

Owner / Applicant Information

Pankaj Patel
The Trustees of Indiana University
1800 NORTH RANGE RD.

BLOOMINGTON IN 47408

Phone 8128555032

Email PPATEL@INDIANA.EDU

Submitter Information

Melissa Tupper
RTM Consultants, Inc.
6640 Parkdale Place

Indianapolis IN

Phone 3173297700

Email tupper@rtmconsultants.com

Designer Information

William Browne, Jr.
RATIO Architects, Inc.
101 S Pennsylvania St.

Indianapolis IN

Phone 3176334040

Email BBrowne@RATIOdesign.com

Project Information

IU Memorial Stadium Addition and Renovations
1001 East 17th Street

Bloomington IN

County MONROE

Project Type New Addition Alteration Existing Change of Occupancy

Project Status U F=Filed U or Null=Unfiled

IDHS Issued Correction order? Has Violation been Issued?

Violation Issued by: NA

Local Building Official

Phone: Email:

Local Fire Official

Phone: Email:

Variance Details

Code Name: Other Code (Not in the list provided)

2014 IBC, 1007.1

Conditions: The variance request is to permit a single accessible mean of egress from the hydrotherapy room and the SA lounge on the ground level, code requires that where more than one means of egress is required from any accessible space that each accessible space be served by not less than two accessible means of egress.

The project is a 3-story addition to the existing stadium and will enclose the south end of the stadium. The addition will consist of physical therapy facilities, event suites, offices, and other assembly functions. The building will be classified as non-separated uses A-2, A-3, and B Occupancies and will be of Type IIA Construction.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

- 1=Non-compliance with the rule will not be adverse to the public health, safety or \
- 1
- 2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts: 1. An accessible exit from this floor has been provided through a horizontal exit, which is not required by code. This floor level is below the level of exit discharge. Other than the horizontal exit, all other means of egress are stairs.

2. The building will be protected throughout with an automatic sprinkler system in accordance with NFPA 13.

3. A fire alarm system will be installed throughout the building.

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

- Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.
- Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.
- Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.
- Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure

Facts: The hardship is the difficulty to construct a second accessible means of egress from these two rooms. Approximately 24 feet of ramp length would be required to provide a second accessible means of egress from the rooms due to change of floor elevations between new and existing buildings. The floor level of the addition is determined by the presence of below-grade bedrock. An accessible exit from this floor isn't required by code, but one has been provided.

Variance Details

Code Name: Other Code (Not in the list provided)

2014 IBC, 706

Conditions: A 2-hour fire barrier will be used in lieu of a 4-hour fire wall to separate enclosed areas of the South end zone addition from the existing East and West grandstand structures. A fire wall is required to separate buildings of different construction types.

The project is a 3-story addition to the existing stadium and will enclose the south end of the stadium. The addition will consist of physical therapy facilities, event suites, offices, and

other assembly functions. The building will be classified as non-separated uses A-2, A-3, and B Occupancies and will be of Type IIA Construction.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

1=Non-compliance with the rule will not be adverse to the public health, safety or welfare.

1

2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts:

1. The building will be protected throughout with an automatic sprinkler system in accordance with NFPA 13.
2. A fire alarm system will be installed throughout the building.
3. A similar variance was granted for the North End Zone Addition Variance 07-04-13(a), attached.

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.

Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.

Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.

Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure

Facts:

It is a cost and operational to construct a new structurally independent fire wall. It would require the installation of fire doors across the open-air concourse on the concourse level of the addition.

Variance Details

Code Name: 2010 NFPA 13 Installation of Sprinkler Systems (675 IAC 28-1-5)
8.1.1, 8.15.7

Conditions: IBC 2014, 903.3.1.1.1
Automatic sprinkler protection will not be provided under the pedestrian concourse roof or under the pedestrian bridge area. There may be food carts and other vendors that occupy the concourse during games and events and the visiting team's equipment truck will be parked under the bridge area during game days. The building is otherwise sprinklered throughout.
The project is a 3-story addition to the existing stadium and will enclose the south end of the stadium. The addition will consist of physical therapy facilities, event suites, offices, and other assembly functions. The building will be classified as non-separated uses A-2, A-3, and B Occupancies and will be of Type IIA Construction.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

- 1=Non-compliance with the rule will not be adverse to the public health, safety or welfare.
- 2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts: The concourse and bridge area are cast in place concrete, the building is Type IIA (non-combustible, 1-hour rated) construction.
The roof of the concourse is 33 feet above the concourse level. This area is very open, limiting the accumulation of smoke.
The truck is parked there only during home games. There are approximately 6-8 home games a year.
The visiting team's equipment truck is unloaded prior to being parked under the bridge area. The areas on each side of the bridge are open, there are no structures above which will limit the accumulation of smoke.

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

- Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.
- Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.
- Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.
- Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure

Facts: It is a cost and operational hardship to provide a dry sprinkler system for these areas when these areas will be used 6-12 times a year.

Variance Details

Code Name: Other Code (Not in the list provided)
2014 IBC, 1021.1

Conditions: The project is a 3-story addition to the existing stadium and will enclose the south end of the stadium.
An enclosed stair will not be provided for the 3rd floor. Code requires each story above the

2nd to have at least one enclosed stair. The 3rd floor is a non-occupied roof terrace with some enclosed areas. The 3rd floor is served by two stairs open to the exterior and an open stair that is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13.

The project is a 3-story addition to the existing stadium and will enclose the south end of the stadium. The addition will consist of physical therapy facilities, event suites, offices, and other assembly functions. The building will be classified as non-separated uses A-2, A-3, and B Occupancies and will be of Type IIA Construction.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

1=Non-compliance with the rule will not be adverse to the public health, safety or welfare.

1

2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts:

1. There are two stairs exterior open stairs that serve the 3rd floor roof terrace. The open stair within the building is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13.

2. The building will be protected throughout with an automatic sprinkler system in accordance with NFPA 13.

3. A fire alarm system will be installed throughout the building.

4. The use of open exterior stairs in lieu of an enclosed stair to exit the 3rd floor is not adverse to safety.

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.

Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.

Y

Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.

Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure

Facts:

The hardship is the cost to enclose a stair to serve the roof terrace when two open exterior stairs have been provided.

Variance Details

Code Name: 2010 NFPA 13 Installation of Sprinkler Systems (675 IAC 28-1-5)
8.1.1; 2014 IBC, 903.3.1.1.1

Conditions: Automatic sprinkler protection will not be provided in the loading dock area. The building is otherwise sprinklered throughout.

The project is a 3-story addition to the existing stadium and will enclose the south end of the stadium. The addition will consist of physical therapy facilities, event suites, offices, and other assembly functions. The building will be classified as non-separated uses A-2, A-3, and B Occupancies and will be of Type IIA Construction.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

1=Non-compliance with the rule will not be adverse to the public health, safety or \

2

2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts: 1. The floor above the loading dock and new wall adjacent to the loading dock will be 2-hour rated construction. Openings will be 90-minute rated, with the exception of the overhead door that leads to the field, which will be protected by a sprinkler located at the ceiling level within 12 inches horizontally of the opening.

2. The walls of the existing building adjacent to the loading dock are 8" thick cast in place concrete. Openings in the walls will be 90-minute rated.

3. The adjacent enclosed areas are sprinklered.

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.

Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.

Y Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.

Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure

Facts:

