PLEASANT VALLEY ESTATES TENTATIVE SUBDIVISION MAP APPLICATION



Prepared by:



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PLEASANT VALLEY ESTATES TENTATIVE SUBDIVISION MAP

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1

Table of Contents

Introduction	. 3
Project Location	.3
Project Summary	
Site Analysis	. 8
Hillside	
Potential Impacts	
Planning Policy Analysis	
Tentative Map Findings	

List of Figures:

Figure 1 – Vicinity Maps	3
Figure 2 – Existing Conditions	
Figure 3 – Existing Cultural/Historical Resource	
Figure 4 – Proposed Subdivision Map	7
Figure 5 – Slope Constraint Map	

Appendices:

Washoe County Development Application Tentative Subdivision Map Supplemental Information Owner Affidavit Proof of Property Tax Payment Title Reports Reduced Exhibits Request to Reserve New Street Names Application for Will-Serve Letter Technical Reports

- Geotechnical Report
- Sewer Study
- Drainage/Hydrology Report

Full-size Exhibits

Survey Computations

Introduction

This application includes the following request:

• A **Tentative Subdivision Map with Common Open Space** to create 58 single-family lots on approximately 42.40 acres within the South Valleys Area Plan.

Project Location

The Pleasant Valley Estates site (APNs 017-410-38, 017-410-39, and 017-200-30) consists of approximately 42.40 acres and is located north of Chance Lane, east of Rhodes Road, south of Big Smokey Drive, and west of Toll Road.



Figure 1 – Vicinity Map

The proposed property consists of several different zoning designations, including MDS (Medium Density Suburban), LDS (Low Density Suburban, MDR (Medium Density Rural), and GR (General Rural). The property is currently vacant except for two single-family residential units, one in the center of the site, and one in the northern most part of the parcels. Adjacent zoning designations consist of MDS to

the north, a combination of MDS and LDS to the west, a combination of MDR and HDR (High Density Residential) to the south, and LDS to the east.



Figure 2 (below) depicts the existing site conditions.



Looking East Across Site



Looking South Across Site



Looking West Across Site

Figure 2 – Existing Conditions

Project Summary

As noted previously, this application includes a tentative Subdivision Map request to create 58 singlefamily lots at the project site. The plan developed for Pleasant Valley Estates includes 58 lots for an overall density of 1.38 units per acre. There are a few areas within the development that will be deedrestricted for development. As seen in the site plan that is attached to this report, there are sections along the east that will be restricted due to slopes, as well as a multitude of rock outcroppings throughout, with one being a large boulder with historical markings on it, shown in Figure 3 (below). Also, Lot 18 in the south will have the stormwater detention basin deed-restricted to it as well.



Figure 3 – Existing Historical/Cultural Resource

Although the open space areas within Pleasant Valley Estates will be private and maintained by a planned LMA (Landscape Maintenance Association), a public use easement will be dedicated to allow all residents access.

Lot sizes within Pleasant Valley Estates are consistent with the MDS zoning and are complementary to the existing subdivision to the north. Lots within Pleasant Valley Estates range in size from 12,508

square feet to 101,032 square feet (1.65 acres) with an overall average lot size of 22,577± square feet.

The project also advances Goal Six of the Toll Road Character Management area by helping to establish a connection between Rhodes Road and Toll Road.





8

Primary access will be provided from Chance Lane with full secondary access connecting to Rocky Vista Road to the north. This will ensure multiple connections to the property as well as proper emergency access and meets all applicable Washoe County requirements. As a relatively small single-family development, the AM and PM peak trips are below the threshold of 80 peak hour trips for requiring a traffic study. To accommodate the small amount of increased traffic, existing roads around the site will be improved to Washoe County standards. Roadways within Pleasant Valley Estates will also be constructed to Washoe County standards and will be dedicated as public rights-of-way. Roads will include 42-foot right of way with curb, gutter, and sidewalk.

Home plans for Pleasant Valley Estates are still being developed and are envisioned to complement surrounding development. Larger lots included within Pleasant Valley Estates are conducive to larger single story floor plans although two-story homes are allwoed. Consistent with Washoe County policy, final home plans and elevations will be subject to the review and approval of the Washoe County Design Review Committee for compliance with development code and Area Plan standards.



PLEASANT VALLEY ESTATES TENTATIVE MAP

Figure 5 – Slope Constraint Map

Hillside Ordinance:

Article 424 of the Washoe County Development Code establishes regulations related to Hillside Development. Specifically, Section 110.424.15(a) requires a site analysis be conducted. This site analysis criteria is listed below and addressed in **bold face** type.

<u>Section 110.424.15(a) Site Analysis</u>. 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 a design standards handbook incorporating both textual and graphical representations of the requested action. At a minimum, a site analysis shall include:

(1) Major topographic conditions including ridgelines, ravines, canyons, and knolls.

The site does contain significant topographic features with part of it being considered a hillside. The engineering plans included with this application provide for grading and drainage plans that clearly depict the site topography.

(2) Preliminary geological conditions including major rock outcroppings, slide areas, and areas underlain with faults that have been active during the Halocene epoch of geological time.

The site characteristics are comparable to surrounding developed areas, which have shown no geologic conditions that would preclude residential development at the densities proposed. A large boulder is located near the western edge of the site, which is being left in place due to some culturally significant markings. All significant rock outcroppings are being deed-restricted and are shown clearly on the site plans.

(3) Preliminary soil conditions including soil type, expansiveness, slumping, erodibility, and permeability.

The site characteristics are comparable to surrounding developed areas, which have shown no soil or geologic conditions that would preclude residential development at the densities proposed. Foundation requirements for each individual unit will be determined as part of the Final Map.

(4) Significant surface hydrological conditions including natural drainage courses, perennial streams, floodplains, wetlands, and ponding areas.

Natural drainage that occurs within the site will be retained and is incorporated into the Stormwater Detention Pond located in Lot 18. Hydrology information is shown on the grading/drainage plan.

(5) The location and types of significant vegetation including known rare and endangered plant

species and general plant communities.

Initial examination indicates that the site vegetation is typical brush-type plants found throughout the area. No known rare and/or endangered plant species are found onsite.

(6) Habitat areas for rare or endangered animal species.

Initial examination indicates that there are no known rare or endangered animal species on the site. Typical animals such as rabbits, mice, and coyotes are the only known fauna in the immediate vicinity.

(7) Preliminary viewshed analysis including cross sections of views to and from the development site from all major roadways within one (1) mile of the project site, and from major focal points on the project site.

Views across the property are previously depicted in Figure 2. In general, houses in the area enjoy views of surrounding mountains, including Slide Mountain and Mt. Rose to the west. Housing lots in this tentative map will be able to take advantage of these views without impacting the views from existing houses. This is due to the continuously variable terrain of the area and substantial southern and southwestern exposure of the area.

(8) How the development responds to the unique conditions of the hillside.

The tentative subdivision map responds to the unique conditions of the hillside by keeping the largest lots along the eastern end of the property where the hillside is located. The deed-restricted areas (determined upon Final Map) also make sure that building pads on those lots are out of the steepest areas.

(9) A slope analysis, submitted on a topographic map with contour intervals of a least five (5) feet for planning purposes. This analysis shall indicate the location and amount of land included with the following slope categories, tabulated in acres: 0-15 percent, 15-20 percent, 20-25 percent, 25-30 percent, greater than 30 percent.

A slope analysis (see Figure 5 above) has been prepared by the project engineer showing the amount of land following the indicated slope categories.

Potential Impacts

This section aims to provide a cursory impact analysis based on the conceptual plan developed for the project, as presented in Figure 3.

Schools

As part of this Tentative Map process, the Washoe County School District was consulted as to the capacities of schools that serve the project area. It was determined that the project site is zoned for the following schools:

- Pleasant Valley Elementary School
- Depoali Middle School
- Damonte Ranch High School

Washoe County School District provided the School District's accepted student generation formulas. Assuming a total of 58 lots, the table on the following page summarizes potential school impacts.

It is important to note that this analysis does not consider the potential for children to attend charter schools, private institutions, or home schooling and is therefore a worst-case scenario in terms of student generation projections. In addition, school impacts will now be addressed regionally with the recent passing of WC-1, which is intended to provide funding for new schools throughout Washoe County.

School	Generation Rate ¹	Number of New Students
Pleasant Valley Elem. School	0.277/unit	16 students
Depoali Middle School	0.064/unit	4 students
Damonte Ranch High School	0.136/unit	8 students
1 – provided by the Washoe County School District.		

• Public Facilities/Infrastructure

The project site is located in an area of existing infrastructure. All municipal services (i.e. water, sewer, storm drain, etc.) are either in place or can easily be extended (at the developer's expense) to serve Pleasant Valley Estates. All new lots within Pleasant Valley Estates will be served by municipal water and sewer. Power, natural gas, cable television, and high speed internet service all exist at or adjacent to the project site.

Preliminary utility plans are included with the engineering plans located in the map pocket of this report.

Public Services

The project has been reviewed by/commented on by the Truckee Meadows Fire Protection District, which has indicated that the property is within an acceptable response time of the Truckee Meadows Fire Protection District station number 237 located on 395-A at Pagni Lane. Also, the Washoe County Sherriff's Office has existing patrols within the project area.

Planning Policy Analysis

The proposed request must be reviewed for consistency with the goals and policies of the Washoe County Master Plan and South Valleys Area Plan. Each of these planning documents is addressed below:

Washoe County Master Plan/South Valleys Area Plan

The South Valleys Area Plan is an element of the Washoe County Master Plan that establishes the overall theme and vision that the community has in terms of how they wish to see the area develop over the next 20 years. Last updated in 2010, there has been little change within the plan area in the last decade. However, as the region's economy continues to grow, there is now opportunity to implement change within the plan area, consistent with the goals and policies of the Area Plan.

The Introduction section of the Area Plan states that the "South Valleys community will maintain and apply objective standards and criteria that serve to manage growth and development in South Valleys in a manner that:

- Respects the scenic and rural heritage of the area by encouraging architectural and site design standards that are responsive to this heritage;
- Maintains a rural agricultural character in the landscape between the urban areas of Reno and Carson City;
- Respects private property rights;
- Provides a limited range of housing opportunities complementary to the area's rural and historic character;
- Encourages the development of commercial opportunities in a manner that helps define the community, provide needed services, and otherwise highlight the character of the community as defined by the Lane Use Table in Appendix A:
- Provides ample open space and recreational opportunities;
- Promotes the educational and scientific opportunities inherent in the area's natural history and rural character;
- Addresses the conservation of natural, scenic, and cultural resources;
- Ensures that infrastructure in coincident with development and appropriate in scale and character to the community character articulated below; and
- Coordinates resource availability with the construction of infrastructure through the implementation of facilities and resources plans.

This Tentative Map request is entirely consistent with this intent of the Area Plan. Pleasant Valley Estates will provide residential uses that will complement existing development patterns in the area as well as provide a desired connection between Rhodes Road and Toll Road. The existing cultural resources and rock formations on the site will be protected through deed restrictions. Infrastructure including streets and utilities will be improved and/or provided in the appropriate scale for the development, while complying with Washoe County standards.

The project site is located within the Steamboat Valley Rural Transition Character Management Area defined in the Area Plan. This "transition zone" as discussed in the area plan specifies that in the areas "{t} o the north and east of Rhodes Road, the densities and land use patterns should provide a transition to the urban land use patterns likely to be implemented in the incorporated areas north of Rhodes Road." The density proposed with Pleasant Valley Estates is consistent with the MDS zoning maximum of 3 du/ac (1.38 du/ac proposed) identified in the plan and provides for an appropriate transition to adjoining properties and City of Reno development to the north.

The Area Plan also contains goals and policies which are applicable to this proposed tentative map. These policies are listed below and are addressed in **bold face** type.

Goal One: The pattern of land use designations in the South Valleys Area Plan will implement and preserve the community character described in the Character Statement.

