



ATTORNEY GENERAL OF TEXAS
GREG ABBOTT

January 10, 2006

The Honorable Ismael "Kino" Flores
Chair, Committee on Licensing and
Administrative Procedures
Texas House of Representatives
Post Office Box 2910
Austin, Texas 78768-2910

Opinion No. GA-0391

Re: Whether a professional engineer may
prepare all plans and specifications for a public
building described in Occupations Code section
1051.703(a) without engaging the services of a
licensed architect (RQ-0360-GA)

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Dear Representative Flores and Mr. Landreth:

Representative Flores asks broadly whether a professional engineer may prepare all plans and specifications for the public buildings described in section 1051.703 of the Occupations Code without engaging the services of a licensed architect.¹ The Texas Board of Architectural Examiners (the "TBAE") poses additional related questions:² (1) whether the legislature intended to regulate the practice of architecture as a profession distinct from the practice of engineering; (2) whether the legislature has created a distinction between the practices by defining the practice of architecture as design of a building "for human use or occupancy";³ (3) whether the exemption for engineers in chapter 1051 of the Occupations Code is absolute, so that engineers may freely practice architecture without registering with the TBAE; (4) alternatively, whether the exception for engineers is limited to an act, service, or work involving "special knowledge or judgment of the mathematical, physical,

¹See Letter from Honorable Ismael "Kino" Flores, Chair, Committee on Licensing and Administrative Procedures, Texas House of Representatives, to Honorable Greg Abbott, Attorney General of Texas (July 7, 2005) (on file with Opinion Committee, *also available at* <http://www.oag.state.tx.us>).

²See Letter from Gordon E. Landreth, AIA, Chair, Texas Board of Architectural Examiners, to Honorable Greg Abbott, Attorney General of Texas (July 6, 2005) [hereinafter TBAE Brief I]; Letter from Gordon E. Landreth, AIA, Chair, Texas Board of Architectural Examiners, to Nancy S. Fuller, Chair, Opinion Committee, Office of Attorney General (Sept. 8, 2005) (briefs on file with Opinion Committee).

³TEX. OCC. CODE ANN. § 1051.001(7) (Vernon Supp. 2005).

or engineering sciences”;⁴ (5) whether, for a building intended for human use or occupancy, an engineer is limited to designing the building’s components of a “mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature”;⁵ and (6) whether Attorney General Opinion DM-161 (1992) is correctly interpreted to mean that the entire scope of building design, including architecture, is an element of engineering.

Building design has generally been recognized as an area of overlap between the practice of architecture and the practice of engineering. *See, e.g., Schmidt v. Kan. State Bd. of Technical Professions*, 21 P.3d 542, 547, 550-51 (Kan. 2001); *Rosen v. Bureau of Prof'l & Occupational Affairs*, 763 A.2d 962, 965 (Pa. Commw. 2000), *appeal denied*, 781 A.2d 150 (Pa. Super. Ct. 2001); Tex. Att’y Gen. Op. No. DM-161 (1992). In some states the overlap is complete, so that building design projects may be performed by a member of either profession.⁶ Other states maintain a line of demarcation between the two professions.⁷ The reason for the lack of nationwide uniformity is due largely to the particular wording of the jurisdictions’ licensing provisions and courts’ construction of them.⁸

In Texas, the legislature recognized the overlap between the two professions as recently as 2003, when both the TBAE and the Texas Board of Professional Engineers (“TBPE”) underwent Sunset Act review.⁹ While it was determined that both boards should continue as independent agencies, the legislature created the Joint Advisory Committee (“advisory committee” or

⁴TEX. OCC. CODE ANN. § 1001.003(b) (Vernon Supp. 2005).

⁵*Id.* § 1001.003(c)(10).

⁶*See, e.g., State of Ala. Bd. of Registered Architects v. Jones*, 267 So.2d 427, 431 (Ala. 1972); *Verich v. Fla. State Bd. of Architecture*, 239 So.2d 29, 31-32 (Fla. 4th Dist. Ct. App. 1970); *Ga. State Bd. for Exam., Qualif. & Registration of Architects v. Arnold*, 292 S.E.2d 830, 832 (Ga. 1982); *Rosen*, 763 A.2d at 967-69.

