



## ALPINE CITY PLANNING COMMISSION MEETING

**NOTICE** is hereby given that the **PLANNING COMMISSION** of Alpine City, UT will hold a **Regular Meeting** at **Alpine City Hall**, 20 North Main, Alpine, Utah on **Tuesday, June 5, 2018 at 7:00 pm** as follows:

### I. GENERAL BUSINESS

- |                             |                     |
|-----------------------------|---------------------|
| A. Welcome and Roll Call:   | David Fotheringham  |
| B. Prayer/Opening Comments: | Sylvia Christiansen |
| C. Pledge of Allegiance:    | By Invitation       |

### II. PUBLIC COMMENT

Any person wishing to comment on any item not on the agenda may address the Planning Commission at this point by stepping to the microphone and giving his or her name and address for the record.

### III. ACTION ITEMS

- A. Major Subdivision Final Plat Review – Bertha’s Place – Will Jones**  
Developer is seeking approval of final plat.
- B. Major Subdivision Preliminary Review – The Ridge at Alpine – Paul Kroff**  
Developer is seeking approval of preliminary plans.
- C. Development Code Review – Section 3.2 Town Residential Zone (TR-10,000)**

### IV. COMMUNICATIONS

### V. APPROVAL OF PLANNING COMMISSION MINUTES: May 15, 2018

### ADJOURN

Chairman David Fotheringham  
June 5, 2018

**THE PUBLIC IS INVITED TO ATTEND ALL PLANNING COMMISSION MEETINGS.** If you need a special accommodation to participate in the meeting, please call the City Recorder's Office at 801-756-6347 ext. 5.

**CERTIFICATION OF POSTING.** The undersigned duly appointed recorder does hereby certify that the above agenda notice was posted at Alpine City Hall, 20 North Main, Alpine, UT. It was also sent by e-mail to The Daily Herald located in Provo, UT a local newspaper circulated in Alpine, UT. This agenda is also available on the City's web site at [www.alpinecity.org](http://www.alpinecity.org) and on the Utah Public Meeting Notices website at [www.utah.gov/pmn/index.html](http://www.utah.gov/pmn/index.html).

## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT: Preliminary Plan Review - Bertha's Place Subdivision**

**FOR CONSIDERATION ON: 5 June 2018**

**PETITIONER: Will Jones**

**ACTION REQUESTED BY PETITIONER: Planning Commission  
recommendation of approval for  
the proposed final plat.**

### **BACKGROUND INFORMATION:**

The petitioner, Will Jones, has submitted the Final Plat for the Bertha's Place Subdivision, located at 723 North Grove Drive. The proposed subdivision includes 4 lots on 1.41 acres, with lot sizes ranging from 0.23 acres to 0.33 acres. The development is in the TR-10,000 zone.

### **STAFF RECOMMENDATION:**

Recommend approval of the proposed final plat.



**Date:** March 12, 2018

**By:** Austin Roy  
City Planner

**Subject:** **Planning and Zoning Review**  
**Bertha's Place Subdivision Concept Plan**  
**4 Lots on 1.41 Acres, TR-10,000 Zone**

### **Background**

The proposed Bertha's Place Subdivision consists of 4 lots on 1.41 acres, with lots ranging in size from 0.23 acres to 0.33 acres. The proposed subdivision is located at 723 North Grove Drive, Alpine City, Utah. The development is in the TR-10,000 (1/4 acre) zone.

### **Lot Area and Width Requirements**

The proposed lots for this subdivision meet the lot area requirement. The required lot width of 90 feet (60 feet when on a cul-de-sac) measured at the front setback for each proposed lot is shown to meet the requirements.

### **Water Source**

Water rights shall be conveyed, via trade, to the City in accordance with the provisions of Section 4.7.23 of the Alpine City Development Code as applicable.

### **RECOMMENDATION**

**The Planning and Zoning Department recommends approval of the proposed Bertha's Place Subdivision concept plan.**



Date: May 30, 2018

By: Jed Muhlestein, P.E.  
City Engineer

Subject: **Bertha's Place Plat A – Preliminary/Final Review**  
**4 lots on 1.42 acres**

### **Background**

The proposed Bertha's Place Plat A Subdivision consists of 4 lots on 1.42 acres. The development is located along Grove Drive, just north of Quincy Court. The development is in TR-10,000 zone with lots ranging in size from 10,000 to 13,404 square feet. Concept Approval was granted by the Planning Commission March 20, 2018. The Developer is seeking Preliminary and Final approval concurrently. A map is attached showing the lot layout.

### **Street System**

The street system consists of one small cul-de-sac (Adam's Court) which meets ordinance in both length and turn-a-round radii. The standard street residential cross-section is shown throughout with curb, gutter, and sidewalk. Sidewalk exists along Grove Drive currently, new sidewalk in the proposed cul-de-sac will connect to it. One street light is shown at the intersection of Adam's Court and Grove Drive.

### **Utilities**

A detailed utility plan has been submitted and reviewed. The subdivision has been accounted for within the utility master plans. Horrocks Engineers has modeled each utility system and gave recommendations, that letter is attached.

**Sewer System.** The sewer system will connect and can be served by an existing 8-inch sewer main in Grove Drive. New 4-inch sewer laterals are shown for each lot. There is an existing home (discussed in General Comments) with an existing sewer lateral. The lateral will be required to be capped ten feet behind the sidewalk. It could be either re-used for lot 4 or left capped.

**Culinary Water System.** The subdivision is well below the 5350 foot elevation, which is the highest elevation the existing water system can serve and still provide a minimum 40 psi required by ordinance. There is currently a 6-inch main line in Grove Drive which would serve the development. The plans show connection to this line with an 8-inch line extending into the

cul-de-sac. 1-inch water service laterals with ¾-inch meters would be required. New laterals are shown to be constructed for each lot. The existing culinary service for 723 N Grove is shown to be re-used. **The Fire Chief has approved the location of proposed fire hydrants.**

The review of the water model indicated that building this development would initiate the need for a master planned pressure reducing valve (PRV) at the intersection of 770 North and Grove Drive. Per the Horrocks review letter, without this PRV there would be inadequate fire flow protection. Since the letter was written discussions with Horrocks have indicated that rather than installing the PRV, a slight modification to pressure zones would accomplish the same thing, that modification is shown on the construction drawings.

**Pressurized Irrigation System.** Similar to the culinary, there is currently a 6-inch pressurized irrigation line in Grove Drive which would serve the development. The plans show connection to this line with a 4-inch line extending in the cul-de-sac. 1-inch laterals are shown to be constructed for each new lot. The existing service for 723 N Grove is shown to be re-used for lot 4.

**Storm Water Drainage System.** The development shows a storm drain system that meets or exceeds City Standards. The storm drain system report is attached for reference. Storm water is collected at the entrance of the subdivision and routed into a retention pond that is sized for the 100-year storm event. There is no storm drain system in Grove Drive to allow drainage in to, the water must be retained onsite as shown.

#### **General Subdivision Remarks**

There are existing buildings onsite that would not meet setbacks if the development was recorded. **All buildings either need removed or a bond provided for the removal of said buildings prior to recordation of the plat.** One of the mentioned buildings is the home located at 723 N. Grove Drive. The services for this home are shown to be re-used for Lot 4. If culinary and pressurized irrigation are unable to be re-used, they will be required to be cut and capped at the main lines in Grove Drive. The sewer would be required to be capped 10 feet behind sidewalk.

**The water policy will need to be met.** A credit for the existing home will be applied to the water policy.

**Geotech Report.** The property is not situated in any hazardous area as depicted by Alpine City hazard maps. A geotechnical report has been submitted and reviewed and is attached for reference.

