WEBER COUNTY PLANNING DIVISION

Administrative Review Meeting Agenda

October 11, 2017
4:00-5:00 p.m.

1. **Consideration and action on a request for administrative approval of River Wood Bend Subdivision 1st Amendment, consisting of one lot. Applicant; Dustin West.**

2. **Consideration and action for final approval of Harper Estates, a two lot Subdivision including the concurrent consideration and action of the Harper access via a private right of way request for Lot 2 with the request to defer asphalt, curb, gutter, and sidewalk. Applicant; Bret and Tamra Harper.**

3. **Consideration and action on an alternative access request to use a private right-of-way as the primary access for a future 1 lot subdivision. Applicant; Rickey Rau.**

4. **Consideration and action on an administrative application for final approval of Silver Bell Estates No 2, 2nd Amendment, a one lot subdivision. Applicant; Travis Braden.**

5. ***Adjournment***

The meeting will be held in the Weber County Planning Division Conference Room, Suite 240, in the Weber Center, 2nd Floor, 2380 Washington Blvd., Ogden, Utah unless otherwise posted

In compliance with the American with Disabilities Act, persons needing auxiliary services for these meetings should call the Weber County Planning Commission at 801-399-8791

Staff Report for Administrative Approval

Weber County Planning Division

Synopsis

Application Information

Application Request:	Consideration and action on a request for administrative approval of River Wood Bend Subdivision 1st Amendment, consisting of one lot.
Type of Decision:	Administrative
Agenda Date:	Wednesday, October 11, 2017
Owner:	Dustin West
File Number:	LVR090817

Property Information

Approximate Address:	436 N 5500 W
Project Area:	5.25 acres
Zoning:	A-2
Existing Land Use:	Agricultural
Proposed Land Use:	Residential
Parcel ID:	15-269-0003
Township, Range, Section:	Township 6 North, Range 2 West, Section 7

Adjacent Land Use

North:	Agricultural	**South:**	Residential
East:	Agricultural	**West:**	Agricultural

Staff Information

Report Presenter:	**Steve Burton** sburton@co.weber.ut.us 801-399-8766
Report Reviewer:	RK

Applicable Ordinances

- Title 104, Zones, Chapter 7, Agricultural (A-2) Zone
- Title 106, Subdivisions

Background

The applicant has submitted a request for administrative approval of River Wood Bend Subdivision 1st Amendment, consisting of one lot, located at approximately 436 N 5500 W, in the A-2 zone. The purpose of the subdivision amendment is to add an additional nine feet to the north property line of the original Lot 1 of River Wood Bend Subdivision, increasing the lot size from 5.04 acres to 5.25 acres.

The proposal has been reviewed against certain standards in the Uniform Land Use Code of Weber County, Utah (LUC). The following is staff's evaluation of the request.

Analysis

General Plan: The proposal conforms to the West Central Weber County General Plan by preserving the rural character and agricultural uses that are dominant in the area (West Central Weber County General Plan, Land Use Element, Identified Land Use Issues).

Zoning: The subject property is located in the Agricultural (A-2) Zone. The purpose of the Agricultural (A-2) zone is identified in the LUC§ 104-7-1 as:

> *"The purpose of the A-2 Zone is to designate farming areas where agricultural pursuits and the rural environment should be promoted and preserved."*

Single-family dwellings, in accordance with the Land Use Code, are permitted in the A-2 Zone.

The proposed Lot 1 will be 5.25 acres and will have 220.66 feet of frontage. The proposed subdivision is in compliance with the minimum lot area requirement of 40,000 sq. feet and the minimum lot width requirement of 150 feet, as outlined in LUC§ 104-7-6. The subdivision plat indicates that a remainder parcel (8.23 acres) will be created and that the remainder parcel is not approved for development.

Natural Hazards Areas: The proposed subdivision is located in Flood Zone X as determined by FEMA to be outside of the 500-year floodplain. The proposed subdivision is not in a Natural Hazards Study area.

Culinary water and sanitary sewage disposal: The existing house on the property receives culinary water from West Warren Water Improvement District and sewage disposal is controlled by an individual septic system.

Additional design standards and requirements: The applicant will be required to file a deferral agreement with Weber County for curb, gutter, and sidewalk. This requirement has been added to the staff recommendation as a condition of approval.

Review Agencies: A condition of approval has been added to ensure that all conditions of the Review Agencies, including the Surveyor's Office, Engineering Division and the Fire District, will be addressed prior to recording the final plat

Tax clearance: The 2016 property taxes have been paid in full. The 2017 property taxes will be due in full on November 1, 2017.

Public Notice: A notice has been mailed not less than ten calendar days before final approval to all property owners of record within 500 feet of the subject property regarding the proposed subdivision per noticing requirements outlined in LUC §106-1-6(b).

Staff Recommendation

Staff recommends final approval of River Wood Bend Subdivision 1st Amendment, consisting of 1 lot. This recommendation for approval is subject to all review agency requirements and based on the following conditions:

1. A deferral agreement for curb, gutter, and sidewalk will be required, prior to recording the final mylar.

This recommendation is based on the following findings:

1. The proposed subdivision conforms to the Western Weber General Plan.
2. With the recommended conditions, the proposed subdivision complies with applicable County ordinances.

Exhibits

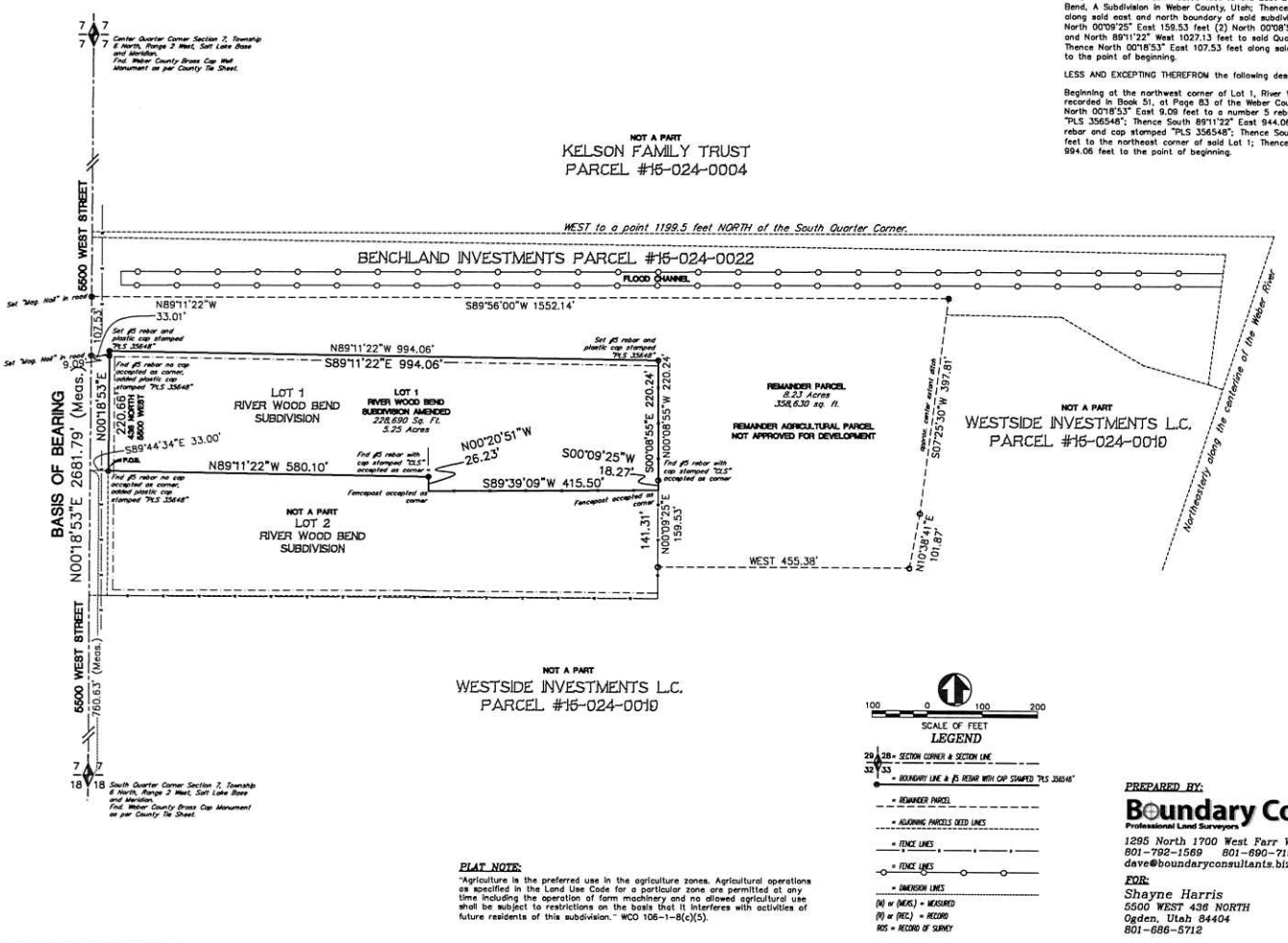
A. Final subdivision plat

Map 1

Exhibit A

RIVER WOOD BEND SUBDIVISION, 1st AMENDMENT
WEST WARREN, UTAH

LYING AND SITUATE IN THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 NORTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN
SURVEY PERFORMED: JUNE 2016



REMAINDER PARCEL:

A part of the Southeast Quarter of Section 7, Township 6 North, Range 2 West Salt Lake Base and Meridian:
Beginning at a point 1080.08 feet North 00°18'53" East along the Quarter Section Line from the South quarter Corner of said Section 7; and running thence North 89°56'00" East 1552.14 feet to the centerline of an existing ditch; Thence two (2) courses along said centerline as follows: 1) South 07°25'30" West 397.81 feet; and 2) South 10°38'41" West 101.84 feet; Thence DUE WEST 455.38 feet to the East Boundary of River Wood Bend, A Subdivision in Weber County, Utah; Thence three (3) courses along said east and north boundary of said subdivision as follows: (1) North 00°09'25" East 159.53 feet (2) North 00°08'55" West 211.17 feet; and North 89°11'22" West 1027.13 feet to said Quarter Section Line; Thence North 00°18'53" East 107.53 feet along said Quarter Section Line to the point of beginning.

LESS AND EXCEPTING THEREFROM the following described parcel:

Beginning at the northwest corner of Lot 1, River Wood Bend Subdivision, recorded in Book 51, at Page 83 of the Weber County Records, thence North 00°18'53" East 9.09 feet to a number 5 rebar and cap stamped "PLS 356548"; Thence South 89°11'22" East 944.06 feet to a number 5 rebar and cap stamped "PLS 356548"; Thence South 00°08'55" East 9.07 feet to the northeast corner of said Lot 1; Thence North 89°11'22" West 994.06 feet to the point of beginning.

PLAT NOTE:

"Agriculture is the preferred use in the agriculture zones. Agricultural operations as specified in the Land Use Code for a particular zone are permitted at any time including the operation of farm machinery and no allowed agricultural use shall be subject to restrictions on the basis that it interferes with activities of future residents of this subdivision." WCO 106-1-8(c)(5).

SURVEYORS CERTIFICATE

I, David E. Hawkes, certify that I am a Professional Land Surveyor holding license number 356548 in accordance with Title 58, Chapter 22, Professional Engineers and Land Surveyors Licensing Act and that a survey of the described tract of land has been completed by me in accordance with Section 17-23-17 and that I have verified all measurements, have placed monuments as shown hereon and that all lots meet the requirements of the Land Use Code.

NARRATIVE

See Record of Survey #5751 filed with the Weber County Surveyor.

BOUNDARY DESCRIPTION

A parcel of land lying and situate in the Southeast Quarter of Section 7, Township 6 North, Range 2 West, Salt Lake Base and Meridian. Comprising 5.25 acres, the 5.04 acres contained in Lot 1, River Wood Bend Subdivision, and a 0.21 acre portion of that particular parcel of land known as Tax Parcel #15-269-0003, described in that certain Warranty Deed recorded as Entry 2822470, of the Weber County Records.
Basis of Bearing for subject parcel being North 00°18'53" East 2681.79 feet (Measured) between the Weber County Surveyor's brass cap monuments monumentalizing the west line of the Southeast Quarter of said Section 7. Subject parcel being more particularly described as follows:

Commencing at the Northwest Corner of said Section thence South 00°18'53" East 760.83 feet coincident with said Quarter Section line; Thence South 89°44'34" East 33.00 feet to the True Point of Beginning;
Thence North 00°18'53" East 220.66 feet coincident with the west line of Lot 1 of said River Wood Bend Subdivision and the prolongation thereof to a number 5 rebar and yellow plastic stamped "PLS 356548"; Thence South 89°11'22" East 994.06 feet to a number 5 rebar and yellow plastic stamped "PLS 356548"; Thence South 00°08'55" East 220.24 feet coincident with the east line of said Lot 1 and the prolongation thereof to a number 5 rebar and cap stamped "LS"; Thence the following the following three (3) courses coincident with the perimeter of said Lot 1, 1) South 00°09'25" West 18.27 feet to a fence corner; 2) South 89°39'09" West 415.50 feet to a fence corner; 3) North 00°20'51" West 26.23 feet to a number 5 rebar and cap stamped "LS"; Thence North 89°11'22" West 580.10 feet coincident with the west line of said Lot 1 and the prolongation thereof to the point of beginning.

OWNERS DEDICATION

Known all men by these presents that we, the undersigned owners of the above described tract of land having caused the same to be subdivided into one lot and as shown on this plat and name said tract *RIVER WOOD BEND SUBDIVISION, 1st AMENDMENT*, and hereby dedicate, grant and convey to Weber County, Utah, all those parts or portions of said tract of land designated as public Utility Easements, with no buildings or structures being erected within thos easements, in witness we have hereunto set our signature.

Signed this_____day of_____2017.

Shayne Harris

Dustin E. West

Amanda K. West

ACKNOWLEDGMENT

STATE OF UTAH }
COUNTY OF WEBER } S.S.

On the_____day of_____2017, personally appeared before me, the undersigned Notary, in and for said County of Weber, in said State of Utah, the signers of the above Owner's Dedication, one (1) in number, who duly acknowledged to me that he, Shayne Harris, signed it freely and voluntarily for the purposes therein mentioned.

Notary Public _____ My Commission Expires _____

ACKNOWLEDGMENT

STATE OF UTAH }
COUNTY OF WEBER } S.S.

On the_____day of_____2017, personally appeared before me, the undersigned Notary, in and for said County of Weber, in said State of Utah, the signers of the above Owner's Dedication, two (2) in number, who duly acknowledged to me that they, Dustin E. West and Amanda K. West, signed it freely and voluntarily for the purposes therein mentioned.

Notary Public _____ My Commission Expires _____

PREPARED BY:
Boundary Consultants
Professional Land Surveyors
1295 North 1700 West Farr West, Utah
801-782-1569 801-690-7158 FAX
dave@boundaryconsultants.biz

FOR:
Shayne Harris
5500 WEST 436 NORTH
Ogden, Utah 84404
801-686-5712

WEBER COUNTY ATTORNEY

I have examined the financial guarantee and other documents associated with this subdivision plat and in my opinion they conform with the County Ordinance applicable thereto and now in force and effect.

Signed this _____ day of _____, 20___.

Signature

COUNTY SURVEYOR'S CERTIFICATE

I hereby certify that the Weber County Surveyor's Office has reviewed this plat for mathematical correctness, section corner data, and for harmony with lines and monuments on record in County offices. The approval of this plat by the Weber County Surveyor does not relieve the Licensed Land Surveyor who execute this plat from the responsibilities and/or liabilities associated therewith.

Signed this _____ day of _____, 20___.

Signature

WEBER COUNTY ENGINEER

I hereby certify that the required public improvement standards and drawings for this subdivision conform with County standards and the amount of the financial guarantee is sufficient for the installation of these improvements.

