



March 4, 2021

102-737

Quincy Property, L.L.C.
900 NW Vesper Road
Blue Springs, MO 64015

ATTN: Mr. Ken Logan

RE: Structural Assessment of Building at 200 Maine Street, Quincy, IL

Mr. Logan:

Per your request, we completed our structural assessment of the subject building exterior stairwells and exterior walkway balconies at the Welcome Inn hotel. We conducted the assessment to address the structural deficiency concerns brought forth by the City of Quincy, IL. During the morning of February 23, 2021, Matt Cissi performed onsite observations and photography of the subject areas, select photos are included in this report. Since this report only includes select photos taken during the site visit, the others can be made available upon request.

Based on the onsite observations, several types of structural issues were observed. These issues, in general, include:

1. Broken or damaged column sheathing, exposing the columns to weather shown in PHOTO 1.
2. Paint delamination on the underside of exterior walkways and HSS beams shown in PHOTO 2 and PHOTO 3, respectively.
3. Corrosion of railings at support points shown in PHOTO 4.
4. Longitudinal cracking of exterior walkway hollow-core precast panels at construction joints (PHOTO 5) and adjacent to construction joints (PHOTO 6).
5. Moderate to severe corrosion of steel HSS beams. Moderate corrosion shown in PHOTO 7, severe corrosion shown in PHOTO 8.
6. Separation of steel HSS beams from supported concrete panels, shown in PHOTO 9.
7. Spalling concrete on the underside of exterior walkway panels exposing reinforcing strands shown in PHOTO 10.
8. Topping material cracking at hollow-core construction joint locations shown in PHOTO 11.
9. Moderate to severe corrosion of landing support beams in the exterior stairwells shown in PHOTO 12 and PHOTO 13, respectively.
10. Cracking of central support column in exterior stairwells shown in PHOTO 14.
11. Extensive concrete spalling of exterior stairwell intermediate landings, exposing reinforcing steel shown in PHOTO 15.
12. Severe corrosion at handrail support locations shown in PHOTO 16.

13. Longitudinal cracking parallel to panel joints on the underside of the exterior walkway exposing reinforcing strands shown in PHOTO 17.
14. Spalling of steps in exterior stairwells shown in PHOTO 18.
15. Longitudinal cracking on the underside of stairway flights in exterior walkways shown in PHOTO 19.

Based on the variance of deterioration of these structural components, we have divided them into three tiers.

Structural components classified as being in Tier 1 require immediate action to prevent damage to property or injury to persons, a general example of Tier 1 structural distress can be seen in PHOTO 20. Structural components identified as being in Tier 1 would include any reinforced concrete member with exposed steel reinforcing bars or strands, any steel HSS (Hollow Structural Section) exhibiting severe corrosion, and any hand railing that has broken loose of one or more of its anchor points or corroded to the extent of being unsafe. Photos of each specific area are identified in the "Structural Components Classified as Tier 1" section and attached later in this report.

Structural components identified as being in Tier 2 require further investigation to determine the extent of damage/degradation, an general example of Tier 2 structural distress can be seen in PHOTO 21. Structural components identified as being in Tier 2 would include any hollow-core slab (elevated exterior walkways) showing transverse cracking at midspan, any hollow-core slab exhibiting longitudinal cracking adjacent to a panel joint, any hollow-core slab that was covered with sheathing preventing visual inspection, any steel HSS beam covered with sheathing preventing visual inspection, any steel HSS beam adjacent to a hollow-core slab covered with sheathing preventing visual inspection of said steel HSS beam, any reinforced concrete column exhibiting moderate cracking, or any reinforced concrete stairway flight section exhibiting longitudinal or other moderate cracking.

Structural components identified as being in Tier 3 will require preventative maintenance in the future to prevent significant degradation, an general example of example of Tier 3 structural distress can be seen in PHOTO 22. Structural components identified as being in Tier 3 would include any hollow-core slab exhibiting peeling or flaking paint, any steel HSS beam exhibiting peeling or flaking paint, any hand railing exhibiting peeling or flaking paint, any column wrap that is damaged in such a way as to allow water intrusion, and any other wrap that is damaged in such a way as to allow water intrusion.

