Schenectady County
Purchasing Department

620 State St.-2nd Floor
Schenectady, NY 12305
Purchasing@schenectadycounty.com
518.388.4240

ADDENDUM

RFB-2024-65
SUNY SCCC CST BUILDING LOBBY AND BATHROOM RENOVATIONS
C2 DESIGN GROUP

ADDENDUM #1

Issued Date: 12/5/2024

The purpose of this addendum is to provide detailed information to all Bidders. This addendum is hereby included in and made part of the Contract Documents, whether or not attached thereto. Receipt of this Addendum must be acknowledged on the bid form.

CONTENTS/RESPONSE TO QUESTIONS/REFERENCE TO ATTACHMENTS

General:

1. This addendum changes the documents for Bid #RFB-2024-65.
2. 01 15 00 – Project Master Schedule
    a. Bid Due/Opening date to Thursday December 12th 2024 @ 2:00 pm.
3. Contractor Bid Walk through list (11/21/2024)

Attachments: Revised/New Contract Drawings and Specifications

1. Drawing E302 – Lobby Level Electrical Removal Plans
    a. Revisions as marked Addendum #1
2. Drawing E303 – Lobby Level Electrical Plans
    a. Revisions as marked Addendum #1
3. Drawing D102 – Enlarged Demolition Plans
    a. Revisions as marked Addendum #1
4. Drawing A103 – Enlarged Plans
    a. Revisions as marked Addendum #1

5. Drawing A104 – Roof Plan and Details
    a. Revisions as marked Addendum #1
6. Drawing A200 – Building Elevations
    a. Revisions as marked Addendum #1
7. Drawing A400 – Stair Sections
    a. Revisions as marked Addendum #1
8. Drawing A500 – Exterior Details
    a. Revisions as marked Addendum #1
9. Drawing A701 – Interior Elevations
    a. Revisions as marked Addendum #1
10. Drawing A900 – Schedules
    a. Revisions as marked Addendum #1
11. Specifications 08 41 13 – Aluminum Storefront Systems
12. Specifications 08 71 00 – Door Hardware

General Bid RFI's

1. Drawing A901, Finish legend calls out two different Types for exterior metal wall panels (EMP-1 & EMP-2) but the drawing only shows "metal panel". Please clarify?
    a. Response: See Drawings A200 & A701 Addendum#1

Please acknowledge this addendum on your bid form.

END OF ADDENDUM #1

SUNY SCCC CST BUILDING LOBBY AND BATHROOM RENOVATIONS

RFB - 2024 - 65

11/21/2024 CONTRACTOR WALKTHROUGH

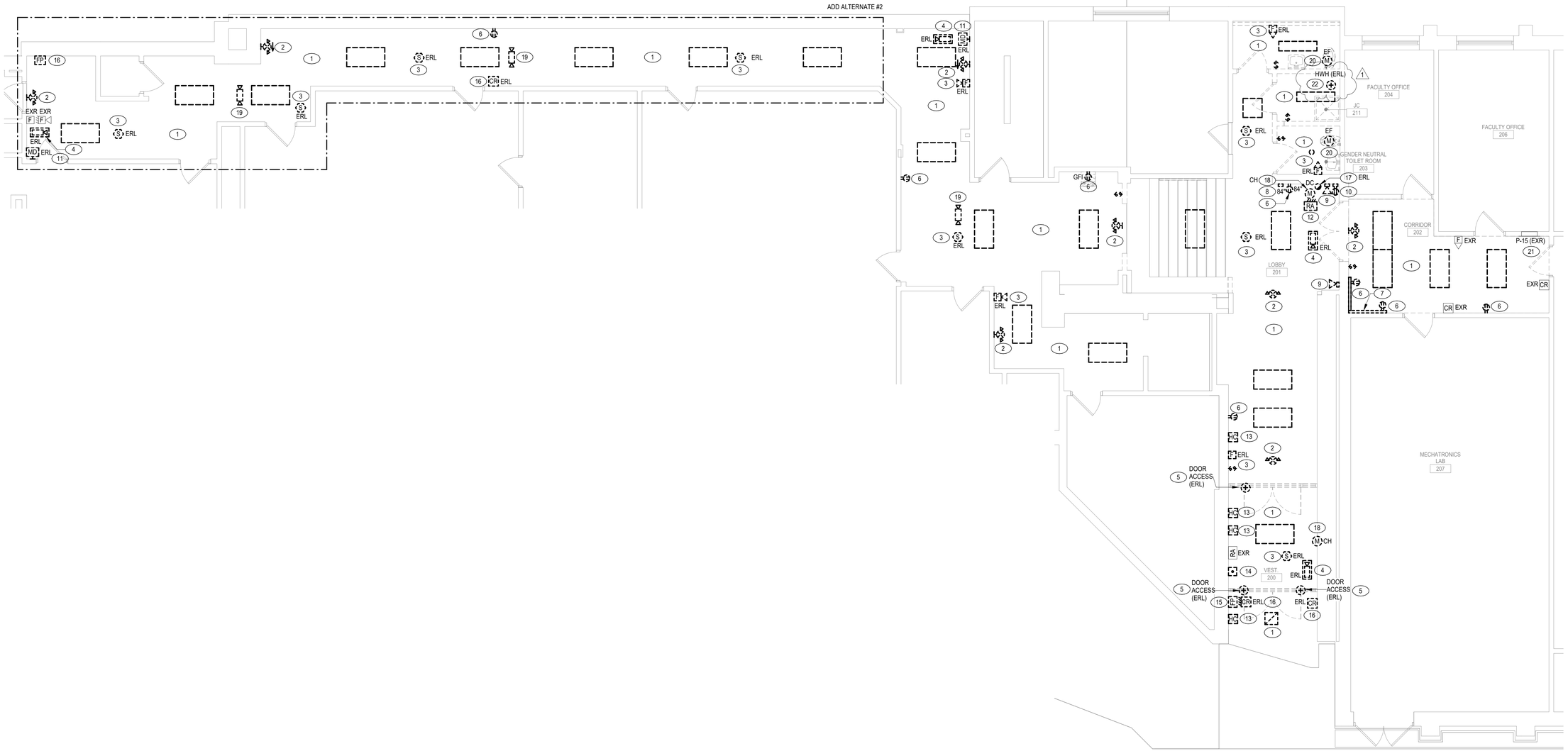
CONTRACTOR:	COMPANY NAME:	PHONE NUMBER:	E-MAIL:
John Vandish	BestHatfield Construction	518-373-2000	jvandish@besthatfield.com
Mark Caulfield	AOW	518-477-0976	mcaulfield@aowconstruction.com
Dalton Lew	MSI	518-665-2981	dalton@midstateltd.com
Chris MacDonald	C&L	518-300-6874	chrismac@clunlimitedinc.com
Rob Shachelton	Iron Sword	518 530 2270	RoShachelton@ironswordllc.com
Bob Lewis	Schdy County	518-729-7760	
Jill Roark	Schdy County	518-530-2570	
Jhon Ramirez	AKROS MGMT	817-721-3906	jjramirez@akrosmgmtinc.com
Chris Moller	EMPIRE BUILDING DIAGNOSTICS	518-477-0728	christopherm@ebdinc
Olivia Whyte	Daisy Ventures	(518)391-1864	daisyventure2018@gmail.com
• ERIN BARONE	SCHENECTADY COUNTY		
• JEFF NUTTER	C2-DESIGNGROUP	(518)320-8252	
• JORDAN KACUR	C2-DESIGNGROUP	" " "	
Jeffrey Rufo	Sam Greco Construction Inc.	518 465-1155	JRufo@Grecoconstruction.com

C2 DESIGN GROUP

PROJECT NAME: SUNY SCCC CST BUILDING LOBBY AND BATHROOM REN.	
DRAWING TITLE: CONTRACTOR BID WALKTHROUGH	
DATE: 11/21/2024	~~SCALE:~~ PROJECT # 2430
~~DRAWN BY:~~ RFB - 2024 - 65	SHEET NO. 1 OF 1

REMOVAL NOTES:

1. DISCONNECT AND REMOVE LIGHT FIXTURES IN AREA. MAINTAIN EXISTING WIRING AND CONTROLS FOR RECONNECTION.
2. DISCONNECT AND REMOVE EXIT SIGN, MAITAIN EXISTING WIRING FOR RECONNECTION.
3. DISCONNECT AND STORE FIRE ALARM DEVICE FOR NEW WORK, MAINTAIN EXISTING WIRING FOR RECONNECTION.
4. DISCONNECT AND STORE SECURITY CAMERA FOR CEILING WORK. MAINTAIN EXISTING WIRING FOR RECONNECTION.
5. DISCONNECT AND STORE DOOR ACCESS CONTROLS FOR RELOCATION, MAINTAIN EXISTING WIRING AND CONTROLS FOR RECONNECTION.
6. DISCONNECT AND REMOVE RECEPTACLE. MAINTAIN EXISTING WIRING FOR REMAINING CIRCUITRY.
7. DISCONNECT AND REMOVE WIREMOLD ON WALL FOR REPLACEMENT. MAINTAIN ALL OTHER EXISTING CIRCUITRY FOR RECONNECTION.
8. DISCONNECT AND REMOVE CATV WIRING AND WALL MOUNTED TELEVISION. DISCONNECT AND REMOVE WIREMOLD ON WALL FOR NEW WORK. MAINTAIN ALL OTHER EXISTING WIRING FOR RECONNECTION.
9. DISCONNECT AND REMOVE DATA OUTLET. DISCONNECT AND REMOVE WIREMOLD ON WALL FOR NEW WORK. MAINTAIN ALL OTHER EXISTING WIRING FOR RECONNECTION.
10. DISCONNECT EMERGENCY OUTLET FOR RELOCATION. DISCONNECT AND REMOVE WIREMOLD ON WALL FOR NEW WORK. MAINTAIN ALL OTHER EXISTING WIRING FOR RECONNECTION.
11. DISCONNECT MOTION DETECTOR FOR CEILING WORK, MAINTAIN EXISTING WIRING FOR RECONNECTION.
12. DISCONNECT AND REMOVE REMOTE ANNUNCIATOR PANEL. VERIFY POWER CONNECTION WITH FACILITIES. IF OPERATIONAL, RELOCATE TO VESTIBULE 202.
13. DISCONNECT AND REMOVE HANDICAP BUTTON. MAINTAIN EXISTING CIRCUITRY FOR RECONNECTION.
14. DISCONNECT AND REMOVE EMERGENCY DOOR RELEASE PULL STATION. MAINTAIN EXISTING CIRCUITRY FOR RECONNECTION.
15. DISCONNECT AND REMOVE FIREFIGHTER TELEPHONE. MAINTAIN EXISTING CIRCUITRY FOR RECONNECTION.
16. DISCONNECT AND STORE CARD READER ON WALL FOR NEW WORK. MAINTAIN EXISTING WIRING FOR RECONNECTION.
17. DISCONNECT AND STORE DOOR CONTACT ON WALL FOR NEW WORK. MAINTAIN EXISTING WIRING FOR RECONNECTION.
18. DISCONNECT CABINET HEATER FOR REMOVAL BY OTHERS. DISCONNECT AND REMOVE ALL ASSOCIATED WIRING AND CONTROLS BACK TO SOURCE.
19. DISCONNECT AND REMOVE EMERGENCY LIGHT AND ALL ASSOCIATED WIRING. MAINTAIN WIRING FOR REMAINING DEVICES IN CIRCUIT.
20. DISCONNECT EXHAUST FAN FOR REMOVAL BY OTHERS. MAINTAIN EXISTING WIRING AND CONTROLS FOR RECONNECTION.
21. EXISTING TO REMAIN ELECTRICAL PANEL 208Y/120V, 3PH, 200A MLO.
22. DISCONNECT HOT WATER HEATER FOR RELOCATION BY PC. MAINTAIN EXISITNG WIRING AND CONTROLS FOR RECONNECTION.



1 Lobby Level Electrical Removal Plan
3/16" = 1'-0"

DESIGN GROUP
www.C2-DesignGroup.com
24 Airport Road
Schenectady, NY 12302
518.320.8250

Owner:
SUNY Schenectady
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Architect:
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MEP Engineer:
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646 Plank Road #104 Phone:(518) 280-2410
Clifton Park, NY 12065 ES #24128

Stamp:

Project:

ADDITIONS AND RENOVATIONS TO
SUNY SCHENECTADY
CST BUILDING LOBBY
AND BATHROOMS
78 Washington Ave Schenectady, NY 12305

BID SET | RFB 2024-65

No.	REVISION #	DATE:
1	Addendum #1	12.04.2024

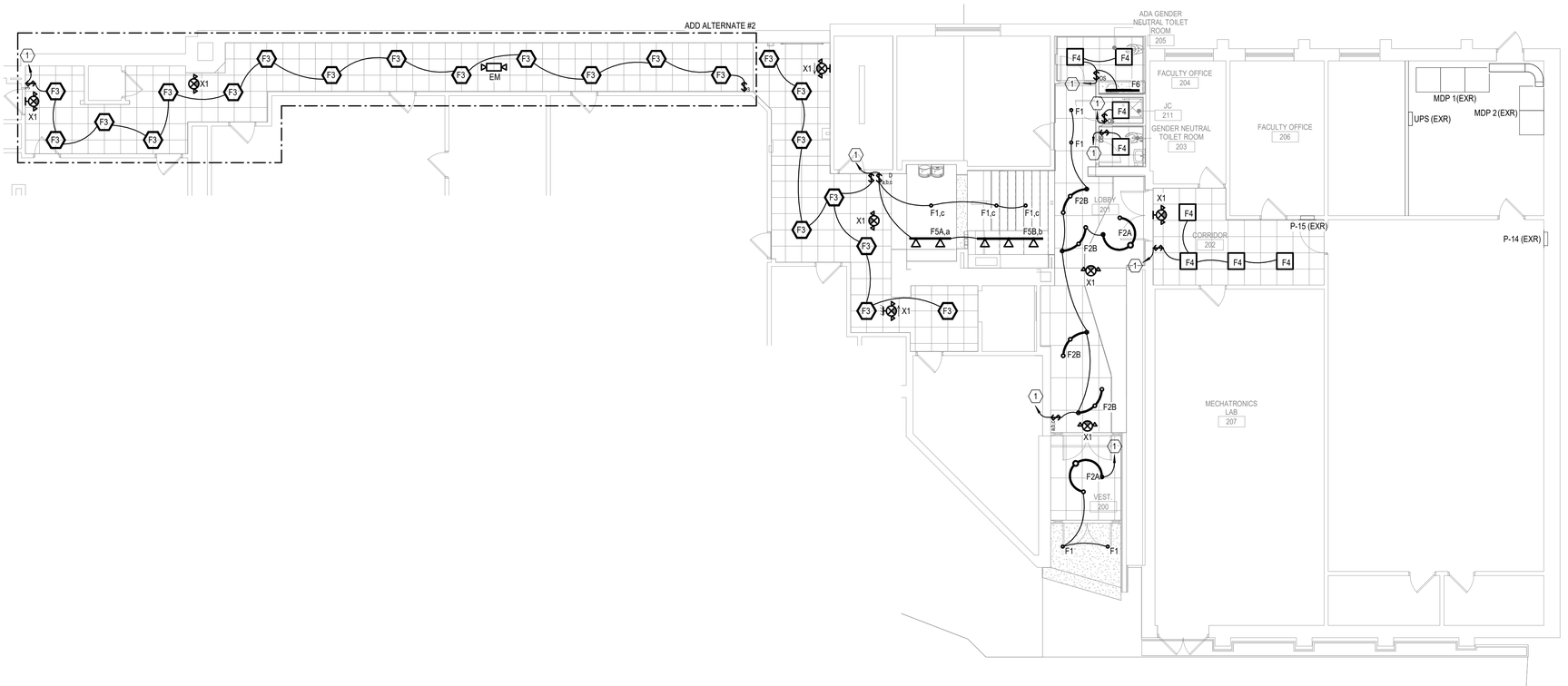
Drawn By:	MS
Scale:	As Noted
Date:	12/04/2024
Job No:	2430

