



Bullitt County Public Schools

1040 Highway 44 East
Shepherdsville, Kentucky 40165

502-869-8000
Fax 502-543-3608
www.bullittschools.org

MEMO:

TO: Mr. Jesse Bacon 

FROM: Bret Highley

DATE: August 15, 2018

RE: Maryville Gym –Acoustical Panels

On February 26, 2018 the Bullitt County Board approved Change Order #27 for installing an 24" acoustic strip around the perimeter of the Maryville Elementary School gym. With further review by Bill Khourie, WNK & Associates/Cardinal Acoustics, it was determined that a better product is needed.

At this time, I am presenting for the Board's approval Change Order #28 for \$1,370.77. This will increase Parco's purchase order to \$6,894,063.02

If you have any questions, please call me at 502-921-3659.

Attachments:

- AIA Document
- Project Breakdown/Cost



AIA® Document G701™ – 2017

Change Order

PROJECT: <i>(Name and address)</i> Maryville Elem School Addition / Renov. 4504 Highway 44 East Shepherdsville, Kentucky 40229	CONTRACT INFORMATION: Contract For: General Construction Date: August 17, 2015	CHANGE ORDER INFORMATION: Change Order Number: 028 Date: August 15, 2018
OWNER: <i>(Name and address)</i> Bullitt County Board of Education 1044 Highway 44 East Shepherdsville, KY	ARCHITECT: <i>(Name and address)</i> Sherman Carter Barnhart Architects PLLC 2405 Harrodsburg Road Lexington, KY 40504	CONTRACTOR: <i>(Name and address)</i> Parco Construction Company 2521 Ridgemark Court Louisville, KY 40269-0339

THE CONTRACT IS CHANGED AS FOLLOWS:

(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)

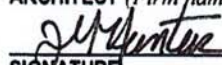

Provide 2" acoustic wall panel in lieu of 1" acoustic wall panel in gymnasium which was approved by change order 27.
Increased thickness will provide NRC.90.

The original Contract Sum was	\$ 6,610,528.00
The net change by previously authorized Change Orders	\$ 282,164.25
The Contract Sum prior to this Change Order was	\$ 6,892,692.25
The Contract Sum will be increased by this Change Order in the amount of	\$ 1,370.77
The new Contract Sum including this Change Order will be	\$ 6,894,063.02

The Contract Time will be unchanged by Zero (0) days.
The new date of Substantial Completion will be

NOTE: This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time, that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER.

<u>Sherman Carter Barnhart Architects PLLC</u> ARCHITECT <i>(Firm name)</i>  SIGNATURE <u>Mitch Hunter, Constr. Admin</u> PRINTED NAME AND TITLE <u>August 15, 2018</u> DATE	<u>Parco Construction Company</u> CONTRACTOR <i>(Firm name)</i>  SIGNATURE <u>Tony Snellen</u> PRINTED NAME AND TITLE <u>August 16, 2018</u> DATE	<u>Bullitt County Board of Education</u> OWNER <i>(Firm name)</i> SIGNATURE PRINTED NAME AND TITLE DATE
--	---	---

FACPAC Contract Change Order Supplemental Information Form (Ref# 49937)

Form Status: Saved

Project: Maryville Elementary School - Addition/Renovations
BG Number: 15-106 (Imported Project) District: Bullitt County (071)
Status: Active Phase: No Data

Contract: PARCO CONST. GROUP, LLC, 00
Type: General Contractor Proposed

Change Order Number 28
Time Extension Required No
Date Of Change Order 8/15/2018
Change Order Amount To Date Increase

Construction Contingency

Calculations below are project wide. Remaining negative Construction Contingency may require the submission of a revised BG1.

Current Approved Amount:	\$491,857.85
Net Approved COs:	\$248,743.55
Remaining After Approved COs:	\$243,114.30
Net All COs:	\$250,114.32
Remaining After All COs:	\$241,743.53

This Requested Change Order Amount \$1,370.77

+/-

Change In A/E Fee This Change Order \$85.67

+/-

Change In CM Fee This Change Order

+/-

Remaining Construction Contingency \$236,446.77

Balance

Contract Change Requested By General Contractor

Contract Change Reason Code Expansion of Scope

Change Order Description And Justification

Provide 2" acoustic wall panel in lieu of 1" acoustic wall panel in gymnasium which was approved by change order 27.

Increased thickness will provide NRC .90

Cost Benefit To Owner

Price is fair and reasonable

Contract unit prices have been utilized No
to support the cost associated with this
change order.

Detailed Cost Breakdown

Contract unit prices have not been utilized, provide a detailed cost breakdown which separates labor, material, profit and overhead.

