STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

FLORIDA ENGINEERS MANAGEMENT CORPORATION,	)	
Petitioner,	)	
vs.	)	Case No. 08-4422PL
GARRY VERMAAS, P.E.,	)	
Respondent.	)	

RECOMMENDED ORDER

Pursuant to notice, the Division of Administrative Hearings, by its duly-designated Administrative Law Judge, Jeff B. Clark, held a final administrative hearing in this case on December 16, 2008, in Orlando, Florida.

APPEARANCES

For Petitioner: John Jefferson Rimes, Esquire
Florida Engineers Management Corporation
2507 Callaway Road, Suite 200
Tallahassee, Florida 32303-5267

For Respondent: Garry Vermaas, Ph.D., P.E., pro se
Ground Floor Engineering
10125 West Colonial Boulevard, Suite 212
Ocoee, Florida 34761

STATEMENT OF THE ISSUE

Whether Respondent, Garry Vermaas, Ph.D., P.E., committed the acts alleged in the Administrative Complaint (as submitted in the parties' joint pre-hearing submission).

PRELIMINARY STATEMENT

On March 20, 2008, Petitioner, Florida Engineers Management Corporation, filed an Administrative Complaint alleging that Respondent, Garry Vermaas, Ph.D., P.E., had violated Florida law and had been negligent in the practice of engineering. In essence, the Administrative Complaint alleged that Respondent was the engineer of record on a project and had sealed, signed, and dated engineering documents that were "deficient and failed to comply with acceptable standards of engineering principles." Therefore, Respondent was negligent in the practice of engineering. The specific deficiencies were:

A. The masonry wall on Gridline A at the first level is not adequately designed in that it is overstressed when compared to the Florida Building Code (the Code) specified wind loads.

B. The block parapet walls at Elevation +49 and +53 are, also, not adequately designed insofar as they are overstressed when compared to the Florida Building Code specified wind loads.

C. Wall Sections A and B on Sheet 1.10 show tapered balcony slabs with a one-inch step. The wall sections are inconsistent with the Typical Cantilever Balcony Detail on Sheet S2.01 and reduce the cover on

the tendon to less than one inch required by the Florida Building Code.

D. The placement of reinforcing bars in the bottom of the cantilevered balcony slabs on Sheets S2.02, S2.04, and S2.06 cannot be reasonably determined from the information on these sheets.

E. Sheet S2.10 shows that the stair adjacent to the elevator must rise from the fourth floor at Elevation +35 to the level of the pool deck at Elevation +49. This is a rise of 14 feet and contrasts with the stair at Gridline A, which rises from the fourth floor and terminates at the fifth floor at Elevation +45. As a result, the stair adjacent to the elevator requires an additional stair run and a landing neither of which have been addressed in Respondent's design documents.

On April 14, 2008, Respondent requested an administrative hearing. Petitioner forwarded the case to the Division of Administrative Hearings on September 9, 2008. On September 10, 2008, an Initial Order was sent to both parties. Based on the parties' response to the Initial Order, on October 6, 2008, the case was scheduled for final hearing in Orlando, Florida, on November 19, 2008.

On October 30, 2008, Respondent's Motion for Continuance was granted; the case was rescheduled for December 16, 2008. The case was presented as rescheduled.

Petitioner presented two witnesses: James Owen Power, P.E., and Joseph M. Berryman, P.E., whose deposition testimony of November 24, 2008, was accepted in lieu of live testimony. Both Messrs. Power and Berryman were accepted as expert witnesses in structural engineering. Petitioner entered seven exhibits into evidence that were marked Petitioner's Exhibits A through F and Change of Petitioner's Exhibit F. Petitioner's Exhibits A through E are also admitted and marked as they are in the Berryman deposition. Respondent testified on his own behalf and presented two witnesses: Adam Ginsburg, P.E., and Yousheng "Jeff" Cheng, Ph.D. Respondent, Mr. Ginsburg and Dr. Cheng were accepted as expert witnesses in structural engineering.

The parties agreed to submit proposed recommended orders 30 days from the filing of the transcript. The Transcript of Proceedings was filed with the Clerk of the Division of Administrative Hearings on January 6, 2009. Both parties timely filed Proposed Recommended Orders.

