

## MEMORANDUM

To: Vail Town Council

From: George Ruther, Housing Director

Date: June 5, 2018

Subject: Exploratory Discussion for Survey Concerning Natural Area Preservation Rezoning (Middle Creek Subdivision)

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### **I. Purpose**

Vacant and available land resources and suitable sites for deed-restricted housing development within the Town of Vail remain in short supply. To that end, a conversation has started regarding a certain undeveloped property in Vail. The property in question is generally located west of the Middle Creek drainage along the northerly edge of the North Frontage Road and legally described as Tract A, Middle Creek Subdivision. To date, much of the conversation about this property and its suitability for residential development has been speculative in nature and absent any objective information or data. In addition to a number of other relevant considerations, the feasibility of residential development on the property remains a significant unanswered question. To better understand the feasibility of development additional information is needed.

The purpose of this memorandum is to:

- 1) share background information on the property, and
- 2) inquire whether the Vail Town Council wishes to allocate up to \$7,500 and a portion of staff time to better determine the feasibility of residential development.

### **II. Background**

A preliminary site feasibility study was completed for Tract A, Middle Creek Subdivision in December of 2107. In summary, the 27- page study examined the opportunities and constraints of development on the property utilizing public record information found on the Town's GIS. Areas of analysis included: land use, zoning, pedestrian/vehicular circulation, geologic hazards, wildlife habitat, floodplain, utilities and open space. A complete copy of the preliminary study has been attached for reference. The study did not include more in depth objective analysis such as boundary survey, site specific topographic data, suitability of soils, vehicular access information, etc.

### **III. Town Council Request**

On April 17, 2018, the Vail Town Council instructed staff to return to a future Town Council meeting with an estimated cost to obtain more in depth objective information on the property. Based upon initial probable cost estimates, up to \$7,500 will be required to obtain this next level of information. Included within this estimated cost is a partial boundary survey, a review of probable soils conditions based upon soils investigations completed for several adjoining properties, staking of the 100-year Middle Creek floodplain, consultation with a traffic engineer, and a preliminary site layout and massing study by an architect/land planner. The time frame for completion is likely to be approximately 45 to 60 days.

**Does the Vail Town Council authorize the expenditure of up to \$7,500 to complete a more in depth analysis of the Tract A, Middle Creek Subdivision property to obtain additional objective information and data?**



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**Memorandum**

To: File

From: Justin Lightfield, Planner

Date: December 5, 2017

Subject: Site Feasibility Study, Tract A, Middle Creek Subdivision, Parcel Number 2101-064-09-003

**I. SUMMARY**

The Town of Vail Community Development Department is examining the site feasibility for future residential development on Tract A, Middle Creek Subdivision, parcel number 2101-064-09-003. The site is located west of the Vail Village (Exit 176) interchange, bounded by US Forest Service (USFS) to the north, I-70 ROW and North Frontage Road to the south, Middle Creek housing development and Mountain Bell Tower site to the south and east, a metes and bounds ±26 acre parcel owned by the Town of Vail to the east, and Solar Vail apartments to the west. The site highlighted below totals 17.87 acres and is owned by the Town of Vail.



## II. PURPOSE

The purpose of this memo is to present the initial findings of a Site Feasibility Study completed by Community Development Staff. The intent of the study is to share the feasibility of potential residential development on the site. Staff examined both the constraints and opportunities through Geographic Information Systems (GIS) analysis. The areas of analysis include: zoning, land use, pedestrian/vehicle circulation, steep slopes, rockfall, debris flow, debris avalanche, snow avalanche, wildlife, floodplains, utilities, and open space.

## III. ZONING

The site contains two types of zone districts; with 12.82 acres (72%) zoned Natural Area Preservation (NAP) and 5.05 acres (28%) zoned General Use (GU). The surrounding zone districts include:

North: N/A (US Forest Service Land)  
South: Housing (I-70)  
East: Natural Area Preservation  
West: Housing and Natural Area Preservation



The NAP district is the Town's most restrictive zone district which is intended to protect lands in their natural state. The purpose of the NAP zone district is:

*The natural area preservation district is designed to provide areas which, because of their environmentally sensitive nature or natural beauty, shall be protected from encroachment by any building or other improvement, other than those listed in section [12-8C-2](#) of this article. The natural area preservation district is intended to ensure that designated lands remain in their natural state, including reclaimed areas, by protecting such areas from development and preserving open space. The natural area preservation district includes lands having valuable wildlife habitat, exceptional aesthetic or flood control value, wetlands, riparian areas and areas with significant environmental constraints. Protecting sensitive natural areas is important for maintaining water quality and aquatic habitat, preserving wildlife habitat, flood control, protecting view corridors, minimizing the risk from hazard areas, and protecting the natural character of Vail which is so vital to the town's tourist economy. The intent shall not preclude improvement of the natural environment by the removal of noxious weeds, deadfall where necessary to protect public safety or similar compatible improvements.*

The following uses are permitted and conditional uses in the NAP district:


**Permitted Uses**

Nature preserves.

<b>Conditional Uses</b>
Equestrian trails, used only to access national forest system lands.
Interpretive nature walks.
Parking, when used in conjunction with a permitted or conditional use.
Paved and unpaved, non-motorized, bicycle paths and pedestrian walkways.
Picnic tables and informal seating areas.
Other uses customarily incidental and accessory to permitted or conditional uses and necessary for the operation thereof, with the exception of buildings.

The purpose of the GU zone district is:

*The general use district is intended to provide sites for public and quasi-public uses which, because of their special characteristics, cannot be appropriately regulated by the development standards prescribed for other zoning districts, and for which development standards especially prescribed for each particular development proposal or project are necessary to achieve the purposes prescribed in section [12-1-2](#) of this title and to provide for the public welfare. The general use district is intended to ensure that public buildings and grounds and certain types of quasi-public uses permitted in the district are appropriately located and designed to meet the needs of residents and visitors to Vail, to harmonize with surrounding uses, and, in the case of buildings and other structures, to ensure adequate light, air, open spaces, and other amenities appropriate to the permitted types of uses.*

The following uses are permitted and conditional uses in the GU district. Conditional uses shall be permitted in the GU district, subject to issuance of a conditional use permit in accordance with the provisions of [12-16-1](#).

**Permitted Uses**

Bicycle and pedestrian paths.
Communications antennas and appurtenant equipment.
Employee housing units, as further regulated by chapter 13 of this title.
Passive outdoor recreation areas, and open space

**Conditional Uses (provided such use is accessory to a parking structure)**

Offices.
Restaurants.
Ski and bike storage facilities.
Sundries shops.
Tourist/guest service related facilities.
Transit/shuttle services.

**Conditional Uses**

Child daycare centers.
Equestrian trails.
Golf courses.
Healthcare facilities.
Helipad for emergency and/or community use.
Major arcades.
Plant and tree nurseries, and associated structures, excluding the sale of trees or other nursery products, grown, produced or made on the premises.
Public and private parks and active outdoor recreation areas, facilities and uses.
Public and private schools.
Public and quasi-public indoor community facilities.
Public buildings and grounds.
Public parking structure.
Public theaters, meeting rooms and convention facilities.
Public tourist/guest service related facilities.
Public transportation terminals.
Public unstructured parking.
Public utility and public service uses.
Religious institutions.
Seasonal structures or uses to accommodate educational, recreational or cultural activities.
Ski lifts, tows and runs.
Water and sewage treatment plants.

Ordinance No. 19, Series of 1995, changed the zoning of 67 properties in the Town of Vail from their previous zoning to the NAP District, Outdoor Recreation (OR) District, or the General Use (GU) District. This was done by the Town to address legal non conforming uses, improve

protection of sensitive natural resources, and to ensure the appropriate zoning of outdoor recreational areas. The Planning and Environmental Commission (PEC) reviewed the proposed zoning changes on September 24, 1995 and voted 4-2-1 to recommend approval. Town Council voted 6-1 to approve Ordinance No. 19, Series of 1995 on second reading. After the passage of Ordinance No. 19, Series of 1995, the zoning of the subject site was amended from Agricultural & Open Space (AOS) to both NAP and GU in 1995.