As described in the previous section, Pleasant Valley Estates conforms to the Character Statement in terms of location within the Steamboat Valley Rural Transition Character Management Area, allowable suburban densities, preservation of natural resources, and informal trail connections.

Goal Two: Common Development Standards in the South Valleys planning area. Establish development guidelines that will implement and preserve the community character commonly found within the South Valleys planning area.

As described earlier, Pleasant Valley Estates has been designed to be complementary to surrounding uses and properties, keeping the community character intact.

SV.2.2: Whenever possible, grading for residential purposes after the date of final adoption of this plan will: a) minimize disruption to natural topography; b) utilize natural contours and slopes;
c) complement the natural characteristics of the landscape; d) preserve existing vegetation and ground coverage to minimize erosion; and e) minimize cuts and fills.

Pleasant Valley Estates has been designed to minimize disruption to the natural topography, utilize natural contours, and minimize cuts and fills by deed restricting development on the portion of the site with the steepest slopes. This area will also serve to preserve natural characteristics and existing vegetation.

14

SV.2.14: Development activities should be designed to support the efficient use of infrastructure and the conservation of recharge areas, habitat, and open vistas.

Access to the site from both Chance Lane and Rocky Vista are located along existing roadways within the area, making an efficient use of existing infrastructure. Future utility infrastructure will tie into existing lines already in place in the surrounding area. No recharge areas or significant habitat are located on the site.

SV.3.5: Potential historic and cultural resources exist throughout the Steamboat Valley Community. Development should be preceded by efforts to identify cultural and historical resources and provide for their conservation.

A large boulder with historical markings is located within the project site. To preserve this cultural/historic resource, a deed restriction for no construction will be made surrounding the engraved outcropping.

SV.3.6: Emergency or secondary access from the Toll Road area to U.S. 395 via Rhodes Road or other feasible location is desired. Development proposals in this general area should be examined for their ability to provide this access. New development should not be permitted to prevent this access from being established.

The design of Pleasant Valley Estates is in line to create the desired connection between Rhodes Road and Chance Lane. As seen on the site plan, Chance Lane will be extended into the property in which a turn down the proposed Westward View Road which turning into Rocky Vista Road (which will be paved within the subdivision) and a turn on Big Smokey Drive completed the connection. This connection is extremely important to the safety of the area and completion of the desires within the Area Plan.

Tentative Map Findings

Section 110.608.20 of the Washoe County Development Code establishes legal findings that must be made by the Planning Commission or Board of County Commissioners in order to approve a Tentative Map request. These findings are listed below and are addressed in **bold face** type.

(a) <u>Environmental and Health Laws.</u> Environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal;

Pleasant Valley Estates will be served by municipal water and sewer service, ensuring full compliance with this finding. Additionally, solid waste disposal service will be provided through Waste Management which currently operates routes in Pleasant Valley and the surrounding areas.

(b) <u>Availability of Water</u>. The availability of water which meets applicable health standards as well as requirements for water rights, quality or will-serve commitments;

The project site is within the service boundary of the Truckee Meadows Water Authority and has completed a Discovery process through TMWA. Water rights will be dedicated to TMWA to serve the project, ensuring full compliance with this finding. Water rights can be purchased directly from TMWA or on the open market (with full TMWA acceptance).

(c) Utilities. The availability and accessibility of utilities;

The project will be served by all municipal utilities, infrastructure, and services as detailed within this report and on the attached engineering plans.

(d) <u>Public Services.</u> The availability and accessibility of public services such as schools, police and fire protection, transportation, recreation and parks;

The project is within an acceptable response time of the Truckee Meadows Fire Protection District's Station 237 located on Highway 395-A at Pagni Lane and is in an area of existing Sherriff patrols. Schools that will serve the project along with the anticipated number of new students are detailed within this report. It is further recognized that it will be disclosed to all new residents (at time of purchase) that school zoning is subject to change based on current enrollments, capacities, etc.

(e) Plan Consistency. General conformance with the Development Code and Master Plan;

Pleasant Valley Estates will provide residential uses that will complement existing development patterns in the area as well as provide significant open space and linkages to informal trails in the area. The existing cultural resource on the site will be kept in place within an accessible open space area for residents and the public to enjoy. Infrastructure including streets and utilities will be improved and/or provided in the appropriate scale for the development, while complying with Washoe County standards.

(f) <u>Impact on Existing Streets</u>. The effect of the proposed subdivision on existing public streets and the need for new streets or highways to serve the subdivision;

As part of this project, Chance Lane will be improved to conform with Washoe County standards. The amount of AM and PM peak trips created by this subdivision does not warrant the need for a traffic study to examine any impacts to other existing roads such as Rhodes Road or Highway 395-A.

(g) <u>Physical Characteristics</u>. Physical characteristics of the land such as flood plain, slope and soil;

The site is well suited for the type and intensity of development proposed. The site contains no slope

or soil conditions that would preclude development nor does it contain any significant wildlife habitats, etc. Drainage will be directed into a detention basin so as not to impact downstream parcels. The hillside area is incorporated into the deed-restricted areas and will not impact individual lots within the project.

(h) <u>Agency Review</u>. The recommendations and comments of the entities reviewing the tentative map; and

Copies of this report and the included plans will be circulated to all applicable reviewing agencies for review and comment. Specific requirements and relevant comments can be included as conditions tied to this request and implemented with final map(s).

(i) <u>Impact on Existing Drainage System.</u> The effect of the proposed subdivision on the existing natural and man-made drainage system.

The project will provide for onsite detention to ensure that no additional flows over what currently exist will occur from the site with development of Pleasant Valley Estates. A highly detailed hydrology study is also included in the appendices of this report demonstrating compliance with all applicable Washoe County requirements related to drainage.

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.

Project Name: Pleasant Valley Estates Project Residential Subdivision. 58 single-Family Residences Description: Project Address: 16100 Rocky Vista Rd, 15995 Rocky Vista Rd, & 1221 Chance Lane Project Area (acres or square feet): 42.40 Project Location (with point of reference to major cross streets AND area locator): Eastern end of Chance Ln; approx 950 ft east of Rhodes Rd. S Valleys Area Plan Assessor's Parcel No.(s): Parcel Acreage: Assessor's Par	Project Information	S	Staff Assigned Case No.:		
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Name: Pleasant Valley Estates, LLCName: TEC Civil Engineering ConsultantsAddress: 701 Flint StAddress: 9437 Double Diamond PkwyReno, NVZip: 89501Ste 17. Reno, NVPhone: 775-846-9200Fax:Phone: 775-352-7800Phone: 775-846-9200Fax:Phone: 775-352-7800Email: hcf2008@live.comEmail: jgilles@tecreno.comCell:Other:Cell:Contact Person: Harry FryContact Person: Jason GillesApplicant/Developer:Other Persons to be Contacted:Name: Same as OwnerName: Rubicon Design GroupAddress:Cip:Reno, NVZip:Reno, NVZip: 89509Phone:Fax:Phone: 775-425-4800Email:Surje: Swright@rubicondesigngroup.comCell:Other:Cell: N/AOther:Cell: N/AOther:Contact Person:Contact Person: Scott WrightDate Received:Initial:Planning Area:County Commission District:Master Plan Designation(s):	Applicant Inf	ormation (attach	additional sheets if necess	sary)	
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County Commission District: Master Plan Designation(s):		For Office	Use Only		
	Date Received:	Initial:	Planning Area:		
CAB(s): Regulatory Zoning(s):	County Commission District:		Master Plan Designation(s):		
	CAB(s):		Regulatory Zoning(s):		

Property Owner Affidavit

Applicant Name:

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA COUNTY OF WASHOE arry C. Fr

J (please print name)

being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.

(A separate Affidavit must be provided by each property owner named in the title report.)

Assessor Parcel Number(s): 017-200-	30, 017-410-38, 017-410-39
	Printed Name Harry C. Fry
	Signed Ary (- Try
	Address 161 Green brac Dr.
	Sparks NV 89431
Subscribed and sworn to before me this 44 day of February, 2019.	(Notary Stamp)
Notary Public in and for said county and state	DEANNA L. McANINCH Notary Public - State of Nevada Appointment Recorded in Washoe County
My commission expires: 4/24/2021	No: 93-1479-2 Expires April 26, 2021

*Owner refers to the following: (Please mark appropriate box.)

- Owner
- Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
- Dever of Attorney (Provide copy of Power of Attorney.)
- Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- D Property Agent (Provide copy of record document indicating authority to sign.)
- Letter from Government Agency with Stewardship

Tentative Subdivision Map Application Supplemental Information

(All required information may be separately attached)

1. What is the location (address or distance and direction from nearest intersection)?

Approximately 1000ft east of the Chance Lane and Rhodes Road intersection

2. What is the subdivision name (proposed name must not duplicate the name of any existing subdivision)?

Pleasant Valley Estates

3. Density and lot design:

a. Acreage of project site	42.40 ac
b. Total number of lots	58
c. Dwelling units per acre	1.38 du/ac
d. Minimum and maximum area of proposed lots	12,507 sf & 101,032 sf
e. Minimum width of proposed lots	120ft
f. Average lot size	27,126 sf

4. What utility company or organization will provide services to the development:

a. Sewer Service	Reno Sparks Joint Wastewater Plant
b. Electrical Service	NV Energy
c. Telephone Service	AT&T
d. LPG or Natural Gas Service	NV Energy
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	Charter Communications
g. Water Service	Truckee Meadows Water Authority

- 5. For common open space subdivisions (Article 408), please answer the following:
 - a. Acreage of common open space:

N/A

b. What development constraints are within the development and how many acres are designated slope, wetlands, faults, springs, and/or ridgelines:

N/A

c. Range of lot sizes (include minimum and maximum lot size):

N/A

Washoe County Planning and Building TENTATIVE SUBDIVISION MAP APPLICATION SUPPLEMENTAL INFORMATION

d. Proposed yard setbacks if different from standard:

N/A

e. Justification for setback reduction or increase, if requested:

N/A

f. Identify all proposed non-residential uses:

N/A

g. Improvements proposed for the common open space:

N/A

h. Describe or show on the tentative map any public or private trail systems within common open space of the development:

N/A

i. Describe the connectivity of the proposed trail system with existing trails or open space adjacent to or near the property:

N/A

j. If there are ridgelines on the property, how are they protected from development?

N/A

k. Will fencing be allowed on lot lines or restricted? If so, how?

N/A

I. Identify the party responsible for maintenance of the common open space:

N/A

6. Is the project adjacent to public lands or impacted by "Presumed Public Roads" as shown on the adopted April 27, 1999 Presumed Public Roads (see Washoe County Engineering website at <u>http://www.washoecounty.us/pubworks/engineering.htm</u>). If so, how is access to those features provided?

N/A

- 7. Is the parcel within the Truckee Meadows Service Area?
 - Yes D No

Washoe County Planning and Building TENTATIVE SUBDIVISION MAP APPLICATION SUPPLEMENTAL INFORMATION

8. Is the parcel within the Cooperative Planning Area as defined by the Regional Plan?

Yes	🖬 No	If yes, within what city?
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9. Has an archeological survey been reviewed and approved by SHPO on the property? If yes, what were the findings?

No

10. Indicate the type and quantity of water rights the application has or proposes to have available:

a. Permit #	TBD	acre-feet per year	TBD
b. Certificate #	TBD	acre-feet per year	TBD
c. Surface Claim #	TBD	acre-feet per year	TBD
d. Other #	TBD	acre-feet per year	TBD

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

TBD

11. Describe the aspects of the tentative subdivision that contribute to energy conservation:

Majority of houses will have east/west driveways and south facing houses

12. Is the subject property in an area identified by Planning and Building as potentially containing rare or endangered plants and/or animals, critical breeding habitat, migration routes or winter range? If so, please list the species and describe what mitigation measures will be taken to prevent adverse impacts to the species:

No

13. If private roads are proposed, will the community be gated? If so, is a public trail system easement provided through the subdivision?

All roads will be public, however there is a shared private driveway access

14. Are there any applicable policies of the adopted area plan in which the project is located that require compliance? If so, which policies and how does the project comply?

