- 1 HB72
 2 155920-2
 3 By Representative Merrill
 4 RFD: Boards, Agencies and Commissions
- 5 First Read: 14-JAN-14
- 6 PFD: 12/18/2013

1	<u>ENGROSSED</u>
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4	A BILL
5	TO BE ENTITLED
6	AN ACT
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8	To amend Sections 34-11-1, 34-11-4, 34-11-6, and
9	34-11-34, Code of Alabama 1975, relating to the practice of
10	engineering and land surveying; to require that certain
11	applicants for licensure pass a board approved examination in
12	lieu of an eight-hour written examination; to authorize the
13	board to contract with an independent testing agency; and to
14	provide that a simple majority of board members is a quorum.
15	BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:
16	Section 1. Sections 34-11-1, 34-11-4, 34-11-6, and
17	34-11-34 of the Code of Alabama 1975, are amended to read as
18	follows:
19	" §34-11-1.
20	"For the purposes of this chapter, the following
21	words and phrases shall have the respective meanings ascribed
22	by this section:
23	"(1) BOARD. The State Board of Licensure for
24	Professional Engineers and Land Surveyors, provided for by
25	Section 34-11-30.
26	"(2) ENGINEER INTERN. A person who has qualified
27	under subdivision (2) of Section 34-11-4, and who, in

addition, has successfully passed an eight-hour written a board approved examination in the fundamental engineering subjects as provided in Section 34-11-6, and who has been 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.
- "(4) LAND SURVEYOR INTERN. A person who has qualified under subdivision (4) of Section 34-11-4, has passed an a board approved examination in the fundamental land surveyor intern surveying subjects, pursuant to this chapter, and who has been certified by the board as a land surveyor intern.
- "(5) LAND SURVEYOR or PROFESSIONAL LAND SURVEYOR. A person who has been duly licensed as a professional land surveyor by the board established under this chapter, and who is a professional specialist in the technique of measuring land, is educated in the principles of mathematics, the related physical and applied sciences, the relevant requirements of law for adequate evidence and all requisites for surveying of real property, and is qualified to practice land surveying as defined in subdivision (8).

"(6) PRACTICE and OFFER TO PRACTICE. Any person shall be construed to practice or offer to practice engineering or land surveying, within the meaning and intent of this chapter, who offers to or does as a profession practice any branch of engineering or land surveying; or who by verbal claim, sign, advertisement, letterhead, card, or in any other way represents himself or herself to be a 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) PRACTICE OF ENGINEERING. Any professional service or creative work, the adequate performance of which requires engineering education, training, and experience in the application of special knowledge of the mathematical, physical, and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning, design and design coordination of engineering works and systems, planning the use of land and water, performing engineering surveys and studies, and the review of construction or other design products for the purpose of monitoring compliance with drawings and specifications; any of which embraces such services or work, either public or private, in connection with any utilities, structures,

buildings, machines, equipment, processes, work systems,

projects, and industrial or consumer products; equipment of a

control, communications, computer, mechanical, electrical,

hydraulic, pneumatic, or thermal nature, insofar as they

involve safeguarding life, health, or property; and including

other professional services necessary to the planning,

progress, and completion of any engineering services.

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

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

"b. Engineering surveys include all survey activities required to support the sound conception, planning, design, construction, maintenance and operation of engineered projects, rights-of-way, and easement acquisitions relative to the centerline of the project. Engineering surveys may be used

to locate, relocate, establish, reestablish, layout, or 1 2 retrace any road, right-of-way, easement, or alignment relative to the centerline of the project. Additionally, 3 4 engineering surveys may be performed to determine areas, volumes, or physical features of the earth, elevation of all 5 6 real property, improvements on the earth, and the 7 configuration or contour of the surface of the earth or the position of fixed objects thereon by measuring lines and 8 angles and applying the principles of mathematics. All 9 10 engineering surveys shall exclude the surveying of real property for the establishment of any property line or land 11 12 boundaries, setting of corners or monuments, and the dependent 13 or independent surveys or resurveys of the public land survey 14 system.

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

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

"(8) PRACTICE OF LAND SURVEYING. Professional services, including, but not limited to, consultation, project coordination, investigation, testimony, evaluation, planning,

1 mapping, assembling, and interpreting reliable scientific 2 measurements and information relative to the location, size, shape, areas, volumes, or physical features of the earth, 3 improvements on the earth, the space above the earth, or any part of the earth, and the utilization and development of 5 6 these acts and interpretation into an orderly survey map, 7 plan, report, description, or project. Project coordination shall include the coordination of those technical submissions 8 as prepared by others. Notwithstanding the provisions of this 9 subdivision, the practice of land surveying shall exclude functions unique to engineering as specified by rules of the 11 12 board. The practice of land surveying shall include, but is 13 not limited to, any one or more of the following:

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

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

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

"d. Determines the 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 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.
 - "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.
 - "(9) RESPONSIBLE CHARGE. Direct control and personal supervision of engineering work or land surveying work.

15 "\$34-11-4.

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

- "(1) PROFESSIONAL ENGINEER. The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for licensure as a professional engineer:
 - "a. Graduation and experience plus examination.
- "1. Graduation in an approved engineering curriculum plus four years experience. A graduate of an approved engineering curriculum of four years or more from a school or college approved by the board who has successfully passed the

eight-hour written a board approved examination in the fundamental engineering subjects and who has a specific record of an additional four years or more of progressive experience in engineering work of a grade and character satisfactory to the board shall be admitted to an eight-hour written a board approved examination in the principles and practice of engineering. Upon passing this examination, the applicant 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 curriculum plus six years experience. A graduate of an unapproved engineering curriculum of four years or more who has successfully passed the eight-hour written a board approved examination in the fundamental engineering subjects and who has a specific record of an additional six years or more of progressive experience in engineering work of a grade and character satisfactory to the board shall be admitted to an eight-hour written a board approved examination in the principles and practice of engineering. Upon passing this examination, the applicant shall be granted a certificate of licensure to practice engineering in this state, provided the applicant is otherwise qualified.

