

APPENDIX B

**NONLINEAR ANALYSIS RESULTS OF MAXIMUM CENTER DISPLACEMENT,
MAXIMUM CORNER DISPLACEMENT, MAXIMUM STORY SHEAR AND
INTERSTORY DRIFT RATIO FOR 8-STORY ISOLATED STRUCTURE**

TABLE B-1 Nonlinear Dynamic Analysis Results for 8-Story Isolated Structure with Isolation System Type # 3 ($T = 1.5$ sec, $\beta = 7\%$). Excitation is Represented by Pairs of Scaled Earthquake Motions Recorded on Stiff Soil Sites (Representative of Soil Type S_1). Weight = 11520 kips, Height = 12 ft

| EXCITATION | BASE CENTER DISPL. (INCH) | | CORNER BEARING DISPL. (INCH) | | CORNER TO CENTER DISPL. RATIO | BASE SHEAR WEIGHT | | 1st STORY SHEAR WEIGHT | | 1st STORY DRIFT HEIGHT (%) | |
|-----------------------|---------------------------|------|------------------------------|------|-------------------------------|-------------------|-------|------------------------|-------|----------------------------|-------|
| | L | T | L | T | | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 4.40 | 2.35 | 4.60 | 2.82 | 1.20 | 0.203 | 0.108 | 0.179 | 0.097 | 0.413 | 0.238 |
| 12 EL CENTRO (117) | 5.03 | 5.19 | 5.87 | 6.60 | 1.27 | 0.227 | 0.222 | 0.209 | 0.208 | 0.490 | 0.499 |
| 13 PARKFIELD (014) | 1.72 | 4.40 | 2.11 | 5.86 | 1.33 | 0.093 | 0.195 | 0.079 | 0.185 | 0.200 | 0.453 |
| 14 SAN FERNANDO (110) | 3.94 | 2.18 | 4.04 | 2.43 | 1.11 | 0.177 | 0.111 | 0.175 | 0.108 | 0.424 | 0.278 |
| 15 SAN FERNANDO (135) | 3.28 | 4.92 | 3.48 | 5.74 | 1.17 | 0.153 | 0.211 | 0.140 | 0.203 | 0.323 | 0.532 |
| 16 SAN FERNANDO (208) | 2.77 | 5.02 | 2.88 | 6.40 | 1.27 | 0.131 | 0.205 | 0.124 | 0.190 | 0.299 | 0.460 |
| 17 SAN FERNANDO (211) | 3.37 | 4.87 | 3.57 | 6.23 | 1.30 | 0.159 | 0.202 | 0.141 | 0.189 | 0.335 | 0.458 |
| 18 SAN FERNANDO (466) | 2.32 | 5.88 | 3.23 | 8.24 | 1.40 | 0.106 | 0.241 | 0.098 | 0.220 | 0.243 | 0.516 |
| 19 SAN FERNANDO (253) | 2.84 | 5.22 | 2.97 | 6.47 | 1.24 | 0.132 | 0.225 | 0.124 | 0.207 | 0.300 | 0.506 |
| 20 SAN FERNANDO (199) | 3.64 | 3.40 | 4.43 | 3.79 | 1.22 | 0.170 | 0.157 | 0.160 | 0.142 | 0.379 | 0.338 |

| | | | | | | | | | | | |
|-----------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| MEAN | 3.33 | 4.34 | 3.72 | 5.46 | 1.25 | 0.155 | 0.188 | 0.143 | 0.175 | 0.341 | 0.428 |
| σ | 0.93 | 1.20 | 1.01 | 1.75 | 0.08 | 0.039 | 0.044 | 0.037 | 0.041 | 0.083 | 0.099 |
| MEAN OF MAX (L,T) | 4.75 | | 5.86 | | | 0.206 | | 0.192 | | 0.464 | |
| σ OF MAX (L,T) | 0.63 | | 1.18 | | | 0.021 | | 0.017 | | 0.047 | |

TABLE B-I Continued

| EXCITATION | 2nd STORY SHEAR WEIGHT | | 3rd STORY SHEAR WEIGHT | | 4th STORY SHEAR WEIGHT | | 5th STORY SHEAR WEIGHT | | 6th STORY SHEAR WEIGHT | | 7th STORY SHEAR WEIGHT | | 8th STORY SHEAR WEIGHT | |
|-----------------------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.162 | 0.093 | 0.152 | 0.089 | 0.136 | 0.095 | 0.122 | 0.097 | 0.111 | 0.087 | 0.096 | 0.065 | 0.058 | 0.037 |
| 12 EL CENTRO (117) | 0.192 | 0.191 | 0.172 | 0.181 | 0.147 | 0.168 | 0.120 | 0.148 | 0.097 | 0.122 | 0.070 | 0.091 | 0.037 | 0.054 |
| 13 PARKFIELD (014) | 0.076 | 0.174 | 0.072 | 0.161 | 0.065 | 0.144 | 0.079 | 0.123 | 0.095 | 0.096 | 0.098 | 0.067 | 0.063 | 0.041 |
| 14 SAN FERNANDO (110) | 0.171 | 0.104 | 0.161 | 0.099 | 0.153 | 0.095 | 0.143 | 0.080 | 0.121 | 0.076 | 0.090 | 0.072 | 0.047 | 0.050 |
| 15 SAN FERNANDO (135) | 0.124 | 0.192 | 0.107 | 0.175 | 0.101 | 0.151 | 0.092 | 0.135 | 0.072 | 0.118 | 0.054 | 0.087 | 0.029 | 0.047 |
| 16 SAN FERNANDO (208) | 0.119 | 0.173 | 0.109 | 0.154 | 0.098 | 0.133 | 0.083 | 0.110 | 0.068 | 0.086 | 0.054 | 0.060 | 0.031 | 0.035 |
| 17 SAN FERNANDO (211) | 0.126 | 0.174 | 0.115 | 0.156 | 0.104 | 0.137 | 0.091 | 0.115 | 0.076 | 0.091 | 0.055 | 0.063 | 0.031 | 0.032 |
| 18 SAN FERNANDO (466) | 0.095 | 0.200 | 0.091 | 0.176 | 0.083 | 0.154 | 0.070 | 0.129 | 0.054 | 0.101 | 0.038 | 0.071 | 0.026 | 0.036 |
| 19 SAN FERNANDO (253) | 0.118 | 0.191 | 0.111 | 0.173 | 0.103 | 0.159 | 0.092 | 0.143 | 0.077 | 0.120 | 0.057 | 0.090 | 0.031 | 0.049 |
| 20 SAN FERNANDO (199) | 0.146 | 0.124 | 0.130 | 0.108 | 0.112 | 0.098 | 0.099 | 0.087 | 0.088 | 0.072 | 0.068 | 0.054 | 0.038 | 0.034 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.133 | 0.162 | 0.122 | 0.147 | 0.110 | 0.133 | 0.099 | 0.117 | 0.086 | 0.097 | 0.068 | 0.072 | 0.039 | 0.042 |
| σ | 0.033 | 0.037 | 0.030 | 0.033 | 0.026 | 0.026 | 0.021 | 0.022 | 0.019 | 0.017 | 0.019 | 0.012 | 0.012 | 0.007 |
| MEAN OF MAX (L,T) | 0.178 | / | 0.162 | / | 0.145 | / | 0.127 | / | 0.105 | / | 0.081 | / | 0.046 | / |
| σ OF MAX (L,T) | 0.016 | / | 0.014 | / | 0.015 | / | 0.015 | / | 0.014 | / | 0.014 | / | 0.010 | / |