Detail Item	Amount	Percent of Total
Labor		0.00 %
Materials	\$1,370.77	100.00 %
Profit and Overhead		0.00 %
Bond Insurance		0.00 %
Cost Breakdown Total:	\$1,370.77	

Cost for this Change Order supported No
by an alternate bid or competitive price
quote

**Change Order Supplemental Information Form Signature
Page (Online Form Ref# 49937)**



Architect

August 15, 2018

Date

Construction Manager

Date



Finance Officer

8-15-18

Date

Local Board of Education Designee

Date

Parco Constructors Group, LLC

General Contractor

2521 Ridgemar Court
P.O. Box 99339
Louisville, Kentucky 40299
(502) 266-7877
Fax (502) 266-9114

July 17, 2018

Mr. Mitch Hunter
Sherman-Carter-Barnhart, PSC
2405 Harrodsburg Road
Lexington, KY 40504
Phone: (859) 224-1351

Re: Maryville Elementary School
BG #15-106
SCB PRN # 014
Gym Acoustical Wall Panels
Parco- RFP #1535-37R2
(Revised)

e-mail: mhunter@scbarchitects.com

Dear Mitch:

Pursuant to your request for pricing associated with furnishing & installing 2" Cardinal Acoustical Wall Panels in accordance with PRN # 014. The cost associated with the installation of the Acoustical Wall Panels is in the amount of **\$32,048.65**. Please see the attached backup & pricing breakdown below.

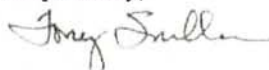
Breakdown:

Contractor	Subcontracted	(Self-Performed Work)		Total
		Materials	Equipment/ Labor	
Parco Constructors Group; LLC				
Protection of Gym Floor		\$ 416.44	\$ 1,813.92	\$ 2,230.36
Fabri-Tough Wall Panels		9,499.00	12,092.80	21,591.80
Freight for Cardinal Wall Panels		875.00	NA	875.00
Z Clips, Anchors, Etc.		630.00	Incl. Above	630.00
Scissors Lift/Mobilizations		NA	1,220.00	1,220.00
KY Sales Tax		<u>721.23</u>	<u>NA</u>	<u>721.23</u>
Total Direct Costs		\$12,741.67	\$15,126.72	\$27,868.39
15 % Mark-up on Self-Performed Work				<u>4,180.26</u>
Total Change Amount				\$32,048.65

Note: With 1,631 s.f. of the 2" Cardinal Acoustical Wall Panel the estimated Reverberation time will be approximately 3 seconds which be a considerable reduction in the echo. The above pricing is based on utilizing the Cardinal standard white painted Wall Panels.

I hope the above proposal meets with your approval. If you have any questions or need any additional information please give me a call.

Respectfully,



Tony Snellen
President/Project Manager

\$ 32,048.65 (REVISED PANELS)
- \$30,677.88 (APPROVED CO #27)
1,370.77
NEW CHANGE ORDER AMOUNT

Parco Constructors Group, LLC

General Contractor

2521 Ridgemar Court
P.O. Box 99339
Louisville, Kentucky 40299
(502) 266-7877
Fax (502) 266-9114

July 17, 2018

Mr. Mitch Hunter
Sherman-Carter-Barnhart, PSC
2405 Harrodsburg Road
Lexington, KY 40504
Phone: (859) 224-1351

e-mail: mhunter@scbarchitects.com

Re: Maryville Elementary School
BG #15-106
SCB PRN # 014
Gym Acoustical Wall Panels
Parco- RFP #1535-37R2
(Revised)

Dear Mitch:

Pursuant to your request for pricing associated with furnishing & installing 2" Cardinal Acoustical Wall Panels in accordance with PRN # 014. The cost associated with the installation of the Acoustical Wall Panels is in the amount of **\$32,048.65**. Please see the attached backup & pricing breakdown below.

Breakdown:		(Self-Performed Work)		
Contractor	Subcontracted	Materials	Equipment/ Labor	Total
Parco Constructors Group; LLC				
Protection of Gym Floor		\$ 416.44	\$ 1,813.92	\$ 2,230.36
Fabri-Tough Wall Panels		9,499.00	12,092.80	21,591.80
Freight for Cardinal Wall Panels		875.00	NA	875.00
Z Clips, Anchors, Etc.		630.00	Incl. Above	630.00
Scissors Lift/Mobilizations		NA	1,220.00	1,220.00
KY Sales Tax		<u>721.23</u>	<u>NA</u>	<u>721.23</u>
Total Direct Costs		\$12,741.67	\$15,126.72	\$27,868.39
15 % Mark-up on Self-Performed Work				<u>4,180.26</u>
Total Change Amount				\$32,048.65

Note: With 1,631 s.f. of the 2" Cardinal Acoustical Wall Panel the estimated Reverberation time will be approximately 3 seconds which be a considerable reduction in the echo. The above pricing is based on utilizing the Cardinal standard white painted Wall Panels.

I hope the above proposal meets with your approval. If you have any questions or need any additional information please give me a call.

