- 1 HB72
- 2 155920-1
- 3 By Representative Merrill
- 4 RFD: Boards, Agencies and Commissions
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- 6 PFD: 12/18/2013

155920-1:n:12/09/2013:KMS/th LRS2013-4342 1 2 3 4 5 6 7 SYNOPSIS: Under existing law, the State Board of 8 Licensure for Professional Engineers and Land 9 10 Surveyors is responsible for licensing and 11 governing the practice of engineers and land 12 surveyors in the state. 13 This bill would require that certain 14 applicants for licensure pass a board approved examination in lieu of an eight-hour written 15 16 examination. 17 This bill would authorize the board to 18 contract with an independent testing agency for 19 administering and grading examinations. 20 This bill would also provide that a simple 21 majority of the board members constitutes a quorum. 22 23 A BILL 24 TO BE ENTITLED 25 AN ACT 26

To amend Sections 34-11-1, 34-11-4, 34-11-6, and 1 2 34-11-34, Code of Alabama 1975, relating to the practice of engineering and land surveying; to require that certain 3 4 applicants for licensure pass a board approved examination in lieu of an eight-hour written examination; to authorize the 5 6 board to contract with an independent testing agency; and to 7 provide that a simple majority of board members is a quorum. BE IT ENACTED BY THE LEGISLATURE OF ALABAMA: 8 Section 1. Sections 34-11-1, 34-11-4, 34-11-6, and 9

10 34-11-34 of the Code of Alabama 1975, are amended to read as 11 follows:

12

"§34-11-1.

13 "For the purposes of this chapter, the following 14 words and phrases shall have the respective meanings ascribed 15 by this section:

"(1) BOARD. The State Board of Licensure for
Professional Engineers and Land Surveyors, provided for by
Section 34-11-30.

19 "(2) ENGINEER INTERN. A person who has qualified 20 under subdivision (2) of Section 34-11-4, and who, in 21 addition, has successfully passed an eight-hour written <u>a</u> 22 <u>board approved</u> examination in the fundamental engineering 23 subjects as provided in Section 34-11-6, and who has been 24 certified by the board as an engineer intern.

"(3) ENGINEER or PROFESSIONAL ENGINEER. A person
who, by reason of his or her special knowledge of the
mathematical and physical sciences and the principles and

methods of engineering analysis and design, acquired by engineering education and engineering experience, is qualified to practice engineering as hereinafter defined and has been licensed by the board as a professional engineer.

5 "(4) LAND SURVEYOR INTERN. A person who has 6 qualified under subdivision (4) of Section 34-11-4, has passed 7 an <u>a board approved</u> examination in the fundamental land 8 surveyor intern <u>surveying</u> subjects, pursuant to this chapter, 9 and who has been certified by the board as a land surveyor 10 intern.

11 "(5) LAND SURVEYOR or PROFESSIONAL LAND SURVEYOR. A 12 person who has been duly licensed as a professional land 13 surveyor by the board established under this chapter, and who 14 is a professional specialist in the technique of measuring 15 land, is educated in the principles of mathematics, the related physical and applied sciences, the relevant 16 17 requirements of law for adequate evidence and all requisites for surveying of real property, and is qualified to practice 18 land surveying as defined in subdivision (8). 19

"(6) PRACTICE and OFFER TO PRACTICE. Any person 20 21 shall be construed to practice or offer to practice 22 engineering or land surveying, within the meaning and intent 23 of this chapter, who offers to or does as a profession 24 practice any branch of engineering or land surveying; or who 25 by verbal claim, sign, advertisement, letterhead, card, or in 26 any other way represents himself or herself to be a 27 professional engineer or a professional land surveyor, or

through the use of some other title implies that he or she is a professional engineer or a professional land surveyor; or who represents himself or herself as able to perform or who does perform any engineering or land surveying service or work or any other service designated by the practitioner which is recognized as engineering or land surveying.

7 "(7) PRACTICE OF ENGINEERING. Any professional service or creative work, the adequate performance of which 8 requires engineering education, training, and experience in 9 10 the application of special knowledge of the mathematical, physical, and engineering sciences to such services or 11 creative work as consultation, investigation, evaluation, 12 13 planning, design and design coordination of engineering works 14 and systems, planning the use of land and water, performing 15 engineering surveys and studies, and the review of construction or other design products for the purpose of 16 17 monitoring compliance with drawings and specifications; any of which embraces such services or work, either public or 18 private, in connection with any utilities, structures, 19 buildings, machines, equipment, processes, work systems, 20 21 projects, and industrial or consumer products; equipment of a 22 control, communications, computer, mechanical, electrical, 23 hydraulic, pneumatic, or thermal nature, insofar as they 24 involve safequarding life, health, or property; and including 25 other professional services necessary to the planning, 26 progress, and completion of any engineering services.

