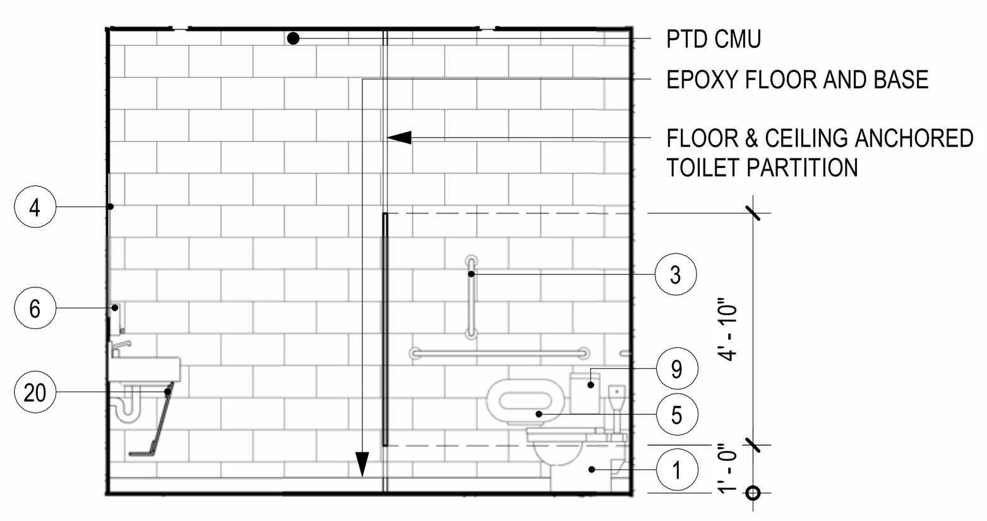
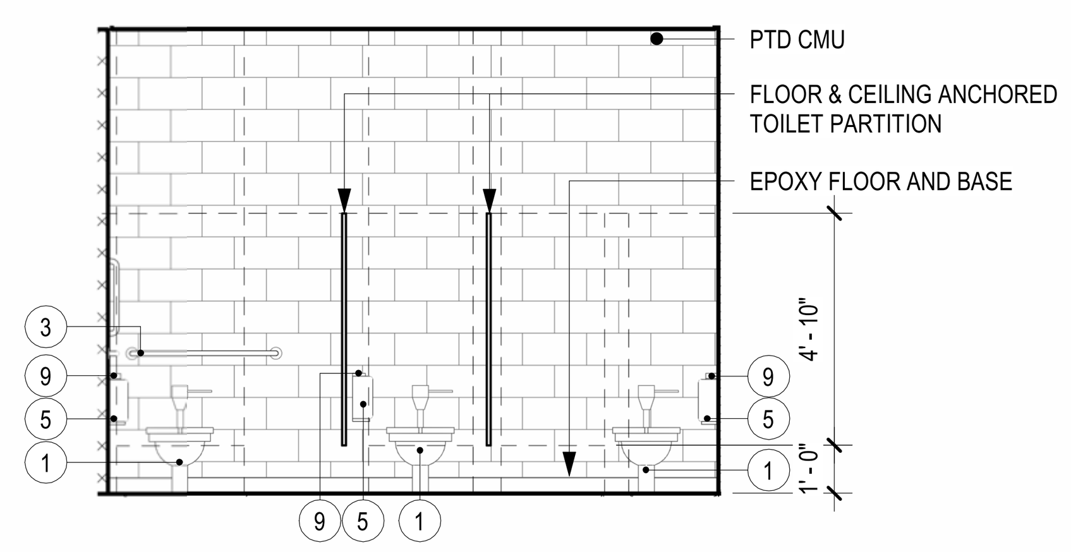
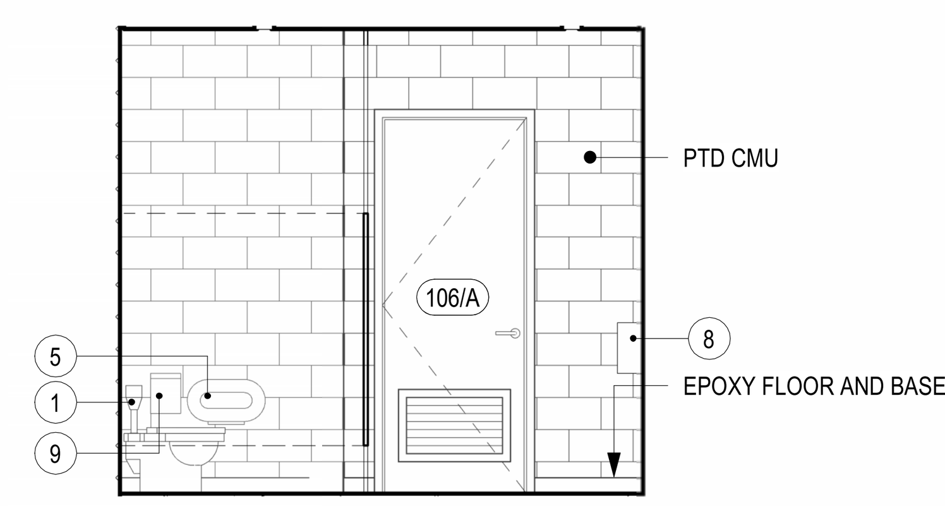


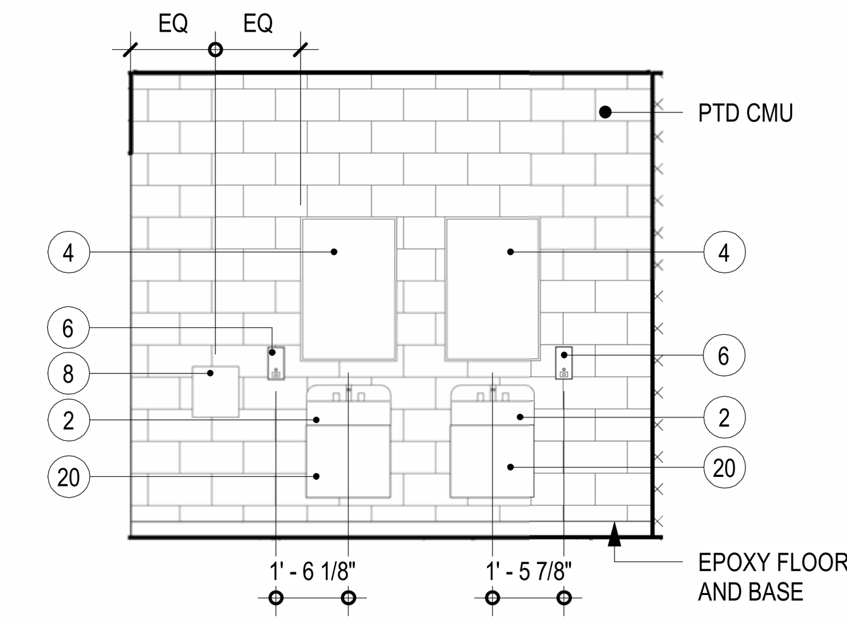
A1 WOMENS - RM 106 INT ELEV 4
1/4" = 1'-0"



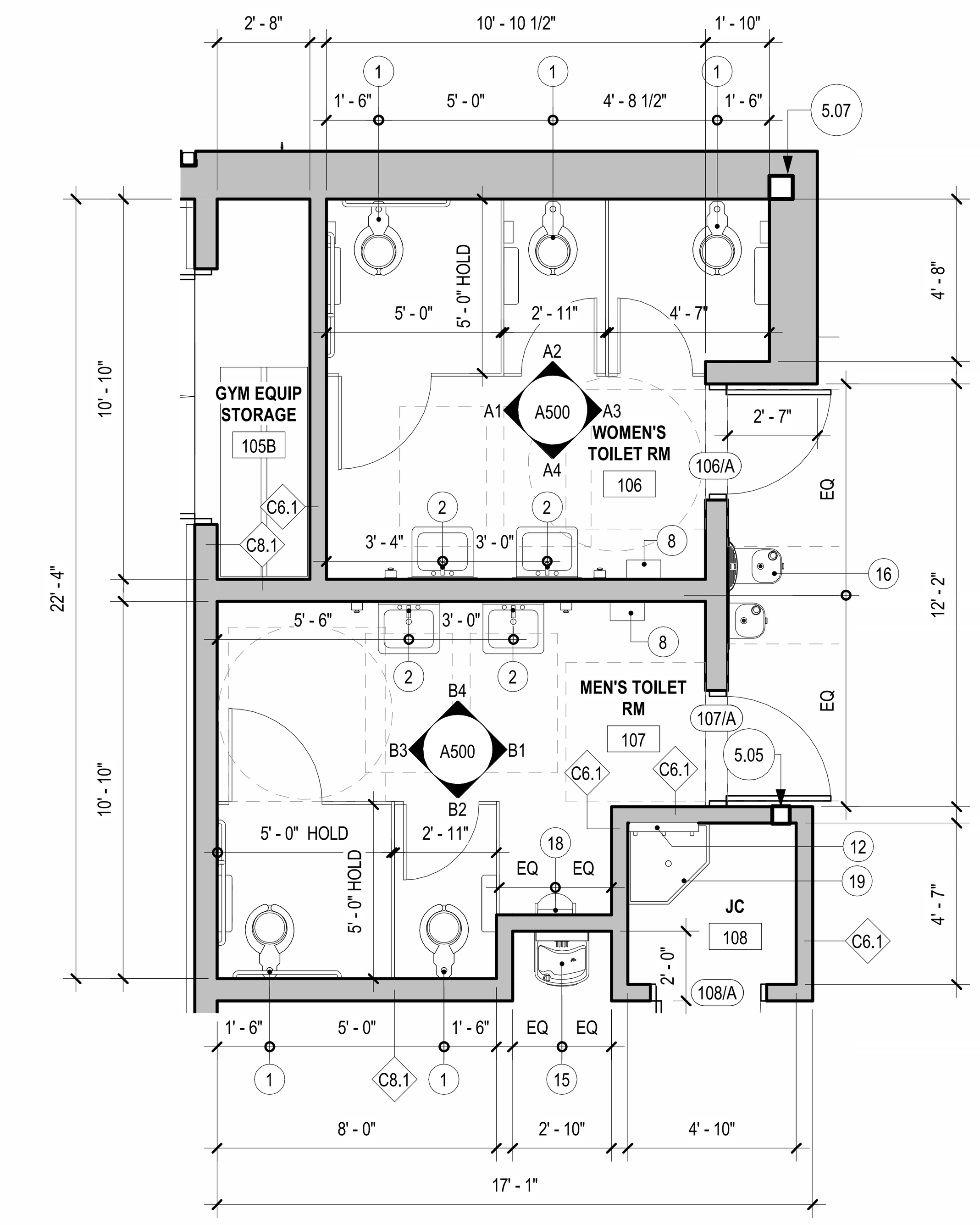
A2 WOMENS - RM 106 INT ELEV 3
1/4" = 1'-0"



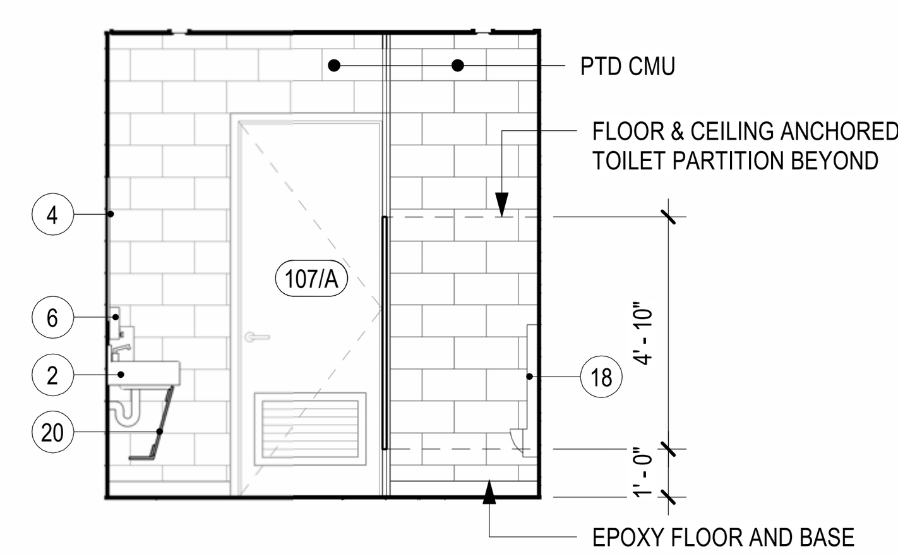
A3 WOMENS - RM 106 INT ELEV 2
1/4" = 1'-0"



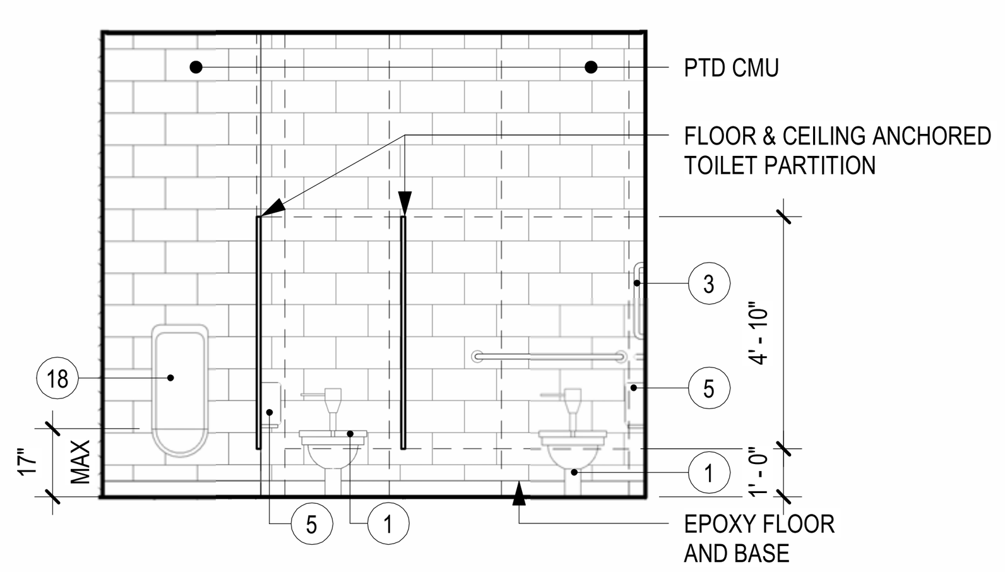
A4 WOMENS - RM 106 INT ELEV 1
1/4" = 1'-0"



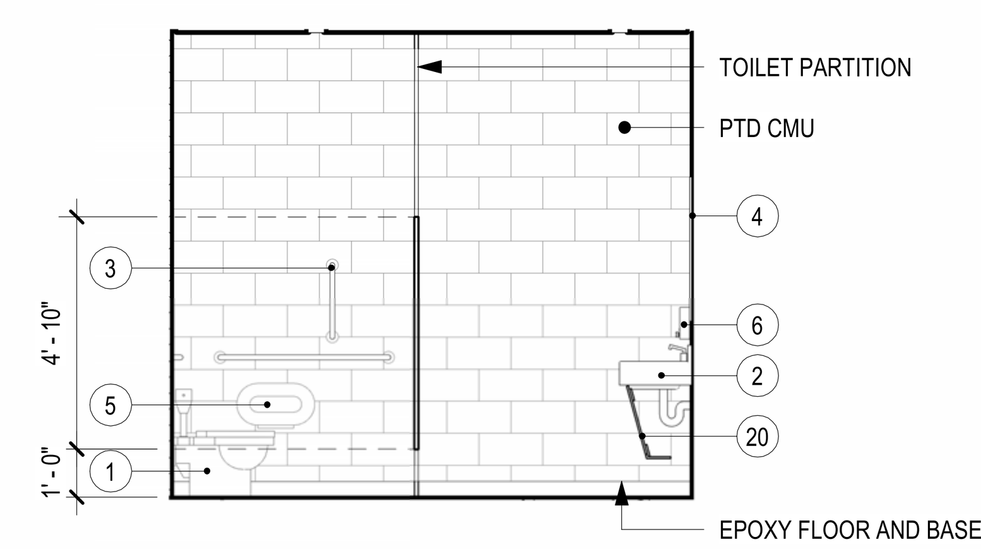
B5 ENLARGED TOILET ROOMS - RM 106 & 107
1/4" = 1'-0"



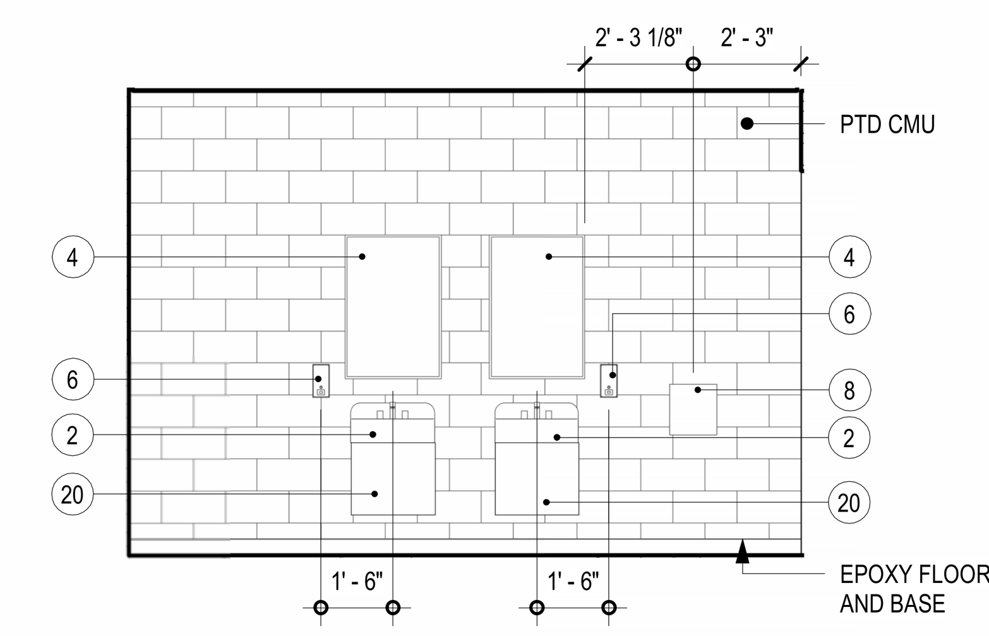
B1 MENS - RM 107 INT ELEV 4
1/4" = 1'-0"



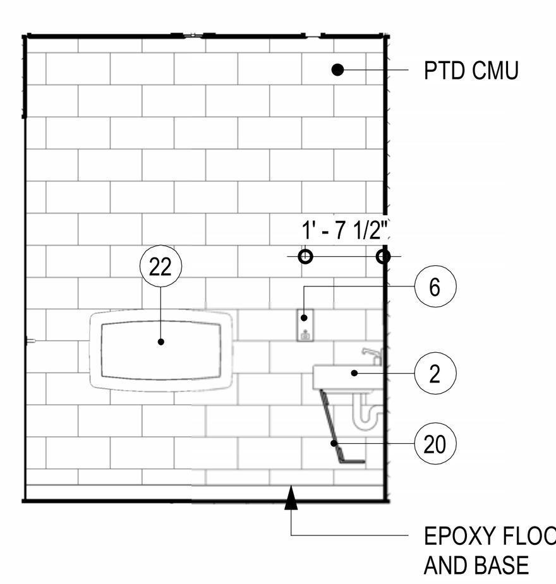
B2 MENS - RM 107 INT ELEV 3
1/4" = 1'-0"



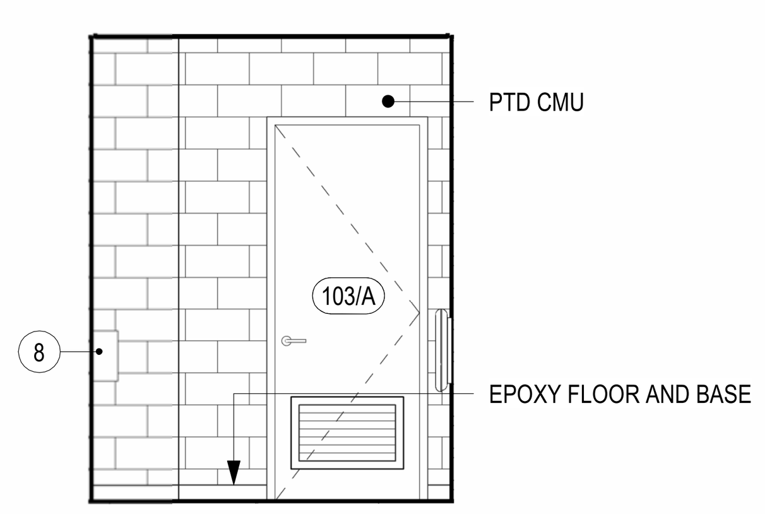
B3 MENS - RM 107 INT ELEV 2
1/4" = 1'-0"



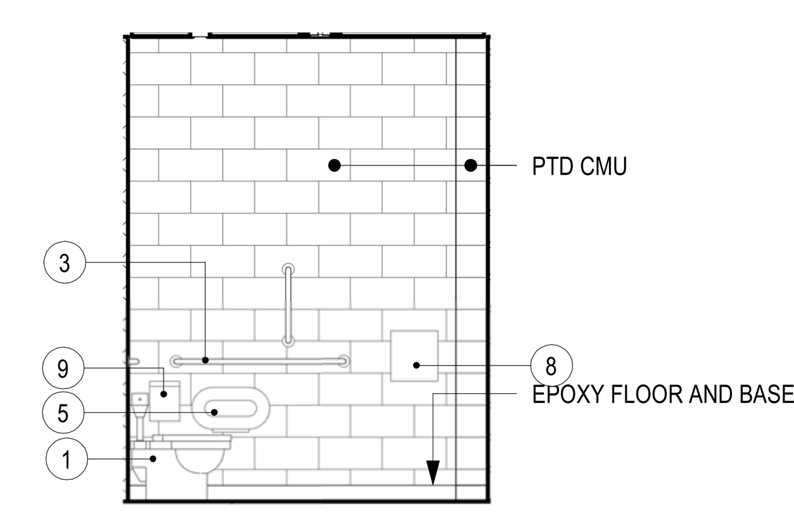
B4 MENS - RM 107 INT ELEV 1
1/4" = 1'-0"



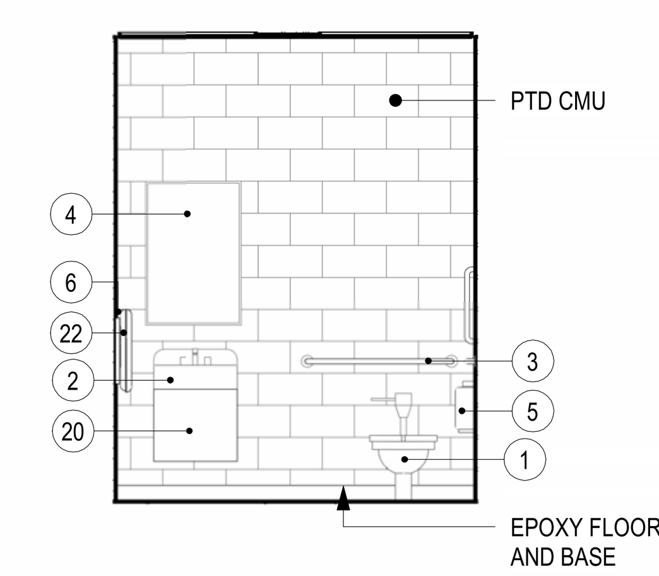
C1 ALL-GENDER RESTROOM - RM 103 INT ELEV 4
1/4" = 1'-0"



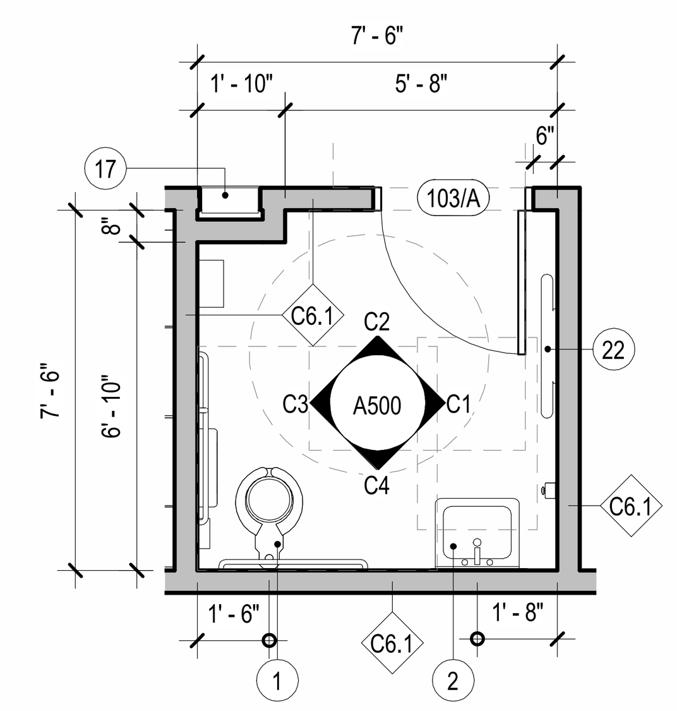
C2 ALL-GENDER RESTROOM - RM 103 INT ELEV 3
1/4" = 1'-0"



C3 ALL-GENDER RESTROOM - RM 103 INT ELEV 2
1/4" = 1'-0"



C4 ALL-GENDER RESTROOM - RM 103 INT ELEV 1
1/4" = 1'-0"

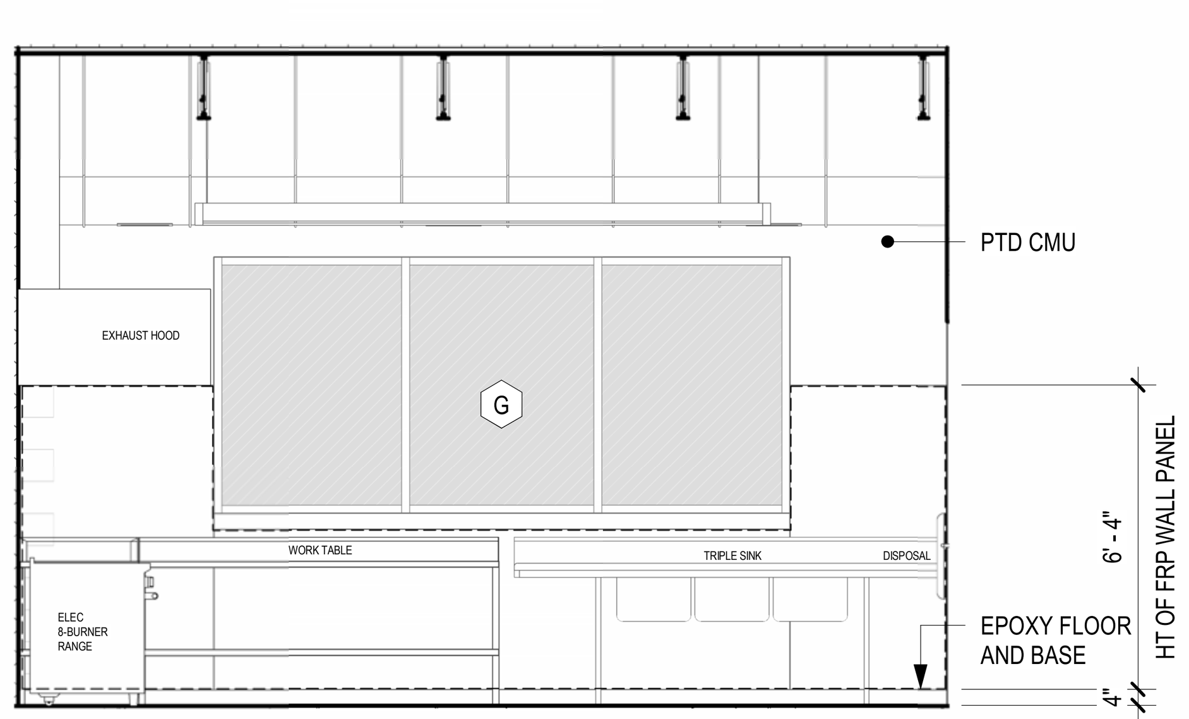


C5 ENLARGED ALL-GENDER RESTROOM - RM 103
1/4" = 1'-0"

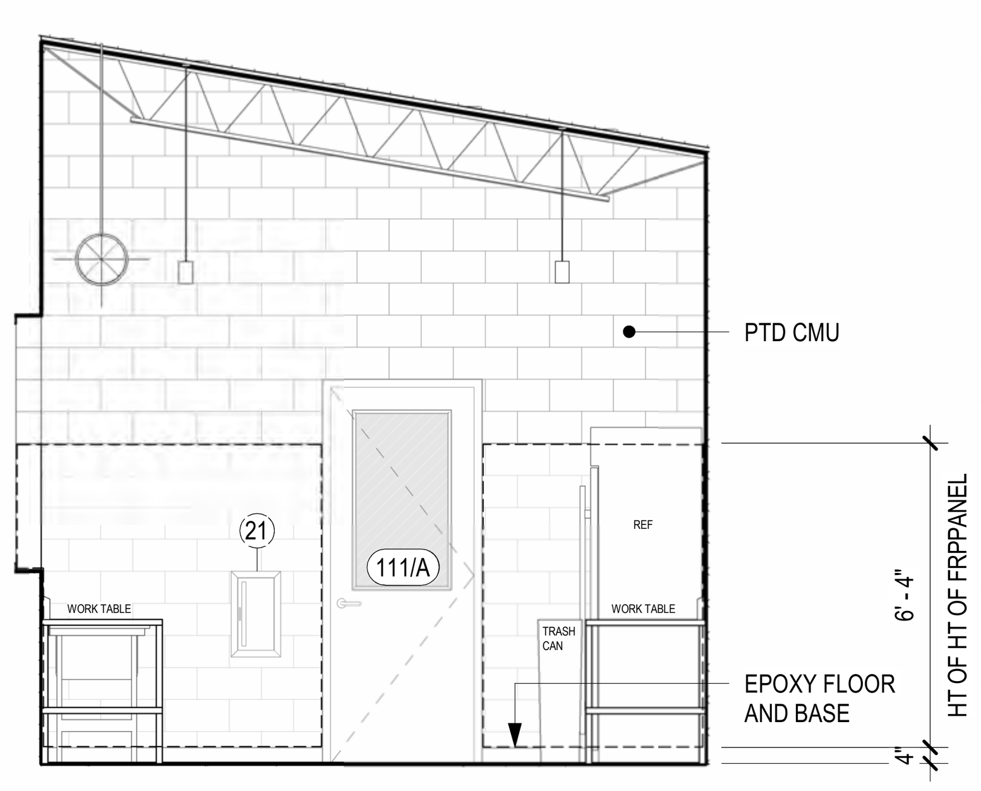
MISC ACCESSORIES LEGEND

KEY	DESCRIPTION
1	FLOOR MOUNTED WATER CLOSET
2	WALL MOUNTED LAVATORY
3	WALL MOUNTED GRAB BARS
4	MIRROR
5	TOILET PAPER DISPENSER
6	SOAP DISPENSER
8	ELECTRIC HAND DRYER
9	SANITARY NAPKIN DISPOSAL
12	WALL MOUNTED MOP STRIP
15	DRINKING FOUNTAIN
16	BI-LEVEL DRINKING FOUNTAIN
17	AED CABINET
18	URINAL
19	MOP SINK
20	REMOVABLE SINK PROTECTION PANEL
21	FIRE EXTINGUISHER CABINET
22	BABY CHANGING STATION

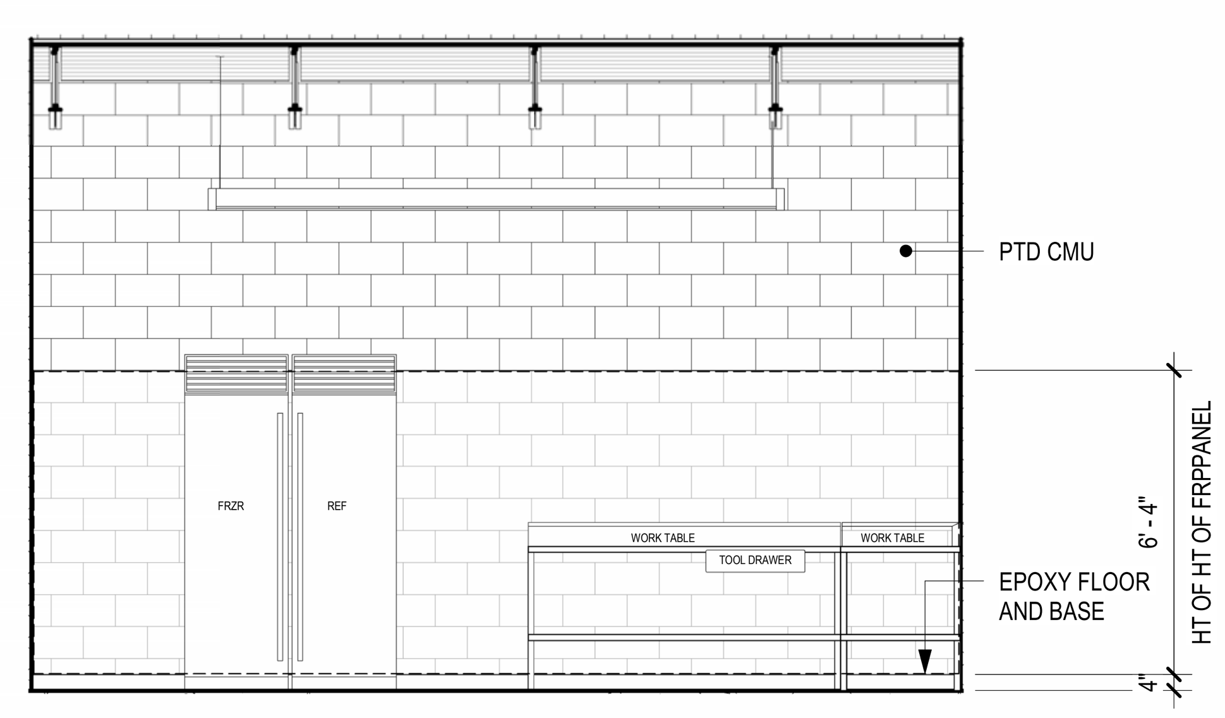
SEE SHEET G005 FOR ADDITIONAL MOUNTING HEIGHTS AND ADDITIONAL INFORMATION



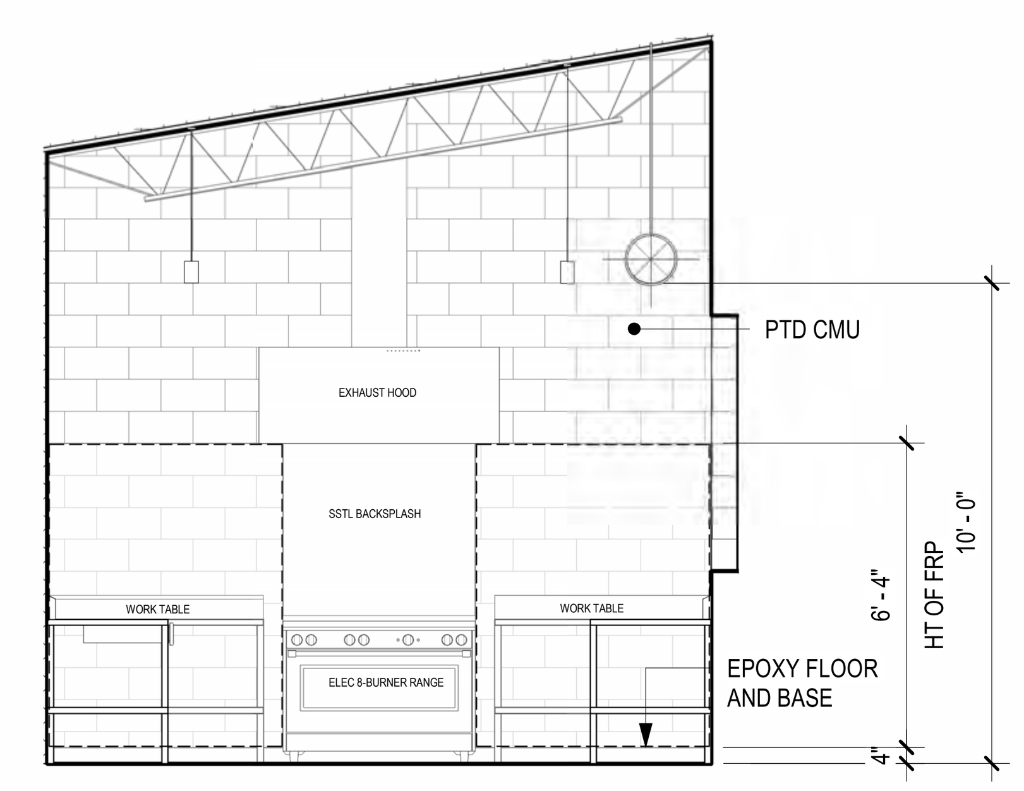
D1 KITCHEN - RM 113 INT ELEV 4
1/4" = 1'-0"



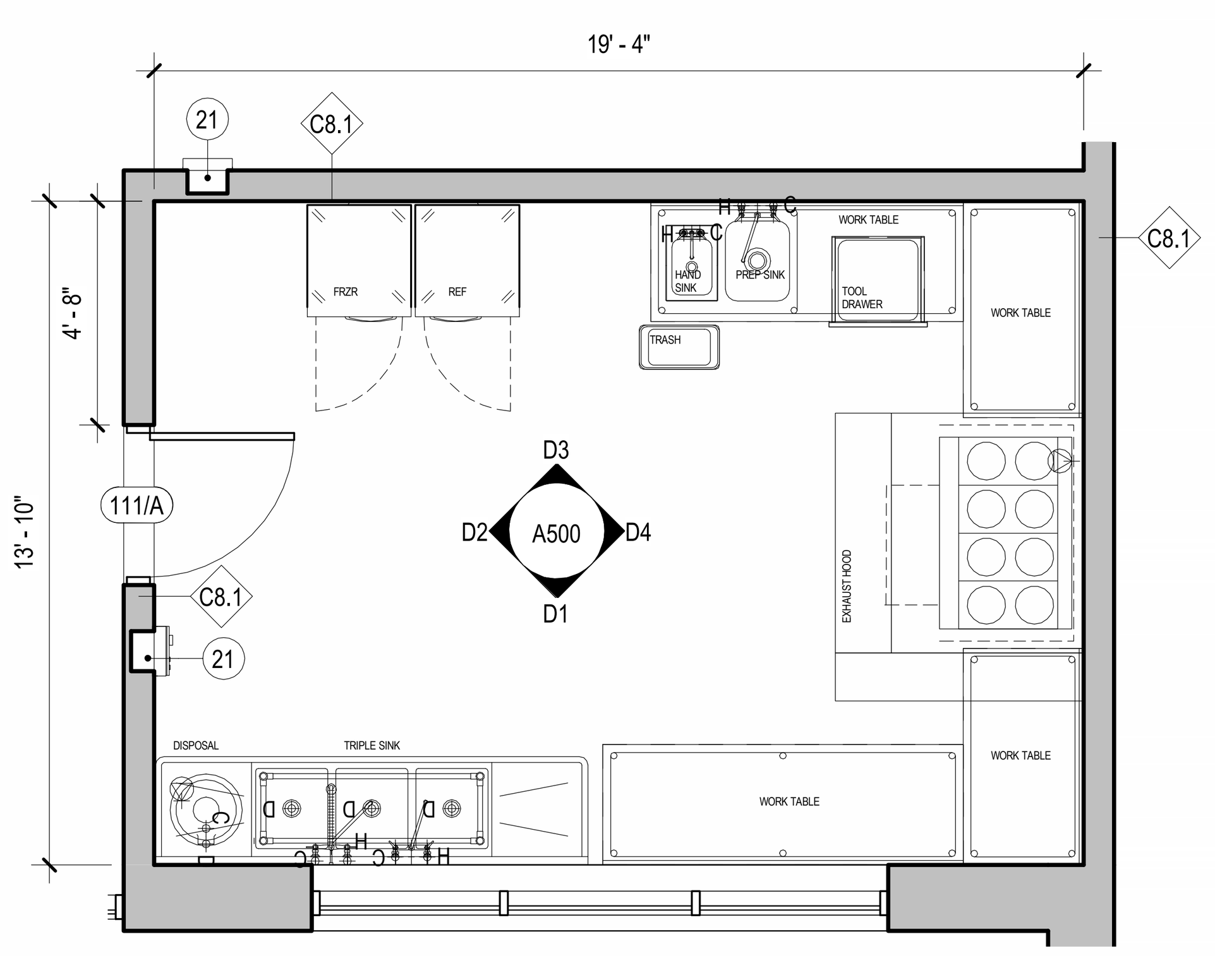
D2 KITCHEN - RM 113 INT ELEV 3
1/4" = 1'-0"



D3 KITCHEN - RM 113 INT ELEV 2
1/4" = 1'-0"



D4 KITCHEN - RM 113 INT ELEV 1
1/4" = 1'-0"



D5 ENLARGED KITCHEN - RM 113
1/4" = 1'-0"

SEE FOOD SERVICES EQUIPMENT DRAWINGS FOR KITCHEN DETAILS AND EQUIPMENT SCHEDULE. SEE MEP FOR EQUIPMENT COORDINATION.

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada architecture·planning

Cornerstone Consulting Engineers & Design Services, Inc.
213 West Main Street . Lansdale . PA 19446
Phone: 215-362-2600 . Fax: 215-362-8400
WWW.CORNERSTONENET.COM

CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

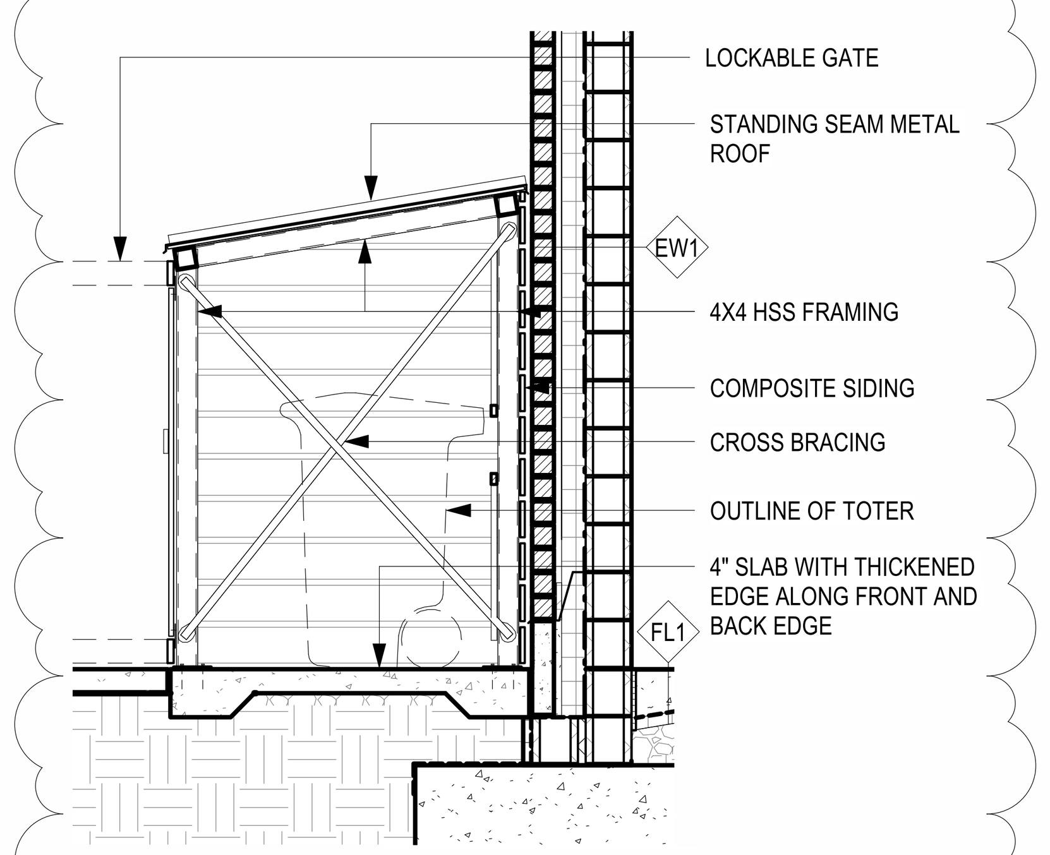
No.	Date	By	Description
1	02/15/2024		BID ADDENDUM 1

Date: 02/09/2024
Scale: 1/4" = 1'-0"
Job No. 604.2
Drawn: NB, KN Appd.: CS

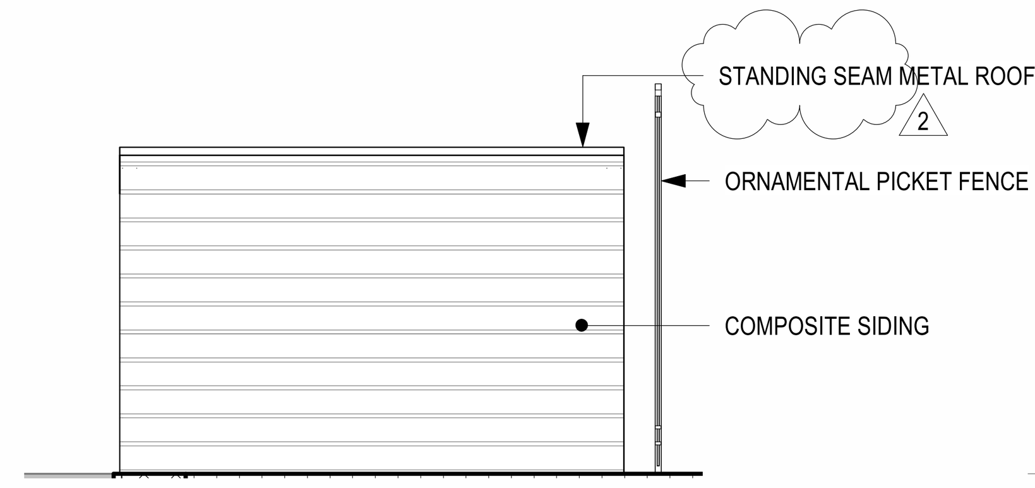
Sheet Title:
ENLARGED DWGS - PLANS + INT ELEVS

Sheet No.
A500

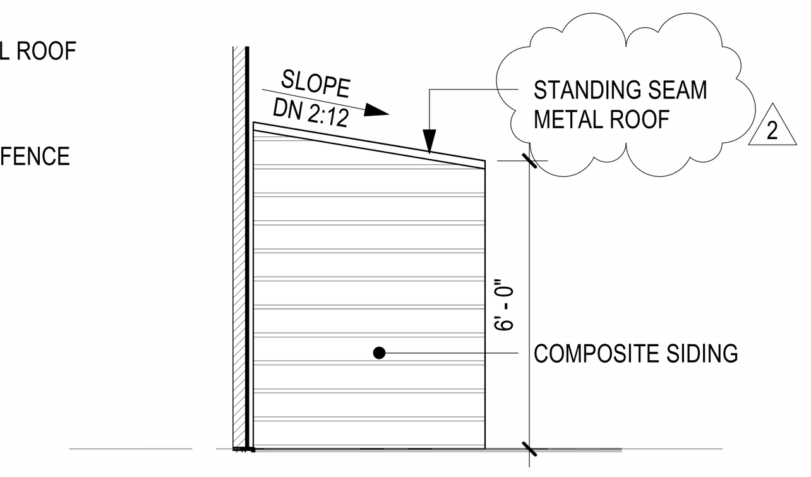
C:\Users\Nan\Documents\604.2 Panati-Rebuild_CENTRA_nhuey.rvt
3/1/2024 1:39:00 PM



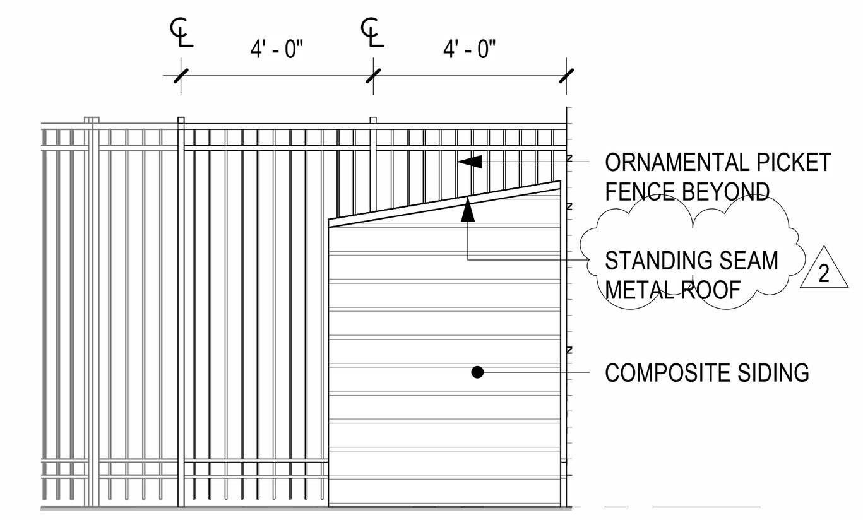
A1 TRASH ENCLOSURE SECTION DETAIL
3/8" = 1'-0"



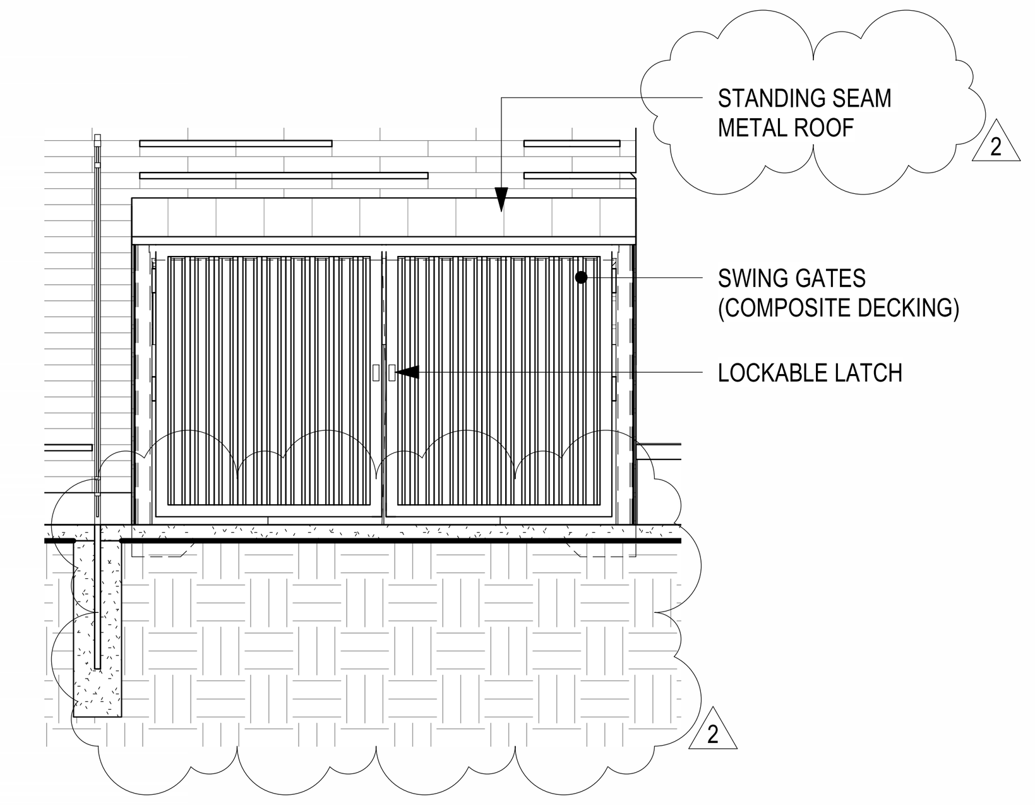
A2 GARBAGE SHED ELEVATION 4
1/4" = 1'-0"



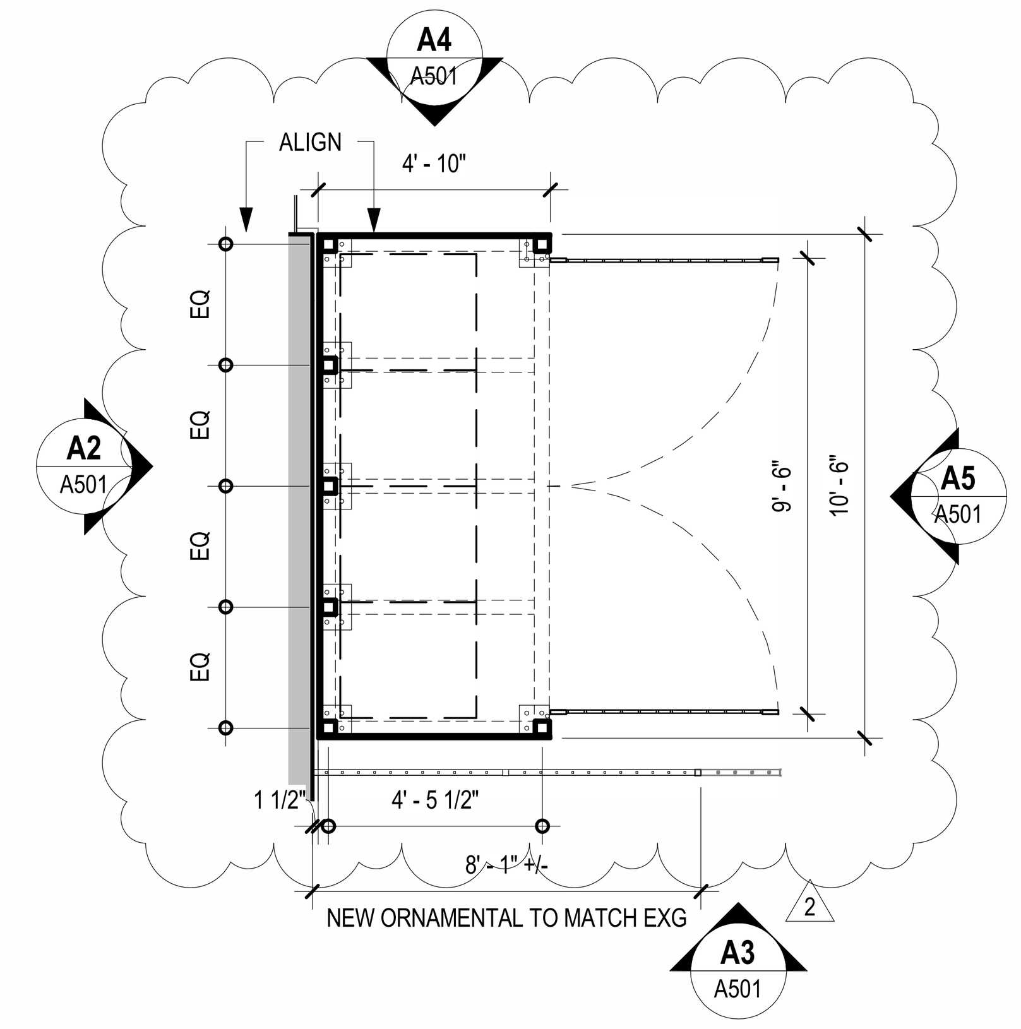
A3 GARBAGE SHED ELEVATION 3
1/4" = 1'-0"



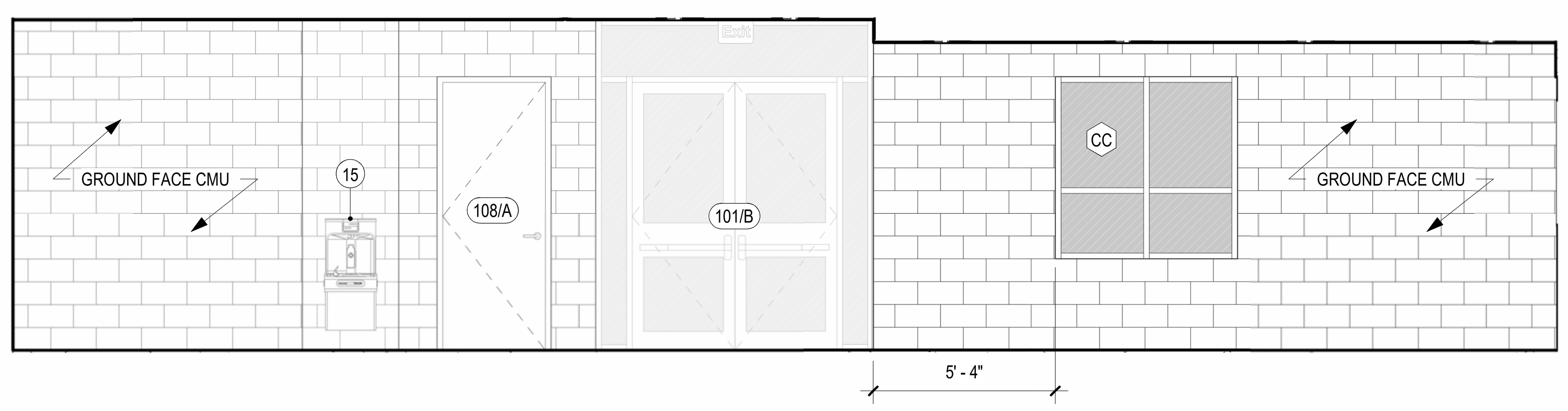
A4 GARBAGE SHED ELEVATION 2
1/4" = 1'-0"



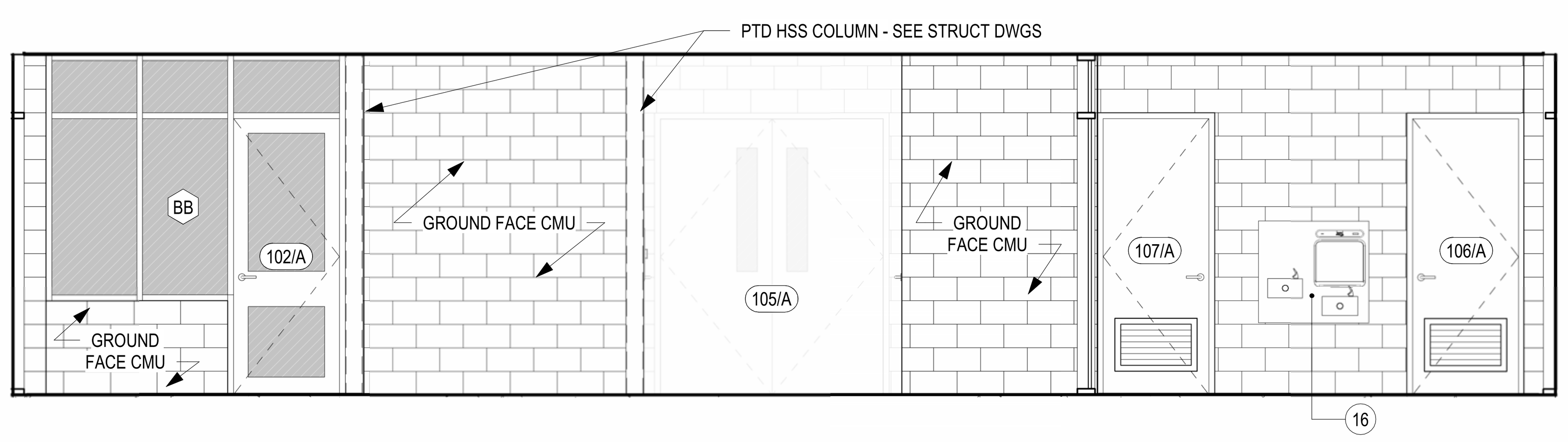
A5 GARBAGE SHED ELEVATION 1
1/4" = 1'-0"



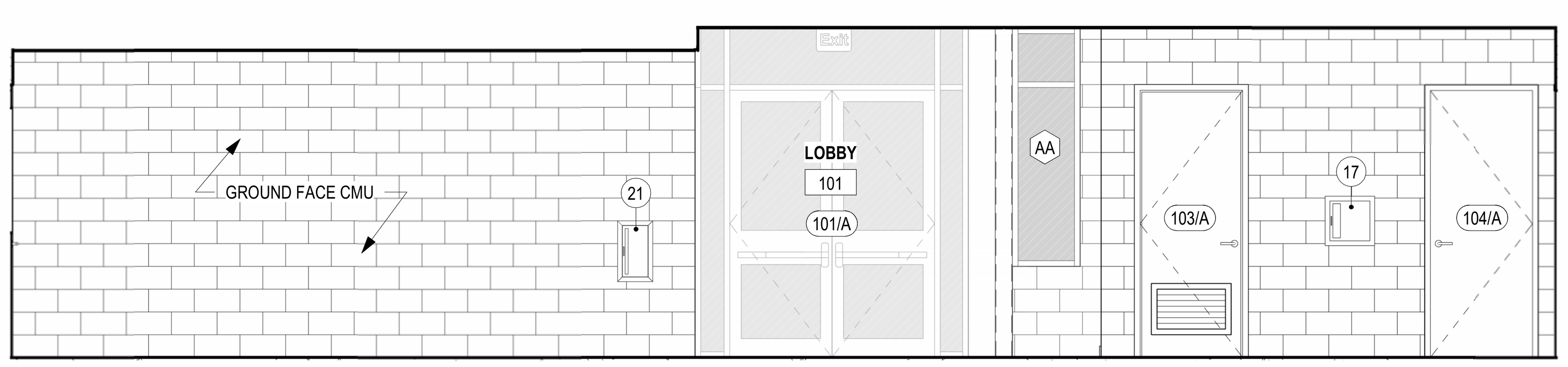
A6 GARBAGE ENCLOSURE
1/4" = 1'-0"



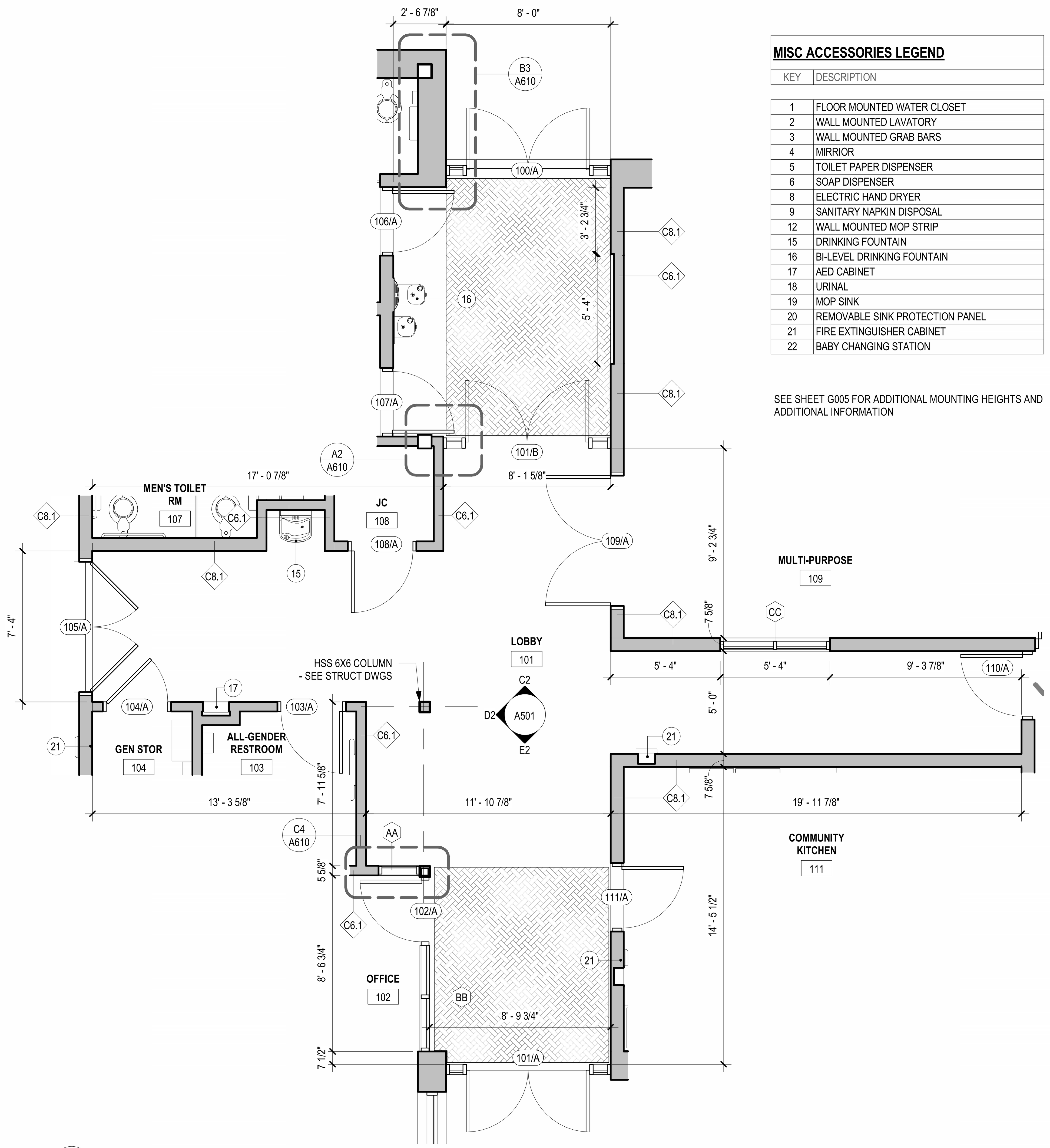
C2 INT ELEV FROM LOBBY - MP WALL
1/4" = 1'-0"



D2 INT ELEV LOBBY - OFFICE
1/4" = 1'-0"



E2 INT ELEV LOBBY - GYM
1/4" = 1'-0"



E4 ENLARGED LOBBY PLAN
1/4" = 1'-0"

MISC ACCESSORIES LEGEND

KEY	DESCRIPTION
1	FLOOR MOUNTED WATER CLOSET
2	WALL MOUNTED LAVATORY
3	WALL MOUNTED GRAB BARS
4	MIRROR
5	TOILET PAPER DISPENSER
6	SOAP DISPENSER
8	ELECTRIC HAND DRYER
9	SANITARY NAPKIN DISPOSAL
12	WALL MOUNTED MOP STRIP
15	DRINKING FOUNTAIN
16	BI-LEVEL DRINKING FOUNTAIN
17	AED CABINET
18	URINAL
19	MOP SINK
20	REMOVABLE SINK PROTECTION PANEL
21	FIRE EXTINGUISHER CABINET
22	BABY CHANGING STATION

SEE SHEET G005 FOR ADDITIONAL MOUNTING HEIGHTS AND ADDITIONAL INFORMATION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada architecture·planning

Cornerstone Consulting Engineers & Design Services, Inc.

CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

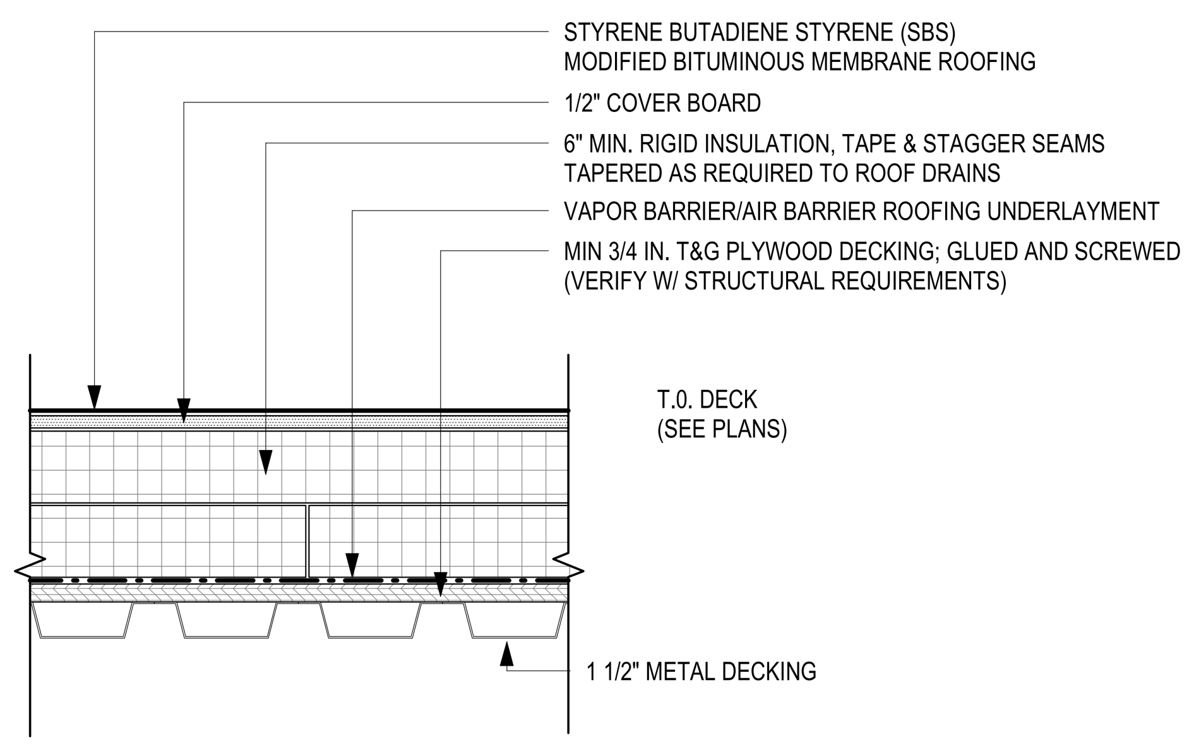
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
1	02/15/2024		BID ADDENDUM 1
2	03/01/2024		BID ADDENDUM 2

Date 02/09/2024
Scale: As indicated
Job No. 604.2
Drawn: NB, KN Appd.: CS

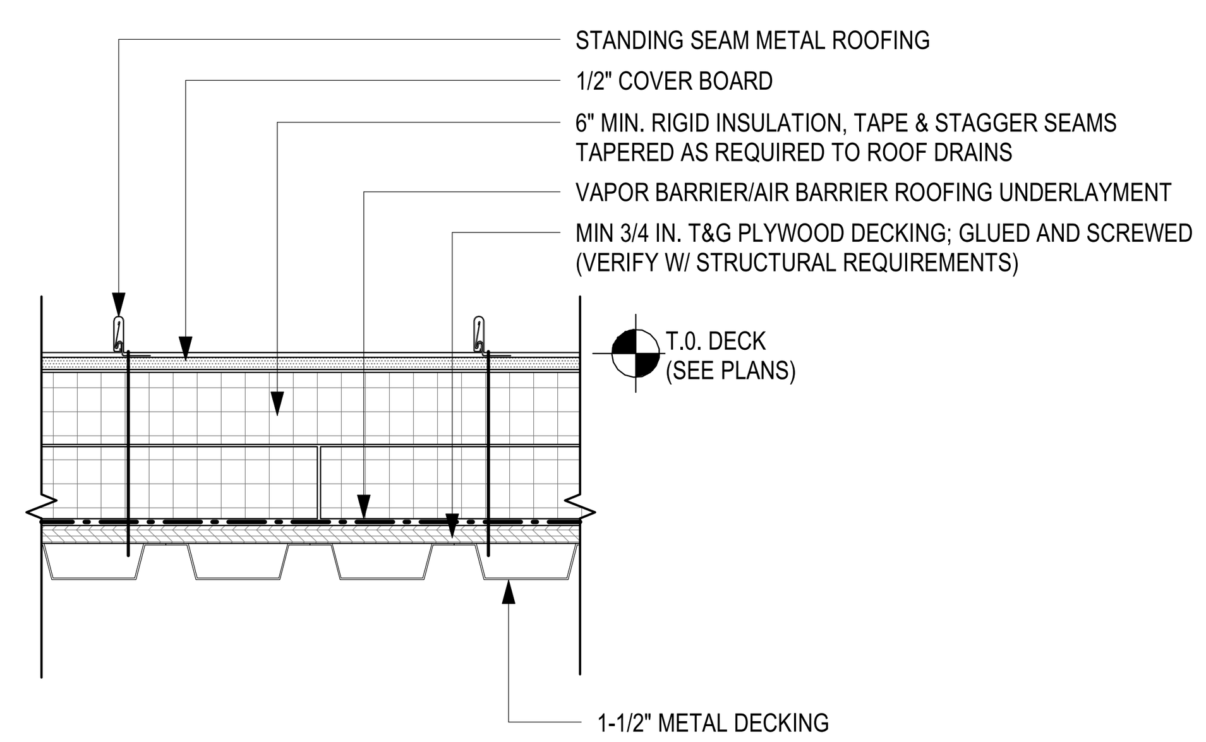
Sheet Title:
ENLARGED DWGS - PLANS + ELEVS

Sheet No.
A501



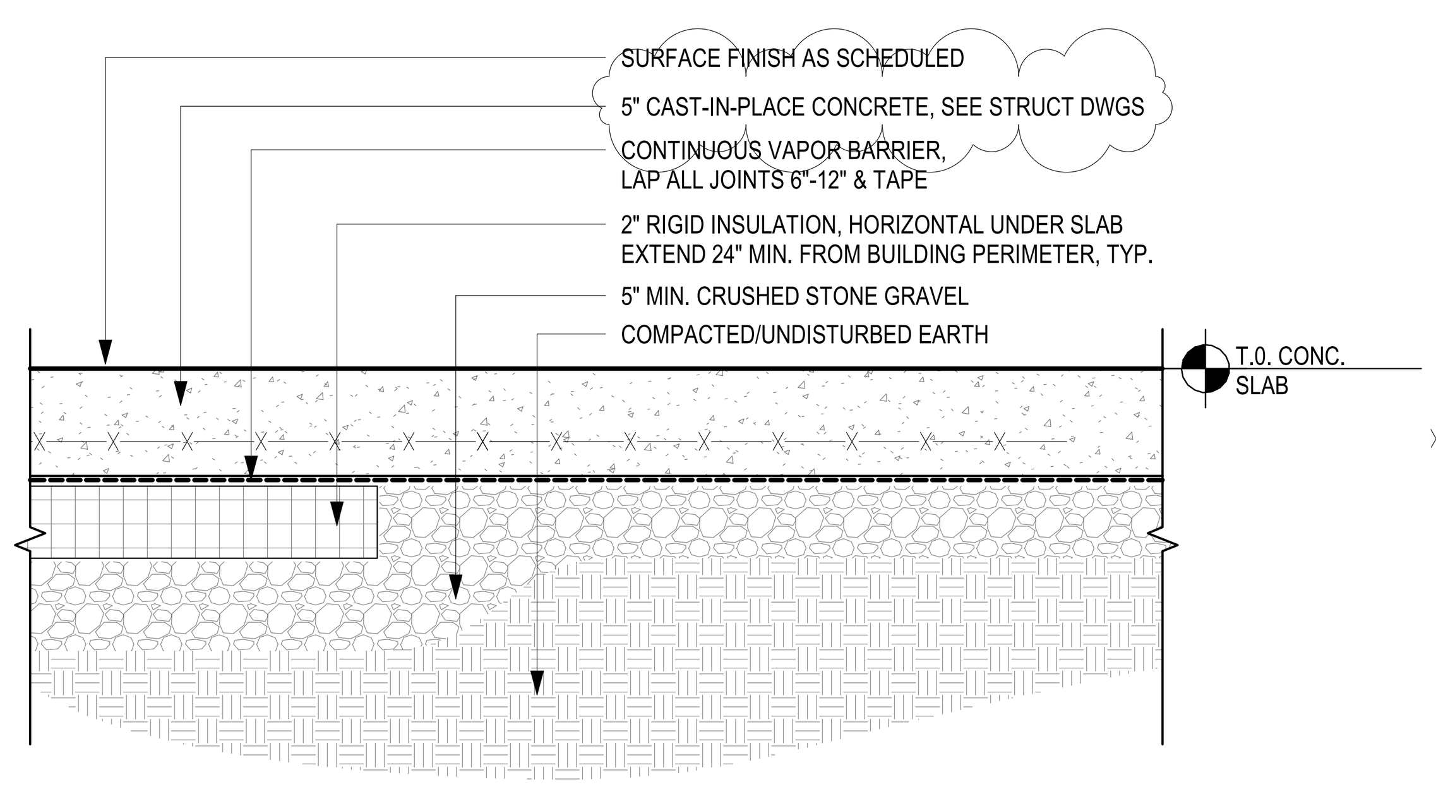
INSULATION R-VALUE
R-30ci

R1 MODIFIED BITUMINOUS MEMBRANE ROOFING
1 1/2" = 1'-0"

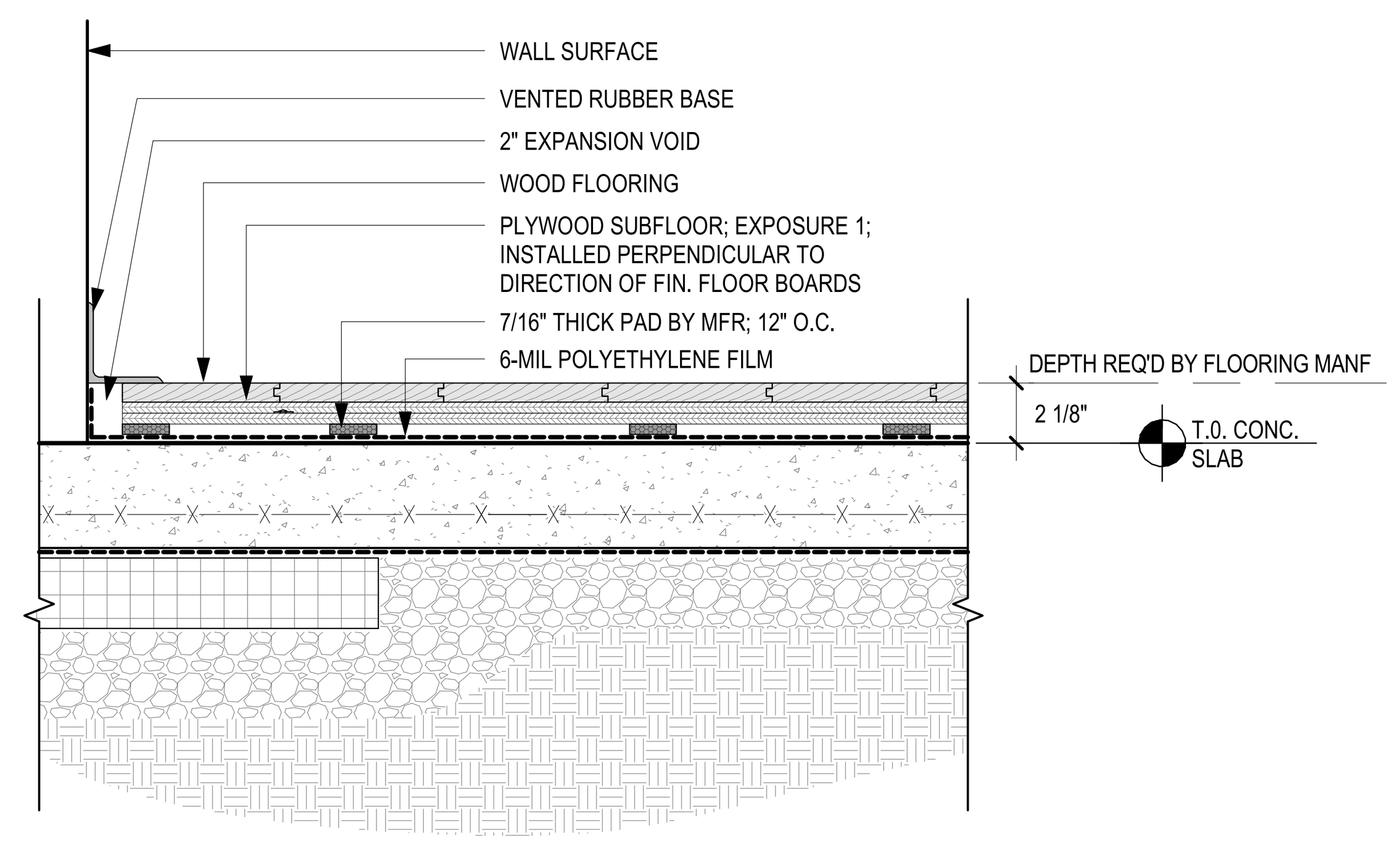


INSULATION R-VALUE
R-30ci

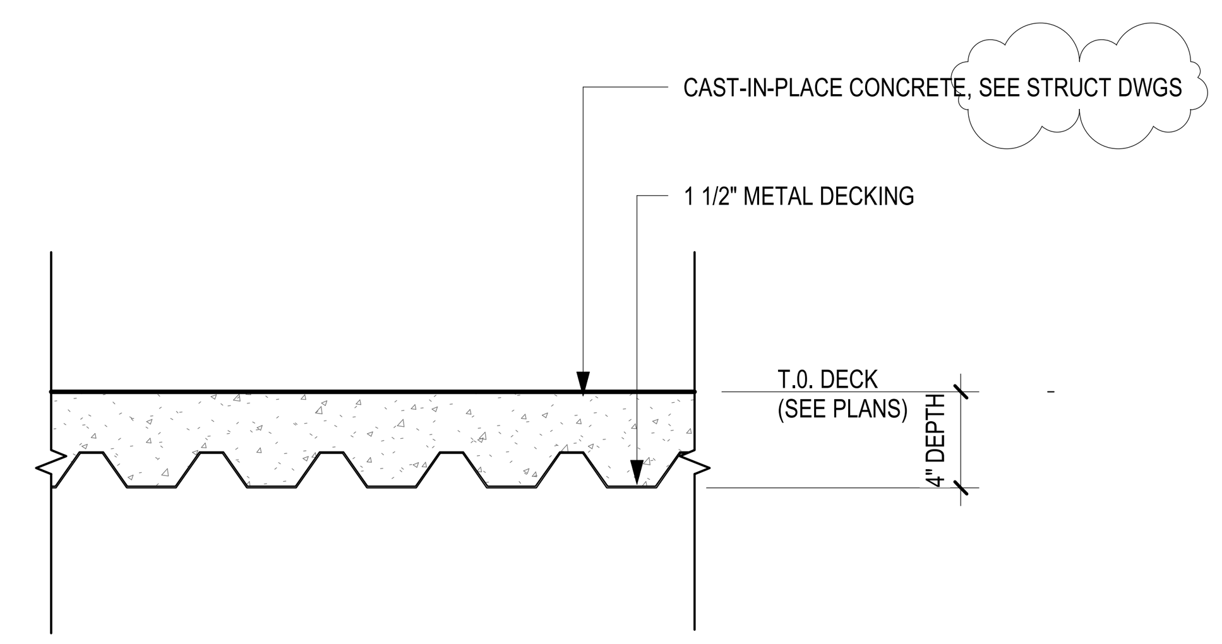
R2 STANDING SEAM ROOFING
1 1/2" = 1'-0"



FL1 FLOOR TYPE - FL1 - CONCRETE SLAB ON GRADE
1 1/2" = 1'-0"

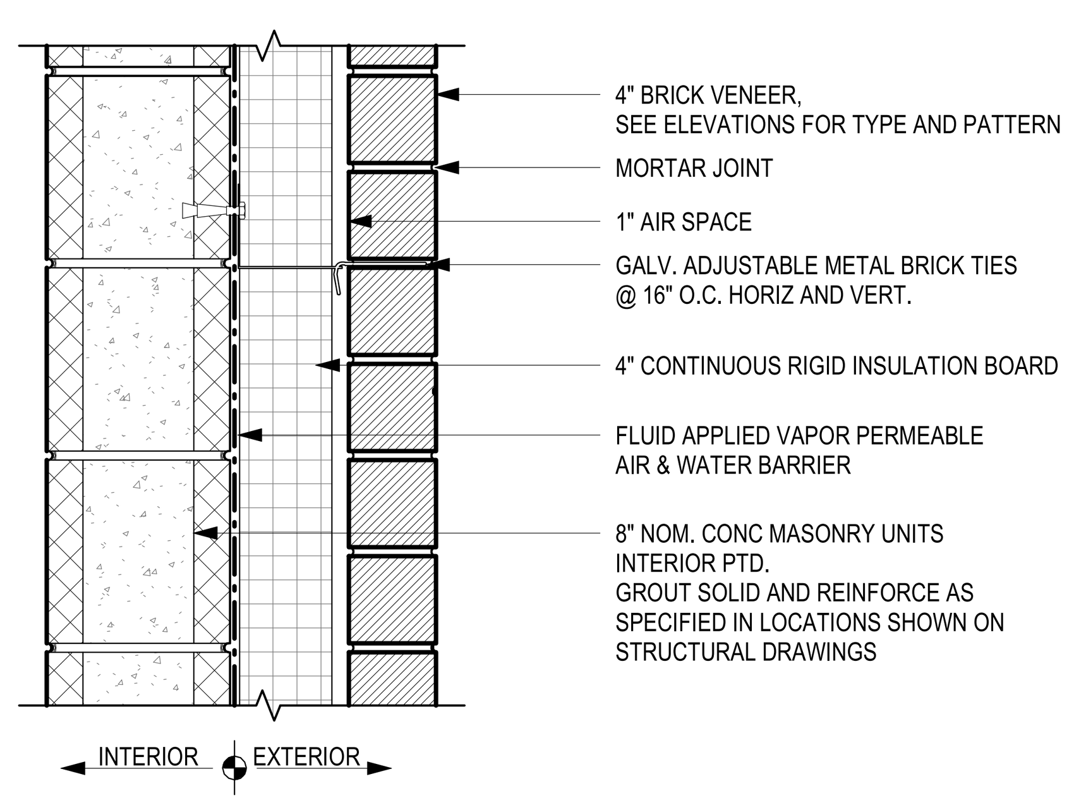


FL2 FLOOR TYPE - FL2 - WD SPORTS FLOOR OVER CONCRETE SLAB ON GRADE
1 1/2" = 1'-0"



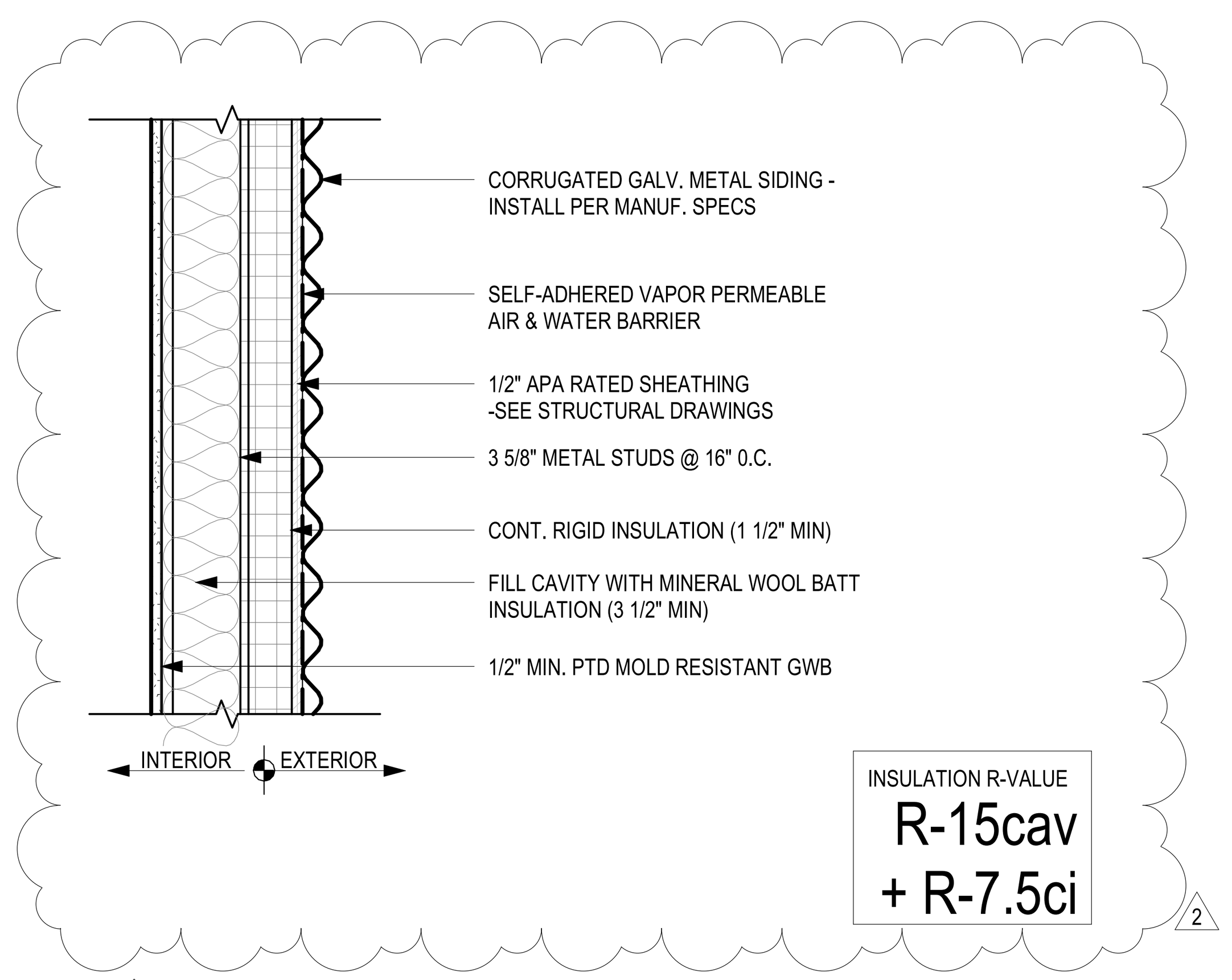
NOTE: SEE STRUCTURAL DRAWINGS FOR REINFORCING

FL3 CONCRETE SLAB OVER METAL DECKING
1 1/2" = 1'-0"

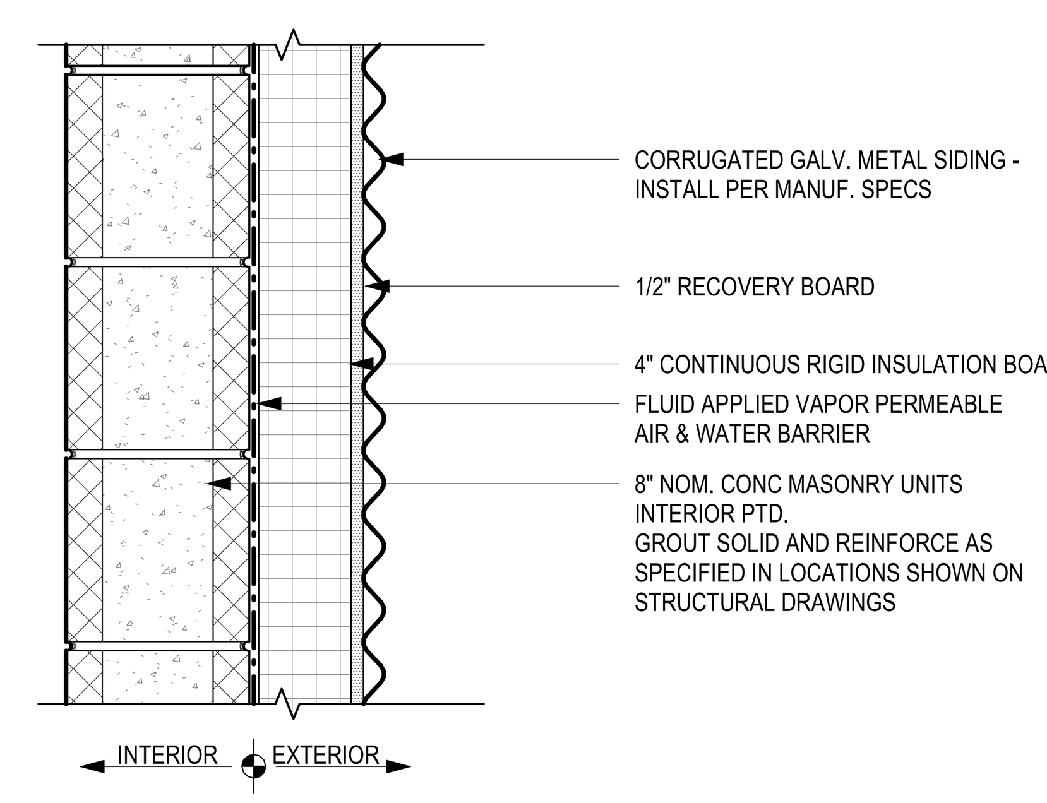


INSULATION R-VALUE
R-20ci

EW1 EXTERIOR WALL ASSEMBLY - TYPE EW1
1 1/2" = 1'-0"

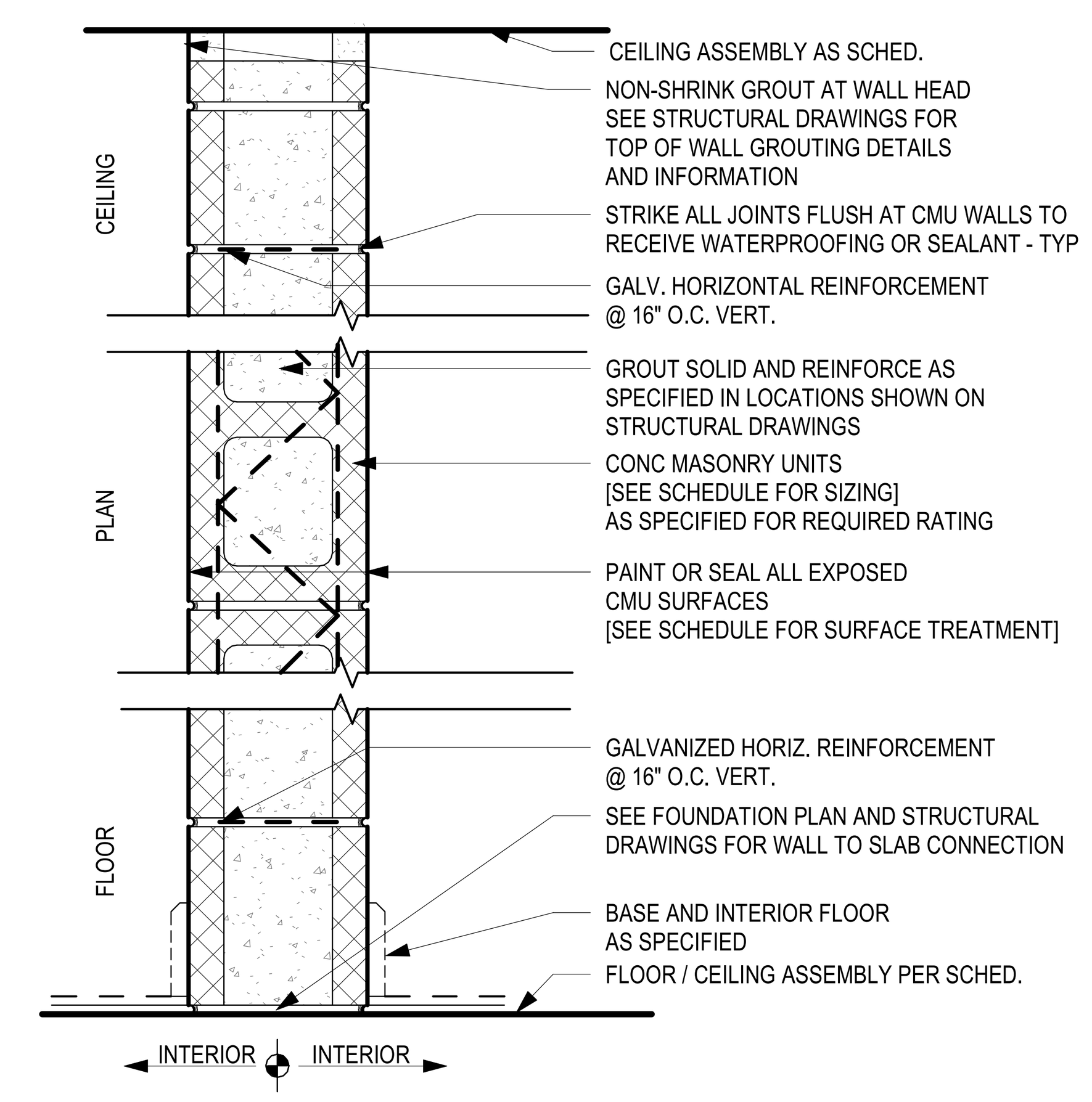


EW2 VINYL SIDING (NR)
1 1/2" = 1'-0"



INSULATION R-VALUE
R-20ci

EW3 EXTERIOR WALL ASSEMBLY - TYPE EW3
1 1/2" = 1'-0"



TYPICAL INTERIOR PARTITION TYPES

TYPE	FRAMING SIZE	FIRE RATING		STC		DESCRIPTION	SOUND BATT	LIMITING HEIGHT FACTOR	COMMENTS
		HOUR	ASSEMBLY #	HOLLOW	GROUT-FILLED				
C6.1	0' - 5 5/8"			32	51	6" NOM. CMU (NON-LOAD BEARING)	No		
C8.1	0' - 7 5/8"			42	55	8" NOM. CMU	No		

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada
architecture • planning

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street . Lansdale . PA 19446
Phone: 215-362-2600 . Fax: 215-362-8400
WWW.CORNERSTONENET.COM

CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

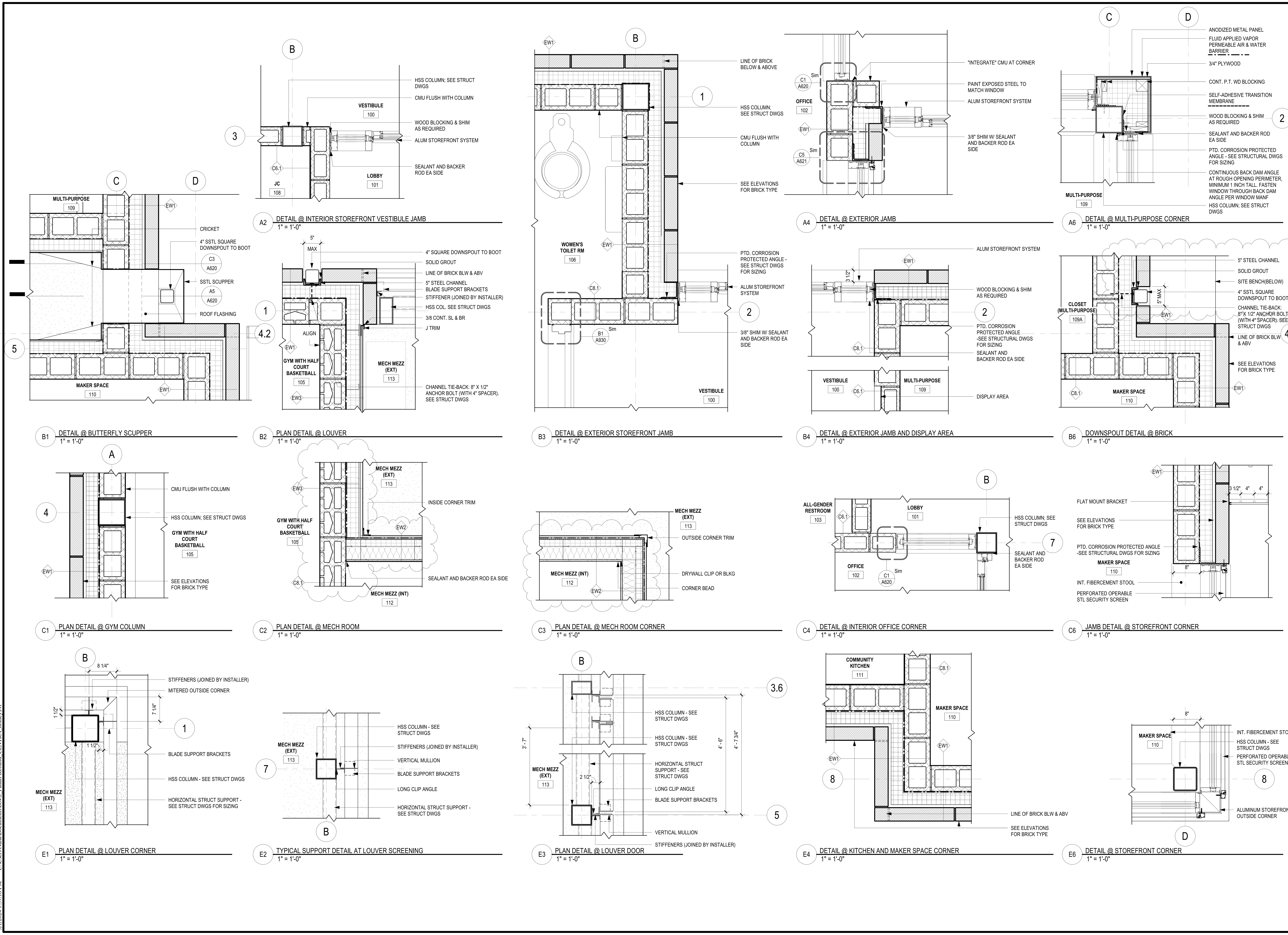
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
2	03/01/2024		BID ADDENDUM 2

Date 02/09/2024
Scale: 1 1/2" = 1'-0"
Job No. 604.2
Drawn: NB, KN Appd.: CS

Sheet Title:
PARTITION & ASSEMBLY SCHEDULE

Sheet No.
A600



D'HUY Engineering, Inc.

CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering

DEI

One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada architecture·planning

Cornerstone Consulting Engineers & Design Services, Inc.

CORSI ASSOCIATES

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

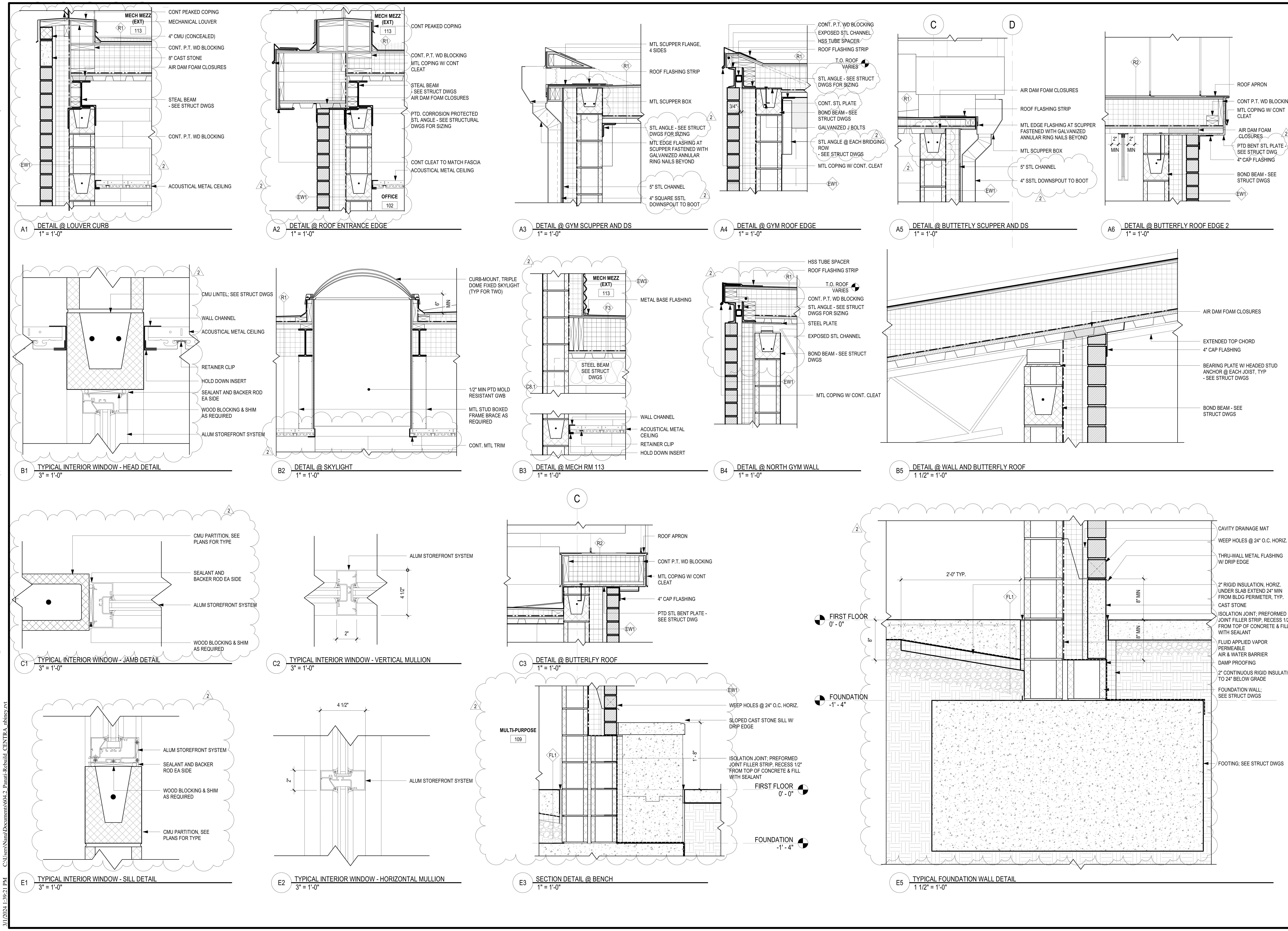
No.	Date	By	Description
2	03/01/2024		BID ADDENDUM 2

Date 02/09/2024
Scale: 1" = 1'-0"
Job No. 604.2
Drawn: NB, KN Appd.: CS

Sheet Title:
ENLARGED PLAN DETAILS

Sheet No.
A610

3/1/2024 1:39:16 PM C:\Users\Nara\Documents\604.2_Panati-Rebuild_CENTRA_nbhuy.rvt



D'HUY Engineering, Inc.

CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering

DEI

One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada architecture·planning

Cornerstone Consulting Engineers & Design Services, Inc.

CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
1	02/15/2024		BID ADDENDUM 1
2	03/01/2024		BID ADDENDUM 2

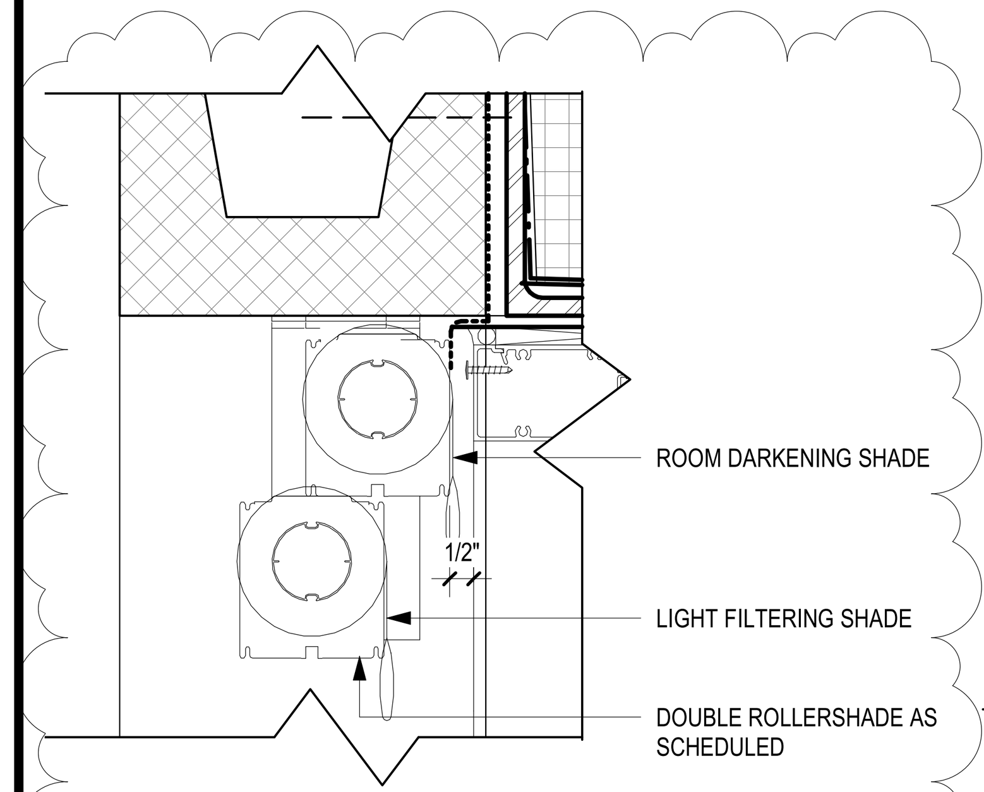
Date 02/09/2024
Scale: As indicated
Job No. 604.2
Drawn: Author Appd.: Approver

Sheet Title:
EXTERIOR AND INTERIOR DETAILS

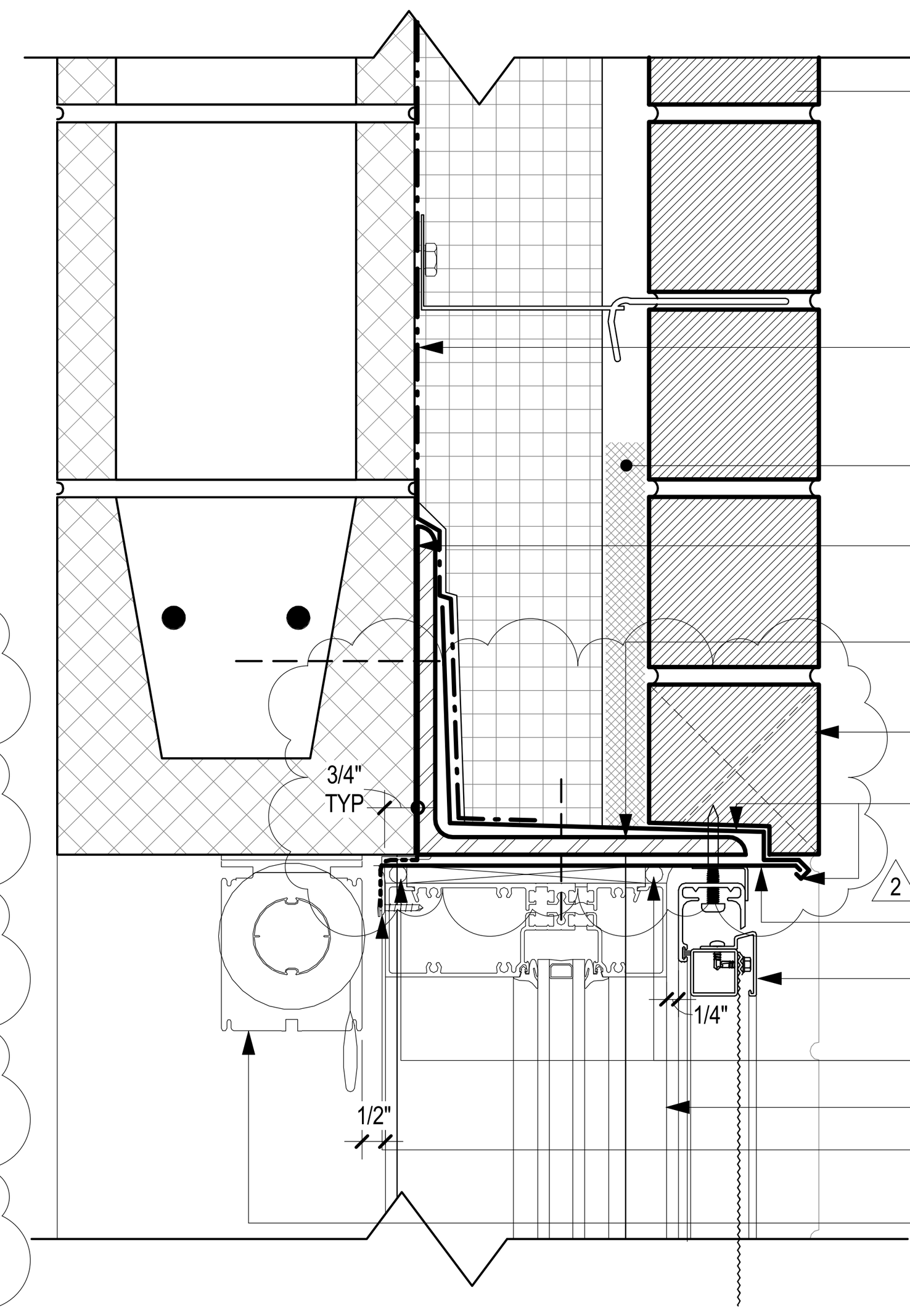
Sheet No.
A620

1 2 3 4 5 6

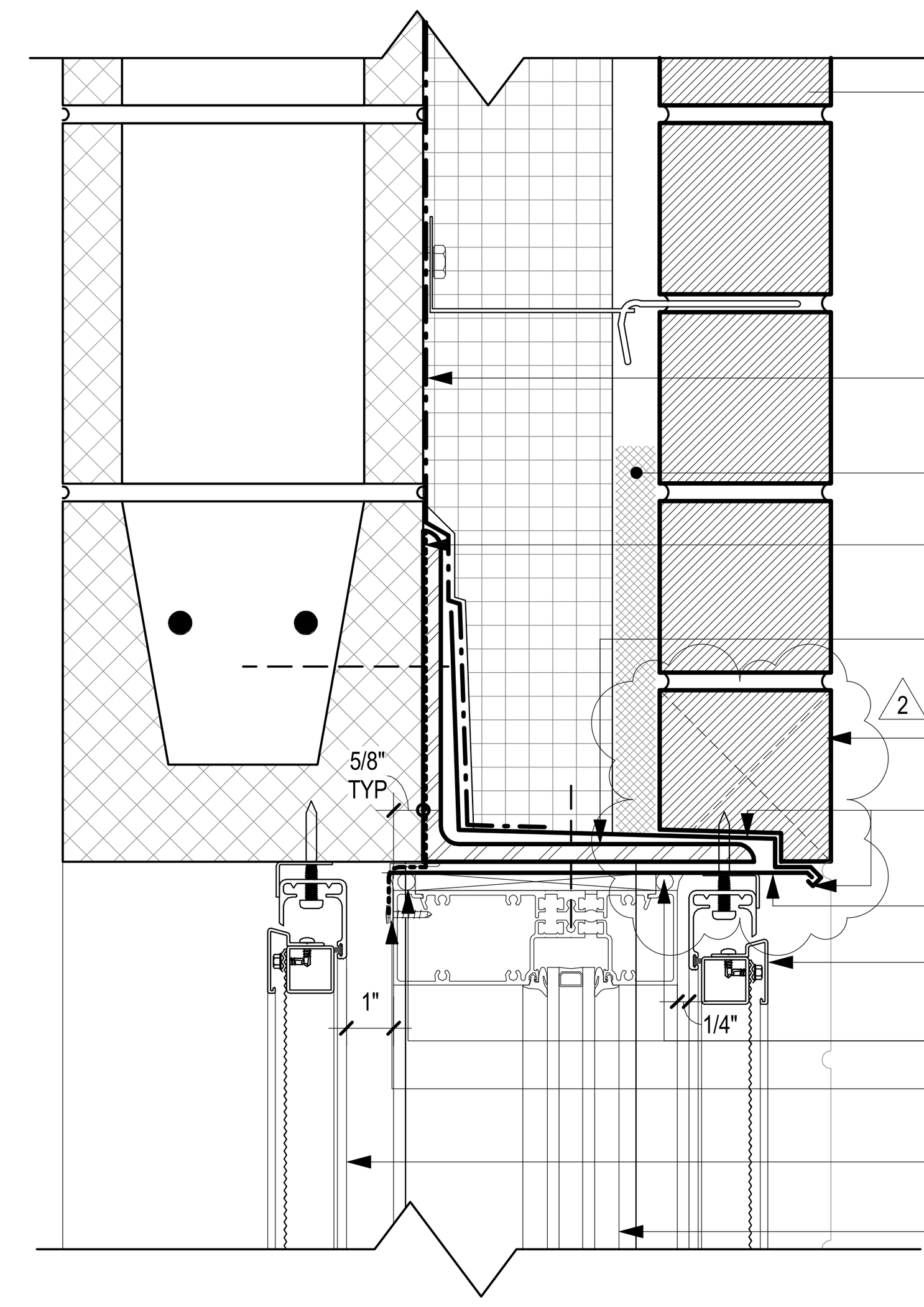
A B C D E



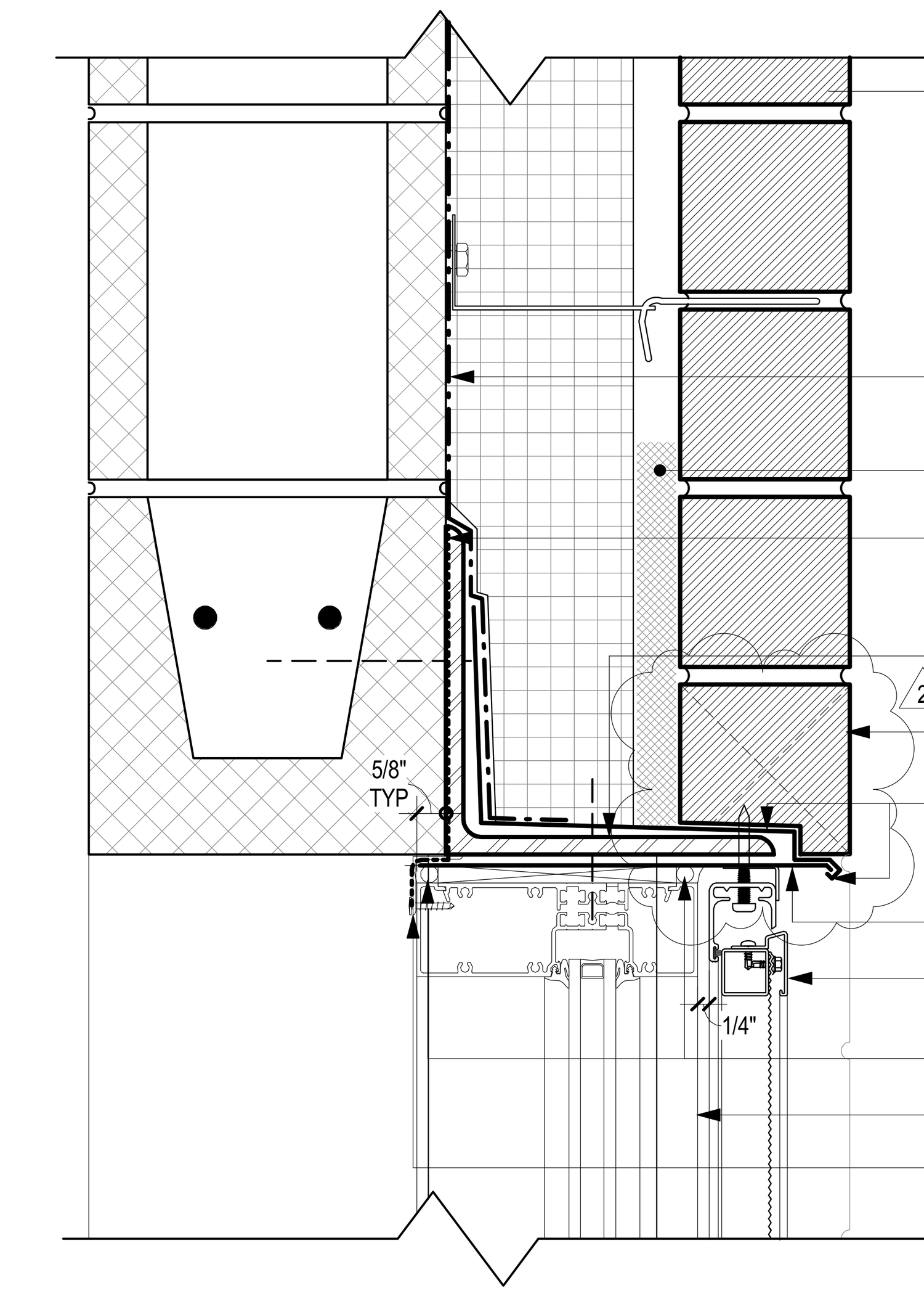
A1 DUAL ROLLER SHADE
3" = 1'-0"



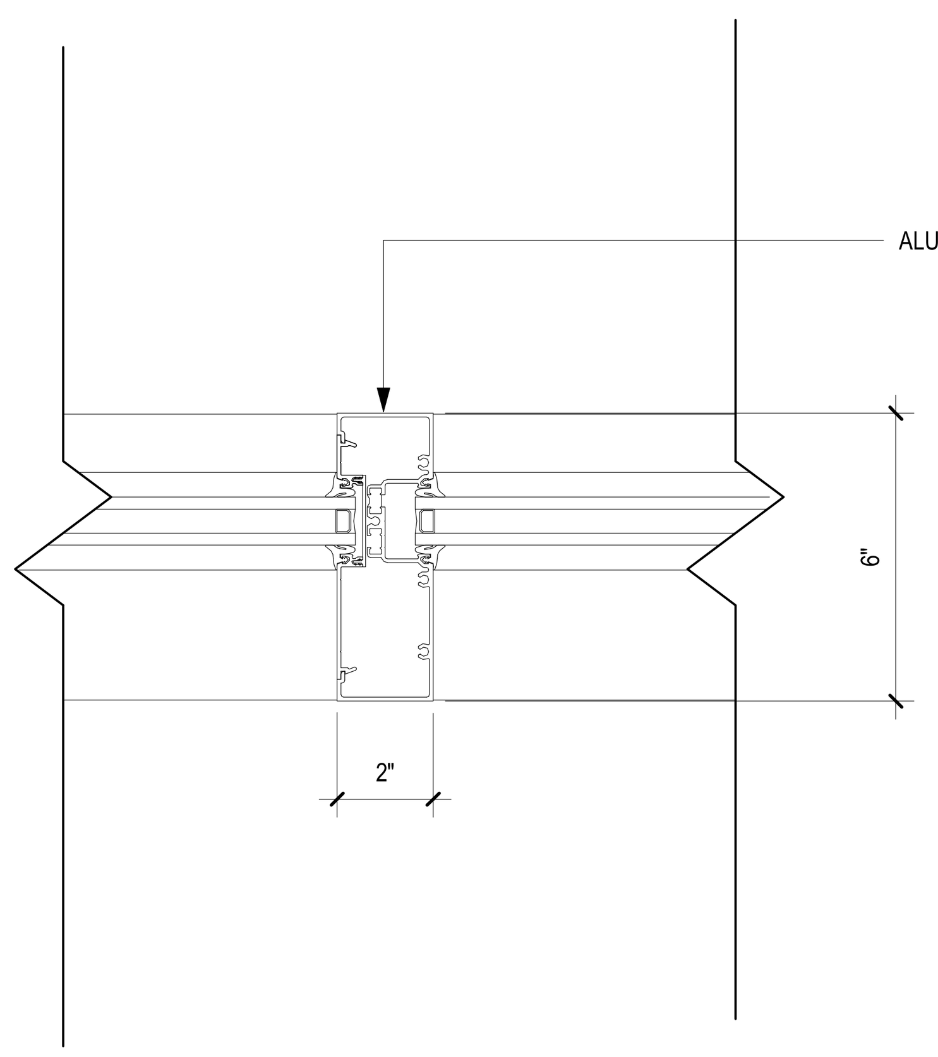
A2 TYPICAL WINDOW - HEAD DETAIL W/ SECURITY SCREEN & ROLLER SHADE
3" = 1'-0"



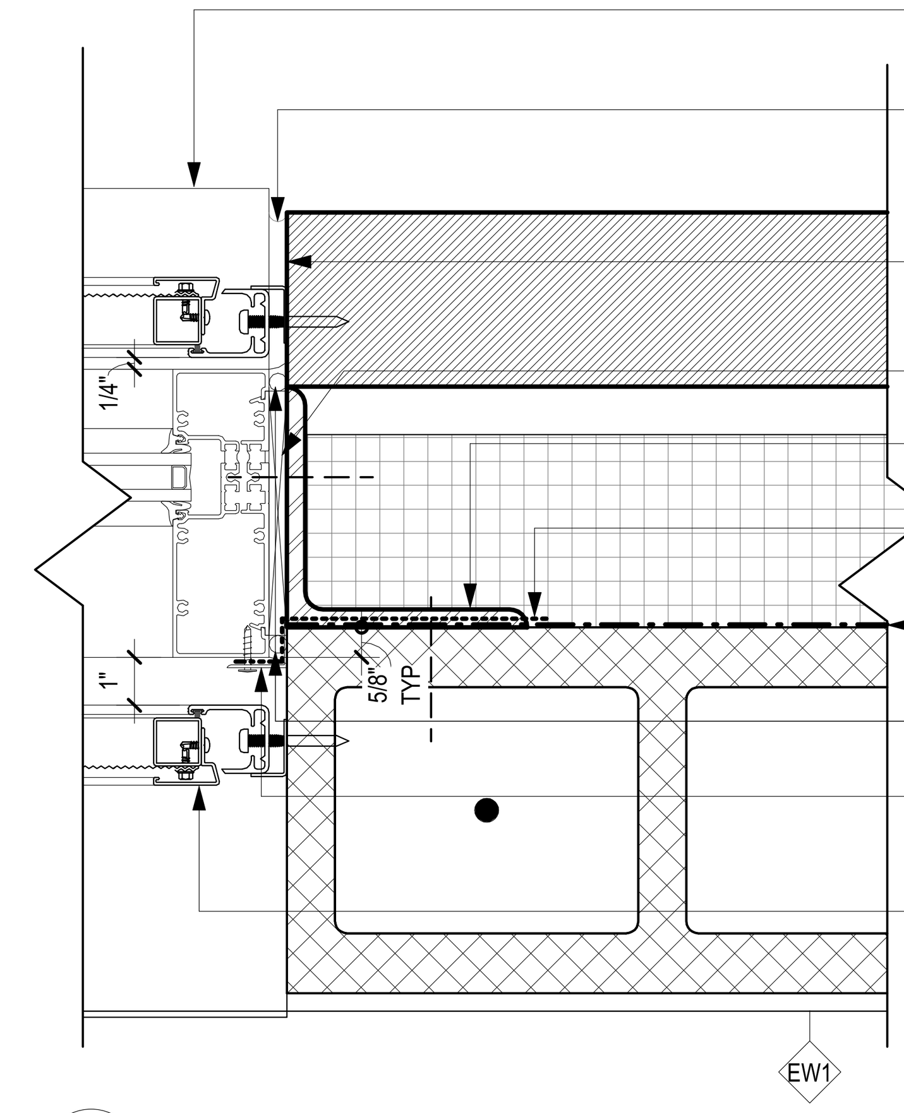
A3 TYPICAL WINDOW - HEAD DETAIL @ GYM
3" = 1'-0"