Respectfully,



Tony Snellen
President/Project Manager

COST ANALYSIS				Parco Constructors Group, LLC		SHEET			
F150									
PROJECT						DATE		17-Jul-18	
MARYVILLE ELEMENTARY SCHOOL				RFP # 1535-37		2nd Revision		3:16 PM	
SECTION						EQUIPMENT/			
GYM WALL SOUND PANELS				MATERIAL		LABOR		TOTAL COST	
DESCRIPTION		QUANTITY	UNIT	Unit	TOTAL	Unit	TOTAL	Unit	TOTAL
1	2" Cardinal Acoustical Wall Panel (59) 4' x 7'	1,652	SF	5.75	9499.00		0.00	5.75	9499.00
2	3" Tap-Cons	2,100	EA	0.30	630.00		0.00	0.30	630.00
3	Freight	1	LS	875.00	875.00		0.00	875.00	875.00
4	Floor Protection- Rhino Bd. (38" x 50')	4	Rolls	29.95	119.80		0.00	29.95	119.80
5	3/4" Plywood	8	SHTS	37.08	296.64		0.00	37.08	296.64
6	Carp. Foreman/Carpenter/ Laborer (CF/C/L)	12	HRS		0.00	151.16	1813.92	151.16	1813.92
7	Misc. Anchors, Drill Bits, Etc.	1	LS	600.00	600.00		0.00	600.00	600.00
8	Mobilize Equipment-	2	EA		0.00	110.00	220.00	110.00	220.00
9	Scissors Lift- 3226	2	EA		0.00	500.00	1000.00	500.00	1000.00
10	Installation- CF/C/L (11) days x 24 mhrs	80	HRS		0.00	151.16	12092.80	151.16	12092.80
11					0.00		0.00	0.00	0.00
12					0.00		0.00	0.00	0.00
14					0.00		0.00	0.00	0.00
15					0.00		0.00	0.00	0.00
16					0.00		0.00	0.00	0.00
17					0.00		0.00	0.00	0.00
18					0.00		0.00	0.00	0.00
19					0.00		0.00	0.00	0.00
20					0.00		0.00	0.00	0.00
TOTALS					\$ 12,020.44		\$ 15,126.72		\$ 27,147.16
SALES TAXES					\$ 721.23				\$ 721.23
TOTAL ESTIMATED COST					\$ 12,741.67		\$ 15,126.72		\$ 27,868.39

Tony Snellen

From: William Khourie <wnkhourie@gmail.com>
Sent: Monday, July 16, 2018 3:37 PM
To: Tony Snellen
Cc: David Duncan
Subject: Re: Maryville Elementary Gym Acoustical Wall Panels
Attachments: MaryvilleElementarySchool2.pdf

Tony

Thanks for your email. I have reviewed your design and I agree that running the panels (84" in length) vertically up the wall would work nicely. It would be the best way to lower the sound and by far the easiest installation. You can directly screw the 2" Cardinal Complete acoustical panels to the wall with 3" painted tapcon screws. Although the design does limit the amount of square footage, it still will lower the reverberation or noise level by almost 60 percent. I feel all areas are doable without having to cut any panels in the field. In addition, if wanted, you may be able to add 63 square feet in area G. Based on using our standard width panels (48") and if you exclude area G, you should only order 57 panels - 2" x 4' x 8'.

Ordering 57 - 2" x 48" x 96" Cardinal Complete panels, bevel / bevel and painted with our standard white would cost you \$ 9,177.00 (total square footage of 1,596). If we add the 63 square feet (area G) your cost goes up to \$ 9,539.25 (total square feet of 1,659).

THIS PANEL YIELDS AN NRC (noise reduction) OF .90. This panel will absorb more sound than any other panel at a cost of \$ 5.75 s/f. I have attached a new reverberation report for your review. The ending sound will probably come out a little lower because people actually absorb sound so if you have 50 or so in the gymnasium, the sound will probably be closer to 2.7 to 2.8 seconds.

Based on the amount of panels (57) you will need 8 boxes of painted white 3" tapcon screws. The cost for these is \$ 600.00

Crating and freight will run \$ 875.00.

Your total cost (not including tax) works out to \$ 10,627.00 and please remember, you going down to under 3 seconds. The 500 square feet that you had ordered of fabric panels would have cost you \$ 10,479.00 and the existing reverb time of 7.4, would have only dropped to 5.3.

I noticed that the architects are calling out for a certain type of white paint. The Cardinal acoustical panels can be painted three times and not lose any absorption. If you want to go with a particular custom white paint the cost increase will be an additional \$ 2,700.00. There would be no set up fee.

Production is 2 to 3 weeks depending when the order comes in. I would be happy to come down and go over all the information with you and the school if you want .

Thanks again and call me if you have any questions

Bill Khourie
WNK & Associates / Cardinal Acoustics

wnkhourie@gmail.com
888 442 6788

On Thu, Jul 12, 2018 at 12:36 PM, Tony Snellen <tony@parcoconstruction.com> wrote:

Bill,

See attached. What are your thoughts on this layout. Attempting to keep walls somewhat balanced in appearance and also eliminate as much as possible the cutting & fitting around items on the walls. The panels would also need to the color of the wall as we were doing with the fabri-tough panels. I can provide you with the PPG paint color. And I would prefer they cut all panels down to the 7' height so those edges are also painted even though they will not be seen @ the top. Please provide pricing & spacing & layout for fastening panels to the wall.

Tony

Cardinal Acoustics

Please insert information into yellow boxes.

Reverberation Time Calculation

Project: Maryville Elementary School

Date 7/13/18

Louisville, Kentucky

Type of Room (Gym, Pool, Auditorium, Etc.): Gymnasium

Room Dimensions

Length 92 ft.
Width 64 ft.
Height 26 ft.

