



Texas Board of Architectural Examiners

Architecture / Interior Design / Landscape Architecture

July 6, 2005

The Honorable Greg Abbott
Texas Attorney General
ATTN: Opinion Committee
P.O. Box 12548
Austin, Texas 78711-2548

Dear General Abbott:

The Texas Board of Architectural Examiners (“the Board”) is seeking a formal opinion from the Attorney General of Texas regarding issues related to the Board’s statutory mission to “protect the public against the irresponsible practice of architecture” by enforcing the provisions of the Architects’ Registration Law, TEX. OCC. CODE ANN. ch. 1051 (“the Act”). It has been argued that a licensed engineer’s authority under TEX. OCC. CODE ANN. ch. 1001 to prepare engineering plans and specifications allows the engineer to provide complete design services for a building that is subject to the restrictions of the Act.

The Board believes that, while the Act does not prohibit a licensed engineer from preparing engineering plans and specifications (*e.g.*, plans and specifications for electrical, mechanical, and structural systems) for a building, it does prohibit an engineer from preparing plans and specifications that “establish 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 Board further believes that if an engineer, without the assistance of an architect, prepares all plans and specifications for a building subject to the restrictions of the Act, he or she engages in the unlawful practice of architecture.

The Board recognizes that many buildings are exempt from the restrictions of the Act and that an engineer, just like any other person who is not an architect, may prepare plans and specifications for those buildings. The Board’s questions are directed toward buildings that are not exempt from the Act, such as the buildings subject to § 1051.703 of the Act. The Board believes the Legislature, in enacting various provisions of the Act, clearly intended architects to prepare architectural plans and specifications for buildings for human use or occupancy that are not exempt from the Act. Although engineers, too, may prepare plans and specifications for these non-exempt buildings, their work is limited by statute to the engineering systems of these buildings.

The attached brief sets forth the Board’s specific questions and describes the law in this area through extensive references to statutory provisions, case law, and a prior Attorney General Opinion addressing this subject. It is the Board’s hope that the Attorney General, through a formal opinion, will help explain and clarify several issues that are critical to the Board’s carrying out its statutory mission effectively and in the manner intended by the Legislature.

If you have questions or a need for clarification of any matter at issue in the brief, please contact the Board’s offices. Thank you for your consideration in this matter.

Sincerely,

Gordon E. Landreth, AIA, Chair
Texas Board of Architectural Examiners

cc: Texas Board of Architectural Examiners
Cathy L. Hendricks, ASID/IIDA, Executive Director

BEFORE THE
ATTORNEY GENERAL
OF THE
STATE OF TEXAS

BRIEF & REQUEST
FOR A
FORMAL OPINION RE:
JURISDICTION OF THE
TEXAS BOARD OF ARCHITECTURAL EXAMINERS

SUBMITTED BY
THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS

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INTRODUCTION:

Texas law regulates the practice of architecture and the practice of engineering. Because members of both professions provide design services and both professions are involved in the area of building design, questions have arisen regarding the scope of the services that may be provided by the members of each profession.

During the 78th Legislature, laws were enacted to create a Joint Advisory Committee to issue advisory opinions to the Texas Board of Architectural Examiners and the Texas Board of Professional Engineers “on whether certain activities constitute the practice of engineering or the practice of architecture or landscape architecture” and “the need for persons working on particular projects” to be a licensed engineer or a registered architect. See TEX. OCC. CODE ANN. §§1001.216, 1051.212 (Vernon 2004). The Joint Advisory Committee has issued an advisory opinion holding in part that certain projects require the services of both an architect and an engineer. See Joint Advisory Opinion attached as Exhibit A. The Board of Professional Engineers subsequently considered and rejected the adoption of that advisory opinion.¹

Upon rejecting the advisory opinion of the joint committee in May 2005, the Board of Professional Engineers voted to propose its own policy advisory opinion regarding the authority of an engineer to design an entire building without the services of an architect. See document entitled *Policy Advisory Opinion Regarding Building Design* dated May 18, 2005 and the letter requesting the opinion, attached hereto as Exhibit B. The policy advisory opinion was published in the June 10, 2005, edition of the *Texas Register*. In its advisory opinion, the Board of Professional Engineers determines that building design, without qualification or limitation, is an element of engineering. The opinion concludes that an engineer may exclusively prepare a comprehensive or complete design of a building, apparently any building, without an architect.² In reaching that conclusion, the Board of Professional Engineers relied upon its interpretation of Attorney General Opinion DM-161.

¹ This is the second time the Board of Professional Engineers has rejected a position statement issued by the Joint Advisory Committee with regard to architects’ and engineers’ roles in the design of buildings. In 2003, the Board of Professional Engineers rejected a joint policy statement saying that the two boards interpreted Attorney General Opinion No. DM-161 to mean that an architect or an engineer may act as the prime design professional for a public building intended for education, assembly, or office occupancy as long as members of both professions are involved in the design of the building. The Board of Architectural Examiners had adopted the joint policy statement shortly before the Board of Professional Engineers rejected it.

² It is highly unlikely that the Legislature delegated to the Texas Board of Professional Engineers the authority to issue an advisory opinion of this nature. Pursuant to TEX. OCC. CODE ANN. §1001.601 (Vernon’s 2004), the Board may issue “a written advisory opinion about *this chapter* [TEX. OCC. CODE ANN. ch. 1001] to a person in regard to a *specified* existing or hypothetical factual situation.” [Emphasis added.] The Board’s advisory opinion is responsive to an open-ended inquiry which did not pose a specific factual question and which necessarily requires consideration of the practice of architecture and the role of architects in building design. The advisory opinion entails the construction of Chapter 1051 of the Occupations Code, relating to the practice of architecture. The result of the conclusion reached is that the Texas Board of Architectural Examiners has no jurisdiction over the practice of architecture by engineers, as architecture is an element of engineering. The Legislature did not delegate to the Board of Professional Engineers the authority to make such a determination. A state agency has only those

Depending upon the nature of the intended use of the building, building design may necessarily include activities that are statutorily defined as the practice of architecture. Because advisory opinions of the Board of Professional Engineers serve as a defense to a charge that a person violated a law, the opinion under consideration may be perceived as, or relied upon as, a grant of immunity to engineers who engage in the unlawful practice of architecture. *See* TEX. OCC. CODE ANN. §1001.604 (Vernon 2004) .

In adopting its advisory opinion, Board of Professional Engineers essentially would usurp the Board of Architectural Examiners' authority to determine when a person is in violation of the laws that regulate the practice of architecture in Texas. Another consequence of the advisory opinion would be to subject architects to simultaneous regulation by both the Board of Architectural Examiners and the Board of Professional Engineers, as architects practicing architecture engage in building design which is construed to be engineering. However, the implications of the advisory opinion are not limited to architects. Building designers, who are not registered as either an engineer or an architect, routinely design buildings that are exempt from the architectural practice act. The exemptions from the engineering practice act are much more limited than those in the architectural practice act. Building designers may find themselves subject to sanction for the unlawful practice of engineering if they prepare what has typically been considered architectural plans for a building that exceeds the exemptions of the engineering practice act. All of these consequences would result in large part from a determination that Attorney General Opinion DM-161 concludes that building design is the practice of engineering.

The advisory opinion proposed by the Board of Professional Engineers raises fundamental issues regarding the jurisdiction of the Board of Architectural Examiners to regulate the practice of architecture. It also makes a drastic and unsupportable expansion of the statutory definition of the term "practice of engineering" within the Texas Engineering Practice Act. *See* TEX. OCC. CODE ANN. §1001.003(b) and (c) (Vernon 2004). In

powers that the legislature has explicitly delegated to the agency or implicitly delegated to it to fulfill those powers. *P.U.C. v. City Pub. Serv. Bd.*, 53 S.W.3d 310, 315-316 (Tex. 2001); *R.R. Comm'n v. Lone Star Gas Co.*, 844 S.W.2d 679, 685 (Tex. 1992); Op. Tex. Att'y Gen. No. GA-0022 (February 19, 2003) at 3. The same 78th Legislature that granted authority to the Board of Professional Engineers to issue advisory opinions also mandated the creation of the Joint Advisory Committee by both boards to address issues of overlap between the professions of architecture and engineering. In light of that fact, the Legislature clearly did not delegate to the Board of Professional Engineers the authority to resolve this issue unilaterally. Furthermore, the advisory opinion constitutes a legal determination of the scope of the jurisdiction of the two Boards based entirely upon a construction of the statutes. Generally, determinations of statutory construction by regulatory agencies are not entitled to deference. *Hammack v. P.U.C.*, 131 S.W.3d 713 (Tex. App. – Austin 2004, pet. denied); *Equitable Trust Co. v. Tex. Finance Comm.*, 99 S.W.3d 384 (Tex. App. – Austin 2003); *Flores v. E.R.S.*, 74 S.W.3d 532, 545-546 (Tex. App. – Austin 2002, pet. denied); *Rylander v. Fisher Controls Int'l. Inc.*, 45 S.W.3d 291, 302 (Tex. App. – Austin 2001). The advisory opinion does not rely upon or involve the technical aspects of engineering. Thus, the effect of Section 1001.604 is to grant an inordinate amount of deference to a statutory construction made by the Board of Professional Engineers.

doing so, it imputes to the Attorney General the same misconstruction of the statutes through an overly broad reading of Attorney General Opinion DM-161.

The Board of Architectural Examiners believes the statutory language and the legislative record behind that language establish a clear statement of legislative intent to regulate the practice of architecture as a distinct aspect of building design which differs from the practice of engineering. The statutes define the practice of architecture as the design of buildings for human use and occupation, while the practice of engineering, to the extent it relates to a building, is the design of building *systems* of a mechanical, electrical, hydraulic, or geotechnical nature. The Legislature anticipated that there may be an activity that would fit under the regulations of either practice act. For this reason, it mandated the creation of a Joint Advisory Committee to address those situations and to advise each Board accordingly.