⁷*See, e.g., Holloway v. Ark. State Bd. of Architects*, 101 S.W.3d 805, 812 (Ark. 2003); *State Bd. of Technical Registration v. McDaniel*, 326 P.2d 348, 354 (Ariz. 1958) (stating “[i]f the legislature had not intended the professions to be distinguishable, requiring separate registration for each, they would not have so provided”); *State of N.J. Bd. of Architects v. North*, 484 A.2d 1297, 1301 (N.J. Super. Ct. Ch. Div. 1984). *See generally* NATIONAL COUNCIL OF ARCHITECTURAL REGISTRATION BOARDS, *Practice Requirements for NCARB Member Boards*, available at <http://www.ncarb.org/stateboards/MBRfaqpractice.asp> (NCARB survey of states, territories and other jurisdictions in which members in 11 jurisdictions responded that engineers are “permitted to practice architecture in your jurisdiction (other than when incidental to engineering practice)”; 42 responded to the contrary).

⁸*Compare Holloway*, 101 S.W.3d at 811-12 (construing Arkansas statutory definition of architecture and exception for engineering services “incidental to the practice of engineering” as meaning “that architects plan and design buildings primarily intended for people to live and work in, and engineers plan and design buildings primarily ‘intended for accommodation of equipment, vehicles, goods, and/or processes.’”), *with Verich*, 239 So.2d at 31 (resolving conflict in Florida statutes “by concluding that the statutes mean a registered architect can plan and design and supervise construction of a building as the practice of architecture and a registered professional engineer can plan and design and supervise construction of a building as a professional engineer.”).

⁹*See* Act of May 31, 2003, 78th Leg., R.S., ch. 331, § 1.04, 2003 Tex. Gen. Laws 1425, 1427 (TBAE); Act of May 31, 2003, 78th Leg., R.S., ch. 1168, § 2, 2003 Tex. Gen. Laws 3307, 3308 (TBPE).

“committee”), the principal purpose of which is to “work to resolve issues that result from the overlap between activities that constitute the practice of engineering and those that constitute the practice of architecture.” TEX. OCC. CODE ANN. §§ 1001.216(d) (concerning TBPE), 1051.212(d) (concerning TBAE) (Vernon 2004).

Earlier this year the advisory committee issued an opinion addressing the “historical disagreement between the respective Boards concerning the statutory authority over comprehensive building design.” JOINT ADVISORY COMMITTEE ON THE PRACTICE OF ENGINEERING AND ARCHITECTURE, *Building Design Joint Advisory Opinion* (Apr. 7, 2005).¹⁰ Following the advisory committee’s opinion, the TBPE issued its own advisory opinion. See TEXAS BOARD OF PROFESSIONAL ENGINEERS, *Policy Advisory Opinion Regarding Building Design* (June 1, 2005) 30 TEX. REG. 3461-62 (2005).¹¹ The opinion concluded that the practice of engineering, which is exempt from chapter 1051’s regulation of the practice of architecture, includes building design which “therefore may be performed exclusively by a licensed professional engineer competent in this field.” *Id.*

The TBPE’s advisory opinion prompted your requests. To address your questions, we review the statutory licensing provisions for both professions, which currently are located in title 6 of the Occupations Code, entitled “Regulation of Engineering, Architecture, Land Surveying, and Related Practices.” TEX. OCC. CODE ANN. §§ 1001.001-1051.801 (Vernon 2004 & Supp. 2005).

I. Chapter 1001, Regulating the Practice of Engineering

In chapter 1001, an “engineer” is defined simply as a person licensed to practice engineering. *Id.* § 1001.002(2) (Vernon 2004). The chapter broadly defines the practice of engineering:

In this chapter, “practice of engineering” means the performance of or an offer or attempt to perform any public or private service or creative work, the adequate performance of which requires engineering education, training, and experience in applying special knowledge or judgment of the mathematical, physical, or engineering sciences to that service or creative work.

¹⁰Exhibit A attached to TBAE Brief I, *supra* note 2.

¹¹The TBAE disputes the TBPE’s authority to issue the opinion because the TBPE is authorized to opine about chapter 1001 of the Occupations Code, concerning engineering, while the opinion it issued involved analysis of chapter 1051 of the Occupations Code, concerning architecture. See TBAE Brief I, *supra* note 2, at 5 n.2; TEX. OCC. CODE ANN. § 1001.601 (Vernon Supp. 2005). However, as explored below, chapters 1001 and 1051 define the practice of engineering and the practice of architecture one in relation to the other. For that reason, it is not inappropriate for the TBPE to consider chapter 1051 in an advisory opinion about the practice of engineering. *Cf. Rosen*, 763 A.2d at 965 (concluding that because Pennsylvania’s engineering and architecture licensing statutes both recognize that the professions overlap, but neither statute establishes a clear, mutually exclusive delineation between the professions, the statutes must be construed together). We address the substantive conclusions in the TBPE opinion *infra*.

