State of Arkansas 1 As Engrossed: H3/29/99 A Bill 2 82nd General Assembly Act 1485 of 1999 3 Regular Session, 1999 HOUSE BILL 1982 4 By: Representative Simmons 5 By: Senator Wooldridge 6 7 8 For An Act To Be Entitled 9 "AN ACT TO AMEND VARIOUS SECTIONS OF THE ARKANSAS CODE 10 PERTAINING TO EARTHQUAKE RESISTANT DESIGN FOR PUBLIC 11 12 STRUCTURES; AND FOR OTHER PURPOSES." 13 Subtitle 14 "AN ACT TO AMEND VARIOUS SECTIONS OF THE 15 16 ARKANSAS CODE PERTAINING TO EARTHQUAKE RESISTANT DESIGN FOR PUBLIC STRUCTURES." 17 18 19 20 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS: 21 22 SECTION 1. Arkansas Code 12-80-102 is amended to read as follows: 23 "12-80-102. Definitions. 24 Whenever used in this chapter, unless a different meaning clearly appears from 25 the context: (1) 'Owner' shall mean any agency of the state, county, city, township, 26 town, village, or private entity, partnership, business, or corporation; 27 28 (2) 'Public structure' means any building intended, or adaptable, for 29 public employment, assembly, or any other use if it will be open to the public. Also included in this definition are certain building types as defined 30 31 under the term 'public works' projects; (3) 'Public works' means works, whether of construction or adaptation, 32 undertaken and carried out by the national, state, county, school district, or 33 municipal authorities, and designed to serve some purpose of public necessity, 34 use, or convenience such as public buildings, roads, aqueducts, parks, and all 35 other fixed works constructed for public use. The term relates to the 36

RRS507

1 construction of public improvements and not to their maintenance or operation;

- (4) 'Add to' shall mean adding to <u>the original</u> existing buildings or structures more than four thousand (4000) square feet in gross floor area and all areas of increased building height;
- (5) 'Alter', 'retrofit', and 'remodel' mean any alteration or repair of a building which when completed will increase the market value of the building by one hundred percent (100%) or more;
- 8 (6) 'Seal' means the Arkansas seal issued to signify certification of 9 registration to practice architecture or engineering;
 - (7) 'Seismic' means pertaining to an earthquake or earth tremor(vibrations); and
 - (8) 'Structural elements' shall mean all structural load-carrying members of a building or structure required to transmit loads (forces) within the building or between the building and the ground."

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- SECTION 2. Arkansas Code 12-80-103 is amended to read as follows:
- 17 "12-80-103. Seismic zones established.
- Areas within the boundaries of this state shall be divided into zones of anticipated damage that will occur in various locations with respect to the New Madrid Seismic Zone. *This will be based on Av and Aa values*.
- 21 (1) Zone 3, the area of greatest anticipated seismic damage, shall
 22 include the following counties: Clay, Greene, Craighead, Mississippi,
 23 Poinsett, Cross, Crittenden, St. Francis, Randolph, Lawrence, Jackson,
 24 Woodruff, and Lee. This area of the state shall be the area where Av and Aa
 25 are to be between 0.2 and 0.3 in a similar manner used in the current Standa
- 25 <u>are to be between 0.2 and 0.3 in a similar manner used in the current Standard</u>
 26 <u>Building Code.</u>
 - (2) Zone 2, the area of moderate anticipated seismic damage, shall include the following counties: Sharp, Independence, White, Lonoke, Prairie, Arkansas, Monroe, Phillips, Fulton, Izard, Stone, and Cleburne. This area of the state shall be the area where Av and Aa are to be between 0.1 and 0.2 in a similar manner used in the current Standard Building Code.
 - (3) Zone 1, the area of low anticipated seismic damage, shall include all remaining counties within the boundaries of this state. This area of the state shall be the area where Av and Aa are less than 0.1 in a similar manner used in the current Standard Building Code."

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- 1 SECTION 3. Arkansas Code 12-80-104 is amended to read as follows: 2 "12-80-104. Design requirements.
 - (a)(1) Hereafter, neither the state, any county, city, township, village, or private entity shall construct, add to, alter, retrofit, or remodel any public structure unless the structural elements are designed to resist the anticipated forces of the designated seismic zone in which the structure is located.
 - (2) Design Loads and seismic design requirements shall be, as a minimum, those listed in the chapter of Minimum Design Chapter of Structure

 Loads and referenced chapters from the Standard Building Code, 1988, or latest edition with revisions Arkansas Fire Prevention Code.
 - (b)(1) All construction plans for public buildings and structures shall comply with §§ 17-14-101 17-14-105, 17-14-201 17-14-204, and 17-14-301 17-14-311.
 - (2) The design of structural elements of public buildings and structures shall be performed by a professional engineer registered in the State of Arkansas who is competent in seismic structural design according to current standards of technical competence.
 - (3) The structural plans of each public building or structure shall bear the Engineer's Arkansas seal and signature and a statement of reference to what seismic zone the structure is designed to satisfy.
 - (4) Educational and institutional structures in Seismic Hazard

 Exposure Group III shall have non-structural interior components (such as bookshelves, light fixtures, shelving, hot water tank, oxygen tanks, etc.) to meet earthquake resistant guidelines."

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27 SECTION 4. Arkansas Code 12-80-

- SECTION 4. Arkansas Code 12-80-105 is amended to read as follows: "12-80-105. Exemptions.
- (a) Certain building types such as single family residential, duplexes, triplexes, fourplexes, and agricultural structures and the following wood frame and/or metal construction business occupancies of four thousand (4,000) square feet or less: business occupancy of less than forty (40), mercantile occupancy with a load less than one hundred (100), and storage shall not be included in the requirements of this chapter.
- (b)(1) The park and recreational facilities of the State of Arkansas, any of its agencies or departments, or any city, town, or county government or

any school district shall not be included in the requirements of this chapter.
(2) As used in this subsection, "park and recreational
facilities" shall mean any facilities which are generally open structures and
have three (3) or fewer sides and are used for athletics, recreation,
relaxation, entertainment, cultural development, and other recreational
activities, including, without limitation, park pavilions, amphitheaters,
covered stage areas, camping centers, tennis courts, golf course shelters,
athletic fields, baseball fields and dugouts, and various other similar park
and recreational facilities.
(c) Buildings of four thousand square feet (4,000 sq. ft.) or less
shall be exempt from the requirements of this chapter only upon the resolution
of the local planning commission, or in the absence of a local planning
commission, upon the resolution of the governing body of the political
subdi vi si on. "
SECTION 5. All provisions of this act of a general and permanent nature
are amendatory to the Arkansas Code of 1987 Annotated and the Arkansas Code
Revision Commission shall incorporate the same in the Code.
SECTION 6. If any provision of this act or the application thereof to
any person or circumstance is held invalid, such invalidity shall not affect
other provisions or applications of the act which can be given effect without
the invalid provision or application, and to this end the provisions of this
act are declared to be severable.
SECTION 7. All laws and parts of laws in conflict with this act are
hereby repealed.
/s/ Simmons, et al
APPROVED: 4/15/1999