The prospective advisory opinion of the Board of Professional Engineers is in direct conflict with the regulatory scheme adopted by the Legislature by which architecture and engineering are regulated separately to protect the public from hazards posed by these different practices. It concludes that architecture is a branch or a component part of engineering. Pursuant to the advisory opinion, any engineer (which includes a chemical, electrical, mechanical, and ceramic engineer) who has obtained an unspecified standard of competence may engage in the practice of architecture, apparently in designing any building for any intended use. The conclusion reached in the advisory opinion of the Board of Professional Engineers would render the regulatory scheme created by the Legislature meaningless. In doing so, the advisory opinion poses significant risks to the public health, safety, and welfare as architects are trained in life safety issues, fire codes, and accessibility aspects of building design. For these reasons, the Texas Board of Architectural Examiners respectfully requests an answer to each of the following questions:

- I. **In enacting TEX. OCC. CODE ANN. ch. 1051, did the Legislature intend to regulate the practice of architecture as a distinct profession separate from the practice of engineering?**

The Texas Board of Architectural Examiners and the State Board for the Registration of Professional Engineers were both created by the 45th Legislature. *See* Act of May 28, 1937, 45th Leg. R.S. ch. 404, 1937 Tex. Gen. Laws 816; and Act of June 9, 1937, 45th Leg. R.S. ch. 478, 1937 Tex. Gen. Laws 1279. The stated purpose of each Act is to safeguard life, health, property, and the public welfare. The enabling legislation of each Board required the examination and registration of persons qualified to engage in the practice of architecture and engineering, respectively. From the inception of the enabling legislation for architecture and engineering, the Legislature recognized them as distinct professions. The examination for architectural registration was to cover subjects prescribed by the Board of Architectural Examiners as necessary in the proper practice of architecture. Act of June 9, 1937, 45th Leg. R.S. ch. 478, §6, 1937 Tex. Gen. Laws 1279, 1283. The examination for registration as a professional engineer was to include special reference to the applicant’s ability to design and supervise engineering work. Act of May 28, 1937, 45th Leg. R.S. ch. 404, §14, 1937 Tex. Gen. Laws 816, 821.

Initially, the enabling legislation for the Board of Architectural Examiners specified a penalty only for the use of the title “architect” by an unregistered person. That prohibition applied to professional engineers in the same manner it would otherwise apply to a person not registered as an architect. The Legislature perceived that the practice of architecture requires knowledge and competence in subjects that are separate from engineering and reserved the use of the title “architect” only to those who had demonstrated, through an objective registration process, that they possessed the requisite knowledge and competence. *Id.* at §11, 1937 Tex. Gen. Laws at 1285-1286.³

Had the Legislature not intended a distinction between architecture and engineering, requiring separate registration for each, it would not have so provided. *State Bd. of Tech. Regist. v. McDaniel*, 326 P.2d 348 (Ariz. 1958) (analyzing distinction between the statutory regulation of the two practices in determining the authority of a state agency to sanction professional engineer for unlawful practice of architecture.) If the Legislature perceived the practice of architecture as a branch of the practice of engineering, it seems unlikely that it would have established a separate examination and registration process for architects, created separate regulatory agencies for each, or prohibited professional engineers from pursuing or engaging in the practice of architecture while using the title “architect” unless they were registered as architects.

³ The enabling legislation for the Board of Architectural Examiners did not prevent engineers from engaging in the practice of engineering, specifically identified as “railroads, hydro-electric work, industrial plants, or other construction primarily intended for engineering use or structures incidental thereto” and “planning, designing, or supervising the structural features of any building.” Act of June 9, 1937, 45th Leg. R.S. ch. 478, §11, 1937 Tex. Gen. Laws 1279, 1285-1286.

In ascertaining the legislative intent of two separate acts passed by the Legislature, the well established rule reads as follows:

The two Acts . . . were enacted at the same session of the Legislature, and consequently, under well established principles of law, they are in ‘*pari materia*,’ and it is presumed that they were actuated by the same policy and imbued with the same spirit; and accordingly in ascertaining the legislative intent, they will be read together, each in the light of the other, as though they were embraced in one Act or were supplemental to each other. [citations omitted.]
Garrett v. Mercantile Nat. Bank, 168 S.W.2d 636, 637 (Tex. 1943).

When the architecture and engineering acts are read together, in *pari materia*, presuming that the Legislature were actuating the same policy as though they were the same Act or supplemental to one another, the only conclusion to be reached is that the Legislature perceived the practice of engineering and the practice of architecture as separate practices, not one as a branch of the other.

A comparison of subsequent versions of the acts regulating the practices of architecture and engineering confirms that the distinction still exists and has become more clearly defined. In 1989, the 71st Legislature created the architectural practice act with the passage of Senate Bill 743. *See* Act of May 28, 1989, 71st Leg. R.S., ch. 858, 1989 Tex. Gen. Laws 3836. The practice act prohibited persons who were not registered as architects from engaging in the practice of architecture. During consideration of the bill in the Senate Committee of Economic Development, the following exchange occurred between Mr. Bob Wise, then Chairman of the Texas Board of Architectural Examiners, and a member of the Committee who was also a professional engineer:

Committee Member: Every building that’s described in here that would require a registered architect, would also require a registered engineer. Am I not correct?

Bob Wise: Well, the statute for engineers is very specific of what’s required.

CM: But it’s even more, it’s even more tightly drawn than this one. Anything over 5,000 square feet requires an engineer’s seal, right?

BW: Yes sir.

CM: So, uh, what we’re saying here is once you reach 20,000 feet, we need both of those seals on there.

BW: That’d be correct.

CM: I would say to you that I practice engineering out in the private sector and my firm does architecture and having an engineer’s seal on [a] 20,000 square foot building is not enough. You do need that architect. So I’ll vote for you.

Hearing on S.B. 743 Before the Texas Senate Committee on Economic Development, 71st Leg. R.S 14 (March 13, 1989).

The testimony related to a section of the bill that is currently codified as TEX. OCC. CODE ANN. §1051.606 (Vernon 2004) which lists projects for which the architectural plans and specifications may be prepared by a person who is not an architect. By negative inference, the statute describes those buildings for which the

architectural plans and specifications must be prepared by an architect. The bill was passed by the committee and eventually, by the Legislature. It appears clear from this testimony that the Legislature perceived a distinction between the practice of architecture and the practice of engineering. It also confirms the Legislature's intent, in passing the architectural practice act, to require both an architect and an engineer to be involved in the design of certain buildings.

The most direct discussion of the Legislature's intent appears in a report of the Texas Sunset Advisory Commission from 1991. In that document, the Commission's staff reported on its study of whether the practice of architecture should continue to be regulated in Texas and whether it would be advisable to combine the architectural and engineering boards into a single agency:

The regulation of architecture addresses public safety needs in the proper design and observation of construction of buildings for public use. Although professional engineers are responsible for many specific aspects of the building process, such as structural elements, registered architects are responsible for the overall development of the building's design and the establishment of plans and details regarding the building's construction and appearance. A major responsibility of architects is the design of buildings to meet fire safety requirements, particularly regarding the containment of fires and the adequacy of exitways. The regulation of architecture ensures that individuals have the education and experience and the demonstrated professional competence to enable them to meet these responsibilities.

Texas Sunset Advisory Commission Staff Evaluation: Texas Board of Architectural Examiners, 1991 at 17-18. As a result of the Sunset Commission's findings, it was recommended that Texas continue the regulation of the profession of architecture. The same report also stated that the architectural and engineering boards should not be combined into a single agency:

The regulation of architecture and landscape architecture requires expertise in areas that are outside the scope of professional engineering. Though similar in some respects, the practices of architecture and landscape architecture and professional engineering differ in many technical aspects related to the construction of buildings. Generally, architects and landscape architects are responsible for the overall design of a building or landscape project, while the engineers are responsible for specific areas, such as structural or electrical engineering. The investigators responsible for enforcing laws for these professions should have expertise in the professional aspects of both architectural and engineering areas.

Id. at 24.

The legislative record appears to acknowledge a distinction between the practices of architects and engineers. There is no indication that the Legislature perceived all building design to be engineering. With regard to certain buildings, the legislative record explicitly affirms the need for the services rendered by the architect in addition to those of the engineer.

II. Is the design for human use or occupancy a distinction between the practice of architecture and the practice of engineering in the regulatory scheme adopted by the Legislature?

A. The intended use of the building to be designed for human habitation is the underlying distinction between the practice of architecture and practice of engineering, pursuant to the statutes regulating the two professions.

The terms “practice of architecture” and “practice of engineering” have very detailed definitions, listing specific conduct as examples of each. In order to ascertain the distinction between the two professions, it is important to look first to the meaning of words as specified in the statute itself. Words and phrases that have acquired a particular meaning by legislative definition are to be construed accordingly. TEX. GOV’T CODE ANN. §311.011 (Vernon 2004). . *City of Garland v. P.U.C.*, 2005 Tex. App. LEXIS 3778 (Tex. App. – Austin, May 19, 2005); *Gables Realty, Ltd. v. Travis Central Appraisal District*, 81 S.W.3d 869, 873 (Tex. App. – Austin, 2002, pet. den.). (In determining legislative intent, every word, phrase, and expression in a statute must be considered as if it were deliberately chosen.) The pertinent parts of the definition of the term “practice of architecture”⁴ read as follows:

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. The term 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);

(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; . . .

⁴ The definition was recently amended. Act of May 17, 2005, 79th Leg. R.S., H.B. 1573, §1 (to be codified at TEX. OCC. CODE ANN. §1051.001). As amended the definition explicitly references “human use or occupancy” as a distinguishing element of architecture and includes the quoted list of activities that are specified as “practice of architecture.” The legislative record indicates that the amendments to the definition clarify and more specifically state the activities that are the “practice of architecture” under the pre-existing definition. The Senate Bill Analysis noted that the revised definition more accurately describes services routinely rendered by architects. SENATE COMM. ON BUSINESS & COMMERCE, BILL ANALYSIS, TEX. C.S.H.B. 1573, 79th Leg., R.S. (2005). Also, the House Bill Analysis stated that the definition contains “general wording” so the definition was amended to provide a more detailed definition of activities typically and frequently performed by architects. HOUSE COMM. ON LICENSING & ADMINISTRATIVE PROCEDURES, BILL ANALYSIS, TEX. C.S.H.B. 1573, 79th Leg., R.S. (2005). When the Legislature attaches a particular meaning to existing law in an amendment to it, the meaning the Legislature attaches to the former statute amounts to a legislative declaration of its meaning and will govern its construction. *Stanford v. Butler*, 181 S.W.2d 269, 274 (Tex. 1944); *Sharp v. House of Lloyd*, 815 S.W.2d 245, 248 (Tex. 1991). Neither analysis specifically addresses the insertion of the words “human use and occupancy” in the definition. However, the legislative records indicates that the Legislature did not perceive this change or any other modification of the definition of “practice of architecture” to be a radical departure of its construction of the pre-existing definition. To the contrary, it would appear that the Legislature perceived the amendments to the definition of “practice of architecture” as merely clarifying and specifically stating what was stated in general terms in the definition prior to its amendment.