Structural components classified as Tier 1 are as follows:

1. Stairway flight from 2nd level landing to intermediate landing between levels 2 and 3 in the northwest stairwell. PHOTO 23
2. Steel HSS beam supporting 3rd level landing in northwest stairwell. PHOTO 24
3. Intermediate landing between 2nd and 3rd level in the northwest stairwell. PHOTO 25
4. Hand railing in the northwest stairwell. PHOTO 26
5. Intermediate landing between ground level and 2nd floor in the northwest stairwell. PHOTO 27

6. Intermediate landing between the 3rd and 4th level in the northwest stairwell. PHOTO28
7. Hand railing between the 2nd and 3rd level in the southwest stairwell. PHOTO 29
8. Steel HSS beam supporting the 3rd level landing in southwest stairwell. PHOTO 30
9. Intermediate landing between the ground level and 2nd floor in the northeast stairwell. PHOTO 31
10. Center column in the northeast stairwell. PHOTO 32
11. Stairway flight between 2nd level and intermediate landing in the northeast stairwell. PHOTO 33
12. Stairway flight between the intermediate landing and the 3rd floor in the northeast stairwell. PHOTO 34
13. Steel HSS beam under the 3rd level landing in the northeast stairwell. PHOTO 35
14. Hand railing from the 2nd level to the 3rd level in the northeast stairwell. PHOTO 36
15. Stairway flight between the 4th level and the intermediate landing in the southwest stairwell. PHOTO 37
16. Steel HSS beam supporting the 2nd floor landing in the southwest stairwell. PHOTO38
17. Hand railing between the 1st level and the 2nd level in the southwest stairwell. PHOTO 39
18. Intermediate landing between the 1st and 2nd level in the southwest stairwell. PHOTO 40
19. Hand railing from the 3rd level to the 4th level in the southeast stairwell. PHOTO 41
20. Stairway flight between the intermediate landing and 4th level in the southeast stairwell. PHOTO 42
21. Intermediate landing between the 3rd and 4th level in the southeast stairwell. PHOTO43
22. Intermediate landing between the 2nd and 3rd level in the southeast stairwell. PHOTO 44
23. Hand railing between the 2nd and 3rd level in the southeast stairwell. PHOTO 45
24. Steel HSS beam supporting the 3rd level landing in the southeast stairwell. PHOTO46
25. Hollow-core panel in front of room 117 between 1st and 2nd level. PHOTO 47
26. Hollow-core slab in front of room 118. PHOTO 48
27. Hollow-core slab in southwest corner of building between the 1st and 2nd levels. PHOTO 49
28. Hollow-core slab in front of room 122. PHOTO 50
29. Hollow-core slab in front of room 123 (2nd floor landing of southwest stairwell). PHOTO 51
30. Hollow-core slab in front of room 124. PHOTO 52
31. Hollow-core slab between 1st and 2nd level on the south side of the western interior stairwell. PHOTO 53
32. Hollow-core slab in front of room 201 between 2nd and 3rd levels. PHOTO 54
33. Hollow-core slab in front of room 203 between 2nd and 3rd levels. PHOTO 55
34. Hollow-core slab in front of room 204 between 2nd and 3rd levels. PHOTO 56
35. Hollow-core slab in front of room 208 between 2nd and 3rd levels. PHOTO 57
36. Hand railing in front of room 310. PHOTO 58
37. Hollow-core slab north of the western interior stairwell between 2nd and 3rd level. PHOTO 59

