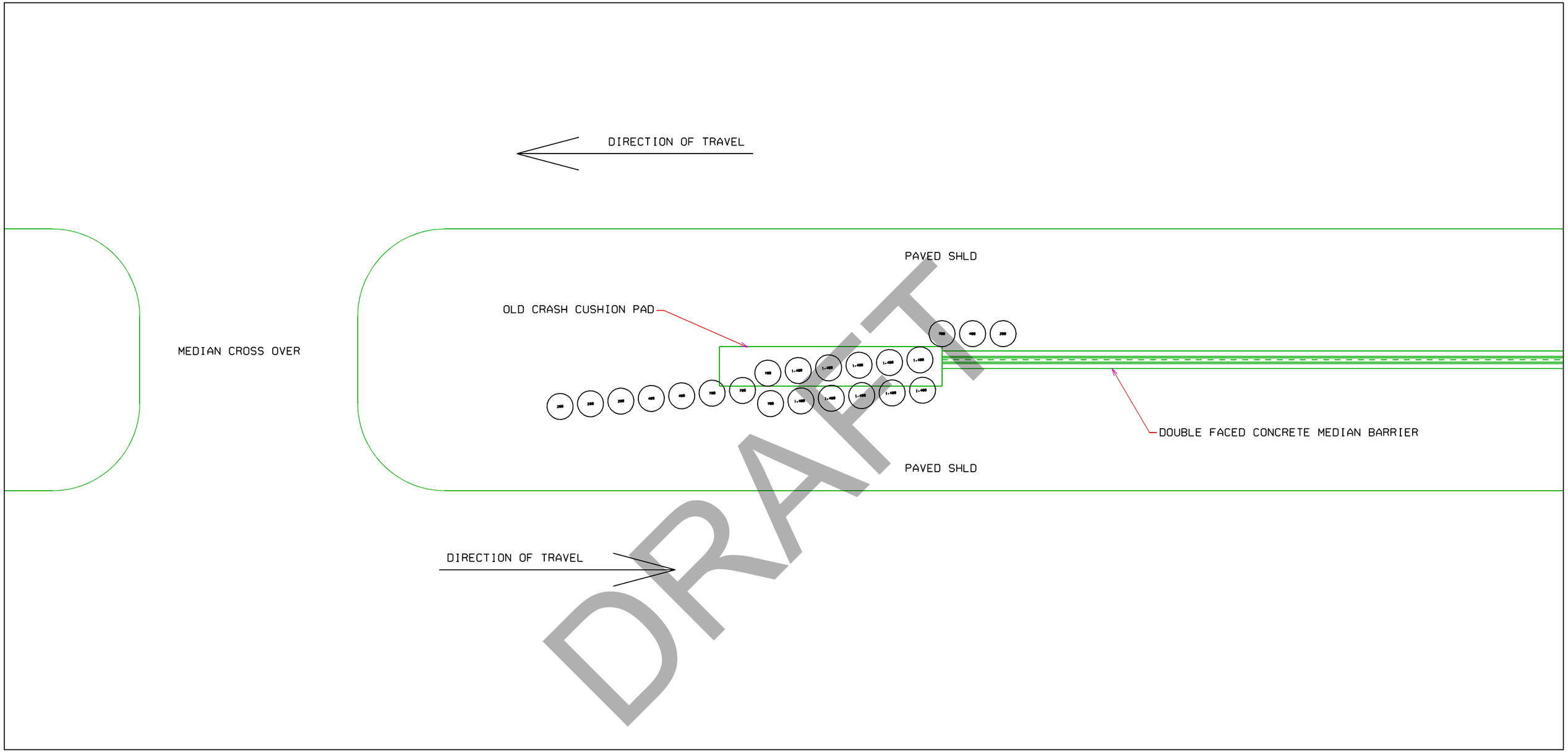
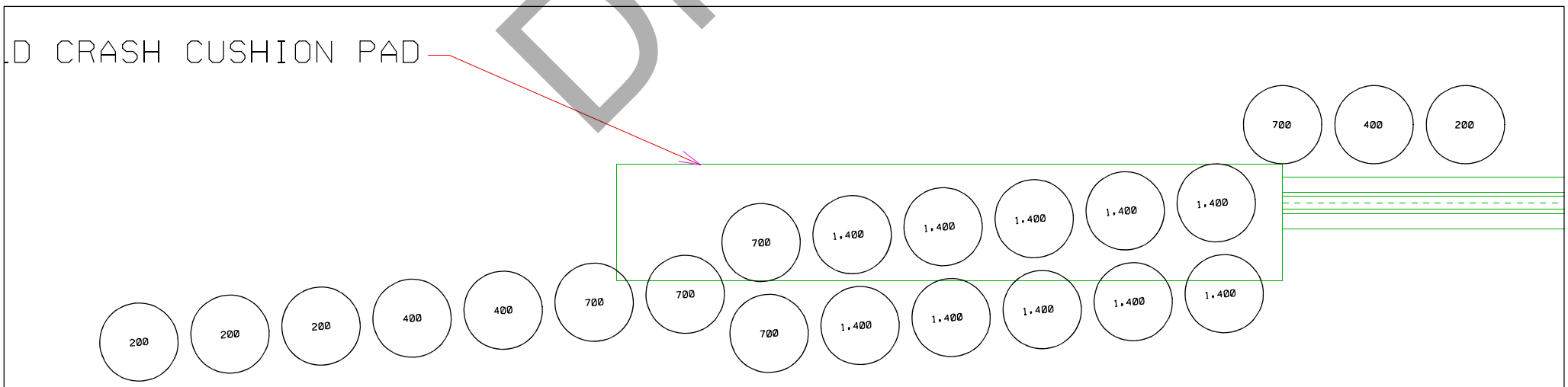

