

Briar Vista ES
Change Order No. 04 - Breakdown

PCO #	Description	Owner Request	Unforeseen Conditions	Allowance	Errors/Omissions
#012	Install a new Security Vestibule based on the revised layout per Bulletin #1R adding addition bullet resistant glass and frames because the original layout for the Security Vestibule shown on the drawings did not indicate which windows were to receive the bullet resistant glass. The revised layout provided the correct designation thus resulting in the increase.				\$337,862.81
#015	Provide a new Taper package for the roof insulation the response to RFI #13 and the revised drawing sheet A-02. Due to the original drawings depicting a slope but after investigation it was determine that the roof was flat and the insulation had to be built up to provide a slope.				\$455,413.49
	TOTAL	\$0.00	\$0.00	\$0.00	\$793,276.30

Payroll Costs

Position	Daily Rate (Burdened)	Days	Total
Program General Manager	\$ 800.00	4	\$ 3,200.00
Assistant Project Manager	\$ 520.00	15	\$ 7,800.00
Superintendent	\$ 520.00	50	\$ 26,000.00
Project Coordinator	\$ 440.00	2	\$ 880.00
			\$ 37,880.00



Mr. George Harkness
george_harkness@dekalbschoolsga.org
1780 Montreal Rd
Tucker, GA 30084

Briar Vista Elementary School Major System Replacement
RFP 23-752-017
Centennial No: 73150-0148

May 17, 2023

Centennial Contractors Enterprises

3200 Cobb Galleria Pkwy
Suite 210
Atlanta GA 30339

Phone 770 613-2999
Fax 770 613-2992
www.cce-inc.com

Dear Mr. Harkness:

Per Appendix C1—Master Project Schedule of the Request for Proposal, Contract Completion and final documentation were to be completed by November 4, 2024. If this change request for the bullet-resistant vestibule is accepted, this project will need to be extended to complete in July 2025.

Extended contract time is required due to the owner's requested added scope issued in Bulletin-R1 and associated material lead times, and school activities. With the acceptance of this proposed change order, we hereby request an extension to the Substantial Completion date from October 5, 2024, to July 28, 2025, and an extension of the Final Documentation end date from November 4, 2024, to August 28, 2025.

For equipment installed during the Summer 2024 work period, those special warranties will continue to start based on the original substantial completion date. The bullet resistant vestibule warranties will start based on the completion of the installation.

Respectfully,

Christian Wilson
Assistant Project Manager

Tyler Shelton
Program General Manager

cc: Carissa Oyedele, Corgan

Christian Wilson
Centennial Contractors
3200 Cobb Galleria Pkwy
Atlanta, GA 30339



Grateful Painting LLC
PO Box 130
Rydal, Ga 30171
Phone: 4704390305

Product / Service	Quantity	Price	Subtotal	Total
Briar Vista ES Vestibule Painting Vestibule Wall Painting	1.00	\$1,650.00	\$1,650.00	\$1,650.00
<ul style="list-style-type: none">• Protect all non-painted surfaces• Prep, prime and paint all new walls per drawing• Clean up and remove all debris				
Subtotal				\$1,650.00
Total				\$1,650.00

Terms and Conditions

We propose hereby to furnish material and labor - complete in accordance with above specifications.

All material is guaranteed to be as specified. All work to be completed in a substantial workmanlike manner according to the specifications submitted, per standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. If either party commences legal action to enforce its rights pursuant to this agreement, the prevailing party in said legal action shall be entitled to recover its reasonable attorney's fees and costs of litigation relating to said legal action, as determined by a court of competent jurisdiction. Client has a (3) day right to cancel without loss of deposit.

Sign And Date To Accept Proposal:

Customer Signature:

Date:



Estimate

Estimate No: 328
 Date: 04/18/2024
 For: Centennial Contractors Enterprises, Inc
 CWilson@cce-inc.com
 3200 Cobb Galleria Parkway, Suite 210
 Atlanta, GA 30339
 Job# Briar Vista Elementary School Revised Drawings

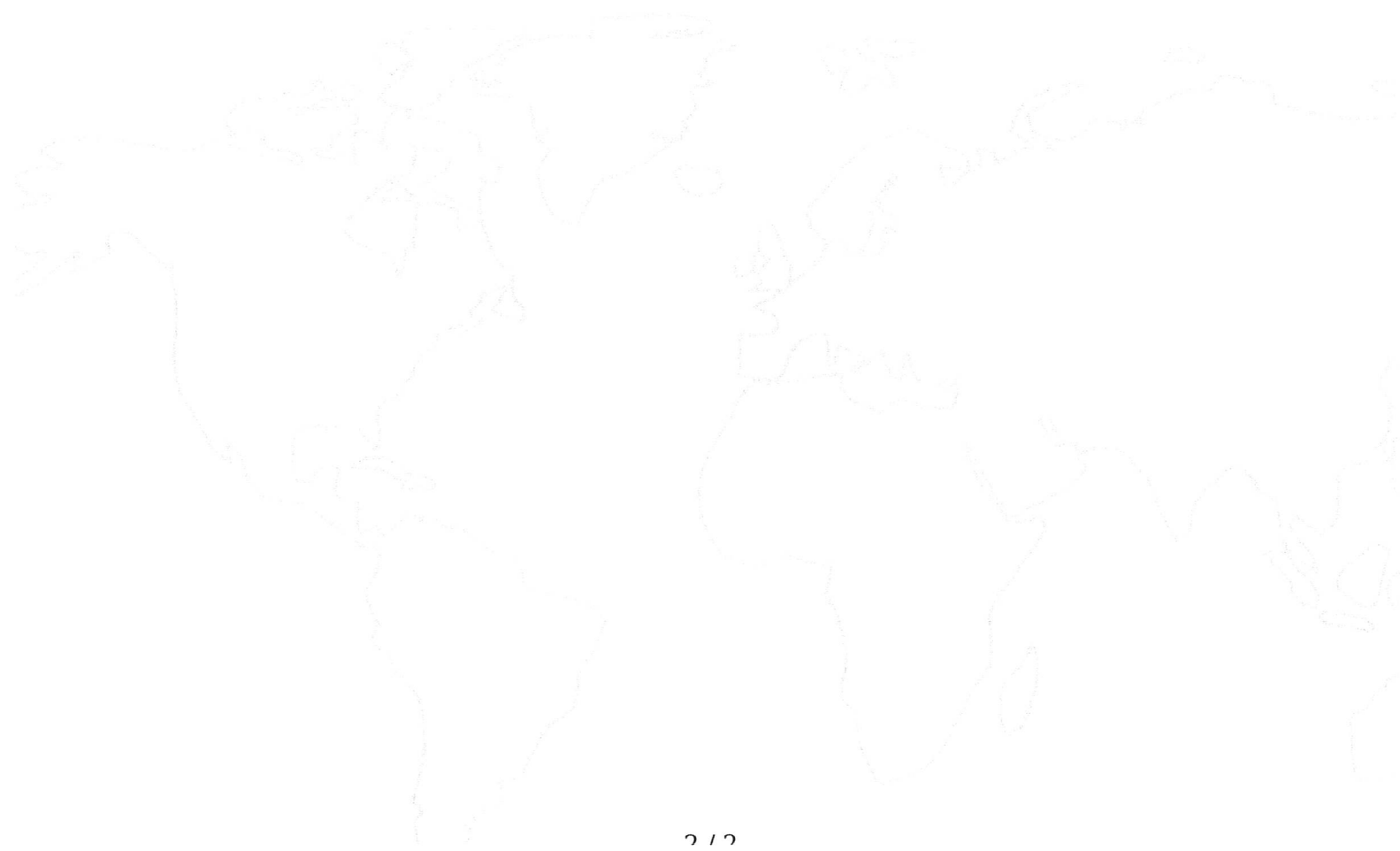
Marietta GA. 30008
 770-361-4846
 edgarsilva695@gmail.com