Sheet Title:

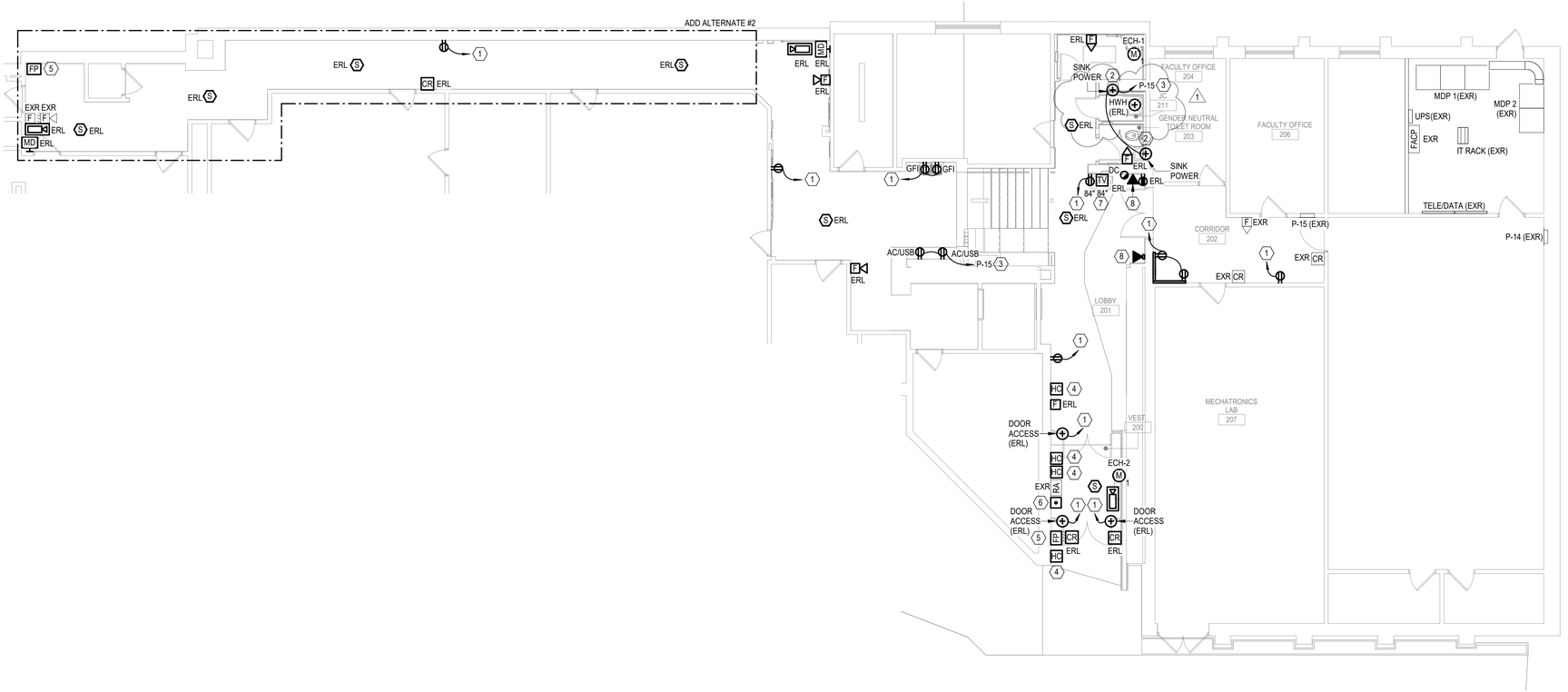
LOBBY LEVEL ELECTRICAL
REMOVAL PLANS

Sheet Number:

E302



1 Lobby Level Lighting Plan
1/8" = 1'-0"



2 Lobby Level Power & Systems Plan
1/8" = 1'-0"

DRAWING NOTES:

1. CONNECT TO EXISTING CIRCUIT SALVAGED FROM REMOVALS. EXTEND WIRING AND CONDUIT AS NECESSARY.

GENERAL NOTES:

A. CONNECT ALL EMERGENCY LIGHTS AND EXIT SIGNS TO CLOSEST UNSWITCHED LIGHTING CIRCUIT IN AREA.

DRAWING NOTES:

1. CONNECT TO EXISTING CIRCUIT SALVAGED FROM REMOVALS. EXTEND WIRING AND CONDUIT AS NECESSARY.
2. PROVIDE 120V/1PH, 20A ELECTRICAL CONNECTION TO SINK MOTION CONTROLS WITH (2) #12 & (1) #12G IN 3/4"C WIRING.
3. PROVIDE 20A/1P BREAKER IN SPACE OF EXISTING ELECTRICAL PANEL.
4. PROVIDE NEW HANDICAP BUTTON. CONNECT TO EXISTING CIRCUIT SALVAGED FROM REMOVALS.
5. PROVIDE NEW FIRE FIGHTER TELEPHONE. CONNECT TO EXISTING CIRCUIT SALVAGED FROM REMOVALS.
6. PROVIDE NEW EMERGENCY DOOR RELEASE PULL STATION. CONNECT TO EXISTING CIRCUIT SALVAGED FROM REMOVALS.
7. PROVIDE CATV OUTLET FOR NEW TELEVISION. EXTEND ALL WIRING AS NECESSARY.
8. PROVIDE NEW DATA OUTLET. EXTEND ALL LOW VOLTAGE WIRING AS NECESSARY.

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Architect:
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MEP Engineer:
Engineered Solutions
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Project:

ADDITIONS AND RENOVATIONS TO
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1	Addendum #1	12.04.2024

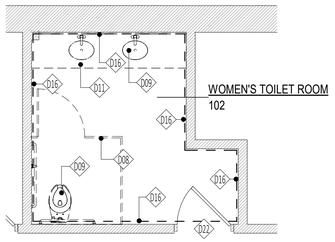
Drawn By:	MS
Scale:	As Noted
Date:	12/04/2024
Job No:	2430

Sheet Title:

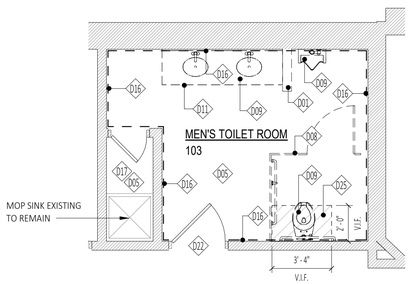
LOBBY LEVEL ELECTRICAL PLANS

Sheet Number:

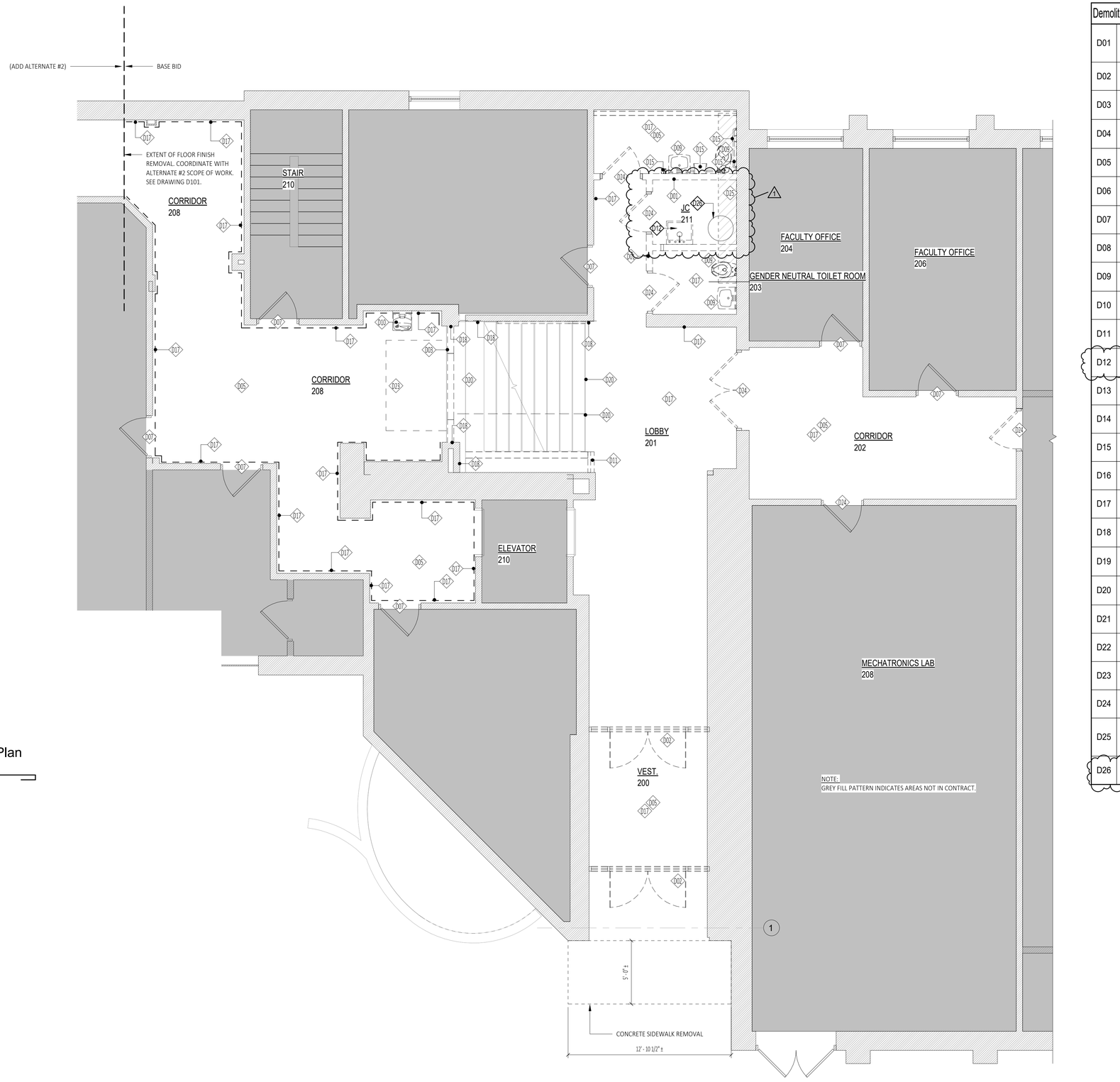
E303



3 D102 Alternate #1 - Enlarged Demolition Plan
Women's Toilet Room
SCALE: 1/4" = 1'-0"



2 D102 Alternate #1 - Enlarged Demolition Plan
Men's Toilet Room
SCALE: 1/4" = 1'-0"



1 D102 Second Floor (Grade Level) Demolition Plan
SCALE: 1/4" = 1'-0"

Demolition Floor Plan Legend

D01	REMOVE EXISTING WALL IN ITS ENTIRETY AS INDICATED BY DASHED LINES. ALL COMPONENTS WITHIN THE WALL SHALL BE MOVED AS TO COORDINATE WITH THE OVERALL SCOPE OF WORK
D02	REMOVE EXISTING STOREFRONT SYSTEM IN ITS ENTIRETY, PREP OPENING FOR THE WORK.
D03	REMOVE EXISTING WALL IN IT'S ENTIRETY. BULK HEAD TO REMAIN. COORDINATE WITH REFLECTED CEILING PLAN.
D04	EXISTING WALL TO REMAIN. REMOVE SHEETROCK DOWN TO EXPOSED FRAMING. PREP WALL FOR NEW FINISH.
D05	REMOVE FLOOR FINISH DOWN TO EXISTING SUBFLOOR, PREP TO RECEIVE SCHEDULED FINISH
D06	PORTION OF EXISTING STAIRS TO BE DEMOLISHED. PREP EXTENT OF EXISTING STAIR FOR NEW FINISH, COORDINATE WITH THE WORK.
D07	ENTIRE DOOR FRAME TO BE PAINTED WITH SCHEDULED FINISH
D08	REMOVE EXISITNG TOILET STALLS AND BATHROOM ACCESSORIES IN THEIR ENTIRETY.
D09	REMOVE EXISTING PLUMBING FIXTURE IN ITS ENTIRETY. CAP PIPING BACK TO SOURCE. SEE PLUMBING DRAWINGS.
D10	REMOVE EXISTING DRINKING FOUNTAIN. SEE PLUMBING DRAWINGS.
D11	REMOVE EXISTING CASEWORK IN ITS ENTIRETY. G.C .TO COORDINATE WITH OWNER ON ITEMS TO BE SALVAGED.
D12	EXISTING SINK TO BE REMOVED. SEE PLUMBING DRAWINGS.
D13	REMOVE ALL CEILING TILES AS INDICATED ON THE DRAWINGS. SEE ELECTRICAL DRAWINGS.
D14	EXISTING FIRE SPRINKLERS TO REMAIN. SEE FIRE PROTECTION DRAWINGS.
D15	REMOVE EXISTING GRAB BARS, PAPER TOWEL, TOILET PAPER, AND SOAP DISPENSERS.
D16	REMOVE WALL TILE AND GYPSUM BOARD IN IT'S ENTIRETY.
D17	REMOVE WALL BASE IN IT'S ENTIRETY. SEE LOCATIONS DESIGNATED ON THE PLAN.
D18	REMOVE WOOD WALL PANELING AND WOOD RAILING. PATCH WALL AS NEEDED TO PREP FOR FINISH.
D19	REMOVE CEILING TILES, LIGHTING, AND GRID AS INDICATED ON THE DRAWINGS. SEE ELECTRICAL DRAWINGS.
D20	REMOVE DAMAGED FLOOR FINISH AND TREAD WITH NOSING ON STAIRS. PREP AND REPAIR CONCRETE STEP AS REQUIRED TO RECIEVE SCHEDULED FINISH.
D21	REMOVE LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS.
D22	REMOVE AUTOMATIC DOOR OPENER HARDWARE. SEE ELECTRICAL DRAWINGS.
D23	REMOVE EXISTING METAL WALK OFF SURFACE.
D24	REMOVE EXISTING DOOR IN IT'S ENTIRETY.
D25	REMOVE/TRENCH CONCRETE SLAB AS REQUIRED FOR THE WORK AND COORDINATED WITH PLUMBING. EXTENT/DIMENSIONS ARE DIAGRAMATIC IN NATURE, G.C. TO REMOVE PER THE WORK. SEE "TRENCH INFILL
D26	EXISTING WATER HEATER TO BE RELOCATED. SEE PLUMBING DRAWINGS.