Signed this _____ day of _____, 20___.

Signature

WEBER COUNTY PLANNING COMMISSION APPROVAL

This is to certify that this subdivision plat was duly approved by the Weber County Planning Commission on the _____ day of _____, 20___.

Chairman, Weber County Planning Commission

WEBER COUNTY COMMISSION ACCEPTANCE

This is to certify that this subdivision plat, the dedication of streets and other public ways and financial guarantee of public improvements associated with this subdivision, thereon are hereby approved and accepted by the Commissioners of Weber County, Utah this _____ day of _____, 20___.

Chairman, Weber County Commission

Attest:_____ Title: _____

WEBER COUNTY RECORDER

ENTRY NUMBER _____

FEE PAID
FILED FOR RECORD AND RECORDED THIS

DAY OF _____ 2017, IN BOOK_____, AT PAGE_____OF THE OFFICIAL RECORDS.

DEPUTY COUNTY RECORDER

Staff Report for Administrative Subdivision Approval

Weber County Planning Division

Synopsis

Application Information

Application Request:	Consideration and action for final approval of Harper Estates, a two lot Subdivision including the concurrent consideration and action of the Harper access via a private right of way request for Lot 2 with the request to defer asphalt, curb, gutter, and sidewalk.
Application Type:	Administrative
Agenda Date:	Wednesday, October 11, 2017
Applicant:	Bret and Tamra Harper
Subdivision File Number:	LVH090517
Alternative Access File #:	AAE 2017-07

Property Information

Approximate Address:	1125 South 4100 West
Project Area:	2.22 Acres
Zoning:	A-1
Existing Land Use:	Residential/Agriculture
Proposed Land Use:	Residential
Parcel ID:	15-059-0019
Township, Range, Section:	Township 6 North, Range 2 West, Section 21

Adjacent Land Use

North:	Residential/Agriculture	**South:**	Residential/Agriculture
East:	Residential/Agriculture	**West:**	Residential/Agriculture

Staff Information

Report Presenter:	Felix Lleverino flleverino@co.weber.ut.us 801-399-8767
Report Reviewer:	RG

Applicable Ordinances

- Title 101 (General Provisions) Section 7 (Definitions)
- Title 102 (Administration) Chapter 1 (General Provisions) Section 2 (Planning Director Authority)
- Title 104 (Zones) Chapter 5 (Agricultural (A-1) Zone)
- Title 106 (Subdivisions) Chapter 1-8 as applicable
- Title 108 (Standards) Chapter 7 (Supplementary and Qualifying Regulations) Section 29 (Flag lot access strip, private right-of-way, and access easement standards)
- Title 108 (Standards) Chapter 18 (Drinking Water Source Protection)

Background and Summary

The applicants have submitted a request for final approval of Harper Estates Subdivision, a small subdivision consisting of two lots. The proposed subdivision will divide a 2.22 acre parcel and create two residential lots that are currently vacant. The application for a two lot subdivision includes the concurrent consideration and action on an application for access by a private right of way across the south side of lot 1, which fronts on 4100 West Street, and will provide access for lot 2. The private access will serve multiple purposes. In the immediate future it will be used as a private drive, and in the distant future, when the neighboring parcel to the south is developed, an additional 30 feet will be required to accommodate for a future 60 foot public right-of-way. The proposed subdivision conforms to both the zoning and subdivision requirements including adequate frontage and access along a dedicated private road. This proposal comes with a request to defer asphalt, curb, gutter and sidewalk. The owner has provided reasoning for approval of an alternative access, in that it is impractical to extend a street across the proposed lot 1 to serve a single lot, and with a limited amount of frontage, and no possible way of obtaining more property from an adjacent land owner a private road will be ideal.

Analysis

General Plan: The proposal conforms to the Western Weber General Plan by creating one acres lots which will preserve the low density rural residential setting.

Zoning: The subject property is located in the Agricultural (A-1) Zone. The purpose and intent of the A-1 Zone is found in the LUC §104-5-1:

"The purpose of the A-1 Zone is to designate farm areas, which are likely to undergo a more intensive urban development, to set up guidelines to continue agricultural pursuits, including the keeping of farm animals, and to direct orderly low-density residential development in a continuing rural environment."

Small Subdivision: The Uniform Land Use Code of Weber County (LUC) §101 defines a "small subdivision" as "A subdivision consisting of three or fewer lots and for which no streets will be created or realigned". This subdivision consists of two lots and no new streets are being created or realigned. Based on these provisions, this subdivision qualifies for administrative approval as a small subdivision.

Lot area, width and yard regulations: Lot 1 will contain .92 acres and will be 356.97 ft. wide. Lot 2 will contain 1.30 acres and will meet the minimum width of 150 ft.

The site development standards for the A-1 Zone are as follows:

Minimum Lot Area: 40,000 sq. ft.
Minimum Lot Width: 150 Feet

The Yard Regulations for a single family dwelling in the A-1 zone are as follows:

Front: 30 feet
Sides: A minimum of 10 feet with a total of two side yards not less than 24 feet
Rear: 30 feet

There are no structures within lots 1 and 2. Lots 1 and 2 meet the minimum area and width requirements of the A-1 Zone.

Culinary water and sanitary sewage disposal: Culinary water will be supplied by Taylor West Weber Water. Sanitary sewer services will be provided by Central Weber Sewer Improvement District.

Review Agencies: Weber County Fire Marshal has approved this proposal with the safety conditions that the private access road meet the requirements of LUC §108-7-29. The Weber County Engineering Division has posted comments on the project, to which the applicant will be able to adequately address. Weber County Surveying has redlined the plat with specific correct/additions that will be addressed by a recently revised plat that has been submitted by the applicant.

Additional design standards and requirements: The alternative access application that is being considered concurrently with this subdivision application comes with conditions that the owner has agreed to and they are as follows:

1. It shall be demonstrated that legal access has been created and executed by way of an easement, right-of-way, or other instrument capable of conveying such right.
2. The land owner also agrees to pay a proportionate cost associated with developing a street if at any time in the future the County deems it necessary.

The applicant plans to utilize a gravel travel surface for the private access road. The plans for a gravel road have shown compliance with requirements stated in LUC § 108-7-29 (Private right-of-way standards).

1. The travel surface must be a minimum of 12 feet wide.
2. It must be capable of supporting a 7500 lbs vehicle on a year round basis.
3. A turnout measuring at least ten feet by 40 feet shall be provided adjacent to the traveled surface of the private right-of-way.
4. A turn-around at the home location shall have an inside turning radius of 30 feet and an outside turning radius of not less than 45 feet.
5. The lot address shall be displayed in a prominently visible location at the street entrance to the flag lot access strip, private right-of-way, or access easement.

Tax clearance: Property taxes have been paid in full. There are no records of past delinquent tax history for either of these parcels.

Public Notice: Noticing requirements, according to LUC 106-1-6(c), have been met by mailing notices out to all property owners of record within 500 feet of the subject property.

Staff Recommendation

Staff recommends approval of Harper Estates Subdivision, a two lot subdivision, including the concurrent consideration and action of the Harper alternative access approval via a private right of way for Lot 2. This recommendation for approval is subject to all review agency requirements and based on the following conditions:

1. A condition of approval that the required agreements will be recorded with the final Mylar to ensure that if the county deems it necessary to have the landowner replace the private right-of-way/easement with a public right-of-way, the owner will pay a proportionate cost.
2. A Deferral Agreement for curb, gutter and sidewalk shall be entered into by the owners.

This recommendation is based on the following findings:

1. The proposed subdivision conforms to the Western Weber General Plan.
2. With the recommended conditions, the proposed subdivision complies with applicable County ordinances.

Administrative Approval

Administrative final approval of Harper Estates Subdivision, a two lot subdivision, including the concurrent consideration and action of the Harper alternative access approval via a private right of way for Lot 2, is hereby granted based upon its compliance with the Weber County Land Use Code. This approval is subject to the requirements of applicable review agencies and the conditions of approval listed in this staff report.

Date of Administrative Approval: _____

_____
Rick Grover
Weber County Planning Director

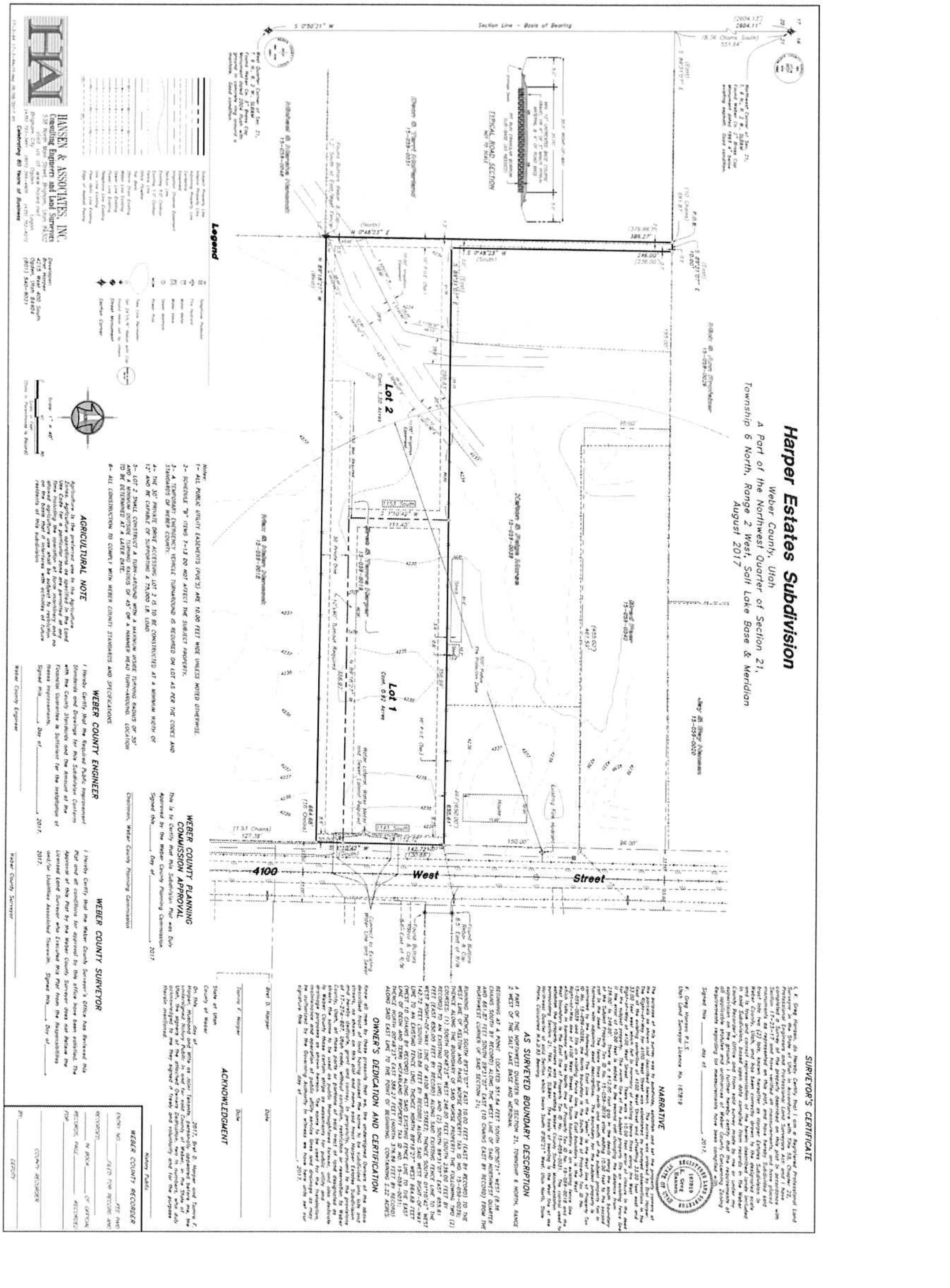
Exhibits

A. Proposed Subdivision
B. Will Serve/Feasibility Letters

Map 1


1001
1063
1090
1087
1121
4100 W ST
1113
1122
4300 W ST W
1054
1130
1146
1189
1209
1178
1240
1215
1250
4270
4196
1250 S ST
1250 S
SOUTHERN PACIFIC RAILROAD RR

Exhibit A


Harper Estates Subdivision
Weber County, Utah
A Part of the Northwest Quarter of Section 21,
Township 6 North, Range 2 West, Salt Lake Base & Meridian
August 2017
Lot 1
Lot 2
4100 West Street
Legend
SURVEYOR'S CERTIFICATE
NARRATIVE
AS SURVEYED BOUNDARY DESCRIPTION
OWNER'S DEDICATION AND CERTIFICATION
ACKNOWLEDGMENT
WEBER COUNTY PLANNING COMMISSION APPROVAL
WEBER COUNTY ENGINEER
WEBER COUNTY SURVEYOR
WEBER COUNTY RECORDER
AGRICULTURAL NOTE
HANSEN & ASSOCIATES, INC.
Consulting Engineers and Land Surveyors

TAYLOR WEST WEBER WATER IMPROVEMENT DISTRICT

2815 WEST 3300 SOUTH
WEST HAVEN, UTAH 84401

May 10, 2017

Weber County Planning Commission
2380 Washington Boulevard
Ogden, Utah 84401

To Whom It May Concern:

This is to inform you that ***preliminary*** approval has been given to provide culinary water only for a two lot subdivision at the approximate address of 1155 South 4100 West in West Weber, Utah.

Requirements per lot:

*Water rights fee = ¼ share of Hooper or Wilson Irrigation (in District's name) or a Weber Basin contract ($2,902 or current cost when paid)

*Secondary water = ½ share of Hooper or Wilson Irrigation (in District's name) to be held by District for a pressurized system

*Hookup/Impact fee = $6,824 (or current cost when paid)

Final approval will be subject to meeting all of the requirements of the District and all fees/shares being paid and received.

Sincerely,

TAYLOR WEST WEBER WATER IMP. DIST.

Val Surrage - Manager

VS/sph

Expires 10/10/17

May 16, 2017

Weber County Planning Commission
2380 Washington Blvd.
Ogden, Utah 84401-1473

Reference: Proposed Harper Lot 2 Subdivision
4100 West approx. 1000 South
Will Serve Letter

We have been asked review the possibility of providing sanitary sewer service for a proposed Harper Lot 2 Subdivision at 4100 West approx. 1000 South. (Tax ID# 15-059-0019) The Central Weber Sewer Improvement District (District) can accept the sanitary sewer discharge from this location. We add the following conditions that must be met prior to any connections being made

1. The District does have a gravity flow sanitary sewer line at this location on 4100 West. We have the capacity to accept and treat the wastewater from this proposed subdivision. Details of the connection to the District's line must be reviewed and approved prior to any connection being made to the District's line.

2. The entire parcel of property to be served will need to be annexed into the District prior to any connection to the District's line. An annexation petition is available from the District's Office.

3. Impact Fees must be paid prior to any connection to the sanitary sewer. As of this date the District's sanitary sewer impact fee is $2333 per equivalent residential unit (ERU)

4. The District must be notified for inspection if at any time connections are being made to the District's sanitary sewer lines. The District will NOT install, own and or maintain any of the sanitary sewer lines being extended to serve this property.

5. The connection of any sump pumps (or similar type pumps) to the sanitary sewer system is prohibited during or after construction. Central Weber's Wastewater Control Rules and Regulations state:

> *Prohibited Discharge into Sanitary Sewer. No person shall discharge or cause or make a connection which would allowed to be discharged any storm water, surface water, groundwater, roof water runoff or subsurface drainage to any sanitary sewer.*

If you have further questions or need additional information please do not hesitate to contact us.