#### **ENGINEERING RECOMENDATION**

**We recommend that Preliminary Approval of the proposed development be APPROVED with the following conditions:**

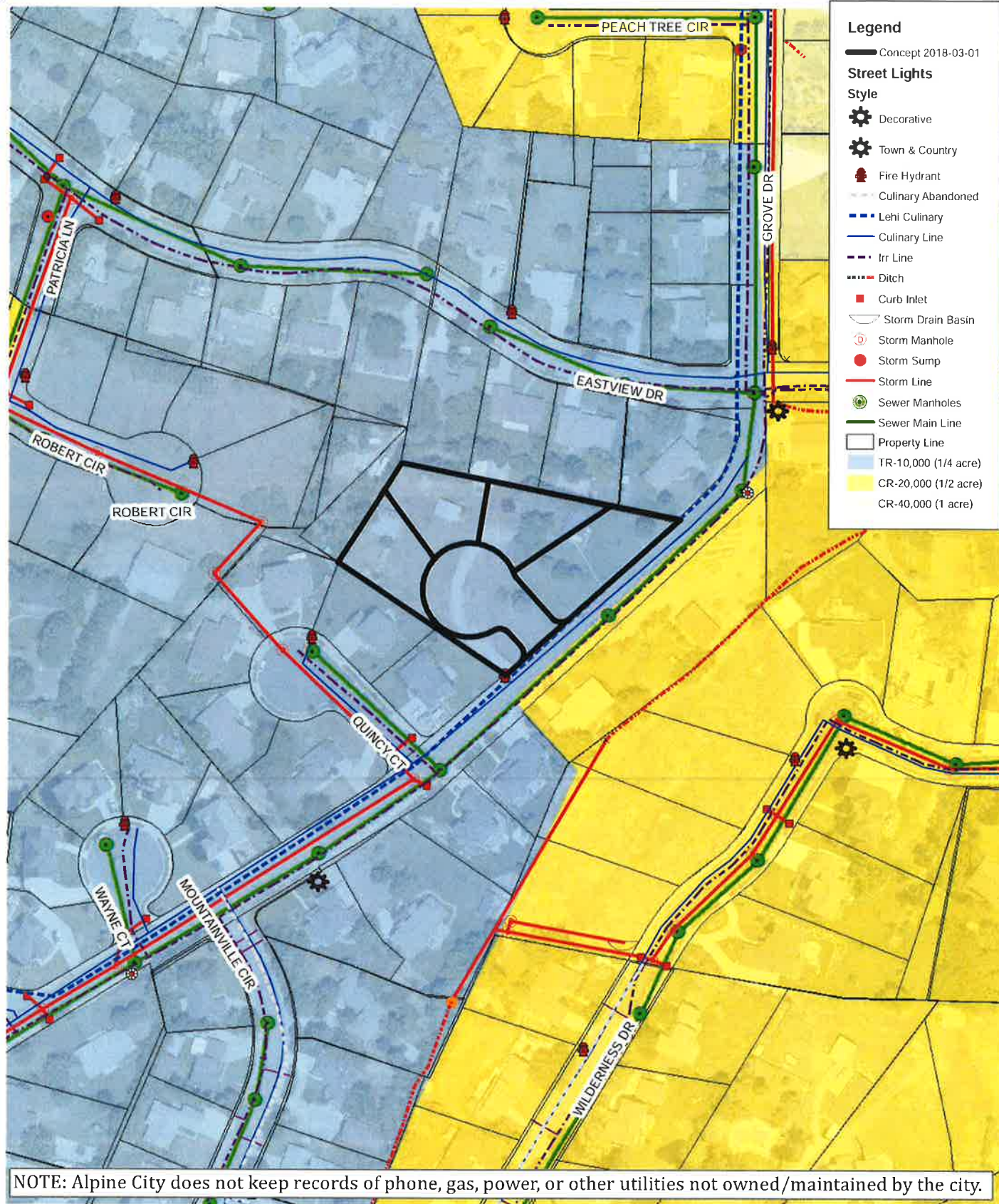
- **The Developer remove all buildings that will conflict with future property lines (or provide a bond to do so) prior to recording the plat**
- **The Developer meet the water policy**

**Attached**

- Subdivision Map Overlay
- Horrocks Engineer's Review Letter
- Lone Peak Fire Review Letter
- Final Plans & Plat
- Drainage Calculations
- Geotechnical Study

## MAP OVERLAY





Property Boundaries and Utilities are shown for reference only. Though shown generally close, a survey and Blue Stake should be done to locate both accurately.



## Alpine Utility Map

1 inch = 167 feet

0 50 100 200 300 400 Feet





**HORROCKS ENGINEERS REVIEW LETTER**  
**LONE PEAK FIRE REVIEW LETTER**

**To:** Jed Muhlestein  
Alpine City

**From:** John E. Schiess, P.E.

**Date:** May 3, 2018

**Memorandum**

**Subject:** Bertha's Place Hydraulic Modeling Results and Recommendations

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The proposed Bertha's Place consists of a cul-de-sac development with four lots off of Grove Drive just north of Quincy Ct and south of 770 North (Eastview Drive).

The proposed culinary water improvements have been modeled in both the current and buildout models. The proposed improvements fit well within the City's culinary water master plan and modeling shows them to be adequate if the master planned PRV is constructed connecting Grove Drive to 770 North (Eastview Drive). Without the PRV connection there will not be adequate fire flow protection for the development. The following comments and recommendations are noted for the proposed culinary water system.

The proposed PI improvements have been modeled in both the current and buildout models under both wet and dry year supply conditions. The proposed improvements fit well within the City's PI master plan and modeling shows them to be adequate. The following comments and recommendations are noted for the proposed PI system.

The proposed sanitary sewer improvements have been modeled in both the current and buildout models. The proposed improvements fit well within the City's sanitary sewer master plan and modeling shows them to be adequate.

**Recommendations:**

1. Install the master planned PRV and connecting pipes in Grove Drive.
2. Install 4 inch pressurized irrigation main in the cul-de-sac.

**Comments:**

3. Fire flow available in the area surrounding the proposed improvements should be over 2000 gallons per minute at 20 psi for the proposed lines.



**LONE PEAK FIRE DISTRICT**  
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HIGHLAND, UTAH 84003  
(801) 763-5365  
[WWW.LONEPEAKFIRE.COM](http://WWW.LONEPEAKFIRE.COM)

*REED M. THOMPSON, FIRE CHIEF*

## MEMORANDUM

**DATE:** 29 May 2018

**To:** Jed Muhlestein, City Engineer, Alpine City  
**Cc:** Austin Roy, City Planner, Alpine City  
**FROM:** Reed M. Thompson, Fire Chief *Reed M. Thompson*  
**SUBJECT:** BERTHA'S PLACE SUBDIVISION

In review of the proposed site development drawings, labeled "Bertha's Place", a four (4) lot project, they meet the intent of the 2015 International Fire Code as drawn, and as such, is approved, providing it meet the associated fire flow requirements with respect to pressure zones established by Alpine City and in accordance with APWA and Utah Division of Drinking Water guidelines.

## PRELIMINARY PLANS



## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT: Major Subdivision Preliminary Plan Review – Ridge at Alpine**

**FOR CONSIDERATION ON: 15 May 2018**

**PETITIONER: Paul Kroff**

**ACTION REQUESTED BY PETITIONER: Review preliminary plans and make a recommendation to City Council.**

### **BACKGROUND INFORMATION:**

The subdivision includes a total of 72 lots ranging in size from 20,030 square feet to 2.58 acres on a site that is approximately 189.5 acres. It is proposed to include approximately 127.3 acres of private open space. Approximately 68.9 acres of that open space is already recorded as a conservation easement. It is also proposed to include 1.9 acres of public open space that will be used as a soccer park. The site is located in the CR-40,000 zone. The subdivision is planned to be done in 3 phases..

