

SEA WORLD ORLANDO SHAMU THEATER SEAT ADDITIONS

Issue: Vertical accessibility to all rows of seats in a performance stadium.

Analysis: The applicant is requesting a waiver from providing vertical accessibility to all rows of seats in a 824 seat addition to an existing 4,900 seat stadium used for performances by the killer whale Shamu. The project includes providing eight additional accessible and companion seats, which is one fewer than required by code; however, the total number of accessible seats complies. The project will cost \$1,600,000; however, the applicant does not claim disproportionate cost, rather technical infeasibility as the basis for the request.

Project Progress:

The project is in plan review.

Items to be Waived:

Vertical accessibility to all rows of seats as required by Section 553.509, Florida Statutes.

553.509 Vertical accessibility. Nothing in Sections 553.501-553.513 or the guidelines shall be construed to relieve the owner of any building, structure or facility governed by those sections from the duty to provide vertical accessibility to all levels above and below the occupiable grade level regardless of whether the guidelines require an elevator to be installed in such building, structure or facility, except for:

- (1) Elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks and automobile lubrication and maintenance pits and platforms;
- (2) Unoccupiable spaces, such as rooms, enclosed spaces and storage spaces that are not designed for human occupancy, for public accommodations or for work areas; and
- (3) Occupiable spaces and rooms that are not open to the public and that house no more than five persons, including, but not limited to equipment control rooms and projection booths.

Waiver Criteria: There is no specific guidance for a waiver of this requirement in the code. The Commission's current rule, authorized in Section 553.512, Florida Statutes, provides criteria for granting waivers and allows consideration of unnecessary or extreme hardship to the applicant if the specific requirements were imposed.

**REQUEST FOR WAIVER FROM ACCESSIBILITY REQUIREMENTS
OF CHAPTER 553, PART V, FLORIDA STATUTES**

Your application will be reviewed by the Accessibility Advisory Council and its recommendations will be presented to the Florida Building Commission. You will have the opportunity to answer questions and/or make a short presentation, not to exceed 15 minutes, at each meeting. The Commission will consider all information presented and the Council's recommendation before voting on the waiver request.

1. Name and address of project for which the waiver is requested.

Name: SeaWorld Orlando Shamu Theater Seat Additions

Address: SeaWorld Orlando, 7007 Sea Harbor Drive, Orlando, FL 32821

2. Name of Applicant. If other than the owner, please indicate relationship of applicant to owner and written authorization by owner in space provided:

Applicant's Name: Sea World of Florida, Inc.

Applicant's Address: 7007 Sea Harbor Drive, Orlando, Florida 32821

Applicant's Telephone: 407.363.2121 **FAX:** 407.363.2129

Applicant's E-mail Address: tim.viox@seaworld.com

Relationship to Owner: N/A

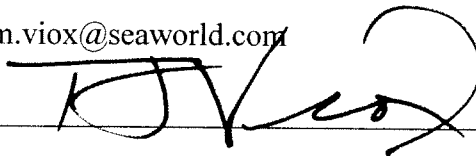
Owner's Name: Timothy J. Viox

Owner's Address: 7007 Sea Harbor Drive, Orlando, Florida 32821

Owner's Telephone: 407.363.2121 **FAX:** 407.363.2129

Owner's E-mail Address: tim.viox@seaworld.com

Signature of Owner: _____



Contact Person: Timothy J. Viox

Contact Person's Telephone: 407.363.2121 **E-mail Address:** tim.viox@seaworld.com

This application is available in alternate formats upon request.
Form No. 2001-01

3. Please check one of the following:

New construction.

Addition to a building or facility.

Alteration to an existing building or facility.

Historical preservation (addition).

Historical preservation (alteration).

4. Type of facility. Please describe the building (square footage, number of floors). Define the use of the building (i.e., restaurant, office, retail, recreation, hotel/motel, etc.)

