



Board of Adjustment Staff Report

Meeting Date: July 11, 2018

Agenda Item: 8C

SPECIAL USE PERMIT CASE NUMBER: WSUP18-0012 (Lemmon Drive Estates)

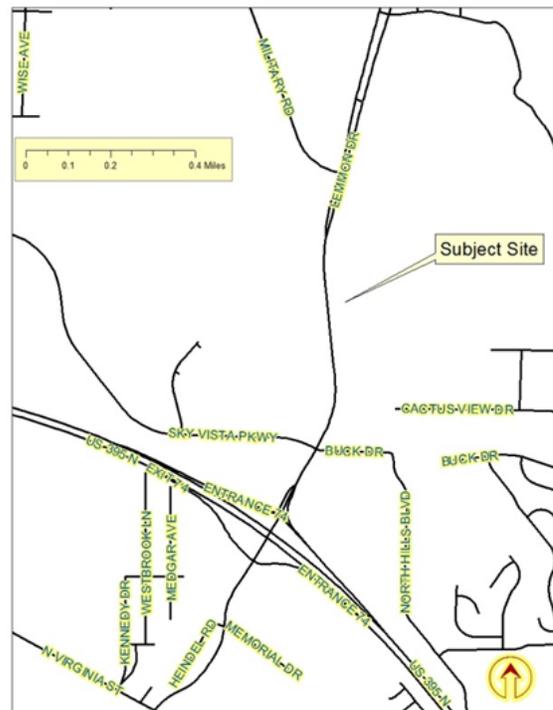
BRIEF SUMMARY OF REQUEST: Special Use Permit for after-the-fact grading done without appropriate permits that triggers Major Grading.

STAFF PLANNER: Planner's Name: Roger Pelham, MPA, Senior Planner
Phone Number: 775.328.3622
E-mail: rpelham@washoecounty.us

CASE DESCRIPTION

For possible action, hearing, and discussion to approve a special use permit for after-the-fact grading done without appropriate permits that triggers Major Grading. The grading done includes the construction of a driveway or road that traverses a slope of 30% or greater.

Applicant/Property Owner:	Chuck Bluth/Lakes at Lemmon Valley, LLC
Location:	East side of Lemmon Drive, approximately 700 feet south of its intersection with Military Road
APN:	552-210-18
Parcel Size:	± 33.97 acres
Master Plan:	Suburban Residential (SR)
Regulatory Zone:	Medium Density Suburban (MDS) - 3 dwellings per acre
Area Plan:	North Valleys
Citizen Advisory Board:	North Valleys
Development Code:	Authorized in Article 438
Commission District:	5 – Commissioner Herman



STAFF RECOMMENDATION

APPROVE

APPROVE WITH CONDITIONS

DENY

POSSIBLE MOTION

I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Washoe County Board of Adjustment approve, with conditions included at Exhibit A, Special Use Permit Case Number WSUP18-0012 for Chuck Bluth/Lakes at Lemmon Valley, LLC, having made all five findings in accordance with Washoe County Code Section 110.810.30.

(Motion with Findings on Page 12)

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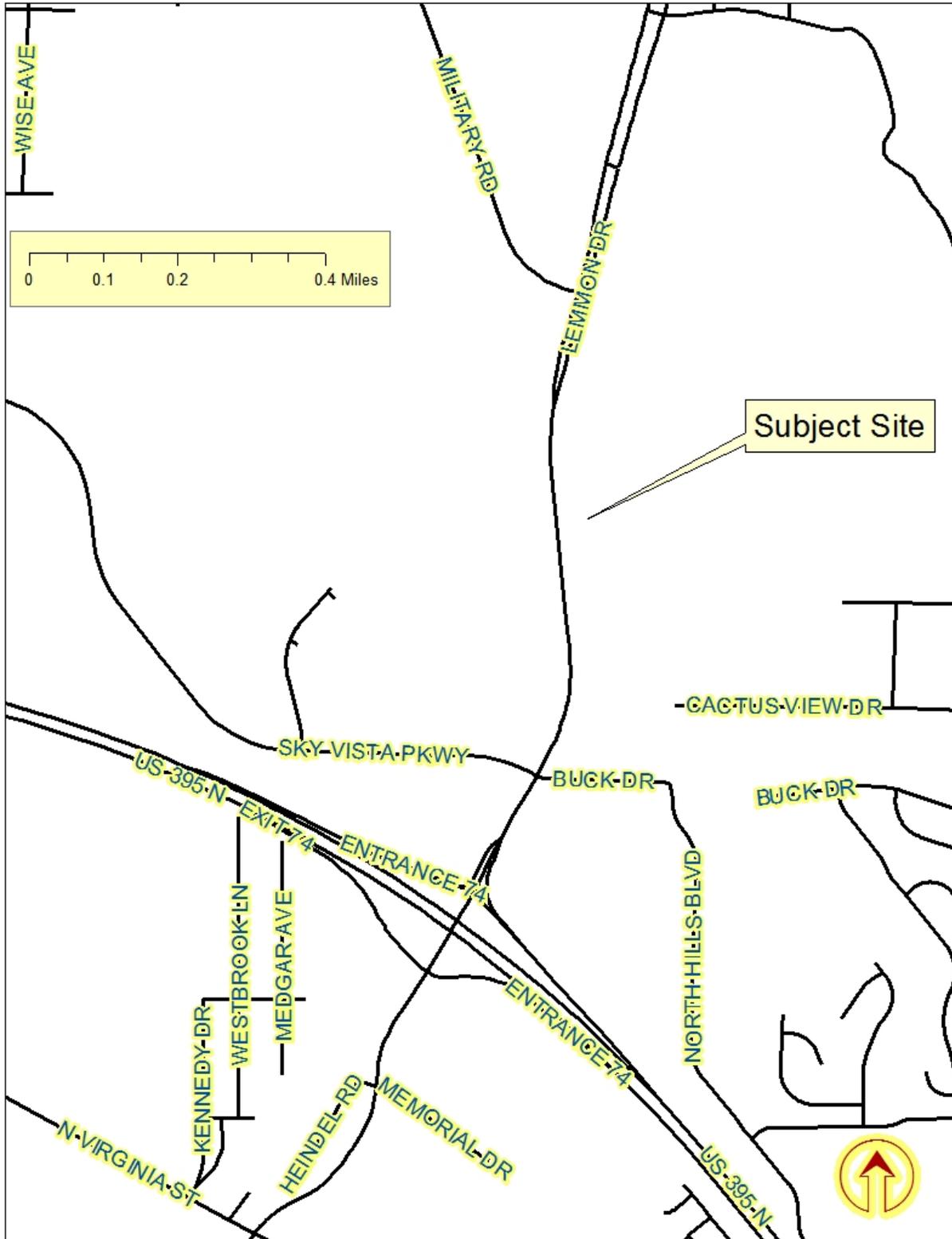
Special Use Permit

The purpose of a Special Use Permit is to allow a method of review to identify any potential harmful impacts on adjacent properties or surrounding areas for uses that may be appropriate within a regulatory zone; and to provide for a procedure whereby such uses might be permitted by further restricting or conditioning them so as to mitigate or eliminate possible adverse impacts. If the Board of Adjustment grants an approval of the Special Use Permit, that approval is subject to Conditions of Approval. Conditions of Approval are requirements that need to be completed during different stages of the proposed project. Those stages are typically:

- Prior to permit issuance (i.e. a grading permit, a building permit, etc.)
- Prior to obtaining a final inspection and/or a certificate of occupancy on a structure
- Prior to the issuance of a business license or other permits/licenses
- Some Conditions of Approval are referred to as “Operational Conditions.” These conditions must be continually complied with for the life of the business or project.

The Conditions of Approval for Special Use Permit Case Number WSUP18-0012 are attached to this staff report and will be included with the Action Order, if approval is granted by the Board of Adjustment.

The subject property is designated as Medium Density Suburban (MDS). Major Grading may be approved in all regulatory zones subject to the approval of a special use permit, in accordance with Article 438, Grading. The applicant has already done Major Grading without having first obtained the appropriate approvals from Washoe County. Therefore, the applicant is seeking approval of this SUP from the Board of Adjustment, for after-the-fact grading done without appropriate permits, that triggers Major Grading. The grading done includes the construction of a driveway or road that traverses a slope of 30% or greater.



Vicinity Map

Project Evaluation

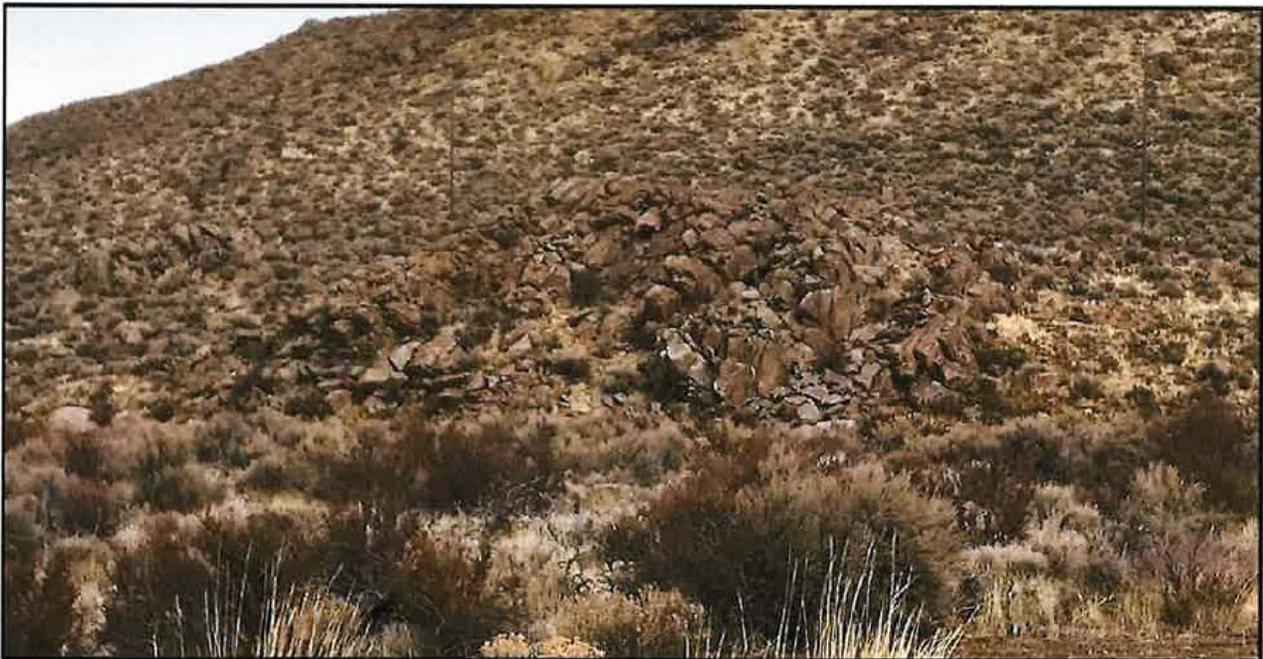
In March of this year the applicant applied for approval of a tentative subdivision map to allow a 98-lot single-family residential, common open space subdivision on the subject site. During the May 1, 2018 hearing before the Washoe County Planning Commission (PC) on that subdivision request, several neighbors noted that area on the subject site, which was proposed to remain undisturbed open space, had been graded and significant excavation had been recently done. The grading had been done after staff had conducted a site inspection. Ultimately, the PC denied the requested subdivision application. The applicant has appealed that denial to the Board of County Commissioners, but has requested to delay the hearing on the requested subdivision until after the unpermitted grading has been addressed appropriately.

On May 3, 2018 the applicant's representative and staff conducted a joint site inspection and determined that the grading done had exceeded the thresholds for Major Grading, specifically, Section 110.438.35(a)(3) which states that Major Grading includes, "Any driveway or road that traverses any slope of thirty (30) percent or greater (steeper)".

It is also important to note that under the Washoe County Development Code, Grading is defined as, "any clearing, excavation, cutting, filling, or other disturbance of the natural state of the landform or natural vegetation and/or any combination thereof."

The grading that was done included the excavation of approximately 340 cubic yards of large rocks or boulders from the lower portion of a hill within the proposed undisturbed open space area of the proposed residential subdivision. The grading also included the disturbance (running over with excavation equipment) an area of approximately 30,000 square feet (\pm 0.7 acres). The grading also included the creation of a roadway across the existing natural drainage way to access the area (hill) from which the rocks and boulders were excavated. The slope of the natural drainage way was greater than 30%.

The photo below shows the area of excavation prior to disturbance and was provided by the applicant in the application for this special use permit.



The following photo shows the area of excavation after the excavation was done.



The following photo shows the roadway which was graded through the natural drainage way.



The following photo shows the continuation of the newly-graded roadway toward the existing sewer access road.



The following photos show the area disturbed by placing the excavated rocks and boulders and the rocks and boulders that have been stockpiled.





Due to the nature of the grading and disturbance of an area otherwise proposed to remain undisturbed, staff is reluctant to recommend approval of the special use permit request. If the special use permit is denied, then Washoe County Code Enforcement will begin the compliance process in accordance with Article 438, which will likely result in the applicant being issued a "remediation order." That order would require the applicant to remedy any identified threats to the public health and safety, but would not provide the opportunity for conditions of approval to remedy other types of damage that have also been done. For this reason staff is recommending approval of the special use permit, subject to a very stringent set of conditions.

No conditions, remediation, revegetation, or restoration will ever completely erase the impact of the grading that has been done. At best, staff hopes that the damage will be made less.