"b. Comity. The board may, upon application, issue a certificate of licensure as a professional engineer to any person who holds a valid professional engineering certificate issued by any jurisdiction of the United States or of any

country; provided, that 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 authorize an applicant to practice engineering on a temporary basis upon issuance of an interim permit which shall remain in effect until the board acts upon the application. The interim permit may be issued upon submission of documentation and a fee which shall be established by the board, not to exceed fifty dollars (\$50).

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

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

"b. Graduation and examination plus experience.

Graduation in an unapproved engineering curriculum plus two years experience. A graduate of an unapproved engineering curriculum of four years or more who has successfully passed an eight-hour written a board approved examination in the fundamental engineering subjects and who has a specific record

of two years or more of progressive experience in engineering work of a grade and character satisfactory to the board shall 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.

- "(3) PROFESSIONAL LAND SURVEYOR. The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for licensure as a professional land surveyor.
 - "a. Graduation and experience plus examination.
- "1. Graduation in an approved land surveying curriculum plus four years experience. A graduate of an approved land surveying curriculum of four years or more including a minimum of 30 semester hours or 45 quarter hours of surveying courses from a school or college approved by the board who has successfully passed an eight-hour written a board approved examination in the fundamental land surveying subjects and who has a specific record of an additional four years or more of combined office and field experience in land surveying work of a grade and character satisfactory to the board shall be admitted to a six-hour written board approved examination in the principles and practice of land surveying

and a two-hour written board approved examination on 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.

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"2. Graduation in an approved curriculum related to surveying plus six 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 and who has successfully passed the eight-hour written a board approved examination in the fundamental land surveying subjects and who has a specific record of an additional six years or more of progressive office and field experience in land surveying work of a grade and character satisfactory to the board shall be 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.

"3. Graduation in a related science curriculum plus eight years experience. A graduate of a related science curriculum of four years or more from a school or college

approved by the board who has successfully passed the eight-hour written a board approved examination in the fundamental land surveying subjects and who has a specific record of an additional eight years or more of progressive combined office and field experience in land surveying work of a grade and character satisfactory to the board shall be 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, 2007, an applicant who has a specific record of eight years or more of combined office and field experience in land surveying work of a grade and character satisfactory to the board shall be admitted to an eight-hour written examination in the fundamentals of land surveying, and after passing the fundamentals examination shall be admitted to a six-hour written examination in the principles and practice of land surveying and a two-hour written examination on laws, procedures, and practices pertaining to land surveying in Alabama. 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.

"c. b. 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 board approved examination of laws, procedures, and practices pertaining to land surveying in Alabama this state, provided that 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 this state at the time such certificate was issued. Upon passing the examination, the applicant shall be granted a certificate of licensure to practice land surveying in this state, provided the applicant is otherwise qualified.

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

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

"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 approved 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 four years experience. A graduate of a related science curriculum of four years or more who has successfully passed an eight-hour written a board approved examination in the fundamentals of land surveying and who has a specific record of an additional four 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.

"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) GRADUATE STUDY. In counting years of experience for professional engineer licensure, the board may give credit, not in excess of one year, for successful completion 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 experience may be credited. The two-year credit shall include one year for the master's degree. If the Ph.D. is obtained without the master's degree, the credit for experience shall be two years. In counting years of experience for professional land surveyor licensure, the board may give credit, not in excess of one year, for successful completion of graduate study leading to a master's degree in land surveying. If a Ph.D. in land surveying is completed, a total of two years' experience may be credited. The credit of two years shall include one year for the master's degree. If the Ph.D. is

- obtained without the master's degree, the credit for 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.

"§34-11-6.

- "(a) Examinations shall be held at such times and places as the board determines and upon payment of an 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.
- "(c) When examinations are required on applied subjects, the applicant shall be permitted to take this part of the professional examination as specified by guidelines established by the board. The scope of the examination and the methods of procedure shall be prescribed by the board with special reference to the applicant's ability to design and supervise engineering or land surveying works so as to protect

1 the safety of life, health, and property. Examinations shall be given for the purpose of determining the qualifications of applicants for licensure separately in engineering and in land 3 surveying. A candidate failing an examination may apply for reexamination under quidelines established by the board.

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"(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).

"(e) The board may contract with an independent testing agency to prepare, grade, or conduct the required examinations. For those examinations so designated by the board, the applicant shall pay the examination fees directly to the board authorized testing agency. The examination fee for the examination on Alabama land surveying laws, procedures, and practices shall be paid directly to the board. "\$34-11-34.

"The board shall hold at least two regular meetings each year. The two regular meetings of the board shall be held in the City of Montgomery, Alabama. The legal office of the board shall be located in the City of Montgomery. Special meetings shall be held at the time and place as the rules of the board may provide. Notice of all meetings shall be given as the rules provide. The board shall elect or appoint annually the following officers: A chair, a vice chair, and a

1	secretary. A quorum of the board shall consist of not less
2	than three members a simple majority of the board membership.
3	Section 2. This act shall become effective on the
4	first day of the third month following its passage and
5	approval by the Governor, or its otherwise becoming law.

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3	House of Representatives
4 5 6 7	Read for the first time and re- ferred to the House of Representa- tives committee on Boards, Agencies
7 8	and Commissions 14-JAN-14
9 10	Read for the second time and placed on the calendar 1 amendment
11	
12 13	Read for the third time and passed as amended 11-FEB-14
14	Yeas 91, Nays 1, Abstains 0
15 16 17 18	Jeff Woodard Clerk