Id. § 1001.003(b) (Vernon Supp. 2005). Subsection 1001.003(c) adds a list of conduct included in the definition, most notably

a service, design, analysis, or other work performed for a public or private entity in connection with a utility, structure, building, machine, equipment, process, system, work, project, or industrial or consumer product or equipment of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature[.]

Id. § 1001.003(c)(10).¹²

¹²In full, section 1001.003(c) provides:

(c) The practice of engineering includes:

(1) consultation, investigation, evaluation, analysis, planning, engineering for program management, providing an expert engineering opinion or testimony, engineering for testing or evaluating materials for construction or other engineering use, and mapping;

(2) design, conceptual design, or conceptual design coordination of engineering works or systems;

(3) development or optimization of plans and specifications for engineering works or systems;

(4) planning the use or alteration of land or water or the design or analysis of works or systems for the use or alteration of land or water;

(5) responsible charge of engineering teaching or the teaching of engineering;

(6) performing an engineering survey or study;

(7) engineering for construction, alteration, or repair of real property;

(8) engineering for preparation of an operating or maintenance manual;

(9) engineering for review of the construction or installation of engineered works to monitor compliance with drawings or specifications;

(10) a service, design, analysis, or other work performed for a public or private entity in connection with a utility, structure, building, machine, equipment, process, system, work, project, or industrial or consumer product or equipment of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature;

(11) providing an engineering opinion or analysis related to a certificate of merit under Chapter 150, Civil Practice and Remedies Code; or

(continued...)

Only a person licensed under chapter 1001 may engage in the practice of engineering. *Id.* § 1001.301(a) (Vernon 2004). The purpose of restricting the practice to licensed engineers is to "protect the public health, safety, and welfare;" to help the state and public identify authorized engineers; and to fix responsibility for engineering work and services. *Id.* § 1001.004(a)-(b). Chapter 1001 is to be liberally construed to carry out the intent of the legislature, which is stated as ensuring that the privilege of engaging in the practice of engineering is restricted to licensed engineers. *Id.* § 1001.004(c)-(d).

Chapter 1001 exempts public work projects not involving electrical or mechanical engineering when the project's completed expense is \$20,000 or less. *Id.* § 1001.053(2). There is an exemption for drawing plans or specifications for private dwellings, smaller apartment buildings, private farm, ranch, and agricultural structures, and certain garages, provided there has been no representation that the services provided constitute engineering. *Id.* § 1001.056(a). Also, there is an exemption for services concerning a one-story building having a total floor area of not more than 5,000 square feet that "does not contain a clear span between supporting structures greater than 24 feet on the narrow side." *Id.* § 1001.056(a)(2)(F)(i)-(iii). If such a building has a span between supporting structures greater than 24 feet, "only the trusses, beams, or other roof supporting members must be engineered or pre-engineered." *Id.* § 1001.056(b). However, an engineer must prepare the engineering plans, specifications, and estimates, and supervise the engineering construction by the state or its political subdivisions of "a public work involving engineering in which the public health, welfare, or safety is involved." *Id.* § 1001.407. Chapter 1001 contains an exemption for architects engaged in the practice of architecture. *Id.* § 1001.063.

II. Chapter 1051, Regulating the Practice of Architecture

In the Occupations Code, the term "architect" is defined simply as a person licensed to practice architecture. *See id.* § 1051.001(1) (Vernon Supp. 2005). The "practice of architecture" is more comprehensively defined as

a service or creative work applying the art and science of developing design concepts, planning for functional relationships and intended uses, and establishing the form, appearance, aesthetics, and construction details for the construction, enlargement, or alteration of a building or environs intended for human use or occupancy, the proper application of which requires education, training, and experience in those matters.

¹²(...continued)

(12) any other professional service necessary for the planning, progress, or completion of an engineering service.

