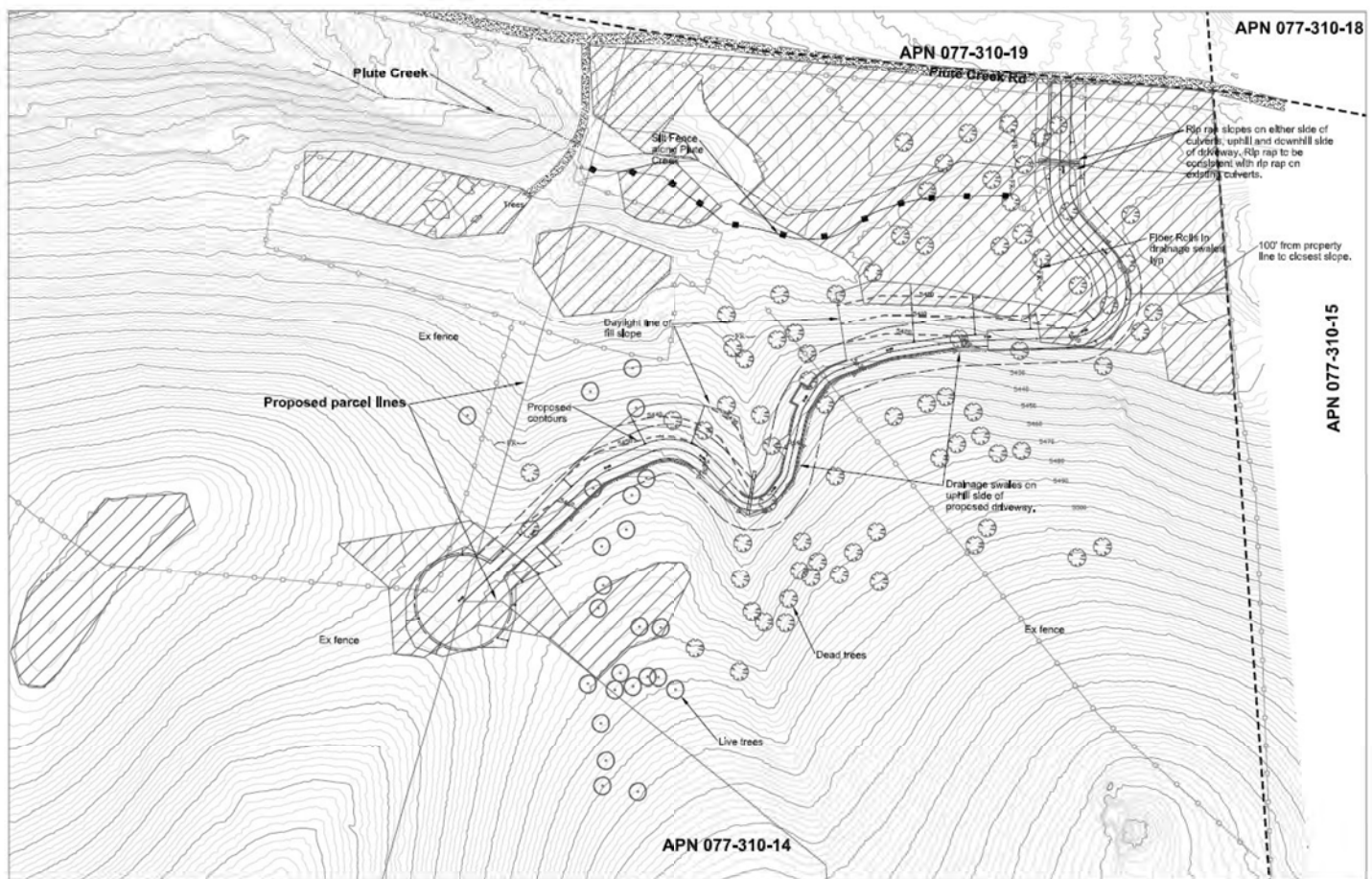
**Figure 2: Northern 30 acres of subject parcel. Existing conditions.**

The remainder of the subject property is pinyon pines (of which a major part of the northern 30 acres has been killed by wildfire) with a sagebrush understory. The large majority of vegetation removed as a result of the driveway construction will be the pinyon pines that have been already killed by wildfire. In the 3H:1V fill slope configuration, only 4 live pines will need to be removed. In the 2H:1V fill slope configuration, only one live pine will need to be removed.