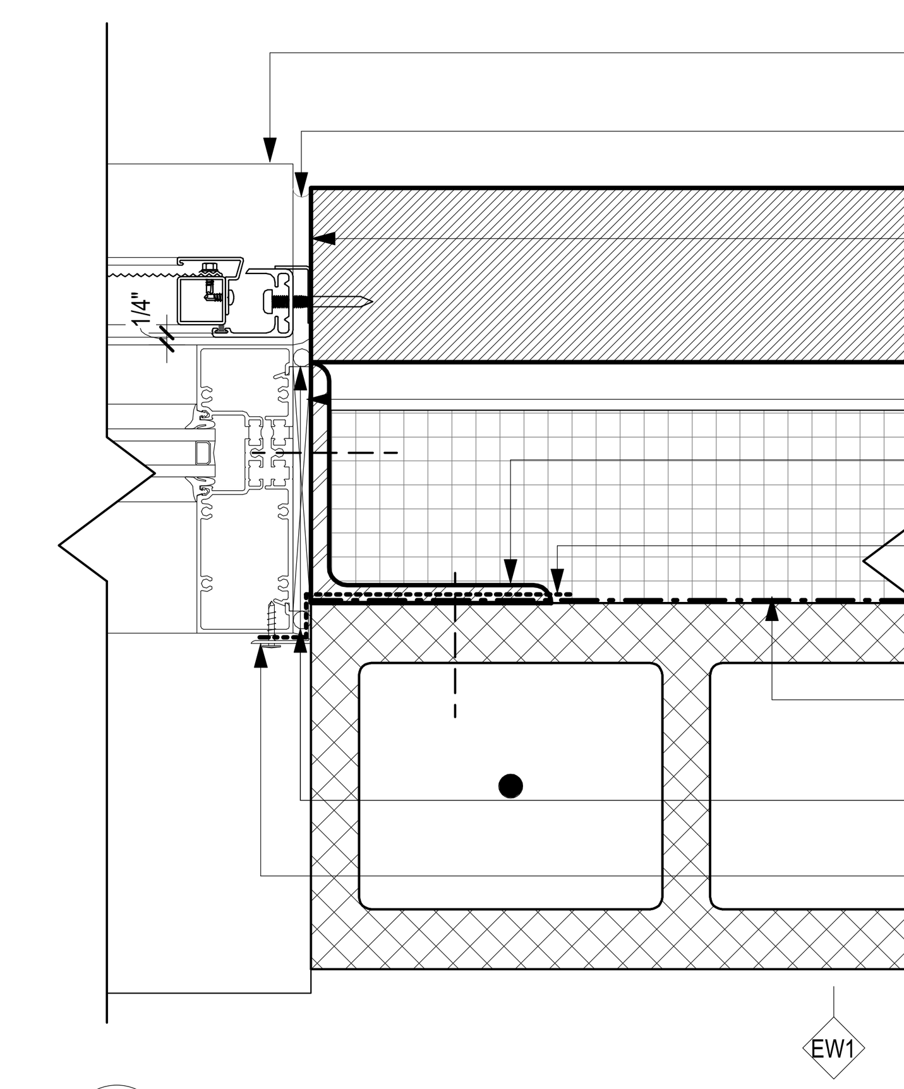
A5 TYPICAL WINDOW - HEAD DETAIL W/ SECURITY SCREEN
3" = 1'-0"



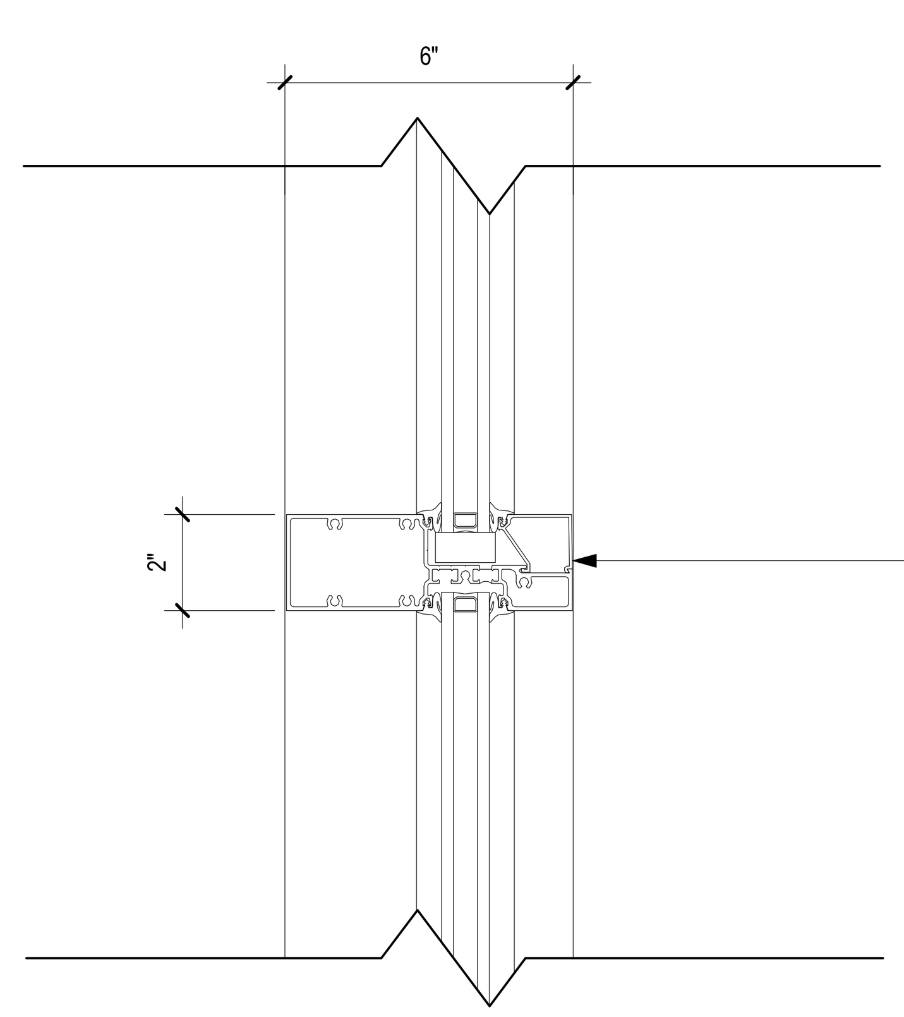
C2 TYPICAL WINDOW - VERTICAL MULLION
3" = 1'-0"



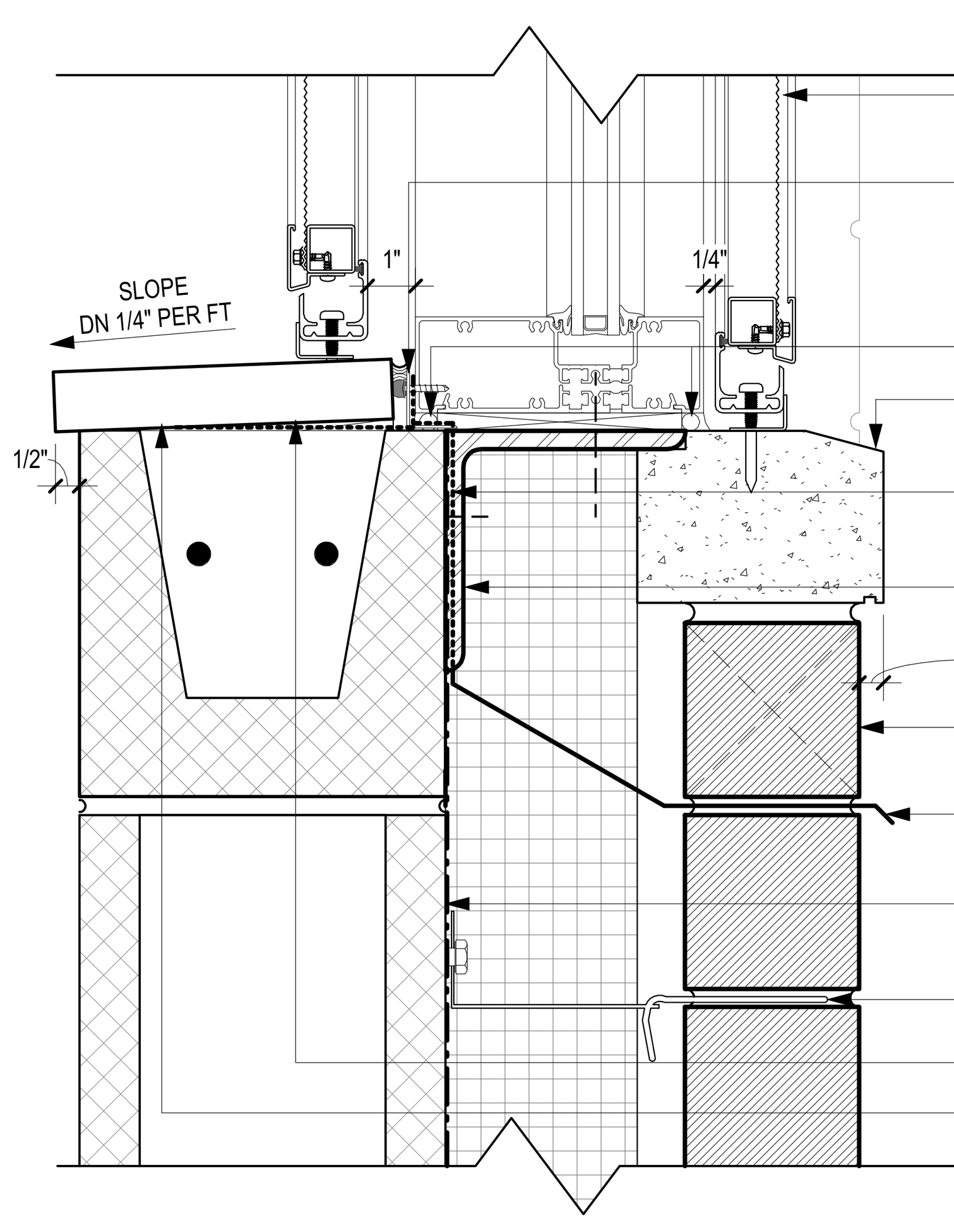
C3 TYPICAL WINDOW - JAMB DETAIL @ GYM
3" = 1'-0"



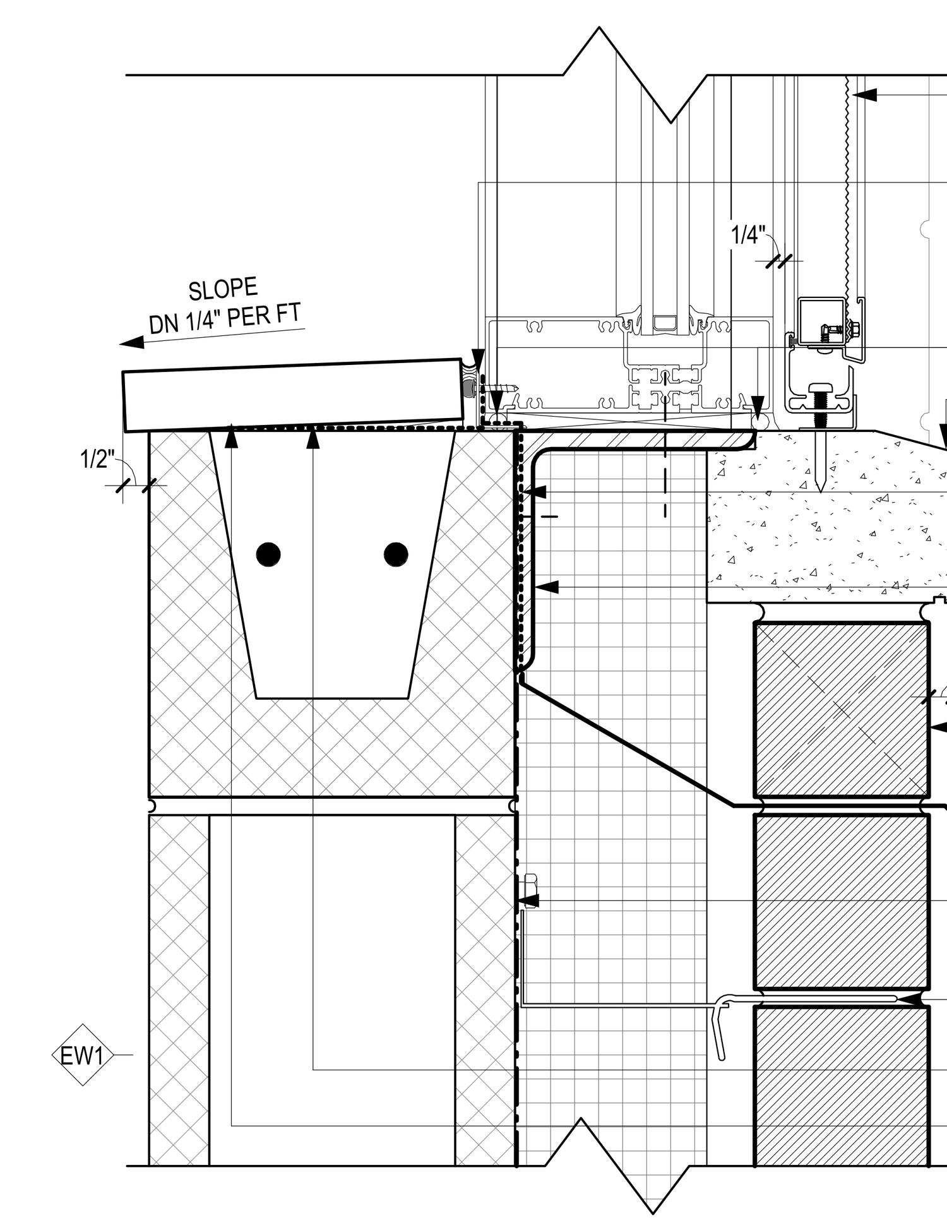
C5 TYPICAL WINDOW - JAMB DETAIL W/ SECURITY SCREEN
3" = 1'-0"



E2 TYPICAL WINDOW - HORIZONTAL MULLION
3" = 1'-0"



E3 TYPICAL WINDOW - SILL DETAIL @ GYM
3" = 1'-0"



E5 TYPICAL WINDOW - SILL DETAIL W/ SECURITY SCREEN
3" = 1'-0"

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada architecture·planning

Cornerstone Consulting Engineers & Design Services, Inc.

CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

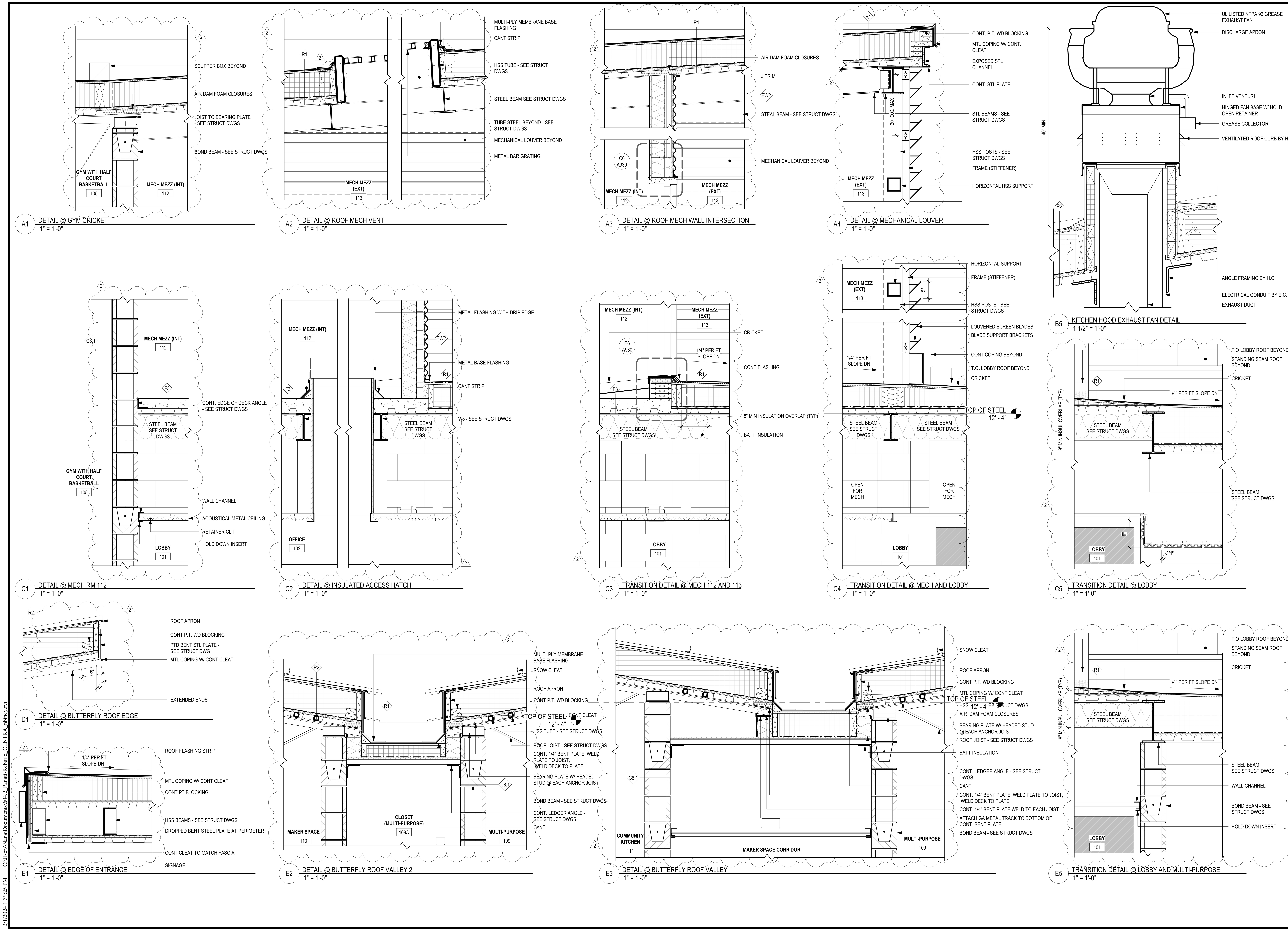
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
2	03/01/2024		BID ADDENDUM 2

Date 02/09/2024
Scale: 3" = 1'-0"
Job No. 604.2
Drawn: Author Appd.: Approver

Sheet Title:
WINDOW DETAILS

Sheet No.
A621



3/1/2024 1:39:25 PM C:\Users\Nam\Documents\604.2_Panati-Rebuild_CENTRAL_nhuy.rvt

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada architecture · planning

Cornerstone Consulting Engineers & Design Services, Inc.

CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND

for

PPR/REBUILD PHILADELPHIA

3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
2	03/01/2024		BID ADDENDUM 2

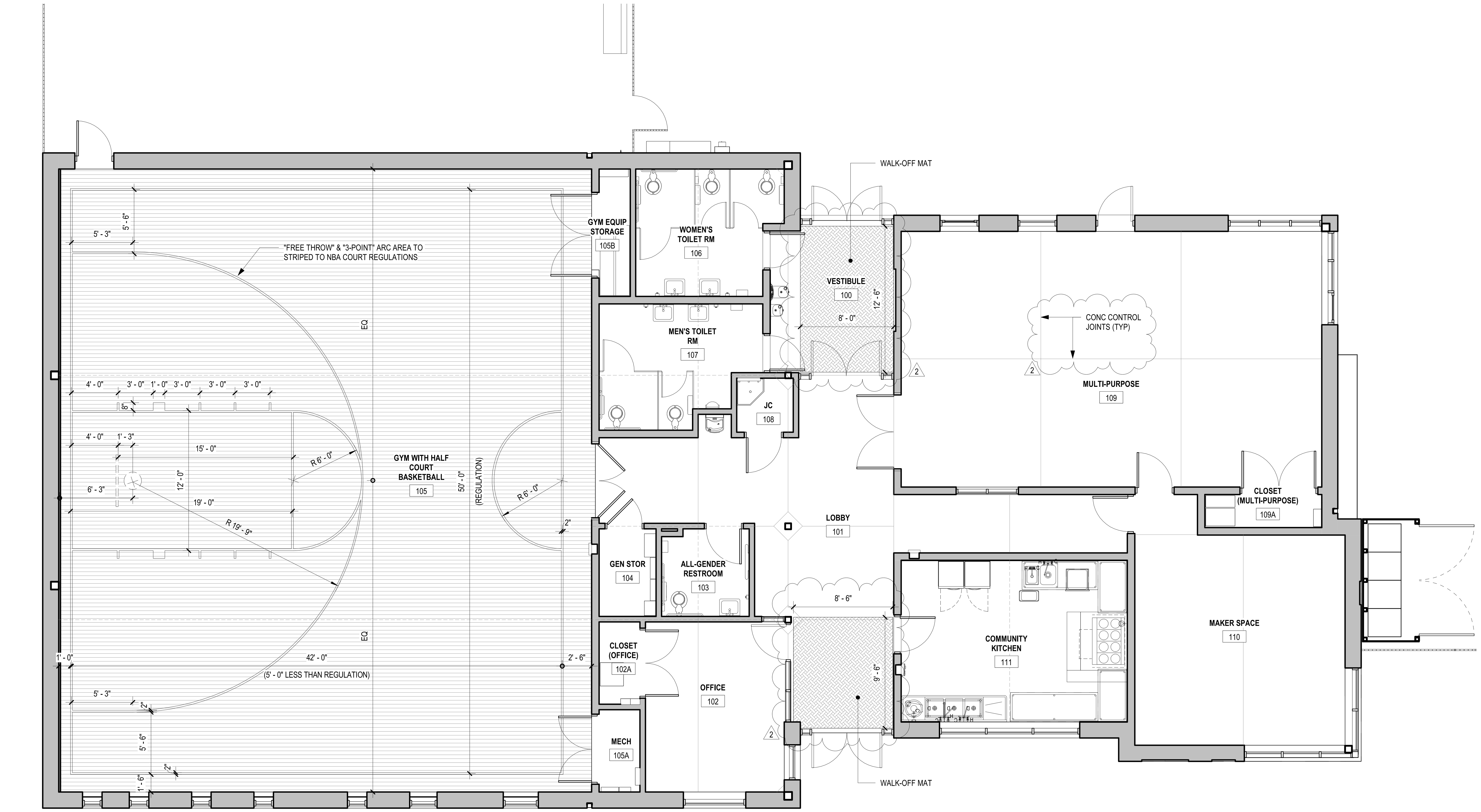
Date 02/09/2024
Scale: As indicated
Job No. 604.2
Drawn: NB, KN Appd.: CS

Sheet Title:

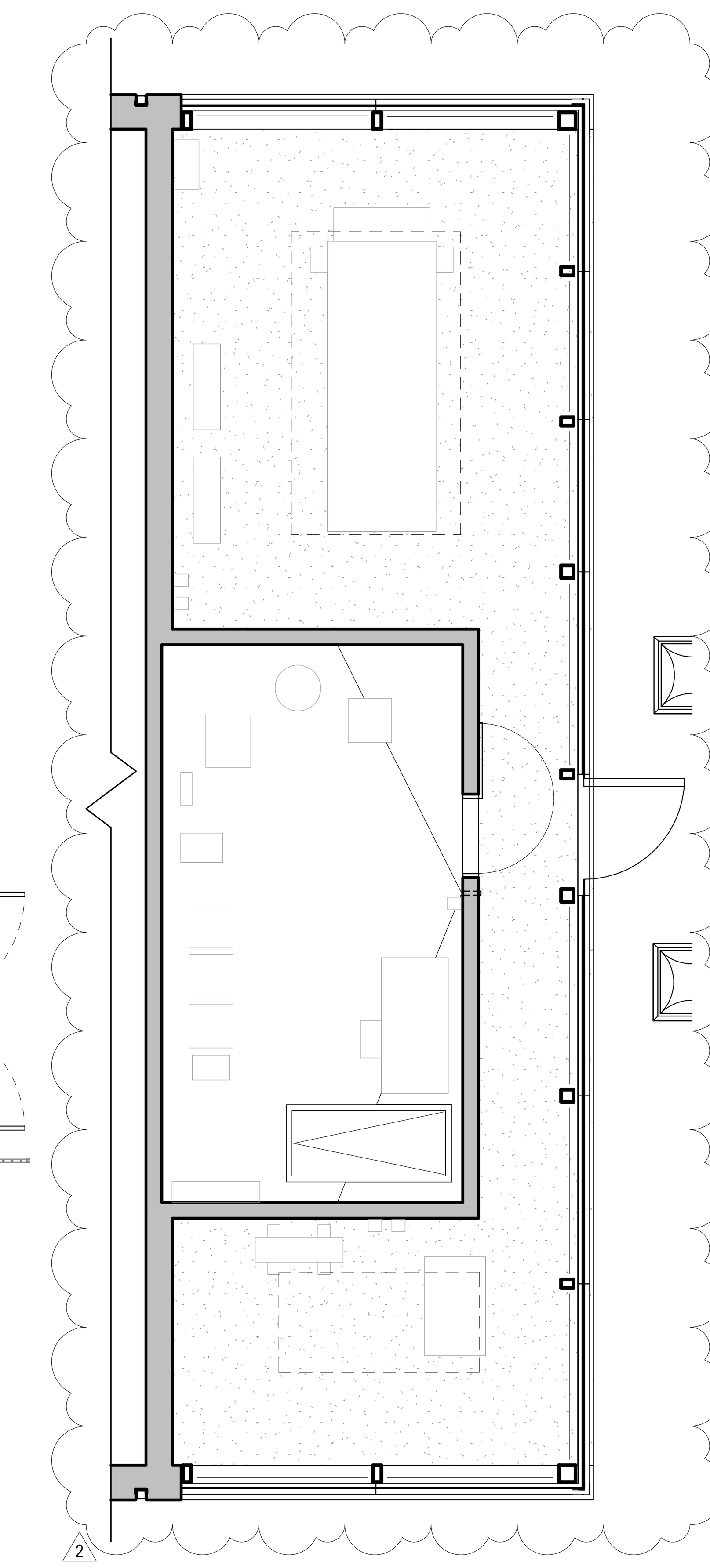
ROOF DETAILS

Sheet No.

A630



D2 FIRST FLOOR FINISH & FURNISHING PLAN
3/16" = 1'-0"



D6 MECH MEZZ FINISH & FURNISHING PLAN
3/16" = 1'-0"

EQUIPMENT SCHEDULE

RM NO	ROOM NAME	TYPE	MANUFACTURER
100	VESTIBULE	LOOSE-LAY WALK-OFF MAT	CONSTRUCTION SPECIALTIES, INC
101	LOBBY	AED WALL CABINET WITH ALARM	STRYKER
101	LOBBY	LIFEPAK CR2 DEFIBRILLATOR	STRYKER
101	LOBBY	AED WALL SIGN TRADITIONAL WITH LOGO	STRYKER
101	LOBBY	LOOSE-LAY WALK-OFF MAT	CONSTRUCTION SPECIALTIES, INC
105B	GYP EQUIP STORAGE	GYM FLOOR COVER & STORAGE RACK	ALL COURT COVERS/RUBBER FLOORING, INC

ROOM FINISH SCHEDULE

NUMBER	NAME	WALL FINISH	FLOOR FINISH	BASE FINISH	CEILING FINISH	COMMENTS
100	VESTIBULE	GROUND FACE CMU	POLISHED CONCRETE*	-	ACOUSTIC METAL DECK CEILING	*8'x12'-6" LOOSE-LAY WALK-OFF MAT
101	LOBBY	GROUND FACE CMU	POLISHED CONCRETE*	-	ACOUSTIC METAL DECK CEILING	*8'-6"x9'-6" LOOSE-LAY WALK-OFF MAT
102	OFFICE	PTD CMU	POLISHED CONCRETE	-	ACOUSTIC METAL DECK CEILING	
102A	CLOSET (OFFICE)	PTD CMU	POLISHED CONCRETE	-	EXPOSED	
103	ALL-GENDER RESTROOM	PTD CMU	EPOXY	EPOXY BASE	ACOUSTIC METAL DECK CEILING	
104	GEN STOR	PTD CMU	POLISHED CONCRETE	-	EXPOSED	
105	GYM WITH HALF COURT BASKETBALL	PTD CMU/ACOUSTIC CMU*	RESILIENT WOOD FLOOR	VENTED COVE	ACOUSTIC METAL DECK CEILING	*SEE SECTIONS FOR EXTENT OF CMU AND ACOUSTIC CMU
105A	MECH	PTD CMU	POLISHED CONCRETE	-	EXPOSED	
105B	GYM EQUIP STORAGE	PTD CMU	POLISHED CONCRETE	-	EXPOSED	
106	WOMEN'S TOILET RM	PTD CMU	EPOXY	EPOXY BASE	ACOUSTIC METAL DECK CEILING	
107	MEN'S TOILET RM	PTD CMU	EPOXY	EPOXY BASE	ACOUSTIC METAL DECK CEILING	
108	JC	PTD CMU	POLISHED CONCRETE	-	EXPOSED	
109	MULTI-PURPOSE	PTD CMU	POLISHED CONCRETE	-	ACOUSTIC METAL DECK CEILING	
109A	CLOSET (MULTI-PURPOSE)	PTD CMU	POLISHED CONCRETE	-	EXPOSED	
110	MAKER SPACE	PTD CMU	POLISHED CONCRETE	-	ACOUSTIC METAL DECK CEILING	
111	COMMUNITY KITCHEN	PTD CMU/FRP	EPOXY	EPOXY BASE	ACOUSTIC METAL DECK CEILING	
112	MECH MEZZ (INT)	PTD CMU*/MOLD-RESISTANT GWB	CONCRETE	-	EXPOSED	*SEE PLAN FOR EXTENT OF CMU AND AND MOLD RESISTANT GWB
113	MECH MEZZ (EXT)	PTD CMU*/LOUVERS	ROOFING	-	EXPOSED	*SEE PLAN FOR EXTENT OF CMU AND LOUVERS

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com
cicada architecture · planning
Cornerstone Consulting Engineers & Design Services, Inc.
CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

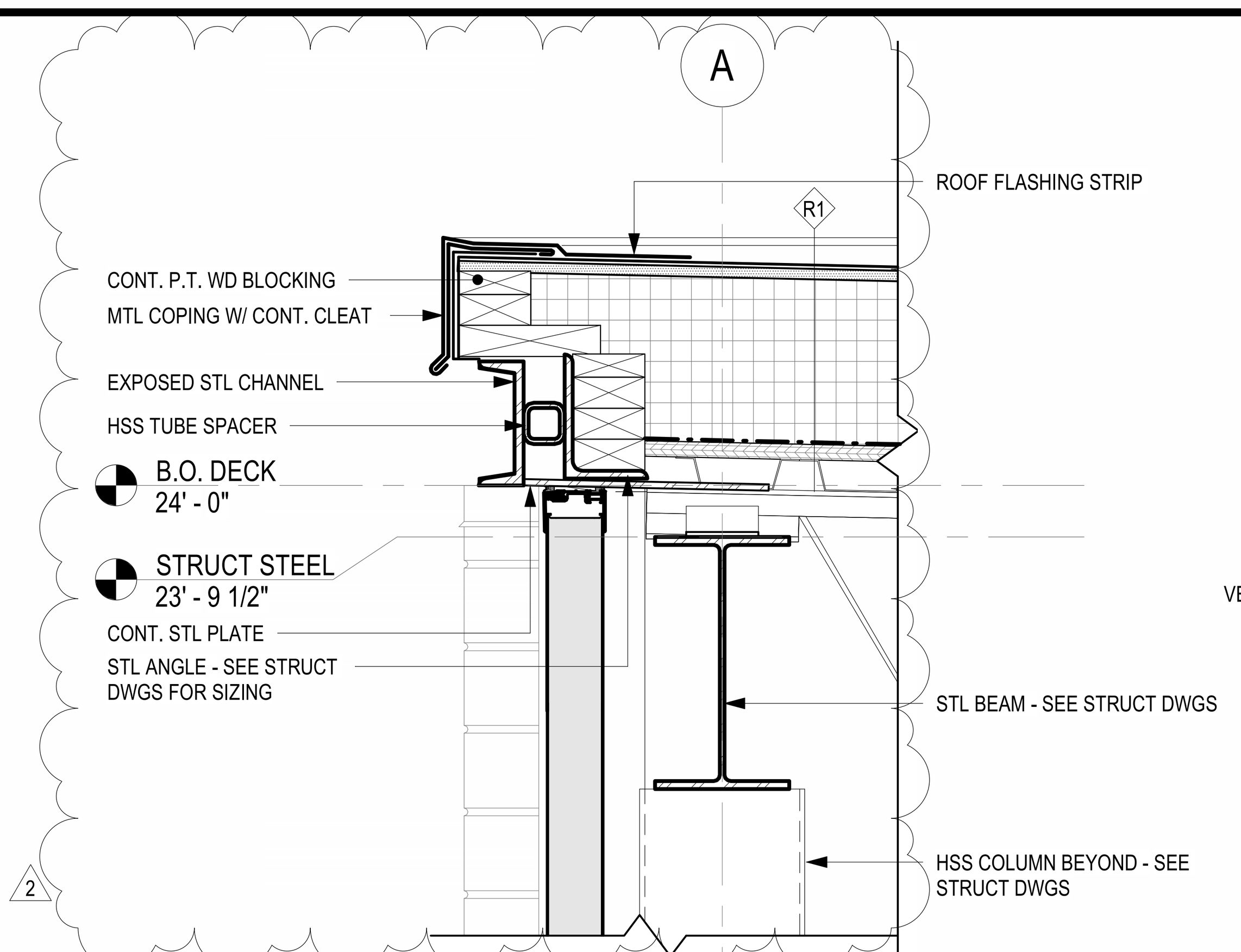
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
2	03/01/2024		BID ADDENDUM 2

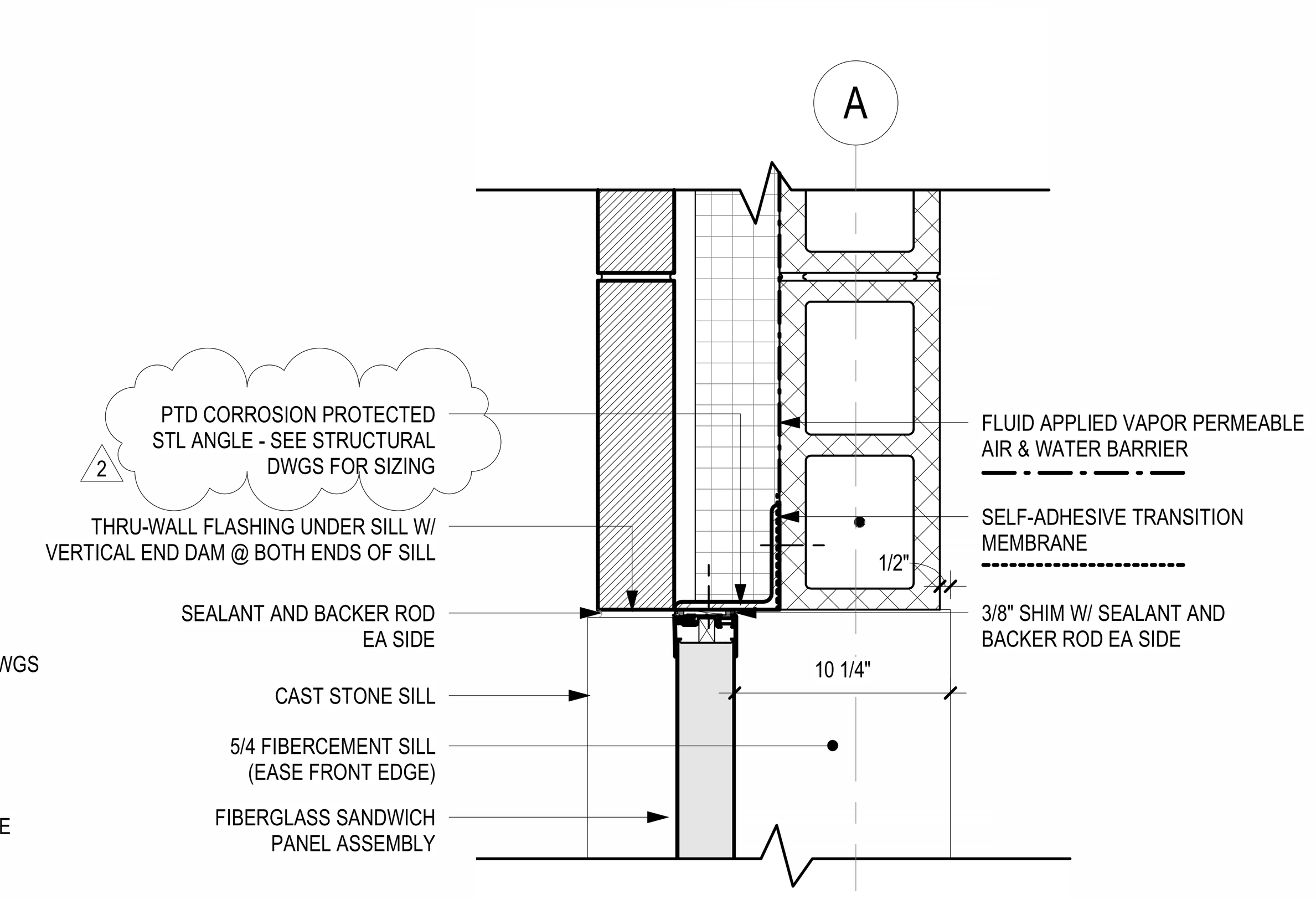
Date 02/09/2024
Scale: 3/16" = 1'-0"
Job No. 604.2
Drawn: NB, KN Appd.: CS

Sheet Title:
FINISH & FURNISHING PLAN

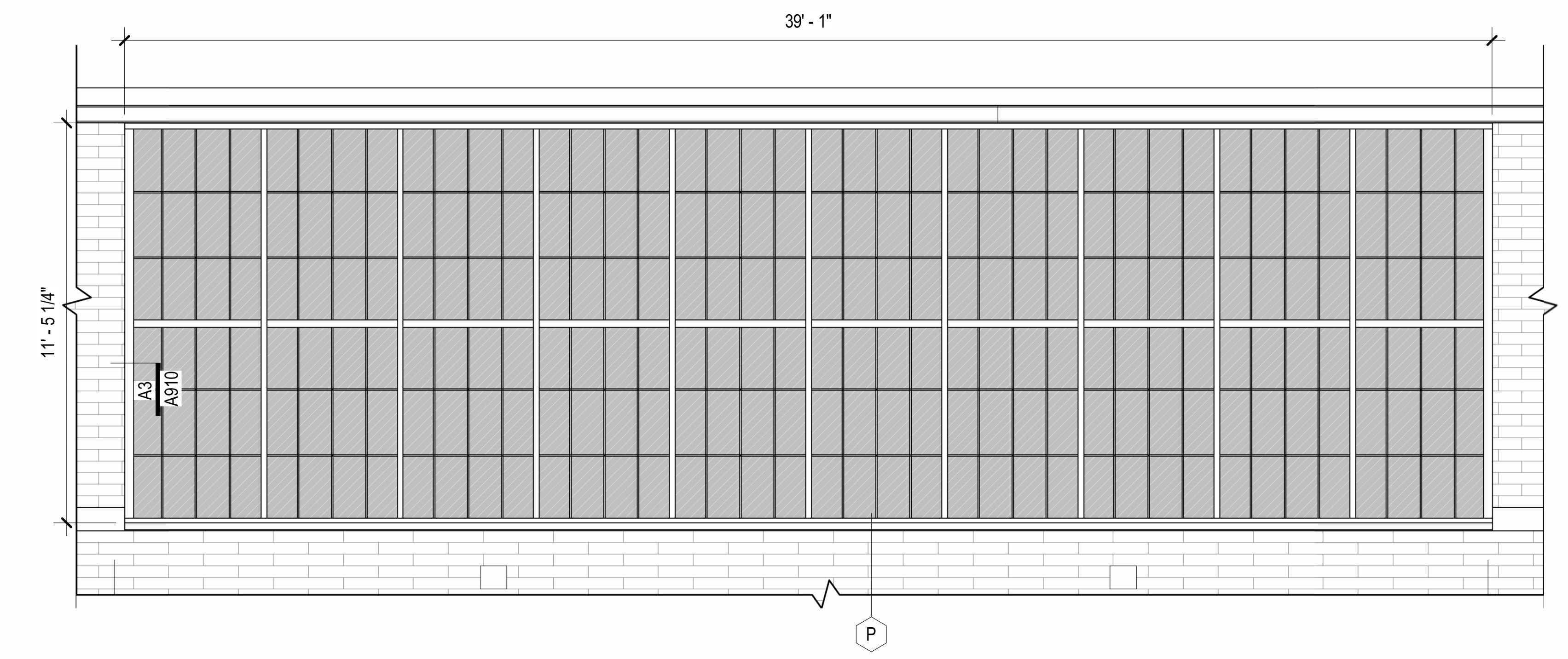
Sheet No.
A810



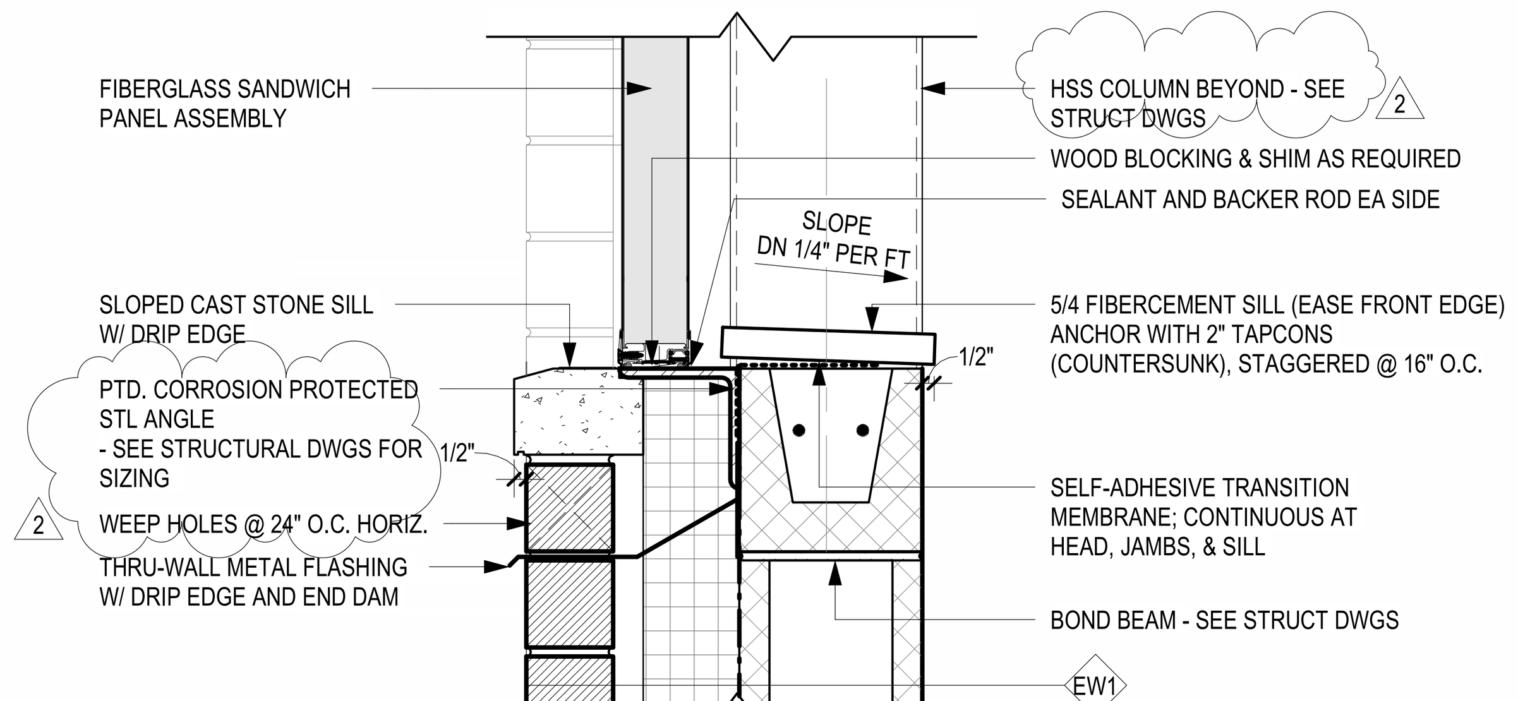
A1 HEAD DETAIL @ FIBERGLASS-SANDWICH-PANEL ASSEMBLY
1 1/2" = 1'-0"



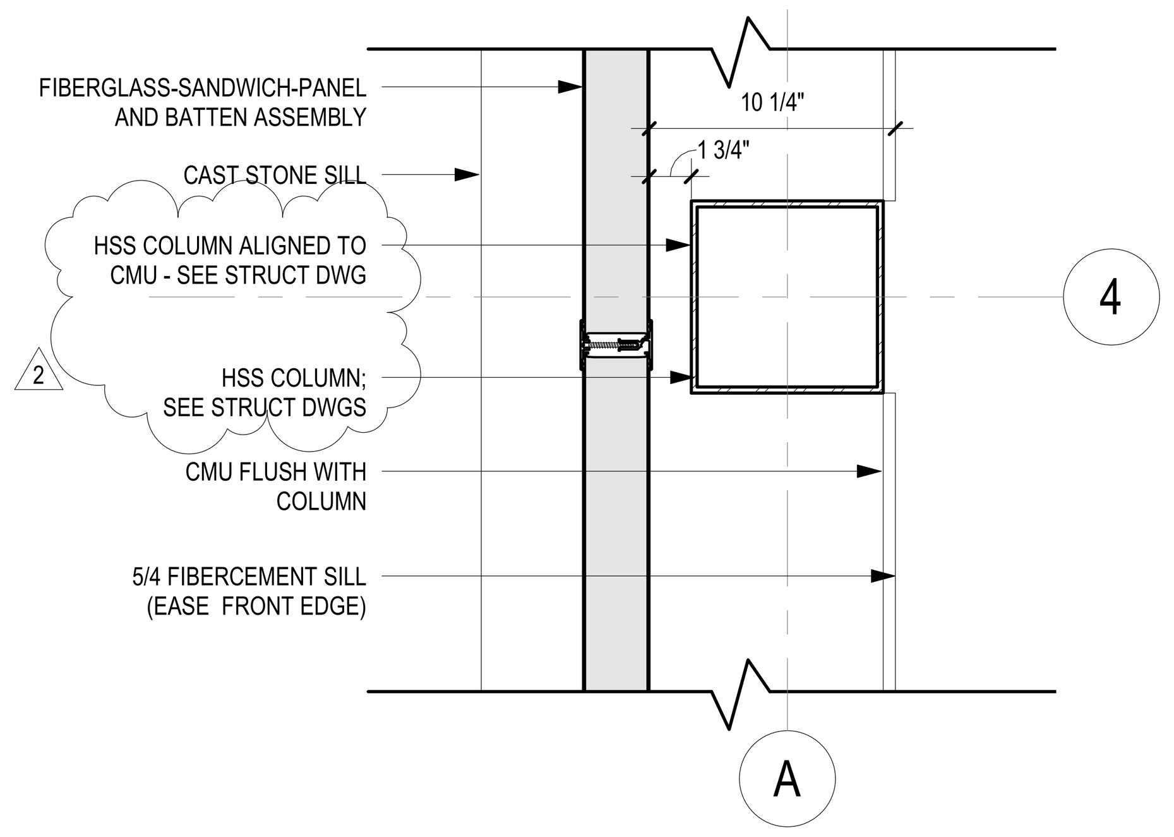
A2 JAMB DETAIL @ FIBERGLASS-SANDWICH-PANEL ASSEMBLY
1 1/2" = 1'-0"



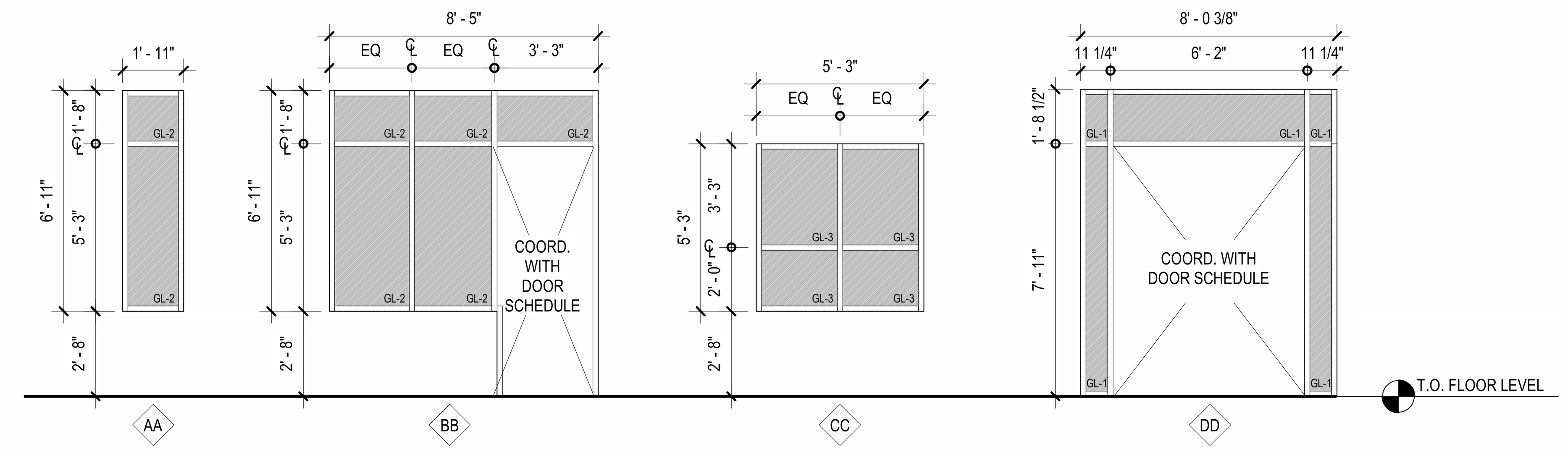
A4 FIBERGLASS-SANDWICH-PANEL - ELEVATION
1/4" = 1'-0"



B1 SILL DETAIL @ FIBERGLASS-SANDWICH-PANEL ASSEMBLY
1 1/2" = 1'-0"

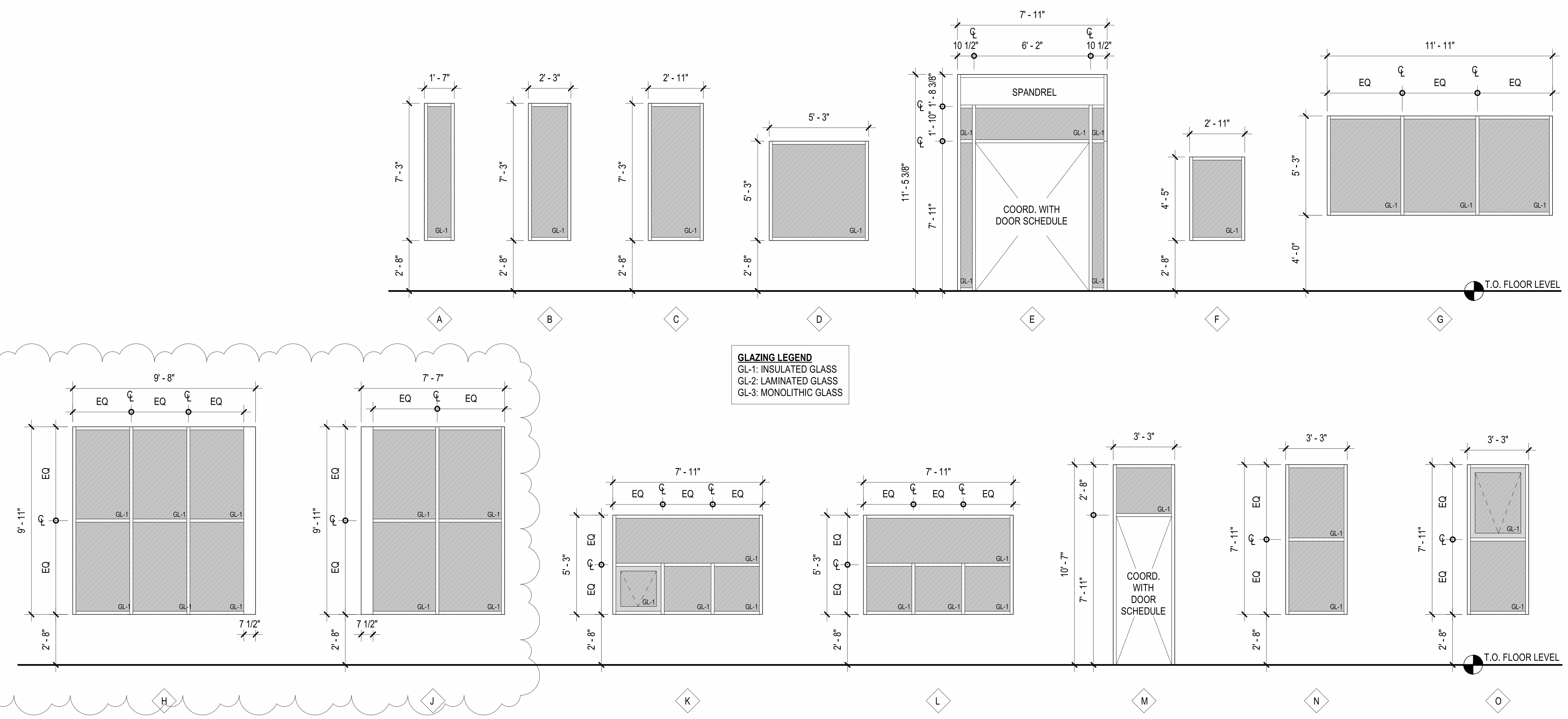


B2 COLUMN DETAIL @ FIBERGLASS-SANDWICH-PANEL ASSEMBLY
1 1/2" = 1'-0"



B4 INTERIOR STOREFRONT LEGEND
1/4" = 1'-0"

WINDOW SCHEDULE												
ID #	TYPE	MANUF	MODEL	SINGLE WDW AREA	QTY	TOTAL WDW AREA	U-FACTOR	SHGC	PF, DETAIL PAGE #	VT	ROLLER-SHADES	NOTES
NORTH												
P	FIXED	KALWALL	WALL SYSTEMS	487	1	487	0.30	0.30	0	N/A	NA	
EAST												
E	FIXED	KAWNEER	TRIFAB 601T	44	1	44	0.38	0.36	0	N/A	NA	
L	FIXED	KAWNEER	TRIFAB 601T	42	1	42	0.38	0.36	0	N/A	1 & 2	
M	FIXED	KAWNEER	TRIFAB 601T	9	1	9	0.38	0.36	0	N/A	1 & 2	
N	FIXED	KAWNEER	TRIFAB 601T	26	1	26	0.38	0.36	0	N/A	1 & 2	
O	CASEMENT/ FIXED	KAWNEER	TRIFAB 601T	26	1	26	0.38	0.36	0	N/A	1 & 2	
SOUTH												
F	FIXED	KAWNEER	TRIFAB 601T	13	1	13	0.38	0.36	0	N/A	1	
J	FIXED	KAWNEER	TRIFAB 601T	75	1	75	0.38	0.36	0	N/A	1	
K	CASEMENT/ FIXED	KAWNEER	TRIFAB 601T	42	1	42	0.38	0.36	0	N/A	1 & 2	
WEST												
A	FIXED	KAWNEER	TRIFAB 601T	12	5	60	0.38	0.36	0	N/A	NA	
B	FIXED	KAWNEER	TRIFAB 601T	16	1	16	0.38	0.36	0	N/A	NA	
C	FIXED	KAWNEER	TRIFAB 601T	21	1	21	0.38	0.36	0	N/A	NA	
D	FIXED	KAWNEER	TRIFAB 601T	28	1	28	0.38	0.36	0	N/A	1	
E	FIXED	KAWNEER	TRIFAB 601T	44	1	44	0.38	0.36	0	N/A	NA	
G	FIXED	KAWNEER	TRIFAB 601T	63	1	63	0.38	0.36	0	N/A	NA	
H	FIXED	KAWNEER	TRIFAB 601T	96	1	96	0.38	0.36	0	N/A	1	
ROOF												
Q	FIXED	WASCO	DOMED UNITS	10	2	20	0.50	0.40	0	N/A	NA	



E2 EXTERIOR STOREFRONT LEGEND
1/4" = 1'-0"

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com
cicada architecture·planning
Cornerstone Consulting Engineers & Design Services, Inc.
CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

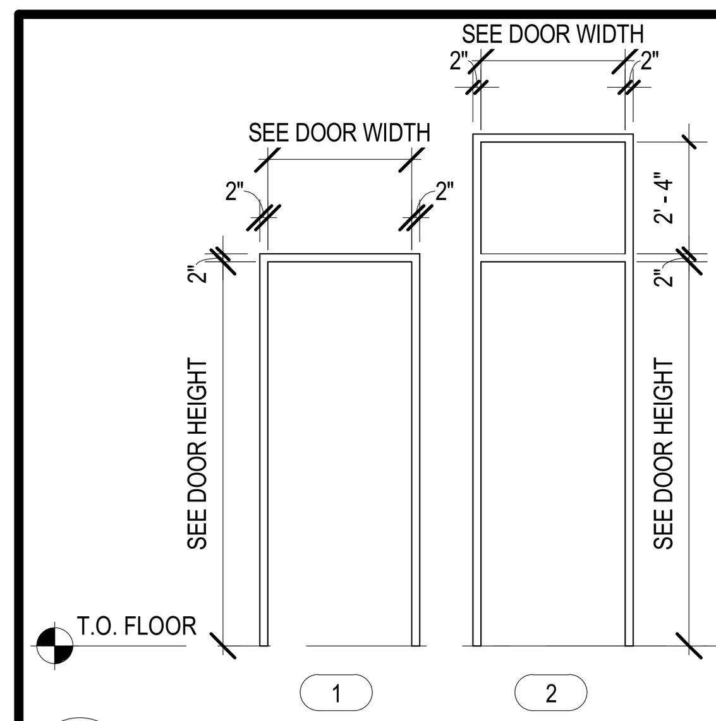
VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
2	03/01/2024		BID ADDENDUM 2

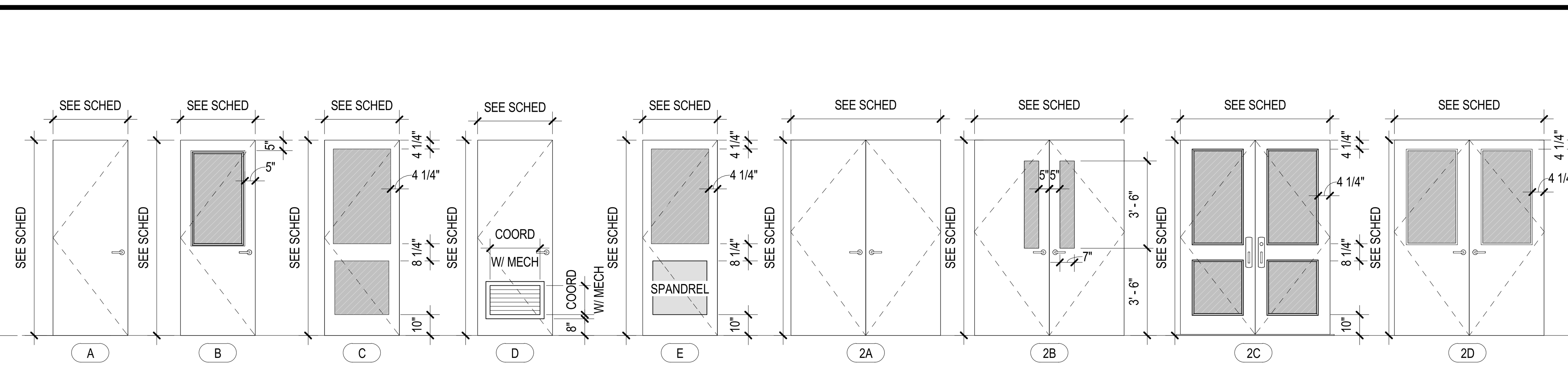
Date 02/09/2024
Scale: As indicated
Job No. 604.2
Drawn: NB, KN Appd.: CS

Sheet Title:
WINDOW SCHEDULES, TYPES, DETAILS

Sheet No.
A910



DOOR FRAME TYPES
1/4" = 1'-0"



DOOR TYPES
1/4" = 1'-0"

DOOR SCHEDULE

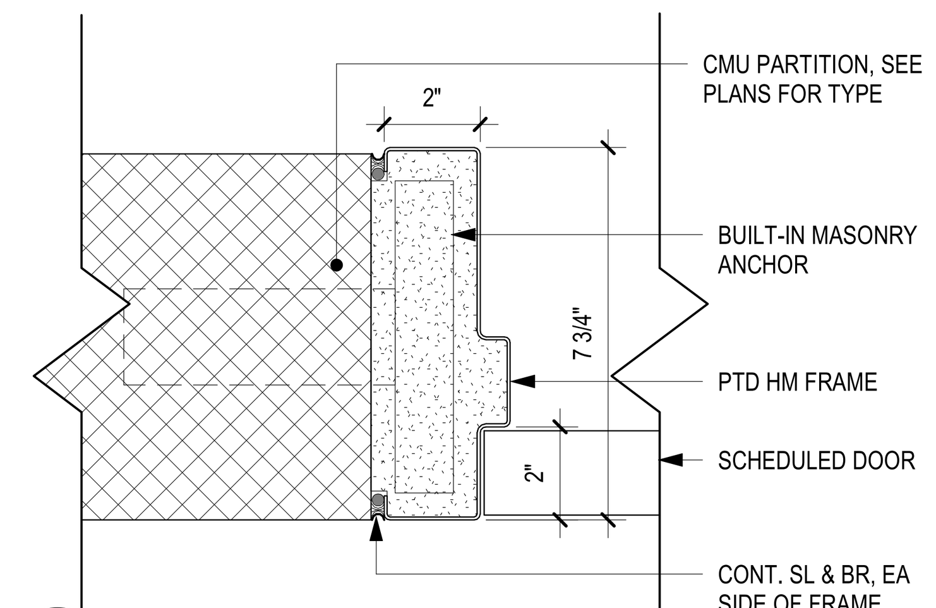
DOOR No.	ROOM	TYPE	INTERIOR OR EXTERIOR	WIDTH	HEIGHT	THICKNESS	DOOR MT'L	FINISH	FRAME TYPE	FRAME MT'L	GLAZING	HEAD DT'L	JAMB DT'L	SILL DT'L	HARDWARE SET	COMMENTS
100/A	VESTIBULE	2C	Exterior	6' - 0"	7' - 10"	0' - 1 3/4"	ALUM	CLEAR ANODIZED	2	ALUM	GL-1	D4/A930	B4/A610	E4/A930	07	
101/A	LOBBY	2C	Exterior	6' - 0"	7' - 10"	0' - 1 3/4"	ALUM	CLEAR ANODIZED	2	ALUM	GL-1	D4/A930	A4/A610	E4/A930	07	
101/B	LOBBY	2C	Interior	6' - 0"	7' - 10"	0' - 1 3/4"	ALUM	CLEAR ANODIZED	2	ALUM	GL-1	D3/A930	A2/A610	E3/A930	07	
102/A	OFFICE	C	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	ALUM	CLEAR ANODIZED	1	ALUM	GL-2	B1/A620	C4/A610	E3/A930	01	
102A/A	CLOSET (OFFICE)	2A	Interior	5' - 8"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B2/A930	-	03A	
103/A	ALL-GENDER RESTROOM	D	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B2/A930	-	02	SIGHT-PROOF LOUVER
104/A	GEN STOR	A	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B2/A930	-	03	
105/A	GYM WITH HALF COURT BASKETBALL	2B	Interior	6' - 4"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	GL-3	B3/A930	B1/A930	E2/A930	05	
105/B	GYM WITH HALF COURT BASKETBALL	A	Exterior	3' - 0"	7' - 10"	0' - 1 3/4"	SSTL	SATIN	1	SSTL	-	C1/A930	D1/A930	E1/A930	11	
105A/A	MECH	2A	Interior	5' - 8"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B1/A930	E2/A930	04	
105B/A	GYM EQUIP STORAGE	2A	Interior	7' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B1/A930	E2/A930	03A	
106/A	WOMEN'S TOILET RM	D	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B1/A930	-	09	SIGHT-PROOF LOUVER
107/A	MEN'S TOILET RM	D	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B1/A930	-	09	SIGHT-PROOF LOUVER
108/A	JC	A	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B2/A930	-	03	
109/A	MULTI-PURPOSE	2D	Interior	6' - 4"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM		B3/A930	B1/A930	-	05	
109/B	MULTI-PURPOSE	E	Exterior	3' - 0"	7' - 10"	0' - 1 3/4"	ALUM	CLEAR ANODIZED	2	ALUM	GL-1(TOP) INSUL PNL (BOT)	D2/A930	B4/A610	C2/A930	11	
109A/A	CLOSET (MULTI-PURPOSE)	2A	Interior	6' - 4"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B1/A930	-	03A	
110/A	MAKER SPACE	B	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	GL-3	B3/A930	B1/A930	-	10	
110/B	MAKER SPACE	A	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	B3/A930	B1/A930	-	10	180 DEG CAPABLE
111/A	COMMUNITY KITCHEN	B	Interior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	GL-3	B3/A930	B1/A930	-	10	
112/A	MECH MEZZ (INT)	A	Exterior	3' - 0"	7' - 10"	0' - 1 3/4"	HM	PTD	1	HM	-	C6/A930	D6/A930	E6/A930	04	

DOOR SCHEDULE / DOOR HARDWARE GENERAL NOTES

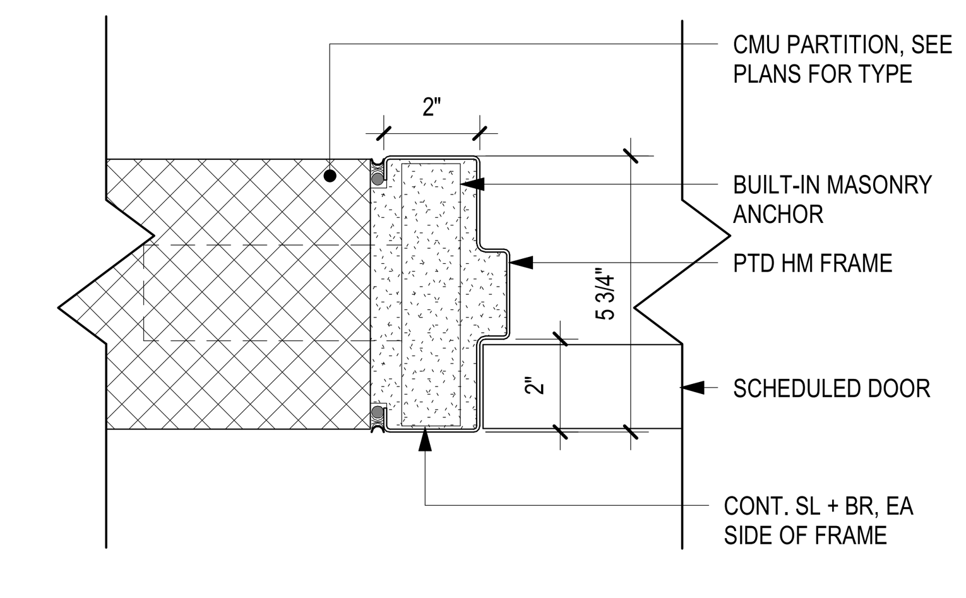
1. AT EXT DOORS - PROVIDE CONT EXT WEATHERSTRIPPING AND ADA ACCESSIBLE ALUM THRESHOLD
2. PROVIDE PANIC HARDWARE AND SURFACE MOUNTED CLOSERS AT ALL EXTERIOR STOREFRONTS
3. ALL INT DOOR THRESHOLDS TO BE ADA ACCESSIBLE HEIGHT
4. CONTRACTOR TO COORDINATE WITH OWNER'S SECURITY VENDOR FOR ADDITIONAL POWER REQUIREMENTS
5. REFER TO ELEC DOCUMENTS FOR ADDITIONAL INFORMATION
6. BOTTOM OF GLASS TO BE 43" MAXIMUM ABOVE THE FLOOR.