Description	Quantity	Rate	Amount
1- DEMO EXISTING CEILING TILE AND GRID TO THE EXTENT INDICATED. REFER TO REFLECTED CEILING PLAN.	320	\$3.25	\$1,040.00*
02- DEMOLISH EXISTING STOREFRONT SYSTEM.	38	\$55.00	\$2,090.00*
03- REMOVE VESTIBULE INTERIOR DRYWALL DOWN TO STUDS	38	\$22.10	\$839.80*
04-NEW INFILL STUD WALL WITH BALLISTIC-RESISTANT PANEL ON ONE SIDE, COVER WITH ONE LAYER OF DRYWALL. (ArmorCore Level 3)	20	\$287.00	\$5,740.00*
REPLACE VESTIBULE INTERIOR DRYWALL FACE WITH ONE LAYER OF BALLISTIC-RESISTANT PANELS. COVER WITH ONE LAYER OF DRYWALL REDY FOR PAINTING. (ArmorCore Level 3)	4	\$267.00	\$1,068.00*
FRAMING NEW 20GA METAL STUD BOX BEAM HEADER, ENGINEERED BY METAL STUD SUPPLIER, @ 4' OPENINGS OVER 4' WIDE WOOD BLOCKING AS REQUIRED	32	\$120.00	\$3,840.00*
NEW CEILING TILE AND GRID TO MATCH EXISTING. ACT-1.	320	\$9.22	\$2,950.40*
Clean up / stocking / protection	1	\$1,600.00	\$1,600.00*

*Indicates non-taxable item

Subtotal	\$19,168.20
Total	\$19,168.20

Total	\$19,168.20
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ATLANTA STOREFRONTS, LLC

May 07 2024

Mr Christian Wilson
Centennial Contractors Enterprises, Inc
3200 Cobb Galleria Pkwy Suite 210
Atlanta, Ga. 30339

RE: Dekalb School- Briar Vista ES
084156 Ballistic-Resistant Storefronts And Entrances
102641 Ballistic-Resistant Panels

Christian,

As per your request, the following Change Order proposal request outlines Atlanta Storefronts scope of work at the above referenced facility with changes made per Plans dated 10/10/22 with Revision Bulletin R1 04/11/2024. This proposal will need to be an exhibit in the chain order to the Contract.

SCOPE OF WORK

1. Supply and Install Insulgard Security Products in opening marked "05", 1- 14'-3 3/4" x 9'-0" with 11 lites and 2- 3'0" x 7'0" single doors #100A and #100B. The Doors are Level 3 BR and Wide Stile 5" x 2 3/8" half lite and glazed with Glass Type "GL-1". Hardware is included per specifications paragraph B, and clear anodized (no finish given). The framing system is BulletBlock TTH600 UL752 Level 3 Bullet Resistant, Thermally Broken, 2-1/2" x 6" aluminum framing with 3-1/4" x 6" mullions finished in a 2-Coat 70% Kynar Fluoropolymer Standard Paint and color selected from standard chart. The frames are glazed with Glass Type "GL2" BALULN25-IG UL 752 Bullet Resistant level 3, Insulated.
 2. Supply and Install Insulgard 44/450 UL752 level 3 Bullet Resistant 2-1/2" x 4 1/2" Aluminum framing system and Wide Stile Doors 44/350 Bullet Resistant, 5" x 2-3/8" including hardware per specifications in a clear anodized finish. The doors and frames are glazed with glass type "GL-1. The following elevations are included :
"06" = 1- 14'-3 3/4" with 2 single doors #100F and #100D and 6 side lites.
"07" = 1- 6'-10" x 7'-0" with 1 single door #101A and 6 side lites including 4" jambs and 1- 24" x 32" SafeChange SVT UL752 Level 3 Bullet resistant Transaction Window with 2 1/4" x 5 1/2" SS Voice Surrounding framing. Glazed with glass type "GL-3" and includes a 24" Wide x 2 1/2" High x 12" Deep Ballistic lined SS Counter with a
-

ATLANTA STOREFRONTS, LLC

with a 16" x 10" x 1-1/2" SS Non Ricochet Recessed deal tray.
"08" = 1- 8'-8" x 7'-1" with 1 Pair #121A and 4" Jambes.

3. Supply and Install Silicone sealant to the Exterior and Interior perimeter of all the new frames. The Color is to be selected from a standard color chart.
4. Includes a daily clean up of all our debris and one final clean of our installed materials.
5. Included is protection of our installed materials by wrapping them with paper held on with non residue tape.
6. PE Stamped Shop Drawings, Submittal Data, and Existing test reports are included.
7. We have included working nights, weekends and holidays.

RELATED WORK

Atlanta Storefronts takes pride in installing our work in a professional manner and per the Manufactures instructions. Our installation team follows all of the OSHA regulations, and guidelines to insure a safe job.

Items Not Included in this bid :

1. Bond
2. Pre construction Mockup.
4. Hiring of a Testing Agency or supplying supervision or equipment for testing.
5. Designing of Field Quality-Control, Inspection reports or programs.
7. Impact tested or Seismic tested System.
8. Free glass replacement " broken" or "scratched" by others.
9. Demolition .

Note :

1. The hardware schedule does not give a finish so we quoted clear anodized.
2. The Hardware schedule has Surface Mounted closures and Auto operators on all of the doors. We have quoted 3 total Auto operators and the remaining doors with surface mounted closures.

Change Order Amount \$ 257,855

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Alternates

1. To supply and Install 2 Bullet resistant Panels per section #102641 in vestibule walls (not to exceed 4' x 8') will **ADD \$5155** to the base bid.
2. To deduct the PE Stamp and review will be a credit of **(\$4,000.)** A PE review will not include anything about the system being Bullet Resistant, only normal wind load type information.

This Quote is valid for 30 days from the date of the quote.

Lead Times

1. Shop drawings and Submittals are 4 weeks after receiving contract.
2. The aluminum SF, doors, and glass are a 18 week lead time after approval of shop drawings and submittals.
3. For Example : If we are awarded the job by June 04 and the shop drawings are returned approved in 4 Weeks we would be on site approximately December 09. If a PE review is necessary then add 3-4 weeks to this.
4. The installation will take 4 weeks and then 2-3 days to punch.

Terms :

1. A two Party check will be required and written to Insulgard & Atlanta Storefronts for \$95,000 when the order is placed.
2. A second two party check for \$95,000 when the job is ready to ship.
3. The remainder of payments will be by normal monthly billing.

If there is any other information you require, please do not hesitate to call me. We look forward to the opportunity of working with you,

Thank You
Respectfully submitted,
Chuck Morris
Senior PM
Atlanta Storefronts LLC



www.insulgard.com

Sales Proposal			
Brighton Office 1291 Rickett Road Brighton, MI 48116 Tel: 800-624-6315 Fax: 810-844-0920		Sales & Estimating Rep	Date 5/2/2024
		Cassie Schlosser (770) 500-6438	Proposal # 52678 Total Pages 1

Proposal Submitted to	Project Information
Account Atlanta Storefronts Contact Chuck Morris Phone 470-227-5328 Email chuck@atlantastorefronts.com Address 9192 Tara Blvd., Bldg D Jonesboro, GA 30236	Project Briar Vista Elementary School Renovation Desc Level 3 Ballistic Improvements City Atlanta State GA Zip 30324

Proposal Valid for:	Leadtime	Payment Terms	Shipment Terms	Shop Drawing Lead time
30 Days	14-18 Weeks Receipt of Approved Shop Drwg	Net 30 Pending Credit Approval	Negotiated Freight	3-4 Weeks Receipt of PO & Required Documents