Complies with area plan policies, specifically SV.1.2, SV.1.4, see report for more

15. Are there any applicable area plan modifiers in the Development Code in which the project is located that require compliance? If so, which modifiers and how does the project comply?

Project is within the SRTMUCMA, see attached report for more info

16. Will the project be completed in one phase or is phasing planned? If so, please provide that phasing plan:

One Phase

Washoe County Planning and Building

TENTATIVE SUBDIVISION MAP APPLICATION SUPPLEMENTAL INFORMATION

December 2018

17. Is the project subject to Article 424, Hillside Development? If yes, please address all requirements of the Hillside Ordinance in a separate set of attachments and maps.

Yes D No If yes, include a separate set of attachments and maps.
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18. Is the project subject to Article 418, Significant Hydrologic Resources? If yes, please address Special Review Considerations within Section 110.418.30 in a separate attachment.

Yes	No No	If yes, include separate attachments.
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Grading

Please complete the following additional questions if the project anticipates grading that involves: (1) Disturbed area exceeding twenty-five thousand (25,000) square feet not covered by streets, buildings and landscaping; (2) More than one thousand (1,000) cubic yards of earth to be imported and placed as fill in a special flood hazard area; (3) More than five thousand (5,000) cubic yards of earth to be imported and placed as fill; (4) More than one thousand (1,000) cubic yards to be excavated, whether or not the earth will be exported from the property; or (5) If a permanent earthen structure will be established over four and one-half (4.5) feet high:

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

202,922 CUYDS of Earthwork Quantities

20. How many cubic yards of material are you exporting or importing? If exporting of material is anticipated, where will the material be sent? If the disposal site is within unincorporated Washoe County, what measures will be taken for erosion control and revegetation at the site? If none, how are you balancing the work on-site?

All material will be transfered within the project boundary

21. Can the disturbed area be seen from off-site? If yes, from which directions, and which properties or roadways? What measures will be taken to mitigate their impacts?

Majority of the work will be screened by the hill on the northeast section of the site

22. 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?

Cut and fill slopes will be 3:1. Temporary irrigation will be provided until revegetation

23. Are you planning any berms and, if so, how tall is the berm at its highest? How will it be stabilized and/or revegetated?

N/A

24. Are retaining walls going to be required? If so, how high will the walls be, will there be multiple walls with intervening terracing, and what is the wall construction (i.e. rockery, concrete, timber, manufactured block)? How will the visual impacts be mitigated?

Yes,

Washoe County Planning and Building TENTATIVE SUBDIVISION MAP APPLICATION SUPPLEMENTAL INFORMATION

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

No removal of trees are being proposed

26. 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 seed mix will be broadcast at a rate of 32pls/ac

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

Temporary irrigation will be provided for slopes

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

n/a

Request to Reserve New Street Name(s) The Applicant is responsible for all sign costs.					
	Applicant Information				
Name:	Pleasant Valley Estates,	LLC			
Address:	701 Flint St				
	Approximately 1000ft e	ast of the Chance	Lane and Rhodes Road interse		
Phone :	775-846-9200	775-846-9200 Fax:			
	X Private Citizen	% Agency/O	rganization		
	(No more than 14 letters or 15 if there	Name Requests	S tach extra sheet if necessary)		
	Vista Sierra Road		Bunkhouse Court		
	High Trail Court		Indian Trails Road		
	Westward View Road				
	ordation has not occurred with for extension to the coordination of the coordination o		is necessary to submit a written piration date of the original		
		Location			
Project Nar	me. Pleasant Valley Estate				
	% Reno % Sparks X Washoe County Parcel Numbers: 041-410-38, 041-410-39, 017-200-30 041-410-38 041-410-39				
		⁶⁰ Parcelization	% Private Street		
Please attach maps, petitions and supplementary information.					
Approved:		Date:			
	Regional Street Naming Coordinator				
Deviado	% Except where noted		Deter		
Denied:	Regional Street Naming Co	ordinator	Date:		
Washoe County Geographic Information Services 1001 E. Ninth Street Reno, NV 89512-2845 Phone: (775) 328-2325 - Fax: (775) 328-6133					

WASHOE COUNTY TREASURER				Page 1 of 1
RENO, NV 89520-3039 775-328-2510	Received By: Location:	fgregory Treasurer's Office	Receipt Number: Receipt Year:	U18.19583 2018
	Session:	fgreg-0-02152019	Date Received:	02/15/2019

PAYMENT RECEIPT

Туре	Description	Balance	Net Tax	Interest	Fees Penalties	Current Due	Current Paid	Balance
Real	Bill Number: 2018121436 Bill Year: 2018 PIN: 01741039 Primary Owner: PLEASANT VALLEY RANCH ESTATES L Property Addr: 1221 CHANCE LN Property Desc: SubdivisionName _UNSPECIFIED Block Lot B	822.62	822.62	0.00	0.00	822.62	822.62	Remainin 0.0
	Township 17 Range 20 S							
Real	Bill Number: 2018121581 Bill Year: 2018 PIN: 01741038 Primary Owner: PLEASANT VALLEY ESTATES LLC Property Addr: 16100 ROCKY VISTA RD Property Desc: Block Range 20 SubdivisionName _UNSPECIFIED Township 17 Section	484.96	484.96	0.00	0.00	484.96	484.96	0.00
Real	Bill Number: 2018023237 Bill Year: 2018 PIN: 01720030 Primary Owner: PLEASANT VALLEY RANCH ESTATES L Property Addr: 15995 ROCKY VISTA RD Property Desc: Township 18 Section 34 Lot A Block Range 20 SubdivisionName _UN	678.90	678.90	0.00	0.00	678.90	678.90	0.00
	Totals:	1,986.48	1,986.48	0.00	0.00	1,986.48	1,986.48	0.00
Tender Info	rmation:		Charge	Summary	:			
Check #06-	08/5251	1,986.			·			1,986.48
Fotal Tende	ered	1,986.	48 Total C	harges	W.	С. Т. О. 28		1,986.48
NASHOE	E COUNTY TREASURER PO	BOX 30039 F	RENO, NV 89	520-3039	FE	B 1 4 2019		

By Whom Paid:

PLEASANT VALLEY RANCH ESTATES L 761 GREENBRAE DR SPARKS NV 89431

BALANCE REMAINING	0.00
CHARGES	1,986.48
PAID	1,986.48
CHANGE	0.00

(IAL/ANNUAL LIST OF MANAC S OR MANAGING MEMBERS AND STAT USINESS LICENSE APPLICATION OF:

PLEASANT VALLEY RANCH ESTATES, LLC

NAME OF LIMITED-LIABILITY COMPANY

FOR THE FILING PERIOD OF 2018 TO 2019. DUE BY 10/31/2018

USE BLACK INK ONLY - DO NOT HIGHLIGHT

YOU MAY FILE THIS FORM ONLINE AT www.nvsilverflume.gov

P. 4 Return one file stamped copy. (If filing not accompanied by order instructions, file stamped copy will be sent to registered agent.)

IMPORTANT: Read instructions before completing and returning this form

1. Print or type names and addresses, either residence or business, for all managers or managing members. A Manager, or if none, Managing Member of the LLC or other person authorized by the LLC must sign the form. FORM WILL BE RETURNED IF UNSIGNED.

2. If there are additional managers or managing members, attach a list of them to this form.

3. Annual list fee is \$150.00. A \$75.00 penalty must be added for failure to file this form by the deadline. An annual list received more than 90 days before its due date shall be deemed an amended list for the

previous year. 4. State Business License fee is \$200.00. Effective 2/1/2010, \$100.00 must be added for failure for file form by deadline.

5. Make your check payable to the Secretary of State.

8. Ordering Copies: If requested above, one file stamped copy will be returned at no additional charge. To receive a certified copy, enclose an additional \$30.00 per certification. A copy fee of \$2.00 per page is required for each additional copy generated when ordering 2 or more file stamped or certified copies. Appropriate instructions must accompany your order. 7. Return the completed form to: Secretary of State, 202 North Carson Street, Carson City, Nevada 89701-4201, (775) 684-5708.

8. Form must be in the possession of the Secretary of State on or before the last day of the month in which it is due. (Postmark date is not accepted as receipt date.) Forms received after due date will be returned for additional fees and penalties. Failure to include annual list and business license fees will result in rejection of filing.

ANNUAL LIST FILING FEE: \$150.00 LATE PENALTY: \$75.00 (if filing late	BUSINESS LICENSE FEE: \$2	00.00 LATE PE	NALTY: \$100.00 (if filing late)		
CHECK ONLY IF APPLICABLE AND ENTER EXEMPTION CODE IN BOX BELOW NR\$ 76.020 Exemption Codes					
Pursuant to NRS Chapter 76, this entity is exempt from the business license fee. Exemption Code: 001 - Governmental Entity					
NOTE: If claiming an exemption, a notorized Declaration of Eligibility form must be attached. Failure					
to attach the Declaration of Eligibility form will result in rejection, which could result in late fees. 006 - NRS 680B.020 Insurance Co.					
CATHERINE BARCOMB					
NAME:	MANAGER OR MANAGING MEMBER				
301 FLINT STREET	RENO	NV	89501		
ADDRESS:	CITY:	STATE:	ZIP:		
HARRY C FRY			·····		
NAME:	MANAGER OR MANAGING MEMBER				
761 GREENBRAE DRIVE	SPARKS	NV	89431		
ADDRESS:	сіту:	STATE:	ZIP;		
NAME:	MANAGER OR MANAGING MEMBER				
		•			
ADDRESS:	СІТҮ:	STATE:	ZIP:		
	· · · · · · · · · · · · · · · · · · ·				
NAME:	MANAGER O	R MANAGING	MEMBER		
4000500		STATE:	ZIP:		
ADDRESS:	СІТҮ:	totate:	121P; 1		
NAME:	MANAGER OR MANAGING MEMBER				
ADDRESS:	CITY:	STATE:	ZIP:		
None of the managers or managing members identified in the list of managers and managing members by		-	•		

exercising the power or authority of a manager or managing member in furtherance of any unlawful conduct.

I declare, to the best/of my knowledge under penalty of perjury, that the information contained herein is correct and acknowledge that pursuant to NRS 239.330, it is a category C felony to ki false or forged instrument for filling in the Office of the Secretary of State. ingly offer any

Х

Signature of Manager, Managing Member or Other Authorized Signature

Title Member

Date

Nevada Secretary of State List ManorMem **Revised: 7-1-17**

Entity Number State of Nevada E0502962015-2

ABOVE SPACE IS FOR OFFICE USE ONLY

Filed in the office of Document Number 20180444881-40 Bachara K. Cigarste Filing Date and Time Barbara K. Cegavske 10/10/2018 8:02 AM Secretary of State

E0502962015-2

ENTITY NUMBER

SECRETARY OF STATE



NEVADA STATE BUSINESS LICENSE

PLEASANT VALLEY RANCH ESTATES, LLC Nevada Business Identification # NV20151637329

Expiration Date: October 31, 2019

In accordance with Title 7 of Nevada Revised Statutes, pursuant to proper application duly filed and payment of appropriate prescribed fees, the above named is hereby granted a Nevada State Business License for business activities conducted within the State of Nevada.

Valid until the expiration date listed unless suspended, revoked or cancelled in accordance with the provisions in Nevada Revised Statutes. License is not transferable and is not in lieu of any local business license, permit or registration.



IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of State, at my office on October 11, 2018

Barbara K. Cegevske

Barbara K. Cegavske Secretary of State

You may verify this license at www.nvsos.gov under the Nevada Business Search.

License must be cancelled on or before its expiration date if business activity ceases. Failure to do so will result in late fees or penalties which by law <u>cannot</u> be waived.

OPERATING AGREEMENT

FOR

PLEASANT VALLEY RANCH ESTATES, LLC A Limited Liability Company ("the Company")

The undersigned members enter into this operating agreement as of this 26^{16} day of October, 2015.