### **STAFF RECOMMENDATION:**

Review Preliminary Plans for The Ridge at Alpine Subdivision and make a recommendation to the City Council.





Date: June 1, 2018

By: Austin Roy  
City Planner

Subject: **Planning and Zoning Review**  
**The Ridge at Alpine PRD Preliminary Plan**  
**Approximately 1100 North Grove Drive – 72 lots on 189.5 acres**

### **Background**

The proposed Alpine Ridge Planned Residential Development (PRD) consists of two parts; recently annexed property (Oberre Annexation) and property that was already located within Alpine City. This distinction needs to be made due to a development agreement between the City and the developer which will affect the lots that were part of the Oberre Annexation. Lots that were already located within Alpine City limits were accepted to be developed as a PRD by the City Council on September 13, 2016 provided that the open space was designated as a soccer field with the gradation and preparation of the park to be the responsibility of the developer in the first phase, and apply the wording of the Development Agreement for the Oberee annexation relating to lot size to this property.

The subdivision includes a total of 72 lots ranging in size from 20,030 square feet to 2.58 acres on a site that is approximately 189.5 acres. It is proposed to include approximately 127.3 acres of private open space. Approximately 68.9 acres of that open space is already recorded as a conservation easement. It is also proposed to include 1.9 acres of public open space that will be used as a soccer park. The site is located in the CR-40,000 zone. The subdivision is planned to be done in 3 phases.

### **PART 1 – PROPERTY WITHIN OBERRE ANNEXATION (59 LOTS)**

#### **Development Agreement**

178.9 acres of the property was annexed into Alpine City and a development agreement (attached) was executed between the City and the Developer. The details of the agreement are unique to this development and may not be consistent with typical subdivision requirements.

#### **Lot Area and Width Requirements**

The Development Agreement (DA) limits the number of lots to be developed on the property. The Developer shall use the base density for the CR-40,000 zone with no bonus density awarded for any public or private open space. In addition, the existing conservation easement on the property will not be included in calculating the base density for the development (DA 3.2). The total number of lots allowed within the annexed area is 60 lots. The developer shows no more than 60 of the 72 lots within the annexed area. This is consistent with the terms of the agreement.

The DA also limits the size of the lots. No more than 20% of the lots to be developed shall be less than 30,000 square feet in area, with no lot being smaller than 20,000 square feet in area (DA 3.3). No lot is shown to be less than 20,000 square feet and 6 lots or 8% of the annexed area are less than 30,000 square feet. The size of the proposed lots is consistent with the terms of the development agreement.

Each lot shall abut upon and have direct access to an adjacent public street. The width of each lot shall be not less than 90 feet (as measured along a straight line connecting each side lot line at a point 30 feet back from the front lot line). The length of the front lot line abutting the City street shall be no less than 60 feet (Section 3.9.7.6). Each proposed lot appears to meet the requirements.

## **PART 2 – PROPERTY ALREADY IN ALPINE CITY (12 LOTS)**

### **Planned Residential Development (PRD) Determination**

The 10.6-acre area of the development that is not a part of the development agreement is proposed to be developed as a PRD. The Planning Commission made a recommendation to the City Council and the PRD proposal was accepted by the City Council on September 13, 2016 provided that the open space was designated as a soccer field with the gradation and preparation of the park to be the responsibility of the developer in the first phase, and apply the wording of the Development Agreement for the Oberee annexation relating to lot size to this property.

It is proposed that **1.94 acres be used as a public soccer park**. Open space has been proposed as an incentive for receiving approval for being developed as a PRD and having smaller lots in this area of the development.

An item worth mention, the **proposed location of the soccer field has been changed from early concept**, which showed it located on the west side of the property (approximately lots 33, 34, and 35). The purpose of moving the proposed soccer field was **for drainage purposes**, as the soccer field doubles as a retention basin. The proposed change does not seem to impact roadways or zoning requirements.

### **Lot Area and Width Requirements**

Since the City Council required that the DA language apply to the area outside of the Oberee Annexation if it is developed as a PRD, the development as a whole will need to have no more than 20% of the lots less than 30,000 square feet and no lot less than 20,000 square feet. The plan shows 7 more lots outside of the Oberee Annexation that are less than 30,000 square feet making a total of 13 lots for the entire development. That is 18% of the development which is consistent

with the language of the DA.

**There is a discrepancy on sheet C3.1 and C4.1 of the preliminary plans** which appear to show **lot 67** divided into two lots (one measuring 13,219 square feet and the other, designated as Lot 912, measuring at 6,173 Square feet). If these are indeed intended to be two different lots, then it would not meet the requirement that **no lot shall be less than 20,000 square feet**.

The width of each lot shall be not less than 90 feet (as measured along a straight line connecting each side lot line at a point 30 feet back from the front lot line). The length of the front lot line abutting the City street shall be no less than 60 feet (Section 3.9.7.6). Each proposed lot appears to meet the width requirements.

### **PART 3 – GENERAL REMARKS (ENTIRE SUBDIVISION)**

#### **Revised Concept**

The concept plan for The Ridge at Alpine has been revised since it was approved with conditions by the Planning Commission on December 6, 2018. The revised concept plan will need Planning Commission approval. Changes to the concept plan include:

- 1) Lot 72 private lane has been altered.
- 2) Savannah Circle layout and design changed.
- 3) Catherine Way connection to Grove Drive changed.
- 4) Change to lot lines and lot size for lots 52 and 53 (old 54).
- 5) Lots 46 and 48 (old 60 and 69) divided to create lot 47.
- 6) Route and location of easterly hiking/mountain bike trail changed.
- 7) Route and location of westerly hiking/mountain bike trail (required per conservation easement) changed.
- 8) Layout of Zachary Way slightly altered.
- 9) Lot 67 (old 40) now shown as two separate parcels (67 and 912) on revised concept, neither of which would meet the minimum requirement of 20,000 square feet.

#### **Public Trails**

The proposed subdivision will include public trails. The **plans currently show two trails** located on the westerly side of the property. The alignment of trails has been discussed in relation to the slope and terrain of the area. The intention is that there will be one trail that will connect the trail at the northwest corner of the Heritage Hills open space and a future trail in the Three Falls Ranch open space.

The second trail is proposed to connect the cul-de-sac at the frontage of the proposed “lot 72” to the Three Falls Ranch open space. Plans show trailhead parking with 5 off-street parking stalls.

The trail committee has recommended alternate alignments for both proposed trails (see attached pictures), one (fulfilling the requirement for the conservation easement) on the far west side of the property linking Heritage Hills to Three Falls. The second trail, providing access from The Ridge

at Alpine Subdivision to Three Falls Trail system.

### **Road Locations**

The Planning Commission had a concern with the location of the roads, specifically the proximity of an exit to the Russon property. The road location has not changed from concept.

### **Parking**

At concept, it was discussed that the developer needed to add parking for both the proposed trailhead and soccer field. Parking has since been added and the proposed preliminary plans currently show 5 off-street parking stalls for the trailhead and 27 off-street parking stalls for the soccer field.

Per the US Soccer Foundation, it is recommended that there be a minimum of 45 parking spaces per field (see official Soccer Field Handbook). As for trailhead parking, the Trail Committee has reviewed the proposal and does not feel that 5 stalls would be sufficient for the estimated use of the proposed trailhead and recommends 15 off-street parking stalls.

Based on the standards set forth by the US Soccer Foundation and the observations of the Trail Committee, it is recommended that additional parking be added to meet the anticipated use for both the trailhead and soccer field.

### **Name of Subdivision**

At concept there were concerns about the name of the subdivision (Alpine Ridge), but the name has since been changed (The Ridge at Alpine) and this is no longer a concern.

### **Lot 72**

There are several concerns with “lot 72” of the proposed plan, including preservation of open space, and development clusters. Engineering and Fire concerns are addressed in separate letters.

