

To: Town of Vail PEC
From: Michael O'Connor, Triumph Development West
RE: Booth Heights Revised Wildlife Mitigation Plan with TOV Biologist Recommendations
Date: August 7, 2019

This memo serves to outline the process and outcomes that resulted from the Town of Vail's review of the Booth Heights Wildlife Mitigation Plan. This review was conducted by Town Staff, Colorado Parks and Wildlife, and the three wildlife biologists engaged by the Town of Vail, as well as the applicant and its biologist, Rick Thompson. This discussion was conducted via three meetings of the group on July 19, July 26 and August 5 – with the final results of the review provided to the applicant on August 7.

The discussion of the group was comprehensive in nature – focusing first on potential challenges encountered by the big horn herd on its entire winter range and enhancements that can be pursued on public lands, as well as specific design recommendations for the Booth Heights plan and options that would allow the applicant to improve upon its proposed offsite mitigation plan to increase the benefits to the bighorn winter range in partnership with the Town of Vail.

In the paragraphs below, Triumph has summarized its support for the recommendations of this roundtable on the steps that can help address the long-term health of wildlife in the Booth Creek vicinity, as well as the components of the applicant's proposed revisions to the mitigation plan based on these conversations (items that are changes to the original proposed triumph mitigation plan are highlighted in *green italics*).

Booth Heights Design Criteria Reducing Potential Impacts:

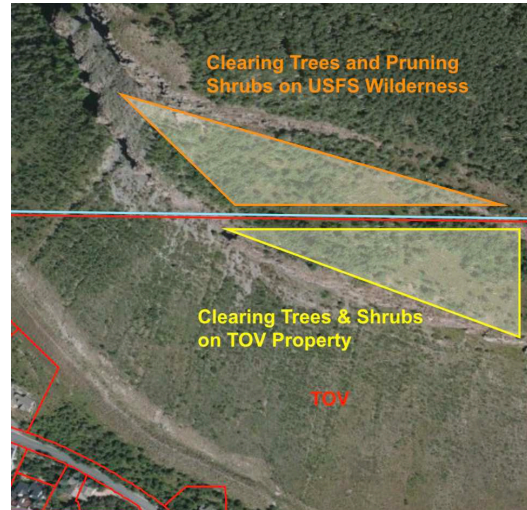
- Development Clustering – Concentrate development onto the front of the Housing Parcel.
- Parcel Access – Vehicular access from the west to work with natural grade.
- Rockfall Berm – Utilize the rockfall berm as a buffer and physical barrier between wildlife and the new development. *At the recommendation of the Town of Vail's biologists, this berm will be screened from townhomes with a row of aspens and replanted with native grasses and forbs that could provide additional sheep winter foraging habitat.* This berm will be built in the first phase of construction with final landscaping completed prior to the first buildings' Certificate of Occupancy.
- Development Buffer – In addition to the berm, *add landscape screening at the west and north of the driveway to provide additional screening.*
- Aspen Screening - Utilize the existing aspen forest to the north and west of the site to buffer the development improvements.
- Setback from the Right of Way – Setback 20' from the property line. *The applicant has also adjusted the landscape plan to identify areas that trees can be saved in this front setback and ROW.*

- Minimize Internal Parks and Parking - To keep the footprint of development small.
- Tree Clearing - along and above the berm to allow east-west wildlife passage.
- Do Not Inhibit East West Wildlife Movement at the Right of Way – Applicant is proposing no major cut slope, structures or paths across the front of the site.
- *Fencing – At the recommendation of the Town’s biologists, the proposed fencing has been removed from the initial site plan. CPW has asked to maintain the ability to add a fence at a later date. The applicant proposes that this can be accomplished by granting an easement to the Town of Vail for the installation and maintenance of a wildlife fence at CPW’s election.*
- New Bus Stop Location – Wildlife biologists favor using the existing East Vail bus stop and not building a new bus stop as proposed in the application. The Town’s Public Works department requests that a full movement bus stop be installed at the site for pedestrian and vehicular safety. The only location where natural grade in the ROW will allow this stop is at location on the west end of the site. Due to the public safety concerns of Public Works, the applicant is proposing this new west bus stop location with landscaping at the rear to buffer the bus stop from the surrounding open space.

Wildlife Mitigation Plan Winter Range Enhancement

- *Conservation Easement on the NAP Parcel – At the recommendation of the Town’s biologists, Triumph will commit to placing a Conservation Easement on the NAP parcel prior to the issuance of the first Building Permit. This Conservation Easement will need to retain the right to make certain work on the NAP parcel that facilitates the development of the Housing Parcel, such as ongoing wildlife enhancements, geotechnical monitoring, and possible soil stabilization.*
- *Enhancement on the NAP Parcel – While the CPW and the Town of Vail’s wildlife biologists all agree that the NAP parcel is valuable wildlife habitat – particularly for elk, deer, bears, and birds – they concluded that resources should be focused on other higher-quality winter range for bighorn sheep. At the recommendation of the Town’s wildlife biologists, Triumph will limit the enhancement of the NAP to pruning of overgrown shrubs to improve winter elk foraging habitat.*
- *Equivalent Wildlife Enhancement on Higher Quality Bighorn Winter Range – The biologist roundtable recommended that treatments and habitat enhancements be focused around prime bighorn sheep ranges that are not on the Booth Heights development site (e.g. Booth Creek cliffs on the east and west sides of Booth Creek TOV and USFS habitat). Triumph will work with the Town of Vail Staff and CPW to identify alternate areas of enhancement that are quantitatively equivalent to that originally proposed on the NAP Parcel – namely 14.3 acres of enhancement that are in quantities and site conditions similar to that original proposal on the NAP parcel. These improvements will be completed before November 15 of the first year of construction, before the winter range period. This work could be extended onto Forest Service property with USFS permission through a Categorical Exclusion that the Applicant and the Town of Vail will continue to pursue together. As an example, the team identified these areas between the upper*