38. Hollow-core slab in front of room 216 between 2nd and 3rd level. PHOTO 60
39. Hollow-core slab in front of room 217 between 2nd and 3rd level. PHOTO 61
40. Hollow-core slab west of room 217 (second full length slab from west end of building) between 2nd and 3rd level. PHOTO 62
41. Hollow-core slab west of room 217 (last full-length slab from west end of building) between 2nd and 3rd level. PHOTO 63
42. Hollow-core slab west of room 222 (second to last full-length slab from west end of building) between 2nd and 3rd level. PHOTO 64
43. Hollow-core slab in front of room 222 between 2nd and 3rd level. PHOTO 65
44. Hollow-core slab in front of room 223 between 2nd and 3rd level. PHOTO 66
45. Hollow-core slab in front of room 224 between 2nd and 3rd level. PHOTO 67
46. Hollow-core slab south of western interior stairwell between 2nd and 3rd level. PHOTO 68
47. Hollow-core slab in front of room 226 between 2nd and 3rd level. PHOTO 69
48. Hollow-core slab in front of room 231 between 2nd and 3rd level. PHOTO 70
49. Hollow-core slab in front of room 301 between 3rd and 4th level. PHOTO 71
50. Hollow-core slab in front of room 302 between 3rd and 4th level. PHOTO 72
51. Hollow-core slab in front of room 304 between 3rd and 4th level. PHOTO 73
52. Hollow-core slab in front of room 305 between 3rd and 4th level. PHOTO 74
53. Hollow-core slab in front of room 309 between 3rd and 4th level. PHOTO 75
54. Hollow-core slab in front of room 314 between 3rd and 4th level. PHOTO 76
55. Hollow-core slab to the west of room 317 (second full length slab from west end of building) between 3rd and 4th level. PHOTO 77
56. Hollow-core slab in front of room 324 between 3rd and 4th level. PHOTO 78
57. Hollow-core slab on south side of western interior stairwell between 3rd and 4th level. PHOTO 79
58. Hollow-core slab in front of room 325 (unmarked room) between 3rd and 4th level. PHOTO 80
59. Hollow-core slab in front of room 326 between 3rd and 4th level. PHOTO 81
60. Hollow-core slab in front of room 333 between 3rd and 4th level. PHOTO 82

Structural components classified as Tier 2 are as follows:

1. Steel HSS beam supporting the landing on the 2nd level in the northeast stairwell.
2. Intermediate landing between the 3rd level and 4th level in the northeast stairwell.
3. Stairway flight to landing joint between the intermediate landing and 4th level in the northeast stairwell.
4. Stairway flight between the intermediate landing and 4th level in southwest stairwell.
5. Intermediate landing between 2nd and 3rd level in the southwest stairwell.
6. Stairway flight between the 2nd level and intermediate landing in the southwest stairwell.
7. Hand railing between the 2nd level and the intermediate landing in the southwest stairwell.
8. Central column in the southwest.
9. Center column in the northwest stairwell.
10. Steel HSS beam supporting the 4th floor landing in the southeast stairwell.
11. Center column in the southeast stairwell.
12. Stairway flight between the 3rd level and intermediate landing in the southeast stairwell.

13. Hand railing between the 2nd and 3rd level in the stairwell.
14. Hollow-core slab east of room 115 (marked 344).
15. Hollow-core slab in front of room 115 (marked 344).
16. Steel HSS beam between room 115 (marked 344) and room 116.
17. Hollow-core slab in front of room 116.
18. Steel HSS beam supporting 2nd level landing in the northwest stairwell.
19. Steel HSS beam between room 116 and 117.
20. Hollow-core slab to the west of room 117 (second full length slab from end of building).
21. Steel HSS beam west of room 117 (second from end of building).
22. Hollow-core slab west of room 117 (last full-length slab from end of building).
23. Hollow-core slab in front of room 119.
24. Steel HSS beam between room 123 and 124.
25. Steel HSS beam between rooms 202 and 203.
26. Hollow-core slab in front of room 205 between 2nd and 3rd levels.
27. Steel HSS beam between room 206 and 207.
28. Steel HSS beam between room 207 and 208.
29. Steel HSS beam between room 208 and 209.
30. Steel HSS beam between room 210 and 211.
31. Steel HSS beam between room 212 and 213.
32. Hollow-core slab in front of room 213 between 2nd and 3rd level.
33. Hollow-core slab in front of room 214 between 2nd and 3rd level.
34. Steel HSS beam between room 214 and western interior stairwell.
35. Hollow-core slab in front of room 215 between 2nd and 3rd level.
36. Hollow-core slab in front of room 216 between 2nd and 3rd level.
37. Steel HSS beam between room 215 and 216.
38. Steel HSS beam between room 216 and 217.
39. Steel HSS beam to the west of room 217 (3rd from west end of building).
40. Steel HSS beam between room 222 and 223.
41. Steel HSS beam between room 223 and 224.
42. Steel HSS beam between western interior stairwell and room 225 (marked "laundry" room).
43. Hollow-core slab in front of room 225 (marked "laundry" room) between 2nd and 3rd floor.
44. Hollow-core slab in front of room 227 between 2nd and 3rd level.
45. Steel HSS beam between room 228 and 229.
46. Hollow-core slab in front of room 228 between 2nd and 3rd level.
47. Steel HSS beam between room 231 and 232.
48. Hollow-core slab in front of room 232 between 2nd and 3rd level (3rd level landing in southeast stairwell).
49. Steel HSS beam between room 232 and 233.
50. Steel HSS beam between room 234 and 235.
51. Steel HSS beam between room 236 and 237.
52. Steel HSS beam to the east of room 238.
53. Steel HSS beam between room 302 and 303.
54. Steel HSS beam between room 304 and 305.
55. Steel HSS beam between room 306 and 307.
56. Hollow-core slab in front of room 307 between 3rd and 4th level.

