LAND SUITABILITY ANALYSIS REPORT

1. INTRODUCTION

This report is provided in accordance with the submittal requirements of the Site Development Plan (SDP). The report accompanies the attached PDP Existing Conditions/Land Suitability Analysis Map and is intended to assess the impact of proposed development on the site's physical and environmental attributes.

2. LOCATION

Alexander Way is a proposed development northeast of the Home Depot anchored retail center, located just east of I-25 and north of Founders Parkway. The property consists of two parcels totaling 73.76 acres and a third parcel of 4.2 acres which was annexed into the Town of Castle Rock in 1987 as part of the Maher Ranch PD.

More specifically, the property is located in areas of the north one-half of the north one-half of Section 28 owned by Tierra Investors, LLC; and areas in the south one-half of the south one-half of Section 26, Township 7 South, Range 67 West, owned by 455 Alexander, LLC. The site is surrounded by existing development and is a logical extension of residential development primarily given the adjacent uses and existence of utility infrastructure.

3. <u>SLOPE ANALYSIS</u>

The property gently rises in topography from west to east. The slope analysis depicts existing slopes on the site in categories of 0-8%, 8-12%, 12-15%, 15-25%, and more than 25%.

a. 25% and greater slopes

The majority of the 25% or greater slopes are located along the major and moderate ridges and within the eastern open space area. It is anticipated that that most of the slopes will be undisturbed.

b. 15%-25% slopes

15% - 25% slope range is generally located adjacent to the steeper slopes stated above. The proper siting and design of the homes with stepping foundations and walk out lower levels will aid in accommodating the sloping lots.

c. 12%-15% slopes

Slopes ranging from 12-15% are generally scattered throughout the site. These areas, in most cases, will be graded to accommodate the lots and roads.

d. 8%-12% slopes

The majority of the central and western side of the site has sloping topography in the 8% - 12% range. These areas, in most cases, will be graded to accommodate the lots and roads.

e. 0%-8% slopes

The flatter areas of the site are located in the western portions of the site. The 0-8% slope category generally presents no constraints to development.

Steeper slopes and a series of minor ridges and drainages are prevalent throughout the open space areas. To the extent possible, these areas will be preserved in their natural state. A native-surface trail is planned to traverse the open space providing connectivity to the Towns trail system in the Metzler Ranch open space.

4. <u>VEGETATION</u>

Stands of native Gambel Oak are located along the eastern boundary of the site. The Gambel Oak brush community varies in height and maturity. There are a few scattered evergreen trees located amongst the Gambel Oak communities. Most of the existing vegetation will be preserved and contained within open space.

5. <u>WILDLIFE</u>

Colorado Parks and Wildlife has provided the following analysis of wildlife within Alexander Way.

<u>Habitat</u>

The main impacts to wildlife from this development would be fragmentation and loss of habitat. Although it is impossible to eliminate fragmentation and habitat loss with any development, impacts to wildlife can be minimized through the use of clustering configurations, density reduction, and providing open space for wildlife.

Fragmentation of wildlife habitat has been shown to impede the movement of wildlife across the landscape. Open space areas are more beneficial to wildlife if they connect to other nearby natural areas. The areas of wildlife habitat that most closely border human development show heavier impacts than do areas on the interior of the open space. However, when open space areas are smaller in size, the overall impacts of the fragmentation is greater (Odell and Knight, 2001). Thus, CPW recommends that the developer and Castle Rock employ a collaborative approach with neighboring cities and towns and with other developments within the county to maintain wildlife habitat in as whole a state as possible. By keeping open space areas contiguous and of larger size, the overall benefit to wildlife increases dramatically.

<u>Trails</u>

When planning trails in the development area, special consideration should be given to the impact trails have on wildlife within the area. Trails should not cut through riparian areas and should remain at least 50 feet from them. They should also be placed at the edges of open space areas and should be no wider than 8 feet throughout their entire length. Trails have the ability to contribute to fragmentation of habitat, disrupting the natural movement of wildlife through an area, and the spreading of noxious weeds.

<u>Noxious Weeds</u>

Noxious weeds should be monitored very closely. The spread and control of noxious weeds on and around this Castle Rock site is a concern for wildlife. Invasive plants endanger the ecosystem by disturbing natural processes and jeopardizing the survival of native plants and the wildlife that depend on them. CPW would recommend implementation of a weed management plan that may already exist within the Town of Castle Rock or Douglas County.