Recommended conditions of approval are intended to mitigate the visual impact, mitigate erosion, to inhibit access, and to encourage the growth of native vegetation. Recommended conditions of approval include: replacing rocks and boulders at the base of the slope from which they were excavated, under the direction of a landscape architect; placing rocks and boulders along both sides of the natural drainage way, where the new roadway was graded; placing rocks and boulders along the new roadway to limit access to the disturbed area; placing rocks and boulders along existing roads or two-track trails to further inhibit access to the disturbed area; re-seeding and provision of temporary irrigation to all disturbed areas; fencing surrounding the base of the slope to inhibit further disturbance during any future construction activities that may occur; and prohibition of exportation of rocks and boulders from the subject site.

North Valleys Citizen Advisory Board (NV CAB)

The proposed project was presented by the applicant's representative at the regularly scheduled Citizen Advisory Board meeting on June 11, 2018. The draft CAB minutes (Exhibit C to this report) reflect discussion on the following items:

- Code Enforcement should be involved
- The grading done is a violation of the Code
- The grading done was unknown to the applicant's representative prior to the Planning Commission hearing

- The rock outcropping within the graded area should be protected
- Boulders should be replaced, but not where they are in danger of rolling off the slope
- Access to the area should be restricted
- The area should be restored
- The drainage way should be restored
- Fines or penalties should be assessed against the applicant

Reviewing Agencies

The following agencies received a copy of the project application for review and evaluation:

- US Army Corps of Engineers
- State of Nevada
 - Environmental Protection
 - Transportation
 - Water Resources
 - Wildlife (NDOW)
- Washoe County Community Services Department
 - Planning and Building Division
 - Geographic Information Systems
 - Engineering and Capital Projects Division
 - Utilities/Water Rights
 - Parks and Open Spaces
- Washoe County Health District
 - Air Quality Management Division
 - Vector-Borne Diseases Program
 - Environmental Health Services Division
- Washoe County Regional Animal Services
- Washoe County Sheriff
- Truckee Meadows Fire Protection District
- Regional Transportation Commission
- Washoe – Storey Conservation District
- City of Reno

Three out of the nineteen above listed agencies/departments provided comments and/or recommended conditions of approval in response to their evaluation of the project application. A **summary** of each agency's comments and/or recommended conditions of approval and their contact information is provided. The Conditions of Approval document is attached to this staff report and will be included with the Action Order, if approval is granted by the Board of Adjustment.

- Washoe County Planning and Building Division addressed the restoration of the graded area and provided conditions requiring replacing rocks and boulders that had been removed without appropriate permits.

Contact: Roger Pelham, 775.328.3622, rpelham@washoecounty.us

- Washoe County Engineering and Capital Projects Division addressed technical requirements for a grading permit, and required a bond for completion of the project.
Contact: Leo Vesely, 775.328.2041, lvesely@washoecounty.us
- Washoe County Health District noted that a Dust Control Permit is required prior to any additional work being done on the project.
Contact: Mike Wolf, 775.784.7206, mwolf@washoecounty.us

Staff Comment on Required Findings

WCC Section 110.810.30, Article 810, *Special Use Permits*, requires that all of the following findings be made to the satisfaction of the Washoe County Board of Adjustment before granting approval of the request. Staff has completed an analysis of the special use permit application and has determined that the proposal is in compliance with the required findings as follows.

1. Consistency. That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the North Valleys Area Plan.
Staff Comment. Major Grading is not prohibited by the North Valleys Area Plan. Policy NV.8.3 requires, "that hillside grading will establish an undulating naturalistic appearance by creating varying curvilinear contours." The plans submitted for restoration of the disturbed area, with the conditions of approval as recommended by staff, will be required to meet this policy.
2. Improvements. That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven.
Staff Comment. The special use permit is for restoration of an area disturbed by grading without appropriate permits. Roadways and other improvements are conditioned to be removed.
3. Site Suitability. That the site is physically suitable for Major Grading for restoration of grading without appropriate permits, and for the intensity of such a development.
Staff Comment. The site proposed for Major Grading is the area that has been disturbed by grading without appropriate permits.
4. Issuance Not Detrimental. That issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area.
Staff Comment. The issuance of the special use permit will not be significantly detrimental to the public health, safety or welfare or injurious to the property or improvements of adjacent properties, or detrimental to the character of the surrounding area. The reason for the special use permit is to restore an area that was graded without appropriate permits. The grading done without appropriate permits may be seen to be significantly detrimental to the public health, safety or welfare or injurious to the property or improvements of adjacent properties, or detrimental to the character of the surrounding area.
5. Effect on a Military Installation. Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.
Staff Comment. There is no military installation within the area required to be noticed for this special use permit.

Recommendation

Those agencies which reviewed the application recommended conditions in support of approval of the special use permit to restore an area graded without appropriate permits. Therefore, after a

thorough analysis and review, Special Use Permit Case Number WSUP18-0012 is being recommended for approval with conditions. Staff offers the following motion for the Board's consideration.

Motion

I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Washoe County Board of Adjustment approve, with conditions included at Exhibit A, Special Use Permit Case Number WSUP18-0012 for Chuck Bluth/Lakes at Lemmon Valley, LLC, having made all five findings in accordance with Washoe County Code Section 110.810.30:

1. Consistency. That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the North Valleys Area Plan.
2. Improvements. That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven.
3. Site Suitability. That the site is physically suitable for Major Grading for restoration of grading without appropriate permits, and for the intensity of such a development.
4. Issuance Not Detrimental. That issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area.
5. Effect on a Military Installation. Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.

Appeal Process

Board of Adjustment action will be effective 10 calendar days after the written decision is filed with the Secretary to the Board of Adjustment and mailed to the applicant, unless the action is appealed to the Washoe County Board of County Commissioners, in which case the outcome of the appeal shall be determined by the Washoe County Board of County Commissioners. Any appeal must be filed in writing with the Planning and Building Division within 10 calendar days from the date the written decision is filed with the Secretary to the Board of Adjustment and mailed to the applicant.

Applicant/Owner/Developer: Chuck Bluth/Lakes at Lemmon Valley LLC
4655 Longley Lane, Suite 107
Reno, NV 89502

Representatives: CFA, Inc.
Attn: Dave Snelgrove
1150 Corporate Blvd
Reno, NV 89502



Conditions of Approval

Special Use Permit Case Number WSUP18-0012

The project approved under Special Use Permit Case Number WSUP18-0012 shall be carried out in accordance with the Conditions of Approval granted by the Board of Adjustment on July 11, 2018. Conditions of Approval are requirements placed on a permit or development by each reviewing agency. These Conditions of Approval may require submittal of documents, applications, fees, inspections, amendments to plans, and more. These conditions do not relieve the applicant of the obligation to obtain any other approvals and licenses from relevant authorities required under any other act.

Unless otherwise specified, all conditions related to the approval of this Special Use Permit shall be met or financial assurance must be provided to satisfy the conditions of approval prior to issuance of a grading or building permit. The agency responsible for determining compliance with a specific condition shall determine whether the condition must be fully completed or whether the applicant shall be offered the option of providing financial assurance. All agreements, easements, or other documentation required by these conditions shall have a copy filed with the County Engineer and the Planning and Building Division.

Compliance with the conditions of approval related to this Special Use Permit is the responsibility of the applicant, his/her successor in interest, and all owners, assignees, and occupants of the property and their successors in interest. Failure to comply with any of the conditions imposed in the approval of the Special Use Permit may result in the institution of revocation procedures.

Washoe County reserves the right to review and revise the conditions of approval related to this Special Use Permit should it be determined that a subsequent license or permit issued by Washoe County violates the intent of this approval.

For the purpose of conditions imposed by Washoe County, “may” is permissive and “shall” or “must” is mandatory.

Conditions of Approval are usually complied with at different stages of the proposed project. Those stages are typically:

- Prior to permit issuance (i.e., grading permits, building permits, etc.).
- Prior to obtaining a final inspection and/or a certificate of occupancy.
- Prior to the issuance of a business license or other permits/licenses.
- Some “Conditions of Approval” are referred to as “Operational Conditions.” These conditions must be continually complied with for the life of the project or business.

The Washoe County Commission oversees many of the reviewing agencies/departments with the exception of the following agencies.

- **The DISTRICT BOARD OF HEALTH, through the Washoe County Health District, has jurisdiction over all public health matters in the Health District. Any conditions set by the Health District must be appealed to the District Board of Health.**

FOLLOWING ARE CONDITIONS OF APPROVAL REQUIRED BY THE REVIEWING AGENCIES. EACH CONDITION MUST BE MET TO THE SATISFACTION OF THE ISSUING AGENCY.

Washoe County Planning and Building Division

1. The following conditions are requirements of Planning and Building, which shall be responsible for determining compliance with these conditions.

Contact Name – Roger Pelham, (775) 328-3622, rpelham@washoecounty.us

- a. The applicant shall demonstrate substantial conformance to the plans approved as part of this special use permit. The Planning and Building Division shall determine compliance with this condition.
- b. The applicant shall submit complete construction plans and building permits shall be issued within two years from the date of approval by Washoe County. The applicant shall complete construction within the time specified by the building permits. Compliance with this condition shall be determined by the Planning and Building Division.
- c. A note shall be placed on all construction drawings and grading plans stating:

NOTE

- Should any cairn or grave of a Native American be discovered during site development, work shall temporarily be halted at the specific site and the Sheriff's Office as well as the State Historic Preservation Office of the Department of Conservation and Natural Resources shall be immediately notified per NRS 383.170.
- d. The applicant shall replace rocks and boulders at the base of the slope from which they were excavated. Replacement of rocks and boulders shall be done in a manner to mimic the adjacent undisturbed area. Replacement of rocks shall be conducted under the direction of a landscape architect, registered in the State of Nevada.
 - e. The applicant shall replace rocks and boulders along both sides of the natural drainage way, where the new roadway was graded. The contour of the land shall be returned to its pre-disturbance state. Replacement of rocks and boulders shall be done in a manner to mimic the adjacent undisturbed area.
 - f. The applicant shall place rocks and boulders along the newly graded roadway to inhibit access to the disturbed area. Replacement of rocks and boulders shall be done in a manner to mimic the adjacent undisturbed area.
 - g. The applicant shall place rocks and boulders along existing roads and dirt tracks to inhibit access. Replacement of rocks and boulders shall be done in a manner to mimic the adjacent undisturbed area.
 - h. The applicant shall re-seed all disturbed areas with a native seed mix of the type of vegetation common to the adjacent undisturbed area.
 - i. The applicant shall provide temporary irrigation to all disturbed areas for at least three years.
 - j. Prior to any work on the site and prior to any equipment being brought onto the subject site, the applicant shall place temporary construction fencing around all disturbed areas to inhibit access during and after grading and construction activities and allow revegetation efforts to proceed.

- k. Rocks and boulders shall not be exported from the subject site.
- l. All rocks and boulders that had been previously excavated shall be replaced on the subject site.
- m. Equipment shall not be allowed to be operated on any area of the subject site that has not been previously disturbed.
- n. Additional area of disturbance or grading on the subject site is prohibited.

Washoe County Engineering and Capital Projects

- 2. The following conditions are requirements of the Engineering Division, which shall be responsible for determining compliance with these conditions.

Contact Name – Leo R. Vesely, P.E., (775) 328-2041, ivesely@washoecounty.us

- a. A complete set of construction improvement drawings, including an on-site grading plan, shall be submitted when applying for a building/grading permit. Grading shall comply with best management practices (BMP's) and shall include detailed plans for grading, site drainage, erosion control (including BMP locations and installation details), slope stabilization, and mosquito abatement. Placement or removal of any excavated materials shall be indicated on the grading plan. Silts shall be controlled on-site and not allowed onto adjacent property.
- b. For construction areas larger than 1 acre, the developer shall complete and submit the Construction Permit Submittal Checklist and pay the Construction Stormwater Inspection Fee prior to obtaining a grading permit.
- c. If material is to be exported from the site, the plans shall note where exported materials will be taken and a grading permit shall be obtained for the import site.
- d. A grading bond of \$2,000/acre of disturbed area shall be provided to the Engineering Division prior to any grading.
- e. All disturbed areas left undeveloped for more than 30 days shall be treated with a dust palliative. Disturbed areas left undeveloped for more than 45 days shall be revegetated.
- f. The following note shall be added to the grading plan; "All properties, regardless if they are located within or outside of a FEMA designated flood zone, may be subject to flooding. The property owner is required to maintain all drainage easements and natural drainages and not perform or allow unpermitted and unapproved modifications to the property that may have detrimental impacts to surrounding properties."

Washoe County Health District

- 3. The following conditions are requirements of the Health District, which shall be responsible for determining compliance with these conditions.

Contact Name – Michael Wolf, (775) 784.7026, mwolf@washoecounty.us

- a. A dust control permit is required prior to any work beginning on the subject site.

*** End of Conditions ***

From: [Schull, Shyanne](#)
To: [Pelham, Roger](#)
Subject: WSUP18-0012 (Lemmon Drive Estates)
Date: Friday, May 25, 2018 3:49:40 PM
Attachments: [image003.png](#)

Roger,
WCRAS does not have any concerns about the above mentioned application.

Shyanne Schull
Director
Washoe County Regional Animal Services
2825A Longley Lane
Reno, NV 89502
775.328.2142 Office
775.322.3647 Dispatch
Sschull@washoecounty.us
www.washoecounty.us
www.washoecounty.us/animal-services

*"Promoting responsible care of animals
through education, proactive outreach,
and regulation, making Washoe County
a safe community".*



From: [Fagan, Donna](#)
To: [Olander, Julee](#); [Pelham, Roger](#)
Subject: FW: May Agency Review Memo II
Date: Tuesday, May 22, 2018 10:08:03 AM

Julee and Roger,

Comments below for WSUP18-0009, WSUP18-0011, and WSUP18-0012.