TABLE B-I Continued

| EXCITATION | 2nd STORY DRIFT (%) / HEIGHT | | 3rd STORY DRIFT (%) / HEIGHT | | 4th STORY DRIFT (%) / HEIGHT | | 5th STORY DRIFT (%) / HEIGHT | | 6th STORY DRIFT (%) / HEIGHT | | 7th STORY DRIFT (%) / HEIGHT | | 8th STORY DRIFT (%) / HEIGHT | |
|-----------------------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.380 | 0.221 | 0.360 | 0.210 | 0.436 | 0.315 | 0.377 | 0.320 | 0.350 | 0.285 | 0.457 | 0.329 | 0.273 | 0.197 |
| 12 EL CENTRO (117) | 0.455 | 0.473 | 0.410 | 0.438 | 0.468 | 0.567 | 0.381 | 0.497 | 0.313 | 0.416 | 0.337 | 0.465 | 0.177 | 0.285 |
| 13 PARKFIELD (014) | 0.190 | 0.445 | 0.181 | 0.394 | 0.221 | 0.481 | 0.250 | 0.405 | 0.305 | 0.320 | 0.468 | 0.334 | 0.299 | 0.215 |
| 14 SAN FERNANDO (110) | 0.400 | 0.266 | 0.381 | 0.248 | 0.496 | 0.336 | 0.464 | 0.283 | 0.396 | 0.246 | 0.438 | 0.358 | 0.225 | 0.258 |
| 15 SAN FERNANDO (135) | 0.296 | 0.525 | 0.260 | 0.465 | 0.325 | 0.550 | 0.298 | 0.493 | 0.233 | 0.438 | 0.254 | 0.483 | 0.138 | 0.252 |
| 16 SAN FERNANDO (208) | 0.283 | 0.440 | 0.265 | 0.373 | 0.321 | 0.435 | 0.271 | 0.359 | 0.213 | 0.289 | 0.259 | 0.320 | 0.146 | 0.199 |
| 17 SAN FERNANDO (211) | 0.309 | 0.441 | 0.276 | 0.378 | 0.336 | 0.447 | 0.299 | 0.374 | 0.250 | 0.302 | 0.276 | 0.315 | 0.155 | 0.166 |
| 18 SAN FERNANDO (466) | 0.233 | 0.494 | 0.223 | 0.419 | 0.271 | 0.494 | 0.226 | 0.409 | 0.173 | 0.321 | 0.182 | 0.344 | 0.120 | 0.170 |
| 19 SAN FERNANDO (253) | 0.284 | 0.486 | 0.270 | 0.416 | 0.335 | 0.512 | 0.294 | 0.456 | 0.244 | 0.389 | 0.278 | 0.443 | 0.153 | 0.241 |
| 20 SAN FERNANDO (199) | 0.353 | 0.313 | 0.318 | 0.264 | 0.360 | 0.339 | 0.317 | 0.300 | 0.282 | 0.251 | 0.323 | 0.281 | 0.177 | 0.179 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.318 | 0.410 | 0.294 | 0.361 | 0.357 | 0.448 | 0.318 | 0.390 | 0.276 | 0.326 | 0.327 | 0.367 | 0.186 | 0.216 |
| σ | 0.076 | 0.099 | 0.068 | 0.083 | 0.082 | 0.086 | 0.067 | 0.073 | 0.063 | 0.064 | 0.092 | 0.067 | 0.057 | 0.059 |
| MEAN OF MAX (L,T) | 0.444 | | 0.394 | | 0.478 | | 0.415 | | 0.350 | | 0.406 | | 0.232 | |
| σ OF MAX (L,T) | 0.051 | | 0.040 | | 0.058 | | 0.057 | | 0.053 | | 0.067 | | 0.047 | |

TABLE B-II Nonlinear Dynamic Analysis Results for 8-Story Isolated Structure with Isolation System Type # 4 ($T = 1.5$ sec, $\beta = 15\%$). Excitation is Represented by Pairs of Scaled Earthquake Motions Recorded on Stiff Soil Sites (Representative of Soil Type S_1). Weight = 11520 kips, Height = 12 ft

| EXCITATION | BASE CENTER DISPL (INCH) | | CORNER BEARING DISPL (INCH) | | CORNER TO CENTER DISPL RATIO | BASE SHEAR WEIGHT | | 1st STORY SHEAR WEIGHT | | 1st STORY DRIFT HEIGHT (%) | |
|-----------------------|--------------------------|------|-----------------------------|------|------------------------------|-------------------|-------|------------------------|-------|----------------------------|-------|
| | L | T | L | T | | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 3.86 | 1.95 | 4.01 | 2.40 | 1.23 | 0.179 | 0.098 | 0.152 | 0.088 | 0.350 | 0.233 |
| 12 EL CENTRO (117) | 3.57 | 4.46 | 3.85 | 5.65 | 1.27 | 0.161 | 0.187 | 0.142 | 0.182 | 0.340 | 0.449 |
| 13 PARKFIELD (014) | 1.52 | 2.70 | 1.63 | 3.68 | 1.36 | 0.099 | 0.134 | 0.067 | 0.122 | 0.151 | 0.320 |
| 14 SAN FERNANDO (110) | 3.87 | 2.11 | 3.97 | 2.36 | 1.12 | 0.167 | 0.114 | 0.166 | 0.110 | 0.409 | 0.284 |
| 15 SAN FERNANDO (135) | 2.31 | 5.71 | 3.04 | 6.75 | 1.32 | 0.126 | 0.226 | 0.108 | 0.216 | 0.246 | 0.556 |
| 16 SAN FERNANDO (208) | 2.77 | 4.99 | 2.99 | 6.32 | 1.27 | 0.120 | 0.199 | 0.123 | 0.186 | 0.300 | 0.453 |
| 17 SAN FERNANDO (211) | 3.07 | 4.79 | 3.26 | 6.13 | 1.28 | 0.128 | 0.197 | 0.134 | 0.186 | 0.323 | 0.449 |
| 18 SAN FERNANDO (466) | 2.03 | 5.50 | 2.15 | 7.20 | 1.31 | 0.102 | 0.220 | 0.091 | 0.202 | 0.222 | 0.477 |
| 19 SAN FERNANDO (253) | 2.26 | 4.17 | 2.40 | 5.72 | 1.25 | 0.125 | 0.178 | 0.113 | 0.158 | 0.263 | 0.383 |
| 20 SAN FERNANDO (199) | 3.43 | 3.08 | 3.51 | 3.50 | 1.14 | 0.165 | 0.139 | 0.150 | 0.130 | 0.351 | 0.341 |

| | | | | | | | | | | | |
|-----------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| MEAN | 2.87 | 3.95 | 3.08 | 4.92 | 1.26 | 0.137 | 0.169 | 0.125 | 0.158 | 0.296 | 0.395 |
| σ | 0.78 | 1.32 | 0.77 | 1.70 | 0.07 | 0.027 | 0.043 | 0.029 | 0.041 | 0.072 | 0.094 |
| MEAN OF MAX (L,T) | 4.35 | | 5.24 | | | 0.185 | | 0.172 | | 0.420 | |
| σ OF MAX (L,T) | 0.89 | | 1.30 | | | 0.026 | | 0.026 | | 0.068 | |

TABLE B-II Continued

| EXCITATION | 2nd STORY SHEAR WEIGHT | | 3rd STORY SHEAR WEIGHT | | 4th STORY SHEAR WEIGHT | | 5th STORY SHEAR WEIGHT | | 6th STORY SHEAR WEIGHT | | 7th STORY SHEAR WEIGHT | | 8th STORY SHEAR WEIGHT | |
|-----------------------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.133 | 0.091 | 0.122 | 0.089 | 0.111 | 0.097 | 0.108 | 0.098 | 0.096 | 0.087 | 0.085 | 0.068 | 0.054 | 0.045 |
| 12 EL CENTRO (117) | 0.134 | 0.179 | 0.123 | 0.168 | 0.108 | 0.155 | 0.118 | 0.141 | 0.110 | 0.118 | 0.085 | 0.093 | 0.045 | 0.064 |
| 13 PARKFIELD (014) | 0.063 | 0.123 | 0.066 | 0.121 | 0.077 | 0.108 | 0.083 | 0.087 | 0.101 | 0.069 | 0.109 | 0.073 | 0.072 | 0.051 |
| 14 SAN FERNANDO (110) | 0.164 | 0.106 | 0.152 | 0.101 | 0.143 | 0.098 | 0.134 | 0.081 | 0.113 | 0.087 | 0.082 | 0.088 | 0.044 | 0.067 |
| 15 SAN FERNANDO (135) | 0.095 | 0.201 | 0.089 | 0.181 | 0.096 | 0.154 | 0.090 | 0.142 | 0.069 | 0.123 | 0.054 | 0.089 | 0.032 | 0.054 |
| 16 SAN FERNANDO (208) | 0.117 | 0.171 | 0.105 | 0.153 | 0.094 | 0.134 | 0.080 | 0.112 | 0.073 | 0.088 | 0.058 | 0.063 | 0.036 | 0.040 |
| 17 SAN FERNANDO (211) | 0.128 | 0.174 | 0.113 | 0.160 | 0.099 | 0.145 | 0.085 | 0.126 | 0.067 | 0.102 | 0.057 | 0.073 | 0.035 | 0.038 |
| 18 SAN FERNANDO (466) | 0.088 | 0.188 | 0.084 | 0.174 | 0.075 | 0.155 | 0.061 | 0.130 | 0.046 | 0.099 | 0.051 | 0.067 | 0.035 | 0.035 |
| 19 SAN FERNANDO (253) | 0.105 | 0.147 | 0.099 | 0.140 | 0.093 | 0.136 | 0.084 | 0.125 | 0.071 | 0.107 | 0.057 | 0.081 | 0.034 | 0.053 |
| 20 SAN FERNANDO (199) | 0.136 | 0.119 | 0.120 | 0.108 | 0.111 | 0.096 | 0.100 | 0.092 | 0.091 | 0.084 | 0.077 | 0.063 | 0.047 | 0.043 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.116 | 0.150 | 0.107 | 0.140 | 0.101 | 0.128 | 0.094 | 0.113 | 0.084 | 0.096 | 0.072 | 0.076 | 0.043 | 0.049 |
| σ | 0.028 | 0.036 | 0.023 | 0.031 | 0.018 | 0.024 | 0.020 | 0.021 | 0.021 | 0.016 | 0.018 | 0.011 | 0.012 | 0.010 |
| MEAN OF MAX (L,T) | 0.162 | 0.149 | 0.135 | 0.104 | 0.121 | 0.104 | 0.083 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 | 0.012 |
| σ OF MAX (L,T) | 0.024 | 0.021 | 0.018 | 0.018 | 0.017 | 0.018 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.012 |

