APPENDIX R — PROPOSED DATA DICTIONARY

One of FEMA's goals is to minimize Privacy Act issues; therefore, Dewberry recommends that the building owner's name not be included in the registry. Another of FEMA's goals is to facilitate automated address matching; this can be done most efficiently if each street address is separated into discrete components including: house number, house number suffix, street prefix, street name, street suffix, and apartment, unit, suite or building number. Another of FEMA's goals is for the registry database to accommodate changes to flood zones and base flood elevations; this can be done most efficiently if the registry includes the latitude and longitude of each structure, in addition to the mandatory items listed on the EC (FEMA form 81-31). Another of FEMA's goals is to improve accuracy by getting surveyors to use accurate and stable monuments (benchmarks) published by the National Geodetic Survey (NGS) rather then FEMA's Elevation Reference Marks which lack stability and are less accurate. Finally, Dewberry believes that the registry would have greater value to insurance agents if some attempt was made to quantify the accuracy of the lowest floor elevation (top of bottom floor), for which recommendations are included in Part I of the Final Report. Therefore, the data dictionary for the registry database should have the following columns, with one row for each record of elevation data, including repeat surveys of the same address performed on different dates. All of these items already exist in the LOMA 2000 database except for items annotated with an asterisk below.

Note that if implemented, this data dictionary would most likely be modified for consistency with the NextGen database.

1. Unique address ID, text (20)
2. State FIPS code, text (2)
3. Community code, text (4)
4. Building's house number, text (8).
5. Building's house number suffix, text (4)
6. Building's street prefix, text (50)
7. Building's street name, text (100)
8. Building street suffix, text (50)
9. Apartment, unit, suite and/or building number, text (20)
10. P.O. box number, text (10)
11. P.O. route number, text (10)
12. City, text (50)
13. Zip code, text (5)
14. Zip code suffix (4)
15. Property description (lot & block numbers, tax parcel number, legal description, etc.), text (40)
16. Assessor's Parcel Number (APN)(book-page-parcel), text (20) *
17. Building use (residential, non-residential, comments), text (20) *
18. Latitude, decimal degrees, number (single precision)

19. Longitude, decimal degrees, number (single precision)
20. Horizontal datum, text (10)
21. Horizontal accuracy code, integer (1)
22. Survey source (GPS, conventional ground survey, USGS quad map, aerial photogrammetry, LIDAR, IFSAR, other), text (40) *
23. Estimated accuracy of lowest floor elevation (top of bottom floor) at the 95% confidence level (ft), number (single precision) *
24. B1 - NFIP community name, text (50)
25. B1 - NFIP community number, text (6)
26. B2 - County name, text (30)
27. County FIPS code
28. B3 – State name, text (50)
29. B4 - FIRM map and panel number, text (10)
30. B5 - FIRM suffix, text (2)
31. B6 - FIRM index date, date/time
32. B7 - FIRM panel effective/revised date, date/time
33. B8 - Flood zone, text (12)
34. B9 - BFE (ft), number (single precision)
35. B10 - Source of BFE data, text (20)
36. B11 - Elevation datum used for the BFE, text (20)
37. B12 - CBRS or OPA, text (10) *
38. B12 – CBRS or OPA designation date, date/time *
39. C1 - Basis for building elevations, text (30) *
40. C2 - Building diagram number, integer (1) *
41. C3 - Elevation datum used for all elevations surveyed, text (20)
42. C3 - NGS PID No. (Permanent Identifier) used as elevation reference, text (6) *
43. C3a - Elevation, top of bottom floor (ft), number (single precision)
44. C3b - Elevation, top of next higher floor (ft), number (single precision) *
45. C3c - Elevation, bottom of lowest horizontal structural member (V zones only) (ft), number (single precision) *
46. C3d - Elevation, attached garage, top of slab (ft), number (single precision) *
47. C3e - Lowest elevation of machinery and/or equipment servicing the building (ft), number (single precision) *
48. C3f - Elevation, lowest adjacent grade (LAG), number (single precision)
49. C3g - Elevation, highest adjacent grade (HAG), number (single precision) *
50. C3h - Number of permanent openings (flood vents) within 1 ft. above adjacent grade, integer (2) *
51. C3i - Total area of all permanent openings (flood vents) in C3h (sq in), number (single precision) *
52. Certifier's name, text (30)
53. License number, text (12) *

54. Certifier's title, text (50) *
55. Certifier's company name, text (50) *
56. Certifier's address, text (100) *
57. Certifier's city, text (50) *
58. Certifier's state, text (50) *
59. Certifier's zip code, text (5) *
60. Certifier's telephone, text (12) *
61. Certifier's email address, text (50) *
62. Date of survey information, date/time *
63. Surveyor comments, text (254) *
64. E2 – Elevation of top of bottom floor from HAG (ft), number (single precision) *
65. E2 – Elevation of top of bottom floor is above/below HAG, text (5) *
66. E3 – Elevation of next higher floor above HAG (ft), number (single precision) *
67. E4 – Is top of bottom floor elevated in compliance with community's ordinance? Yes/no, Boolean *
68. Scanned EC image file name (50) * (for FEMA use only; EC image not available to the public)
69. Scanned EC image path name (50) *
70. Depth(s) of prior interior flooding, text (20) *
71. Date(s) of prior flooding, text (20) *
72. Digital images path name (50) *
73. Digital image, front view, file name (50) *
74. Digital image, rear view, file name (50) *
75. Was habitable space constructed in garages, basements or crawl spaces previously intended for storage only? Yes/No, Boolean. Explain (50)
76. Was habitable space constructed beneath elevated structures in V-zones? Yes/No, Boolean. Explain (50)
77. Were rooms added, enlarged, or deleted? Yes/No, Boolean. Explain (50)
78. Have flood vents been removed/closed during remodeling? Yes/No, Boolean. Explain (50)
79. Is lowest elevation of machinery below the BFE? Yes/No, Boolean. Explain (50)
80. Have breakaway panels in V-zones been replaced with permanent panels or walls? Yes/No, Boolean, Explain (50)