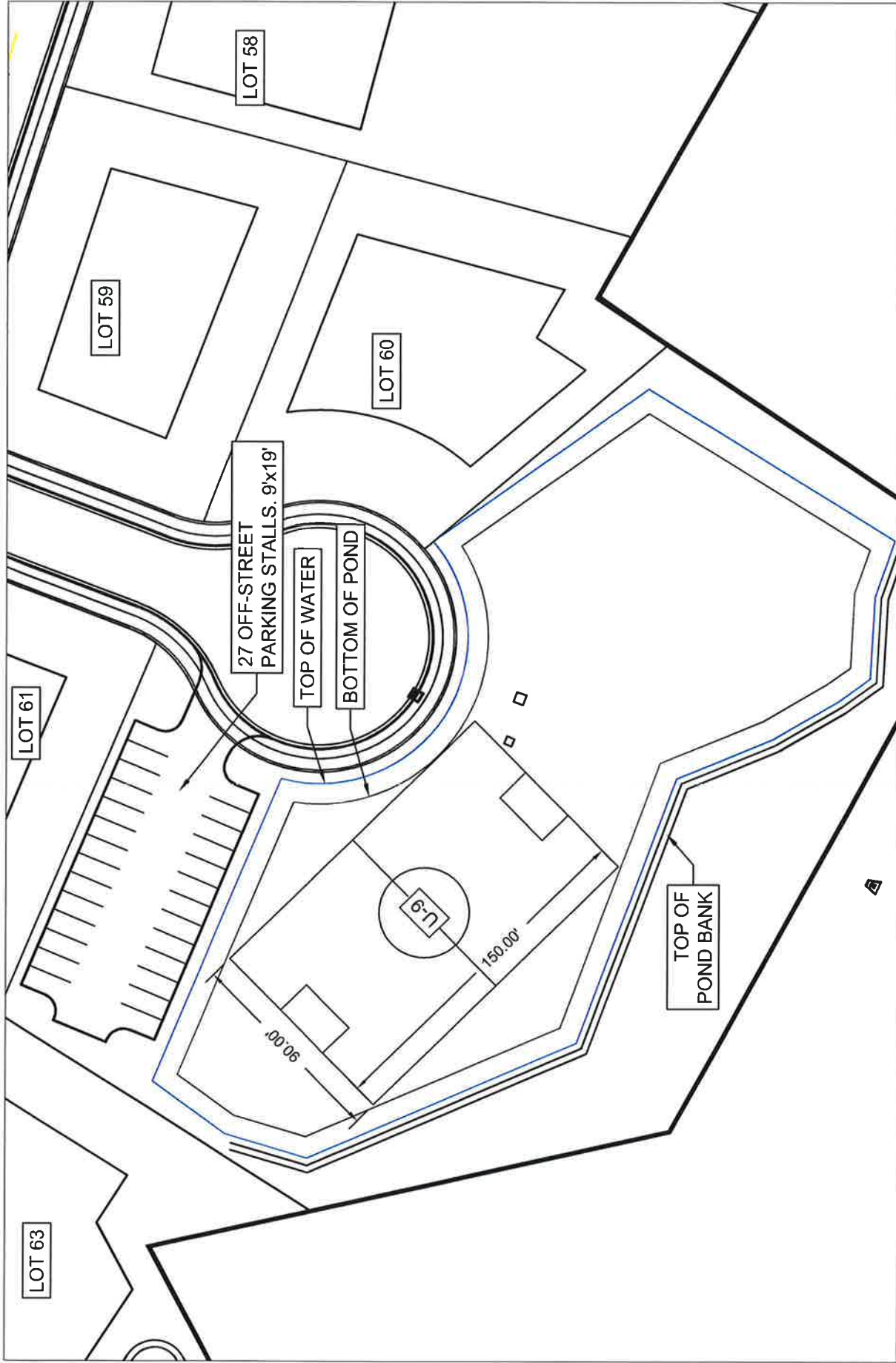
Section 3.9.1.D of the PRD ordinance states that the proposed project must demonstrate that it will “preserve open space to meet the recreational, scenic, and public service needs.” In addition, the dwelling cluster requirements (section 3.9.6.1) states that “All lots shall be located within a designated development cluster. Each cluster shall contain no less than three (3) separate lots.” And “Where a project contains land located within and outside the Sensitive Land Overlay Zone, development clusters will **be located outside the Sensitive Land Overlay Zone, to the maximum extent possible.**” The consensus staff interpretation of the ordinance is that “lot 72” would not be consistent with the scenic intent and dwelling cluster requirements of a Planned Residential Development. Due to the above concerns it is recommended that “lot 72” be eliminated or modified to meet the PRD ordinance.

### **RECOMMENDATION**

**The Planning and Zoning Department recommends that the proposed subdivision concept**

**plan be approved with the following conditions:**

- The Developer eliminate or modify “Lot 72” to meet the scenic intent and dwelling cluster requirements of a PRD.
- The Developer correct the discrepancy in the plans regarding “lot 67”.
- The Developer address parking concerns for the trailhead and soccer field.
- The Developer implement the proposed alignment as recommended by the Trail Committee.