TABLE B-II Continued

| EXCITATION | 2nd STORY DRIFT (%) / HEIGHT | | 3rd STORY DRIFT (%) / HEIGHT | | 4th STORY DRIFT (%) / HEIGHT | | 5th STORY DRIFT (%) / HEIGHT | | 6th STORY DRIFT (%) / HEIGHT | | 7th STORY DRIFT (%) / HEIGHT | | 8th STORY DRIFT (%) / HEIGHT | |
|-----------------------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF (117) | 0.311 | 0.234 | 0.293 | 0.223 | 0.360 | 0.340 | 0.334 | 0.347 | 0.303 | 0.302 | 0.408 | 0.344 | 0.252 | 0.239 |
| 12 EL CENTRO (117) | 0.319 | 0.451 | 0.294 | 0.410 | 0.347 | 0.521 | 0.378 | 0.470 | 0.353 | 0.398 | 0.409 | 0.475 | 0.210 | 0.334 |
| 13 PARKFIELD (014) | 0.145 | 0.305 | 0.149 | 0.294 | 0.243 | 0.364 | 0.274 | 0.280 | 0.322 | 0.241 | 0.518 | 0.389 | 0.340 | 0.276 |
| 14 SAN FERNANDO (110) | 0.383 | 0.269 | 0.359 | 0.251 | 0.466 | 0.345 | 0.437 | 0.285 | 0.369 | 0.284 | 0.398 | 0.451 | 0.205 | 0.343 |
| 15 SAN FERNANDO (135) | 0.221 | 0.542 | 0.217 | 0.472 | 0.311 | 0.549 | 0.289 | 0.508 | 0.221 | 0.448 | 0.263 | 0.487 | 0.155 | 0.288 |
| 16 SAN FERNANDO (208) | 0.279 | 0.438 | 0.256 | 0.377 | 0.304 | 0.446 | 0.259 | 0.370 | 0.230 | 0.299 | 0.276 | 0.348 | 0.171 | 0.223 |
| 17 SAN FERNANDO (211) | 0.297 | 0.438 | 0.267 | 0.387 | 0.322 | 0.475 | 0.276 | 0.409 | 0.221 | 0.339 | 0.277 | 0.367 | 0.164 | 0.192 |
| 18 SAN FERNANDO (466) | 0.213 | 0.459 | 0.204 | 0.404 | 0.247 | 0.493 | 0.201 | 0.411 | 0.150 | 0.323 | 0.244 | 0.335 | 0.163 | 0.177 |
| 19 SAN FERNANDO (253) | 0.246 | 0.363 | 0.234 | 0.320 | 0.298 | 0.428 | 0.267 | 0.393 | 0.227 | 0.338 | 0.278 | 0.391 | 0.167 | 0.276 |
| 20 SAN FERNANDO (199) | 0.325 | 0.328 | 0.289 | 0.285 | 0.367 | 0.340 | 0.330 | 0.321 | 0.291 | 0.288 | 0.371 | 0.327 | 0.226 | 0.225 |
| MEAN | 0.274 | 0.383 | 0.256 | 0.342 | 0.327 | 0.430 | 0.305 | 0.379 | 0.269 | 0.326 | 0.344 | 0.391 | 0.205 | 0.257 |
| σ | 0.065 | 0.093 | 0.055 | 0.076 | 0.061 | 0.075 | 0.064 | 0.071 | 0.066 | 0.057 | 0.085 | 0.056 | 0.054 | 0.053 |
| MEAN OF MAX (L,T) | 0.402 | | 0.361 | | 0.447 | | 0.396 | | 0.343 | | 0.415 | | 0.265 | |
| σ OF MAX (L,T) | 0.073 | | 0.058 | | 0.064 | | 0.064 | | 0.047 | | 0.060 | | 0.058 | |

TABLE B-III Nonlinear Dynamic Analysis Results for 8-Story Isolated Structure with Isolation System Type # 5 (T = 1.5 sec, $\beta = 31\%$). Excitation is Represented by Pairs of Scaled Earthquake Motions Recorded on Stiff Soil Sites (Representative of Soil Type S₁). Weight = 11520 kips, Height = 12 ft

| EXCITATION | BASE CENTER DISPL (INCH) | | CORNER BEARING DISPL (INCH) | | CORNER TO CENTER DISPL RATIO | BASE SHEAR WEIGHT | | 1st STORY SHEAR WEIGHT | | 1st STORY DRIFT HEIGHT (%) | |
|-----------------------|--------------------------|------|-----------------------------|------|------------------------------|-------------------|-------|------------------------|-------|----------------------------|-------|
| | L | T | L | T | | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 2.90 | 1.71 | 2.94 | 2.00 | 1.17 | 0.147 | 0.114 | 0.131 | 0.094 | 0.319 | 0.256 |
| 12 EL CENTRO (117) | 3.66 | 3.56 | 3.82 | 4.54 | 1.27 | 0.154 | 0.153 | 0.139 | 0.139 | 0.331 | 0.353 |
| 13 PARKFIELD (014) | 1.33 | 2.01 | 1.40 | 2.24 | 1.11 | 0.112 | 0.122 | 0.080 | 0.121 | 0.191 | 0.316 |
| 14 SAN FERNANDO (110) | 3.82 | 2.04 | 3.97 | 2.30 | 1.13 | 0.149 | 0.114 | 0.149 | 0.109 | 0.372 | 0.283 |
| 15 SAN FERNANDO (135) | 2.53 | 7.15 | 3.11 | 8.45 | 1.23 | 0.113 | 0.223 | 0.099 | 0.203 | 0.242 | 0.525 |
| 16 SAN FERNANDO (208) | 2.49 | 4.00 | 2.74 | 5.22 | 1.31 | 0.118 | 0.157 | 0.120 | 0.140 | 0.297 | 0.349 |
| 17 SAN FERNANDO (211) | 3.04 | 3.57 | 3.22 | 4.82 | 1.35 | 0.124 | 0.152 | 0.133 | 0.139 | 0.327 | 0.339 |
| 18 SAN FERNANDO (466) | 1.63 | 5.06 | 2.43 | 6.14 | 1.49 | 0.109 | 0.174 | 0.093 | 0.154 | 0.214 | 0.394 |
| 19 SAN FERNANDO (253) | 1.65 | 3.31 | 1.77 | 4.18 | 1.26 | 0.120 | 0.145 | 0.104 | 0.130 | 0.247 | 0.331 |
| 20 SAN FERNANDO (199) | 2.24 | 3.50 | 2.47 | 3.97 | 1.13 | 0.129 | 0.145 | 0.116 | 0.132 | 0.286 | 0.352 |

| | | | | | | | | | | | |
|-----------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| MEAN | 2.53 | 3.59 | 2.79 | 4.39 | 1.25 | 0.128 | 0.150 | 0.116 | 0.136 | 0.283 | 0.350 |
| σ | 0.80 | 1.53 | 0.77 | 1.88 | 0.11 | 0.016 | 0.031 | 0.021 | 0.028 | 0.055 | 0.069 |
| MEAN OF MAX (L,T) | 3.90 | | 4.65 | | | 0.157 | | 0.144 | | 0.363 | |
| σ OF MAX (L,T) | 1.31 | | 1.64 | | | 0.025 | | 0.022 | | 0.059 | |

TABLE B-III Continued

| EXCITATION | 2nd STORY SHEAR WEIGHT | | 3rd STORY SHEAR WEIGHT | | 4th STORY SHEAR WEIGHT | | 5th STORY SHEAR WEIGHT | | 6th STORY SHEAR WEIGHT | | 7th STORY SHEAR WEIGHT | | 8th STORY SHEAR WEIGHT | |
|-----------------------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.125 | 0.096 | 0.116 | 0.095 | 0.112 | 0.122 | 0.113 | 0.126 | 0.101 | 0.114 | 0.081 | 0.097 | 0.046 | 0.066 |
| 12 EL CENTRO (117) | 0.124 | 0.133 | 0.129 | 0.131 | 0.137 | 0.132 | 0.135 | 0.129 | 0.122 | 0.117 | 0.098 | 0.114 | 0.056 | 0.073 |
| 13 PARKFIELD (014) | 0.072 | 0.120 | 0.078 | 0.118 | 0.088 | 0.113 | 0.102 | 0.103 | 0.108 | 0.086 | 0.123 | 0.092 | 0.083 | 0.070 |
| 14 SAN FERNANDO (110) | 0.149 | 0.107 | 0.138 | 0.102 | 0.125 | 0.098 | 0.118 | 0.091 | 0.103 | 0.108 | 0.085 | 0.114 | 0.052 | 0.082 |
| 15 SAN FERNANDO (135) | 0.094 | 0.182 | 0.087 | 0.159 | 0.088 | 0.150 | 0.082 | 0.139 | 0.071 | 0.117 | 0.062 | 0.098 | 0.036 | 0.057 |
| 16 SAN FERNANDO (208) | 0.116 | 0.128 | 0.114 | 0.121 | 0.108 | 0.123 | 0.091 | 0.114 | 0.073 | 0.091 | 0.068 | 0.071 | 0.043 | 0.045 |
| 17 SAN FERNANDO (211) | 0.127 | 0.130 | 0.127 | 0.121 | 0.122 | 0.116 | 0.107 | 0.094 | 0.084 | 0.078 | 0.059 | 0.061 | 0.035 | 0.041 |
| 18 SAN FERNANDO (466) | 0.084 | 0.141 | 0.080 | 0.136 | 0.076 | 0.127 | 0.066 | 0.112 | 0.060 | 0.092 | 0.069 | 0.068 | 0.046 | 0.051 |
| 19 SAN FERNANDO (253) | 0.093 | 0.120 | 0.086 | 0.120 | 0.082 | 0.116 | 0.072 | 0.096 | 0.066 | 0.082 | 0.057 | 0.090 | 0.035 | 0.067 |
| 20 SAN FERNANDO (199) | 0.122 | 0.126 | 0.125 | 0.119 | 0.126 | 0.112 | 0.114 | 0.099 | 0.098 | 0.094 | 0.087 | 0.072 | 0.058 | 0.053 |
| MEAN | 0.111 | 0.128 | 0.108 | 0.122 | 0.106 | 0.121 | 0.100 | 0.110 | 0.087 | 0.098 | 0.079 | 0.088 | 0.049 | 0.061 |
| σ | 0.023 | 0.022 | 0.022 | 0.017 | 0.020 | 0.013 | 0.021 | 0.016 | 0.020 | 0.014 | 0.019 | 0.018 | 0.014 | 0.012 |
| MEAN OF MAX (L,T) | 0.135 | | 0.129 | | 0.126 | | 0.116 | | 0.102 | | 0.092 | | 0.062 | |
| σ OF MAX (L,T) | 0.018 | | 0.012 | | 0.010 | | 0.013 | | 0.013 | | 0.020 | | 0.014 | |