ARTICLE I. MEMBERS

1.1 <u>"Voting Members"</u>: A "voting member" is a member holding voting shares. The names and addresses of the initial voting members are:

Name

1.2 <u>"Nonvoting Members"</u>: A "nonvoting member" is a member who holds nonvoting shares. As provided elsewhere herein, a nonvoting member has the right to vote to amend the company's articles of organization and this operating agreement. The names and addresses of the initial nonvoting members are:

Name

None.

1.3 <u>List of Members</u>: Exhibit A attached hereto is the initial list of Members. It shall be amended from time to time by the management committee to reflect the name and address of each current member. A transfer of any membership interest shall not be effective until it has been recorded in the records of the company.

1.4 <u>"Management Committee"</u>: The "management committee" consisting of one or more managers shall be selected by majority vote of the voting members. The management committee shall have limited authority to manage the company and on behalf of each and every member pursuant to the terms and conditions set forth herein. The Articles are amended so that the Management Committee is not required to have a voting member on the committee.

1.5 <u>Limited Liability</u>: Except as otherwise agreed in writing by all members, no member shall be personally liable for any of the debts of the Company or any of the losses thereof beyond the capital contributions made by that member, the share of undistributed profits

1

Address

Address

301 Flint Street, Reno, Nevada 89501

HARRY C. FRY

of the Company attributable to that member and, to the extent required by law, the amount of any return made to that member of his capital contributions, with interest.

1.6 <u>Member's Interest</u>: The members of the Company shall receive all distributions of money and money's worth from the Company in the proportions set forth in Exhibit A, "Member's Interest."

ARTICLE 2. CAPITAL CONTRIBUTIONS

2.1 <u>Initial Capital Contributions</u>: The members, upon execution of this agreement, shall make capital contributions in the amount set out in Exhibit A attached hereto.

2.2 <u>Additional Contributions Permitted</u>: If the voting members by majority vote determine that additional capital contributions are required for the operation of the Company or to pay obligations of the Company, each member may contribute additional capital. No member shall be required to make an additional contribution. Unless otherwise determined by the management committee, contribution of additional capital shall not alter the voting and participation rights set forth in this Operating Agreement.

2.3 <u>No Withdrawal</u>: Members shall not be entitled to withdraw all or any part of their capital contributions or to receive any distribution from the Company, except as provided in Article 3 and 9 hereof.

ARTICLE 3. DISTRIBUTIONS

3.1 <u>General</u>: The management committee at the direction of the members by majority vote, may from time to time cause the Company to distribute cash and/or other property to the members in proportion to the Member's Interest.

3.2 <u>Payments and Reimbursements Not Distributions</u>: Any amounts paid pursuant to Section 5.7 hereof shall not be deemed to be distributions for purposes of this agreement.

3.3 <u>Distributions of Capital</u>: The management committee may from time to time, at the direction of the members by majority vote, cause the Company to distribute cash and/or other property to the members as a return of capital. Distributions made pursuant to this Section 3.3 can be made to any member, in the discretion of the management committee, as long as that distribution is designated as a "return of capital"; provided, however, that distributions under this Section 3.3 may only be made to a member to the extent of the positive balance in that member's capital account.

ARTICLE 4. PROFITS AND LOSSES

4.1 <u>General Allocation of Profits and Losses</u>: Except as otherwise provided in this

agreement, the profits and losses of the Company arising during any tax year of the Company shall be allocated to the members in proportion to the Member's Interest.

4.2 <u>Special Allocations</u>: The managers of the Company may, by unanimous written consent, alter the General Allocation of Profits and Losses, upon ten (10) days' written notice, to all members, in such amounts as are necessary to comply with or take advantage of all regulations contained in the I.R.C. and all Treasury Regulations.

ARTICLE 5. MANAGEMENT COMMITTEE

5.1 <u>Election of Management Committee</u>: The Management Committee shall be elected annually by a simple majority of the voting members. The date, time and manner of election shall be determined in advance by the Management Committee and all voting members shall be given at least ten (10) days' notice of the election.

5.2 <u>Number of Management Committee Members</u>: The voting members shall, before each such annual election, stipulate to the number and qualifications of members of the Management Committee.

5.3 <u>Rights and Powers of Management</u>: Except as otherwise expressly provided in this Operating Agreement, all management rights, powers and authority over the business, affairs and operations of the Company shall be solely and exclusively vested in the Members, except for the following powers, which will be vested in the Management Committee:

(a) Execution of any and all the agreements and documents for the following properties to complete the purchase and transfer of said properties into the Company:

- (i) purchase of the real property at 16100 Rocky Vista Road, Reno, Nevada 89521;
- (ii) purchase of the real property from John Rhodes adjacent to the Rocky Vista property;
- (iii) transfer of the real property located at 1221 Chance Lane, Reno, Nevada 89521 into the Company.

5.4 <u>Restrictions on Rights and Powers</u>: Neither the Management Committee nor any member shall have the authority to take any of the following actions:

(a) perform any act which would subject any member to personal liability for the obligations of the Company; or

(b) do any act in contravention of this Operating Agreement or which would make it impossible to carry on the ordinary business or affairs of the Company.

5.5 <u>Duties and Obligations of Voting Members</u>: Unless otherwise agreed by all

nonvoting members, the Voting Members shall have the following duties and obligations:

(a) to take all actions which may be necessary or appropriate to accomplish the purpose of the Company;

(b) to take all actions which may be necessary or appropriate for the continuation of the Company's valid existence as a Limited Liability Company under the laws of the State of Nevada;

(c) to conduct its affairs and the affairs of the Company in such a manner that no member will have any personal liability for any obligations or liabilities of the Company, except as agreed by each affected member.

5.6 <u>Filing of Documents</u>: The Management Committee shall file or cause to be filed all certificates or documents as may be determined by the Management Committee to be necessary or appropriate for the formation, continuation, qualification and operation of a limited liability company in the State of Nevada and any other state in which the Company may elect to do business.

5.7 <u>Compensation and Reimbursement of the Members</u>:

(a) <u>Compensation</u>: The Management Committee shall not be entitled to a management fee for their services rendered to the Company.

(b) <u>Reimbursements</u>: The Company shall pay all of the costs and expenses incurred by the Management Committee in connection with the business, affairs and operations of the Company, including, but not limited to, all overhead and operating expenses, employee compensation, benefits and other expenses, indemnification expenses and amounts paid to any person to acquire or to dispose of any interest in any property, to settle claims or to perform services at the request of, or for the benefit of, the Company, in each case as the Members authorize or approve in their reasonable discretion. Notwithstanding any provision of this Agreement, however, the Company shall not pay, or reimburse any member for, any taxes on, or measured by, the income of that member. Reimbursements to a member shall be promptly paid.

5.8 <u>Company Funds</u>: The funds of the Company shall be deposited in that account or those accounts as are designed by the Members. All withdrawals from or charges against those accounts shall be made by the Members. Funds of the Company may be invested as determined by the Members, except in connection with acts or otherwise expressly prohibited by this Agreement.

5.9 <u>Liability of the Members</u>: Neither a member of the Company nor the members or shareholders, directors, officers, employees, or agents of a member shall be liable to the Company or any other member for errors in judgement or for any acts or omissions taken in good

faith, except for acts or omissions for which he, she or it is adjudged by a court of competent jurisdiction to be guilty of actual fraud or willful or wanton misconduct.

5.10 <u>Title to Company Assets</u>: Title to property of the Company, whether real, personal or mixed, tangible or intangible, shall be deemed to be owned by the Company as an entity, and no member, individually or collectively, shall have ownership interest in the property of the Company or any other portion thereof. Title to any or all of the Company's property must be held in the name of the Company.

5.11 <u>Withdrawal of Voting Members</u>: No Voting Member may withdraw from or reduce his capital contribution to this Company prior to the time for dissolution and liquidation of the Company pursuant to Article 9 of this Agreement without the consent of the Management Committee.

ARTICLE 6. NONVOTING MEMBERS

6.1 <u>Rights of the Nonvoting Members</u>: Except as otherwise expressly provided for in this Operating Agreement, the nonvoting members shall not take any part in the management or control of the Company's business or affairs, participate in decisions regarding the Company's business or affairs or have the power to act for or bind the Company.

6.2 <u>Withdrawal of Nonvoting Members</u>: No nonvoting member may withdraw from or reduce his capital contribution to the Company prior to the time for dissolution and liquidation of the Company pursuant to Article 9 of this Operating Agreement without the consent of the Members by majority vote.

ARTICLE 7. BOOKS, RECORDS, REPORTS AND ACCOUNTING

7.1 <u>Records and Accounting</u>: The Management Committee at the direction of the Members shall keep or cause to be kept at the Registered Office of the Company appropriate books and records with respect to the Company and its business and affairs, including, without limitation, all books and records necessary to provide to the members any information, lists and copies of documents required to be provided pursuant to applicable law.

(a) Any records maintained by the Company in the regular course of its business including records of the holders of Member's Interest, books of account and records of proceedings, may be kept on or be in any form of information storage device, provided that the records so kept are convertible into legible written form within a reasonable period of time.

(b) All decisions as to accounting matters, except as specifically provided to the contrary herein, shall be made by the Members.

7.2 <u>Fiscal Year and Method of Accounting</u>: The fiscal year of the Company shall be the calendar year or any other year which the Members may from time to time select in their discretion as permitted under pertinent law. All amounts computed for the purposes of this Operating Agreement other than for tax purposes and all applicable questions concerning the rights of members shall be determined using the accrual method of accounting and generally accepted accounting principles in effect from time to time.

7.3 <u>Preparation of Tax Returns</u>: The Members shall arrange for the preparation and timely filing of all returns of Company income, gains, deductions, losses and other items necessary for federal and state income tax purposes and shall cause to be furnished to the members the tax information reasonably required for federal and state income tax reporting purposes. The classification, realization and recognition of income, gain losses and deductions and other items shall be on the cash or accrual method of accounting for federal income tax purposes as the Management Committee shall determine in their discretion. The taxable year of the Company shall be the calendar year, unless the Management Committee determines otherwise in their discretion.

7.4 <u>Tax Matters</u>: The Members may in their discretion make all decisions and elections pursuant to the Internal Revenue Code.

7.5 <u>Access to Records</u>: All voting and nonvoting members shall be permitted to access to all records of the Company, after adequate notice, at any reasonable time. The Members shall maintain and preserve during the term of the Company and for Ten (10) years thereafter all accounts, books and other relevant company documents.

ARTICLE 8. TRANSFER OF MEMBERS INTEREST

8.1 Assignment of Member's Interest:

(a) Except as provided in this Article 8, no member may transfer, in whole or in part, any Member's Interest. Any attempted transfer shall be void ad initio. To the extent the law requires the members and the Company to recognize any involuntary transfer -- such as an attachment, seizure, lien, garnishment, etc. — the transferee's rights shall be limited as provided in this Operating Agreement and in Section 86.351 of the Nevada Revised Statutes.

(b) The members shall have the free and unrestricted right to transfer all or part of their Member's Interest to another member, a member's spouse or descendants (whether natural born or adopted) or a spouse of any such descendant, either directly, through utilization of a trust, or in accordance with the Uniform Transfer to Minors Act.

(c) No transferee, however, shall become a substituted voting member without the unanimous vote of all the members and shall not become a substituted nonvoting member without the majority vote of all members. The transferee may be admitted as a substituted member only upon restricted compliance with the terms of Section 8.3.

8.2 <u>No Assignment Under Certain Circumstances</u>: Notwithstanding anything to the contrary contained in any other provision of this Operating Agreement, members shall not transfer all or any part of their Member's Interest if (a) such transfer would cause the termination of the Company's partnership status for federal income tax purposes or (b) the transfer would violate any applicable federal or state securities laws.

8.3 <u>Requirements for Transfer to Become a Substituted Member:</u>

(a) A transferee shall become a substituted member in the Company only if the following conditions are satisfied:

(1) all voting and nonvoting members shall have consented to such substitution, as required in subparagraph 8.1(c).