Id. § 1051.001(7). Among other changes to the statute made during the last regular session, the legislature added a list of specific examples of the practice of architecture:

The term [practice of architecture] includes:

(A) establishing and documenting the form, aesthetics, materials, and construction technology for a building, group of buildings, or environs intended to be constructed or altered;

(B) preparing, or supervising and controlling the preparation of, the architectural plans and specifications that include all integrated building systems and construction details, unless otherwise permitted under Section 1051.606(a)(4) [specified exceptions];

(C) observing the construction, modification, or alteration of work to evaluate conformance with architectural plans and specifications described in Paragraph (B) for any building, group of buildings, or environs requiring an architect;

(D) programming for construction projects, including identification of economic, legal, and natural constraints and determination of the scope and spatial relationship of functional elements;

(E) recommending and overseeing appropriate construction project delivery systems;

(F) consulting, investigating, and analyzing the design, form, aesthetics, materials, and construction technology used for the construction, enlargement, or alteration of a building or environs and providing expert opinion and testimony as necessary;

(G) research to expand the knowledge base of the profession of architecture, including publishing or presenting findings in professional forums; and

(H) teaching, administering, and developing pedagogical theory in academic settings offering architectural education.

Id. § 1051.001(7)(A)-(H). A person may not practice architecture as defined in section 1051.001(7)(A)-(C) without registering with the TBAE or otherwise qualifying for an exception. *See id.* § 1051.701(a).¹³

Chapter 1051 allows persons who do not represent themselves as architects to prepare architectural plans or render other services in connection with certain privately owned buildings, such as those used primarily for “farm, ranch, or agricultural purposes”; for raw agricultural commodity storage; single family, dual-family and smaller multifamily dwellings; smaller commercial buildings; and warehouses with limited public access. *See id.* § 1051.606(a)(4)(A)-(E) (Vernon 2004). However, section 1051.703 provides that architectural plans or specifications for certain buildings may be prepared only by an architect. *Id.* § 1051.703.¹⁴ Most notably, the section

¹³Section 1051.701(b) provides additionally that a firm, partnership, corporation, or joint stock association, including those engaged in the practice of engineering, may practice architecture or offer architectural services only if such services are performed by or through a registered architect. *See* TEX. OCC. CODE ANN. § 1051.701(b) (Vernon Supp. 2005).

¹⁴In full, section 1051.703 provides:

(a) An architectural plan or specification for any of the following may be prepared only by an architect:

(1) a new building or modification of an existing building intended for occupancy on a 24-hour basis by persons who are receiving custodial care from the proprietor or operator of the building, regardless of the number of stories or square footage of the building;

(2) a new building having construction costs exceeding \$100,000 that is to be:

(A) constructed and owned by a state agency, a political subdivision of this state, or any other public entity in this state; and

(B) used for education, assembly, or office occupancy; or

(3) an alteration or addition having construction costs exceeding \$50,000 that:

(A) is to be made to an existing building that:

(i) is owned by a state agency, a political subdivision of this state, or any other public entity in this state; and

(ii) is or will be used for education, assembly, or office occupancy; and

(B) requires the removal, relocation, or addition of a wall or partition or the alteration or addition of an exit.

(b) This section does not prohibit an owner of a building from choosing an architect or engineer as the prime design professional for a building construction, alteration, or addition project.

requires an architect to prepare plans or specifications for new construction exceeding \$100,000 or modifications exceeding \$50,000 in cost of a building that is owned by a public entity and is “used for education, assembly, or office occupancy.” *Id.* 1051.703(a)(2)-(3).¹⁵

In addition, section 1051.601 generally exempts licensed engineers from chapter 1051 and rules adopted thereunder to the extent they perform acts, services, or works within the scope of the practice of engineering:

(a) This chapter and any rule adopted under this chapter do not limit the right of an engineer licensed under Chapter 1001 to perform an act, service, or work within the scope of the practice of engineering as defined by that chapter.

(b) This chapter does not prohibit an engineer licensed under Chapter 1001 from:

(1) planning and supervising work on:

(A) a construction project primarily intended for engineering use, including a railroad, hydroelectric work, or industrial plant; or

(B) a structure incidental to a construction project described by Paragraph (A); or

(2) planning, designing, or supervising the mechanical, electrical, or structural features of a building.

Id. § 1051.601(a)-(b)(1)-(2).