**THE RIDGE AT ALPINE**  
PARKING CONCEPT FOR PARK  
ALPINE, UTAH



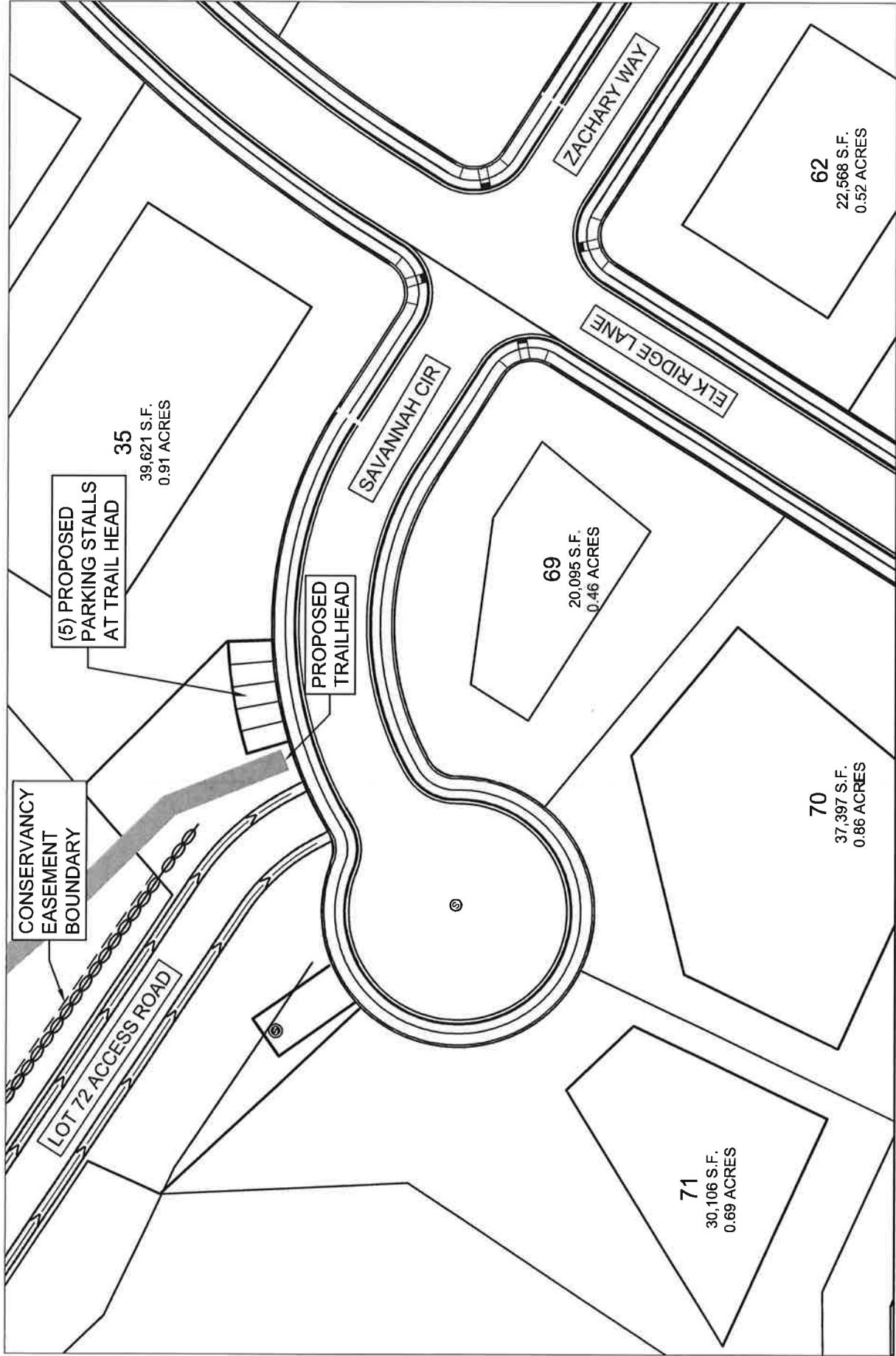
**BUSH & GUDGEELL, INC.**

Engineers - Planners - Surveyors

205 East Tabernacle Suite #4  
St. George, Utah 84770

Phone (435) 673-2337 / Fax (435) 673-3161



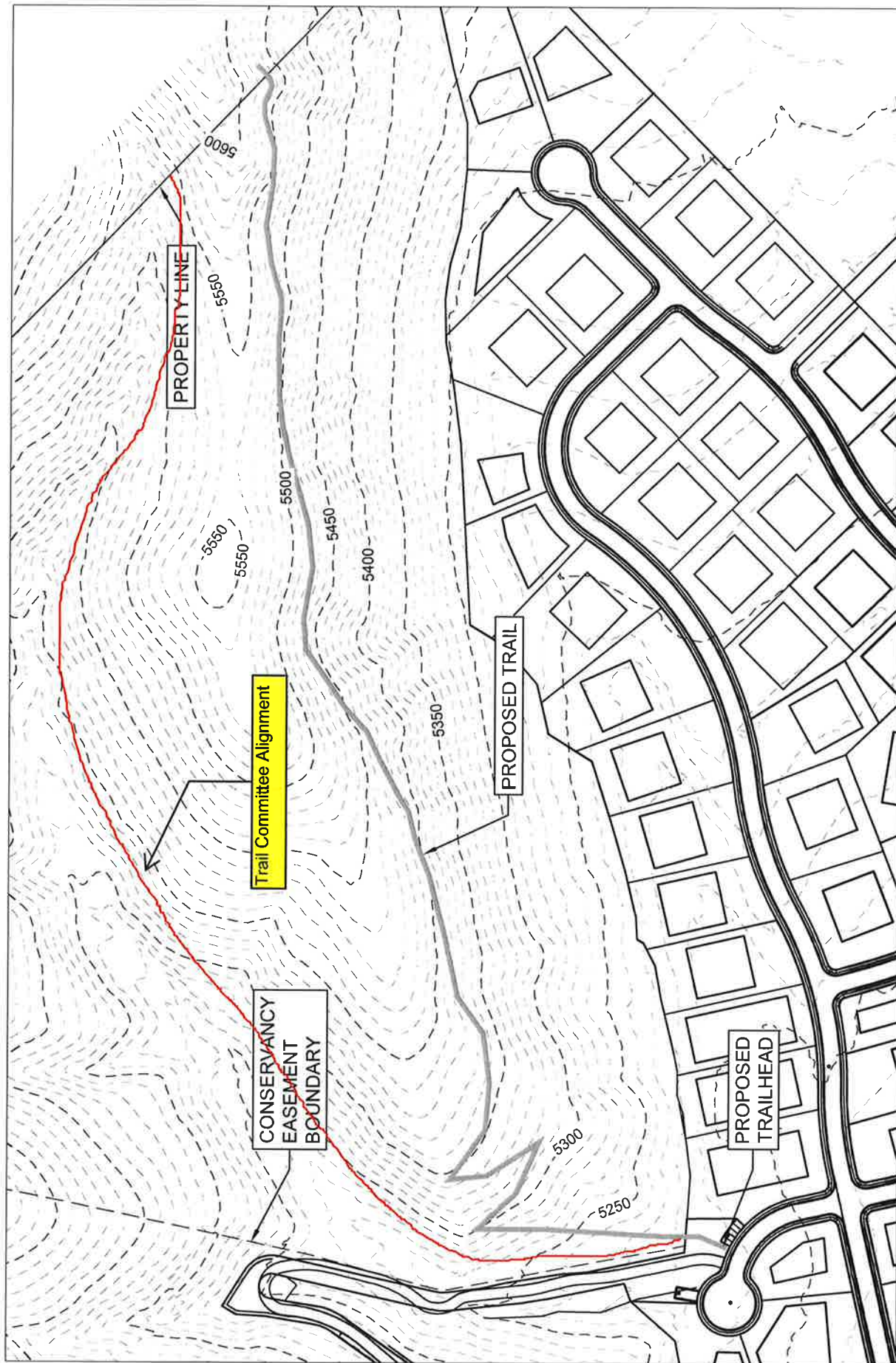


# THE RIDGE AT ALPINE TRAILHEAD EXHIBIT ALPINE, UTAH



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SCALE: 1"=60'



THE RIDGE AT ALPINE  
TRAIL EXHIBIT  
ALPINE, UTAH



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SCALE: 1"=60'



Date: June 1, 2018

By: Jed Muhlestein, P.E.   
City Engineer

Subject: **The Ridge at Alpine – ENGINEER’S PRELIMINARY REVIEW**  
**72 Lots on 189.5 Acres, CR 40,000 Zone**

This is the engineering review for The Ridge at Alpine preliminary subdivision plans. A separate Planning Review will also be completed. The proposed development consists of 72 lots on 189.5 acres. The development is located in the CR 40,000 zone, west of the Cove subdivision and north east of Heritage Hills Plat A. A map was prepared showing the preliminary plan overlaid on existing city infrastructure, it is attached for reference.

### **Street System**

#### Alpine Cove Road Connection

At concept it was mentioned that a connection to Alpine Cove Drive would be made. The plans show this connection but with no curb and gutter, which match the current conditions in the Cove. The City does not have a typical cross section without curb and gutter but in this situation Staff would be in favor of an exception. Due to the “built-out” nature of the Cove, where landscaping exists and encroaches in the right of way throughout the development, Staff does not think upgrading the roads to the City standard with curb, gutter, sidewalk, and park strips will be feasible in the foreseeable future. Because of this, **Staff would recommend an exception to the City’s road standards on Oak Drive as proposed.** The developer would be responsible for construction of Oak Drive on their property, the City would be responsible for the offsite costs to make the connection.

#### Design Standards

The street system appears to be in compliance with the street master plan, which does not show collector or arterial roads on/through the property. The typical residential street, having 30 feet of pavement and a 54-foot right of way, is shown throughout the development.

The cul-de-sacs appear to be dimensioned per code and overall road design looks ok though **there are some redline comments for road design to be corrected as part of the approval process.** The standard road cross section is shown everywhere besides the Oak Drive stub road as mentioned earlier.

Frontage improvements along Grove Drive are discussed in the development agreement

(attached). The road design includes the design and improvement of the intersection by the Russon's residence. Grove Drive improvements are discussed in the section 5.4 of the development agreement.