(2) the transferee shall have agreed in writing to assume any and all of the obligations under this Operating Agreement with respect to the Member's Interest(s) to which the transfer releases;

(3) all reasonable expenses of the Company required in connection with the transfer shall have been paid by or for the account of the transferee; and

(4) all agreements, certificated or amended certificates and all other documents shall have been executed and filed and all other acts shall have been performed which the Management Committee shall deem necessary to make the transferee a substituted member in the Company and to preserve the tax status of the Company.

(b) A transferee who does not become a substituted member shall not be entitled to receive the allocation of income, gain, losses, credits, deductions, distributions to which his assignor would otherwise be entitled under this Operating Agreement.

8.4 <u>Right of Refusal</u>:

(a) Except as provided in Section 8.1, members may not transfer all or part of their Member's Interest without first complying with the requirements of this Section 8.4.

(b) In the event that any member shall receive a bona fide offer for the transfer of all or part of the Member's Interest (the "purposed transfer") and its desirous of accepting such offer, the member shall, prior to accepting such offer, give written notice thereof to the Members, which notice (the "notice of offer") shall set forth the terms and conditions of the offer so received including the identity and the address of the proposed transferee. Similarly in the event
that any member shall otherwise desire to transfer all or part of the shares (also a "proposed transfer"), the member shall first offer such Member's Interest to the Company pursuant to a written notice to the Members (the "notice of offer"), which shall set forth the terms and conditions of such offer. Within 30 days after the receipt of the notice of offer, the Company may purchase all or part of the Member's Interest in the proposed transfer at the purchase price stated in the purchase price stated in the notice of offer. If the Company fails to purchase the Member's Interest in the proposed transfer, then each member may, within 60 days after the receipt of the notice of offer for their account.

(c) To the extent that neither the Company nor the other members purchase the Member's Interest in connection with the proposed transfer, the transferee may transfer the Member's Interest, the transferee may transfer the Member's Interest of the transferee executes a counterpart to this Operating Agreement. The transferee shall not be admitted as a substituted member except upon strict compliance with the terms of Section 8.03.

8.5 <u>Admission of Additional Voting Members</u>: No person shall be admitted as an additional voting member without the written consent of all the voting and nonvoting members.

ARTICLE 9. TERMINATION AND WINDING UP

9.1 <u>Dissolution</u>: The life of the Company shall be perpetual. Therefore, dissolution shall only occur upon the prior occurrence of any of the events set forth in Section 86.491 of the Nevada Revised Statutes.

9.2 <u>Termination and Winding Up</u>: In the event of the dissolution of the Company, the dissolution of the Company shall be accomplished in accordance with NRS 86.491 inclusive.

ARTICLE 10. GENERAL PROVISIONS

10.1 <u>Waiver of Partition</u>: Each member hereby waives any right to partition, owelty or the right to take any other action which might otherwise be available to such member for the purpose of severing his or her relationship with the Company or his or her interest in the assets and properties held by the Company from the interest of the other members until the dissolution of the Company.

10.2 <u>Notices:</u> All notices and other communications required or permitted to be given pursuant to this Operating Agreement shall be in writing and shall be deemed to have been duly given, made and received only when delivered against receipt or when deposited in the United States Mail, first class, postage prepaid, certified or registered mail, return receipt required, addressed to the addressee at his address as shown from time to time in the records of the Company. Any member may alter the address to which communications are to be sent by giving notice of such change of address to the Management Committee in conformity with the provisions of this Article 10.

10.3 <u>Successors and Assigns</u>: This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, heirs, personal representatives and assigns.

10.4 <u>Controlling Law</u>: This Agreement shall be governed by and constructed in accordance with the laws of the State of Nevada, notwithstanding any Nevada or other conflict-of-law provisions to the contrary.

10.5 <u>Severability</u>: If any provisions of this Agreement shall be or shall become illegal or unenforceable in whole or in part, for any reason, the remaining provisions shall nevertheless be deemed valid, binding and subsisting.

10.6 <u>No Waiver</u>: Neither the failure nor any delay on the part of any party to exercise any right, remedy, power or privilege under this Operating Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any other right, remedy, power or privilege preclude any other or further exercise of any other right, remedy, power or privilege with respect to any occurrence be construed as a waiver of such right, remedy, power or privilege with respect to any subsequent occurrence.

10.7 <u>Gender</u>: Words used herein, regardless of the number or gender specifically used, shall be deemed and construed to include any other number, singular or plural, and other gender, masculine, feminine or neuter, as the context requires.

10.8 <u>Statutory Provisions</u>: Any statutory references in this Operating Agreement shall include a reference to any successor to such statute and/or to the referred to provision of such statute.

10.9 <u>Amendment</u>: This Operating Agreement may only be amended by an agreement in writing executed by all voting members.

10.10 <u>Counterparts</u>: This Operating Agreement may only be executed in counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.

Exhibit "A"

Voting Members

HARRY C. FRY

Nonvoting Members

None

n • • • •

Member's Interest

100%

Member's Interest



November 16, 2016

Mr. Harry Fry Pleasant Valley Estates LLC 301 Flint Street Reno, NV 89501

RE: Pleasant Valley Estates Acknowledgement of Water Service (Revised 11/16/2016) TMWA Work Order 16-5262

Dear Mr. Fry:

I have reviewed the plans for the above referenced development ("Project") as submitted to the Truckee Meadows Water Authority and have determined the Project is wihin the Truckee Meadows Water Authority's retail water service area. This letter constitutes an Acknowledgment of Water Service pursuant to NAC 445A.6666, and the Truckee Meadows Water Authority hereby acknowledges that Truckee Meadows Water Authority is agreeable to supplying water service to the Project, subject to applicant satisfying certain conditions precedent, including, without limitation, the dedication of water resources, approval of the water supply plan by the local health authority, the execution of a Water Service Agreement, payment of fees, and the construction and dedication of infrastructure in accordance with our rules and tariffs. This Acknowledgement does not constitute a legal obligation by Truckee Meadows Water Authority to supply water service to the Project, and is made subject to all applicable Truckee Meadows Water Authority Rules.

Review of conceptual site plans or tentative maps by Truckee Meadows Water Authority does not constitute an application for service, nor implies a commitment by Truckee Meadows Water Authority for planning, design or construction of the water facilities necessary for service. The extent of required off-site and on-site water infrastructure improvements will be determined by Truckee Meadows Water Authority upon receiving a specific development proposal or complete application for service and upon review and approval of a water facilities plan by the local health authority. Because the NAC 445A Water System regulations are subject to interpretation, Truckee Meadows Water Authority cannot guarantee that a subsequent water facility plan will be approved by the health authority or that a timely review and approval of the Project will be made. The Applicant should carefully consider the financial risk associated with committing resources to their project prior to receiving all required approvals. After submittal of a complete Application for Service, the required facilities, the cost of these facilities, which could be significant, and associated fees will be estimated and

Page 2 November 16, 2016

will be included as part of the Water Service Agreement necessary for the Project. All fees must be paid to Truckee Meadows Water Authority prior to water being delivered to the Project.

Please call me at 834-8292 at your convenience if you have any questions.

Sincerely, Truckee Meadows Water Authority

Listian

Keith Ristinen, P.E. Principal Engineer



300 Western Road, #3, Reno, NV 89506 • (775) 852-7475 FAX (775) 852-7488

November 10, 2016 1149-07N

Dr. Harry Fry 760 Greenbrae Drive Sparks, Nevada 89431

> Site Assessment and Geotechnical Considerations Proposed Pleasant Valley Estates Washoe County, Nevada

Introduction

This report presents the results of the site assessment we performed and general geotechnical considerations we determined for the proposed Pleasant Valley Estates to be located in Washoe County, Nevada. The property is off of the existing street; Chance Lane, and listed as APN 017-410-38/39. We understand that this preliminary report is required as part of the tentative map application for the project. There are 2 large lots to be developed for single family housing tracks. The property will be serviced by community sewage disposal and water supply systems.

The scope of our work was to assess and review any pertinent site and geotechnical considerations, and comment on the anticipated affect, if any, to development of the property.

Site, Soil, Geologic and Flooding Conditions

At the time of our site visit, the property appears to have not been previously developed and was vegetated with an abundance of brush, few trees, and high grasses and weeds. The topography of the property is uneven due to natural drainage areas, but generally slopes down to the west. There are many boulders exposed on the surface of the lot, ranging to about 8 feet in size. These boulders are primarily granitic. The site is bounded by housing units on the north, and by undeveloped land on the south, east, and west. The soils in the area are granular in nature and of good quality. They are derived from weathering of the granitic rock.

The site is located just south of Reno, Nevada, which is within the extreme west central portion of the Basin and Range physiographic province. Based on the Preliminary Revised Geologic Maps of the Reno Urban Area, Nevada (Nevada Bureau of Mines and Geology, Alan R. Ramelli, Christopher Henry, and Jerome Walker, et.al., 2011), the site is underlain by Intermediate Aged Fan Deposits (Qfi), of Pleistocene Age.

No faults are located on site or in the vicinity. There is a regional potential for moderate to large magnitude earthquakes in the mid and western portions of Nevada. Washoe County currently requires the use of the site characterization criteria found in the 2012 International Building Code (IBC) for design. The seismic design criteria is found in Chapter 16, Section 1613 of the 2012 IBC and the USGS website. The IBC requires that the Site Class be determined by soil and rock parameters described in Table 1613.3.2. The Site Class defaults to "D" without confirming soil and rock data to a depth of 100 feet below the ground surface. The maximum considered earthquake ground motion spectral accelerations for short periods and for one second periods



Dr. Harry Fry Project: Pleasant Valley Estates Project No.: 1149-07N November 10, 2016 - Page 2

are given on figures in the code. These values are mapped in contour format and estimated site values are determined by interpolation of the nearest contours. However, using the site latitude and longitude as input, the USGS website provides a much more accurate site specific acceleration values along with the respective site coefficients and design spectral response acceleration parameters in their Design Maps Summary Report. Based on this research, the site specific seismic design criteria for the subject property is presented below:

TABLE 1 - 2012 IBC SEISMIC DESIGN CRITERIA	
Spectral Response at Short Periods, S _s (USGS)	2.112
Spectral Response at 1-Second Period, S ₁ (USGS)	0.687
Site Class (Subsection 1613.3.2)	D
Site Coefficient F _a (USGS)	1.000
Site Coefficient F _v (USGS)	1,499
Design Spectral Response Acceleration, Short Periods, $SD_s = 2/3 \times Fa \times Ss$ (USGS)	1.408
Design Spectral Response Acceleration, 1-Second Period, $SD_1 = 2/3 \times Fv \times S_1$ (USGS)	0.687

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (Panel No. 32019C0275E, January 16, 2009) indicates that the development area is within Flood Hazard Zone X. Zone X is designated as those areas determined to be outside the 0.2% annual chance floodplain.

Discussion and Conclusions

Our field reconnaissance, review of the available geological/geotechnical information and our experience in the site vicinity indicates that, in general, the site is suitable for typical single family housing development. We believe conventional construction, including normal mass cutting and filling for support of standard spread foundations for buildings and with associated concrete slabs-on-grade and/or asphaltic concrete exterior flatwork, can be used. Streets can be paved with conventional asphaltic concrete and aggregate base thickness design.

The native soils in the vicinity are medium dense, silty sands with gravel. Large cobbles or boulders may be encountered during excavation, based on what was observed on surface. Attention to encountering the large boulders at any depth and any bedrock deeper with the corresponding excavation difficulty should be anticipated. For deeper excavations, rock masses may be too large to move and blasting or other rock splitting technique may be needed. We will explore and test the fill soils, along with the native sands during the final geotechnical report phase and determine if the materials are suitable for reuse or need to be wasted. Our experience indicates that there are no zones of moderately to highly expansive native clayey soils in the vicinity. The buildings, on-site flatwork and public street improvement materials will be satisfactorily supported on existing fill materials that are approved for reuse with compaction and/or on firm native sands.

