

Company: Company

Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 4)

File: C:\IE REGIDOR\MOD4.rcb

Engineer: Name

9:19:27 a. m. 27/06/2025

REDUNDANCY ANALYSIS

STORY-STRENGTH REDUCTION DUE TO REMOVAL OF CRITICAL ELEMENT

Story	E A R T H Q U A K E - X				E A R T H Q U A K E - Y			
	Vi	Vi/Vb	Crit.Element	Ve/Vi	Vi	Vi/Vb	Crit.Element	Ve/Vi
1	32.3	1.00	BEM:I (7-11)	0.17	32.3	1.00	BEM:7 (F-I)	0.20
MAXIMA				0.17				0.20

NOTE: Shear values are divided by R

Removal of any critial element on any story supporting more than 35% Vb (Base Shear) would not reduce the story strength by more than 33%. Thus SEISMIC FORCE-RESISTING SYSTEM SEEMS REDUNDANT!!
It should be investigated if removal of critical element would induce Extreme Torsional Irregularity (1bP)

Proposed Reduction Factor for Lack of Redundancy: Ørx = 1 Øry = 1