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INTERIOR RENOVATION TO:
SUNY SCCC CST BUILDING LOBBY AND BATHROOM RENOVATIONS
78 Washington Ave Schenectady, NY 12305

BID SET | RFB 2024-65

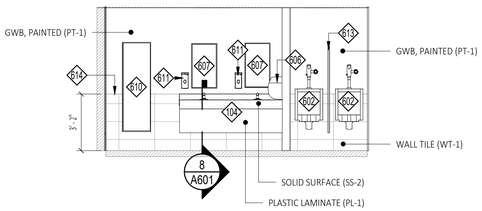
No.	REVISION #	DATE:
1	Addendum #1	12/04/2024

Drawn By:	C2 Architecture
Scale:	As Noted
Date:	11/05/2024
Job No:	2430

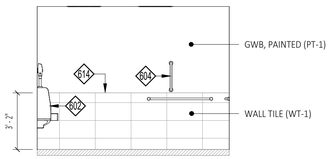
Sheet Title:
ENLARGED DEMOLITION PLANS

Sheet Number:
D102

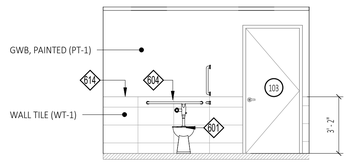
PLOT DATE: 12/4/2024 3:53:19 PM



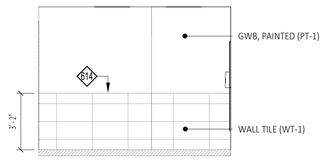
17 / A103 Interior Elevation - Men's Toilet Room 103 (North)
SCALE: 1/4" = 1'-0"



18 / A103 Interior Elevation - Men's Toilet Room 103 (East)
SCALE: 1/4" = 1'-0"

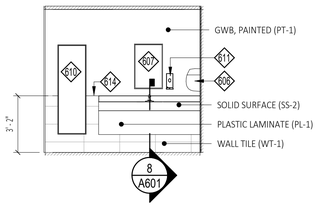


19 / A103 Interior Elevation - Men's Toilet Room 103 (South)
SCALE: 1/4" = 1'-0"

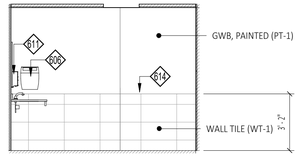


20 / A103 Interior Elevation - Men's Toilet Room 103 (West)
SCALE: 1/4" = 1'-0"

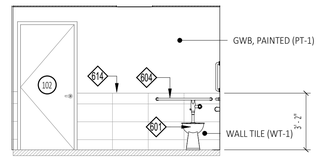
Enlarged Floor Plan Keynote Legend	
601	ANSI A117.1 COMPLIANT FLOOR MOUNTED FLUSH TANK TOILET. SEE PLUMBING DRAWINGS.
602	ANSI A117.1 COMPLIANT URINAL. SEE PLUMBING DRAWINGS.
603	WALL MOUNTED SOLID SURFACE COUNTERTOP WITH INTEGRAL SINK. SEE PLUMBING DRAWINGS.
604	ANSI A117.1 COMPLIANT STAINLESS STEEL GRAB BARS. PROVIDE BLOCKING IN WALL AS REQUIRED FOR ALL WALL MOUNTED ACCESSORIES.
605	WALL MOUNTED TOILET PAPER DISPENSER. PROVIDE BLOCKING IN WALL AS REQUIRED.
606	WALL MOUNTED PAPER TOWEL DISPENSER. PROVIDE BLOCKING IN WALL AS REQUIRED.
607	WALL MOUNTED MIRROR. PROVIDE BLOCKING IN WALL AS REQUIRED.
608	TOILET ROOM STALL PARTITONS. PROVIDE SOLID BLOCKING IN WALL AS REQUIRED.
609	WALL MOUNTED SINK. SEE PLUMBING DRAWINGS.
610	WALL MOUNTED FULL LENGTH MIRROR. PROVIDE BLOCKING IN WALL AS REQUIRED.
611	WALL MOUNTED SOAP DISPENSER. PROVIDE BLOCKING AS REQUIRED.
612	EXISTING CONCRETE SLABS CUT AND FILL: ALL CONCRETE SLABS ARE BY G.C. WITH MINIMUM WIDTH DIMENSION OF 2'-0", LENGTH AS SHOWN ON DRAWINGS. COORDINATE FINAL LOCATION WITH PLUMBING CONTRACTOR. FILL WITH 3,000 PSI CONCRETE TO DEPTH TO MATCH EXISTING SLAB (V.I.F) NOTE: THE G.C. SHALL VERFIY ALL EXISTING SLAB UTILITIES IN AREA OF PROPOSED SLAB CUTS.
613	WALL MOUNTED URINAL PARTITION. PROVIDE BLOCKING AS REQUIRED.
614	TRIM PIECE, TYP. (TS-2). SEE FINISH SCHEDULE.



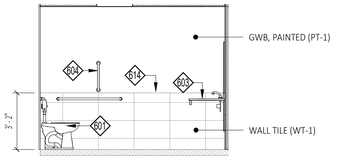
13 / A103 Interior Elevation - Women's Toilet Room (102) North
SCALE: 1/4" = 1'-0"



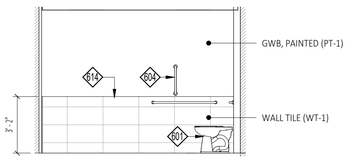
16 / A103 Interior Elevation - Women's Toilet Room 102 (East)
SCALE: 1/4" = 1'-0"



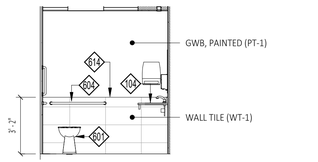
15 / A103 Interior Elevation - Women's Toilet Room 102 (South)
SCALE: 1/4" = 1'-0"



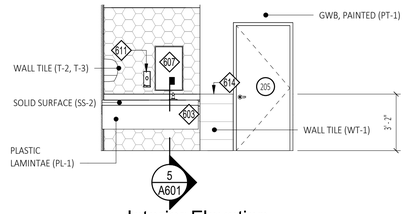
14 / A103 Interior Elevation - Women's Toilet Room 102 (West)
SCALE: 1/4" = 1'-0"



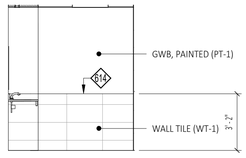
9 / A103 Interior Elevation - Toilet Room 205 (North)
SCALE: 1/4" = 1'-0"



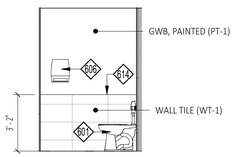
10 / A103 Interior Elevation - Toilet Room 205 (East)
SCALE: 1/4" = 1'-0"



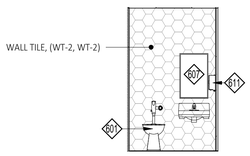
11 / A103 Interior Elevation - Toilet Room 205 (South)
SCALE: 1/4" = 1'-0"



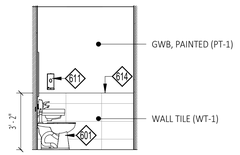
12 / A103 Interior Elevation - Toilet Room 205 (West)
SCALE: 1/4" = 1'-0"



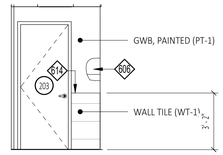
6 / A103 Interior Elevation Toilet 209 (North)
SCALE: 1/4" = 1'-0"



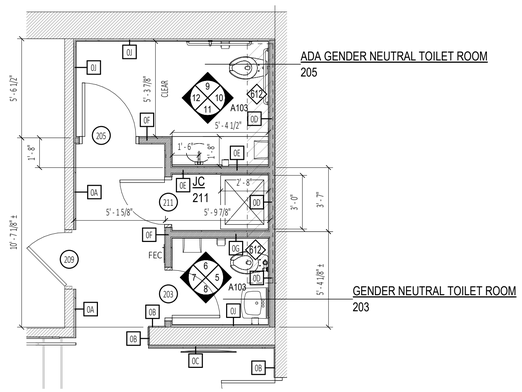
5 / A103 Interior Elevation Toilet 209 (East)
SCALE: 1/4" = 1'-0"



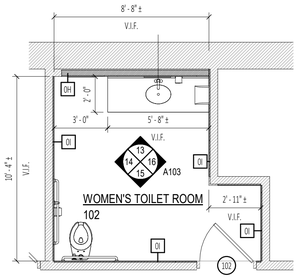
8 / A103 Interior Elevation Toilet 209 (South)
SCALE: 1/4" = 1'-0"



7 / A103 Interior Elevation Toilet 209 (West)
SCALE: 1/4" = 1'-0"

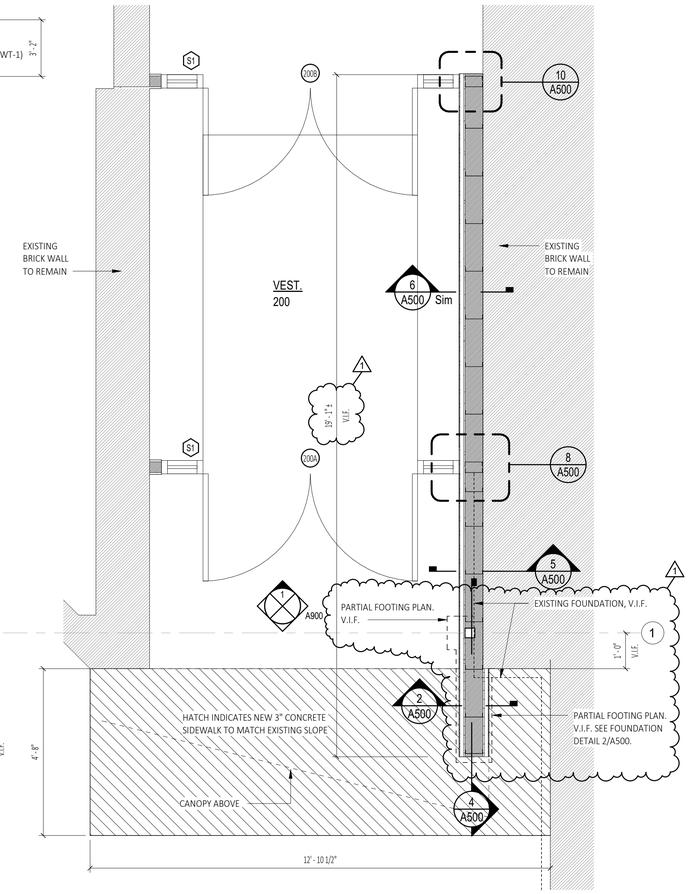


4 / A103 Enlarged Plan
SCALE: 1/4" = 1'-0"



2 / A103 Alternate #1 - Enlarged Plan Women's Toilet Room
SCALE: 1/4" = 1'-0"

1 / A103 Alternate #1 - Enlarged Plan Men's Toilet Room
SCALE: 1/4" = 1'-0"



3 / A103 Lobby Floor Plan (Floor 2) - Callout 1
SCALE: 1/2" = 1'-0"

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Architect:
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Schenectady, NY 12302

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Sheet Title:
ENLARGED PLANS

Sheet Number:
A103

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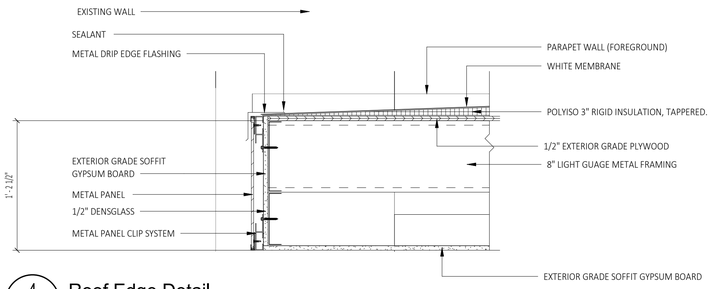
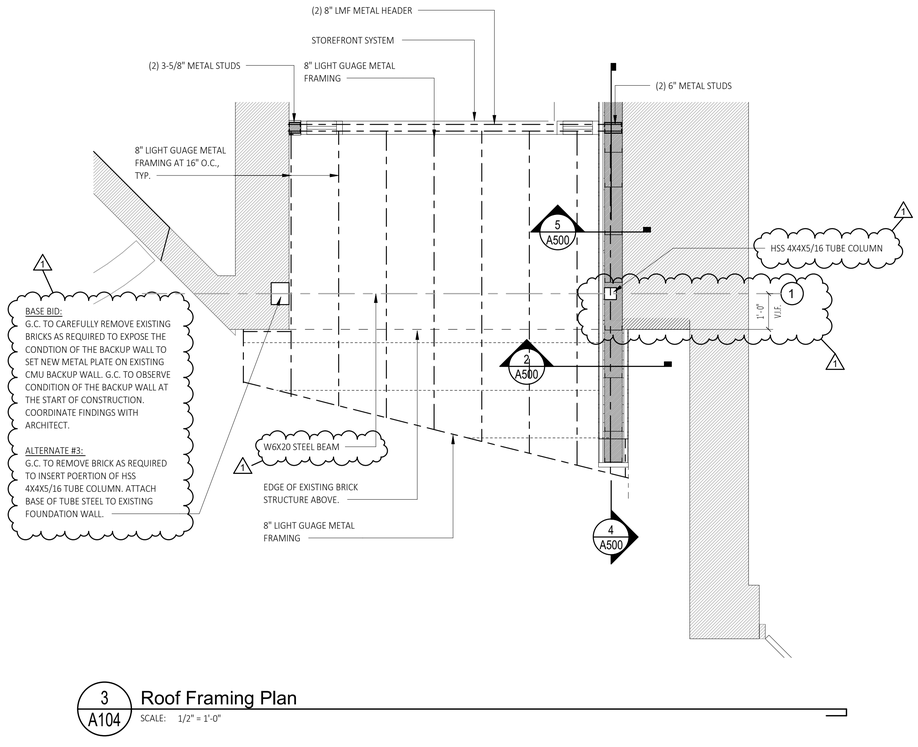