DOOR HARDWARE SETS

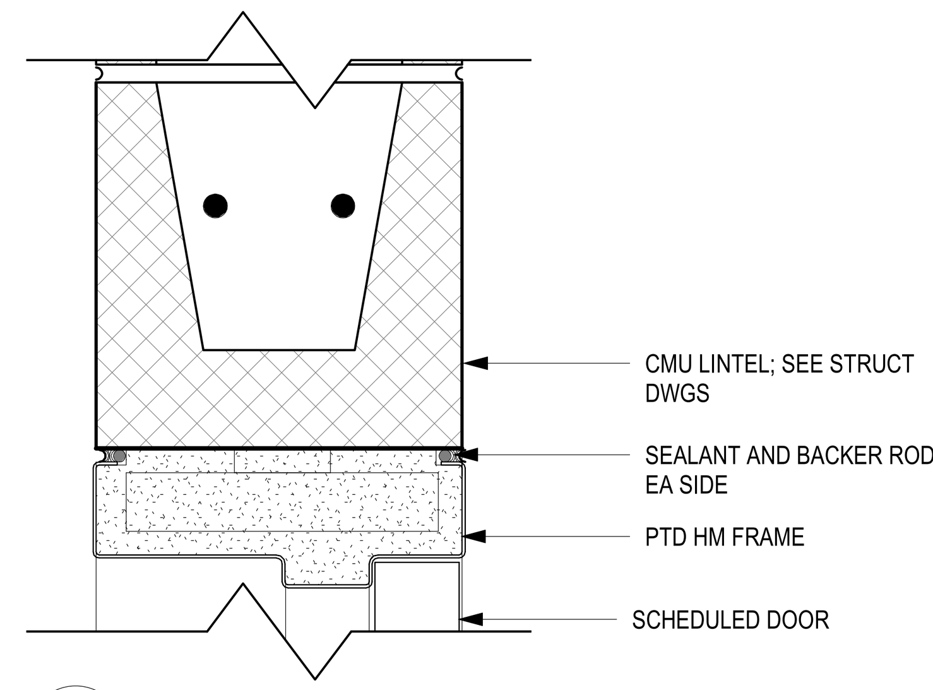
HARDWARE SET 01 - OFFICE WITH LOCK
HARDWARE SET 02 - KEYED PRIVACY TOILET
HARDWARE SET 03 - STORAGE CLOSET WITH LOCK
HARDWARE SET 03A - STORAGE CLOSET DOUBLE DOORS WITH LOCK
HARDWARE SET 04 - MECHANICAL ROOM DOUBLE DOORS WITH LOCK
HARDWARE SET 05 - PANIC HARDWARE DOUBLE DOORS
HARDWARE SET 07 - EXTERIOR PANIC HARDWARE DOUBLE DOORS
HARDWARE SET 09 - PUSH/PULL SINGLE DOOR, NO LOCKING
HARDWARE SET 10 - CLASSROOM
HARDWARE SET 11 - EXTERIOR PANIC HARDWARE, SINGLE DOOR (NO EXT HARDWARE)



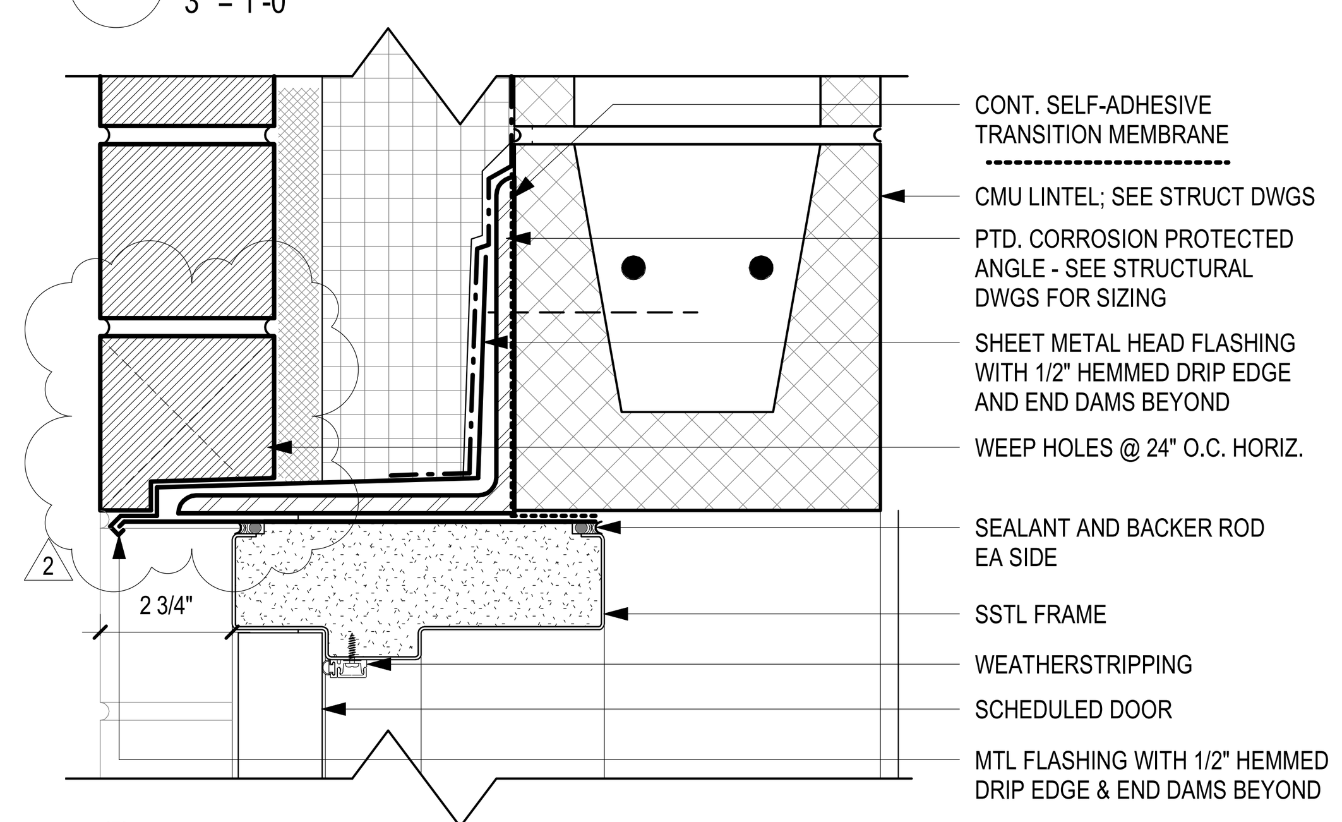
B1 MASONRY FRAME NEW 8" CMU WALL
3" = 1'-0"



B2 MASONRY FRAME NEW 6" CMU WALL
3" = 1'-0"

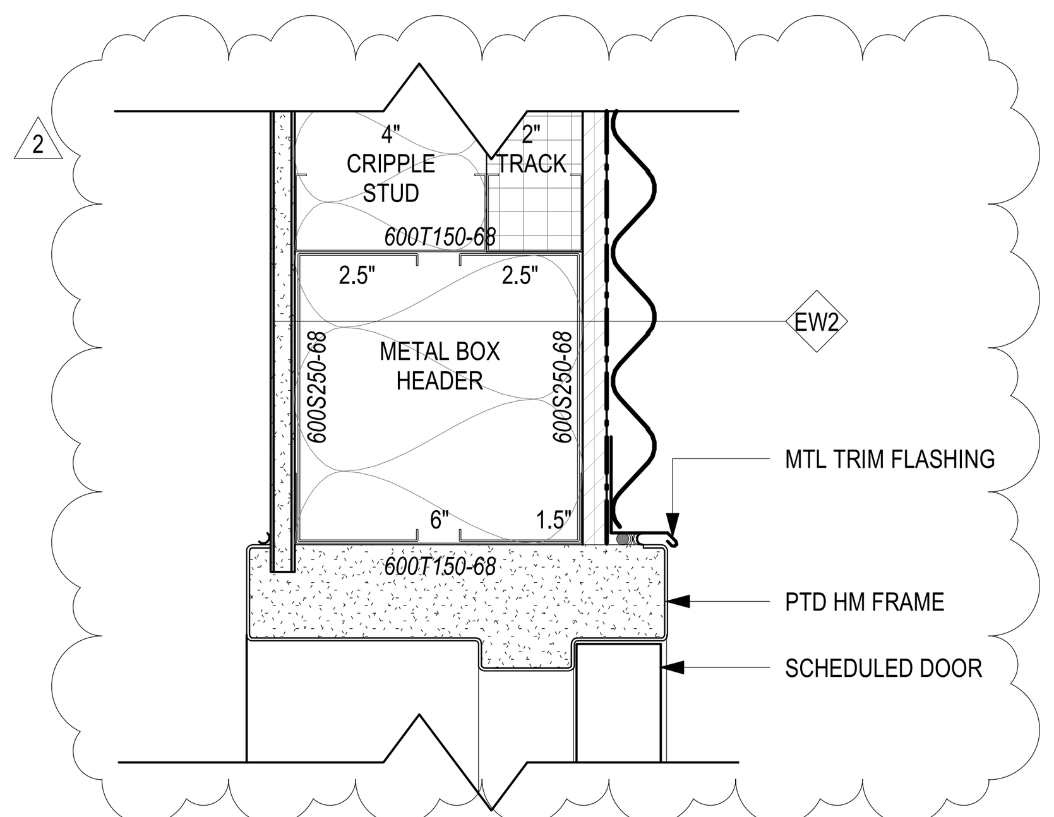


B3 DETAIL HEAD @ INTERIOR CMU
3" = 1'-0"

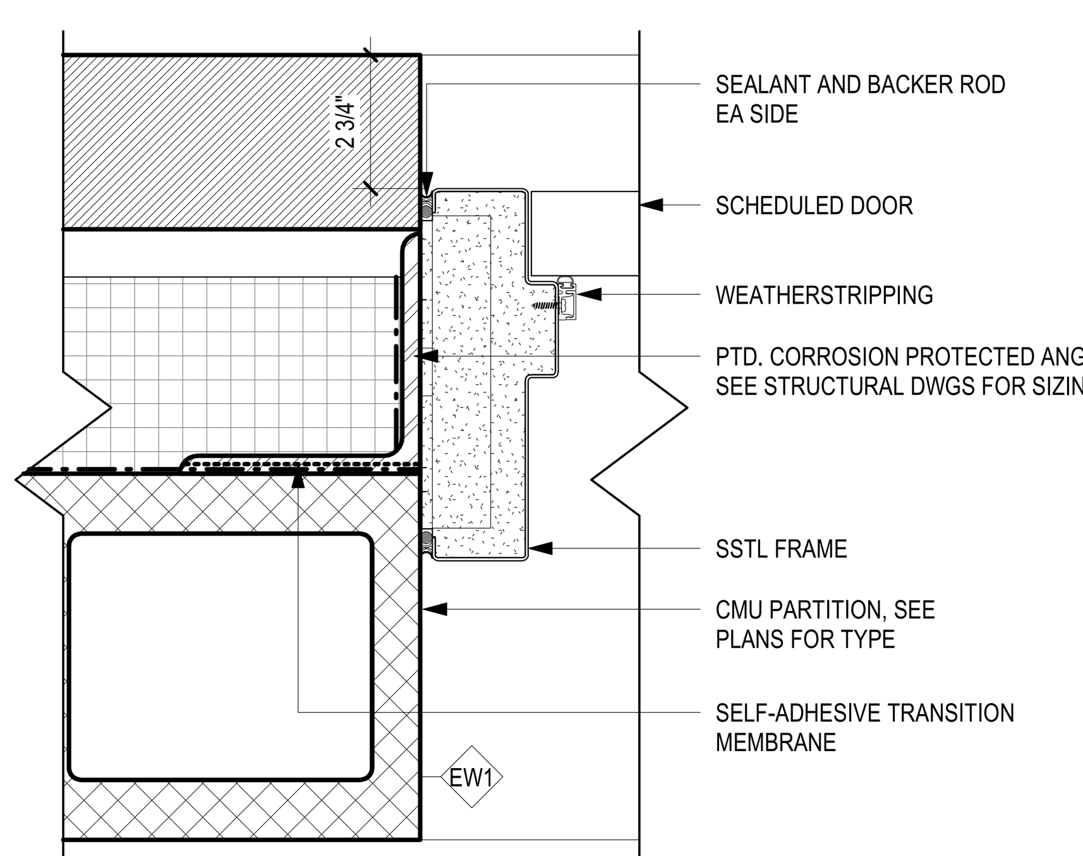


C1 DETAIL HEAD @ EXTERIOR GYM
3" = 1'-0"

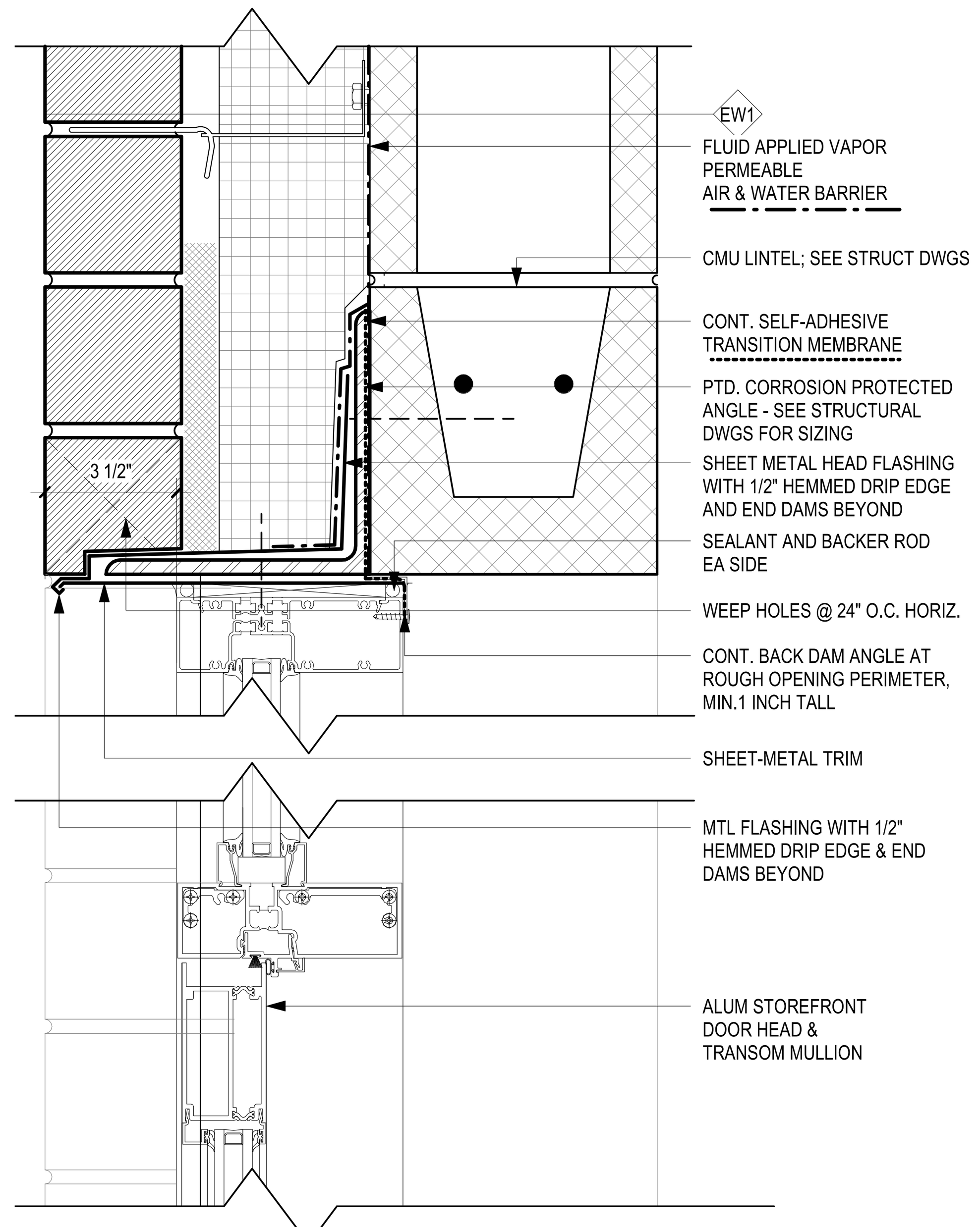
GLAZING LEGEND
GL-1: INSULATED GLASS
GL-2: LAMINATED GLASS
GL-3: MONOLITHIC GLASS



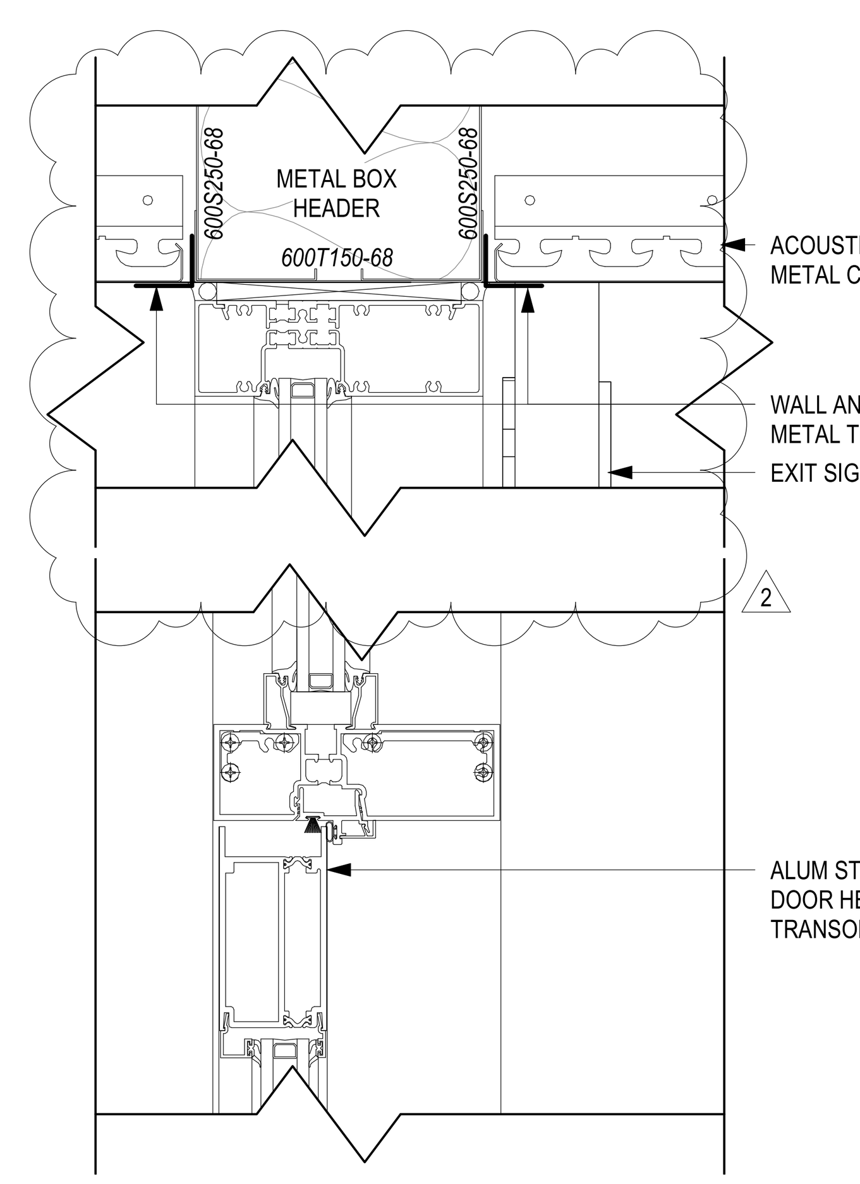
C6 DETAIL HEAD @ MECH RM 112 & 113
3" = 1'-0"



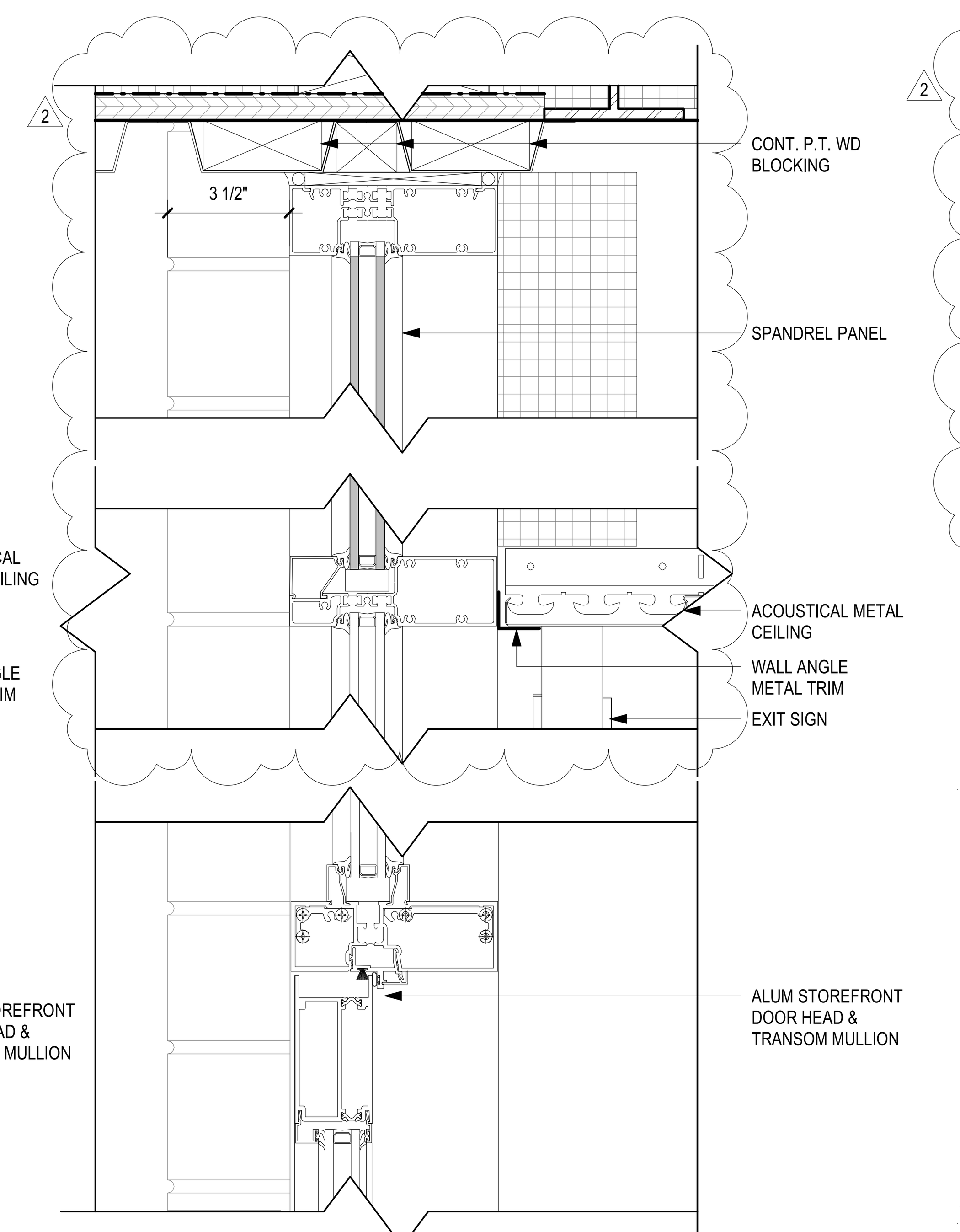
D1 DETAIL JAMB @ EXTERIOR GYM
3" = 1'-0"



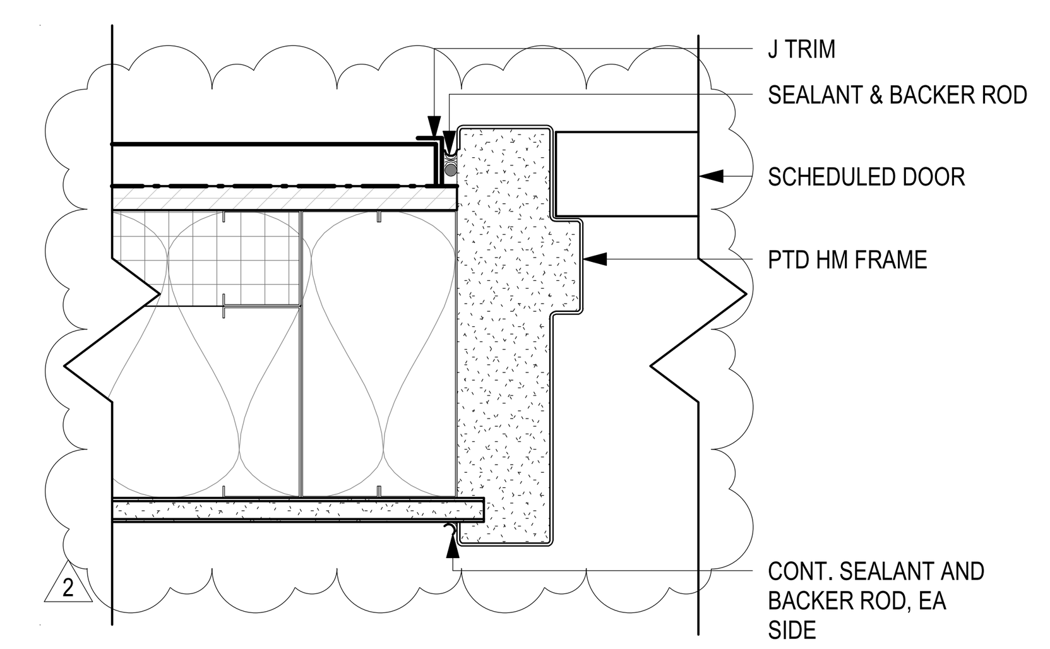
D2 DETAIL HEAD & TRANSOM @ RM 109 EXT. ALUM STOREFRONT
3" = 1'-0"



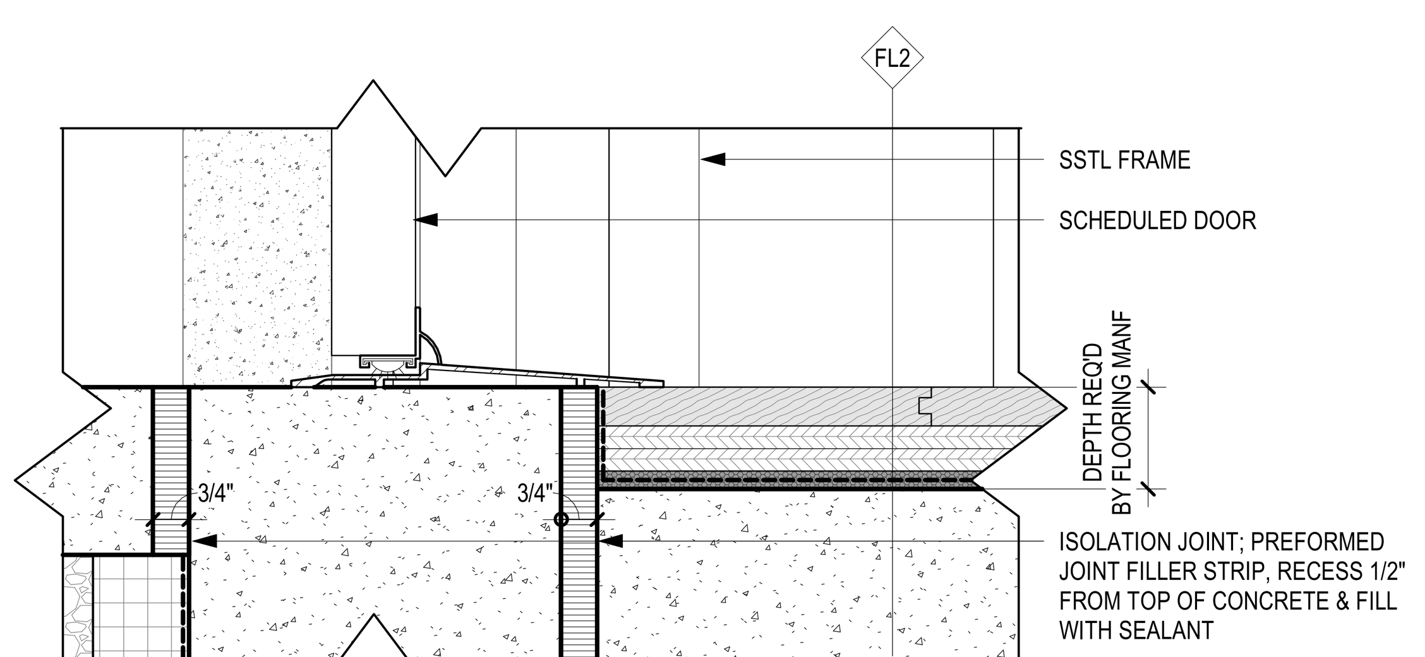
D3 DETAIL HEAD & TRANSOM @ INTERIOR STOREFRONT
3" = 1'-0"



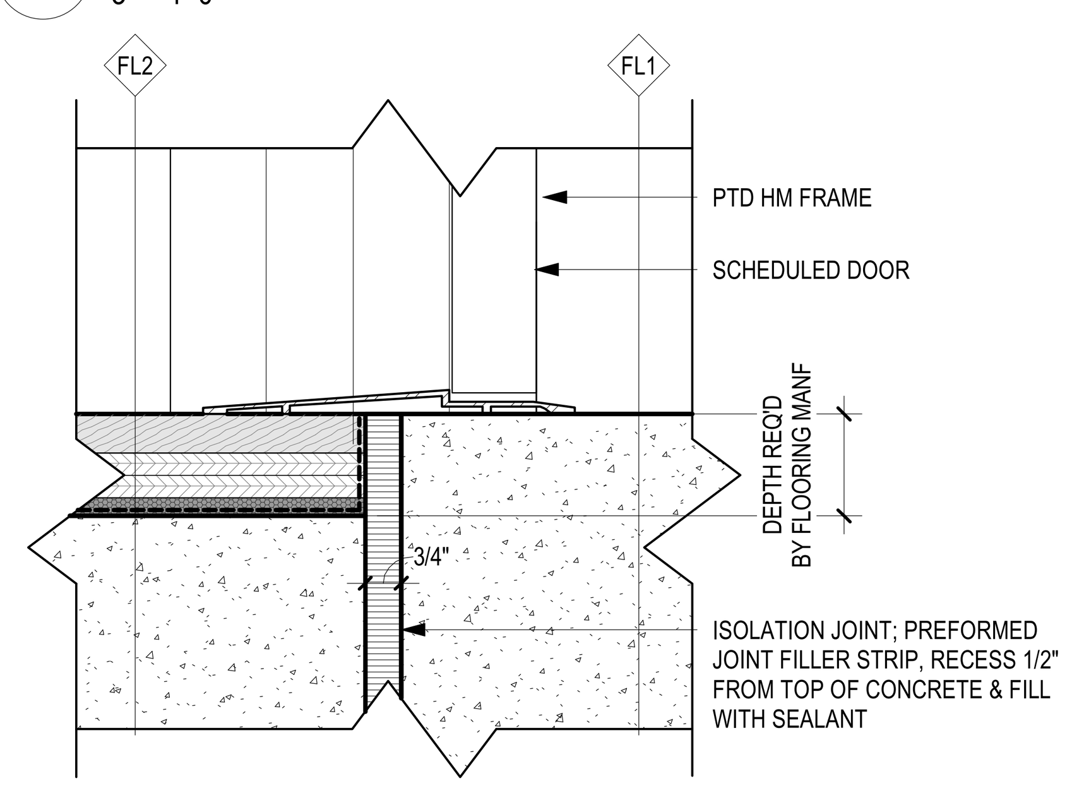
D4 DETAIL HEAD & TRANSOM @ EXTERIOR STOREFRONT
3" = 1'-0"



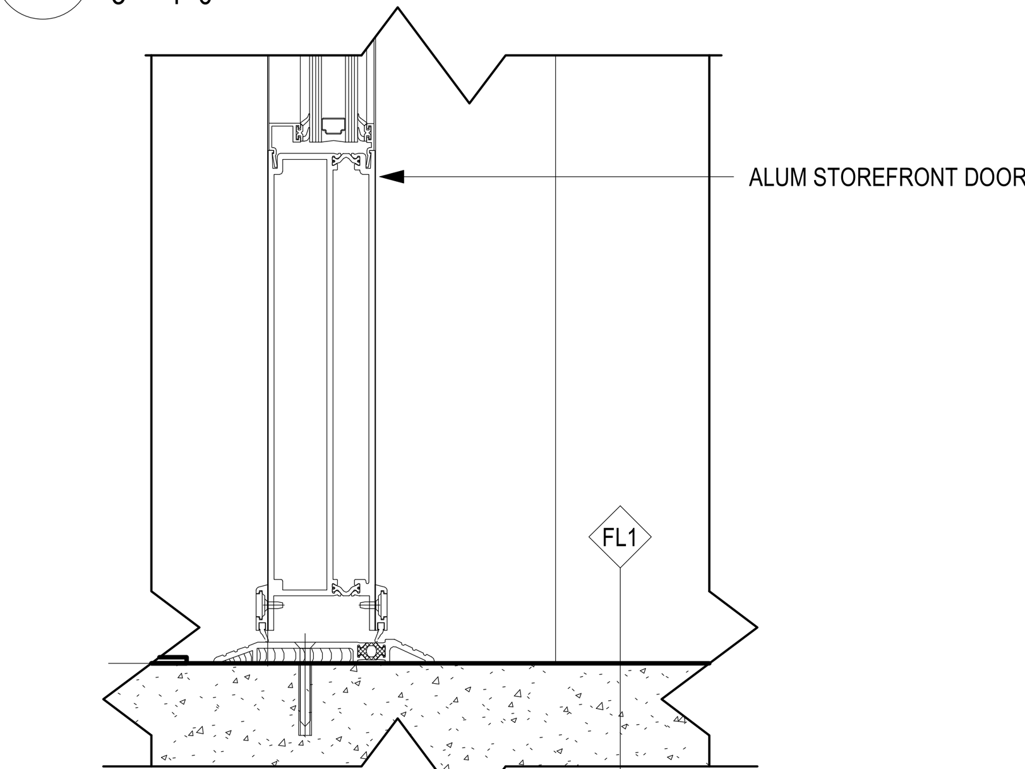
D6 DETAIL JAMB @ MECH RM 112
3" = 1'-0"



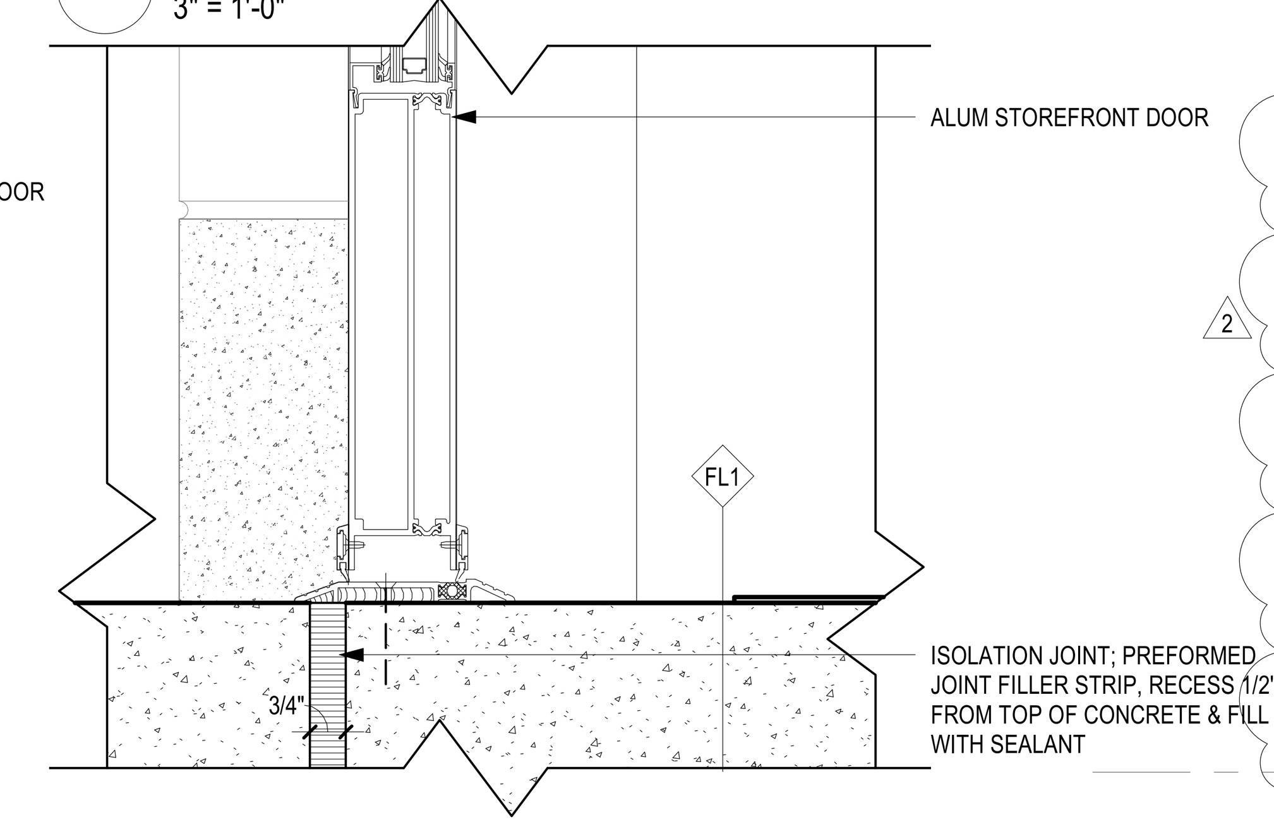
E1 DETAIL THRESHOLD @ EXTERIOR GYM
3" = 1'-0"



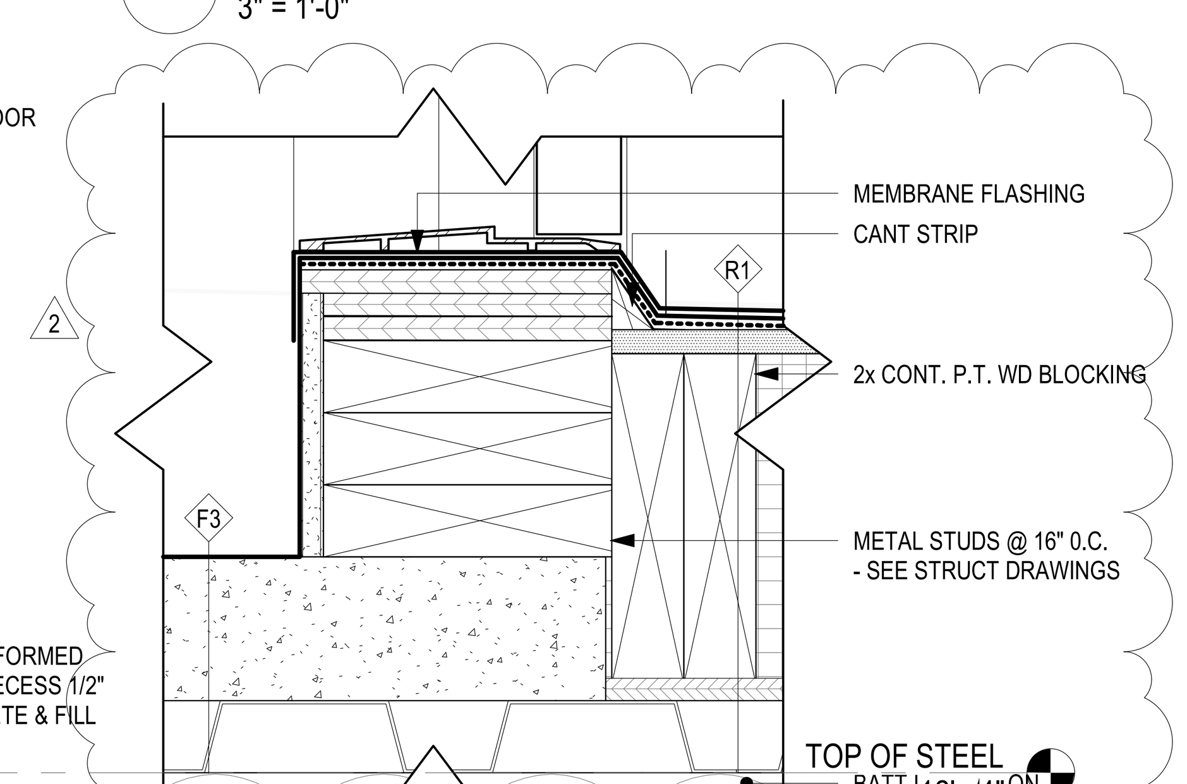
E2 DETAIL THRESHOLD @ INTERIOR GYM & LOBBY
3" = 1'-0"



E3 DETAIL THRESHOLD @ INTERIOR ALUM STOREFRONT
3" = 1'-0"



E4 DETAIL THRESHOLD @ EXTERIOR ALUM STOREFRONT
3" = 1'-0"



E6 DETAIL THRESHOLD @ MECH RM 112 & 113
3" = 1'-0"

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada
architecture • planning

Cornerstone
Consulting Engineers & Design Services, Inc.
213 West Main Street . Lansdale . PA 19446
Phone: 215-362-2600 . Fax: 215-362-8400
WWW.CORNERSTONENET.COM

CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
1	02/15/2024		BID ADDENDUM 1
2	03/01/2024		BID ADDENDUM 2

Date	02/09/2024
Scale:	As indicated
Job No.	604.2
Drawn: NB, KN	Appd.: CS

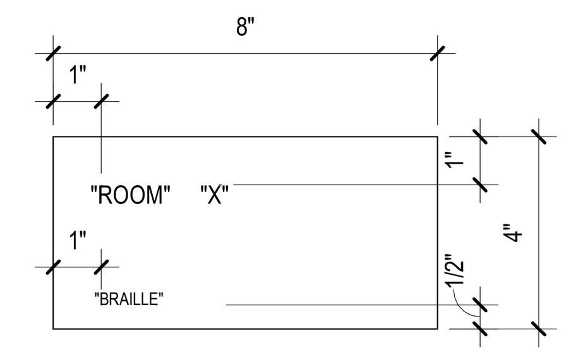
Sheet Title:
DOOR SCHEDULES, TYPES, DETAILS

Sheet No.
A930

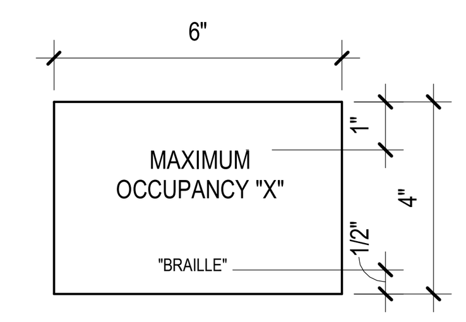
3/1/2024 1:39:37 PM C:\Users\Nam\Documents\604.2_Panati-Rebuild_CENTRAL_dhuey.rvt

GENERAL NOTES

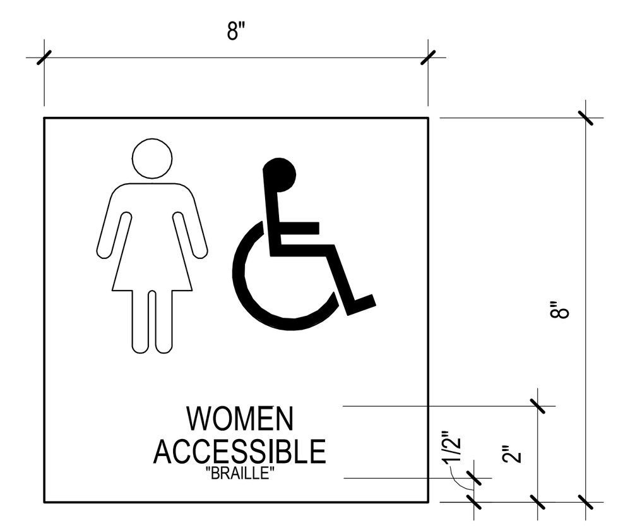
1. ALL SIGNAGE CONFORMS TO OR EXCEEDS THE REQUIREMENTS OF:
   - ANSI A117.1 2009, CHAPTER 7
   - INTERNATIONAL BUILDING CODE 2018, CHAPTER 11
   - ADA ACCESSIBILITY GUIDELINES, 4.30 SIGNAGE
2. INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGNAGE SHALL BE LOCATED:
   - AT EACH REQUIRED ACCESSIBLE PUBLIC ENTRANCE
   - AT EACH REQUIRED ACCESSIBLE TOILET / BATHING FACILITY
   - AT EACH REQUIRED AREA OF REFUGE
3. MOUNT SIGNAGE AT 50" AFF, MEASURED TO THE BOTTOM OF THE BRAILLE UON
4. MOUNT SIGNAGE ON THE LATCH SIDE OF DOOR; WHEN THERE IS NO WALL SPACE ON THE LATCH SIDE OF A SINGLE DOOR, OR THE RIGHT SIDE OF DOUBLE DOORS, SIGNAGE SHALL BE LOCATED ON THE NEAREST ADJACENT WALL
5. ALL CHARACTERS TO BE RAISED, MIN 1/32". ALL TEXT AND GRAPHICS TO BE CENTERED HORIZONTALLY IN SIGNAGE UON.
6. FONT COLORS AND TACTILE GRAPHIC COLORS SHALL BE SELECTED FROM FULL-RANGE OF MANUFACTURER'S STANDARD RANGE OF COLORS
7. FONT: SANS SERIF TYPE, 5/8" - ARIAL FONT UON. CONTRACTOR TO PROVIDE FULL RANGE OF SANS SERIF FONTS TO ARCHITECT / CLIENT FOR FINAL SELECTION.
8. ALL BRAILLE SHALL BE GRADE 2 UON
9. WHEN SIGNAGE IS MOUNTED TO GLASS, A FLAT BACK PLATE WITH ADHESIVE SHALL BE PROVIDED ON THE OTHER SIDE OF THE GLASS; TYP UON
10. CONTRACTOR SHALL CONFIRM ALL SIGNAGE TYPES AND LOCATIONS WITH CLIENT
11. PROVIDE MECHANICAL FASTENERS FOR ALL SIGNS



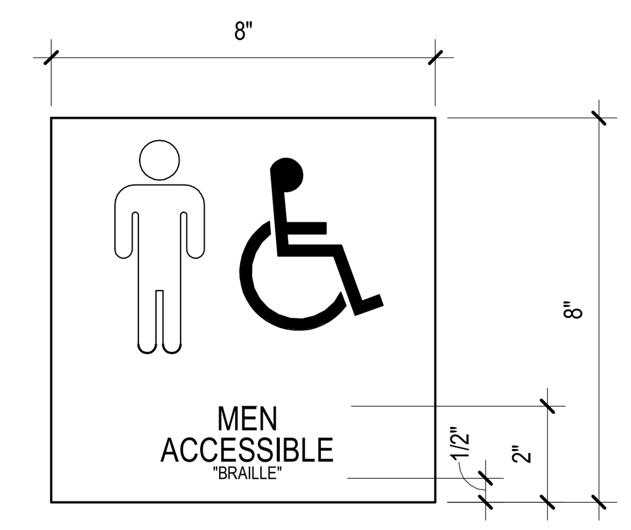
SIGN TYPE 2A
COMMON ROOM DOORS / OFFICE / MULTI-PURPOSE / COMMUNITY KITCHEN / MAKERSPACE / GYMNASIUM / STORAGE / CUSTODIAL



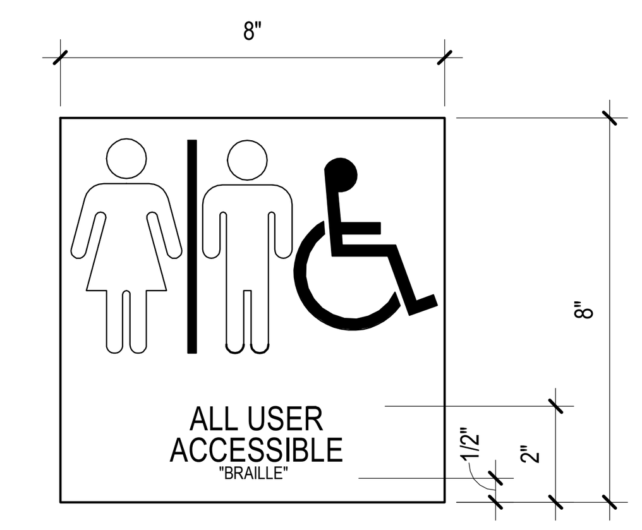
SIGN TYPE 11
ASSEMBLY OCCUPANCY SPACES



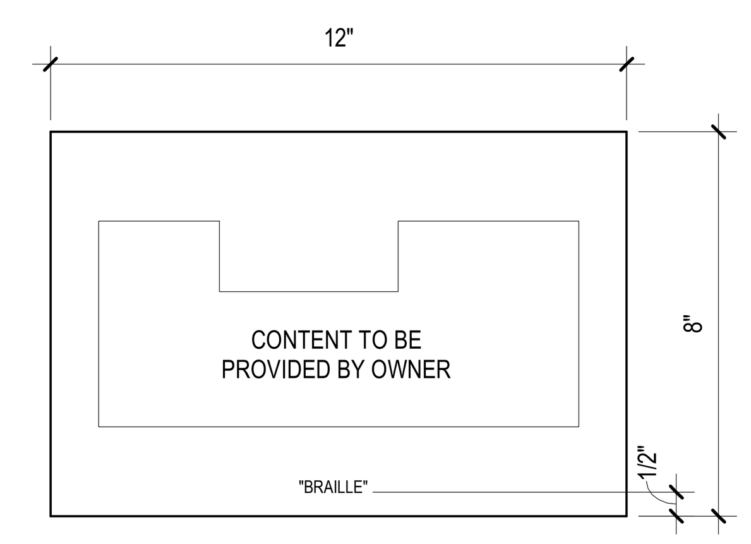
SIGN TYPE 9A
PUBLIC TOILET ROOMS



SIGN TYPE 9B
PUBLIC TOILET ROOMS (ACCESSIBLE)



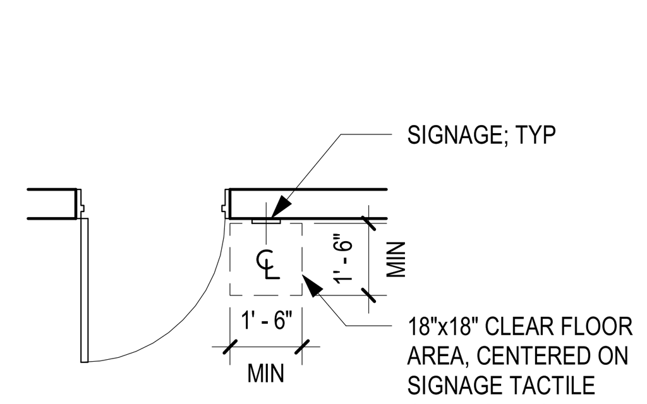
SIGN TYPE 9C
PUBLIC TOILET ROOMS (ACCESSIBLE)



SIGN TYPE 14
EVACUATION MAP
(LOCATIONS AS REQUIRED BY BUILDING CODE)

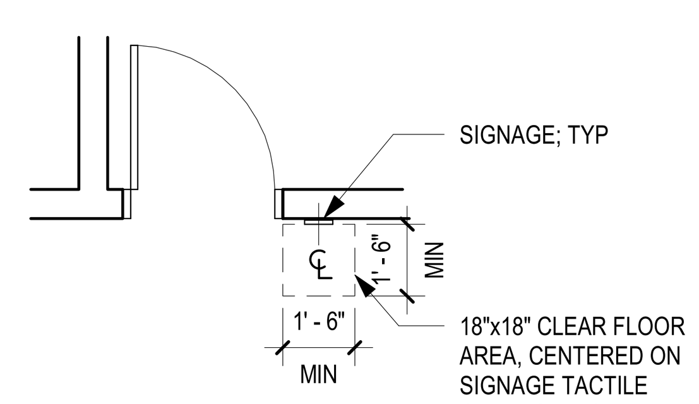
SIGN TYPE 16A
EVERY BUILDING ENTRANCE, EXIT

ADA SIGNAGE - SIGN TYPES
3" = 1'-0"



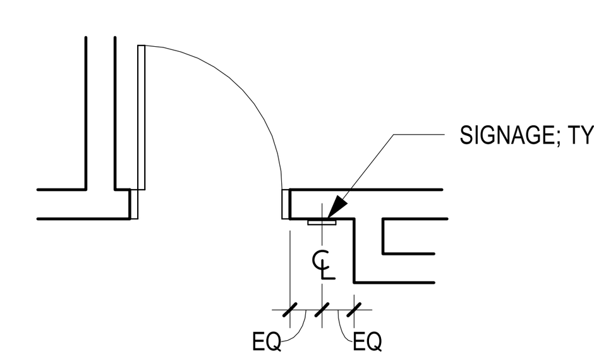
CORRIDOR

SIGNAGE AT TYPICAL PULL SIDE DOOR



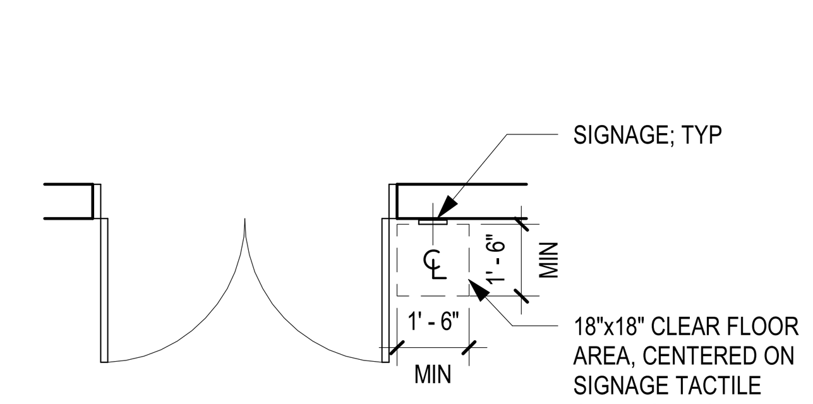
CORRIDOR

SIGNAGE AT TYPICAL PUSH SIDE DOOR



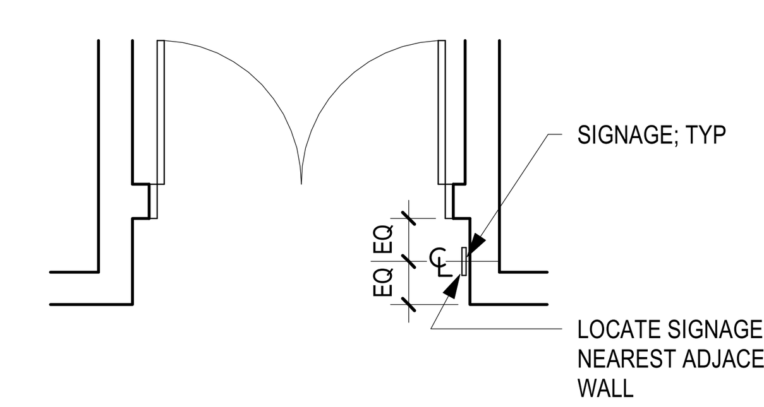
CORRIDOR

SIGNAGE AT DOOR W/ LATCH SIDE OBSTRUCTION



CORRIDOR

SIGNAGE AT TYPICAL DOUBLE DOOR



CORRIDOR

SIGNAGE AT RECESSED DOUBLE DOOR WITHOUT SPACE AT RIGHT HAND DOOR

ADA SIGNAGE - LOCATION DIAGRAMS
1/4" = 1'-0"

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

cicada architecture • planning

Cornerstone Consulting Engineers & Design Services, Inc.
213 West Main Street . Lansdale . PA 19446
Phone: 215-362-2600 . Fax: 215-362-8400
WWW.CORNERSTONENET.COM

CORSI ASSOCIATES
1489 Baltimore Pike, Ste 109, Springfield, PA 19064
(866) 267-7447 www.corsiassociates.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

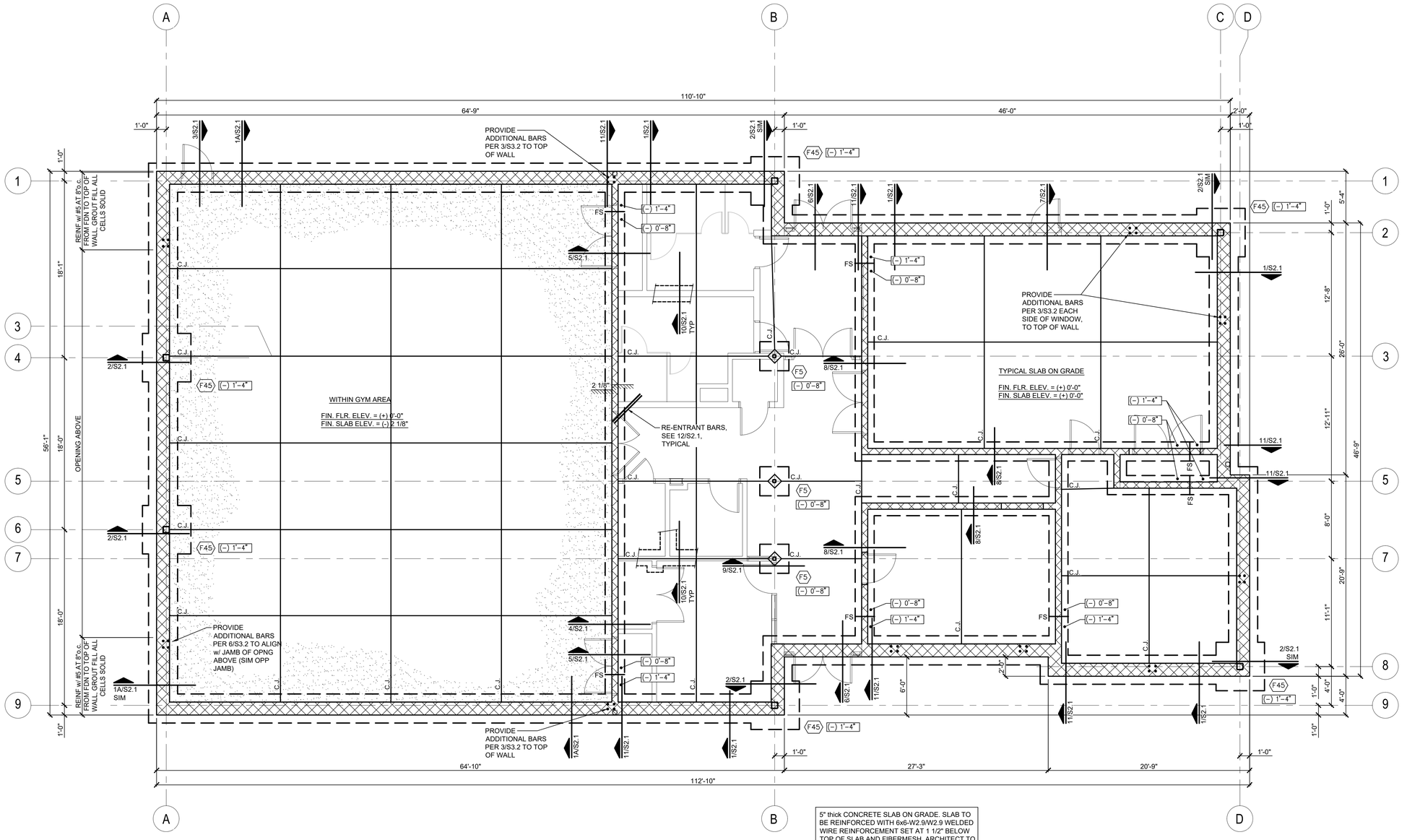
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: As indicated
Job No. 604.2
Drawn: NB, KN Appd.: CS

Sheet Title:
INTERIOR SIGNAGE TYPES, SCHEDULE

Sheet No.
A940



5" thick CONCRETE SLAB ON GRADE. SLAB TO BE REINFORCED WITH 6x6-W2.9/W2.9 WELDED WIRE REINFORCEMENT SET AT 1 1/2" BELOW TOP OF SLAB AND FIBERMESH. ARCHITECT TO INDICATE VAPOR RETARDER REQUIREMENTS. STONE SUBGRADE BENEATH SLAB PER RECOMMENDATIONS OF GEOTECHNICAL REPORT.