The only roadway within one mile with a view of the proposed driveway is Piute Creek Road. All other roadways are shielded from the view of the driveway by the surrounding mountains. The closest paved road is Whiskey Springs Road which is

just over 1.2 miles away. The proposed driveway would not be visible from Whiskey Springs Road.

The driveway traverses the hillside with a slope of more than 30% with a straight section at a slope of 9%. The driveway crosses the area of the drainage swale evident in Figure 3, this page, near the dividing line between the dead trees and live trees with a curve with a radius of 25 ft to cross a drainage swale. This allows the driveway slope across the drainage swale to be 5.0%. The end of the driveway is a cul-de-sac with a radius of 48 feet. It is placed on a saddle between two mountain ridges. The natural slope in that area is approximately 5.1%. Figure 3 shows the proposed driveway overlaid on the existing conditions with the fill slope in the 2H:1V slope configuration.



**Figure 3: Northern 30 acres of subject parcel. Proposed conditions.**

Table 1, page 7, tabulates the areas within different slope categories for the northern 30 acres. That area was chosen since it is the area most impacted by the

proposed action. The rest of the property will not be impacted by the proposed action at all nor is any work proposed for the remainder of the subject parcel.

**Table 1**

Slope Table		
Min Slope	Max Slope	Area (ac)
0%	15%	4.44
15%	20%	0.99
20%	25%	2.12
25%	30%	3.95
30%		18.42

The map showing the slope areas is included as Attachment 1.

The developable area map is included as Attachment 2. Since slopes greater than 30% are deemed less suitable for development, the applicant requests an exception based on Section 110.424.20(d). Per that section:

*1) The purposes of this article will not be compromised.*

The proposed personal driveway will be constructed according to applicable construction standards, the geotechnical report and recommendations and all applicable Washoe County standards.

*2) Unstable slopes proposed for development will be sufficiently stabilized.*

No unstable slopes have been identified in the area due to the presence of a large number of mature pinyon pine trees. The proposed driveway installation would follow all applicable standards to ensure stable construction.

*3) Areas of landslide or landslide potential proposed for development will be stabilized.*

No areas of landslide or landslide potential have been identified. Again, this is due to the presence of a large number of mature pinyon pine trees within the 30% slope area.

*4) Earthquake resistant structures will be constructed on development sites proposed on potential earthquake areas.*

No structures will be constructed as part of this Special Use Permit application. No known faults exist within one mile of the subject property.

- 5) *Areas of rare or endangered animal or plant habitat proposed for development will be relocated and mitigation measures adhered to*

No rare or endangered plant or animal species or habitats are known to exist within the subject property.

- 6) *Significant ridgelines, rock outcroppings, canyons and landforms will be protected to the greatest extent possible.*

No significant ridgelines, rock outcroppings, canyons or landforms exist within the subject property.

Based on the previous discussion in this handbook, the only constraint will be the portion of the driveway which traverses a hillside with a slope greater than 30%. The proposed driveway is approximately 1100 feet long; the portion traversing the area of 30% or greater slope is from Sta 0+75 to Sta 7+50, or approximately 675 ft of the 1100 ft length. Per discussions with TMFPD, a 12 ft wide section of driveway would be allowed if a mid-point turnout was constructed. The 12-ft wide section would be constructed from Sta 3+25 to Sta 7+50 or 425 ft, all within the 30% or greater slope area. This is to minimize disturbance to the hillside in the 30% slope area. An emergency vehicle turnout is included at Sta 5+00. Retaining walls on the uphill side of the driveway are proposed for almost the entire length of the driveway. The only exception is the area along the drainage swale near Sta 3+50. No cut is proposed on the uphill side in that section and will be left in a natural state. On the downhill side of the driveway, retaining or rockery walls are proposed for an approximately 200 ft section. The remainder would be fill slopes. Fill slopes would be constructed to the geotechnical report recommendations. It is requested that Washoe County approve a 2H:1V fill slope as is recommended in the geotechnical report. A 2H:1V fill slope would result in approximately 70% less fill required when compared to a 3H:1V fill slope and would extend from the driveway only a maximum of 75 feet compared to 200+ ft in the 3H:1V fill slope configuration.

No zoning or Master Plan Amendment is sought as part of this Special Use Permit application.