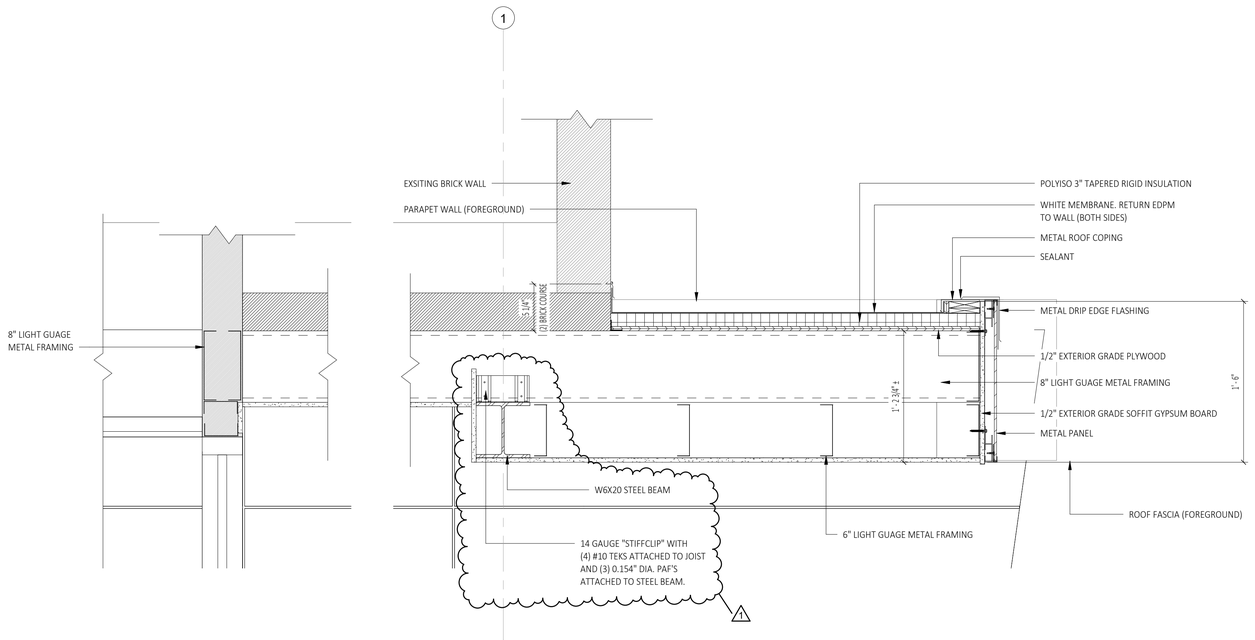
4 A104 Roof Edge Detail

SCALE: 1 1/2" = 1'-0"



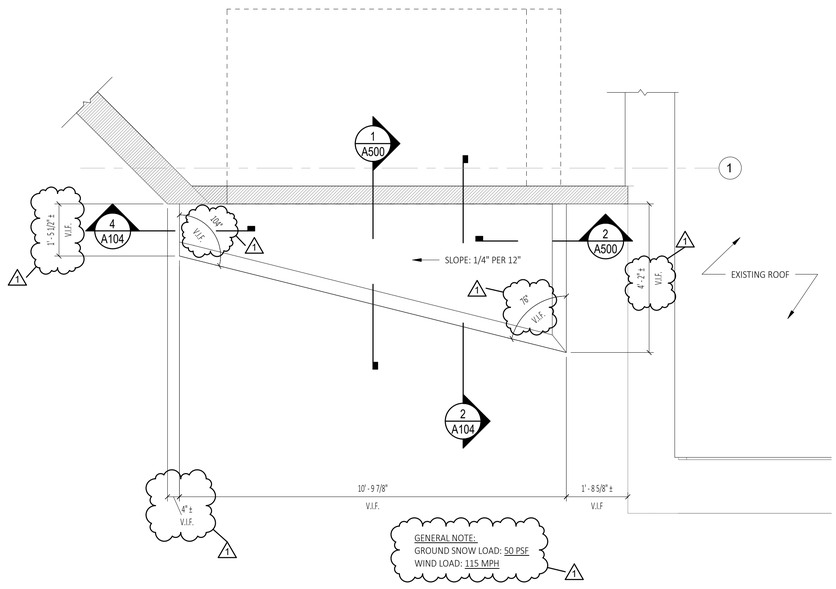
3 A104 Roof Framing Plan

SCALE: 1/2" = 1'-0"



2 A104 Roof Section Detail

SCALE: 1 1/2" = 1'-0"



1 A104 Canopy Roof Plan

SCALE: 1/2" = 1'-0"

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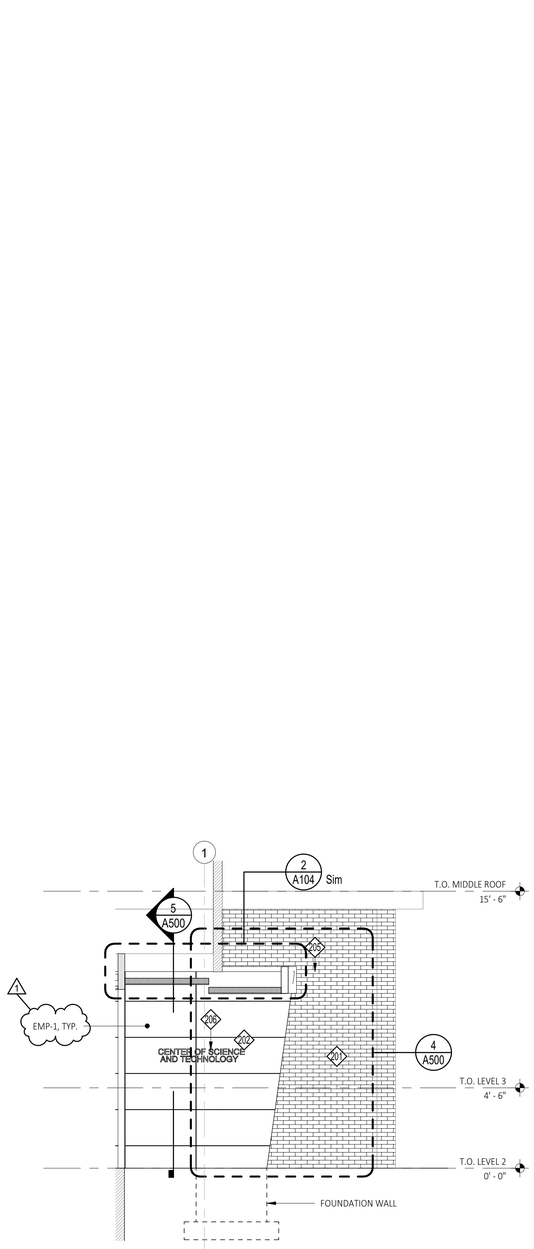
Sheet Title:
ROOF PLAN AND DETAILS

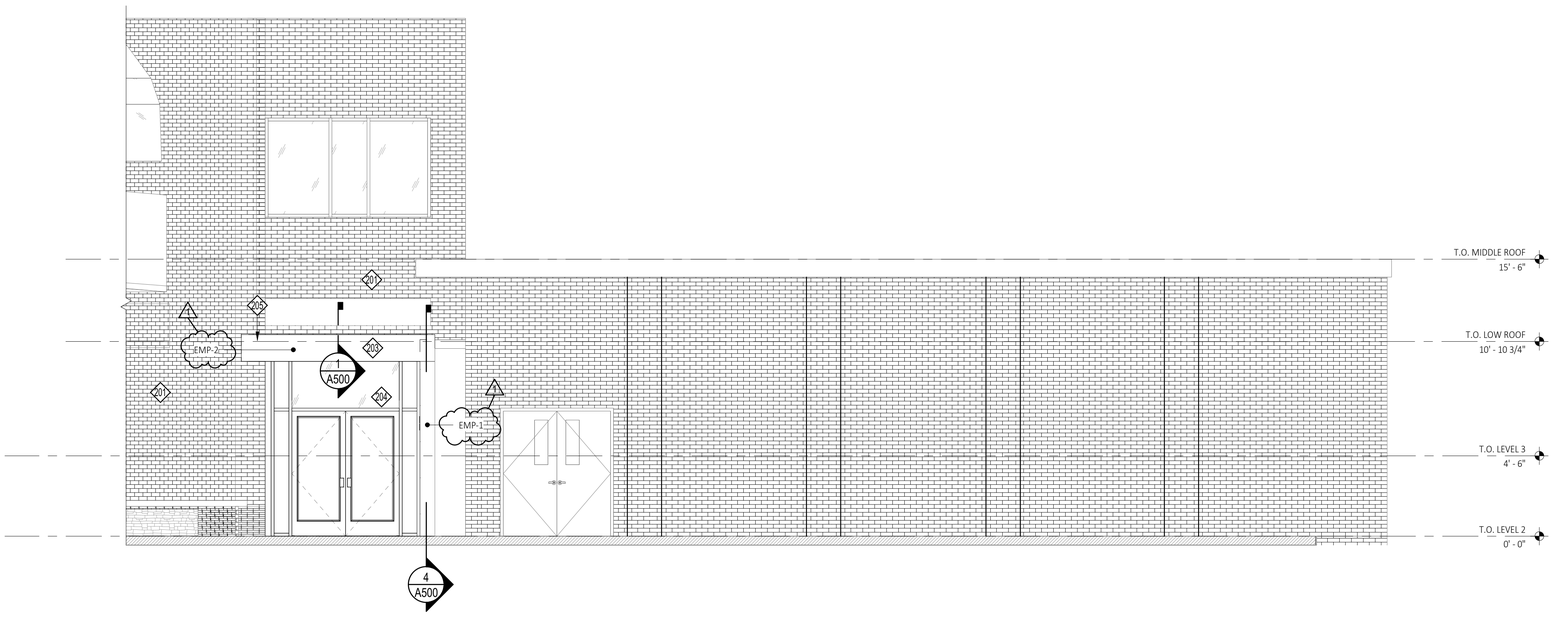
Sheet Number:
A104

PLOT DATE: 12/4/2024 3:56:28 PM

Exterior Elevation Keynote Legend	
201	EXISING BRICK TO REMAIN.
202	METAL WALL PANEL SYSTEM (EMP-1) SEE DETAILS.
203	METAL WALL PANEL (EMP-2) SEE DETAILS.
204	STOREFRONT SYSTEM, REFERENCE G-SERIES FOR ADDITIONAL INFORMATION
205	CANOPY ROOF SYSTEM. SEE DETAILS.
206	METAL SIGNAGE.



2 A200 Exterior Elevation - Main Entry (East)
SCALE: 1/4" = 1'-0"



1 A200 Exterior Elevation - Main Entry (North)
SCALE: 1/4" = 1'-0"

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BUILDING ELEVATIONS

Sheet Number:
A200

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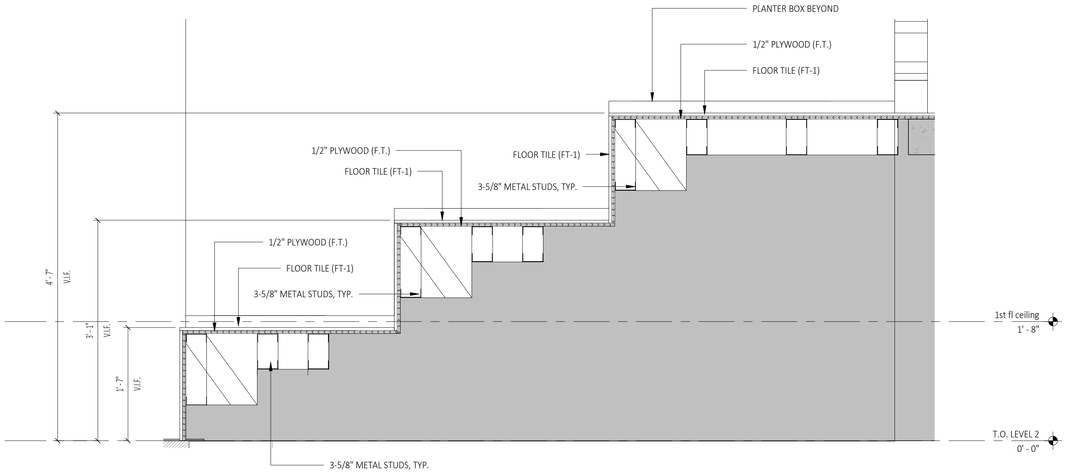
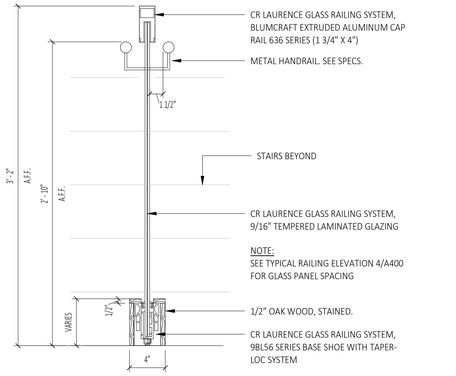
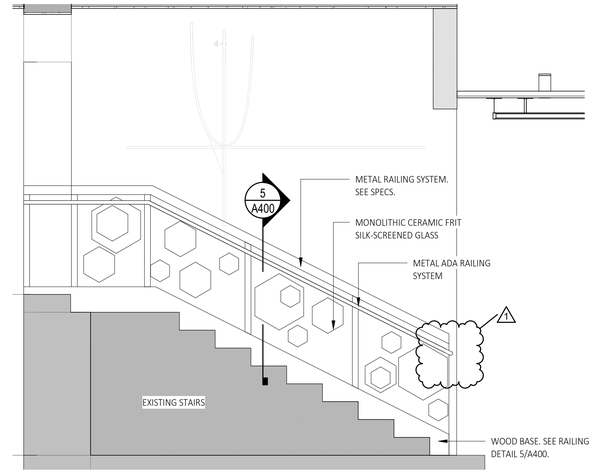


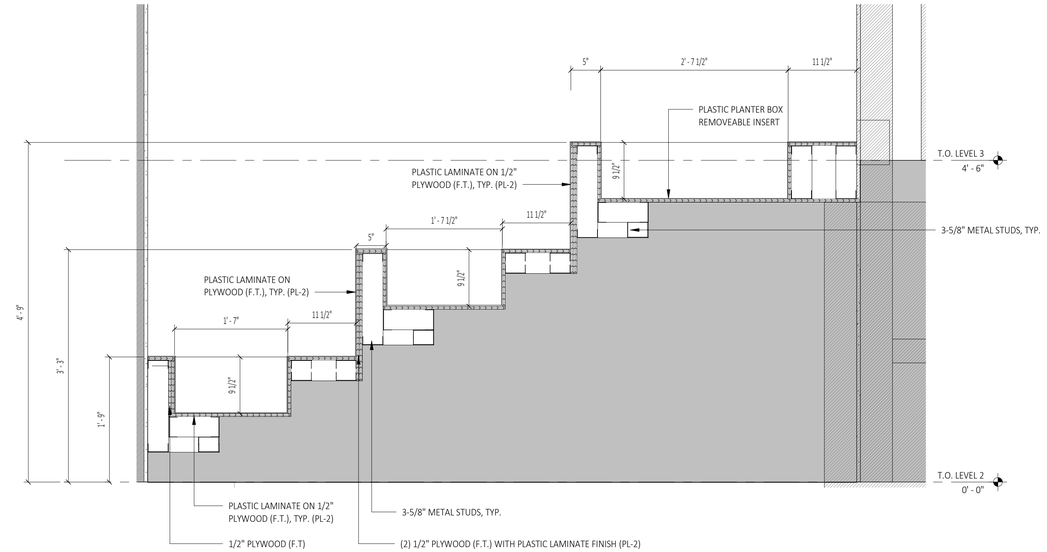
6 A400 **Stepped Seating Detail**
SCALE: 1" = 1'-0"



