

Owner / Applicant Information

Darryl Angermeier
Evansville Vanderburgh School Corporation
951 WALNUT STREET

EVANSVILLE IN 47713

Phone 8124358453

Email DARRYL.ANGERMEIER@EVSCK12.com

Submitter Information

Mark Smith
ALVA Electric
118 W. Franklin St.

Evansville IN

Phone 8124255200

Email msmith@manionstigger.com

Designer Information

Amy Barrett
Hafer Associates
21 SE Third Street, Suite 800

Evansville IN

Phone 8124224187

Email abarrett@haferdesign.com

Project Information

New Northside Elementary School
10701 Petersburg Road

Evansville IN 47725

County VANDERBURGH

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

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

IDHS Issued Correction order? ☒ yes Has Violation been Issued? ☒ yes

Violation Issued by: SBC

Local Building Official

Phone: Email:

Local Fire Official

Phone: Email:

Variance Details

Code Name: 2009 Indiana Electrical Code (675 IAC 17-1.8)
300.10

Conditions:	<p>Nature of Non-Compliance</p> <p>The method of installation used is based upon the interpretation of NEC 300.10 by IBEW electricians in that the raceways inside the masonry wall meet Exception 1 to NEC 300.10. The short sections of raceway inside the masonry walls enter a wall mounted box and both are secured by the wall rather than an electrical box connector.</p> <p>The installation method used is a common practice and has long been accepted by the Evansville Vanderburgh County Building Commission (Local Building Commission). On this project alone, the Local Building Commission inspected and approved the connection method in question on seven occasions and passed the installation on each inspection. Ultimately the Local Building Commission issued a final inspection on the electric system with no conditions to acceptance.</p> <p>After construction of the Project was complete, the installation method was brought to the Indiana State Division of Fire Protection and Building Safety (DHS). DHS issued an interpretation of NEC 300.10, opining that the installation did not meet the exception and is non-compliant.</p>
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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

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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:	<p>See uploaded document - Not adverse to HSW.</p> <p>ALVA is an electrical contractor specializing in commercial electrical construction. ALVA employs, on average, 100 electricians and its employment accounts for over 10% of the IBEW Local 16 employment.</p> <p>ALVA relies exclusively upon IBEW-trained electricians trained by the Joint Apprenticeship Training Committee. The IBEW, NECA, and the JATC partner to provide the most highly trained electrical workforce possible. IBEW electricians are trained to follow the NEC, which is the Indiana Electric Code.</p> <p>The conduit installation method in question has been commonly used where a ground fault conductor is used and bonded to equipment boxes, and has been used by IBEW electricians in Southern Indiana for many years. The method in question has continuously been accepted by the Vanderburgh County Building Commission and the State Fire and Building Safety Division. Vanderburgh County and other Indiana County buildings contain identical installations including many EVSC buildings.</p> <p>The building, and installation in question, was regularly inspected and approved during construction through County and State inspections. Vanderburgh County inspected installations of the type that are now in violation repeatedly and passed the installations as it always has. Vanderburgh County issued seven partial rough-in approvals for the installation, a final Green Tag approval of the electric system, and approved the building for occupancy. Connections were not hidden from inspectors, and the connections were known to be a common IBEW practice. The connections to the pipes in masonry walls were not considered adverse to health, safety, nor welfare during prior years of acceptance and were considered code compliant until July of 2018.</p>
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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.

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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.

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

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

Facts:

Facts demonstrating imposition of the rule would result in undue hardship because of excessive costs of additional and altered construction elements.

ALVA Electric Inc. (¿ALVA¿) is under contract to construct the electrical system for the building in accordance with code authority mandates. The violation in this case concerns conduits that are a part of a completed structure and the conduits in question are now encased in solid concrete walls. All other building systems are complete and share above roof space with the electrical system components.

In order to gain the access needed to change the conduit connections, a large part of the building systems will have to be demolished. Workers will need access that allows for disassembly of the conduit system and to perform partial demolition of the concrete masonry walls. The cost of changing the conduit system has not been fully estimated, but would likely be more than a million dollars and would take years.

Imposition of the Rule will result in undue hardship to the Vanderburgh County School Corporation as well as ALVA because of major operational problems in the use of the building or structure. Attempting to perform partial demolitions of the building, electrical system changes, and rebuilding portions of the building over the summers is impractical and will result in portions of the school being unusable or closings of the entire school. The time that changing the electrical system will take and the operational problems will drive the costs of imposition of the rule to an unknown amount of money that ALVA does not possess.