III. Analysis and Conclusion

A. Statutory Construction

The primary goal of statutory interpretation is to ascertain legislative intent and give it effect. *See McIntyre v. Ramirez*, 109 S.W.3d 741, 745 (Tex. 2003). To discern the legislature’s intent, we begin with a statute’s plain language because the words the legislature chooses are the surest guide to its intent. *See Fitzgerald v. Advanced Spine Fixation Sys., Inc.*, 996 S.W.2d 864, 865-66 (Tex. 1999). When a statute is plain and unambiguous on its face, it should generally be construed as written. *Id.* Legislative intent must be derived from an examination of an act as a whole, not just isolated portions. *State v. Gonzalez*, 82 S.W.3d 322, 327 (Tex. 2002).

¹⁵Section 1051.703 “does not prohibit an owner of a building from choosing an architect or engineer as the prime design professional for a building construction, alteration, or addition project.” *Id.* § 1051.703(c).

B. Section 1001.003

Section 1001.003(b) generally defines the practice of engineering as service or work, “the adequate performance of which requires engineering education, training, and experience.” TEX. OCC. CODE ANN. § 1001.003(b) (Vernon Supp. 2005). This general definition does not expressly state whether building design is the practice of engineering. However, if the adequate performance of a work or service for a particular building design project requires engineering education, training, and experience, it falls within the general definition. *See id.*

The TBAE asks whether the definition in section 1001.003(c)(10) authorizes engineers to engage in comprehensive building design. TBAE Brief I, *supra* note 2, at 41-44. The recent advisory opinion by the TBPE, which states that an engineer may engage in comprehensive and complete building design without the services of an architect, relies extensively on section 1001.003(c)(10), which defines the practice of engineering as including:

a service, design, analysis, or other work performed for a public or private entity in connection with a utility, structure, building, machine, equipment, process, system, work, project, or industrial or consumer product or equipment of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature[.]

TEX. OCC. CODE ANN. § 1001.003(c)(10) (Vernon Supp. 2005); *see* TEXAS BOARD OF PROFESSIONAL ENGINEERS, *Policy Advisory Opinion Regarding Building Design* (June 1, 2005), 30 TEX. REG. 3461-62 (2005). The opinion notes that the statute includes the words and phrases “design,” “in connection with,” and “building” and concludes that building design “may be performed exclusively by a licensed professional engineer competent in this field.” *See id.* The TBAE, on the other hand, contends that the phrase “of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature” qualifies all of the terms preceding it. *See* TBAE Brief I, *supra* note 2, at 39-44.

Under either construction, section 1001.003(c)(10) does not resolve whether an engineer may engage in comprehensive building design without the assistance of an architect. While section 1001.003(c)(10) states that the practice of engineering includes design in connection with a building, it does not say that all building design of any nature is engineering. If that were the case, then any “service, design, analysis, or other work” that could be rendered in connection with a building would also be engineering. But while section 1001.003(c)(10) does not expressly include comprehensive building design within the practice of engineering, neither does the statute exclude it. Section 1001.003(c)(10) is but one of several examples of services or work included in the definition of the practice of engineering. “Including” is not a term “of limitation or exclusive enumeration, and use of the [term] does not create a presumption that components not expressed are excluded.” TEX. GOV’T CODE ANN. § 311.005(13) (Vernon 2005). The examples in section 1001.003(c) do not in any way limit or restrict the general definition of the practice of engineering in section 1001.003(b).

Thus section 1001.003(c)(10) does not answer whether the practice of engineering includes comprehensive building design.

C. Sections 1051.001 and 1051.703

The TBAE asks whether the legislature has established a “line of demarcation” between the practice of architecture and the practice of engineering in sections 1051.001 and 1051.703, thereby generally restricting the design of buildings intended for human use or occupancy to architects. TBAE Brief I, *supra* note 2, at 12. Section 1051.001 defines the practice of architecture in relation to “a building or environs intended for human use or occupancy.” TEX. OCC. CODE ANN. § 1051.001(7) (Vernon Supp. 2005). Section 1051.703 provides for architects to prepare the architectural plans for major projects concerning a building owned or to be owned by a public entity and “used for education, assembly, or office occupancy.” *Id.* § 1051.703(a)(2)-(3) (Vernon 2004). From the quoted phrase, the TBAE suggests that the legislature has expressed an intent that only architects are authorized to design major public buildings intended for human use or occupancy, while engineers may comprehensively design buildings only that are incidental to an engineering project or are otherwise exempted from chapter 1051. TBAE Brief I, *supra* note 2, at 16.