The existing Shamu Stadium is a FBC designated A-5 (Grandstands and Stadiums) occupancy classification. The stadium is used for viewing water mammal performances. It consists of one-story, and a seating capacity of 4900 (64 accessible spaces with assist) within the upper and lower grandstands. The north/south additions to the upper grandstands consists of constructing 824 more seats, in addition to, 8 accessible spaces with assist for a grand total of 5740 seats. According to FBC 11-4.1.3 (19a) for New Construction, the number of accessible spaces required is as follows: $5568 \times 1 \text{ ADA space}/100 \text{ seats} + 4 \text{ accessible spaces} = 60 \text{ accessible spaces}$, where $5740 - 64 \text{ accessible exist} - 8 \text{ accessible new} - 100 = 5568$. The quantity provided after the addition is 72 accessible spaces with assist. In summation, there are 64 accessible spaces at the lower grandstand and 8 accessible spaces at the upper grandstand.

5. Project Construction Cost (Provide cost for new construction, the addition or the alteration):

The projected cost is \$1,600,000 for the new additions.

6. Project Status: Please check the phase of construction that best describes your project at the time of this application. Describe status.

Under Design Under Construction*

In Plan Review Completed*

Project will be submitted in October to the Building Department

* Briefly explain why the request has now been referred to the Commission.

The project has been reviewed previously for permitting in 2006. One of the comments from the Building Department concerned obtaining a waiver from the DCA stating compliance with FBC 11-4.33. The project was placed on hold and the waiver was not sought. The project was recently bid with the intention of constructing. The following is the comment from the Building Department that will be addressed with the Request for

Waiver from Accessibility Requirements:

“PLEASE PROVIDE AN APPROVED WAIVER FROM DCA STATING THAT THE ACCESSIBLE SEATING COMPLIES WITH FBC 11-4.33.”

7. Requirements requested to be waived. Please reference the applicable section of Florida law. Only Florida-specific accessibility requirements may be waived.

Issue

1: Florida Administrative Code, Chapter 9B-7, 553.509 and 2004 FBC 11-4.1.6.1.f (Vertical Accessibility).

Issue

2: _____

Issue

3: _____

8. Reason(s) for Waiver Request: The Florida Building Commission may grant waivers of Florida-specific accessibility requirements upon a determination of unnecessary, unreasonable or extreme hardship. Please describe how this project meets the following hardship criteria. Explain all that would apply for consideration of granting the waiver.

The hardship is caused by a condition or set of conditions affecting the owner which does not affect owners in general.

The Florida Administrative Code, Chapter 9B-7, 553.509 and FBC 11-4.1.6.1.f require the owner to the following:

“provide vertical accessibility to all levels above and below the occupiable grade level, regardless of whether the guidelines require an elevator to be installed in such building, structure, or facility.....”

Providing vertical accessibility to all tiered rows of fixed seating in an existing theater (that is also being expanded at each end) is unreasonable and unnecessary. The existing tiered rows of seating were designed specifically for sightlines. The existing Shamu Theater provides more than the required quantity of accessible seating and companion seating with many lines of sight (sightlines) allocated horizontally along the middle accessible aisle (corridor) in its entirety. Each of these accessible seating spaces is directly served by an accessible means of egress. Furthermore, these accessible seats along the middle aisle are placed at the upper edge of the “Soak Zone”, an area that the audience experiences getting

splashed by Shamu. The addition of two bays at each end of the existing stadium provides 824 more standard seats in the upper grandstands, in addition to, 8 accessible spaces with companion seats. The tiered rows at the additions match the existing rows in width, and comply with all applicable codes for egress. An accessible ramp is provided to egress these additional 8 accessible spaces. The vertical height difference is approximately 36 inches above the current accessible spaces with a viewing slope of approximately 36 percent (12/33) to the pools/stage below, providing, yet another, viewing perspective that is accessible.