Room Volume (V = L x W x H) 153088 cubic feet

Area Calculations

length by width **Area in sq.ft.**
Ceiling 5888
Floor 5888
Walls 8112
Other surfaces 0

Absorption Coefficients

Painted Wood	0.02	Concrete	0.02
VCT	0.02	Conc Blk	0.05
Brick & Block	0.02	Painted Concrete Blk	0.07
Glass	0.04	Water Surface of a Pool	0.01
Wood	0.06	Carpet	0.30
Steel (Metal Roof Deck)	0.01	Gypsum Board	0.06

Area	Material	Absorption Coefficient		Area Quantity	Total Absorption
Ceiling	Metal	<u>0.02</u>	x	5888	117.76
Floor	Wood	<u>0.06</u>	x	5888	353.28
Walls	Concrete	<u>0.07</u>	x	8112	567.84
Other surfaces			x	0	0

Current Absorption

A= 1038.88 Sabins

Estimated Existing Reverberation Time $T = (.05 \times V) / A$

7.4 Seconds

Desired Reverberation Time (DT)

3 Seconds

Absorption Required, AR= $(.05 \times V) / DT$

2552 Sabins

Estimated Additional Units Needed

1513.12 Sabins

Estimated square footage / panels need to achieve desired reverb time

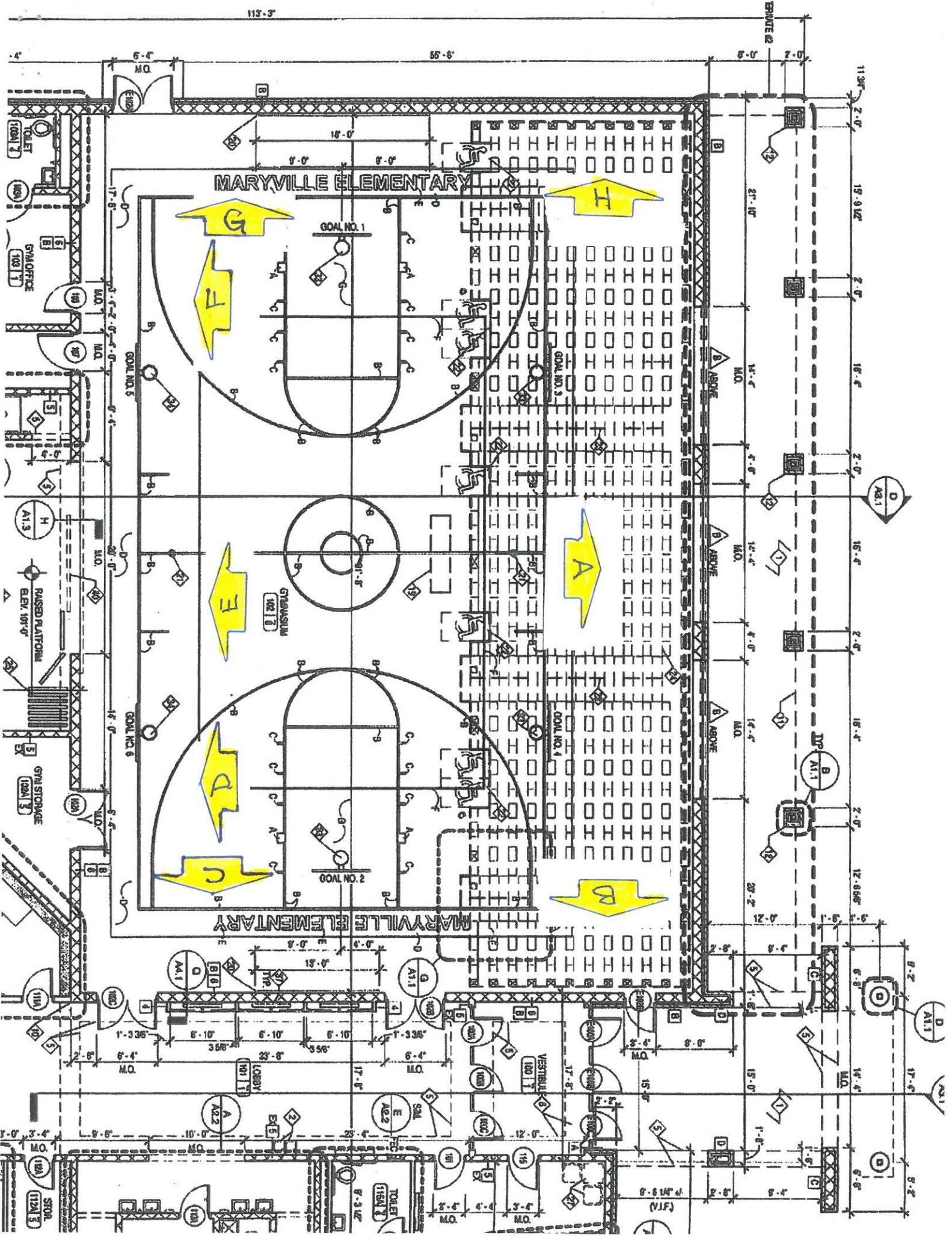
CA NRC

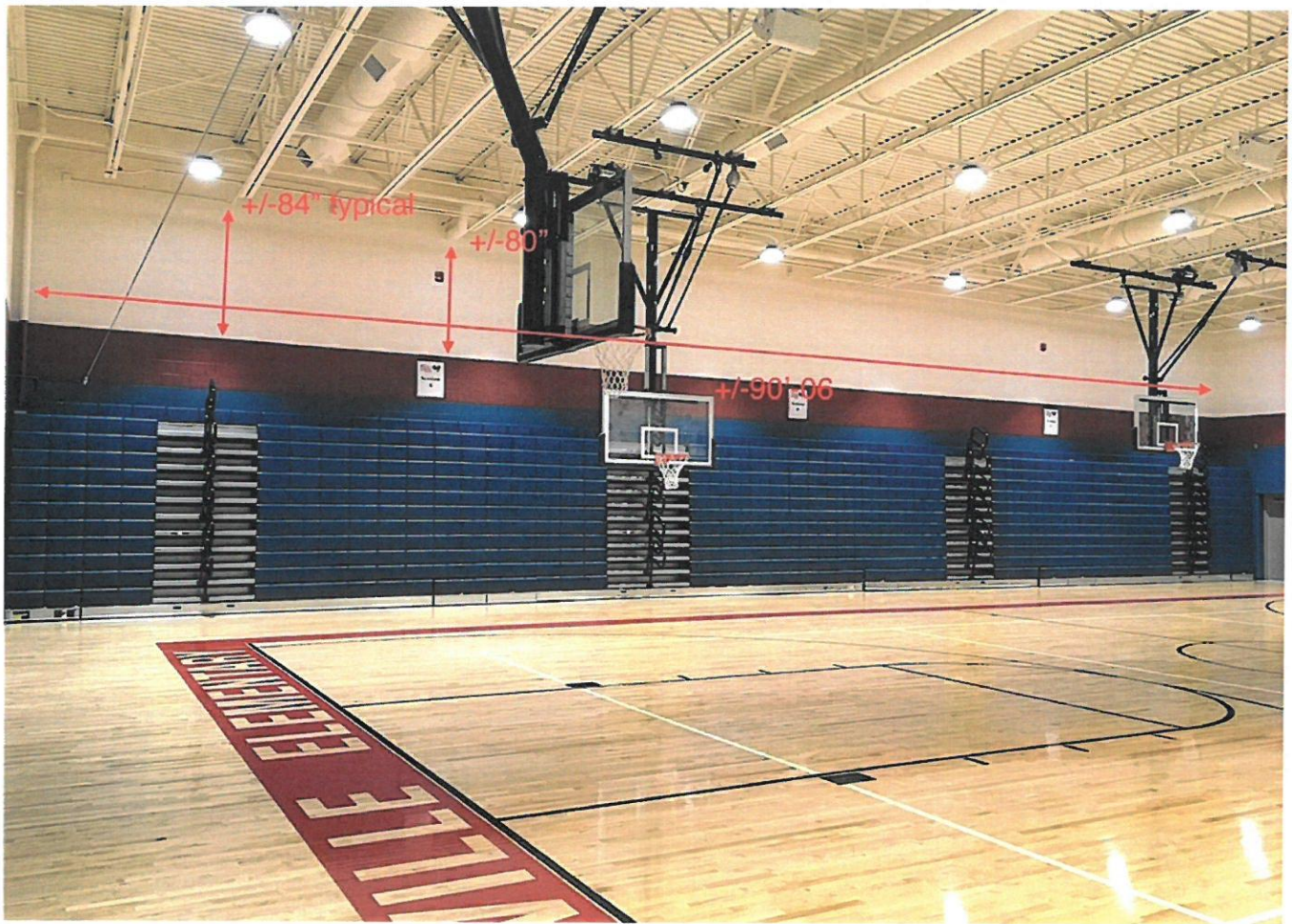
0.9

1682 Sq.Ft.

All testing performed by Riverbank Labs

(Panel size in feet) **Panel Size =** Length Width
7 4 61 Panels





A

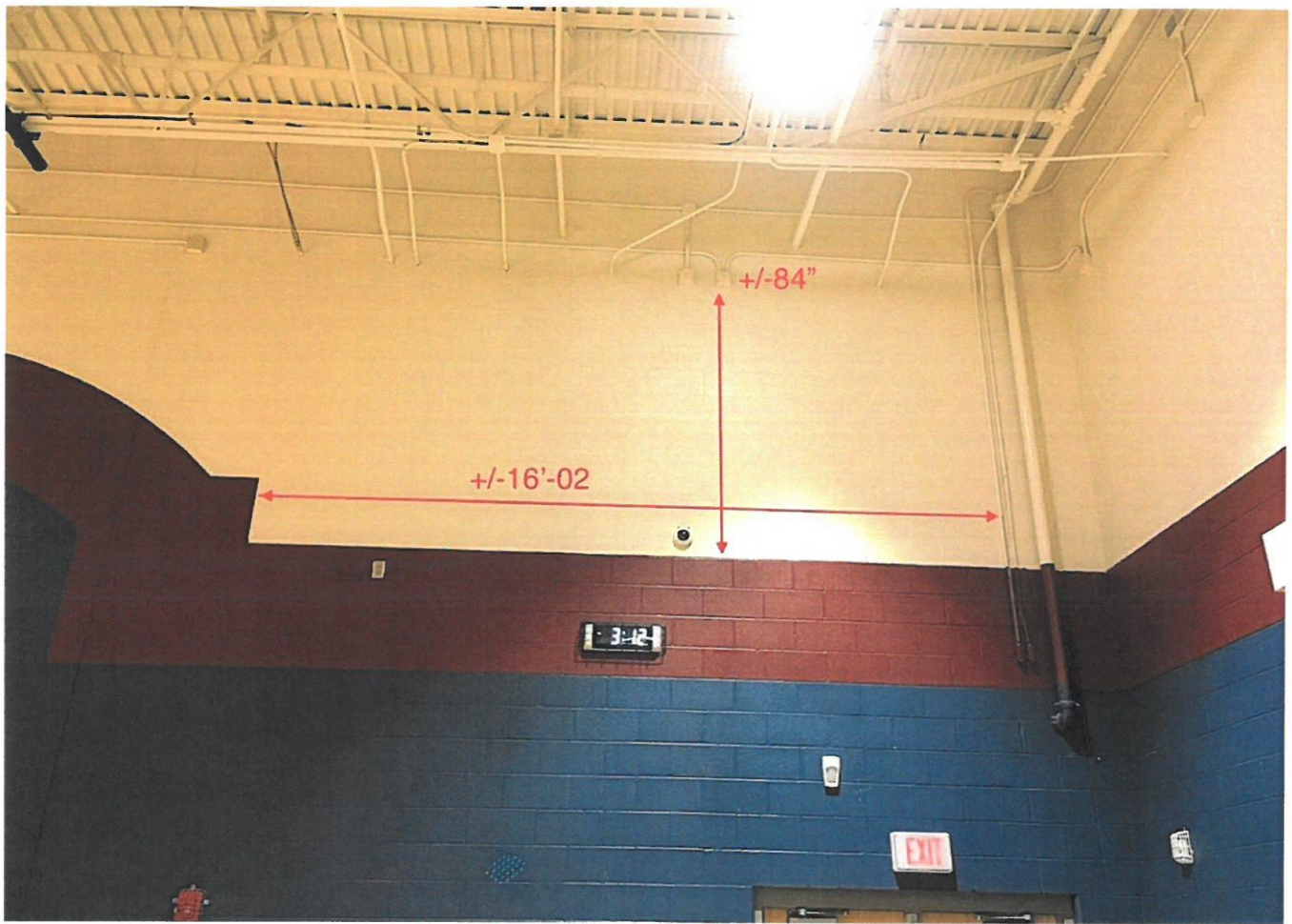
$$90' \times 7' = 630 \text{ SF}$$

ELEV.	ACOUSTICAL WALL PANEL	SF
A	90' x 7'	630
B	28' x 7'	196
C	16' x 7'	112
D	24' x 7'	168
E	24' x 7'	168
F	24' x 7'	168
G		
H	27' x 7'	189
	TOTAL	1,631