Base Proposal		
Item #	Description	Price
	SUPPLY ONLY, STOREFRONT SYSTEMS AS BELOW, LINE ITEMS #1 & #2:	\$ 92,957
1	Supply Only. BulletBlock™ TTH600 UL752 Level 3 Bullet Resistant. Thermally Broken, 2-1/2" x 6" Aluminum Framing System with 3-1/4" x 6" Mullions to be Glazed with 2 00" Level 3 Bullet Resistant, Insulated, Low-Spall BALULN25 Glass Clad Polycarbonate with Clear Temp #2 (Type 'GL2') and 44/350 Bullet Resistant, 5" x 2-3/8" Wide Stile. Half-Lite Aluminum Door System with Select SL11-HD Continuous Hinge. Prep for Balance of Compatible Hardware, to be Glazed with 1.30" Clear Level 3 Bullet Resistant, Non-Insulated, Low-Spall BALULN25 Glass Clad Polycarbonate (Type 'GL1'). Low-Spall Glazing is UL Modified product (not UL stenciled) with 3/16" Glass Laminated to Protected Side Over Polycarbonate to Prevent Cracking & Crazing (damages not covered under warranty) Glass on Both faces (no exposed polycarbonate) Exterior *1 each 171-3/4"W x 108"H Divided into 11 Lites with 2 each 3070 Single Door Systems. REF. Elevation '05'	
2	Supply Only. BulletBlock™ 44/450 UL752 Level 3 Bullet Resistant, 2-1/2" x 4-1/2" Aluminum Framing System with 2-1/2" x 4-1/2" Mullions and 44/350 Bullet Resistant, 5" x 2-3/8" Wide Stile. Aluminum Doors with Select SL11-HD Continuous Hinge. Prep for Balance of Compatible Hardware, to be Glazed 1.30" Clear Level 3 Bullet Resistant, Non-Insulated, Low-Spall BALULN25 Glass Clad Polycarbonate (Type 'GL1'). Low-Spall Glazing is UL Modified product (not UL stenciled) with 3/16" Glass Laminated to Protected Side Over Polycarbonate to Prevent Cracking & Crazing (damages not covered under warranty) Glass on Both faces (no exposed polycarbonate) Interior Storefronts Include *1 each 171-3/4"W x 86"H Divided into 6 Lites with 2 each 3070 Single Full Vision Door Systems with Mid-Rail. REF. Elevation '06' *1 each 82"W x 84"H Divided into 5 Lites with 1 each 3070 Single Half-Lite Door System and 44/175 Ballistic Lined 1-3/4" x 4" Aluminum Tubes at Exterior Jamb. REF. Elevation '07' *1 each 80"W x 85"H with 6070 (PR 3070) Half-Lite Door Systems and 44/175 Ballistic Lined 1-3/4" x 4" Aluminum Tubes at Exterior Jamb. REF. Elevation '08'	
3	Supply Only. SafeChange™ SVT UL752 Level 3 Bullet Resistant Transaction Window with 2-1/4" x 5-1/2" Stainless Steel. Voice Surround Framing Glazed with 1 28" Clear SP1250 UL752 Level 3 Bullet Resistant Laminated Lexgard Polycarbonate (Type 'GL3') and to Include 24"W x 2-1/2"H x 12"D Ballistic Lined Stainless Steel Counter with 16" x 10" x 1-1/2" Stainless Steel, Non-Ricochet Recessed Deal Tray Includes *1 each 24"W x 32"H for Installation into Type '07' Framing	\$ 3,752
4	CRATING	\$ 1,375
5	ESTIMATED SHPPING VIA STANDARD LTL DELIVERY (2 SHIPMENTS GLAZING & FRAMING TO SHIP SEPARATELY)	\$ 5,880

NOTE: ALUMINUM FINISH TO BE 2-COAT 70% KYNAR FLUOROPOLYMER STANDARD PAINT FINISH (non-mica, non-metallic, non-exotic, non-bright white). Delegated design by others. Separate mock-up is not included but can be added upon request for an additional fee.

*Framing to be fully fabricated and shipped partially assembled when possible for installation by others. Pricing includes fasteners, setting blocks, gaskets and shop drawings with up to 2 revisions. Anchors by others. Standard warranty included: 1 year workmanship / 5 year glazing / 5 year anodized finish. 10 year painted finish. Sales tax not included. Exemption certificate required or sales tax will be added to final order. Shipping is estimated at time of bid based on standard LTL delivery to facility with loading dock and forklift. Adtl fees will apply for special delivery requests at time of shipment.***Freight costs are subject to change based on shipping method and actual rates at time of shipment***

*PRICES ARE SUBJECT TO CHANGE AFTER RECEIPT OF PO IF FINAL SHOP DRAWING APPROVAL FOR MATERIAL RELEASE IS NOT RECEIVED WITHIN 15 BUSINESS DAYS FROM DATE OF SUBMISSION. ACCEPTANCE OF THIS QUOTE SIGNIFIES ACCEPTANCE OF THESE TERMS, SIGNED OR NOT.

Total Base Price \$ 103,964

Alternates / Options		
Item #	Description	Price
1	ADD to Base Bid for SolarBan70VT Clear Temp #2 Added to Insulated Glass Type 'GL2' Above	\$ 1,299
2	DEDUCT from Base Bid to Replace Low-Spall BALULN25 Glazing (included for types 'GL1' & 'GL2') with 1 22" Clear ICGCP2416 Symmetrical Glass Clad Polycarbonate Tested for Ballistics: 25 Shots 44 Mag. No-Penetation/Low-Spall, Forced Entry. ASTM 1915 Grade 1, WMFL Level 1 (60 Minute) Glass on Both Faces (no exposed polycarbonate)	\$ (827)
3	ADD to Base Bid for HDWR Set #A (1 each) for 6070 PR #121A. Final Cores by Others	\$ 8,657
4	ADD to Base Bid for HDWR Set #B (5 each) for 3070 SGL Doors #100A, #100B, #100D, #100F, #101A. Final Cores by Others	\$ 21,514
5	ADD to HDWR Set #A or #B Above to Replace Closer(s) with LCN 4642 REGARM Auto Equalizer Power Operator with 8310-865 Receiver & 8310-862 Transmitter. PRICE PER UNIT.	\$ 6,214

Multiply by 3.
One per storefront

Exclusions and Qualifications	
Item #	Description
1	Price does not include applicable taxes
2	Price includes freight
3	Proposal does not include installation

Name	Title	Signature	Date

\$103,964
 \$1,299
 \$8,657
 \$21,514
 \$6,214
 \$6,214
 \$6,214
 8% sales tax
 = \$166,527

Briar Vista ES Change Order Request

Insulgard	166,527	Materials, Hardware, Tax
PE Review	4000	
Cualking	1500	
Labor	62387	Premium Time
Cost	234414	
10%	23441	
Change Order	257855	
Contract Amount	48895	
Revised Contract	306750	

Transmittal

21309.0000, Briar Vista Elementary School Major Building System Replacement

Date 4/17/2024
Subject 21309-Briar Vista ES - Bulletin R1
Transmittal Id 00013
Purpose For your use
Via Info Exchange

FROM

Name	Company	Email	Phone
Sanika Kulkarni	Corgan	Sanika.Kulkarni@corgan.com	470-750-9269

TO

Name	Company	Email	Phone
Atiba_Nunnally@dekalbschoolsga.org		Atiba_Nunnally@dekalbschoolsga.org	
George_Harkness@dekalbschoolsga.org		George_Harkness@dekalbschoolsga.org	
tshelton@cce-inc.com		tshelton@cce-inc.com	
MWilson@cce-inc.com		MWilson@cce-inc.com	
CWilson@cce-inc.com		CWilson@cce-inc.com	

REMARKS

Hi,

Attaching Briar Vista ES Bulletin R1 below.
Let me know if you have any questions or concerns.

Thank you,

SANIKA KULKARNI
Project Specialist
Corgan

D — 470-750-9269

DESCRIPTION OF CONTENTS

QTY	Dated	Title	Notes
1	3/28/2024	Spec	
1	4/17/2024	21309 - Briar Vista ES_ BULLETIN R1.pdf	
1	4/17/2024	Bulletin-R1 Narrative.pdf	

COPIES:

Hiral Tank (Corgan)
Carissa Oyedele (Corgan)

Bulletin-R1 Narrative

213098, BRIAR VISTA ELEMENTARY SCHOOL RENOVATION

Meeting Date and Time: 4/11/2024 12:00 AM

To: Name- Atiba Nunnally
Position- Project Manager
Company- C.E.R.M.
Street Address- 1990 Lakeside Parkway, Suite 300,
City, State, Zip Code- Tucker GA 30084

Bulletin: 0R1 Prepared By: Sanika Kulkarni

This addendum contains changes to the requirements of the contract drawings and/or project manual. Such changes shall be incorporated into the contract documents and shall apply to the work with the same meaning and force as if they had been included in the original documents. Wherever this addendum modifies a portion of the paragraph of project manual or any portion of the drawing, the remainder of the paragraph of drawing affected shall remain in force.