1 "Notwithstanding any other provision of this 2 chapter, in qualifying a witness to offer expert testimony on the practice of engineering, the court shall consider as 3 4 evidence of his or her expertise whether the proposed witness holds a valid Alabama license for the practice of engineering. 5 6 Provided, however, such qualification by the court shall not 7 be withheld from an otherwise qualified witness solely on the basis of the failure of the proposed witness to hold such 8 valid Alabama license. 9

10 "a. Design coordination includes the review and 11 coordination of those technical submissions prepared by 12 others, including, as appropriate and without limitations, 13 consulting engineers, architects, landscape architects, land 14 surveyors, and other professionals working under the direction 15 of the engineer.

"b. Engineering surveys include all survey 16 17 activities required to support the sound conception, planning, design, construction, maintenance and operation of engineered 18 projects, rights-of-way, and easement acquisitions relative to 19 20 the centerline of the project. Engineering surveys may be used 21 to locate, relocate, establish, reestablish, layout, or 22 retrace any road, right-of-way, easement, or alignment 23 relative to the centerline of the project. Additionally, 24 engineering surveys may be performed to determine areas, 25 volumes, or physical features of the earth, elevation of all 26 real property, improvements on the earth, and the 27 configuration or contour of the surface of the earth or the

position of fixed objects thereon by measuring lines and angles and applying the principles of mathematics. All engineering surveys shall exclude the surveying of real property for the establishment of any property line or land boundaries, setting of corners or monuments, and the dependent or independent surveys or resurveys of the public land survey system.

8 "c. The term shall not include the practice of 9 architecture except such architectural work as is incidental 10 to the practice of professional engineering; nor shall the 11 term include work ordinarily performed by persons who operate 12 or maintain machinery or equipment.

13 "d. The practice of engineering shall include the 14 offering of expert opinion in any legal proceeding in Alabama 15 regarding work legally required to be performed under an 16 Alabama engineer's license number or seal, which opinion may 17 be given by an engineer licensed in any jurisdiction.

"(8) PRACTICE OF LAND SURVEYING. Professional 18 services, including, but not limited to, consultation, project 19 coordination, investigation, testimony, evaluation, planning, 20 21 mapping, assembling, and interpreting reliable scientific 22 measurements and information relative to the location, size, 23 shape, areas, volumes, or physical features of the earth, 24 improvements on the earth, the space above the earth, or any 25 part of the earth, and the utilization and development of 26 these acts and interpretation into an orderly survey map, plan, report, description, or project. Project coordination 27

shall include the coordination of those technical submissions as prepared by others. Notwithstanding the provisions of this subdivision, the practice of land surveying shall exclude functions unique to engineering as specified by rules of the board. The practice of land surveying shall include, but is not limited to, any one or more of the following:

7 "a. Locates, relocates, establishes, reestablishes,
8 lays out, or retraces any property line or boundary of any
9 tract of land or any road, right-of-way, easement, alignment,
10 or elevation of all real property whether or not fixed works
11 are sited or proposed to be sited on the property.

12 "b. Makes any survey for the subdivision of any13 tract of land or for condominiums.

14 "c. Determines, by the use of the principles of land 15 surveying, the position for any survey, monument, or reference 16 point; or sets, resets, or replaces any such monument or 17 reference point.

18 "d. Determines the configuration or contour of the 19 surface of the earth or the position of fixed objects thereon 20 by measuring lines and angles and applying the principles of 21 mathematics or photogrammetry.

"e. Geodetic surveying which includes surveying for determination of the size and shape of the earth both horizontally and vertically and the precise positioning of points on the earth utilizing angular and linear measurements through spatially oriented spherical geometry. I "f. Creates, prepares, or modifies electronic or computerized data, including land information systems and geographic land information systems, relative to the performance of the activities in paragraphs a. to e., inclusive.

6 "(9) RESPONSIBLE CHARGE. Direct control and personal 7 supervision of engineering work or land surveying work.