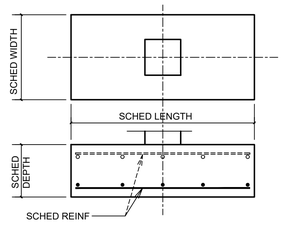
FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

1. DIMENSIONS AND ELEVATIONS ARE SHOWN FOR CONVENIENCE ONLY. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH ARCHITECTURAL DRAWINGS ALL DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
2. WALLS AS SHOWN ON PLAN:
   WALLS ASSOCIATED TO PLAN: .....
3. BOTTOM OF PERIMETER WALL FOOTINGS AND EXTERIOR COLUMN FOOTINGS TO BE (-) 3'-0" (MIN.) FROM FINISHED ADJACENT EXTERIOR GRADE, U.N.O.
   (–) 1'–4" (EXAMPLE) REFERS TO TOP OF FOOTING MEASURED FROM REFERENCE FINISH FLOOR ELEVATION 0'-0". ADJUST IF REQ'D TO OBTAIN MIN FROST DEPTH INDICATED AS REQUIRED BY SITE GRADING CONDITIONS.
4. CONTRACTOR SHALL COORDINATE ALL VENDOR REQUIREMENTS FOR SPECIALIZED EQUIPMENT WITH STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.
5. SEE SHEET S4.1 FOR GENERAL NOTES.
6. PROVIDE (2) #4 x 4'-0" LONG REINFORCING BARS AT ALL RE-ENTRANT SLAB CORNERS. SEE DETAIL 12/S2.1.
7. AT ALL LOCATIONS WHERE PIPING RUNS THROUGH FOUNDATION WALLS, DEEPEN FOOTINGS AS REQUIRED TO ALLOW 6" (MIN) CLEARANCE BETWEEN PIPE AND TOP OF FOOTING. SLEEVE PIPE. SEE DETAIL 2/S2.2.
8. CONTRACTOR SHALL SUBMIT LAY-OUT FOR SLAB ON GRADE CONSTRUCTION AND CONTRACTION JOINTS TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO PLACING CONCRETE. SEE DETAIL 1/S2.2.
9. SEE ARCH. DWGS. FOR DEPRESSED SLAB LOCATIONS AND DEPTHS.
10. FS REFERS TO FOOTING STEP, SEE 11/S2.1.
11. SEE LINTEL PLAN S1.4 FOR VERTICAL CMU MASONRY JOINT LOCATIONS. SEE ARCH FOR BRICK VENEER JOINTS
12. SEE 3/S3.2, 6/S3.2, AND 7/S3.2 FOR ADDITIONAL REINFORCEMENT REQUIREMENTS
13. SEE 4/S2.2 FOR SLAB AT COLUMNS

FOOTING SCHEDULE

FOOTING MARK	DIMENSIONS LxWxTHK	REINFORCING
F45	4'-6" x 4'-6" x 30"	(5) #6 EACH WAY TOP & BOTT
F5	5'-0" x 5'-0" x 18"	(5) #6 EACH WAY BOTT



NOTE: ARCHITECTURAL PLAN, CIVIL AND MEP BACKGROUND INFORMATION IS SHOWN FOR REFERENCE AND COORDINATION ONLY. THE CONTRACTOR SHALL VERIFY ALL BACKGROUND DIMENSIONS, BUILDING COMPONENTS AND CONDITIONS WITH THE FINAL SET OF ARCHITECTURAL DRAWINGS ISSUED FOR CONSTRUCTION

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND

PPR/REBUILD PHILADELPHIA

3101-27 N 22ND ST, PHILADELPHIA, PA 19132

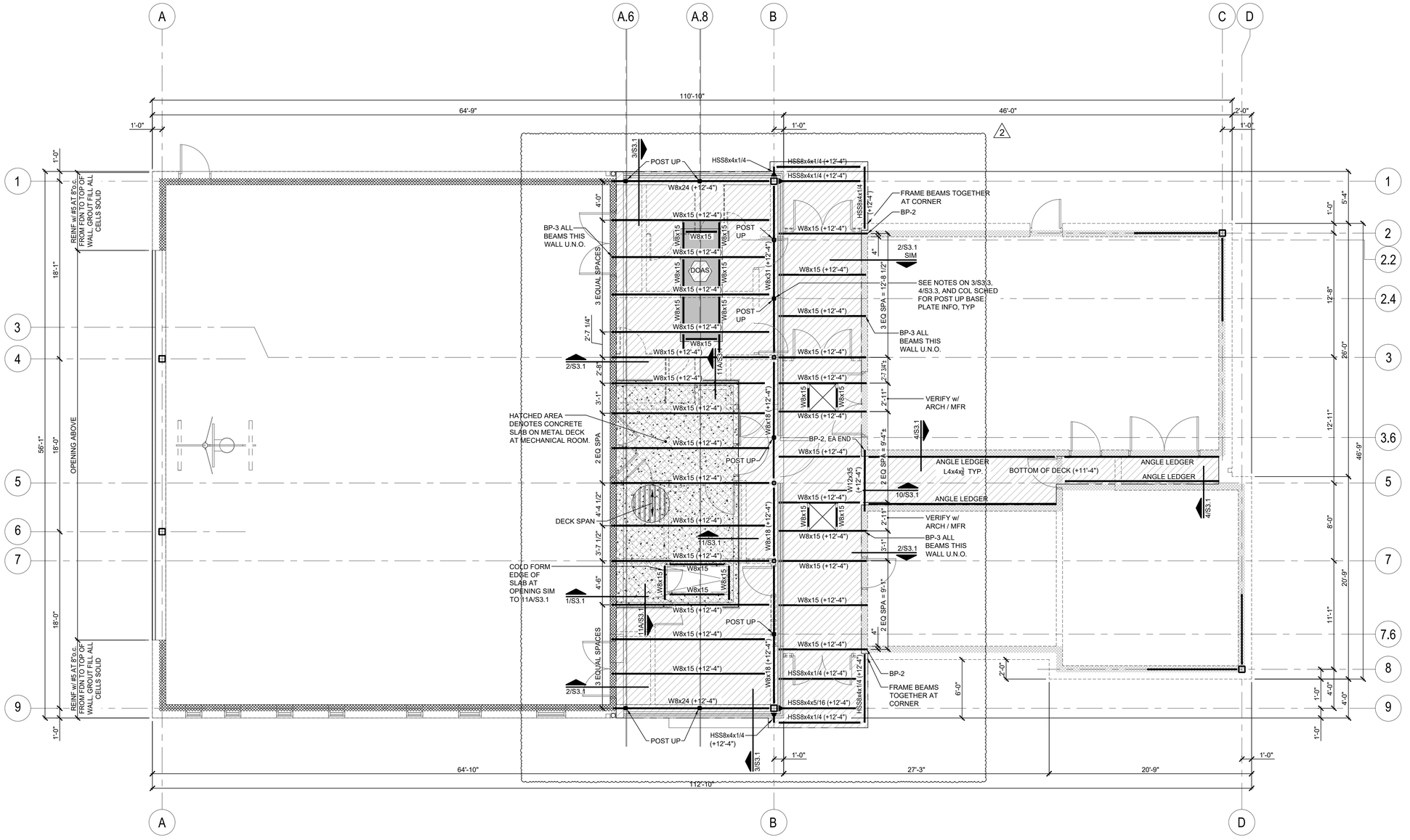
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

Sheet Title:
FOUNDATION PLAN

Sheet No.
S1.1



MEZZANINE & LOW ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

1. DIMENSIONS AND ELEVATIONS ARE SHOWN FOR CONVENIENCE ONLY. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH ARCHITECTURAL DRAWINGS ALL DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
2. JOIST QUANTITIES AND LAYOUT REPRESENT DESIGN INTENT ONLY. ACTUAL QUANTITIES, SPACING AND LAYOUT MUST BE FIELD VERIFIED WITH ACTUAL CONDITIONS AND DIMENSIONS AND ADJUSTED AS NECESSARY
3. WALLS AS SHOWN ON PLAN:
   WALLS ASSOCIATED TO PLAN: .....
   WALLS OF PLAN BELOW: .....
4. TOP OF STEEL ELEVATIONS VARY. TOP OF STEEL = BOTTOM OF METAL DECK.
5. AT MECHANICAL MEZZANINE, TOP OF STEEL ELEV. AT (+) 12'-4" FROM FIN. FIRST FLOOR.
6. AT LOBBY ROOF, TOP OF STEEL ELEV. AT (+) 12'-4" FROM FIN. FIRST FLOOR.
7. AT MAKER SPACE HALL, TOP OF STEEL ELEV. AT (+)11'-4" FROM FIN. FIRST FLOOR.
8. METAL DECK AT MEZZANINE AND LOW ROOFS TO BE 1 1/2" x 20 ga. INVERTED 'B' WIDE RIB ROOF DECK. SEE GENERAL NOTES.
9. CONCRETE SLAB AT INTERIOR MECHANICAL MEZZANINE TO BE 4" THICK (OVERALL) NORMAL WEIGHT CONCRETE ON THE INVERTED 'B' DECK. COLD FORM ALL EDGES OF SLAB AT MECHANICAL MEZZANINE.
10. CONTRACTOR SHALL COORDINATE ALL VENDOR REQUIREMENTS FOR SPECIALIZED EQUIPMENT WITH STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.
11. SEE SHEET S4.1 FOR GENERAL NOTES.
12. CONTRACTOR SHALL COORDINATE ALL SLAB OPENINGS WITH MECHANICAL DRAWINGS. OPENINGS LARGER THAN 12" DIAMETER OR SQUARE MUST BE SUPPORTED ON AN ANGLE FRAME. SEE DETAIL 2/S3.2
13. SEE LOOSE LINTEL SCHEDULE ON DRAWING S3.3 FOR MASONRY OPENING LINTELS NOT LABELED ON PLAN.
14. MAXIMUM BEAM SPACING NOT TO EXCEED 5'-6" o.c. UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE.
15. DENOTES MOMENT CONNECTION. SEE PLAN MARK.
16. BP-1 (EXAMPLE) DENOTES BEARING PLATE, SEE SCHEDULE 2/S3.3.
17. SEE LINTEL PLAN S1.4 FOR VERTICAL CMU MASONRY JOINT LOCATIONS. SEE ARCH FOR BRICK VENEER JOINTS
18. INDICATES ROOF DECK TO BE 1 1/2" x 20ga. TYPE B WIDE RIB ROOF DECK. SEE GENERAL NOTES.
19. INDICATES ROOF DECK TO BE INVERTED 1 1/2" x 20ga. TYPE B WIDE RIB ROOF DECK. SEE GENERAL NOTES.

2

NOTE: ARCHITECTURAL PLAN, CIVIL AND MEP BACKGROUND INFORMATION IS SHOWN FOR REFERENCE AND COORDINATION ONLY. THE CONTRACTOR SHALL VERIFY ALL BACKGROUND DIMENSIONS, BUILDING COMPONENTS AND CONDITIONS WITH THE FINAL SET OF ARCHITECTURAL DRAWINGS ISSUED FOR CONSTRUCTION

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA, PA 19132

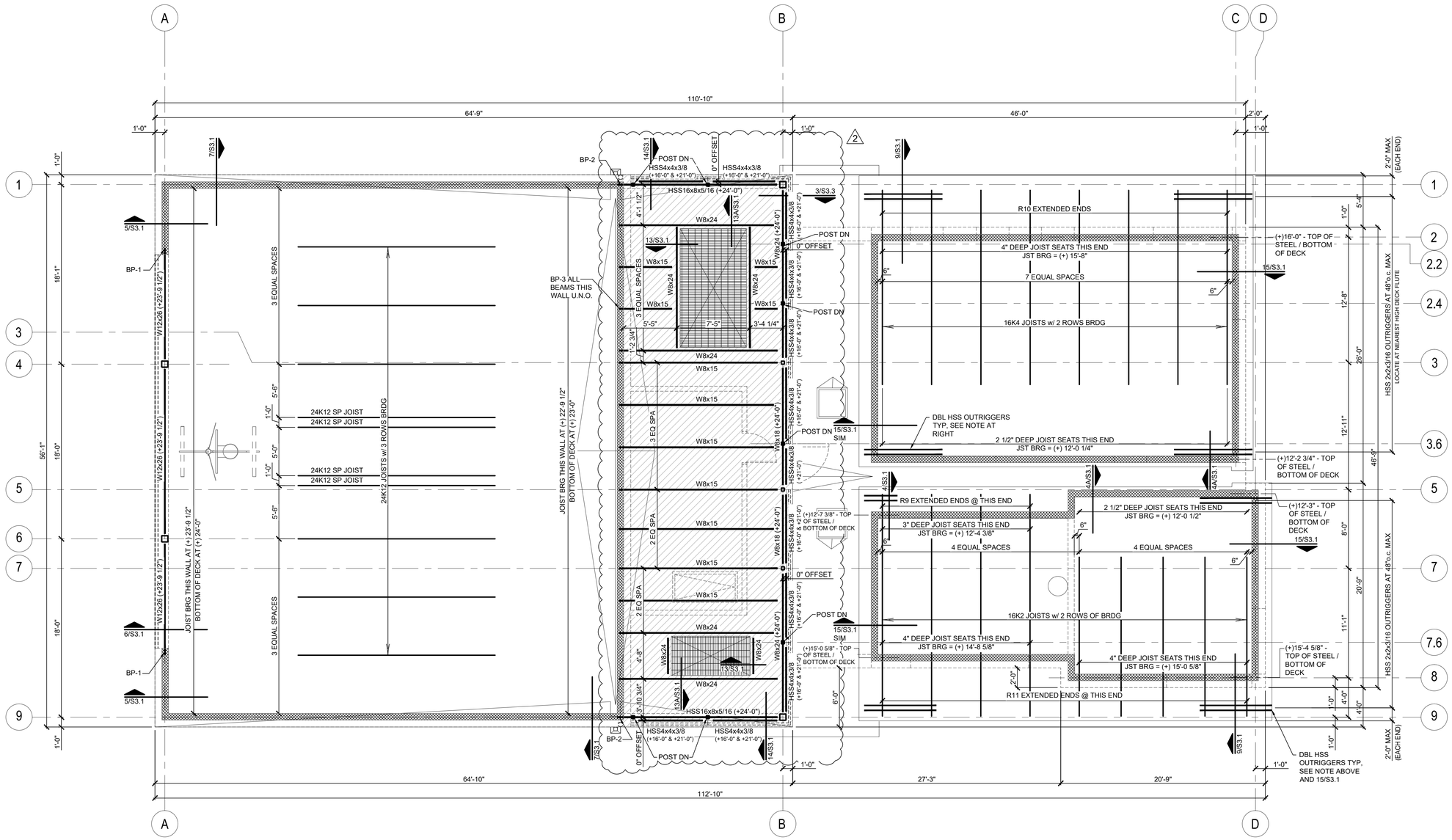
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	Description
1	03/01/2024	ADDENDUM #2

Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

Sheet Title:
MEZZANINE & LOW ROOF FRAMING PLAN

Sheet No.
S1.2



HIGH ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

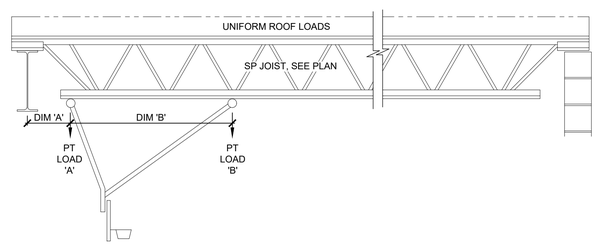
1. DIMENSIONS AND ELEVATIONS ARE SHOWN FOR CONVENIENCE ONLY. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH ARCHITECTURAL DRAWINGS ALL DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
2. JOIST QUANTITIES AND LAYOUT REPRESENT DESIGN INTENT ONLY. ACTUAL QUANTITIES, SPACING AND LAYOUT MUST BE FIELD VERIFIED WITH ACTUAL CONDITIONS AND DIMENSIONS AND ADJUSTED AS NECESSARY
3. WALLS AS SHOWN ON PLAN:
   WALLS ASSOCIATED TO PLAN: .....
   WALLS OF PLAN BELOW: .....
4. MAXIMUM JOIST SPACING NOT TO EXCEED 6'-0"o.c. UNLESS NOTED OR SHOWN OTHERWISE ON PLAN.
5. SEE SECTIONS FOR TOP OF STEEL ELEVATIONS, UNLESS NOTED ON PLAN.
6. CONTRACTOR SHALL COORDINATE ALL VENDOR REQUIREMENTS FOR SPECIALIZED EQUIPMENT WITH STRUCTURAL ENGINEER PRIOR TO PLACING ROOF DECK.
7. SEE SHEET S4.1 FOR GENERAL NOTES.
8. CONTRACTOR SHALL COORDINATE ALL SLAB OPENINGS WITH MECHANICAL DRAWINGS. OPENINGS LARGER THAN 12" DIAMETER OR SQUARE MUST BE SUPPORTED ON AN ANGLE FRAME. SEE DETAIL 2/S3.2.
9. ROOF DECK OVER GYM, MULTI-PURPOSE ROOM, AND MAKER SPACE TO BE 2" X 20 ga VERSA-DEK 2.0 S ES ACOUSTICAL ROOF DECK. SEE GENERAL NOTES.

2

10. INDICATES ROOF DECK TO BE 1 1/2" x 20ga. TYPE B WIDE RIB ROOF DECK. SEE GENERAL NOTES.
11. SEE LOOSE LINTEL SCHEDULE 1/S3.3 FOR MASONRY OPENING LINTELS NOT LABELED ON PLAN.
12. BP-1 (EXAMPLE) DENOTES BEARING PLATE, SEE SCHEDULE 2/S3.3.
13. COORD. FINAL DIMENSIONS AND LOCATIONS w/ RTU EQUIPMENT PURCHASED.
14. TOP OF STEEL ELEV LISTED ON PLAN ARE ABOVE FIN. FIRST FLOOR.
15. PROVIDE BRIDGING FOR JOISTS AS REQUIRED BY THE STEEL JOIST INSTITUTE (SJI).
16. TOP OF ROOF STEEL AND UNDERSIDE OF ROOF DECK ELEVATIONS VARY. SEE PLAN AND SECTIONS.
17. ▶— DENOTES MOMENT CONNECTION. SEE PLAN MARK, COORD. w/ CONNECTION NOTE BELOW.

NOTE: ARCHITECTURAL PLAN, CIVIL AND MEP BACKGROUND INFORMATION IS SHOWN FOR REFERENCE AND COORDINATION ONLY. THE CONTRACTOR SHALL VERIFY ALL BACKGROUND DIMENSIONS, BUILDING COMPONENTS AND CONDITIONS WITH THE FINAL SET OF ARCHITECTURAL DRAWINGS ISSUED FOR CONSTRUCTION

2



JOIST DESIGNATION	UNIFORM ROOF LOADS			POINT LOADS (DL)		DIMENSIONS	
	DEAD LOAD	RF LIVE LOAD	SNOW LOAD	PT LOAD 'A'	PT LOAD 'B'	DIM 'A'	DIM 'B'
24K12 SP	27 PSF	20 PSF	25 PSF	500 LBS	400 LBS	1.75'	8.3'

NOTES TO SPECIAL JOIST LOADING
1. CALCULATE UNIFORM LOADS BASED ON JOIST SPACING/TRIBUTARY WIDTH.
2. SEE PLAN FOR JOIST SPAN AND SPACING.
3. 'PSF' DENOTES 'POUNDS PER SQUARE FOOT.'

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND

for

PPR/REBUILD PHILADELPHIA

3101-27 N 22ND ST, PHILADELPHIA, PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	Description
2	03/01/2024	ADDENDUM #2

Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

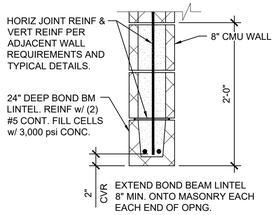
Sheet Title: HIGH ROOF FRAMING PLAN

Sheet No. S1.3

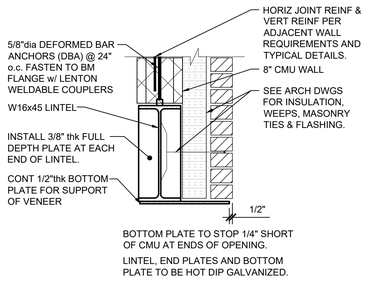
LINTEL PLAN

SCALE: 3/16" = 1'-0"

1. ■M.J. DENOTES VERTICAL CMU MASONRY JOINT LOCATIONS. SEE 4/S3.2 FOR DETAIL. SEE ARCH FOR BRICK VENEER JOINT LOCATIONS AND DETAILS.
2. SEE 6/S3.2 FOR OPENING ELEVATION AND REINF REQUIREMENTS.
3. SEE 1/S3.3 FOR MISCELLANEOUS LINTELS NOT LABELED ON THIS PLAN.



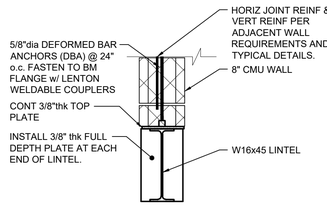
LINTEL TYPE L-5



BOTTOM PLATE TO STOP 1/4" SHORT OF CMU AT ENDS OF OPENING.

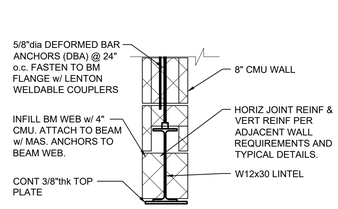
LINTEL, END PLATES AND BOTTOM PLATE TO BE HOT DIP GALVANIZED.

LINTEL TYPE L-6



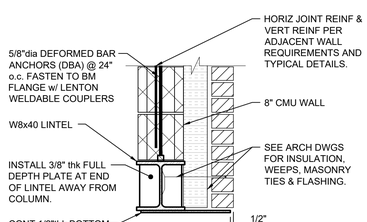
TOP PLATE TO STOP 1/4" SHORT OF CMU AT ENDS OF OPENING.

LINTEL TYPE L-7



BOTTOM PLATE TO STOP 1/4" SHORT OF CMU AT ENDS OF OPENING.

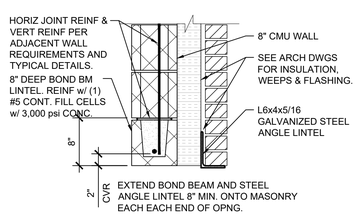
LINTEL TYPE L-8



BOTTOM PLATE TO STOP 1/4" SHORT OF CMU AT ENDS OF OPENING.

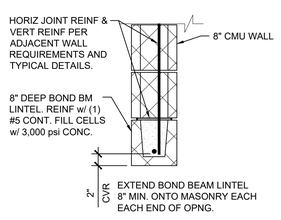
LINTEL, END PLATE AND BOTTOM PLATE TO BE HOT DIP GALVANIZED.

LINTEL TYPE L-9

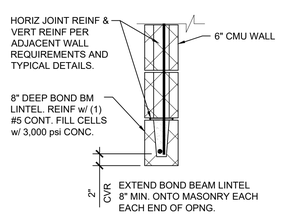


LINTEL ANGLE TO BE HOT DIP GALVANIZED.

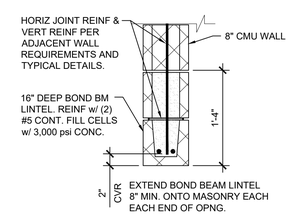
LINTEL TYPE L-1



LINTEL TYPE L-2



LINTEL TYPE L-3



LINTEL TYPE L-4

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA, PA 19132

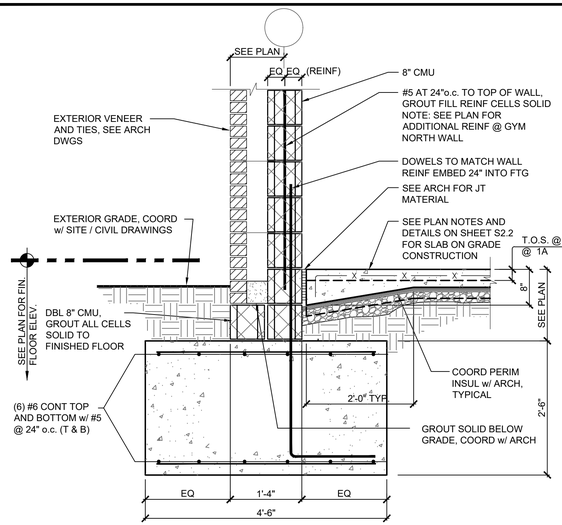
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

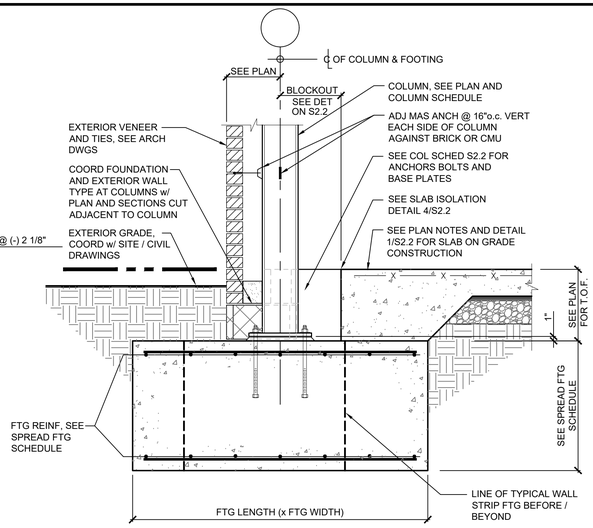
Sheet Title: LINTEL PLAN

Sheet No. S1.4

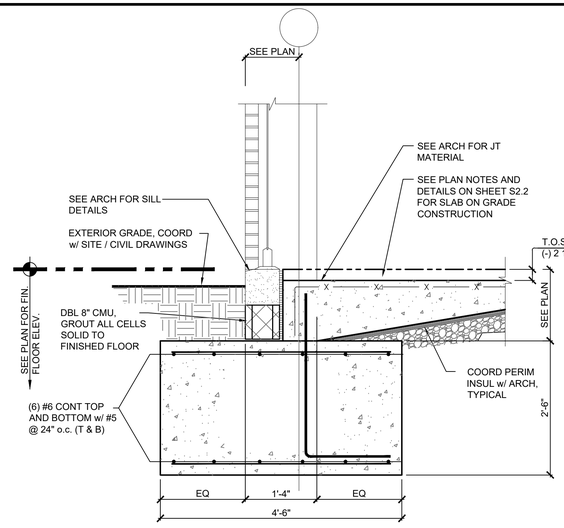


1, 1A / S2.1 SECTION
SCALE: 3/4"=1'-0"

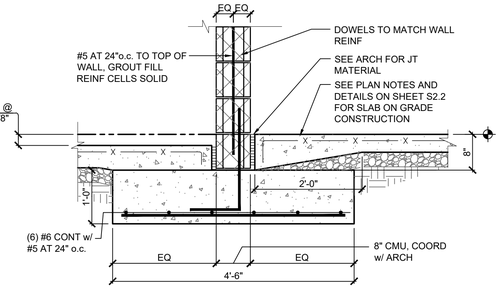
COORD ADDITIONAL VERT REINF (NOT SHOWN) SET INTO FTGS w/ PLAN NOTES AND ALL ADDITIONAL DETAILS PROVIDED THROUGHOUT THE STRUCTURAL DRAWING SET



2 / S2.1 SECTION
SCALE: 3/4"=1'-0"



3 / S2.1 SECTION
SCALE: 3/4"=1'-0"



4 / S2.1 SECTION
SCALE: 3/4"=1'-0"

5 / S2.1 SECTION
SCALE: 3/4"=1'-0"

6 / S2.1 SECTION
SCALE: 3/4"=1'-0"

7 / S2.1 SECTION
SCALE: 3/4"=1'-0"

8 / S2.1 SECTION
SCALE: 3/4"=1'-0"

9 / S2.1 SECTION
SCALE: 3/4"=1'-0"

✳ TYPICAL AT ALL INTERIOR CMU PARTITION WALLS, UNLESS DETAILED OR NOTED OTHERWISE

10 / S2.1 SECTION
SCALE: 3/4"=1'-0"

11 / S2.1 SECTION
SCALE: 3/4"=1'-0"

12 / S2.1 RE-ENTRANT BAR DETAIL
SCALE: NONE

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA, PA 19132

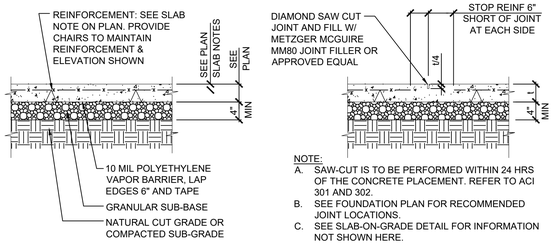
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

Sheet Title:
FOUNDATION DETAILS

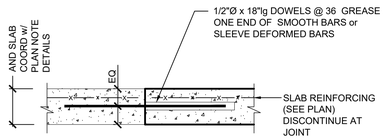
Sheet No.
S2.1



SLAB ON GRADE

NOTE:
A. SAW-CUT IS TO BE PERFORMED WITHIN 24 HRS OF THE CONCRETE PLACEMENT. REFER TO ACI 301 AND 302.
B. SEE FOUNDATION PLAN FOR RECOMMENDED JOINT LOCATIONS.
C. SEE SLAB-ON-GRADE DETAIL FOR INFORMATION NOT SHOWN HERE.

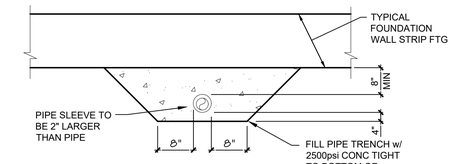
CONTRACTION JOINT



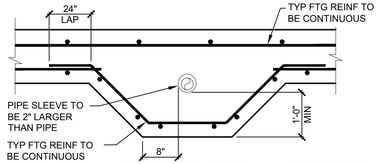
NOTE:
A. CONSTRUCTION JOINTS TO BE USED WHEN CONCRETING OPERATIONS ARE TO BE INTERRUPTED, CONSTRUCTION JOINTS MAY ONLY BE USED AT LOCATIONS SPECIFIED FOR CONTROL JOINTS. SEE FOUNDATION PLAN
B. SEE TYP SLAB-ON-GRADE DETAIL FOR INFORMATION NOT SHOWN HERE.

CONSTRUCTION JOINT

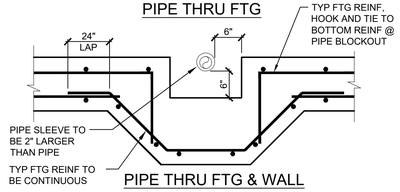
1 S2.2 **SLAB DETAILS**
SCALE: 3/4"=1'-0"



PIPE UNDER FTG

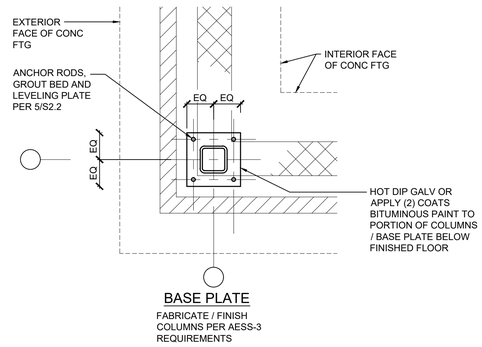


PIPE THRU FTG



PIPE THRU FTG & WALL

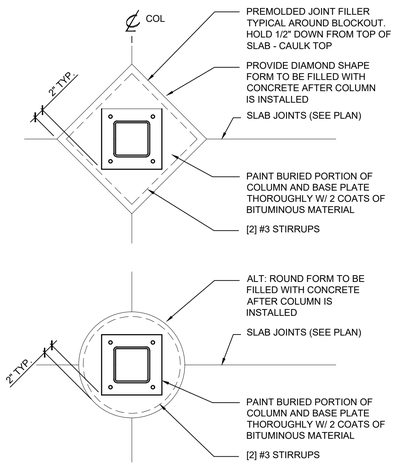
2 S2.2 **FOUNDATION CONDUIT AND PLUMBING CONDITIONS**
SCALE: 3/4"=1'-0"



BASE PLATE

FABRICATE / FINISH COLUMNS PER AESS-3 REQUIREMENTS

3 S2.2 **PLAN VIEW**
SCALE: 3/4"=1'-0"

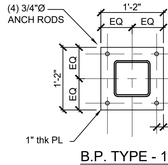


SIMILAR ALONG PERIMETER WALLS AND CORNERS

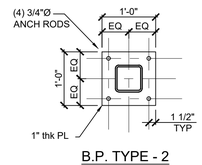
4 S2.2 **ISOLATION JOINT DETAILS**
SCALE: 3/4"=1'-0"

COLUMN SCHEDULE

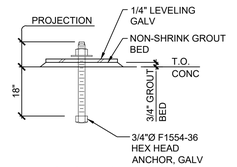
COLUMN MARK	A/4, A/6	B/1, B/9	B/3, B/5, B/7	C/2	D/8	A.6/1, A.8/1 A.6/9, A.8/9	B/2.2, B/2.4, B/3.6, B/7.6
T.O. COLUMN (+)24'-0"							
T.O. COLUMN (+)23'-9 1/2"						HSS 8x4x1/4	HSS 6x4x1/4
B.O. COLUMN (+)13'-0"							
B.O. COLUMN (+)12'-4" (MEZZ)	HSS 8x8x1/4	HSS 8x8x1/4	HSS 6x6x1/4		HSS 8x8x1/4	SEE 4/S3.3	SEE 4/S3.3
T.O. COLUMN (+)8'-0"				HSS 8x8x1/4			
FINISH FLOOR (+)0'-0"							
T.O. FDN (-)0'-8"							
T.O. FDN (-)1'-4"							
BASE PLATE B N THK	14" 14" 1"	14" 14" 1"	12" 12" 1"	14" 14" 1"	14" 14" 1"	10" 8" 3/4"	10" 6" 3/4"
BASE PLATE TYPE	TYPE 1	TYPE 1	TYPE 2	TYPE 1	TYPE 1		
ANCHOR BOLTS	(4) 3/4" DIA F1554-55 RODS	(4) 3/4" DIA F1554-55 RODS	(4) 3/4" DIA F1554-55 RODS	(4) 3/4" DIA F1554-55 RODS	(4) 3/4" DIA F1554-55 RODS		



B.P. TYPE - 1



B.P. TYPE - 2



ANCHOR RODS

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST. PHILADELPHIA, PA 19132

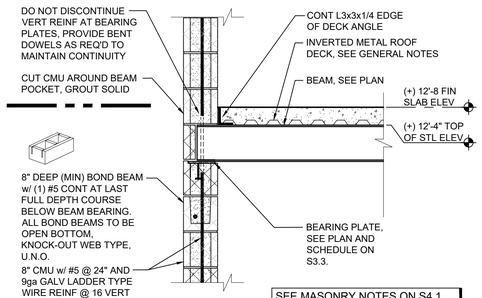
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

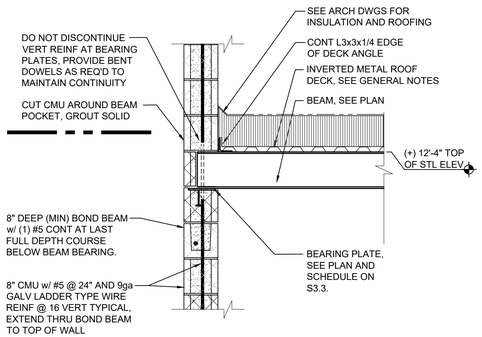
Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

Sheet Title:
FOUNDATION DETAILS

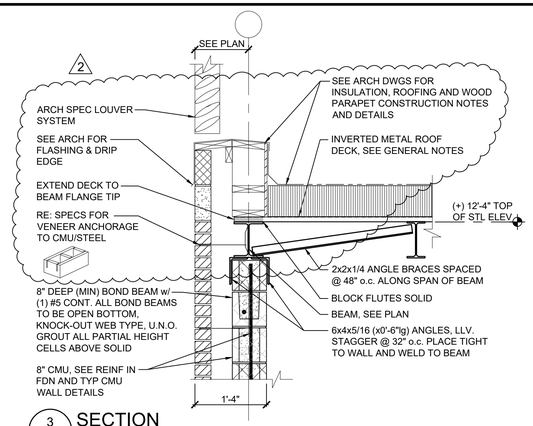
Sheet No.
S2.2



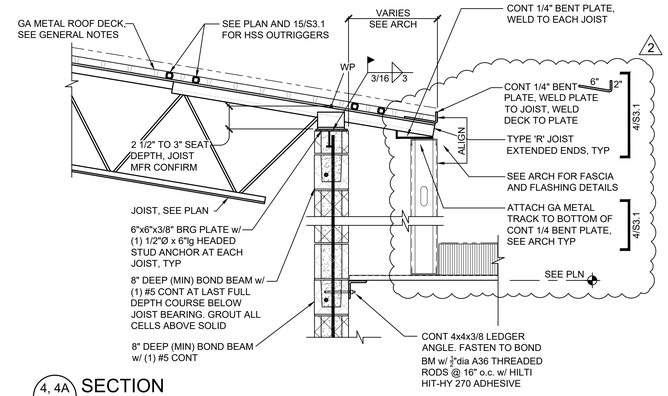
1 S3.1 SECTION
SCALE: 3/4"=1'-0"



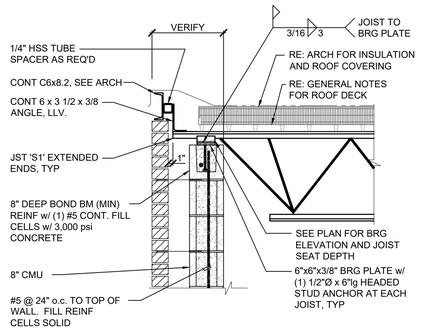
2 S3.1 SECTION
SCALE: 3/4"=1'-0"



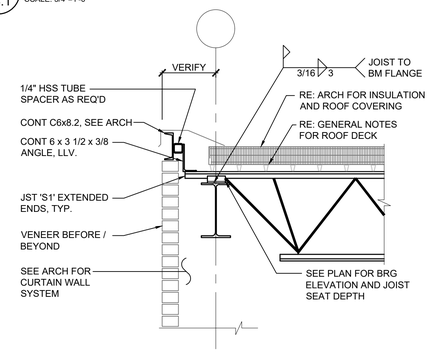
3 S3.1 SECTION
SCALE: 3/4"=1'-0"



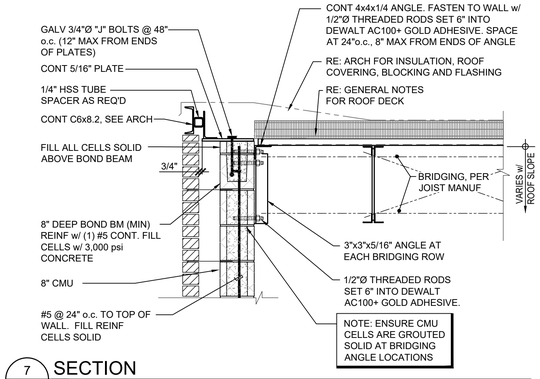
4, 4A S3.1 SECTION
SCALE: 3/4"=1'-0"



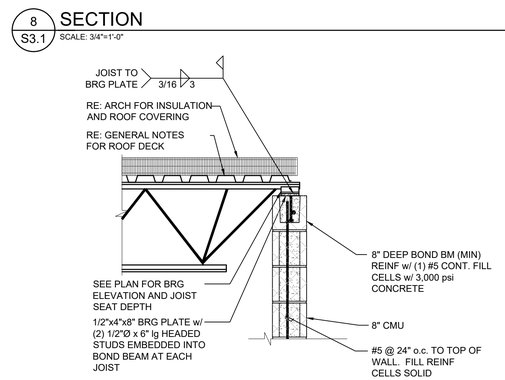
5 S3.1 SECTION
SCALE: 3/4"=1'-0"



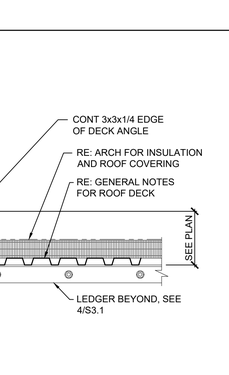
6 S3.1 SECTION
SCALE: 3/4"=1'-0"

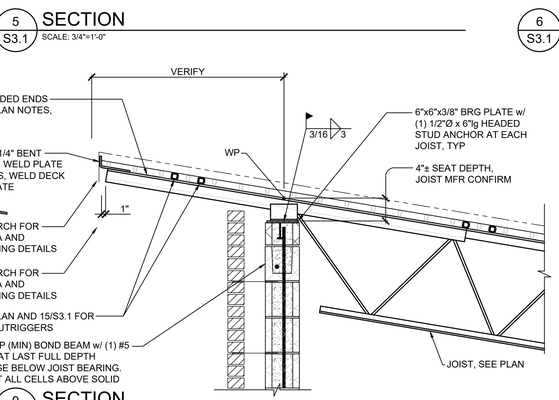


7 S3.1 SECTION
SCALE: 3/4"=1'-0"

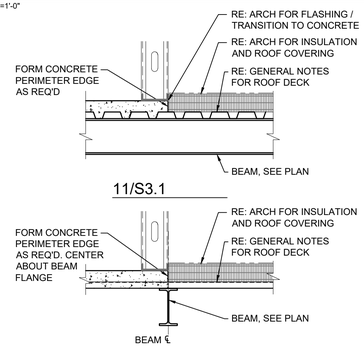


8 S3.1 SECTION
SCALE: 3/4"=1'-0"

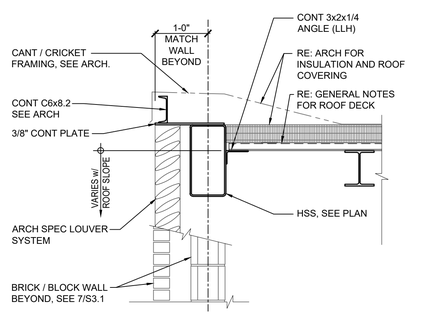




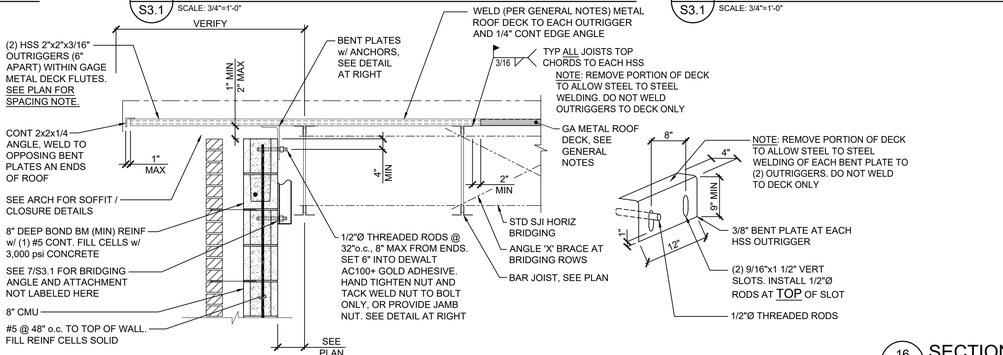
9 S3.1 SECTION
SCALE: 3/4"=1'-0"



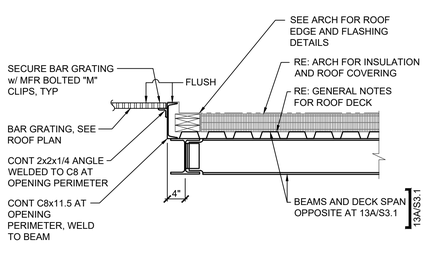
10 S3.1 SECTION
SCALE: 3/4"=1'-0"



11,11A S3.1 SECTION
SCALE: 3/4"=1'-0"



12 S3.1 SECTION
SCALE: 3/4"=1'-0"



13,13A S3.1 SECTION
SCALE: 3/4"=1'-0"

14 S3.1 SECTION
SCALE: 3/4"=1'-0"

15 S3.1 SECTION
SCALE: 3/4"=1'-0"

16 S3.1 SECTION
SCALE: 3/4"=1'-0"

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA, PA 19132

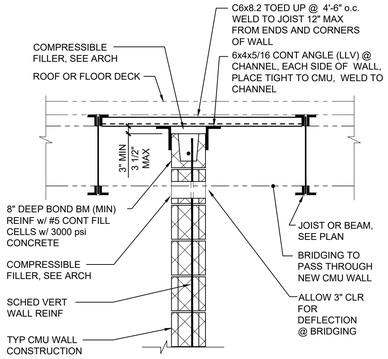
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	Description
2	03/01/2024	ADDENDUM #2

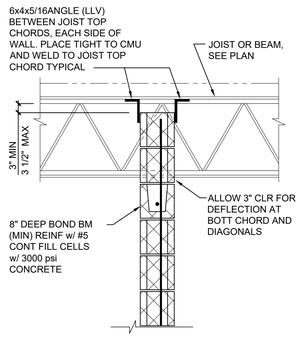
Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

Sheet Title:
FRAMING DETAILS

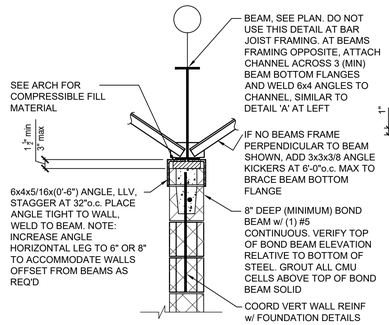
Sheet No.
S3.1



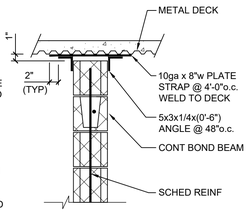
DETAIL A



DETAIL B



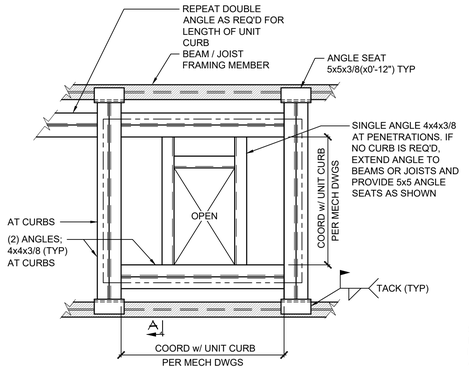
DETAIL C



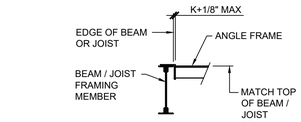
DETAIL D

1 S3.2 INTERIOR CMU PARTITION WALL BRACING DETAILS

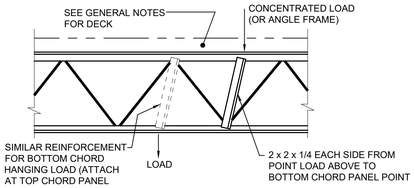
SCALE: 3/4"=1'-0"



ANGLE FRAME AT FLOOR / ROOF OPENINGS AND CURBS



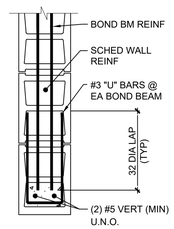
DETAIL A



JOIST REINF DETAIL FOR POINT LOADS

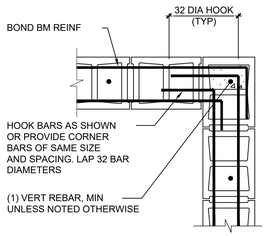
2 S3.2 TYPICAL ROOF OPENING DETAIL

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

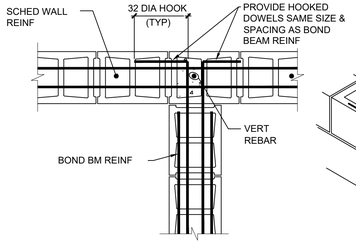


WALL ENDS

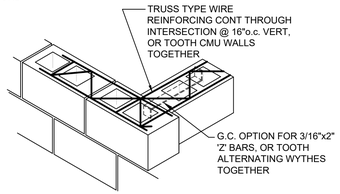
(SEE 6/S3.2 FOR MASONRY JAMBS AT OPENINGS)



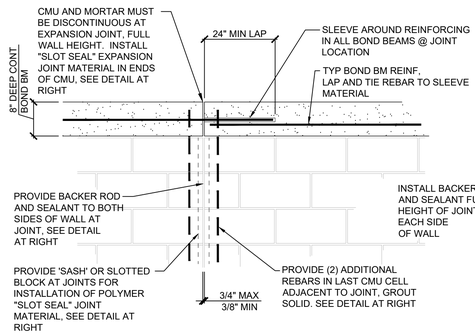
AT CORNERS

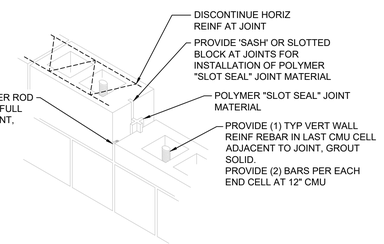


AT INTERSECTION



AT INTERSECTION NOT AT BOND BEAM





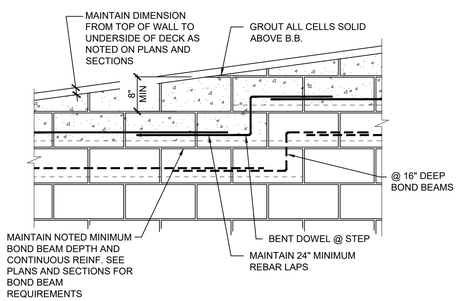
SEE ARCH DRAWINGS FOR LOCATIONS OF BRICK VENEER JOINTS

NOTES:

1. CORNERS AND INTERSECTIONS: AT POINTS WHERE CONCRETE MASONRY WALLS MEET OR INTERSECT, LAY 50% OF UNITS IN MASONRY BOND WITH ALTERNATE UNITS HAVING A BEARING ON NOT LESS THAN 4 INCHES ON THE UNIT BELOW (U.N.O).
2. DOWELS: PROVIDE DOWELS FROM CONCRETE FOOTING OR WALL BELOW WITH SAME SIZE AND SPACING AS BARS AT LEVEL BELOW (U.N.O.). LAP BARS 48 DIA. MINIMUM (U.N.O.).

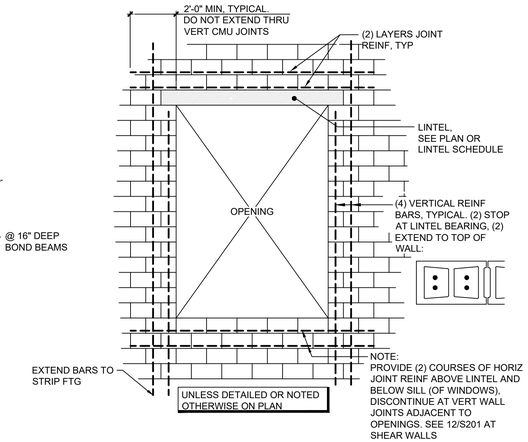
3 S3.2 TYPICAL CMU WALL DETAILS

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

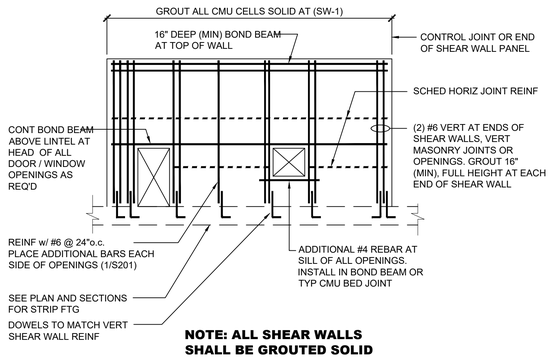


4 S3.2 CMU EXPANSION JOINT

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



ELEVATION OF TYPICAL MASONRY OPENINGS



NOTE: ALL SHEAR WALLS SHALL BE GROUTED SOLID

5 S3.2 TYPICAL STEPPED BOND BEAM DETAIL

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

6 S3.2

SCALE: NONE

7 S3.2 MASONRY SHEAR WALL ELEVATION (SW-1)

SCALE: NONE

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA, PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

Sheet Title: FRAMING DETAILS

Sheet No. S3.2

LINTEL SCHEDULE (NON LOAD BEARING WALLS)				
WALL THICKNESS	CLEAR SPAN			
	4'-0" OR LESS	4'-1" TO 5'-4"	5'-5" TO 6'-4"	6'-5" TO 8'-0"
3-5/8"	L5x3-1/2x5/16 LLV or L6x6x5/16	L5x3-1/2x5/16 LLV or L6x6x5/16	L5x3-1/2x5/16 LLV or L6x6x5/16	L5x3-1/2x3/8 LLV or L6x6x5/16
	6x6x5/16 ANGLE LINTEL AS SHOWN OR REQUIRED BY ARCH, COORD w/ SECTIONS AND DETAILS			
5-5/8	2 L 3-1/2x2-1/2x5/16	2 L 3-1/2x2-1/2x5/16	2 L 3-1/2x2-1/2x3/8	2 L 3-1/2x2-1/2x3/8
7-5/8	2 L 4x3-1/2x5/16	2 L 4x3-1/2x5/16	2 L 5x3-1/2x5/16	2 L 5x3-1/2x3/8
11-5/8	3 L 4x3-1/2x5/16	3 L 4x3-1/2x5/16	3 L 5x3-1/2x5/16	W8x18 w/ $\frac{1}{2}$" x 11x3/8
11-5/8 ALTERNATE	3/8" PLATE ASSEMBLY	3/8" PLATE ASSEM	3/8" PLATE ASSEM	3/8" PLATE ASSEM
1'-4"	3/8" PLATE ASSEMBLY w/ VENEER ANGLE SEE "EXTERIOR PLATE LINTEL" DETAIL AT RIGHT		TO 6'-6" M.O.	
1'-8"	3/8" PLATE ASSEMBLY w/ VENEER ANGLES SEE "EXTERIOR PLATE LINTEL" DETAIL AT RIGHT		TO 6'-6" M.O.	

FOR USE AT LOCATIONS NOT SPECIFICALLY NOTED ON PLAN

THE GENERAL CONTRACTOR SHALL PROVIDE STEEL LINTELS IN ALL OPENINGS IN MASONRY WALLS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:

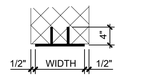
- ABOVE ALL EXTERIOR WALL OPENINGS. LINTELS TO BE HOT DIP GALVANIZED, OR AS SPECIFIED BY ARCH.
- ABOVE ALL METAL FRAMES IN MASONRY WALLS (UNLESS NOTED ON THE DOOR SCHEDULE TO BE FRAMED WITH STUDS AND GYPSUM BOARD.)
- ABOVE ALL OPENINGS, PASSAGES, ROLL-UP OR OVERHEAD DOORS, IN MASONRY WALLS.
- ABOVE ALL HEATING DUCTS PASSING THROUGH MASONRY WALLS.
- ABOVE ALL BUILT-IN ITEMS (SUCH AS CABINET HEATERS, CONVECTORS, LOUVERS, ACCESS PANELS, ETC.)
- AT ALL LOCATIONS WHERE NOTED ON THE PLANS AND/OR WALL SECTIONS.

SIZES TO BE AS INDICATED IN THE SCHEDULE ABOVE, LENGTHS TO BE THE FULL OPENING AND MINIMUM 8" BEARING ON EACH END.

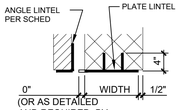
GENERAL CONTRACTOR SHALL COORDINATE OPENINGS WITH PLUMBING, MECHANICAL, ELECTRICAL, AND FIRE PROTECTION DRAWINGS.

ALL ANGLE INSTALLED LONG LEG VERTICAL UNLESS NOTED OTHERWISE

ALL EXTERIOR LINTELS TO BE HOT DIP GALVANIZED OR FINISHED PER ARCH SPECS

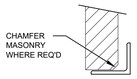


INTERIOR PLATE LINTEL



(OR AS DETAILED AND REQUIRED BY ARCH FOR CLOSURE)

EXTERIOR PLATE LINTEL



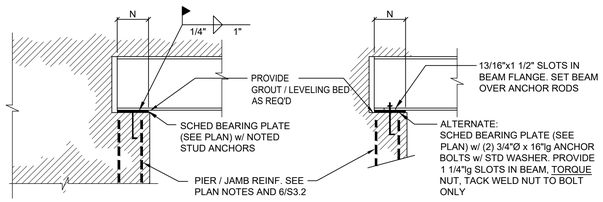
1 S3.3 LINTEL SCHEDULE, NOTES AND DETAILS

SCALE: NONE

BASE PLATE DIMS:
LENGTH AS INDICATED x
WIDTH (= HSS DEPTH + $\frac{1}{2}$" MIN)

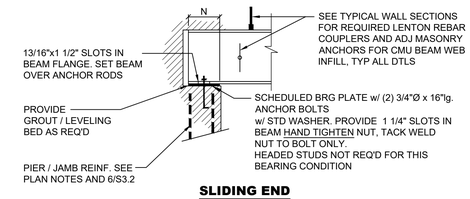
4 S3.3 SECTION

SCALE: 3/4"& 1 1/2" =1'-0"



PINNED END OPTIONS

SCALE: NONE



SLIDING END

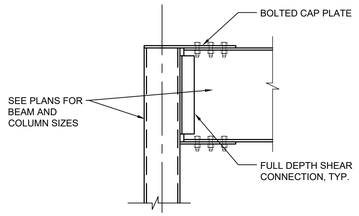
SCALE: NONE

BEARING PLATE SCHEDULE

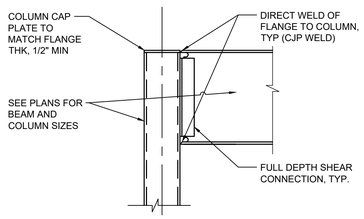
PLATE MARK	PLATE DIMENSIONS B	N	T	ANCHORS (1/2"Ø x 6"lg. U.N.O.)	REMARKS
BP-1	7 1/2"	7 1/2"	7/8	AS NOTED FOR SLIDING END	SLIDING END DETAIL
BP-2	8"	8"	3/8		
BP-3	6"	6"	3/8		

2 S3.3 BEARING PLATES

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



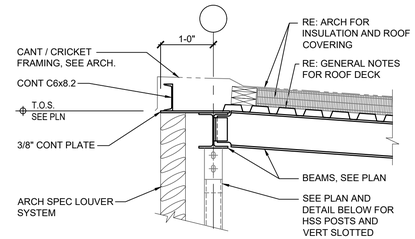
BOLTED MOMENT CONNX & BOLTED SHEAR CONNX.

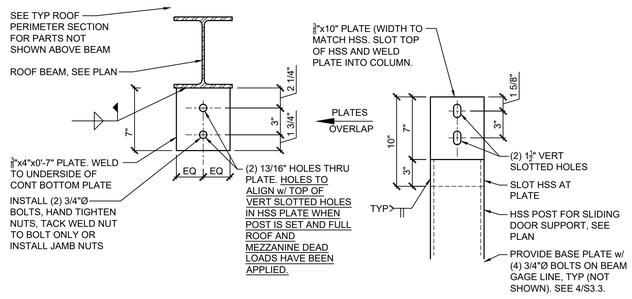


WELDED MOMENT CONNX & BOLTED SHEAR CONNX.

5 S3.3 TYPICAL CONNECTIONS

SCALE: 3/4"& 1 1/2" =1'-0"





3 S3.3 SECTION

SCALE: 3/4"& 1 1/2" =1'-0"

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA, PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: NOTED
Job No. 725002
Drawn: PMG | Appd.: PMG

Sheet Title: FRAMING DETAILS

Sheet No. S3.3

GENERAL NOTES

1. THE WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE PENNSYLVANIA UNIFORM CONSTRUCTION CODE (PA UCC), BASED UPON THE 2018 INTERNATIONAL BUILDING CODE (IBC) AND THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" ASCE 7-10.

2. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, BRACING, SHEETING, AND MAKE SAFE ALL FLOORS, ROOFS, WALLS, AND ADJACENT PROPERTY AS PROJECT CONDITIONS REQUIRE. SHORING AND SHEETING SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE PROJECT JURISDICTION HIRED BY THE CONTRACTOR WHO SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR THE OWNER'S REVIEW.

3. THE STRUCTURAL COMPONENTS HAVE BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:

SNOW LOAD DESIGN DATA	
GROUND SNOW LOAD - Pg	25 PSF
FLAT ROOF SNOW LOAD - Pf	25 PSF + DRIFT
SNOW EXPOSURE FACTOR - Ce	1.0
SNOW LOAD IMPORTANCE FACTOR - Is	1.0
THERMAL FACTOR - Ct	1.0
DRIFT SURCHARGE LOAD - N-S	44 PSF
DRIFT WIDTH - N-S	8.0 FT
DRIFT SURCHARGE LOAD - E-W	44 PSF
DIRFT WIDTH - E-W	5.0 FT

WIND DESIGN DATA	
BASIC WIND SPEED - Vult	112 MPH
BASIC WIND SPEED - Vasd	87 MPH
RISK CATEGORY	II
WIND EXPOSURE	B
INTERNAL PRESSURE COEFFICIENT, GCpi	±0.18
COMPONENTS / CLADDING WIND PRESSURE	42 PSF

EARTHQUAKE DESIGN DATA	
SEISMIC IMPORTANCE FACTOR - Ie	1.00
MAPPED SPECTRAL RESPONSE ACCEL., SS	0.182
MAPPED SPECTRAL RESPONSE ACCEL., S1	0.047
SITE CLASS	"D"
SPECTRAL RESPONSE COEFFICIENT, SDS	0.194
SPECTRAL RESPONSE COEFFICIENT, SD1	0.076
SEISMIC DESIGN CATEGORY	"B"
BASIC SEISMIC FORCE RESISTING SYSTEMS "ORDINARY REINFORCED MASONRY SHEAR WALLS"	
RESPONSE MODIFICATION FACTORS, R	2.0
ANALYSIS PROCEDURE - EQUIV. LATERAL FORCE PROCEDURE	

FLOOR LIVE LOADS	
MECHANICAL ROOMS - UNIT WEIGHTS ADDED AS REQUIRED	100 PSF
SLAB ON GRADE	100 PSF

4. SOME DETAILS OF THE WORK ARE SHOWN ON THE ARCHITECTURAL DRAWINGS. A CAREFUL REVIEW AND STUDY OF THESE DETAILS IS NECESSARY BEFORE THE FULL SCOPE OF THE WORK CAN BE COMPREHENDED.