The conditions of the basic project manual shall govern all work described in this addendum. Wherever the conditions of work and the quality of quantity of materials or workmanship are not fully described in this Addendum, the conditions of work, etc. included in the basic project manual for similar items of work shall apply to the work described in this addendum.

The "Conditions of the Contract" apply to all work described in this Addendum. The following changes shall be and are hereby made:

Summary of Revisions

Revisions include Architectural, Mechanical, and Electrical, revisions, and coordination items as noted below:

DRAWING REVISIONS:

ARCHITECTURE:

A04-03-

- Addition of vestibule #100 at entrance.
- Added new exterior ballistic-resistant storefront system with doors at existing location.
- Replace vestibule interior drywall face with one layer of ballistic-resistant panels. Cover with one layer of drywall and paint.
- New ballistic-resistant interior storefront system with doors.

- New infill stud wall with ballistic-resistant panel on vestibule side, cover with one layer of drywall and paint.
- New CMU wall, painted on one side to match storefront mullion.
- Admin #101 Added new storefront system with new transaction window.
- Demo existing Cafeteria #121 storefront system.
- Cafeteria #121 new interior storefront system with double door.

A08-21-

- New exterior storefront doors 100A, 100B
- New interior storefront doors 100D, 100F
- New storefront door 101A
- New storefront door 121A

MECHANICAL:**M-200**

- HVAC layout updates

ELECTRICAL:**E-301**

- Electrical lighting and power plan updates.

SPECIFICATON REVISIONS:**00 01 10 TABLE OF CONTENTS**

- Updated contents

08 41 56 BALLISTIC-RESISTANT STOREFRONTS AND ENTRANCES

- Specification section added.

10 26 41 BULLET RESISTANT PANEL

- Updated contents

End of Addendum Summary

CC:

Attachments:

Please review this information and advise writer of any corrections, misunderstandings, or additions within 3 business days.

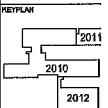
DOOR SCHEDULE											
NO.	SYMBOL	DOOR	FRAME	GLASS	FINISH	OPERATION	SWITCH	HANDLE	LOCK	THRESHOLD	NOTES
1	1	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
2	2	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
3	3	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
4	4	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
5	5	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
6	6	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
7	7	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
8	8	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
9	9	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
10	10	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
11	11	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
12	12	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
13	13	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
14	14	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
15	15	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
16	16	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
17	17	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
18	18	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
19	19	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
20	20	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
21	21	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
22	22	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
23	23	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
24	24	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
25	25	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
26	26	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
27	27	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
28	28	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
29	29	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
30	30	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
31	31	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
32	32	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
33	33	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
34	34	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
35	35	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
36	36	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
37	37	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
38	38	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
39	39	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
40	40	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
41	41	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
42	42	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
43	43	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
44	44	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
45	45	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
46	46	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
47	47	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
48	48	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
49	49	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1
50	50	6'0" x 8'0" SWH	1	1	1	1	1	1	1	1	1

ISSUES	
NO.	DESCRIPTION
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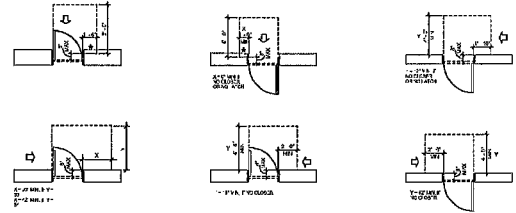
Date of Issue:
10.10.2022

**Briar Vista Elementary
School Renovation**
1454 Briar Vista Terrace, Needham Heights, MA 02461

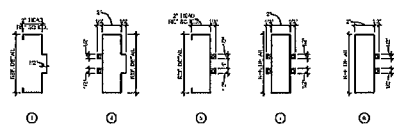


DOOR AND FRAME DETAILS

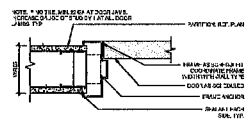
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DATE 04/11/2024
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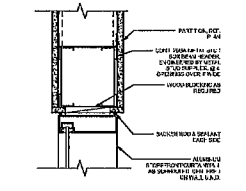
REQUIRED DOOR CLEARANCE & FOOTINGS FOR WALLS GREATER THAN 8" THICK
1/4" x 1/2"



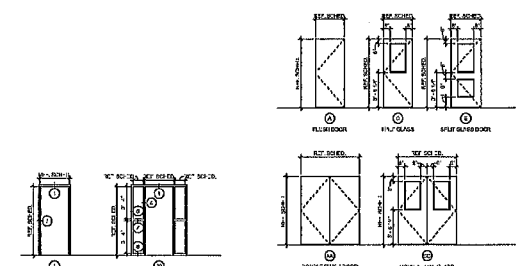
11. M. FRAME PROFILE
1/4" x 1/2"



10. STUDY/P. - LEAD/AMB
1/4" x 1/2"



12. STUDY/P. - INTERIOR STAIR/EZENT - HEAD
1/4" x 1/2"



13. FRAME TYPES
1/4" x 1/2"

14. STANDARD PANEL TYPES
1/4" x 1/2"

SECTION 08 41 56

BALLISTIC-RESISTANT STOREFRONTS AND ENTRANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Ballistic-resistant, field-glazed storefronts and factory-glazed entrances and transaction windows.

B. Related Requirements:

1. Section 02 41 19 "Selective Demolition" at storefront and transaction window openings.
2. Section 08 41 13 "Aluminum-Framed Entrances and Storefronts" for coordinating finish among aluminum fenestration units.
3. Section 10 26 41 "Bullet-Resistant-Panels" for bullet-resistant solid panel assemblies.
4. Work of Divisions 26 and 28 for power and security requirements.

1.2 COORDINATION

- ###### A.
- Coordinate installation of anchorages for ballistic-resistant windows, storefronts, and entrances. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in adjacent construction.

1.3 PREINSTALLATION MEETINGS

- ###### A.
- Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, glazing and fabrication methods, dimensions of individual components and profiles, hardware, and finishes for aluminum windows, storefront, and entrances.

B. Shop Drawings: For ballistic-resistant windows, storefront, and entrances.

1. Include plans, elevations, sections, framing members, including internal armoring, reinforcement, and stiffeners, and details of installation, including anchor, flashing, and sealant installation.
2. Show connection to and continuity with adjacent thermal, weather, air, and vapor barriers.

- C. Samples for Verification: For ballistic-resistant windows, storefront, and entrances and components required, showing full range of color variations for finishes, and prepared on Samples of size indicated below:

1. Exposed Finishes: 2 by 4 inches (50 by 100 mm).
2. Glass: 12 by 12 inches for each glass type including bullet-resistant, insulating bullet-resistant, and non-bullet-resistant glass units.

1.5 INFORMATIONAL SUBMITTALS

- A. Delegated Design: For ballistic-resistant window, storefront, and entrance assemblies indicated to comply with performance requirements and design criteria, including structural calculations signed and sealed by the qualified professional engineer responsible for their preparation.
- B. Qualification Data: For manufacturer and Installer.
- C. Product Test Reports: For each type of ballistic-resistant aluminum window, for tests performed by a qualified testing agency.
- D. Field quality-control reports.
- E. Sample Warranties: For special warranties.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A manufacturer capable of fabricating UL-752 Level 3 ballistic-rated aluminum windows, storefront, and entrances that meet or exceed performance requirements indicated and of documenting this performance by test reports and calculations.
- B. Installer Qualifications: An authorized representative who is trained and approved by window, storefront, and entrances manufacturer for installation of units required for this Project.
- C. Manufacturer Installation Instructions: Maintain current copy of ballistic-resistant window, storefront, and entrances manufacturer's published installation instructions and UL-752 Level 3 requirements in Project Field Office and refer to installation instructions during installation.
- D. Mockups: Build mockups to demonstrate installation of ballistic-resistant windows, storefront, and entrances including anchorages, installation methods including sequential installation process based on manufacturer's printed installation instructions, and aesthetic effects. Mock establishes quality standards for materials and execution.
 1. Build mockup of typical storefront and entrance including fully-glazed full-height sidelite with frame and horizontal mullion, factory-glazed double doors with frame and hardware, and framed transom as shown on Drawings.
 - a. Demonstrate operation of doors including automatic operators.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 FIELD CONDITIONS

- A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.8 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace aluminum windows, storefront, and entrances that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:
 - a. Failure to meet performance requirements.
 - b. Structural failures including excessive deflection, water leakage, condensation, and air infiltration.
 - c. Faulty operation and hardware.
 - d. Deterioration of materials and finishes beyond normal weathering.
2. Warranty Period: 1 year from date of Substantial Completion.

