

Owner / Applicant Information

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Project Information

Allison Transmission Technical Innovation Center
10th and Cossell Road

Speedway IN 46222

County MARION

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:

Conditions:

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 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:

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:

Variance Details

Code Name: 2014 IBC
722.1

Conditions: A new structure of Type I-B construction will have portions of its roof structure supported by exposed concrete-filled steel columns with a calculated fire resistance rating of at least one hour per American Society of Civil Engineers (ASCE) 29-05. The columns will have effective lengths of approximately 27 feet. The code referenced standard limits the unbraced length limit 13 feet.

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

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

Facts: 1. The building will be protected with an automatic fire sprinkler system per NFPA 13.
2. Fire-resistance engineering calculations of the concrete-filled steel columns based on ASCE Standard ASCE/SEI/SFPE 29-05 and interpolation for column height results in fire-resistive ratings of not less than one-hour. (1.3 hours for square columns).
3. The columns are located in large open spaces where the fire loading will be relatively low.

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: For these columns and this space, the ideal design desired is for these columns to be exposed. The cost and look of intumescent fire rated coatings makes this an undesirable option. Additionally, the difficulty of providing and maintaining sprayed fire resistive material and then to conceal the columns with gypsum board is also an undesirable option.

