

Shadow Mountain Bike Park

A cul-de-sac in an Extreme Wildland Fire Risk Area – YES or NO?

1st Referral Challenge for the Elk Creek Fire Protection District

Presentation to the Board of the Elk Creek Fire Protection District

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Recently, Shadow Mountain Bike Park (SMBP) submitted paperwork [about 2 inches thick printed out] to JeffCo P&Z to begin the process of seeking approval of an Official Development Plan (ODP).

These submitted documents are available under [Case number 23-101397 RZ](#). The documents are currently under a Sufficiency Review by P&Z staff to see if they meet the basic standards for acceptance. When all of the documents are deemed sufficient, the Case will be formally accepted and sent out to various agencies and organizations for comments under the 1st Referral.

The purpose of my appearance before you is to alert the Board to one of the key design failures of the proposed project – a single entrance/exit [a cul-de-sac] in an extreme risk wildland fire area.

The parking lot as shown on the Drainage Map is 281 spaces, plus 20 additional spaces for staff at the maintenance area. Elsewhere, in the submittal documents 300 spaces + 20 staff spaces is reiterated as their design goal.

I believe two points of ingress/egress are essential for public safety.

In particular, vehicles attempting a back into the Park entrance to turn around are susceptible to flipping over. From Shadow Mountain Drive there is a proposed 3% slope into the facility. Under a general, immediate fire evacuation, everybody that has a motorhome, car trailer, horse trailer or a stake trailer is going to be driving them out full of animals and stuff. Many of the drivers will have little or no experience driving these rigs.

The Elk Creek FPD “Will Serve” letter (November 14, 2022) states that “The offsite fire apparatus access to the property is acceptable.” The letter is silent on if this single road is acceptable for egress under wildland fire immediate evacuation conditions.

The report by Ember Alliance, "Shadow Mountain Bike Park Wildfire Risk Assessment" [no date on the report, but presumably around November 2022] maps areas of Non-survivable roadways along Shadow Mountain Drive (Figure 11).

The Safe Separation Distance analysis (Figure 15) states, "Under extreme weather conditions, the safe separation distance would need to be up to 2350 ft away from the parking lot, which is approximately the distance to the top of the lift line ..." Continuing, "the average safe separation distance for the parking lot area is 1100 feet."

In the discussion titled "Temporary Area of Refuge," (Figure 23) Ember Alliance states, "Under extreme weather conditions and current vegetation, the safe separation distance between people and fire would need to be up to 2350 feet away from the parking lot, which is approximately the distance from the parking lot to the top of the lift line. Understanding that it is not feasible to clear an area that large, and that SMBP has no control over the areas outside its boundary, we recommend clearing all trees in the basecamp area except aspen and regularly removing any ladder fuels."

Continuing on, if the area was flat and with no wind, 150 feet flame separation would be a "safe distance". "The area is not flat and there is expected to be wind during fire events, so doubling that safe zone would make a buffer of at least 300 feet around the parking lot."

In view of the non-survivability segments on Shadow Mountain Drive and a recommended, greatly reduced flame separation of 300 feet, I suggest it would be mandatory to have two exit points for the facility. Indeed, in the first conceptual map released by SMBP at the time of their first P&Z required Community Meeting, (January 2021). Two entrances are shown in the northwest corner of their lease block. Ember Alliance in Figures 12 & 14 included these outdated two entrances (apparently in error).

The question is -- will the Elk Creek FPD recommend a cul-de-sac design or two entrances for this proposed project in the 1st Referral?

Paper copy presented to Board Members at the meeting The Ember Alliance [No Date, possibly November 2022] SMBP Wildfire Risk Assessment [Proof of Fire](#)

Paper copy presented to Board Members at the meeting SE Group, November 2022, SMBP – Phase 1 Drainage Report [Developed Drainage Conditions Map DPP-1](#) a page extracted from the pdf [Phase 1 Drainage Report](#)