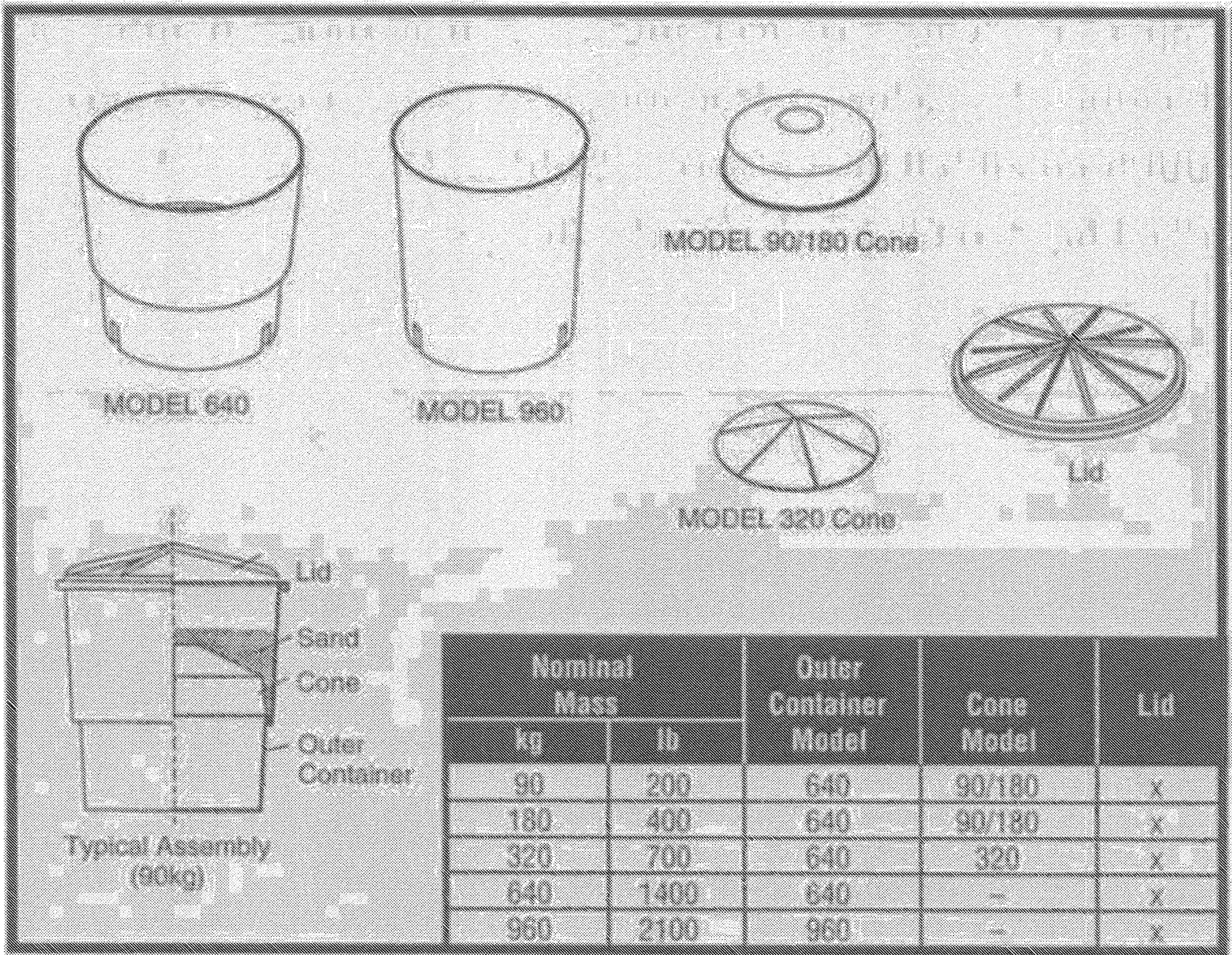
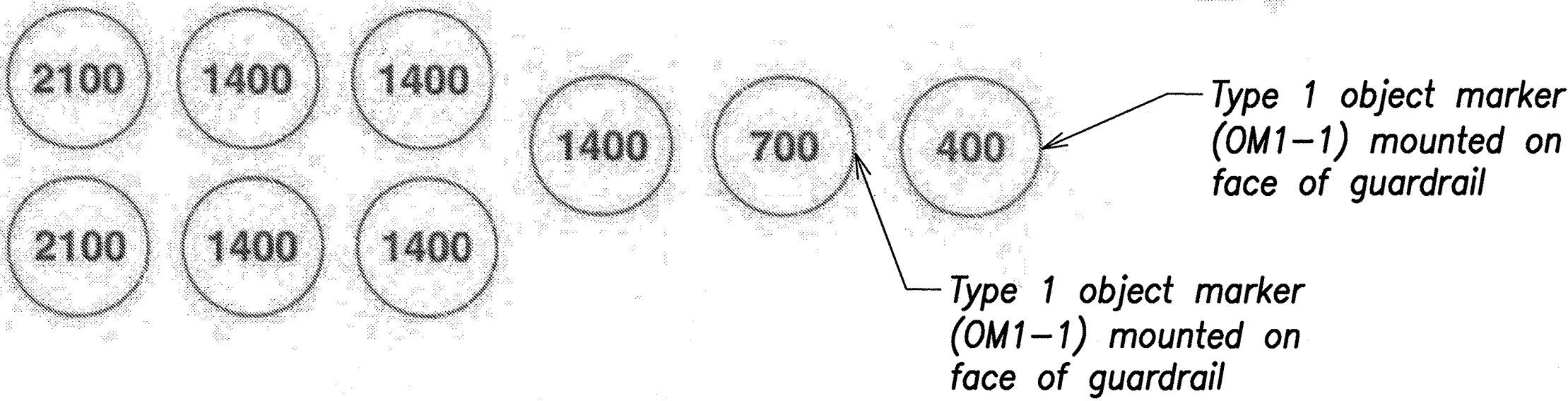


DESIGN VELOCITY 45 mph (72 km/h)							
ROW	SAND MASS (lbs)	1800 lb vehicle			4500 lb vehicle		
		EXIT VEL (mph)	AVE G'S FOR ROW	IMPULSE TIME (sec)	EXIT VEL (mph)	AVE G'S FOR ROW	IMPULSE TIME (sec)
0		45.0			45.0		
1	400	36.8	7.5	0.05	41.3	3.5	0.05
2	700	26.5	7.3	0.06	35.8	4.8	0.05
3	1400	14.9	5.4	0.10	27.3	6.0	0.06
4	2800	5.8	2.1	0.20	16.8	5.1	0.09
5	2800	2.3	.3	0.50	10.4	2.0	0.15
6	4200	.7	.1	1.38	5.4	.9	0.26



WALTER G. C. CHONG
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HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES, ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS."

Walter G. C. Chong
R. M. TOWILL CORPORATION
4/30/22
LIC. EXPIRATION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CRASH CUSHION DETAILS
*Kamehameha Highway
Kaipapau Stream Bridge Replacement
Federal Aid Project No. BR-083-1(48)*

Scale: As Noted Date: February 2021

SHEET No. C-48 OF SHEETS

DESIGNED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	