Sincerely,

CENTRAL WEBER SEWER IMPROVEMENT DISTRICT

Lance L. Wood, P. E.
General Manager

cc: Chad Meyerhoffer, Weber County Engineering
Bret Harper

Staff Report for Administrative Approval

Weber County Planning Division

Synopsis

Application Information

Application Request:	Consideration and action on an alternative access request to use a private right-of-way as the primary access for a future 1 lot subdivision.
Agenda Date:	Wednesday, October 11, 2017
Applicant:	Rickey Rau
File Number:	AE 2017-08

Property Information

Approximate Address:	3009 E 3350 N, Liberty
Project Area:	4.67 acres
Zoning:	Forest Valley Zone (FV-3)
Existing Land Use:	Vacant
Proposed Land Use:	Residential
Parcel ID:	22-025-0021
Township, Range, Section:	T7N, R1E, Section 30

Adjacent Land Use

North:	Residential	**South:**	Residential
East:	Residential	**West:**	Forest

Staff Information

Report Presenter:	Felix Lleverino flleverino@co.weber.ut.us 801-399-8767
Report Reviewer:	RG

Applicable Land Use Codes

- Title 104 (Zones) Chapter 3 (Residential Estates RE-15 Zone)
- Title 108 (Standards) Chapter 7 (Supplementary and Qualifying Regulations) Section 31 (Access to a lot/parcel using a private right-of-way or access easement)

Development History

Research into the legality of the parcel to which this application will be securing alternative access for was performed by the Weber County Planning Division April 28, 2009. A letter was prepared by Scott Mendoza describing that an Alternative Access Approval will need to be granted prior to the applying for a one lot subdivision.

Background

The applicant is requesting approval to utilize an easement agreement recorded April 4th 2012 concurrently with approval of an alternative access to lots/parcels at a location other than across the front lot line. The applicant is proposing to use an existing driveway access from a 20' wide private road. The 20' wide private road has access from 3350 North Street, which is a County right-of-way. The parcel that will be served by the alternative access is approximately 660' from 3350 North Street. Approval of the alternative access will allow a future one lot subdivision.

Alternative access applications should be approved as long as the design standards can be implemented during the subdivision process. The application meets the criteria in LUC §108-7-31(1)(b) which states:

> *Based on substantial evidence, it shall be shown that it is unfeasible or impractical to extend a street to serve such lot/parcel. Financial adversity shall not be considered; however, circumstances that may support an approval of a private right-of-way/access easement as access to a lot/parcel may include but not be limited to unusual soil, topographic, or property boundary conditions.*

Analysis

The application has been forwarded to the applicable review agencies and after a thorough review of the applicant's proposal, staff feels that the applicant has provided adequate evidence to show that it is unfeasible or impractical to extend a street to serve such lot/parcel due to the proposal of a future subdivision consisting of only 1 lot. This determination is based on the review and analysis of the information provided by the applicant. The applicant has provided proof of the legal access in the form of a recorded easement agreement, included in this staff report as Exhibit B.

The applicant will be required to ensure that the following design standards are met for the private right of way, as outlined in LUC §108-7-29(1):

(1)*Design standards.*

a. The flag lot access strip, private right-of-way, or access easement shall be designed and built to a standard approved by the county engineer. The improved road surface does not require hard-surface paving, i.e., concrete or asphalt, but the improvements shall meet the following standards.

b. The flag lot access strip shall have a minimum width of 20 feet and a maximum width of 30 feet. A private right-of-way or access easement shall have a minimum width of 16 feet and a maximum width of 50 feet. The private right-of-way and access easement width standards may be modified by the Weber Fire District in conjunction with the county engineer on a case-by-case basis.

c. The improved travel surface of the flag lot access strip, private right-of-way, or access easement shall be a minimum of 12 feet wide if the access serves fewer than five dwellings, and a minimum of 20 feet wide if the access serves five or more dwellings.

d. The improved road surface of the flag lot access strip, private right-of-way, or access easement shall be capable of supporting a minimum weight of 75,000 pounds.

e. A turnout measuring at least ten feet by 40 feet shall be provided adjacent to the traveled surface of the a flag lot access strip, private right-of-way, or access easement (private access) if the private access is greater than 200 feet in length. The turnout shall be located at the approximate midpoint of the private access if its length is between 200 and 800 feet. If the private access length is greater than 800 feet, turnouts shall be provided at least every 400 feet thereafter. These standards may be modified by the Weber Fire District in conjunction with the county engineer on a case-by-case basis.

f. The flag lot access strip, private right-of-way, or access easement shall have a maximum grade of ten percent. This standard may be modified by the Weber Fire District in conjunction with the county engineer on a case-by-case basis; however, the maximum grade shall not exceed 15 percent.

g. The flag lot access strip, private right-of-way, or access easement shall have a minimum vertical clearance of 14.5 feet.

h. No buildings, structures, or parking areas are allowed within the flag lot access strip, private right-of-way, or access easement.

i. New bridges, including decking and culverts shall be capable of supporting a minimum weight of 75,000 pounds. For existing bridges, a current certified engineer statement of load bearing capabilities must be submitted to the county engineer and the Weber Fire District for review.

j. The flag lot access strip, private right-of-way, or access easement shall have a minimum inside travel-way radius of 26 feet, outside travel-way radius of 45 feet, and outside clear zone radius of 50 feet on all curves, particularly switchbacks. The width of the access may need to be increased to accommodate these standards.

k. Water and sewer lines located within the flag lot access strip, private right-of-way, or access easement require written notification from the agencies providing such services.

(2)*Safety standards.*

a. The lot address shall be displayed in a prominently visible location at the street entrance to the flag lot access strip, private right-of-way, or access easement.

b. A turn-around area shall be provided at the home location to allow firefighting equipment to turn around. This area shall be a year round surface capable of supporting fire equipment (a minimum inside turning radius of 30 feet and an outside turning radius of not less than 45 feet).

c. A fire hydrant or other suppression method may be required by the fire district.

d. A site plan showing the location of the home, any proposed access roads and driveways, along with the location of and distance to the nearest fire hydrant (if available) shall be submitted to the fire district for review.

e. Conditions may be imposed by the land use authority to ensure safety, accessibility, privacy, etc., to maintain or improve the general welfare of the immediate area.

The applicant will be required to demonstrate compliance with the above design standards as part of subdivision approval. Compliance with the design and safety standards has been added as a condition of approval to ensure the standards are met.

In addition to demonstrating compliance with the applicable design and safety standards, the applicant will also be required to file an agreement with the County, in which the applicant agrees to pay a proportionate amount of the costs associated with developing a street if, at any time in the future, the county deems it necessary to have the land owner replace the private right of way/easement with a street that would serve as a required access to additional lots, as outlined in LUC §108-7-31(2)(b).

Staff Recommendation

Staff recommends approval of the application to utilize an easement agreement recorded April 4th 2012 concurrently with approval of an alternative access to lots/parcels at a location other than across the front lot line, as the primary access for the future 1 lot subdivision located at approximately 3009 E 3350 N, Liberty, parcel 22-025-0021. This recommendation for approval is subject to all review agency requirements and based on the following conditions:

1. The landowner of record or authorized representative shall agree to pay a proportionate amount of the costs associated with developing a street if, at any time in the future, the County deems it necessary to have the landowner replace the private right-of-way/easement with a street that would serve as a required access to additional lots. The agreement shall be in the form considered appropriate and acceptable to the office of the Weber County Recorder and shall recite and explain all matters of fact, including a lot/parcel boundary description, which are necessary to make the agreement intelligible and show its successive nature.
2. The alternative access design standards outlined in LUC §108-7-29(1) shall be met as part of subdivision approval for the future subdivision.

This recommendation is based on the following findings:

1. Based on substantial evidence, it has been shown that it is unfeasible or impractical to extend a street to serve a subdivision consisting of only one lot.

Administrative Approval

Administrative final approval of Rau Alternative Access to lots/parcels at a location other than across the front lot line, as the primary access for the future 1 lot subdivision located at approximately 3009 E 3350 N, Liberty, parcel 22-025-0021.

Date of Administrative Approval: _____

_____

Rick Grover
Weber County Planning Director

Exhibits

A. Application
B. Easement Agreement

Property Map

Weber County Alternative Access Application

Application submittals will be accepted by appointment only. (801) 399-8791, 2380 Washington Blvd. Suite 240, Ogden, UT 84401

Date Submitted /Completed	Application Fee:	Receipt Number *(Office Use)*	File Number *(Office Use)*
08/30/17	**$350.00**		

Application Type

- ☐ Flag lot access strip
- ☑ Access by Private Right of Way
- ☑ Access at a location other than across the front lot line

Property Owner Contact Information

Name of Property Owner(s)	Mailing Address of Property Owner(s)
Rickey Rau	2355 Nordic Valley Way Eden, UT 84310
Phone: 385-205-985 / Fax:	
Email Address (required): rickeyrau@yahoo.com	Preferred Method of Written Correspondence: ☑ Email ☐ Fax ☐ Mail

Authorized Representative Contact Information

Name of Person Authorized to Represent the Property Owner(s)	Mailing Address of Authorized Person
Phone / Fax	
Email Address (required)	Preferred Method of Written Correspondence: ☐ Email ☐ Fax ☐ Mail

Property Information

Project Name	Total Acreage	Current Zoning
Accessable Acerage	4.67	FS-3
Approximate Address: 3009 E 3350 N, Eden, UT	Land Serial Number(s): 22-025-002[illegible]	
Proposed Use: Single family dwelling		

Project Narrative: As this property is currently described, right of way for access is granted through an agreement from 2012 (Attachment 1). The purpose of this petition is to utilize this easement agreement and the existing driveway pursuant to current Weber County code and standards (108-7-29 (attached) and 108-7-31).

Basis for Issuance of Access to a lot/parcel at a location other than across the front lot line

Access to lots/parcels at a location other than across the front lot line may be approved as the primary access, subject to the following:

Sec. 108-7-32. - Access to a lot/parcel at a location other than across the front lot line.

(1) The applicant demonstrates that special or unique boundary, topographic, or other physical conditions exist which would cause an undesirable or dangerous condition to be created for property access across the front lot line.

(2) It shall be demonstrated that appropriate and legal access exists due to historic use, court decree, or the execution of an easement, right-of-way, or other instrument capable of conveying or granting such right.

Please provide the following information to support your request for Access to a lot/parcel at a location other than across the front lot line:

- ☑ Attach proof that appropriate and legal access exists due to historic use, court decree, or the execution of an easement, right-of-way, or other instrument capable of conveying or granting such right.
- ☑ The landowner of record or authorized representative agrees to pay a proportionate amount of the costs associated with developing a street if, at any time in the future, the County deems it necessary to have the landowner replace the private right-of-way/easement with a street that would serve as a required access to additional lots. The agreement shall be in the form considered appropriate and acceptable to the office of the Weber County Recorder and shall recite and explain all matters of fact, including a lot/parcel boundary description, which are necessary to make the agreement intelligible and show its successive nature.

Property Owner Affidavit

I (We), Rickey Rau, depose and say that I (we) am (are) the owner(s) of the property identified in this application and that the statements herein contained, the information provided in the attached plans and other exhibits are in all respects true and correct to the best of my (our) knowledge. I (We) understand that an approval of an alternative access application does not grant a legal right to access property that I(we) currently do not own.

_____ Property Owner _____ Property Owner

Subscribed and sworn to me this 5 day of SEPT, 20 17.

_____ Notary

Authorized Representative Affidavit

I (We), _____, the owner(s) of the real property described in the attached application, do authorized as my (our) representative(s), _____, to represent me (us) regarding the attached application and to appear on my (our) behalf before any administrative or legislative body in the County considering this application and to act in all respects as our agent in matters pertaining to the attached application.

_____ Property Owner _____ Property Owner

Dated this _____ day of _____, 20 ___, personally appeared before me_____, the signer(s) of the Representative Authorization Affidavit who duly acknowledged to me that they executed the same.

_____ Notary

Weber County Corporation
Weber County
2380 Washington Blvd
Ogden UT 84401

Customer Receipt	
Receipt Number	54053

Receipt Date
09/05/17

Received From:
Rickey Rau

Time: 14:28
Clerk: tbennett

Description	Comment	Amount
Alt. Access Fee	Alt. Access Fee	$350.00

Payment Type	Quantity	Ref	Amount
CHECK		131	

AMT TENDERED:	$350.00
AMT APPLIED:	$350.00
CHANGE:	$0.00

W2569893

When Recorded, Return To:
Phillip Geurts
Geurts Law Firm
3400 N. Ashton Blvd. Suite 180
Lehi, Utah 84043

M2-1064JN

E# 2569893 PG 1 OF 7
ERNEST D ROMLEY, WEBER COUNTY RECORDER
04-Apr-12 0808 AM FEE $24.00 DEP SC
REC FOR: MOUNTAIN AMERICA TITLE
ELECTRONICALLY RECORDED

EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT is entered into on this 3RD day of ~~January~~ April 2012 by and between Foothill Associates L.C. of 1045 E. Millstream Way, Bountiful, Utah 84010 ("Grantor") and Wyatt Grace Holdings, LLC. of 1454 N Hill Field RD #2, Layton, Utah 84041 ("Grantee").

WITNESSETH:

WHEREAS the Grantor is the owner of certain parcels of real property described as Parcel No. 22-025-0047 and Parcel No. 22-025-0038 in Weber County, Utah (the "Servient Properties") more particularly described in *Exhibit A* and *Exhibit B* attached hereto and hereby incorporated into this Agreement.

WHEREAS the Grantee is the owner of that certain parcel of real property described as Parcel No. 22-025-0021 Weber County, Utah located at 3009 East 3350 North, Eden, Utah 84317 (the "Dominant Property") more particularly described in *Exhibit C* attached hereto and hereby incorporated into this Agreement.

WHEREAS the Grantor has agreed on and subject to the terms and conditions set forth herein, to grant unto the Grantee an easement to allow for the ingress, egress and regress of the Grantor's properties along a right of way as hereinafter set forth.

NOW THEREFORE for and in consideration of Ten Dollars ($10.00) and other good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, the Grantor, as the owner of the Servient Properties, does hereby grant and convey unto the Grantee, as the owner of the Dominant Property, the following described easement, to wit: PT 22-025-0021 PT 22-025-0038 PT 22-025-0047 LLK

A RIGHT OF WAY 20 FEET IN WIDTH FOR THE PURPOSES OF INGRESS AND EGRESS OVER, UPON, ALONG AND ACROSS THE FOLLOWING DESCRIBED TRACT OF LAND:

PART OF THE NORTHEAST QUARTER OF SECTION 30, TOWNSHIP 7 RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY: BEGINNING ON THE SOUTHERLY LINE OF COUNTY ROAD AT A POINT WHICH IS SOUTH 1194 FEET, NORTH 83° 13' WEST 330 FEET AND SOUTH 86° 10" WEST 251.97 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 30,

RUNNING THENCE SOUTH 17° 10' WEST 1435 FEET, MORE OR LESS, TO THE NORTHWESTERLY LINE OF PARCEL NO. 22-025-0021.

The easement created herein for the benefit of the Dominant Property shall run with the land and be binding upon the Servient Properties, and shall run with the land and benefit the Dominant Property and every portion thereof.

ARTICLE 1

CONSTRUCTION AND MAINTENANCE OF RIGHT OF WAY

1.1 Grantee has the right but not the obligation to construct, extend and improve the right of way including but not limited to grading, applying gravel, paving, or providing drainage.

1.2 All reasonable costs and expenses incurred to maintain the right of way shall be split between the Grantor and Grantee equally.

ARTICLE 2

NO RIGHTS IN PUBLIC

Nothing contained herein shall be construed as creating any rights in the general public or as dedicating for public use any portion of real property subject to this Agreement.