The subject site falls within property number 34 and 35 in Ordinance No. 19, Series of 1995, which highlights unique features of the site as moderate debris flow and medium rock fall geographic hazards for the site. The previous zoning for the site at the time of the Ordinance No. 19, Series of 1995, was Agricultural and Open Space (AOS). The current zoning designation of NAP and GU resulted from the passage of the Ordinance.

#### IV. LAND USE PLAN

The Land Use Plan was adopted in 1989 to guide development for the Town of Vail, with its primary focus on the long-term needs and desires of the Town as it progresses and matures. The adopted map of the Vail Land Use Plan shows a recommendation of Open Space for the property, which totals 17.87 acres (100%) of the site as Open Space. Land use of the adjacent properties include:

- North: N/A
- South: Public/Semi-Public and High Density Residential
- East: Open Space
- West: Medium Density Residential and Open Space



The Open Space category is defined as follows:

*Passive recreation areas such as greenbelts, stream corridors and drainage ways are the types of areas in this category. Hillsides which were classified as undevelopable due to high hazards and slopes over 40% are also included in this area. These hillside areas would still be allowed types of development permitted by existing zoning, such as one unit per 35 acres, for areas in agricultural zoning. Also, permitted in this area would be institutional / public uses.*

This property was likely included in this category due to geologic hazards, including medium severity rockfall and moderate hazard debris flow areas, and due to slopes in excess of 40%. A geologic hazards figure and slope figure are shown later in the study.

Goal statements were developed from the Vail Land Use Plan and should be used in the evaluation of any development proposal. The two most applicable categories for this site include General Growth / Development and Residential. All goal statements in the Vail Land Use Plan should be reviewed for the project. Below are several examples of goal statements relevant to the property when reviewing for development:

## 1. General Growth / Development

- 1.1. Vail should continue to grow in a controlled environment, maintaining a balance between residential, commercial and recreational uses to serve both the visitor and the permanent resident.
- 1.2. Development proposals on the hillsides should be evaluated on a case by case basis. Limited development may be permitted for some low intensity uses in areas that are not highly visible from the Valley floor. New projects should be carefully controlled and developed with sensitivity to the environment.
- 1.3. Development of Town owned lands by the Town of Vail (other than parks and open space) may be permitted where no high hazards exist, if such development is for public use.
- 1.4. Town owned lands shall not be sold to a private entity, long term leased to a private entity or converted to a private use without a public hearing process.
- 1.5. Vail should accommodate most of the additional growth in existing developed areas (infill areas).

## 2. Residential

- 2.1. Additional residential growth should continue to occur primarily in existing, platted areas and as appropriate in new areas where high hazards do not exist.
- 2.2. Affordable employee housing should be made available through private efforts, assisted by limited incentives, provided by the Town of Vail, with appropriate restrictions.
- 2.3. The existing employee housing base should be preserved and upgraded. Additional employee housing needs should be accommodated at varied sites throughout the community.

## V. PEDESTRIAN/VEHICLE CIRCULATION

The five minute walk is a standard that is best described as the average distance that a pedestrian is willing to walk before choosing to drive. The average walking speed of a human is at approximately 3 miles per hour, which translates to  $\frac{1}{4}$  of a mile in five minutes. The figure below shows a transportation network walking analysis with 5, 10, and 15-20 minute walk times highlighted based on the four major routes highlighted from the site. All routes highlighted below begin from the site center point and extend south to the edge of the site. The routes shown fall within the following walk times:

### 5 Minute Walk Time

- Center point to Middle Creek bus station

### 10 Minute Walk Time

- Center point to Sandstone School bus station

### 15 - 20 Minute Walk Time

- Center point to Lionshead Parking Structure
- Center point to Vail Village Parking Structure



## VI. SLOPE

Slope has been divided into three categories – below 30%, 30% - 40%, and above 40%. All areas over 40% slopes are considered steep slopes per the Vail Land Use Plan. Per the Vail Town Code zoning regulations, slopes in excess of 30% slope are considered “excessive slopes”. The existing, natural gradient of the undisturbed land surface is a naturally steep site. 13.84 acres (77%) of the site are above 40% slope, 2.28 acres (13%) are 30% - 40% slope, and

only 1.77 acres (10%) of the site are below 30% slope.



The Town Code states no structure shall be built on a slope of forty percent (40%) or greater except in single-family residential, two-family residential, or two-family primary/secondary residential zone districts. A variance would be required in this event to build on a slope greater than 40% due to the practical difficulty resulting from topographic conditions on the site. Additionally, not more than sixty percent (60%) of the total site area may be disturbed from present conditions by construction activities. The design review board (DRB) may approve site disturbance in excess of the sixty percent (60%) maximum if specific design criteria warrant the extent of the requested deviation.

**VII. HAZARDS**

The site contains medium severity rockfall areas and moderate hazard debris flow areas. 13.72 acres (77%) of the site is within medium severity rockfall area, while 1.46 acres (8%) of the site is within moderate hazard debris flow. Due to the site containing areas identified as rockfall and debris flow, the site must undergo site specific geologic investigations. No initial application for a building permit, grading permit or major or minor subdivision shall be approved until a site specific geologic investigation is complete by a "professional geologist". Any development on

the site will require site specific studies for rockfall and debris flow with building permit application or with Design Review Board (DRB) application if it is for a multi-family or commercial development.



## VIII. WILDLIFE

According to Colorado Parks and Wildlife data, the site contains the following types of wildlife:

1. Black Bear: Overall Range, Summer Concentration, Human Conflict Area
2. Boreal Toad: Overall Range
3. Elk: Summer Range, Overall Range
4. Lynx: Potential Habitat
5. Moose: Overall Range, Summer Range
6. Mountain Lion: Human Conflict Area, Overall Range
7. Mule Deer: Overall Range, Summer Range
8. Terrestrial Garter Snake: Overall Range

While the entire valley/watershed is shown as Boreal Toad and Lynx habitat based on Surveying and Mapping (SAM) maps, this site is not suitable habitat for either species due to lack of water in the case of Boreal Toads and lack of cover/presence of human disturbance and activity in the case of Lynx.

The Boreal Toad is presently listed as a state endangered species by the state of Colorado.

Lynx are presently listed as a federally threatened and state endangered species. This designation does not restrict future development, due to the site providing no suitable habitat to either species. A more detailed field inspection would be needed to verify the data specifically for the site.

## IX. FLOODPLAIN

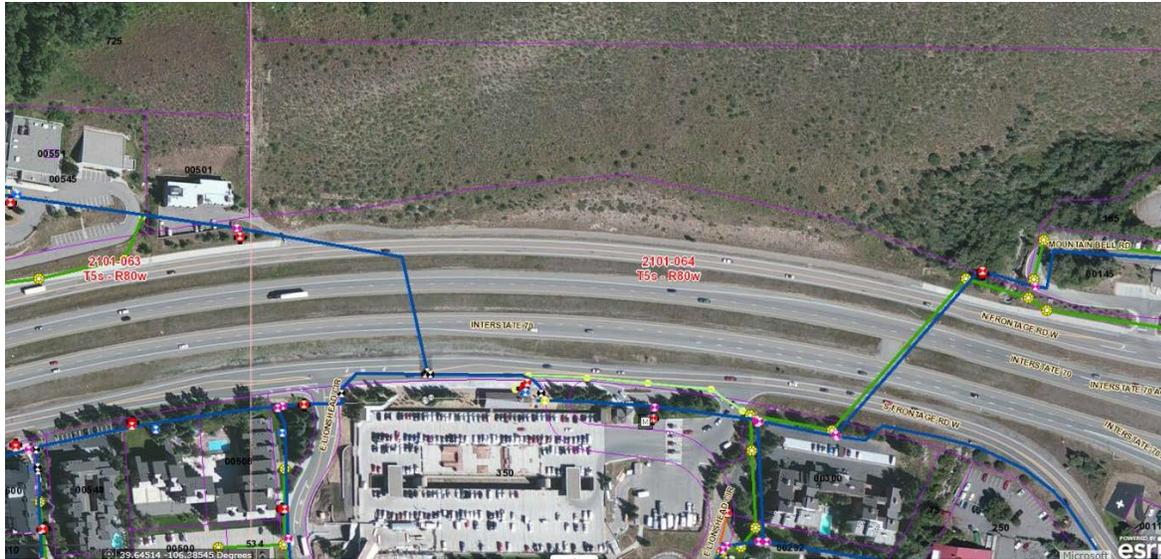
Middle Creek flows through a small portion (0.58 acres) of the site, west of the Mountain Bell Tower and Middle Creek housing development. The area is identified as a Hazard Area on the Federal Emergency Management Agency (FEMA) Flood map. Areas immediately adjacent to Middle Creek are inundated by a flood event having a one-percent chance of being equaled or exceeded in any given year. The one-percent annual chance flood is also referred to as a 100-year flood. The majority of the site (17.29 acres) is clear of the floodplain. All modifications, grading or installation of proposed improvements within the 100-year floodplain shall be in accordance with [12-21-11: Flood Hazard Zones](#). A floodplain use permit or floodplain modification permit is required depending on the circumstance and conditions.