Donna Fagan

Office Support Specialist ½Washoe County Community Services Department ½Planning and Building Division
dfagan@washoecounty.us ½o 775.328.3616 ½f 775.328.6133 ½1001 E. Ninth St., Bldg. A, Reno, NV 89520



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From: Wolf, Mike
Sent: Tuesday, May 22, 2018 9:59 AM
To: Fagan, Donna
Subject: RE: May Agency Review Memo II

All three will require dust control permits, prior to any work stating.

Thanks

Michael Wolf, CEM

Permitting and Enforcement Branch Chief | Air Quality Management Division | Washoe County Health District
mwolf@washoecounty.us | O: (775) 784-7206 | 1001 E. Ninth St., Bldg. B, Reno, NV 89512

OurCleanAir.com

**WASHOE COUNTY
HEALTH DISTRICT**
ENHANCING QUALITY OF LIFE



From: [Lawson, Jacqueline](#)
To: [Pelham, Roger](#)
Cc: [Dayton, Brittany](#)
Subject: May Agency Review Memo II
Date: Wednesday, May 30, 2018 4:28:32 PM

Hello Roger,

The EMS Program does not have any comments for Special Use Permit Case Number WSUP18-0011 (Murry Grading) included in May Agency Review Memo II (item 2).

The EMS Program also does not have any comments for Special Use permit Case Number WSUP18-0012 (Lemmon Drive Estates) included in May Agency Review Memo II (item 3).

Please let me know if you have any questions.

Thank you

Jackie

Jackie Lawson

Office Support Specialist | Emergency Medical Services and Public Health Preparedness

Washoe County District Health District

jlawson@washoecounty.us | O: (775) 326-6051

1001 E. Ninth St., Bldg. B, Reno, NV 89512

**WASHOE COUNTY
HEALTH DISTRICT**
ENHANCING QUALITY OF LIFE



From: [Kaneyuki, Bradley](#)
To: [Pelham, Roger](#)
Subject: RE: May Agency Review Memo II.pdf
Date: Tuesday, May 22, 2018 6:31:47 AM

Re: WSUP18-0012 (Lemmon Drive Estates)
APN 552-210-18
CFA

Morning Roger,

There are no street name reservations for WSUP18-0012, Lemmon Drive Estates.

Bradley Kaneyuki
Technology Systems Developer II
Regional Services/GIS
(775) 328-2344
1001 E 9th St, Bldg C, Reno, NV 89512



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

May 24, 2018

FR: Chrono/PL 183-18

Mr. Roger Pelham, Senior Planner
Community Services Department
Washoe County
PO Box 11130
Reno, NV 89520

RE: WSUP18-0012 (Lemmon Drive Estates)

Dear Mr. Pelham,

We have reviewed the subject application and have the following comments and recommendations.

Comments and Recommendations:

1. The 2040 Regional Transportation Plan (RTP) identifies Lemmon Drive as an arterial with moderate-Access control. To maintain arterial capacity, the following RTP access management standards should be maintained.

Access Management Standards-Arterials ¹ and Collectors							
Access Management Class	Posted Speeds	Signals Per Mile and Spacing ²	Median Type	Left From Major Street? (Spacing from signal)	Left From Minor Street or Driveway?	Right Decel Lanes at Driveways?	Driveway Spacing ³
Moderate Access Control	40-45 mph	3 or less Minimum spacing 1590 feet	Raised or painted w/turn pockets	Yes 500 ft. minimum	No, on 6 or 8-lane roadways w/o signal	Yes ⁴	200 ft./300 ft.

¹ On-street parking shall not be allowed on any new arterials. Elimination of existing on-street parking shall be considered a priority for major and minor arterials operating at or below the policy level of service.

² Minimum signal spacing is for planning purposes only; additional analysis must be made of proposed new signals in the context of planned signalized intersections, and other relevant factors impacting corridor level of service.

³ Minimum spacing from signalized intersections/spacing other driveways.

⁴ If there are more than 80 inbound, right-turn movements during the peak-hour.

2. The policy Level of Service (LOS) standard for Lemmon Drive is LOS D. Policy LOS for intersections shall be designed to provide a level of service consistent with maintaining the policy level of service of the intersection corridor. This project should be required to meet all the conditions necessary to complete road improvements to maintain policy LOS standards.
3. The 2040 RTP identifies Lemmon Drive from US 395 to Military Road to be widened from 4 to 6 lanes by 2026. Dedication of right-of-way or setbacks adequate to complete

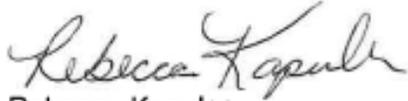
RTC Board: Ron Smith (Chair) • Bob Lucey (Vice Chair) • Paul McKenzie • Vaughn Hartung • Neoma Jardon
PO Box 30002, Reno, NV 89520 • 1105 Terminal Way, Reno, NV 89502 • 775-348-0400 • rtcwashoe.com

RTP improvements should be required as a condition of approval. See the attached typical 120' right-of-way section for a 6-lane facility. Additional right-of-way may be required for dedicated turn lanes at intersections.

4. The applicant may be eligible for RRIF waivers for right-of-way and/or construction of improvements to Lemmon Drive through a RRIF Offset Agreement. To be eligible for RRIF waivers, the capital improvements to Lemmon Drive must be included in the RRIF Capital Improvement Plan (CIP). RRIF eligible intersection improvements are limited to the intersection of two regional roadways. The project access roadways are not regional roadways and therefore, not eligible for RRIF Waivers the RRIF Offset program. The 6th Edition RRIF CIP is currently under development and will include the widening of Lemmon Drive to 6 lanes. Once the RRIF CIP is adopted, the developer may request to enter into a RRIF Offset Agreement through a letter of intent. Questions regarding RRIF waivers should be directed to Julie Masterpool, RTC Engineering Manager – RRIF Traffic Engineer (348-0171).
5. A Traffic Impact Study prepared by Traffic Works was submitted with the application and identifies the project would generate 925 Daily Trips, 73 AM peak hour trips, and 97 PM peak hour trips. Per the RTC access management standards, left turns from the minor street will be prohibited on a 6 lane facility, unless signal warrants are met. If signal warrants aren't warranted for build out of the project, left turn movements from the minor streets at both intersections should be prohibited in the interim condition.
6. A Traffic Impact Study prepared by Traffic Works was subsequently submitted as an addendum to the application. Recommended improvements included limiting the two project driveways to right in and right out movements only and improvements to the Lemmon Drive/Military Road intersection to allow enough space for large passenger vehicles to make northbound to southbound u-turns.
7. The RTP, the RTC Bicycle/Pedestrian Master Plan and the Nevada Department of Transportation Pedestrian Safety Action Plan, all indicate that new development and re development will be encouraged to construct pedestrian and bicycle facilities, internal and/or adjacent to the development, within the regional road system. Also, these plans recommend that the applicant be required to design and construct any sidewalks along the frontage of the property in conformance with the stated ADA specifications.

Thank you for the opportunity to comment on these applications. Please feel free to contact me at 775-332-0174 or email me at rkapuler@rtcwashoe.com if, you have any questions or comments.

Sincerely,



Rebecca Kapuler
Planner

RK/jm

Attachment

Copies: Mojra Hauenstein, Washoe County Community Services
Trevor Lloyd, Washoe County Community Services
Jae Pullen, Nevada Department of Transportation, District II
Daniel Doenges, Regional Transportation Commission
Tina Wu, Regional Transportation Commission
Mark Maloney, Regional Transportation Commission
Julie Masterpool, Regional Transportation Commission
David Jickling, Regional Transportation Commission

/807 Lemmon Drive Estates

From: [O'Connor, Tim](#)
To: [Pelham, Roger](#)
Subject: WSUP18-0011 (Murry Grading) and WSUP18-0012 (Lemmon Drive Estates)
Date: Tuesday, May 22, 2018 7:08:50 AM

Roger,

With regard to WSUP18-0011 (Murry Grading) and WSUP18-0012 (Lemmon Drive Estates), the Washoe County Sheriff's Office has no issues or concerns with the projects.

Captain Tim O'Connor
Washoe County Sheriff's Office
Patrol Division
775-328-3354
PRIDE - Professionalism, Respect, Integrity, Dedication, Equality

From: [Simpson, Tim](#)
To: [Pelham, Roger](#)
Cc: [Klein, Kris](#); [West, Walt](#)
Subject: Board of Adjustment Cases
Date: Wednesday, June 06, 2018 8:22:48 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Roger,

The utility has no comments or conditions for cases WSUP18-011 (Murry Grading) or WSUP18-0012 (Lemmon Drive Estates).



Timothy Simpson, P.E.

Licensed Engineer | Community Services Department

tsimpson@washoecounty.us | Office: (775) 954-4648 | Fax: (775) 328-3699

1001 East 9th Street, Bldg A, Reno, NV 89512





WASHOE COUNTY
COMMUNITY SERVICES DEPARTMENT
Engineering and Capital Projects

1001 EAST 9TH STREET
 PO BOX 11130
 RENO, NEVADA 89520-0027
 PHONE (775) 328-3600
 FAX (775) 328.3699

Date: June 11, 2018
 To: Roger Pelham, Planning and Building Division
 From: Leo R. Vesely, P.E., Engineering and Capitol Projects Division
 Re: Lemmon Drive Estates Special Use Permit WSUP18-0012
 APNs 552-210-18

GENERAL PROJECT DISCUSSION

Washoe County Engineering and Capital Project staff has reviewed the above referenced application. The SUP is for the construction of an access road and for the removal of approximately 340 cubic yards of boulders for use in a project permitted within the City of Reno. The Engineering and Capital Projects Division recommends approval with the following comments and conditions of approval which supplement applicable County Code and are based upon our review of the application prepared by CFA Inc. The County Engineer shall determine compliance with all the following conditions of approval.

For questions related to sections below, please see the contact name provided.

GENERAL CONDITIONS

Contact Information: Leo R. Vesely, P.E. (775) 328-2041

1. A complete set of construction improvement drawings, including an on-site grading plan, shall be submitted when applying for a building/grading permit. Grading shall comply with best management practices (BMP's) and shall include detailed plans for grading, site drainage, erosion control (including BMP locations and installation details), slope stabilization, and mosquito abatement. Placement or removal of any excavated materials shall be indicated on the grading plan. Silts shall be controlled on-site and not allowed onto adjacent property.
2. For construction areas larger than 1 acre, the developer shall complete and submit the Construction Permit Submittal Checklist and pay the Construction Stormwater Inspection Fee prior to obtaining a grading permit.
3. If material is to be exported from the site, the plans shall note where exported materials will be taken and a grading permit shall be obtained for the import site.
4. A grading bond of \$2,000/acre of disturbed area shall be provided to the Engineering Division prior to any grading.
5. All disturbed areas left undeveloped for more than 30 days shall be treated with a dust palliative. Disturbed areas left undeveloped for more than 45 days shall be revegetated.
6. The following note shall be added to the grading plan; "All properties, regardless if they are located within or outside of a FEMA designated flood zone, may be subject to flooding. The property owner is required to maintain all drainage easements and natural drainages and not



INTEGRITY



EFFECTIVE
COMMUNICATION



QUALITY
PUBLIC SERVICE

WWW.WASHOECOUNTY.NV.US

Subject: Lemmon Drive Estates Special Use Permit WSUP18-0012
Date: June 6, 2018
Page: 2

perform or allow unpermitted and unapproved modifications to the property that may have detrimental impacts to surrounding properties.”

TRAFFIC AND ROADWAY (COUNTY CODE 110.436)

Contact Information: Clara Lawson, P.E. (775) 328-3603

There are no traffic related conditions of approval.

UTILITIES (County Code 422 & Sewer Ordinance)

Contact Information: Tim Simpson, P.E. (775) 954-4648

There are no utility related conditions of approval

From: Patrick Mohn
To: [Pelham, Roger](#)
Subject: "After-the-Fact" grading, Lemmon Drive Estates WSUP18-0012
Date: Thursday, May 31, 2018 8:48:16 AM

Roger,

I don't have any comment except that there should be consequences for them grading without a permit, and I don't understand how the developer can come in with a request for an SUP after the fact. Fortunately, the total disturbance was less than 1 acre, which would not normally require an NDEP stormwater permit, unless the disturbance was near a watercourse. Consequences for grading without authorization is under County purview.

Pat



Patrick A. Mohn, M.Sc., P.E.
UIC Compliance Coordinator
Bureau of Water Pollution Control (BWPC)
Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, NV 89701
p: 775.687.9419 fax: 775.687.4684
pmohn@ndep.nv.gov





NORTH VALLEYS CITIZEN ADVISORY BOARD

changes to

DRAFT: Approval of these draft minutes, or any changes to the draft minutes, will be reflected in writing in the next meeting minutes and/or in the minutes of any future meeting where these minutes are approved by the CAB. Minutes of the regular meeting of the North Valleys Citizen Advisory Board held June 11, 2018 at the North Valleys Regional Park, 8085 Silver Lake Road, Reno, NV.

1. *CALL TO ORDER/ DETERMINATION OF QUORUM - The meeting was called to order at 6:38 p.m. by Ray Lake. A quorum was present.

Present: Teresa Aquila, Ray Lake, Jean Harris, Jennifer Salisbury, Roger Edwards.

2. *PLEDGE OF ALLEGIANCE - Ray Lake led the pledge.

3. *PUBLIC COMMENT –

Roger Pelham, Washoe County Planning said the County is interested in your opinion on how the County should grow. He handed out post cards to complete a survey.