Chapter 1051 states that “[a] person may not engage in the practice of architecture or offer or attempt to engage in the practice of architecture. . . [as defined above⁵]. . . unless the person is registered as an architect” and that

A firm, partnership, corporation, or association, including a firm, partnership, corporation, or joint stock association engaged in the practice of engineering under Section 1001.405, may engage in the practice of architecture, represent to the public that the entity is engaged in the practice of architecture or is offering architectural services, or use the word ‘architect’ or ‘architecture’ in any manner in its name only if any practice of architecture or architectural service performed on behalf of the entity is performed by or through a person registered as an architect.

TEX. OCC. CODE ANN. § 1051.701 (Vernon 2004).

The engineering practice act, TEX. OCC. CODE ANN. ch. 1001 (Vernon 2004), defines and regulates the “practice of engineering” in Texas. Chapter 1001 defines “practice of engineering” as follows:

‘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.

Chapter 1001 further states that

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; or

⁵ As amended by Act of May 17, 2005, 79th Leg. R.S., H.B. 1573, §3 (to be codified as TEX. OCC. CODE ANN. §1051.701(a).

(11) any other professional service necessary for the planning, progress, or completion of an engineering service.⁶

Although the professions of architecture and engineering are similar in that they both include design services related to real property, an underlying distinction between the two is that the practice of architecture involves the design of buildings for human use or occupancy but the practice of engineering does not. Engineering involves the design of building systems such as structural, electrical, and mechanical systems of a building regardless of whether the building is intended for human use or occupancy.

This distinction has been implicit in Texas law for many years. For example, language in the architectural practice act exempts construction projects and structures incidental to construction projects “primarily intended for engineering use, including a railroad, hydroelectric work, or industrial plant.” TEX. OCC. CODE ANN. §1051.601(b) (Vernon 2004). The architectural practice also designates that public buildings require an architect if they are intended for “education, assembly, or office occupancy.” TEX. OCC. CODE ANN. §1051.703 (Vernon 2004). It also specifies that institutional residential facilities, where people are housed while receiving custodial care, require an architect. *Id.*

By contrast, the practice of engineering is defined as the design of systems, machines, structures, and buildings of a mechanical, electrical, electronic, chemical, hydraulic pneumatic, geotechnical, or thermal nature. Certain public works are exempt from the engineering practice act based upon cost thresholds which differ depending upon whether the project involves electrical or mechanical engineering. TEX. OCC. CODE ANN. §1001.053 (Vernon 2004). Under the exemption statutes, only the trusses, beams, and other roof supporting members of certain buildings must be engineered or pre-engineered. TEX. OCC. CODE ANN. §1001.056(a)(2)(F) and (b)(Vernon 2004). The exemptions from the engineering practice act define what is subject to the

⁶ Under the doctrine of *ejusdem generis*, when a specific enumeration of items are followed by items stated in general terms, the general terms are to be construed as limited and applying only to the same class or type of

act and must be prepared by an engineer. The exemptions speak to the mechanical, electrical, and structural components of buildings and, by negative inference, require only these building systems, in contrast to building components relating to human use or occupancy, be prepared by engineers.

The statutory definitions of the two professions disclose a legislative intent to segregate aspects of building design related to human use or occupancy for regulation as the practice of architecture. Likewise, there is a clear legislative intent to regulate aspects of building design related to the mechanical, electrical, hydraulic, and other engineering aspects of building systems as the practice of engineering. To determine which practice covers a particular activity in a specific factual situation where the definitions may overlap, the Legislature mandated the creation of a Joint Advisory Committee. *See* TEX. OCC. CODE ANN. §§1001.216, 1051.212 (Vernon 2004). By lifting the words “design” and “building” from the definition of “practice of engineering,” the Board of Professional Engineers’ advisory opinion takes these terms out of context and reaches an overly broad conclusion that ignores the Legislature’s intent to draw important distinctions between the two practices.⁷

The definition of each practice is qualified by reference to the “education, training, and experience” necessary to properly engage in each respective practice. An analysis of this component of the definitions further reinforces the differences between architecture and engineering and distinguishes architecture as the design for human use and occupancy.

B. Registration as an architect requires significant education, training, and experience in areas not included in engineering education, training, and experience.

The identification of services that are the “practice of architecture” must begin with an analysis of the education, training, and experience required for architectural licensure in Texas.

Appendix A to this brief contains a lengthy analysis of the education, training, and experience required for architectural registration in Texas. The Texas Board of Architectural Examiners has determined that such education, training, and experience is necessary in order to qualify a person to perform architectural services. As a result, the analysis helps identify services that are the “practice of architecture” under the architectural practice act. Appendix B includes an analysis of the education, training, and experience required to become licensed as an engineer in Texas. The Texas Board of Professional Engineers has determined that such education, training, and

specific items listed. *Stanford v. Butler*, 181 S.W.2d at 272. The broad statement “any other professional service” in subsection (11) should be construed in light of the specific *engineering* services listed above.

⁷ By applying the same reasoning, a similar argument could be constructed with regard to the definition of “practice of architecture.” Because the definition of “practice of architecture” includes the words “developing

experience is necessary to qualify a person to perform engineering services and therefore establishes the parameters of the definition of “practice of engineering.”

While some of the subjects within the scope of the education and training for the practice of architecture are also covered within engineering education and training, there are several which are unique to the practice of architecture. These services that architects are qualified to provide by virtue of their architectural education, training, and experience do not fit under the definition of “practice of engineering” because they are not included in the education, training, and experience required for engineering licensure in Texas. Architectural services which generally do not appear to be included in the definition of “practice of engineering” include the following examples, which are not intended as an exhaustive list:

- Exterior building elevations
- Building sections
- Wall sections
- Reflected ceiling plans
- Room finish schedules
- Window and door schedules
- Space planning
- Universal design
- Coordination of building components
- Construction planning
- Master planning
- Site planning

The practice of architecture requires education and training in human behavior; accessibility issues; environmental aspects such as lighting, acoustics, and environmental controls; building codes, and the coordination of the separate building systems in a project. *See* Appendix A. The practice of engineering requires education and training in mathematics through differential equations, physics, thermodynamics, fluid mechanics, structures, building mechanical and electrical systems, and other technical design aspects. *See* Appendix B. Architects are educated and trained in the aspects of building design related to human use or occupancy while

design . . . for the construction . . . of a building,” the Board of Architectural Examiners could conclude that registered architects are authorized to design all aspects of buildings, including engineering systems.

engineers, to the extent that they design buildings, are educated and trained to design building components “of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical or thermal nature.”

C. The curriculum for a bachelor’s degree in architectural engineering primarily covers engineering subjects. The architectural engineering examination primarily tests knowledge of engineering practice and principles.

Neither the engineering practice act nor the architectural practice act recognizes a practice or profession identified as architectural engineering for licensing or regulatory purposes. The title “architectural engineer” is not included in a list of professional or business engineering titles which the engineering practice act reserves only to licensed engineers. TEX. OCC. CODE ANN. §1001.301(b) (Vernon 2004). The architectural practice act makes an exception to the prohibition upon the use of the title “architect” for those engineers who have a degree in architectural engineering. The exception reads as follows: “[t]his chapter does not prohibit an engineer who has an architectural engineering degree from a public or private college or university from using the title ‘architectural engineer.’” TEX. OCC. CODE ANN. §1051.601 (c) (Vernon 2004). There is no exemption to allow engineers holding a degree in architectural engineering to engage in the practice of architect.⁸

Other than inclusion of “one practicing [accredited] architectural engineer” on the Joint Advisory Committee on the practice of architecture, engineering, and landscape architecture, neither chapter makes any other reference to architectural engineers. TEX. OCC. CODE ANN. §§ 1001.216, 1051.212 (Vernon 2004). However, the Board of Professional Engineers’ advisory opinion concludes that some engineers are competent to completely design an entire building including architectural aspects of the building. The opinion does not identify *which* engineers are competent to do so. Presumably, architectural engineers might be considered by the Board of Professional Engineers to be competent in this respect.⁹ However, an analysis of the curriculum for a bachelor’s degree in architectural engineering at an accredited program reveals that it is in essence an engineering degree that does not provide extensive education in architectural subjects.

The only accredited architectural engineering program within the state is at the University of Texas at Austin, within the Department of Civil, Architectural, and Environmental Engineering. The program is accredited by the Accreditation Board for Engineering and Technology (ABET) but not the National Architectural

⁸ See *infra* pages 28-34, regarding the exemption from the architectural practice act.

⁹ On May 20, 2004, the Texas Board of Professional Engineers adopted a rule requiring candidates for licensure to designate a “branch” of engineering “under which experience has been gained.” 29 Tex. Reg. 4873 (2004) (22 TEX. ADMIN. CODE §133.13.) The rule states that an applicant is to designate a branch or an area of specialty in order to determine an applicant’s competence. One of the listed branches is “architectural” engineering.

Accreditation Board (NAAB)¹⁰. A Bachelor of Science Degree in the Architectural Engineering Program requires completion of a curriculum totaling 126 semester hours. *See* Document attached as part of Appendix B, titled *Welcome to the Department of Civil, Architectural, and Environmental Engineering at The University of Texas at Austin* from the University's Web site. From the prefixes on the course titles, it appears that the courses in the curriculum that relate to architecture include the following:

- Introduction to Architectural Engineering 1 hour
- Approved Architectural History Elective 3 hours
- Introduction to Design I 3 hours
- Materials and Methods of Building Construction 3 hours
- Structural Design in Wood 3 hours
- Project Management and Economics 3 hours
- Computer-Aided Design and Graphics 2 hours
- Introduction to Design II 3 hours
- Building Environmental Systems 3 hours
- Contracts, Liability, & Ethics 3 hours
- Integrated Design Project 4 hours

Of the 126 semester hours required for a degree in architectural engineering, 31 hours relate to architecture. The remaining semester hours required for the degree are purely engineering. By contrast, in order to obtain a professional degree in architecture from the School of Architecture at the University of Texas at Austin, an NAAB accredited program, a student must complete 167 semester hours of course work, which must include 94 semester hours in architectural courses. Of those 94 semester hours, 39 specifically cover architectural design. For an architectural degree, the total hours in architectural design courses alone exceed the total of *all* architectural course work for an architectural engineering degree. In light of this and the fact that the program is accredited by the organization for accrediting engineering programs but not the organization for accrediting architectural programs, it would appear that an architectural engineering degree is primarily a degree in engineering.