57. Steel HSS beam between room 307 and 308.
58. Hollow-core slab in front of room 308 between 3rd and 4th level.
59. Steel HSS beam between room 308 and 309.
60. Hollow-core slab in front of room 310 between 3rd and 4th level.
61. Steel HSS beam between room 310 and 311.
62. Hollow-core slab in front of room 311 between 3rd and 4th level.
63. Steel HSS beam between room 312 and 313.
64. Hollow-core slab in front of room 312 between 3rd and 4th level.
65. Hollow-core slab in front of room 313 between 3rd and 4th level.
66. Hollow-core slab in front of room 313 between 2nd and 3rd level.
67. Hollow-core slab in north of western interior stairwell between 2nd and 3rd level.
68. Steel HSS beam between room 314 and western interior stairwell.
69. Steel HSS beam between room 315 and 316.
70. Hollow-core slab in front of room 316 between 3rd and 4th level (4th level landing in the northwest stairwell).
71. Steel HSS beam between room 316 and 317.
72. Steel HSS beam to the west of room 317 (third beam from the west end of the building).
73. Hollow-core slab to the west of room 317 (last full-length slab on west end of building) between 3rd and 4th level.
74. Hollow-core slab in the northwest corner of building between 3rd and 4th level.
75. Hollow-core slab in the northwest corner of building between 2nd and 3rd level.
76. Hollow-core slab in front of room 319 between 3rd and 4th level.
77. Hollow-core slab in the southwest corner of building between 2nd and 3rd level.
78. Steel HSS beam to the west of room 322 (third beam from west end of building).
79. Hollow-core slab in front of room 322 between 3rd and 4th level.
80. Steel HSS beam between room 322 and 323.
81. Hollow-core slab in front of room 323 between 3rd and 4th level.
82. Steel HSS beam between room 323 and 324.
83. Steel HSS beam between western interior stairwell and room 325 (unmarked room).
84. Steel HSS beam between room 328 and 329.
85. Hollow-core slab in front of room 329 between 3rd and 4th level.
86. Hollow-core slab in front of room 330 between 3rd and 4th level.
87. Steel HSS beam between room 330 and 331.
88. Hollow-core slab in front of room 331 between 3rd and 4th level.
89. Steel HSS beam between room 331 and 332.
90. Hollow-core slab in front of room 332 between 3rd and 4th level.
91. Steel HSS beam between room 332 and 333.
92. Hollow-core slab in front of room 335 between 3rd and 4th level.
93. Hollow-core slab in front of room 337 between 3rd and 4th level.
94. Hollow-core slab in front of room 338 between 3rd and 4th level.

Structural components classified as Tier 3 are as follows:

1. Steel HSS beam supporting the landing on the 4th level in the southwest stairwell.
2. Hand railing in the southwest stairwell.
3. Intermediate landing between the 4th level and 3rd level in the southwest stairwell.
4. Steel HSS beam supporting the 3rd level landing in the southwest stairwell.
5. Stairway flight between the 1st and 2nd level in the southwest stairwell.