This report provides general information to aid the owners and/or developers in preliminary development planning and required for the tentative map application. It is not intended to be a complete geotechnical study. Prior to any serious development or construction plans, a complete



Dr. Harry Fry Project: Pleasant Valley Estates Project No.: 1149-07N November 10, 2016 - Page 3

geotechnical investigation report developed through field exploration, laboratory testing and engineering analysis should be completed. The final report should provide engineering parameters of the soils across the site and specific recommendations concerning site preparation and grading with attention to the filling conditions, foundation design criteria and support of exterior flatwork and flexible pavements. Such a study could result in providing alternative recommendations which would help planners determine the most cost effective methods for development and construction.

We trust that this provides the information needed at this time. If you have any questions, please contact our office.

Yours very truly,

NORTECH Geotechnical/Civil Consultants, Ltd.

Andrew J. Pikero

Engineering Intern - OT7618

ER S

Nicholas S. Vestbie Civil Engineer - 5173

NSV/IIm

cc: Gray & Associates 130 Vine Street Reno, Nevada 89503 Assessor's Site Map



February 14, 2019 APN

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

Washoe County Washoe County GIS Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

This information for illustrative puroposes only. Not be used for boundary resolution or location and not intended to be used for measurement, calculation, or delineation. Washoe County Technology Services - Regional Services Division, 1001 E. 9th St, Building C-200, Reno, NV 89512 www.washoecounty.us/gis (775) 328-2345







Google Earth

39°22'28.80" N 119°43'23.27" W elev 4798 ft eye alt 9999 ft 🕥

PRELIMINARY SANITARY SEWER REPORT

TO SUPPORT THE

TENTATIVE MAP FOR THE PLEASANT VALLEY ESTATES RESIDENTIAL SUBIDIVISON

PREPARED FOR:

PLEASANT VALLEY RANCH ESTATES LLC 301 FLINT STREET RENO, NV 89501



PREPARED BY:



JOB #: FRY001 DATE: FEBRUARY 15TH, 2019

Table of Contents

1.	Inti	roduction	1						
2.	Pro	Project Area							
3.	Me	ethodology	1						
4.	Exi	sting Sanitary Sewer System	1						
	4.1.	Layout	1						
	1.2.	Capacity	2						
5.	Pro	pposed Sanitary Sewer System							
ļ	5.1.	Layout	2						
ļ	5.1.1.	Route #1)						
!	5.1.2.								
1	5.1.3.	Route #3	2						
1	5.2.	Proposed Sewage Demands	3						
ľ	5.1.	Capacity	3						
6.	Dise	cussion	3						
7.		nmary/Conclusion4							
Ref		ces1							

1. Introduction

This Preliminary Sanitary Sewer Analysis was prepared to support the Tentative Map for the Pleasant Valley Estates Residential Subdivision. Pleasant Valley Estates spans across three existing parcels of land with a cumulative area of approximately 41.34 acres (Assessor's Parcel Numbers (APNs): 017-200-30, 017-410-38 and 39). APN 017-200-30 is located in the southeastern ¼ of the southwestern ¼ of Section 34, Township 18 North, Range 20 East. APNs 017-410-38 & 39 are located in the northeastern ¼ of the northwestern ¼ of Section 3, Township 17 North, Range 20 East. Pleasant Valley Estates is a 58-lot residential subdivision which has a surrounding area that consists primarily for single family residential homes. The location of the project is depicted in Figure 1 (Vicinity Map).

2. Project Area

The site generally slopes from north to south at an approximate grade of 2.2%. The onsite sewer infrastructure will not convey any offsite sanitary sewer flows. No special areas or large flow commercial uses are located on or adjacent to the project site. All sewage to be generated is domestic use.

3. <u>Methodology</u>

Sanitary sewer flows were estimated utilizing the design criteria in Chapter 2 (Gravity Sewer Collection Design Standards) of the Washoe County Department of Water Resources, Engineering Design Standards. Peak flows for the mains were estimated at 270-gallons per day (GPD) per capita with 3-capita per dwelling unit (±810-gallons/day/dwelling unit). The Manning's equation was utilized to determine the capacities of the sanitary sewer mains, and a roughness (*n*) of 0.012 for the PVC pipes to determine the capacities and velocities of the sanitary sewer mains.

Manning's Equation

$$Q = \frac{1.49}{n} * A * R^{\frac{2}{3}} * S^{\frac{1}{2}}$$

- Q = Capacity of pipe (ft³/s)
- n = Manning's runoff coefficient (unitless)- n = 0.012 for all proposed pipes
- \blacktriangleright A = Cross-sectional area of the pipe (ft²)
- R = Hydraulic radius of the pipe (ft)
- S = Slope of pipe (ft/ft)

4. Existing Sanitary Sewer System

4.1. Layout

As indicated in Figure 2, the nearest existing sanitary sewer main is located to the east of the site in Star Pointe Drive. This sanitary sewer main conveys sewage north along Star Pointe Drive to

Secret Pass Drive. The sanitary sewer main then extends north along Secret Pass Drive to Big Smokey Drive. The sanitary sewer main then extends westerly along Big Smokey Drive to Sylvester Road. The sanitary sewer main flows northerly along Big Smokey Drive away from the project. Per the Washoe County Regional Mapping System Website, the 8-inch diameter sanitary sewer mains convey the sewage northwesterly towards the crossing of Geiger Grade Road prior to upsizing to a 12-inch diameter trunk main. (Figure 4)

4.2. Capacity

The existing sanitary sewer mains are listed in the Washoe County Regional Mapping System Website as 8-inch diameter sanitary sewer mains. The existing sanitary sewer main slopes were also obtained from this website. The existing sanitary sewer main capacities varied with a minimum capacity (slope=0.25%) of 0.212-million gallons per day (MGD). This 0.25% slope is less than that currently required by Washoe County (0.5%) for an 8-inch diameter sanitary sewer main.

5. Proposed Sanitary Sewer System

5.1. Layout

The proposed sanitary sewer system will consist of 8-inch diameter PVC sanitary sewer mains and 4-inch diameter PVC sanitary sewer laterals. The proposed sanitary sewer mains will convey sewage to the southern end of the property to a future lift station located in Lot #18. The proposed lift station will pump the sewage north along Westward View Road to 1 of 3 potential routes.

5.1.1. Route #1

The first potential route is to pump the sewage north along Westward View Road along Rocky Vista Road to Node A (Figure 2). From this point the sewage would gravity flow via a proposed 8-inch diameter sanitary sewer system northerly to Big Smokey Drive then easterly to the existing sanitary sewer manhole located at the intersection of Big Smokey Drive and Sylvester Road.

5.1.2. Route #2

The second potential route is to pump the sewage north along Westward View Road to the proposed Vista Sierra Road then easterly along Vista Sierra Road to the eastern boundary of the project (Node B, Figure 2). From this point, the sewage would then flow via a proposed 8-inch diameter sanitary sewer main easterly into the existing sanitary sewer main located in Star Pointe Drive.

5.1.3. Route #3

The third potential route is to pump sewage similar to Route #2. However, the force main is further extended north along the easterly boundary of the site to the northeast corner of the

subject property. At this point the force main extends easterly towards Star Pointe Drive where it terminates at a proposed sanitary sewer manhole (Node C, Figure 2). An 8-inch diameter sanitary sewer main will extend from this proposed manhole easterly and connect to the existing sanitary sewer main located in Star Pointe Drive.

An overview of the proposed site layout and sanitary sewer system is presented in Figure 3. The approximate Node locations for each sewer route are further identified in Figure 2.

5.2. Proposed Sewage Demands

The proposed 58-lot subdivision is anticipated to generate 46,980 gallons per day (0.047 million gallons per day (MGD)) peak flow. The project site consists of homes, as such estimated peak flows are assumed to be that of single family residential dwelling units.

The following assumptions were made:

- 58-lot subdivision
- 1 home = 1 dwelling unit
- Single Family Residential assumption per Chapter 2 = 3.0 capita/dwelling unit
- 270 gallons per capita per day (peak flow) * 3.0 = ±810 gallons/day per dwelling unit (peak flow)

58 Dwelling Units * 3 $\frac{Capita}{Dwelling Unit}$ * 270 $\frac{gpd}{Capita}$ = 46,980 gpd (0.047 – MGD)

5.1. Capacity

The future sanitary sewer mains were assumed to have slopes approximately equal to their respective street grades with a minimum slope of 0.5%. Assuming a sanitary sewer main was constructed with PVC pipe at a minimal slope of 0.5%, it would have a minimum capacity of 0.299 million gallons per day (MGD) while flowing 50% full.

6. <u>Discussion</u>

All of the proposed sanitary sewer mains will be sized to convey the proposed peak sewage demand of approximately 0.047-MGD. The proposed sanitary sewer lift station and associated force mains will also be sized to convey the proposed sewage flows. Regardless of which sanitary sewer route is ultimately constructed, all of the sewage generated will be added to the existing sanitary sewer main located in Sylvester Road and all of its downstream mains.

As previously discussed, the sanitary sewer mains in Sylvester Road and downstream are 8-inch diameter until the main diameter increases to a 12-inch diameter trunk main. The approximate location of the existing downstream sanitary sewer system and the location of the trunk main are indicated in Figure 4.

The flattest sanitary sewer main affected by the development of Pleasant Valley is listed on the Washoe Regional Mapping Website as 0.25%. As indicated in Figure 4, this sanitary sewer main is located upstream of the 12-inch diameter sanitary sewer trunk main. An 8-inch diameter sanitary sewer main with a slope of 0.25% has a half full capacity of approximately 0.212-MGD. This pipe is estimated to be approximately 64% full under existing conditions. The peak sewage rate (including Pleasant Valley) at this sanitary sewer main is estimated at 0.357-MGD which equates to the main being approximately 71% full.

This pipe is flatter than that required by Washoe County and appears to be incorrectly listed in the website. This length of the sanitary sewer main is most likely either steeper than what is listed or more likely this pipe is also 12-inches in diameter similar to the adjacent trunk main which would result in a half full capacity of approximately 0.624-MGD. In either case, this pipe will need to be surveyed with final design of this project to determine if the information listed in the website is accurate. If the information is accurately listed, upsizing of this sanitary sewer main may be required. Based upon the estimated peak flow rates and the information provided in the Washoe Regional Mapping Website, all of the other affected sanitary sewer mains will convey the proposed sewage while remaining less than half full.

7. Summary/Conclusion

The Pleasant Valley Tentative Map is a proposed 58-lot subdivision. The proposed sanitary sewer system will convey all of the generated sewage to a sanitary sewer lift station. The proposed lift station will convey the sewage to one of three potential locations where it will tie into the existing sanitary sewer system. All 3 points of connection are conveyed via the same portion of the existing sanitary sewer system. One existing sanitary sewer main may be undersized to accommodate the flows from either the existing or the future peak demands while remaining less than half full. This pipe will be surveyed to determine its existing diameter and slope to verify its capacity. Upsizing of this pipe may be required depending the results of this survey. Therefore, with the proposed development of this subdivision and the potential upsizing of the previously discussed offsite sanitary sewer main, no adverse effects are anticipated to the proposed or existing sanitary sewer systems.

References

Washoe County Engineering Design Standards, Chapter 2- Gravity Sewer Collection Design Standards, March, 2016.







EXISTING SS MAIN (w/ DIRECTION OF FLOW)

PRELIMINARY SANITARY SEWER REPORT TO SUPPORT THE TENTATIVE MAP FOR THE PLEASANT VALLEY ESTATES RESIDENTIAL SUBDIVISION FIGURE 2 EXISTING SEWER SYSTEM





N.T.S.