Under the rules of the Board of Architectural Examiners, an architectural engineering degree would not be sufficient to satisfy the education requirements for registration as an architect. 22 TEX. ADMIN. CODE §1.21. Thus, the education and training obtained by one holding a degree in architectural engineering fits the definition of

¹⁰ To be registered as an architect, one must obtain a degree from an architectural education program accredited by the NAAB or a substantially equivalent accrediting organization for out-of-state programs. 22 TEX. ADMIN. CODE

the practice of engineering and not that of the practice of architecture. Assuming an architectural engineer's qualifications establish the standard of competence for an engineer to perform the entire design of a building pursuant to the Board of Professional Engineer's advisory opinion, the advisory opinion establishes a noncompliant standard of competence to engage in the practice of architecture. To this extent, the advisory opinion is outside the parameters of the Board of Professional Engineer's statutory authority.¹¹

Recently, the National Council of Examiners for Engineering and Surveying (NCEES), the contractor that provides the Board of Professional Engineers the examination to license engineers, began offering an architectural engineering examination as one of its optional examinations.¹² Only five percent of the examination covers building systems; two percent tests for knowledge of life and safety codes, regulations and statutes; and 16 percent tests for knowledge of the design of structural systems, only a portion of which would cover architectural aspects of structural design. *See* Outline of Architectural Examination, dated April 2003, attached as part of Appendix B. Like the educational requirements for an architectural engineering degree, the examination for architectural engineering is primarily an engineering examination. It tests knowledge of engineering principles and practices, and it is taken by candidates seeking licensure as professional engineers. A candidate could pass this examination with little knowledge of the aspects of building design relating to human use and occupancy.

D. Legal precedent construing engineering and architectural acts generally find a “line of demarcation” between the two professions when a distinction is made in the statutes.

Courts in jurisdictions throughout the United States have recognized that, with regard to the design of buildings, architecture and engineering overlap in both directions. These courts have acknowledged that architects are able to perform some building design functions that are the “practice of engineering” and engineers are able to perform some building design functions that are the “practice of architecture.” An analysis of relevant cases makes it clear that courts focus on statutory language to identify the areas of overlap between the two professions and the areas where there is a distinction between the two professions.

The most recent case reported in this area is *Holloway v. Arkansas State Board of Architects*, 101 S.W.3d 805 (Ark. 2003). The ruling in this case is particularly instructive because (1) the Arkansas law in question was similar to the Texas law in question in that it exempted from the architectural practice act engineers who were engaged in the practice of engineering as defined in Arkansas' engineering practice act; (2) it is a relatively recent

§1.21(a).

¹¹ *See* Note 2 *supra* regarding the scope of the authority for the Board of Professional Engineers to issue advisory opinions.

¹² To obtain licensure as an engineer, a candidate must pass a mandatory examination titled “Fundamentals of Engineering.” Thereafter, the candidate must obtain experience in the practice of engineering for a specified

ruling which indicates it was based on principles of architecture and engineering that would be similar today; and (3) the decision was rendered in a state close in proximity to Texas.

In its decision, the *Holloway* court upheld the decision of the Arkansas architectural board to fine a licensed engineer for preparing plans for a pre-engineered metal building, seventy percent of which was intended to be used for office space. The Arkansas court found that reading the architectural and engineering practice acts together, “a person of ordinary intelligence can glean 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.’” *Holloway*, 101 S.W.3d at 812.

An important point made by the *Holloway* court is that in the Arkansas law “[a] critical element of the definition of the practice of architecture is that the building be designed for human occupancy or habitation.” *Id.* The Texas law has been recently amended to explicitly make the same distinction. Furthermore, as noted earlier, an analysis of pre-existing Texas law makes clear that in effect it, too, distinguishes between buildings designed for human occupancy or habitation and those intended for more utilitarian purposes. For example, the architectural practice act exempts construction projects and structures incidental to construction projects “primarily intended for engineering use, including a railroad, hydroelectric work, or industrial plant.” TEX. OCC. CODE ANN. § 1051.601(b) (Vernon 2004). Similarly, under the act, the architectural plans and specifications for buildings used primarily for farm, ranch, or agricultural purposes, or the storage of raw agricultural commodities and warehouses that have limited public access need not be prepared by an architect. TEX. OCC. CODE ANN. § 1051.606(a)(4)(A) and (E) (Vernon 2004). The architectural practice act also mandates that an architect prepare the architectural plans and specifications for public buildings if they are intended for “education, assembly, or office occupancy.” It also specifies that institutional residential facilities intended for occupancy on a 24-hour basis by persons receiving custodial care must be designed by an architect. TEX. OCC. CODE ANN. § 1051.703(a) (Vernon 2004). Similarly, in its list of projects that are the practice of engineering, the engineering practice act describes buildings, structures, and other projects “of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature” and other similar projects. TEX. OCC. CODE ANN. § 1001.003 (Vernon 2004). Taken together, the two Texas statutes reveal a legislative intent to require the inclusion of an architect in the design of buildings intended primarily for human occupancy or use even prior to the explicit inclusion of the words “for human use or occupancy” in the architectural practice act. Thus, Texas law has implicitly distinguished between buildings intended for human occupancy or use and those intended for more utilitarian purposes. Pursuant to recent

period of time and complete one of several optional “Principles and Practices” examinations. 22 TEX. ADMIN.

amendments to the statutory definition of “practice of architecture,” Texas law now also explicitly makes such a distinction.¹³

Not all architecture/engineering cases from various United States jurisdictions over the last sixty years draw a clear line between architecture and engineering in the area of building design. Generally, those cases where a line was not drawn were in jurisdictions where the statutes defined the two professions in substantively identical terms. However, in those jurisdictions where the statutes draw a distinction between the practice of architecture and engineering, either by reference to the distinct education and training of the two professions or by reference to the intended purpose of the buildings designed by each, the cases find a line of demarcation between the practices of the two professions.

In *Gionti v. Crown Motor Freight Co.*, 26 A.2d 282 (N.J. 1942), the New Jersey Supreme Court found that an engineer’s contract to design a garage and office building was void because it was a contract for architectural services and, therefore, could be entered into only by an architect. The New Jersey statutes prohibited any person other than an architect from pursuing the practice of architecture. The statutes included an exception for engineers designing buildings “incidental or supplemental to engineering projects.” The court observed:

It is argued that as a result of the progress made in the professions of the practice of architecture and engineering, many ‘overlapping functions and activities’ have arisen between them, that the result has been that all ‘distinctions’ between them have ‘passed away,’ that they ‘differ in name only,’ and, therefore, we should construe the respective statutes relating to those professions accordingly. However interrelated the professions and the statutes relating to them may be, the legislature has made and maintained a marked cleavage between them. It is beyond our power to thwart that clear legislative cleavage.

Gionti, 26 A.2d at 285. Though the *Gionti* case held that there is a statutorily recognized distinction between the practice of architecture and engineering, it did not address what that distinction may be. This issue was resolved in *State of New Jersey Board of Architects v. North*, 484 A.2d 1297 (N.J. Super. 1984). The case involved an action taken by the state board of architects against a structural engineer for engaging in the practice of architecture in designing a duplex. The court struggled to ascertain whether the structural engineer had unlawfully practiced architecture or had lawfully engaged in a practice incidental to engineering. Ultimately, the court adopted the reasoning of the architecture board that it is the intended purpose for a structure that determines whether it is an engineering project. The court concluded, albeit with strong reservations arising from ambiguities

CODE §133.61. One of the optional examinations is titled “Architectural.” See material attached to Appendix B.

¹³ The bill analyses of the legislation that makes the explicit distinction that the practice of architecture is building design “for human use or occupancy” inferred that the law as it existed prior to amendment made the same distinction. The analyses noted that the definition is amended to specify in detail what is currently the practice of architecture. The construction of the existing law by a later act is a legislative declaration of its intent. *Stanford v. Butler*, 181 S.W.2d 269, 274 (Tex. 1944); *Calvert v. Marathon Oil Company*, 389 S.W.2d 153 (Tex. App. – Austin 1965, writ ref’d n r.e.). See *supra*, page 10, note 4.

in the statutes, that buildings meant for human habitation, like the duplex at issue, are not engineering projects even though many elements designed by the structural engineer were engineered sub-structures. *North*, 484 A.2d at 1301. Thus, the court ruled engineers could not design dwellings, such as the duplex at issue, as a practice that is incidental or supplemental to an engineering project.

In *State v. Beck*, 165 A.2d 433 (Me. 1960), the Supreme Judicial Court of Maine upheld the criminal conviction of an engineer for advertising himself as an architect. The engineer had argued that there was no “efficacious” difference between architecture and engineering “other than the aesthetics of the latter.” *Beck*, 165 A.2d at 435. The engineer also noted that the statutes allowed engineers to engage in the practice of architecture incidental to the practice of engineering.

The court concluded that “while all architects may be engineers, all engineers are not architects.” *Beck*, 165 A.2d at 437. Although the court seems to have held architecture is “species of the genus engineering” in the estimation of the Maine legislature, the court explained several clear distinctions between architecture and engineering. In doing so, the court observed that though both professions directly relate to the public health and welfare, they play very different roles in the manner in which they serve that purpose:

Architects are commonly engaged to project and supervise the erection of costly residences, schools, hospitals, factories, office and industrial buildings and to plan and contain urban and suburban development. Health, safety, utility, efficiency, stabilization of property values, sociology, psychology are only some of the integrants involved intimately. Banking quarters, commercial office suites, building lobbies, store merchandising salons and display atmospheres, motels, restaurants and hotels eloquently and universally attest the decisive importance in competitive business of architectural science, skill and taste. A synthesis of the utilitarian, the efficient, the economical, the healthful, the alluring and the blandished is often the difference between employment and unemployment, thriving commerce and a low standard of existence. Basic engineering no longer suffices to satisfy many demands of American health, wealth, or prosperity.