<u>Wildlife</u>

CPW would expect a variety of wildlife species to utilize this site on a regular basis, most notably small to mid-sized mammals, song birds, and raptors, but also with the possibility for big game species (elk, deer, bear, and mountain lion), reptiles, and amphibians to be present.

<u>Raptors</u>

Raptors are protected from take, harassment, and nest disruption at both the state and federal levels. Should a nest ever get built or be discovered, CPW recommends that buffer zones around nest sites be implemented during any period of activity that may interfere with nesting season. This will prevent the intentional or unintentional destruction of an active nest.

Living with Wildlife

Future residents should be informed that wildlife such as fox, coyotes, deer, elk, and even bear or mountain lion might frequent the development area in search of food and cover. Coyotes, foxes, cottontail rabbits, and raccoons are several species that have adapted well to living in urban environments. This proposed site within Castle Rock also has the potential for the presence of bears that have been accustomed to living in close proximity to humans. Bears, as well as other wildlife, should not be a concern for residents if CPW recommendations are met.

The following information from Colorado Parks and Wildlife is available: "Your Guide to Avoiding Human-Coyote Conflicts," "Don't Feed the Wildlife," "Living with Bears," and "Too Close for Comfort: Avoid Conflicts with Wildlife in the City". These brochures can also be downloaded from our web site at http://cpw.state.co.us/learn/Pages/LivingwithWildlife.aspx. Overall, development will impact habitat; however, continuous and connected open spaces within Alexander Way will promote travel corridors and coverage for wildlife. Large lots with open fencing aid in providing wider open travel corridors for the wildlife. Additionally, the preservation of vegetation enables much of the wildlife to stay in the area and permits many species of this wildlife to continue their migration, hunting and gathering patterns unabated. It is anticipated that wildlife will continue to visit the area of development.

No known nationally-designated threatened or endangered species have been observed or are known to exist within the property boundary. Coordination with Colorado Parks and Wildlife will be ongoing during the design and Site Development Plan process and will aid in identifying key wildlife areas and travel corridors and methods to mitigate impacts on wildlife.

6. <u>GEOLOGY, SOILS and NATURAL FEATURES</u>

This site contains two distinct soil and subsoil conditions, KtE Kutch sandy loam and Sv Stony steep land. The general soil classifications are noted on the LSAR map. The Kutch sandy loam association soils are generally located within the western half of the site in slopes of 5 to 20%, well drained with a typical profile of Loam, Clay and Sandy clay loam. The Stony steep land association soils are generally located within the eastern half of the site in ridges and valley sides. The soils are well drained with a typical profile of Sandy loam and Sandy clay loam.

A geotechnical engineering analyses and subsurface exploration with laboratory test will be conducted in the location of the proposed roads and residential structures to determine foundation type and pavement sections.

7. <u>SKYLINE / RIDGELINE</u>

Towards the northeast corner of the site, an area is located within the Major, Moderate and Minor Skylines. Continuing southeast, the property line follows edges of Moderate and Minor Skylines. In the southeast corner of the site, a large area is within the Major, Moderate and Minor Skylines.

All of the Major and Moderate Skyline areas are to be located within proposed open space. A small portion of the Minor Skyline in the northeast corner is located on the edge of Planning Area 1 and will be within the backyards single family detached lots.