B

$$28' \times 7' = 196 \text{ SF}$$



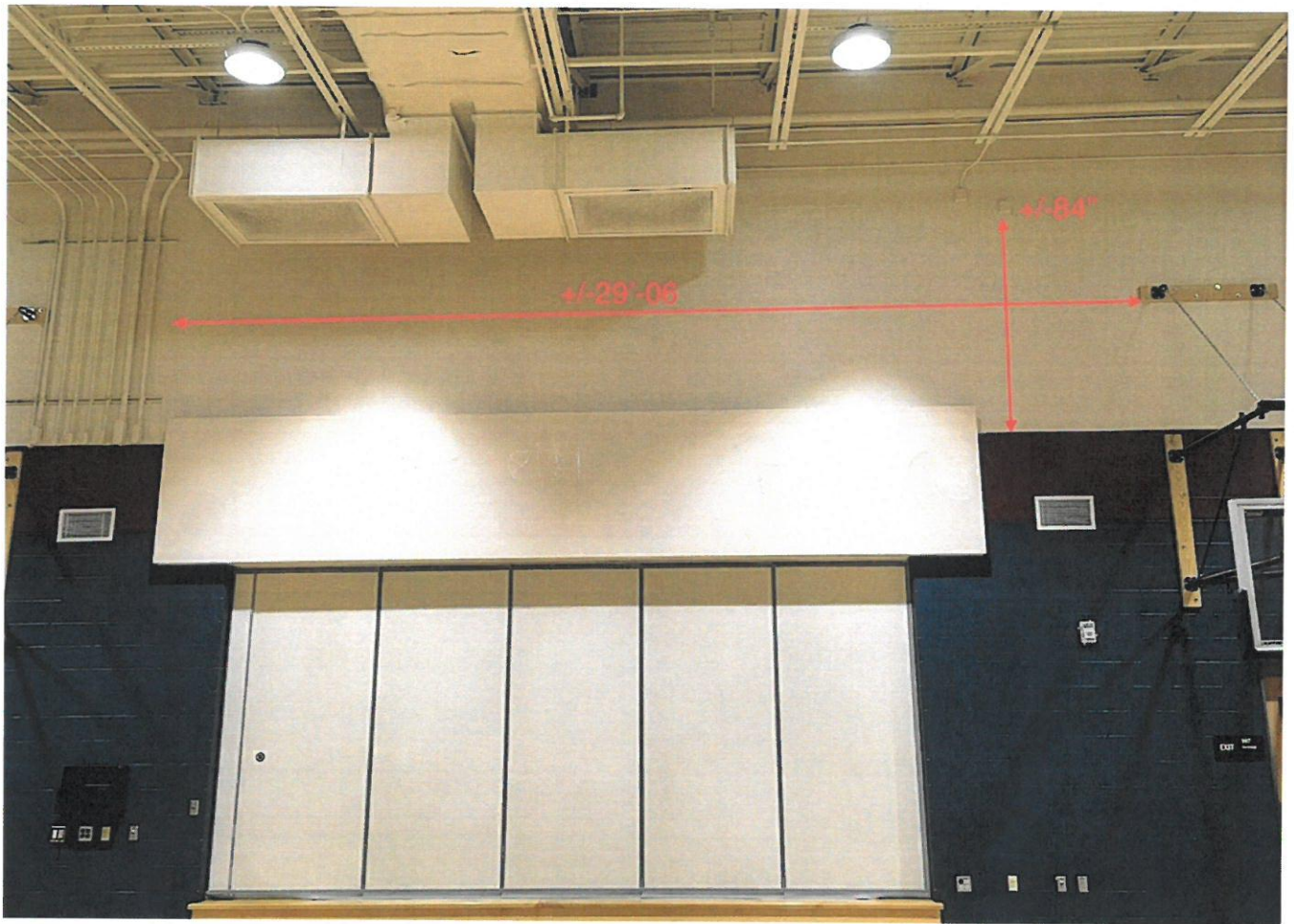
C

$$16' \times 7' = 112 \text{ SF}$$



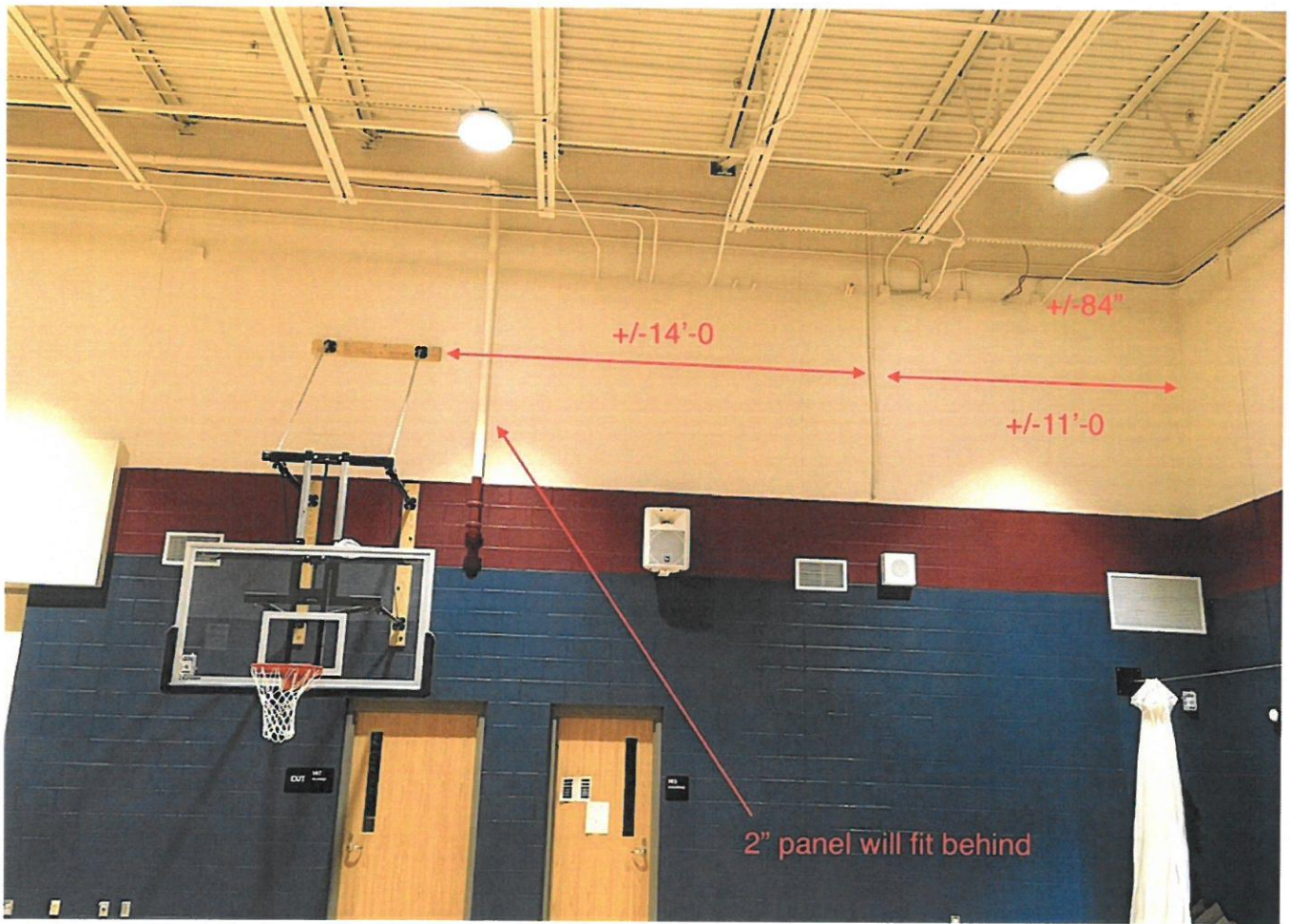
D

$$24' \times 7' = 168 \text{ SF}$$



E

$$24' \times 7' = 168 \text{ SF}$$

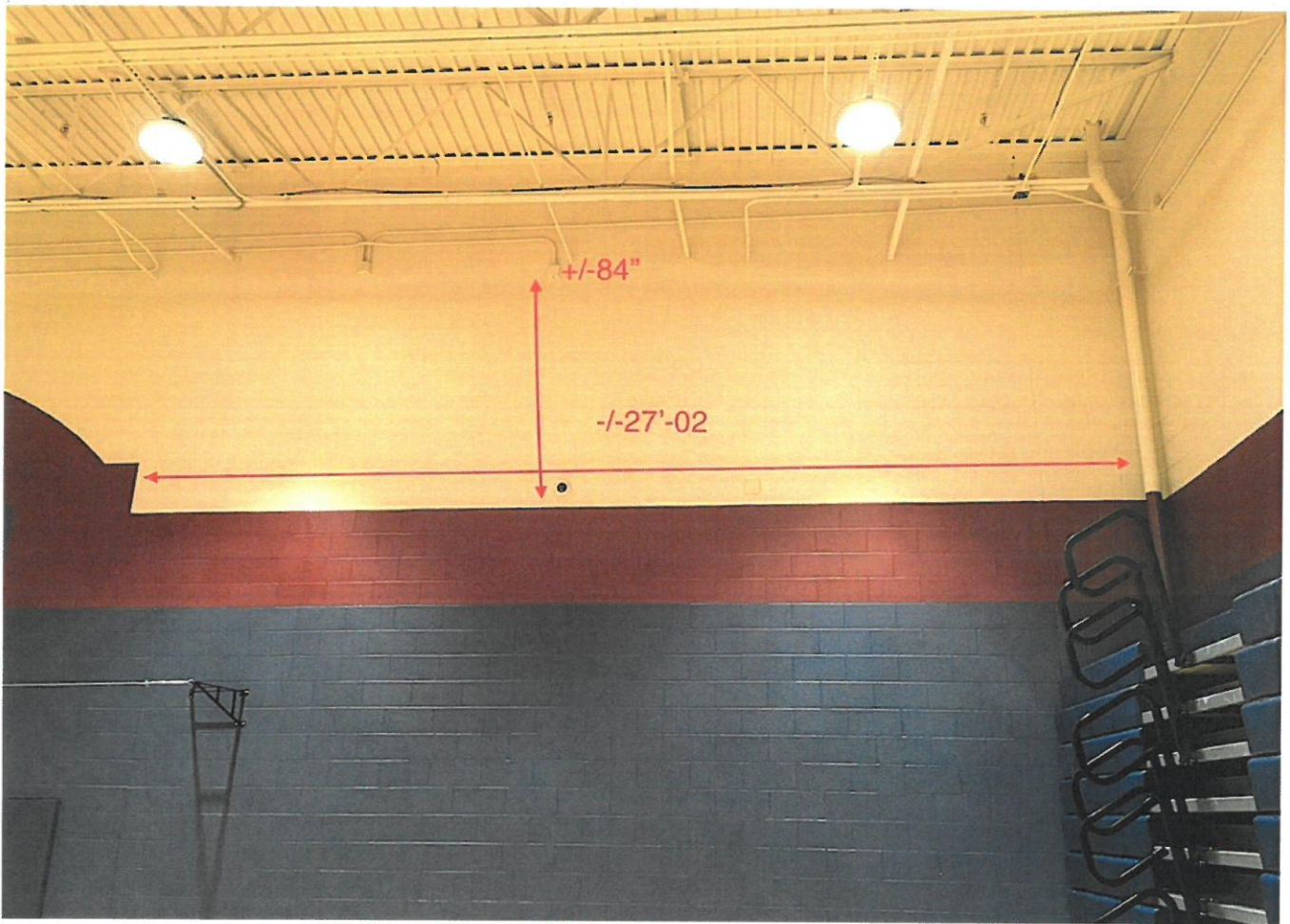


F

$$24' \times 7' = 168 \text{ SF}$$



G



H

$$27' \times 7' = 189 \text{ SF}$$

<u>Item/Area</u>	<u>Manufacturer/Line</u>	<u>Color/Finish</u>
RFG 6		
<i>Gymnasium 102</i>		
Floor		
Wood Floor		TBD
Gym Striping		
		TBD
Base		
6" Vented Rubber		Black
Walls		
Field	Sherwin Williams	SW6140 Moderate White
Accent "A" (Stripe)	Sherwin Williams	SW7602 Indigo Batik
Accent "B" (Stripe)	Sherwin Williams	SW7592 Crabby Apple
289		
Bleachers		
	Hussey Seating	289 Dark Blue
Ceiling		
Exposed Structure-Paint	Sherwin Williams	SW6140 Moderate White
<hr/>		
RFG 7		
<i>Ramps 108, 176; Stairs A, B</i>		
Floor		
12"x12" Raised Radial Rubber Tile		Roppe 129 Dolphin
Base		
4" Resilient Base	Roppe	129 Dolphin
Walls		
Field – Gyp/CMU	Sherwin Williams	SW6140 Moderate White
Ceiling		
Varies – See Reflected Ceiling Plans		
Stairs, Handrails, Guardrails		
	Sherwin Williams	SW7025 Backdrop