## Utilities

### Sewer System

The upper portion of the property can gravity flow to an 8-inch sewer main located in Grove Drive. Parts of the south westerly side of the development can gravity flow to an existing 8-inch main in Elk Ridge Drive. The lower middle section of the development (lots 49-51, 56-61) is shown to use a low pressurized sewer system. The sewage for these lots will be required to be pumped to the nearest gravity sewer main, which is located in Zachary Way. The sewer master plan showed these lots being served via a gravity sewer main that ran southward, offsite through private property, and connected back to Elk Ridge Lane. Negotiations with the private property owner for a sewer alignment failed and the City Council voted for the use of a pumped system for these lots. New laterals are shown for each lot. There are existing buildings that have sewer systems which must be removed or capped in place. This would be a condition of final approval for the appropriate phase of the development.

### Pressurized Irrigation System

Horrocks Engineers has modeled the site and recommends a 12-inch irrigation main to be installed from Grove Drive to the intersection of Elk Ridge and East View Lane. This is a master planned improvement and is larger than needed for the subdivision but benefits the city as a whole. The minimum required mainline size in residential roads is a 6-inch line. The city would be responsible for and use impact fees to pay the cost of upsizing this mainline to 12-inch. The City would also be responsible for the offsite improvements of this line (from the end of Elk Ridge Lane to the intersection of East View and Elk Ridge Lane). The remainder of the subdivision would use 6-inch lines for main roads including the northern most cul-de-sac and 4-inch lines for the minor cul-de-sacs. Connection to the lines in Grove Drive and Elk Ridge is shown on the plans.

Source of water is an ongoing problem in the high zone, where the development is proposed. The development agreement discusses the responsibility of the developer to install a variable speed pump at the Fort Creek booster station which could be dedicated to pumping water to this zone from the low zone. It was mentioned at Concept that the design of this system improvement should be submitted with the Preliminary Application and the pumps should be installed along with the first phase of development. Since Concept there have been projects discussed that may or may not affect the need for these pumps; namely a new well in the high zone and pressurized irrigation meters for the entire city. **Prior to Final Approval, the Developer needs to work with Staff regarding the specifics of what would be required for this development agreement item. The City Council would need to approve the result of those discussions.**

New 1-inch laterals are shown to be installed for each new lot except Lot 72. The building pad for Lot 72 sits above the maximum elevation to which the system can serve and



would therefore be watered with culinary water only.

There are two existing pressurized irrigation laterals that currently serve the property. Neither would be useful for the proposed design and are therefore required to be cut and capped at the main. This is noted in the redline comments on the plans and is one of the conditions of Preliminary Approval.

#### Culinary Water System

The subdivision is very close to the 5,350-foot elevation, which is the highest elevation the existing water system can serve and still provide the minimum 40 psi required by ordinance. The culinary water master plan calls for a new 10-inch main to be installed from the Grove tank to the 90-degree bend in Grove Drive that would provide minimum fire flows to the area. The development agreement specifies it is the responsibility of the developer to bring offsite utilities to the development (section 4.2.1). Discussions have indicated that the size of homes desired in the upper portion of the development may require a larger line to meet the fire protection demands. The developer has elected to install a 16-inch line instead of the 10-inch, which increases fire flows to 2,750 gpm. With 2,750 gpm available fire flow, the maximum sized home to be built without the need for fire sprinklers or alternate construction materials would be 11,300 square feet based on the International Fire Code.

The fire flow for this development was dependent upon the completion of the water system improvements in Three Falls and Fort Canyon Road. These improvements are complete and in operation.

1-inch laterals with ¾-inch meters are required, and shown, for each new lot.

**The Fire Chief has reviewed the plans, but changes have been made since his review. The Fire Chief will need to review and approve the changes, his letters are attached.**

#### Storm Water Drainage System

The storm water system design and drainage report has been submitted, reviewed, and approved with some redline comments. It is attached. There are four main topics to cover concerning storm water.

##### 1. School House Springs Drainage and Existing Irrigation Ditches.

The school house springs drainage enters Alpine City on the top west side of Alpine Cove. From there it travels southward until it enters the Zolman property. Section 4.7.19 of the development code requires existing ditches to be piped. A 30-inch pipe is proposed to capture this drainage and route it through the property.

The Northfield Ditch also runs through the property. This ditch has been abandoned and therefore will not be required to be piped through the property. **The Developer will be required to weld a metal plate at the upstream head gates to ensure water will not enter the abandoned ditch.**

##### 2. Onsite Drainage.

Onsite drainage consists of a piped system to capture and route water to three different detention basins. Each basin is designed for the 100-yr storm event which releases water to the existing drainages in the area. On Catherine Way there is a low

point in the road which would cause flooding problems for events greater than a 10-year storm. Because of this a drainage swale is proposed between lots 44, 45 and 49, 50. The swale would adequately route larger storm event flows to the pond south of Annie Circle without causing a flooding risk for the nearby homes.

3. Hillside/Offsite Drainage.

The geotechnical report highlighted the issue of debris flows that would enter the development from the west side in the event of post fire flows or heavy rainfall events.

The Developer contracted with IGES to design debris flow nets to capture these flows and mitigate the potential problem. The nets are designed to capture the debris, water would be allowed to pass through the nets and continue down the drainage. The water that passes the nets would follow Savannah Cir, Elk Ridge Lane Zachary Way, and Annie Circle to make its way to the detention pond. Calculations have been done to show that the homes along this route would not be flooded in the event of a post fire situation if they were required to build homes at least 1.75' above the curb. A note will be required to be placed on the plat for the appropriate phases and checked prior to Final Approval for this requirement. The Drainage Reports and IGES design for debris flow nets are attached.

4. Low Impact Development.

March 1, 2016, the State implemented into the General MS4 Permit (Small Municipal Separate Storm Sewer Systems) the requirement of all developments to evaluate Low Impact Development (aka - LID) for their site. LID is a measure of handling storm water and improving water quality. LID emphasizes conservation and the use of on-site natural features to protect water quality. There are many ways to meet the LID requirement. LID can be met by the use of drainage swales, rainwater harvesting, curb cuts to direct water to smaller local basins, and so on. The developer shows in the storm water calculations that LID will be implemented at the building permit level with each new lot retaining the 90<sup>th</sup> percentile storm, which equates to about a 2-year, 1-hr rainfall event for Alpine City. This is something Alpine is doing for all new homes within the city as required by the State. This is not done just as a measure of protecting water quality, but also protecting against runoff from one property to another.

## **Geotechnical / Hazard Reports**

### Geotechnical Report

The proposed development falls within the Geologic Hazards Overlay Zone as well as the Urban/Wildland Interface. As with any development, the developer would be required to obtain and submit a Geologic Hazards Report for the property. The developer has had such a report prepared and it is included herewith. Several reports have been done on the property. Of particular note is an area of mass grading and fill of an existing ravine that ran through the property. The City has no records of compaction or what type of material was used to fill the ravine. The report did pay specific attention to this area and has provided recommendations for



building there. The report also mentioned the need to look further into Geologic Hazards such as debris flow and rock fall. The report should be made available to all future home buyers.

#### Hazard Report

The Developer contracted with IGES to provide further information regarding certain hazards. The report covers rock fall and debris flow in more depth. It was determined that there is a low to moderate rock fall hazard for most the lots along the westerly side of the development.

The lots in the north westerly corner were considered to have a moderate rockfall hazards and IGES recommended more studies be done in the area prior to development to determine if larger setbacks or other mitigation efforts would be required. **Staff would recommend that report be a condition of final approval for that phase of development.** The report recommended disclosure to future buyers of lots along the westerly side of the potential rock-fall hazard. A note should be placed on the plat for any phase of development that contains these lots. This will be checked at final approval.

