# **B-Engrossed** Senate Bill 55

Ordered by the House May 20 Including Senate Amendments dated April 6 and House Amendments dated May 20

Printed pursuant to Senate Interim Rule 213.28 by order of the President of the Senate in conformance with presession filing rules, indicating neither advocacy nor opposition on the part of the President (at the request of Governor Theodore R. Kulongoski for State Board of Examiners for Engineering and Land Surveying)

### SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Establishes registration and certification requirements for persons practicing photogrammetric mapping. Defines "photogrammetric mapping."
Allows State Board of Examiners for Engineering and Land Surveying to establish branches of

land surveying for issuance of certificate of registration. Allows board to issue certificate of registration in newly established branch of land surveying without examination under certain circumstances. Allows board to issue temporary permit to practice photogrammetric mapping without examination under certain circumstances.

Redefines "practice of land surveying.

Exempts certain data transcribers and other [professionals qualified to document maps] persons and agencies from board regulation.

Revises language to expressly state that board has authority to establish fees by rule.

#### A BILL FOR AN ACT 1

- Relating to professions regulated by State Board of Examiners for Engineering and Land Surveying; creating new provisions; and amending ORS 105.718, 279C.100, 672.002, 672.005, 672.060, 672.155 3 and 672.255. 4
- Be It Enacted by the People of the State of Oregon: 5
- SECTION 1. Sections 2 to 5a of this 2005 Act are added to and made a part of ORS 672.002 6 to 672.325. 7
  - SECTION 2. (1) A person may not practice photogrammetric mapping in this state unless the person is registered and has a valid certificate to practice land surveying, engineering or photogrammetric mapping issued under ORS 672.002 to 672.325.
  - (2) A photogrammetrist may perform services defined as photogrammetric mapping under ORS 672.002. A photogrammetrist may not engage or offer to engage in an act constituting the practice of land surveying other than photogrammetric mapping.
- SECTION 3. To qualify for a certificate of registration as a photogrammetrist, a person 14 15 must:
  - (1) Pass the fundamentals of land surveying examination;
  - (2) Pass a professional photogrammetric mapping examination administered by the State Board of Examiners for Engineering and Land Surveying; and
  - (3) Have four or more years of experience acceptable to the board as an active practitioner of photogrammetric mapping.
    - SECTION 4. Notwithstanding the qualifications required under section 3 of this 2005 Act,

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the State Board of Examiners for Engineering and Land Surveying may issue a certificate of registration as a photogrammetrist to an applicant without an examination if the applicant:

- (1)(a) Has eight or more years of experience as a practitioner of photogrammetric mapping; or
- (b) Has eight or more years of experience in responsible charge of photogrammetric mapping projects meeting:
- (A) The Federal Geographic Data Committee positioning accuracy and metadata standards in effect on the effective date of this 2005 Act;
- (B) A later version of the standards described in subparagraph (A) of this paragraph, recognized by the board by rule; or
  - (C) Other standards of the committee, recognized by the board by rule;
  - (2) Meets any additional professional qualifications established by the board by rule;
- (3) Pays a fee established by the board by rule for the issuance of a photogrammetrist certificate without examination; and
  - (4) Submits the application no later than January 1, 2008.
- SECTION 5. If the State Board of Examiners for Engineering and Land Surveying specifies a new branch of engineering or land surveying for examination and registration under ORS 672.002 to 672.325, the board may issue a certificate to an individual in the new branch without examination if the individual:
  - (1) Is a registered professional engineer, if the new branch is a branch of engineering;
- (2) Is a registered engineer or land surveyor if the new branch is a branch of land surveying;
- (3) Establishes to the satisfaction of the board that the person has four years' experience in the new branch specified by the board;
- (4) Pays the fee established under ORS 672.155 for certification in a newly established branch, without examination, based on experience; and
- (5) Submits an application to the board for issuance of the certificate in the new branch within one year after the date the board first gives an examination in the new branch.
- <u>SECTION 5a.</u> The State Board of Examiners for Engineering and Land Surveying may issue a temporary permit to a person to practice photogrammetric mapping in this state, without an examination, for a period not to exceed six months. The board may not issue a temporary permit to the person more than once. The board may issue the temporary permit only if the person:
  - (1) Pays the appropriate fee;

- (2) Is an applicant for registration under ORS 672.002 to 672.325;
- (3) Has, in the judgment of the board, met all qualifications for registration under ORS 672.002 to 672.325 other than passing an examination; and
- (4) Is authorized to practice photogrammetric mapping in another jurisdiction in the United States or a foreign country, by a jurisdiction having authorization standards that the board considers equivalent to the standards for practicing photogrammetric mapping in this state.
  - **SECTION 6.** ORS 672.002 is amended to read:
- 44 672.002. As used in ORS 672.002 to 672.325, unless the context requires otherwise:
  - (1) "Board" means the State Board of Examiners for Engineering and Land Surveying provided

1 by ORS 672.240.

