CERTIFICATION OF ENROLLMENT

SUBSTITUTE SENATE BILL 5984

60th Legislature 2007 Regular Session

Passed by the Senate March 13, 2007 YEAS 36 NAYS 11

President of the Senate

Passed by the House April 10, 2007 YEAS 98 NAYS 0

Speaker of the House of Representatives

Approved

FILED

Secretary of State State of Washington

Governor of the State of Washington

CERTIFICATE

I, Thomas Hoemann, Secretary of the Senate of the State of Washington, do hereby certify that the attached is **SUBSTITUTE SENATE BILL 5984** as passed by the Senate and the House of Representatives on the dates hereon set forth.

Secretary

SUBSTITUTE SENATE BILL 5984

Passed Legislature - 2007 Regular Session

State of Washington 60th Legislature 2007 Regular Session

By Senate Committee on Labor, Commerce, Research & Development (originally sponsored by Senators Murray and Clements)

READ FIRST TIME 02/28/07.

1 AN ACT Relating to performing engineering services on significant 2 structures; amending RCW 18.43.040 and 18.43.020; and providing an 3 effective date.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 **Sec. 1.** RCW 18.43.040 and 2000 c 172 s 1 are each amended to read 6 as follows:

(1) be considered as 7 The following will minimum evidence 8 to the board that the applicant is qualified for satisfactory engineer, 9 registration а professional engineer-in-training, as 10 professional land surveyor, or land-surveyor-in-training, respectively: (a)(i) As a professional engineer: A specific record of eight 11 12 years or more of experience in engineering work of a character satisfactory to the board and indicating that the applicant is 13 14 competent to practice engineering; and successfully passing a written 15 or oral examination, or both, in engineering as prescribed by the board. 16

17 (ii) Graduation in an approved engineering curriculum of four years 18 or more from a school or college approved by the board as of 19 satisfactory standing shall be considered equivalent to four years of

such required experience. The satisfactory completion of each year of 1 2 such an approved engineering course without graduation shall be considered as equivalent to a year of such required experience. 3 Graduation in a curriculum other than engineering from a school or 4 college approved by the board shall be considered as equivalent to two 5 years of such required experience((: PROVIDED, That)). However, no б applicant shall receive credit for more than four years of experience 7 because of undergraduate educational qualifications. The board may, at 8 its discretion, give credit as experience not in excess of one year, 9 for satisfactory postgraduate study in engineering. 10

(iii) Structural engineering is recognized as a specialized branch 11 12 of professional engineering. To receive a certificate of registration 13 in structural engineering, an applicant must hold a current registration in this state in engineering and have at least two years 14 of structural engineering experience, of a character satisfactory to 15 the board, in addition to the eight years' experience required for 16 registration as a professional engineer. An applicant for registration 17 18 as a structural engineer must also pass an additional examination as ((Applicants for a certificate of prescribed by the board. 19 registration in structural engineering who have had their application 20 21 approved by the board prior to July 1, 2001, are not required to have 22 an additional two years of structural engineering experience if the applicant passes the additional structural examination before January 23 24 $\frac{30, 2002}{1000}$

25 (iv) An engineer must be registered as a structural engineer in 26 order to provide structural engineering services for significant 27 structures. The board may waive the requirements of this subsection 28 (1)(a)(iv) until December 31, 2010, if:

29 (A) On January 1, 2007, the engineer is registered with the board 30 as a professional engineer; and

31 (B) Within two years of January 1, 2007, the engineer demonstrates 32 to the satisfaction of the board that the engineer has sufficient 33 experience in the duties typically provided by a professional 34 structural engineer regarding significant structures.

35 <u>(b)(i)</u> As an engineer-in-training: An applicant for registration 36 as a professional engineer shall take the prescribed examination in two 37 stages. The first stage of the examination may be taken upon 38 submission of his or her application for registration as an engineerin-training and payment of the application fee prescribed in RCW 18.43.050 at any time after the applicant has completed four years of the required engineering experience, as defined in this section, or has achieved senior standing in a school or college approved by the board. The first stage of the examination shall test the applicant's knowledge of appropriate fundamentals of engineering subjects, including mathematics and the basic sciences.