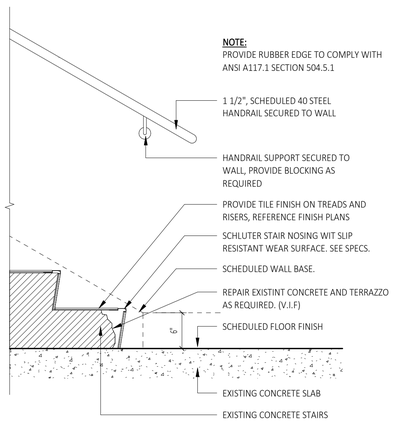
5 A400 **Railing Detail**
SCALE: 1 1/2" = 1'-0"



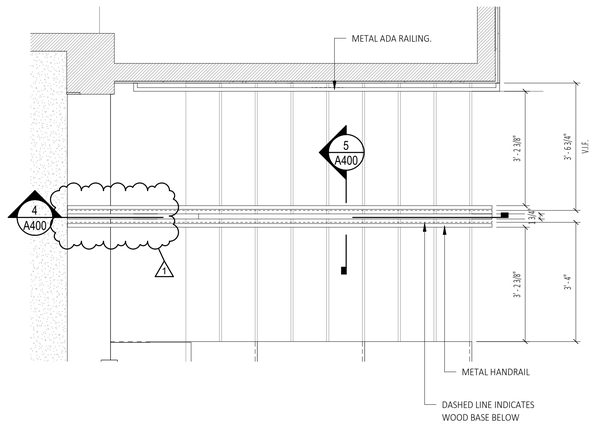
4 A400 **Stair Section**
SCALE: 1/2" = 1'-0"



3 A400 **Planter Box Section**
SCALE: 1" = 1'-0"



2 A400 **Stair Base Enlargement**
SCALE: 1" = 1'-0"



1 A400 **Enlarged Plan - Lobby Stair**
SCALE: 1/2" = 1'-0"

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Sheet Title:
STAIR SECTIONS

Sheet Number:
A400

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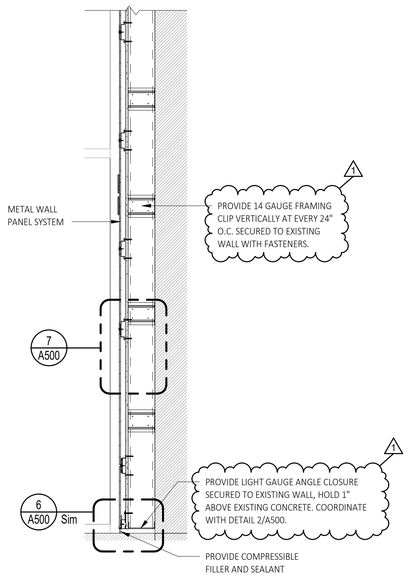
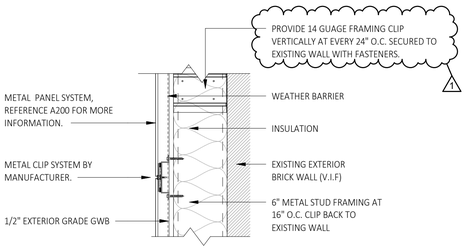


5 A500 Wall Section at Exterior Existing Wall

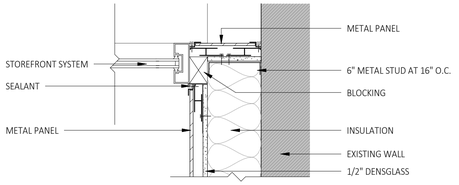
SCALE: 3/4" = 1'-0"



NOTE:
REFERENCE OMEGA PANEL SPECIFICATIONS. FOR ADDITIONAL INFORMATION SEE MANUFACTURER'S DETAILS.

7 A500 Exterior Wall Assembly at Existing Wall

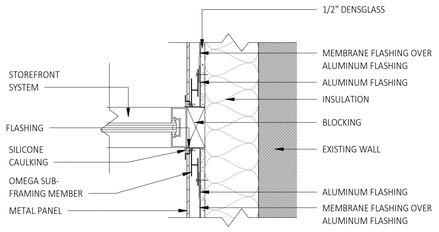
SCALE: 1 1/2" = 1'-0"



NOTE:
REFERENCE OMEGA PANEL SPECIFCATIONS. FOR ADDITIONAL INFORMATION SEE MANUFACTURER'S DETAILS.

10 A500 Storefront Jamb Detail at Interior

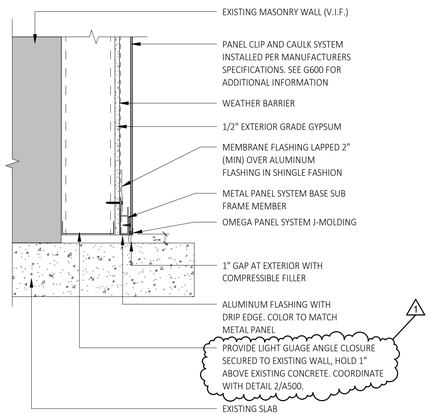
SCALE: 1 1/2" = 1'-0"



NOTE:
REFERENCE OMEGA PANEL SPECIFICATIONS. FOR ADDITIONAL INFORMATION SEE MANUFACTURER'S DETAILS.

8 A500 Storefront Jamb Detail

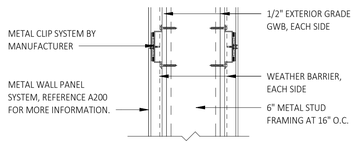
SCALE: 1 1/2" = 1'-0"



NOTE:
REFERENCE OMEGA PANEL SPECIFICATIONS. FOR ADDITIONAL INFORMATION SEE MANUFACTURER'S DETAILS.

6 A500 Typical Base Detail at Omega Panel (Framed Wall)

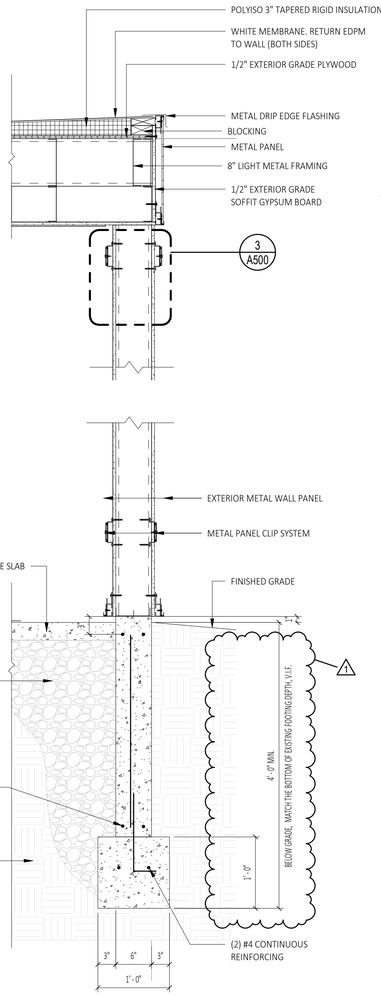
SCALE: 1 1/2" = 1'-0"



NOTE:
REFERENCE OMEGA PANEL SPECIFICATIONS. FOR ADDITIONAL INFORMATION SEE MANUFACTURER'S DETAILS.

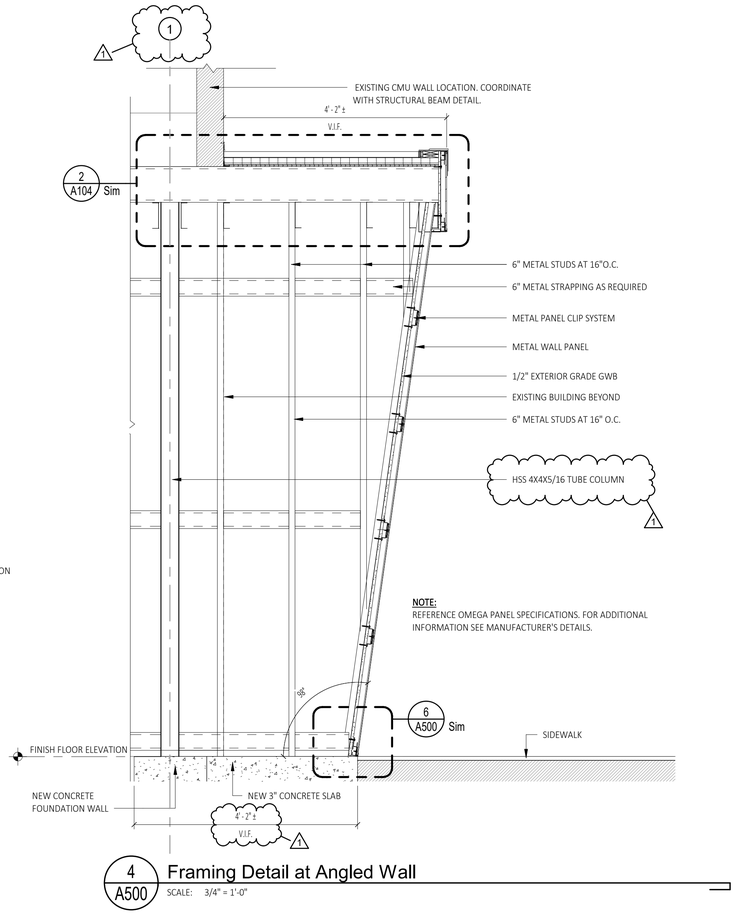
3 A500 Exterior Wall Assembly

SCALE: 1 1/2" = 1'-0"



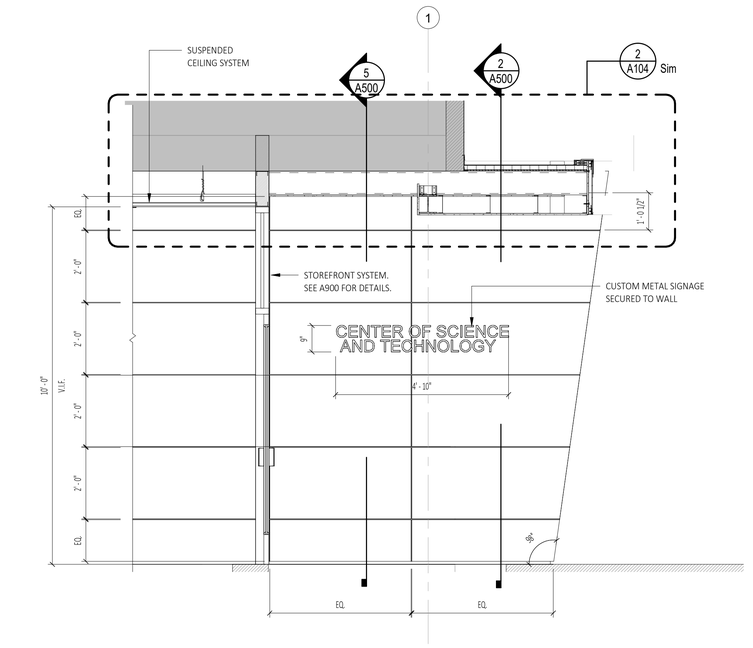
2 A500 Wall Section at Exterior

SCALE: 1" = 1'-0"



4 A500 Framing Detail at Angled Wall

SCALE: 3/4" = 1'-0"



1 A500 Roof Section at Storefront

SCALE: 1/2" = 1'-0"

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Job No:	2430

Sheet Title:
EXTERIOR DETAILS

Sheet Number:
A500

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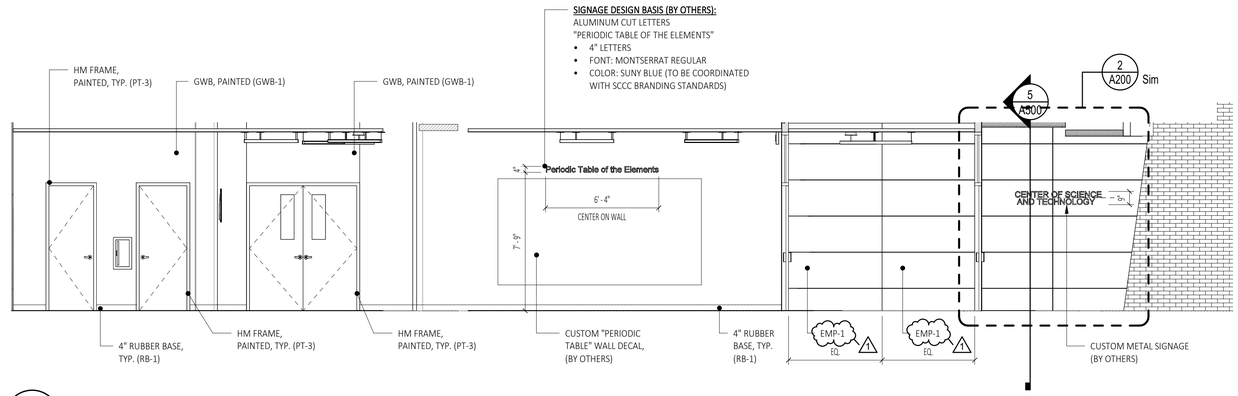
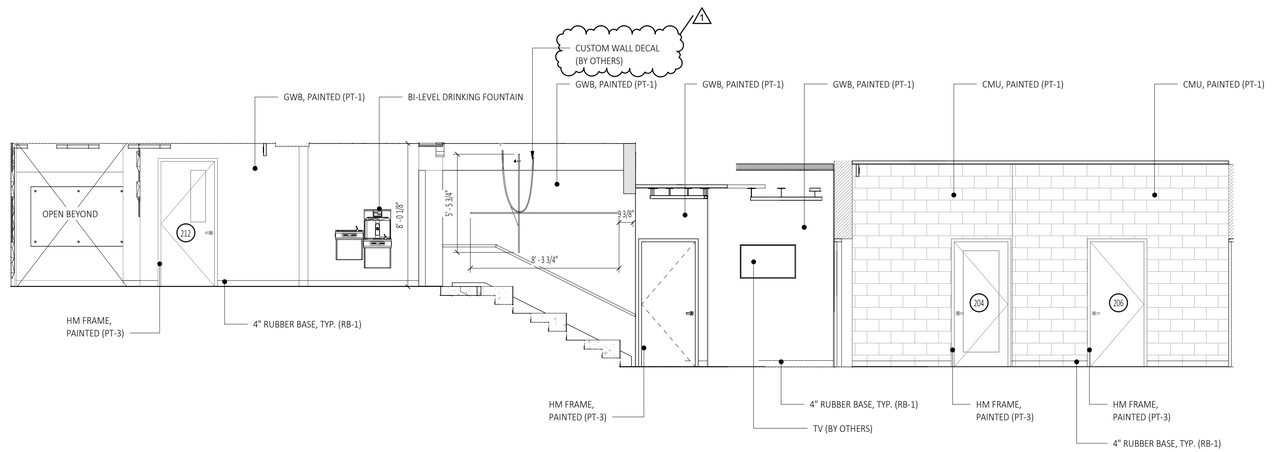