- (2) "Engineer," "licensed engineer," "professional engineer," "registered engineer" or "registered professional engineer" means a person who is registered in this state and holds a valid certificate to practice engineering in this state as provided under ORS 672.002 to 672.325.
- (3) "Engineering intern" means a person enrolled by the board as having passed an examination in the fundamental engineering subjects.
- (4) "Geodetic survey" means a determination of the size and shape of the earth or the position of any point on the earth.
- [(4)] (5) "Land surveyor," "surveyor," "licensed surveyor," "professional surveyor," "professional land surveyor," "registered land surveyor" or "registered professional land surveyor" means a person who is registered in this state and holds a valid certificate to practice surveying in this state as provided by ORS 672.002 to 672.325.
- [(5)] (6) "Land surveying intern" means a person enrolled by the board as having passed an examination in the fundamental land surveying subjects.
- (7) "Photogrammetric mapping" means an evaluating and measuring of land that is limited to the determination of the topography, area, contours and location of planimetric features, by using photogrammetric methods or similar remote sensing technology, including but not limited to using existing ground control points incidental to the photogrammetric or remote sensing mapping process.
- (8) "Photogrammetrist" means a person registered with the board and holding a valid certificate to practice photogrammetric mapping.
  - [(6)] (9) "Responsible charge" means to have supervision and control of:
  - (a) The engineering design of works with responsibility for design decisions; or
- (b) Land surveying work for the purpose of ensuring conformance to the relevant requirements of law and sound surveying practice.
- [(7)] (10) "Supervision and control" means establishing the nature of, directing and guiding the preparation of, and approving the work product and accepting responsibility that the work product is in conformance with standards of professional practice.

**SECTION 7.** ORS 672.005 is amended to read:

- 672.005. As used in ORS 672.002 to 672.325, unless the context requires otherwise:
- (1)[(a)] "Practice of engineering" or "practice of professional engineering" means doing any of the following:
- [(A)] (a) **Performing** any professional service or creative work requiring engineering education, training and experience.[; and]
- [(B)] (b) [The application of] Applying special knowledge of the mathematical, physical and engineering sciences to such professional services or creative work as consultation, investigation, testimony, evaluation, planning, design and services during construction, manufacture or fabrication for the purpose of ensuring compliance with specifications and design, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works or projects.
  - [(b) "Practice of engineering" or "practice of professional engineering" may include:]
- [(A)] (c) Surveying to determine area or topography.[;]
- [(B)] (d) Surveying to establish lines, grades or elevations, or to determine or estimate quantities of materials required, removed or in place.[; or]
- [(C)] (e) Surveying required for design and construction layout of engineering and architectural infrastructure.

(f) Performing photogrammetric mapping.