TABLE B-III Continued

| EXCITATION | 2nd STORY DRIFT HEIGHT (%) | | 3rd STORY DRIFT HEIGHT (%) | | 4th STORY DRIFT HEIGHT (%) | | 5th STORY DRIFT HEIGHT (%) | | 6th STORY DRIFT HEIGHT (%) | | 7th STORY DRIFT HEIGHT (%) | | 8th STORY DRIFT HEIGHT (%) | |
|-----------------------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.302 | 0.354 | 0.284 | 0.237 | 0.366 | 0.417 | 0.363 | 0.436 | 0.327 | 0.387 | 0.389 | 0.491 | 0.218 | 0.352 |
| 12 EL CENTRO (117) | 0.302 | 0.346 | 0.303 | 0.329 | 0.435 | 0.450 | 0.429 | 0.465 | 0.386 | 0.404 | 0.465 | 0.581 | 0.259 | 0.389 |
| 13 PARKFIELD (014) | 0.165 | 0.324 | 0.173 | 0.307 | 0.278 | 0.403 | 0.326 | 0.365 | 0.341 | 0.309 | 0.589 | 0.492 | 0.396 | 0.376 |
| 14 SAN FERNANDO (110) | 0.348 | 0.268 | 0.323 | 0.250 | 0.411 | 0.346 | 0.386 | 0.311 | 0.335 | 0.362 | 0.413 | 0.584 | 0.248 | 0.427 |
| 15 SAN FERNANDO (135) | 0.226 | 0.498 | 0.210 | 0.419 | 0.283 | 0.541 | 0.258 | 0.497 | 0.233 | 0.422 | 0.299 | 0.524 | 0.174 | 0.313 |
| 16 SAN FERNANDO (208) | 0.275 | 0.327 | 0.271 | 0.321 | 0.348 | 0.451 | 0.297 | 0.421 | 0.235 | 0.339 | 0.329 | 0.381 | 0.210 | 0.237 |
| 17 SAN FERNANDO (211) | 0.299 | 0.323 | 0.294 | 0.322 | 0.384 | 0.425 | 0.338 | 0.346 | 0.262 | 0.266 | 0.282 | 0.320 | 0.173 | 0.222 |
| 18 SAN FERNANDO (466) | 0.195 | 0.365 | 0.187 | 0.319 | 0.244 | 0.409 | 0.209 | 0.357 | 0.204 | 0.309 | 0.336 | 0.349 | 0.217 | 0.261 |
| 19 SAN FERNANDO (253) | 0.226 | 0.317 | 0.199 | 0.288 | 0.265 | 0.407 | 0.232 | 0.350 | 0.204 | 0.296 | 0.273 | 0.463 | 0.171 | 0.350 |
| 20 SAN FERNANDO (199) | 0.278 | 0.346 | 0.292 | 0.311 | 0.399 | 0.403 | 0.364 | 0.354 | 0.315 | 0.318 | 0.422 | 0.366 | 0.278 | 0.271 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.262 | 0.347 | 0.254 | 0.310 | 0.341 | 0.425 | 0.320 | 0.390 | 0.284 | 0.341 | 0.380 | 0.455 | 0.234 | 0.320 |
| σ | 0.054 | 0.056 | 0.052 | 0.047 | 0.065 | 0.048 | 0.067 | 0.057 | 0.061 | 0.048 | 0.093 | 0.091 | 0.064 | 0.066 |
| MEAN OF MAX (L,T) | 0.355 | | 0.322 | | 0.432 | | 0.399 | | 0.344 | | 0.470 | | 0.322 | |
| σ OF MAX (L,T) | 0.050 | | 0.035 | | 0.040 | | 0.050 | | 0.047 | | 0.095 | | 0.068 | |

TABLE B-IV Nonlinear Dynamic Analysis Results for 8-Story Isolated Structure with Isolation System Type # 6 ($T = 2.0$ sec, $\beta = 6\%$). Excitation is Represented by Pairs of Scaled Earthquake Motions Recorded on Stiff Soil Sites (Representative of Soil Type S_1). Weight = 11520 kips, Height = 12 ft

| EXCITATION | BASE CENTER DISPL (INCH) | | CORNER BEARING DISPL (INCH) | | CORNER TO CENTER DISPL RATIO | BASE SHEAR WEIGHT | | 1st STORY SHEAR WEIGHT | | 1st STORY DRIFT HEIGHT (%) | |
|-----------------------|--------------------------|------|-----------------------------|-------|------------------------------|-------------------|-------|------------------------|-------|----------------------------|-------|
| | L | T | L | T | | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 6.09 | 4.42 | 6.43 | 5.57 | 1.26 | 0.158 | 0.106 | 0.145 | 0.099 | 0.344 | 0.240 |
| 12 EL CENTRO (117) | 8.38 | 9.98 | 10.18 | 13.14 | 1.32 | 0.204 | 0.236 | 0.185 | 0.220 | 0.437 | 0.535 |
| 13 PARKFIELD (014) | 2.86 | 7.67 | 4.69 | 10.63 | 1.64 | 0.077 | 0.184 | 0.073 | 0.163 | 0.191 | 0.377 |
| 14 SAN FERNANDO (110) | 5.02 | 2.84 | 5.13 | 3.06 | 1.08 | 0.125 | 0.081 | 0.126 | 0.080 | 0.306 | 0.208 |
| 15 SAN FERNANDO (135) | 9.72 | 8.17 | 10.19 | 10.55 | 1.29 | 0.228 | 0.193 | 0.209 | 0.176 | 0.496 | 0.431 |
| 16 SAN FERNANDO (208) | 7.78 | 9.58 | 8.08 | 13.36 | 1.39 | 0.190 | 0.219 | 0.172 | 0.200 | 0.409 | 0.475 |
| 17 SAN FERNANDO (211) | 9.24 | 8.32 | 9.55 | 10.05 | 1.21 | 0.221 | 0.203 | 0.202 | 0.188 | 0.479 | 0.474 |
| 18 SAN FERNANDO (466) | 5.21 | 9.15 | 6.48 | 11.95 | 1.31 | 0.136 | 0.216 | 0.125 | 0.198 | 0.303 | 0.469 |
| 19 SAN FERNANDO (253) | 6.41 | 9.24 | 6.45 | 11.94 | 1.29 | 0.165 | 0.221 | 0.145 | 0.193 | 0.335 | 0.455 |
| 20 SAN FERNANDO (199) | 8.60 | 8.48 | 10.11 | 11.23 | 1.32 | 0.215 | 0.199 | 0.194 | 0.183 | 0.458 | 0.428 |

| | | | | | | | | | | | |
|-----------------------|------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| MEAN | 6.93 | 7.79 | 7.73 | 10.15 | 1.31 | 0.172 | 0.186 | 0.158 | 0.170 | 0.376 | 0.409 |
| σ | 2.07 | 2.21 | 2.05 | 3.14 | 0.13 | 0.046 | 0.049 | 0.041 | 0.043 | 0.091 | 0.101 |
| MEAN OF MAX (L,T) | 8.43 | | 10.44 | | | 0.202 | | 0.185 | | 0.439 | |
| σ OF MAX (L,T) | 1.58 | | 2.56 | | | 0.034 | | 0.029 | | 0.069 | |