4. APPROVAL OF AGENDA FOR THE MEETING OF MAY 11, 2018 – Roger Edwards moved to approve the agenda for **MAY 11, 2018**. Teresa Aquila seconded the motion to approve the agenda. The motion passed unanimously.

5. APPROVAL OF THE MINUTES FOR THE MEETING OF APRIL 9, 2018 –Teresa Aquila moved to approve the minutes of **APRIL 9, 2018**. Jennifer Salisbury seconded the motion to approve the minutes. Roger Edwards abstained. The motion passed.

6. DEVELOPMENT PROJECTS – The project description is provided below with links to the application or you may visit the Planning Program website and select the Application tab and then the Applications Commission District Five. https://www.washoecounty.us/csd/planning_and_development/index.php

6.A. Special Use Permit Case Number WSUP18-0012 (Lemmon Drive Estates) – Request for community feedback, discussion and possible action to forward community and Citizen Advisory Board comments to Washoe County staff on after-the-fact grading done without appropriate permits, that triggers Major Grading. The grading done includes the construction of a driveway or road that traverses a slope of 30% or greater. (For Possible Action)

- Applicant/ Property Owner: Chuck Bluth, Lakes at Lemmon Valley, LLC
- Location: On the east side of Lemmon Drive, approximately 700 feet south of its intersection with Military Road
- Assessor's Parcel Number: 552-210-18
- Staff: Roger Pelham, Senior Planner; 775-328-3622; rpelham@washoecounty.us
- Reviewing Body: Tentatively scheduled for the Board of Adjustment on July 11, 2018

The request is for a Special Use Permit for Grading. In association with Lemmon Drive Estates tentative map. Land was disturbed by grading. The boulders were removed for other uses.

Dave Snelgrove with AFC, applicant representative was present to answer questions.

Jean Harris said she was at the meeting when this excavation discovery took place. She said the property owner said he wasn't going to do anything with that land, which wasn't true. She asked if there are fines for illegal grading. She asked for the next step. Roger Pelham said the applicant can't take additional action until this is rectified. Roger Pelham said they are requesting this Special Use Permit to bring them into compliance, and applicant has appealed the denial of the tentative map by the Planning Commission. That appeal will go forward to County Commissioners. The applicant asked it to put a hold on the appeal until this Special Use Permit could take place.

Teresa Aquila asked if the road graded is part of proposed development. Roger Pelham said no.

Roger Edward said you cannot grade even if it's a new project. He asked why is any work being done before the appeal process is complete. Roger Pelham said the work was done without permits; that is why we are here today. If the Special Use Permit is approved, certain work can be conducted to restore the disturbed area.

Roger Edwards asked if we need code enforcement to stop them from driving them across the illegal road that was created. Roger Pelham said the code talks about grading, it doesn't address driving across the road. The road was graded illegally. If code enforcement was involved, they would have been involved at the start of the process; code enforcement would require the applicant to get a Special Use Permit which is what they are requesting today.

Roger Edwards said the Special Use Permit is to correct the violation. He asked what prevents the applicant from putting in the road for his project. Roger Pelham said permits are required and work has to be in compliance. Roadwork cannot be done.

Roger Edwards asked if code enforcement been notified. Roger Pelham said no, because we are now in the Special Use Permit process. We are already two steps ahead of code enforcement.

Dave Snelgrove, CFA, project representative said they discovered the illegal grading at the same meeting as the County. They didn't understand the magnitude. The equipment followed a sewer line road. Sage brush had been crushed. Survey crews went out to identify the disturbed land – they identified graded and exposed new earth which includes the rock pile and crushed sage brush. The Special Use Permit will rectify something that should not have happened. There will be Conditions of Approval for this process for restoration. He said the magnitude triggered a need for SUP. The grading done includes the construction of a driveway or road that traverses a slope of 30% or greater as well as boulders were disturbed. This is not a grading permit, it's a Special Use Permit. Dave Snelgrove said the applicant apologized. This sideswiped his project. Dave Snelgrove said they will re-grade the slope back to 30% and replace the rocks. It's a waste of time and money, but we are following the rules; this has to be fixed.

Ray Lake asked what the client proposes to do. Dave Snelgrove said it will come down to the County's Conditions. Dave Snelgrove said they will then have to file a formal grading permit for approval. Dave advised his client not to put another piece of equipment on the land until approved by the County. Dave Snelgrove said he is concerned the rock outcrop will get tagged with graffiti. He said he doesn't want it accessible, and he

recommends the County be present when they are out at the property. Ray Lake said there are a few options – bite the bullet and approve the permit, or we could deny it.

Dave Snelgrove asked if anyone has gone out to see the property. Jean Harris said she has been out there. Dave said its helpful to get recommendations in a form of a condition such as replacing the boulders. He said whether you want to support it or not, we are trying to find a solution for something that should not have happened.

Teresa Aquila said if the owner had integrity, he would have be here. She said Mr. Bluth was hoping no one would see it. It's secluded. This is alarming. To take boulders and disturb the stability and change the grading, it could be a major impact during rain. She said it looked like they were planning on something. They graded it for a reason. Dave Snelgrove said he disagreed with her; there are existing roads on the site.

Jean Harris said her comment about untruthfulness, it was towards Mr. Bluth. She said Mr. Bluth stated he wouldn't touch the property, but he did. Dave Snelgrove said this is a fix-it. Dave said he wants to create a barrier to prevent access. There will be large equipment out there to create a block in the interim.

Jean Harris said she would support the Special Use Permit to fix it, mitigate what has happen. She said Mr. Bluth's integrity and all the nice things he was going to do for the neighbor is now in question.

Roger Edwards said we are confronted with projects that have not been approved, nor has it been approved as it happens. He said he is upset that Mr. Bluth thought he could press on while he waited for the appeal process. Golden valley is impacted by drainage. Mother nature will reclaim a drainage way. Dave Snelgrove said according to the timeline, this grading happen before the planning commission meeting. Roger Edwards said Mr. Bluth moved rocks to help drainage for a project that hasn't been approved yet.

Teresa Aquila asked how long has Mr. Bluth been in the grading company. Dave said he said doesn't know how long the grading company has been in the business. She said they should have known better.

Ray Lake said asked if the drainage channel that was disturbed was part of the proposed project; Dave said not as designed. Dave said earth needs to be pulled back up on the slope, and slope needs to be restored and fixed.

Public comment:

Denise Ross said she questions Mr. Bluth's intergrity. She said when Mr. Bluth was questioned by the council if he knew if he wasn't supposed to do it. Mr. Bluth said yes. He is a snake in the grass.

Danny Cleous said he doesn't believe a Special Use Permit should be issued. Mr. Bluth needs to be fined a lot of money. Make him do the work himself by hand. Developers think the rules don't apply to them.

Tammy Holt-Still said the county staff that processes the tentative map didn't do the proper things per standards. You job isn't legal by NRS standards. Maybe the man needs a million dollar bond posted. All developers need bonds posted. The staff needs to stop working so closely with the developers and stop being so friendly and make them follow the rules.

Dan Harold said he owns property adjacent to the subject property. He said he attended the meeting where Mr. Bluth spoke about the drainage; he has been telling lies. There is no faith it will be completed as it's supposed to. Make sure it gets restored before the appeal is approved. He said he is concerned with his

integrity. He asked if he will do anything to restore it. Mr. Harold said he walks the property all the time. He said the owner entered the area after the Planning Meeting in order to try to dress it up best they could and clean up the mess they started. You can see the amount of rocks that were moved.

Ray Lake as it's been said, the rocks cannot be put back. Possible Conditions could be: The drainage be restored to original condition. He said the CAB denied the original project, and the project shouldn't be considered until this is restored. Dave said the appeal is held until this is addressed.

Ray Lake said we approve permit with condition that drainage be restored. Knowing the kids are out of school, its a concern. There should be a stipulation to prevent the kids from accessing the area. Sheriff and Fire Department cannot access the area. Jean Harris said she would like the disturbance be restored as much as possible – drainage, vegetation and roadway, what is feasible. She understands if it's not feasible to put the rocks back to their original state. She also asked to put a fine on it. Roger Edwards said the permit request is to reestablish everything within reason, but understand the rocks can't be put on the hill, but it created an unstable cliff. The area needs to be made safe, block road, restore drainage and vegetation.

MOTION: Roger Edwards moved to approve with the conditions which include making the area, restore drainage and vegetation, and block access. Teresa seconded the motion to approve the Special Use Permit with conditions discussed. The motion passed unanimously.

Roger Pelham said this item will be heard on July 11 at the Board of Adjustment meeting, 12:30 p.m.

7. *PUBLIC OFFICIAL REPORTS

7.A. *Washoe County Commission Update — Washoe County Commissioner, Jeanne Herman, may be available to provide updated information on discussions and actions by the Board of County Commissioners (BCC). Following her presentation Commissioner Herman will be available to address questions and concerns from the CAB and the audience. Commissioner Herman can be reached at (775) 501-0002 or via email at landfindercountry@gmail.com. (This item is for information only and no action will be taken by the CAB).

There were no updates from Commissioner Herman.

8. *CHAIRMAN/BOARD MEMBER ITEMS — This item is limited to announcements by CAB members.

Ray Lake said he requested briefings from the City and County regarding sewer. He received a tour from Commissioner Herman. He said he has seen the Planning Commission meetings regarding Swan Lake. He said we cannot make that worse. Cannot continue to dump affluent water into Swan Lake to bring it up to the 100 year flood level.

He said he attended the NDOT board meeting – they decided they will name the early action project 'Spaghetti Bowl Express.' The draft Environmental Impact Study should be ready late this summer with the final one being mid-2019. He said he has seen re-paving, and they are supposed to do re-alignment on Clear Acre.

9. *PUBLIC COMMENT — Limited to no more than three (3) minutes. Anyone may speak pertaining to any matter either on or off the agenda. The public are requested to submit a "Request to Speak" form to the Board chairman. Comments are to be addressed to the Board as a whole.

Sherman Boxx said he is running for Washoe County Sherriff. He said tomorrow is the vote day, and the only way to change things is to change those you aren't happy with.

Commissioner Herman said we will have vacancies on this CAB board. Ray Lake said Jean Harris isn't seeking re-appointment. Ray thanked Jean for her service. There will be vacancy on this board. Call the CAB board (775) 328-2720 if you are interesting on serving on the CAB board.

ADJOURNMENT - Meeting was adjourned at 7:32 p.m.

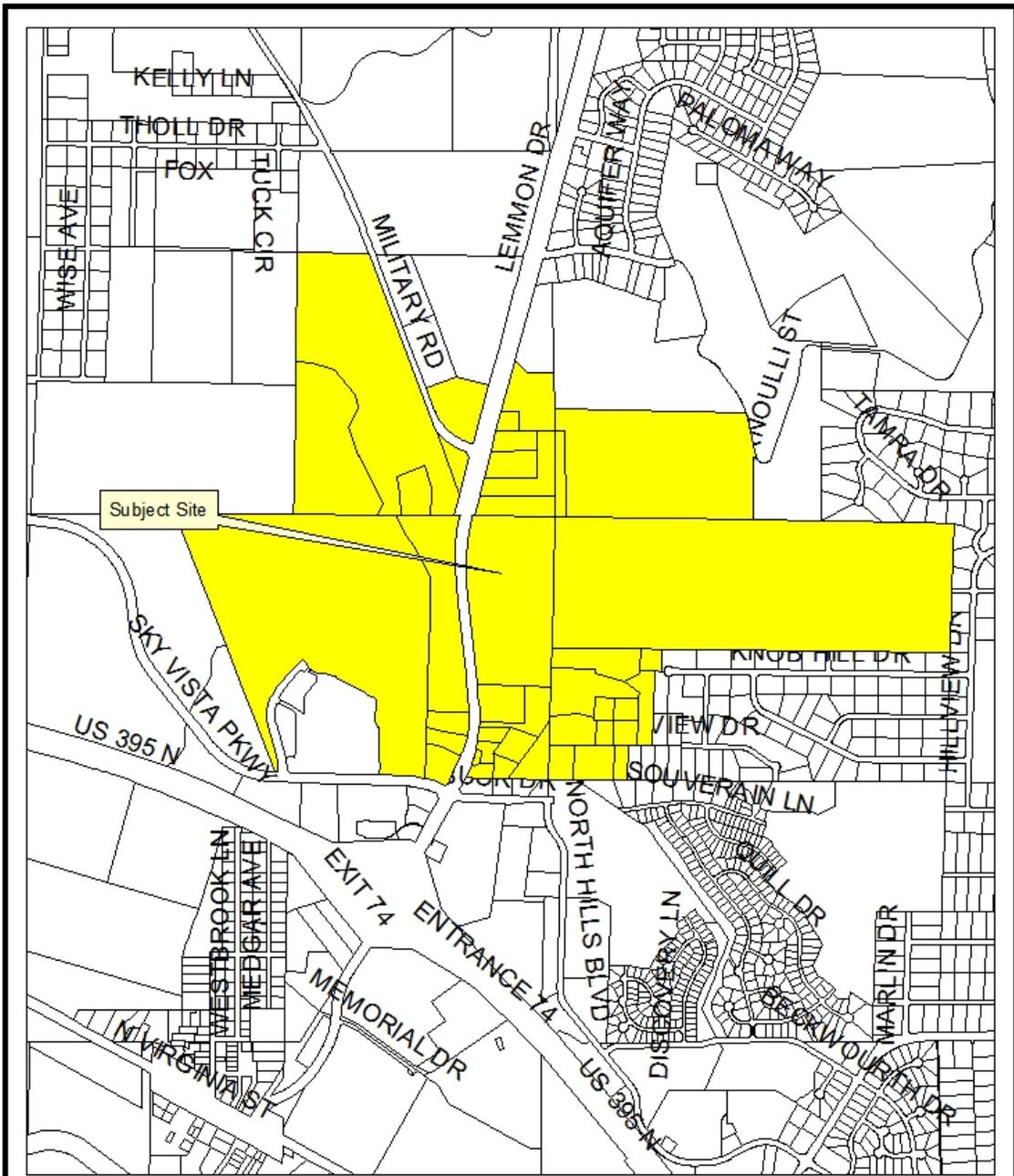
Number of CAB members present: 5

Number of Public Present: 21

Presence of Elected Officials: 1

Number of staff present: 1

Submitted By: Misty Moga



Mailing Label Map
Special Use permit Case Number WSUP18-0012
(Lemmon Drive Estates Grading)
 41 Parcels selected at 900 feet.