Beck, 165 A.2d at 438. Thus, in lieu of being a statement that architecture is a subspecies of engineering or that an engineer may fully engage in the practice of architecture, the *Beck* case is a strong and eloquent statement about the distinct and unique role of the architect and contrasts it with the role of the engineer.

In *Fanning v. College of Steubenville*, 197 N.E.2d 422 (Ohio Common Pleas 1961), the court found that the plaintiff engineer had illegally performed architectural services in designing buildings at a college. The court’s decision explicitly overruled an advisory opinion rendered by the Attorney General of Ohio twenty-five years prior to the *Fanning* case. That opinion had advised that an engineer should be allowed to design public school buildings because there was no clear line of demarcation between the two professions under the statutes. *Fanning*, 107 N.E.2d at 425-426.

The Ohio statutes acknowledged the overlap of architecture and engineering by allowing architects and engineers to each to engage in the practice of the other when doing so may be incidental to their particular

profession. *Fanning*, 197 N.E.2d at 424. However, the court emphasized that under the laws at issue there is a distinction between the two professions and the exemptions do not erase that distinction. “Is a professional engineer under our statutes entitled to enter into the general practice of architecture, and would an architect be permitted to enter into the general practice of engineering, and, if so, why did the legislature establish two separate professions? The legislature in establishing each of these professions recognized that they required a different educational background. The legislature also recognized that they have some things in common, and provided for this, and still recognize that each profession must be protected in its primary field of endeavor.” *Fanning*, 197 N.E.2d at 426-427.

The cases holding that the practices of architecture and engineering overlap completely generally reach that conclusion because in those jurisdictions the statutory definitions of the terms “practice of architecture” and “practice of engineering” were substantively identical. See e.g., *State Board of Architects v. Jones*, 267 So.2d 427 (Ala. 1972); *Verich v. Florida State Board of Architecture*, 239 So.2d 29 (Fla. App. 1970), *Jones v. Spindel*, 196 S.E.2d 22 (Ga. App. 1973); and *Georgia Assoc. of A.I.A. v. Gwinnet County*, 233 S.E.2d 142 (Ga. 1977) (However, in *Georgia A.I.A.*, the court held the overlap does not authorize engineers to “freely” practice architecture. *Georgia A.I.A.*, 233 S.E.2d at 144.) The case *Verich v. Florida State Board of Architecture*, is representative of this line of cases. In *Verich*, a Florida appellate court reversed an injunction imposed upon an engineer for the unlawful practice of architecture. The Florida statutes defined “practice of architecture” as “planning or design for the erection, enlargement or alteration of buildings for others or furnishing architectural supervision for the construction thereof” The term was further clarified by a list of exemptions from the statute. The term “professional engineering” was defined as “any professional service requiring use or knowledge of mathematics and the principles of engineering . . . for public or private buildings and any consultation, investigation, plan, design, or responsible supervision of construction in any public or private building.” *Verich*, 239 So.2d at 30. Neither definition included references to the education or experience unique to the practice of architecture or engineering, unlike the definitions that appear in the Texas architecture and engineering acts. Similarly, neither definition in the Florida statutes made a distinction based upon the intended uses of the buildings to be designed by each profession.

The court found that the two regulatory acts could only be resolved by construing them to mean that both architects and engineers may plan and supervise the construction of buildings. *Id.*

The Florida board of architecture had argued the “generally accepted concepts” of the two professions *did* indicate that engineers design buildings of an industrial nature primarily to house machinery and equipment rather

than “designed primarily for habitation or occupancy by humans.” *Id.* The court recognized such a distinction would help preserve a line of demarcation between the two professions “consistent with generally accepted concepts.” However, the court noted the Florida Legislature could have explicitly created such a line of demarcation had that been its intent.¹⁴

During the thirty years since these cases were decided, the statutory definitions of the practices of architecture and engineering have been clarified to more clearly distinguish between the two professions. Thus, in more recent cases, such as *Holloway*, courts have found a distinction in that the practice of architecture involves the design of buildings for human use or occupancy while engineering involves the design of buildings for equipment, vehicles, and processes. *Holloway*, 101 S.W.3d at 812. In the *Verich* case, the court inferred that its decision would likely have been different if this “line of demarcation” had been specified in the Florida statutes at issue. *Verich*, 239 So2d at 32. Likewise, the Georgia Supreme Court stated that “[a] more precise line ought to be drawn between these professions, but that we must leave to the General Assembly.” *Georgia Assoc. of A.I.A. v. Gwinnett County*, 233 S.E.2d 142, 144 (Ga. 1977).

Although there is no clear consensus among the courts confronted with the question of whether engineers may design buildings without architects, those courts consistently have focused on the statutory framework governing the two professions. If a jurisdiction’s legislature appeared to draw a line between the professions, courts almost invariably would draw a similar line. When the legislature failed to do so, courts have held that either profession may design a building while acting within the scope of their respective professions. Courts have drawn a distinction between the practices of the two professions based upon the legislature’s recognition of the differences in the educational qualifications of each profession. *Fanning*, 197 N.E.2d 422. Courts have also drawn a distinction based upon an architects’ role in designing buildings for human use and occupancy, when that distinction is drawn by the legislature. *Holloway*, 101 S.W.3d at 812. *See also Dahlem Construction Company v. State Board of Architects*, 459 S.W.2d 169 (Ky. 1970) (Engineers design structures but architects design buildings which are statutorily defined as structures erected to “shelter human beings, their activities and possessions.”)

Applying the case law to the Texas statutes clearly establishes Texas as one of the jurisdictions where a “line of demarcation” has been drawn between the “practice of architecture” and the “practice of engineering.” As in the *Fanning* case, the Texas statutes define the two terms by reference to the education and experience necessary

¹⁴ Since *Verich*, the Florida Legislature has explicitly created that line of demarcation. The Florida Statutes currently defines “architecture” as “rendering or offering to render services in connection with the design and construction of a structure or a group of structures which have as their principal purpose *human habitation or use*, and the utilization of space within and surrounding such structures. These services include planning, providing

for the practice of each profession. Like the statutes at issue in *Holloway*, the Texas statutes have always generally inferred that architects must prepare the architectural plans and specifications for buildings intended for human use and occupation. Furthermore, the definition of the term “practice of architecture” has recently been amended to make that distinction explicit. By contrast, the term “practice of engineering,” to the extent that it relates to the design of a building, is limited to a building of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature. According to the reasoning of cases from other jurisdictions in addressing similar laws, architecture, as contrasted to engineering, applies primarily to the design of buildings for human use and occupancy. The Texas Legislature made this distinction by reference to the different education and training of the two professions, by requiring architects to prepare architectural plans and specifications for buildings intended for human use, and, recently, by explicitly defining architecture as the design of buildings for human use and occupancy under Texas law.

III. Is the exemption for professional engineers within TEX. OCC. CODE ANN. ch. 1051 a limited exemption or is it an absolute exemption which completely excludes engineers from the practice restrictions of that chapter?

The architectural practice act states that it does not restrict an engineer from engaging in an activity that is within the scope of the “practice of engineering” as that term is defined in the engineering practice act. The wording of the exemptions for engineers set forth in the act is thus drafted in terms that indicate a limited exemption to allow the practice of engineering. The exemption allows engineers to perform activities within the scope of the practice of engineering which coincidentally might also be within the scope of the practice of architecture.

The exemption for engineers from the architectural practice act is found in TEX. OCC. CODE ANN. §1051.601 (Vernon 2004). That exemption reads, in part, as follows:

Section 1051.601. ACTIVITIES OF LICENSED ENGINEER.

- (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.

The language of the exemption set forth in Section 1051.601 shows that it is not an absolute exemption from the statute’s requirements. Instead, it is limited by the phrase “within the scope of the practice of engineering.” The

preliminary study designs, drawings and specifications, job-site inspection, and administration of construction

exemption does not address the practice of architecture by engineers. It merely states those activities which are engineering are not limited by the architectural practice act. The exemption is unambiguous and it must be construed according to the plain meaning of the words used in the statute. *Texas Dept. of Protective and Regulatory Serv. v. Mega Childcare, Inc.*, 145 S.W.3d 170 (Tex. 2004). According to the plain meaning of the words used in the statute, it does not allow engineers to freely engage in the practice of architecture. Rather, the exemptions for engineers confirm that they may not do so. “As a general matter, the creation of a statutory exception by the legislature ‘makes plain the intent that the statute should apply in all cases not excepted.’” *Op. Tex. Atty. Gen. No. JM-217* (October 24, 1984) quoting *State v. Richards*, 301 S.W.2d 597, 600 (Tex. 1957); *Insurance Co. of North America v. Morris*, 981 S.W.2d 667, 681 (Tex. 1998). In contrast, professional exemptions included in numerous other licensing statutes are stated in absolute terms¹⁵:

- The interior design registration law, TEX. OCC. CODE ANN. ch. 1053 (Vernon 2004), provides an absolute exemption for architects. It states, “This chapter does not apply to a person who is registered to practice architecture in this state.”¹⁶ *Id.* at §1053.002(a)(2).
- The landscape architectural practice act, TEX. OCC. CODE ANN. ch. 1052 (Vernon 2004), also provides an absolute exemption for architects. It states, “A person may not engage in the practice of landscape architecture unless the person holds a certificate of registration under this chapter or the person is licensed in this state to practice architecture.” *Id.* at § 1052.003(a)(11)(A). An identical exemption for engineers exists in the landscape architectural practice act. *Id.* at §1052.003(a)(11)(B).
- The barber registration act, TEX. OCC. CODE ANN. ch. 1601 (Vernon 2004), includes an absolute exemption for certain medical and surgical officers. It states, “This chapter does not apply to a person who . . . is a commissioned or authorized medical or surgical officer of the United States armed forces.” *Id.* at §1601.003(2)(B).
- The physical therapy practice act, TEX. OCC. CODE ANN. ch. 453 (Vernon 2004), includes an absolute exemption for physical therapy aides. It states, “This chapter does not apply to a physical therapy aide.” *Id.* at §453.004(b)(1).

