Owner / Applicant Information

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Project Information

GRANT COUNTY SHERIFF'S OFFICE & JAIL
501 S. Adams St

Marion IN 46953 -

County GRANT

Project Type New [ ] Addition [Y] Alteration [Y] Existing [Y] 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: 7654567362 Email: jfoustnight@cityofmarion.in.gov

Local Fire Official

Phone: 7654567362 Email: BECKSTEIN@CITYOFMARION.IN.GOV

Variance Details

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

2014 IBC, 408.7

Conditions: The project involves the partial renovation of the existing two story jail and the addition of a new, two-story jail pod building. The project will be of Type II-B Construction with a fire suppression system.

The security glazing in smoke barrier walls will have operable 12-inch X 12-inch gun ports on the 2nd level of the Control Room overlooking the individual jail pods. Non-rated Security glazing with sprinkler protection on each side is permitted to be installed in a smoke barrier wall, however, the language suggests fixed glazing only is permitted. The smoke barrier wall divides the housing units into two (2) separate smoke compartments to permit defense in place egress and separation of smoke control zones.

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

[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 gun port openings consist of a normally closed and latched 12-gauge steel panels and will be opened only in the event of an occurrence in one of the cell pods requiring intervention by the officers in the control room.

2. A row of close-spaced sprinklers will be provided on each side of the wall of security glazing, as required. The building will be protected throughout with an automatic sprinkler system.

3. This variance has been granted previously, including 22-07-10(a), 21-06-21(a), 21-03-71(c), 20-12-35(b), 20-03-01(b), 19- 08-99(a), 23-12-52(a)

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: The correctional officer in charge of the control room is requesting the use of operable gun ports to allow direct intervention for inmate disturbances warranting the use of rubber bullets, etc. This allows for immediate control without endangering officers having to enter cells or dayrooms to break up the disturbance.

Variance Details

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

2014 IBC, 408.9

Conditions: The project involves the partial renovation of the existing two story jail and the addition of a new, two-story jail pod building. The project will be of Type II-B Construction with a fire suppression system.

The 2014 IBC requires windowless buildings shall be provided with an engineered smoke control system to provide a tenable environment for exiting from the smoke compartment in the area of fire origin in accordance with Section 909 for each windowless smoke compartment. The HVAC system in this building will be designed to provide 100% exhaust and 100% outside air to the areas of the building meeting the definition of windowless.

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Facts:

The HVAC system will operate as follows:
1. Under a non-alarm condition, air handlers operate in normal mode for heating and cooling.

2. Under alarm conditions, air handlers can be manually operated in smoke control mode. Smoke detectors will still be provided per the IBC section 907.2.6.3.3.

The location of HVAC supply and return ductwork better address the functional dispersal of smoke and gas used for occupant control in an emergency situation.

NFPA 101 for life safety does not require a smoke control system in a Detention and Correctional Facility, instead using a ¿Total Concept¿ per section 22.1.1.2 which allows architects and engineers to design systems that address safety and security measures of the facility. Detention and correctional facilities are required to comply with additional fire and life safety criteria including strict limitations of flame spread and combustibility of furniture and mattresses, implementation of fire prevention programs, ignition control strategies and emergency planning.

Identical variances were approved for 22-07-10(b), Jail 21-06-21(b), 20-12-35(a), 21-03-71(a), 23-12-52(b)

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Facts:

The purpose of section 408.9 is to establish minimum requirements for the design of smoke control systems that are intended to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations or for assistance in fire suppression or overhaul activities. The proposed system design will allow the security personnel to provide a smoke control system that will function for both a life safety should relocation be required and security function involving the use of occupant control measures.

Variance Details

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

Sec. 8.5.5.3.1

Conditions: The project involves the partial renovation of the existing two story jail and the addition of a new, two-story jail pod building. The project will be of Type II-B Construction with a fire suppression system.

A mezzanine obstruction, with an average width of approximately 5'-3", will not be provided with sprinklers below. Code requires sprinklers to be installed under obstructions over 4'-0" wide.

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Facts: The mezzanine is noncombustible with open grating. The mezzanine is only used for walkway access to mezzanine cells. There will be no storage on the mezzanine to obstruct the open grating.

Similar variances have been approved for 22-07-10(c), 19-05-13, 19-08-98(b), 19-08-99(b), 19-09-06, 20-03-01(a), 20-12-35(c), 21-03-71(b), 21-06-21(c), 23-12-52(c)

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Facts: Exposed water pipe and sprinkler heads below the mezzanine would be subject to vandalism and portions of damaged equipment potentially used as weapons by the inmates.

Variance Details

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

2014 IBC, 904.2

Conditions: The project involves the partial renovation of the existing two story jail and the addition of a new, two-story jail pod building. The project will be of Type II-B Construction with a fire suppression system.

An alternative automatic fire-extinguishing system has been installed in the data rooms in lieu of automatic sprinklers. Code permits the system to be used however, does not permit the system to satisfy permitted reductions or exceptions in the code for the installation of an automatic sprinkler system throughout the building. The variance request is to permit the building to be classified as fully sprinklered. The building will otherwise be protected throughout with an NFPA 13 automatic sprinkler system.

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Facts:

1. The alternative fire-extinguishing system will be designed to suppress the fire and installed per the appropriate NFPA standard and will be maintained as required.

2. The use of a clean agent in this room is desirable to avoid damage that could be caused by sprinkler water discharge.

3. The rest of the building is protected throughout with an NFPA 13.

4. Similar variances were approved for 22-07-10(d), 14-12-47, 18-07-54, 19-06-59, 19- 07-20, 19-10-20, 20-12-35(d), 21-03-71(d), 21-06-21(d), 23-12-52(d)

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Facts:

The proposed clean agent system will provide fire suppression without damaging sensitive electronic equipment in the Data Room.

Variance Details

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

2014 IBC, Table 509

Conditions: The project involves the partial renovation of the existing two story jail and the addition of a new, two-story jail pod building. The project will be of Type II-B Construction with a fire suppression system.

Group I-3 cells equipped with padded surfaces are required to have 1-hour rated separation walls. An option for a sprinkler to mitigate the 1-hour requirement is not provided.

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Facts: Padded cells are required for these units in order to keep inmates from injuring themselves and are utilized as a safety precaution. These padded systems are the Gold Medal Safety Padding as fabricated by Marathon Engineering Corporation (See attached brochure and test data).

Gold Medal Safety Padding has been tested in accordance with ASTM E84 and is given a CLASS A FIRE RATING as no lower rating is available, which provides for Flame Spread of 0 and Smoke Development of 10. During testing the padding was shown to be self-extinguishing. Self-extinguishing materials are defined as a material with the ability to cease burning once the source of the flame has been removed.

These Class A units will be utilized to eliminate the possibility of burning.

New walls are being constructed of concrete masonry units.

Additionally, the cell is provided with a fire-sprinkler as required by code.

Similar variances were approved for 22-07-10(e), 23-12-52(e)

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Facts: The difficulty is providing a rated ceiling system that will require access for maintenance. This construction of a concrete masonry unit wall system, concrete floor and metal deck on top of the rooms is cost-prohibitive. The ceiling system will be a cellular metal deck and is protected by the sprinkler system.