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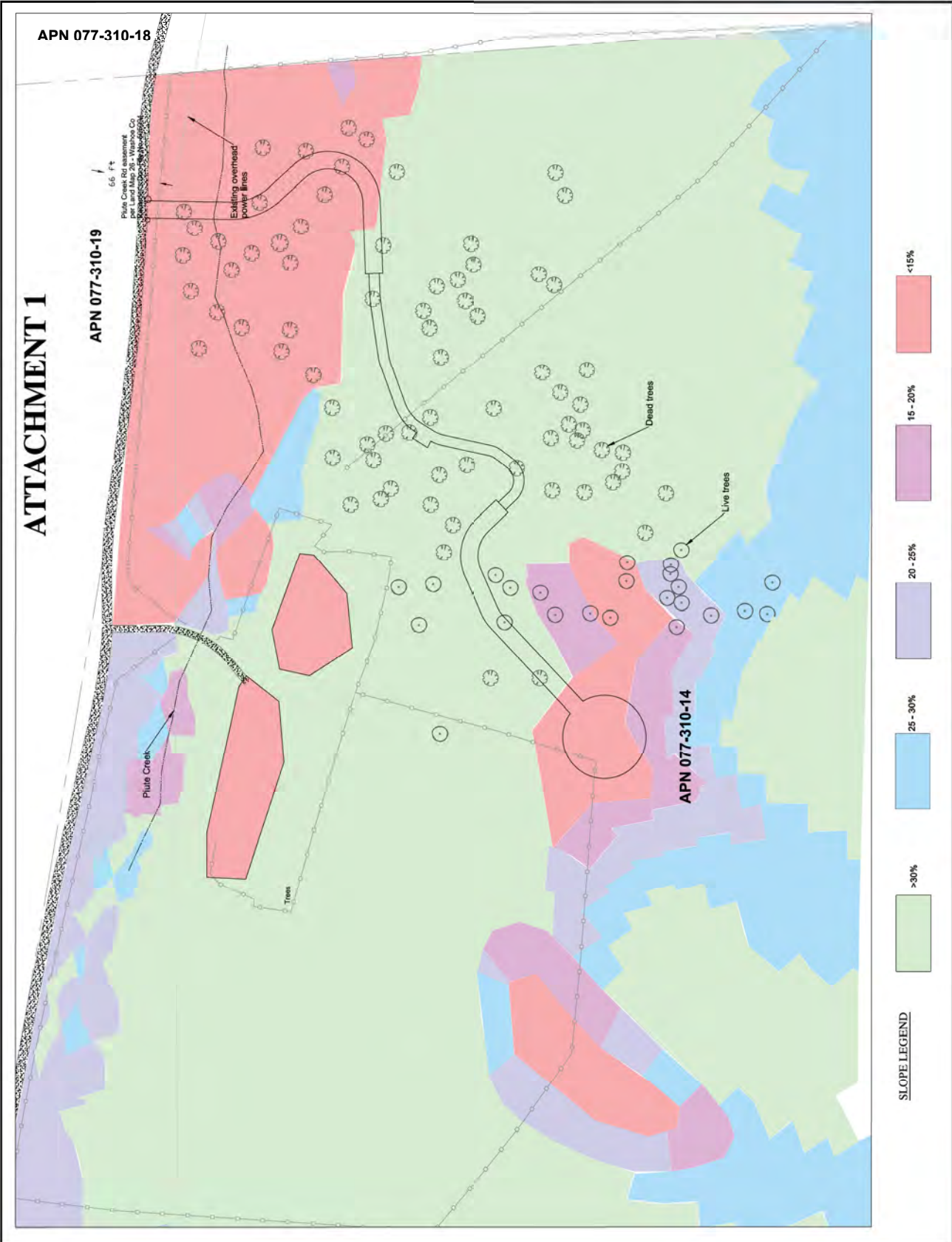
NO.	DATE	DESCRIPTION	BY:

ENGINEER'S STAMP:

**SLOPE AREA MAP**  
Project: Summer Parcel Map Driveway  
Owner: Richard & Corinne Summer 1955 Plute Creek Rd  
(Washoe County, NV)  
APN 077-310-14

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DATE: 1-31-2023  
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OF 1 SHEETS



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**DEVELOPABLE AREA MAP**

Project: Summer Parcel Map Driveway  
 Owner: Richard & Corinne Summer 1955 Plute Creek Rd  
 (Washoe County, NV)  
 APN 077-310-14

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