LEGEND

	FORCE MAIN					
	PROPOSED (GRAVITY) SANITARY SEWER MAIN					
	PROPOSED BOUNDARY LINE					
	BOUNDARY					
۲	PROPOSED MANHOLE					
	GRAVITY MAIN DIRECTION OF FLOW					

PRELIMINARY SANITARY SEWER REPORT TO SUPPORT THE TENTATIVE MAP FOR THE PLEASANT VALLEY ESTATES RESIDENTIAL SUBDIVISION FIGURE 3 PROPOSED SEWER SYSTEM



PRELIMINARY HYDROLOGY REPORT

TO SUPPORT THE

PLEASANT VALLEY ESTATES TENTATIVE MAP

PREPARED FOR:

PLEASANT VALLEY ESTATES, LLC 301 FLINT ST RENO NV 89501



PREPARED BY:



JOB #: FRY001 DATE: FEBRUARY 15TH, 2019

Table of Contents

1.	Intro	oduction1
1.	.1.	Project Site
1.	.2.	Flood Zone1
1.	.3.	Methodology1
1	.3.1.	Time of Concentration (Tc)1
2.	Exis	ting Conditions
2.	.1.	Offsite Runoff
2.	.2.	Onsite Runoff
2.	.3.	Calculations2
3.	Prop	bosed Runoff Conditions
3	.1.	Offsite Runoff
3.	.2.	Onsite Runoff
3	.3.	Calculations
3.	.4.	Detention Pond Volume and Discharge
4.	Disc	eussion/ Conclusions
5.	Refe	erences

List of Tables

Table 1: Existing Drainage Basins Hydrology	2
Table 2: Proposed Drainage Basins Hydrology	3
Table 3: Detention Summary	4

List of Appendices

NOAA Atlas Point Precipitation Frequency Estimate	APPENDIX A
Travel Time Velocity Figure (Figure 701)	APPENDIX A
FEMA Flood Insurance Rate Maps	APPENDIX A
Figure 1: Vicinity Map	APPENDIX B
Figure 2: Existing Drainage Basins	APPENDIX B
Figure 3: Proposed Drainage Basins	APPENDIX B

1. Introduction

1.1. Project Site

The proposed ± 41.32 -acre subdivision will be located east of Rhodes Road in Washoe County. The project is located in the NW ¼ of Section 3, Township 17N, Range 20E, and SW ¼ of Section 34, Township 18N, Range 20E, in Assessor's Parcel Numbers (APNs) 017-200-30, 017-410-38, and 017-410-39. The exact location of the site is indicated in Figure 1 (Vicinity Map).

1.2. Flood Zone

The project is located in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) 32031C3263G and 32031C3351G. The Panel is listed in the FEMA FIRM Index Map as being entirely within an Unshaded Flood Zone X (areas determined to be outside the 500-year flood plain) according to the FEMA National Flood Insurance Program. The maps are provided in the appendix.

1.3. Methodology

Due to the limited size of the contributing runoff areas, the Rational Method was utilized in determining the existing and proposed peak runoff rates. The following elements are required in utilizing the Rational Method:

$$Q = C*i*A$$

- C = Rational Method Runoff Coefficient obtained from the City of Reno Design Manual (unitless)
- i = Average Rainfall Intensity obtained from the National Oceanic and Atmospheric Administration (NOAA) Atlas (inches/ hour)
- \rightarrow A = Watershed area (Acres)
- Q = Peak runoff flow (cubic feet/ second)

The City of Reno Design Manual was utilized to determine C-values due to the separation The Truck Meadows Regional Design Manual (TMRDM) not separating the 5 and 100-year C-Values.

The detention pond was sized using the Rational Method.

1.3.1.Time of Concentration (Tc)

A maximum time of concentration was determined by utilizing the longest drainage flow path in the particular hydrologic basin. The time of concentration was calculated using the time travel figure in the appendix.

Overland flow, ditch, and gutter travel time were calculated using the following equation:

$$t_t = \frac{D}{V} \left(\frac{1}{60}\right)$$

Where:

 $t_t = \text{ditch and gutter flow time ($ *minutes* $)}$

D = distance of travel *(feet)*

V = velocity (*feet per second*) (From Travel Time Velocity Figure in the Appendix)

Rainfall intensities were derived from the National Oceanic and Atmospheric Administration (NOAA) Atlas. The rainfall data point was utilized to derive point precipitation frequency estimates. Time of concentration values were calculated using the Truckee Meadows Regional Drainage Manual and the City of Reno Time Travel Velocity Figure. According to the Washoe County's Standards, the minimum time of concentration to be used in calculations is 10 minutes. These values were applied to the Rational Method to estimate peak flows for both the proposed development and the parcel as it exists currently. A copy of the NOAA Atlas Point Precipitation Frequency Estimate and Time Travel Velocity Figure is provided in the Appendix.

2. Existing Conditions

2.1. Offsite Runoff

Approximately 21.14 acres of offsite area drains through the existing site. To the northwest, there is a portion of a hill that is conveyed to and through the site. To the north, a saddle separates most of the drainage from the aforementioned hill. However, this saddle contributes approximately 11.88 acres of runoff to the site. To the west, several peaks separate the site from Rhodes Road. These peaks contribute approximately 0.47 acres of runoff to the site. There is no contributing runoff from the south of the site to the proposed project. The east property line runs along a ridge; as such, very little contributing offsite flows are anticipated from the east. Reference Figure 2 for existing basin delineation.

2.2. Onsite Runoff

The offsite flows contributing from the north, northwest, and west all flow to the middle of the site and are channelized. The channel then flows south to an existing 24" Corrugated Metal Pipe (CMP). The CMP 24" pipe crosses under an existing dirt driveway that runs east to west along the southern boundary, draining offsite to adjacent properties. Reference Figure 2 for existing basin delineation.

2.3. Calculations

The time of concentration was calculated to be 20.80-minutes. Interpolating between the 15 and 30-minute rainfall intensities, 1.10 and 2.66-inches/hour were calculated for the rainfall intensities for the 5 and 100-year storm event.

AREA	RUNOFF COEFFICIENT (C)		RAINFALL INTENSITY (i)		AREA (A)	R	RUNOFF ATE)=CiA
	(UNITLESS)	(UNITLESS)	(INCHES/HR)		(ACDES)	(FT ³ /SEC)	
	5-YEAR	100-YEAR	5-YEAR	100-YEAR	(ACRES)	5-YEAR	100-YEAR
EX-1	0.40	0.50	1.10	2.66	63.54	27.97	84.61
	63.54	27.97	84.61				
C=0.40 (5-YEAR STORM, OPEN SPACE, 5-15% GRADE) C= 0.50 (100-YEAR STORM, OPEN SPACE, 5-15% GRADE)							

Table 1: Existing Drainage Basins Hydrology

As indicated in Table 1, approximately 27.97-cfs and 84.61-cfs of peak runoff are currently generated by the 5 and 100-year storm events, respectively.

3. Proposed Runoff Conditions

3.1. Offsite Runoff

Flow from the north will be captured via storm drain and curb and gutter. The flow from the northwest will be captured with an eight-foot V-ditch that runs along the northern boundary of the property. This V-ditch will then direct the offsite runoff to a storm drain inlet. The storm drain inlet will be connected to the site's storm drain infrastructure. Reference Figure 3 for the proposed basin delineation.

3.2. Onsite Runoff

Storm drain will be located throughout the site to maintain proper drive-isles and prevent flooding. The storm drain infrastructure will convey the runoff to a detention pond on the south side of the site. With final design, a detention pond outlet structure will be designed to meter flows out at existing rates. The metered flows will be conveyed to historic locations. Reference Figure 3 for the proposed basin delineation.

3.3. Calculations

The proposed conditions were analyzed similarly to the existing conditions. The same drainage basin was utilized, but with a different time of concentration, rainfall intensity, and roughness coefficient. The time of concentration was shortened to 11.28 minutes. This changed the rainfall intensities to 1.45 and 3.53-inches/hour for the 5 and 100-year storm event, respectively. The C-values were altered by creating a weighted average of 5-15% open space, 1/3 acre lots, and impervious concrete and asphalt (values were utilized from the City of Reno.

AREA	RUNOFF COEFFICIENT (C)		RAINFALI	L INTENSITY (i)	AREA (A)	PEAK RUNOFF RATE (Q)=CiA		
	(UNITLESS)	(UNITLESS)	(INCHES/HR)		(ACDES)	<i>(FT³/SEC)</i>		
	5-YEAR	100-YEAR	5-YEAR	100-YEAR	(ACRES)	5-YEAR	100-YEAR	
BASIN 1	0.43	0.56	1.45	3.53	63.54	39.71	125.47	
				TOTAL=	63.54	39.71	125.47	
C=0.43 (5-YEAR STORM, WEIGHTED C-VALUE) C= 0.56 (100-YEAR STORM, WEIGHTED C-VALUE)								

Table 2: Proposed Drainage Basins Hydrology

As indicated in Table 2, approximately 39.71 and 125.47-cfs of peak runoff are generated onsite during the 5 and 100-year storm events, respectively.

3.4. Detention Pond Volume and Discharge

As shown in Table 3, the increase in peak runoff rates are estimated to be 11.74 and 40.86-cfs for the 5 and 100-year storm events, respectively. Detention volume is calculated by multiplying the time of concentration by the peak flows of the proposed and existing conditions, and then finding the difference between the two. The detention volume required has been calculated to be approximately 20,690-cubic feet. The provided detention volume allotted is approximately 28,760-cubic feet. The volume provided has a factor of safety of 1.40. Detention summary calculations can be seen in Table 3. The excess runoff volume will be captured via a detention pond located on the south side of the site. Runoff from the site will be

restricted through the use of a detention structure that will be sized with final design. The existing 24" CMP culvert will then be utilized to convey the restricted flow as existing conditions did previously.

Table 3	Detention	Summary
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AREA	RUNOFF COEFFICIENT (C)			NFALL ENSITY (i)	AREA (A)	PEAK RUNOFF RATE (Q)=CiA		
	(UNITLESS)	(UNITLESS)	(INCHES/HR)		(ACDES)	(FT ³ /SEC)		
	5-YEAR	100-YEAR	5-YEAR	100-YEAR	(ACRES)	5-YEAR	100-YEAR	
ENTIRE-EX	0.40	0.50	1.10	2.66	63.54	27.97	84.61	
ENTIRE-PRO	0.43	0.56	1.45	3.53	63.54	39.71	125.47	
		TOTAL	AREA/DIFFERENCE=		63.54	11.74	40.86	

4. Discussion/ Conclusions

The Pleasant Valley Estates Tentative map is a ± 41.32 -acre subdivision located east of Rhodes Road in Washoe County. Currently, runoff through the site flows from north to south and is captured and carried offsite via a 24" CMP pipe. The proposed site will utilize storm drain pipes, inlets, manholes, V-ditches, drainage swales, and a detention pond at 24" CMP to convey and manage the predicted stormwater. The subdivision is anticipated to increase stormwater runoff and volume. The increase in runoff will be captured, detained, and metered out at historic rates with the use of a detention pond and outlet structure, which will be appropriately sized with final design. As such, no adverse hydrologic effects are anticipated due to the development of this project site.