Source: Planning and Development Division



Date: June 2018

Community Services
 Department
 Planning and
 Development Division
WASHOE COUNTY
NE VADA
 Post Office Box 11120
 Reno, Nevada 89520
 (775) 228-2800

LEMMON DRIVE ESTATES PROPERTY GRADING SPECIAL USE PERMIT

PREPARED FOR

CHUCK BLUTH

PREPARED BY:

CFA, INC.

1150 CORPORATE BOULEVARD

RENO, NV 89502

(775) 856-1150



MAY 15, 2018

PROJECT: 16-013.00

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Property Location 1
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Images of Areas that were Disturbed 5
Development Statistics 7

Appendices

Washoe County Development Application & Grading SUP Forms A
Reduced Map Sheets B
 Conceptual Disturbance Exhibit
 Existing Site Contours
 Slope Analysis Map
Project Reports & Supporting Information C
 Proof of Property Tax Payment
 Geotechnical Report

Project Description

Project Request

This application is a request for an “ex post facto” special use permit for grading on a 33.97+/- acre parcel located on the east side of Lemmon Drive between Buck Drive and Military Road in Lemmon Valley. The Washoe County Assessor's office recognizes the property as APN 552-210-18.

The property owner directed his grading contractor to go to the subject property and retrieve some landscape size rocks and boulders for use at another project site on which he was working (approximately 1 mile away). This occurrence was exposed to both the Washoe County staff and the applicants planning representative at a planning commission hearing for WTM18-004 as both had last been to the site prior to this work being done. At the time of the planning commission hearing, the overall size and scope of the grading and ground disturbance was not known and it appeared that it could to be a rather small area that would need to be addressed. However, upon site visit by the Washoe County Planner (Roger Pelham) and the applicant's planning consultant (Dave Snelgrove), it was recognized that a special use permit for grading would be required, along with a following grading permit for the work that had been done without the knowledge of either individual.

Washoe County Code Article 438 (Grading Standards) identified what permits are required for a variety of levels of grading. It was determined through site visit with County staff and the applicant's planning consultant that the grading threshold had been crossed and would necessitate a special use permit review, in addition to a grading permit. In this case, each would be after-the-fact of the work. The specific threshold that has been crossed is identified under Section 110.438.35(A)(3), which states: Any driveway or road that traverses and slope of 30% or greater (steeper). An access road was graded through the movement of earth to soften the access slope. Images of this area where earth was moved from its original contours can be seen on page 6 of this project description. From visual inspection of the site, other areas that were disturbed are comprised of areas of crushed natural vegetation and exposure of soil where boulders were removed from the base of the rock outcropping.

Property Location

The subject property is located on the west side of Lemmon Drive between Buck Drive and Military Road. The southern property line of the subject parcel is located approximately 1,200 feet north of Buck Drive and the north property line of the subject property is approximately 650 feet south of Military Road. A vicinity map is provided on page 2 of this project description.

LEMMON DRIVE ESTATES PROPERTY

SPECIAL USE PERMIT FOR GRADING

Figure 1 – Vicinity Map



Existing Site Conditions

The site is currently vacant and presents low to moderately sloped land on the western and southern ends of the site and possesses a floodplain and steep slopes that are located approximately in the northeast ¼ to 1/3 third of the property. There are existing dirt access roads across the site that can be seen in the topographic map and vicinity map. The access roads serve utility lines that cross the site from north to south and east to west. Following are site photos showing the existing condition of the property. All of the photos were taken from the areas that are defined by Washoe County to be the most developable portions of the property



View of subject property from Southwest corner, near Lemmon Drive and Silver State Kennels.



View of property from current intersection of gas line and sewer line toward the northeast. Lower rock outcropping is on the subject property and will not be disturbed. Peak of hill is not part of subject property.

LEMMON DRIVE ESTATES PROPERTY

SPECIAL USE PERMIT FOR GRADING

View of property from current northwest corner near Lemmon Drive and north property line. Dirt road to on left side of photo is the existing sewer line easement access road.



Image of rock outcropping prior to any disturbance by property owner to remove some of the rocks at the base.

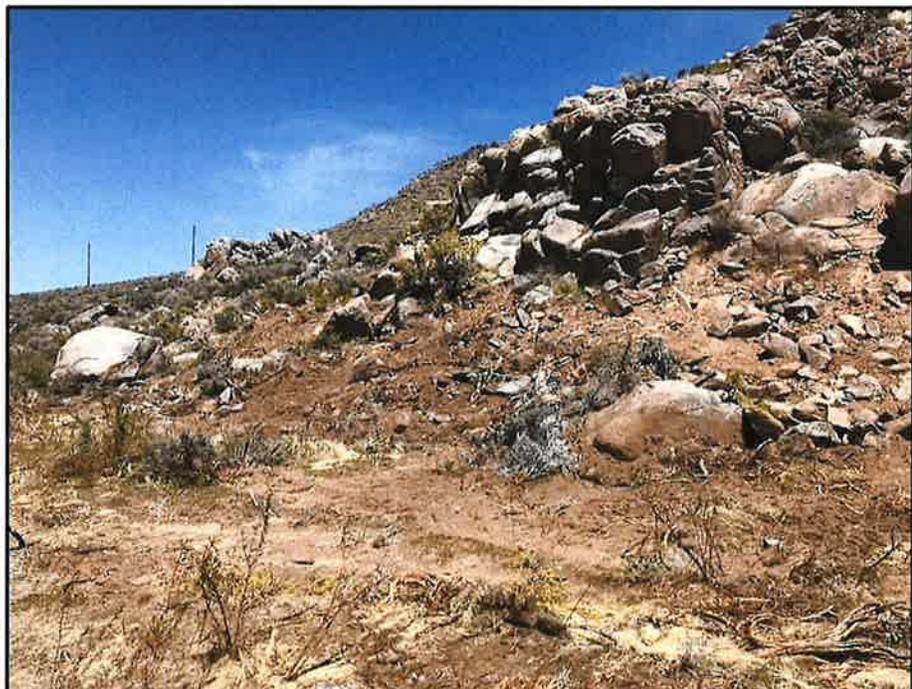
Images of Areas that were Disturbed

Following are photos of the areas that were either graded (changing the grade of the land) or disturbed by crushing natural vegetation by driving heavy equipment over it or removing rocks that had fallen to the base of the rock outcropping.



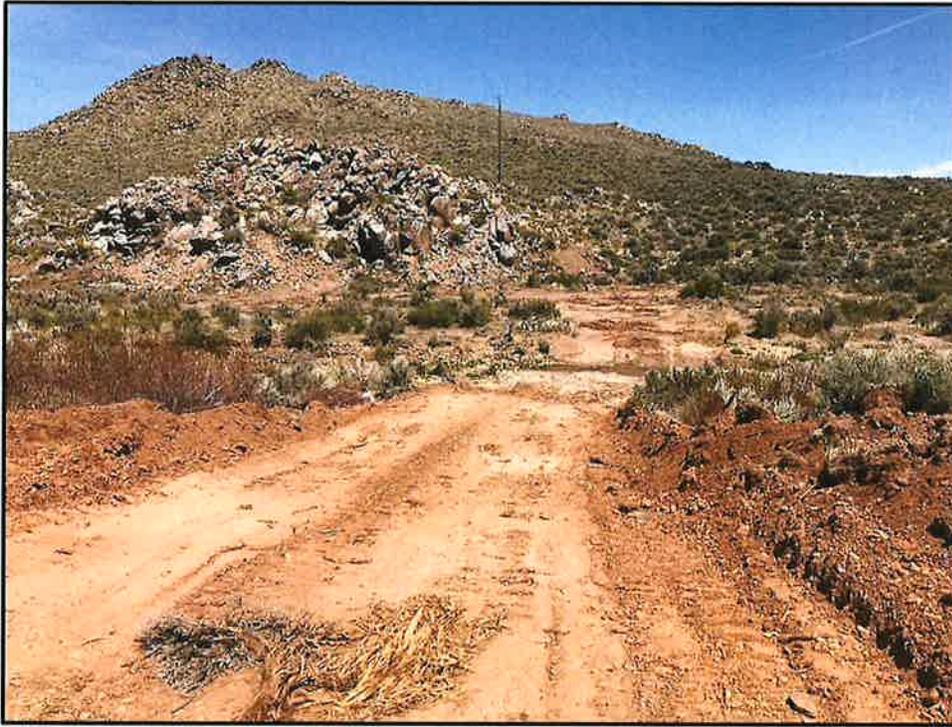
Southern portion of rock outcropping on eastern side of drainageway where some rocks were removed from base and lower portion of outcropping. No "regrading" or recontouring of land recognized in these photos as vegetation is only crushed, not removed.

Northern portion of rock outcropping on eastern side of drainageway where some rocks were removed from base and lower portion of outcropping. Again, no "regrading" or recontouring of land recognized in these photos as vegetation is only crushed, not removed.



LEMMON DRIVE ESTATES PROPERTY

SPECIAL USE PERMIT FOR GRADING



Portion of new access that was "graded" to get across a steep slope on west side of drainageway.



Portion of new access that branches off of existing sewer line road where vegetation was crushed, but earth was not "regraded."

LEMMON DRIVE ESTATES PROPERTY

SPECIAL USE PERMIT FOR GRADING

Development Statistics

Total Site Area	33.97+/- AC (1,479,733.2+/- SF)
(1) Area that was Regraded for Access	1,840+/- SF
(1a) Area of Regrading that Occurred on 30% or Steeper Slopes	300+/- SF
(2) Area of 30% or Steeper Slopes where Boulders were Removed	3,770+/- SF
(3) Area where Sagebrush/Native Vegetation was Crushed by Heavy Equipment	26,802+/- SF
(4) Rock Stockpile Area	2,640+/- SF
Total Surface Level Disturbance (1+2+3+4)	35,052+/- SF (2.4% of the Site)

APPENDIX A

Property Owner Affidavit

Applicant Name: Lakes at Lemmon Valley LLC

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)

Charles P. Bluth, Owner of the Lakes at Lemmon Valley, LLC
(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): 552-210-18

Printed Name CHARLES P. BLUTH

Signed [Handwritten Signature]

Address 4655 Longley Lane, Suite 107

Reno, Nevada 89502

Subscribed and sworn to before me this 10th day of MAY, 2018.

[Handwritten Signature: Kathleen O'Connell]
Notary Public in and for said county and state

My commission expires: 12-26-2018

(Notary Stamp)



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

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

Special Use Permit Application for Grading Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to special use permits may be found in Article 810, Special Use Permits. Article 438, Grading, and Article 418, Significant Hydrologic Resources, are the ordinances specifically involved in this request.

1. What is the purpose of the grading?

Ground and vegetation disturbance occurred when the property owner had his grading contractor create an access to an area where landscape rocks and boulders exist.

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

340+/- CY was excavated in the form of boulders that were removed and are now stockpiled on the site.

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

Approximately 35,052+/- SF s.f. of surface was disturbed.

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

340+/- CY of rock is proposed to be exported to an apartment site located less than 1 mile away on Sky Vista Parkway.

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

No. The grading was done by the owner with neither consult of Washoe County nor his planning consultant/firm (CFA, Inc.). The extent of grading/ground disturbance that was found after it had already occurred surpassed the threshold for a special use permit upon site visit by the County staff member (Roger Pelham) and the applicant's planning consultant (Dave Snelgrove).

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

Existing roads were used for access and are not identified as having been graded nor disturbed in this recent work. Only a new road that affected a 30% or greater slope area and crushed vegetation on the property are included as areas of graded areas on the proposed conceptual grading/vegetation disturbance exhibit.

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

All areas that have been disturbed are shown with this application. Another application WTM18-004 (a common open space tentative map application) is currently in appeal and is proposed to provide a 98-lot subdivision on the west side of the existing drainageway. As such, there is proposed to be addition grading on the site if the common open space tentative map request is ultimately approved.

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

Only the stacked rock and some newly exposed earth at the base of the rock outcropping from where the rock was removed can be seen from any public right-of-way (Lemmon Drive).

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

No. the area that was accesses is proposed (per case no. WTM18-004) to be within undisturbed area.

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

Recontouring of the roadway is proposed and revegetation of the areas where vegetation was crushed is proposed.

11. Are you planning any berms?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, how tall is the berm at its highest?
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12. If your property slopes and you are leveling a pad for a building, are retaining walls going to be required? If so, how high will the walls be and what is their construction (i.e. rockery, concrete, timber, manufactured block)?

No buildings nor retaining walls are proposed under this application request.

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

removal of the rocks and revegetation of the areas that were disturbed.

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

No. no trees exist on the site, nor were disturbed.

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

A landscape architect will be consulted for appropriate application method and seed mix with a final grading permit submittal.

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

No water source currently exists to the site. as such, no temporary vegetation is proposed.