(ii) At any time after the completion of the required eight years 8 of engineering experience, as defined in this section, the applicant 9 may take the second stage of the examination upon submission of an 10 application for registration and payment of the application fee 11 12 prescribed in RCW 18.43.050. This stage of the examination shall test 13 the applicant's ability, upon the basis of his or her greater experience, to apply his or her knowledge and experience in the field 14 of his or her specific training and qualifications. 15

16 (c)(i) As a professional land surveyor: A specific record of eight 17 years or more of experience in land surveying work of a character 18 satisfactory to the board and indicating that the applicant is 19 competent to practice land surveying, and successfully passing a 20 written or oral examination, or both, in surveying as prescribed by the 21 board.

(ii) Graduation from a school or college approved by the board as of satisfactory standing, including the completion of an approved course in surveying, shall be considered equivalent to four years of the required experience. Postgraduate college courses approved by the board shall be considered for up to one additional year of the required experience.

land-surveyor-in-training: An applicant 28 (d)(i) As а for registration as a professional land surveyor shall take the prescribed 29 examination in two stages. The first stage of the examination may be 30 taken upon submission of his or her application for registration as a 31 32 land-surveyor-in-training and payment of the application fee prescribed in RCW 18.43.050 at any time after the applicant has completed four 33 years of the required land surveying experience, as defined in this 34 section, or has achieved senior standing in a school or college 35 approved by the board. The first stage of the examination shall test 36 37 the applicant's knowledge of appropriate fundamentals of land surveying subjects, including mathematics and the basic sciences. 38

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1 (ii) At any time after the completion of the required eight years 2 of land surveying experience, as defined in this section, the applicant 3 may take the second stage of the examination upon submission of an 4 application for registration and payment of the application fee 5 prescribed in RCW 18.43.050. This stage of the examination shall test 6 the applicant's ability, upon the basis of greater experience, to apply 7 knowledge and experience in the field of land surveying.

8 (iii) The first stage shall be successfully completed before the 9 second stage may be attempted. Applicants who have been approved by 10 the board to take the examination based on the requirement for six 11 years of experience under this section before July 1, 1996, are 12 eligible to sit for the examination.

13 (2) No person shall be eligible for registration as a professional 14 engineer, engineer-in-training, professional land surveyor, or land-15 surveyor-in-training, who is not of good character and reputation.

16 <u>(3)</u> Teaching, of a character satisfactory to the board shall be 17 considered as experience not in excess of two years for the appropriate 18 profession.

19 <u>(4)</u> The mere execution, as a contractor, of work designed by a 20 professional engineer, or the supervision of the construction of such 21 work as a foreman or superintendent shall not be deemed to be practice 22 of engineering.

23 (5) Any person having the necessary qualifications prescribed in 24 this chapter to entitle him or her to registration shall be eligible 25 for such registration although the person may not be practicing his or 26 her profession at the time of making his or her application.

27 **Sec. 2.** RCW 18.43.020 and 1995 c 356 s 1 are each amended to read 28 as follows:

29 <u>The definitions in this section apply throughout this chapter</u> 30 <u>unless the context clearly requires otherwise.</u>

31 (1) ((Engineer: The term)) "Engineer" ((as used in this chapter 32 shall)) means a professional engineer as ((hereinafter)) defined <u>in</u> 33 this section.

34 (2) ((Professional engineer: The term)) "Professional engineer" 35 ((within the meaning and intent of this chapter, shall)) means a person 36 who, by reason of his or her special knowledge of the mathematical and 37 physical sciences and the principles and methods of engineering 1 analysis and design, acquired by professional education and practical 2 experience, is qualified to practice engineering as ((hereinafter)) 3 defined <u>in this section</u>, as attested by his or her legal registration 4 as a professional engineer.

5 (3) ((Engineer in training: The term)) "Engineer-in-training" ((as 6 used in this chapter)) means a candidate who ((has)): (a) <u>Has</u> 7 <u>s</u>atisfied the experience requirements in RCW 18.43.040 for 8 registration; (b) <u>has</u> successfully passed the examination in the 9 fundamental engineering subjects; and (c) is enrolled by the board as 10 an engineer-in-training.

11 (4) ((Engineering: The term)) "Engineering" ((as used in this 12 chapter shall)) means the "practice of engineering" as ((hereinafter)) 13 defined in this section.

