Simulations
Photos
All Graphics (no plans)

8195 E Lone Mountain Residence
Cut / Fill Volume Calculations
692-PA-2016

Using Formula for volume of a pyramid to approximate: Base Area x Height / 3 = Volume
Area traced around affected topography lines
Cut / Fill calculated from 6" below top of slab in order to account for slab thickness
1 Truck = 13 cubic yards capacity
No increase was made for the increase in volume of excavated earth due to air entrainment (swell)

FFE	CUT					FILL					Ratio
	Area (SF)	Height (Ft)	Cut Volume (in CY)	# of trucks	# add'l trucks	Area (SF)	Height (Ft)	Fill Volume (in CY)	# of trucks	# add'l trucks	C-F Ratio
2349.5	17,614	11	2,392	184	-87	5,623	9	625	48	+15	~4:1
2348.5	19,687	12	2,917	224	-47	5,291	8	523	40	+7	~5.5:1
2347.5 *	21,969	13	3,526	271	0	5,017	7	434	33	0	~8:1
2346.5	24,163	14	4,176	321	+50	3,916	6	290	22	-11	~14.5:1
2345.5	26,163	15	4,845	373	+102	3,283	5	203	16	-17	~24:1
2344.5	28,114	16	5,553	427	+156	2,514	4	124	10	-23	~45:1
2343.5 **	31,337	17	6,577	506	+235	1,777	3	66	5	-28	~100:1
2342.5	33,577	18	7,462	574	+303	1,163	2	29	2	-31	~257:1
2341.5 ***	35,702	19	8,375	644	+373	733	1	9	1	-32	~931:1

*As Proposed

**Additional retaining wall is required at western ravine side (house is pushed below ravine side's natural grade)

***The elevation at which a Hardship Exemption would not be required