The examples of various absolute exemptions discussed above show that the Legislature enacts statutory exemptions in absolute terms when it so intends. Moreover, if the engineering exemption in Chapter 1051 were interpreted as being an absolute exemption, the provision restricting the exemption to the practice of engineering

contracts.” FLA. STAT. ANN. §481.203(6)(West 2004).

¹⁵ This is not an exhaustive list of the absolute exemptions found in Texas licensing statutes. A few examples were chosen randomly.

¹⁶ It is important to note that the interior design registration law’s architectural exemption was enacted in 1991 through Senate Bill 429, a bill that also included the architectural practice act’s engineering exemption for public buildings. That engineering exemption was codified in § 1051.601 as set forth above. As enacted it read, “This section does not prevent, limit, or restrict a registered professional engineer from performing any act, performance, or work that is the practice of engineering as defined by The Texas Engineering Practice Act.” Act of May 27, 1991, 72nd Leg., R.S., ch. 579, § 2, 1991 Tex. Gen. Laws 2064. In contrast, the architects’ exemption from the interior design registration law was absolute: “This article does not . . . apply to an architect registered to practice in this state.” *Id.* at § 1. The coexistence in the same bill of these two very different types of exemptions strongly supports the position that the engineering exemption in the architectural practice act was not intended to be absolute. If the Legislature had intended to enact an absolute exemption for engineers in section 2 of the bill, they easily could have used language similar to that which was used in section 1 of the same bill.

would be rendered meaningless. It is well settled in Texas law that when construing a statute, an effort must be made to give effect to all of the statute's language. "In enacting a statute, it is presumed that the entire statute is intended to be effective." TEX. GOV'T. CODE ANN. § 311.021 (Vernon 2004); *see also Brown v. De La Cruz*, 156 S.W.3d 560, 566 (Tex. 2004)(courts will not read statutory language to be pointless if it is reasonably susceptible of another interpretation) and *Home Savings Assoc. of Dallas County v. Crow*, 514 S.W.2d 160 (Tex. Civ. App.—Dallas 1974), *affirmed*, 522 S.W.2d 457 (Tex. 1975) (holding that statutory language must be strictly construed, especially when it is included in a statute that is penal in nature). To ignore the restrictions within the architectural practice act's engineering exemption would be inconsistent with the clear mandate of Texas law.

Like the limiting language of TEX. OCC. CODE ANN. §1051.601, another provision of the architectural practice act confirms that engineers do not enjoy a blanket exemption from the act's restrictions. Section 1051.701(b) governs the activities of various business entities:

A firm, partnership, corporation, or association, including a firm, partnership, corporation, or joint stock association engaged in the practice of engineering under Section 1001.405, may engage in the practice of architecture, represent to the public that the entity is engaged in the practice of architecture or is offering architectural services, or use the word "architect" or "architecture" in any manner in its name only if any practice of architecture or architectural service performed on behalf of the entity is performed by or through a person registered as an architect under this chapter.

TEX. OCC. CODE ANN. § 1051.701 (Vernon 2004). As with Section 1051.601, an effort must be made to derive meaning from all of the language set forth in this provision. That language includes the phrase "including a firm, partnership, corporation, or joint stock association engaged in the practice of engineering," the obvious effect of which is to allow engineering firms to offer or engage in the practice of architecture only if such architectural services are performed by or through a registered architect. If engineers had statutory authority to practice architecture, as implied by the Board of Professional Engineers' advisory opinion, this language would be meaningless. Alternatively, the statute would have the absurd construction of prohibiting engineers from practicing architecture collectively, when operating as a business, while permitting them to do so individually. Statutory interpretations which would produce absurd results are to be avoided. *Sharp v. House of Lloyd, Inc.*, 815 S.W.2d 245, 249 (Tex. 1991). The Legislature's inclusion in TEX. OCC. CODE ANN. §1051.701 of a reference to engineering firms reiterates the legislative intent to exempt engineers from the architectural practice act only to the extent that they are engaged in the practice of engineering.

An additional provision of TEX. OCC. CODE ANN. ch. 1051 demonstrates that the engineering exemption is not absolute. Section 1051.703 describes the architectural practice act's restrictions related to public buildings. It states that the architectural plans and specifications for certain public buildings must be prepared by a registered architect. It goes on to point out that a building owner is not prohibited from choosing an engineer as the "prime

design professional” for a building project. TEX. OCC. CODE ANN. §1051.703(b) (Vernon 2004). By making the point that an engineer may act as the prime design professional, the language of this section indicates that engineers are not completely exempt from the statute. If they were completely exempt, it would not be necessary to point out that engineers can take on some tasks – those involved in acting as the prime design professional – that otherwise may be handled only by architects. As with the statutory provisions discussed above, this provision supports the proposition that engineers are prohibited from performing some services that are the “practice of architecture.”

The advisory opinion proposed by the Board of Professional Engineers cites one sentence from a report related to the Sunset Commission’s 1991 Sunset Review of the Board of Architectural Examiners. That sentence reads “Engineers or interior designers may perform building design services as part of their work, but may not hold themselves out as architects.” *Texas Sunset Advisory Commission Staff Evaluation: Texas Board of Architectural Examiners*, 1991 at 7. When read in context, the sentence cannot reasonably be construed as a statement that engineers are completely exempt from the architectural practice act or that every aspect of building design is part of the practice of engineering. The paragraph from which that sentence is quoted reads as follows:

The statute contains two different kinds of exemptions from the registration requirement for architects. One set of exemptions concerns activities that are exempt because they are not considered architectural practices. For example, engineers or interior designers may perform building design services as part of their work, but may not hold themselves out as architects. The second set of exemptions covers architectural activities that are exempt from the practice provisions of the Act.

When read in context, the statement is nothing more than a correct construction of the exemptions from the architectural practice act in that both engineers and interior designers are exempt from the architectural practice act when they are engaged in the respective practices for which they are licensed. If anything, this statement emphasizes the limited nature of the exemption for engineering which exists because of the distinction between architecture and engineering.¹⁷ The exemption exists because engineering is “not considered architectural practices.” Furthermore, the assertion that the sentence states that engineers may design all of the components of any building ignores the reference to interior designers. If the statement, in fact, supported the proposition that all building design is the practice of engineering, it would logically follow that all building design is the practice of interior design. In actuality, it is undisputed that interior designers are authorized by law to design only part of a building.

IV. Are the exemptions for engineers limited to an act, service, or work the application of which involves special knowledge of the mathematical, physical, or engineering sciences to that act, service, or work?

As discussed above, the plain meaning of the engineering exemption from the architecture practice act is that nothing in the act limits the activities of an engineer which are within the scope of the practice of engineering under TEX. OCC. CODE ANN. ch. 1001 (Vernon 2004). The statute also lists a series of specific engineering activities that are not restricted by the architectural practice act. TEX. OCC. CODE ANN. §1051.601 (Vernon 2004). The advisory opinion of the Board of Professional Engineers concludes that all building design, which would include architectural design, is within the scope of the practice of engineering. Although not explicitly stated, the implied reasoning of the advisory opinion is that an engineer while engaged in building design, including architecture, is exempt from the architectural practice act because building design is within the scope of the “practice of engineering.” This reasoning expands the definition of the term “practice of engineering” in a manner that is contrary to the rules of statutory construction.

Words and phrases are to be construed to have a particular meaning, if that meaning is acquired by legislative definition. TEX. GOV’T CODE ANN. §311.011(b) (Vernon 2004). In order to ascertain the extent of the exemption for a service or work “within the scope of engineering,” it is necessary to refer to the particular meaning specified in the definition of the term “practice of engineering.”

The portions of the definition of “practice of engineering” relied upon in the Board of Professional Engineers’ advisory opinion are:

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 a special knowledge or judgment of the mathematical, physical, or engineering sciences to that service or creative work The practice of engineering includes 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(b) and (c)(10) (Vernon 2004).

The definition of “practice of engineering” is a two-part definition. It begins with a general definition that limits the term to services and creative work which requires education, training, and experience in applying “special knowledge or judgment of the mathematical, physical, or engineering sciences.” This definition is followed by a list of several specific activities,¹⁸ which are included as the practice of engineering. The one activity on that list that makes reference to the design of buildings is quoted above. The list of specific activities included within the practice of engineering must be read in light of this qualifying language within the general definition. TEX. GOV’T CODE ANN. §311.021 (Vernon 2004). (In enacting a statute, it is presumed that the entire statute is intended to be effective.) In determining legislative intent, a court would read “every word, phrase, and expression

¹⁷ See *supra* at pages 8-9 for additional context from the Sunset Report.

¹⁸ The entire definition appears *supra* at page 11.

in a statute as if it were deliberately chosen and presume the words excluded from the statute are done so purposefully.” *City of Garland v. P.U.C.*, 2005 Tex. App. LEXIS 3778 (Tex. App. – Austin May 19, 2005); *Gables Realty, Ltd. v. Travis Central Appraisal District*, 81 S.W.3d 869, 873 (Tex. App. – Austin 2002, pet. den.).

In construing the architectural practice act’s exemption for engineers in a manner that presumes the Legislature deliberately chose the term “practice of engineering,” it is necessary to ascribe to that term the definition adopted by the Legislature. *Texas Dept. of Transportation v. Needham*, 82 S.W.3d 314, 317 (Tex.2002). In construing the definition, it must be presumed that the Legislature deliberately limited it to activities that require engineering education and training and that involve special knowledge of mathematical, physical, or engineering sciences. It also must be presumed that the Legislature intentionally excluded references to architecture or performing services that require architectural education and training from the definition of engineering and, consequently, from the exemption of engineering from the architectural practice act. *City of Garland v. P.U.C.*, 2005 Tex. App. LEXIS 3778 (Tex. App. – Austin, May 19, 2005); *Gables Realty, Ltd. v. Travis Central Appraisal District*, 81 S.W.3d 869, 873 (Tex. App. – Austin 2002, pet. den.). Thus, the only proper construction of the exemption for engineers from the architectural practice act is that engineers are exempt when performing the listed services or creative works which require engineering education and training in applying special knowledge or judgment of the mathematical, physical, or engineering sciences. In short, engineers are exempt from the architectural practice act only when engaged in the practice of engineering subject to the restrictions within the definition of that term. Engineers are not exempt when practicing architecture. The exemption is at most a legislative recognition of the limited overlap between the two professions.