2 A701 Lobby Elevation - East

SCALE: 1/4" = 1'-0"



1 A701 Staircase Elevation - North

SCALE: 1/4" = 1'-0"

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Job No:	2430

Sheet Title:

INTERIOR ELEVATIONS

Sheet Number:

A701

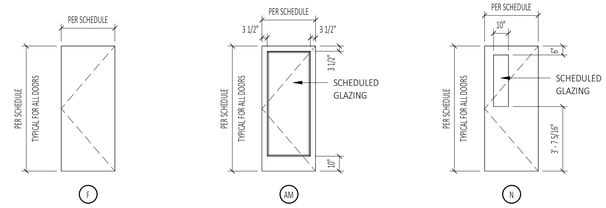
PLOT DATE: 12/4/2024 3:44:15 PM

Door Schedule

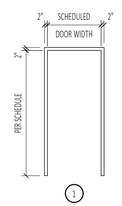
Door No.	Location		DOOR							FRAME						Hardware	Rating	Comments	Door No.
			Width	Height	Thk.	Material	Finish	Type	Glazing	Material	Finish	Type	Head	Jamb	Sill				
102	WOMEN'S TOILET ROOM		3' - 0"	7' - 0"	0' - 1 3/4"	-	-	F	-	-	-	1	EXIST	EXIST	EXIST	01		EXISTING DOOR TO REMAIN.	102
103	MEN'S TOILET ROOM		3' - 0"	7' - 0"	0' - 1 3/4"	-	-	F	-	-	-	1	EXIST	EXIST	EXIST	02		EXISITNG DOOR TO REMAIN.	103
200A	VESTIBULE	(2)	3' - 0"	7' - 0"	0' - 1 3/4"	AL/GL	ANNOD.	AM	TEMP		-	-	-	-	-	03			200A
200B	VESTIBULE	(2)	3' - 0"	7' - 0"	0' - 1 3/4"	AL/GL	ANNOD.	AM	TEMP		-	-	H2	-	-	04			200B
201	LOBBY	(2)	3' - 0"	7' - 0"	0' - 1 3/4"	WD	STAIN	N	TEMP	HM	PT-3	1	H1	J1	-	05	45 MNUTE		201
203	GENDER NEUTRAL TOILET ROOM		2' - 8"	7' - 0"	0' - 1 3/4"	WD	STAIN	F	-	HM	PT-3	1	H1	J2	-	06			203
204	FACULTY OFFICE		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	TEMP	HM	PT-3	1	EXIST	EXIST	-	07	45 MINUTE	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	204
205	ADA GENDER NEUTRAL TOILET ROOM		3' - 0"	7' - 0"	0' - 1 3/4"	WD	STAIN	F		HM	PT-3	1	H1	J2	-	06			205
206	FACULTY OFFICE		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	-	HM	PT-3	1	EXIST	EXIST	-	07	45 MINUTE	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	206
207	LAB		3' - 0"	7' - 0"	0' - 1 3/4"	WD		N	TEMP	HM	PT-3	1	H1	J1	-	08	45 MINUTE		207
208	LAB		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	N	TEMP	HM	PT-3	1	EXIST	EXIST	EXIST	07	45 MINUTE	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	208
209	FACULTY OFFICE		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	-	HM	PT-3	1	EXIST	EXIST	11/A600	07	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	209
210	JANITORS CLOSET		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	-	HM	PT-3	1	EXIST	EXIST	EXIST	07	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	210
211	JANITORS CLOSET		2' - 6"	7' - 0"	0' - 1 3/4"	WD	STAIN	F	-	HM	PT-3	1	H1	J2	EXIST	09	-		211
212	STAIR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	N	TEMP	HM	PT-3	1	EXIST	EXIST	EXIST	07	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	212
213	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	N	TEMP	HM	PT-3	1	EXIST	EXIST	EXIST	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	213
214	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	N	TEMP	HM	PT-3	1	EXIST	EXIST	12/A600	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	214
215	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	N	TEMP	HM	PT-3	1	EXIST	EXIST	12/A600	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	215
216	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	N	TEMP	HM	PT-3	1	EXIST	EXIST	12/A600	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	216
217	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	-	HM	PT-3	1	EXIST	EXIST	12/A600	-		EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	217
218	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	-	HM	PT-3	1	EXIST	EXIST	12/A600	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	218
219	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	-	HM	PT-3	1	EXIST	EXIST	12/A600	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	219
220	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	-	HM	PT-3	1	EXIST	EXIST	12/A600	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	220
221	FACULTY OFFICE		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	N	TEMP	HM	PT-3	1	EXIST	EXIST	12/A600	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	221
235	CORRIDOR		3' - 0"	7' - 0"	0' - 1 3/4"	WD	-	F	-	HM	PT-3	1	EXIST	EXIST	EXIST	-	-	EXISITNG DOOR TO REMAIN. EXISTING DOOR FRAME TO BE PAINTED. SEE FINISH SCHEDULE.	235

1

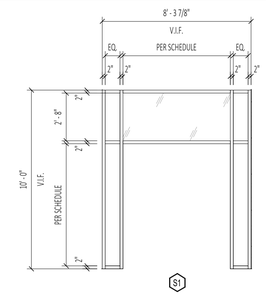
Door Types



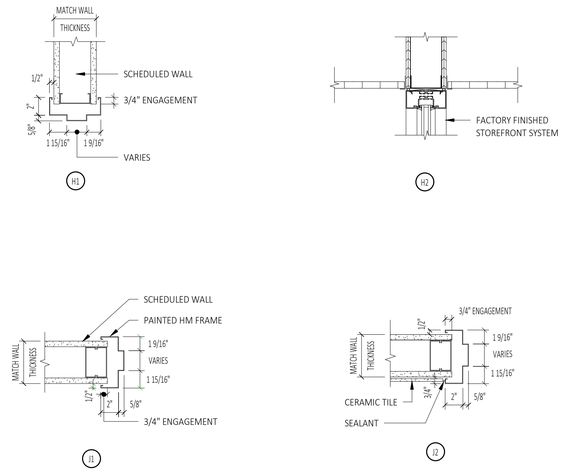
Frame Types



Storefront Schedule



Jamb and Head Details



C2 Design Group
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24 Airport Road
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Owner:
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78 Washington Ave
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Architect:
C2 Architecture
24 Airport Road
Schenectady, NY 12302

MEP Engineer:
Engineered Solutions
646 Plank Rd
Clifton Park, NY 12065

Stamp:

Project:

Interior Renovation to:

SUNY SCCC CST Building Lobby and Bathroom Renovations

78 Washington Ave Schenectady, NY 12305

Bid Set | RFB 2024-65

No.	REVISION #	DATE:
1	Addendum #1	12/04/2024

Drawn By:	C2 Architecture
Scale:	As Noted
Date:	11/05/2024
Job No:	2430
Sheet Title:	Schedules
Sheet Number:	A900

PLOT DATE: 12/4/2024 3:44:15 PM

SECTION 084113
ALUMINUM FRAMED ENTRANCES AND STOREFRONTS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Agreement, including General Conditions and Division 01 of the Project Manual, apply to work of this Section.

1.02 SUMMARY

A. This Section includes the following:
   1. Exterior aluminum-framed thermally broken storefront.
   2. Interior aluminum storefront framing.
   3. Manual swing aluminum entrance doors and door frame units.
   4. Engineering design of storefront systems.

B. Related specification sections include the following:
   1. Section 079200 - “Sealants” for installation of joint sealants installed with aluminum-framed systems and for sealants to the extent not specified in this Section.
   2. Section 087100 - “Door Hardware” for hardware to the extent not specified in the Section. Closers and panic devices are to be provided by single source for all locations throughout project.
   3. Section 088100 - “Glazing” for glazing requirements to the extent not specified in this Section.

1.03 STANDARDS

A. All work of this section shall conform to industry standards and/or manufacturer’s recommendations.

B. AA 45 "The Aluminum Association Designation System for Aluminum Finishes".

C. AAMA CW-10 - “Care and Handling of Architectural Aluminum from Shop to Site”.

D. AAMA 501.2 - “Quality Assurance and Diagnostic Water Leakage Field Check of Installed Storefronts, Curtain Walls, and Sloped Glazing Systems”.

E. AAMA 611 - “Voluntary Specification for Anodized Architectural Aluminum”.

F. AAMA 1503 - “Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Door and Glazed Wall Sections”.

G. AAMA 2605 - “Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix)”.

H. ANSI H35.2 "American National Standard Dimensional Tolerances for Aluminum Mill Products".

I. ASTM B221 "Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes".

J. ASTM E283 - “Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the

Specimen".

K. ASTM B633 "Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel".

1.04 SUBMITTALS

A. Pursuant to Section 013300 - Submittal Procedures.

B. Pursuant to Section 016000 - Product Requirements.

C. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of product indicated.

D. Shop Drawings: Prepared by or under the supervision of a qualified professional engineer detailing fabrication and assembly of aluminum-framed systems. Include plans, elevations, sections, details, and attachments to other work.
   1. Include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
   2. Include details of provisions for system expansion and contraction and for draining moisture occurring within the system to the exterior.
   3. For entrances, include hardware schedule and indicate operating hardware types, functions, quantities, and locations.

E. Samples for Verification: For each type of exposed finish required, in manufacturer's standard sizes.

F. Installer Qualifications.

G. Maintenance Data: For aluminum-framed systems to include in maintenance manuals.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.

B. Engineering Responsibility: Prepare data for aluminum-framed systems, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in systems similar to those indicated for this Project.

C. Product Options: Information on Drawings and in Specifications establishes requirements for systems' aesthetic effects and performance characteristics. 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. Performance characteristics are indicated by criteria subject to verification by one or more methods including pre-construction testing, field testing, and in-service performance

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Pursuant to manufacturers published instructions.

B. Protect against moisture exposure and damage.

C. Protect against any damage. Handle to avoid racking and excessive or improperly applied loads.

1.07 PERFORMANCE REQUIREMENTS

A. Design and size components to withstand the following load requirements without damage or permanent set, when tested in accordance with ASTM E 330, using loads 1.5 times the design wind loads and 10 second duration of maximum load.
   1. Design Wind Loads: Comply with requirements of IBC - International Building Code (latest edition).
   2. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.

B. Movement: Accommodate movement between storefront and perimeter framing and deflection of lintel, without damage to components or deterioration of seals.

C. Air Infiltration: Limit air infiltration through assembly to 0.06 cu ft/min/sq. ft of wall area, measured at a reference differential pressure across assembly of 6.24 psf as measured in accordance with ASTM E 283.

D. Condensation Resistance Factor: CRF of not less than 57 (exterior frames) when measured in accordance with AAMA 1503.1.

E. Thermal Resistance of Exterior Framing: Thermal transmittance U value not more than 0.38 BTU/HR/FT2/°F when measured in accordance with AAMA 1503.1.

F. Water Leakage: None, when measured in accordance with ASTM E 331 with a test pressure difference of 12 lbs./sq. ft.

G. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.

H. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170° F over a 12-hour period without causing detrimental effect to system components, anchorages, and other building elements.

1.08 WARRANTY

A. Special Warranty: Manufacturer’s standard form in which manufacturer agrees to repair or replace components of aluminum-framed systems that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to the following:
      a. Structural failures including, but not limited to, excessive deflection.
      b. Noise or vibration caused by thermal movements.
      c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
      d. Adhesive or cohesive sealant failures.
      e. Water leakage through fixed glazing and framing areas.
      f. Failure of operating components.
   2. Warranty Period: Five Years (Class I Anodized) from date of Substantial Completion.

B. Special Finish Warranty: Manufacturer’s standard form in which manufacturer agrees to repair or replace components on which finishes do not comply with requirements or that fail in materials or workmanship within specified warranty period. Warranty does not include normal weathering.
   1. Warranty Period: 20 years from date of Substantial Completion.

1.09 DELIVERY, STORAGE, AND HANDLING

A. Handle products of this section in accordance with AAMA CW-10.

B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. EFCO Corporation (EFCO).
   2. Kawneer, An Arconic Company.
   3. Special-Lite Inc
   4. Architect Approved Equivalent.

2.02 MATERIALS

A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
   1. Sheet and Plate: ASTM B 209
   2. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221
   3. Extruded Structural Pipe and Tubes: ASTM B 429
   4. Welding Rods and Bare Electrodes: AWS A5.10/A5.10M

B. Steel Reinforcement: Manufacturer’s standard zinc-rich, corrosion-resistant primer, complying with SSPC-PS Guide No. 12.00; applied immediately after surface preparation and pretreatment. Select surface preparation methods according to recommendations in SSPC-SP COM and prepare surfaces according to applicable SSPC standard.
   1. Structural Shapes, Plates, and Bars: ASTM A 36/A 36M
   2. Cold-Rolled Sheet and Strip: ASTM A 1008/A 1008M
   3. Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011M

2.03 FRAMING SYSTEMS 2.03 FRAMING SYSTEMS

A. Products:
   1. EFCO; XTherm Series 406 (T) exterior and Series 402 (NT) interior.
   2. Kawneer; Trifab VersaGlaze 601T Thermal Break (exterior) and Trifab® VersaGlaze 451 (interior).
   3. Special-Lite Inc., SL-600TB Thermally broken frame and SL450.
   4. Architect Approved Equivalent.

B. Framing Members: Manufacturer’s standard extruded-aluminum framing members, minimum wall thickness of 0.080” and reinforced as required to support imposed loads.
   1. Construction: Thermally Broken Frame for exterior units only.
   2. Glazing System: Retained mechanically with gaskets on four sides inside glazed.
   3. Glazing Plane:
      a. Exterior 6" system: Front Set System.
      b. Interior 4 1/2" system: Center Set System.
   4. Depth of Frame: 6" (exterior) and 4-1/2" (Interior).
   5. Face of Frame: 2".

C. Brackets and Reinforcements: Manufacturer’s standard high-strength aluminum with

non-staining, non-ferrous shims for aligning system components.

D. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, non-staining, non-bleeding fasteners and accessories compatible with adjacent materials.
   1. Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.
   2. Reinforce members as required to receive fastener threads.
   3. Use exposed fasteners with countersunk Phillips screw heads to install hardware only, finished to match framing system.