All statutory references are to Florida Statutes (2006), unless otherwise noted.

FINDINGS OF FACT

Based on the oral and documentary evidence presented at the final hearing, the following Findings of Fact are made:

1. At all times material to the allegations in the Administrative Complaint, Respondent was a licensed professional engineer with License No. PE 61163.

2. Respondent was the structural engineer of record for a 13-unit apartment building complex located at 214 Salamanca Avenue, Coral Gables, Florida. As such, on or about January 24, 2007, Respondent signed and sealed the last iteration of structural engineering documents for the project which were filed with the City of Coral Gables, Florida, as part of the application for a building permit.

3. Respondent was the structural engineer of record for the above-referenced project as that term is used in Florida Administrative Code Rule 61G15-31.

4. Petitioner is charged with providing administrative, investigative, and prosecutorial services to the Florida Board of Professional Engineers pursuant to Subsection 471.038(4), Florida Statutes.

5. The Florida Board of Professional Engineers regulates the practice of engineering pursuant to Chapters 455 and 471, Florida Statutes.

6. The Administrative Complaint alleges that Respondent's structural engineering plans were deficient and failed to comply with acceptable standards of engineering practice, citing five instances:

A. The masonry wall on Gridline A at the first level is not adequately designed in that it is overstressed when compared to the Florida Building Code specified wind loads.

B. The block parapet walls at Elevation +49 and +53 are, also, not adequately designed insofar as they are overstressed when compared to the Florida Building Code specified wind loads.

C. Wall Sections A and B on Sheet 1.10 show tapered balcony slabs with a one-inch step. The wall sections are inconsistent with the Typical Cantilever Balcony Detail on Sheet S2.01 and reduce the cover on the tendon to less than one inch required by the Florida Building Code.

D. The placement of reinforcing bars in the bottom of the cantilevered balcony slabs on Sheets S2.02, S2.04 and S2.06 cannot be reasonably determined from the information on these sheets.

E. Sheet S2.10 shows that the stair adjacent to the elevator must rise from the fourth floor at

Elevation +35 to the level of the pool deck at Elevation +49. This is a rise of 14 feet and contrasts with the stair at Gridline A which rises from the fourth floor and terminates at the fifth floor at Elevation +45. As a result, the stair adjacent to the elevator requires an additional stair run and a landing neither of which have been addressed in Respondent's design documents.

A. The masonry wall on Gridline A at the first level is not adequately designed in that it is overstressed when compared to the Florida Building Code specified wind loads.

7. On Sheets S1.03 and S1.04 Respondent's structural engineering plans show a concrete masonry wall at Gridline A extending from reference lines 1.1 to 1.8 on the west side of the building; the floor-to-floor distance is 15 feet. The wall is subject to appreciable gravity load from above through vertical connective rebar. Post tension design of the floor system is unique; when the post tension concrete slab deflects, the vertical rebar will transfer the load to the wall in question.

8. As a result of this loading, the subject wall receives loading in more than one direction and should be defined as a main wind force resisting system and should be designed as it is in Respondent's plans.

9. The suggestion by Petitioner's experts that the wall is overstressed by 22 or 65 percent is a result of applying conservative values and failing to include the vertical load on the wall. Within the conservative and non-conservative values allowed by the Florida Building Code, there could be a 400-percent yield difference. The conclusion that the wall is overstressed by 22 or 65 percent does not prove negligence.

B. The block parapet walls at Elevation +49 and +53 are not adequately designed insofar as they are overstressed when compared to the Florida Building Code specified wind loads.

10. Average vertical bar spacing, as used by Respondent in the design of the subject parapet walls, is allowed by the Florida Building Code and is called the "plate" method of design. Petitioner's experts used calculations based on the "strip" method, also allowed by the Florida Building Code. The resulting suggestion that the parapet walls are overstressed by 24 or 62 percent is a result of the differences in analysis of the two methods and the application of conservative values. As stated above, the application of conservative or non-conservative values can result in a 400-percent yield differential.