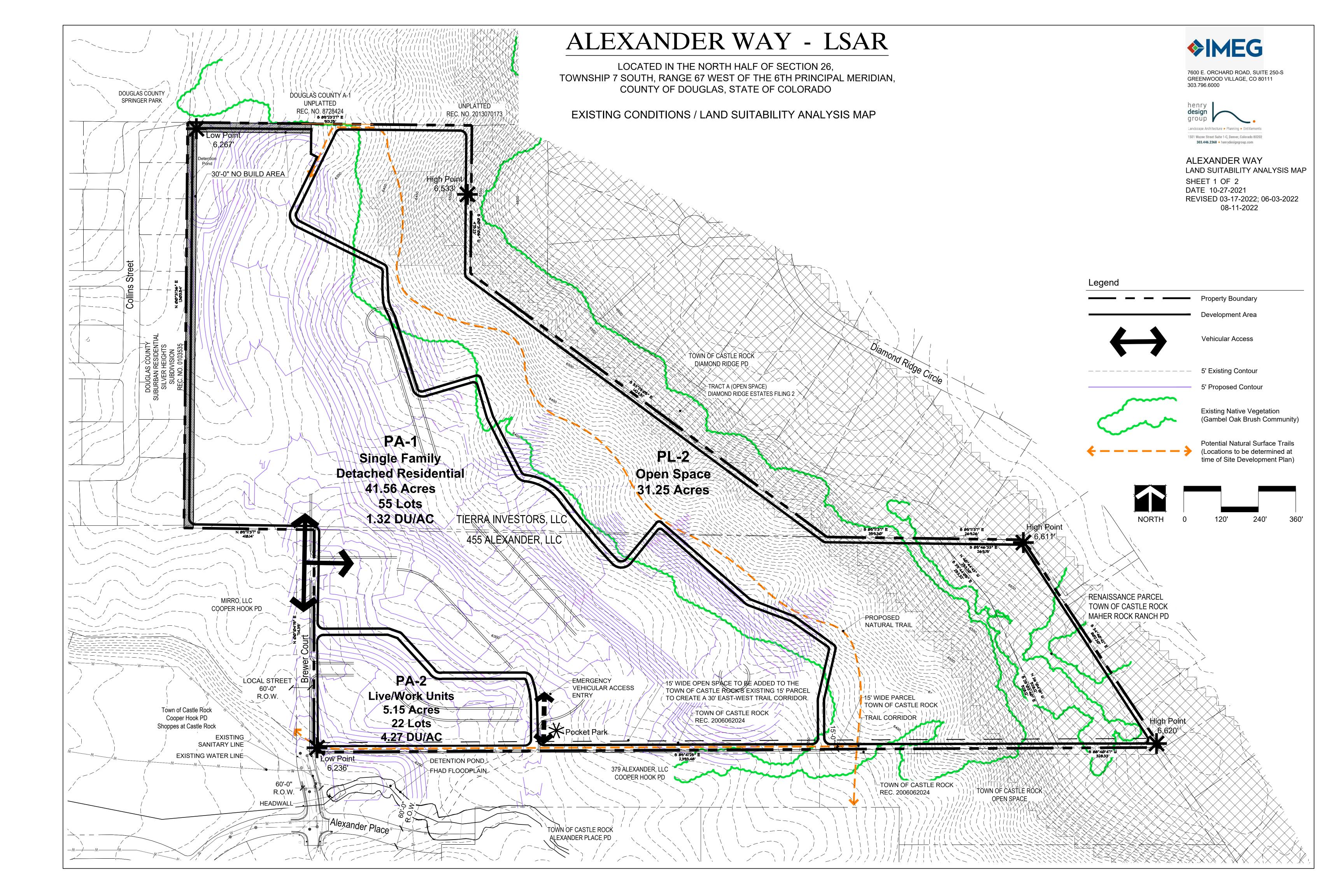
8. <u>OPPORTUNITIES AND CONSTRAINTS</u>

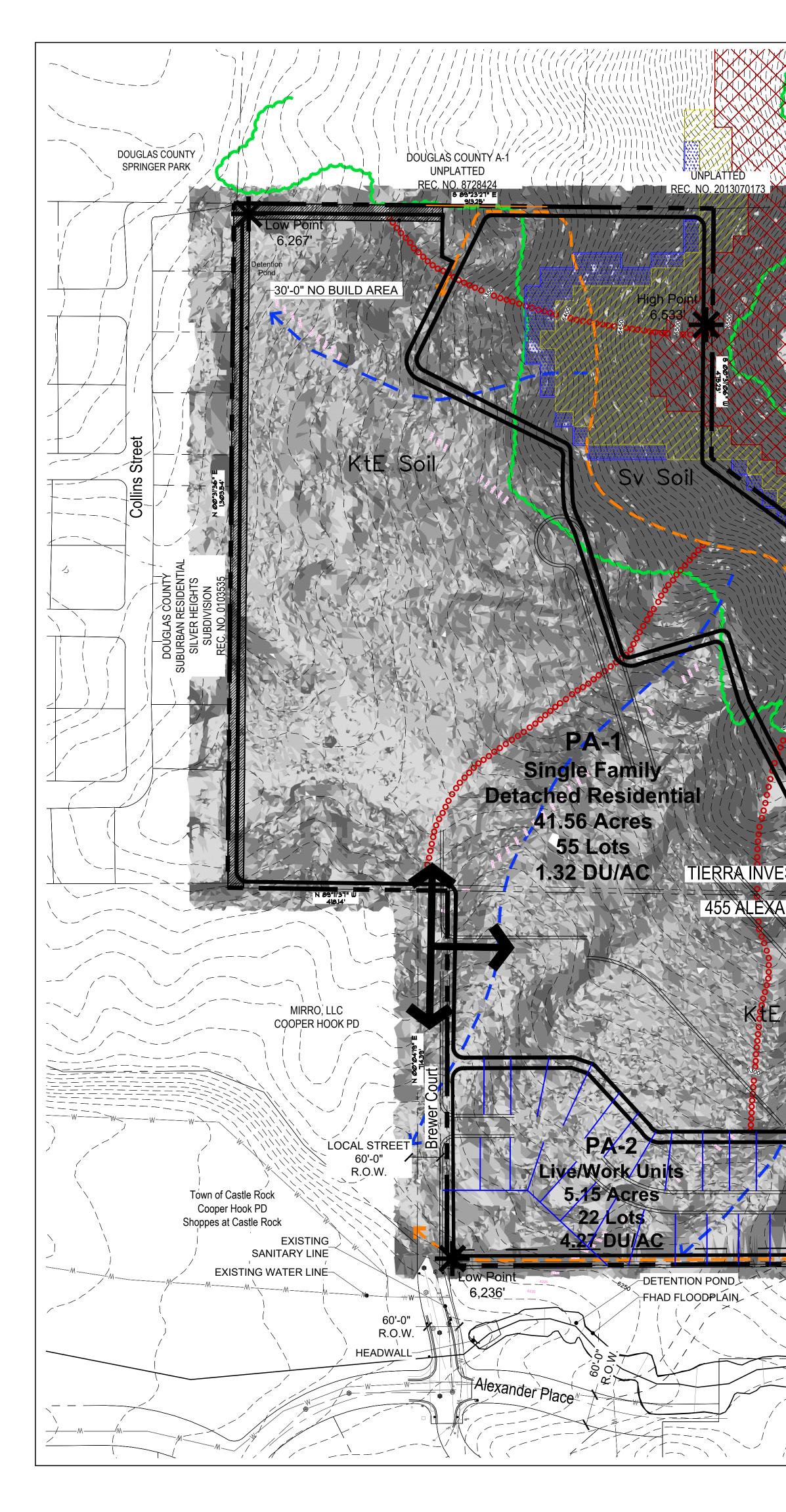
The site is suited for development and will be designed to function in harmony with the natural features of the site to the extent possible while meeting the Town's criteria.

Additionally, the design of the homes will provide stepping foundations and walk out lower levels to aid in accommodating sloping lots.

9. <u>CONCLUSION</u>

The Land Suitability Analysis shows that the site on which Alexander Way will be developed is appropriate for the few number of single family lots proposed within Planning Area 1. The live/work units within Planning Area 2 are located in the southwest corner of the site where the slopes can be accommodated and environmental conditions are limited. The LSAR illustrates limited areas of steeper slopes and with proper design of the homes and foundations, the slopes can be accommodated. The streets will be graded in accordance with Town criteria but overlot grading of the site will be minimized. The open spaces and larger lots with limited fencing will aid in maintaining existing vegetation and therefore wildlife cover and corridors. The site contains no adverse soils or geology that would limit development. The areas within the Skyline/Ridgeline will not limit development of homes on the site. Mitigation techniques and building heights restrictions will be met in accordance with Town criteria.