E. Concrete and Masonry Inserts: Hot-dip galvanized cast-iron, malleable-iron, or steel inserts, complying with ASTM A 123/A 123M or ASTM A 153/A 153M.

F. Concealed Flashing: Manufacturer's standard corrosion-resistant, non-staining, non-bleeding flashing compatible with adjacent materials.

G. Framing System Gaskets and Sealants: Manufacturer's standard, recommended by manufacturer for joint type.

H. NOTE: Door 200A shall receive a center mullion. Refer also to specification section 087100, Door Hardware for coordination.

2.04 GLAZING SYSTEMS

A. Glazing: As specified in Division 08 Section "Glazing".

B. Glazing Gaskets: Manufacturer's standard compression types; replaceable, molded or extruded, of profile and hardness required to maintain watertight seal.

C. Spacers and Setting Blocks: Manufacturer's standard elastomeric type.

D. Bond-Breaker Tape: Manufacturer's standard TFE-fluorocarbon or polyethylene material to which sealants will not develop adhesion.

2.05 ENTRANCE DOOR SYSTEM

A. Products:
   1. EFCO; D518 Heavy Duty Entrance Door.
   2. Kawneer; AA 425 Thermal Entrance.
   3. Special-Lite Inc., SL-15 Wide Stile Monumental Door.
   4. Architect Approved Equivalent.

B. Entrance Doors: manufacturer's standard glazed entrance doors for manual-swing operation.
   1. Door Construction: 2 1/4-inch overall thickness, with minimum 0.125-inch thick, extruded aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated, and fillet welded or that incorporate concealed tie rods.
   2. Door Design: Wide stile; 4 1/4-inch nominal width and 10" bottom rail.
   3. Glazing Stops and Gaskets: Square, snap-on, extruded-aluminum stops and preformed gaskets.
      a. Provide non-removable glazing stops on outside of door.
   4. Provide an integral ½-inch diameter wire tube in doors to receive electrified locksets, panic bars, mortised electric locksets, or electric strikes in the inactive leaf of pairs of doors to accommodate wiring associated with power transfer hinges, knuckles, and electrified

hardware within the door.

2.06 ENTRANCE DOOR HARDWARE

A. Entrance Door Hardware: Door hardware other than that furnished by this Section, as specified in Specification Section 087100 - “Door Hardware” and in hardware sets included in the Door and Hardware Schedule.

B. Weather Stripping: Manufacturer’s standard replaceable components.
   1. Compression Type: Made of ASTM D 2000, molded neoprene, or ASTM D 2287, molded PVC.
   2. Sliding Type: AAMA 701, made of wool, polypropylene, or nylon woven pile with nylon-fabric or aluminum-strip backing.

C. Weather Sweeps: Manufacturer’s standard exterior-door bottom sweep with concealed fasteners on mounting strip.

D. Silencers: BHMA A156.16, Grade 1.

2.07 ACCESSORY MATERIAL

A. Joint Sealants: For installation at perimeter of aluminum-framed systems, furnished and installed by Division 07 Section “Sealants”.

B. Bituminous Paint: Cold-applied, asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos; formulated for 30-mil thickness per coat.

2.08 FABRICATION

A. Form or extrude aluminum shapes before finishing.

B. Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.

C. Framing Members, General: Fabricate components that, when assembled, have the following characteristics:
   1. Profiles that are sharp, straight, and free of defects of deformations.
   2. Accurately fitted joints with ends coped or mitered.
   3. Means to drain water passing joints, condensation within framing members, and moisture migrating within the system to exterior.
   4. Physical and thermal isolation of glazing from framing members.
   5. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.
   6. Provisions for field replacement of glazing from exterior.
   7. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.

D. Mechanically Glazed Framing Members: Fabricate for flush glazing without projecting stops.

E. Storefront Framing: Fabricate components for assembly using screw-spline system.

F. Entrance Door Frames: Reinforce as required to support loads imposed by door operation and for installing entrance door hardware.
   1. At exterior doors, provide compression weather stripping at fixed stops.

2. At interior doors, provide silencers at stops to prevent metal-to-metal contact. Install three silencers on strike jamb of single-door frames and two silencers on head frames for pairs of doors.

G. Entrance Doors: Reinforce doors as required for installing entrance door hardware.
1. At pairs of exterior doors, provide sliding-type weather stripping retained in adjustable strip and mortised into door edge.
2. At exterior doors, provide weather sweeps applied to door bottoms.

H. Entrance Door Hardware Installation: Factory install entrance door hardware to the greatest extent possible. Cut, drill, and tap for factory-installed entrance door hardware before applying finishes.

I. Prepare doors to receive security systems hardware in accordance with final security systems shop drawings and templates provided by security systems hardware supplier.

J. After fabrication, clearly mark components to identify their locations in Project according to shop drawings.

2.09 FINISHES

A. Finish: Providing coverage on all exposed areas of aluminum components.
1. Manufacturer’s standard factory applied baked-on fluorocarbon-based (Kynar 500 thermoplastic enamel).
2. Architect shall select color from manufacturer’s standard range of colors

PART 3 EXECUTION

3.01 INSTALLATION

A. Erect level, square, plumb, and in alignment with other elements of the Work; and pursuant to manufacturer's published instructions.

B. Seal all joints watertight between framing and adjacent construction.

C. Apply isolating coating at a rate of at least 1.6 to 2.1 mils, dry film thickness, where aluminum contacts other metals, concrete, plaster, or other alkaline materials.
1. In contact with other metals: apply coating to other metal.
2. In contact with alkaline material: apply coating to aluminum.

D. Provide perimeter anchors of sufficient size, adequate material, and proper spacing to transmit all loads into building structure. Isolate carbon steel anchors from aluminum.

3.02 TOLERANCES

A. Maximum Variation from Plumb: 0.06 inches every 3 ft non-cumulative or 1/16 inches per 10 ft, whichever is less.

B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

3.03 ADJUSTING

A. Adjust operating hardware and sash for smooth operation.

3.04 CLEANING

A. Remove protective material from pre-finished aluminum surfaces.

B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

C. Remove excess sealant by method acceptable to sealant manufacturer.

3.05 PROTECTION

A. Protect exposed aluminum surfaces against any damage from subsequent construction activities and from any contaminants, including, but not limited to, concrete, mortar, plaster, lime, acid, paint, spray foam insulation and waterproofing materials.

B. Remove and replace all damaged materials.

END OF SECTION 084113

SECTION 087100
DOOR HARDWARE

Part 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes but not limited to the following:

1. Mechanical and/or electrical hardware.

B. Related Requirements

1. Division 01 Section “Closeout Procedures”
2. Division 06 Section “Rough Carpentry”.
3. Division 06 Section “Finish Carpentry”.
4. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.

C. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 101 - Life Safety Code.
5. State Building Codes, Local Amendments.

1.3 COORDINATION

A. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

B. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.

1.4 COORDINATION AND MEETINGS

A. Location: Conduct conferences on project site or other location as directed by the Architect/Owner.

B. Preinstallation Conference

1. Purpose of the Preinstallation conference is to:

a. Coordinate between trades, so all understand their responsibilities.
b. To instruct the installing contractors' personnel on the proper installation and adjustment of their respective products.

1. Hardware supplier is responsible for bringing the installation instructions to the meeting.

c. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
d. Review sequence of operation narratives for each unique access-controlled opening.
e. Review the requirements for local and state building codes and how they apply to doors, frames, and hardware.
1. Opening forces to follow DOJ's "2010 ADA Standards for accessible design".
f. Review any special applications.

2. Conference participants shall include but not limited to:

a. General Contractor.
b. Installer for doors, frames, and hardware.
c. Supplier Representative.
d. Owner and/or Owners Representative.
e. Construction Manager (if applicable).
f. Engineer and/or Engineers Consultant.

C. Keying Conference:

1. Incorporate conference decisions into keying schedule after reviewing door hardware keying system including, but not limited to, the following:

a. Flow of traffic and degree of security required.
b. Preliminary key system schematic diagram.
c. Requirements for key control system.
1. This is to include the number of keys per keyset.
2. Number of Master level keys.
3. Use of keyed construction cores.
d. Requirements for access control.
e. Address for delivery of keys.

2. Keying Conference participants shall include but not limited to:

a. Supplier Representative.
b. Owner and/or Owners Representative.
Engineer and/or Engineers Consultant

1.5 SUBMITTALS

A. Submittal Sequence to follow in this order and each are to be submitted under separate cover:
1. Door Hardware Schedule.
2. Hardware Product Data.
3. Samples.
4. Keying Schedule (Only after the keying meeting has taken place).
5. Closeout Submittals.

6. Submit door hardware schedule concurrent with submissions of Product Data, Samples, Riser Diagrams.

B. Information Submittals:

1. Qualification Data: Submit qualification data for the Installer and Supplier as defined under Quality Assurance of the Section.
2. Product Certifications:
   a. Certify that door hardware for use on each type and size of labeled fire-rated doors complies with listed fire-rated door assemblies.

C. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Use same scheduling sequence and use same door numbers as in the Contract Documents.

2. Content: Include the following information:
   a. Index of openings showing hardware set assignments.
   b. Identification number, location, hand, fire rating, size, degree of opening, and material of each door and frame.
   c. Locations of each door hardware set, cross-referenced to floor plans, and to door and frame schedule.
   d. Complete designations, including name and manufacturer, type, style, function, size, quantity, function, and finish of each door hardware product.
   e. Description of electrified door hardware sequences of operation and interfaces with other building control systems.
   f. Fastenings and other installation information.
   g. Explanation of abbreviations, symbols, and designations contained in door hardware schedule.
   h. Mounting locations for door hardware.
   i. Complete list of related door devices specified or supplied in other Sections for each door and frame.

D. Door Hardware Product Data: Prepared by or under the supervision of supplier.
1. Provide an index of products used grouped by manufacturer.
2. Each product shall be highlighted or marked accordingly.
   a. Do not include pages or products that are not applicable to the project. If they appear on the same page as a product being used, they shall be crossed out.

E. Samples:

1. Provide a finish sample for each exposed product in each finish specified, in manufacturer's standard size.

2. Tag Samples with full product description to coordinate samples with the door hardware schedule.

F. Keying Schedule: Only after a keying meeting with the owner has taken place, prepare a keying schedule detailing final instruction. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions.

1. The owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

G. Closeout Submittals:

1. After final approval is received from the architect, submit a Record Copy of the Door and Hardware Schedule with all the content as previously required.
   a. Submittal must be stamped “RECORD COPY”.
   b. The Record Copy will be given to the installer for the installation of the hardware.

2. Warranty Submittal: Warranty information to include the following information:
   a. Original factory order number.
   b. Date order was placed.
   c. Date of installation (approximately if unknown).

3. Operating and Maintenance Manuals:
   a. Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

H. Submittals that do not comply with all the requirements above will be rejected and will have to be resubmitted. Any project delays caused by incorrect/incomplete submittals will be the responsibility of the General Contractor and Hardware Supplier.

1.6 QUALITY ASSURANCE

A. Installer Qualifications:

1. A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

B. Door Hardware Supplier Qualifications:

1. Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project.
2. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity.

1.7 DELIVERY AND STORAGE

A. All hardware for field installation shall be delivered to the project site.

1. Any hardware that is required to be factory installed shall be delivered to the factory at the cost of the supplier of the doors or frames requiring the factory installation.

B. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site.

1. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

2. Storage area must be maintaining low humidity and a temperature between 60 to 90 degrees Fahrenheit.

C. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

D. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.8 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

D. Special Warranty Periods:

1. Locks, manual overhead door closers & mechanical exit hardware to have a minimum ten (10) years warranty.
2. All remaining hardware to be warranted as manufacturers standard warranty.

1.9 MAINTENANCE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

Part 2 – PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain each type of door hardware from single manufacturer.

1. Provide electrified door hardware from same manufacturer as mechanical door hardware unless otherwise indicated. Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.

2.2 PERFORMANCE REQUIREMENTS

A. Means of Egress Doors: Latches do not require more than 15 lbf to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.

B. Accessibility Requirements: For door hardware on doors in an accessible route, comply with the DOJ's "2010 ADA Standards for Accessible Design".

1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf.
2. Comply with the following maximum opening-force requirements:
   a. Interior, Hinged Doors: 5 lbf applied perpendicular to door.
   b. Sliding or Folding Doors: 5 lbf applied parallel to door at latch.
   c. Provide thresholds not more than 1/2 inch high.
   d. Adjust door closer sweep periods so that, from an open position of 90 degrees, the door will take at least 5 seconds to move to a position of 12 degrees from the latch.
   e. Adjust spring hinges so that, from an open position of 70 degrees, the door will take at least 1.5 seconds to move to the closed position.

2.3 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

B. For products furnished, but not installed, under this Section, Coordinating, purchasing, delivering, and scheduling remain requirements of this Section.

C. Equals: Requests for equals and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

D. Substitutions: Are not allowed unless the listed product(s) are no longer available.

2.4 HINGES

A. Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.

B. Hinge Size: Provide the size listed in the hardware sets.

C. Hinge Type: Provide the type listed in the hardware sets.

D. Manufacturers:

1. PBB Hinge Company (PBB). (Basis of Design).
2. Hager (HAG).
3. IVES (IVE).

2.5 CONTINUOUS HINGES

A. Geared continuous hinges shall meet ANSI/BHMA 156.26, Grade 1 requirements.

B. Manufactured out of 6063-T5 extruded aluminum, pinless, geared hinge leaves joined by a continuous extruded aluminum channel cap; with concealed, self-lubricating bearings.

C. Provide template-produced hinges for hinges installed on hollow-metal and aluminum doors and frames.

D. Manufacturers:

1. Select (SEL) SL11HD, SL24HD (Basis of Design).
2. PBB (PBB) CG31, CG31PN.
3. Ives (IV) 112, 224HD.

2.6 ELECTRIC STRIKES

A. Electric strikes shall meet or exceed ANSI/BHMA A156.31, Grade 1 requirements.

1. Shall be for use on non-rated or fire rated openings.
2. Strikes shall be tested to a minimum endurance of 1 million operating cycles.
3. Provide strikes with 12 or 24 VDC capability, fail-secure unless otherwise specified.
4. Where specified provide latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike.
5. Manufacturers:

a. HES (HES) (Basis of Design).
b. Security Door Controls (SDC).
c. Trine (TRI) (Basis of Design).

2.7 MECHANICAL LOCK AND LATCHING DEVICE

A. Cylindrical Locks:

1. Locks shall meet or exceed ANSI/BHMA A156.2 Series 4000 Operation Grade 1 requirements.
2. Locks are to be non-handed and fully field reversible.
3. Basket:
   a. 2-3/4” unless noted otherwise.
4. Lock trim and function as shown in hardware sets.
5. Latchbolt:
   a. Provide deadlocking latchbolt for all locks with a keyed function.
6. Manufacturers:

a. TownSteel (TST). CDC-1 Series (Basis of Design)
b. Falcon (FAL) T Series.
c. Best (BST) 9K Series.