- B. Manufacturer's Special Warranty for Laminated Glass: Manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.

1. Warranty Period: Five years from date of Substantial Completion.

- C. Special Warranty, Glass-Clad Polycarbonate Glazing: Manufacturer agrees to replace glass-clad polycarbonate glazing that fails in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:
 - a. Defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning glass-clad polycarbonate glazing contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glazing, blemishes exceeding those allowed by referenced polycarbonate standard, yellowing, and loss of light transmission.

2. Warranty Period: Five years from date of Substantial Completion.

- D. Manufacturer's Special Warranty for Insulating Glass: Manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period.

1. Deterioration of insulating glass is defined as failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.
 - a. Defects in coated-glass lites include peeling, cracking, and other indications of deterioration in coating.
 - b. Defects in laminated-glass lites include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.
 - c. Defects in glass-clad polycarbonate lites include edge separation, delamination materially obstructing vision through glazing, blemishes exceeding those allowed by referenced glass-clad polycarbonate standard, yellowing, and loss of light transmission.
 2. Warranty Period: Five years from date of Substantial Completion.
- E. Special Finish Warranty, Anodized Finishes: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of anodized finishes within specified warranty period.
1. Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Delta E units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain ballistic-resistant aluminum storefront and entrances from single source from single manufacturer.
- B. Product Options: Information on Drawings and in Specifications establishes requirements for aesthetic effects and performance characteristics of storefront and entrance assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.
 1. Do not change intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If changes are proposed, submit comprehensive explanatory data to Architect for review.

2.2 SYSTEM DESCRIPTION

- A. Ballistic-Resistant Storefronts and Entrances: Provide complete storefront and entrance systems for secure vestibules and conditions shown, complying with UL 752, Level 3.
- B. Labeling: Each storefront and entrance shall bear a permanent label indicating performance test criteria. Label shall bear name of independent laboratory that tested the assembly. Label shall indicate test pressures, both positive and negative in pounds per square foot; and design pressure, both positive and negative in pounds per square foot.

2.3 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 40 00 "Quality Requirements," to design aluminum storefront and entrances.
- B. Ballistically rated for Threat Level 3 based on UL752 standards, .
- C. General Performance: Comply with performance requirements specified, as determined by testing of ballistic-resistant aluminum storefront and entrances representing those indicated for this Project without failure due to defective manufacture, fabrication, installation, or other defects in construction.
 - 1. Ballistic-resistant aluminum storefront and entrances shall withstand movements of supporting structure, including, but not limited to, twist, column shortening, long-term creep, and deflection from uniformly distributed and concentrated live loads.
 - 2. Failure also includes the following:
 - a. Thermal stresses transferring to building structure.
 - b. Glass breakage.
 - c. Noise or vibration created by wind and thermal and structural movements.
 - d. Loosening or weakening of fasteners, attachments, and other components.
- D. Structural Loads:
 - 1. Wind Loads: As indicated on Drawings.
 - 2. Other Design Loads: As indicated on Drawings.
- E. Energy Performance: Provide storefront and entrances with performance properties specified, as indicated in manufacturer's published test data, based on procedures indicated below and certified in accordance with NFRC:
 - 1. Thermal Transmittance (U-Factor): Glazing and framing areas as a whole have U-factor of not more than 0.37 Btu/sq. ft. x h x deg F (1.70 W/sq. m x K) as determined in accordance with NFRC 100.
 - 2. Solar Heat-Gain Coefficient (SHGC): Glazing and framing areas as a whole have SHGC of no greater than 0.45 as determined in accordance with NFRC 200.
- F. Thermal Movements: Provide aluminum storefront and entrances, including anchorage, that allow for thermal movements resulting from the following maximum

change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change: 120 deg F (67 deg C) ambient; 180 deg F (100 deg C) material surfaces.

2.4 BALLISTIC-RESISTANT ALUMINUM STOREFRONT AND ENTRANCES

- A. Basis of Design, Storefront: Field-glazed, Model BulletBlock TTH600 Thermally-Broken Bullet-Resistant Window Framing System by Insulgard Security Products.
- B. Basis of Design, Entrances: Factory-glazed, Model BulletBlock 44/350 Bullet-Resistant Door System by Insulgard Security Products.
- C. Basis of Design, Transaction Window: Factory-glazed, Model SafeChange SVT Transaction Window by Insulgard Security Products.
- D. Types: Provide the following types in locations indicated on Drawings:
 1. Thermally Improved Construction: Fabricate frames with integral, concealed, low-conductance thermal barrier located between exterior materials and window members exposed on interior side in a manner that eliminates direct metal-to-metal contact.
- E. Frame Materials:
 1. Aluminum Extrusions: ASTM B221 (ASTM B221M). Provide alloy and temper recommended by manufacturer for strength, corrosion resistance, and application of required finish, but not less than 22,000-psi (150-MPa) ultimate tensile strength.
 2. Aluminum Sheet and Plate: ASTM B209 (ASTM B209M).
- F. Glazing System: Manufacturer's standard factory-glazing system that produces weathertight seal and complies with performance criteria.
 1. GL-1 Basis of Design, Exterior Entrance Doors and Interior Storefront and Entrances: UL 752 Level 3 units; nominal 1 inch thick Lexguard SP 1250 BALULN25 Armor-Gard as manufactured by Insulgard Security Products.
 2. GL-2 Basis of Design at Exterior Storefront: UL 752 Level 3 units; 2 inch thick BALULN25-IG glass consisting of 6 mm clear tempered glass, 3/4-inch air space, and nominal 1 inch thick Lexguard SP 1250 BALULN25 Armor-Gard as manufactured by Insulgard Security Products.
 3. GL-3 Basis of Design, Transaction Window: UL 752 Level 3 units consisting of 1-1/4 inch thick Lexguard SP 1250 BALULN25 Armor-Gard and stainless steel framing and voice tubes, as manufactured by Insulgard Security Products.
 4. Glazing Materials, General: See Section 08 80 00 "Glazing."
- G. Glazing Strips and Weather Stripping: Manufacturer's standard replaceable components.

- H. Fasteners: Stainless steel Type 304, 3/8 inch diameter, compatible with storefront and entrance members, trim, hardware, anchors, and other components. Pre-drill framing and wall surfaces to receive anchors.
 - 1. Anchorage at hollow CMU: Drilled-in toggle bolt anchors
 - 2. Anchorage at solid or grouted CMU: Drilled-in expansion bolt anchors
 - 3. Exposed Fasteners: Do not use exposed fasteners.

2.5 ACCESSORIES

- A. Subsills: Thermally broken, extruded-aluminum subsills in configurations indicated on Drawings.
- B. Bituminous Paint: Cold-applied asphalt-mastic paint containing no asbestos, formulated for 30-mil (0.762-mm) thickness per coat.