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

No, not at this point. However, this may be a good source for recommendations for revegetation methods that will be the most fruitful.

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

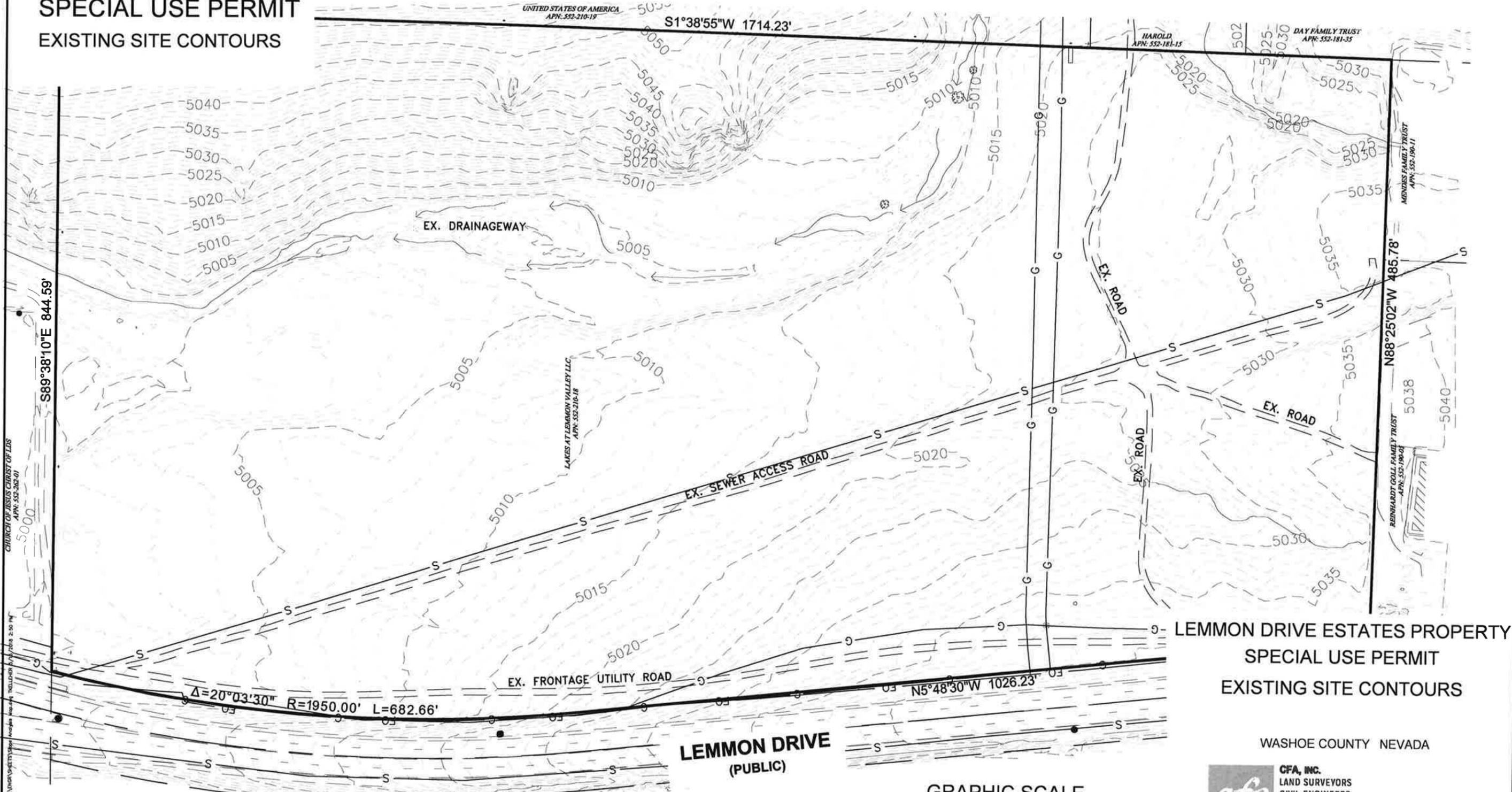
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, please attach a copy.
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APPENDIX B

LEMMON DRIVE ESTATES PROPERTY

SPECIAL USE PERMIT

EXISTING SITE CONTOURS

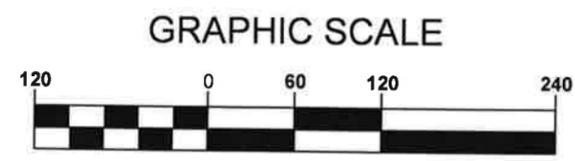


LEMMON DRIVE ESTATES PROPERTY
SPECIAL USE PERMIT
EXISTING SITE CONTOURS

WASHOE COUNTY NEVADA

cfa, inc.
LAND SURVEYORS
CIVIL ENGINEERS
LAND USE PLANNERS
1150 CORPORATE BOULEVARD • RENO, NEVADA 89502
775-856-1150 MAIN • 775-856-1160 FAX • CFARENO.COM

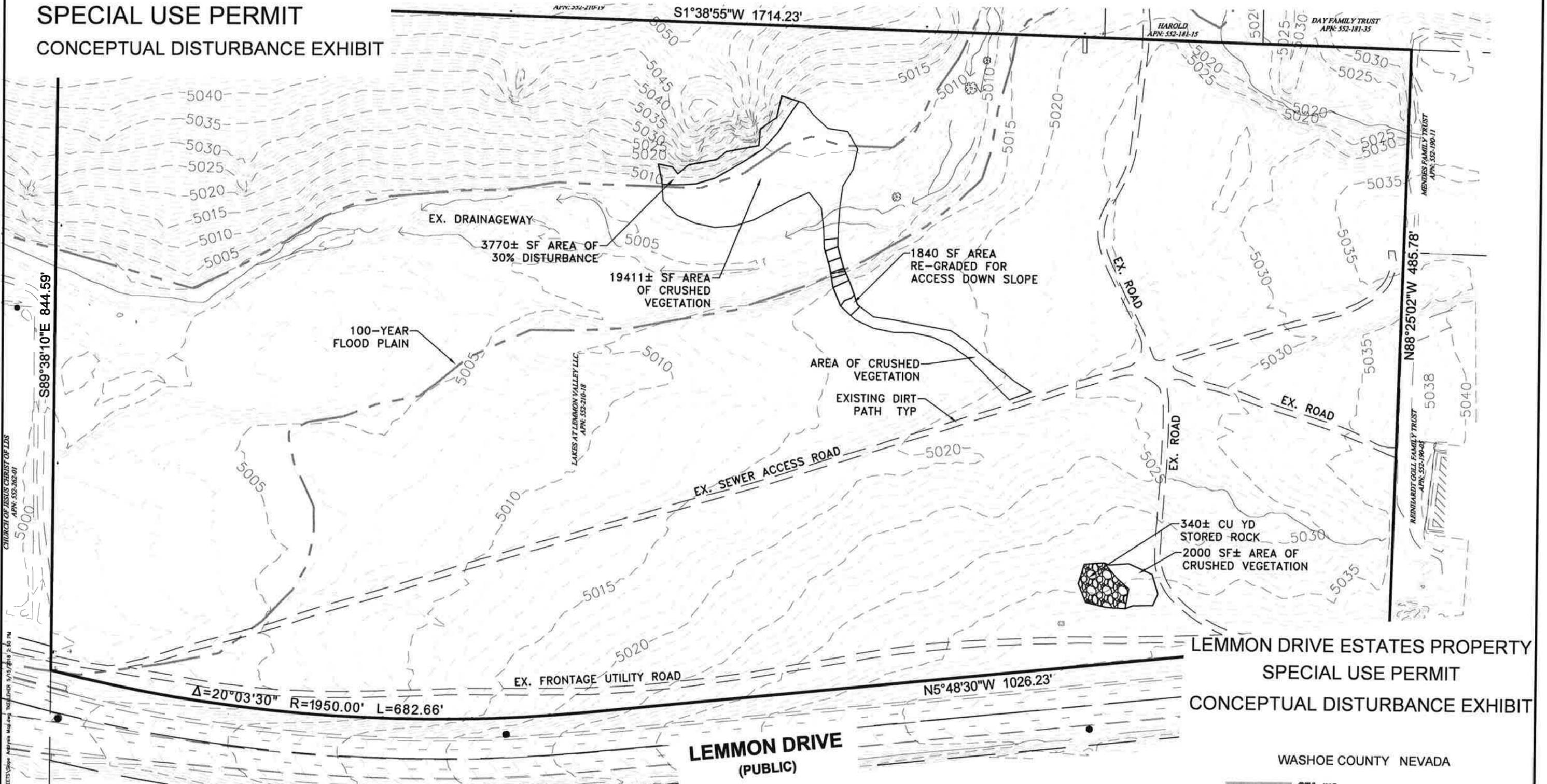
JOB NO: 16013.00 DATE: 05-15-2018



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 APN: 552-202-01

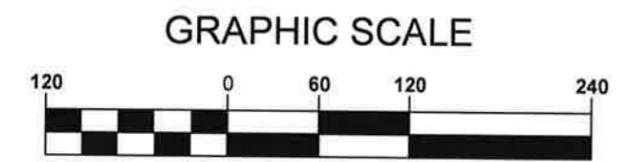
LEMMON DRIVE ESTATES PROPERTY

SPECIAL USE PERMIT
CONCEPTUAL DISTURBANCE EXHIBIT



LEMMON DRIVE ESTATES PROPERTY
SPECIAL USE PERMIT
CONCEPTUAL DISTURBANCE EXHIBIT

WASHOE COUNTY NEVADA



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JOB NO: 16013.00 DATE: 05-15-2018

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LEMMON DRIVE ESTATES PROPERTY

SPECIAL USE PERMIT

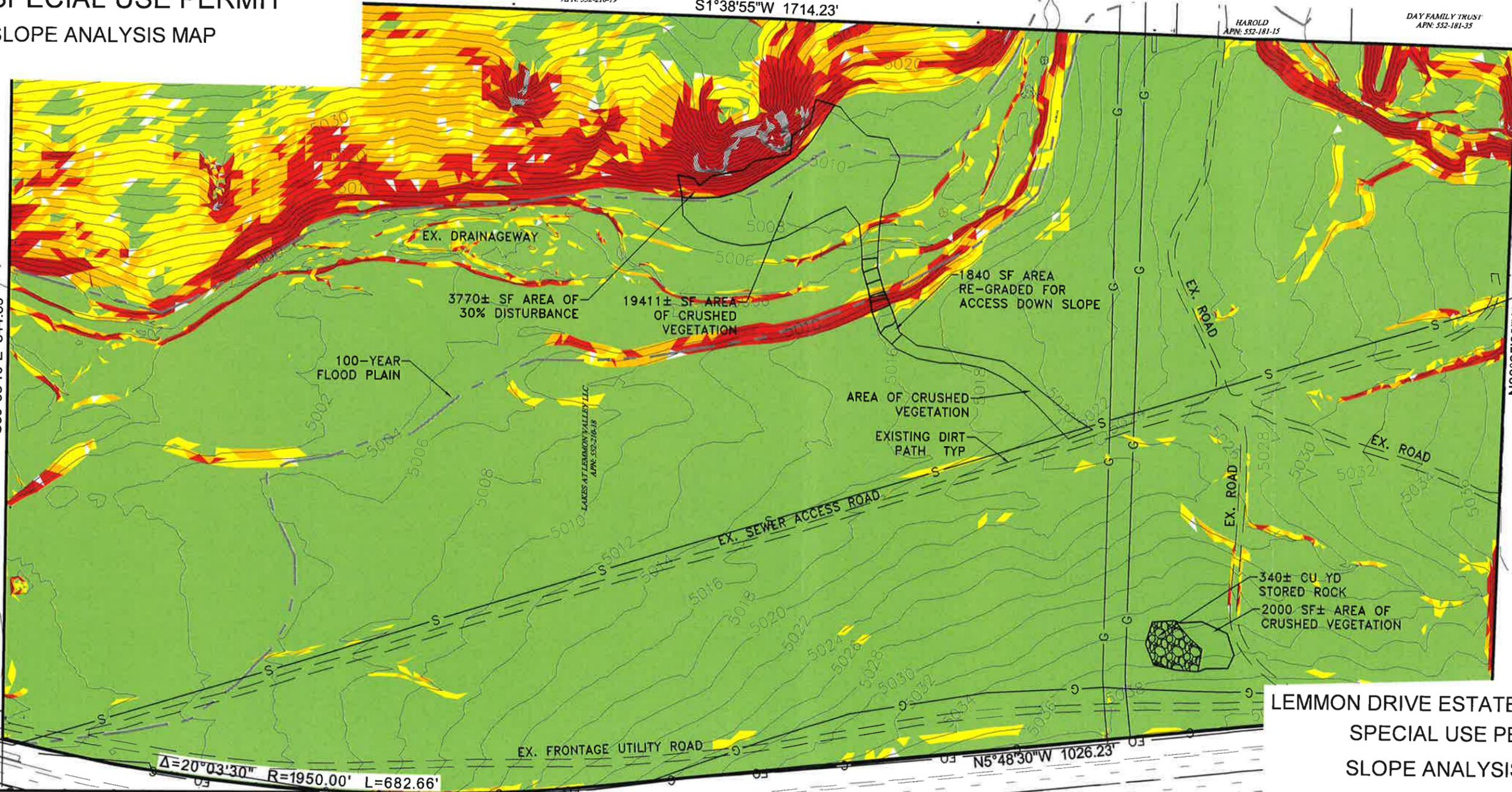
SLOPE ANALYSIS MAP

UNITED STATES OF AMERICA
APN: 552-210-19

S1°38'55"W 1714.23'

HAROLD
APN: 552-181-15

DAY FAMILY TRUST
APN: 552-181-35



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C:\Users\j\OneDrive\Documents\16013.00\16013.00.dwg 5/15/2018 2:50 PM
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APN: 552-202-01

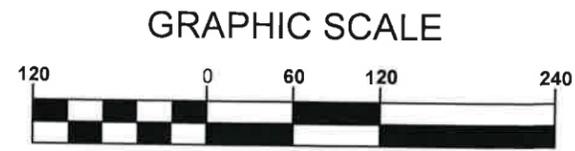
MENDES FAMILY TRUST
APN: 552-190-11

REINHARDT GOLL FAMILY TRUST
APN: 552-180-08

$\Delta=20^{\circ}03'30''$ $R=1950.00'$ $L=682.66'$

N5°48'30"W 1026.23'

Slopes Table					
Number	Min. Slope	Max. Slope	Area	% Area	Color
1	0.00%	15.00%	1187696.73	80.3%	Green
2	15.10%	20.00%	109857.44	7.4%	Yellow
3	20.10%	25.00%	82965.84	5.6%	Orange
4	25.10%	30.00%	40641.72	2.7%	Red-Orange
5	30.10%	100.00%	58571.47	4.0%	Red
Total Area			1479733.2 s.f.		