According to ADAAG 2002, 4.33.3 Placement of Wheelchair Locations; (included in FBC 11-4.33):

“Wheelchair areas shall be an integral part of any fixed seating plan and shall be provided so as to provide people with physical disabilities a choice of admission prices and lines of sight comparable to those for members of the general public. They shall adjoin an accessible route that also serves as a means of egress in case of emergency. At least one companion fixed seat shall be provided next to each wheelchair seating area.”

Furthermore, the Exception provided for this requirement states the following:

“Accessible viewing positions may be clustered for bleachers, balconies, and other areas having sight lines that require slopes of greater than 5 percent. *Equivalent accessible viewing positions may be located on levels having accessible egress.*”
Emphasis added.

Both the existing and new addition meet the FBC 1024, NFPA 102, FBC 11-4.33 (11-4.1.3.19) and ADAAG 4.33 criteria for the quantity, lines of sight (sightlines), clustering allowance, and accessibility along an accessible route that serves as a means of egress.

[] Substantial financial costs will be incurred by the owner if the waiver is denied.

[] The owner has made a **diligent investigation** into the costs of compliance with the code, but cannot find an efficient mode of compliance. Provide detailed cost estimates and, where appropriate, photographs. Cost estimates must include bids and quotes.

9. Provide documented cost estimates for each portion of the waiver request and identify any additional supporting data which may affect the cost estimates. For example, for vertical accessibility, the lowest documented cost of an elevator, ramp, lift or other method of providing

vertical accessibility should be provided, documented by quotations or bids from at least two vendors or contractors.

a. _____

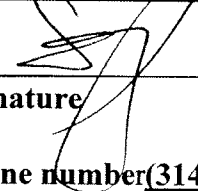
b. _____

c. _____

_____.

10. **Licensed Design Professional:** Where a licensed design professional has designed the project, his or her comments **MUST** be included and certified by signature and affixing of his or her professional seal. The comments must include the reason(s) why the waiver is necessary.

The Florida specific requirement for vertical accessibility as set forth in Florida Administrative Code, Chapter 9B-7, 553.509 and 2004 FBC 11-4.1.6.(f) for the Shamu Theater Seat Additions is both unnecessary and unreasonable. The theater is specifically designed for quality lines of sight utilizing tiered rows of seating. Accessible seating is dispersed around the full perimeter of the middle accessible aisle, permitting quality viewing spaces for those in need. Furthermore, the new additions at the north/south ends provide accessible spaces and companion seats above the existing accessible spaces height, providing another level of experience.



Jim Moorkamp
Printed Name

Signature

Phone number (314) 231-7318

(SEAL)

CERTIFICATION OF APPLICANT:

I hereby swear or affirm that the applicable documents in support of this Request for Waiver are attached for review by the Florida Building Commission and that all statements made in this application are to the best of my knowledge true and correct.

Dated this 17th day of October, 2007



Signature

Timothy J. Viox
Printed Name

By signing this application, the applicant represents that the information in it is true, accurate and complete. If the applicant misrepresents or omits any material information, the Commission may revoke any order and will notify the building official of the permitting jurisdiction. Providing false information to the Commission is punishable as a misdemeanor under Section 775.083, Florida Statutes.

Photo Exhibit - 1



Description: Existing sloped, accessible means of egress route (bottom photo is tunnel) from vomitory. This route leads to middle accessible aisle between upper and lower grandstands and serves as a means of egress to each accessible space. See Exhibit – 2 for existing accessible spaces along middle accessible aisle.

Photo Exhibit - 2



Description: Existing middle accessible aisle continuous between upper and lower grandstands and serves as a means of egress to each accessible space. Each module between aisle stairs at lower grandstands provides 4 accessible spaces + 4 companion spaces as indicated on this photo. There are 64 existing accessible spaces along this middle aisle, with *many lines of sight*.

Photo Exhibit - 3



Description: Existing stairs leading to the upper grandstands' aisle stair along the middle accessible aisle. The upper grandstands are approximately 36 inches above the middle accessible aisle to enhance viewing.