The rules of statutory construction also require the architectural and engineering acts to be read in harmony, as though serving one purpose. *See Garrett v. Mercantile Nat. Bank*, 168 S.W.2d 636, 637 (Tex. 1943), *quoted supra* at page 6. An interpretation of the statutes that completely exempts engineers from the architectural practice act ignores the general distinctions made by the statutory definitions of the two professions adopted by the Legislature. When read in *pari materia*, it is apparent that the Legislature intended to regulate two distinct, albeit related, professions involved in the design of buildings. Had the Legislature intended licensure as an engineer to constitute registration as an architect, or vice versa, it could have done so. It did not do so.

V. In performing a service, design, analysis, or other work performed in connection with a building for human use or occupancy is an engineer limited to designing those components of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature?

Generally, buildings intended for human occupancy or use, the designs for which require education, experience, and training as an architect, must be prepared by an architect, unless the building is exempt from the

architectural practice act. TEX. OCC. CODE ANN. §§1051.606 and 1051.703 (Vernon 2004). However, assuming the project is not exempt from the engineering practice act, the engineering aspects of the building must be designed by an engineer. TEX. OCC. CODE ANN. §1051.301 (Vernon 2004). The practical effect of these two requirements is that both an architect and an engineer must be involved in the design of most buildings intended for human use or occupancy.¹⁹

The advisory opinion published by the Texas Board of Professional Engineers carves from a portion of the definition of the term “practice of engineering” the words “engineering includes . . . design . . . in connection with a . . . building . . .” to support its conclusion that engineering includes the entire design of any building intended for any use. A basic tenet of statutory construction is that words and phrases are to be considered in context. TEX. GOV’T CODE ANN. §311.011 (Vernon 2004). *J.B. Advertising , Inc. v. Sign Board of Appeals of City of Carrollton*, 883 S.W.2d 443 (Tex. App. -- Eastland 1994, writ denied); *Meritor Automotive, Inc.v Ruan Leasing Co.*, 44 S.W.3d 86, 90 (Tex. 2001) and cases cited therein.

The statutory construction made by the advisory opinion ignores the regulation of the practice of engineering in context with the regulation of the practice of architecture. It also ignores words within the definition of “practice of engineering,” itself, even words within the very subsection from which these words were extracted. There is a very significant qualifying prepositional phrase at the end of the subsection which reads: “of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature.” When read together with this phrase, the words from that subsection take on a meaning that is much more consistent with the rest of the definition. Read in context, the language states that the design of certain specific building systems is the “practice of engineering.”

Construing the definition of the term “practice of engineering” to include all building design as an element of engineering ignores the qualifying language included in the definition. Such a construction also ignores the definition of the term “practice of architecture.” The cardinal rule of statutory construction is to ascertain legislative intent. Every word and phrase in a statute is to be considered as though it were deliberately selected by the Legislature. *City of Garland*, 2005 LEXIS 3778 (Tex. App. – Austin May 19, 2005.) Every word and phrase is to be considered in context. *Meritor Automotive, Inc. v. Ruan Leasing Co.*, 44 S.W.3d 86, 89 (Tex. 2001). (In determining legislative intent, words, phrases, and clauses are not to be read in isolation. The entire act must be examined to glean meaning so as to make sense of the statute as a cohesive whole.) If a statute defines a

¹⁹ Many private residential buildings, including single family and two-family homes and certain apartments are exempt from these requirements. TEX. OCC. CODE ANN. §§1001.056 and 1051.606(Vernon 2004).

term, the courts are bound to construe that term by its statutory definition only. *Texas Dept. of Transportation v. Needham*, 82 S.W.3d 314, 317 (Tex. 2002).

When the entire definition of the term “practice of engineering” is considered in light of the definition of the term “practice of architecture,” it is apparent that engineering includes the design of engineering systems, not the design of an entire building. When the words selected from the definition in the advisory opinion are read in context, engineering as it relates to the design of buildings is limited to designs “of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature.” This construction of the definition, taking into account all the words and phrases therein, also harmonizes the definition with the engineering exemption from the architectural practice act. The engineering exemptions in the architectural practice act permits engineers to plan “mechanical, electrical, or structural features of a building” and otherwise allows engineers to design structures primarily intended for, or incidental to, an engineering use. TEX. OCC. CODE ANN. §1051.601(b)(Vernon 2004). If the practice of engineering encompassed the entire design of all buildings, the limited nature of the exemption would be meaningless.

With regard to the design of buildings for human use or occupancy, the practice of engineering, by definition, restricts engineers to designing the mechanical, electrical, hydraulic and other building systems or “features.” TEX. OCC. CODE ANN. §1051.601(b)(2)(Vernon 2004). The Board of Professional Engineers put it succinctly: “Engineering [is] the art and science by which the mechanical properties of matter are made useful to man in structures and machines.” *See* Appendix B at page 1.

VI. Is it the correct interpretation of Op. Tex. Att’y Gen. No. DM-161(1992) to conclude that it holds that the entire scope of building design, including architecture, is an element of the practice of engineering?

In 1992, Attorney General Dan Morales issued an opinion regarding the authority of a person, other than a registered architect, to prepare the plans and specifications of certain public buildings in light of a statute currently codified at TEX. OCC. CODE ANN. §1051.703(a)(2)(Vernon 2004). Op. Tex. Att’y. Gen. No. DM-161 (August 27, 1992). The statute requires an architectural plan or specification for a new building to be prepared by an architect if the building is to be owned by a public entity; the construction costs of the building exceed \$100,000; and the building is to be used for education, assembly, or office occupancy. The opinion, referring to the definition of the term “practice of engineering” as it existed at the time, concluded that the statute in question did not prohibit engineers from preparing plans and designs “requiring the application of engineering principles and the interpretation of engineering data.” *Id.* at page 6-7.

The advisory opinion prepared by the Board of Professional Engineers relies heavily on its interpretation of Attorney General Opinion DM-161 in concluding that building design is an element of engineering and an engineer may design buildings without an architect, regardless of the intended use or size of the building. In addition, this interpretation of the opinion has been frequently and effectively cited in opposition to any agreement between the two boards regarding the necessity for, or the respective roles of, the two professions in the design of public buildings. The Board of Architectural Examiners respectfully submits that this interpretation is an overly-broad and inaccurate representation of the conclusion reached in the opinion.

The opinion does conclude that engineers may provide building design services within the scope of the practice of engineering. It does not logically follow that the opinion holds that all building design services are engineering.²⁰ Likewise, the opinion does acknowledge that there is an overlap between the profession of architecture and the profession of engineering. The opinion does not state that the two professions overlap entirely or that architecture is an element of engineering. To the contrary, the opinion observes that: “Cases from other states have determined that the professions of architect and engineer overlap in the area of designing buildings, so that *some* building designs may be prepared by a person with either license.” *Id.* at page 3. [Emphasis added.] This language is followed by a citation to *Smith v. American Packing & Provision Co.*, 130 P.2d 951 (Utah 1942). In *Smith*, the Utah Supreme Court determined that the professions overlapped and, consequently, an engineer working on an engineering project may perform some activities that might also be within the scope of architecture. The court then adds the following caveat: “However, we do not say that professional engineers can make plans for all kinds of buildings or do whatever an architect can do, *for clearly the entire field of architecture is not embraced within the field of professional engineering* as defined by statute.” *Smith*, 130 P.2d at 957. [Emphasis added.] It would appear to be quite a stretch to construe Attorney General Opinion DM-161, citing the *Smith* case which emphasized the limited nature of the overlap of the professions, as holding that engineering so envelopes architecture that the entire field of building design is an “element of engineering.”

The Board of Professional Engineers’ interpretation of Attorney General Opinion DM-161 imputes to the Attorney General flawed reasoning in the construction of the statutes. If all building design, including architecture, is an element of engineering, why would the Legislature specify completely different circumstances under which an engineer must prepare engineering plans and an architect must prepare architectural plans in the design of a public building? *Compare* TEX. OCC. CODE ANN. §§1001.053, 1001.056 *and* TEX. OCC. CODE ANN.

²⁰ Understanding this proposition requires no expertise in legal reasoning but rather an understanding of simple logic. Although all Chihuahuas are dogs, it does not logically follow that all dogs are Chihuahuas. Although

§§1051.606, 1051.703. If all building design is engineering, it would follow that the only difference between architectural building designs and engineering building designs is that an architect creates one and an engineer creates the other. However, if that were the case, the phrase “An architectural plan or specification . . . may be prepared only by an architect . . .” in Section 1051.703, Occupations Code, would be nothing more than a superfluous statement of the logically obvious. Statutes should not be construed as meaningless, especially when legislative intent can be derived from a simple reading of the statute taking into consideration the plain, ordinary meaning of the words used. *See Gables Realty v. Travis Central Appraisal District*, 81 S.W.3d 869, 872-873 (Tex. App. – Austin 2002, pet. denied) and cases cited therein. *Fitzgerald v. Advanced Spine Fixation Systems, Inc.*, 996 S.W.2d 864, 865-866 (Tex. 1998). *See also* TEX. GOV’T CODE ANN. §311.011 (Vernon 2004). There are many other examples, discussed *supra*, which demonstrate that this interpretation of Opinion DM-161 clashes with the clear statement of legislative intent expressed in the statutes relating to the regulation of architecture and engineering, such as the differences in the definitions, the differences in the education and training for each profession, and the separate licensing examination for each profession.

Legislative action since the opinion further reinforces the extent to which the Board of Professional Engineers’ interpretation of Attorney General Opinion DM-161 conflicts with the Legislature’s intent. If all building design is the practice of engineering, why would the Legislature mandate the creation of the Joint Advisory Committee, in part, to issue opinions on the need for persons working on a particular project to be registered as an architect or licensed as an engineer? TEX. OCC. CODE ANN. §1051.212(e)(1) and (3)(Vernon 2004). If all building design is an element of engineering, there would be no need for the committee to render opinions on that issue as the answer would always be obvious. The Board of Architectural Examiners submits that the Attorney General surely made no such construction in issuing the opinion.