1 inch = 120 ft.

LEMMON DRIVE ESTATES PROPERTY SPECIAL USE PERMIT SLOPE ANALYSIS MAP

WASHOE COUNTY NEVADA



CFA, INC.
LAND SURVEYORS
CIVIL ENGINEERS
LAND USE PLANNERS
1150 CORPORATE BOULEVARD # RENO, NEVADA 89502
775-856-1150 MAIN # 775-856-1160 FAX # CFARENO.COM

JOB NO: 16013.00 DATE: 05-15-2018

APPENDIX C

Washoe County Treasurer
Tammi Davis

Washoe County Nevada
P.O. Box 30039 Reno, NV 89520-3039
tel: (775) 328-2510 fax: (775) 328-2500
email: tax@washoecounty.nv.us

Bill Detail

[Back to Account Detail](#) [Change of Address](#) [Print this Page](#)

Washoe County Parcel Information

Parcel ID	Status	Last Update
55221018	Active	3/13/2018 2:06:47 AM
Current Owner:		SITUS:
LAKES AT LEMMON VALLEY LLC 4655 LONGLEY LN STE 107 RENO, NV 89502		0 LEMMON DR WCTY NV
Taxing District	Geo CD:	
Legal Description		
Section 9 Township 20 Range 19 SubdivisionName _UNSPECIFIED		

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

Installments

Period	Due Date	Tax Year	Tax	Penalty/Fee	Interest	Total Due
INST 1	8/21/2017	2017	\$0.00	\$0.00	\$0.00	\$0.00
INST 2	10/2/2017	2017	\$0.00	\$0.00	\$0.00	\$0.00
INST 3	1/1/2018	2017	\$0.00	\$0.00	\$0.00	\$0.00
INST 4	3/5/2018	2017	\$0.00	\$0.00	\$0.00	\$0.00
Total Due:			\$0.00	\$0.00	\$0.00	\$0.00

Change of Address

All requests for a mailing address change must be submitted in writing, including a signature (unless using the online form).

To submit your address change online [click here](#)

Address change requests may also be faxed to: (775) 328-2500

Address change requests may also be mailed to:
Washoe County
Treasurer
P O Box 30039
Reno, NV 89520-3039

Tax Detail

	Gross Tax	Credit	Net Tax
<u>State of Nevada</u>	\$343.61	(\$258.60)	\$85.01
<u>Truckee Meadows Fire Dist</u>	\$1,091.46	(\$855.80)	\$235.66
<u>Washoe County</u>	\$2,812.93	(\$2,117.05)	\$695.88
<u>Washoe County Sc</u>	\$2,301.16	(\$1,731.87)	\$569.29
Total Tax	\$6,549.16	(\$4,963.32)	\$1,585.84

Payment History

Tax Year	Bill Number	Receipt Number	Amount Paid	Last Paid
2017	2017175096	B17.115237	\$396.46	9/29/2017
2017	2017175096	B17.167131	\$396.46	12/22/2017
2017	2017175096	B17.230091	\$396.46	3/2/2018
2017	2017175096	B17.61449	\$396.46	8/21/2017

The Washoe County Treasurer's Office makes every effort to produce and publish the most current and accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation. If you have any questions, please contact us at (775) 328-2510 or tax@washoecounty.nv.us

This site is best viewed using Google Chrome, Internet Explorer 11, Mozilla Firefox or Safari



PRELIMINARY GEOTECHNICAL INVESTIGATION

PROPOSED

LEMMON DRIVE ESTATES

Washoe County Assessor's Office Parcel Number 555-210-18

Lemmon Valley Area

RENO, NEVADA

Prepared for:

Bluth Development, LLC
9550 Gateway Drive
Reno, Nevada 89521

Attention: Charles Bluth, President

March 13, 2018

Project No. 18.169.02-G



March 13, 2018
Project No. 18.169.02-G

Bluth Development, LLC
9550 Gateway Drive
Reno, Nevada 89521

Attn: Charles Bluth, President

Re: Preliminary Geotechnical Investigation, Proposed Lemmon Drive Estates,
Washoe County Assessor's Office Parcel Number 555-210-18,
Lemmon Valley Area, Reno, Nevada.

Dear Bluth:

Axion Geotechnical is pleased to present results of a preliminary geotechnical investigation our firm conducted for the project. Based on results of our investigation, experience in the area, and understanding of project development, we conclude that the site is suitable for its intended use. The primary geotechnical concerns are the potential presence of **expansive soil** and **bedrock**, and the presence of **drainages**, **flood zone** and **utility easements**.

We appreciate being selected to perform this preliminary investigation and trust results fulfill your needs at this time. If you or your design consultants have questions, please contact us at (775) 771-2388 or at chris@axionengineering.net.

Respectfully,

AXION GEOTECHNICAL, LLC

Chris D. Betts

Chris D. Betts, P.E.
President



C O N T E N T S

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I INTRODUCTION

Axion Geotechnical is pleased to present results of a preliminary geotechnical investigation our firm conducted for the proposed Lemmon Drive Estates. The 33.97-acre parcel is on the south side of Lemmon Drive, west of its intersection with Military Road and is Washoe County Assessor's Office parcel number 555-210-18 (Property). Proposed development includes construction of isolated pads for single-family residences serviced by community water and sewer system and on-site storm water retention. The structures will have one to two levels, will be wood-framed, and will be supported with shallow conventional spread foundations. Dedicated services streets will be surfaced with asphaltic concrete.

We have not received information concerning foundation loads; however, we anticipate maximum wall loads will be on the order of 1.5 kips per foot (dead plus live plus snow load), and that maximum column loads will be less than 5 kips (dead plus live plus snow load). For frost protection, perimeter foundations will bottom at least 24 inches below lowest adjacent exterior ground surface. Structural design will follow criteria outlined in the 2012 *International Building Code*.

We have not received civil design plans; however, we anticipate earthwork to attain proposed grades and for proper site drainage will include cuts and fill on the order of five feet. New slopes will be constructed at final inclinations of two horizontal to one vertical (2H:1V) or flatter. Site earth retaining walls are not anticipated. Depth of utility trenches should be less than eight feet. We assume underground utilities in proposed structural areas will be abandoned or relocated. Earthwork will be performed in accordance with the 2012 *Standard Specifications for Public Works Construction* by the Regional Transportation Commission (RTC).

The purpose of our preliminary geotechnical investigation was to perform a site reconnaissance and review available literature and maps to provide opinions and discussions concerning the geotechnical suitability of the Property for its intended use. Once design parameters, such as building locations, finish floor elevations, foundation loads and proposed grading are known; a design-level geotechnical investigation report with detailed information of the subsurface soil conditions and recommendations for design and construction must be performed.

This report is preliminary and geotechnical in nature and not intended to identify other potential site constraints such as environmental hazards, wetlands determinations or the potential presence of buried utilities. Opinions and discussions included in this report are specific to development at the Property and are not intended for off-site development.

II SITE, SOIL AND WATER CONDITIONS

The Property is undeveloped, vacant, and bordered by undeveloped land to the east, Lemmon Drive to the west, a church to the north and dog kennels to the south. The surface grades gently downward from the south to the north, and moderately to steeply downward from the east to the west. The Property is covered by medium dense to dense sagebrush and weeds. Trees are present along the eastern drainage. Rock outcrops are present along the steep hillside to the east. Boulders are present in the central portion of the site. Two drainages cross the Property from south to north. Overhead utilities cross along the eastern portion of the Property, and underground utilities (sanitary sewer) crosses the central and eastern portions of the Property. Dirt roads are present.



View of Property from SW corner

Based on the United States Geological Survey 7.5-Minute topographic map of the Reno Quadrangle, the Property is in the NE $\frac{1}{4}$ of Section 9, Township 19 North, Range 19 East and elevation ranges from about 5,040 to 5,060 feet relative to mean sea level.

Based on mapping by H. F. Bonham, Jr. and E. C. Bingler (*Reno Folio, Geologic Map*), the materials underlying the Property are predominantly Quaternary-age alluvial fan deposits of Peavine Mountain (Qpf), with Mesozoic-age granodiorite (Mzgd) along the eastern hillside. These units are described as follows:

Peavine Mountain (Qpf): Poorly sorted, pale yellowish to reddish brown, montmorillonitic, gravelly, to sandy and clayey silt, with white silicified andesite fragments common. In the Black Springs area, the unit contains pale orange brown clayey and gravelly sand.

Granodiorite (Mzgd): Gray hornblende-biotite granodiorite. Deuteric alteration has commonly formed actinolite and chlorite from hornblende and biotite; epidote calcite, and sericite partially replace plagioclase. It is not normally deeply weathered and usually forms numerous outcrops.

According to mapping by the U. S. Department of Agriculture, Soil Conservation Service (*Soil Survey of Washoe County, Nevada, South Part, Sheet No. 22, 1980*), the Property is underlain by the following units:

Haybourne loamy sand, 2 to 4 percent slopes (# 140): This unit is along the larger drainage to the east. This very deep, well-drained soil on alluvial fans. It formed in alluvium derived dominantly from granitic rocks. Elevation is 4,500 to 5,900 feet. Typically, the surface layer is pale brown loamy sand about 10 inches thick. The subsoil is brown sandy loam about 16 inches thick. The substratum to a depth of 63 inches or more is brown, stratified fine sandy loam through coarse sand. Permeability is moderately rapid in the subsoil and moderately rapid to rapid in the substratum. Effective rooting depth is 60 inches or more. Runoff is slow, the hazard of water erosion is slight. The hazard for soil blowing is moderate. The soil is subject to flash flooding during storms of unusually high intensity and channeling. Deposition are common along streambanks. Limitations for shallow excavations are severe due to cutbanks caving. Limitations for dwellings with or without basements, small commercial buildings are severe due to flooding. Limitations for local roads and streets are severe due to flooding. Limitations for septic tank absorption fields are severe due to poor filter. The shrink-swell potential is low. The frequency of flooding is rare. Depth to high water table is greater than 6.0 feet. Depth to bedrock is greater than 60 inches. The potential frost action is moderate. The risk of corrosion to uncoated steel is moderate, and to concrete it is low. Limitations associated with the use of this unit for urban development, as defined by the soil survey, are flooding, rapid permeability and the susceptibility to frost heaving.

Northmore sandy loam, 2 to 4 percent slopes (# 201). This unit is along the central portion of the Property. This very deep, well-drained soil is on alluvial fans. It formed in alluvium derived from mixed rock sources. Elevation is 4,500 to 5,500 feet. Typically, the surface layer is grayish brown sandy loam about 15 inches thick. The subsoil is brown sandy clay about 30 inches thick. The substratum to a depth of 60 inches or more is pale brown sandy loam. Permeability is slow. Effective rooting depth is 60 inches or more. runoff is medium, and the hazard of water erosion is slight. The hazard of soil blowing is slight. Limitations for shallow excavations are slight. Limitations for dwellings with or without basements are severe due to shrink-swell. Limitations for roadways are severe due to low strength and shrink-swell.

Limitations for septic tank absorption fields are severe due to slow percolation rates. The shrink-swell potential is low to high. The frequency of flooding is none. Depth to high water table is greater than 6.0 feet. Depth to bedrock is greater than 60 inches. The potential frost action is low. The risk of corrosion to steel and concrete is moderate. The main limitations associated with the use of this unit for urban development, as described by the soil survey, are the high clay content, slow permeable subsoil, and low bearing strength.

Northmore sandy loam, 4 to 8 percent slopes (# 202). This unit is along the central and western portions of the Property. This very deep, well-drained soil is on alluvial fans. It formed in alluvium derived from mixed rock sources. Elevation is 4,500 to 5,500 feet. Typically, the surface layer is grayish brown sandy loam about 10 inches thick. The subsoil is brown sandy clay about 35 inches thick. The substratum to a depth of 60 inches or more is a pale brown sandy loam. Permeability is slow. Available water capacity is high. Effective rooting depth is 60 inches or more. Runoff is medium, and the hazard of water erosion is slight. The hazard of soil blowing is slight. Limitations for shallow excavations are slight. Limitations for dwellings with or without basements and small commercial buildings are severe due to shrink-swell. Limitations for roadways are severe due to low strength and shrink-swell. Limitations for septic tank absorption fields are severe due to slow percolation rates. The shrink-swell potential is low to high. The frequency of flooding is none. Depth to high water table is greater than 6.0 feet. Depth to bedrock is greater than 60 inches. The potential frost action is low. The risk of corrosion to steel and concrete is moderate. The main limitations associated with the use of this unit for urban development, as described by the soil survey, are the high clay content, slow permeability, and low bearing strength.