6. Hand railing between the 3rd and 4th level in the southeast stairwell.
7. Stairway flight between the 2nd and 3rd level in the southeast stairwell.
8. Column wrap between room 201 and 202.
9. Column wrap to the east of room 201.
10. Column wrap between room 118 and 119.
11. Column wrap to the west of room 117.
12. Column wrap between room 120 and 121.
13. Column wrap to the south of rooms 121, 221, 321, 421.
14. Steel HSS beam supporting Hollow-core slabs on to the east of the 1st level interior stairwell on the north side of the building.
15. Steel HSS beam directly to the east of room 115 (marked 344).
16. Steel HSS beam west of room 117 (on far west end of building).
17. Hollow-core slab between 1st and 2nd level in the north west corner of the building.
18. Steel HSS north of room 118.
19. Steel HSS beam between room 118 and 119.
20. Steel HSS beam between room 119 and 120.
21. Hollow-core slabs in front of rooms 120 and 121.
22. Steel HSS beam between room 120 and 121.
23. Steel HSS beam south of room 121.
24. Steel HSS beam west of room 122 (western most beam on south side of building).
25. Hollow-core slabs (last two full length slabs) on the south side of the building between the 1st and 2nd levels.
26. Steel HSS beam between room 124 and the interior stairwell.
27. Steel HSS beam supporting 2nd level slabs on the south side of the building to the east of the interior stairwell.
28. "Barrier wrap" on the east and north side of room 201.
29. Two eastern most columns on the north side of the building.
30. Steel HSS beam east of room 201.
31. Steel HSS beam between rooms 201 and 202.
32. Steel HSS beam between rooms 203 and 204.
33. Steel HSS beam between rooms 204 and 205.
34. Column wrap between rooms 205 and 206.
35. Steel HSS beam between rooms 205 and 206.
36. Column wrap on the southeast column in the northeast stairwell.
37. Column wrap on the southwest column in the northeast stairwell.
38. Steel HSS beam between room 209 and 210.
39. Hollow-core slab in front of room 209 between 2nd and 3rd level.
40. Hollow-core slab in front of room 210 between 2nd and 3rd level.
41. Column wrap between room 209 and 210.
42. Hollow-core slab in front of room 211 between 2nd and 3rd level.
43. Hollow-core slab in front of room 212 between 2nd and 3rd level.
44. Steel HSS beam between room 211 and 212.
45. Column wrap between room 212 and 213.
46. Hand railing in front of room 212.
47. Column wrap between room 213 and 214.
48. Steel HSS beam between room 213 and 214.
49. Hand railing in front of room 214.
50. Column wrap between room 214 and western interior stairwell.

51. Steel HSS beam between western interior stairwell and room 215.
52. Column wrap to the west of room 217 (all three columns).
53. Steel HSS beam west of room 217 (second from end on west of building).
54. Steel HSS beam west of room 217 (last beam on west end of building).
55. Hollow-core slab in northwest corner of building between 2nd and 3rd level.
56. Steel HSS beam north of room 218.
57. Hollow-core slab in front of room 218 between 2nd and 3rd level.
58. Steel HSS beam between room 218 and 219.
59. Hand railing on west side of building on 2nd level.
60. Hollow-core slab in front of room 219 between 2nd and 3rd level.
61. Steel HSS beam between room 219 and 220.
62. Steel HSS beam between room 220 and 221.
63. Hollow-core slab in front of room 220 between 2nd and 3rd level.
64. Steel HSS beam to the south of room 221.
65. Hollow-core slab on southwest corner of building between 2nd and 3rd level.
66. Column wrap on western most column on south side of building.
67. Three Steel HSS beam west of room 222.
68. Hollow-core slab west of room 222 (last full-length slab) between 2nd and 3rd level.
69. Steel HSS beam between room 224 and western interior stairwell.
70. Column wrap on both columns between room 224 and 225 (marked "laundry" room).
71. Steel HSS beam between room 225 (marked "laundry" room) and room 226.
72. Steel HSS beam between room 225 and 226.
73. Column wrap between room 228 and 229.
74. Column wrap between room 229 and 230.
75. Steel HSS beam between room 229 and 230.
76. Steel HSS beam between room 230 and 231.
77. Hollow-core slabs in front of rooms 229 and 230 between the 2nd and 3rd level.
78. Hollow-core slab in front of room 233 between 2nd and 3rd level.
79. Steel HSS beam between 233 and 234.
80. Hollow-core slab in front of room 234 between 2nd and 3rd level.
81. Hollow-core slab in front of room 235 between 2nd and 3rd level.
82. Steel HSS beam between room 235 and 236.
83. Hollow-core slab in front of room 236 between 2nd and 3rd level.
84. Hollow-core slab in front of room 237 between 2nd and 3rd level.
85. Steel HSS beam between room 237 and 238.
86. Hollow-core slab in front of room 238 between 2nd and 3rd level.
87. Steel HSS beam to the east of room 301.
88. Steel HSS beam between room 301 and 302.
89. Steel HSS beam between room 303 and 304.
90. Steel HSS beam between room 305 and 306.
91. Hollow-core slab in front of room 306 between 3rd and 4th level.
92. Steel HSS beam between room 309 and 310.
93. Steel HSS beam between room 311 and 312.
94. Steel HSS beam between room 313 and 314.
95. Hollow-core slab to the north of western interior stairwell between 3rd and 4th level.
96. Steel HSS beam between western interior stairwell and room 315.
97. Hollow-core slab in front of room 315 between 3rd and 4th level.
98. Hollow-core slab in front of room 317 between 3rd and 4th level.