## X. UTILITIES

Potable water and waste water are provided to the areas south, west, and east of the site by Eagle River Water and Sanitation District. Water lines are highlighted in blue, while wastewater lines are highlighted in green. Water and wastewater lines run northeast across I-70 from Vail International to the Mountain Bell site, then flow east. A wastewater line ends between the Gymnastics facility and Solar Vail, where it runs west along the CDOT ROW beyond Red

Sandstone School. A water line crosses I-70 north of the Lionshead parking structure, then immediately turns northwest once it crosses North Frontage Road, through the southwestern portion of Solar Vail and through Red Sandstone School. Water, sewer, electric, gas, and communication extensions would be needed to serve the property.



## XI. DESIGNATED OPEN SPACE

According to the 2017 Open Lands Plan (DRAFT), the western portion zoned Natural Area Preservation is eligible for a Designated Open Space Overlay. The eastern 1.5 acre area zoned Natural Area Preservation is not currently eligible for a Designated Open Space Overlay. In order to be considered for dedication as Designation Open Space, a parcel must be owned by the Town of Vail, and zoned either Natural Area Preservation, Outdoor Recreation or Agricultural Open Space. Additionally, the parcel must be either:

1. Environmentally sensitive lands (wetlands, riparian areas, critical habitat identified by the division of wildlife, or the natural heritage program);
2. High natural hazard areas including the 100-year flood plain, red avalanche hazard area, high rock fall hazard area, and high debris flow hazard area; or
3. Town of Vail park that provides passive outdoor recreation opportunities.

Designated Open Space is an overlay designation, established within the Vail Town Charter, which can be applied by the Town Council to any Town-owned parcel that satisfies certain criteria highlighted in the Charter. Once a parcel is dedicated as Designated Open Space, it is then arguably locked as a park or open space land due to the steps needed for the disposal of Designated Open Space listed below:

*Town council may consider the sale, lease, trade, alienation, partition, granting of an exclusive license or permit, use or zone change other than one of the open space zone districts identified*

*in this section of designated open space only upon receiving a unanimous recommendation of such action from the open space board of trustees.*

*Once such recommendation is received, the town council shall consider an ordinance referring such question of disposal of designated open space to the registered electors at a town election for their acceptance or rejection. The ordinance shall give the location of the land in question and the intended disposal thereof. Every such ordinance shall require the affirmative vote of*

*three-fourths of the entire council for passage. The vote of the town on proposed disposal of designated open space shall be held not less than thirty days and not later than ninety days from the date of the final council vote thereon. If no regular town election is to be held within the period prescribed in this subsection, the council shall provide for a special election; otherwise, the vote shall be held at the same time as such regular election, except that the council may at its discretion provide for a special election at an earlier date within the prescribed period. Copies of the proposed ordinance to dispose of designated open space shall be made available to the public within a reasonable time before the election and also at the polls at the time of the election.*

## **XII. CONCLUSION**

Highly constrained areas have limited development potential; however, the areas are not off limits when following the proper steps necessary for new construction. There is a small portion towards the center of the site to the southern side where residential development could occur within a 30-40% slope. The Town Code states no structure shall be built in any flood hazard zone or on a slope of forty percent (40%) or greater except in a single-family residential, two-family residential, or two-family primary/secondary residential zone districts. Otherwise, a variance would be required in this event to build on a slope greater than 40% due to the practical difficulty resulting from topographic conditions on the site. Variances are governed by the provisions of [12-17](#), Vail Town Code. Significant retaining walls and cuts in the grade would be needed as well. Working within such a highly constrained site will add significant costs to site grading, excavation, and construction.

## **XIII. ATTACHMENTS**

- A. Site Photos
- B. Study Area Map
- C. Zoning Map
- D. Land Use Map
- E. Pedestrian/Vehicle Circulation
- F. Steep Slopes Map
- G. Site Sections (1-3)
- H. Site Sections (4-6)
- I. Site Sections (7-8)
- J. Site Sections (9-11)
- K. Site Sections (12-13)
- L. Hazards Map
- M. Town Owned Property Map
- N. FEMA Flood Hazards Map
- O. Utilities Map