2.6 HARDWARE

- A. For each pair of doors: Coordinate with Work of Division 26 for power requirements and connections.
 - 1. One (1) Select continuous hinge SL-11HD CTW-10, RHR
 - 2. One (1) Select continuous hinge SL-11HD, LHR
 - 3. One (1) Von Duprin KR 4954 Removable Steel Mullion
 - 4. Two (2) Panic Hardware S8-EO-SNB (LHR and RHR)
 - 5. Two (2) Door Pulls VR910 DT (LHR and RHR)
 - 6. Two (2) Door Contacts 679-05
 - 7. SFIC rim cylinder
 - 8. Two (2) LCN 4040XP Series door closers
 - 9. Two (2) Automatic Door Operators: Stanley Magic-Force with power supply and remote actuator located at school office to control access.
 - 10. Intercom, Controls, and Security Hardware: Coordinate with Work of Division 28.
- B. For each single door replacing existing vestibule door; provide one each of the following: Coordinate with Work of Division 26 for power requirements and connections.
 - 1. Select continuous hinge SL-11HD CTW-10, handed to suit swing shown.
 - 2. Panic Hardware S8-EO-SNB (LHR and RHR)
 - 3. Door Pull VR910 DT (LHR and RHR)
 - 4. Door Contact 679-05
 - 5. SFIC rim cylinder
 - 6. LCN 4141 Series door closers
 - 7. Automatic Door Operator: Stanley Magic-Force with power supply and remote actuator located at school office to control access.
 - 8. Intercom, Controls, and Security Hardware: Coordinate with Work of Division 28.

2.7 FABRICATION

- A. Fabricate aluminum storefront and entrances in sizes indicated. Include a complete system for assembling components and anchoring storefront and entrances.

- B. Provide weep holes and internal water passages for exterior ballistic-resistant storefront and entrances to conduct infiltrating water to the exterior.
- C. Thermally Improved or Thermally Broken Construction: Fabricate framing with an integral, concealed, low-conductance thermal barrier, located between exterior materials and members exposed on interior in a manner that eliminates direct metal-to-metal contact.
- D. Framing: Miter or cope corners the full depth of framing; weld and dress smooth.
 - 1. Fabricate framing with manufacturer's standard, internal reinforcing in thicknesses required for storefront and entrances to comply with windborne-debris-impact-resistance performance and wind load pressures indicated.
- E. Glazing Stops: Finish glazing stops to match storefront and entrance framing.
- F. Metal Protection: Separate dissimilar metals to protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose.
- G. Weather Stripping: Factory applied.
- H. Preglazed Fabrication: Preglaze transaction window units and entrances at factory. Installation orientation of glazing to meet performance requirements.
 - 1. Clean glazing channels and other framing members receiving glazing immediately before glazing. Remove coatings not firmly bonded to substrates.
 - 2. Examine glazing units to locate exterior and interior surfaces. Label or mark units as needed so that exterior and interior surfaces are readily identifiable. Do not use materials that will leave visible marks in the completed work.
- I. Complete fabrication, assembly, finishing, and other work in the factory to greatest extent possible. Disassemble components only as necessary for shipment and installation.

2.8 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.9 ALUMINUM FINISHES

- A. High-Performance Organic Finish, Two-Coat PVDF: Fluoropolymer finish complying with AAMA 2605 and containing not less than 70 percent PVDF resin by weight in color coat.
 - 1. Prepare, pretreat, and apply chromium pretreatment coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions for seacoast and severe environments.
 - 2. Color and Gloss: As selected by Architect from manufacturer's full range to match existing.

- B. Superior-Performance Organic Finish, Single-Coat FEVE: Contractor's Option. Fluoropolymer finish complying with AAMA 2605.
 - 1. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 - 2. Color and Gloss: As selected by Architect from manufacturer's full range to match existing.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

- B. Verify rough opening dimensions and levelness of sill for tolerance and proper fit of ballistic-rated openings.
 - 1. Storefront openings in ballistic-rated walls shall be constructed no more than 1/8-inch (3-mm) larger per side than the physical size of the storefront frame.
 - 2. Ensure openings in ballistic-rated walls contain no gaps exceeding 1/4-inch (6-mm) between storefront and entrance frame and substrate.
 - 3. At transaction windows, ensure opening to receive frame is 1/2-inch wider and 1/4-inch higher than frame size. Shim opening to receive frame and apply manufacturer's trim to enclose window and ensure bullet-resistance level specified.
 - 4. Do not install windows in frame openings that are not plumb or are out-of-tolerance for size or alignment.

- C. Examine roughing-in for embedded and built-in anchors to verify actual locations of ballistic-resistant storefront and entrance connections before storefront and entrance installation.

- D. Examine wall flashings, air barriers, transition strips, and other built-in components to ensure weathertight storefront and entrance installation.

- E. For factory-installed glazing materials whose orientation (secure or windborne-debris side) is critical for performance, verify installation orientation.

- F. Report in writing to Architect prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Coordination: Furnish layouts for cast-in-place anchors, clips, and other window and storefront anchors.
 - 1. Furnish cast-in-place anchors and similar devices to other trades for installation well in advance of time needed for coordinating other work.
 - 2. Pre-drill anchors as required by framing manufacturer.

3.3 INSTALLATION

- A. Install ballistic-resistant windows, storefronts, and entrances in accordance with manufacturer's published instructions and requirements of UL-752 Level 3.
- B. Metal Protection:
 - 1. Where aluminum is in contact with dissimilar metals, protect against galvanic action by painting contact surfaces with materials recommended by manufacturer for this purpose or by installing nonconductive spacers.
 - 2. Where aluminum is in contact with concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- C. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing ballistic-resistant windows, storefronts, and entrances to in-place construction. Include threaded fasteners for inserts, and other connectors. Space anchors at 12 inches OC or as required by framing manufacturer based on ballistic-resistance testing and certifications.
- D. Install windows, storefronts, and entrances level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction to produce weathertight construction.
- E. Install exterior storefront and entrances and components to drain condensation, water penetrating joints, and moisture migrating within storefront and entrances to the exterior.

3.4 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Inspect window, storefront, and entrance installation for conformance with UL-752 Level 3 requirements.
- C. Field Quality-Control Testing: Perform the following test on representative areas of exterior ballistic-resistant storefront and entrances.

1. Water-Spray Test: Before installation of interior finishes has begun, areas designated by Architect shall be tested according to AAMA 501.2 and shall not evidence water penetration.

a. Perform in areas directed by Architect.

D. Storefront and entrances will be considered defective if they do not pass tests and inspections.

E. Prepare test and inspection reports.

3.5 ADJUSTING, CLEANING, AND PROTECTION

A. Clean exposed surfaces immediately after installing windows. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.

1. Keep protective films and coverings in place until final cleaning.

B. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

C. Protect window surfaces from contact with contaminating substances resulting from construction operations. If contaminating substances do contact window surfaces, remove contaminants immediately according to manufacturer's written instructions.

END OF SECTION

SECTION 10 26 41

BALLISTIC-RESISTANT PANELS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Bullet resistant fiberglass panels of the following ballistic rating level:

1. UL 752 Level 3.

1.2 RELATED SECTIONS

A. Section 09 21 16 - Gypsum Board Assemblies.

1.3 REFERENCES

A. ASTM International (ASTM):

1. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
2. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
3. ASTM E 413 - Classification for Rating Sound Insulation.
4. ASTM F 1233 - Standard Test Method for Security Glazing Materials and Systems.
5. ASTM E 1332 - Standard Classification for Rating Outdoor-Indoor Sound Attenuation.

B. National Institute of Justice Ballistic Standards (NIJ):

1. NIJ Standard 0108.01.

C. Underwriters Laboratories (UL):

1. UL 752 Standard for Bullet Resisting Equipment.

D. The United States Department of State:

1. The International Traffic in Arms Regulations (ITAR).

1.4 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

B. Shop Drawings: Details of installation of bullet resistant fiberglass panels.

- C. Certificates: Submit printed data to indicate compliance with following requirements.
 - 1. UL Listing Verification and UL752 Current Test Results as provided by Underwriters Laboratories.
 - 2. ASTM E 119.
 - 3. ASTM F 1233.
 - 4. ASTM E 90.
 - 5. ASTM E 413.
 - 6. ASTM E 1332.
 - 7. Manufacturer's U.S. Dept. of State ITAR Statement of Registration.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5-year experience manufacturing similar products.
- B. Installer Qualifications: Minimum 2-year experience installing similar products.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship is approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 PRE-INSTALLATION MEETINGS

- A. Convene minimum two weeks prior to starting work of this section.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Deliver materials to project with manufacturer's UL Listed labels intact and legible.
- C. Handle material with care to prevent damage. Store materials inside under cover, stack flat and off the floor.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.9 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.10 WARRANTY

- A. Provide manufacturer's standard limited warranty for materials and workmanship against defects for a period of ten years from the date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. ArmorCore by Waco Composites
 - 2. Armortex
 - 3. United States Bullet Proofing, Inc.