99. Steel HSS beam west of room 317 (second from west end of building).
100. Steel HSS beam west of room 317 (last beam on north side of building).
101. Steel HSS beam north of room 318.
102. Steel HSS beam between room 318 and 319.
103. Hollow-core slab in front of room 319 between 3rd and 4th level.
104. Steel HSS beam between room 319 and 320.
105. Hollow-core slab in front of room 320 between 3rd and 4th level.
106. Steel HSS beam between room 320 and 321.
107. Hollow-core slab in front of room 321 between 3rd and 4th level.
108. Steel HSS beam south of room 321.
109. Hollow-core slab in southwest corner of building between 3rd and 4th level.
110. Hollow-core slab west of room 322 (last full-length slab on west end of building) between 3rd and 4th level.
111. Steel HSS beam west of room 322 (second from west end of building).
112. Hollow-core slab west of room 322 (second to last full-length slab on west end of building) between 3rd and 4th level.
113. Steel HSS beam between room 324 and western interior stairwell.
114. Steel HSS beam between room 325 (unmarked room) and 326.
115. Steel HSS beam between room 326 and 327.
116. Hollow-core slab in front of room 327 between 3rd and 4th level.
117. Steel HSS beam between room 327 and 328.
118. Hollow-core slab in front of room 328 between 3rd and 4th level.
119. Steel HSS beam between room 329 and 330.
120. Steel HSS beam between room 333 and 334.
121. Hollow-core slab in front of room 334 between 3rd and 4th level.
122. Steel HSS beam between room 334 and 335.
123. Hollow-core slab in front of room 335 between 3rd and 4th level.
124. Steel HSS beam between room 335 and 336.
125. Hollow-core slab in front of room 336 between 3rd and 4th level.
126. Steel HSS beam between room 336 and 337.
127. Steel HSS beam between room 337 and 338.
128. Steel HSS beam east of room 338.
129. All hollow-core slabs on the north side of level 4 between 4th level and roof.
130. All steel HSS beams on the north side of level 4.
131. All hollow-core slabs on the west side of level 4 between the 4th level and roof.
132. All steel HSS beams on the west side of level 4.
133. All hollow-core slabs on the south side of level 4 between the 4th level and roof.
134. All steel HSS beams on the south side of level 4.



PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4

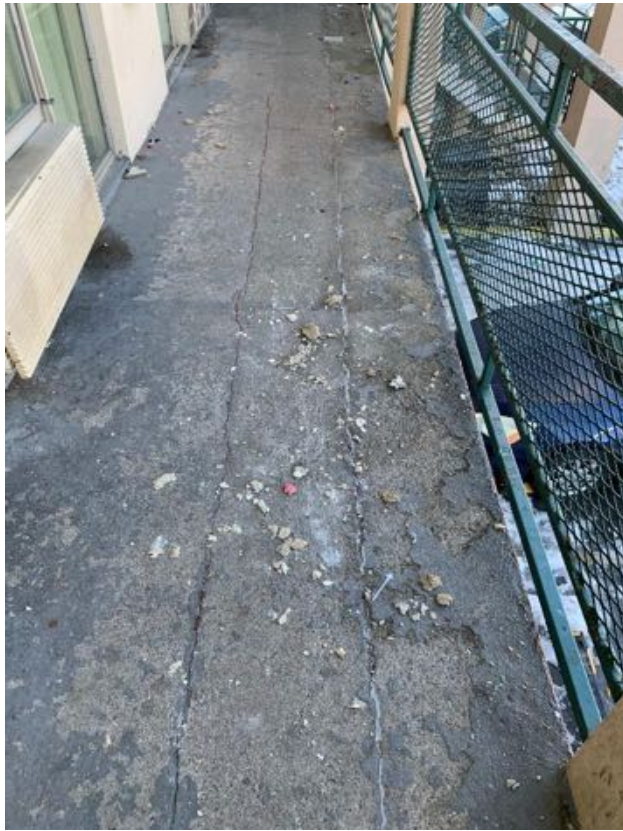


PHOTO 5



PHOTO 6



PHOTO 7



PHOTO 8



PHOTO 9



PHOTO 10



PHOTO 11



PHOTO 12



PHOTO 13



PHOTO 14



PHOTO 15



PHOTO 16



PHOTO 17



PHOTO 18



PHOTO 19



PHOTO 20



PHOTO 21



PHOTO 22



PHOTO 23



PHOTO 24



PHOTO 25



PHOTO 26



PHOTO 27



PHOTO 28



PHOTO 29



PHOTO 30



PHOTO 31



PHOTO 32



PHOTO 33



PHOTO 34 (Bottom)