**A. SITE PHOTOS**



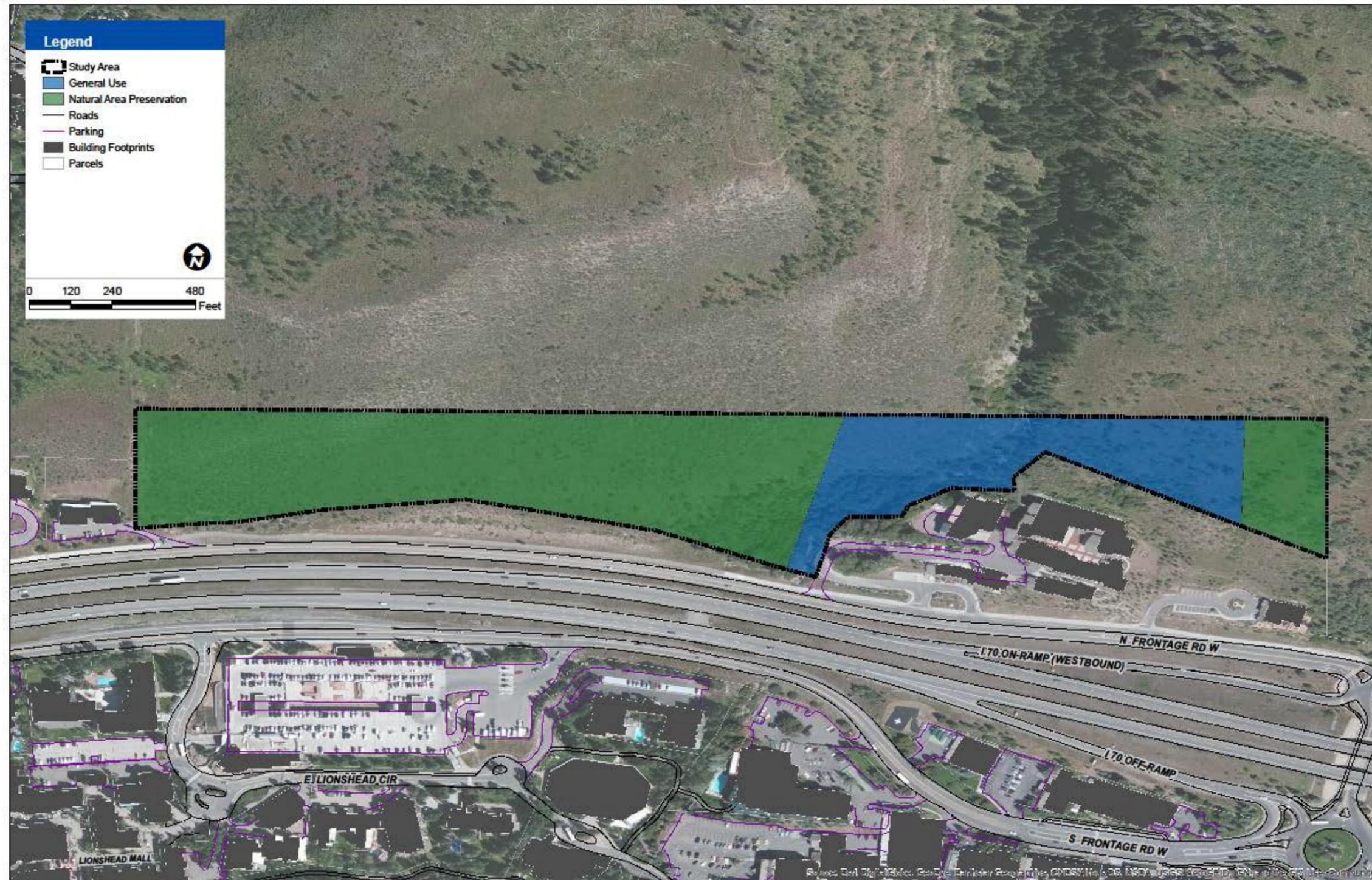


## B. MAPPING – STUDY AREA

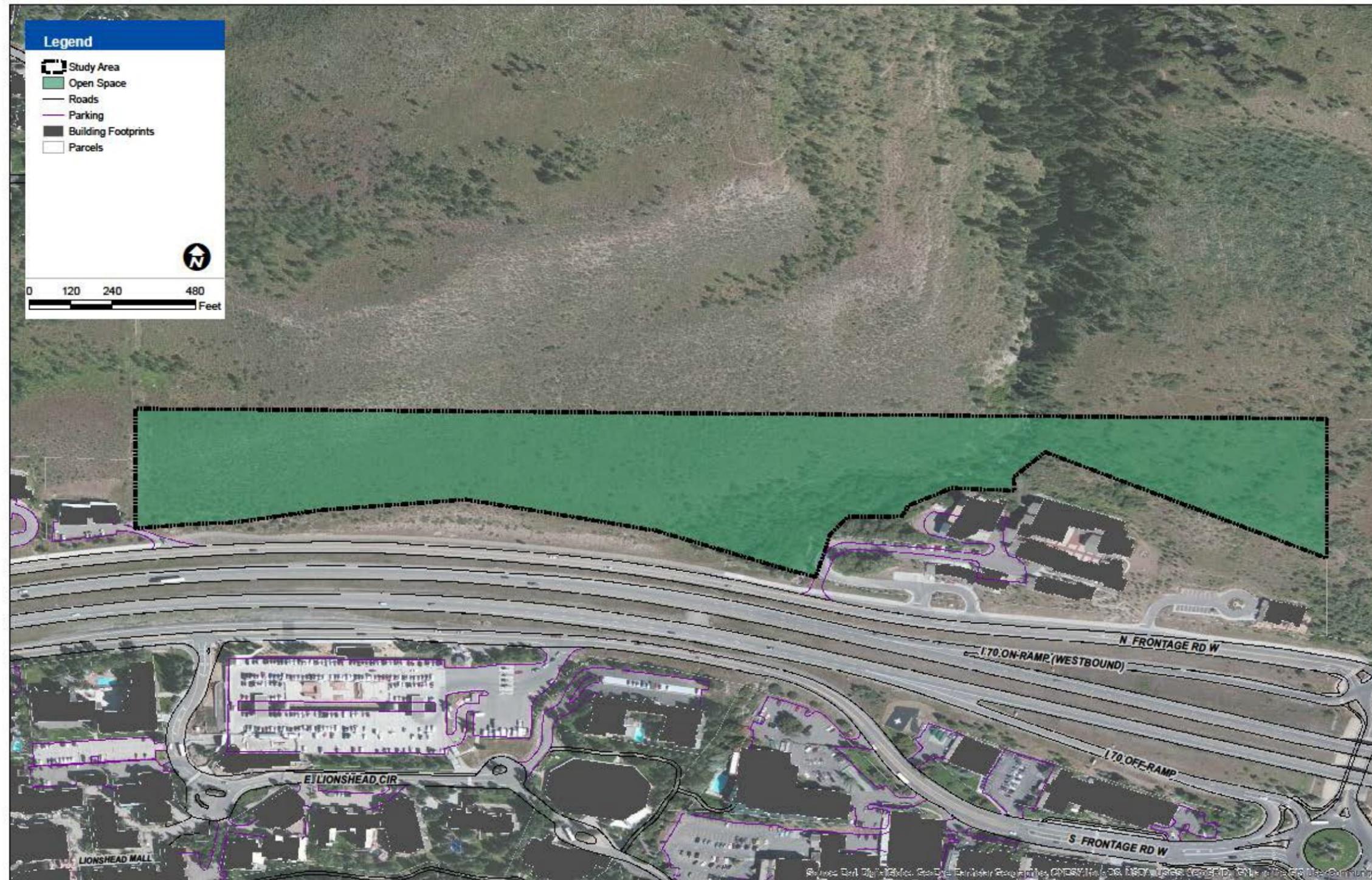




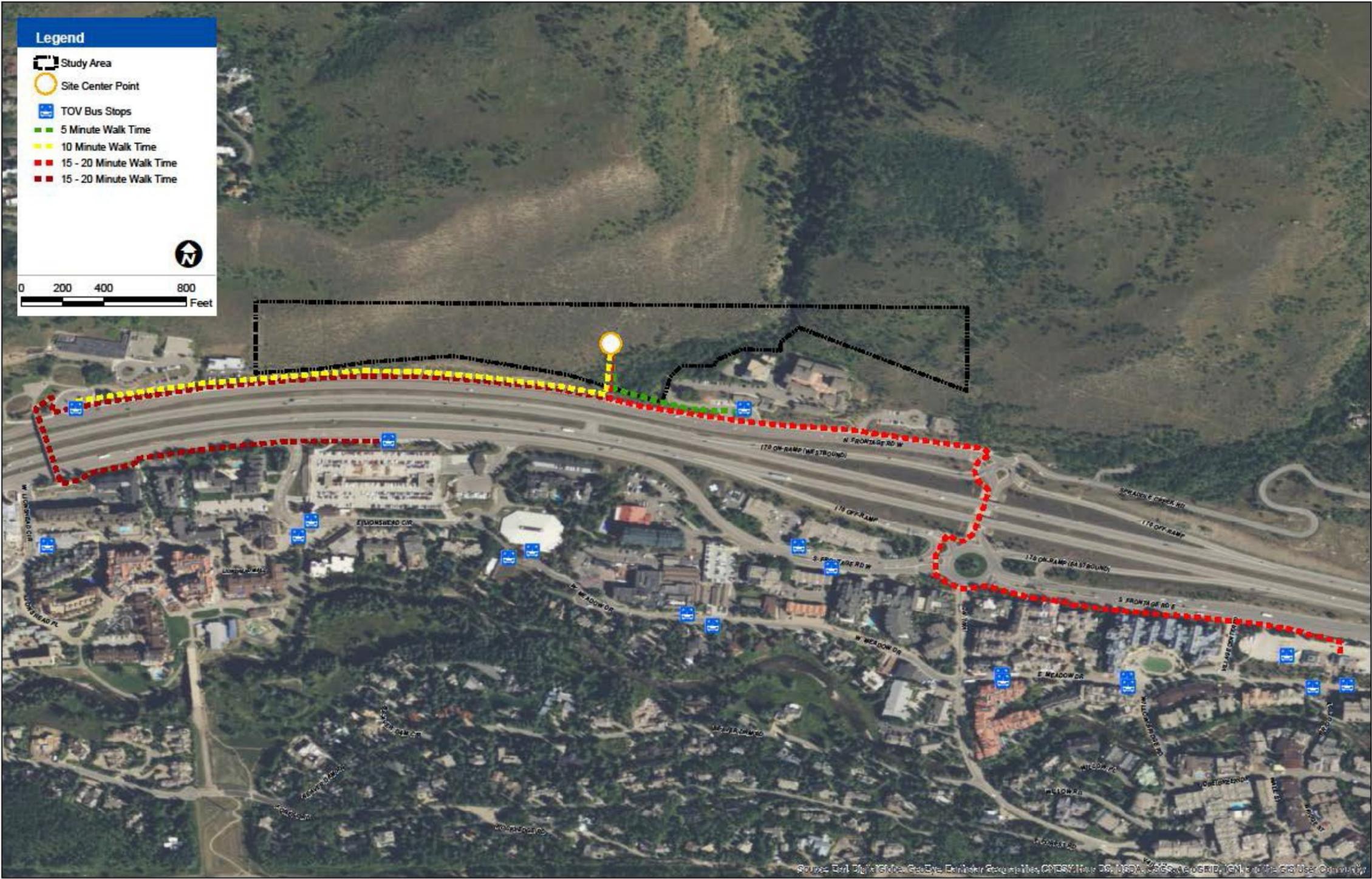
C. MAPPING – ZONING



D. MAPPING – LAND USE



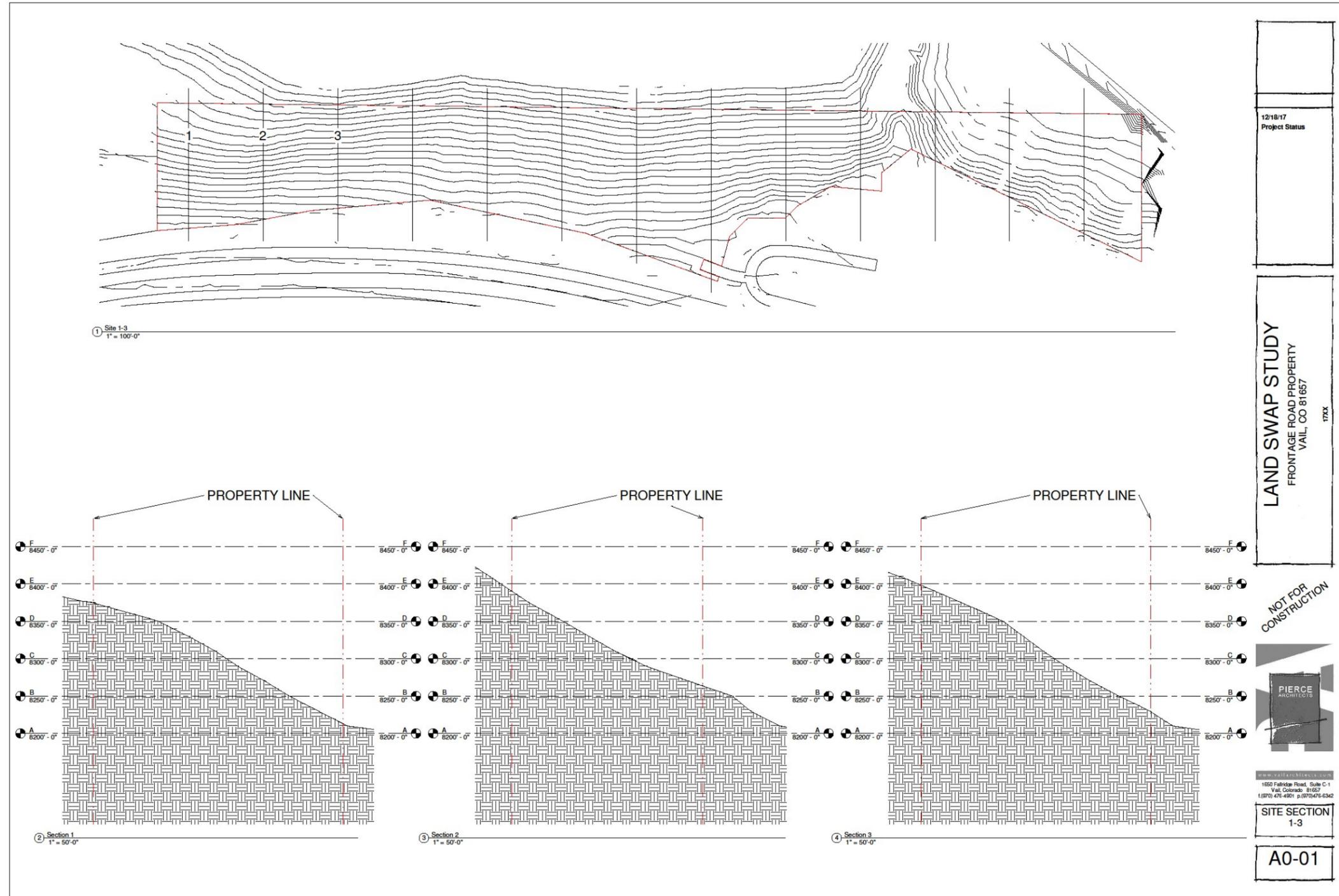
E. MAPPING – PEDESTRAIN/VEHICLE CIRCULATION