ARTICLE 3

REMEDIES AND ENFORCEMENT

3.1 In the event of a breach or threatened breach by any party of any terms of this Agreement the non-breaching party shall be entitled to full and adequate relief by injunction and/or all other available legal and equitable remedies against the breaching party.

3.2 No breach hereunder shall entitle any party to cancel, rescind or otherwise terminate this Agreement.

3.3 In the event that a party institutes any legal action or proceeding for the enforcement of any right pursuant to this Agreement, the prevailing party shall be entitled to recover its costs and reasonable attorneys fees incurred in the preparation and prosecution of such action or proceeding.

ARTICLE 4

CONVEYENCE OR SUBDIVISION

4.1 At the time any sale, transfer or conveyance occurs which results in any kind of change in ownership of any parcel or any portion of any parcel of real property subject to this Agreement, the transferee, successor or assignee of such parcel or portion of such parcel shall be bound by the terms of this Agreement.

4.2 If a parcel of real property subject to this Agreement is subdivided, the parcel owner shall record an instrument in the Weber County Recorder's Office allocating to the applicable subdivided parcels the maintenance obligations of the right of way pursuant to this Agreement.

ARTICLE 5

MISCELLANEOUS

5.1 This Agreement shall only be modified, amended or terminated in writing and such writing shall be executed by the owners of all real property subject to this Agreement.

5.2 Each owner of real property subject to this Agreement shall indemnify and hold harmless the other owners of real property subject to this Agreement from and against all claims, actions, damages, liability and expense in connection with bodily and personal injury, death or property damage occurring in or upon the right of way occasioned wholly or in part by any negligent act or omission of such indemnifying party or that indemnifying party's agents and/or employees.

5.3 The easement contained herein shall run with the land and create equitable servitudes in favor of the real property benefitted thereby, shall bind every person having any fee, leasehold or other interest therein and shall inure to the benefit of the respective parties and their successors, assigns, heirs and personal representatives.

5.4 The laws of the State of Utah shall govern this Agreement.

5.5 The partial or complete invalidity of any one or more provisions of this Agreement shall not affect the validity or continuing force and effect of any other provision. In the event a provision is determined to be partially or completely invalid, the parties agree to negotiate in good faith to reach equitable agreement, which shall effect the original intent of the parties as set forth in this Agreement.

5.6 All Exhibits referred to in this Agreement and attached hereto are hereby incorporated into this Agreement.

5.7 The failure of either party to insist, in any one or more instances, on the performance of any of the terms of this Agreement, or to exercise any of its rights, shall not be construed as a waiver or relinquishment of such rights.

5.8 This Agreement contains the complete understanding and agreement of the parties with respect to all matters referred to herein, and all prior representations, negotiations and understandings are superseded hereby.

Dated this 27 day of March 2012.

WYATT GRACE HOLDING, LLC.
By Shawn Moore, Registerd Agent

Dated this 27 day of March 2012.

WYATT GRACE HOLDING, LLC.
By Teresa Moore, Member

Dated this 3RD day of March 2012.
April

FOOTHILL ASSOCIATES L.C.
By Dennis V. Back, Member

EXHIBIT A

Parcel No. 22-025-0047 Pt

PART OF SECTIONS 29 AND 30, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY: BEGINNING AT A POINT IN AN EXISTING FENCE WHICH IS 1194.00 FEET SOUTH 0D16'15" EAST ALONG THE SECTION LINE, 330.00 FEET NORTH 83D13' WEST; AND 209.87 FEET SOUTH 86D10' WEST FROM THE NORTHEAST CORNER OF SAID SECTION 30; RUNNING THENCE SOUTH 15D25' WEST 122.16 FEET, THENCE SOUTH 17D08'31" WEST 252.29 FEET, THENCE NORTH 82D53' WEST 36.21 FEET, THENCE SOUTH 17D10' WEST 423 FEET, THENCE SOUTH 82D53' EAST 962.50 FEET, THENCE SOUTH 16D56'20" WEST 336.83 FEET, THENCE ALONG THE ARC OF AN 1133.80 FOOT RADIUS CURVE TO THE RIGHT A DISTANCE OF 11.00 FEET (LC BEARS SOUTH 74D17'58" EAST 11.00 FEET), THENCE SOUTH 17D10' WEST 261.65 FEET TO THE EAST QUARTER CORNER OF SAID SECTION 30, THENCE SOUTH 0D16'15" EAST 244 FEET ALONG THE SECTION LINE, THENCE WEST 2631.43 FEET TO THE SECTION LINE THENCE NORTH ALONG SAID SECTION LINE 244 FEET TO THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 30, THENCE NORTH 195 FEET THENCE EAST 1550.92 FEET , THENCE NORTH 11D00' EAST 1103.37 FEET, MORE OR LESS, THENCE NORTH 62D10' EAST 320.41 FEET, MORE OR LESS, THENCE NORTH 86D10' EAST 104.43 FEET, MORE OR LESS, TO THE POINT OF BEGINNING. SUBJECT TO A RIGHT OF WAY DESCRIBED AS FOLLOWS: A RIGHT OF WAY 16.5 FEET IN WIDTH FOR PURPOSES OF INGRESS AND EGRESS OVER, UPON, ALONG AND ACROSS THE FOLLOWING DESCRIBED TRACT OF LAND: BEING 8.25 FEET IN WIDTH ON EACH SIDE OF AND MEASURED PERPENDICULARLY TO THE FOLLOWING DESCRIBED CENTERLINE: PART OF THE NORTHEAST QUARTER OF SECTION 30, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY: BEGINNING ON THE SOUTHERLY LINE OF COUNTY ROAD AT A POINT WHICH IS SOUTH 1194 FEET, NORTH 83D13' WEST 330 FEET AND SOUTH 86D10" WEST 251.97 FEET FROM THE NORTHEAST CORNER OF SAID

SECTION 30, RUNNING THENCE SOUTH 17D10' WEST 1435 FEET, MORE OR LESS, TO THE NORTHERLY LINE OF THE MARY C BROWN PROPERTY. (BOOK 1721 PAGE 828)

EXHIBIT B

Parcel No. 22-025-0038 \ 2.5 uk

PART OF THE NORTHEAST QUARTER OF SECTION 30, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY: BEGINNING AT A POINT 1194 FEET SOUTH 330 FEET NORTH 83D13' WEST AND 314.3 FEET SOUTH 86D10' WEST FROM THE NORTHEAST CORNER OF SAID QUARTER SECTION, RUNNING THENCE SOUTH 62D10' WEST 400.00 FEET; THENCE 65D10' WEST 220.00 FEET TO THE EAST LINE OF SPRING MOUNTAIN RANCHETTES; THENCE 4 COURSES ALONG SAID EAST LINE AS FOLLOWS: NORTH 18D21'29" WEST 245 FEET, NORTHERLY ALONG THE ARC OF A 245.19 FOOT RADIUS CURVE TO THE LEFT 39.47 FEET (L C BEARS NORTH 22D58'12" WEST 39.43 FEET). EASTERLY ALONG THE ARC OF A 25 FOOT RADIUS CURVE TO THE RIGHT 43.95 FEET (L C BEARS NORTH 22D46'47" EAST 38.50 FEET) AND NORTH 73D08'29" EAST 133.85 FEET TO THE SOUTH LINE OF THE SPRING CREEK ROAD; THENCE EASTERLY 750 FEET, MORE OR LESS, ALONG SAID SOUTH LINE TO A POINT NORTH 86D10' EAST O F THE POINT OF BEGINNING; THENCE SOUTH 86D10' WEST 250 FEET, MORE OR LESS, TO THE POINT OF BEGINNING. CONTAINING 2.90 ACRES, M/L.

EXHIBIT C

Parcel No. 22-025-0021 12.4

PART OF THE NORTHEAST QUARTER OF SECTION 30, TOWNSHIP 7 NORTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, U.S. SURVERY: BEGINNING AT A POINT 1194 FEET SOUTH, SOUTH 83D30' EAST 420.7 FEET, SOUTH 17D10' WEST 420 FEET AND NORTH 82D53' WEST 481.25 FEET FROM THE NORTHEAST CORNER OF SAID QUARTER SECITON, RUNNING THENCE SOUTH 17D10' EAST 423 FEET; THENCE NORTH 82D53' WEST 481.25 FEET; THENCE NORTH 17D10' EAST 423 FEET TO A POINT SOUTH 17D10' WEST 773 FEET FROM COUNTY ROAD; THENCE SOUTH 82D53' EAST 481.25 FEET TO THE PLACE OF BEGINNING

Staff Report for Administrative Subdivision Approval

Weber County Planning Division

Synopsis

Application Information

Application Request:	Consideration and action on an administrative application for final approval of Silver Bell Estates No 2, 2nd Amendment, a one lot subdivision.
Type of Decision:	Administrative
Agenda Date:	Wednesday, October 11, 2017
Applicant:	Travis Braden, owner
File Number:	UVS 061317

Property Information

Approximate Address:	2200 N 3800 E, Liberty UT
Project Area:	2.1 Acres
Zoning:	Forest Valley (FV-3) Zone
Existing Land Use:	Forest
Proposed Land Use:	Residential
Parcel ID:	22-036-0001
Township, Range, Section:	T7N, R1E, Section 32

Adjacent Land Use

North:	Residential	**South:**	Residential
East:	Residential	**West:**	Forest

Staff Information

Report Presenter:	Felix Lleverino flleverino@co.weber.ut.us 801-399-8767
Report Reviewer:	RK

Applicable Ordinances

- Title 101 (General Provisions) Section 7 (Definitions)
- Title 104 (Zones) Chapter 14 (FV-3 Zone)
- Title 106 (Subdivisions)
- Title 108 (Standards) Chapter 18 (Drinking Water Source Protection)
- Title 108 (Standards) Chapter 22 (Natural Hazard Areas)

Background and Summary

The applicant has submitted a proposal for a one lot subdivision. The proposed subdivision will expand the size of the recorded lot 63 of the Silver Bell Estates No 2. Currently, both parcels have been combined for tax purposes only. There are no structures on either lot 63 or the parcel to the south. Lot 63 is a corner lot that has access from Nordic Valley Drive, a private right of way, and a County Road called Viking Drive (see Exhibit A, B and C).

Zoning for this lot is Forest valley (FV-3). The area and width requirements for the FV-3 Zone are 150' lot width and 3 acres lot area. This lot has 214.4 feet in width and 2.10 acres in area. Site development standards were met by the lots within this subdivision which was created at a time when zoning allowed for 1 acre lots.

This lot is located within a Natural Hazard Area where County ordinance requires a geologic study be conducted. The applicant provided a Geologic Reconnaissance Report that has been included as Exhibit E. The Geologic Report prepared by Western Geologic has identified several hazards that have a risk level of "Moderate" that can be found on pages 10, 14, and 15. An "N" has been placed on the plat following the lot number indicating that this lot is located within a Natural Hazard Area. There is also a note on the plat stating that a Geologic Study was conducted and that the final report is available for public review at the Weber County Planning Division.

The subdivision plat with contours has an average slope of 17.62% which is below the 25% grade threshold for requiring an "R" be placed next to the lot number.

There is a stream corridor named Pole Canyon Creek that runs along the east boundary of the lot. The proposed plat shows the stream corridor and the required 50 foot drainage easement. The Uniform Land Use Code of Weber County, Utah (LUC §108-7-23) states that "no structures, accessory structures, roads, or parking areas shall be built in the required set-backs for river and streams."

This lot is also located within a Drinking Water Source Protection Zone 4, (LUC) §108-18-5 and §108-18-6 state the allowed and prohibited uses. The proposed residential uses are in accordance with Drinking Water Source Protection requirements.

The proposed subdivision and lot configuration are in conformance with the applicable zone and subdivision requirements as required in the LUC. The following section is a brief synopsis of the review criteria and conformance with the LUC.

Analysis

General Plan: The Silver Bell Estates No2 2nd Amendment is in harmony with the Ogden Valley General Plan by enlarging a residential lot to encourage the preservation and management of forest areas (*2016 Ogden Valley General Plan Page 7*).

Zoning: The property is located in the FV-3 Zone. The purpose of this zone is stated in the LUC §104-3-1 as follows:

> *"The purpose of the Forest Valley Zone, FV-3 is to provide area for residential development in a forest setting at a low density, as well as to protect as much as possible the naturalistic environment of the development."*
>
> This proposal meets the purpose and intent of the Uniform Land Use Code of Weber County, Utah.

Lot Area, Frontage Width and Yard Regulations: The proposed Lot 22 will contain 2.10 acres and is 214.4 ft. wide. The site development standards for the FV-3 Zone are as follows:

> Minimum Lot Area: 3 acres.
> Minimum Lot Width: 150 Feet

The Yard Regulations for a single family dwelling in the FV-3 zone are as follows:

> Front: 30 feet
> Sides: 20 feet
> Rear: 30 feet

The proposed lot is considered a "Non conforming lot" and is allowed to be amended per LUC §108-12-11 (2) which states: *"A lot that was plated within the bounds of a subdivision, and met zoning standards in effect at the time of its creation may be amended pursuant to minimum standards that were in effect at the time of its creation".*

Small Subdivision: The Weber County Land Use Code (Title 101) defines a "small subdivision" as "An amended subdivision consisting of five (5) or fewer lots and for which no streets will be created or realigned." This subdivision consists of one lot and no new streets are being created or realigned. Based on these provisions, this subdivision qualifies for administrative approval as a small subdivision.

Natural Hazards Area: This lot is located within a FEMA Flood Zone X, and is in the area determined to be outside of the 500-year flood area.

The proposed subdivision is located within a Natural Hazards Area and a geologic study has been submitted for review to determine if hazards exist on the site, the severity of the hazards, and to identify the need for further recommendations. Earthquake Ground Shaking poses a high risk to the site. "A Project Geotechnical Engineer, in conjunction with the builder should confirm and evaluate the seismic ground-shaking hazard and provide appropriate seismic design parameters as needed (see page 11 of the Geologic report)."

Stream Flooding has a risk level of moderate. "Areas adjacent to Pole Canyon Creek may have a high risk from stream flooding. However, no other active drainages are present, and areas more than 50 feet from the stream course likely have low risk (see page 12 and 13 of the Geologic report)."

Land Slides and Slope Failures have a risk level of moderate. "Due to the slope of the land and soil type of Norwood Formation it is conservatively recommended that the site be evaluated in a geotechnical engineering evaluation prior to building. Care should also be taken that site grading does not destabilize sloped in this area without prior geotechnical analysis and grading plans, and that proper drainage is maintained (see page 13 of the Geologic report)."

Also see pages 14 and 15 of the geologic report for Conclusions and Recommendations concerning: Seismic Design, Site Grading and Drainage, Geotechnical Investigation, Stream Flooding, and Availability of Report.

Based on the hazard potential, an "N" has been added to the lot number to notify future property owners of the need for additional geologic/geotechnical investigation prior receiving an approved building permit. The following note must be added to the plat to provide future property owners notice of the additional requirements:

> *"Name of Subdivision* is located within a Natural Hazards Area. A geotechnical and geologic investigation has been performed by *Name of Geotech and Geologic Company (include date and job/project#(s)*). Lots identified with an "N" will require further geologic and geotechnical investigations prior to submitting an application for a land use and building permit. The final report is available for public review at the Weber County Planning Division Office."

Sanitary Water and Culinary Water: A letter from the Health Department stating that feasibility for an onsite wastewater management system will be evaluated when the owners are ready to develop the property (see Exhibit D). A letter from Nordic Mountain Water Inc. has been submitted stating that Lot 63 of Silver Bell Estates possesses a culinary water share (see Exhibit D-2).

Additional design standards and requirements: This proposal lies within a Drinking Water Source Protection Zone 3. Due to the potential for ground water contamination Weber County land use code lists specific restrictions for this zone. The current residential use does not violate the Drinking Water Source Protection Regulations.