PHOTO 34 (Top)



PHOTO 35



PHOTO 36



PHOTO 37



PHOTO 38



PHOTO 39



PHOTO 40



PHOTO 41



PHOTO 42



PHOTO 43



PHOTO 44

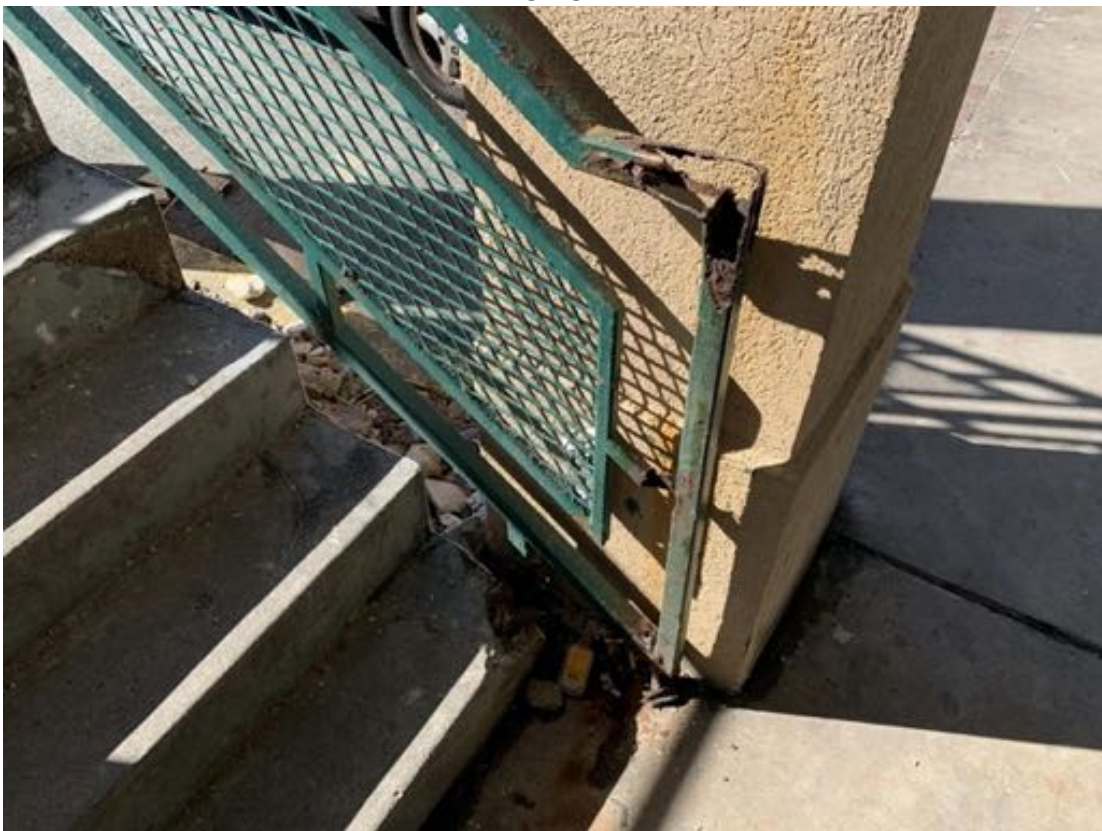


PHOTO 45



PHOTO 46



PHOTO 47



PHOTO 48



PHOTO 49



PHOTO 50



PHOTO 51



PHOTO 52



PHOTO 53



PHOTO 54



PHOTO 55



PHOTO 56



PHOTO 57



PHOTO 58



PHOTO 59



PHOTO 60



PHOTO 61



PHOTO 62



PHOTO 63



PHOTO 64

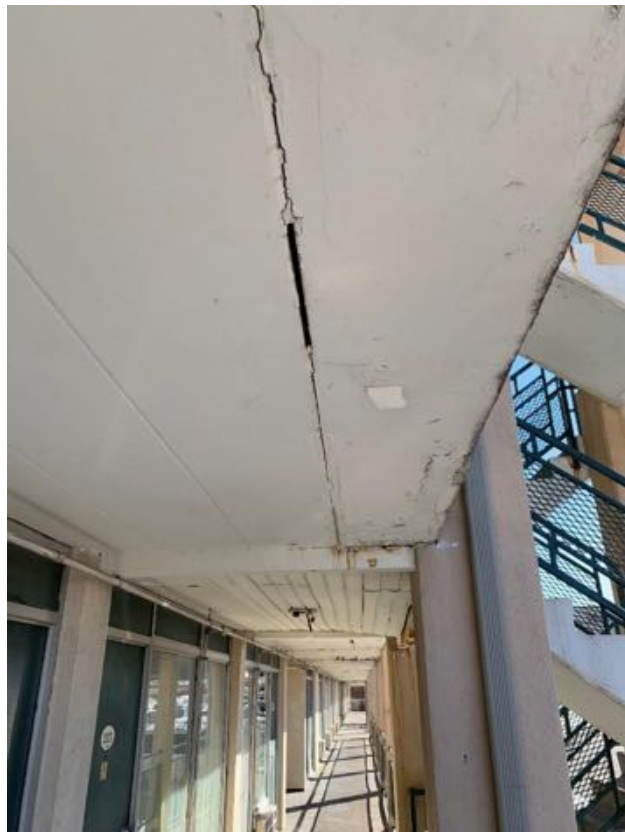


PHOTO 65



PHOTO 66



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PHOTO 70



PHOTO 71



PHOTO 72



PHOTO 73



PHOTO 74



PHOTO 75



PHOTO 76



PHOTO 77



PHOTO 78



PHOTO 79



PHOTO 80



PHOTO 81



PHOTO 82

To summarize, the following table shows the different types of structural components that were investigated and how many of each fall into each of the three tiers.

	Tier One	Tier Two	Tier Three
Stairway flight	5	4	2
HSS Members	5	45	All not mentioned
Intermediate Landings	7	2	1
Hand Railings	7	2	All not mentioned
Hollow-core Slabs	35	38	79
Columns	1	3	27

To resolve the Tier 1 structural issues, these components must be replaced or repaired in such a way as to correct the underlying issue. Repairing many of these structural sections could be costly in terms of time and money and therefore may be more economical to replace these components instead of repairing them. For example, all corroded reinforcing steel must be removed from the concrete and replaced with new reinforcing steel. This is impractical to do with the hollow-core slabs due to the nature of their design and construction. For cast-in-place reinforced concrete with corroded or exposed reinforcing steel, it may be possible to remove and replace the necessary steel without replacing the entire structural section if there is not extensive damage.