The phrase “intended for human use or occupancy” was added to the definition of the practice of architecture in section 1051.001 in the recent regular session along with a number of other changes to the statute. *See* Act of May 18, 2005, 79th Leg., R.S., ch. 208, § 1, 2005 Tex. Gen. Laws 369, 369 (codified as an amendment to TEX. OCC. CODE ANN. § 1051.001). The bill analyses for this amendment state generally that the purpose of the changes is to make the definition more accurately reflect the activities that architects currently and typically perform. *See* SENATE COMM. ON BUSINESS & COMMERCE, BILL ANALYSIS, Tex. Comm. Substitute H.B. 1573, 79th Leg., R.S. (2005); HOUSE COMM. ON LICENSING & ADMINISTRATIVE PROCEDURES, BILL ANALYSIS, Tex. Comm. Substitute H.B. 1573, 79th Leg., R.S. (2005). Neither bill analysis specifically addresses the purpose of adding the phrase “intended for human use or occupancy.” However, section 1051.001, as it read before the recent amendment and as it reads currently, defines the practice of architecture but does not do so in exclusive terms. To the contrary, both sections 1051.001 and 1051.703 are subject to the exception for engineers in section 1051.601. Under 1051.601, an engineer may engage in architecture provided the service or work also constitutes the practice of engineering. *See* TEX. OCC. CODE ANN. § 1051.601(a) (Vernon 2004). We are thus returned again to the general definition of the practice of engineering under section 1001.003(b), which is service or work, “the adequate performance of which requires engineering education, training, and experience.” *Id.* § 1001.003(b) (Vernon Supp. 2005).

D. Attorney General Opinion DM-161

The TBAE asks if the recent opinion by TBPE correctly construes Attorney General Opinion DM-161 as establishing that all building design is the practice of engineering. TBAE Brief I, *supra* note 2, at 44-45. *See* Tex. Att’y Gen. Op. No. DM-161 (1992). The question presented then was “whether the plain language of Section 16 [of article 249a, Texas Revised Civil Statutes] prohibits an individual, other than one licensed as an architect, from preparing the plans

and specifications for the type of public works covered by Section 16?”¹⁶ Section 16 of article 249a was the predecessor to Occupations Code section 1051.703 concerning plans and specifications that must be prepared by an architect. The opinion stated that “[t]he practice of engineering includes preparing building plans and designs when that service requires the application of engineering principles and the interpretation of engineering data.” Tex. Att’y Gen. Op. No. DM-161 (1992) at 5. The opinion determined that “[a]n engineer’s license confers authority to perform building design services requiring the application of engineering principles and the interpretation of engineering data for public buildings described by section 16.” *Id.* at 6. It concluded in summary:

Section 16 of article 249a, V.T.C.S., the statute regulating the practice of architecture, does not bar a professional engineer licensed under article 3271a, V.T.C.S., from preparing plans and specifications, the preparation of which requires the application of engineering principles and the interpretation of engineering data, for “a new building that is to be constructed and owned by a State agency, a political subdivision of this State, or any other public entity in this State if the building will be used for education, assembly, or office occupancy and the construction costs exceed \$100,000.”

Id. at 7-8. The opinion clearly established that section 16 of the former statute did not prevent an engineer from preparing plans and specifications for a building when it constitutes the practice of engineering. We agree with that conclusion as extended to the present statute, Occupations Code section 1051.703. However, DM-161 does not attempt to resolve whether all aspects of building design constitute the practice of engineering. Nor does it address whether an engineer may engage in comprehensive design without the involvement of any other professional. That question requires a determination of whether a particular work or service constitutes the practice of engineering as defined in section 1001.003(b).

E. Sections 1001.003(b), 1001.063, and 1051.601

Examining individual statutes in chapter 1001 and chapter 1051 and as a whole, we do not discern a legislative intent to establish a categorical rule about whether an engineer may engage in comprehensive building design. We may conclude from the exception for engineers in chapter 1051 that the legislature did not intend for the practice of engineering to encompass the practice of architecture. Section 1051.601 does not create an absolute exemption for engineers, but instead exempts only work or service that constitutes the practice of engineering. *See* TEX. OCC. CODE ANN. § 1051.601(a) (Vernon 2004) (engineering exception). If the legislature had intended the practice of engineering to subsume the practice of architecture, it could easily have written a categorical exemption for licensed engineers. *See, e.g., id.* § 1053.002(a)(2) (stating that the chapter requiring interior design registration “does not apply to a person who is registered to practice architecture in this state”). Moreover, section 1051.601 provides a further specific exception for licensed engineers to plan and supervise work on “structures incidental” to “a construction project

