

PROJECT: Design Build Agreement Ph	CONTRACTOR: Johnson Controls Fire Protection L							
DATE: February 7, 2023	DATE: February 7, 2023			CHANGE ORDER #: COR#25				
This contract shall be changed as follo	ws:							
CHANGES:								
Rock Canyon Damper adds				\$293,300.65				
2.								
3.								
4.								
5.								
		TOTAL CHANGE	ORDER:	\$293,300.65				
CONTRACT STATUS:								
Original Contract Sum	\$3,045,829.00							
Previous Change Orders	\$420,520.58							
Current Contract This Change Order	\$3,466,349.58 \$293,300.65							
This change order								
NEW CONTRACT TOTAL	\$3,759,650.23							
The Contract time will be extended by	TBD	calendar days. Therefor	e, the date of Final C	Completion as of				
the date of this Change Order is	July 30, 2023	-						
NOT VALID until signed by the Contra	ctor, Architect, and Ow	vner, and approved by th	ne School District's					
Board of Education (if applicable).								
	Johnson Controls Fire	Protection LP	Douglas Cou	inty School District				
Consultant	Contractor			_				
	Robert Cull							
Ву	By Rot A hel		By Richard Chief Op	Cosgrove perations Officer				
Date	Date		Date					
	2/7/2023	_						

	А	В	С		D	
1		Count	Cost		Total	
2	Subcontracting Installation					
3	Material	155	\$	85.00	\$	13,175.00
4	Labor	1400	\$	115.00	\$	161,000.00
5	Equipment	8	\$	1,365.00	\$	10,920.00
6	Markup	1	\$	22,211.40	\$	22,211.40
7	Subtotal				\$	207,306.40
8						
9	JCI Labor and Materials					
10						
11	PM	24	\$	133.50	\$	3,204.00
12	CAD	32	\$	105.00	\$	3,360.00
13	Design	32	\$	115.00	\$	3,680.00
14	Commissioning	160	\$	115.00	\$	18,400.00
15	Admin	4	\$	95.00	\$	380.00
16	Fire Alarm Parts	155	\$	367.55	\$	56,970.25
17					\$	-
18	Subtotal				\$	85,994.25
19	Design Builders Fee (waived)				\$	-
20						
21	Total COR				\$	293,300.65

TLH FIRE

RCHS EXISTING NON-COMPLIANCE

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6901 S. Pierce Street | Suite 205 | Littleton, CO 80128 tami@TLHFire.com | 303.517.1775

December 7, 2022

RE: Douglas County School District Rock Canyon High School Existing Non-Compliant Conditions

TLH Fire performed an on-site observation on October 18th, 2022, with the intent to document the building construction and life safety conditions to derate walls that are no longer required to be rated per IBC 2021 and therefore allowing for the removal of non-required fire/smoke dampers.

The following was discovered while on site visit:

- 1. The construction type is 2B instead of the documented 2A (red arrows highlight structural members in figures 1 & 2 below.)
- 2. The documented 2-hour fire walls were not constructed to the approved architectural drawings (exposed metal studs on existing fire walls are shown in figures 1 & 2 below.)

The above conditions push the school over the allowable fire area allowed per UBC or IBC.

The fire alarm upgrade project is a Level 1 alteration. Field verified fire/smoke dampers will remain in place and DCSD will not pursue fire/smoke damper modifications at this time.

From the coordination meeting between DCSD, JCI, TLH Fire, SMFR, and DFPC on December 7th, 2022, the existing certificate of occupancy is still valid. The building will need to be evaluated if/when the school district decides to perform future IEBC Level 2 or Level 3 alternations.

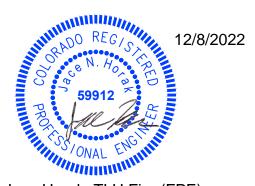


Figure 1 & 2 - Existing Non-Compliant 2-Hour Rated Wall & Construction Examples

Thank you,

Tami Lynn Holley, PE

Tami Lym Holly



Jace Horak, TLH Fire (FPE)



IEBC 2021 Alteration Levels:

SECTION 503 ALTERATION—LEVEL 1

503.1 Scope. Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

503.2 Application. Level 1 alterations shall comply with the provisions of Chapter 7.

SECTION 504 ALTERATION—LEVEL 2

504.1 Scope. Level 2 alterations include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment. 504.2 Application. Level 2 alterations shall comply with the provisions of Chapter 7 for Level 1 alterations as well as the provisions of Chapter 8.

SECTION 505 ALTERATION—LEVEL 3

505.1 Scope. Level 3 alterations apply where the work area exceeds 50 percent of the building area. 505.2 Application. Level 3 alterations shall comply with the provisions of Chapters 7 and 8 for Level 1 and 2 alterations, respectively, as well as the provisions of Chapter 9.



KEYNOTES:



STRATEGY USED FOR DAMPER ACTUATION: IMC 607.3.3.2.1: WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED INSIDE THE DUCT OR OUT-SIDE THE DUCT WITH SAMPLING TUBES PROTRUDING INTO THE DUCT. THE DETECTOR OR TUBES WITHIN THE DUCT SHALL BE WITHIN 5 FEET (1524 MM) OF THE DAMPER. AIR OUTLETS AND INLETS SHALL NOT BE LOCATED BETWEEN THE DETECTOR OR TUBES AND THE DAMPER. THE DETECTOR SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY ANTICIPATED AT THE POINT WHERE IT IS INSTALLED. OTHER THAN IN MECHANICAL SMOKE CONTROL SYSTEMS, DAMPERS SHALL BE CLOSED UPON FAN SHUTDOWN WHERE LOCAL SMOKE DETECTORS REQUIRE A MINIMUM VELOCITY TO OPERATE.

- 9 STRATEGY USED FOR DAMPER ACTUATION: IMC 607.3.3.2.3: WHERE A SMOKE DAMPER IS INSTALLED WITHIN AN UNDUCTED OPENING IN A WALL, A SPOT-TYPE DETECTOR SHALL BE INSTALLED WITHIN 5 FEET (1524 MM) HORIZONTALLY OF THE DAMPER. THE DETECTOR SHALL BE LISTED FOR RELEASING SERVICE IF USED FOR DIRECT INTERFACE WITH THE DAMPER.
- STRATEGY USED FOR DAMPER ACTUATION: IMC 607.3.3.2.4: WHERE A SMOKE DAMPER IS INSTALLED IN A CORRIDOR WALL OR CEILING, THE DAMPER SHALL BE PERMITTED TO BE CONTROLLED BY A SMOKE DETECTION SYSTEM INSTALLED IN THE CORRIDOR.
- STRATEGY USED FOR DAMPER ACTUATION: IMC 607.3.3.2.5: WHERE A SMOKE DETECTION SYSTEM IS INSTALLED IN ALL AREAS SERVED BY THE DUCT IN WHICH THE DAMPER WILL BE LOCATED, THE SMOKE DAMPERS SHALL BE PERMITTED TO BE CONTROLLED BY THE SMOKE DETECTION SYSTEM.
- ROOM DOES NOT HAVE SUITABLE CONDITIONS FOR SMOKE DETECTION. TO AVOID NUISANCE ALARMS, HEAT DETECTOR AND SPRINKLER HEAD (FLOW ALARM) WILL INITIATE DAMPER CLOSURE.