C. Wall Sections A and B on Sheet 1.10 show tapered balcony slabs with a one-inch step. The Wall Sections are inconsistent with the Typical Cantilever Balcony Detail on Sheet S2.01 and reduce the cover on the tendon to less than one inch required by the Florida Building Code.

11. The subject wall sections are full wall sections and are not inconsistent, but demonstrate, generally, what the wall will look like. The slab design does not remain constant. The Typical Cantilever Balcony Detail on Sheet S2.01 shows that the post tension slab steps down at the top and bottom. The one-inch step-down prevents wind-driven rain from flowing in from outdoors. The resultant one-inch step-down on the bottom of the slab relates to maintaining proper clearance on the tendon.

12. The detail (Typical Cantilever Balcony Detail on Sheet S2.01) demonstrates the one-inch step-down and would not be confused by an experienced post-tension subcontractor. The plans consistently refer to an eight-inch slab.

D. The placement of reinforcing bars in the bottom of the cantilevered balcony slabs on Sheets S2.02, S2.04 and S2.06 cannot be reasonably determined from the information on these sheets.

13. The exact placement of mild reinforcement in post tension design is not important. These plans are adequate in that they label the location of the bars (top or bottom) and clearly describe how the bars should be distributed.

14. This item, according to Petitioner's expert, is not related to design, but to drawing preparation. Testimony revealed that the information used is imported through AutoCad software. These notes are clearly understandable to someone experienced with post tension design and construction.

E. Sheet S2.10 shows that the stair adjacent to the elevator must rise from the fourth floor at Elevation +35 to the level of the pool deck at Elevation +49. This is a rise of 14 feet and contrasts with the stair at Gridline A, which rises from the fourth floor and terminates at the fifth floor at Elevation +45. As a result, the stair adjacent to the elevator requires an additional stair run and a landing neither of which have been addressed in Respondent's design documents.

15. There is a similar staircase from the ground floor to the fifth floor elevation. An ancillary detail, Section G on Sheet S1.13 shows how to get from the fifth floor slab to the pool deck. Section G has three different staircases that show the contractor how the stairs should be constructed. The additional stair run is addressed on this section.

16. The design and drawings comply with Section 1603.1 of the Florida Building Code, which states that "[t]he design loads and other information pertinent to the structural design required by Sections 1603.1. through 1603.1.8 shall be clearly indicated on the construction documents." Drawing presentations and which portions of the structure require more detail, is largely an opinion matter for each engineer to decide as long as he complies with the Florida Building Code.

17. Respondent's expert witness, each of whom had excellent credentials and vast experience with post-tension design of floor systems, opined that Respondent's structural engineering documents for the subject project were not negligent in any way, and Respondent's drawings and calculations conform to acceptable engineering standards and safeguard the life, health, property and welfare of the public. Their testimony on the five alleged areas of negligence and their general conclusions are credible.

CONCLUSIONS OF LAW

18. The Division of Administrative Hearings has jurisdiction over the subject matter of and the parties to this proceeding. § 120.57(1), Fla. Stat. (2008).

19. Subsection 471.038(3), Florida Statutes, authorizes Petitioner to provide administrative, investigative, and prosecutorial services to the Board of Professional Engineers.

20. Petitioner must prove the allegations of its Administrative Complaint by clear and convincing evidence. Department of Banking and Finance v. Osborne Stern and Company, Inc., 670 So. 2d 932 (Fla. 1996); Ferris v. Turlington, 510 So. 2d 292 (Fla. 1987).

21. The "clear and convincing" standard requires:

> [T]hat the evidence must be found to be credible; the facts to which the witnesses testify must be distinctly remembered; the

> testimony must be precise and explicit and the witnesses must be lacking in confusion as to the facts in issue. The evidence must be of such weight that it produces in the mind of the trier of fact a firm belief or conviction, without hesitancy, as to the truth of the allegations sought to be established.

In Re: Davey, 645 So. 2d 398, 404 (Fla. 1994), quoting Slomowitz v. Walker, 429 So. 2d 797, 800 (Fla. 4th DCA 1983).

