Appendix F
Detailed Local Analysis Results

a. Single-cell Box Girder
Figure B-1. Model 1S Force vs Deflection (mid height)
Figure B-2. Model 1S Force vs Deflection (quarter height)
Figure B-3. Model 1S Max Principle Strain Contours at 75% Pc
Figure B-4. Model 1S Max Principle Strain Contours at 100% Pc
Figure B-5. Model 1S Max Principle Strain Contours at 125% Pc
Figure B-6. Model 1S Max Principle Strain Contours at 150% Pc
Figure B-7. Model 2S Force vs Deflection (mid height)
Figure B-8. Model 2S Force vs Deflection (quarter height)
Figure B-9. Model 2S Max Principle Strain Contours at 75% Pc
Figure B-10. Model 2S Max Principle Strain Contours at 100% Pc
Figure B-11. Model 2S Max Principle Strain Contours at 125% Pc
Figure B-12. Model 3S Force vs Deflection (mid height)
Figure B-13. Model 3S Force vs Deflection (quarter height)
Figure B-14. Model 3S Max Principle Strain Contours at 75% Pc
Figure B-15. Model 3S Max Principle Strain Contours at 100% Pc
Figure B-16. Model 3S Max Principle Strain Contours at 125% Pc
Figure B-17. Model 3S Max Principle Strain Contours at 150% Pc
Figure B-18. Model 4S Force vs Deflection (mid height)
Figure B-19. Model 4S Force vs Deflection (quarter height)
Figure B-20. Model 4S Max Principle Strain Contours at 75% Pc
Figure B-21. Model 4S Max Principle Strain Contours at 100% Pc
Figure B-22. Model 4S Max Principle Strain Contours at 125% Pc
Figure B-23. Model 4S Max Principle Strain Contours at 150% Pc
Figure B-24. Model 5S Force vs Deflection (mid height)
Figure B-25. Model 5S Force vs Deflection (quarter height)
Figure B-26. Model 5S Max Principle Strain Contours at 75% Pc
Figure B-27. Model 5S Max Principle Strain Contours at 100% Pc
Figure B-28. Model 5S Max Principle Strain Contours at 125% Pc
Figure B-29. Model 5S Max Principle Strain Contours at 150% Pc
Figure B-30. Model 6S Force vs Deflection (mid height)
Figure B-31. Model 6S Force vs Deflection (quarter height)
Figure B-32. Model 6S Max Principle Strain Contours at 75% Pc
Figure B-33. Model 6S Max Principle Strain Contours at 100% Pc
Figure B-34. Model 6S Max Principle Strain Contours at 125% Pc
Figure B-35. Model 6S Max Principle Strain Contours at 150% Pc
Figure B 36. Model 7S Force vs Deflection (mid height)
Figure B-37. Model 7S Force vs Deflection (quarter height)
Figure B-38. Model 7S Max Principle Strain Contours at 75% Pc
Figure B-39. Model 7S Max Principle Strain Contours at 100% Pc
Figure B-40. Model 7S Max Principle Strain Contours at 125% Pc
Figure B-41: Model 7S Max Principle Strain Contours at 150% Pc
Figure B-42. Model 8S Force vs Deflection (mid height)
Figure B-43. Model 8S Force vs Deflection (quarter height)
Figure B-44. Model 8S Max Principle Strain Contours at 75% Pc
Figure B-45. Model 8S Max Principle Strain Contours at 100% Pc
Figure B-46. Model 8S Max Principle Strain Contours at 125% Pc
Figure B-47. Model 8S Max Principle Strain Contours at 150% Pc
Figure B-48. Model 9S Force vs Deflection (mid height)
Figure B-49. Model 9S Force vs Deflection (quarter height)
Figure B-50. Model 9S Max Principle Strain Contours at 75% Pc
Figure B-51. Model 9S Max Principle Strain Contours at 100% Pc
Figure B-52. Model 9S Max Principle Strain Contours at 125% Pc
