

CERTIFICATION OF ENROLLMENT

SUBSTITUTE SENATE BILL 5984

Chapter 193, Laws of 2007

60th Legislature
2007 Regular Session

STRUCTURAL ENGINEERS--SIGNIFICANT STRUCTURES

EFFECTIVE DATE: 07/01/08

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

BRAD OWEN

President of the Senate

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

FRANK CHOPP

Speaker of the House of Representatives

Approved April 21, 2007, 11:38 a.m.

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.

THOMAS HOEMANN

Secretary

FILED

April 23, 2007

CHRISTINE GREGOIRE

Governor of the State of Washington

**Secretary of State
State of Washington**

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:

7 (1) The following will be considered as minimum evidence
8 satisfactory to the board that the applicant is qualified for
9 registration as a professional engineer, engineer-in-training,
10 professional land surveyor, or land-surveyor-in-training, respectively:

11 (a)(i) As a professional engineer: A specific record of eight
12 years or more of experience in engineering work of a character
13 satisfactory to the board and indicating that the applicant is
14 competent to practice engineering; and successfully passing a written
15 or oral examination, or both, in engineering as prescribed by the
16 board.

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

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

11 (iii) Structural engineering is recognized as a specialized branch
12 of professional engineering. To receive a certificate of registration
13 in structural engineering, an applicant must hold a current
14 registration in this state in engineering and have at least two years
15 of structural engineering experience, of a character satisfactory to
16 the board, in addition to the eight years' experience required for
17 registration as a professional engineer. An applicant for registration
18 as a structural engineer must also pass an additional examination as
19 prescribed by the board. (~~Applicants for a certificate of~~
20 ~~registration in structural engineering who have had their application~~
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~~
23 ~~applicant passes the additional structural examination before January~~
24 ~~30, 2002.))~~

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 (b)(i) 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 engineer-

1 in-training and payment of the application fee prescribed in RCW
2 18.43.050 at any time after the applicant has completed four years of
3 the required engineering experience, as defined in this section, or has
4 achieved senior standing in a school or college approved by the board.
5 The first stage of the examination shall test the applicant's knowledge
6 of appropriate fundamentals of engineering subjects, including
7 mathematics and the basic sciences.

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

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.

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

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

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 (3) 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 (4) 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 The definitions in this section apply throughout this chapter
30 unless the context clearly requires otherwise.

31 (1) (~~Engineer:—The term~~) "Engineer" (~~as used in this chapter~~
32 ~~shall~~) means a professional engineer as (~~hereinafter~~) defined in
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 in this section, 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) Has
7 satisfied the experience requirements in RCW 18.43.040 for
8 registration; (b) has 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
15 engineering" (~~within the meaning and intent of this chapter shall~~)
16 means any professional service or creative work requiring engineering
17 education, training, and experience and the application of special
18 knowledge of the mathematical, physical, and engineering sciences to
19 such professional services or creative work as consultation,
20 investigation, evaluation, planning, design, and supervision of
21 construction for the purpose of assuring compliance with specifications
22 and design, in connection with any public or private utilities,
23 structures, buildings, machines, equipment, processes, works, or
24 projects.

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

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

1 (6) (~~Land surveyor: The term~~) "Land surveyor" (~~(as used in this~~
2 ~~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-in-
11 training" (~~(as used in this chapter)~~) means a candidate who: (a) Has
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
15 as a land-surveyor-in-training.

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

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

29 (11) "Significant structures" include:

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;

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

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

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 NEW SECTION. Sec. 3. This act takes effect July 1, 2008.

Passed by the Senate March 13, 2007.

Passed by the House April 10, 2007.

Approved by the Governor April 21, 2007.

Filed in Office of Secretary of State April 23, 2007.