5. STRUCTURAL MEMBERS SHOWN DEPICT SIZES AND APPROXIMATE LOCATIONS ONLY. ROOF CONFIGURATIONS, SLOPES, DIMENSIONS AND ELEVATIONS ARE TO BE VERIFIED AND COORDINATED BY THE CONTRACTOR WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.

6. PRINCIPAL OPENINGS IN THE STRUCTURE AND BUILDING ENVELOPE ARE SHOWN ON THE CONTRACT DOCUMENTS. REFER TO AND COORDINATE WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SLEEVES, CURBS, INLETS, ETC. NOT INDICATED ON THESE DRAWINGS. THE LOCATION OF SLEEVES OR OPENINGS IN STRUCTURAL MEMBERS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

7. THIS STRUCTURE HAS BEEN DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE CONSTRUCTION OF THE BUILDING HAS BEEN COMPLETED. THE STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THIS RESPONSIBILITY EXTENDS TO ALL RELATED ASPECTS OF THE CONSTRUCTION ACTIVITY INCLUDING, BUT NOT LIMITED TO, ERECTION METHODS, ERECTION SEQUENCE, TEMPORARY BRACING, FORMS, SHORING, USE OF EQUIPMENT, AND SIMILAR CONSTRUCTION PROCEDURES, UNLESS SPECIFICALLY INDICATED ON THE CONTRACT DOCUMENTS. LACK OF COMMENT ON THE PART OF THE ENGINEER WITH REGARD TO CONSTRUCTION PROCEDURES IS NOT TO BE INTERPRETED AS APPROVAL OF THOSE PROCEDURES.

8. JOB SITE SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR, REVIEW OF THE CONSTRUCTION BY THE ENGINEER IS FOR CONFORMANCE WITH DESIGN ASPECTS ONLY, NOT TO REVIEW THE CONTRACTOR'S PROVISIONS FOR JOB SITE SAFETY. GUIDELINES FOR CONSTRUCTION SAFETY SHALL BE IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE CONSTRUCTION INDUSTRY OSHA SAFETY AND HEALTH STANDARDS (1926 STANDARDS), AND ANY LOCAL ORDINANCES OR CODES THAT MIGHT APPLY. LACK OF COMMENT ON THE PART OF THE ENGINEER WITH REGARD TO JOB SITE SAFETY IS NOT TO BE INTERPRETED AS APPROVAL OF JOB SITE SAFETY ASPECTS.

9. THE STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION AND COORDINATION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.

10. SPECIAL INSPECTIONS, AS REQUIRED BY THE PA UCC AND IBC, SHALL BE PERFORMED BY AN APPROVED AGENCY, IN CONTRACT WITH THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE THE REQUIRED SPECIAL INSPECTIONS WITH THE WORK AND SHALL NOT CONCEAL WORK UNTIL THE REQUIRED INSPECTIONS HAVE BEEN COMPLETED AND THE WORK APPROVED.

11. STRUCTURAL OBSERVATIONS PERFORMED BY THE ENGINEER DURING CONSTRUCTION DO NOT CONSTITUTE CONTINUOUS OR SPECIAL INSPECTION SERVICES.. REQUIRED INSPECTIONS REMAIN THE RESPONSIBILITY OF THE BUILDING INSPECTOR OR TESTING AGENCY IDENTIFIED. STRUCTURAL OBSERVATIONS PERFORMED BY THE ENGINEER DO NOT CONSTITUTE SUPERVISION OF CONSTRUCTION AND DO NOT GUARANTEE THE WORK OF THE CONTRACTOR.

12. IT IS EACH CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL WORK IN ACCORDANCE WITH THE FEDERAL, STATE, AND LOCAL LAWS, BYLAWS, ORDINANCES AND REGULATIONS IN ANY MANNER AFFECTING THE CONDUCT OF THIS WORK, AS WELL AS ALL ORDERS OR DECREES WHICH HAVE BEEN PROMULGATED OR ENACTED BY ANY LEGAL BODIES OR TRIBUNALS HAVING AUTHORITY OR JURISDICTION OVER THE WORK, MATERIALS, EMPLOYEES, OR CONTRACT.

13. IF FAULTY CONSTRUCTION PROCEDURES, OR MATERIAL, RESULT IN DEFECTIVE WORK THAT REQUIRES ADDITIONAL ENGINEERING TIME TO DEVISE CORRECTIVE MEASURES, PROFESSIONAL FEES MAY BE CHARGED TO THE CONTRACTOR AT THE STANDARD HOURLY RATE OF ADDITIONAL SERVICES. SUCH FEES MAY BE WITHHELD FROM THE CONTRACTORS PAYMENT. REFER TO GENERAL CONDITIONS SECTION OF THE PROJECT SPECIFICATIONS.

14. ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED PRIOR TO BEGINNING ANY WORK. IF EXISTING CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS AS SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY AND PROVIDE AN ACCURATE SKETCH OF THE CONDITION, INCLUDING A PROPOSED MODIFICATION OR CORRECTION, FOR REVIEW AND APPROVAL.

15. UNLESS NOTED OTHERWISE IN THE CONTRACT DOCUMENTS, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL STRUCTURAL STEEL, MISCELLANEOUS STEEL, AND LOOSE LINTELS THAT ARE NECESSARY TO SUPPORT ALL ROOF TOP MOUNTED MECHANICAL EQUIPMENT, MASONRY WALL OPENINGS AND FLOOR AND ROOF OPENINGS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL DRAWINGS OF ALL PRIME CONTRACTS TO DETERMINE THE QUANTITY, SIZE, AND LOCATIONS OF ALL ROOF TOP EQUIPMENT, ALL MASONRY OPENINGS, AND ALL FLOOR AND ROOF OPENINGS.

16. THESE DRAWINGS ARE SUPPLEMENTED BY A DETAILED TECHNICAL SPECIFICATION. THE NOTES SHOWN ON THESE DRAWINGS UNDER CERTAIN CATEGORIES OF WORK ARE INTENDED TO SUMMARIZE BASIC REQUIREMENTS AND ARE ON THE DRAWINGS FOR CONVENIENCE.

17. THE CONTRACTOR'S CONSTRUCTION SEQUENCES SHALL ALLOW FOR THE EFFECTS OF THERMAL MOVEMENTS DURING THE CONSTRUCTION PERIOD, PRIOR TO THE BUILDING BEING ENCLOSED AND TEMPERATURE CONTROLLED. NEGATIVE EFFECTS OF SUCH THERMAL MOVEMENTS, SUCH AS MATERIAL CRACKING, FROST HEAVE, ETC. SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

FOUNDATION NOTES

1. THE FOUNDATIONS HAVE BEEN DESIGNED TO REST ON INORGANIC, UNDISTURBED SOIL HAVING AN ALLOWABLE BEARING VALUE OF 2,000 PSF. SUCH BEARING STRATA IS ANTICIPATED AT THE BOTTOM OF FOOTING ELEVATIONS NOTED ON THE FOUNDATION PLAN. ALL BEARING STRATA SHALL BE VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO THE PLACING OF CONCRETE IN ORDER TO VERIFY THE BEARING VALUE. THE BEARING VALUE SHOULD BE VERIFIED TO A DEPTH OF 3 TO 4 FEET BELOW BEARING ELEVATION TO ENSURE THE BEARING MATERIALS COMPLY WITH THE BORING LOGS AND DESIGN CRITERIA.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LIMITING POURS TO MINIMIZE SHRINKAGE CRACKING. IN GENERAL, WALLS SHALL NOT BE POURED IN CONTINUOUS LENGTHS EXCEEDING 40 FEET. THE LOCATION AND CONFIGURATION OF JOINTS EXPOSED TO VIEW SHALL BE COORDINATED WITH THE ARCHITECT.

3. EXCAVATIONS FOR SPREAD AND CONTINUOUS FOOTINGS SHALL BE CLEANED AND HAND TAMPED TO A UNIFORM SURFACE. CONCRETE SHALL BE PLACED WITHIN 24 HOURS OF EXCAVATION OF THE FOOTING BEARING SURFACE. THE CONTRACTOR IS RESPONSIBLE FOR HAVING ALL REQUIRED INSPECTIONS, OBSERVATIONS AND TESTING COMPLETED WITHIN THAT TIMEFRAME.

4. STEP FOOTINGS WHERE ELEVATIONS CHANGE AT A MAXIMUM SLOPE OF ONE VERTICAL ON TWO HORIZONTAL, CONTRACTOR SHALL PLACE LOWER FOOTING FIRST.

5. ALL SOIL SURROUNDING AND UNDER FOOTINGS SHALL BE PROTECTED FROM FREEZING AND THAWING DURING THE COURSE OF CONSTRUCTION.

6. THE BOTTOM OF EXTERIOR FOOTINGS NOT ON SOLID ROCK SHALL BE AT MINIMUM 3'-0" BELOW GRADE.

7. THE INSPECTION AND TESTING OF ALL SUBGRADE AND COMPACTED EARTHWORK SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE OWNERS GEOTECHNICAL CONSULTANT. THE CONTRACTOR SHALL ADVISE THE ARCHITECT AND STRUCTURAL ENGINEER TWENTY-FOUR HOURS PRIOR TO PLACEMENT OF CONCRETE IN THE FOOTINGS. IF UNSUITABLE SUBGRADE SOILS ARE ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS PREPARED BY A LICENSED GEOTECHNICAL CONSULTANT TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL.

8. THE SLAB-ON-GRADE SUB-BASE SHALL BE A CRUSHER RUN STONE FREE FROM SOFT DISINTEGRATED PIECES, MUD, DIRT, OR OTHER INJURIOUS MATERIAL. THE MATERIAL SHALL HAVE NO STONE GREATER THAN 2" IN ANY ONE DIMENSION AND WITH LESS THAN 10% BY WEIGHT PASSING A #100 SIEVE.

9. IN AREAS REQUIRING FILL OR BACKFILL, INCLUDING THE BACKFILLING OF FOUNDATION EXCAVATIONS, THE FILL MATERIAL SHALL BE A UNIFORMLY GRADED SELECT STRUCTURAL FILL OF 2A MODIFIED, RECYCLED CONCRETE, OR EQUIVALENT MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER. THE FILL SHALL BE PLACED IN LIFTS OF 8" TO 10" BEFORE COMPACTION. EACH LIFT SHALL BE COMPACTED WITH APPROPRIATE EQUIPMENT TO A MINIMUM OF 95% OF ITS MAXIMUM MODIFIED DENSITY AT OR NEAR OPTIMUM MOISTURE. A SOILS TESTING LABORATORY, HIRED AS OUTLINED IN THE PROJECT SPECIFICATIONS, SHALL TEST THE MATERIAL BEFORE AND AFTER COMPACTION FOR CONFORMANCE WITH THIS SPECIFICATION. NO LIFTS SHALL BE PLACED WHEN WEATHER CONDITIONS ARE SUCH THAT THE MOISTURE CONTENT OF THE FILL CANNOT BE PROPERLY CONTROLLED. IN PLACING AND COMPACTING FILL AND BACKFILL MATERIAL, DO NOT DAMAGE NOR DISPLACE CONCRETE WORK ALREADY IN PLACE BY CONTACT FROM COMPACTION MACHINERY BY SUBJECTING IT TO OVERTURNING FROM HEAVY COMPACTION LOADING OR ANY OTHER CAUSE. BRING FILL AGAINST SUCH CONCRETE AT THE SAME RATE AS THE REMAINDER OF FILL, COMPACTING UNIFORMLY ON BOTH SIDES USING HAND, OR MECHANICAL TAMPERS.

CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 (LATEST EDITION), "SPECIFICATIONS FOR STRUCTURAL CONCRETE IN BUILDINGS" AND ACI 318 (LATEST EDITION), "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."

2. ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL DEVELOP A COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 DAYS. REFER TO SPECIFICATION 033000 FOR DESIGN MIX REQUIREMENTS.

3. ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE LATEST ACI CODE AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES".

4. CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW, TOGETHER WITH LABORATORY REPORTS ATTESTING THAT THE MIXES CAN ATTAIN THE MINIMUM DESIGN STRENGTH REQUIRED IN ACCORDANCE WITH CHAPTER 5 OF ACI 301 (LATEST EDITION). IF DURING CONSTRUCTION ANY CONCRETE FAILS TO MEET THE ACCEPTANCE CRITERIA, THE CONTRACTOR SHALL TAKE SUCH STEPS AS ARE DEEMED NECESSARY BY THE STRUCTURAL ENGINEER TO IMPROVE SUBSEQUENT TEST RESULTS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL ALSO BEAR THE COST OF SPECIAL INVESTIGATION, TESTING, OR REMEDIAL WORK NECESSARY BECAUSE OF EVIDENCE OF LOW STRENGTH OR NON-CONFORMING CONCRETE OR WORKMANSHIP.

5. CONTRACTOR SHALL SUBMIT STEEL REINFORCING DRAWINGS THAT DETAIL FABRICATION, BENDING AND PLACEMENT. INCLUDE BAR SIZES, LENGTHS, MATERIAL, GRADE, BAR SCHEDULES, STIRRUP SPACING, BENT BAR DIAGRAMS, BAR ARRANGEMENTS, SPLICES AND LAPS, MECHANICAL CONNECTIONS, TIE SPACING, HOOP SPACING AND SUPPORTS FOR CONCRETE REINFORCING. A 4"x4" SQUARE AREA NEAR THE TITLE BLOCK SHALL BE RESERVED FOR THE ENGINEER'S REVIEW STAMP. THE ENGINEER'S DRAWINGS MAY NOT BE REPRODUCED IN WHOLE OR PART AS A SHOP DRAWING. SHOP DRAWINGS SHALL BE CHECKED PRIOR TO SUBMITTAL. ANY DISREGARD FOR THE AFORESAID REQUIREMENTS SHALL BE CAUSE FOR REJECTION OF THE SUBMITTAL WITHOUT REVIEW.

6. NO ADMIXTURES ARE PERMITTED WITHOUT THE ENGINEER'S WRITTEN PERMISSION OTHER THAN ENTRAINED AIR. CONCRETE EXPOSED TO THE WEATHER, SUCH AS THAT USED IN FOUNDATION WALLS, SHALL CONTAIN 4% MIN. AND 6% MAX. ENTRAINED AIR.

2

7. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60. EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A 775, GRADE 60. REFER TO PLANS AND SECTIONS FOR THE USE OF PLAIN OR EPOXY COATED (E.C.) REINFORCEMENT.

8. WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A 185, GRADE 60. EPOXY COATED WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A 884, GRADE 75. REFER TO PLANS AND SECTIONS FOR THE USE OF PLAIN OR EPOXY COATED (E.C.) REINFORCEMENT.

9. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WITH A MINIMUM YIELD STRENGTH OF 75KSI AND SHALL BE SUPPLIED IN FLAT SHEETS. LAP TWO MESHES AT SIDES AND ENDS, AND WIRE TIE TOGETHER.

10. CONCRETE SLABS SHALL BE PROTECTED FROM LOSS OF SURFACE MOISTURE FOR NOT LESS THAN 7 DAYS BY USING A CURING COMPOUND CONFORMING TO ASTM C-309, BY WET BURLAP, OR A PLASTIC MEMBRANE.

11. NO WELDING OF REINFORCING BARS WILL BE PERMITTED.

12. GROUT SHALL BE NONSHRINKABLE GROUT CONFORMING TO ASTM C827, AND SHALL HAVE SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 5000 PSI. PREGROUTING OF BASE PLATES WILL NOT BE PERMITTED.

13. MIXING, TRANSPORTING AND PLACING OF CONCRETE SHALL CONFORM TO ACI 301 (LATEST EDITION).

14. MINIMUM CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS SHALL BE AS FOLLOWS: (SEE ACI 318 (LATEST EDITION) SECTION 7.7 FOR CONDITIONS NOT NOTED)

FOOTINGS	3 INCHES
SLABS ON GRADE (MAX)	2 INCHES (TOP)
WALLS	1 1/2 INCHES (I.F)

PROVIDE STANDARD BAR CHAIRS AND SPACERS AS REQUIRED TO MAINTAIN CONCRETE PROTECTION SPECIFIED.

15. REINFORCEMENT DESIGNATED AS "CONTINUOUS" SHALL LAP 47 BAR DIAMETERS MINIMUM AT SPLICES, UNLESS NOTED OTHERWISE:

REBAR SIZE	LAP / SPLICE LENGTHS
#3	18"
#4	24"
#5	30"
#6	36"
#7	42"
#8	48"

16. HORIZONTAL FOOTING REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90 DEGREE BENDS AND EXTENSIONS, OR CORNER BARS OF EQUIVALENT SIZE LAPPED 44 BAR DIAMETERS, AT CORNERS AND INTERSECTIONS. NO REINFORCING OR REINFORCING SUPPORTS SHALL BE EMBEDDED INTO THE FOUNDATION SOIL. ALL REINFORCING PROJECTING FROM THE CONCRETE SHALL BE TIED TO THE FOUNDATION OR WALL REINFORCING AND FULLY SUPPORTED FROM MOVEMENT DURING CONCRETE INSTALLATION. NO "WET STICKING" OF REINFORCING IS PERMITTED.

17. HORIZONTAL JOINTING WILL NOT BE PERMITTED IN CONCRETE CONSTRUCTION EXCEPT AS SHOWN ON THE CONTRACT DOCUMENTS. VERTICAL JOINTS SHALL OCCUR AT CENTER OF SPANS AT LOCATIONS APPROVED BY THE STRUCTURAL ENGINEER.

18. SLABS WITH SHRINKAGE STEEL (WWF) SHALL HAVE CONSTRUCTION JOINTS OR CONTRACTION JOINTS AT EACH COLUMN LINE IN EACH DIRECTION. ADDITIONAL CRACK CONTRACTION JOINTS SHALL BE PROVIDED, SUCH THAT THE MAXIMUM SPACING BETWEEN CONSTRUCTION AND CRACK CONTROL JOINTS DOES NOT EXCEED 15' AND DOES NOT EXCEED A LENGTH TO WIDTH RATIO 1.5:1.

19. REPAIR CONCRETE EXHIBITING VOIDS DUE TO SNAP TIES, "HONEYCOMBS," ROCK POCKETS, AND RUNS, SPALLS OR OTHERWISE DAMAGED SURFACES WITH DRY PACK OR CEMENT GROUT, AND FINISH FLUSH WITH ADJOINING SURFACES. AT THE DISCRETION OF THE STRUCTURAL ENGINEER OR AS QUALIFIED BY LAB TESTING, EXCESSIVE HONEYCOMBS OR EXPOSED REINFORCEMENT THAT JEOPARDIZE THE DESIGN SHALL BE REMOVED AND REPLACED AT THE EXPENSE OF THE CONTRACTOR.

20. PROVIDE TWO (2) #4 X 4'0" AT ALL RE-ENTRANT CORNERS, PLACED ON THE DIAGONAL WITH 1 1/2" CLEARANCE FROM THE CORNER AND TOP OF SLAB. REFER TO DETAIL.

21. CONSTRUCTION JOINTS BETWEEN FOOTINGS AND PILASTERS AND SIMILAR JOINTS SHALL BE PREPARED BY ROUGHENING THE CONTACT SURFACE IN AN APPROVED MANNER TO FULL AMPLITUDE OF APPROX. 14 INCHES, LEAVING THE CONTACT SURFACE FREE AND CLEAR OF LAITANCE. REINFORCED (DOWELED) JOINTS SHALL HAVE BINDER ADDITIVE APPLIED PRIOR TO POUR.

22. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE INDICATED.

23. CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT FINISHED SURFACES FROM STAINS OR ABRASIONS. NO FIRE SHALL BE ALLOWED IN DIRECT CONTACT WITH CONCRETE. PROVIDE ADEQUATE PROTECTION AGAINST INJURIOUS ACTION BY SUN OR WIND. FRESH CONCRETE SHALL BE THOROUGHLY PROTECTED FROM HEAVY RAIN, FLOWING WATER, AND MECHANICAL INJURY.

24. TOPS OF FOUNDATIONS SHALL BE TROWEL FINISHED AND SMOOTH. REFER TO DRAWINGS FOR BASE PLATE ACCOMMODATIONS.

25. SLUMP TESTS SHALL BE MADE PRIOR TO THE ADDITION OF PLASTICIZERS. CONCRETE FOR THE PREPARATION OF TEST CYLINDERS SHALL BE TAKEN FROM THE HOSE END FOR CONCRETE PLACED BY PUMP.

26. WATER SHALL NOT BE ADDED TO THE CONCRETE AT THE JOBSITE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE REQUIREMENTS OF THE CONCRETE SUPPLIER AND PUMPER TO ENSURE PUMPABLE AND WORKABLE MIX WITHOUT THE ADDITION OF WATER AT THE JOBSITE. THE USE OF PLASTICIZERS, RETARDANTS AND OTHER ADDITIVES SHALL BE AT THE OPTION OF THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER. FOLLOW THE RECOMMENDATIONS OF THE MANUFACTURER FOR PROPER USE OF RETARDANTS AND OTHER ADDITIVES. USE OF CALCIUM E CHLORIDE OR OTHER CHLORIDE BEARING SALTS SHALL NOT BE PERMITTED.

27. PLACE CONCRETE IN A MANNER SO AS TO PREVENT SEGREGATION OF THE MIX. DELAY FLOATING AND TROWELING OPERATIONS UNTIL THE CONCRETE HAS LOST SURFACE WATER SHEEN OR ALL FREE SLABS SURFACE WATER. FINISHING OF SLAB SURFACES SHALL COMPLY WITH ACI RECOMMENDATIONS 302 AND 304 (LATEST EDITION) FOR GARAGES.

28. CONTRACTION JOINTS, IF SAW CUT, SHALL MEET THE FOLLOWING REQUIREMENTS:

JOINT DEPTH:	1/4 OF SLAB THICKNESS
SOFF-CUT SAW:	JOINTS TO BE CUT WITHIN 2 HOURS OF FINISHING
WET-CUT SAW:	JOINTS TO BE CUT BETWEEN 4 AND 12 HOURS AFTER FINISHING.

29. SLABS ON GRADE SHALL BE REINFORCED WITH WELDED WIRE FABRIC AND FIBER REINFORCEMENT AS INDICATED ON THE CONTRACT DOCUMENTS.

30. PROVIDE POUR STOP MATERIAL WHERE NOT INDICATED ON PLAN AS REQUIRED COMPLETING JOB.

31. HOT WEATHER CONCRETING: WHEN CONCRETING IS TO BE DONE IN HOT WEATHER CONDITIONS THAT COULD ADVERSELY AFFECT THE PROPERTIES AND SERVICEABILITY OF CONCRETE, PREPARATIONS AND PROCEDURES OUTLINED IN ACI 305R (LATEST EDITION) SHOULD BE FOLLOWED UNLESS OTHERWISE NOTED IN CONSTRUCTION SPECIFICATIONS.

32. COLD WEATHER CONCRETING: WHEN CONCRETING IS TO BE DONE IN COLD WEATHER CONDITIONS THAT COULD ADVERSELY AFFECT THE PROPERTIES AND SERVICEABILITY OF CONCRETE, PREPARATIONS AND PROCEDURES OUTLINED IN ACI 306R (LATEST EDITION) SHOULD BE FOLLOWED UNLESS OTHERWISE NOTED IN CONSTRUCTION SPECIFICATIONS.

33. TESTING OF COMPOSITE SAMPLES OF FRESH CONCRETE OBTAINED ACCORDING TO ASTM C172 SHALL BE PERFORMED ACCORDING TO THE FOLLOWING REQUIREMENTS:
    a. OBTAIN ONE COMPOSITE SAMPLE FOR EACH DAYS POUR OF EACH CONCRETE MIXTURE EXCEEDING 5 CU. YDS BUT LESS THAN 25 CU YDS., PLUS ONE SET FOR EACH ADDITIONAL 50 CU YD OR FRACTION THEREOF.
    b. CONCRETE SLUMP, AIR CONTENT AND TEMPERATURE SHALL BE TAKEN AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE. PERFORM ADDITIONAL TEST WHEN CONSISTENCY APPEARS TO CHANGE.
    c. COMPRESSION TEST SPECIMENS SHALL BE PER ASTM C31 REQUIREMENTS. CAST AND CURE ONE SET OF FIVE STANDARD CYLINDER SPECIMENS FOR EACH COMPOSITE SAMPLE.
    d. COMPRESSION STRENGTH TEST SHALL BE PER ASTM C39. TEST TWO LABORATORY-CURED SPECIMENS AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS. MAINTAIN AND CURE ONE FIELD CURED SPECIMEN FOR 56 DAYS OR LONGER AT THE REQUEST OF THE ENGINEER.

CONCRETE MASONRY

1. ALL CONCRETE MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 530/ASCE 5 (LATEST EDITION), "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES".

2. CONCRETE BLOCK SHALL BE NORMAL WEIGHT LOAD BEARING MASONRY UNITS CONFORMING TO ASTM C-90, GRADE N-1, WITH A MINIMUM (f'm = 2,500psi) COMPRESSIVE STRENGTH OF 3,250 PSI ON THE NET AREA OF THE UNITS.

3. PROVIDE CONCRETE UNIT MASONRY THAT DEVELOPS A PRISMATIC STRENGTH EQUAL TO Fm' = 2,500 PSI OR BETTER. THE MINIMUM AVERAGE NET AREA COMPRESSIVE STRENGTH SHALL EQUAL 3,250 PSI.

4. MORTAR SHALL BE TYPE M OR S AND CONFORM TO ASTM C-270.

5. CEMENT USED IN THE MORTAR AND GROUT SHALL CONFORM TO ASTM C-150.

6. GROUT SHALL CONFORM TO ASTM C476 WITH A MIN. COMPRESSIVE STRENGTH OF 2,000 PSI.

7. GROUT SHALL CONFORM TO THE PROPORTIONAL REQUIREMENTS OF ASTM C476. PROVIDE FINE AND COARSE GROUTS APPROPRIATE FOR SIZE OF VOID SPACE BEING FILLED. GROUT SHALL HAVE A MINIMUM SLUMP OF 8 INCHES PROVIDED BY SUFFICIENT WATER CONTENT. ADMIXTURES ARE NOT PERMITTED IN GROUT.

8. STEEL REINFORCING BARS SHALL CONFORM TO ASTM A-615, GRADE 60. JOINT (HORIZONTAL) REINFORCEMENT SHALL BE DUR-O-WALL TRUSS TYPE, OR AN APPROVED EQUAL.

9. MASONRY SHALL NOT BE CONSTRUCTED IN TEMPERATURES BELOW 40 DEG.F. PROVIDE A HEAT SOURCE AND PROTECTION AS REQUIRED TO MAINTAIN TEMPERATURE ABOVE 40 DEG.F. COORDINATE ADDITIONAL REQUIREMENTS WITH ACI 530, LATEST EDITION.

10. ALL CELLS WITH REINFORCING BARS OR BOLTS SHALL BE GROUTED SOLID. ALL CELLS IN PARAPET MASONRY SHALL BE GROUTED SOLID.

11. REINFORCED VOIDS, AND NON-REINFORCED VOIDS SPECIFIED TO BE GROUTED, IN CONCRETE MASONRY SHALL BE FILLED SOLID WITH GROUT IN 5 FT MAXIMUM LIFTS. STOP POURS 1 1/2" BELOW THE BED JOINT TO FORM A KEY AT POUR JOINTS.

12. REINFORCING BARS SHALL BE TIED TO DOWELS AND HELD IN THE PROPER POSITION BY MECHANICAL BAR POSITIONERS DESIGNED FOR THAT PURPOSE.

13. REINFORCING BARS SHALL NOT BE PLUNGED INTO WET GROUT.

14. REINFORCEMENT DESIGNATED AS "CONTINUOUS" SHALL LAP 40 BAR DIAMETERS MINIMUM AT SPLICES, UNLESS NOTED OTHERWISE:

REBAR SIZE	LAP / SPLICE LENGTHS
#3	16"
#4	20"
#5	26"
#6	30"
#7	36"
#8	40"

15. VERTICAL CELLS TO BE GROUTED SOLID SHOULD HAVE A MINIMUM CLEAR OPENING AS IDENTIFIED IN ACI 530, LATEST EDITION, FOR FINE OR COARSE GROUT. COORDINATE GROUT USED WITH OPENING SIZE AND THE REQUIREMENTS OF ASTM C476, AS NOTED ABOVE.

16. ALL MASONRY BEARING BENEATH STEEL BEAMS SHALL HAVE (2) #5 VERT. REINFORCING BARS (ONE PER CELL) AND ALL COURSES OF CMU FILLED WITH GROUT, UNLESS DETAILED OR NOTED OTHERWISE.

17. CONSOLIDATE GROUT POURS EXCEEDING 12 INCHES IN HEIGHT BY MECHANICAL VIBRATION AND RECONSOLIDATE BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.

18. CERTIFICATES OF COMPLIANCE ARE REQUIRED TO BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR BLOCK GRADE, STRENGTH, GROUT, MORTAR, AND REINFORCING BARS PRIOR TO DELIVERY OF THE BLOCK.

19. ALL WALLS SHALL HAVE A BOND BEAM AT THE ROOF, WHICH TIES INTO THE VERTICAL REINFORCEMENT. BOND BEAMS SHALL BE PROVIDED AT THE TOPS OF ALL CMU WALLS AND AT HORIZONTAL INTERVALS NOT TO EXCEED EIGHTEEN (18) TIMES THE WALL (CMU) THICKNESS. UNLESS INDICATED ON DRAWINGS, REINFORCE ALL BOND BEAMS WITH A MINIMUM (2) CONTINUOUS #5 BARS WITH MINIMUM 3,000 PSI SMALL AGGREGATE CONCRETE (NOTE: MORTAR MIX DOES NOT CONSTITUTE GROUT). PROVIDE WALL ANCHORS TO ALL BUILDING COLUMNS AT MAXIMUM 48" VERTICAL AND AT ALL BOND BEAMS.

20. PROVIDE HORIZONTAL JOINT REINFORCING IN ALL MASONRY WALLS AT 16"oc VERTICALLY. JOINT REINFORCING SHALL BE 9 GAGE GALVANIZED TRUSS-TYPE WIRE, U.N.O. SEE PLANS AND DETAILS FOR VERTICAL REINFORCING REQUIREMENTS.

21. PROVIDE #5 BAR VERTICALLY AROUND ALL MASONRY OPENINGS LARGER THAN 12 INCHES OR AS INDICATED ON DRAWINGS. FILL CELLS SOLID WITH GROUT.

22. PROVIDE (2) #5 BARS VERTICALLY AT ALL EXTERIOR CORNERS AND AT THE TERMINAL ENDS OF WALLS OR AS INDICATED ON DRAWINGS. FILL CELLS SOLID WITH GROUT.

23. PLACE REINFORCEMENT IN REQUIRED POSITION SECURING FROM DISPLACEMENT WITH WIRE TIES. LAP CONTINUOUS BARS 36 DIAMETERS.

24. PERPENDICULAR INTERSECTING WALLS SHALL BE TOOTHED TOGETHER OR HAVE THE HORIZONTAL TRUSS-TYPE WIRE REINFORCEMENT CONTINUOUS THROUGH THE INTERSECTION. NOTE: CORRUGATED SHEET METAL TAB ANCHORS ARE NOT ACCEPTABLE CONNECTORS AT INTERSECTING WALLS PER ACI-530 - EMPIRICAL DESIGN ANCHORAGE REQUIREMENTS.

25. LOAD BEARING CMU SHALL HAVE FULL MORTAR BED JOINTS.

26. PROVIDE LADDER-TYPE, HORIZONTAL JOINT REINFORCEMENT AS FOLLOWS:

TYPICAL:	16 IN C/C MAX
AT BELOW GRADE WALLS:	PROVIDE AT 8 IN C/C
AT PARAPETS:	PROVIDE AT 8 IN C/C
AT WALL OPENINGS:	PROVIDE ADDITIONAL REINF NOT MORE THAN 8 IN ABOVE AND BELOW OPENING. TERMINATE 2 FT BEYOND OPENING.

27. INSPECTION OF MASONRY CONSTRUCTION SHALL BE AS OUTLINED IN TABLE 1704.5.1 OF THE PA UCC AND IBC 2018, AS LEVEL 2 SPECIAL INSPECTION.

STEEL DECK NOTES

1. STEEL DECK SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE CURRENT SPECIFICATION OF THE STEEL DECK INSTITUTE.

2. SHOP DRAWINGS SHALL INDICATE THE FINISH, TYPE, GAGE, DIMENSIONS, AND LAYOUT OF ALL DECK AND ACCESSORIES. DRAWINGS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

2

3. STEEL ROOF DECK TO BE ONE OF THE FOLLOWING TWO TYPES OF DECK:
    a. ROOF DECK OVER GYM, MULTI-PURPOSE ROOM, AND MAKER SPACE: VERSA-DEK 2.0 S ES ACOUSTICAL DECK, AS MANUFACTURED BY NEW MILLENNIUM, OR AN APPROVED EQUAL. THIS DECK SHALL BE 2" DEEP, 20 GAGE, GALVANIZED DECK WITH MANUFACTURER'S STANDARD ACOUSTICAL HOLES. REFER TO PLANS.
    b. ALL OTHER ROOF DECK TO BE 1 1/2" DEEP, 20 GAGE, GALVANIZED, TYPE 'B' WIDE RIB ROOF DECK, AS MANUFACTURED BY CANAM, INC., OR AN APPROVED EQUAL.
        b.1) ONLY ROOF DECK TO BE FILLED WITH CONCRETE AT FLOOR OF MECHANICAL MEZZANINE TO BE INSTALLED INVERTED. ALL OTHER WIDE RIB ROOF DECK TO BE INSTALLED NON-INVERTED.

4. THE STEEL ROOF DECK SHALL BE SUPPLIED IN MINIMUM LENGTHS AS REQUIRED TO PROVIDE A "3 SPAN" CONDITION. END CLOSURES, ROOF SUMPS, CLOSURES AT PENETRATIONS, AND ALL OTHER ACCESSORIES NECESSARY FOR A COMPLETE INSTALLATION ARE REQUIRED.

5. STEEL ROOF DECK SHALL BE WELDED TO THE SUPPORTING STEEL (FRAME FASTENING) WITH 5/8" DIAMETER PUDDLE OR ELONGATED WELDS IN PATTERNS IDENTIFIED IN THE PROJECT SPECIFICATIONS. INTERMEDIATE SIDE CONNECTIONS (STITCH FASTENING) SHALL BE MADE WITH #10 SELF-TAPPING SCREWS, 1 1/2" SEAM WELDS, OR 5/8" PUDDLE WELDS SPACED AT 18"o.c. MAX.

6. REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION SHALL BE AS OUTLINED IN TABLE 1704.3 OF THE PA UCC AND IBC 2018.

7. MECHANICAL FASTENING METHODS ARE PERMITTED IN LIEU OF WELDING. CONTRACTOR SHALL PROVIDE SUBMITTAL TO INDICATE SPECIFIC FASTENING SYSTEM AND DATA TO INDICATE THAT MECHANICAL FASTENERS MEET OR EXCEED THE DIAPHRAGM CAPACITY ACHIEVED BY THE WELDING PATTERN DESCRIBED ABOVE, OR OTHER SPECIFIC REQUIREMENTS INDICATED.

STRUCTURAL STEEL

1. DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION, AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

2. MATERIALS:

a.	STRUCTURAL STEEL	ASTM A 992
b.	STRUCTURAL STL TUBING, SQ & ROUND	ASTM A 500 GRADE B
c.	CHANNELS, PLATES AND ANGLES	ASTM A-36
d.	BOLTS	ASTM A 325
e.	ANCHOR RODS	ASTM F1554-36
f.	WELDING ELECTRODE	ASTM E 70XX LOW HYDROGEN

3. PROVIDE BITUMINOUS COATING AND/OR ISOLATION SLEEVE AND WASHERS / INSERTS BETWEEN ALL CONNECTIONS CONTAINING DISSIMILAR METALS.

4. ALL WELDING SHALL CONFORM TO THE CODE FOR THE ARC AND GAS WELDING IN BUILDING CONSTRUCTION OF THE AMERICAN WELDING SOCIETY, AND BE PERFORMED BY A CERTIFIED WELDER IN ACCORDANCE WITH THE A.W.S. STANDARDS.

5. BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS SHALL BE AISC STANDARD DESIGNED FOR 125% OF THE FULL SHEAR CAPACITY OF THE BEAM

6. CONNECTIONS NOT SHOWN ARE TO BE DETAILED BY THE FABRICATOR IN ACCORDANCE WITH THE AISC SPECIFICATION REFERRED TO IN NOTE 1 ABOVE. DETAILS OF ALL CONNECTIONS MUST BE SHOWN ON THE SHOP DRAWINGS. MINIMUM CONNECTION ANGLE THICKNESS TO BE 5/16". CONNECTION DESIGNS ARE TO BE PREPARED BY A STRUCTURAL ENGINEER LICENSED TO PERFORM ENGINEERING IN THE COMMONWEALTH OF PENNSYLVANIA.

7. SINGLE TAB PLATE CONNECTIONS ARE NOT PERMITTED, U.N.O.

8. ALL STRUCTURAL STEEL BEAMS AND COLUMNS ADJACENT TO MASONRY ARE TO HAVE MASONRY WALL ANCHORS OF THE TYPE AND SIZE INDICATED IN THE SPECIFICATIONS AT 2'-0" ON CENTER, UNLESS NOTED OTHERWISE.

9. PROVIDE 9/16" DIAMETER HOLES FOR WOOD NAILERS AS REQUIRED BY ARCHITECTURAL DRAWINGS.

10. STRUCTURAL STEEL SHALL BE CLEANED IN ACCORDANCE WITH THE STEEL STRUCTURES PAINTING COUNCIL SPECIFICATION SP-3-82 FOR POWER TOOL CLEANING AND PAINTED TO A MINIMUM DRY FILM THICKNESS OF 2 MILS WITH A SHOP COAT OF TNEMEC #10-99 ALKYD RUST INHIBITIVE PRIMER AS MANUFACTURED BY TNEMEC COMPANY, INC., OF KANSAS CITY, MO. OR AN APPROVED EQUAL.

11. ALL STRUCTURAL STEEL SUBJECTED TO EXTERIOR WEATHERING SHALL BE HOT DIPPED GALVANIZED PER ASTM A123.

12. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE FABRICATION OF THE STRUCTURAL STEEL COMPONENTS. SHOP DRAWINGS SHALL BE CHECKED PRIOR TO SUBMITTAL. DRAWINGS SHALL INCLUDE DETAILS OF CUTS, CONNECTIONS, SPLICES, CAMBERS, HOLES. INDICATE ALL WELDS BY STANDARD AWS SYMBOLS. SHOW SIZE, LENGTH AND TYPE OF EACH WELD. INDICATE ALL BOLTS BY SIZE, LENGTH AND TYPE. CERTIFICATES OF COMPLIANCE ARE REQUIRED TO BE SUBMITTED TO THE ENGINEER FOR STRUCTURAL STEEL, BOLTS, NUTS, WASHERS, AND WELD FILLER MATERIAL PRIOR TO THE FABRICATION OF ANY STEEL.

13. HIGH STRENGTH BOLTS IN CONNECTIONS USED FOR KICKERS AND BRACING MEMBERS THAT ARE FABRICATED WITH SLOTTED HOLES SHALL BE SLIP-CRITICAL. IF STANDARD HOLES ARE USED, BOLTS SHALL BE FULLY PRE-TENSIONED.

14. WEB STIFFENERS SHALL BE PROVIDED IN WF SHAPES AS FOLLOWS:
    COLUMN WEBS: AT FULLY DEVELOPED MOMENT CONNECTIONS. STIFFENERS SHALL BE FILLET WELDED U.N.O. SAME THICKNESS AND GRADE AS BEAM FLANGES. WHERE MOMENT CONNECTIONS OCCUR ON COLUMN FLANGES AND COLUMN WEBS, STIFFENER THICKNESS SHALL EQUAL THE VECTOR SUMMATION OF THE RESPECTIVE BEAM FLANGE THICKNESSES.
    BEAM WEBS:WHERE BEAM BEARS ON COLUMN, SAME THICKNESS AND STRENGTH AS COLUMN FLANGES.
    BEAM WEBS: WHERE COLUMN BEARS ON BEAM, SAME THICKNESS AND STRENGTH AS COLUMN FLANGES.

15. CERTIFICATES OF COMPLIANCE ARE REQUIRED TO BE SUBMITTED TO THE ENGINEER FOR STRUCTURAL STEEL, BOLTS, NUTS, WASHERS, AND WELD FILLER MATERIAL PRIOR TO THE FABRICATION OF ANY STEEL.

16. SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS IS PROHIBITED WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER AS TO LOCATION, TYPE OF SPLICE AND CONNECTION TO BE MADE.

17. BEAMS SHALL BE CAMBERED UPWARD WHERE SHOWN ON THE CONTRACT DOCUMENTS. WHERE NO UPWARD CAMBER IS INDICATED, ANY MILL CAMBER SHALL BE DETAILED UPWARD IN THE BEAMS.

18. HEADED CONCRETE ANCHORS SHALL BE NELSON OR KSM HEADED CONCRETE ANCHORS (OR APPROVED EQUAL), AND SHALL CONFORM TO ASTM A108. ANCHORS SHALL BE AUTOMATICALLY END WELDED WITH SUITABLE STUD WELDING EQUIPMENT IN THE SHOP OR IN THE FIELD. WELDING SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE NELSON STUD WELDING COMPANY OR THE KSM WELDING SYSTEMS COMPANY.

19. CONFORMANCE WITH THE RECOMMENDATIONS OF THE LENTON COMPANY.

20. PROVIDE POUR STOP MATERIAL WHERE NOT INDICATED ON PLANS AS REQUIRED FOR COMPLETING JOB.

21. PROVIDE LOOSE OR HANGING LINTELS NOT SHOWN ON DRAWINGS AS REQUIRED TO COMPLETE JOB. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS. CONTACT STRUCTURAL ENGINEER AS PER ANY DESIGN INFORMATION REQUIRED.

22. REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION SHALL BE AS OUTLINED IN TABLE 1704.3 OF THE PA UCC AND IBC 2018.

STEEL BAR JOIST NOTES:

1. OPEN WEB STEEL JOISTS SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE CURRENT SPECIFICATION OF THE STEEL JOIST INSTITUTE.

2. JOISTS SHALL BE SUPPLIED WITH ALL ATTACHED DEVICES, BRIDGING, AND SIMILAR ACCESSORIES REQUIRED FOR STRICT CONFORMANCE WITH THE STEEL JOIST INSTITUTE'S SPECIFICATIONS. ALL OF THE ABOVE INFORMATION MUST BE SHOWN ON THE SHOP DRAWINGS.

3. JOISTS SHALL BE FIELD WELDED TO THEIR SUPPORTING MEMBERS BY A CERTIFIED WELDER AS DEFINED BY THE AMERICAN WELDING SOCIETY.

4. JOISTS AT ALL COLUMN LINES SHALL HAVE THEIR LOWER CHORDS EXTENDED AND SECURED TO THE COLUMN AFTER THE ALL OF THE BUILDINGS DEAD LOADS HAVE BEEN APPLIED, AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.

5. WHEN CONSTRUCTING STEEL JOISTS ON MASONRY WALLS, SETTING PLATES SHOULD ALWAYS BE PROPERLY ANCHORED TO THE WALL. THE SETTING PLATE SHOULD BE INSTALLED NOT MORE THAN 1/2" FROM THE FACE OF THE WALL.

6. STAGGER JOISTS WHEN LESS THAN THE MINIMUM BEARING IS POSSIBLE ON A COMMON BEARING SURFACE.

7. JOISTS SHALL BE CLEANED IN ACCORDANCE WITH THE STEEL STRUCTURES PAINTING COUNCIL SPECIFICATION SP-2-63 AND PAINTED TO A MINIMUM DRY FILM THICKNESS OF 1 MIL WITH A RE OXIDE PAINT IN ACCORDANCE WITH SSPC PAINT SPECIFICATION NO. 15, TYPE 1.

8. REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION SHALL BE AS OUTLINED IN TABLE 1704.3 OF THE PA UCC AND IBC 2018.

9. JOISTS AND BRIDGING MUST BE DESIGNED TO RESIST A NET UPLIFT LOADING OF 15 PSF. NO STRESS INCREASES ARE PERMITTED FOR LOAD COMBINATION EFFECTS.

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA, PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	Description
2	03/01/2024	ADDENDUM #2

Date	02/09/2024
Scale:	NOTED
Job No.	725002
Drawn: PMG	Appd.: PMG

Sheet Title:

GENERAL NOTES

Sheet No.

S4.1

NOT FOR CONSTRUCTION

HVAC SYMBOLS - DUCTWORK

BREAK IN ROUND DUCT

BREAK IN RECTANGULAR DUCT

SUPPLY AIR RISE

SUPPLY AIR FLOOR OR ROOF PENETRATION

SUPPLY AIR DROP

RETURN, EXHAUST, OR OUTSIDE AIR RISE

RETURN, EXHAUST, OR OUTSIDE AIR FLOOR OR ROOF PENETRATION

RETURN, EXHAUST, OR OUTSIDE AIR DROP

TRANSITION IN RISE

BRANCH DUCT WITH TOP TAKE-OFF AND VOLUME DAMPER

VD

12x12 RECTANGULAR DUCT SIZE (FIRST FIGURE = WIDTH)

12"Ø ROUND DUCT SIZE

ACOUSTICAL LINING

EXISTING DUCT

EXISTING DUCT TO BE REMOVED (DEMO)

SUPPLY DIFFUSER

RETURN OR EXHAUST DIFFUSER

AD ACCESS DOOR

FC FLEXIBLE CONNECTION

SD DUCT SMOKE DETECTOR

FS SMOKE/ FIRE DAMPER

VD VOLUME DAMPER

ATC ATC CONTROL DAMPER

BDD BACKDRAFT DAMPER

FD AD FIRE DAMPER WITH ACCESS DOOR

90° RADIUS ELBOW

45° RADIUS ELBOW

90° ELBOW WITH TURNING VANES

BRANCH DUCT TAKE-OFF WITH VOLUME DAMPER

FLEXIBLE DUCT

SLOT DIFFUSER

SIDE WALL DIFFUSER

HVAC EQUIPMENT

AHU - AIR HANDLING UNIT (INCLUDING HEATING & VENTILATING UNITS)

CDP - CONDENSATE DRAIN PUMP (AIR CONDITIONING)

DC - DUCT COIL (ELECTRIC HEAT)

DOAS - DEDICATED OUTDOOR AIR SYSTEM

EWH - ELECTRIC HEATER (INCLUDES WALL HEATERS AND TOE-SPACE HEATERS)

EF - EXHAUST FAN

HP - HEAT PUMP (AIRSIDE, WATERSOURCE, AND MINI SPLIT

CFM GRILLE, REGISTER, OR DIFFUSER

H - HUMIDIFIER

KH - KITCHEN HOOD

L - LOUVER

MAU - MAKE-UP AIR UNIT

RTU - ROOFTOP UNIT (AIR CONDITIONING AND HEAT PUMPS)

HVAC ABBREVIATIONS

AC	AIR CONDITIONING
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AMB	AMBIENT
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
ATC	AUTOMATIC TEMPERATURE CONTROL
AWT	AVERAGE WATER TEMPERATURE
BHP	BREAK HORSE POWER
BHP	BOILER HORSE POWER
BMS	BUILDING MANAGEMENT SYSTEM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BWE	BAKED WHITE ENAMEL
FA	FREE AREA
FM	CUBIC FEET PER MINUTE
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FV	FACE VELOCITY
COP	COEFFICIENT OF PERFORMANCE
CW	COLD WATER
DB	DRY BULB
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EFF	EFFICIENCY
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
EX	EXISTING
EXT	EXTERIOR
FLA	FULL LOAD AMPS
FL DR	FLOOR DRAIN
FT	FEET
FT HD	FEET OF HEAD
GA	GAUGE
HC	HVAC CONTRACTOR
HP	HORSE POWER
HTG	HEATING
HW	HOT WATER
HWR	HOT WATER RETURN
ID	INSIDE DIAMETER OR IDENTIFIER
IN	INCHES
INSUL	INSULATION
IN-WC	INCHES OF WATER COLUMN
IR	INFRARED
ISP	INTERNAL STATIC PRESSURE
IW	INDIRECT WASTE
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LAT CAP	LATENT CAPACITY
LBS	POUNDS
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MBH	1,000 BTU
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
M.O.D.	MOTOR OPERATED DAMPER
MOP	MAXIMUM OVERCURRENT PROTECTION
MFR	MANUFACTURER
MHP	MAXIMUM HORSE POWER
RNC	ROOM NOISE CRITERIA
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PIR	PASSIVE INFRARED
PRV	PRESSURE RELIEF VALVE
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RH	RELATIVE HUMIDITY
RLA	RUN LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SS	STAINLESS STEEL
SST	SATURATED SUCTION TEMPERATURE
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SEN CAP	SENSIBLE CAPACITY
SP	STATIC PRESSURE
T	THERMOMETER
TA	TRANSFER AIR
TEMP	TEMPERATURE
TOG	TOP OF GRILLE
TOL	TOP OF LOUVER
TOT. CAP	TOTAL CAPACITY
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TW	TEPID WATER
UC	UNDERCUT DOOR
UNO	UNLESS NOTED OTHERWISE
V	VENT
V/P/H	VOLTS/PHASE/HERTZ
VTR	VENT THRU ROOF
W	WALL-MOUNTED
WB	WET BULB
WPD	WATER PRESSURE DROP
WT	WEIGHT

HVAC SYMBOLS - CONTROLS

T THERMOSTAT OR TEMPERATURE SENSOR

H HUMIDISTAT OR HUMIDITY SENSOR

R REFRIGERANT LEAK SENSOR

C CARBON MONOXIDE SENSOR

G NATURAL GAS OR LP LEAK SENSOR

O CARBON DIOXIDE SENSOR

T TEMPERATURE SENSOR WITH THERMAL WELL

P HUMIDISTAT OR HUMIDITY SENSOR

DP DIFFERENTIAL PRESSURE SENSOR

FS FLOW SWITCH

CONTROL PANEL

COMMON SYMBOLS

N PLAN NORTH

A / H1.1 SECTION ID; SHEET NO. WHERE SECTION IS; DIRECTIONAL VIEW OF SECTION

REVISION CLOUD

1 REVISION NUMBER

ELEVATION 100.00'

1 KEYNOTE

CONNECT TO EXISTING

EXISTING TO BE REMOVED

TYPE ID EQUIPMENT TAG SHOWING TYPE AND ID. SEE EQUIPMENT SCHEDULES FOR DETAILS

EXISTING TO REMAIN

REMOVE EXISTING

PROVIDE NEW

HVAC GENERAL NOTES

1. THE HVAC DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE APPROXIMATE LOCATIONS OF EQUIPMENT, PIPING, DUCTWORK AND ASSOCIATED SYSTEMS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATE THE INSTALLATION OF HVAC SYSTEMS WITH ACTUAL CONDITIONS IN THE FIELD.
   A. PIPE AND DUCT ELEVATIONS ARE FOR REFERENCE ONLY. FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS
   B. DUCT SIZES ARE MINIMUM CLEAR INSIDE DIMENSIONS.
   C. COORDINATE INSTALLATION OF MECHANICAL WORK WITH ALL OTHER TRADES
   D. MAINTAIN MANUFACTURERS RECOMMENDED SERVICE CLEARANCES
2. THE CONTRACTOR SHALL COORDINATE THE SHUTDOWN AND REMOVAL OF EXISTING SYSTEMS AND EQUIPMENT AND THE INSTALLATION OF NEW SYSTEMS AND EQUIPMENT WITH THE PROJECT CONSTRUCTION PHASING SCHEDULE.
3. PRIOR TO ORDERING MECHANICAL EQUIPMENT, VERIFY CLEARANCE FOR RIGGING EQUIPMENT THROUGH EXISTING DOORS, HATCHES, WINDOWS, AND SIMILAR EXISTING SPACE CONSTRAINT CONDITIONS. DISASSEMBLE AND RE-ASSEMBLE EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS WHERE EQUIPMENT DOES NOT CLEAR EXISTING OPENINGS.
4. DO NOT RIG OR HOIST EQUIPMENT OR MATERIALS ABOVE OCCUPIED AREAS OF THE BUILDING.
5. PROVIDE ALL METHODS AND MATERIALS FOR SUPPORTING EQUIPMENT, PIPING, AND DUCTWORK. IN AREAS OF BAR JOIST CONSTRUCTION, SUPPORT LOADS FROM TOP CHORD OF BAR JOISTS AT PANEL POINTS.
6. UNLESS OTHERWISE INDICATED, THIS CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING OF THE EXISTING FACILITY FOR HIS RESPECTIVE WORK. PATCHING SHALL MATCH EXISTING MATERIALS, FINISHES, AND METHODS OF CONSTRUCTION.
   A. PROVIDE LINTELS WHERE PENETRATING EXISTING MASONRY CONSTRUCTION; SUBMIT SHOP DRAWINGS ON LINTELS, INDICATING SIZE AND TYPE, FOR PENETRATIONS OF LOAD BEARING MASONRY WALLS.
   B. CUTTING AND PATCHING OF THE ROOF SHALL BE PERFORMED BY AN AUTHORIZED SUB-CONTRACTOR CERTIFIED BY THE ORIGINAL ROOFING MANUFACTURER; ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH EXISTING WARRANTY REQUIREMENTS.
   C. PROVIDE STEEL FRAMING ANGLES WHERE PENETRATING FLOOR AND ROOF DECKS; ANGLES SHALL BE MINIMUM 4" x 4" x 1/4" UNLESS NOTED OTHERWISE.
   D. MODIFY EXISTING ROOF, FLOOR, AND WALL OPENINGS TO ACCOMMODATE THE INSTALLATION OF NEW EQUIPMENT AND SYSTEMS; PROVIDE ANGLE FRAMING FOR ROOF AND FLOOR PENETRATIONS, SLEEVES AND LINTELS FOR WALL PENETRATIONS. PATCH EXITING ROOF, FLOOR, AND WALL OPENINGS TO MATCH EXISTING MATERIALS AND METHODS WHERE PENETRATIONS ARE NOT UTILIZED FOR NEW EQUIPMENT AND SYSTEMS.
   E. WHERE CUTTING AND PATCHING IS INDICATED TO BE PERFORMED BY THE GENERAL CONTRACTOR, COORDINATE THE SIZE AND LOCATION OF OPENINGS.
   F. REMOVE AND REINSTALL EXISTING ACOUSTICAL CEILING TILES AND CEILING GRID TO FACILITATE THE INSTALLATION OF DUCTWORK, PIPING, EQUIPMENT, AND CONTROLS.
   G. UNLESS OTHERWISE INDICATED, CUT AND PATCH EXISTING PLASTER CEILINGS TO FACILITATE THE INSTALLATION OF DUCTWORK, PIPING, EQUIPMENT, AND CONTROLS.
7. IMMEDIATELY NOTIFY THE ARCHITECT, ENGINEER, AND OWNER IF ENVIRONMENTAL HAZARDS SUCH AS ASBESTOS IS ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DISTURBING EXISTING HAZARDOUS MATERIALS. THE MECHANICAL CONTRACTOR SHALL NOT PERFORM ABATEMENT WORK AS PART OF THIS CONTRACT.
8. ALL MATERIAL EXPOSED WITHIN THE CEILING RETURN AIR PLENUMS SHALL BE NONCOMBUSTIBLE OR HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE-DEVELOPED RATING OF 50. ALL DUCT TYPE, MASTICS, AND VIBRATION ISOLATION CONNECTIONS SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND SMOKE SPREAD RATING OF 50 OR LESS. DUCT COVERING AND LININGS SHALL NOT FLAME, GLOW, SMOLDER, OR SMOKE WHEN TESTED IN ACCORDANCE WITH ASTM C411 AND UL 181. FLEXIBLE DUCTWORK SHALL COMPLY WITH UL 181.
9. PROVIDE UL LISTED FIRE PROOFING SEALANTS AROUND ALL DUCT, PIPING, AND CONDUIT PENETRATIONS OF RATED FIRE RESISTANT WALLS AND FLOORS. PROVIDE UL LISTED DRAFT STOPPING SEALANTS AROUND ALL DUCT, PIPING, AND CONDUIT PENETRATIONS OF NON-RATED FLOORS.
10. PROVIDE ACOUSTICAL SEALS AROUND DUCTWORK AND PIPING PENETRATIONS OF ACOUSTICALLY RATED PARTITIONS.
11. PRIME AND PAINT ALL FERROUS MATERIALS EXPOSED TO THE OUTDOORS. PRIME AND PAINT ADDITIONAL MATERIALS AS NOTED ON THE DRAWINGS. PRIMER AND PAINT SHALL BE SUITABLE FOR ITS INTENDED APPLICATION.
12. COORDINATE MOUNTING HEIGHTS OF LOUVERS, BRICK VENTS, SIDEWALL GRILLES, AND WALL MOUNTED EQUIPMENT WITH THE ARCHITECTURAL EXTERIOR AND INTERIOR ELEVATIONS.
13. PROVIDE AUTOMATIC AIR VENTS AT ALL HIGH POINTS IN HYDRONIC PIPING SYSTEMS; PROVIDE DRAIN VALVES AT ALL LOW POINTS.
14. VERIFY REFRIGERANT PIPE SIZES WITH AIR-CONDITIONING EQUIPMENT MANUFACTURER.
15. MOUNT THERMOSTATS AND SIMILAR CONTROL DEVICES 48" AFF.
16. UNLESS OTHERWISE NOTED, SMOKE DETECTORS SHALL BE FURNISHED, WIRED, AND INSTALLED BY THE H.C. IN THE RETURN AIR DUCTS UPSTREAM OF ANY FILTERS, EXHAUST AIR CONNECTIONS, AND OUTDOOR AIR CONNECTIONS FOR ALL UNITS WITH A DESIGN CAPACITY OF 2000 CFM OR GREATER. SMOKE DETECTORS SHALL BE LABELED FOR INSTALLATION IN AIR DISTRIBUTION SYSTEM AND INSTALLED IN ACCORDANCE WITH NFPA 72.
17. OUTSIDE AIR INTAKE OPENINGS SHALL BE LOCATED A MINIMUM OF 10 FEET FROM LOT LINES, OTHER BUILDING, FUEL-FIRED APPLIANCE VENTS, PLUMBING VENTS, EXHAUST FAN DISCHARGE, OR FROM ANY OTHER SOURCE OF HAZARDOUS OR NOXIOUS CONTAINMENT.
18. PERFORM START-UP EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURERS' WRITTEN START-UP INSTRUCTIONS OR IN CONJUNCTION WITH FACTORY AUTHORIZED TECHNICIANS. ADJUST AUTOMATIC TEMPERATURE CONTROLS TO ACHIEVE SATISFACTORY TEMPERATURE AND/OR HUMIDITY CONTROL AS APPLICABLE.
19. PROVIDE WRITTEN NOTICE AT LEAST 3 DAYS PRIOR TO PERFORMING PIPING LEAK TESTS AND 7 DAYS PRIOR TO EQUIPMENT START-UP AND OPERATIONAL TESTS.
20. UNLESS OTHERWISE INDICATED, ALL DUCTWORK SHALL BE OF SHEET METAL CONSTRUCTION WITH SEALED JOINTS. ROUND FLEXIBLE DUCTWORK SHALL BE LIMITED TO 6'-0" PER BRANCH DUCT
21. DO NOT UTILIZE AIR HANDLING EQUIPMENT AND DUCTED SYSTEMS FOR TEMPORARY HEAT; OBTAIN WRITTEN APPROVAL FROM THE ENGINEER PRIOR TO PLACING EQUIPMENT INTO SUSTAINED OPERATION. CHANGE ALL AIR FILTERS 30 DAYS AFTER PROJECT COMPLETION.
22. PROVIDE ACCESS DOORS IN WALLS AND CEILINGS FOR ALL SERVICEABLE DEVICES INCLUDING FIRE DAMPERS, SHUT-OFF VALVES, CONTROL VALVES, CONTROL DAMPERS, AND VOLUME DAMPERS. PROVIDE UL-LISTED ACCESS DOORS IN FIRE RESISTANCE RATED CONSTRUCTION.
23. PROVIDE IDENTIFICATION OF MECHANICAL SYSTEMS AND EQUIPMENT INCLUDING DUCTWORK AND PIPING.
   A. PROVIDE LOCATION / IDENTIFICATION MARKERS ON CEILING GRID OR ACCESS PANELS FOR SHUT-OFF VALVES, CONTROL VALVES, FIRE DAMPERS, SMOKE DETECTORS, AND OTHER SERVICEABLE DEVICES.