Northmore sandy loam, 8 to 15 percent slopes (# 203). This unit is at the SE corner of the Property. This very deep, well-drained soil is on side slopes of alluvial fans. It formed in alluvium derived from mixed rock sources. Elevation is 4,500 to 5,500 feet. Typically, the surface layer is grayish brown sandy loam about 10 inches thick. The subsoil is brown sandy clay about 35 inches thick. The substratum to a depth of 60 inches or more is a pale brown sandy loam. Permeability is slow. Available water capacity is high. Effective rooting depth is 60 inches or more. Runoff is medium, and the hazard of water erosion is slight. The hazard of soil blowing is slight. Limitations for shallow excavations are moderate. Limitations for dwellings with or without basements are severe due to shrink-swell. Limitations for small commercial buildings are severe due to shrink-swell and slopes. Limitations for roadways are severe due to low strength and shrink-swell. Limitations for septic tank absorption fields are severe due to slow percolation rates. The shrink-swell potential is low to high. The frequency of flooding is none. Depth to high water table is greater than 6.0 feet. Depth to bedrock is greater than 60 inches. The potential frost action is low. The risk of corrosion to steel and concrete is moderate. The main limitations associated with the use of this unit for urban development, as described by the soil survey, are the high clay content, slow permeability, and low bearing strength.

Acrelane-Rock outcrop complex, 15 to 50 percent slopes (# 260): This unit is along the far eastern portions of the Property. This map unit is on uplands. Elevation is 4,500 to 6,000 feet. This unit is 65 percent Acrelane very stony sandy loam, 15 to 50 percent slopes, and 25 percent Rock outcrop. The Acrelane soil is on rolling uplands, and the Rock outcrop is on ridgetops and crests. Areas of the components of the unit are so intricately intermingled that it is not practical to map them separately at the scale used. Included in this unit are Verdico Variant soils on slightly concave slopes and in shallow depressions, Graufels soils at higher elevations near Rock outcrop, and Surgem soils on lower colluvial slopes. This unit is about 3 percent Verdico Variant soils, 4 percent Graufels soils, and 3 percent Surgem soils. Descriptions of the two main materials are as follows:

Acrelane soil: This soil is shallow and well-drained. It formed in residuum derived dominantly from granodiorite. Typically, 3 to 10 percent of the surface is covered with stones. The surface layer is brown very stony sandy loam about 6 inches thick. The subsoil is brown very gravelly sandy clay loam about 4 inches thick. Weathered granodiorite is at a depth of 10 inches. Depth to weathered bedrock ranges from 10 to 20 inches. Permeability is moderate. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is high. The hazard of soil blowing is slight. Limitations for shallow excavations are severe due to depth to rock. Limitations for dwellings with or without basements and for small commercial buildings are severe due to depth to rock and slope. Limitations for local roads and streets are severe due to slope. Limitations for septic tank absorption fields are severe due to depth to rock and slope. Shrink-swell potential is low to moderate. Frequency of flooding is none. Depth to high water table is greater than 6.0 feet. Depth to bedrock is 10 to 20 inches. Hardness of bedrock is soft. Potential frost action is moderate. Risk of corrosion to uncoated steel and concrete is moderate.

Rock outcrop: This material consists of exposed areas of granodioritic rock.

The main limitations associated with the use of this complex for urban development, as defined by the soil survey, are steepness of the slopes, and the shallowness of soil over bedrock.

Acrelane very stony sandy loam, 8 to 15 percent slopes (# 262): This unit is along the far SE portion of the Property. This shallow, well-drained soil is on uplands. It formed in residuum derived dominantly granodiorite. Elevation is 4,500 to 6,000 feet. Typically, 3 to 10 percent of the surface is covered with stones. The surface layer is brown very stony sandy loam about 4 inches thick. The subsoil is brown very gravelly sandy clay loam about 6 inches thick. Weathered granodiorite is at a depth of 10 inches. Depth to weathered bedrock ranges from 10 to 20 inches. Permeability is moderate. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is slight. The hazard of soil blowing is slight. Limitations for shallow excavations are severe due to depth to

rock. Limitations for dwellings with or without basements and for small commercial buildings are severe due to depth to rock and slope. Limitations for roadways are moderate due to depth to rock, slope and frost action. Limitations for septic tank absorption fields are severe due to depth to rock. The shrink-swell potential is low to moderate. The frequency of flooding is none. Depth to high water table is greater than 6.0 feet. Depth to bedrock is 10 to 20 inches. The hardness of bedrock is soft. The potential frost action is moderate. The risk of corrosion to steel and concrete is moderate. The main limitations associated with the use of this unit for urban development, as described by the soil survey, are the steepness of slope, depth to bedrock and stones, shallowness of the soil over bedrock, and susceptibility of the soil to frost heaving.

According to the *Reno Folio Hydrologic Map* (Cooley, Span and Scheibach) the top of water table is estimated to be between 20 and 60 feet.

III GEOLOGIC AND SEISMIC CONSIDERATIONS

To evaluate geological hazards at the site, our investigation included a site reconnaissance and review of available geological literature and maps.

A. Geology

The Property is in the northern foothills of the Truckee Meadows a structural basin bounded by Peavine Mountain, Steamboat Hills, the Virginia Range and the Sierra Nevada to the north, south, east and west, respectively. The basin is transitional between the Basin and Range physiographic province to the east and the Sierra Nevada to the West. The geologic structure of the area is characterized by high-angle extensional normal faults trending in a north-northeast direction. The Truckee Meadows is a down-dropped graben with neighboring horsts to the east and west.

B. Faulting and Seismicity

Based on mapping by E. C. Binger (*Earthquake Hazards Map, Reno Folio*) no fault traces cross the Property. According to the United States Geological Survey Earthquakes Hazards Program, *Quaternary Faults in Google Earth*, no faults cross the Property. The website indicates that the nearest Holocene- to latest-Pleistocene-age fault is approximately 1.9 mile southwest of the Property. These faults are those that have moved or shifted in the last 15,000 years.

According to the Nevada Seismological Laboratory website (<http://www.seismo.unr.edu>), the nearest principal Quaternary-age fault is the north Reno fault zone. The Nevada Seismological Laboratory indicates earthquakes of magnitude 6.6 is possible along this fault zone (*Reno/Carson Fault Information*, updated January 31, 2003).

C. Liquefaction

Liquefaction is a loss of soil shear strength associated with loose saturated granular soils subjected to strong earthquake shaking. Liquefaction can result in unacceptable movement of foundations supported by such soils. According to the referenced earthquake hazards map the Property is not in an area of potential liquefaction.

D. Slope Stability

Based on the referenced Earthquake Hazards Map the subject property is in an area potentially underlain by moderately stable, semi-lithified alluvial fan deposits which may be subject to minor slumping and rock falls on vertical or near vertical cuts or natural embankments. Based on our understanding proposed slopes will be constructed at maximum inclinations of two horizontal to one vertical (2:1) or flatter, we do not believe the site is susceptible to slumps or ground disturbances.

E. Radon

Radon, a colorless, odorless, radioactive gas derived from the natural decay of uranium, is found in nearly all rocks and soils. The Environmental Protection Agency (EPA) suggests that remedial action be taken to reduce radon in any structure with average indoor radon of 4.0 picocuries per liter (pCi/L) or more. According to *Radon in Nevada* (Rigby *et al.*, Nevada Bureau of Mines and Geology, Bulletin 108, 1994), the Property is in an area with an average indoor measurement equal to or greater than 2.0 pCi/L and less than 4.0 pCi/L.

F. Flooding

Flood hazard studies were completed by the Federal Emergency Management Agency (FEMA), and are dated March 16, 2009 are published on Community Panel Number 32031C3026G. The map indicates much of the Property is in flood zone X; however, along the eastern drainage system it is in flood zone AE. According to FEMA, zone X are areas of minimal flood hazard, while zone AE are special flood hazard areas.

IV OPINION AND DISCUSSION

Based on results of our preliminary investigation, experience in the area, and understanding of the proposed project, we conclude that the site is suitable for its intended use. The primary geotechnical concerns are the potential presence of **expansive soil** and **bedrock**, and the presence of **drainages**, **flood zone** and **utility easements**.

Expansive soils are subject to substantial volume changes (shrink and swell) with changes in moisture content. Changes in moisture content can occur because of seasonal variations in precipitation, landscape irrigation, broken or leaking water pipes and sewer lines, and/or poor site drainage. These volume changes can cause differential movement such as

settlement or heave of foundations, slabs-on-grade, exterior flatwork such as walkways, stoops and patios, and pavement sections. To reduce potential for movement the expansive soil must be removed (over-excavated) a sufficient depth and replaced with approved compacted granular fill, thereby reducing the thickness of the expansive layer, providing surcharge, and maintaining moisture at a near constant level.

Alternatively, to mitigate potential movement, structures can be supported with pier and grade beams which penetrates the expansive soil and attain support by end-bearing on the lower firm native soils or by surface adhesion with the pier edges and native soil. Structural support may also be attained using post-tensioned slab-on-ground foundations, which mitigates movement by the rigid nature of the system.

Clay or fine-grain soils exhibit a lower Resistance R-Value and Modulus of Subgrade Reaction (k) than granular material. To reduce the thickness of aggregate base and minimize future maintenance in slab-on-grade, exterior flatwork and pavement areas, portions of these soils must be removed and replaced with approved compacted granular fill subbase.

As clayey soil will also inhibit achieving uniform moisture content and impede compaction efforts, consideration should be given to time constraints associated with scarification, moisture conditioning, drying and compacting clayey soils. During periods of inclement weather, water may also become perched above the clayey soil, resulting in a saturated condition for prolonged periods and creating additional limitations on equipment mobility. Consideration should be given to the necessity for maintaining moisture content to prevent wind erosion and for controlling dust during earthwork operations.

Shallow bedrock is present across the Property. Consideration should be given to the difficulty of grading and trenching associated with bedrock. Although we do not believe that blasting will be necessary, as is inherent with bedrock, localized areas of resistant material may be encountered which will require the use of special equipment such as a hydraulic rock hammer.

In addition to potential difficulty of earthwork operations, consideration should be given to the fact that oversize aggregate such as gravel, cobbles and boulders, will be generated during earthwork operations. Consideration should be given to the subsequent reduction of the quantity of material available for use as fill, and that oversize aggregate could require off-hauling or that import material could be required to balance earthwork quantities to attain proposed grades. If oversize aggregate is proposed for use as fill, screening will be required, and sufficiently large equipment will be necessary to properly place and compact rock fills. Compaction approval during the placement of rock fills can only be achieved based on visual performance specifications established by the Geotechnical Engineer, which would increase on-site technician time and thus, in turn, increase the cost of inspection services. The removal of large cobbles or boulders will result in undercutting of excavation sidewalls and the resulting trench widths would be increased. The presence of

resistant bedrock could protrude into foundation areas, thereby requiring the drilling and epoxy of reinforcing steel. Footings may need to be formed and stepped.

Two natural drainages cross portions of the Property. Consideration should be given to potential seepage associated with these drainages and ditch and added construction costs associated with their abandonment, containment or realignment. Consideration should be given to the complete removal of organic material associated with these ditches and that proper benching and fill are provided prior to the construction of site improvements or the placement of new fill material. Consideration should also be given to the possibility that construction set-backs may be required.

According to FEMA, a portion of the Property is in an area of potential flooding. Consideration should be given to local and federal regulations which may impose construction constraints, such as requiring minimum finish floor elevations, or ordinances banning basements. Due to constant revisions associated with flood zoning, the Property delineation with respect to flood zoning should be verified with the most current map at the time of building permit application.

Overhead and underground utility easements cross the Property. Consideration should be given to the possibility that, prior to development, these utilities require relocation or abandonment in proposed structural areas. Consideration should also be given to the possibility that construction set-backs are required, and the subsequent potential reduction of property available for development.

The presence of steep drainages can lead to differential settlement as transition areas will occur where building pads are supported on a combination of in-situ soil and compacted fill material. To mitigate potential differential settlement in transition zones, native soils should be removed a sufficient depth to provide for a minimum section of compacted fill material below foundations, or foundations should be deepened to bottom uniformly on in-situ soil. The presence of slopes will require that construction off-sets be established.

The soil survey suggests that the slow percolation rates, frost action low load-bearing and corrosion to steel and concrete can be an additional constraint associated with the use of the underlying soils for urban development. Based on our understanding that project development will be serviced by community water, sewer and storm drain systems, we do not believe that slow permeability rates will impact the site. Consideration, however, should be given to performing infiltration tests if retention/detention basins are proposed. Based on our anticipation that structural fill will be provided below footing and roadways, we do not believe frost action or low load-bearing strength will impact site development. Based on our experience in the area, we believe adequate mitigation can be attained by using properly prepared and placed Type II portland cement concrete, by maintaining a minimum three-inch concrete cover where reinforcing steel or other metal is in proximity to native soils and, at the direction of the Manufacturer, by using special coating on reinforcing steel and metal. Consideration should also be given to chemical constituents which may inhibit establishment of landscaping, such as lawns, plants and other vegetation growth, not

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indigenous to the area. Laboratory testing to determine the agronomic characteristics of the native soils was not part of the scope of our work; however, it should be considered.

There are no apparent geologic hazards that would place unusual constraints on the project; however, strong ground shaking associated with earthquakes should be expected to occur during the life of the project.

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