"§34-11-4.

9 "The board may approve engineering, land surveying, 10 and related science programs which shall be accepted under the 11 following criteria:

12 "(1) PROFESSIONAL ENGINEER. The following shall be 13 considered as minimum evidence satisfactory to the board that 14 the applicant is qualified for licensure as a professional 15 engineer:

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"a. Graduation and experience plus examination.

17 "1. Graduation in an approved engineering curriculum plus four years experience. A graduate of an approved 18 engineering curriculum of four years or more from a school or 19 20 college approved by the board who has successfully passed the 21 eight-hour written a board approved examination in the fundamental engineering subjects and who has a specific record 22 23 of an additional four years or more of progressive experience in engineering work of a grade and character satisfactory to 24 25 the board shall be admitted to an eight-hour written a board 26 approved examination in the principles and practice of engineering. Upon passing this examination, the applicant 27

shall be granted a certificate of licensure to practice
 engineering in this state, provided the applicant is otherwise
 qualified.

"2. Graduation in an unapproved engineering 4 curriculum plus six years experience. A graduate of an 5 6 unapproved engineering curriculum of four years or more who 7 has successfully passed the eight-hour written a board approved examination in the fundamental engineering subjects 8 and who has a specific record of an additional six years or 9 10 more of progressive experience in engineering work of a grade and character satisfactory to the board shall be admitted to 11 12 an eight-hour written a board approved examination in the 13 principles and practice of engineering. Upon passing this 14 examination, the applicant shall be granted a certificate of 15 licensure to practice engineering in this state, provided the applicant is otherwise gualified. 16

17 "b. Comity. The board may, upon application, issue a certificate of licensure as a professional engineer to any 18 person who holds a valid professional engineering certificate 19 issued by any jurisdiction of the United States or of any 20 21 country; provided, that the education, experience, and 22 examination qualifications of the applicant are, in the 23 judgment of the board, of a standard not lower than that 24 specified in the applicable licensure act in effect in Alabama at the time such certificate was issued. The board may 25 authorize an applicant to practice engineering on a temporary 26 basis upon issuance of an interim permit which shall remain in 27

1 effect until the board acts upon the application. The interim 2 permit may be issued upon submission of documentation and a 3 fee which shall be established by the board, not to exceed 4 fifty dollars (\$50).

5 "(2) ENGINEER INTERN. The following shall be 6 considered as minimum evidence satisfactory to the board that 7 the applicant is qualified for certification as an engineer 8 intern:

9 "a. Graduation and examination. A graduate of an 10 approved engineering curriculum of four years or more from a 11 school or college approved by the board who has successfully 12 passed an eight-hour written <u>a board approved</u> examination in 13 the fundamental engineering subjects shall be certified as an 14 engineer intern, if otherwise qualified.

15 "b. Graduation and examination plus experience. Graduation in an unapproved engineering curriculum plus two 16 17 years experience. A graduate of an unapproved engineering curriculum of four years or more who has successfully passed 18 an eight-hour written a board approved examination in the 19 20 fundamental engineering subjects and who has a specific record 21 of two years or more of progressive experience in engineering 22 work of a grade and character satisfactory to the board shall 23 be certified as an engineer intern, if otherwise qualified.

"c. Comity. The education, experience, and
examination qualifications of the applicant are, in the
judgment of the board, of a standard not lower than that
specified in the applicable licensure act in effect in Alabama

at the time such certificate was issued. Fundamentals of
 engineering examinations of comparable character taken and
 passed in another jurisdiction may be accepted by the board.

4 "(3) PROFESSIONAL LAND SURVEYOR. The following shall
5 be considered as minimum evidence satisfactory to the board
6 that the applicant is qualified for licensure as a
7 professional land surveyor.

8

"a. Graduation and experience plus examination.

"1. Graduation in an approved land surveying 9 10 curriculum plus four years experience. A graduate of an approved land surveying curriculum of four years or more 11 12 including a minimum of 30 semester hours or 45 quarter hours 13 of surveying courses from a school or college approved by the 14 board who has successfully passed an eight-hour written a 15 board approved examination in the fundamental land surveying subjects and who has a specific record of an additional four 16 17 years or more of combined office and field experience in land surveying work of a grade and character satisfactory to the 18 board shall be admitted to a six-hour written board approved 19 20 examination in the principles and practice of land surveying 21 and a two-hour written board approved examination on laws, 22 procedures, and practices pertaining to land surveying in 23 Alabama this state. Upon passing these examinations, the 24 applicant shall be granted a certificate of licensure to practice land surveying in this state, provided the applicant 25 26 is otherwise gualified.