Photo Exhibit - 4



Description: Existing upper grandstands' aisle accessway (space between rows of seating). The existing space between each row is 2'-9" and 12 inches vertical rise. The clear aisle accessway space is 15 inches. The seating additions at each end will match the row spacing and seating of existing as shown.

PECKHAM GUYTON AIRES & VIETS INC. **PGA**

200 North Broadway
Suite 1000
St. Louis, MO 63102
P: 314 231-7118
www.pga.com

SeaWorld Orlando - Stadium Seating Additions

Florida Building Code - 2004 (Jurisdiction: Orange County)

Use or Occupancy Classification

301 Assembly Use Group
301.1 A-5 (Grandstands and Structures)

General Building Heights and Areas

Table 501	Allowable Height and Building Area, Type II-B and A-5	Height allowed: 50 feet	Height actual: 50 feet (maximum eave to top of roof frame)
		Story allowed: unlimited stories	Story actual: 1 stories
		Area total permitted (A-5): unlimited	

Types of Construction

602 Construction Classification: Type II-B (existing building and new addition)

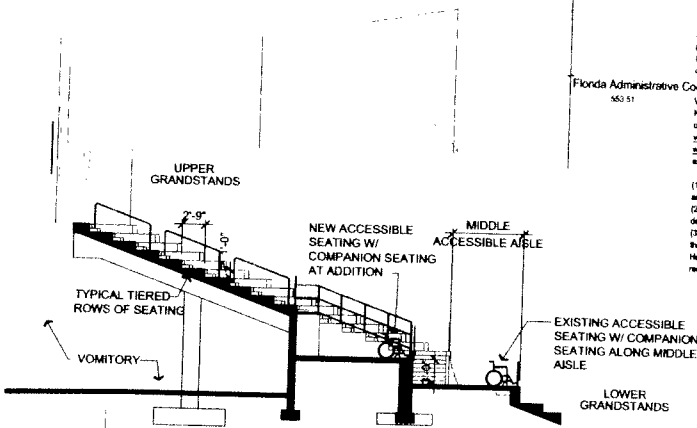
Florida Accessibility Code (amended ADAAG)

114.1.1 Accessible buildings, new construction (85% existing and 15% new construction)
 114.1.2(1) Assembly Areas: For the first 100 seats, accessible and usable spaces shall be provided consistent with the following table:
 Accessible spaces: 51-100 seats = 4 accessible spaces + about seat of each
 For all remaining fixed seats, there shall not be less than one such accessible and usable space for each 100 fixed seat or fraction thereof.
 Total Fixed Seats: 3000 fixed seats (5120-72, 5040)
 Accessible spaces required: 5088 = 101 + (2568 x 1/100) seats = 51 + 4 = 55 accessible spaces
 Accessible spaces provided: 64 accessible spaces (existing) + 8 accessible spaces (new addition)
 Assembly areas
 Placement of wheelchair locations: Wheelchair areas shall be an integral part of any fixed seating plan and shall be provided to as to provide people with physical disabilities a choice of admission prices and lines of sight comparable to those for members of the general public. They shall adjoin an accessible route that also serves as a means of egress in case of emergency. At least one companion fixed seat shall be provided next to each wheelchair seating area. When the seating capacity exceeds 300, wheelchair spaces shall be provided in more than one location. Readily removable seats may be included in wheelchair spaces when the spaces are not required to accommodate wheelchair users.
 Exception: Accessible seating positions may be reserved for teachers, balconies, and other areas having sight lines that require slopes of greater than 5 percent. Equivalently accessible seating positions may be located on levels having accessible egress.
 Seating accessible spaces arranged along middle aisle in its entirety providing numerous lines of sight.