TABLE B-IV Continued

| EXCITATION | 2nd STORY SHEAR WEIGHT | | 3rd STORY SHEAR WEIGHT | | 4th STORY SHEAR WEIGHT | | 5th STORY SHEAR WEIGHT | | 6th STORY SHEAR WEIGHT | | 7th STORY SHEAR WEIGHT | | 8th STORY SHEAR WEIGHT | |
|-----------------------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.140 | 0.087 | 0.133 | 0.071 | 0.122 | 0.074 | 0.106 | 0.069 | 0.087 | 0.057 | 0.069 | 0.044 | 0.039 | 0.026 |
| 12 EL CENTRO (117) | 0.166 | 0.201 | 0.146 | 0.181 | 0.127 | 0.158 | 0.110 | 0.133 | 0.087 | 0.106 | 0.062 | 0.076 | 0.033 | 0.041 |
| 13 PARKFIELD (014) | 0.067 | 0.143 | 0.059 | 0.125 | 0.050 | 0.109 | 0.045 | 0.092 | 0.055 | 0.072 | 0.054 | 0.050 | 0.033 | 0.030 |
| 14 SAN FERNANDO (110) | 0.122 | 0.077 | 0.116 | 0.074 | 0.112 | 0.069 | 0.102 | 0.058 | 0.085 | 0.044 | 0.062 | 0.050 | 0.033 | 0.033 |
| 15 SAN FERNANDO (135) | 0.189 | 0.156 | 0.168 | 0.136 | 0.145 | 0.115 | 0.119 | 0.091 | 0.091 | 0.073 | 0.062 | 0.051 | 0.032 | 0.027 |
| 16 SAN FERNANDO (208) | 0.154 | 0.181 | 0.134 | 0.160 | 0.113 | 0.137 | 0.092 | 0.112 | 0.071 | 0.086 | 0.049 | 0.059 | 0.025 | 0.030 |
| 17 SAN FERNANDO (211) | 0.180 | 0.172 | 0.158 | 0.153 | 0.1366 | 0.133 | 0.112 | 0.110 | 0.086 | 0.087 | 0.058 | 0.061 | 0.029 | 0.032 |
| 18 SAN FERNANDO (466) | 0.113 | 0.178 | 0.099 | 0.155 | 0.084 | 0.132 | 0.069 | 0.111 | 0.053 | 0.089 | 0.037 | 0.064 | 0.019 | 0.034 |
| 19 SAN FERNANDO (253) | 0.127 | 0.165 | 0.109 | 0.146 | 0.096 | 0.126 | 0.080 | 0.107 | 0.063 | 0.085 | 0.043 | 0.060 | 0.022 | 0.031 |
| 20 SAN FERNANDO (199) | 0.172 | 0.166 | 0.150 | 0.146 | 0.129 | 0.124 | 0.106 | 0.102 | 0.082 | 0.080 | 0.057 | 0.056 | 0.029 | 0.029 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.143 | 0.153 | 0.127 | 0.135 | 0.111 | 0.118 | 0.094 | 0.099 | 0.076 | 0.078 | 0.055 | 0.057 | 0.029 | 0.031 |
| σ | 0.035 | 0.038 | 0.031 | 0.034 | 0.027 | 0.026 | 0.022 | 0.021 | 0.014 | 0.017 | 0.009 | 0.009 | 0.006 | 0.004 |
| MEAN OF MAX (L,T) | 0.167 | | 0.149 | | 0.131 | | 0.110 | | 0.087 | | 0.062 | | 0.033 | |
| σ OF MAX (L,T) | 0.023 | | 0.019 | | 0.014 | | 0.010 | | 0.008 | | 0.006 | | 0.004 | |

TABLE B-IV Continued

| EXCITATION | 2nd STORY DRIFT / HEIGHT (%) | | 3rd STORY DRIFT / HEIGHT (%) | | 4th STORY DRIFT / HEIGHT (%) | | 5th STORY DRIFT / HEIGHT (%) | | 6th STORY DRIFT / HEIGHT (%) | | 7th STORY DRIFT / HEIGHT (%) | | 8th STORY DRIFT / HEIGHT (%) | |
|-----------------------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.323 | 0.218 | 0.312 | 0.174 | 0.384 | 0.243 | 0.332 | 0.223 | 0.275 | 0.189 | 0.324 | 0.214 | 0.182 | 0.132 |
| 12 EL CENTRO (117) | 0.405 | 0.516 | 0.362 | 0.444 | 0.407 | 0.526 | 0.346 | 0.439 | 0.276 | 0.358 | 0.302 | 0.389 | 0.160 | 0.210 |
| 13 PARKFIELD (014) | 0.178 | 0.352 | 0.159 | 0.297 | 0.179 | 0.354 | 0.146 | 0.299 | 0.170 | 0.240 | 0.252 | 0.248 | 0.156 | 0.161 |
| 14 SAN FERNANDO (110) | 0.289 | 0.203 | 0.281 | 0.189 | 0.363 | 0.248 | 0.331 | 0.207 | 0.277 | 0.154 | 0.302 | 0.247 | 0.155 | 0.174 |
| 15 SAN FERNANDO (135) | 0.461 | 0.414 | 0.414 | 0.356 | 0.469 | 0.410 | 0.374 | 0.319 | 0.286 | 0.260 | 0.305 | 0.273 | 0.161 | 0.147 |
| 16 SAN FERNANDO (208) | 0.376 | 0.454 | 0.331 | 0.386 | 0.366 | 0.448 | 0.285 | 0.367 | 0.220 | 0.292 | 0.238 | 0.307 | 0.129 | 0.158 |
| 17 SAN FERNANDO (211) | 0.439 | 0.455 | 0.388 | 0.390 | 0.435 | 0.457 | 0.347 | 0.377 | 0.266 | 0.303 | 0.281 | 0.322 | 0.149 | 0.167 |
| 18 SAN FERNANDO (466) | 0.281 | 0.445 | 0.250 | 0.372 | 0.280 | 0.431 | 0.221 | 0.355 | 0.171 | 0.294 | 0.187 | 0.319 | 0.102 | 0.166 |
| 19 SAN FERNANDO (253) | 0.304 | 0.425 | 0.272 | 0.361 | 0.316 | 0.426 | 0.259 | 0.361 | 0.203 | 0.295 | 0.214 | 0.314 | 0.113 | 0.159 |
| 20 SAN FERNANDO (199) | 0.421 | 0.408 | 0.372 | 0.342 | 0.416 | 0.394 | 0.332 | 0.321 | 0.255 | 0.259 | 0.280 | 0.272 | 0.149 | 0.141 |

| | | | | | | | | | | | | | | |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.348 | 0.389 | 0.314 | 0.331 | 0.362 | 0.394 | 0.297 | 0.327 | 0.240 | 0.264 | 0.269 | 0.291 | 0.146 | 0.162 |
| σ | 0.084 | 0.098 | 0.072 | 0.083 | 0.080 | 0.085 | 0.067 | 0.067 | 0.043 | 0.056 | 0.342 | 0.047 | 0.023 | 0.020 |
| MEAN OF MAX (L,T) | 0.414 | | 0.363 | | 0.427 | | 0.357 | | 0.288 | | 0.311 | | 0.169 | |
| σ OF MAX (L,T) | 0.067 | | 0.049 | | 0.049 | | 0.036 | | 0.029 | | 0.033 | | 0.016 | |

TABLE B-V Nonlinear Dynamic Analysis Results for 8-Story Isolated Structure with Isolation System Type # 7 (T = 2.0 sec, $\beta = 16\%$). Excitation is Represented by Pairs of Scaled Earthquake Motions Recorded on Stiff Soil Sites (Representative of Soil Type S_1). Weight = 11520 kips, Height = 12 ft

| EXCITATION | BASE CENTER DISPL (INCH) | | CORNER BEARING DISPL (INCH) | | CORNER TO CENTER DISPL RATIO | BASE SHEAR WEIGHT | | 1st STORY SHEAR WEIGHT | | 1st STORY DRIFT HEIGHT (%) | |
|-----------------------|--------------------------|------|-----------------------------|-------|------------------------------|-------------------|-------|------------------------|-------|----------------------------|-------|
| | L | T | L | T | | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 4.04 | 2.77 | 4.26 | 3.34 | 1.21 | 0.108 | 0.077 | 0.103 | 0.068 | 0.253 | 0.181 |
| 12 EL CENTRO (117) | 6.47 | 7.34 | 6.86 | 9.11 | 1.24 | 0.160 | 0.166 | 0.134 | 0.157 | 0.307 | 0.392 |
| 13 PARKFIELD (014) | 1.30 | 4.12 | 1.96 | 5.40 | 1.51 | 0.061 | 0.114 | 0.055 | 0.099 | 0.142 | 0.251 |
| 14 SAN FERNANDO (110) | 5.02 | 2.74 | 5.15 | 2.98 | 1.09 | 0.120 | 0.085 | 0.123 | 0.083 | 0.302 | 0.217 |
| 15 SAN FERNANDO (135) | 5.14 | 7.73 | 5.17 | 10.13 | 1.31 | 0.122 | 0.180 | 0.113 | 0.163 | 0.266 | 0.430 |
| 16 SAN FERNANDO (208) | 5.65 | 7.56 | 5.98 | 9.34 | 1.24 | 0.132 | 0.174 | 0.120 | 0.161 | 0.289 | 0.401 |
| 17 SAN FERNANDO (211) | 6.79 | 7.30 | 7.06 | 9.00 | 1.23 | 0.145 | 0.165 | 0.133 | 0.155 | 0.322 | 0.388 |
| 18 SAN FERNANDO (466) | 4.74 | 7.74 | 5.37 | 9.46 | 1.22 | 0.114 | 0.170 | 0.104 | 0.154 | 0.244 | 0.387 |
| 19 SAN FERNANDO (253) | 5.65 | 8.42 | 5.92 | 10.78 | 1.28 | 0.139 | 0.193 | 0.128 | 0.166 | 0.300 | 0.414 |
| 20 SAN FERNANDO (199) | 7.12 | 6.01 | 7.85 | 7.86 | 1.31 | 0.165 | 0.130 | 0.151 | 0.124 | 0.355 | 0.296 |