1 "2. Graduation in an approved curriculum related to 2 surveying plus six years experience. A graduate of a curriculum related to surveying of four years or more 3 4 including a minimum of 15 semester hours or 22.5 quarter hours of surveying courses from a school or college approved by the 5 6 board and who has successfully passed the eight-hour written a 7 board approved examination in the fundamental land surveying subjects and who has a specific record of an additional six 8 9 years or more of progressive office and field experience in 10 land surveying work of a grade and character satisfactory to the board shall be admitted to a six-hour board approved 11 12 examination in the principles and practice of land surveying 13 and a two-hour written board approved examination of laws, 14 procedures, and practices pertaining to land surveying in 15 Alabama this state. Upon passing these examinations, the applicant shall be granted a certificate of licensure to 16 17 practice land surveying in this state, provided the applicant is otherwise qualified. 18

"3. Graduation in a related science curriculum plus 19 eight years experience. A graduate of a related science 20 21 curriculum of four years or more from a school or college 22 approved by the board who has successfully passed the 23 eight-hour written a board approved examination in the 24 fundamental land surveying subjects and who has a specific 25 record of an additional eight years or more of progressive 26 combined office and field experience in land surveying work of a grade and character satisfactory to the board shall be 27

admitted to a six-hour board approved examination in the principles and practice of land surveying and a two-hour written board approved examination of laws, procedures, and practices pertaining to land surveying in Alabama this state. Upon passing these examinations, the applicant shall be granted a certificate of licensure to practice land surveying in this state, provided the applicant is otherwise qualified.

"b. Experience plus examination. Before December 31, 8 2007, an applicant who has a specific record of eight years or 9 10 more of combined office and field experience in land surveying work of a grade and character satisfactory to the board shall 11 12 be admitted to an eight-hour written examination in the 13 fundamentals of land surveying, and after passing the 14 fundamentals examination shall be admitted to a six-hour 15 written examination in the principles and practice of land 16 surveying and a two-hour written examination on laws, 17 procedures, and practices pertaining to land surveying in Alabama. Upon passing these examinations, the applicant shall 18 be granted a certificate of licensure to practice land 19 surveying in this state, provided the applicant is otherwise 20 21 qualified.

"c. Comity. The board may, upon application, may
grant to any person who holds a valid professional land
surveying certificate issued by any jurisdiction of the United
States or of any country, admission into a two-hour written
<u>board approved</u> examination of laws, procedures, and practices
pertaining to land surveying in Alabama this state, provided

1 that the education, experience, and examination qualifications 2 of the applicant are, in the judgment of the board, of a standard not lower than that specified in the applicable 3 4 licensure act in effect in Alabama this state at the time such certificate was issued. Upon passing the examination, the 5 applicant shall be granted a certificate of licensure to 6 7 practice land surveying in this state, provided the applicant is otherwise gualified. 8

9 "(4) LAND SURVEYOR INTERN. The following shall be 10 considered as minimum evidence satisfactory to the board that 11 the applicant is qualified for certification as a land 12 surveyor intern:

13 "a. Graduation plus examination. Graduation in an 14 approved land surveying curriculum. A graduate of a land 15 surveying curriculum of four years or more including a minimum of 30 semester hours or 45 quarter hours of surveying courses 16 17 from a school or college approved by the board who has successfully passed an eight-hour written board approved 18 examination in the fundamentals of land surveying shall be 19 certified as a land surveyor intern, if otherwise qualified. 20

21

"b. Graduation and examination plus experience.

"1. Graduation in an approved curriculum related to
surveying plus two years experience. A graduate of a
curriculum related to surveying of four years or more
including a minimum of 15 semester hours or 22.5 quarter hours
of surveying courses from a school or college approved by the
board who has successfully passed an eight-hour written board

<u>approved</u> examination in the fundamentals of land surveying and who has a specific record of an additional two years or more of combined office and field experience in land surveying work of a grade and character satisfactory to the board shall be certified as a land surveyor intern, if otherwise qualified.