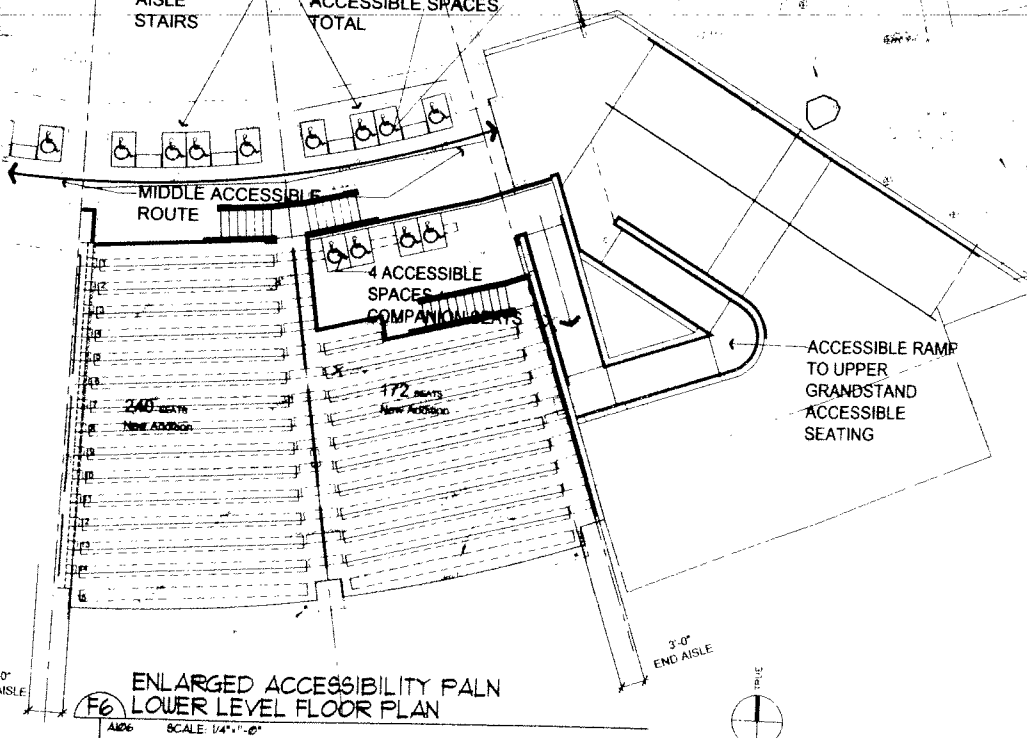
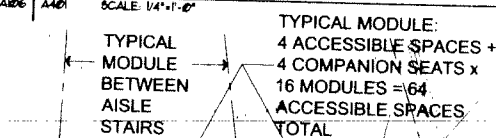
Florida Administrative Code (Chapter 9B-7)

9B-7.01 Vertical accessibility
 Nothing in Sections 9B-7.01 through 9B-7.03 or the guidelines shall be construed to relieve the owner of any building, structure, or facility governed by those sections from the duty to provide vertical accessibility to all levels, stories and facilities in compliance with the level, height, or depth of the building, structure, or facility, except for:

- (1) Elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks, and automobile lubrication and maintenance pits and padrooms.
- (2) Unoccupiable spaces, such as rooms, enclosed spaces, and storage spaces that are not designed for human occupancy; for public accommodations, or for work areas, and accessible spaces and rooms that are not open to the public and that house no more than five persons, including, but not limited to, equipment control rooms and projection booths. However, buildings, structures, and facilities must as a minimum comply with the requirements in the ADAAG.



SECTION THRU STADIUM



Notes

1. The design of this project is a minimum of a "Level" design in accordance with the Florida Building Code, Chapter 9B-7.01 through 9B-7.03. The design of this project is a minimum of a "Level" design in accordance with the Florida Building Code, Chapter 9B-7.01 through 9B-7.03. The design of this project is a minimum of a "Level" design in accordance with the Florida Building Code, Chapter 9B-7.01 through 9B-7.03.

ISSUE FOR BIDS

SeaWorld ADVENTURE PARK

SeaWorld Orlando Florida

Shamu Stadium Seat Additions

Accessibility Plan

Author: PGV
 Date: August 31, 2007

Sheet No. **A106**