Figure B-53. Model 9S Max Principle Strain Contours at 150% Pc
Figure B-54. Model 10S Force vs Deflection (mid height)
Figure B-55. Model 10S Force vs Deflection (quarter height)
Figure B-56. Model 10S Max Principle Strain Contours at 75% Pc
Figure B-57. Model 10S Max Principle Strain Contours at 100% Pc
Figure B-58. Model 10S Max Principle Strain Contours at 125% Pc
b. Multi-cell Box Girder
Figure A-1. Model 1M Force vs Deflection (mid height)
Figure A-2. Model 1M Force vs Deflection (quarter height)
Figure A-3. Model 1M Max Principle Strain Contours at 75% Pc
Figure A-4. Model 1M Max Principle Strain Contours at 100% Pc
Figure A-5. Model 1M Max Principle Strain Contours at 125% Pc
Figure A-6. Model 1M Max Principle Strain Contours at 150% Pc
Figure A-7. Model 2M Force vs Deflection (mid height)
Figure A-8. Model 2M Force vs Deflection (quarter height)
Figure A-9. Model 2M Max Principle Strain Contours at 75% Pc
Figure A-10. Model 2M Max Principle Strain Contours at 100% Pc
Figure A-11. Model 2M Max Principle Strain Contours at 125% Pc
Figure A-12. Model 2M Max Principle Strain Contours at 150% Pc
Figure A-13. Model 3M Force vs Deflection (mid height)
Figure A-14. Model 3M Force vs Deflection (quarter height)
Figure A-15. Model 3M Max Principle Strain Contours at 75% Pc
Figure A-16. Model 3M Max Principle Strain Contours at 100% Pc
Figure A-17. Model 3M Max Principle Strain Contours at 125% Pc
Figure A-18. Model 4M Force vs Deflection (mid height)
Figure A-19. Model 4M Force vs Deflection (quarter height)
Figure A-20. Model 4M Max Principle Strain Contours at 75% Pc
Figure A-21. Model 4M Max Principle Strain Contours at 100% Pc
Figure A-22. Model 4M Max Principle Strain Contours at 125% Pc
Figure A-23. Model 5M Force vs Deflection (mid height)
Figure A-24. Model 5M Force vs Deflection (quarter height)
Figure A-25. Model 5M Max Principle Strain Contours at 75% Pc
Figure A-26. Model 5M Max Principle Strain Contours at 100% Pc
Figure A-27. Model 5M Max Principle Strain Contours at 125% Pc
Figure A-28. Model 5M Max Principle Strain Contours at 150% Pc
Figure A-29. Model 6M Force vs Deflection (mid height)
Figure A-30. Model 6M Force vs Deflection (quarter height)
Figure A-31. Model 6M Max Principle Strain Contours at 75% Pc
Figure A-32. Model 6M Max Principle Strain Contours at 100% Pc
Figure A-33. Model 6M Max Principle Strain Contours at 125% P<sub>c</sub>
Figure A-34. Model 6M Max Principle Strain Contours at 150% Pc
Figure A-35. Model 7M Force vs Deflection (mid height)
Figure A-36. Model 7M Force vs Deflection (quarter height)
Figure A-37. Model 7M Max Principle Strain Contours at 75% Pc
Figure A-38. Model 7M Max Principle Strain Contours at 100% Pc
Figure A-39. Model 7M Max Principle Strain Contours at 125% Pc
Figure A-40. Model 7M Max Principle Strain Contours at 150% Pc
Figure A-41. Model 8M Force vs Deflection (mid height)
Figure A-42. Model 8M Force vs Deflection (quarter height)
Figure A-43. Model 8M Max Principle Strain Contours at 75% Pc
Figure A-44. Model 8M Max Principle Strain Contours at 100% Pc
Figure A-45. Model 8M Max Principle Strain Contours at 125% Pc
Figure A-46. Model 8M Max Principle Strain Contours at 150% Pc