¹⁶*See* Letter from Robert H. Norris, Executive Director, Texas Board of Architectural Examiners, to Honorable Dan Morales, Attorney General of Texas (Sept. 20, 1991) (on file with Opinion Committee).

primarily intended for engineering use." *Id.* § 1051.601(b)(1)-(2). This specific exception would be unnecessary if the practice of engineering included all of the practice of architecture. A comparable statute exempts architects from the requirement to register as an engineer under chapter 1001, but only when they are engaged in the practice of architecture. *Id.* § 1001.063. These limited exceptions suggest an intent to maintain the practice of engineering and the practice of architecture as distinct professions, so that an engineer is not authorized to practice all aspects of architecture. These sections recognize an area of overlap between the professions without attempting to establish the overlap's precise boundaries.

The clearest expression of legislative intent is in section 1001.003(b), the general definition of the practice of engineering, and in section 1051.001(7), the general definition of the practice of architecture. Under section 1001.003(b), a particular service or creative work is the practice of engineering if "the adequate performance of [such service or creative work] requires engineering education, training, and experience in applying special knowledge or judgment of the mathematical, physical, or engineering sciences." *Id.* § 1001.003(b) (Vernon Supp. 2005). Under section 1051.001(7), a service or creative work is the practice of architecture if it is the application of

the art and science of developing design concepts, planning for functional relationships and intended uses, and establishing the form, appearance, aesthetics, and construction details for the construction, enlargement, or alteration of a building or environs intended for human use or occupancy, the proper application of which requires education, training, and experience in those matters.

Id. § 1051.001(7). Examining the statutes side by side, it is clear that whether a particular work or service is the practice of engineering, the practice of architecture, or both, requires a determination of the education, training, and experience necessary to adequately and properly perform the work or service. Under these statutes, an engineer may comprehensively design a project when its adequate performance requires engineering education, training, and experience. The statutes do not provide a basis to answer categorically whether an engineer may engage in comprehensive building design, contrary to the conclusion in the TBPE's advisory opinion. To this extent, the TBPE's advisory opinion is incorrect.

We have received extensive materials concerning the education, training, and experience required to be licensed as an engineer compared to that required to be licensed as an architect. However, whether a particular service or work may be adequately performed by one with the education, training, and experience of an engineer, but not that of an architect, or vice versa, is intensely a question of fact, generally requiring expert testimony. *See, e.g., Holloway*, 101 S.W.3d at 813; *North*, 484 A.2d at 1299. Resolving questions of fact is beyond the scope of the opinion process. *See* Tex. Att'y Gen. Op. No. GA-0003 (2002) at 1.

The legislature has authorized the TBPE to determine whether particular conduct constitutes the practice of engineering. *See* TEX. OCC. CODE ANN. §§ 1001.201, .202, .304 (Vernon 2004). It has charged the TBAE to determine whether conduct is the unlicensed practice of architecture. *Id.*

§§ 1051.501.-.701(a) (Vernon 2004 & Supp. 2005). To do so, the TBAE must determine whether the conduct falls within one of the exceptions, such as the exception for engineers engaged in the practice of engineering. *See id.* § 1051.601 (Vernon 2004). As the legislature has given overlapping jurisdiction to TBPE and TBAE, a court may not be constrained to give complete deference to the interpretation of one over the other in the area of overlap. *See, e.g., Rosen*, 763 A.2d at 968 (stating that the Pennsylvania architecture licensing board is not entitled to the usual deference given to an agency’s construction of its statutes because the agency shares jurisdiction with the engineering board); *see also* TEXAS SUNSET ADVISORY COMMISSION STAFF EVALUATION: *Texas Board of Architectural Examiners* 17-18 (1991) (suggesting that the regulation of the professions remain separate but recommending that the “investigators responsible for enforcing laws for these professions should have expertise in the professional aspects of both architectural and engineering areas.”). Examining chapters 1001 and 1051 as a whole reveals an intent to regulate the practice of engineering and the practice of architecture as distinct professions, while at the same time permitting a degree of overlap between the two professions. There is no attempt in the statutes to sharply circumscribe the boundaries of the overlap, leaving that to be refined by the TBPE and the TBAE.

As long ago as 1973, the legislature provided

it is the intent of this Act to acknowledge the necessity of professional inter-relations and cooperation between the professions for the benefit of the public and to achieve the highest standards in design, planning, and building.