COMMON ABBREVIATIONS

A/E	ARCHITECT/ENGINEER
AB CLG	ABOVE CEILING
ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
AFI	ARC-FAULT INTERRUPTER
AFR	ABOVE FINISHED ROOF
ALT	ALTERNATE
ATS	AUTOMATIC TRANSFER SWITCH
BFC	BELOW FINISHED CEILING
C/G	COUNTERTOP GFI
CD	CORD DROP
CL	CENTERLINE
CLG	CEILING
CM	CEILING MOUNTED
COL	COLUMN
CT	COUNTERTOP HEIGHT-44" AFF UNO OR CURRENT TRANSFORMER
CR	CORD REEL
DBF	DOWN BELOW FLOOR
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DL	DOOR LOUVER
DN	DOWN
DW	DISHWASHER
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EL	ELEVATION
ELEV	ELEVATOR
EMER	EMERGENCY
EO	EMERGENCY ONLY (NORMALLY OFF)
EWC	ELECTRIC WATER COOLER (PROVIDE GFI RECEPTACLE)
EX	EXISTING
FA	FIRE ALARM
FBO	FURNISHED BY OWNER
FLR	FLOOR
FPC	FIRE PROTECTION CONTRACTOR
FSC	FOOD SERVICE CONTRACTOR
GC	GENERAL CONTRACTOR
GFI	GROUND-FAULT INTERRUPTER
GND	GROUND
HC	HVAC CONTRACTOR
HCP	HANDICAPPED
HGT	HEIGHT
HR	HOUR
IR	INFRARED
JB	JUNCTION BOX
KES	KITCHEN EQUIPMENT SUPPLIER
LV	LOW-VOLTAGE
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MT	MULTITECHNOLOGY
MO	MICROWAVE OVEN
NA	NOT APPLICABLE
NE	NORMAL/EMERGENCY (NORMALLY ON)
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OFCI	OWNER FURNISHED-CONTRACTOR INSTALLED
PC	PLUMBING CONTRACTOR
PIR	PASSIVE INFRARED
REC	RECESSED
SE	SERVICE ENTRANCE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPD	SURGE PROTECTION DEVICE
SPEC	SPECIFICATION
SS	SERVICE SINK
STD	STANDARD
SUSP	SUSPENDED
TBR	TO BE REMOVED
TL	TASK LIGHT
TR	TAMPER RESISTANT
TSTAT	THERMOSTAT
UNO	UNLESS NOTED OTHERWISE
US	ULTRASONIC
W/	WITH
W/O	WITHOUT
W	WALL-MOUNTED
WP	WEATHERPROOF

COMMON SYMBOLS

N PLAN NORTH

A / H1.1 SECTION ID; SHEET NO. WHERE SECTION IS; DIRECTIONAL VIEW OF SECTION

REVISION CLOUD

1 REVISION NUMBER

ELEVATION 100.00'

DIRECTION OF VIEW

1 / H4.3 SHEET NO. WHERE EL. IS DRAWN; ELEVATION ID

1 KEYNOTE

1 / H1.1 DETAIL ID; SHEET NO. WHERE DETAIL IS

101 ROOM/SPACE NO.

TYPE ID EQUIPMENT TAG SHOWING TYPE AND ID. SEE EQUIPMENT SCHEDULES FOR DETAILS

PROVIDE NEW

EXISTING TO REMAIN

REMOVE EXISTING

CONNECT TO EXISTING

EXISTING TO BE REMOVED

DRAWING LIST

P0.1	COVER SHEET
P1.1	SITE PLAN
P2.1	FLOOR PLAN--DRAINAGE
P2.2	ROOF & MEZZANINE PLANS
P3.1	FLOOR PLAN--SUPPLY
P7.1	DETAILS
P8.1	SCHEDULES
H0.1	COVER SHEET
H2.1	FLOOR PLAN
H2.2	ROOF PLAN
H7.1	DETAILS
H8.1	DETAILS & SCHEDULES
E0.1	COVER SHEET
E0.2	ELECTRICAL NOTES
E0.3	SITE PLAN - DEMOLITION
E0.4	SITE PLAN - NEW
E2.1	FLOOR PLAN - LIGHTING
E3.1	FLOOR PLAN - POWER
E4.1	FLOOR PLAN - LOW-VOLTAGE
E5.1	MEZZANINE PLANS
E7.1	DETAILS
E7.2	DETAILS
E7.3	DETAILS
E8.1	SCHEDULES

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST. PHILADELPHIA PA 19132

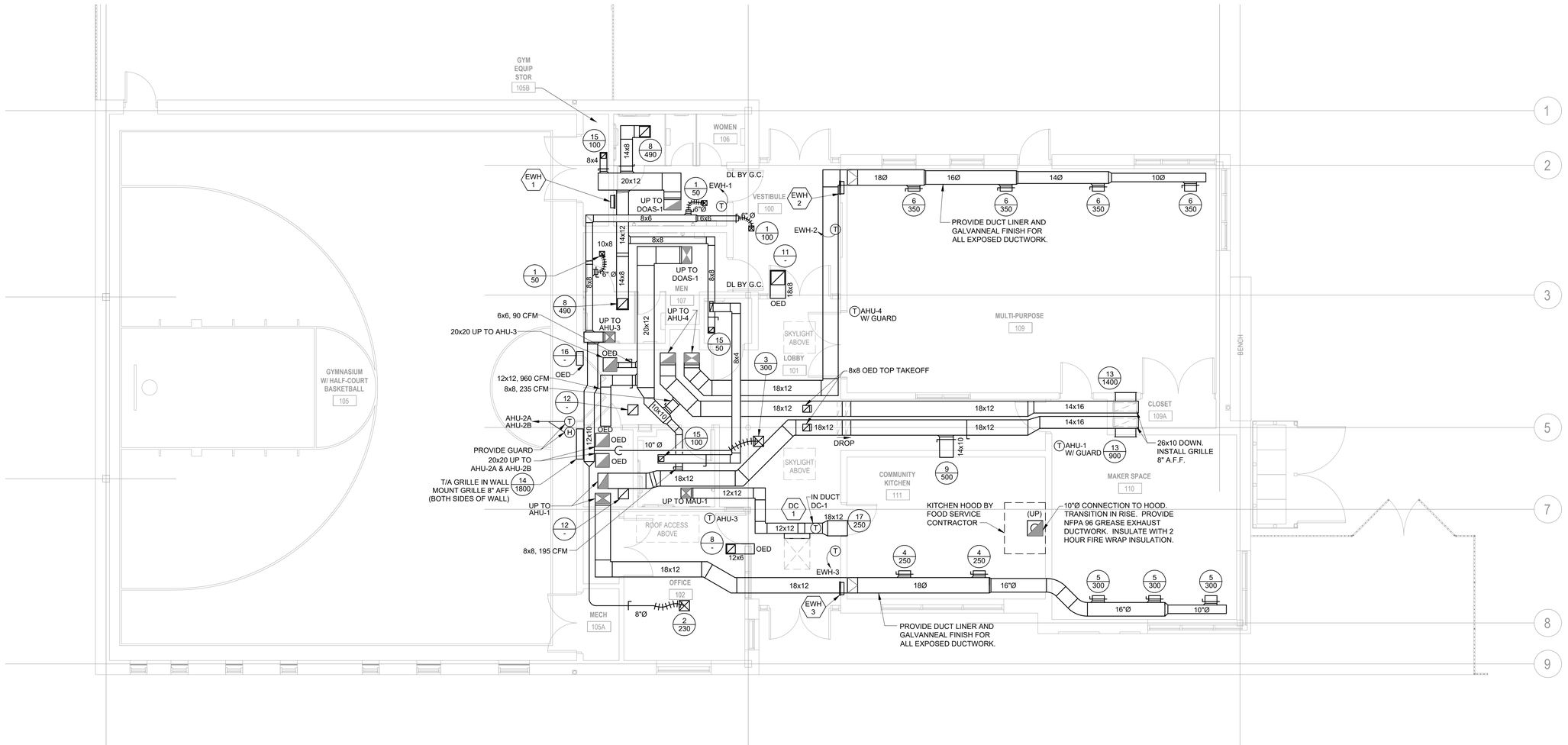
VERIFY SCALE
0 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING 1

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: DMC | Appd.: KSB

Sheet Title: COVER SHEET

Sheet No. H0.1



FIRST FLOOR PLAN

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.

CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering

One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

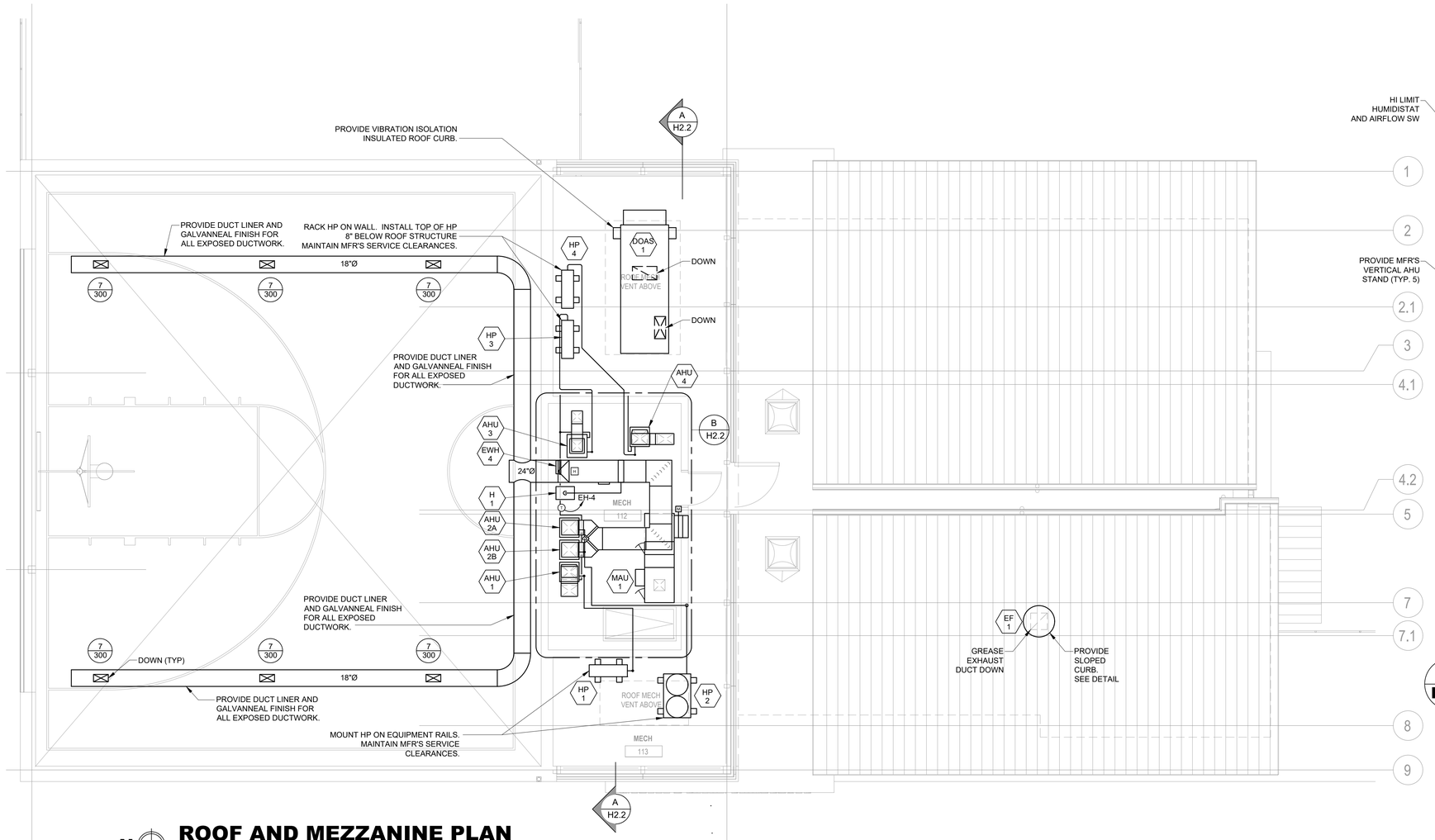
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: DMC | Appd.: KSB

Sheet Title:
FLOOR PLAN

Sheet No.
H2.1

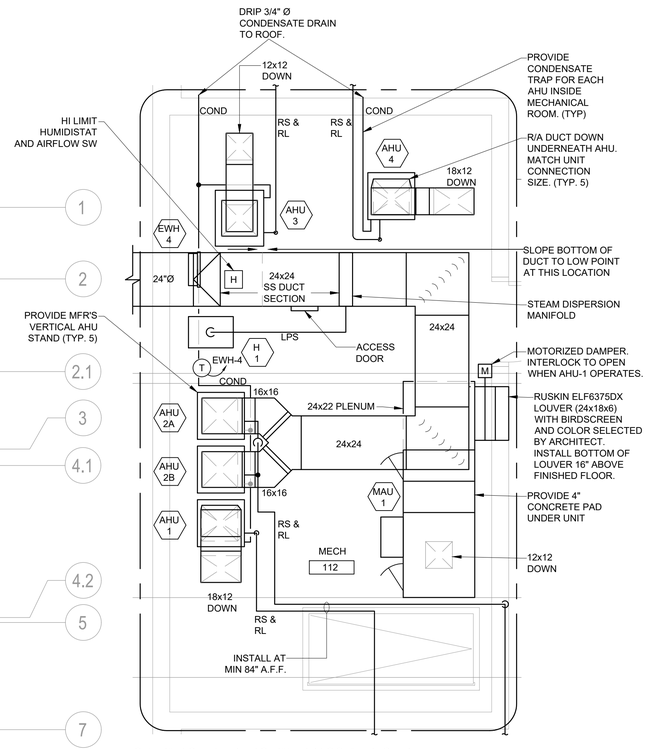


N

ROOF AND MEZZANINE PLAN

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

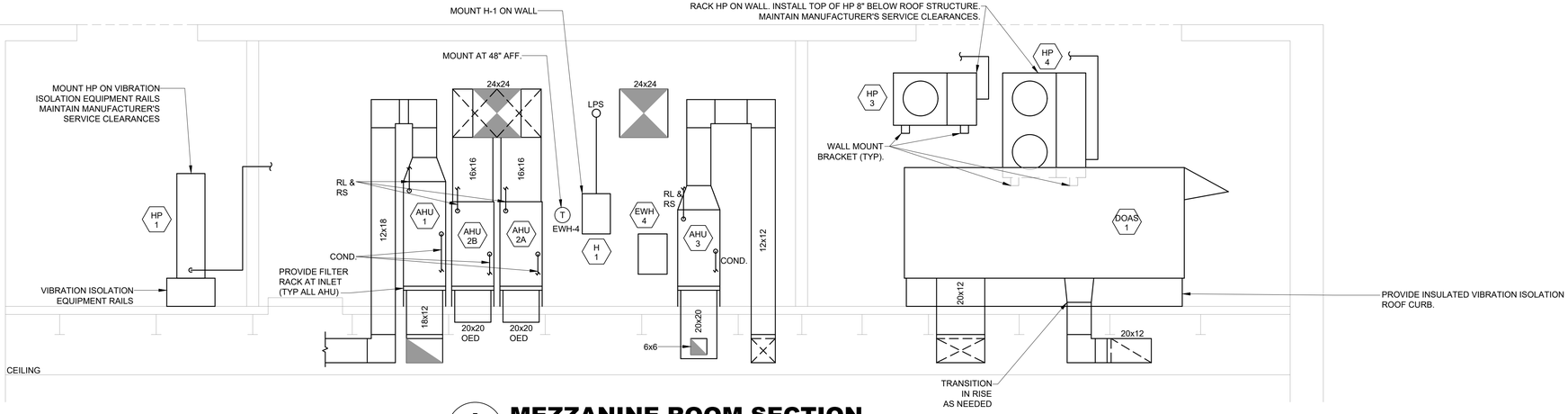


GENERAL NOTE: ALL REFRIGERANT PIPING SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S REQUIREMENTS. ALL CONDENSATE PIPING SHALL BE 3/4" Ø. SLOPE ALL CONDENSATE PIPING A MINIMUM OF 1/8" PER FOOT.

B H2.2 ENLARGED MECH ROOM 112

0 0.5' 1.5' 3' 6'

Scale: 3/8" = 1'-0"



A H2.2 MEZZANINE ROOM SECTION

0 0.5' 1.5' 3' 6'

Scale: 3/8" = 1'-0"

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

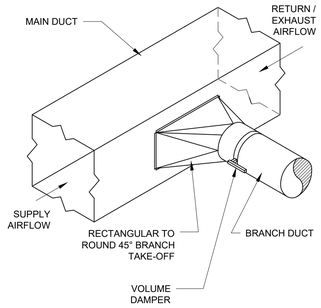
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

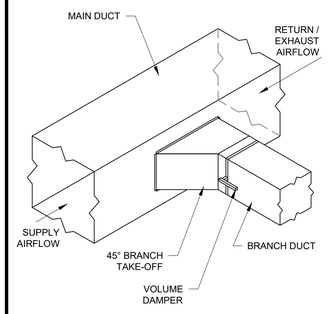
Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: DMC | Appd.: KSB

Sheet Title:
ROOF PLAN

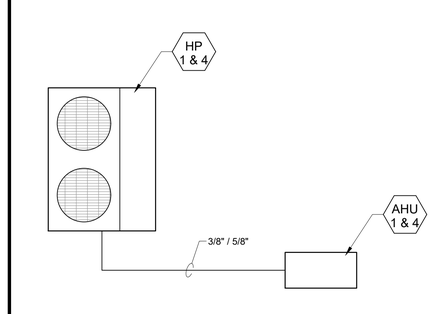
Sheet No.
H2.2



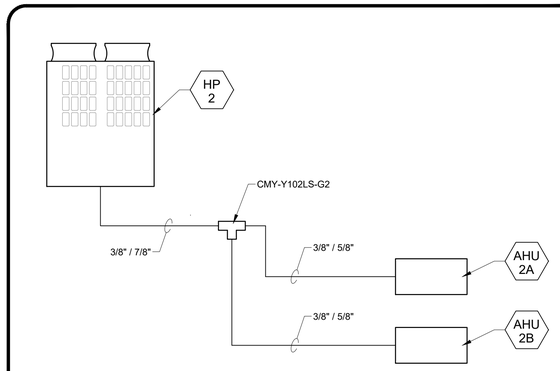
45° DUCT TAKE-OFF DETAIL
NOT TO SCALE



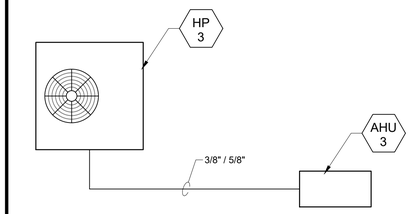
45° DUCT TAKE-OFF DETAIL
NOT TO SCALE



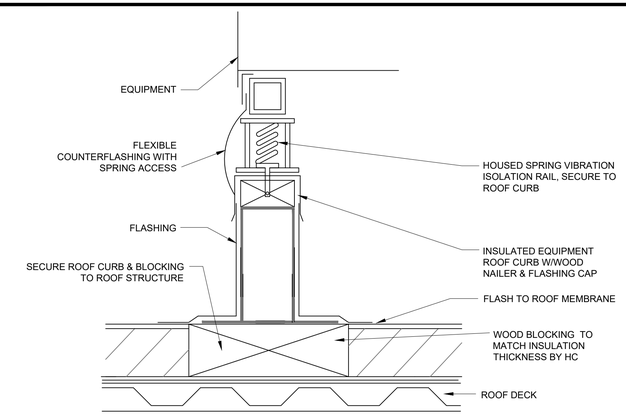
HP-1 / AHU-1 & HP-4 / AHU-4 PIPING SCHEMATIC
NOT TO SCALE



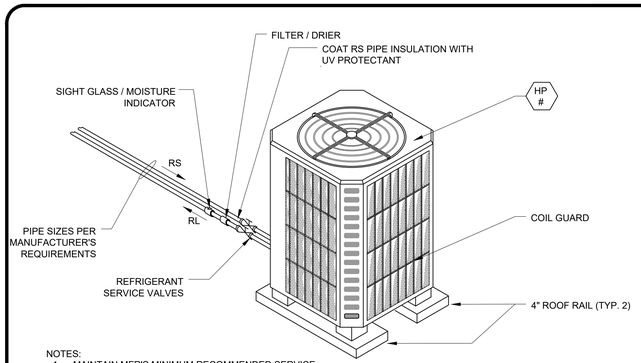
HP-2 / AHU-2A & 2B PIPING SCHEMATIC
NOT TO SCALE



HP-3 / AHU-3 PIPING SCHEMATIC
NOT TO SCALE

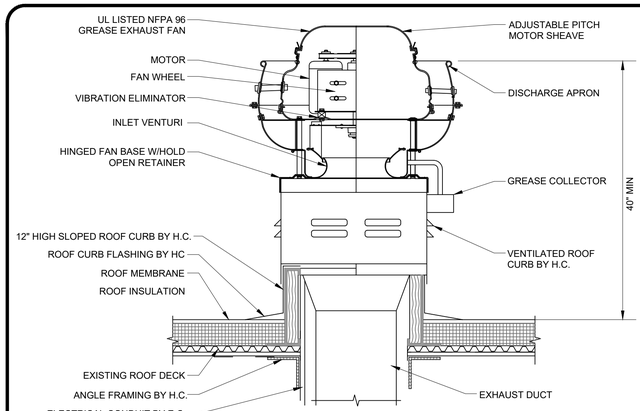


EQUIPMENT SUPPORT CURB DETAIL
NOT TO SCALE

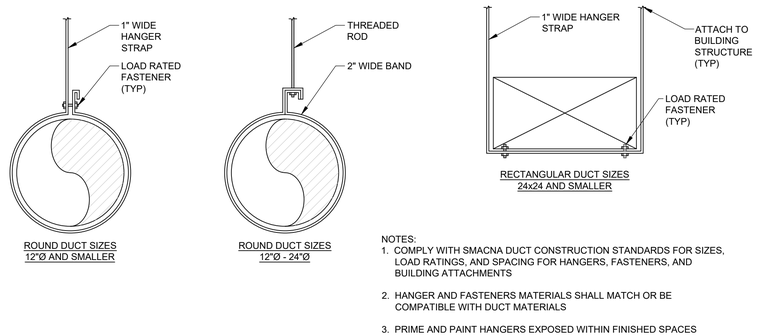


NOTES:
1. MAINTAIN MFR'S MINIMUM RECOMMENDED SERVICE CLEARANCE AND CLEARANCES TO OBSTRUCTIONS
2. SIZE AND INSTALL REFRIGERANT PIPING PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.

HEAT PUMP UNIT DETAIL
NOT TO SCALE

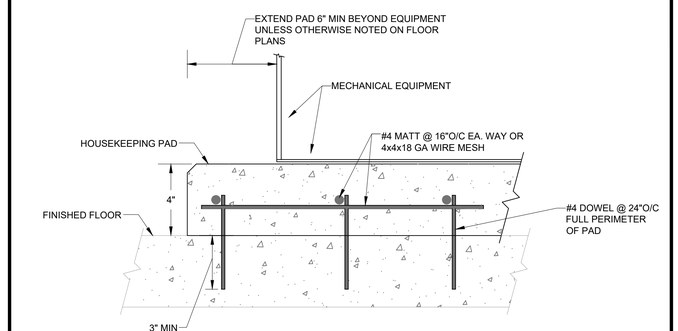


KITCHEN HOOD EXHAUST FAN DETAIL
NOT TO SCALE

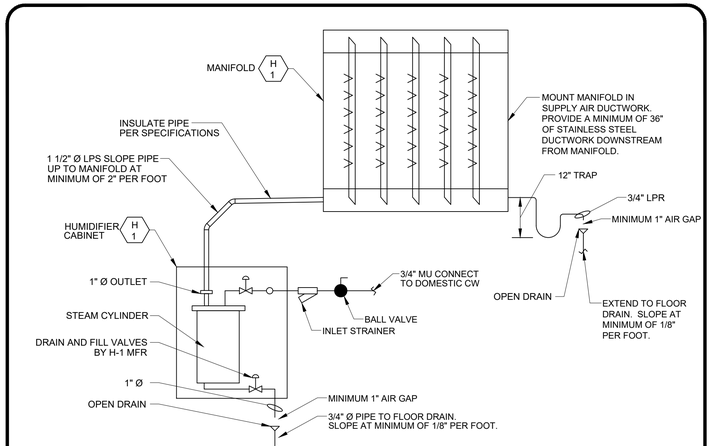


NOTES:
1. COMPLY WITH SMACNA DUCT CONSTRUCTION STANDARDS FOR SIZES, LOAD RATINGS, AND SPACING FOR HANGERS, FASTENERS, AND BUILDING ATTACHMENTS
2. HANGER AND FASTENERS MATERIALS SHALL MATCH OR BE COMPATIBLE WITH DUCT MATERIALS
3. PRIME AND PAINT HANGERS EXPOSED WITHIN FINISHED SPACES

DUCT HANGER DETAILS
NOT TO SCALE



CONCRETE PAD DETAIL
NOT TO SCALE



HUMIDIFIER PIPING DIAGRAM
NOT TO SCALE

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: DMC | Appd.: KSB

Sheet Title:
DETAILS

Sheet No.
H7.1

NOT FOR CONSTRUCTION

ROOFTOP DEDICATED OUTDOOR AIR CONDITIONING UNIT SCHEDULE (HEAT RECOVERY)

DOAS #

TAG	MANUFACTURER	MODEL	SUPPLY FAN				EXHAUST FAN				O/A CFM	COOLING					HOT GAS REHEAT			REV CYCLE HEATING			ELECT. HEAT		COMPRESSOR		FANS		ENERGY WHEEL					ELECTRICAL				ENERGY		OPER. WT. LBS	REMARKS
			CFM	ESP IN WG	HP	RPM	CFM	ESP IN WG	HP	RPM		TOT CAP MBH	SENS. CAP MBH	EAT/DB °F	LAT/WB °F	REFRIG-ERANT	MBH	EAT/DB °F	LAT/DB °F	MBH (34°F)	EAT/DB °F	LAT/DB °F	ELECT KW	STAGES	NO.	RLA	NO.	FLA	OA	EA	EFF (COOL)	EFF (HEAT)	WHEEL (HP)	V/P/Hz	FLA	MCA	MOCP	SYSTEM EER	COP		
DOAS-1	TRANE	OABE072C3	1480	1.0	1.0	2006	1230	1.0	1.0	1882	1480	66.6	42.7	81	54/53	R-410A	38.4	54	78	64.8	50	88	24	NOTE 5	1	20.4	1	4.2	1480	1230	82%	82%	0.17	208/3/60	96.5	118.3	125	19	4.1	2037	1,2,3,4,5,6

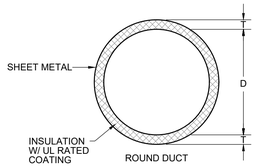
NOTES:
1. PROVIDE MODULATING HOT GAS REHEAT COIL AND CONSTANT VOLUME OPERATION.
2. PROVIDE DISCONNECT SWITCH.
3. PROVIDE SERVICE RECEPTACLE. SERVICE RECEPTACLE SHALL BE POWERED WHEN DISCONNECT SWITCH IS OFF.
4. PROVIDE INSULATED VIBRATION ISOLATION ROOF CURB.
5. PROVIDE SCR CONTROL FOR ELECTRIC HEAT.
6. PROVIDE MANUFACTURER CONTROLS AND BACNET INTERFACE CARD. REFER TO 230993 FOR SEQUENCES.

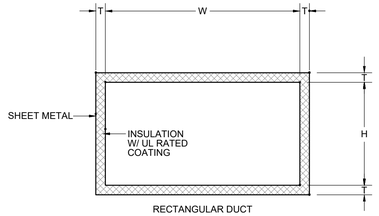
SPLIT SYSTEM HEAT PUMP SCHEDULE

AHU # / HP #

INDOOR UNIT																		OUTDOOR UNIT									
TAG	MANUFACTURER	MODEL	SUPPLY CFM	O/A CFM	ESP in H2O	TAP SPEED	HP (kW)	MCA	MOCP	V/P/Hz	DX COOLING COIL					HEATING		OPER. WT. LBS	TAG	MODEL	COMPRESSOR		FANS		V/P/Hz	MCA	MOCP	SYSTEM		NOTES
											TOT CAP MBH	SENS. CAP MBH	EAT/DB °F	EAT/WB °F	REFRIG-ERANT	SENS. CAP MBH	EAT/DB °F				NO.	RLA	NO.	FLA				SEER	COP (47 °F)	
AHU-1	MITSUBISHI / TRANE	TPVFYP048	1400	195	0.8	HIGH	1/2	5.6	15	208/1/60	42.0	31.7	75	63	R-410A	38.8	70	172	HP-1	NTXMSH42A	1	19.0	2	.36/.36	208/1/60	36	40	18.5	3.7	1,2,3,5,6,7
AHU-2A	MITSUBISHI / TRANE	TPVFYP036A	910	480	0.8	HIGH	1/3	4.1	15	208/1/60	34.0	25.4	80	67	R-410A	39.9	70	126	HP-2	TUHYH0723AN40AN	1	10.5	2	1.3/1.3	208/3/60	38	60	12.5	4.2	1,2,3,5,6,7
AHU-2B	MITSUBISHI / TRANE	TPVFYP036A	910	480	0.8	HIGH	1/3	4.1	15	208/1/60	34.0	25.4	80	67	R-410A	39.9	70	126											
AHU-3	MITSUBISHI / TRANE	NTXAMT24A	730	90	0.8	HIGH	1/4	NOTE 4	NOTE 4	208/1/60	23.2	19.1	75	63	R-410A	23.4	70	93	HP-3	NTXSKH24A	1	9.0	1	.36	208/1/60	17	27	16	3.7	1,2,3,4,5,6,7
AHU-4	MITSUBISHI / TRANE	TPVFYP048	1400	235	0.8	HIGH	1/2	5.6	15	208/1/60	42.0	31.7	75	63	R-410A	38.8	70	172	HP-4	NTXMSM42A	1	19.0	2	.36/.36	208/1/60	36	45	18.5	3.7	1,2,3,5,6,7

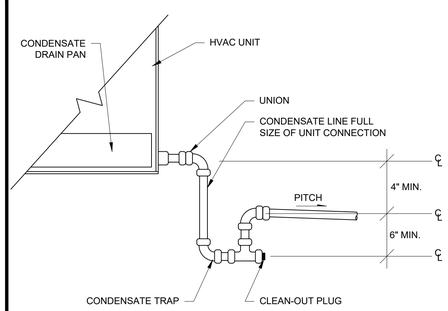
NOTES:
1. PROVIDE LOW AMBIENT COOLING, ANTI CYCLE TIMER, LOW VOLTAGE WALL MOUNT THERMOSTAT.
2. HEATING PERFORMANCE GIVEN AT 0° F OAT. HSPF RATED AT 47° F OAT.
3. SIZE AND INSTALL REFRIGERANT PIPING PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.
4. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT. EC TO PROVIDE POWER WIRING BETWEEN INDOOR AND OUTDOOR UNITS. HC TO PROVIDE CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS.
5. PROVIDE MANUFACTURER'S CONTROLS AND BACNET INTERFACE CARD. REFER TO 230993 FOR SEQUENCES.
6. OUTDOOR UNIT DISCONNECT PROVIDED BY EC.
7. PROVIDE MANUFACTURER'S VERTICAL MOUNT AHU FLOOR STAND FOR INDOOR UNIT(S)





D = DUCT DIAMETER-SIZE NOTED ON DRAWINGS
W = DUCT WIDTH-SIZE NOTED ON DRAWINGS
H = DUCT HEIGHT-SIZE NOTED ON DRAWINGS
T = INSULATION THICKNESS (SEE SPEC)

TYPICAL LINED DUCT
NOT TO SCALE



CONDENSATE TRAP DETAIL
NOT TO SCALE

HUMIDIFIER SCHEDULE

H #

TAG	MANUFACTURER	MODEL	TYPE	LBS/HR	AIRFLOW CFM	DUCT SIZE	ENT AIR		KW	FLA	V/P/HZ	OPERATING WEIGHT	NOTES
							DB	% RH					
H-1	DRI-STEEM	XTP-006	ELECTRODE	18.0	1820	24 X 20	56.3	25.9	6.0	20	208/3/60	46	1,2

NOTES:
1. PROVIDE ULTRA-SORB DISPERSION MANIFOLD.
2. PROVIDE RETURN AIR HUMIDISTAT. MOUNT IN RETURN AIR DUCTWORK.

FAN SCHEDULE

EF #

TAG	AREA SERVED	MANUFACTURER	MODEL	CFM	ESP IN WG	DRIVE	SONES	MOTOR			ROOF OPENING INxIN	CONTROL	DAMPER	WEIGHT LBS	NOTES
								HP (WATTS)	RPM	V/P/Hz					
EF-1	KITCHEN	LOREN COOK	ARCUBXP-165	925	1.5	BELT	12.5	3/4	1604	200/3/60	18x18	NOTE 2	-	100	1

NOTES:
1. PROVIDE DISCONNECT SWITCH, SLOPED CURB, HINGED VENTED CURB, UL762 CONSTRUCTION, GREASE COLLECTION TROUGH.
2. CONTROL BY FOOD SERVICE CONTRACTOR. MOTOR STARTER BY EC.

DUCT COIL (ELECTRIC HEAT)

DC #

TAG	MANUFACTURER	MODEL	DUCT SIZE	AIRFLOW (CFM)	ELECTRIC HEATING COIL					APD (IN WG)	NOTES
					EAT	LAT	KW	STEPS	V/P/Hz		
DC-1	BRASCH	HUA	12x12	825	10	71	16	SCR	208/3/60	0.05	1,2

NOTES:
1. PROVIDE DISCONNECT SWITCH
2. PROVIDE DISCHARGE AIR TEMPERATURE CONTROL (DUCT SENSOR) FOR SCR HEAT.

MAKE-UP AIR HANDLING UNIT SCHEDULE

MAU #

TAG	MANUFACTURER	MODEL	S/A CFM	O/A CFM	FAN			ELECTRICAL			WEIGHT LBS	NOTES
					ESP	HP	RPM	V/P/Hz	MCA	MOCP		
MAU-1	TRANE	CSAA003	825	825	1.0	1	2600	208/3/60	5.25	15	554	1,2,3,4

NOTES:
1. PROVIDE SINGLE POINT POWER CONNECTION AND FACTORY FUSED DISCONNECT SWITCH
2. PROVIDE VFD
3. PROVIDE FLAT FILTER, ACCESS, PLENUM FAN, DOWN DISCHARGE.
4. INTERLOCK OPERATION WITH EF-1. REFER TO 230993 FOR SEQUENCES.

ELECTRIC HEATER SCHEDULE

EWH #

TAG	MANUFACTURER	MODEL	CAPACITY KW	STAGES	V/P/Hz	MOUNTING	NOTES
EWH-1	BERKO	FRC4024F	3	1	208/1/60	REC	1,2,3
EWH-2	BERKO	FRC4024F	3	1	208/1/60	REC	1,2,3
EWH-3	BERKO	FRC4024F	3	1	208/1/60	REC	1,2,3
EWH-4	BERKO	FRC4024F	3	1	208/1/60	SURFACE	1,2,3,4

NOTES:
1. PROVIDE DISCONNECT SWITCH.
2. PROVIDE 14 GAUGE SECURITY FRONT COVER. COLOR SELECTED BY ARCHITECT.
3. PROVIDE CONTACT FOR REMOTE BMS THERMOSTAT.
4. PROVIDE SURFACE MOUNT KIT.

GRILLE - REGISTER - DIFFUSER SCHEDULE

/ CFM

TAG	MANUFACTURER	MODEL	SIZE	PATTERN	FINISH	MAX NC	NOTES
1	TITUS	TDCA-AA	6"Ø, 6X6	4-WAY	BWE	25	-
2	TITUS	TDCA-AA	8"Ø, 9X9	4-WAY	BWE	25	-
3	TITUS	TDCA-AA	10"Ø, 12X12	3-WAY	BWE	25	-
4	TITUS	272FL	12X6	DBL DFL	ALUM.	25	1
5	TITUS	272FL	14X6	DBL DFL	ALUM.	25	1
6	TITUS	272FL	18X6	DBL DFL	ALUM.	25	1
7	TITUS	US-DL-SV	18X6	ADJ.	ALUM.	25	1
8	TITUS	350FL	12X12	RETURN	ALUM.	25	-
9	TITUS	350FL	14X10	RETURN	ALUM.	25	-
10							NOT USED
11	TITUS	350FL	16X16	RETURN	STEEL	25	-
12	TITUS	350FL	24X24	RETURN	STEEL	25	-
13	TITUS	33RS	24X32	RETURN	ALUM.	25	2
14	TITUS	33FL	36X24	EXHAUST	ALUM.	25	2
15	TITUS	350FL	6X6	EXHAUST	ALUM.	25	-
16	TITUS	33RL	30X16	EXHAUST	ALUM.	25	2
17	TITUS	272FL	18x12	DBL DFL	ALUM.	25	1

NOTES:
1. PROVIDE OPPOSED BLADE VOLUME DAMPER
2. HEAVY DUTY CONSTRUCTION

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: DMC | Appd.: KSB

Sheet Title:
DETAILS & SCHEDULES

Sheet No.
H8.1

EQUIPMENT TYPES

ATS	AUTOMATIC TRANSFER SWITCH
CB	PHOTOVOLTAIC DC COMBINER BOX
CONT	CONTACTOR
CP	CONSOLIDATION POINT
DS	DISCONNECT SWITCH
ECB	ENCLOSED CIRCUIT BREAKER
HH	HANDHOLE
IDF	INTERMEDIATE DISTRIBUTION FRAME
LCP	LIGHTING CONTROL PANEL
MCC	MOTOR CONTROL CENTER
MS	MOTOR STARTER
PDU	POWER DISTRIBUTION UNIT
PNL	ELECTRICAL PANEL
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TRAN	TRANSFORMER
UPS	UNINTERRUPTIBLE POWER SUPPLY

ELECTRICAL SYMBOLS

LIGHTING

- S — SINGLE POLE SWITCH
- S_3 — 3-WAY SWITCH
- S_4 — 4-WAY SWITCH
- S_K — ROTARY/BARREL TYPE KEY SWITCH
- S_a — LOW-VOLTAGE LIGHTING CONTROL SWITCH, ZONE a
- S_T — SWITCH WITH ELECTRONIC TIMER
- S_D — DIMMER SWITCH
- S_{3P} — 3-WAY SWITCH WITH LOCATOR LED
- S_M — SWITCH WITH MOTION SENSOR
- S_{DM} — DIMMER SWITCH WITH MOTION DETECTOR
- EMERGENCY BATTERY BACKUP UNIT
- EMERGENCY HEADS
- EXIT SIGN, ARROWS AS SHOWN
- LUMINAIRES
- $\bigcirc_{Ab}$ — LUMINAIRE TYPE A IN CONTROL ZONE b
- WALL-MOUNT LUMINAIRE
- NORMAL/EMERGENCY LUMINAIRE
- EMERGENCY-ONLY LUMINAIRE
- SHOWN ON LIGHTING PLANS:
  - M_{US} — MOTION SENSOR - CEILING-MOUNTED US
  - M — MOTION SENSOR - CEILING-MOUNTED MT
  - M — MOTION SENSOR - AISLE TYPE
  - M — MOTION SENSOR - ADJUSTABLE SWIVEL NECK - CORNER CEILING OR WALL MOUNTED MT
- DL — CEILING MOUNTED DAYLIGHT SENSOR
- RC — WALL MOUNTED ROOM CONTROLLER WITH X 0-10V RELAYS, EMERGENCY 924 LISTED

FIRE ALARM

- S — SMOKE DETECTOR
- H — HEAT DETECTOR
- C — COMBINATION SMOKE AND HEAT DETECTOR
- S_{BT} — BEAM SMOKE DETECTOR TRANSMITTER
- S_{BR} — BEAM SMOKE DETECTOR RECEIVER
- SD — DUCT SMOKE DETECTOR
- FJ — FIREFIGHTER TELEPHONE JACK
- F — MANUAL PULL STATION
- F — AUDIO/VISUAL ALARM
- S — VISUAL ALARM
- S_{DM} — VISUAL ALARM - CEILING MOUNTED
- FS — VOICE/VISUAL ALARM
- FS_{DM} — VOICE/VISUAL ALARM - CEILING MOUNTED
- FS — SPEAKER
- FACP — FIRE ALARM CONTROL PANEL
- FAA — ANNUNCIATOR PANEL
- H — DOOR HOLDER
- FS — FLOW SWITCH INTERFACE
- IM — INPUT INTERFACE MODULE
- OM — OUTPUT INTERFACE MODULE
- TS — TAMPER SWITCH INTERFACE

SECURITY

- VIDEO SURVEILLANCE CAMERA 1 DATA JACK PLUS 1 SPARE
- 360° VIDEO SURVEILLANCE CAMERA
- 180° VIDEO SURVEILLANCE CAMERA
- 90° VIDEO SURVEILLANCE CAMERA

GENERAL ELECTRIC

- S_P — SWITCH WITH PILOT LIGHT
- S_F — FAN SWITCH
- MOTOR STARTER
- DISCONNECT SWITCH
- COMBINATION STARTER
- DUPLEX RECEPTACLE
  - G GROUND FAULT INTERRUPTER
  - C COUNTERTOP HEIGHT
  - E ELECTRICAL WATER COOLER - GFI
  - CM CEILING MOUNTED
  - W WEATHERPROOF
  - TR TAMPER RESISTANT
  - X-Y NEMA X-Y
  - # MOUNT #' ABOVE FINISH FLOOR
  - S SURFACE MOUNT
  - T TELEVISION
  - U USB
- DOUBLE-DUPLEX RECEPTACLE
- SPECIAL RECEPTACLE
- 20 — POWER RECEPTACLE, AMPERAGE
- R — RANGE RECEPTACLE
- DEVICE IN CONCEALED RECESSED FLOOR BOX
- JUNCTION BOX
- T — TRANSFORMER
- H — HANDHOLE
- M — MANHOLE
- P — POWER POLE
- TC — TIME CLOCK
- HAND DRYER
- HAIR DRYER
- TWO-COMPARTMENT SURFACE RACEWAY. PROVIDE 3/4" CONDUIT TO HIGH-VOLTAGE AND 1 1/4" TO LOW-VOLTAGE SECTIONS. FOR EACH 30' OF RACEWAY.
- PANEL
- BASEBOARD HEATER
- MOTOR
- WIRING CONCEALED EXCEPT WHERE RUN IN OPEN STRUCTURE
- WIRING BELOW SLAB OR GRADE
- EMERGENCY SYSTEM WIRING
- P1-1 — HOME RUN/CIRCUIT TAG
- MULTICONDUCTOR WIRING
- CONDUIT RISE
- CONDUIT DROP

COMMUNICATIONS

- ∇_{TV} — TELEVISION OUTLET, PROVIDE USER INTERFACE BOX AND 1.25" CONDUIT TO ACCESSIBLE CEILING
- ∇ — SINGLE DATA OUTLET, PROVIDE 1-GANG BOX AND 3/4" CONDUIT TO ACCESSIBLE CEILING
- ∇_N — DATA OUTLET WITH N JACKS, PROVIDE 1-GANG BOX AND 3/4" CONDUIT TO ACCESSIBLE CEILING
- ▼ — SINGLE TELEPHONE OUTLET, PROVIDE 1-GANG BOX AND 3/4" CONDUIT TO ACCESSIBLE CEILING
- $\blacktriangledown_N$ — TELEPHONE OUTLET WITH N JACKS, PROVIDE 1-GANG BOX AND 3/4" CONDUIT TO ACCESSIBLE CEILING
- BOX WITH BLANK PLATE AND CONDUIT TO ACCESSIBLE CEILING SPACE FOR FUTURE DEVICE.
- V — WIRELESS COMMUNICATIONS SYSTEM ANTENNA WITH 2 DATA JACKS IN HOUSING. PROVIDE 1-GANG BOX AND 3/4" CONDUIT TO ACCESSIBLE CEILING

COMMON ABBREVIATIONS

A/E	ARCHITECT/ENGINEER
AB CLG	ABOVE CEILING
ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
AFI	ARC-FAULT INTERRUPTER
AFR	ABOVE FINISHED ROOF
ALT	ALTERNATE
ATS	AUTOMATIC TRANSFER SWITCH
BFC	BELOW FINISHED CEILING
C/G	COUNTERTOP GFI
CD	CORD DROP
CL	CENTERLINE
CLG	CEILING
CM	CEILING MOUNTED
COL	COLUMN
CT	COUNTERTOP HEIGHT-44" AFF UNO OR CURRENT TRANSFORMER
CR	CORD REEL
DBF	DOWN BELOW FLOOR
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DL	DOOR LOUVER
DN	DOWN
DW	DISHWASHER
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EL	ELEVATION
ELEV	ELEVATOR
EMER	EMERGENCY
EO	EMERGENCY ONLY (NORMALLY OFF)
EWC	ELECTRIC WATER COOLER (PROVIDE GFI RECEPTACLE)
EX	EXISTING
FA	FIRE ALARM
FBO	FURNISHED BY OWNER
FLR	FLOOR
FPC	FIRE PROTECTION CONTRACTOR
FSC	FOOD SERVICE CONTRACTOR
GC	GENERAL CONTRACTOR
GFI	GROUND-FAULT INTERRUPTER
GND	GROUND
HC	HVAC CONTRACTOR
HCP	HANDICAPPED
HGT	HEIGHT
HR	HOUR
IR	INFRARED
JB	JUNCTION BOX
KES	KITCHEN EQUIPMENT SUPPLIER
LV	LOW-VOLTAGE
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MT	MULTITECHNOLOGY
MO	MICROWAVE OVEN
NA	NOT APPLICABLE
NE	NORMAL/EMERGENCY (NORMALLY ON)
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OFCI	OWNER FURNISHED-CONTRACTOR INSTALLED
PC	PLUMBING CONTRACTOR
PIR	PASSIVE INFRARED
REC	RECESSED
SE	SERVICE ENTRANCE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPD	SURGE PROTECTION DEVICE
SPEC	SPECIFICATION
SS	SERVICE SINK
STD	STANDARD
SUSP	SUSPENDED
TBR	TO BE REMOVED
TL	TASK LIGHT
TR	TAMPER RESISTANT
TSTAT	THERMOSTAT
UNO	UNLESS NOTED OTHERWISE
US	ULTRASONIC
W/	WITH
W/O	WITHOUT
W	WALL-MOUNTED
WP	WEATHERPROOF

COMMON SYMBOLS

- N — PLAN NORTH
- A / H1.1 — SECTION ID; SHEET NO. WHERE SECTION IS; DIRECTIONAL VIEW OF SECTION
- REVISION CLOUD
- REVISION NUMBER
- ELEVATION 100.00'
- DIRECTION OF VIEW
- 11 H1.1 — SHEET NO. WHERE EL. IS DRAWN; ELEVATION ID
- 1 — KEYNOTE
- 1 / H1.1 — DETAIL ID; SHEET NO. WHERE DETAIL IS
- 101 — ROOM/SPACE NO.
- TYPE ID — EQUIPMENT TAG SHOWING TYPE AND ID. SEE EQUIPMENT SCHEDULES FOR DETAILS
- PROVIDE NEW
- EXISTING TO REMAIN
- REMOVE EXISTING
- CONNECT TO EXISTING
- EXISTING TO BE REMOVED

DRAWING LIST

P0.1	COVER SHEET
P1.1	SITE PLAN
P2.1	FLOOR PLAN–DRAINAGE
P2.2	ROOF & MEZZANINE PLANS
P3.1	FLOOR PLAN–SUPPLY
P7.1	DETAILS
P8.1	SCHEDULES
H0.1	COVER SHEET
H2.1	FLOOR PLAN
H2.2	ROOF PLAN
H7.1	DETAILS
H8.1	DETAILS & SCHEDULES
E0.1	COVER SHEET
E0.2	ELECTRICAL NOTES
E0.3	SITE PLAN - DEMOLITION
E0.4	SITE PLAN - NEW
E2.1	FLOOR PLAN - LIGHTING
E3.1	FLOOR PLAN - POWER
E4.1	FLOOR PLAN - LOW-VOLTAGE
E5.1	MEZZANINE PLANS
E7.1	DETAILS
E7.2	DETAILS
E7.3	DETAILS
E8.1	SCHEDULES

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD –VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 — 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title:
COVER SHEET

Sheet No.
E0.1

ELECTRICAL NOTES

A. General Requirements

1. Work shall be in accordance with NFPA 70 (the National Electrical Code)--either the latest version or the version adopted by the local jurisdiction--and all local codes.
2. Secure all permits, inspections, and approvals as required.
3. Furnish and install all materials and labor required to provide complete and operational systems as indicated on the drawings.
4. The electrical drawings are diagrammatic and are intended to show the approximate locations of equipment, devices, raceways, and associated systems. Drawings are not to be scaled for the accurate cutting or its exact placement, but they shall be followed as closely as actual building construction and the work of other trades will permit. The contractor shall verify all dimensions and coordinate the installation of electrical systems with actual conditions in the field.
5. General work practices for electrical construction shall be in accordance with NECA 1, *Good Workmanship in Electrical Construction,* published by the National Electrical Contractors Association.
6. All material and equipment shall be listed and labelled for the application by Underwriters Laboratories or other NRTL, and installed according to its listing.
7. Unless otherwise indicated, this contractor shall perform all cutting and patching of the existing facility for their respective work. Patching shall match existing materials, finishes, and methods of construction.
8. Submit shop drawings to the Architect/Engineer for all materials and equipment.
9. Provide protection and storage for equipment and materials during construction.
10. All material and equipment shall be turned over in a new, clean condition.
11. Coordinate work with other trades. Where electrical devices are depicted on Architectural drawings, install as depicted.
12. Exact locations of outlets, conduits, equipment, devices shall be reviewed, coordinated with and approved by the Owner, after completion of coordination with Architect, Engineer and other contractors.
13. Provide circuits and final connection to mechanical equipment, furniture and equipment supplied by others. Where electrical drawings and equipment rough-in drawings or equipment submittals are in conflict, consult with Architect for resolution.
14. Coordinate equipment clearances and work space with manufacturer's service recommendations.
15. The contractor shall coordinate the installation and startup of new systems and equipment with the project construction phasing schedule.
16. Maintain as-built plans during construction. Turn over to Architect/Engineer at completion of construction. Provide electronic version and at least two paper copies, more if required elsewhere.
17. Provide operating and maintenance manuals for all equipment. Provide electronic version and at least two paper copies, more if required elsewhere.
18. Provide at least 12-month warranty on all materials, equipment, and workmanship from date of substantial completion.

B. Demolition and Connections to Existing Equipment

1. Disconnect and remove electrical service.
2. Disconnect and remove branch circuits wiring from existing site luminaires back to source. Extend existing conduits to new lighting control panel. Provide new site lighting circuits as shown on the electrical drawings. Field verify conduit size and conductor size. New conductors and conduits shall match existing to ensure new conductors fit in existing conduits.
3. Disconnect and remove camera cables from outdoor cameras back to source. Extend existing conduits to new data cabinet. Provide new category 6a outdoor rated cable from cabinet to existing cameras. New cables and conduits shall match existing to ensure new conductors fit in existing conduits.
4. Disconect and remove branch circuits wiring from existing basketball court sports luminaires back to source. Extend existing conduits to new lighting control panel. Provide new site lighting circuits as shown on the electrical drawings. Field verify conduit size and conductor size. New conductors and conduits shall match existing to ensure new conductors fit in existing conduits.
5. Disconnect and remove power and low-voltage utilities from the existing building being demolished, coordinate shutdown and removal with each utility provider.

C. Utility Services

1. Coordinate installation of permanent electric utility service entrance with utility company. PECO new service work order #: 190-661-39.
2. Coordinate with PECO for temporary service and demolition of existing service.
3. Coordinate installation of permanent telephone utility service entrance with utility company.
4. Coordinate installation of permanent cable television utility service entrance with utility company.
5. Direct costs of utility service entrances (those paid directly to the utility companies) will be paid for by the Owner, without contractor markup.
6. Provide all excavation, backfilling, conduits, conductors, meter bases, current transformer cabinets, disconnects/breakers, bollards, etc., to meet all utility company requirements for service. Note, initial disconnecting means, CT cabinet and meter shall be outside the building, final location as coordinated with the Owner and Architect.
7. Use minimum 4" conduit for utility service entrances.

D. Basic Materials and Methods

1. Wire shall be copper THHW, THWN or XHHW. Ampacity shall be based on 75C ratings, factory applied color sheathing as noted below.
   a. Panelboard, site lighting circuits shall have XHHW conductor insulation.
2. For 208Y/120V systems, use black (phase A), red (phase B) and blue (phase C) color coding.
3. Minimum wire size shall be 12AWG. For emergency and outdoor circuits, minimum wire size shall be 10AWG. For branch circuits longer than 60' one-way circuit distance, minimum wire size shall be 10AWG.
4. Provide a dedicated 100% rated neutral conductor in each circuit which rely on the neutral conductor to complete the circuit (example: 120V, 277V or multiphase circuits with a neutral).
5. Where oversized conductors are indicated or otherwise required for voltage drop or derating, provide junction boxes and other means required to transition back to standard conductor sizes for connection to standard lugs at equipment.
6. Minimum conduit size shall be 3/4".
7. Where branch circuit wiring is spliced, use wirenuts, PVC coated mechanical lug terminals or other Engineer approved means that allows access to cable ends. Do not use spring tension splices to connect wiring. Splice fittings shall be listed for wet location where located outdoors.
8. Use wire in conduit except in accessible indoor ceiling spaces and in hollow gypsum-board partitions, where MC cable may be used, unless prohibited by code. Use MC cable connectors with threaded lock nuts to box and screw down cable grips.
   Additional MC cable limitations:
   a. Use conductors in conduit from panelboard to room with termination. Once in the space with the termination, MC cable may be used where acceptable for use and accessible.
   b. MC cable shall not pass-thru partitions, extend beyond the space where the cable terminates.
   c. MC Cable shall not be located in masonry walls, in or above metal panel ceilings.
9. Provide flexible connections for final connection to motors or other vibrating equipment.
10. Provide plastic bushings wherever conductors would otherwise be exposed to threaded metal fittings.
11. Conduit types:
    ii. Outdoor, buried: Schedule 40 PVC, Solvent fused PVC fitting, 3" concrete encasement, spacer at intervals not more than 4' and not more than 2' from fitting.
    ij. Outdoor, in slab or just below, within 6" of slab: RMC, matching threads,
    ik. Outdoor, exposed: Threaded RMC field painted as directed, matching threaded fittings.
    il. Outdoor, flexible final connections to vibrating equipment: LFMC, malleable iron type fittings, listed for outdoors.
    im. Indoor, subject to physical damage or below 9' AFF: Threaded RMC field painted, matching threaded fittings.
    in. Indoor, dry, not subject to physical damage and above 9'AFF: EMT, set screw or compression fittings. Where exposed conduit shall be field painted.
    io. Indoor, dry, flexible final connections to vibrating equipment: FMC, malleable iron fittings.
12. Where boxes and conduit are indicated to be field painted, provide color selection as directed by Architect.
13. Coordinate conduit installation with other trades. Where conduit is in the vicinity of equipment, coordinate conduit locations to ensure access and clearances about equipment are maintained.
14. Exposed raceways and boxes in finished spaces shall be custom painted to match adjacent surfaces and surface colors. Where surfaces have more than one color, provide color scheme to match existing.
15. Exposed raceway systems, enclosures, trays, boxes and covers in unfinished ceilings shall be custom painted to match existing.
16. Except where code requires otherwise, use steel boxes of the proper type, not less than 4" square. Secure firmly, true, square, and, where mounted in a finished wall, flush with the finished surface. Where outdoors, provide cast metal boxes custom painted to match adjacent surface.
17. In finished spaces and below 9' AFF exposed boxes shall be cast metal box custom painted to match adjacent surface.
18. Low-voltage cable may be installed open in accessible indoor ceiling spaces, attics and in hollow gypsum-board partitions; otherwise, provide raceway. Support low-voltage at maximum 48" intervals with J-hooks or other devices listed for low-voltage cable support.
19. Support cables, conduits, and junction boxes rigidly and securely with heavy duty clamps and anchors listed for the application and installed according to their listing.
20. The use of spring tension cable or conduit support clips is not acceptable. Connectors to be threaded type with locking washer.
21. In finished spaces, all wiring shall be concealed under floors, in walls, or above ceilings, unless drawings indicate otherwise.
22. In unfinished spaces, all wiring shall be concealed under floors, in walls. Exposed raceway systems, enclosures, boxes and supports are acceptable where located snug to the upper cord of roof structure or where approved in the field by the Engineer.
23. Identify each wire on the project with a circuit number. Use wrap-around tape at the ends of wires.
24. Provide approved tags for each feeders, at either end and at intermediate junction boxes and pull boxes. Tag shall indicate feeder designation or equipment serviced, and state phase and voltage. Tags shall be machine printed, not less than #12 font, black text on white or grey background.
25. Where circuits penetrate an interior or exterior masonry wall provide sleeves listed for the application.
26. Seal all wall and floor penetrations. For fire-rated walls or floors, provide listed penetration sealant or other assembly to maintain rating.
27. Outdoor branch circuits shall have minimum 30" cover and shall be provided with a continuous warning tape.
28. Outdoor feeders shall have minimum 36" cover, shall be concrete-encased (3"), and shall be provided with a continuous warning tape.
29. Megger each feeder circuit. Conduct test with 1000V DC for 1 minute. Test phase to phase, phase to neutral and phase to ground for each conductor. Provide electronic test report showing each test outcome. Where resistance values are under 25 megohm, correct deficiency and retest. Turnover test report to Engineer.

E. Grounding and Bonding

1. Provide grounding and bonding as below, in addition to requirements of NEC.
2. Provide insulated copper equipment grounding conductors in all circuits.
3. Provide continuous copper perimeter grounding electrode, either ground ring electrode or concrete-encased electrode.
4. Provide bond between perimeter grounding electrode and each perimeter column and at building columns at intervals not greater than 50'.
5. Where ground bars are indicated, provide Erico or equal copper bar, minimum 1/4" thick x 4" wide x 12" long with manufacturer's mounting kit including insulating bracket.

F. Surface Raceway

1. Use Wiremold ALA4800-series or equal, aluminum, two-channel system.
2. Provide all fittings for a complete installation where shown on the drawings. Provide corners, end caps, rises/drops, etc., as required.
3. Provide recessed conduit drops and recessed boxes for feeds in wall behind raceway. Provide 0.75" conduit for power channel and 1.25" conduit for low-voltage channel. Provide at least one set of drops for each 20' of raceway.
4. Provide brackets for in-line device mounting.
5. Coordinate mounting height of raceway with millwork and furniture, and obtain Owner approval for height selected before installation.

G. Wiring Devices

1. Standard switches shall be ivory or as directed, extra heavy-duty industrial grade, 277V, 20A, manufactured by Leviton, Arrow Hart or Pass & Seymour. Where keyed switches are shown provide barrel key locking type. Where pilot-lighted switches and other types are noted, provide those types of the same quality by the same manufacturer.
2. Standard receptacles shall be ivory or as directed, extra heavy-duty industrial grade, tamper resistant, 120V, 20A, grounding type, manufactured by Leviton, Arrow Hart or Pass & Seymour. Where other receptacle types are noted, provide those types of the same quality by the same manufacturer.
3. Standard USB receptacle shall comply with the requirements of the standard receptacle and provide a single USB A and USB C charging port capable of 5A at 5VDC.
4. Standard GFCI receptacles shall be UL 943, 10kA maximum interrupting capacity, weather resistant complying with requirements above.
5. Where receptacles are located in damp or wet locations, provide weather resistant devices.
6. Provide cast metal weatherproof (WP) boxes and heavy duty other housings, as noted, tamper-resistant hardware.
7. Outdoor receptacles not protected from the weather shall be provided with hinged metal WP "in-use" covers, where WP rating is maintained with equipment plug is inserted into the receptacle, tamper-resistant hardware.
8. Indoor receptacles in wet locations and outdoors under roofed openings, canopies, or marquees, not subject to beating rain or water run-off, shall be cast metal WP type when receptacle is covered (attached plug cap not inserted and receptacle cover closed), tamper-resistant hardware.
9. Provide brushed stainless steel wall plates for devices in indoor finished spaces, galvanized steel wall plates for devices indoor unfinished spaces and cast iron or aluminum covers outdoors. Use one-piece wall plates for all groups of devices. Plates shall be square and true, with the edges of the plate in continuous contact with the wall, tamper-resistant hardware.
10. Identify each device on the project with a circuit number. Use 2 self-adhesive labels on the front and back of the faceplate of each switch or receptacle cover.
11. Each wiring device coverplate shall be provided with tamper-resistant hardware. Supply 6 vandal resistant installation and removal tools to the Owner at completion of work.
12. The color of wiring devices and type and color of device plates shall be indicated on submittals, and shall be coordinated with the Architect prior to installation.

H. Distribution Equipment

1. Distribution equipment shall be manufactured by Cutler-Hammer, GE/ABB, Siemens, or Square D.
2. Circuit breaker and other lugs shall be rated 75C.
3. Panelboards shall be hinged door-in-door dead-front, having bolt-on molded-case circuit breakers.
4. 208V and 240V panelboards shall have enhanced fingersafe IP2X per IEC 60529 barriers for all ungrounded parts.
5. Safety switches shall be heavy-duty.
6. Enclosures shall be suitable for installed location.
7. Provide new typewritten panel directories for all panels where work is done, including existing panels. Incorporate Owner's final room designations for all circuits. Obtain approval before installing.
8. Provide handle locks on breakers which serve emergency lighting circuits, exit signs, fire alarm equipment, lighting control panels & lighting control devices and camera equipment.
9. Identify panelboards, safety switches, and motor starters with engraved plastic laminate labels, showing panel designation, system voltage, and source location.

I. Lighting Control Devices

1. These controls function within a room and are not networked with the rest of the building.
2. Wall-box controls:
   a. Wall-box switches with motion detectors shall have the following features: dual-technology sensor (PIR and US) with 225 sq ft coverage rating for minor motion for both technologies, manual override pushbutton, sensitivity adjustment, mounts in standard box with standard Decora-style wall plate, 120/277V, 800W, off-delay adjustable, integrated light level sensor with adjustable threshold, LEDs indicate motion detection, coverplate and device color to match wiring devices or as directed. Provide Watt Stopper DW-100. Configure for 20-minute off-delay, manual on.
   b. Wall-box dimmers with motion detectors shall have the following features: dual-technology sensor (PIR and US) with 225 sq ft coverage rating for minor motion for both technologies, manual override pushbuttons, sensitivity adjustment, mounts in standard box with standard Decora-style wall plate, 120/277V, 1000W, 0-10V dimming, off-delay adjustable, LEDs indicate motion detection, coverplate and device color to match wiring devices or as directed. Provide Watt Stopper DW-311. Configure for 20-minute off-delay, automatic on to 50%.
   c. Wall-box switches with timers shall have the following features: backlit LCD display with digital countdown timer, single pushbutton operation, mounts in standard box with standard Decora-style wall plate, 120/277V, 800W, auto off after selectable time up to 12 hours, flash/beep indicator, scrolling override of preset timeout, coverplate and device color to match wiring devices or as directed. Provide Watt Stopper TS-400. Set initial preset to 30 minutes. Set beep and flash indicators on. Where multiple wall-box timers control the same lights, wire in parallel.
3. Motion sensors:
   a. Ceiling or wall corner-mounted occupancy sensors shall have the following features: dual-technology sensor (PIR and US) with 1000 sq ft coverage rating for minor motion (for 10' mounting, 2000 sq ft coverage rating for major motion), sensitivity adjustment, swivel bracket, off-delay adjustable up to 30 minutes, integrated light level sensor with adjustable threshold, LED indicates motion detection. Adjust sensitivity for proper operation without false triggering. Adjust light level threshold to 50%. Set initial off-delay to 30 minutes, automatic on (capable of manual on).
   b. Ceiling center-mounted occupancy sensors shall have the following features: semi-recessed, dual-technology sensor (PIR and US) with 360 degree, 1000 sq ft coverage rating, sensitivity adjustment, off-delay adjustable up to 30 minutes, integrated light level sensor with adjustable threshold, LED indicates motion detection. Adjust sensitivity for proper operation without false triggering. Adjust light level threshold to 50%. Set initial off-delay to 30 minutes, automatic on (capable of manual on).
   c. Ceiling center-mounted US occupancy sensors shall have the following features: semi-recessed mounting, 2000 sq ft coverage rating, sensitivity adjustment, off-delay adjustable up to 30 minutes, LED indicates motion detection. Mount ultrasonic sensors at least 4' from air diffusers. Adjust sensitivity for proper operation without false triggering. Set initial off-delay to 30 minutes, automatic on.
4. Room controllers:
   a. UNO, where room controllers or daylight sensors are indicated, provide room controller together with low-voltage sensors and low-voltage wall controls.
   b. Basis of design is Hubbell NX or Watt Stopper DLM.
   c. Wall switches shall be 2-button on/off or 4-button on/off/raise/lower, color to match wiring device or as directed by Architect.
   d. Provide room controllers to accommodate multiple circuits, voltages or zones as required, including multiple room controllers if needed.
   e. Daylight sensor for daylight harvesting.
   f. Provide dedicated dry low-voltage contact for HVAC integration; provide dedicated external interface unit if required.
   g. Motion sensors: provide ceiling corner dual tech, ceiling center dual tech and ceiling center ultrasonic. Sensors shall meet performance specification above and intended for use with room controller.
5. Controls with sensitivity or other adjustments shall be initially set as described. After the Owner has become accustomed to the use of the system, make further changes at the Owner's direction. Provide two visits to the site for this work, in addition to any punchlist, warranty or other visits.
6. Use yellow plenum rated category 5e cable for low-voltage wiring, or low-voltage wiring as directed by manufacturer.
7. Provide Owner training for each type of lighting control device provided.
8. Label each switch and room controller with a printed circuit label indicating panel and circuit number.
9. Locate controllers above drop ceiling by the door to the space or above the ceiling just outside the main entrance in the corridor (where rooms don't have a ceiling.
10. Exposed wiring shall be installed in conduit.