14

5. <u>References</u>

- > Truckee Meadows Regional Drainage Manual dated April, 2009
- > City of Reno Design Manual, Chapter II Storm Drainage, January, 2009

APPENDIX A

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National Flood Hazard Layer FIRMette

42'54 95"VI



Legend



NOAA Atlas 14, Volume 1, Version 5 Location name: Reno, Nevada, USA* Latitude: 39.3726°, Longitude: -119.7271° Elevation: 4738.69 ft** * source: ESRI Maps ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF tabular | PF graphical | Maps & aerials

PF tabular

PDS-b	S-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) ¹						onfidence	intervals	(in inches	s/hour) ¹
Duration		Average recurrence interval (years)								
Duration	1	2	5	10	25	50	100	200	500	1000
5-min	1.20	1.50	2.00	2.48	3.28	4.00	4.85	5.89	7.55	9.06
	(1.03-1.42)	(1.28-1.78)	(1.70-2.39)	(2.10-2.95)	(2.69-3.91)	(3.18-4.84)	(3.73-5.95)	(4.36-7.38)	(5.26-9.74)	(6.01-12.0)
10-min	0.918 (0.786-1.08)	1.14 (0.978-1.36)	1.52 (1.30-1.81)	1.89 (1.60-2.24)	2.49 (2.05-2.98)	3.04 (2.42-3.68)	3.69 (2.84-4.53)	4.48 (3.31-5.61)	5.74 (4.00-7.41)	6.89 (4.58-9.10)
15-min	0.756 (0.648-0.892)	0.944 (0.808-1.12)	1.26 (1.07-1.50)	1.56 (1.32-1.86)	2.06 (1.69-2.46)	2.51 (2.00-3.04)	3.05 (2.35-3.74)	3.70 (2.74-4.64)	4.74 (3.30-6.12)	5.70 (3.78-7.52)
30-min	0.510 (0.438-0.602)	0.636 (0.544-0.754)	0.848 (0.722-1.01)	1.05 (0.890-1.25)	1.39 (1.14-1.66)	1.69 (1.35-2.05)	2.05 (1.58-2.52)	2.49 (1.84-3.12)	3.19 (2.22-4.12)	3.84 (2.55-5.06)
60-min	0.315	0.393	0.525	0.650	0.857	1.05	1.27	1.54	1.98	2.38
	(0.271-0.372)	(0.337-0.466)	(0.447-0.624)	(0.551-0.773)	(0.705-1.03)	(0.834-1.27)	(0.979-1.56)	(1.14-1.93)	(1.38-2.55)	(1.58-3.13)
2-hr	0.209	0.260	0.333	0.396	0.491	0.576	0.674	0.798	1.01	1.22
	(0.184-0.242)	(0.230-0.300)	(0.290-0.384)	(0.341-0.456)	(0.412-0.570)	(0.472-0.676)	(0.538-0.804)	(0.615-0.974)	(0.748-1.29)	(0.864-1.58)
3-hr	0.167	0.208	0.261	0.304	0.363	0.415	0.475	0.556	0.694	0.822
	(0.149-0.190)	(0.187-0.238)	(0.231-0.297)	(0.267-0.346)	(0.314-0.416)	(0.353-0.480)	(0.396-0.557)	(0.453-0.661)	(0.548-0.867)	(0.633-1.06)
6-hr	0.118	0.147	0.182	0.210	0.245	0.273	0.301	0.334	0.387	0.439
	(0.105-0.132)	(0.131-0.166)	(0.161-0.206)	(0.184-0.237)	(0.213-0.280)	(0.234-0.313)	(0.254-0.349)	(0.276-0.393)	(0.312-0.462)	(0.347-0.538)
12-hr	0.077	0.097	0.122	0.141	0.167	0.187	0.207	0.228	0.255	0.277
	(0.068-0.087)	(0.086-0.109)	(0.108-0.138)	(0.124-0.160)	(0.145-0.190)	(0.160-0.215)	(0.175-0.241)	(0.189-0.268)	(0.205-0.306)	(0.219-0.338)
24-hr	0.047	0.059	0.075	0.088	0.105	0.119	0.134	0.149	0.169	0.186
	(0.043-0.053)	(0.054-0.066)	(0.068-0.084)	(0.079-0.098)	(0.094-0.117)	(0.106-0.133)	(0.117-0.150)	(0.129-0.169)	(0.145-0.194)	(0.156-0.215)
2-day	0.028	0.035	0.045	0.053	0.063	0.072	0.081	0.090	0.103	0.113
	(0.025-0.032)	(0.032-0.040)	(0.040-0.051)	(0.047-0.059)	(0.056-0.072)	(0.063-0.082)	(0.070-0.093)	(0.077-0.104)	(0.086-0.121)	(0.093-0.135)
3-day	0.021	0.026	0.033	0.039	0.048	0.054	0.062	0.069	0.080	0.088
	(0.019-0.023)	(0.023-0.029)	(0.030-0.037)	(0.035-0.044)	(0.042-0.054)	(0.048-0.062)	(0.053-0.070)	(0.059-0.079)	(0.067-0.093)	(0.073-0.104)
4-day	0.017	0.021	0.028	0.033	0.040	0.046	0.052	0.059	0.068	0.076
	(0.015-0.019)	(0.019-0.024)	(0.025-0.031)	(0.029-0.037)	(0.035-0.045)	(0.040-0.051)	(0.045-0.059)	(0.050-0.067)	(0.057-0.079)	(0.063-0.089)
7-day	0.011	0.014	0.019	0.022	0.027	0.031	0.035	0.039	0.045	0.050
	(0.010-0.013)	(0.013-0.016)	(0.017-0.021)	(0.020-0.025)	(0.024-0.031)	(0.027-0.035)	(0.030-0.040)	(0.034-0.045)	(0.038-0.053)	(0.042-0.059)
10-day	0.009	0.011	0.015	0.017	0.021	0.024	0.027	0.030	0.035	0.038
	(0.008-0.010)	(0.010-0.013)	(0.013-0.017)	(0.015-0.020)	(0.019-0.024)	(0.021-0.027)	(0.023-0.031)	(0.026-0.035)	(0.029-0.040)	(0.032-0.044)
20-day	0.005	0.007	0.009	0.011	0.013	0.014	0.016	0.018	0.020	0.022
	(0.005-0.006)	(0.006-0.008)	(0.008-0.010)	(0.009-0.012)	(0.011-0.014)	(0.013-0.016)	(0.014-0.018)	(0.015-0.020)	(0.017-0.023)	(0.018-0.025)
30-day	0.004	0.005	0.007	0.008	0.010	0.011	0.012	0.013	0.015	0.016
	(0.004-0.005)	(0.005-0.006)	(0.006-0.008)	(0.007-0.009)	(0.009-0.011)	(0.010-0.012)	(0.011-0.014)	(0.012-0.015)	(0.013-0.017)	(0.014-0.019)
45-day	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.010	0.011	0.012
	(0.003-0.004)	(0.004-0.005)	(0.005-0.006)	(0.006-0.007)	(0.007-0.008)	(0.007-0.009)	(0.008-0.010)	(0.009-0.011)	(0.010-0.012)	(0.010-0.013)
60-day	0.003	0.004	0.005	0.005	0.006	0.007	0.008	0.008	0.009	0.010
	(0.003-0.003)	(0.003-0.004)	(0.004-0.005)	(0.005-0.006)	(0.006-0.007)	(0.006-0.008)	(0.007-0.009)	(0.007-0.009)	(0.008-0.010)	(0.008-0.011)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Back to Top

PF graphical

Please refer to NOAA Atlas 14 document for more information.

TRAVEL TIME VELOCITY



. 11

APPENDIX B

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PRELIMINARY HYDROLOGY REPORT TO SUPPORT THE PLEASANT VALLEY PROPOSED DRAINAGE BASIN FIGURE 3



 \Box

600

PROPOSED RUNOFF DIRECTION SUBBASINS

PROJECT BOUNDARY

PROPOSED LOT LINES

HYDROLOGIC BASIN

(e)CONTOURS

PROPOSED AC AREA

PROPOSED PADS

TIME OF CONCENTRATION PATH

LEGEND





SLOPE CONSTRAINT MAP

SLOPE CONSTRAINT MAP

2/15/2019
1"=200'
FRY.001



PRELIMINARY COVER SHEET SHEET 1 of 7



THE TRUCKEE MEADOWS REGIONAL GPS "VRS" NETWORK. THE SPARKS MODIFIED SCALE FACTOR OF 1.000197939 (R/S 2775, R/S 3396, & R/S 3885). ALL





PRELIMINARY SITE PLAN SHEET 2 of 7

1. ALL STREETS WITHIN THE TENTATIVE MAP ARE PROPOSED PUBLIC UNLESS NOTED OTHERWISE.

LEGEND

 PROJECT BOUNDARY
 PROPOSED LOT LINE
 EXISTING LOT LINE
PROPOSED A.C. PAVEMENT ARE
 EASEMENT
 EXISTING EASEMENT
EXISTING PAVED ROAD





2/15/2019 1"=100' FRY.0





BASIS OF ELEVATION

BASIS OF ELEVATIONS IS THE RENO DATUM, NAVD 1988



PLEASANT VALLEY ESTATES TENTATIVE MAP

...... A.C. PAVEMENT AREA CONCRETE AREA RETAINING WALL ______ SD_____ STORM DRAIN MAIN (DASHED IF EXISTING) GRADE BREAK 90.00 FI PROPOSED GRADE @ FLOWLINE 80.00

ZONE X.

DESIGN.

EARTHWORK QUANTITIES

TOTAL PROJECT TOTAL DISTURBE TOTAL AREA >3 EARTHWORK QU. NET EXPORT

ROJECT A ISTURBED REA >30%	AREA		ACRES ACRES ACRES
ORK QUAN PORT		230,922 0	CUYDS CUYDS
		Constant of the second	PH G.
DATE: SCALE: JOB #:	2/15/2019 1"=40' FRY.01	TEC	SHEET 3 CIVIL ENGINEERING CONSULTANTS 9437 DOUBLE DIAMOND PARKWAY, STE 17 REND, NEVADA BEGGI PH (775) 352-7900 ~ PAX (775) 352-7929

4) ALL 3:1 SLOPES TO BE TREATED WITH EITHER DG MULCH, 4" ROCK MULCH OR REVEG SEEDING MIX PER LANDSCAPE ARCHITECT'S RECOMENDATIONS WITH FINAL DESIGN. 5) DUST PALLIATIVE AND SILT FENCES TO BE UTILIZED ON ALL DISTURBED AREAS UNDEVELOPED FOR OVER 30 DAYS. ADDITIONAL BMPS TO BE PROVIDED AS REQUIRED.

LANDSCAPE ARCHITECT'S RECOMENDATIONS WITH FINAL

2) ENTIRE PROJECT LOCATED WITHIN FEMA UNSHADED 3) ALL 2:1 SLOPES ALONG CHANCE LANE TO BE COVERED WITH ﷺ Ì Ї Ї ĞËGÄÜ ΦΆΪ ΦΊΑ̈́Ι ŒIJÁŨĐŪ ŪÃOĐU VÒÔP ÞÔOŒŠÁOÞÕ Œ ÒOÜ ŒĂŒĐÖ ĐU ÜÁ

PROPOSED GRADE @ TOP OF WALL PROPOSED GRADE @ BOTTOM OF WALL PROPOSED GRADE @ TOP OF CURB 4700 EXISTING CONTOUR LINE ----- EXISTING LOT LINE LOT #3 LOT NUMBERS SLOPE INDICATOR ——————— EXTENTS OF GRADING APPROXIMATE AREAS WITH SLOPES >30% NOTES: 1) ADD 4600 FEET TO ALL SPOT ELEVATIONS.

LEGEND

STORM DRAIN (SEE DESCRIPTION)

CATCH BASIN (HOLLOW IF EXISTING)

PROPOSED GRADE @ FINISH GRADE

PROPOSED GRADE @ GRADEBREAK

PROPOSED GRADE @ HIGHPOINT

PROPOSED GRADE @ LOWPOINT

(DASHED IF EXISTING)

STORM DRAIN MANHOLE (HOLLOW IF EXISTING)

----- PROJECT BOUNDARY



PRELIMINARY GRADING PLAN SHEET 4 of 7





9437 DOUBLE DIAMOND PARKWAY, STE 17 RENO, NEVADA 89521 PH (775) 352-7800 ~ FAX (775) 352-7929





PRELIMINARY UTILITY PLAN SHEET 6 of 7

1) ALL PROPOSED WATER TO BE OWNED AND MAINTAINED

BY TRUCKEE MEADOWS WATER AUTHORITY. 2) ALL PROPOSED SEWER TO BE PUBLICLY OWNED AND MAINTAINED. 3) ALL PROPOSED STORM DRAIN TO BE PUBLICLY OWNED AND MAINTAINED.









SECTION B-B



PRELIMINARY CROSS-SECTIONS SHEET 7 of 7





SECTION A-A