2.2 BULLET RESISTANT PANELS

- A. General:
 - 1. Bullet Resistant Fiberglass Panels, "non-ricochet type" to permit the capture and retention of an attacking projectile lessening the potential of a random injury or lateral penetration.
 - 2. Bullet resistance of joints: Equal to that of the panel.
- B. Product: Panels shall be fabricated of multiple layers of woven roving ballistic grade fiberglass cloth impregnated with a thermoset polyester resin and compressed into flat rigid sheets as manufactured by Waco Composites.
- C. Panel Product:
 - 1. Panel Rating: UL752 Level 3.
 - 2. Armor Type: NIJ Standard 0108.01 - Type IIIa.
 - 3. Physical Characteristics: 7/16 inch (11.1 mm) thick, 4.8 lbs. per sq.ft. (23.4 kg per sq. m).
 - 4. Panel Size: Maximum size to limit number of seams.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Prior to starting installation, verify work of related trades required in contract documents and architectural drawings is complete to the point where work of this Section may properly commence.

- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions and in proper relationship with adjacent construction.
- B. Reinforce joints with a back-up layer of bullet resistive material. Minimum width of reinforcing layer at joint shall be 4 inches (102 mm), centered on panel joints.
- C. Install panels in accordance with manufacturer's printed recommendations and as required by contract documents.
- D. Secure armor panels using screws, bolts, or an industrial adhesive.
- E. Method of application shall install panels minimizing vulnerabilities by fitting tightly to adjacent surfaces including concrete floor slab, concrete roof slab, bullet resistive door frames, bullet resistive window frames, and other assemblies.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION



POTENTIAL CHANGE ORDER (PCO) REQUEST

School Name:	Briar Vista Elementary School	Date:	July 3, 2024
Project Name:	Briar Vista Elementary School MBSR	Project Number:	357-35
Title:	Roof Taper Add	PCO #:	015
Allowance or CO	Change Order		

Description of Work:

Per RFI 13 and revised sheet A02-R provided by Corgan, a new taper package will be required to provide the 1/4 per foot slope. The original bid set drawings assumed a sloped deck roof, but upon further investigation, it was found that the roof deck is flat.

We have excluded extended GCs from this PCO, assuming that PCO 12, which already includes extended GCs, will be approved. If PCO 12 is not approved, we must bill for extended GCs for PCO 15.

A. Subcontractor Cost of the Work

Midian Roofing	\$	431,992.23	
	\$	-	
	\$	-	
	\$	-	
	\$	-	
	\$	-	
	\$	-	
		Subtotal A:	\$ 431,992.23

B. CONTRACTOR Fee: (As per Section 11.7.1.2) - 5% subcontractor work

Subtotal B: \$ 21,599.61

C. CONTRACTOR Cost of the Work:

Payroll Costs (See attached supporting documentation.)	\$	-	
Materials and Equipment (See attached supporting documentation.)	\$	-	
Consultant Costs (See attached supporting documentation.)	\$	-	
Self-Performed Costs (See attached supporting documentation.)			

Subtotal C: \$ -

D. P&P Bond - 0.4% of Total Subs Cost of Change

Subtotal D: \$ 1,821.65

E. CONTRACTOR Fee: - 10% OH&P

Subtotal E: \$ -

Total = (A + B + C + D + E)

Total: \$ 455,413.49

The proposal would Increase Decrease the Milestones and/or Contract Time by 300 calendar days.

The proposal does NOT affect the Milestones and/or Contract Time.

Christian Wilson

Contractor Signature

Asst. PM / Program General Manager

Title

07/11/2024

Date

Carissa Oyedele
Vice President, Corgan

July 12, 2024



402 Shorter Ave.
Rome, Ga 30165
706-232-3085

Contract

WO #	Terms	Contract Date	REP
	CASH or CHECK		FINANCING
Upon Approval for Financing Through Finance of America			
Estimated Payment		Estimated Payment Period	
\$		120 Months	
<p>PAYMENT IS DUE UPON COMPLETION OF WORK. ALL CHARGES NOT PAID UPON COMPLETION OF WORK ARE SUBJECT TO A LATE PENALTY OF 2.5 % OF THE UNPAID BALANCE MONTHLY.</p>			

Customer
Centennial Contractors
Jobsite
Briar Vista Elementary School

Proposal	Total
<p>Scope of work for Change Order to Install Taper System with Gutters and Downspouts.</p> <ul style="list-style-type: none"> : Fully adhere a full ¼” per foot taper system to direct water to roof edges as shown on revised drawings : Provide and install a gutter system on all sides as shown on revised drawings : Provide and install an all purpose termination bar on top of parapet walls : Clean up and haul off all debris : All work to be done in a prompt and timely manner : Licensed, Insured with General Liability and Worker's Comp. for your Protection : We supply all materials and labor (any remaining materials belong to Midian Roofing) : Price is good for 30 days 	<p>\$431,992.23</p>
	<p>ESTIMATE GOOD FOR 30 DAYS</p>

Customer Signature	_____	Cash \$431,992.23
Midian Roofing Signature	_____	
		<p>**Plus, any supplement approved by your insurance company**</p>

By Signing This Contract, the Customer Agrees to Any and All Midian Roofing, Inc. Terms and Conditions



Added contract value in CO1 price breakdown

Item	Unit	Quantity	Unit Cost	Total
Taper Package	SF	83,117	\$1.34	\$111,376.78
Adhesive Kits (Canisters Par A and B)	EA	40	\$1,680.00	\$67,200.00
Gutters and Downspout	LF	1,600	\$12.00	\$19,200.00
Taper Installation Labor	SF	83,117	\$1.80	\$149,610.60
Gutter and Downspout Labor	LF	1,600	\$10.00	\$16,000.00
Dumpsters	EA	6	\$675.00	\$4,050.00
Tax				\$13,844.37
10% Over Head and Profit				\$38,128.18
Total				\$419,409.93
Bond Rate 3%				\$12,582.30
Total with Bond				\$431,992.23

Additional
dumpsters for
added waste



Date: 05/01/24
Estimator: T Knox
Contact: 205.209.5879
knox@heelybrown.com

Cancels: 6/30/24

Heely Brown Co. Tapered Quote

Ref #: JM Material
Job Name: Briar Vista ES - 3rd REVISION
Location: Atlanta, GA

Roof Area:	42412 sf	Total sf applied:	83117 sf
Tapered Area	42412 sf	Average R-Value	26.38
Slope:	1/4" per ft		
Cricket Slope:	1/2" per ft	Base or overlay if incl:	N/A sf
Min Thickness:	0.50"	Trucks:	5.29
Max Thickness:	10.75"		

Special Notes:

Sell Price: \$111,228.00

***Material will be priced at time of shipment - current pricing is based on
Manufacturer's most recent pricing guidelines**

Notes: Unless specifically noted otherwise, quote is for 20 psi Iso with minimum start thickness of 1/2". Additional layers / thicknesses required are the responsibility of contractor.
Price does NOT include, sales tax, freight, fuel surcharges or deficit freight amounts.