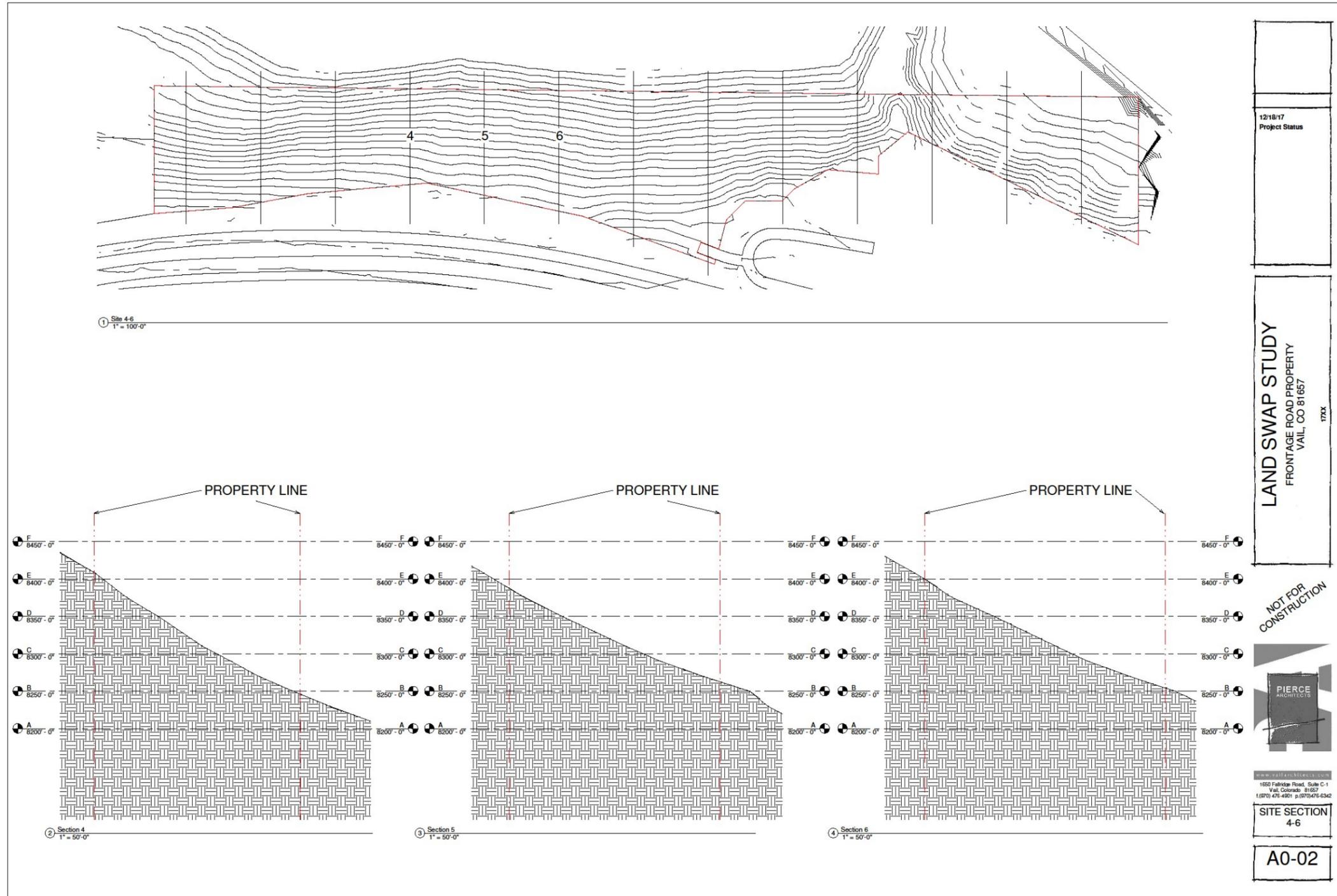
F. MAPPING – SLOPE



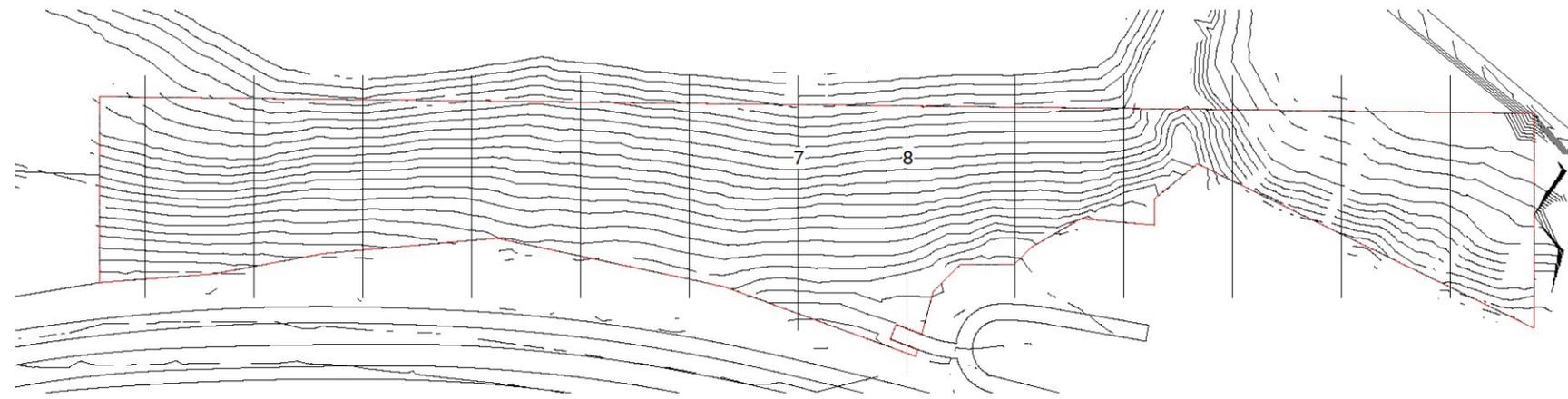
G. MAPPING – SITE SECTIONS (1-3)



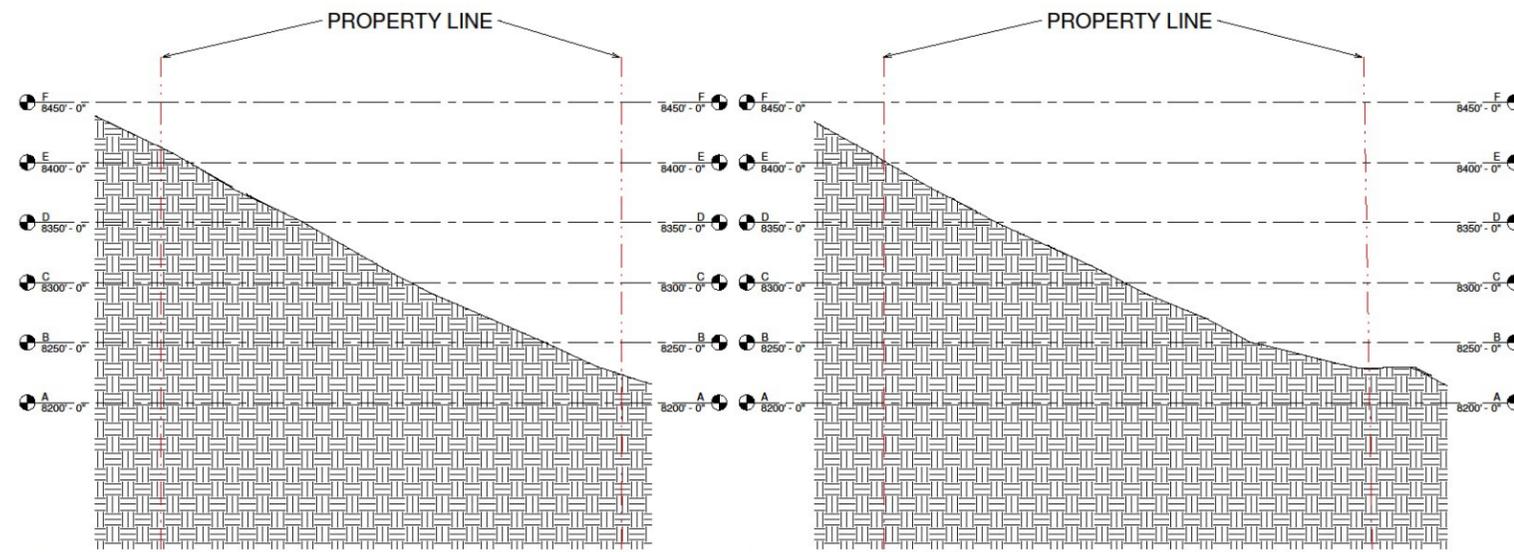
H. MAPPING – SITE SECTIONS CONTINUED (4-6)



I. MAPPING – SITE SECTIONS CONTINUED (7-8)



① Site 7-8  
1" = 100'-0"



② Section 7  
1" = 50'-0"

③ Section 8  
1" = 50'-0"