With the exception of the recommended conditions identified in this staff report additional standards and requirements are unnecessary at this time.

Review Agencies: Weber County Engineering has approved the proposal, and the County Surveyor has made several comments the on the plat for revisions.

Tax Clearance: The 2016 property taxes have been paid in full. The 2017 property taxes will be due in full on November 1, 2017.

Public Notice: Noticing requirements, according to LUC 106-1-6(c), have been met by mailing notices out to all property owners of record within 500 feet of the subject property.

Staff Recommendations

Staff recommends final plat approval Silver Bell Estates No. 2, 2nd Amendment, consisting of one lot. This recommendation is based on meeting all review agencies requirements and based on the following conditions:

1. A note must be added to the plat to provide future property owners notice of the additional requirements due to the property being located within a Natural Hazards Area and being noted with an "N".

This recommendation is based on the following findings:

1. The proposed subdivision conforms to the Western Weber General Plan.
2. The proposed subdivision complies with the applicable County codes.

Administrative Approval

Administrative final approval of Silver Bell Estates No. 2, 2nd Amendment is hereby granted based upon its compliance with the Weber County Uniform Land Use Code. This approval is subject to the requirements of applicable review agencies and the conditions of approval listed in this staff report.

Date of Administrative Approval: _____

_____

Rick Grover
Weber County Planning Director

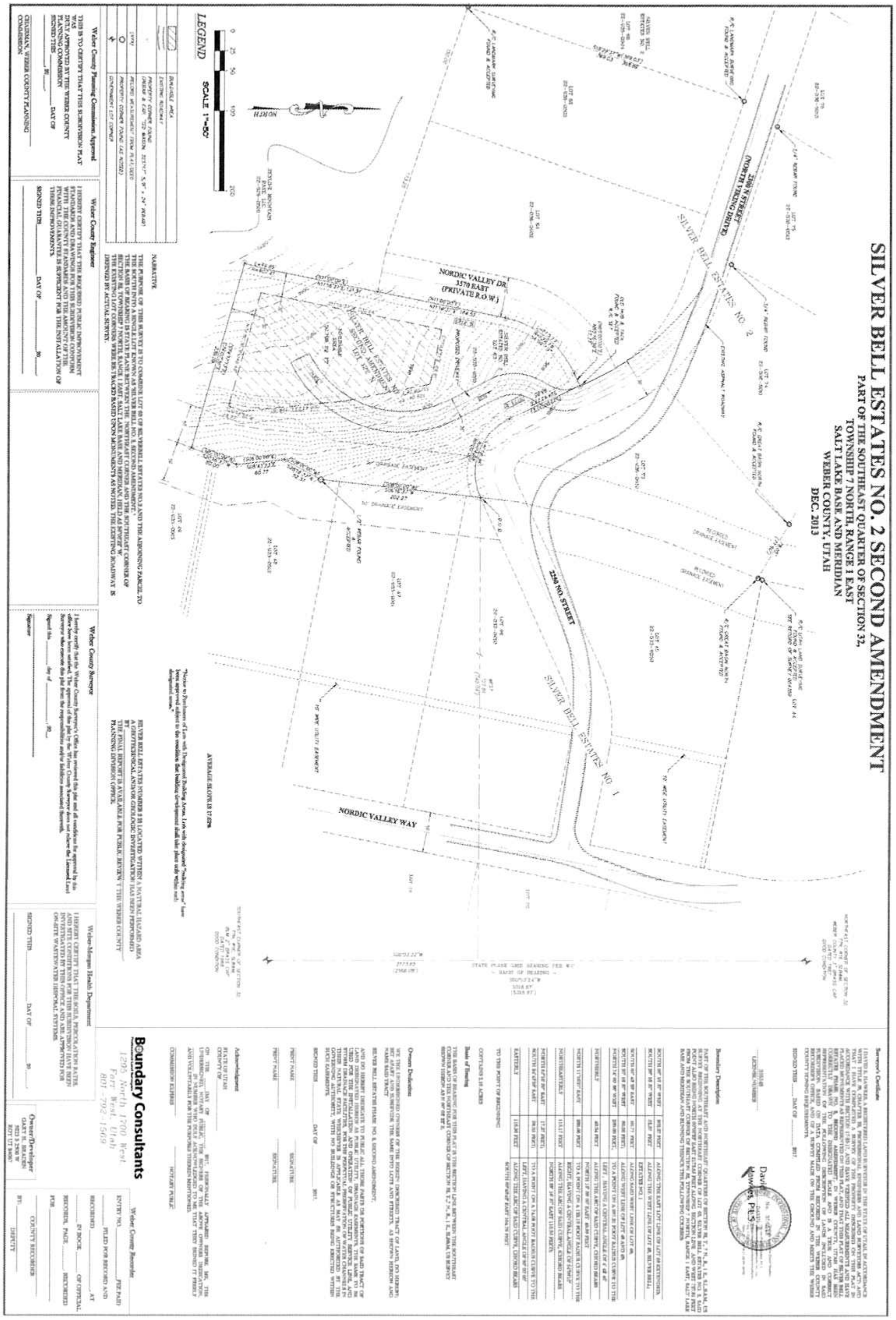
Exhibits

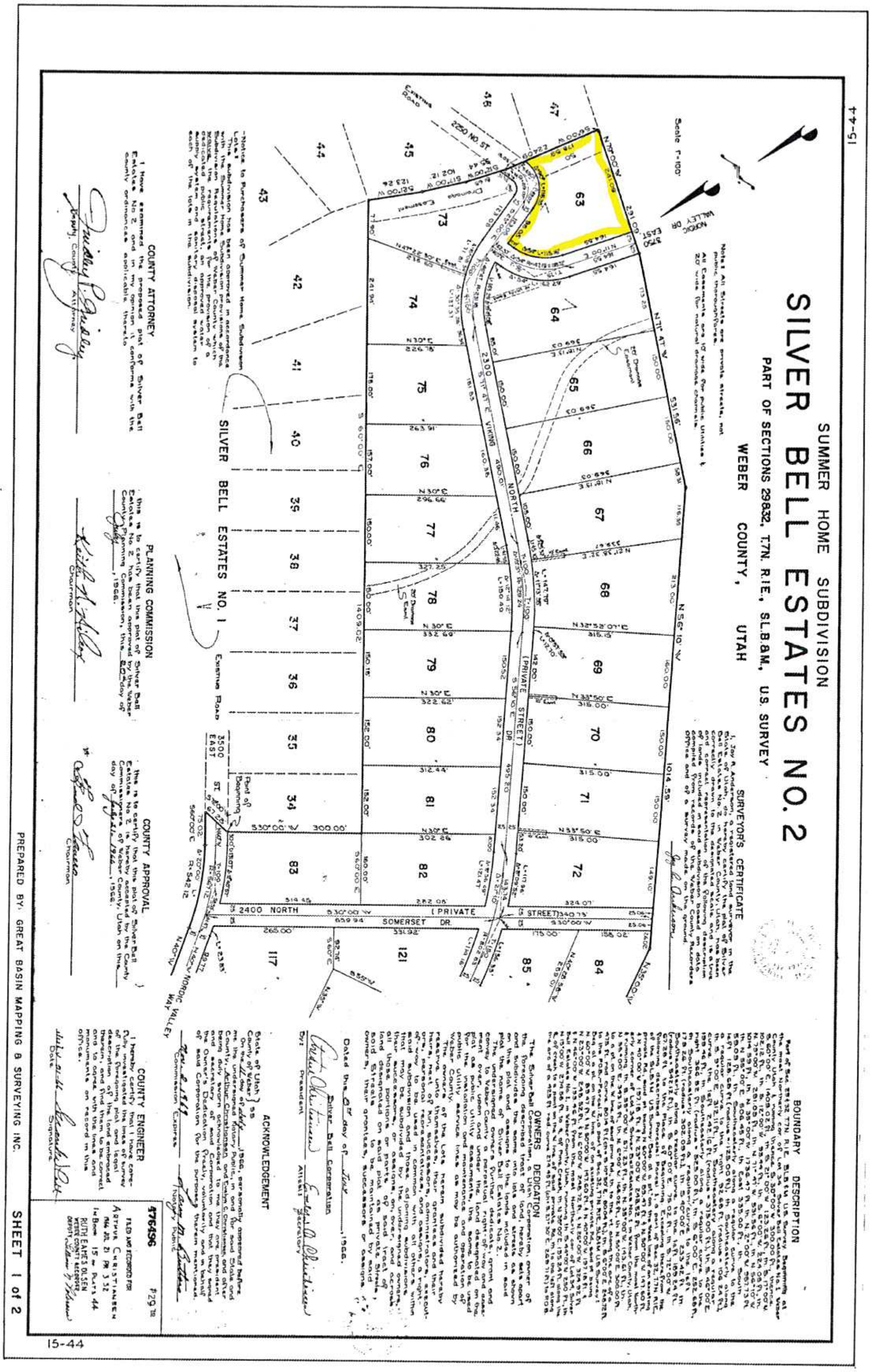
A. Silver Bells Estates No. 2, 2nd Amendment
B. Original Silver Bell Estates No. 2
C. Current Recorders Plat
D. Feasibility Letters
E. Geologic Report

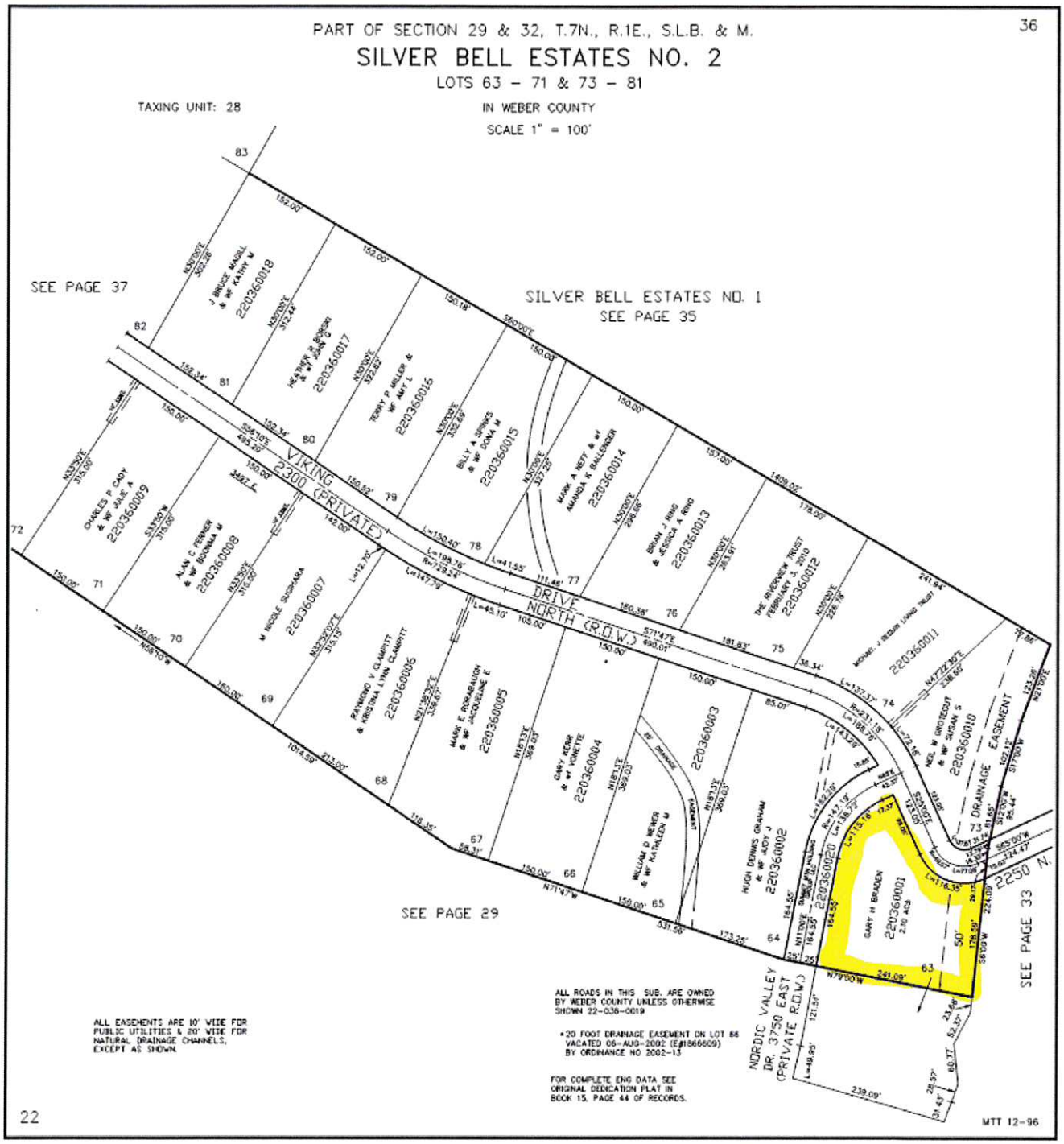
Area Map


NORDIC VALLEY WAY
VIKING DR
2250 N ST
Liberty
Nordic Valley Dr
Subject Property
BIG SK

Exhibit A


SILVER BELL ESTATES NO. 2 SECOND AMENDMENT
PART OF THE SOUTHEAST QUARTER OF SECTION 32,
TOWNSHIP 7 NORTH, RANGE 1 EAST
SALT LAKE BASE AND MERIDIAN
WEBER COUNTY, UTAH
DEC. 2013
NORDIC VALLEY DR.
3570 EAST
(PRIVATE R.O.W.)
2250 NO. STREET
NORDIC VALLEY WAY
SILVER BELL ESTATES NO. 1
SILVER BELL ESTATES NO. 2
LEGEND
SCALE 1"=50'
NARRATIVE
Weber County Planning Commission Approval
Weber County Engineer
Weber County Surveyor
Weber-Morgan Health Department
Boundary Consultants
Weber County Recorder


15-44
SUMMER HOME SUBDIVISION
SILVER BELL ESTATES NO. 2
PART OF SECTIONS 29&32, T.7N. R.1E., SL.B.&M., U.S. SURVEY
WEBER COUNTY, UTAH
SURVEYOR'S CERTIFICATE
BOUNDARY DESCRIPTION
OWNERS DEDICATION
ACKNOWLEDGEMENT
COUNTY ENGINEER
COUNTY APPROVAL
PLANNING COMMISSION
COUNTY ATTORNEY
SILVER BELL ESTATES NO. 1
PREPARED BY: GREAT BASIN MAPPING & SURVEYING INC.
SHEET 1 of 2
15-44


PART OF SECTION 29 & 32, T.7N., R.1E., S.L.B. & M.
36
SILVER BELL ESTATES NO. 2
LOTS 63 - 71 & 73 - 81
TAXING UNIT: 28
IN WEBER COUNTY
SCALE 1" = 100'
SEE PAGE 37
SILVER BELL ESTATES NO. 1
SEE PAGE 35
VIKING DRIVE
2300 (PRIVATE)
NORTH (R.O.W.)
SEE PAGE 29
SEE PAGE 33
2250 N.
NORDIC VALLEY DR. 3750 EAST (PRIVATE R.O.W.)
73 DRAINAGE EASEMENT
ALL EASEMENTS ARE 10' WIDE FOR PUBLIC UTILITIES & 20' WIDE FOR NATURAL DRAINAGE CHANNELS, EXCEPT AS SHOWN
ALL ROADS IN THIS SUB. ARE OWNED BY WEBER COUNTY UNLESS OTHERWISE SHOWN 22-036-0019
•20 FOOT DRAINAGE EASEMENT ON LOT 66 VACATED 06-AUG-2002 (E#1866609) BY ORDINANCE NO 2002-13
FOR COMPLETE ENG DATA SEE ORIGINAL DEDICATION PLAT IN BOOK 15, PAGE 44 OF RECORDS.
22
MTT 12-96

BRIAN W. BENNION, M.P.A., L.E.H.S.
Health Officer/Executive Director

WEBER-MORGAN
HEALTH DEPARTMENT

May 23, 2017

Weber County Planning Commission
2380 Washington Blvd.
Ogden UT 84401

RE: Proposed Vahalla Estates, Lot 1
Parcel #22-036-0001

Dear Gentlemen:

Information on the above referenced property has been reviewed by staff of this office.