See Act of May 19, 1973, 63d Leg., R.S., ch. 361, § 8, sec. 10(b), 1973 Tex. Gen. Laws 801, 804. In 2003, the legislature established the joint advisory committee to address the areas of overlap between the two professions.¹⁷ The advisory committee, composed of three members from each board, a practicing architectural engineer, and a practicing architect, “shall assist each agency in protecting the public rather than advancing the interests of either agency or the profession it regulates.” TEX. OCC. CODE ANN. §§ 1001.216(d), 1051.212(d) (Vernon 2004). To that end, the committee is directed to issue advisory opinions to both boards.¹⁸ While the statute does not purport to make advisory committee opinions binding on either the TBPE or the TBAE, the apparent goal is to develop a body of precedent to guide the advisory committee when it addresses future questions. *See id.* §§ 1001.216(f), 1051.212(f). However, as the committee is given only advisory powers, chapters 1001 and 1051 continue to reflect an intent to regulate the two professions through cooperation between the two boards. Whether the TBPE and the TBAE, with the assistance of the joint advisory committee, are able to satisfactorily implement the legislative intent in this regard is a matter for the legislature.

¹⁷*See* Act of May 31, 2003, 78th Leg., R.S., ch. 1168, § 18, 2003 Tex. Gen. Laws 3307, 3314-15 (TBPE); Act of May 31, 2003, 78th Leg., R.S., ch. 331, § 1.21, 2003 Tex. Gen. Laws 1425, 1431 (TBAE).

¹⁸The specific subjects of joint advisory committee opinions are: (1) whether certain activities constitute the practice of engineering or the practice of architecture or landscape architecture; (2) the specific disciplinary proceedings initiated by either the TBAE or the TBPE; and (3) the need for persons working on particular projects to be registered by the TBAE or licensed by the TBPE. TEX. OCC. CODE ANN. §§ 1001.216(e), 1051.212(e) (Vernon 2004).

With reference to the TBAE's specific questions: (1) chapters 1001 and 1051 construed as a whole reveal an intent to regulate the practice of engineering and the practice of architecture as distinct professions, while at the same time permitting overlap between the two professions; (2) the inclusion of the phrase "for human use or occupancy" in the definition of the practice of architecture in section 1051.601 of the code does not create a distinction between the practice of architecture and the practice of engineering; (3) the exemption for engineers in section 1051.601 is not absolute and does not permit engineers to freely practice architecture without registering with TBAE; (4) the exemption in section 1051.601 is limited to an act, service, or work that constitutes the practice of engineering as defined in chapter 1001; (5) section 1001.003(c)(10) does not limit engineers' authority to engage in building design to the "components of a mechanical electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature"; (6) Attorney General Opinion DM-161 (1992) determined that the predecessor to Occupations Code section 1051.703 did not preclude engineers from preparing building plans and specifications but did not determine, as suggested by TBPE, that the entire scope of building design, including architecture, is an element of engineering.


We conclude by addressing Representative Flores' more general question. Chapters 1001 and 1051 of the Occupations Code do not establish as a categorical proposition whether an engineer may engage in comprehensive and complete building design of a project without the involvement of an architect. The answer to that question will depend on whether the adequate performance of the particular service or work in connection with that project requires a person with engineering education, training, and experience. Whether adequate performance of a particular service or work requires a person with engineering education, training, and experience is a question of fact that cannot be resolved in the opinion process.

S U M M A R Y

Chapters 1001 and 1051 of the Occupations Code maintain the practice of engineering and the practice of architecture as distinct professions. These chapters recognize that the two professions overlap concerning building design, but they do not precisely define the overlap's boundaries. On one hand, the provisions in chapter 1051 are subject to an exception for engineers engaged in the practice of engineering as defined in chapter 1001. On the other hand, neither the statutes nor Attorney General Opinion DM-161 establish that engineering includes all aspects of building design.

Chapters 1001 and 1051 of the Occupations Code do not provide a basis to answer categorically whether an engineer may comprehensively design a building without the involvement of an architect, and to that extent the Board of Professional Engineers' policy advisory opinion regarding building design, dated June 1, 2005, is not correct. Rather, the answer to that question will depend on whether the adequate performance of the particular service or work requires a person with engineering education, training, and experience. Whether adequate performance of a particular service or work requires a person with engineering education, training, and experience is a question of fact that cannot be resolved in the opinion process.

Very truly yours,



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