and lower band of booth cliffs that have been overgrown with Aspen as shown on the below photo:



Construction-Related Minimization Measures

- Heavy site construction including clearing, excavation, grading, retaining wall construction, and berm construction will only be performed from *June 1 through November 14. The June 1 start date will be reviewed and modified with CPW based on the severity off the winter and availability of other forage and lambing areas.*
- Prohibit construction personnel from bringing animals onto the site as allowed by law, feeding wildlife, and certified bear-proof trash receptacles for food refuse.
- No rock blasting will be performed until July 31 or until peregrine fledging of nearby nests.

Wildlife Requirements for Residents of the East Vail Workforce Housing Parcel to Minimize Human Habitation Relative Impacts

- *Short-term rentals will be prohibited.*
- No planting of garden fruit/nut bearing trees *and bird feeders will not be allowed.*
- No additional roads or trails will be built on the undeveloped portion of the entire East Vail Workforce Housing Subdivision. Social trails will be deconstructed and the neighboring landowner (e.g. Town of Vail) will be notified of the trespassing.
- Signage around the property notifying residents and guests of the Important Surrounding Wildlife Area and the prohibition of access to these properties from the site.
- Education program for the residents of Booth Heights about the Important Surrounding Wildlife Areas and Wildlife protections incorporated into all leases and HOA Documents.

- No outside overnight storage of garbage or trash at the residences.
- Implement a weed management program to discourage the growth of noxious weeds.
- Prohibition of flying drones on or around the property.
- All pets will be prohibited at rental properties, except as required by law.
- Pets of guests, families and contractors will be prohibited, except as required by law.
- *No resident-occupied townhome will have more than one dog, except as required by law.*
- *All livestock, including domestic sheep and goats, are prohibited.*
- Animals must be under direct control of its owner at all times on a leash of no more than 12 feet (unless the duties of the service animal require it to be unleashed).
- The walking of animals within the property shall be confined to the developed areas below the berm. All residents will pick up after their animal. Pets shall not be fed outside. No pets shall be permitted to chase animals.
- No animal will be permitted to be a public nuisance, such as excessive barking, as determined by the HOA at its discretion.
- Policies and procedures for enforcement and fines as well as education of the residents will be as outlined in detail in the applicant's Wildlife Mitigation Plan and will be documented in the HOA documents and/or residential leases. *The applicant also will grant the Town of Vail the ability to enforce these fines on its behalf of the owner and HOA at the Town of Vail's election.*

Wildlife Enhancement Recommendations to TOV, CPW, and USFS on the 1880-acre Winter Range

- Establish a Colorado Wildlife Habitat Enhancement Special District
- Establish a mitigation fund for enhancement and protection of bighorn sheep habitat. *Triumph will contribute \$50,000 in seed money upon the issuance of the first certificate of occupancy for the establishment of this fund and these funds could be used on items outlined below.*
- Fund a bighorn sheep movement study in cooperation with CPW, USFS, and the proponent to determine how sheep are using the Booth Creek areas. *[Possible use of Triumph seed money]*
- Consider fertilization. It might be wise to do a treatment/control study to determine efficacy of treatments. *[Possible use of Triumph seed money]*
- Treat burn areas with herbicide effective in preventing native vegetation from being replaced by cheatgrass and other noxious weeds post-burn. *[Possible use of Triumph seed money]*
- Encourage CPW to update current CPW sheep mapping to reflect the current distribution and use patterns.
- Burn or cut, stack, and burn to open-up aspen woodlands to create and maintain important surrounding wildlife areas. Burning will be most effective and cheapest alternative. Investigate methodologies to allow for prescribed fire.
- Prohibit bike paths and sidewalks along the frontage road in the Booth Creek area.
- Work with USFS and TOV to set up a winter closure on the Booth Creek area to prevent human recreation use.
- Work with USFS to prohibit dogs year-round on the Booth Creek area.

- Cut/maintain winter sheep movement corridors suggested in the 1998 USFS habitat plan.
- Consider using salt or other supplements to keep bighorn sheep away from the frontage road and I-70. *During construction of the development and in the event of a severe winter, Triumph will share the cost of feeding the bighorn herd in the immediate vicinity of the Booth Cliffs at the election and direction of CPW.*
- Town of Vail to use its authority as a municipality and property owner to enact and enforce protective restrictions on nearby important surrounding wildlife habitat at appropriate times during the year, including, but not limited to, closing Town property that includes bighorn winter range to access (e.g. the Town property to the west) and assisting property owners with policing trespassing (e.g. the NAP Parcel).