The Health Department will agree to the proposed lot changes per plans reviewed. Because the two lots have been previously recorded, combining them will not negatively impact onsite wastewater considerations. The Health Department will evaluate the property at a later time for feasibility of a wastewater disposal system when owners are ready to develop the property.

If you have any questions please contact our office at 801-399-7160.

Sincerely,

Brian Cowan, LEHS
Environmental Health Division

BC/gk

Nordic Mountain Water, Inc.
4794 East 2600 North
P. O. Box 897
Eden, Utah 84310
(801) 745-2605
nmwi@digis.net

June 6, 2017

Reference:

Lot# All of Lot #63, SILVER BELL ESTATES NO.2, WEBER COUNTY, UTAH.

Weber County Tax ID# 22-036-0001

To Whom It May Concern:

We certify the above referenced property has a culinary water share with Nordic Mountain Water, Inc. guaranteeing the right to connect to the NMWI water system. All labor and materials required to physically connect this property to the NMWI water line is the responsibility of the property owner. In addition, shareholders not connected to the system are assessed a $20.00/month standby fee as their part of NMWI debt repayment until such time as they physically connect to the system.

NMWI is an approved culinary water company in good standing within Weber County, State of Utah.

Bill D. Green
President of the Board of Directors
Nordic Mountain Water, Inc.

REPORT

GEOLOGIC HAZARDS RECONNAISSANCE

SILVER BELL ESTATES LOT 63

NORDIC VALLEY DRIVE AND VIKING DRIVE

EDEN, WEBER COUNTY, UTAH

Prepared for

Wendy Crook
Keller Williams Success Realty
5711 South 1475 East
South Ogden, Utah

August 22, 2017

Prepared by

Western GeoLogic, LLC
2150 South 1300 East, Suite 500
Salt Lake City, Utah 84106

Voice: 801.359.7222
Fax: 801.990.4601
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WESTERN GEOLOGIC, LLC
2150 SOUTH 1300 EAST, SUITE 500
SALT LAKE CITY, UT 84106 USA

Phone: 801.359.7222 Fax: 801.990.4601 Email: cnelson@westerngeologic.com

August 22, 2017

Wendy Crook
Keller Williams Success Realty
5711 South 1475 East
South Ogden, Utah

SUBJECT: Geologic Hazards Reconnaissance
Silver Bell Estates Lot 63
Nordic Valley Drive and Viking Drive
Eden, Weber County, Utah

Dear Ms. Crook:

This report presents results of an engineering geology and geologic hazards review and evaluation conducted by Western GeoLogic, LLC (Western GeoLogic) for Lot 63 in the Silver Bell Estates Subdivision in unincorporated Weber County, Utah, Utah (Figure 1 – Project Location). The Project consists of a 2.1-acre parcel identified as Weber County Assessor's parcel number 22-036-0001. The parcel is not currently addressed, but is southeast of the intersection of Nordic Valley and Viking Drives. The site is at the eastern base of the Wasatch Range, at the southern end of Nordic Valley on the northwestern margin of Ogden Valley in the SE1/4 Section 32, Township 7 North, Range 1 East (Salt Lake Base Line and Meridian; Figure 1). Elevation of the site ranges from about 5,560 feet to 5,680 feet above sea level. It is our understanding that the property is currently part of real estate transaction and there are currently no formalized development plans.

PURPOSE AND SCOPE

The purpose and scope of this investigation is to identify and interpret surficial geologic conditions at the site to identify potential risk from geologic hazards to the Project. This investigation is intended to: (1) provide preliminary geologic information and assessment of geologic conditions at the site; (2) identify potential geologic hazards that may be present and qualitatively assess their risk to the intended site use; and (3) provide recommendations for additional site- and hazard-specific studies or mitigation measures, as may be needed based on our findings. Such recommendations could require further multi-disciplinary evaluations, and/or may need design criteria that are beyond our professional scope. No hazard-specific evaluations or subsurface exploration were conducted for this report or within the scope of our study.

The following services were performed in accordance with the above stated purpose and scope:

- A site reconnaissance conducted by an experienced certified engineering geologist to assess the site setting and look for adverse geologic conditions;

- Review of readily-available geologic maps, reports, and air photos; and
- Evaluation of available data and preparation of this report, which presents the results of our study.

The engineering geology section of this report has been prepared in accordance with Bowman and Lund (2016) and current generally accepted professional engineering geologic principles and practice in Utah, and meets specifications provided in Chapter 27 of the Weber County Land Use Code within the above stated scope. We do not include discussion of radon hazard potential, as recommended in Bowman and Lund (2016), because radon gas poses an environmental health hazard and indoor levels are heavily influenced by several post-construction, non-geologic factors. The hazard from radon should be evaluated by long-term testing following construction.

HYDROLOGY

The U.S. Geological Survey (USGS) topographic map of the Huntsville Quadrangle shows the site is on the western margin of Ogden Valley on slopes northeast of the mouth of Pole Canyon Creek overlooking the southern end of Nordic Valley (Figure 1). Pole Canyon Creek flows to the north along the eastern Project boundary. Nordic Valley Ski Area is about 0.7 miles to the northwest. Other than Pole Canyon Creek on the eastern site margin, no active drainages are shown crossing the site on Figure 1, and no springs or seeps were observed at the site or are shown in the site area on Figure 1.

The site is the western margin of Ogden Valley about 1.3 miles northwest of the north arm of Pineview Reservoir. The valley bottoms to the east are dominated by unconsolidated lacustrine and alluvial basin-fill deposits, whereas slopes bounding the east side of Nordic Valley are in Tertiary-age tuffaceous bedrock and slopes on the west are in Paleozoic Maple Canyon Formation bedrock. Both bedrock units are a source for numerous landslides in the area that have occurred since Late Pleistocene time. No site-specific groundwater information was available for the Project, but the Utah Division of Water Rights Well Driller Database shows three nearby water wells (Figure 1) with reported depths to static groundwater of 34 to 75 feet. Given the above, we anticipate the depth to groundwater at the Project is generally greater than 30 feet; however, areas within 50 feet of Pole Canyon Creek may have shallower depths, and groundwater depths at the site also likely vary seasonally from snowmelt runoff and annually from climatic fluctuations. Such variations would be typical for an alpine environment. Perched conditions above less-permeable, clay-rich bedrock layers may also be present in the subsurface that could cause locally shallower groundwater levels.

Avery (1994) indicates groundwater in Ogden Valley occurs under perched, confined, and unconfined conditions in the valley fill to depths of 750 feet or more. A well-stratified lacustrine silt layer forms a leaky confining bed in the upper part of the valley-fill aquifer. The aquifer below the confining beds is the principal aquifer, which is in primarily fluvial and alluvial-fan deposits. The principal aquifer is recharged from precipitation, seepage from surface water, and subsurface inflow from bedrock into valley fill along the valley margins (Avery, 1994). The

confined aquifer is typically overlain by a shallow, unconfined aquifer recharged from surface flow and upward leakage. Groundwater flow is generally from the valley margins into the valley fill, and then toward the head of Ogden Canyon (Avery, 1994). Based on topography, we expect groundwater flow at the site to be to the northeast.

GEOLOGY

Surficial Geology

The site is located on the northwestern margin of Ogden Valley, a sediment-filled intermontane valley within the Wasatch Range, a major north-south trending mountain range marking the eastern boundary of the Basin and Range physiographic province (Stokes; 1977, 1986). Surficial geology of the site is mapped by Coogan and King (2016; Figure 2) as mainly Pleistocene-age alluvial-fan deposits (units Qafb and Qafp), with a narrow area of Holocene- to Pleistocene-age debris- and mud-flow deposits along Pole Canyon Creek (unit Qmdf).

Coogan and King (2016) describe surficial geologic units in the site area on Figure 2 as follows:

> ***Qal, Qal1, Qal2, Qal2?*** *– Stream alluvium and flood-plain deposits (Holocene and uppermost Pleistocene).* Sand, silt, clay, and gravel in channels, flood plains, and terraces typically less than 16 feet (5 m) above river and stream level; moderately sorted; unconsolidated; along the same drainage Qal2 is lower than Qat2 and has likely been subject to flooding, at least prior to dam building; present in broad plains along the Bear, Ogden, and Weber Rivers and larger tributaries like Deep, Cottonwood, East Canyon, Lost, and Saleratus Creeks, along Box Elder, Heiners, and Yellow Creeks, and in narrower plains of larger tributary streams; locally includes muddy, organic overbank and oxbow lake deposits; composition depends on source area, so in back valleys typically contains many quartzite cobbles recycled from the Wasatch Formation; mostly Holocene, but deposited after regression of Lake Bonneville from the late Pleistocene Provo shoreline; width in Morgan Valley is combined flood plain of Weber River and East Canyon and Deep Creeks; 6 to 20 feet (2-6 m) thick and possibly as much as 50 feet (15 m) along Weber River and thinner in the Kaysville quadrangle; greater thicknesses (>50 feet [15 m]) are reported in Morgan Valley (Utah Division of Water Rights, well drilling database), but likely include Lake Bonneville and older Pleistocene deposits.
>
> Suffixes 1 and 2 indicate ages where they can be separated, with 1 including active channels and 2 including low terraces 10 to 20 feet (3-6 m) above the Weber and Ogden Rivers, and the South Fork Ogden River that may have been in the flood plain prior to damming of these waterways. Qal2 queried in low terraces above Bear River, Saleratus Creek, and Dry Creek where deposits may not be in the flood plain.

Qaf, Qafy, Qaf3, Qaf3?, Qaf4, Qaf4?, Qaf5 – *Alluvial-fan deposits (Holocene and Pleistocene).* Mostly sand, silt, and gravel that is poorly bedded and poorly sorted and that is not close to late Pleistocene Lake Bonneville and is geographically in the Huff Creek and upper Bear River drainages; variably consolidated; includes debris flows, particularly in drainages and at drainage mouths (fan heads); generally less than 60 feet (18 m) thick. Qaf with no suffix used where age uncertain or for composite fans where portions of fans with multiple ages cannot be shown separately at map scale; toes of some fans have been removed by human disturbances, so their age cannot be determined.

Where possible, subdivided into relative ages, indicated by letter and number suffixes (like Qa and Qat suffixes) and relative ages only apply to the local drainage, with unit Qafy being the lowest (youngest) fans and unit 3 may or may not post-date Lake Bonneville. Relative ages of these fans are partly based on heights above present drainages at drainage-eroded edge of fan. The relative age is queried where the age is uncertain, generally due to the height not fitting into the typical order of surfaces. The various deposits listed, Qafy and Qaf3 through Qaf5, are 20 to 140 feet (6-40 m) above and west of Saleratus Creek, and also above Yellow Creek and the Bear River. Qafy fans are active, impinge on present-day floodplains, divert active streams, and overlie low terraces.

Qafp, Qafp?, Qafb, Qafb?, Qafpb, Qafpb? – *Lake Bonneville-age alluvial-fan deposits (upper Pleistocene).* Like undivided alluvial fans, but height above present drainages appears to be related to shorelines of Lake Bonneville and is within certain limits (see table 1); these fans are inactive, unconsolidated to weakly consolidated, and locally dissected; fans labeled Qafp and Qafb are related to the Provo (and slightly lower) and Bonneville shorelines of late Pleistocene Lake Bonneville, respectively, while unit Qafpb is used where fans may be related to the Provo or Bonneville shoreline (for example Qafpb is ~40 feet [12 m] above Lost Creek Valley), or where fans of different ages cannot be shown separately at map scale; Qafp fans typically contain well-rounded, recycled Lake Bonneville gravel and sand and are moderately well sorted; generally 10 to less than 60 feet (3-18 m) thick. Lake Bonneville-age fans are queried where relative age is uncertain (see Qaf for details); fans labeled Qafpb? are above the Bonneville shoreline and might be Qafo or like Qafm; see the note under Qao about two possible ages of older alluvium (Qao, Qato, and Qafo).

Most of the Lake Bonneville-age fans in the James Peak quadrangle are far from the Bonneville shoreline and their age is inferred from their stratigraphic relationship(s) to coeval Pinedale glacial outwash (see age equality in Table 3).

The channels (Qafp/Qdlb) on the Weber River delta and Lake Bonneville fines (Qafp on Qlfb) probably record scour and fill during the rapid drawdown of the lake as it fell from the Bonneville shoreline to the Provo shoreline.

Qap, Qap?, Qab, Qab?, Qapb – *Lake Bonneville-age alluvium (upper Pleistocene).* Like undivided alluvium but height above present drainages appears to be related to shorelines of Lake Bonneville and is within certain limits, and unconsolidated to weakly consolidated; alluvium labeled Qap and Qab is related to Provo (and slightly lower) and Bonneville shorelines of Lake Bonneville (at ~4800 to 4840 feet [1463-1475 m] and 5180 feet [1580 m] in Morgan Valley), respectively; suffixes partly based on heights above adjacent drainages near Morgan Valley (see tables 1 and 2); Qap is typically about 15 to 40 feet (5-12 m) above present adjacent drainages, but is locally 45 feet (12 m) above; Qapb is used where more exact age cannot be determined, typically away from Lake Bonneville, or where alluvium of different ages cannot be shown separately at map scale; Qap is up to about 50 feet (15 m) thick, with Qapb and Qab, at least locally up to 40 and 90 feet (12 and 27 m) thick, respectively. Queried where classification or relative age uncertain (see Qa).

A prominent surface ("bench") is present on Qap and Qatp at about 4900 feet (1494 m) elevation and about 25 to 40 feet (8-12 m) above the Weber River in Morgan Valley and along the South Fork Ogden River.

In the Devils Slide quadrangle, the Qab that is mapped about 80 to 95 feet (24-29 m) above Round Valley and 40 to 50 feet (12-15 m) above adjacent drainages at the mouth of Geary Hollow appears unique. Based on heights above adjacent drainages, these deposits would be Qao (see table 1), but similar alluvial deposits to the east near Phil Shop Hollow have a Bonneville shoreline cut in them and are much thinner than 40 feet (12 m). The lack of a Bonneville shoreline, and small thickness and heights above drainages indicate the deposits could be a Bonneville shoreline fan-delta.

Qmdf, Qmdf? – *Debris- and mud-flow deposits (Holocene and upper and middle? Pleistocene).* Very poorly sorted, clay- to boulder-sized material in unstratified deposits characterized by rubbly surface and debris-flow levees with channels, lobes, and mounding; variably vegetated; in drainages typically form mounds, an indication of more viscous Qmdf, rather than being flat like unit Qac; Qmdf queried where may not be mostly debris- and mud-flow deposits; many debris flows cannot be shown separately from alluvial fans at map scale; 0 to 40 feet (0-12 m) thick. Age(s) uncertain; deposits in drainages likely post-date the Provo shoreline of Lake Bonneville, while deposits above drainages, like north of the Right Hand Fork Peterson Creek, are likely as old as Bull Lake glaciation, but could pre-date Bull Lake glaciation and be middle Pleistocene.