2.8 EXIT DEVICES

A. Exit Devices and Auxiliary Items shall meet or exceed ANSI/BHMA A156.3, Grade 1 requirements.

B. Where function of the Exit Device requires a cylinder, provide a cylinder per the requirements of the Keying System.

C. Function and Trim design as listed in the Hardware Sets.

D. Provide mounting bracket or spacers as required for proper installation and operation.

E. Do not cut perimeter gasket to mount the Exit Device Strikes. Adjust template accordingly.

F. Manufacturers:

1. TownSteel 1000 (Basis of Design).
2. Von Duprin 98 Series.
3. Detex Apex Series.

2.9 CYLINDERS AND KEYING

A. Cylinders: Original manufacturer cylinders complying with the following:

1. Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver.
2. Meet or exceed ANSI/BHMA A156.5 Grade 1 requirements.
3. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
4. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
   a. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes. Stamped collars are not allowed.
5. Face finished to match lockset.
6. Core Type: SFIC.
   a. Permanent cores to be provided by owner.

B. Construction Keying:

1. Construction Master Keys: Provide temporary construction cylinders or permanent cylinders with feature that permits voiding of construction keys without cylinder removal.
   a. Provide 10 construction master keys.

C. Manufacturers:

1. Best (BE) (Basis of Design).

2.10 SURFACE CLOSERS

A. Surface Closers shall meet or exceed ANSI/BHMA A156.4, Grade 1 requirements.

B. Surface Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.

C. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use.

D. Provide Surface Closers complying the Americans with Disabilities Act, ANSI ICC/A117.1.

E. Provide accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation and operation.

F. Coordinate with Overhead Holder/Stop installation, provide special templates as required to avoid hardware conflicts.

G. Manufacturers:

1. TownSteel (TST). TDC-40 Series (Basis of Design).
2. Norton (NOR) 9500 Series.
3. LCN (LCN) 4040XP Series.

2.11 ARCHITECTURAL TRIM

A. Protective Plates:

1. Shall meet ANSI/BHMA A156.6 requirements.

2. Protective plates, fabricated from the following:
   a. Stainless Steel: 300 grade, 050-inch thick.

3. Kick Plates are to be installed on the push side of the door, unless stated otherwise.

4. Size: Fabricate protection plates not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates.

5. Provide Plates with countersunk screw holes.

6. Provide Plates are to be beveled on all 4 edges.

7. Height: 10”, unless noted otherwise.

8. Manufacturers:

   a. Trimco (TRM) (Basis of Design).
   b. Rockwood Products (ROC).
   c. Burns Manufacturing (BUR).

2.12 OVERHEAD STOPS

A. Stops and Holders shall meet or exceed ANSI/BHMA A156.8, Grade 1 requirements.

B. Provide units that are through bolted on all Wood Door applications.

C. Coordinate with door closer installation, special templating may be required.

D. Where stops and holders are specified, coordinate with door manufacturer to ensure proper application, installation, and operation.

E. Function as show in Hardware Sets.

F. Manufacturers:

   a. ABH (ABH) (Basis of Design).
   b. Glynn Johnson (GLY).
   c. Rixson (RIX).

2.13 SWEEPS, WEATHERSTRIP, AND GASKETING

A. Door Gasketing shall comply with ANSI/BHMA A156.22 requirements.

B. Provide with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.

C. Perimeter gasketing should not be cut around door hardware. Gaskets must maintain a continuous seal at top and vertical edges. Adjust hardware templates accordingly.

D. Manufacturers:

1. K.N. Crowder (KNC) (Basis of Design).
2. Hager Companies (HAG).
3. National Guard (NGP).

2.14 THRESHOLDS

A. Thresholds shall comply with ANSI/BHMA A156.21 requirements.

B. Thresholds shall be fabricated to full width of opening.

C. Provide non-slip surface.

D. Provide Stainless Steel Fasteners, type as detailed or required for specific floor conditions.

E. Manufacturers:

1. K.N.Crowder (KNC) (Basis of Design).
2. National Guard (NGP).
3. Pemko (PEM).

2.15 FABRICATION

A. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rating labels and as otherwise approved by Architect.

1. Manufacturer's identification is permitted on rim of lock cylinders only.

B. Base Metals: Produce door hardware units of base metal indicated, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18.

1. The use of Aluminum or Brass/Bronze based screws is not acceptable.

C. Fasteners: Provided by door hardware manufacturer, to comply with published installation instructions, templates and as test for fire rated applications.

1. The use of other fasteners will be rejected.

2. Provide Phillips flat-head screws with finished heads to match surface of door hardware unless otherwise indicated.

3. The use of Self-Drilling or Self-Tapping Screws is not permitted.

4. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners.

5. Gasket Fasteners: Provide Stainless Steel fasteners.

6. Threshold Fasteners:

   a. Concrete floors: Provide ¼-20 Stainless Steel Machine Screws and Expansion Shields.

7. Hinge Fasteners:

   a. Provide steel or stainless-steel screw to match hinge base material.
   b. Provide Machine Screws for metal door and frame applications.

2.16 FINISHES

A. Provide finishes complying with ANSI/BHMA A156.18 as indicated in door hardware schedule.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

Part 3 – EXECUTION

3.1 EXAMINATION

A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance of the Work.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware.

C. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Steel Doors and Frames: For surface-applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.

3.3 INSTALLATION

A. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.

B. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.

C. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI' s "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames".
2. Comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities".

D. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

E. Self-closing doors must close and latch completely from the fully opened position.

F. Lock Cylinders:

1. Install construction cylinders to secure building and areas during construction period.

G. Thresholds: Set thresholds in full bed of sealant, and caulk around all edges, complying with requirements specified in Section 079200 "Joint Sealants."

H. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

1. Do not notch or cut perimeter gasketing to install other surface-applied hardware.

I. Door Bottoms: Apply to bottom of door, forming seal with floor or threshold when door is closed.

J. Door Closers: Adjust closers to follow opening forces listed under this sections Performance Requirements.

1. Degree of opening: Template the closer to allow for the maximum degree of opening the conditions will allow.

2. Back Check valve shall be adjusted so it engages 10 degrees prior to the door reaching full swing.

3. Latch Speed valve shall be adjusted so the door latches properly without slamming.

K. Wall Bumpers or Stops: Note that blocking in drywall partitions where wall stops, or other wall mounted hardware is located is required.

3.4 FIELD QUALITY CONTROL

A. Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating, and adjusted.

Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

B. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.
   1. Submit documentation of incomplete items in PDF electronic format.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

   1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

3.6 CLEANING AND PROTECTION

A. Clean adjacent surfaces soiled by door hardware installation.

B. Clean operating items as necessary to restore proper function and finish.

C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

3.7 MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

3.8 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.9 DOOR HARDWARE SCHEDULE

A. The hardware sets represent the design intent and direction of the owner and architect. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process.

B. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required.

Hardware Sets:

Legend:
↯Electrified Opening

Hardware Group No. 01

For use on Door #(s):
102

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	BB81 4.5"		US26D	PBB
1	EA	ELECTRIC STRIKE	8300		630	HES
1	EA	PRIVACY LOCK W/ INDICATOR	SLM-76-S		630	TOW
1	EA	AUTO OPERATOR	HA9	↯	AL	REC
2	EA	ACTUATOR, TOUCH	8310-853T	↯	630	LCN
2	EA	MOUNT BOX	8310-867S			LCN
1	EA	KICK PLATE	K0050 10"		630	TRI
1	EA	WALL STOP	1270WX		630	TRI
3	EA	SILENCER	1229		GRY	TRI

THEORY OF OPERATION:
AUTO OPERATOR TO POWER ELECTRIC STRIKE.
THEORY OF OPERATION:
ACTUATOR EITHER SIDE ENERGIZES ELECTRIC STRIKE AND INITIATES AUTOMATIC OPERATION.

Hardware Group No. 02

For use on Door #(s):
103

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	BB81 4.5"		US26D	PBB
1	EA	PUSH PLATE	8200 4" X 16"		630	IVE
1	EA	PULL PLATE	8305 6" 4" X 16"		630	IVE
1	EA	AUTO OPERATOR	HA9	↯	AL	REC
2	EA	ACTUATOR, TOUCH	8310-853T	↯	630	LCN
2	EA	MOUNT BOX	8310-867S			LCN
1	EA	KICK PLATE	K0050 10"		630	TRI
1	EA	WALL STOP	1270WX		630	TRI
3	EA	SILENCER	1229		GRY	TRI

THEORY OF OPERATION:
ACTUATOR EITHER SIDE INITIATES AUTOMATIC OPERATION.

Hardware Group No. 03

For use on Door #(s):
200A

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONTINUOUS HINGE	SL11 HD		628	SEL
1	EA	CONTINUOUS HINGE	SL11 HD EPT		628	SEL
2	EA	POWER TRANSFER	EPT10	✓	689	VON
1	EA	KEYED REMOVABLE MULLION	MUL-7-CYL		600	TOW
1	EA	EXIT DEVICE	ED1100		630	TOW
1	EA	ELECTRIC PANIC HARDWARE	ELR-LM-RX-ED1100	✓	630	TOW
2	EA	RIM CYLINDER	TS1 ICR7		626	TOW
2	EA	SFIC PERMANENT CORE	BY OWNER		626	BES
2	EA	90 DEG OFFSET PULL	8190EZHD 10" STD		630-316	IVE
1	EA	SURFACE CLOSER	TDC40 SCUSH		689	TOW
1	EA	AUTO OPERATOR	HA9	✓	AL	REC
2	EA	ACTUATOR, TOUCH	8310-853T	✓	630	LCN
2	EA	MOUNT BOX	8310-867S			LCN
1	EA	GASKETING	BY DOOR AND FRAME MFR.			
2	EA	SWEEP	W-35-1		CLR	KNC
1	EA	THRESHOLD	CT-45		MIL	KNC
1	EA	CARD READER	EXISTING TO REMAIN	✓		
2	EA	DOOR CONTACT	BY SECURITY CONTRACTOR	✓	BLK	
1	EA	POWER SUPPLY	PS-101	✓		TOW
1			PROVIDE RISER AND POINT TO POINT DIAGRAMS			

THEORY OF OPERATION:
DOORS NORMALLY LOCKED FROM EXTERIOR. OUTSIDE ACTUATOR DISABLED.
VALID CREDENTIAL TO READER RETRACTS LATCH ON ACTIVE LEAF AND ENABLES OUTSIDE ACTAUATOR FOR AUTOMATIC OPERATION.
FROM VESTIBULE - ACTUATOR RETRACTS LATCH AND INITIATES AUTOMATIC OPERATION.
DURING OPEN HOURS LATCHES HELD RETRACTED IN THE DOGGED POSITION. BOTH ACTUATORS ENABLED FOR AUTOMATIC OPERATION.
FREE EGRESS AT ALL TIMES.

Hardware Group No. 04

For use on Door #(s):
200B

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	CONTINUOUS HINGE	SL11 HD		628	SEL
2	EA	DUMMY PUSH BAR	1000 SERIES		630	TOW
2	EA	90 DEG OFFSET PULL	8190EZHD 10" STD		630-316	IVE
1	EA	SURFACE CLOSER	TDC40 SCUSH		689	TOW
1	EA	AUTO OPERATOR	HA9	✓	AL	REC
2	EA	ACTUATOR, TOUCH	8310-853T	✓	630	LCN
2	EA	MOUNT BOX	8310-867S			LCN
1	EA	GASKETING	BY DOOR AND FRAME MFR.			

THEORY OF OPERATION:
BOTH ACTUATORS ALWAYS ENABLED FOR AUTOMATIC OPERATION.

Hardware Group No. 05

For use on Door #(s):
201

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONTINUOUS HINGE	SL24 HD		628	SEL
1	EA	CONTINUOUS HINGE	SL24 HD EPT		628	SEL
1	EA	POWER TRANSFER	EPT10	✓	689	VON
1	EA	FIRE EXIT DEVICE	EF1200-LBR	✓	630	TOW
1	EA	FIRE EXIT DEVICE	RX-ELR-EF1200-LBR	✓	630	TOW
2	EA	EXIT DEVICE TRIM	ED308R		626	TOW
2	EA	RIM CYLINDER	TS1 ICR7		626	TOW
2	EA	SFIC PERMANENT CORE	BY OWNER		626	BES
1	EA	SURFACE CLOSER	TDC40 CUSH		689	TOW
1	EA	SURFACE CLOSER	TDC40 EDA		689	TOW
1	EA	KICK PLATE	K0050 10"		630	TRI
1	EA	WALL STOP	1270WX		630	TRI
1	EA	GASKETING	W-66		BK	KNC
2	EA	MEETING STILE ASTRAGAL	W-5S		AL	KNC
1	EA	CARD READER	BY SECURITY CONTRACTOR	✓		

THEORY OF OPERATION:
DOORS NORMALLY LOCKED FROM LOBBY.
VALID CREDENTIAL TO READER RETRACTS LATCH ON ACTIVE LEAF.
FREE EGRESS AT ALL TIMES.

Hardware Group No. 06

For use on Door #(s):
203 205

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	BB81 4.5"	US26D	PBB
1	EA	PRIVACY LOCK W/ INDICATOR	SLM-76-S	630	TOW
1	EA	SURFACE CLOSER	TDC40	689	TOW
1	EA	KICK PLATE	K0050 10"	630	TRI
1	EA	WALL STOP	1270WX	630	TRI
3	EA	SILENCER	1229	GRY	TRI

Hardware Group No. 07

For use on Door #(s):
204 206 208 209 210 212

Provide each SGL door(s) with the following:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1		EXISTING DOOR, FRAME AND HARDWARE TO REMAIN		

Hardware Group No. 08

For use on Door #(s):
207

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	BB81 4.5" NRP		US26D	PBB
1	EA	ELECTRIC STRIKE	8300		630	HES
1	EA	STOREROOM LOCK	CDC-1-86-S		626	TOW
1	EA	SFIC PERMANENT CORE	BY OWNER		626	BES
1	EA	KICK PLATE	K0050 10"		630	TRI
1	EA	WALL STOP	1270WX		630	TRI
1	EA	GASKETING	W-66		BK	KNC
1	EA	CARD READER	BY SECURITY CONTRACTOR	↙		
1	EA	SMART PAC III	2005M3			HES
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR	↙		

Hardware Group No. 09

For use on Door #(s):
211

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	BB81 4.5" NRP	US26D	PBB
1	EA	STOREROOM LOCK	CDC-1-86-S	626	TOW
1	EA	SFIC PERMANENT CORE	BY OWNER	626	BES
1	EA	OVERHEAD STOP	4400	630	ABH
1	EA	KICK PLATE	K0050 10"	630	TRI
3	EA	SILENCER	1229	GRY	TRI

END OF SECTION