

Owner / Applicant Information

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Project Information

IU North Walnut Grove Housing  
North Walnut Grove

Bloomington IN 47406

County MONROE

Project Type New ☒ Y Addition ☐ Alteration ☐ Existing ☐ Change of Occupancy ☐

Project Status ☒ U F=Filed U or Null=Unfiled

IDHS Issued Correction order? ☒ No Has Violation been Issued? ☒ No

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)  
716.5, 2014 IBC

Conditions: Nonrated openings (windows and doors) will occur in corridor walls on each floor at the quiet study rooms. Based upon the 1-hour corridor rating, openings are required to have a fire-protection rating. .  
The project involves construction of two (2) separate residential buildings. The North building will be 6 stories in height, and the South building will be 5 stories in height. Each building contains 5 stories of student dormitory rooms, along with small study and lounge spaces. The main ground floor level of both buildings contain larger gathering spaces and other amenity functions along with the student dormitory rooms. The partial 1st floor level of the North building contains two (2) 2-bedroom apartments, as well as utility and other building support functions. The building will be of Type IB Construction.

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

- 2

1=Non-compliance with the rule will not be adverse to the public health, safety or w
- 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 a sprinkler system per NFPA 13.  
2. The openings will be protected with a sprinkler located at the ceiling level on the room side.  
3. This request is identical to a previous variance approved for IU Ashton (08-09-35a), also Variances 18-06-50b, 16-12-31b, 14-10-29b and 14-10-30b at UND. Similar variances have been granted for several other student housing projects, including 12-11-22(e) for Johnson Hall and others at Ball State University, and 14-1-37(d) for Indiana State Mills Hall, and several other more recent ISU dormitory projects.

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.
- 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: Visibility into the affected rooms from the corridor is an important feature in the design, and will enhance personal safety and security.

Variance Details

Code Name: Other Code (Not in the list provided)  
1018.6, 2014 IBC

Conditions: Student lounge areas on each floor will be open to the 1-hour egress corridors serving the residence rooms. Rooms other than 2foyers, reception rooms, and lobbies2 are required to be separated from corridors where the corridor is required to have a fire rating. The project involves construction of two (2) separate residential buildings. The North building will be 6 stories in height, and the South building will be 5 stories in height. Each building contains 5 stories of student dormitory rooms, along with small study and lounge spaces. The main ground floor level of both buildings contain larger gathering spaces and other amenity functions along with the student dormitory rooms. The partial 1st floor level of the North building contains two (2) 2-bedroom apartments, as well as utility and other building support functions. The building will be of Type IB Construction.

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☐ 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 a sprinkler system per NFPA 13.  
2. Smoke detection will be provided in the lounge areas open to the corridor connected to the building fire alarm system.  
3. The design of the corridor will comply with Sec. 28.3.6.6, NFPA 101, Life Safety Code, which permits spaces to be open to the corridor, provided that the spaces are not used for sleeping rooms, the building is protected throughout with a sprinkler system, and the space does not obstruct access to required exits.  
4. This request is identical to approved variances 18-06-50c, 16-12-31c, 14-10-29a, 14-10-30a, 14-1-37c, 06-11-47, 07-07-26(b), 08-06-34, 08-12-21(a), 10-11-37(a), and 13-11-63(a).

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Facts: The lounge areas open to the corridor are an important operational feature, providing an open place for students to socialize outside of the dorm rooms.

Variance Details

Code Name: Other Code (Not in the list provided)  
716.5.9, 2014 IBC

Conditions: Dormitory sleeping room door assemblies will not be provided with closers. The corridor doors are required to be either self- or automatic-closing, based upon the 20-minute fire rating. The project involves construction of two (2) separate residential buildings. The North building will be 6 stories in height, and the South building will be 5 stories in height. Each building contains 5 stories of student dormitory rooms, along with small study and lounge spaces. The main ground floor level of both buildings contain larger gathering spaces and other amenitv functions along with the student dormitory rooms. The partial 1st floor level of

other utility functions along with the student dormitory rooms. The partial 1st floor level of the North building contains two (2) 2-bedroom apartments, as well as utility and other building support functions. The building will be of Type IB Construction.

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

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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 a sprinkler system per NFPA 13.  
2. The corridor will be provided with a smoke detection system connected to the building fire alarm system - corridor smoke detectors are not required by code. Each sleeping room will be provided with single-station smoke alarms, as required.  
3. This variance has been approved for several college housing projects, including 98-4-9, 00-2-23, 00-5-9, 06-11-47(a), 07-07-26(a), 10-1-37(b), 11-3-17(a), 12-05-36c, and 14-1-37(e), 14-10-29c, 14-10-30c, 15-04-39(a), 15-04-42(g), 16-01-03(e), 16-12-31a, 17-03-11(f), 17-12-54(a), and 18-06-50a.

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

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☐

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Facts:

The hardship is the ongoing cost of maintaining door closers or door hold-open devices that are rendered essentially inoperative in a short period of time in the student environment.

Variance Details

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

Table 601, 2014 IBC

Conditions: Structural steel columns in the 1-story Activity Center on the Main Level of the South Building will not be provided with fireproofing for the required 1-hour fire rating. The project involves construction of two (2) separate residential buildings. The North building will be 6 stories in height, and the South building will be 5 stories in height. Each building contains 5 stories of student dormitory rooms, along with small study and lounge spaces. The main ground floor level of both buildings contain larger gathering spaces and other amenity functions along with the student dormitory rooms. The partial 1st floor level of the North building contains two (2) 2-bedroom apartments, as well as utility and other building support functions. The building will be of Type IB Construction.

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Facts: 1. The building will be protected throughout with a sprinkler system per NFPA 13. A sprinkler will be provided at the top of columns to spray one side of the column. This method of protecting structural steel is recognized in various NFPA standards, including NFPA 15, ¿Standard for Water Spray Fixed Systems for Fire Protection¿ (for steel supporting flammable liquid storage tanks and other applications), NFPA 13, ¿Standard for the Installation of Sprinkler Systems¿ (for structural steel in rack storage buildings), and NFPA 409, ¿Standard on Aircraft Hangars¿ (for structural columns). The application of water will absorb the heat from a fire impinging upon the column, providing sufficient cooling to protect the steel from structural failure.  
2. Similar variances have been granted for structural steel supporting floor assemblies, including 16-12-61, 16-05-46, and 15-10-39a, as well as for steel supporting roof assemblies including 18-04-10, 18-03-70b, 17-12-54d, 17-06-24a, 17-05-43a, 16-03-53, 15-11-11c, 15-06-33b, 15-01-28a, and 14-03-15c.

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Facts: Exposed steel is desired within the exterior curtain wall design for the room. The cost to provide intumescent coatings for the steel in question is prohibitive.