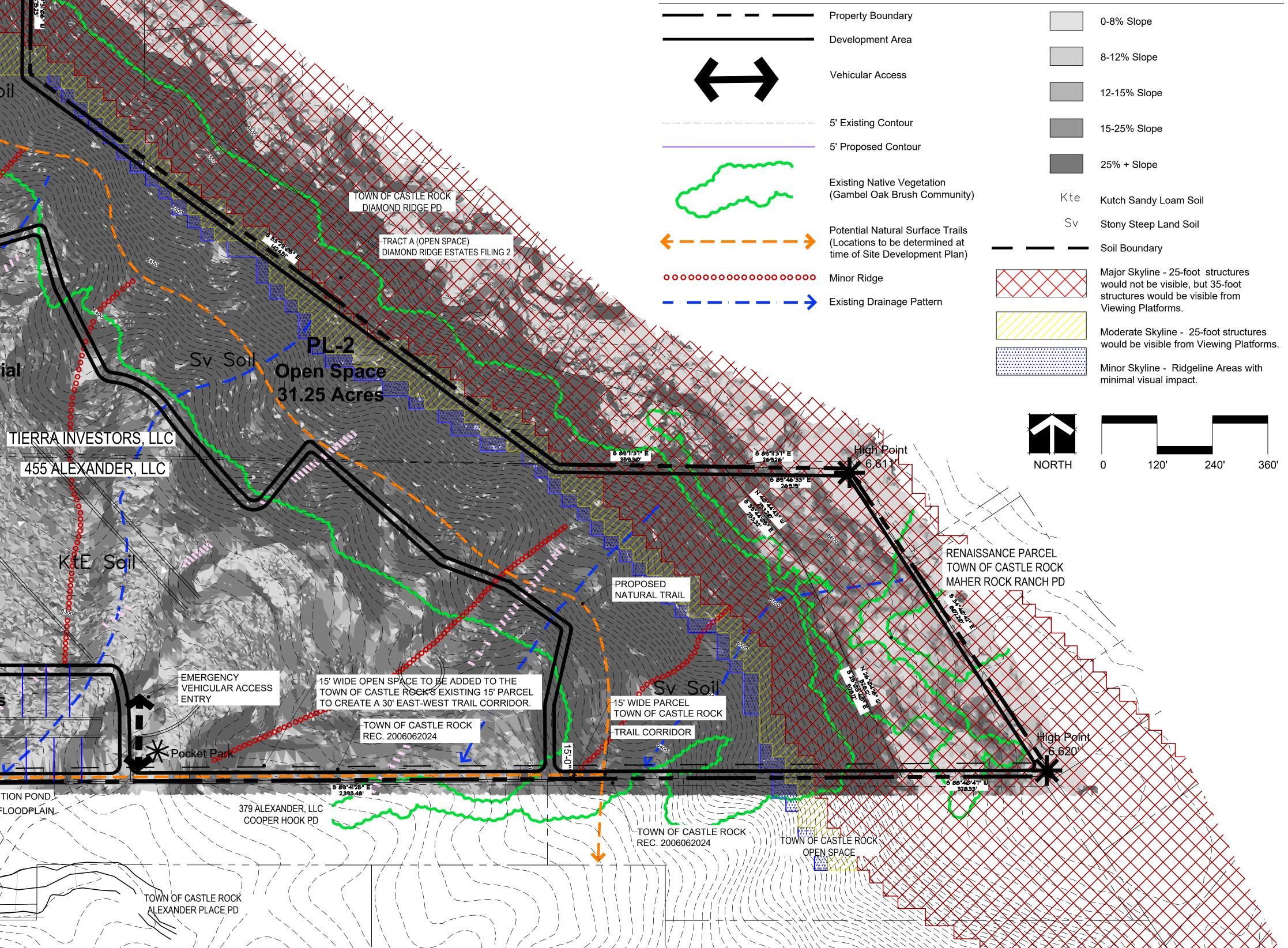




ALEXANDER WAY - LSAR

LOCATED IN THE NORTH HALF OF SECTION 26, TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO

EXISTING CONDITIONS / LAND SUITABILITY ANALYSIS MAP



Legend

NOTES:

- 1. Many species of birds and raptors utilize the site's habitat, as well as mule deer, antelope, elk, bear, coyote, red fox and mountain lion. To mitigate the existing wildlife, the PD shall maintain continuous and connective open space, providing corridors and movement routes.
- 2. Lots adjacent to open space shall be limited to 42" open rail fences so as to reduce wildlife injuries.



7600 E. ORCHARD ROAD, SUITE 250-S GREENWOOD VILLAGE, CO 80111 303.796.6000



303.446.2368 • henrydesigngroup.com

ALEXANDER WAY LAND SUITABILITY ANALYSIS MAP SHEET 2 OF 2 DATE 10-27-2021 REVISED 03-17-2022; 06-03-2022 08-11-2022