12/18/17  
Project Status

LAND SWAP STUDY  
FRONTAGE ROAD PROPERTY  
VAIL, CO 81657  
ITX

NOT FOR  
CONSTRUCTION

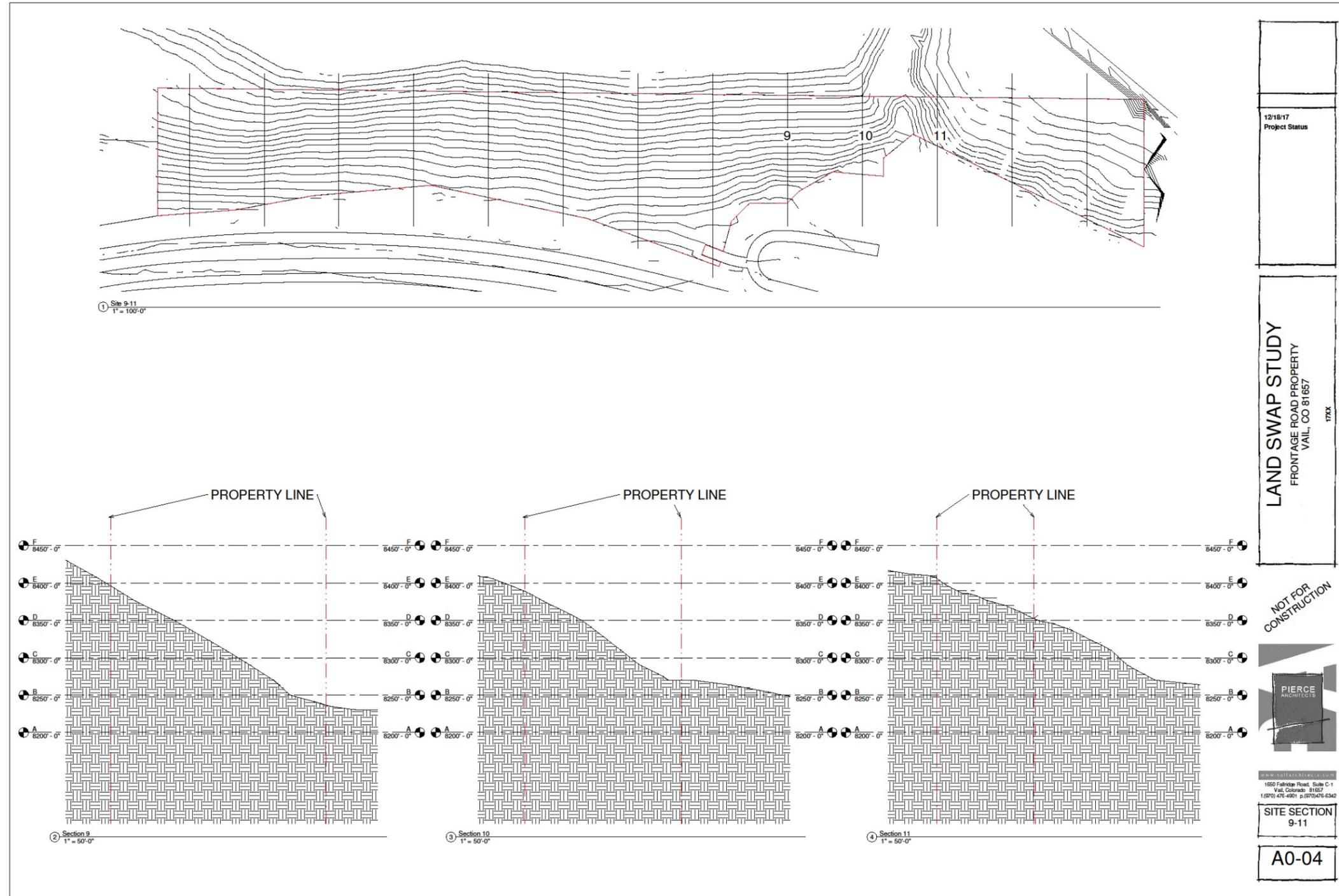


www.piercearchitects.com  
1650 Fairridge Road, Suite C-1  
Vail, Colorado 81657  
(970) 476-4801 p:970/476-4342

SITE SECTION  
7-8

A0-03

J. MAPPING – SITE SECTIONS (9-11)



12/18/17  
Project Status

LAND SWAP STUDY  
FRONTAGE ROAD PROPERTY  
VAIL, CO 81657  
17X

NOT FOR CONSTRUCTION

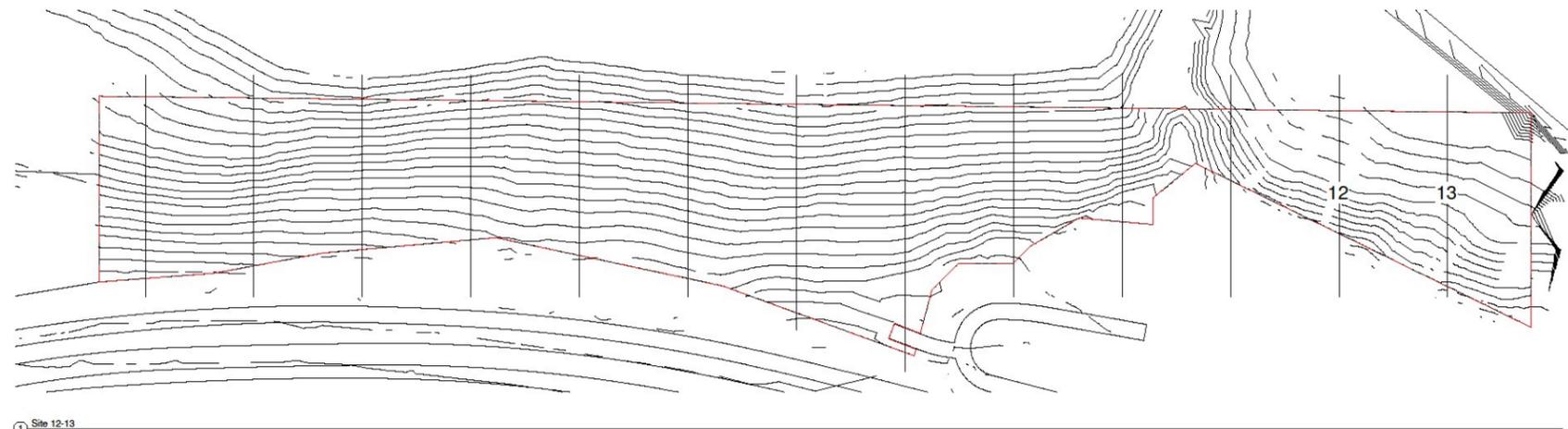


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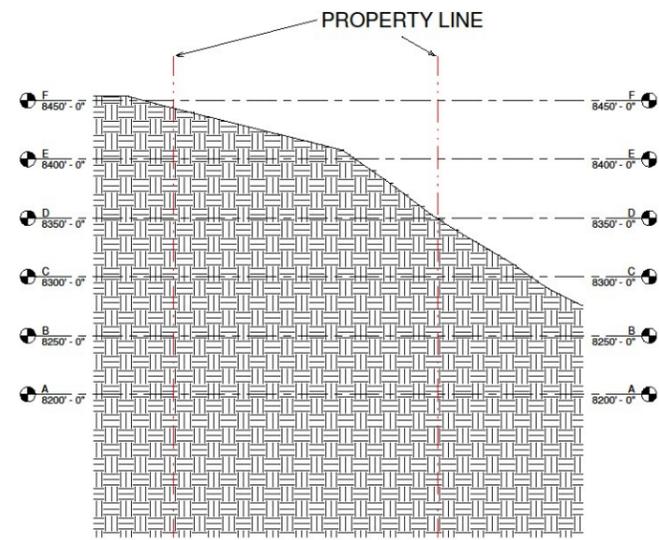
SITE SECTION  
9-11

A0-04

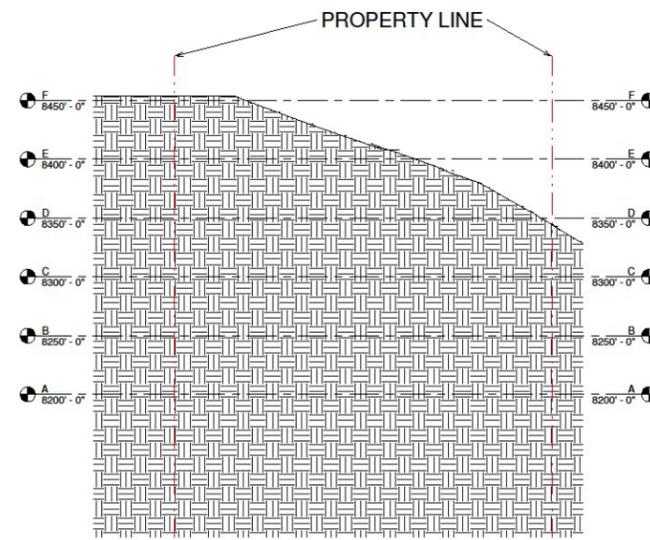
K. MAPPING – SITE SECTIONS (12-13)



① Site 12-13  
1" = 100'-0"



② Section 12  
1" = 50'-0"



③ Section 13  
1" = 50'-0"