| | | | | | | | | | | | |
|-----------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| MEAN | 5.19 | 6.17 | 5.56 | 7.74 | 1.26 | 0.127 | 0.135 | 0.116 | 0.133 | 0.278 | 0.336 |
| σ | 1.58 | 2.05 | 1.57 | 2.67 | 0.10 | 0.028 | 0.055 | 0.025 | 0.035 | 0.055 | 0.086 |
| MEAN OF MAX (L,T) | 6.64 | | 8.05 | | | 0.156 | | 0.143 | | 0.357 | |
| σ OF MAX (L,T) | 1.53 | | 2.17 | | | 0.028 | | 0.024 | | 0.062 | |

TABLE B-V Continued

| EXCITATION | 2nd STORY SHEAR WEIGHT | | 3rd STORY SHEAR WEIGHT | | 4th STORY SHEAR WEIGHT | | 5th STORY SHEAR WEIGHT | | 6th STORY SHEAR WEIGHT | | 7th STORY SHEAR WEIGHT | | 8th STORY SHEAR WEIGHT | |
|-----------------------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.105 | 0.068 | 0.100 | 0.074 | 0.093 | 0.082 | 0.086 | 0.078 | 0.076 | 0.068 | 0.064 | 0.052 | 0.038 | 0.038 |
| 12 EL CENTRO (117) | 0.126 | 0.146 | 0.123 | 0.134 | 0.117 | 0.121 | 0.103 | 0.104 | 0.083 | 0.085 | 0.058 | 0.072 | 0.029 | 0.050 |
| 13 PARKFIELD (014) | 0.052 | 0.094 | 0.049 | 0.087 | 0.058 | 0.077 | 0.064 | 0.066 | 0.071 | 0.053 | 0.073 | 0.054 | 0.047 | 0.036 |
| 14 SAN FERNANDO (110) | 0.120 | 0.081 | 0.110 | 0.077 | 0.106 | 0.073 | 0.097 | 0.059 | 0.080 | 0.059 | 0.060 | 0.066 | 0.037 | 0.044 |
| 15 SAN FERNANDO (135) | 0.103 | 0.146 | 0.091 | 0.128 | 0.083 | 0.109 | 0.073 | 0.094 | 0.059 | 0.080 | 0.044 | 0.057 | 0.025 | 0.036 |
| 16 SAN FERNANDO (208) | 0.108 | 0.147 | 0.096 | 0.132 | 0.083 | 0.115 | 0.069 | 0.097 | 0.054 | 0.076 | 0.043 | 0.054 | 0.028 | 0.030 |
| 17 SAN FERNANDO (211) | 0.121 | 0.143 | 0.110 | 0.129 | 0.097 | 0.114 | 0.081 | 0.097 | 0.063 | 0.077 | 0.044 | 0.056 | 0.027 | 0.029 |
| 18 SAN FERNANDO (466) | 0.092 | 0.140 | 0.086 | 0.126 | 0.078 | 0.110 | 0.067 | 0.092 | 0.053 | 0.072 | 0.038 | 0.055 | 0.025 | 0.031 |
| 19 SAN FERNANDO (253) | 0.117 | 0.152 | 0.105 | 0.136 | 0.091 | 0.120 | 0.076 | 0.101 | 0.059 | 0.083 | 0.042 | 0.060 | 0.026 | 0.042 |
| 20 SAN FERNANDO (199) | 0.136 | 0.115 | 0.121 | 0.104 | 0.105 | 0.093 | 0.087 | 0.079 | 0.070 | 0.067 | 0.056 | 0.051 | 0.035 | 0.032 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.108 | 0.123 | 0.099 | 0.113 | 0.091 | 0.101 | 0.080 | 0.087 | 0.067 | 0.072 | 0.052 | 0.058 | 0.032 | 0.037 |
| σ | 0.022 | 0.030 | 0.020 | 0.024 | 0.016 | 0.017 | 0.012 | 0.015 | 0.010 | 0.010 | 0.011 | 0.006 | 0.007 | 0.006 |
| MEAN OF MAX (L,T) | 0.133 | | 0.120 | | 0.107 | | 0.092 | | 0.077 | | 0.061 | | 0.038 | |
| σ OF MAX (L,T) | 0.019 | | 0.015 | | 0.013 | | 0.010 | | 0.005 | | 0.007 | | 0.007 | |

TABLE B-V Continued

| EXCITATION | 2nd STORY $\frac{\text{DRIFT } (\%) }{\text{HEIGHT}}$ | | 3rd STORY $\frac{\text{DRIFT } (\%) }{\text{HEIGHT}}$ | | 4th STORY $\frac{\text{DRIFT } (\%) }{\text{HEIGHT}}$ | | 5th STORY $\frac{\text{DRIFT } (\%) }{\text{HEIGHT}}$ | | 6th STORY $\frac{\text{DRIFT } (\%) }{\text{HEIGHT}}$ | | 7th STORY $\frac{\text{DRIFT } (\%) }{\text{HEIGHT}}$ | | 8th STORY $\frac{\text{DRIFT } (\%) }{\text{HEIGHT}}$ | |
|-----------------------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|--|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.240 | 0.173 | 0.232 | 0.185 | 0.299 | 0.289 | 0.275 | 0.272 | 0.243 | 0.233 | 0.300 | 0.268 | 0.174 | 0.197 |
| 12 EL CENTRO (117) | 0.294 | 0.384 | 0.290 | 0.339 | 0.368 | 0.415 | 0.325 | 0.256 | 0.263 | 0.295 | 0.281 | 0.369 | 0.144 | 0.271 |
| 13 PARKFIELD (014) | 0.134 | 0.252 | 0.126 | 0.227 | 0.182 | 0.261 | 0.209 | 0.214 | 0.222 | 0.180 | 0.347 | 0.286 | 0.221 | 0.188 |
| 14 SAN FERNANDO (110) | 0.283 | 0.209 | 0.268 | 0.195 | 0.347 | 0.260 | 0.315 | 0.210 | 0.260 | 0.193 | 0.288 | 0.338 | 0.167 | 0.233 |
| 15 SAN FERNANDO (135) | 0.247 | 0.407 | 0.221 | 0.346 | 0.258 | 0.388 | 0.230 | 0.340 | 0.188 | 0.291 | 0.215 | 0.307 | 0.124 | 0.190 |
| 16 SAN FERNANDO (208) | 0.267 | 0.384 | 0.239 | 0.328 | 0.271 | 0.385 | 0.219 | 0.320 | 0.171 | 0.260 | 0.205 | 0.277 | 0.131 | 0.158 |
| 17 SAN FERNANDO (211) | 0.299 | 0.376 | 0.272 | 0.326 | 0.314 | 0.391 | 0.255 | 0.328 | 0.199 | 0.266 | 0.214 | 0.287 | 0.129 | 0.151 |
| 18 SAN FERNANDO (466) | 0.224 | 0.374 | 0.209 | 0.323 | 0.251 | 0.382 | 0.212 | 0.316 | 0.170 | 0.247 | 0.185 | 0.278 | 0.117 | 0.155 |
| 19 SAN FERNANDO (253) | 0.280 | 0.399 | 0.254 | 0.344 | 0.291 | 0.406 | 0.235 | 0.339 | 0.191 | 0.279 | 0.208 | 0.308 | 0.119 | 0.217 |
| 20 SAN FERNANDO (199) | 0.329 | 0.288 | 0.296 | 0.251 | 0.338 | 0.303 | 0.272 | 0.268 | 0.216 | 0.236 | 0.265 | 0.265 | 0.168 | 0.170 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.260 | 0.325 | 0.241 | 0.286 | 0.292 | 0.348 | 0.255 | 0.286 | 0.212 | 0.248 | 0.251 | 0.298 | 0.149 | 0.193 |
| σ | 0.051 | 0.082 | 0.047 | 0.061 | 0.052 | 0.059 | 0.039 | 0.047 | 0.033 | 0.037 | 0.050 | 0.031 | 0.031 | 0.036 |
| MEAN OF MAX (L,T) | 0.343 | | 0.303 | | 0.361 | | 0.304 | | 0.260 | | 0.308 | | 0.196 | |
| σ OF MAX (L,T) | 0.059 | | 0.043 | | 0.047 | | 0.037 | | 0.022 | | 0.032 | | 0.037 | |

