



## Mountain Peak earthmoving

Bill Hocker | Mar 1, 2017

on the web at: <http://sodacanyonroad.org/forum.php?p=1465>

The excavation of 33,000 sf of caves and a crushed on the Mountain Peak site, and the necessary topsoil clearings, redistribution of the excavated spoils and replacement of topsoil, means that a lot of earth will be moved in the project. The amount is enough to justify a great deal of concern in terms of soil runoff into the watercourses adjacent and bisecting the site, and of the impact of dust on neighbors surrounding the constricted site. How much earth will be moved?

### References

Mountain Peak Civil Plans

Mountain Peak Updated Cave Plans

### Excavation from table on Civil Plan UP4 and Cave Plan

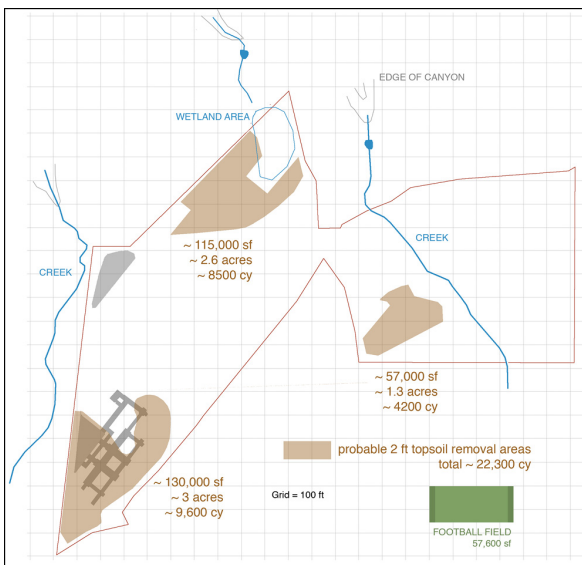
Cave excavation: 21070 cy x 1.4 bulking	29500 cy
Other excavation (crush pad, stormwater basin, parking lot?): 14000 cy x 1.4? bulking	19600 cy
Total excavated spoils to be redistributed:	<b>49,100 cy</b>

### Fill from Civil Plan UP1

Spoils fill areas shown on Civil Plan UP1: 10,100 cy + 5,900 cy	16,000 cy
Spoils fill NOT NOTED on plans: 49100-16,000 cy destined for the service driveway and berms at southernmost area of the site	33,100* cy

\*Will the service driveway and berms around parking actually absorb twice as much in spoils as the designated spoils areas? This does beg unanswered questions about the ability of the site to accommodate all of the spoils.

### Topsoil removal and replacement



Note that the amount of dirt to be excavated and repositioned on the site is much larger than just the cuts that produce spoils. ~ 2 feet of topsoil must be removed in all areas to receive spoils, stored on the site and then recovered over spoils.

From the site plan it appears that about 7 acres (Includes some guessing around the winery) will have to be stripped of their topsoil and replaced after the distribution of spoils.

Removal, storage and replacement of 6.9 acres of topsoil, 2 feet deep

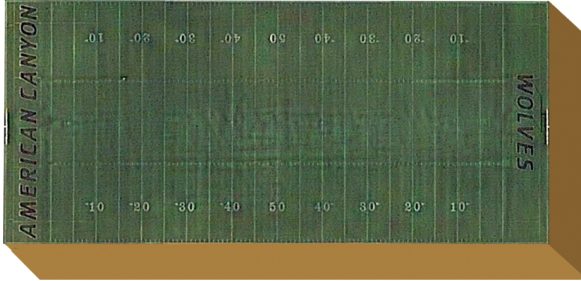
22,300 cy

**Total amount of earth being moving around the site**

**71,400 cy**

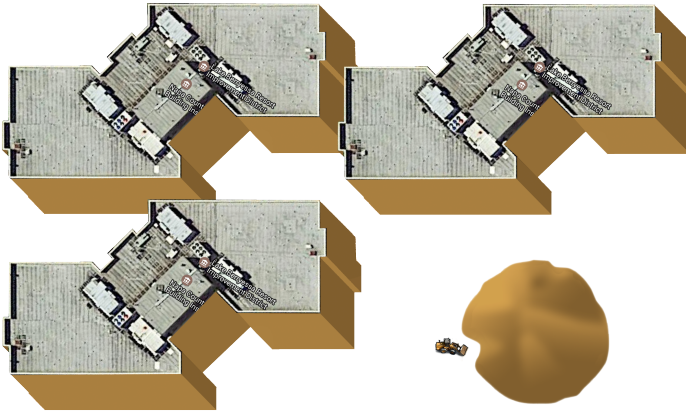
49,100 cy spoils + 22,300 cy topsoil

In all about 71,400 cy of topsoil and spoils must be moved around the site. To put that into perspective, if the earth being moved around on the site were piled on a football field (including end zones) the height would be 33 feet, the height of a 3 story building.



Football field = 57,600 sf  
Dirt piled 33 ft high: ~ 71,400 cy

Another way to put that amount of dirt into perspective: it is a volume equivalent to 3.25 Napa County Buildings.



County Building = ~ 16,500 sf  
If 36 ft high: ~ 22,000 cy each