"2. Graduation in a related science curriculum plus 6 7 four years experience. A graduate of a related science curriculum of four years or more who has successfully passed 8 9 an eight-hour written a board approved examination in the 10 fundamentals of land surveying and who has a specific record of an additional four years or more of combined office and 11 12 field experience in land surveying work of a grade and 13 character satisfactory to the board shall be certified as a 14 land surveyor intern, if otherwise qualified.

"c. Comity. The education, experience, and examination qualifications of the applicant are, in the judgment of the board, of a standard not lower than that specified in the applicable licensure act in effect in Alabama at the time such certificate was issued. The board may accept fundamentals of land surveying examinations of comparable character taken and passed in another jurisdiction.

"(5) CHARACTER. No person shall be eligible for licensure as a professional engineer, certification as an engineer intern, licensure as a professional land surveyor, or certification as a land surveyor intern who is not of good character and reputation. "(6) TEACHING CREDITS. In considering the
qualifications of applicants, teaching in an engineering
curriculum approved by the board may be considered as
engineering experience. Teaching land surveying subjects in a
land surveying curriculum approved by the board may be
considered as land surveying experience.

7 "(7) GRADUATE STUDY. In counting years of experience for professional engineer licensure, the board may give 8 credit, not in excess of one year, for successful completion 9 10 of graduate study leading to a master's degree in engineering. If a Ph.D. in engineering is completed, a total of two year's 11 12 experience may be credited. The two-year credit shall include 13 one year for the master's degree. If the Ph.D. is obtained 14 without the master's degree, the credit for experience shall be two years. In counting years of experience for professional 15 land surveyor licensure, the board may give credit, not in 16 17 excess of one year, for successful completion of graduate study leading to a master's degree in land surveying. If a 18 Ph.D. in land surveying is completed, a total of two years' 19 experience may be credited. The credit of two years shall 20 21 include one year for the master's degree. If the Ph.D. is 22 obtained without the master's degree, the credit for 23 experience shall be two years.

"(8) NONPRACTICING APPLICANTS. Any person having the
 necessary qualifications prescribed in this chapter to entitle
 the applicant to licensure shall be eligible for licensure

although the applicant may not be practicing engineering or
 land surveying at the time of making application.

"(9) RECOGNITION OF PREVIOUSLY TAKEN EXAMINATIONS.
The board may accept fundamentals and principles and practice
examinations of comparable character taken and passed in
another jurisdiction.

7

"§34-11-6.

8 "(a) Examinations shall be held at such times and 9 places as the board determines and upon payment of an 10 examination fee.

"(b) When examinations are required on fundamental subjects, the applicant shall be permitted to take this part of the professional examination as specified by rules of the board. A candidate failing an examination may apply for reexamination under guidelines established by the board.

16 "(c) When examinations are required on applied 17 subjects, the applicant shall be permitted to take this part of the professional examination as specified by guidelines 18 established by the board. The scope of the examination and the 19 20 methods of procedure shall be prescribed by the board with 21 special reference to the applicant's ability to design and 22 supervise engineering or land surveying works so as to protect 23 the safety of life, health, and property. Examinations shall 24 be given for the purpose of determining the qualifications of 25 applicants for licensure separately in engineering and in land 26 surveying. A candidate failing an examination may apply for 27 reexamination under guidelines established by the board.

"(d) The fees for examination, and reexamination,
and administration of the examination on the laws, procedures,
and practices pertaining to land surveying in this state shall
be set by the board and shall not exceed three hundred dollars
(\$300).

6 "(e) The board may contract with an independent 7 testing agency to prepare, grade, or conduct the required 8 examinations. For those examinations so designated by the 9 board, the applicant shall pay the examination fees directly 10 to the board authorized testing agency. The examination fee 11 for the examination on Alabama land surveying laws, 12 procedures, and practices shall be paid directly to the board.

13

"§34-11-34.

14 "The board shall hold at least two regular meetings 15 each year. The two regular meetings of the board shall be held in the City of Montgomery, Alabama. The legal office of the 16 17 board shall be located in the City of Montgomery. Special meetings shall be held at the time and place as the rules of 18 the board may provide. Notice of all meetings shall be given 19 20 as the rules provide. The board shall elect or appoint 21 annually the following officers: A chair, a vice chair, and a 22 secretary. A quorum of the board shall consist of not less 23 than three members a simple majority of the board membership."

24 Section 2. This act shall become effective on the 25 first day of the third month following its passage and 26 approval by the Governor, or its otherwise becoming law.