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- (2) "Practice of land surveying" means [that branch of the practice of engineering in which:]
- 3 [(a) Surveys are made to determine area or topography, to establish or reestablish land boundaries, 4 corners or monuments or to subdivide or plat land;]
  - [(b) Surveys are made to establish lines, grades or elevations, or to determine or estimate quantities of materials required, removed or in place;]
    - [(c) Surveys are made for horizontal or vertical mapping control or geodetic control; or]
- 8 [(d) Consultation, investigation, evaluation or planning relating to land surveying matters is required.] doing any of the following:
  - (a) Providing or offering to provide professional services that apply mathematics, geodesy and other sciences and involve:
    - (A) The making of geometric measurements and gathering of related information pertaining to:
      - (i) The physical or legal features of the earth;
      - (ii) Improvements on the earth; or
    - (iii) The space above or below the earth; or
    - (B) The development of measurements and information described in subparagraph (A) of this paragraph into graphics, data, maps, plans, reports, descriptions, projects or other survey products.
      - (b) Performing geodetic surveys.
    - (c) Establishing, reestablishing or replacing boundaries or geodetic control monuments or reference points.
    - (d) Locating, relocating, establishing, reestablishing or retracing any property lines or boundaries for any tract of land, road right-of-way or easement.
    - (e) Making any survey for the division or subdivision of a tract of land or for the consolidation of tracts of land.
    - (f) Locating and laying out alignments, positions or elevations for the construction of fixed works.
    - (g) Performing or offering to perform any investigation, interpretation or evaluation of, or any consultation or testimony about, any of the services described in paragraphs (a) to (f) of this subsection.
    - (h) Collecting, preparing, manipulating or modifying data related to activities described in paragraphs (a) to (f) of this subsection, other than acting as a scrivener.
      - (i) Performing photogrammetric mapping.
  - (j) Making surveys that involve horizontal or vertical mapping control or geodetic control.
    - SECTION 8. ORS 672.060 is amended to read:
    - 672.060. ORS 672.002 to 672.325 do not apply to:
    - (1) A registered architect practicing architecture.
    - (2) A registered environmental health specialist or registered environmental health specialist trainee working under the supervision of a registered environmental health specialist practicing environmental sanitation, or a registered waste water specialist or registered waste water specialist trainee working under the supervision of a registered waste water specialist practicing waste water sanitation.
      - (3) A person working as an employee or a subordinate of a registered professional engineer if:

(a) The work of the person does not include final engineering designs or decisions;

- (b) The work of the person is done under the supervision and control of and is verified by a registered professional engineer; and
- (c) The person does not purport to be an engineer or registered professional engineer by any verbal claim, sign, advertisement, letterhead, card or title.
- (4) A person practicing land surveying under the supervision of a registered professional land surveyor or registered professional engineer. The exemption in this subsection does not allow an engineer to supervise a land surveying activity the engineer could not personally perform under ORS 672.025.
  - (5) An individual, firm, partnership or corporation practicing engineering or land surveying:
- (a) On property owned or leased by the individual, firm, partnership or corporation, or on property in which the individual, firm, partnership or corporation has an interest, estate or possessory right; and
- (b) That affects exclusively the property or interests of the individual, firm, partnership or corporation, unless the safety or health of the public, including employees and visitors, is involved.
- (6) The performance of engineering work by a person, firm or corporation, or by full-time employees thereof, provided:
- (a) The work is in connection with or incidental to the operations of the persons, firms or corporations; and
  - (b) The engineering work is not offered directly to the public.
- (7) A person executing engineering work designed by a professional engineer or supervising the construction of engineering work as a foreman or superintendent.
- (8) A landowner performing land surveying within the boundaries of the landowner's land or the landowner's regular employee performing land surveying services as part of the employee's official duties within the boundaries of the land of the employer.
- (9) An individual, firm, partnership or corporation offering to practice engineering or land surveying if:
- (a) The individual, firm, partnership or corporation holds a certificate of registration to engage in the practice of professional engineering or land surveying issued by the proper authority of any other state, a territory or possession of the United States, or a foreign country; and
- (b) The offer includes a written statement that the offeror is not registered to practice engineering or land surveying in the State of Oregon, but will comply with ORS 672.002 to 672.325 by having a person holding a valid certificate of registration in this state in responsible charge of the work prior to performing any engineering or land surveying work within this state.
- (10) A person making plans or specifications for, or supervising the erection, enlargement or alteration of, a building, or an appurtenance thereto, if the building is to be used for a single family residential dwelling or farm building or is a structure used in connection with or auxiliary to a single family residential dwelling or farm building, including but not limited to a three-car garage, barn or shed or a shelter used for the housing of domestic animals or livestock. ORS 672.002 to 672.325 do not prevent a person from making plans or specifications for, or supervising the erection, enlargement or alteration of, a building, or an appurtenance thereto, if the building has a ground area of 4,000 square feet or less and is not more than 20 feet in height from the top surface of lowest flooring to the highest interior overhead finish of the structure.
- (11) A construction contractor licensed under ORS chapter 701 that offers services constituting the practice of engineering if:

- (a) The services are appurtenant to construction services to be provided by the contractor;
- (b) The services constituting the practice of engineering are performed by an engineer or engineers registered under ORS 672.002 to 672.325; and
- (c) The offer by the construction contractor discloses in writing that the contractor is not an engineer and identifies the registered engineer or engineers that will perform the services constituting the practice of engineering.
- (12) A person transcribing existing georeferenced data into a Geographic Information System or Land Information System format by manual or electronic means, and the maintenance of that data, if the data are clearly not intended to indicate the authoritative location of property boundaries, the precise shape or contour of the earth or the precise location of fixed works of humans.
- (13) A person carrying out activities under ORS 306.125 or 308.245. This exemption applies to the transcription of tax maps, zoning maps and other public data records into Geographic Information System or Land Information System formatted cadastre and the maintenance of those cadastre, if:
  - (a) The data are not modified for other than graphical purposes; and
  - (b) The data are clearly not intended to authoritatively represent property boundaries.
- (14) A person preparing maps or compiling databases depicting the distribution of natural or cultural resources, features or phenomena, if the maps or data are not intended to indicate the authoritative location of property boundaries, the precise shape or contour of the earth or the precise location of fixed works by humans.
- (15) A federal agency or its contractors, in the preparation of military maps, quadrangle topographic maps, satellite imagery or other maps or images that do not define real property boundaries.
- (16) A federal agency or its contractors, in the preparation or transcription of documents or databases into a Geographical Information System or Land Information System format, including but not limited to the preparation or transcription of federal census and other demographic data.
- (17) A law enforcement agency or its contractors, in the preparation of documents or maps for traffic accidents, crime scenes or similar purposes depicting physical features or events or generating or using georeferenced data involving crime statistics or criminal activities.
- (18) A peace officer, as defined in ORS 161.015, or a fire service professional, as defined in ORS 181.610, conducting, reporting on or testifying about or otherwise performing duties regarding an official investigation.
  - (19) A person creating general maps prepared for private firms or governmental agencies:
  - (a) For use as guides to motorists, boaters, aviators or pedestrians;
- (b) For publication in a gazetteer or an atlas as an educational tool or reference publication;
  - (c) For use in the curriculum of any course of study;
- (d) If produced by any electronic or print media, for use as an illustrative guide to the geographic location of any event; or
- (e) If prepared for conversational or illustrative purposes, including but not limited to for use as advertising material or user guides.
  - **SECTION 9.** ORS 672.155 is amended to read:

- 672.155. [In addition to any fees established by rule, fees required to be paid to] The State Board of Examiners for Engineering and Land Surveying shall [be] establish fees by rule, including but not limited to fees for the following:
- 4 (1) Examination in the fundamentals of engineering.

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- (2) Examination for registration as a registered professional engineer.
- (3) Examination in the fundamentals of land surveying.
  - (4) Reexamination [of] in any portion of the land surveyor's examination, if required.
- (5) Examination for registration as registered professional land surveyor.
- 9 (6) [Initial] Issuance or renewal of a registered professional land surveyor certificate [and re-10 newal].
- 11 (7) [Initial] Issuance or renewal of a registered professional engineer certificate [and 12 renewal].
  - (8) Issuance or renewal of a registered photogrammetrist certificate.
  - [(8)] (9) Registration of nonresident engineer without examination under ORS 672.125.
  - [(9)] (10) Registration of a nonresident land surveyor under ORS 672.125.
  - [(10)] (11) Issuance of a temporary permit [issued] under ORS 672.135 or section 5a of this 2005 Act.
    - [(11)] (12) Reissuance of a lost or mutilated certificate.
    - [(12)] (13) Issuance of a certificate of registration, without examination, based on experience in a branch of engineering or land surveying newly established by the board under ORS 672.255.
      - **SECTION 10.** ORS 672.255 is amended to read:
      - 672.255. (1) The State Board of Examiners for Engineering and Land Surveying shall adopt rules:
  - (a) Establishing fees as provided in ORS 672.155 [for certificates, enrollments and permits issued by the board].
  - (b) Providing a procedure for the issuance, denial, suspension or revocation of certificates, enrollments and permits.
    - (c) Prescribing standards of professional conduct for professional engineers, professional land surveyors, **photogrammetrists**, engineering interns and land surveying interns.
    - (d) Specifying branches of engineering and land surveying in which examinations are offered [and for registration of individuals and for issuance of certificates].
    - (e) For registering individuals and issuing certificates of registration and temporary permits to individuals under ORS 672.002 to 672.325. [If the board specifies a new branch for examination and registration under this paragraph, the board may issue a certificate to an individual in the new branch without examination if the individual:]
      - [(A) Is a registered professional engineer;]
    - [(B) Establishes to the satisfaction of the board that the person has four years' experience in the new branch of engineering specified by the board;]
  - [(C) Pays the fee established under ORS 672.155 for certification in a newly established branch of engineering, without examination, based on experience; and]
  - [(D) Submits an application to the board for issuance of the certificate in the new branch within one year after the date the board first gives an examination in the new branch.]
  - [(e)] (f) Prescribing standards and intellectual, educational and technical qualifications for examination and certificate renewal in addition to [those] the qualifications and conditions prescribed in ORS 672.097, 672.099 and 672.170 and section 3 of this 2005 Act.
  - [(f)] (g) Prescribing standards and guidelines for retired or inactive status of registrants, in-