The report also looked further into debris flow from Big Hollow canyon. This canyon exits near lots 72 and onto Savannah Circle. The worst-case scenario would be a post-fire situation. IGES provided a design for debris flow nets that would capture the potential debris from such an event but would allow the water to pass through. This design is similar in nature to what the city built in Box Elder where water is allowed to pass but the debris is captured. The location of two debris flow nets are shown in the report.

#### **Lot 72**

Lot 72 (previously Lot 69) has been discussed at the concept level in depth. A design has been provided which meets fire flow and pressure standards according to Horrocks' review. Pressurized irrigation will not be served on this lot due to its elevation. The driveway design follows an existing dirt road with retaining walls that were recently constructed without a building permit. The walls currently would not meet city ordinance and would need to be rebuilt per city ordinances. Pictures attached. **The Fire Chief will need to approve the design.** From an engineering standpoint the lot is buildable assuming retaining walls can be built to city code. **Engineering recommends approval of the lot be contingent on retaining wall compliance to city code.** A separate review from the Planner will discuss other ordinances that apply to the lot.

#### **Existing buildings**

The property has several existing buildings onsite. Prior to the recordation of any phase of development that contains existing buildings, the existing building(s) must be removed, existing services either re-used or cut and capped, or a bond provided to the city to ensure those things will happen prior to a building permit being issued on the affected lot(s). These would all be conditions of Final Approval.

## **Conservation Easement**

It should be noted that a conservation easement exists on a large portion of the north westerly area of the property. The language for the easement expressly prohibits any kind of building or development. Trails are allowed and discussed in the Planner's Review Letter. The recorded conservation easement is attached.

## **ENGINEERING RECOMENDATION**

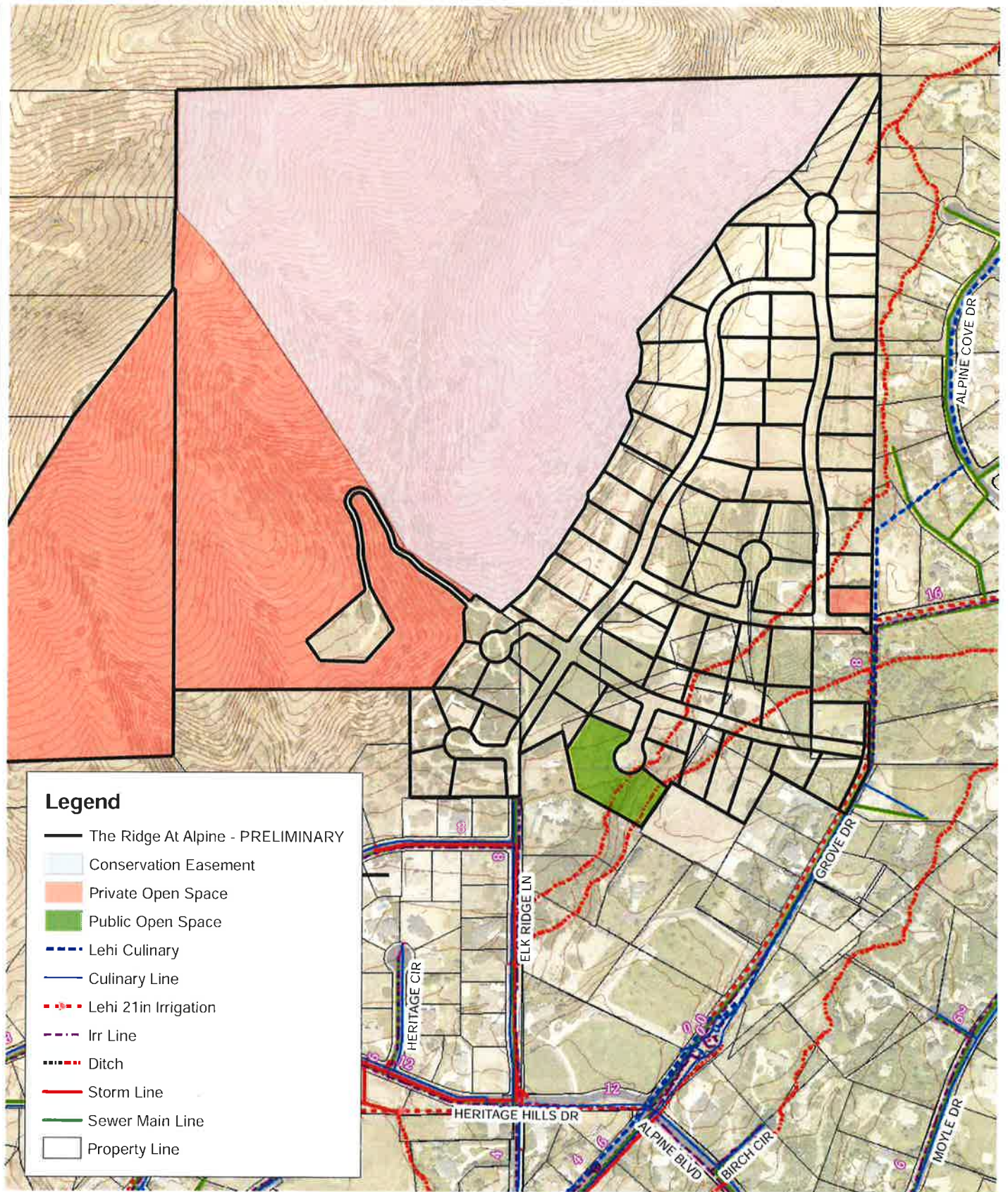
**Engineering recommends that Preliminary Approval of the proposed development be approved with the following conditions:**

- **An exception be granted for a non-standard road cross section along Oak Drive. The cross section would include 30 feet of pavement with 3 foot shoulders on each side;**
- **The Developer address redline comments on the plans and drainage report;**
- **The Developer work with Staff regarding the variable speed pumps required in the Annexation and Development Agreement, then report to the City Council prior to submitting for Final Approval;**
- **The Developer weld metal plates at the upstream head gates of North Field Ditch;**
- **The Fire Chief approves the plans;**
- **The Developer submit a retaining wall design that meets city ordinance for Lot 72.**

## **Attachments**

- **Preliminary Map Overlay**
- **Annexation Development Agreement**
- **Horrocks Engineer's Review Letter**
- **Fire Chief Letters**
- **Preliminary Plans**
- **Drainage Report**
- **Geotechnical Studies**
- **IGES Debris Flow Net Design**
- **Conservation Easement**
- **Lot 72 Existing Retaining Walls**

## PRELIMINARY MAP OVERLAY







PREPARED FOR:  
SBP HOLDINGS INC

SHEET 2 OF 8

**MANAGEMENT'S SUMMARY**

ALPINE SLOPE MANAGEMENT CONSULTANT

ALPINE HOUSE PLANNED RESIDENTIAL DEVELOPMENT

ALPINE HOUSE PLANNED RESIDENTIAL DEVELOPMENT

LOCATED IN  
NORTHWEST 1/4 OF SECTION 18, TOWNSHIP 4 SOUTH, RANGE 2 EAST,  
SALT LAKE BASE AND MERIDIAN

PREPARED FOR:  
SBP HOLDINGS LTD

**BUSH & GUDGELL, INC.**  
Engineers - Planners - Surveyors

Bob Latt, CEO  
Sallie Krawcheck, L.L.M.  
Phone (801) 585-6184 / Fax (801) 585-6189

Phone (800) 855-1144 / Fax (503) 585-0160  
www.southwestair.com

Number of days in

DATE: 9-7-18  
FILE: 180005 ALPHAT 000134







## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT: Development Code Review – Section 3.2 Town Residential Zone**

**FOR CONSIDERATION ON: 5 June 2018**

**PETITIONER: Staff**

**ACTION REQUESTED BY PETITIONER: Recommend updates and/or corrections.**

### **BACKGROUND INFORMATION:**

The Alpine City Planning Commission has decided to review the Development Code in 2018. The purpose is to 1) be better familiar with the city code, and 2) to review the code for errors, inconsistencies, needed updates.