TABLE B-VI Nonlinear Dynamic Analysis Results for 8-Story Isolated Structure with Isolation System Type # 8 ($T = 2.0$ sec, $\beta = 30\%$). Excitation is Represented by Pairs of Scaled Earthquake Motions Recorded on Stiff Soil Sites (Representative of Soil Type S_1). Weight = 11520 kips, Height = 12 ft

| EXCITATION | BASE CENTER DISPL (INCH) | | CORNER BEARING DISPL (INCH) | | CORNER TO CENTER DISPL RATIO | BASE SHEAR WEIGHT | | 1st STORY SHEAR WEIGHT | | 1st STORY DRIFT HEIGHT (%) | |
|-----------------------|--------------------------|------|-----------------------------|-------|------------------------------|-------------------|-------|------------------------|-------|----------------------------|-------|
| | L | T | L | T | | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 3.53 | 1.86 | 3.68 | 2.07 | 1.11 | 0.095 | 0.080 | 0.093 | 0.073 | 0.226 | 0.200 |
| 12 EL CENTRO (117) | 6.64 | 5.37 | 6.97 | 6.08 | 1.13 | 0.142 | 0.119 | 0.121 | 0.105 | 0.286 | 0.282 |
| 13 PARKFIELD (014) | 1.24 | 2.34 | 1.30 | 2.74 | 1.17 | 0.076 | 0.088 | 0.054 | 0.087 | 0.136 | 0.238 |
| 14 SAN FERNANDO (110) | 5.08 | 2.70 | 5.24 | 2.95 | 1.09 | 0.107 | 0.081 | 0.110 | 0.079 | 0.276 | 0.207 |
| 15 SAN FERNANDO (135) | 3.74 | 9.92 | 4.71 | 12.77 | 1.29 | 0.086 | 0.174 | 0.089 | 0.160 | 0.225 | 0.394 |
| 16 SAN FERNANDO (208) | 4.13 | 6.15 | 4.51 | 7.71 | 1.25 | 0.092 | 0.128 | 0.084 | 0.120 | 0.209 | 0.291 |
| 17 SAN FERNANDO (211) | 5.05 | 5.60 | 5.41 | 7.12 | 1.27 | 0.105 | 0.123 | 0.094 | 0.116 | 0.224 | 0.287 |
| 18 SAN FERNANDO (466) | 3.43 | 7.56 | 3.98 | 9.27 | 1.23 | 0.075 | 0.143 | 0.068 | 0.132 | 0.168 | 0.324 |
| 19 SAN FERNANDO (253) | 4.90 | 8.65 | 5.63 | 11.27 | 1.30 | 0.096 | 0.154 | 0.088 | 0.139 | 0.206 | 0.333 |
| 20 SAN FERNANDO (199) | 4.60 | 4.38 | 5.29 | 5.72 | 1.31 | 0.107 | 0.102 | 0.094 | 0.093 | 0.224 | 0.251 |

| | | | | | | | | | | | |
|-----------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| MEAN | 4.23 | 5.45 | 4.67 | 6.77 | 1.22 | 0.098 | 0.119 | 0.090 | 0.110 | 0.218 | 0.281 |
| σ | 1.35 | 2.58 | 1.43 | 3.44 | 0.08 | 0.018 | 0.030 | 0.018 | 0.027 | 0.042 | 0.057 |
| MEAN OF MAX (L,T) | 6.01 | | 7.25 | | | 0.126 | | 0.117 | | 0.291 | |
| σ OF MAX (L,T) | 2.18 | | 3.01 | | | 0.026 | | 0.022 | | 0.047 | |

TABLE B-VI Continued

| EXCITATION | 2nd STORY SHEAR WEIGHT | | 3rd STORY SHEAR WEIGHT | | 4th STORY SHEAR WEIGHT | | 5th STORY SHEAR WEIGHT | | 6th STORY SHEAR WEIGHT | | 7th STORY SHEAR WEIGHT | | 8th STORY SHEAR WEIGHT | |
|-----------------------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.087 | 0.073 | 0.079 | 0.080 | 0.076 | 0.099 | 0.077 | 0.097 | 0.070 | 0.088 | 0.056 | 0.075 | 0.033 | 0.053 |
| 12 EL CENTRO (117) | 0.110 | 0.099 | 0.097 | 0.091 | 0.111 | 0.084 | 0.115 | 0.096 | 0.102 | 0.096 | 0.080 | 0.092 | 0.046 | 0.062 |
| 13 PARKFIELD (014) | 0.053 | 0.086 | 0.058 | 0.084 | 0.072 | 0.086 | 0.079 | 0.072 | 0.085 | 0.063 | 0.092 | 0.073 | 0.061 | 0.051 |
| 14 SAN FERNANDO (110) | 0.109 | 0.077 | 0.100 | 0.075 | 0.093 | 0.070 | 0.090 | 0.064 | 0.081 | 0.077 | 0.065 | 0.083 | 0.042 | 0.055 |
| 15 SAN FERNANDO (135) | 0.089 | 0.145 | 0.085 | 0.129 | 0.080 | 0.112 | 0.071 | 0.095 | 0.064 | 0.083 | 0.053 | 0.075 | 0.045 | 0.032 |
| 16 SAN FERNANDO (208) | 0.087 | 0.112 | 0.087 | 0.103 | 0.086 | 0.092 | 0.076 | 0.086 | 0.063 | 0.077 | 0.051 | 0.057 | 0.033 | 0.037 |
| 17 SAN FERNANDO (211) | 0.095 | 0.109 | 0.093 | 0.100 | 0.087 | 0.092 | 0.077 | 0.080 | 0.061 | 0.060 | 0.052 | 0.046 | 0.031 | 0.031 |
| 18 SAN FERNANDO (466) | 0.065 | 0.124 | 0.059 | 0.114 | 0.054 | 0.102 | 0.046 | 0.087 | 0.045 | 0.070 | 0.049 | 0.053 | 0.033 | 0.032 |
| 19 SAN FERNANDO (253) | 0.083 | 0.123 | 0.076 | 0.107 | 0.069 | 0.093 | 0.060 | 0.076 | 0.056 | 0.066 | 0.047 | 0.070 | 0.030 | 0.053 |
| 20 SAN FERNANDO (199) | 0.099 | 0.086 | 0.106 | 0.084 | 0.104 | 0.086 | 0.088 | 0.089 | 0.077 | 0.082 | 0.074 | 0.062 | 0.047 | 0.042 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.088 | 0.103 | 0.084 | 0.097 | 0.083 | 0.092 | 0.078 | 0.084 | 0.070 | 0.076 | 0.062 | 0.069 | 0.040 | 0.045 |
| σ | 0.017 | 0.022 | 0.015 | 0.016 | 0.016 | 0.011 | 0.017 | 0.010 | 0.016 | 0.011 | 0.015 | 0.013 | 0.009 | 0.011 |
| MEAN OF MAX (L,T) | 0.110 | 0.102 | 0.102 | 0.102 | 0.098 | 0.098 | 0.089 | 0.089 | 0.080 | 0.080 | 0.072 | 0.072 | 0.048 | 0.048 |
| σ OF MAX (L,T) | 0.017 | 0.013 | 0.013 | 0.013 | 0.008 | 0.008 | 0.011 | 0.011 | 0.011 | 0.011 | 0.014 | 0.014 | 0.011 | 0.011 |

TABLE B-VI Continued

| EXCITATION | 2nd STORY DRIFT (%) HEIGHT | | 3rd STORY DRIFT (%) HEIGHT | | 4th STORY DRIFT (%) HEIGHT | | 5th STORY DRIFT (%) HEIGHT | | 6th STORY DRIFT (%) HEIGHT | | 7th STORY DRIFT (%) HEIGHT | | 8th STORY DRIFT (%) HEIGHT | |
|-----------------------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|----------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF (117) | 0.212 | 0.183 | 0.196 | 0.192 | 0.244 | 0.349 | 0.247 | 0.344 | 0.227 | 0.303 | 0.275 | 0.384 | 0.163 | 0.280 |
| 12 EL CENTRO (117) | 0.263 | 0.273 | 0.234 | 0.245 | 0.352 | 0.310 | 0.366 | 0.329 | 0.324 | 0.324 | 0.375 | 0.478 | 0.207 | 0.335 |
| 13 PARKFIELD (014) | 0.129 | 0.242 | 0.134 | 0.229 | 0.228 | 0.297 | 0.257 | 0.261 | 0.266 | 0.221 | 0.441 | 0.382 | 0.288 | 0.270 |
| 14 SAN FERNANDO (110) | 0.257 | 0.200 | 0.238 | 0.189 | 0.306 | 0.252 | 0.282 | 0.219 | 0.255 | 0.259 | 0.314 | 0.432 | 0.196 | 0.291 |
| 15 SAN FERNANDO (135) | 0.210 | 0.377 | 0.197 | 0.322 | 0.251 | 0.378 | 0.229 | 0.347 | 0.205 | 0.299 | 0.254 | 0.399 | 0.152 | 0.243 |
| 16 SAN FERNANDO (208) | 0.203 | 0.281 | 0.207 | 0.244 | 0.274 | 0.313 | 0.241 | 0.316 | 0.199 | 0.280 | 0.247 | 0.316 | 0.160 | 0.199 |
| 17 SAN FERNANDO (211) | 0.217 | 0.278 | 0.215 | 0.244 | 0.274 | 0.337 | 0.240 | 0.295 | 0.190 | 0.224 | 0.247 | 0.258 | 0.151 | 0.167 |
| 18 SAN FERNANDO (466) | 0.159 | 0.317 | 0.148 | 0.280 | 0.176 | 0.340 | 0.149 | 0.288 | 0.145 | 0.239 | 0.234 | 0.275 | 0.156 | 0.168 |
| 19 SAN FERNANDO (253) | 0.194 | 0.311 | 0.181 | 0.262 | 0.222 | 0.309 | 0.203 | 0.270 | 0.180 | 0.230 | 0.226 | 0.356 | 0.135 | 0.269 |
| 20 SAN FERNANDO (199) | 0.228 | 0.241 | 0.247 | 0.224 | 0.333 | 0.302 | 0.287 | 0.315 | 0.248 | 0.281 | 0.361 | 0.319 | 0.227 | 0.220 |

| | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 0.207 | 0.270 | 0.200 | 0.243 | 0.266 | 0.319 | 0.250 | 0.298 | 0.224 | 0.266 | 0.297 | 0.360 | 0.184 | 0.244 |
| σ | 0.038 | 0.054 | 0.035 | 0.057 | 0.051 | 0.033 | 0.054 | 0.038 | 0.049 | 0.035 | 0.069 | 0.066 | 0.044 | 0.052 |
| MEAN OF MAX (L,T) | 0.279 | 0.251 | 0.251 | 0.331 | 0.331 | 0.308 | 0.271 | 0.370 | 0.247 | 0.247 | 0.370 | 0.247 | 0.247 | 0.247 |
| σ OF MAX (L,T) | 0.045 | 0.031 | 0.031 | 0.024 | 0.024 | 0.033 | 0.031 | 0.068 | 0.031 | 0.031 | 0.068 | 0.068 | 0.053 | 0.053 |

TABLE B-VII Nonlinear Dynamic Analysis Results for 8-Story Isolated Structure with Isolation System Type # 9 (T = 2.5 sec, $\beta = 10\%$). Excitation is Represented by Pairs of Scaled Earthquake Motions Recorded on Stiff Soil Sites (Representative of Soil Type S₁). Weight = 11520 kips, Height = 12 ft

| EXCITATION | BASE CENTER DISPL. (INCH) | | CORNER BEARING DISPL (INCH) | | CORNER TO CENTER DISPL RATIO | BASE SHEAR WEIGHT | | 1st STORY SHEAR WEIGHT | | 1st STORY DRIFT HEIGHT (%) | |
|-----------------------|---------------------------|-------|-----------------------------|-------|------------------------------|-------------------|-------|------------------------|-------|----------------------------|-------|
| | L | T | L | T | | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 5.57 | 3.24 | 5.92 | 3.94 | 1.22 | 0.092 | 0.062 | 0.093 | 0.058 | 0.225 | 0.144 |
| 12 EL CENTRO (117) | 11.05 | 9.40 | 11.96 | 12.23 | 1.30 | 0.178 | 0.135 | 0.156 | 0.123 | 0.359 | 0.312 |
| 13 PARKFIELD (014) | 2.78 | 5.98 | 3.28 | 7.80 | 1.30 | 0.054 | 0.101 | 0.050 | 0.086 | 0.124 | 0.211 |
| 14 SAN FERNANDO (110) | 5.72 | 3.19 | 5.82 | 3.39 | 1.06 | 0.094 | 0.063 | 0.094 | 0.062 | 0.230 | 0.164 |
| 15 SAN FERNANDO (135) | 6.86 | 14.78 | 7.83 | 20.60 | 1.39 | 0.111 | 0.215 | 0.102 | 0.197 | 0.249 | 0.473 |
| 16 SAN FERNANDO (208) | 10.88 | 14.18 | 11.61 | 20.37 | 1.44 | 0.173 | 0.204 | 0.157 | 0.184 | 0.372 | 0.439 |
| 17 SAN FERNANDO (211) | 11.08 | 12.15 | 11.80 | 17.52 | 1.44 | 0.175 | 0.176 | 0.159 | 0.159 | 0.375 | 0.379 |
| 18 SAN FERNANDO (466) | 16.93 | 22.34 | 18.50 | 29.91 | 1.34 | 0.244 | 0.308 | 0.222 | 0.279 | 0.539 | 0.643 |
| 19 SAN FERNANDO (253) | 15.27 | 17.11 | 15.99 | 23.61 | 1.38 | 0.219 | 0.251 | 0.200 | 0.232 | 0.475 | 0.542 |
| 20 SAN FERNANDO (199) | 11.97 | 9.94 | 13.29 | 12.94 | 1.30 | 0.189 | 0.148 | 0.169 | 0.133 | 0.405 | 0.316 |

| | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| MEAN | 9.81 | 11.23 | 10.60 | 15.23 | 1.32 | 0.153 | 0.166 | 0.140 | 0.151 | 0.335 | 0.362 |
| σ | 4.27 | 5.84 | 4.57 | 8.27 | 0.11 | 0.058 | 0.076 | 0.051 | 0.069 | 0.120 | 0.156 |
| MEAN OF MAX (L,T) | 12.09 | | 15.71 | | | 0.181 | | 0.165 | | 0.391 | |
| σ OF MAX (L,T) | 5.13 | | 7.66 | | | 0.069 | | 0.060 | | 0.135 | |

TABLE B-VII Continued

| EXCITATION | 2nd STORY SHEAR WEIGHT | | 3rd STORY SHEAR WEIGHT | | 4th STORY SHEAR WEIGHT | | 5th STORY SHEAR WEIGHT | | 6th STORY SHEAR WEIGHT | | 7th STORY SHEAR WEIGHT | | 8th STORY SHEAR WEIGHT | |
|-----------------------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|------------------------------|-------|
| | L | T | L | T | L | T | L | T | L | T | L | T | L | T |
| 11 LOWER CALIF. (117) | 0.092 | 0.061 | 0.091 | 0.062 | 0.087 | 0.059 | 0.077 | 0.050 | 0.063 | 0.043 | 0.047 | 0.032 | 0.027 | 0.024 |
| 12 EL CENTRO (117) | 0.135 | 0.109 | 0.124 | 0.097 | 0.113 | 0.087 | 0.097 | 0.075 | 0.076 | 0.060 | 0.052 | 0.055 | 0.027 | 0.036 |
| 13 PARKFIELD (014) | 0.046 | 0.075 | 0.041 | 0.068 | 0.039 | 0.061 | 0.039 | 0.054 | 0.039 | 0.046 | 0.041 | 0.042 | 0.026 | 0.029 |
| 14 SAN FERNANDO (110) | 0.091 | 0.060 | 0.087 | 0.058 | 0.083 | 0.054 | 0.075 | 0.043 | 0.062 | 0.033 | 0.047 | 0.038 | 0.027 | 0.025 |
| 15 SAN FERNANDO (135) | 0.093 | 0.178 | 0.157 | 0.083 | 0.134 | 0.071 | 0.110 | 0.061 | 0.085 | 0.050 | 0.059 | 0.037 | 0.031 | 0.020 |
| 16 SAN FERNANDO (208) | 0.140 | 0.163 | 0.122 | 0.142 | 0.104 | 0.119 | 0.085 | 0.095 | 0.066 | 0.073 | 0.047 | 0.050 | 0.024 | 0.026 |
| 17 SAN FERNANDO (211) | 0.141 | 0.141 | 0.122 | 0.123 | 0.103 | 0.103 | 0.084 | 0.083 | 0.066 | 0.064 | 0.048 | 0.044 | 0.025 | 0.023 |
| 18 SAN FERNANDO (466) | 0.198 | 0.249 | 0.173 | 0.218 | 0.147 | 0.186 | 0.119 | 0.152 | 0.091 | 0.116 | 0.062 | 0.079 | 0.031 | 0.040 |
| 19 SAN FERNANDO (253) | 0.179 | 0.211 | 0.156 | 0.189 | 0.132 | 0.164 | 0.109 | 0.136 | 0.085 | 0.106 | 0.059 | 0.073 | 0.030 | 0.038 |
| 20 SAN FERNANDO (199) | 0.149 | 0.117 | 0.128 | 0.100 | 0.109 | 0.082 | 0.089 | 0.068 | 0.070 | 0.055 | 0.049 | 0.040 | 0.025 | 0.021 |
| MEAN | 0.126 | 0.136 | 0.120 | 0.114 | 0.105 | 0.099 | 0.088 | 0.082 | 0.070 | 0.065 | 0.051 | 0.049 | 0.027 | 0.028 |
| σ | 0.043 | 0.061 | 0.037 | 0.052 | 0.029 | 0.043 | 0.022 | 0.035 | 0.014 | 0.026 | 0.006 | 0.015 | 0.002 | 0.007 |
| MEAN OF MAX (L,T) | 0.148 | | 0.133 | | 0.116 | | 0.097 | | 0.076 | | 0.055 | | 0.030 | |
| σ OF MAX (L,T) | 0.062 | | 0.044 | | 0.036 | | 0.028 | | 0.020 | | 0.012 | | 0.005 | |