14 (5) ((Practice of engineering: The term)) (a) "Practice of engineering" ((within the meaning and intent of this chapter shall)) 15 means any professional service or creative work requiring engineering 16 17 education, training, and experience and the application of special knowledge of the mathematical, physical, and engineering sciences to 18 such professional services or creative work as consultation, 19 investigation, evaluation, planning, design, and supervision of 20 21 construction for the purpose of assuring compliance with specifications 22 and design, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works, or 23 24 projects.

(b) A person shall be construed to practice or offer to practice 25 engineering, within the meaning and intent of this chapter, who 26 27 practices any branch of the profession of engineering; or who, by verbal claim, sign, advertisement, letterhead, card, or in any other 28 way represents himself or herself to be a professional engineer, or 29 through the use of some other title implies that he or she is a 30 professional engineer; or who holds himself or herself out as able to 31 32 perform, or who does perform, any engineering service or work or any other professional service designated by the practitioner or recognized 33 by educational authorities as engineering. 34

35 <u>(c)</u> The practice of engineering ((shall)) <u>does</u> not include the work 36 ordinarily performed by persons who operate or maintain machinery or 37 equipment.

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(6) ((Land surveyor: The term)) "Land surveyor" ((as used in this
 chapter shall)) means a professional land surveyor.

3 (7) ((Professional land surveyor: The term)) "Professional land 4 surveyor" ((as used in this chapter)) means a person who, by reason of 5 his or her special knowledge of the mathematical and physical sciences 6 and principles and practices of land surveying, which is acquired by 7 professional education and practical experience, is qualified to 8 practice land surveying and as attested to by his or her legal 9 registration as a professional land surveyor.

10 (8) ((Land-surveyor-in-training: The term)) "Land-surveyor-intraining" ((as used in this chapter)) means a candidate who: (a) Has 11 12 satisfied the experience requirements in RCW 18.43.040 for 13 registration; (b) successfully passes the examination in the 14 fundamental land surveying subjects; and (c) is enrolled by the board as a land-surveyor-in-training. 15

16 (9) ((Practice of land surveying: The term)) "Practice of land 17 surveying" ((within the meaning and intent of this chapter, shall)) means assuming responsible charge of the surveying of land for the 18 establishment of corners, lines, boundaries, and monuments, the laying 19 out and subdivision of land, the defining and locating of corners, 20 21 lines, boundaries, and monuments of land after they have been 22 established, the survey of land areas for the purpose of determining the topography thereof, the making of topographical delineations and 23 24 the preparing of maps and accurate records thereof, when the proper 25 performance of such services requires technical knowledge and skill.

(10) ((Board: The term)) "Board" ((as used in this chapter shall))
means the state board of registration for professional engineers and
land surveyors, provided for by this chapter.

29

<u>(11) "Significant structures" include:</u>

30 (a) Hazardous facilities, defined as: Structures housing,
 31 supporting, or containing sufficient quantities of explosive substances
 32 to be of danger to the safety of the public if released;

(b) Essential facilities that have a ground area of more than five
 thousand square feet and are more than twenty feet in mean roof height
 above average ground level. Essential facilities are defined as:

36 (i) Hospitals and other medical facilities having surgery and 37 <u>emergency treatment areas;</u>

38 (ii) Fire and police stations;

1	(iii) Tanks or other structures containing, housing, or supporting
2	water or fire suppression material or equipment required for the
3	protection of essential or hazardous facilities or special occupancy
4	structures;
5	(iv) Emergency vehicle shelters and garages;
6	(v) Structures and equipment in emergency preparedness centers;
7	(vi) Standby power-generating equipment for essential facilities;
8	(vii) Structures and equipment in government communication centers
9	and other facilities requiring emergency response;
10	(viii) Aviation control towers, air traffic control centers, and
11	emergency aircraft hangars; and
12	(ix) Buildings and other structures having critical national
13	defense functions;
14	(c) Structures exceeding one hundred feet in height above average
15	ground level;
16	(d) Buildings that are customarily occupied by human beings and are
17	five stories or more above average ground level;
18	(e) Bridges having a total span of more than two hundred feet and
19	piers having a surface area greater than ten thousand square feet; and
20	(f) Buildings and other structures where more than three hundred
21	people congregate in one area.

22 <u>NEW SECTION.</u> Sec. 3. This act takes effect July 1, 2008.

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