It seems a more reasonable conclusion could be derived from reading the architectural and engineering practice acts together, especially the afore-mentioned statutes relating to public works. Construing both acts as a harmonious statement of one public purpose, the Legislature most likely intended to require both an architect and an engineer to be involved in the design of new public buildings intended for education, assembly, and office occupancy. This interpretation takes into account the differences between the definition of the terms “practice of architecture” and “practice of engineering;” the differences between the education, training, and experience required for each profession; and the different statutory thresholds at which the services of architects and engineers are required in public building projects. *Gables Realty*, 81 S.W.3d at 873 *quoting RepublicBank Dallas, N.A., v.*

engineering encompasses the design of building features, engineering is not synonymous with the term “building

Interkal, Inc., 691 S.W.2d 605, 607 (Tex. 1985) quoting *Simmons v. Arnim*, 220 S.W. 66, 70 (1920). (Statutes are to be construed to give full effect to all of their terms.) Such an interpretation would also fulfill the obvious public purpose of securing the public safety by ensuring that the expertise of both professions are utilized in the design of the buildings most likely to be used by the greatest number of people. See TEX. OCC. CODE ANN. §§1001.004 and 1051.0015(Vernon 2004). (The purpose of the engineering and architectural practice acts is to safeguard public life, health, and property.)

Another important point regarding the Board of Professional Engineers' interpretation of Attorney General Opinion DM-161 should not be overlooked. If building design is the practice of engineering, then the commonly accepted practice of allowing many building design services to be performed by persons who are neither architects nor engineers should not continue. For example, unlicensed persons currently are permitted to design all features except for the engineering systems of two-story apartment buildings that include more than four but no more than sixteen units per building. Such apartment buildings are exempt from the architectural practice act but not from the engineering practice act. Compare TEX. OCC. CODE ANN. §§1001.056(a)(2)(C) and 1051.606(a)(4)(C) (Vernon 2004). As a result, unlicensed persons have been allowed to undertake major roles in the design of these buildings as long as they engage engineers to design the engineering components of the buildings. Essentially all design elements except for the engineering components have been accepted as being architectural in nature and exempt from licensure requirements as long as the thresholds in the architectural practice act are not exceeded. This practice would be inconsistent with a holding that building design is the practice of engineering under Texas law. If building design were the practice of engineering, unlicensed building designers performing services for these projects would be in violation of the engineering practice act.

At the end of Attorney General Opinion DM-161, one sentence states that engineers have the same authority to prepare building designs and specifications that they had prior to the adoption of the statute in question in 1989. Because the architectural practice act was not adopted until 1989, it has been argued that this sentence is a holding that engineers are statutorily authorized to prepare the complete and comprehensive design of a building with or without an architect. When read in context, the sentence appears to mean only that the passage of the architectural practice act did not restrict the pre-existing authority of engineers to engage in the practice of engineering. Prior to 1989, nothing in laws relating to the practice of architecture or engineering authorized engineers to prepare architectural plans and specifications. In fact, prior to 1989, the exemption from the architectural act for the practice of engineering was limited to work on railroads, hydroelectric work, industrial

plants, and structural engineering. *See supra* page 5, note 3. Engineers, as well as everyone else, were not prohibited from preparing those building designs that are now restricted to architects so long as they did not use the title “architect.” However, being licensed as an engineer did not grant one authority to engage in the practice of architecture, prior to 1989, nor has it since. Holding a license as an engineer grants a person the authority to engage in the practice of engineering, not architecture. TEX. OCC. CODE ANN. §1001.301(a)(Vernon 2004). The sentence, when read in context, does not support the proposition that all building design is engineering or that there is a complete overlap of the two professions. Such an interpretation of the sentence would bring it into conflict with the rest of the opinion and the statutes construed by the opinion.

Nothing in Attorney General Opinion DM-161 supports the conclusions made by the Board of Professional Engineers’ advisory opinion. The opinion merely holds that a statute which mandates an architect to prepare architectural plans and specifications for certain public buildings does not prohibit an engineer from preparing engineering plans and specifications for those buildings. The opinion repeatedly states that an engineering service includes the preparation of building plans and designs “when that service requires the application of engineering principles and the interpretation of engineering data.” Op. Tex. Att’y. Gen. No. DM-161 at pages 5, 6, and 7. Nowhere, either expressed or implied, is there a statement within the opinion that engineering is the complete and comprehensive design of the entire building.²¹ If there is any implied holding in the opinion, a more reasonable and legally tenable holding would be that both architects and engineers are required in the design of certain public buildings. The holding derived from the interpretation made by the Board of Professional Engineers is not legally tenable.

CONCLUSION:

The regulation of the practice of architecture affects the vast majority of the population of the state of Texas. Decisions regarding its scope must be made carefully to ensure that the built environment of Texas is safe and healthy for its citizens. The Legislature has delegated to the Texas Board of Architectural Examiners the duty

²¹ Within Attorney General Opinion DM-161, there is a comment that a provision currently codified as Section 1051.703(b) “qualifies” the language currently in subsection (a)(2) of the statute, which requires the architectural plans and specifications of the described public buildings to be prepared by an architect. The referenced paragraph (b) states that the statute does not prohibit a building owner from “choosing an architect or engineer as the prime design professional for a building construction, alteration or addition project.” Applying the rule that unambiguous statutory language is to be given the interpretation supported by the plain meaning of the statute’s words and terms, it would seem that the provision means only that an engineer may be selected to act as the prime design professional. *See Fitzgerald*, 996 S.W.2d at 865; *Meritor Automotive*, 44 S.W.3d at 89. The term “prime design professional” is not statutorily defined. Generally, a “prime contractor” has been defined by statute as “one who has undertaken to procure the performance of work or service.” *Chagolla v. Dunlap Construction*, 838 S.W.2d 943, 946 (Tex. App. – Houston [4th Dist.] 1992). Applying this reasoning, it seems as though the provision means only that there is no prohibition upon an owner contracting with an engineer to obtain

to enforce the laws regulating the practice of architecture. The Board takes its responsibility in these matters very seriously. The Board respectfully submits that the actions of the Texas Board of Professional Engineers create confusion regarding the jurisdiction of each board, are not in compliance with the intent of the Legislature, and will have a deleterious effect on the people of Texas. Architects are uniquely educated and trained in the design of buildings intended for human habitation, including the design of aspects relating to life-safety issues, accessibility, and fire codes. If the advisory opinion of the Texas Board of Professional Engineers stands, that expertise may be excluded from the design of buildings intended for use and occupancy by people.

The statutes governing architecture and engineering must be consulted to determine whether and to what extent the members of each profession must be involved in designing buildings. From the consumer's perspective, this issue revolves around health and safety. Consumers will not save money as a result of the answer to this request because, regardless of the answer, consumers will be required to engage licensed professionals to perform design services – whether they be architects, engineers, or both. As the 72nd Texas Legislature observed, “It is the intent of the [architectural practice] act to acknowledge the necessity of professional interrelations and cooperation between the professions [of architecture and engineering] for the benefit of the public and to achieve the highest standards in design, planning and building. . . .” TEX. REV. CIV. STAT. ANN. art. 249a §10b (Vernon 2000). The members of the 72nd Legislature recognized that the exclusion of either profession would compromise the public's interest.

The Board of Architectural Examiners has no illusions about how this request will be portrayed. This will be represented as a mere “turf war” or campaign to exclude engineers from building design. This simply is not true, and the Board does not have the luxury of concerning itself with such matters. The Board of Professional Engineers has, in effect, proclaimed itself the umbrella agency over the regulation of all building design - both architectural and engineering. In so doing, it has no doubt created confusion in the building industry and among building officials, usurped the authority of the Joint Advisory Committee, and undermined the authority of the Board of Architectural Examiners to enforce the law regulating the practice of architecture – all in derogation of the Legislature's intent as expressed in Texas Law. This is no turf war nor is this a campaign to secure work for anyone or exclude anyone from practicing within the scope of his or her profession. This is an effort by a regulatory agency to ascertain the scope of the powers delegated to it by the Legislature in light of an implicit interpretation of its enabling legislation made by a sister agency.

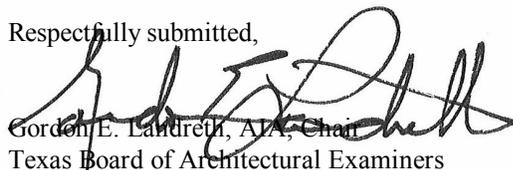
the services of an architect as a subcontractor and vice versa. There is no reasonable interpretation of this provision to support the proposition that all building design is engineering.

The Board of Architectural Examiners has no choice but to request this opinion. It cannot be perceived to have acquiesced to the position taken by the Board of Professional Engineers if it is to have any credibility as the agency charged with enforcing the laws relating to the practice of architecture. It has learned through experience that the Board of Professional Engineers' position expressed in its advisory opinion is intractable. The Board of Professional Engineers has twice rejected a statement that even implicitly contradicts this position. Even if the Board of Professional Engineers were to withdraw or retract its advisory opinion, it would still adhere to this position and the cloud over the jurisdiction of the Board of Architectural Examiners would remain. To finally resolve the dispute between these differing interpretations of its jurisdiction, the Texas Board of Architectural Examiners respectfully requests the Attorney General to determine whether:

- There is a profession of architecture separate and distinct from the profession of engineering, under the regulatory scheme adopted by the Texas Legislature;
- There is a statutory "line of demarcation" between the practice of architecture and the practice of engineering that generally holds architects design buildings for human use and occupancy while engineers design building systems and buildings related to an engineering use;
- The exemptions for engineers from the architectural practice act is limited to the practice of engineering or is an absolute exemption allowing engineers to engage in the practice of architecture; and
- Attorney General Opinion DM-161 is correctly interpreted by the Texas Board of Professional Engineers as holding that building design is an element of engineering and there is a total overlap of the two professions.

When those issues are finally resolved, the Joint Advisory Committee will in a better position to perform its function of determining the factual issues of the scope of the overlap between the two professions and the circumstances under which an architect, an engineer, or both must be retained to render design services. In short, the Joint Advisory Committee will be able to exercise "interrelations and cooperation between the professions for the benefit of the public and to achieve the highest standards in design, planning, and building." *Id.*

Respectfully submitted,



Gordon E. Landreth, AIA, Chair
Texas Board of Architectural Examiners

cc: Texas Board of Architectural Examiners
Cathy L. Hendricks, ASID/IIDA, Executive Director

[Appendix A](#)
[Appendix B](#)
[Exhibit A](#)