Heely-Brown Company - Chattanooga
 5904 Quintus Loop Road
 Chattanooga, TN 37421
 Phone: (800)-407-0486

QUOTE
CHT0000697620

Account: MIDIRO 0005
Branch: CHATTANOOGA
Phone: (706)-232-3085
Fax: (706)-232-3085

Bill To: MIDIAN ROOFING, INC.
 402 SHORTER AVE
 ROME, GA 30165

Ship To: BRIAR VISTA ADHESIVE
 5904 QUINTUS LOOP RD
 CHATTANOOGA, TN 37421

PO:	Ref:	Job:
Exp Delv Date: 05/17/24	Sales T.Waguespack	Type: CPU
Activation Date: 05/17/24	Agents P.Wasil	Quoted For:
Close Date: 06/16/24		Quoted By: paw
		Ship Via: PICK-UP

QUANTITY	UOM	ITEM/DESCRIPTION	PRICE/UOM	AMOUNT
1	EA	MNV70005637 JM UIA INSULATION ADHESIVE CANISTER PART 1	840.00/EA	840.00
1	EA	MNV70005638 JM UIA INSULATION ADHESIVE CANISTER PART 2	840.00/EA	840.00
		Subtotal		1,680.00
				X40 = 67200



Payment Terms:
 0.5% 10th Net 25th

Original contract value breakdown

Materials	Quantity	Unit	Cost	Total
Poly ISO Roof Insulation	1170	Sq	\$175.00	\$204,750.00
Q- Panel for Crickets	125	Ea	\$25.00	\$3,125.00
1/2" Cover Board	585	Sq	\$110.00	\$64,350.00
Fasteners	2	M	\$290.00	\$580.00
Insulation Adhesive Part A and B	70	Kits	\$1,680.00	\$117,600.00
Seam Plates	2	M	\$290.00	\$580.00
80Mil PVC KEE 10'x100'	68	Rolls	\$2,130.00	\$144,840.00
Edge Metal	2500	LF	\$11.75	\$29,375.00
Walk Pads	9	Rolls	\$805.00	\$7,245.00
PVC Bonding Adhesive	225	5Gal	\$315.00	\$70,875.00
Naps	80	Ea	\$1.50	\$120.00
Rollers	20	Ea	\$8.00	\$160.00
Pourable Sealer	5	1Gal	\$105.00	\$525.00
Asphalt Night Tie In	29	Kegs	\$90.00	\$2,610.00
Membrane Cleaner	5	5Gal	\$285.00	\$1,425.00
Rags	10	Bags	\$35.00	\$350.00
Pipe Boots	20	Ea	\$80.00	\$1,600.00
Universal Corner	160	Ea	\$20.00	\$3,200.00
Water Block	100	Ea	\$9.00	\$900.00
Caulk	100	Ea	\$10.00	\$1,000.00
Term Bar	50	Ea	\$10.00	\$500.00
Gutter	870	LF	\$12.00	\$10,440.00
Down Spout	500	LF	\$12.00	\$6,000.00
Support Brackets	300	Ea	\$9.00	\$2,700.00
Hangers	450	Ea	\$6.00	\$2,700.00
Taxes				\$47,428.50
Sub Total Materials				\$724,978.50
Labor	Quantity	Unit	Cost	Total
Installation of Roofing System	665	Sq	\$350.00	\$232,750.00
Installation of Gutter and Down Spouts	1370	LF	\$10.00	\$13,700.00
Sub Totals Labor				\$246,450.00
Miscellaneous Charges	Quantity	Unit	Cost	Total
Lift Rental/Delivery	2	Ea	\$3,500.00	\$7,000.00
Dumpster Fees	35	Ea	\$475.00	\$16,625.00
Delivery Fees	4		\$1,000.00	\$4,000.00
Sub Totals Misc Charges				\$27,625.00
Total Cost of Project				\$999,053.50

RFI #13: DCSD Briar Vista ES - TPO Roof Slope Issue

Status	Closed on 05/09/24		
To	Hiral Tank (Corgan Associates, Inc. (Atlanta Office))	From	Christian Wilson (Centennial Contractors Enterprises, Inc.)
	Sanika Kulkarni (Corgan Associates, Inc. (Atlanta Office))		3200 Cobb Galleria Parkway, Suite 210 Atlanta, Georgia 30339
Date Initiated	Apr 11, 2024	Due Date	Apr 14, 2024
Location	Roof	Project Stage	Course of Construction
Cost Impact	TBD	Schedule Impact	TBD
Spec Section	07 54 19 - Polyvinyl-Chloride Roofing	Cost Code	
Drawing Number	A02-R	Reference	
Linked Drawings			
Received From	Wesley Lovell (Midian Roofing)		
Copies To	Marco Gonzalez (Centennial Contractors Enterprises, Inc.), Carissa Oyedele (Corgan Associates, Inc. (Atlanta Office)), Tyler Shelton (Centennial Contractors Enterprises, Inc.)		

Activity

Question

Question from Christian Wilson Centennial Contractors Enterprises, Inc. on Thursday, Apr 11, 2024 at 10:04 AM EDT

Per sheet A02-R, the 2011 and 2010 (including the cafeteria) building roofs should have a consistent slope to one side. It has been determined that these roofs have little to no slope. To achieve the 1/4" per foot required slope as drawn, there would need to be a 22" wall built on the Plan North side of the 2011 Building and the Plan South side of the 2010 Building. Instead of building new walls, we propose to build up insulation to a center ridge line and pitch the roof in both directions. This would require additional gutters and downspouts on the Plan North side of the 2011 Building and the Plan South side of the 2010 Building. Additionally, the existing downspouts tie into underground stormwater piping. If we are to slope in each direction, would new stormwater piping need to be installed that tie into the properties existing stormwater, or shall the roof stormwater discharge onto splash blocks onto the ground?

Please confirm if this solution would be acceptable, and how to proceed with the stormwater discharge from the roof.

Attachments

[A5A5DCE2-23E4-47B2-A09E-92B6D6EF41E5.jpeg](#), [9F8B0FE0-3900-4B58-9D3E-7A674E2D605E.jpeg](#), [546EF977-93D7-435F-B64F-35618E0E3CC1.jpeg](#), [EC967732-FDD4-4227-9A85-F53978623462.jpeg](#), [7A7E7DBD-075F-4645-A3B6-20CDD839E2B8.jpeg](#), [32E5FAAA-5999-41B0-9F24-3F70C353A300.jpeg](#), [34CFF2DA-5EAD-40A7-A60F-084370D48B58.jpeg](#), [AFB6C283-EF14-4FDD-A379-2A242CA5E36B.jpeg](#), [127333C5-B003-439E-BAC0-0C5169FDB71C.jpeg](#), [6B08E2FE-B74D-42A6-A288-DB7E46DE5B18.jpeg](#), [DDBDEDE9-FFA5-49F2-AF90-7F37B4035A66.jpeg](#)

Official Response

Response from Christian Wilson Centennial Contractors Enterprises, Inc. on Thursday, May 9, 2024 at 12:17 PM EDT

Attached is Corgan's updated revised Roof Plan and the related email conversation.

Attachments

[240509-Briar Vista ES - RFI#13- updated response- Email Discussion.pdf](#), [240509-Briar Vista ES - RFI#13- updated response- Overall roof plan .pdf](#)

Official Response

Response from Hiral Tank Corgan Associates, Inc. (Atlanta Office) on *Tuesday, Apr 23, 2024 at 12:07 PM EDT*

The proposed solution is acceptable. Please find the attached response and revised drawing. Let us know if you have any questions.

Thanks.

Attachments

[RFI #13 DCSD Briar Vista ES - TPO Roof Slope Issue- Corgan Response- 04.23.2024.pdf](#)

RFI #13: DCSD Briar Vista ES - TPO Roof Slope Issue

Status	Open		
To	Sanika Kulkarni (Corgan Associates, Inc. (Atlanta Office)) Hiral Tank (Corgan Associates, Inc. (Atlanta Office))	From	Christian Wilson (Centennial Contractors Enterprises, Inc.) 3200 Cobb Galleria Parkway, Suite 210 Atlanta, Georgia 30339
Date Initiated	Apr 11, 2024	Due Date	Apr 14, 2024
Location	Roof	Project Stage	Course of Construction
Cost Impact	TBD	Schedule Impact	TBD
Spec Section	07 54 19 - Polyvinyl-Chloride Roofing	Cost Code	
Drawing Number	A02-R	Reference	
Linked Drawings			
Received From	Wesley Lovell (Midian Roofing)		
Copies To	Marco Gonzalez (Centennial Contractors Enterprises, Inc.), Carissa Oyedele (Corgan Associates, Inc. (Atlanta Office)), Tyler Shelton (Centennial Contractors Enterprises, Inc.)		

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Awaiting an Official Response

Corgan Response- 04.23.2024

New gutters added to the Roof as shown on the next page. Changes are clouded and tagged. GC to provide splash blocks at the bottom of the downspout outlets.

Hiral Tank.