cluding provisions to allow the return to active status.

- (h) Defining the scope of practice for persons holding a certificate issued by the board to practice land surveying or a certificate or temporary permit issued by the board to perform photogrammetric mapping.
- (2) In adopting rules under subsection (1)(c) [and (d)] to (h) of this section, the board shall give consideration to national practices as well as local practices. Adoption of rules shall be in accordance with ORS chapter 183.

## **SECTION 11.** ORS 105.718 is amended to read:

- 105.718. If the proceeding in a boundary action involves the location of a public land survey corner as defined by ORS 209.250 (3), the court shall determine the location of the public land survey corner by the following method:
- (1) The court shall appoint three disinterested commissioners who are registered professional land surveyors, one of whom shall be the county surveyor of the county in which the action is brought, and shall direct the commissioners to go upon the land of the parties and establish and mark out upon the ground the true and correct location of the corner in accordance with ORS 209.070. If the county surveyor of the county in which the action is brought is interested in any tract of land, the title of which is in dispute before the court, the court shall appoint the county surveyor of an adjacent county to serve in lieu of the interested county surveyor.
- (2) The three commissioners shall establish and monument the true location of the corner in accordance with the current United States Manual of Surveying Instructions. The monument set shall be in accordance with the standards of the county surveyor of the county in which the corner is located. For the purposes of ORS 672.002 [(6)(b)] (9)(b), the county surveyor shall be the person in "responsible charge" and shall affix a seal and signature to any plat or report prepared.
- (3) The county surveyor shall be responsible for the preparation and filing of the survey in accordance with ORS 209.250.
- (4) The corner, when properly established by the commission, shall be recognized by the court as the legal and permanent corner. The decision of the commission is not subject to appeal.
- (5) The costs for the services of the three commissioners shall be paid by either the plaintiff or the defendant, or both, as determined by the court.

## SECTION 12. ORS 279C.100 is amended to read:

279C.100. As used in ORS 279C.100 to 279C.125:

- (1) "Architect" means a person who is registered and holds a valid certificate in the practice of architecture in the State of Oregon, as provided under ORS 671.010 to 671.220, and includes without limitation the terms "architect," "licensed architect" and "registered architect."
- (2) "Architectural, engineering and land surveying services" means professional services that are required to be performed by an architect, engineer or land surveyor.
- (3) "Engineer" means a person who is registered and holds a valid certificate in the practice of engineering in the State of Oregon, as provided under ORS 672.002 to 672.325, and includes all terms listed in ORS 672.002 (2).
- (4) "Land surveyor" means a person who is registered and holds a valid certificate in the practice of land surveying in the State of Oregon, as provided under ORS 672.002 to 672.325, and includes all terms listed in ORS 672.002 [(4)] (5).
- (5) "Personal services" mean the services of a person or persons that are designated by the Oregon Department of Administrative Services or a local contract review board as personal services under ORS 279A.055. "Personal services" includes architectural, engineering and land surveying

services procured under ORS 279C.105 or 279C.110 and related services procured under ORS 279C.120.

(6) "Related services" means personal services, other than architectural, engineering and land surveying services, that are related to the planning, design, engineering or oversight of public improvement projects or components thereof, including but not limited to landscape architectural services, facilities planning services, energy planning services, space planning services, environmental impact studies, hazardous substances or hazardous waste or toxic substances testing services, wetland delineation studies, wetland mitigation studies, Native American studies, historical research services, endangered species studies, rare plant studies, biological services, archaeological services, cost estimating services, appraising services, material testing services, mechanical system balancing services, commissioning services, project management services, construction management services and owner's representative services or land-use planning services.

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