22. Statutes that authorize the imposition of penal sanctions must be strictly construed and any ambiguity must be construed in favor of Respondent. Elmariah v. Department of Business and Professional Regulation, 574 So. 2d 164, 165 (Fla. 1st DCA 1990). The Florida lenity statute, Subsection 775.021(1), Florida Statutes, provides that "offenses" defined by any Florida Statutes must be construed most favorably to the offender if the language is susceptible to different meanings. Pasquale v. Florida Elections Commission, 759 So. 2d 23, 26 (Fla. 4th DCA 2000).

23. Petitioner must present expert testimony proving both the standard and deviation, where a negligent violation of general standards of professional conduct is alleged. Purvis v. Department of Professional Regulation, 461 So. 2d 134 (Fla. 1st DCA 1984).

24. Subsection 471.033(1)(g), Florida Statutes, reads as follows:

(1) The following acts constitute grounds for which the disciplinary actions in subsection (3) may be taken:

* * *

(g) Engaging in fraud or deceit, negligence, incompetence, or misconduct, in the practice of engineering.

25. Florida Administrative Code Rule 61G15-19.001(4) reads as follows:

(4) A professional engineer shall not be negligent in the practice of engineering. The term negligence set forth in Section 471.033(1)(g), F.S., is herein defined as the failure by a professional engineer to utilize due care in performing in an engineering capacity or failing to have due regard for acceptable standards of engineering principles. Professional engineers shall approve and seal only those documents that conform to acceptable engineering standards and safeguard the life, health, property and welfare of the public. Failure to comply with the procedures set forth in the Responsibility Rules as adopted by the Board of Professional Engineers shall be considered as non-compliance with this section unless the deviation or departures therefrom are justified by the specific circumstances of the project in question and the sound professional judgment of the professional engineer.

26. Florida Administrative Code Rule 61G15-30.002(1) reads as follows:

Engineer of Record. A Florida professional engineer who is in responsible charge for the preparation, signing, dating, sealing and issuing of any engineering document(s)

for any engineering service or creative work.

27. Florida Administrative Code Rule 61G15-31.002(1) and (5) reads as follows:

> (1) Engineer of Record for the Structure. The Florida registered professional engineer who develops the structural design criteria and structural framing concept for the structure, performs the analysis and is responsible for the preparation of the structural construction documents.
>
> * * *
>
> (5) Structural Engineering Documents. The structural drawings, specifications and other documents setting forth the overall design and requirements for the construction, alteration, modernization, repair, removal, demolition, arrangement and/or use of the structure, prepared by and signed and sealed by the engineer of record for the structure. Structural engineering documents shall identify the project and specify design criteria both for the overall structure and for structural components and structural systems. The drawings shall identify the nature, magnitude and location of all design loads to be imposed on the structure. The structural engineering documents shall provide construction requirements to indicate the nature and character of the work and to describe, detail, label and define the structure's components, systems, materials, assemblies, and equipment.

28. Florida Administrative Code Rule 61G15-31.001 reads as follows:

> The engineer of record for a structure is responsible for all structural aspects of the design of the structure including the

> design of all of the structure's systems and components. As noted herein the engineer of record for a structure may delegate responsibility for the design of a system or component part of the structure to a qualified delegated engineer. In either case the structural documents shall address, as a minimum, the items noted in the following subsections covering specific structural systems or components. Both the engineer of record for the structure and the delegated engineer, if utilized, shall comply with the requirements of the general responsibility rules, and with the requirements of the more specific structural responsibility rules contained herein.

29. Petitioner has failed to prove clearly and convincingly that Respondent was negligent as alleged. At best, the case Petitioner presented is weak. Post-tension design is a unique area of structural engineering. Respondent and his experts presented convincing evidence of their personal experience in the field and that his project design was appropriate and met the standards of professional conduct.

RECOMMENDATION

Based on the foregoing Findings of Fact and Conclusions of Law, it is

RECOMMENDED that Petitioner, Board of Professional Engineers, issue a final order dismissing the Administrative Complaint filed against Respondent, Garry Vermaas, Ph.D., P.E.

DONE AND ENTERED this 4th day of March, 2009, in Tallahassee, Leon County, Florida.

JEFF B. CLARK
Administrative Law Judge
Division of Administrative Hearings
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Filed with the Clerk of the
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this 4th day of March, 2009.

COPIES FURNISHED:

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.