12/18/17  
Project Status

LAND SWAP STUDY  
FRONTAGE ROAD PROPERTY  
VAIL, CO 81657  
ITXX

NOT FOR  
CONSTRUCTION

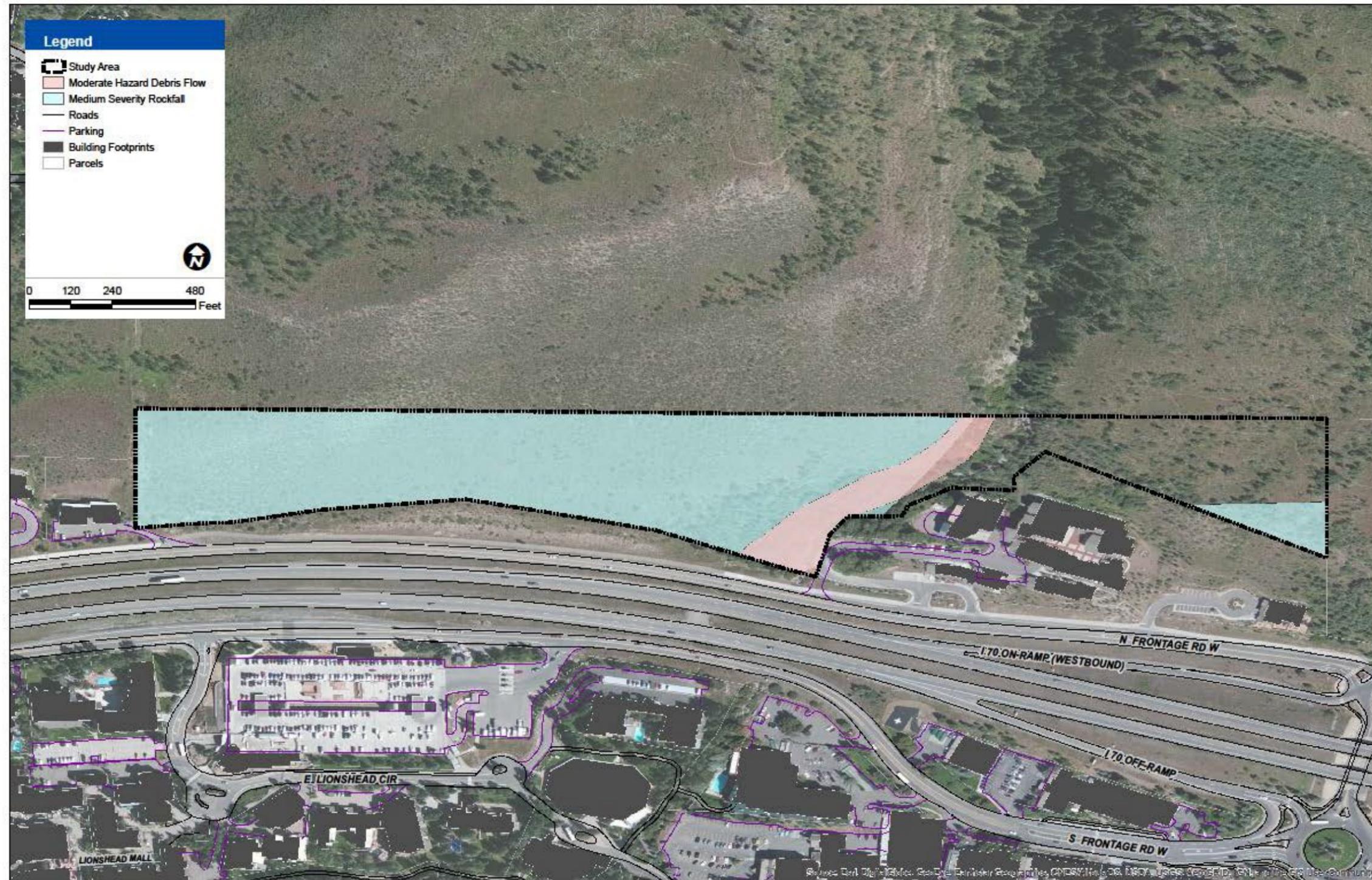


1650 Fairview Road, Suite C-1  
Vail, Colorado 81657  
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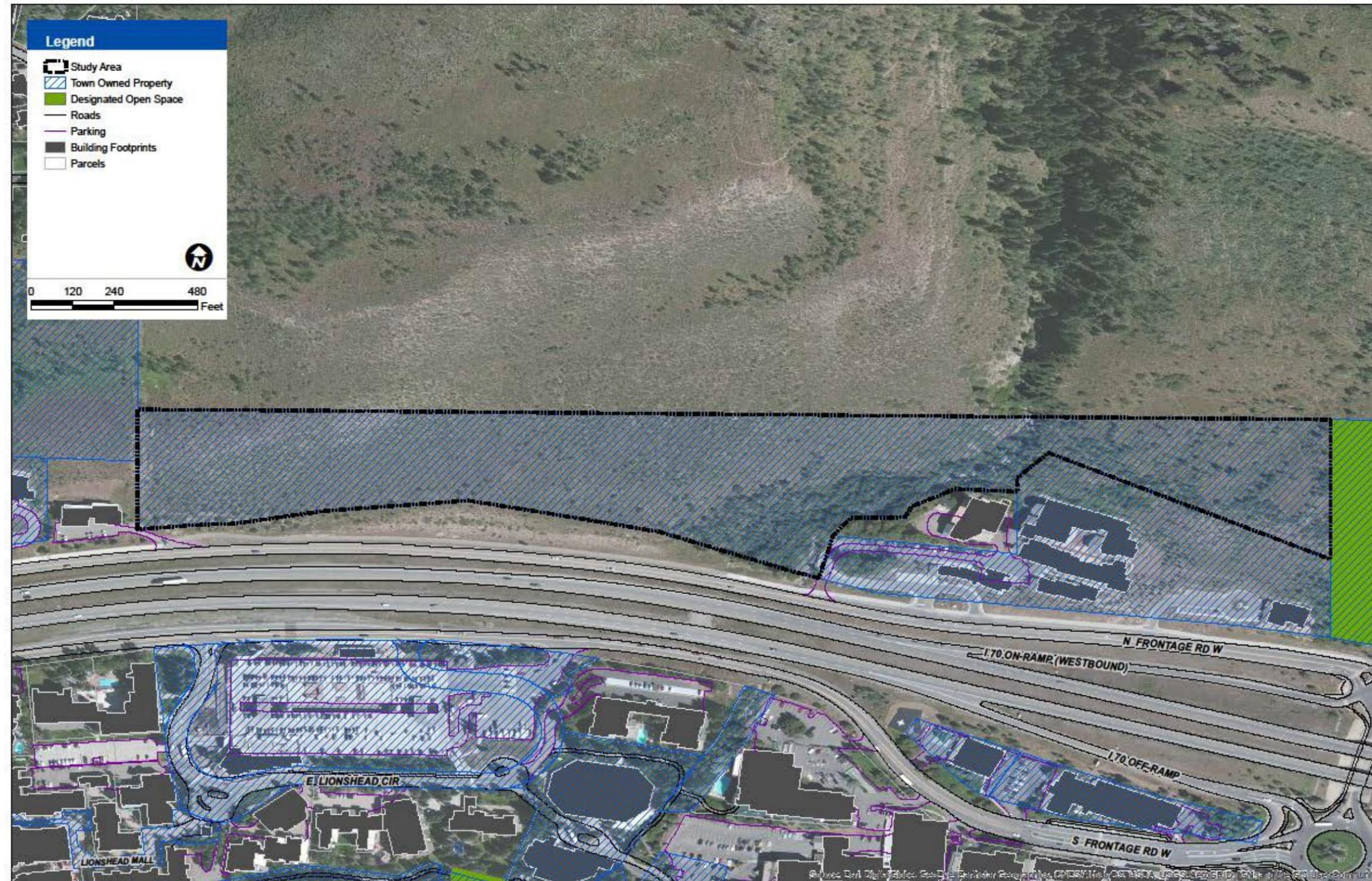
SITE SECTION  
12-13

A0-05

L. MAPPING – HAZARDS



M. MAPPING – TOWN OWNED PROPERTY



N. MAPPING – FEMA Flood Hazards