Qms, Qms?, Qmsy, Qmsy?, Qmso, Qmso? – *Landslide deposits (Holocene and upper and middle? Pleistocene).* Poorly sorted clay- to boulder sized material; includes slides, slumps, and locally flows and floods; generally characterized by hummocky topography, main and internal scarps, and chaotic bedding in displaced blocks; composition depends on local sources; morphology becomes more subdued with time and amount of water in material during emplacement; Qms may be in contact with Qms when landslides are different/distinct; thickness highly variable, up to about 20

to 30 feet (6-9 m) for small slides, and 80 to 100 feet (25-30 m) thick for larger landslides. Qmsy and Qmso queried where relative age uncertain; Qms queried where classification uncertain. Numerous landslides are too small to show at map scale and more detailed maps shown in the index to geologic mapping should be examined.

Qms without a suffix is mapped where the age is uncertain (though likely Holocene and/or late Pleistocene), where portions of slide complexes have different ages but cannot be shown separately at map scale, or where boundaries between slides of different ages are not distinct. Estimated time of emplacement is indicated by relative-age letter suffixes with: Qmsy mapped where landslides deflect streams or failures are in Lake Bonneville deposits, and scarps are variably vegetated; Qmso typically mapped where deposits are "perched" above present drainages, rumpled morphology typical of mass movements has been diminished, and/or younger surficial deposits cover or cut Qmso. Lower perched Qmso deposits are at Qao heights above drainages (95 ka and older) and the higher perched deposits may correlate with high level alluvium (QTa_) (likely older than 780 ka) (see table 1). Suffixes y and o indicate probable Holocene and Pleistocene ages, respectively, with all Qmso likely emplaced before Lake Bonneville transgression. These older deposits are as unstable as other slides, and are easily reactivated with the addition of water, be it irrigation or septic tank drain fields.

Qls, Qls?, Qlsp, Qlsb, Qlsb? – *Lake Bonneville sand (upper Pleistocene).* Mostly sand with some silt and gravel deposited nearshore below and near the Provo shoreline (Qlsp) and between the Provo and Bonneville shorelines (Qlsb); Qls mapped downslope from slope break below Provo shoreline beach deposits where thin Lake Bonneville regressional sand may overlie transgressional sand; grades downslope into unit Qlf with decreasing sand content and laterally with more gravel into units Qdlp, Qdlb, and upslope with more gravel into unit Qlgb; Qls and Qlsb queried where grain size or unit identification uncertain; may be as much as 75 feet (25 m) thick, and thickest near Ogden; typically less than 20 feet (6 m) thick in Morgan Valley; may include small deltas and deltas that lack typical delta shape.

Qla, Qla? – *Lake Bonneville lacustrine deposits and post- and pre-Lake Bonneville alluvial deposits, undivided (Holocene and upper? Pleistocene).* Mostly poorly sorted and poorly bedded sand, silt, and clay, with some gravel; mapped where Lake Bonneville deposits are reworked by later stream action or covered by thin stream and fan deposits, and where lake deposits are thin and overlie older alluvial deposits; unit queried where may be dominantly alluvium; deposits typically eroded from shallow Norwood Formation; mostly mapped near Bonneville shoreline; also mapped in Peterson quadrangle along upper Deep Creek above Bonneville shoreline where lake deposits seem to indicate landslide dam of creek; thickness uncertain.

Tn, Tn? – *Norwood Formation (lower Oligocene and upper Eocene).* Typically light-gray to light-brown altered tuff (claystone), altered tuffaceous siltstone and sandstone, and conglomerate; unaltered tuff, present in type section south of Morgan, is rare;

locally colored light shades of red and green; variable calcareous cement and zeolitization; involved in numerous landslides of various sizes; estimate 2000-foot (600 m) thick in exposures on west side of Ogden Valley (based on bedding dip, outcrop width, and topography). Norwood Formation queried where poor exposures may actually be surficial deposits. For detailed Norwood Formation information see description under heading "Sub-Willard Thrust - Ogden Canyon Area" since most of this unit is in and near Morgan Valley and covers the Willard thrust, Ogden Canyon, and Durst Mountain areas.

Zmcg, Zmcg? – *Maple Canyon Formation, Lower (green arkose) member (Neoproterozoic).* Grayish-green, fine-grained arkosic (feldspathic) meta-sandstone and sandy argillite (meta-graywacke), with local quartzite lenses up to 200 feet (60 m) thick; weathers darker gray to brown to greenish-gray and greenish-brown; 500 to 1000 feet (150-305 m) thick and lower thickness would eliminate the need for faulting in southwest part of Huntsville quadrangle. This unit is prone to slope failures.

Zpu, Zpu? – *Formation of Perry Canyon, Upper member (Neoproterozoic).* Olive drab to gray, thin-bedded slate to argillite to phyllite to micaceous meta-siltstone to meta-graywacke to meta-sandstone in variable proportions such that unit looks like both the "greywacke-sandstone" and "mudstone" members of previous workers; unit identification based on underlying diamictite in Mantua quadrangle; rare meta-gritstone and meta-diamictite (actually conglomerate?); locally schistose; meta-sandstone contains poorly sorted lithic, quartz, and feldspar grains in silty to micaceous matrix; meta-sandstone is quartzose in outcrops on west margin of Mantua quadrangle (Crittenden and Sorensen, 1985a) and medial zone of sandstone is feldspathic east of Ogden Valley, where mapped and described as argillite member of Maple Canyon Formation by Crittenden (1972) and Sorensen and Crittenden (1979); thickness uncertain, but appears to be about 600 feet (180 m) thick on west flank of Grizzly Peak in the Mantua quadrangle and about 1000 feet (300 m) thick between Ogden Canyon and North Ogden divide. In Ogden Valley typically non-resistant and tan weathering such that gray to green to dark-gray fresh color is seldom seen except in cut slopes and excavations. This unit is prone to slope failures.

Citations, tables, and figures above are not provided herein, but are in Coogan and King (2016).

Seismotectonic Setting

The property is located at the western margin of Ogden Valley, a roughly 40 square-mile back valley described by Gilbert (1928) as a structural trough similar to Cache and Morgan Valleys to the north and south, respectively. The back valleys of the northern Wasatch Range are in a transition zone between the Basin and Range and Middle Rocky Mountains provinces (Stokes, 1977, 1986). The Basin and Range is characterized by a series of generally north-trending elongate mountain ranges, separated by predominately alluvial and lacustrine sediment-filled valleys and typically bounded on one or both sides by major

normal faults (Stewart, 1978). The boundary between the Basin and Range and Middle Rocky Mountains provinces is the prominent, west-facing escarpment along the Wasatch fault zone at the base of the Wasatch Range. Late Cenozoic normal faulting, a characteristic of the Basin and Range, began between about 17 and 10 million years ago in the Nevada (Stewart, 1980) and Utah (Anderson, 1989) portions of the province. The faulting is a result of a roughly east-west directed, regional extensional stress regime that has continued to the present (Zoback and Zoback, 1989; Zoback, 1989). The back valleys are morphologically similar to valleys in the Basin and Range, but exhibit less structural relief (Sullivan and others 1988).

Ogden Valley occupies a structural trough created by up to 2,000 feet of vertical displacement on normal faults bounding the east and west sides of the valley. The Ogden Valley southwestern margin fault (Black and others, 2003) is mapped on Figure 2 near the southwest corner of the Project. However, the most recent movement on this fault is pre-Holocene (Sullivan and others, 1986). The fault is concealed where mantled by Late Pleistocene and Holocene surficial deposits (Figure 2, dashed and dotted bold lines). Norwood Formation mapped in the site area (Figure 2, unit Tn) likely represents an in-place faulted block preserved between the faults (Jon King, Utah Geological Survey, verbal communication, February 29, 2016).

The site is also situated near the central portion of the Intermountain Seismic Belt (ISB). The ISB is a north-south-trending zone of historical seismicity along the eastern margin of the Basin and Range province which extends for approximately 900 miles from northern Arizona to northwestern Montana (Sbar and others, 1972; Smith and Sbar, 1974). At least 16 earthquakes of magnitude 6.0 or greater have occurred within the ISB since 1850, with the largest of these events the M_S 7.5 1959 Hebgen Lake, Montana earthquake. However, none of these events have occurred along the Wasatch fault zone or other known late Quaternary faults in the region (Arabasz and others, 1992; Smith and Arabasz, 1991). The closest of these events to the site was the 1934 Hansel Valley (M_S 6.6) event north of the Great Salt Lake and south of the town of Snowville.

Lake Bonneville History

Lakes occupied nearly 100 basins in the western United States during late-Quaternary time, the largest of which was Lake Bonneville in northwestern Utah. The Bonneville basin consists of several topographically closed basins created by regional extension in the Basin and Range (Gwynn, 1980; Miller, 1990), and has been an area of internal drainage for much of the past 15 million years. Lake Bonneville consisted of numerous topographically closed basins, including the Salt Lake and Cache Valleys (Oviatt and others, 1992). Portions of Ogden Valley were inundated by Lake Bonneville at its highstand. Sediments from Lake Bonneville are not mapped at the site, but are shown at lower elevations to the east and northeast on Figure 2.

Timing of events related to the transgression and regression of Lake Bonneville is indicated by calendar age estimates of significant radiocarbon dates in the Bonneville Basin (Oviatt, 2015). Approximately 30,000 years ago, Lake Bonneville began a slow transgression (rise)

to its highest level of 5,160 to 5,200 feet above mean sea level. The lake rise eventually slowed as water levels approached an external basin threshold in northern Cache Valley at Red Rock Pass near Zenda, Idaho. Lake Bonneville reached the Red Rock Pass threshold and occupied its highest shoreline, termed the Bonneville beach, around 18,000 years ago. During the transgression and highstand, major drainages that emanate from within the Wasatch Range (such as the Weber River) formed large deltaic complexes in the lake at their canyon mouths. Headward erosion of the Snake River-Bonneville basin drainage divide then caused a catastrophic incision of the threshold and the lake level lowered by roughly 360 feet in fewer than two months (Jarrett and Malde, 1987; O'Conner, 1993). The Project is above the elevation for the lake highstand.

Following the Bonneville flood, the lake stabilized and formed a lower shoreline referred to as the Provo shoreline between about 16,500 and 15,000 years ago. Climatic factors then caused the lake to regress rapidly from the Provo shoreline, and by about 13,000 years ago the lake had eventually dropped below historic levels of Great Salt Lake. Oviatt and others (1992) deem this low stage the end of the Bonneville lake cycle. Great Salt Lake then experienced a brief transgression around 11,600 years ago to the Gilbert level at about 4,250 feet before receding to and remaining within about 20 feet of its historic average level (Lund, 1990). Drainages that fed Lake Bonneville began downcutting through stranded deltaic complexes and near-shore deposits as the lake receded.

SITE CHARACTERIZATION

Empirical Observations

On August 14, 2017, Mr. Bill D. Black of Western GeoLogic conducted a reconnaissance of the property. Weather at the time of the site reconnaissance was partly cloudy with temperatures in the 70's (°F). The site is at the western margin of Ogden Valley on heavily vegetated northeast-facing slopes overlooking the upper (southern) part of Nordic Valley. Pole Canyon Creek flows northward along the eastern boundary of the site. Native vegetation appeared to consist of heavy oak brush and grasses. Pole Canyon Creek was flowing at a very low flow level at the time of the reconnaissance. No other active streams, springs, or seeps were observed, and no bedrock outcrops were evident at the site or in adjacent slopes. Surficial soils appeared to consist of gravelly clayey sand to clayey sandy gravel (SM/GM) with scattered cobbles. Slopes in the upper western part of the site are steep and show about a 2:1 (horizontal:vertical) gradient, whereas the eastern half has gentler 4:1 to 6:1 slopes. No evidence for recent or ongoing slope instability, debris flows, active surface faulting, or other geologic hazards was observed.

Air Photo Observations

Black and white aerial photography from 1997, 1-meter bare earth DEM LIDAR from 2011, and orthophotography from 2012 available from the Utah AGRC were reviewed to obtain information about the geomorphology of the Project area (Figures 3A-C, respectively). The Project is on a alluvial fan contemporaneous with late Pleistocene Lake Bonneville that was downcut by Pole Canyon Creek following the lake retreat. The creek

flows northward along the eastern boundary of the site and has a floodplain extending further east. Areas along the drainage are heavily vegetated. The canyon mouth is about 1,700 feet to the southwest of the property. Debris flows and floods generated in the drainage basin are deposited at the canyon mouth and downstream, although the depositional pattern has likely varied. No debris flow levees or depositional features were evident at the Project. Given the above, Holocene flows generated in the drainage basin may be deposited well before they reach the Project. No other evidence of geologic hazards was observed on the air photos in the site area.

GEOLOGIC HAZARDS

Assessment of potential geologic hazards and the resulting risks imposed is critical in determining the suitability of the site for development. Table 1 below shows a summary of the geologic hazards reviewed at the site, as well as a relative (qualitative) assessment of risk to the Project for each hazard. A "high" hazard rating (H) indicates a hazard is present at the site (whether currently or in the geologic past) that is likely to pose significant risk and/or may require further study or mitigation techniques. A "moderate" hazard rating (M) indicates a hazard that poses an equivocal risk. Moderate-risk hazards may also require further studies or mitigation. A "low" hazard rating (L) indicates the hazard is not present, poses little or no risk, and/or is not likely to significantly impact the Project. Low-risk hazards typically require no additional studies or mitigation. We note that these hazard ratings represent a conservative assessment for the entire site and risk may vary in some areas. Careful selection of development areas can minimize risk by avoiding known hazard areas.

Table 1. *Geologic hazards summary.*

Hazard	H	M	L	...Hazard Rating
Earthquake Ground Shaking	X			
Surface Fault Rupture			X	
Liquefaction and Lateral-spread Ground Failure			X	
Tectonic Deformation			X	
Seismic Seiche and Storm Surge			X	
Stream Flooding		X		
Shallow Groundwater		X		
Landslides and Slope Failures		X		
Debris Flows and Floods		X		
Rock Fall			X	
Problem Soil			X	

Earthquake Ground Shaking

Ground shaking refers to the ground surface acceleration caused by seismic waves generated during an earthquake. Strong ground motion is likely to present a significant risk during moderate to large earthquakes located within a 60 mile radius of the project area (Boore and others, 1993). Seismic sources include mapped active faults, as well as a random or "floating" earthquake source on faults not evident at the surface. Mapped active faults within this distance include the East and West Cache fault zones; the Brigham City, Weber, Salt Lake, and Provo segments of the Wasatch fault zone; the East Great Salt Lake fault zone; the Morgan fault; the West Valley fault zone; the Oquirrh fault zone; and the Bear River fault zone (Black and others, 2003).

The extent of property damage and loss of life due to ground shaking depends on factors such as: (1) proximity of the earthquake and strength of seismic waves at the surface (horizontal motions are the most damaging); (2) amplitude, duration, and frequency of ground motions; (3) nature of foundation materials; and (4) building design (Costa and Baker, 1981). Based on 2012/2015 IBC provisions, a site class of D (stiff soil), and a risk category of II, USGS calculated uniform-hazard and deterministic ground motion values with a 2% chance of exceedance in 50 years are as follows:

Table 2. *Seismic hazards summary.*
(Site Location: 41.299004 ° N, -111.857315 ° W)

S_S	*1.006 g*
S_1	*0.350 g*
S_{MS} (F_a x S_S)	*1.104 g*
S_{M1} (F_v x S_1)	*0.595 g*
S_{DS} (2/3 x S_{MS})	*0.736 g*
S_{D1} (2/3 x S_{M1})	*0.397 g*
Site Coefficient, F_a	*= 1.098*
Site Coefficient, F_v	*= 1.700*

Given the above information, earthquake ground shaking poses a high risk to the site. The hazard from earthquake ground shaking can be adequately mitigated by design and construction of homes in accordance with appropriate building codes. The Project geotechnical engineer, in conjunction with the builder or architect, should confirm and evaluate the seismic ground-shaking hazard and provide appropriate seismic design parameters as needed.