DIRECTION OF TRAVEL
PAVED SHLD
OLD CRASH CUSHION PAD
MEDIAN CROSS OVER
DOUBLE FACED CONCRETE MEDIAN BARRIER
PAVED SHLD
DIRECTION OF TRAVEL
DRAFT

DRAFT


LD CRASH CUSHION PAD
700
400
200
1,400
1,400
1,400
1,400
1,400
1,400
700
1,400
1,400
1,400
1,400
1,400
700
200
200
200
400
400
700
700

Sand Barrel Array Core Layout Calculator

Design Speed mph: 62

	Calculated G Max	Desirable G Max	Maximum G MAX	
Car	7.01	6-7	12	Justify use of higher G Max. Value
Truck	5.74	6-7	12	G Max. Value acceptable

Barrel Mass
200
400
700
1400
2800

	Calculated Min. Speed FT/Sec	
Car	0.43	na
Truck	4.5	na

Car Weight: 2,420

Row	Barrel Mass Lbs	Vo Ft/Sec.	V1 Ft/Sec.	A (Ft/Sec)2	G	Ts Sec.
1	200	90.9	84.0	202.37	6.28	0.034
2	200	84.0	77.6	172.66	5.36	0.037
3	200	77.6	71.7	147.30	4.57	0.040
4	400	71.7	61.5	225.57	7.01	0.045
5	400	61.5	52.8	166.11	5.16	0.053
6	700	52.8	40.9	184.90	5.74	0.064
7	700	40.9	31.7	111.24	3.45	0.083
8	1,400	31.7	20.1	100.57	3.12	0.116
9	2,800	20.1	9.3	52.93	1.64	0.204
10	2,800	9.3	4.3	11.38	0.35	0.440
11	2,800	4.3	2.0	2.45	0.08	0.948
12	2,800	2.0	0.9	0.53	0.02	2.046
13	2,800	0.9	0.4	0.11	0.00	4.412

Truck Weight: 5,000

Row	Barrel Mass Lbs	Vo Ft/Sec.	V1 Ft/Sec.	A (Ft/Sec)2	G	Ts Sec.
1	200	90.9	87.4	103.97	3.23	0.034
2	200	87.4	84.1	96.13	2.99	0.035
3	200	84.1	80.8	88.88	2.76	0.036
4	400	80.8	74.9	155.38	4.83	0.039
5	400	74.9	69.3	133.22	4.14	0.042
6	700	69.3	60.8	184.56	5.73	0.046
7	700	60.8	53.3	142.01	4.41	0.053
8	1,400	53.3	41.7	184.69	5.74	0.063
9	2,800	41.7	26.7	170.43	5.29	0.088
10	2,800	26.7	17.1	70.03	2.17	0.137
11	2,800	17.1	11.0	28.78	0.89	0.214
12	2,800	11.0	7.0	11.82	0.37	0.333
13	2,800	7.0	4.5	4.86	0.15	0.520

DRAFT

60 was the last row for calculation