Figure A-47. Model 9M Force vs Deflection (mid height)
Figure A-48. Model 9M Force vs Deflection (quarter height)
Figure A-49. Model 9M Max Principle Strain Contours at 75% Pc
Figure A-50. Model 9M Max Principle Strain Contours at 100% Pc
Figure A-51. Model 9M Max Principle Strain Contours at 125% P_c
Figure A-52. Model 10M Force vs Deflection (mid height)
Figure A-53. Model 10M Force vs Deflection (quarter height)
Figure A-54. Model 10M Max Principle Strain Contours at 75% Pc
Figure A-55. Model 10M Max Principle Strain Contours at 100% Pc
Figure A-56. Model 10M Max Principle Strain Contours at 125% Pc
Figure A-57. Model 10M Max Principle Strain Contours at 150% Pc
Figure A-58. Model 11M Force vs Deflection (mid height)
Figure A-59. Model 11M Force vs Deflection (quarter height)
Figure A-60. Model 11M Max Principle Strain Contours at 75% Pc
Figure A-61. Model 11M Max Principle Strain Contours at 100% Pc
Figure A-62. Model 11M Max Principle Strain Contours at 125% Pc
Figure A-63. Model 12M Force vs Deflection (mid height)
Figure A-64. Model 12M Force vs Deflection (quarter height)
Figure A-65. Model 12M Max Principle Strain Contours at 75% Pc
Figure A-66. Model 12M Max Principle Strain Contours at 100% Pc
Figure A-67. Model 12M Max Principle Strain Contours at 125% Pc
Figure A-68. Model 12M Max Principle Strain Contours at 150% Pc
Figure A-69. Model 13M Force vs Deflection (mid height)
Figure A-70. Model 13M Force vs Deflection (quarter height)
Figure A-71. Model 13M Max Principle Strain Contours at 75% Pc
Figure A-72. Model 13M Max Principle Strain Contours at 100% Pc
Figure A-73. Model 13M Max Principle Strain Contours at 125% Pc
Figure A-74. Model 13M Max Principle Strain Contours at 150% Pc
Figure A-75. Model 14M Force vs Deflection (mid height)
Figure A-76. Model 14M Force vs Deflection (quarter height)
Figure A-77. Model 14M Max Principle Strain Contours at 75% Pc
Figure A-78. Model 14M Max Principle Strain Contours at 100% Pc
Figure A-79. Model 14M Max Principle Strain Contours at 125% P_c
Figure A-80. Model 14M Max Principle Strain Contours at 150% Pc
Figure A-81. Model 2MVert Force vs Deflection (mid height)
Figure A-82. Model 2MVert Force vs Deflection (quarter height)
Figure A-83. Model 2MVert Max Principle Strain Contours at 75% Pc
Figure A-84. Model 2MVert Max Principle Strain Contours at 100% Pc
E, Max. Principal
Multiple section points
(Ave. Crit., 75%)

+0.084e+02
+5.000e-04
+1.000e-03
+1.500e-03
+2.000e-03
+2.500e-03
+3.000e-03
+3.500e-03
+4.000e-03
+4.500e-03
+5.000e-03
+5.500e-03
+6.000e-03
+4.084e-02

Step: Step-4
Increment: 10, Step Time = 0.1688
Primary Var: E, Max. Principal
Deformed Var: U, Deformation Scale Factor: +5.000e+00

Figure A-85. Model 2MVert Max Principle Strain Contours at 125% Pc
Figure A-86. Model 2MVert Max Principle Strain Contours at 150% Pc
Figure A-87. Model 11MVert Force vs Deflection (mid height)
Figure A-88. Model 11MVert Force vs Deflection (quarter height)
Figure A-89. Model 11MVert Max Principle Strain Contours at 75% Pc
Figure A-90. Model 11MVert Max Principle Strain Contours at 100% Pc
Figure A-91. Model 11MVert Max Principle Strain Contours at 125% Pc
Figure A-92. Model 11MVert Max Principle Strain Contours at 150% Pc