Surface Fault Rupture

Movement along faults at depth generates earthquakes. During earthquakes larger than Richter magnitude 6.5, ruptures along normal faults in the intermountain region generally propagate to the surface (Smith and Arabasz, 1991) as one side of the fault is uplifted and the other side down dropped. The resulting fault scarp has a near-vertical slope. The surface rupture may be expressed as a large singular rupture or several smaller ruptures in a broad zone. Ground displacement from surface fault rupture can cause significant damage or even collapse to structures located on an active fault.

The nearest active fault to the site is the Weber segment of the WFZ about four miles to the west, and no evidence of active surface faulting is mapped or was evident at the site. The Ogden Valley southwestern margin fault is mapped by Coogan and King (2016; Figure 2) trending near the southwest corner of the Project, but the most recent movement on this fault is pre-Holocene (Sullivan and others, 1986). Assuming a risk category of IIa, the fault would not be in an activity class recommended for further evaluation by Bowman and Lund (2016). Based on the above, the existing hazard from surface faulting is rated as low.

Liquefaction and Lateral-spread Ground Failure

Liquefaction occurs when saturated, loose, cohesionless, soils lose their support capabilities during a seismic event because of the development of excessive pore pressure. Earthquake-induced liquefaction can present a significant risk to structures from bearing-capacity failures to structural footings and foundations, and can damage structures and roadway embankments by triggering lateral spread landslides. Earthquakes of Richter magnitude 5 are generally regarded as the lower threshold for liquefaction. Liquefaction potential at the site is a combination of expected seismic (earthquake ground shaking) accelerations, groundwater conditions, and presence of susceptible soils.

Soils at the site are mapped by the NRCS (https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx) as well-drained stony to gravelly loams on 3 to 60 percent slopes. Weber County GIS mapping also shows the site in a very low liquefaction hazard zone (zone 1). Given the above, we do not anticipate that conditions conducive to liquefaction are present and rate the risk as low.

Tectonic Deformation

Tectonic deformation refers to subsidence from warping, lowering, and tilting of a valley floor that accompanies surface-faulting earthquakes on normal faults. Large-scale tectonic subsidence may accompany earthquakes along large normal faults (Lund, 1990). Tectonic subsidence is believed to mainly impact those areas immediately adjacent to the downthrown side of active normal faults. No active (Holocene) faults are mapped in the site area, as discussed above. Based on this, the risk from tectonic subsidence is rated as low.

Seismic Seiche and Storm Surge

Earthquake-induced seiche presents a risk to structures within the wave-oscillation zone along the edges of large bodies of water, such as the Great Salt Lake. Given the elevation of the subject property and distance from large bodies of water, the risk to the subject property from seismic seiches is rated as low.

Stream Flooding

Stream flooding may be caused by direct precipitation, melting snow, or a combination of both. In much of Utah, floods are most common in April through June during spring snowmelt. High flows may be sustained from a few days to several weeks, and the potential for flooding depends on a variety of factors such as surface hydrology, site grading and drainage, and runoff.

Pole Canyon Creek flows northward along the eastern boundary of the Project, and areas adjacent to the drainage may have a high risk from stream flooding. However, no other active drainages are present, and areas more than 50 feet from the stream course likely have low risk. The risk from stream flooding is therefore rated as moderate. Site hydrology and runoff should be addressed in the civil engineering design and grading plan for the Project in accordance with all applicable local government guidelines.

Shallow Groundwater

No springs or seeps are shown on the topographic map for the site or were reported or observed, and no site-specific groundwater information was available for the Project. However, groundwater at the site appears to be greater than 30 feet deep based on nearby data. Areas within 50 feet of Pole Canyon Creek may have shallower depths, and groundwater levels at the site also likely vary seasonally and annually. Such variations would be typical for an alpine environment. Perched conditions above less-permeable, clay-rich bedrock layers may also be present in the subsurface that could cause locally shallower groundwater levels. Given all of the above, we rate the risk from shallow groundwater as moderate, although we do not anticipate shallow groundwater will pose a significant development constraint given setbacks typically recommended to reduce risk from stream flooding.

Landslides and Slope Failures

Slope stability hazards such as landslides, slumps, and other mass movements can develop along moderate to steep slopes where a slope has been disturbed, the head of a slope loaded, or where increased groundwater pore pressures result in driving forces within the slope exceeding restraining forces. Slopes exhibiting prior failures, and also deposits from large landslides, are particularly vulnerable to instability and reactivation.

No landslides are mapped at the site, and no evidence for recent or ongoing landsliding or slope instability was observed on air photos or during our reconnaissance. However, slopes at the site are steep in some areas, and landslides are mapped nearby in similar slopes, particularly those underlain by Norwood Formation and Maple Canyon Formation. The hazard from landsliding is therefore equivocal and rated as moderate. Given the above, we conservatively recommend that stability of slopes at the site be evaluated in a geotechnical engineering evaluation prior to building, based on site-specific data and subsurface information. Recommendations for reducing the risk from landsliding should be provided if factors of safety are determined to be unsuitable. The stability evaluation should be conducted after development plans have been formalized, will involve some subsurface exploration that may require further geologic characterization, and should take into account possible perched groundwater and fluctuating seasonal levels. Care should also be taken that site grading does not destabilize slopes in this area without prior geotechnical analysis and grading plans, and that proper drainage is maintained.

Debris Flows

Debris flow hazards are typically associated with unconsolidated alluvial fan deposits at the mouths of large range-front drainages, such as those along the Wasatch Front. Debris

flows have historically significant damage in the Wasatch Front area. Pole Canyon Creek flows along the eastern boundary of the site. No evidence for debris-flow channels, levees, or other debris-flow features was observed at the site on air photos or during our reconnaissance, but low-lying areas adjacent to the creek may experience some flooding and debris from large flows and flows emanating from the canyon mouth about 1,700 feet to the southwest. Given the above, we rate the risk as moderate. Setback guidelines typically recommended for reducing stream flooding risk will similarly reduce the debris flow/flood risk.

Rock Fall
No bedrock outcrops were observed at the site or in higher slopes that could present a source area for rock fall clasts. Based on the above, we rate the hazard from rock falls as low.

Swelling and Collapsible Soils
Surficial soils that contain certain clays can swell or collapse when wet. A geotechnical engineering evaluation should be performed to address soil conditions and provide specific recommendations for site grading, subgrade preparation, and footing and foundation design.

CONCLUSIONS AND RECOMMENDATIONS

The only geologic hazards posing a high relative risk to the site is earthquake ground shaking. Stream flooding, shallow groundwater, landslides, and debris flows/floods also pose moderate-risk hazards either because the hazard is equivocal or only affects portions of the property. The following recommendations are provided with regard to the geologic characterizations in this report:

- ***Seismic Design*** – All habitable structures developed at the property should be constructed to current seismic hazards to reduce the risk of damage, injury, or loss of life from earthquake ground shaking.

- ***Site Grading and Drainage*** – No unplanned cuts should be made in the slopes at the site without prior geotechnical analyses, and proper site drainage should be maintained.

- ***Geotechnical Investigation*** - A design-level geotechnical engineering study should be conducted after formalization of development plans, but prior to construction to: (1) address soil conditions at the site for use in foundation design, site grading, and drainage; (2) provide recommendations regarding building design to reduce risk from seismic acceleration; and (3) evaluate stability of slopes at the site, including providing recommendations for reducing the risk of landsliding if the factors of safety are deemed unsuitable. The stability evaluation should account for possible perched groundwater, seasonal fluctuations, and water from sources such as landscape irrigation and septic systems.

The above geotechnical study will require site-specific data from subsurface exploration, as well as a cross section based on geologic characterizations. We should be contacted to review the subsurface data obtained from the geotechnical study and provide a geologic cross section for the stability evaluation, as well as to observe and document any subsurface exploration that may be conducted. A cost estimate for these services can be prepared once the scope of the geotechnical evaluation has been determined.

- ***Stream Flooding*** – The civil engineering design for the development should assess site hydrology and surface drainage, in accordance with all applicable local government guidelines. We anticipate setbacks typically recommended for reducing the stream flooding risk will similarly reduce risks from shallow groundwater and debris flows/floods.

- ***Availability of Report*** - The report should be made available to architects, building contractors, and in the event of a future property sale, real estate agents and potential buyers. This report should be referenced for information on technical data only as interpreted from observations and not as a warranty of conditions throughout the site. The report should be submitted in its entirety, or referenced appropriately, as part of any document submittal to a government agency responsible for planning decisions or geologic review. Incomplete submittals void the professional seals and signatures we provide herein. Although this report and the data herein are the property of the client, the report format is the intellectual property of Western Geologic and should not be copied, used, or modified without express permission of the authors.

LIMITATIONS

This investigation was performed at the request of the Client using the methods and procedures consistent with good commercial and customary practice designed to conform to acceptable industry standards. The analysis and recommendations submitted in this report are based upon the data obtained from site-specific observations and compilation of known geologic information. This information and the conclusions of this report should not be interpolated to adjacent properties without additional site-specific information. In the event that any changes are later made in the location of the proposed site, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or approved in writing by the engineering geologist.

This report has been prepared by the staff of Western GeoLogic for the Client under the professional supervision of the principal and/or senior staff whose seal(s) and signatures appear hereon. Neither Western GeoLogic, nor any staff member assigned to this investigation has any interest or contemplated interest, financial or otherwise, in the subject or surrounding properties, or in any entity which owns, leases, or occupies the subject or surrounding properties or which may be responsible for environmental issues identified during the course of this investigation, and has no personal bias with respect to the parties involved.

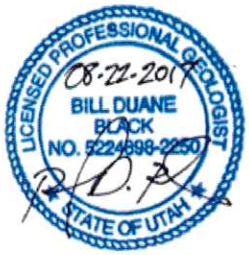
The information contained in this report has received appropriate technical review and approval. The conclusions represent professional judgment and are founded upon the findings of the investigations identified in the report and the interpretation of such data based on our experience and expertise according to the existing standard of care. No other warranty or limitation exists, either expressed or implied.

The investigation was prepared in accordance with the approved scope of work outlined in our proposal for the use and benefit of the Client; its successors, and assignees. It is based, in part, upon documents, writings, and information owned, possessed, or secured by the Client. Neither this report, nor any information contained herein shall be used or relied upon for any purpose by any other person or entity without the express written permission of the Client. This report is not for the use or benefit of, nor may it be relied upon by any other person or entity, for any purpose without the advance written consent of Western GeoLogic.

In expressing the opinions stated in this report, Western GeoLogic has exercised the degree of skill and care ordinarily exercised by a reasonable prudent environmental professional in the same community and in the same time frame given the same or similar facts and circumstances. Documentation and data provided by the Client, designated representatives of the Client or other interested third parties, or from the public domain, and referred to in the preparation of this assessment, have been used and referenced with the understanding that Western GeoLogic assumes no responsibility or liability for their accuracy. The independent conclusions represent our professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by the Client or their representative has been assumed to be correct and complete. The conclusions presented are based on the data provided, observations, and conditions that existed at the time of the field exploration.

It has been a pleasure working with you on this project. Should you have any questions, please call.

Sincerely,
Western GeoLogic, LLC



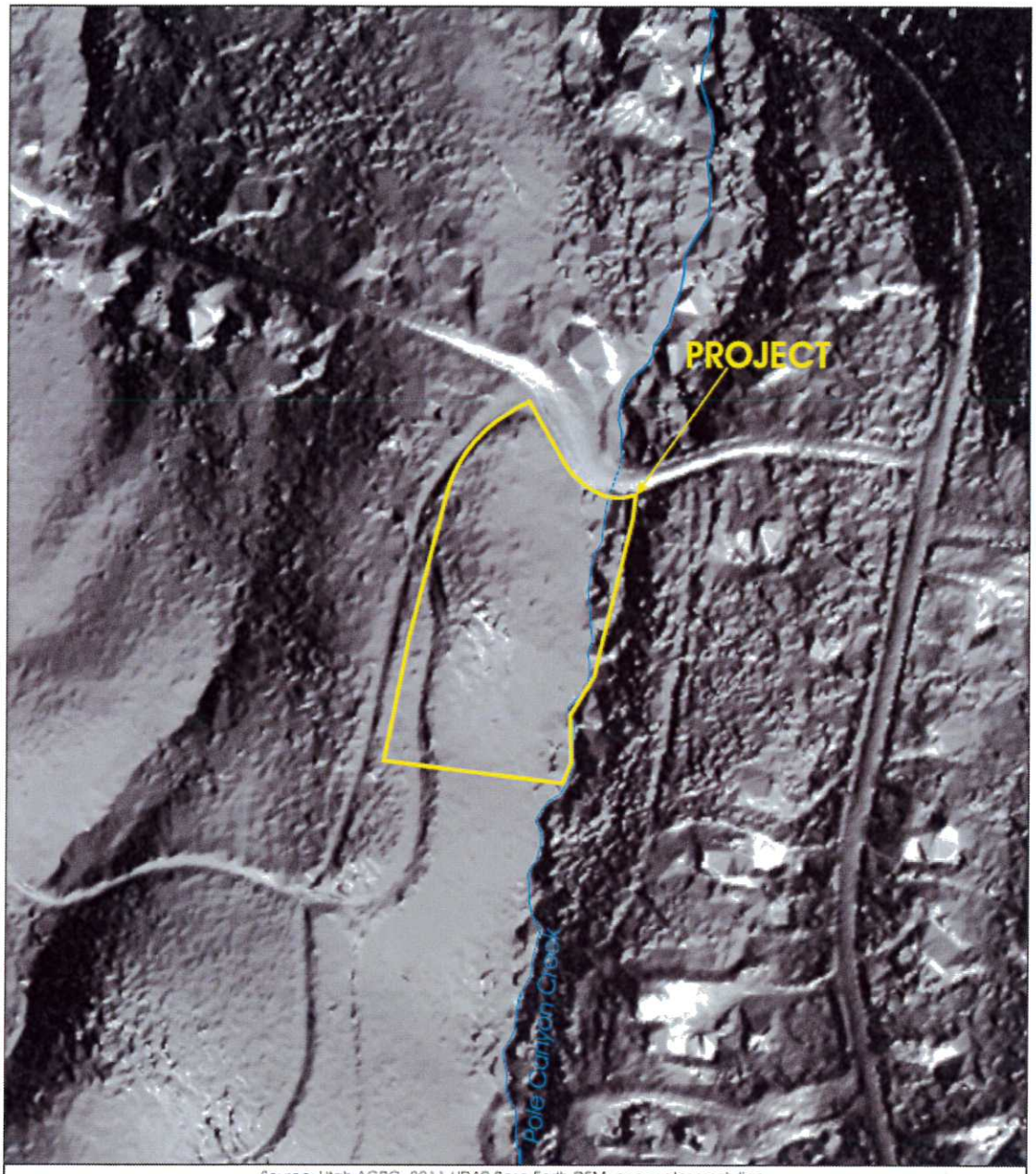
Bill. D. Black, P.G.
Senior Engineering Geologist

Reviewed by:

Craig V. Nelson, P.G.
Principal Engineering Geologist

ATTACHMENTS

Figure 1. Location Map (8.5"x11")
Figure 2. Geologic Map (8.5"x11")
Figure 3A. 1997 Air Photo (8.5"x11")
Figure 3B. 2011 LIDAR Image (8.5"x11")
Figure 3C. 2012 Air Photo (8.5"x11")
Appendix. Photographic Record of Site Reconnaissance



Source: Utah AGRC, 2011 LIDAR Bare Earth DEM, one meter resolution.

WESTERN GEOLOGIC

N
W E
S

0 100 200 feet

Scale 1:2,400
(1 inch = 200 feet)

2011 LIDAR IMAGE

GEOLOGIC HAZARDS RECONNAISSANCE
Silver Bell Estates Lot 63
Nordic Valley Drive and Viking Drive
Eden, Weber County, Utah

FIGURE 3B