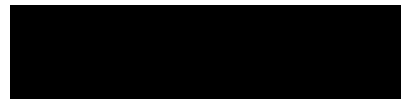
Due to the nature of Tier 2, these components may fall in either Tier 1 or Tier 3, but were unable to be classified during the site visit due to various reasons such as being obscured by temporary sheathing, requiring partial demolition, time constraints, etc. Consequently, more extensive investigation is necessary to properly ascertain the extent of damage and to determine whether replacement or repairs are necessary.

As for the structural components in Tier 3, their condition does not appear to pose an immediate threat to persons or property. However, if these components are left in their current conditions, they may become a risk to persons and property in the future. To prevent these components from degrading over time, it would be best to remove rust from steel members via sand blasting or other appropriate methods, stop water intrusion by waterproofing, regrouting or fixing column enclosures, and painting to protect from weather. For the hollow-core slabs that fall into this category, it is recommended to remove and replace the layer of concrete topping on the affected slabs as well re-painting the bottom side. For the steel members in this category, it is recommended to remove rust before applying paint.

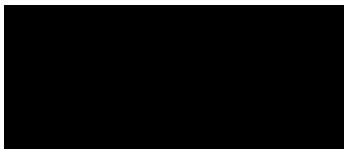
This concludes our services for this project. Thank you again for the opportunity to assist you. Please feel free to contact us if you have questions or want to discuss anything.

Sincerely,

MECO ENGINEERING COMPANY, INC.



Matthew D. Cissi, EIT



James D. Bensman, PE, SE, Vice President