### **STAFF RECOMMENDATION:**

Review Section 3.2 of the Development Code and recommend needed updates and/or corrections.

## **ARTICLES 3.2 - 3.20 ESTABLISHMENT OF ZONING DISTRICTS AND REGULATIONS**

**The following zone districts are hereby established for the City of Alpine:**

### **ARTICLE 3.2 TOWN RESIDENTIAL ZONE (T-R 10,000) (Ord. 2015-02, 02/10/15)**

#### **3.2.1 PURPOSE**

To allow for residential growth within the originally settled town center of Alpine; to maintain the village scale and character; to provide for appropriate community activities and civic buildings; and to allow a density of development that is compatible with the limitations of municipal resources.

#### **3.2.2 PERMITTED USES**

The following uses of land shall be permitted upon compliance with the applicable standards and conditions set forth in this ordinance.

1. Single-unit detached dwellings when located on a lot in a recorded subdivision and subject to compliance with the applicable conditions within the zone.
2. Customary residential accessory structures which are an integral part of and incidental to an approved dwelling.
3. Customary household pets.
4. Public park and recreational open spaces and appurtenant structures;
5. Agriculture, including the raising of row crops, grains and fruits.
6. The keeping and raising of animals and fowl, subject to the provisions of Article 3.21.9 of Supplementary Regulations.

#### **3.2.3 CONDITIONAL USES**

The following buildings, structures and uses of land may be permitted upon compliance with the standards and conditions set forth in this ordinance and after approval has been given by the designated review body.

1. Single family dwellings (conventional construction) when proposed for placement on a lot not in a recorded subdivision, subject to compliance with the applicable conditions within the zone and approval of a site plan by the Planning Commission.
2. Cemeteries;
3. Child care nurseries and group day-care centers;
4. Civic buildings;
5. Subdivision projects, subject to compliance with the applicable requirements of the subdivision ordinance.
6. Water, sewer and utility transmission lines and facilities required as an incidental part of development within the zone, and subject to the approval of a site plan by the Planning Commission.

7. Motor vehicle roads and rights-of-way subject to compliance with City standards for design and construction for such uses, and upon approval of site plan by the Planning Commission.
8. Accessory apartments, subject to the provisions of Section 3.23.7.1 of the Development Code. (Ord. 94-06);
9. Home occupations, subject to the provisions of Section 3.23.7.3 of the Development Code.
10. Schools, churches, hospitals (human care) and similar quasi public buildings subject to the approval of site plan by the Planning Commission.
11. Incidental Produce Stands, subject to the provisions of Section 3.23.7.4 of the Development Code. (Ord. 96-05, 4/10/96)

### **3.2.4 DENSITY AND REGULATIONS**

1. Lot Size. The minimum lot area for a single-unit dwelling shall be 10,000 square feet (Amended by Ord. 94-06).
2. Lot Coverage. No lot within the T-R District may have more than fifty (50) percent of its land area covered by buildings or other impervious material.
3. Lot Width. The minimum width of any lot for a dwelling shall be ninety (90) feet, measured at the required front yard set back line.

### **3.2.5 SETBACK REQUIREMENTS (see Appendix for drawing)**

#### **3.2.5.1 Dwellings and Other Main Buildings**

1. Front Yard. The minimum front yard for all main dwelling structures shall be thirty (30) feet (measured from the front property line).
2. Side Yard Interior Lots. All dwellings shall be situated on the lot to allow for a side yard on each side of the main building the aggregate widths of which shall be at least twenty-two (22) feet. Neither side yard shall be less than ten (10) feet wide.
3. Side Yard Corner Lots. On corner lots, the front and side yard requirements shall be the same as above, except that the side set back from the street for all buildings shall not be less than thirty (30) feet.
4. Rear Yard Interior Lots. All main dwelling structures shall be set back from the rear property line a distance not less than twenty (20) feet.
5. Rear Yard Corner Lots. All main dwelling structures shall be set back from the rear property line a distance of twenty (20) feet.

#### **3.2.5.2 Accessory Buildings.** All accessory buildings shall be located in accordance with the following: (Amended by Ord. No. 2006-14, 9/12/06; Ord. No. 2010-03, 8/24/10)

1. Setback from main building. Accessory buildings which are located twelve (12) feet or closer to a main building and are attached to the main building by a common roof or wall shall be considered as part of the main building and shall meet the same setbacks as the main building.

2. Side Setback - Corner Lot, Side Abutting a Street. Accessory buildings shall be set back not less than forty (40) feet from the side lot line which abuts on a street.
3. Front Setback. Accessory buildings shall be set back not less than forty (40) feet from the front property line.
4. Side and Rear Setback - Interior Lot Line. Accessory buildings shall be set back no less than ten (10) feet from the rear lot line and five (5) feet from the side lot line, except that no minimum rear or side setback shall be required when all the following conditions are met:
  - a. The accessory building is located more than twelve (12) feet from an existing dwelling on the same or adjacent lot;
  - b. The accessory building contains no openings on the side contiguous to the lot line;
  - c. No drainage from the roof will be discharged onto an adjacent lot;
  - d. The accessory building shall be constructed of non-combustive materials or have fire resistive walls rated at one (1) hour or more;
  - e. The building will not be placed on land designated as a recorded easement, such as a utility or trail easement; and
  - f. The building will not be taller than ten (10) feet to the top of the roof line.

### **3.2.6 BUILDING REQUIREMENTS**

1. Height of Dwellings. The maximum height of any dwelling or other main building shall be thirty-four (34) feet, as determined in accordance with the provisions of Section 3.21.8 of the Development Code. (Ord 96-15, 12/18/96).
2. Height of Accessory Buildings. The maximum height of any accessory building shall be twenty (20) feet as measured from the average finished grade of the ground surface adjacent to the foundation of the structure to the top of the ridge line.

For every one (1) foot of additional height above twenty (20) feet, an additional two (2) feet of side yard and rear yard setback will be required. The maximum height of an accessory building as measured to the ridgeline shall be thirty (30) feet.

3. Exceptions to Height Requirements. Chimneys, flag poles, television antennas, and similar ancillary structures not used for human occupancy shall be excluded in determining height, provided that no such ancillary structure shall extend to a height in excess of fifteen (15) feet above the building.

### **3.2.7 ACCESS REQUIREMENTS**

Each lot shall abut upon and have direct access to an existing City-maintained street or a street, which has been formally accepted by action of the City Council. The distance of said abutting side shall be not less than the minimum lot width requirement of the zone except that the length of said abutting side may be reduced to not less than sixty (60) feet when the lot abuts upon a cul-de-sac or sharp curve and the side lot lines radiate in such a manner that the width of the lot, measured between the side lot lines at the minimum front setback line will meet or exceed the minimum width requirements of the zone.

### **3.2.8 UTILITY REQUIREMENT**

- 3.2.8.1 Culinary Water.** All dwellings and other structures to be used for human occupancy shall be served by the City's water system. The system serving the dwelling shall be capable of providing water to the dwelling of a volume sufficient for both culinary and fire fighting purposes and at a pressure of not less than 40 p.s.i. as determined by the City Engineer.
- 3.2.8.2 Domestic Sewage Disposal.** All dwellings and other structures intended for human occupancy shall be served by the City's central sewage collection system.

### **3.2.9 SPECIAL PROVISIONS**

1. **Heliports.** The installation of a heliport for the use of a helicopter or other manned rotary wing aircrafts capable of vertical takeoff or landing is prohibited.