J. Lighting Control Panels

1. Lighting control panels shall provide relay-based control of 20A, 120/277V lighting circuits. They shall provide programmable automatic control by integrated 365-day astronomic timeclock, and/or by low-voltage manual switching.
2. Provide relays, sensors and switches described and shown on the drawings and all other components required for a complete and operational system. Relays are shown on schedules. Switches are shown on the floor plans. Any interfaces, bus extenders, power supplies, wiring, etc, shall be included.
3. Submittals shall include the following:
   a. Bill of materials including types and quantities of all components.
   b. Standard manufacturer's information on all components, including signal wiring.
   c. Project-specific schedules of panels, switches, and time schedules.
   d. Floor plans showing types of signal wiring and proposed physical routing of switch and panel bus wiring, with estimated lengths.
   e. Floor plans shall show locations of proposed bus extenders, if needed.
   f. Floor plans shall indicate switch addresses.
   g. Submittals not providing the above are inadequate for installation and ongoing maintenance of the system and will be rejected.
4. Acceptable equipment shall be manufactured by one of the following. Listing of a manufacturer does not negate any of the requirements described here and on the plans.
   a. Acuity.
   b. Cooper.
   c. Leviton.
   d. Lutron.
   e. Watt Stopper.
5. Provide control power to lighting control panel (from the same circuit powering relay 1, UNO).
6. If lighting control panels are used to control emergency lighting, system must be listed as a system to UL 924 and include all components required for listing, including a shunt relay for each emergency circuit.
7. Provide typed schedules in each panel. Schedules shall show relay number, lighting circuit number, zone, identify which spaces the contractor controls and time schedule.
8. Provide day/occupied and night/unoccupied modes. For a schedule such as "Off 6PM, on 7AM", provide four timeclock events: off at 6PM, unoccupied mode at 6PM, on at 7AM, occupied mode at 7AM. For a schedule such as "Off 6PM, manual 7AM", provide three timeclock events: off at 6PM, unoccupied mode at 6PM, occupied mode at 7AM.
9. Whenever a time schedule turns off lights, provide a blink-warning sequence five minutes before the off time.
10. Confirm time schedule in writing with Owner before programming.
11. Low-voltage switches controlling relays in lighting control panel shall be digital bus devices and shall function as follows: In occupied times (when lights are scheduled to be on), switches shall act as manual switches. In unoccupied times (when lights are scheduled to be off), switches shall act as two-hour on-overrides.
12. Provide one switch per box gang. Switches shall mount behind standard switch plate (toggle or Decora) and shall provide status LED. Provide decorator style switches that are digital, addressable, and match the lighting control panel. Switches shall be the same color as wiring devices and light switches.
13. Factory-authorized technician shall train contractor before system rough-in. After submittals are provided for approval, provide site visit to review system layout, time schedules and interfaces. At the meeting, provide Owner approval of time schedule in writing.
14. Factory-authorized technician shall provide on-site system startup. Where construction is broken up into phases, provide separate startup visits for each phase.
15. Factory-authorized technician shall provide on-site Owner training, at a time and day separate from startup.
16. Controls and time schedules shall be initially set as described above and on the Drawings. After the Owner has become accustomed to the use of the system, make further changes at the Owner's direction. Provide two visits to the site for this work, in addition to any punchlist, warranty or other visits.

K. Lighting

1. Provide submittals for each luminaire. When a luminaire is proposed as a substitute for that specified, provide photometric report for the exact model proposed.
2. Provide driver/ballast disconnecting means whether or not required by NEC.
3. Each luminaire shall be provided with driver/ballast, lamps, trim and mounting hardware suitable for the installed location.
4. Provide hardware to support luminaires independent of the ceiling support system.
5. For grid-mounted luminaires, provide hardware to securely attach the luminaires to the grid.
6. For linear pendant luminaires mounted in grid ceilings or on the grid, provide a single junction box with low-profile ceiling trim used to covert from flexible cord to plenum rated circuiting and to support the pendant stem. If necessary to keep separation of normal and emergency circuiting, provide dedicated junction box at one end of the pendant used to support stem and house normal circuiting and another junction box at the other end of the pendant used to support the stem and housing of emergency circuiting.
7. When more than one luminaire is joined together to create a longer row or larger pattern, verify with luminaire manufacturer requirements for luminaire interior wiring, driver requirements, and luminaire support requirements prior to submitting a cost to provide the lighting.
8. Identify each luminaire on the project with a circuit number. Use self-adhesive labels inside luminaires, placed so that the labels are visible when changing driver but not visible in typical use.
9. For adjustable fixtures, adjust as directed by the Architect.
10. See architectural ceiling plan for exact placement of lighting. In case of gross discrepancy between lighting plans and architectural ceiling plan, alert architect and engineer for resolution.
11. After dirty work is complete, remove construction dust, dirt and finger prints from luminaires, lenses, lamps and reflectors from new lighting.

L. Emergency Lighting

1. Provide emergency lighting equipment as specified on the drawings.
2. If in conduit or box, emergency system wiring shall not be in a conduit shared with normal system wiring.

M. Teledata Wiring System

1. Provide a unified teledata wiring system, with a link for each telephone and data jack shown on the drawings. Run cables from jacks to modular patch panels.
2. Provide plenum-rated horizontal links as follows:
   a. Where indicated for wireless access points, provide two Category 6A links, use white cable.
   b. Where indicated for video surveillance cameras, provide two Category 6A link, use green Category 6A cables.
   c. Otherwise, provide Category 6A links using blue cable.
3. Provide raceway except in accessible indoor ceiling spaces, attics and in hollow gypsum-board partitions.
4. At jack locations, provide multiport stainless steel faceplates with four openings.
5. Provide 21" deep wall-mount 25U or 26U swing rack for data patch panels and Owner equipment--Hubbell HPWWMR48D or Ortronics OR-604045451.
6. Provide empty, high-density, 48-port patch panels with at least 10% more openings in each IDF than needed for this project. Provide keystone jacks to terminate each installed cable. Provide separate panels for Category 6A.
7. Provide rear cable management bars that screw into the back of the rack at each patch panel. Provide horizontal and vertical wire management panels surrounding each patch panel.
8. Train wiring on hinge side of swing rack to permit use of hinge.
9. Unless Owner directs otherwise, jack labels shall have the form XY, where X shall be a letter designating the patch panel, and Y shall be a number designating the jack in the patch panel.
10. Labels shall be placed at each end of the cable, on the workstation faceplate, and on the patch panel. Use machine-printed, self-adhesive labels.
11. Provide as-built plans with each location shown, indicating the label used and the number of jacks.
12. Test installed wiring through patch panels and jack locations to specified EIA/TIA standards using an automated tester. Repair any deficiencies and retest. Submit testing report.
13. Cross-connect wiring and patch cables will be provided by the Owner.

N. Television Distribution

1. Not in scope of work.

O. Paging System and Public Address System

1. Not in scope of work.

P. Multimedia

1. Not in scope of work.

Q. Clock

1. Not in scope of work.

R. Access Control

2. Not in scope of work.

S. Intrusion Detection

1. Not in scope of work.

T. Video Surveillance

1. Provide IP video surveillance system with cameras, supports, monitor and NVR. See specification section 282300 - Video Surveillance for additional requirements.
2. At each camera location, provide data jack.
3. Where cameras are shown on the drawings, provide vandal resistant type network dome cameras and mounting hardware. Where indicated on on the drawings to provide 360 degree camera, comply with specifications for 360 degree cameras.
4. Provide plenum-rated horizontal links as follows:
   a. Where indicated for indoor or building mounted video surveillance cameras, provide one Category 6A link. Use green Category 6A cables.
   b. Where indicated for outdoor video surveillance cameras provide jack at nearest accessible above ceiling indoor location, and 0.75" conduit to outdoor location. Provide outdoor-rated plenum rated Category 6A patch cord and seal conduit.
   c. See alternate for pole mounted cameras. Where indicated for outdoor video surveillance cameras mounted on site luminaires, provide fiber links for each outdoor camera, as detailed on E7.3. Use outdoor wet location/plant cable, type to match existing cable, cable conduit fill to match existing. EC to field verify existing conduit fill requirements prior to procuring cables for existing cameras.
5. At jack locations, provide plenum rated jack housing box capable of 2 jacks with a protective label cover. Secure box to wall or structure.
6. At either end of cable provide 10' looped coiled and secured above the ceiling.
7. Support cables every 4' with j-hooks, sized for 50% future cable fill, in accessible ceilings, use cable in conduit otherwise.
8. Terminate cables in unloaded patch panel dedicated to cameras. Provide rear cable management bars that screw into the back of the rack at each patch panel, secure cables to support bars. Provide horizontal and vertical wire management panels surrounding each patch panel.
9. Train wiring on hinge side of swing rack to permit use of hinge.
10. Unless Owner directs otherwise, jack labels shall have the form XY, where X shall be a letter designating the patch panel, and Y shall be a number designating the jack in the patch panel.
11. Labels shall be placed at each end of the cable, on the workstation faceplate, and on the patch panel. Use machine-printed, self-adhesive labels.
12. Provide as-built plans with each location shown, indicating the label used and the number of jacks.
13. Test installed wiring through patch panels and jack locations to specified EIA/TIA standards using an automated tester. Repair any deficiencies and retest. Submit testing report.
14. Install cross-connect wiring and patch cables between patch panels and switches, data jacks and cameras.
15. Provide startup and adjustment to cameras. Provide Camera Mounting Coordination and Pre-Acceptance Adjusting as noted below, coordinate work with Owner.
16. Camera Mounting Coordination
    a. Meet with Owner on site to review camera mounting schedule.
    b. For Owner meeting, provide written schedule describing mounting hardware and proposed viewing angles at each camera location. Use tags on drawings to identify locations.
    c. During meeting, review placement and mounting of each camera. Mark actual location of proposed camera placement.
    d. During meeting, review proposed viewing angle of each camera. Show viewing angles on plan.
    e. Do not proceed without Owner approval of mounting types, locations, and viewing angles in writing.
17. Pre-Acceptance Adjusting
    a. After cameras and network are operational, meet with Owner on site to review/adjust camera views--zoom and angle.
    b. Provide at least three technicians for this adjustment session--two for adjusting cameras and one for conferring with Owner at viewing location.
    c. Note final zoom and angle of each camera.
    d. Provide to Owner record of settings in writing.

U. Fire Alarm

1. Provide addressable, analog fire alarm system manufactured by Notifier/Honeywell or as approved by PPR, see specifications for Digital, Addressable Fire-Alarm System for additional requirments.
2. Provide devices shown on the drawings, including remote annunciator, manual pull stations, photoelectric smoke detectors, horn/strobe units, and strobe-only units.
3. Provide all power supplies, expansion boards, wiring, and programming required to support devices.
4. For each duct smoke detector, provide remote test/indicator station. Coordinate location of station with Owner.
5. Provide dial out over digital alarm communicator transmitter.Unit shall receive an alarm, supervisory, or trouble signal from fire-alarm control unit and automatically capture two telephone line(s) and dial a preset number for a remote central station at the City's Central Radio Room. Unit shall also receive an alarm, supervisory, or trouble signal from fire-alarm control unit and automatically transmit radio signals via cellular telephone network for a remote central station at a PPR approved fire alarm monitoring service.
6. Wiring shall be listed fire alarm cable as recommended by the manufacturer.
7. Provide shop drawings, I/O matrix, battery calculations, voltage drop calculations and other documentation required by NFPA 72 to the authority having jurisdiction. If the authority deems these items as required for approval of LVE plans, LVE requests that these be considered deferred submittals as described in 2018 IBC 107.3.4.1.
8. Obtain permits and satisfactory inspections from authority having jurisdiction.
9. Provide record of completion, owner's manual, record drawings, and other testing and documentation to meet NFPA 72 requirements and satisfy the authority.

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

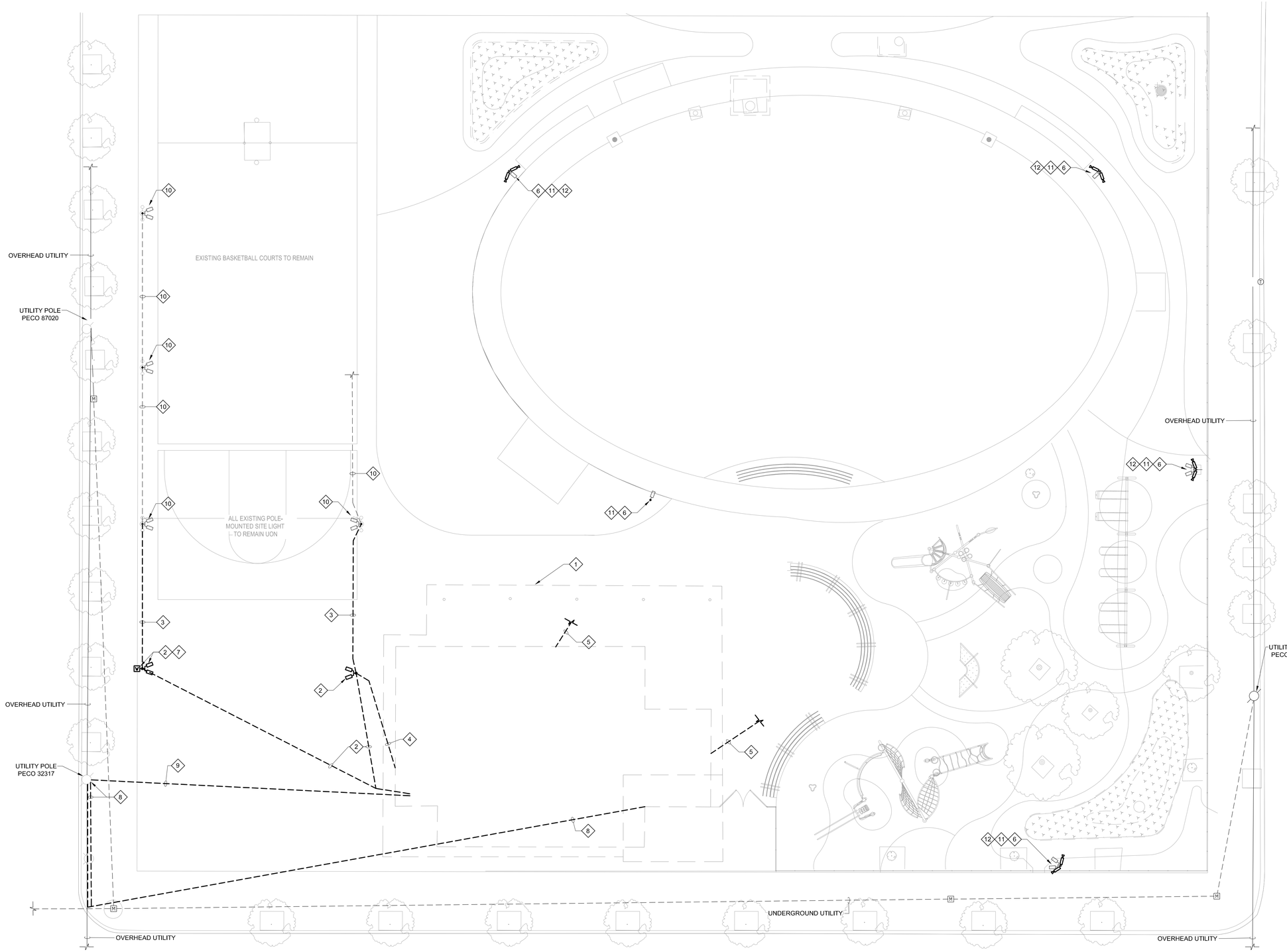
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title:
ELECTRICAL NOTES

Sheet No.
E0.2



KEY NOTES

1. OUTLINE OF BUILDING TO BE DEMOLISHED. REMOVE UTILITY SERVICES (POWER AND LOW-VOLTAGE) FROM THE BUILDING BACK TO SOURCE. REMOVE SITE LIGHTING CIRCUITS AND LOW-VOLTAGE WIRING FROM BUILDING BACK TO SOURCE. EXTEND EXISTING CONDUITS TO ELECTRICAL PANELS AND DATA CABINETS IN NEW BUILDING, UNO. SEE NOTES BELOW AND OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS.
2. REMOVE LUMINAIRE, BASE, AND CIRCUITING BACK TO SOURCE.
3. UNDER BASE BID REMOVE WIRING FROM LUMINAIRE BACK TO SOURCE. PROVIDE NEW CIRCUITING AS SHOWN ON THE LIGHTING PLAN TO EXISTING LUMINAIRE. NEW CONDUCTORS SHALL BE THE SAME CONDUCTOR DIAMETER OF THOSE REMOVED.
4. REMOVE OVERHEAD CIRCUIT TO SPORTS LIGHTING. PROVIDE NEW UNDERGROUND CIRCUITING AS PART OF BASE BID.
5. REMOVE EXPOSED 2 - 2" RMC AND 1 -1" RMC CONDUITS AND CIRCUITS AWAY FROM AREA OF DEMOLITION. EXTEND TO NEW ELECTRIC ROOM. FIELD VERIFY CONDUIT AND CONDUCTOR SIZES AND CABLE TYPES, NEW POWER CONDUCTORS AND CATEGORY 6A CABLES SHALL MATCH EXISTING. FIELD VERIFY CABLE SIZES AND TYPE TO ENSURE NEW CABLES FIT IN EXISTING CONDUITS.
6. EXISTING SITE LUMINAIRE TO REMAIN. REMOVE CIRCUITING FROM SITE LUMINAIRE BACK TO SOURCE. PROVIDE NEW SITE LIGHTING CIRCUIT FROM NEW ELECTRIC ROOM. NEW CONDUCTORS SHALL BE THE SAME CONDUCTOR DIAMETER OF THOSE REMOVED.
7. REMOVE WIRELESS ACCESS POINT AND ASSOCIATED WIRING BACK TO SOURCE.
8. COORDINATE REMOVAL OF OVERHEAD COMMUNICATIONS CABLE FROM BUILDING TO UTILITY POLE WITH COMMUNICATIONS PROVIDER. COORDINATE INSTALLATION OF NEW COMMUNICATIONS CABLE IN UNDERGROUND CONDUIT.
9. REMOVE 200A 240/120V/1P/3W UNDERGROUND ELECTRIC SERVICE FROM BUILDING BACK TO SOURCE. PROVIDE NEW UNDERGROUND ELECTRIC SERVICE FROM NEW UTILITY TRANSFORMERS TO ELECTRIC SERVICE. COORDINATE DEMOLITION AND NEW WORK WITH ELECTRIC UTILITY.
10. CLEAN, RE-AIM AND REPLACE HID LAMPS WITH NEW LAMPS, TYPE TO MATCH EXISTING.
11. PROVIDE TEMPORARY POWER AND ASTRONOMIC TIME CLOCK CONTROL TO LUMINAIRE DURING CONSTRUCTION. REPLACE TEMPORARY WIRING AND CONTROLS WITH NEW AS SHOWN ON DRAWINGS.
12. BASE BID: DEMOLISH CAMERAS, REMOVE WIRING FROM CAMERAS BACK TO SOURCE. PROVIDE NEW CAMERAS AND CABLES AS SHOWN ON SITE PLAN - NEW, ON DETAILS, & AS SPECIFIED. ALTERNATE: MAINTAIN CAMERAS AND MEDIA CONVERTERS AT CAMERAS & DEMOLISHED NVR. REPLACE FIBER WITH NEW HYBRID MULTIMODE FIBER & 2 POWER CONDUCTORS.

N

SITE PLAN - DEMOLITION

0 5' 10' 20'

Scale: 1" = 10'-0"

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD –VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

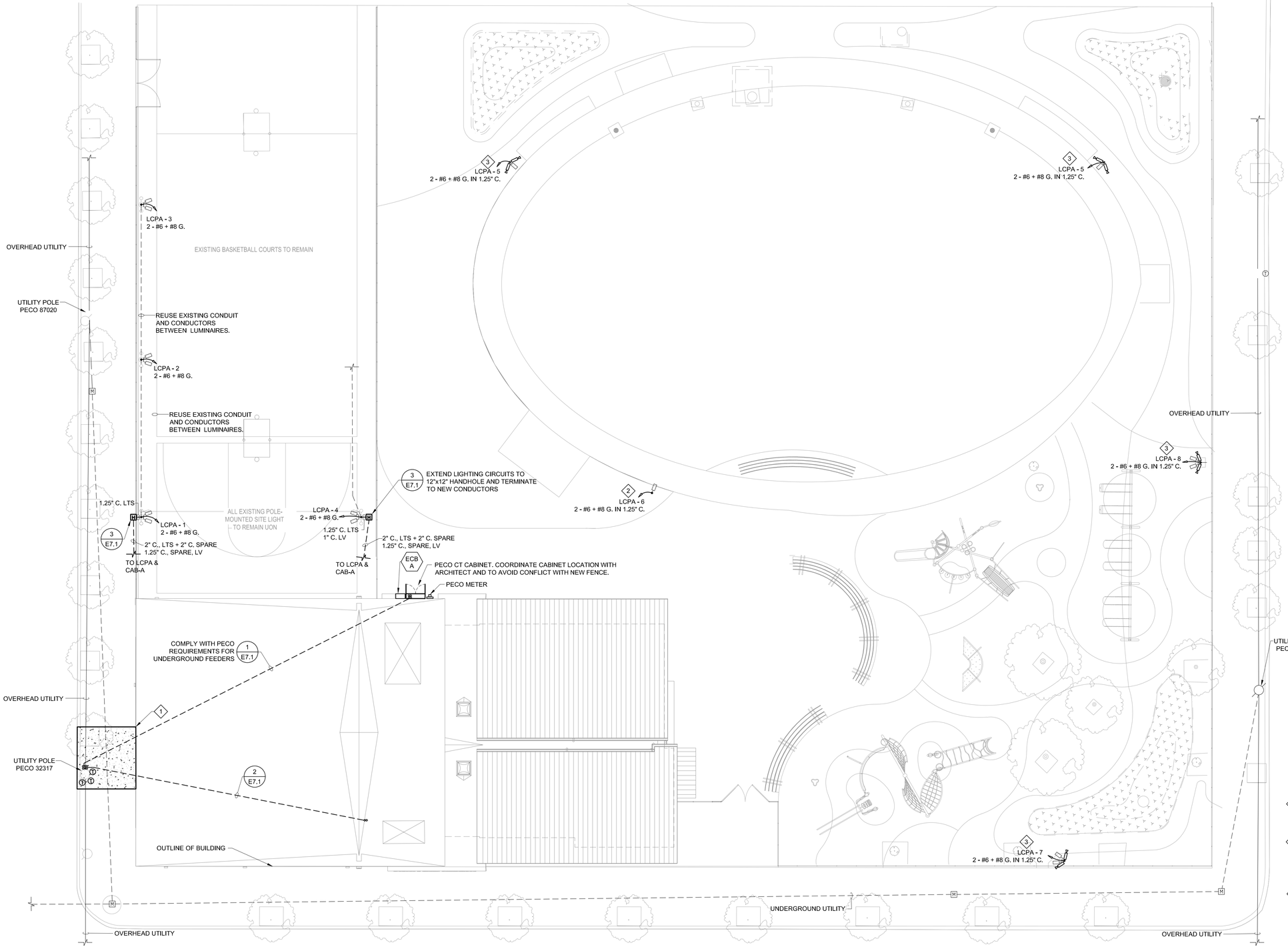
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title:
SITE PLAN - DEMOLTION

Sheet No.
E0.3



N

SITE PLAN - NEW

0 5' 10' 20'

Scale: 1" = 10'-0"

PLAN NOTES

1. EXISTING UNDERGROUND CONDUIT LOCATIONS UNKNOWN. PROVIDE GROUND PENETRATING RADAR TO DETERMINE FINAL LOCATION & DEPTH OF EXISTING UNDERGROUND CONDUITS.
2. SEE ALTERNATE #5 FOR WORK ASSOCIATED WITH REPLACING EXISTING OUTDOOR POLE MOUNTED CAMERAS WITH NEW.

KEY NOTES

1. SAW CUT AND REMOVE SIDEWALK FOR UNDERGROUND DUCT BANK WORK. PROVIDE NEW, MEANS, MATERIALS & METHODS TO MATCH EXISTING SIDEWALK.
2. EXISTING SITE LUMINAIRE . EXTEND EXISTING CONDUITS TO BUILDING, FIELD VERIFY CONDUIT SIZES AND LOCATION. PROVIDE NEW SITE LIGHTING CIRCUIT FROM NEW ELECTRIC ROOM. NEW CONDUCTORS SHALL BE MATCH THE CABLE DIAMETER OF THOSE REMOVED.
3. EXISTING SITE LUMINAIRE. EXTEND EXISTING CONDUITS TO BUILDING, FIELD VERIFY CONDUIT SIZES AND LOCATIONS. PROVIDE NEW LIGHTING CIRCUIT AND CAMERA CABLES FROM NEW ELECTRIC ROOM AND DATA CLOSET. NEW CONDUCTORS AND CABLES SHALL MATCH THE CONDUCTOR AND CABLE DIAMETER OF THOSE REMOVED. SEE TYPICAL SITE CAMERA WIRING DETAIL FOR ADDITIONAL REQUIREMENTS.

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

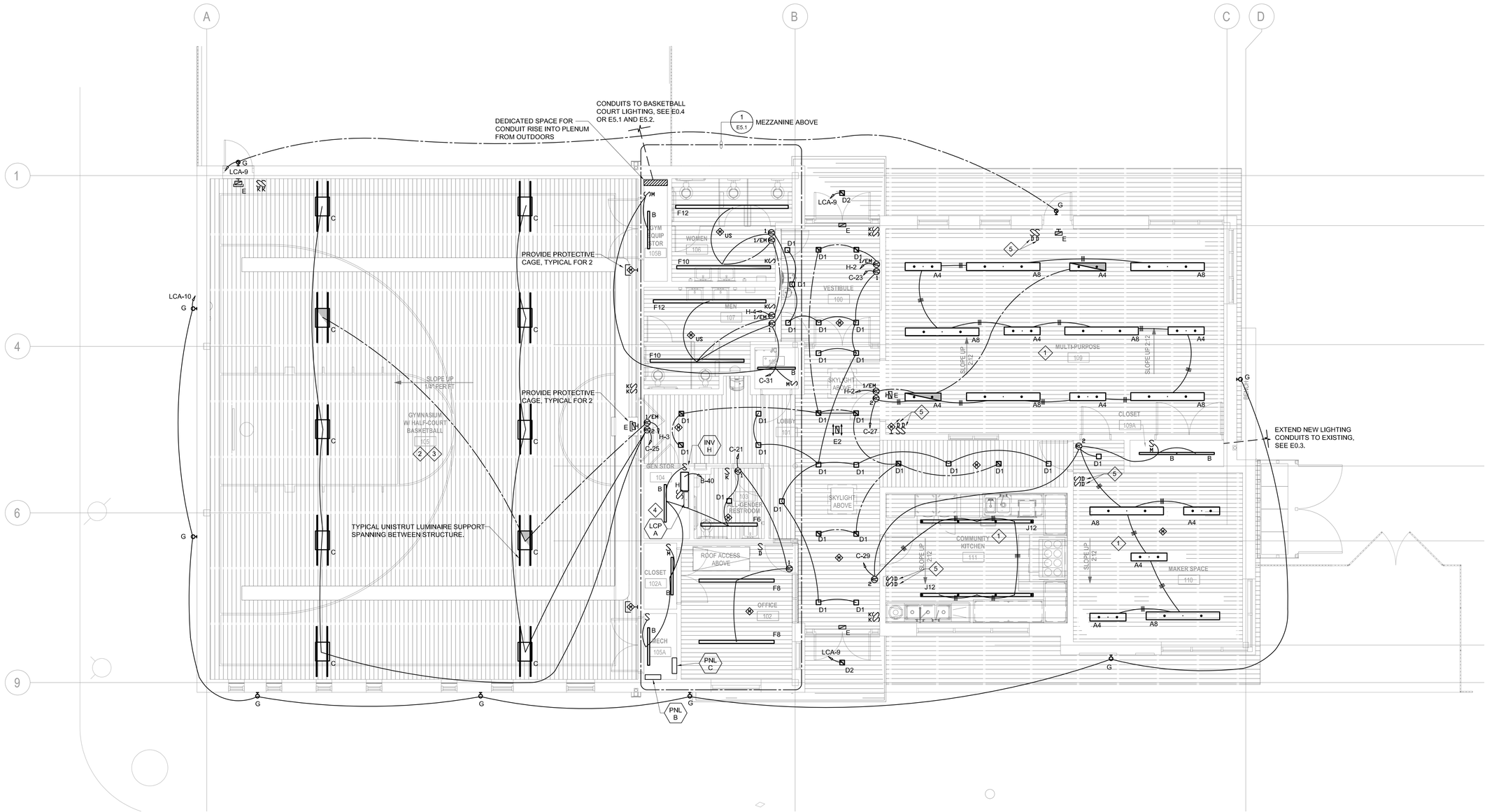
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title:
SITE PLAN - NEW

Sheet No.
E0.4



N

FLOOR PLAN - LIGHTING

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

PLAN NOTES

1. CIRCUIT EXIT SIGNS FROM INVERTER H CIRCUIT 1.
2. SECURE LUMINAIRES RECESSED IN METAL PAN CEILINGS FROM BUILDING STRUCTURE ABOVE WITH THREADED ROD AND UNISTRUT.
3. WHERE TERMINATIONS OR BOXES ARE LOCATED ABOVE THE METAL PAN CEILING, PROVIDE REMOVABLE SECTION OF METAL PANEL CEILING.

KEY NOTES

1. LOCATE WIRING IN CONDUIT JUST ABOVE HARD CEILING. FINAL LOCATION OF CONDUITS IN THE CEILING SHALL BE COORDINATED WITH PENDANT LUMINAIRES AND THE CEILING INSTALLER. TERMINATIONS OR BOXES ABOVE THE CEILING SHALL BE ACCESSIBLE VIA A REMOVABLE SECTION OF CEILING PANEL.
2. RIGIDLY SECURE LUMINAIRES FROM BUILDING STEEL. USE GALVANIZED L-CHANNEL OR UNISTRUT SUPPORT. BOTTOM OF LUMINAIRE SHALL BE .5" ABOVE THE BOTTOM OF ROOF STRUCTURE OR AS DIRECTED BY THE ARCHITECT.
3. CUSTOM PAINT SUPPORTS AND EXPOSED RACEWAYS AND BOXES TO MATCH CEILING SURFACE.
4. PROVIDE 2 MANUAL OVERRIDE SWITCHES FOR EXISTING OUTDOOR BASKETBALL COURT LIGHTING AND SECURITY LIGHTING.
5. PROVIDE STAINLESS STEEL LEGRAND WP26-L, OR EQUAL, LOCKING COVER FOR SWITCHES.

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD -VINCENT G. PANATI PLAYGROUND

for

PPR/REBUILD PHILADELPHIA

3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE

0 1

BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024

Scale: AS NOTED

Job No. 725002

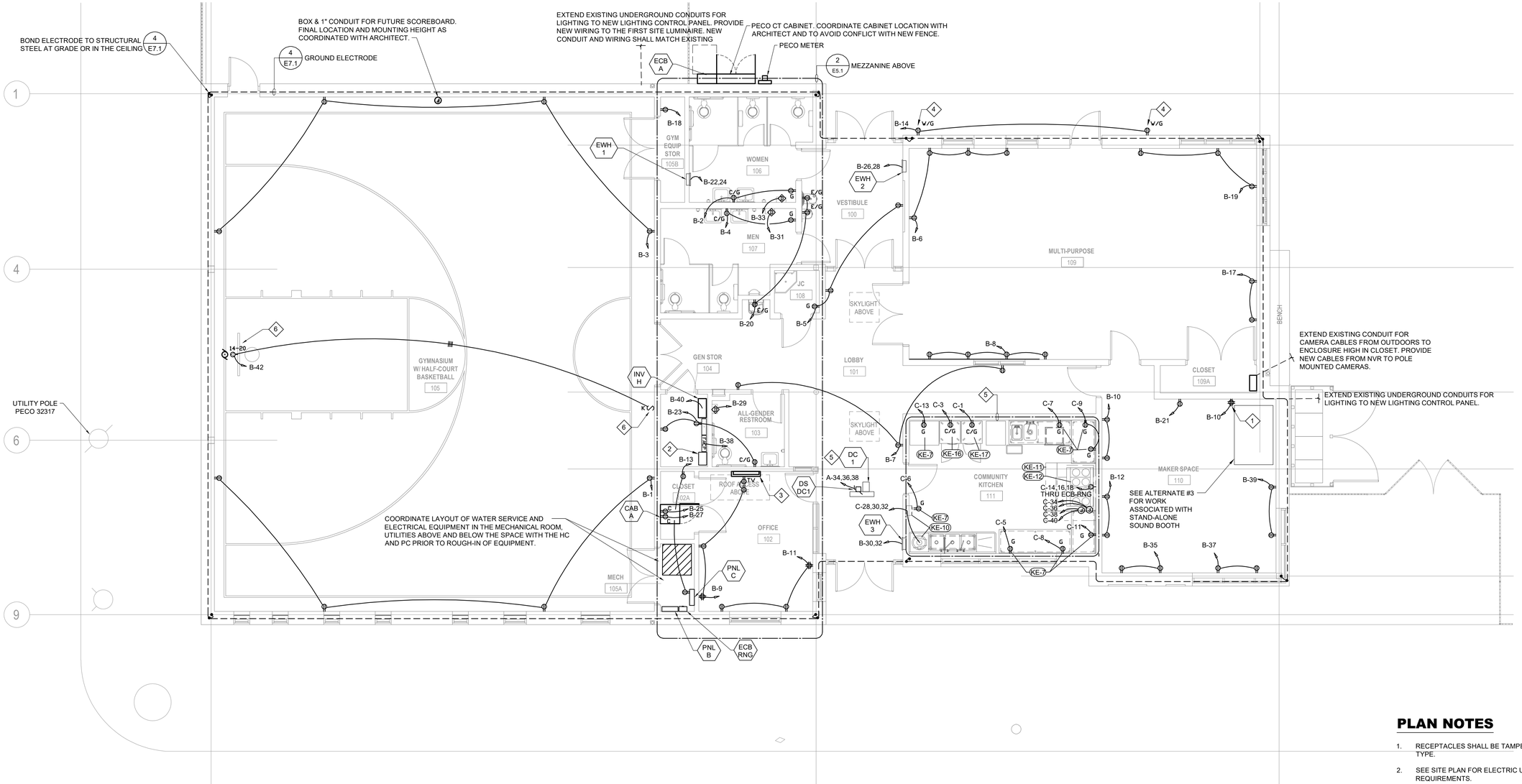
Drawn: JCR | Appd.: MCD

Sheet Title:

FLOOR PLAN - LIGHTING

Sheet No.

E2.1



N

FLOOR PLAN - POWER

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

Community Kitchen Electrical Schedule

Tag	Equipment Type	Wiring	Mounting	Comments
KE-7	General Purpose Receptacles	2 - #12 + #12 gnd. in 3/4" C.	Mount at 18" AFF	NEMA 5-20R GFI
KE-16	Food Waste Disposer	3 - #10 + #10 gnd. in 3/4" C.	Hardwire	through disconnect/controller
KE-11	Exhaust Hood	8 - #10 + #10 gnd. in 1" C.	Hardwire	Provide remote ADA accessible on/off of fan and light switches
KE-12	Range	4 - #6 + #8 gnd. in 1.25" C.	Mount at 24" AFF	NEMA 14-50R with matching 6' cord and plug, fed from PNL C thru ECB-RNG (shunt trip type) to NEMA-14-50R, shunt trip control from hood, coordinate shunt control voltage with hood installer.
KE-16	Reach-in freezer	2 - #12 + #12 gnd. in 3/4" C.	Mount at 48" AFF	NEMA 5-20R GFI
KE-17	Reach-in refrigerator	2 - #12 + #12 gnd. in 3/4" C.	Mount at 48" AFF	NEMA 5-20R GFI

Electrical device locations shown for rerference. Coordinate rough-in of electrical device, control and wiring with kitchen equipment installer and electrical rough-in kitchen drawings.
Switches, controls and electrical devices shall be ADA accessible, coordinate layout of switches, devices and controls with kitchen equipment installer and Architect to ensure compliance.

PLAN NOTES

1. RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.
2. SEE SITE PLAN FOR ELECTRIC UTILITY REQUIREMENTS.

KEY NOTES

1. FIELD COORDINATE FINAL LOCATION OF CONNECTION AND TYPE OF CONNECTION TO RECORDING BOOTH WITH THE BOOTH INSTALLER.
2. REMOTE MANUAL SWITCH CONTROLS FOR EXISTING BASKETBALL COURT LIGHTING AND SECURITY LIGHTING.
3. CAMERA SYSTEM LOW-PROFILE MONITOR MOUNTED IN LOW-PROFILE SEE THROUGH VANDAL PROOF ENCLOSURE. COORDINATE FINAL LOCATION WITH PPR, AVOID LOCATIONS THAT IS IN CONFLICT WITH FURNITURE, DOORS SWINGS, AND ROOF HATCH ACCESS.
4. PROVIDE CAST METAL HEAVY DUTY IN-USE COVER CAPABLE OF BEING LOCKED.
5. SEE ALTERNATE #4 FOR WORK ASSOCIATED WITH KITCHEN EQUIPMENT.
6. PROVIDE POWER AND CONTROL WIRING TO POWERED GYM EQUIPMENT SYSTEM, INCLUDING BOX AND CONDUIT TO SWITCH AND RECEPTACLE AND TERMINATIONS. COORDINATE REQUIREMENTS FOR WIRING, DEVICES, AND LOCATIONS WITH THE POWERED GYM EQUIPMENT SYSTEM INSTALLER. WIRING SHALL BE RECESSED IN THE WALLS AND FLOORS AND IN CONDUIT IN THE CEILING SPACE. CUSTOM PAINTED TO MATCH ADJACENT SURFACES.

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

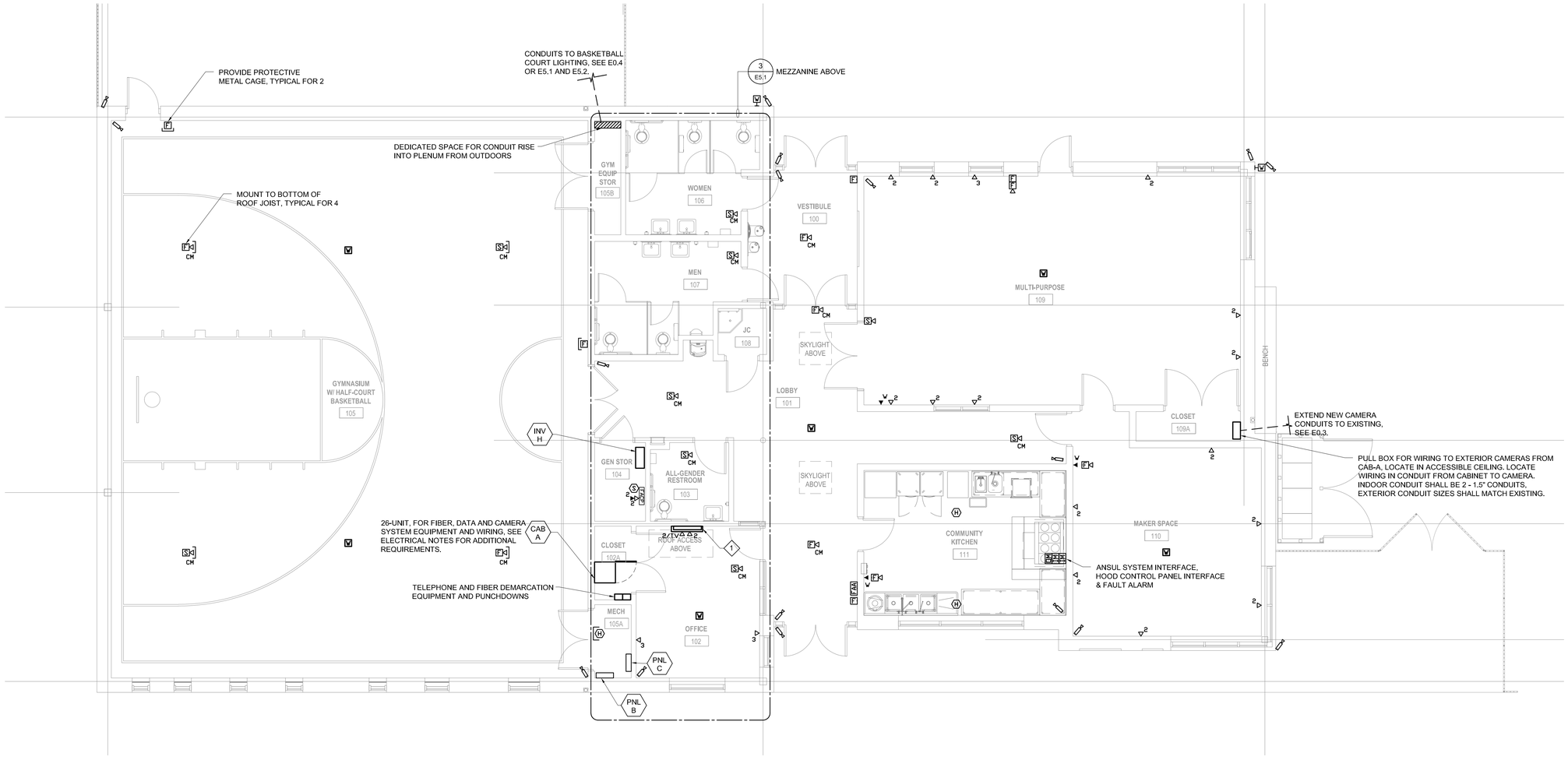
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title: FLOOR PLAN - POWER

Sheet No. E3.1



N

FLOOR PLAN - LOW-VOLTAGE

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

PLAN NOTES

1. COORDINATE FINAL LOCATION OF DATA & TELEPHONE JACKS WITH OWNER.
2. COORDINATE FINAL LOCATION, MOUNTING HEIGHT & AIMING OF CAMERAS WITH OWNER.

KEY NOTE

1. CAMERA SYSTEM LOW-PROFILE MONITOR MOUNTED IN LOW-PROFILE SEE THROUGH VANDAL PROOF ENCLOSURE. COORDINATE FINAL LOCATION WITH PPR, AVOID LOCATIONS THAT IS IN CONFLICT WITH FURNITURE, DOORS SWINGS, AND ROOF HATCH ACCESS. PROVIDE BOX AND CONDUIT TO ACCESSIBLE CEILING FOR FUTURE ADDITIONAL WIRING.

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD –VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

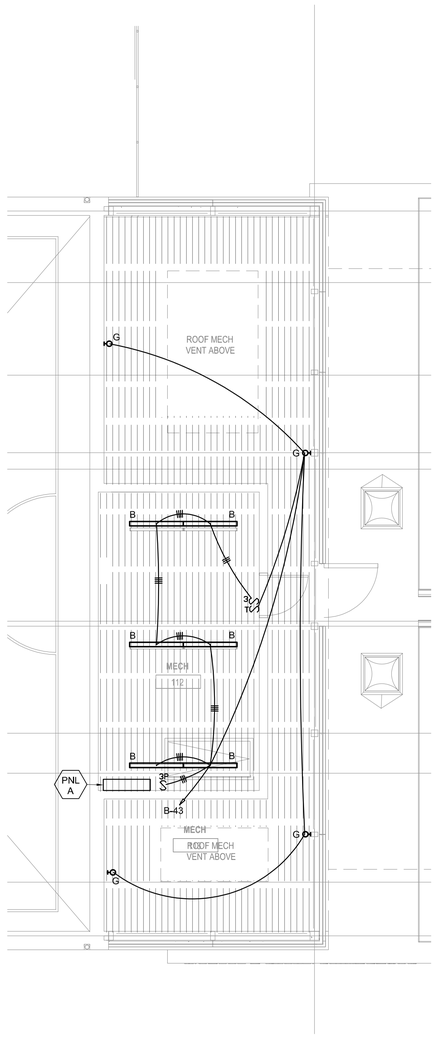
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title: FLOOR PLAN - LOW-VOLTAGE

Sheet No. E4.1

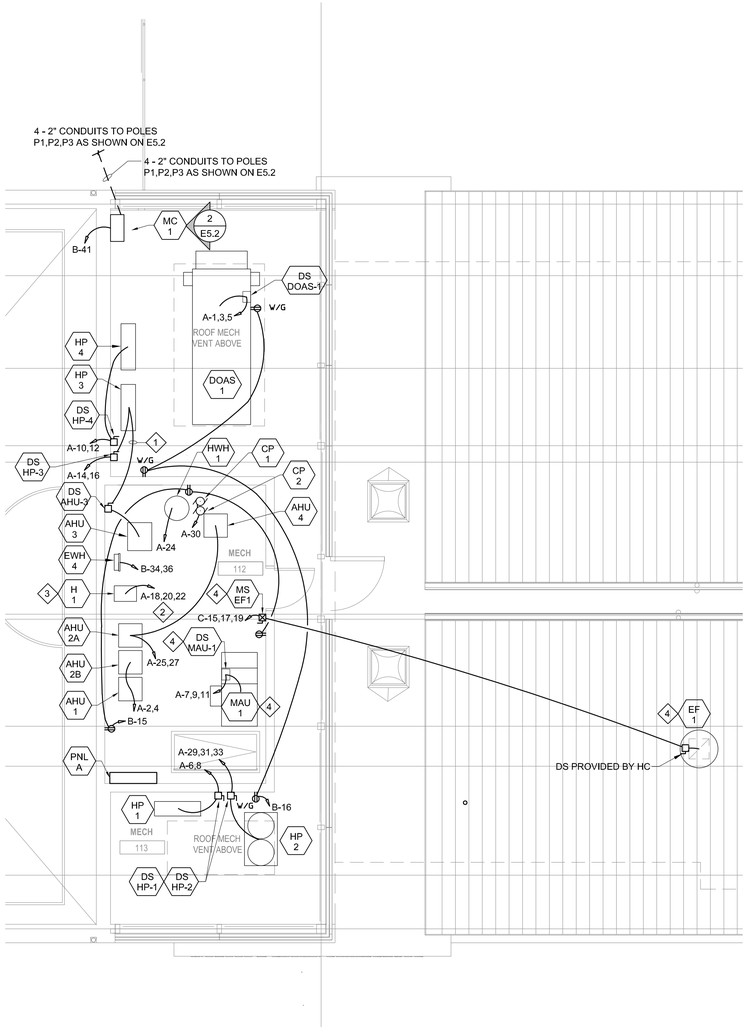


MEZZANINE PLAN - LIGHTING

N 1 E5.1

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"



MEZZANINE PLAN - POWER

N 2 E5.1

0 1' 3' 6' 10'

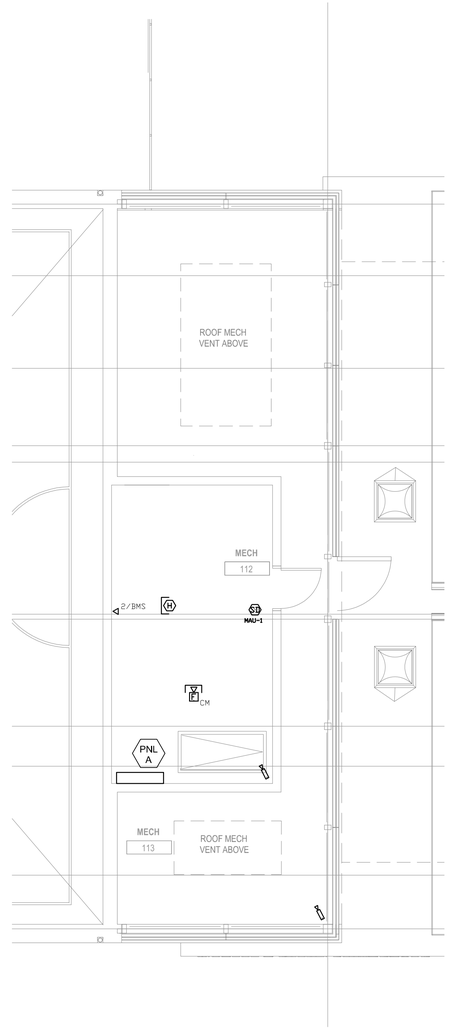
Scale: 3/16" = 1'-0"

PLAN NOTE

1. PROVIDE 3/4" CONDUIT BETWEEN OUTDOOR HEAT PUMPS AND ASSOCIATED INDOOR AIR HANDLING UNITS FOR HC PROVIDED CONTROL WIRING.

KEY NOTES

1. PROVIDE 3 - #10 + #10G IN 3/4" CONDUIT BETWEEN OUTDOOR HP-3 AND ASSOCIATED INDOOR AHU-3. PROVIDE CONTROL WIRING BETWEEN OUTDOOR AND INDOOR UNIT. TERMINATIONS SHALL BE MADE IN DS-AHU-3.
2. PROVIDE 3 - #10 + #10G IN 3/4" CONDUIT.
3. SEE ALTERNATE #1A & #1B FOR WORK ASSOCIATED WITH GYM WOOD FLOORING.
4. SEE ALTERNATE #4 FOR WORK ASSOCIATED WITH KITCHEN EQUIPMENT.



MEZZANINE PLAN - LOW VOLTAGE

N 3 E5.1

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND

for

PPR/REBUILD PHILADELPHIA

3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE

0 1

BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024

Scale: AS NOTED

Job No. 725002

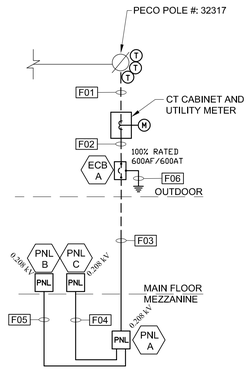
Drawn: JCR | Appd.: MCD

Sheet Title:

MEZZANINE PLANS

Sheet No.

E5.1



SINGLE LINE DIAGRAM - POWER

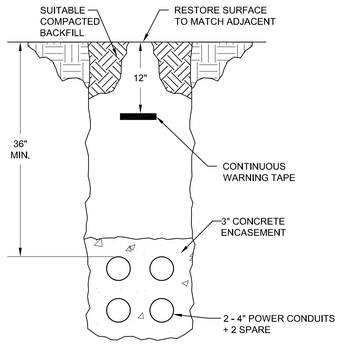
NO SCALE

NOTES:

1. PANELS AND EQUIPMENT THAT ARE PART OF THE EMERGENCY SYSTEM, SHALL BE SELECTIVELY COORDINATED TO 0.01 SECONDS AS REQUIRED TO COMPLY WITH ARTICLE 700 OF THE NEC.
2. COMPLY WITH PECO REQUIREMENTS FOR NEW UNDERGROUND SERVICE FROM POLE MOUNTED TRANSFORMERS. FINAL TERMINATIONS TO UTILITY TRANSFORMERS BY PECO.

Feeder Schedule

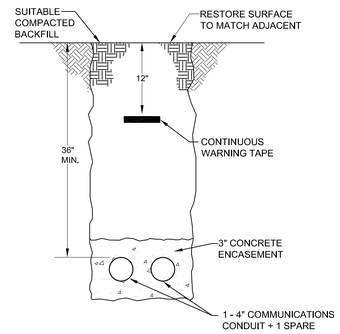
Tag	Overcurrent Protection	Phase Wires (per conduit)	Ground	Conduit	Number of Conduits	Comments
F01	600A	4-350kcmil	#1	4"	2	+ 2 spare
F02	600A	4-350kcmil	#1	4"	2	+ 1 spare
F03	600A	4-350kcmil	#1	4"	2	+ 1 spare
F04	200A	4-4/0	#4	2.5"	1	
F05	200A	4-4/0	#4	2.5"	1	
F06	-	-	2/0	-	-	Ground electrode



1 / E7.1 **SERVICE DUCT BANK DETAIL**

NOT TO SCALE

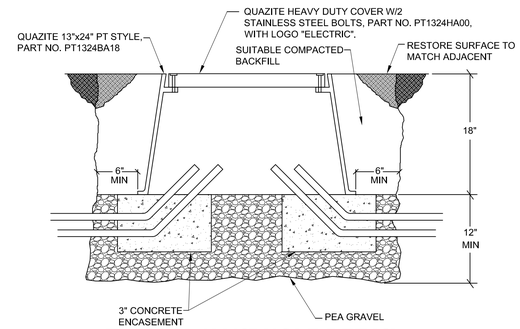
NOTE: COMPLY WITH PECO REQUIREMENTS FOR UNDERGROUND FEEDERS.



2 / E7.1 **SERVICE DUCT BANK DETAIL**

NOT TO SCALE

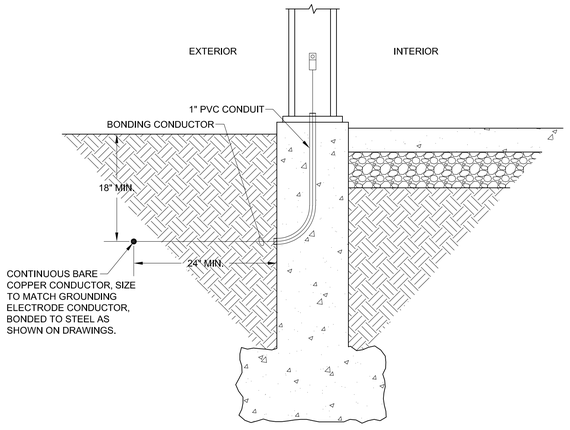
NOTE: COMPLY WITH TELEPHONE/DATA SERVICE PROVIDER REQUIREMENTS FOR UNDERGROUND FEEDERS.



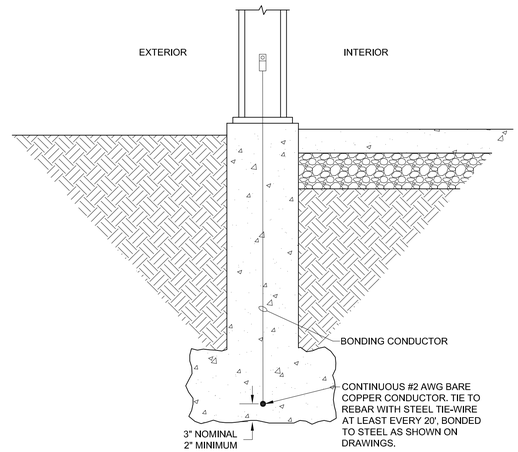
3 / E7.1 **TYPICAL HANDHOLE DETAIL**

NO SCALE

NOTE: PROVIDE SIZE SHOWN, UNLESS SITE PLAN INDICATES OTHERWISE



GROUND RING ELECTRODE OPTION



CONCRETE-ENCASED ELECTRODE OPTION

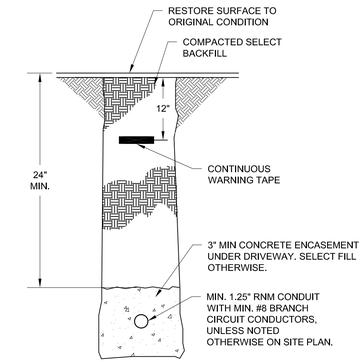
4 / E7.1 **GROUNDING ELECTRODE & STEEL BONDING DETAIL**

0 3" 6" 1' 2'

Scale: 1" = 1'-0"

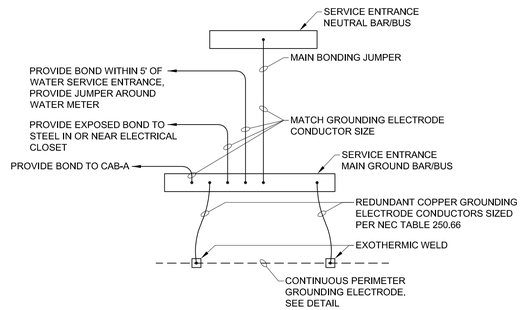
NOTES:

1. PROVIDE CONTINUOUS COPPER GROUNDING ELECTRODE AROUND ENTIRE PERIMETER OF BUILDING, EITHER GROUND RING ELECTRODE OPTION OR CONCRETE-ENCASED ELECTRODE OPTION.
2. USE ONLY EXOTHERMIC WELDS FOR JOINING COPPER CONDUCTORS UNDERGROUND OR WITHIN CONCRETE.
3. BONDING CONDUCTOR SIZE SHALL MATCH GROUNDING ELECTRODE CONDUCTOR SIZE.
4. BOND EACH PERIMETER COLUMN AND ADDITIONAL COLUMNS SHOWN ON FLOOR PLAN. PROVIDE CLEAN CONNECTION TO STEEL, REMOVE MATERIALS OR PAINT THAT WOULD PREVENT A CLEAN CONNECTIONS.
5. BONDING CONNECTORS AT COLUMNS SHALL BE WELDED CONNECTORS LISTED FOR THE APPLICATION. WHERE COLUMN CONNECTORS ARE ACCESSIBLE FOR INSPECTION, MECHANICAL CONNECTORS BOLTED TO COLUMNS MAY BE USED.



TYPICAL UNDERGROUND CONDUIT DETAIL

NO SCALE



SERVICE ENTRANCE GROUNDING DETAIL

NO SCALE

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

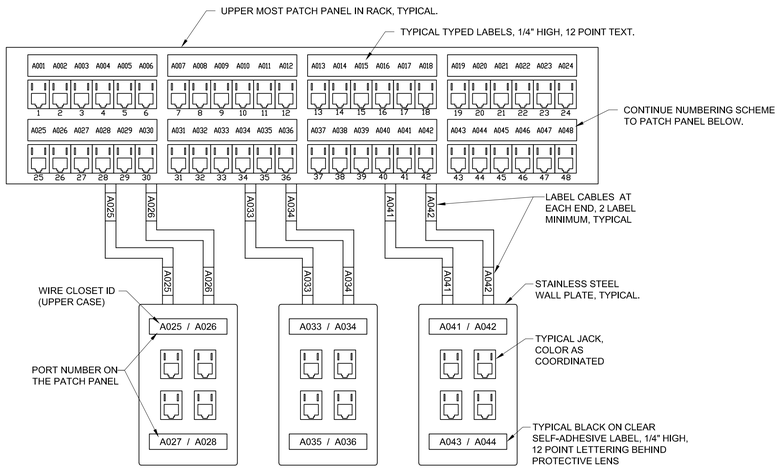
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title:
DETAILS

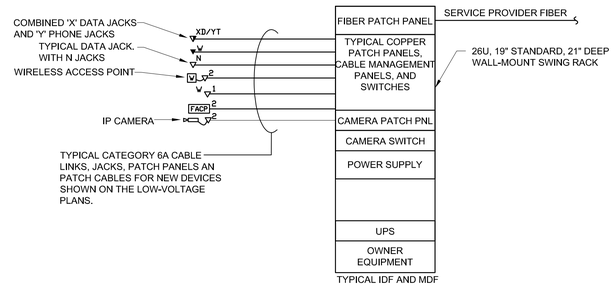
Sheet No.
E7.1



TYPICAL TELEDATA LABELING DETAIL

NOT TO SCALE

NOTES:
1. FILL UNUSED OPENINGS WITH ELECTRICAL IVORY BLANK MODULES.
2. PATCH PANELS ARE TO BE LABELED IN CONSECUTIVE ORDER STARTING AT RACK LETTER, PORT 001. FACE PLATE SHALL IDENTIFY RACK LETTER AND PORT NUMBER FOR EACH JACK.
3. LABELING SCHEME SHOWN IS AN EXAMPLE. PROVIDE LABELING OF TELEDATA CABLES, PATCH PANELS, AND JACKS AS DEFINED BY OWNER IN WRITING.



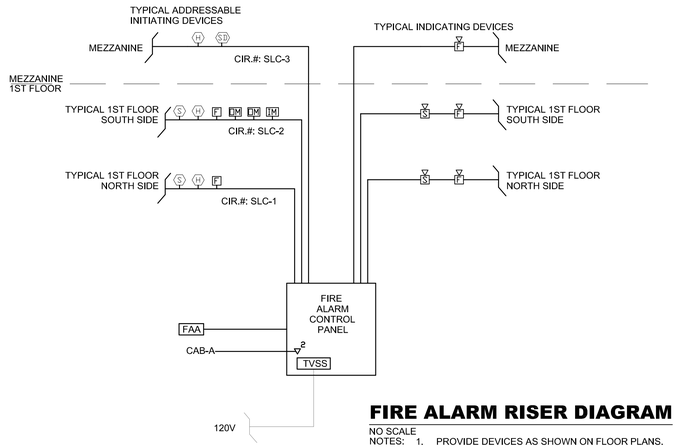
TYPICAL IDF AND MDF

TYPICAL TELEDATA RISER DIAGRAM

NO SCALE

DIAGRAM NOTES

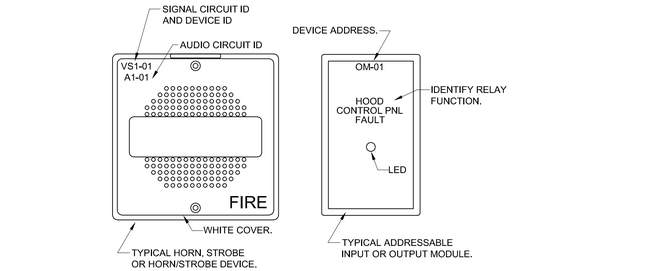
1. FINAL LOCATION OF DATA JACKS AT TELEVISIONS, MONITORS, PROJECTORS, CAMERAS, & OWNER OR ARCHITECTURAL FURNITURE SHALL BE COORDINATED IN THE FIELD WITH ARCHITECT. PROVIDE FINAL APPROVAL BY OWNER FOR DEVICE LOCATIONS PRIOR TO ROUGH-IN OF CONDUIT AND BOXES.
2. PUNCH DOWN TELEPHONE AND DATA OUTLETS THRU CATEGORY 6A PATCH PANELS. PROVIDE ONE SMALL PATCH CABLE BETWEEN PATCH PANEL AND OWNER FURNISHED SWITCHES.
3. INSTALL NEW FIBER CABLES, FIBER PATCH PANELS. NETWORK SWITCHES, CAMERA EQUIPMENT & PATCH CABLES BY OWNER.
4. PROVIDE STANDARD DATA JACK COVERPLATE WITH MOUNTING STUDS TO MATCH EXISTING TELEPHONES, OR AS REQUESTED.
5. PROVIDE VERTICAL GROUND BAR IN CABINET. INSTALL #4 CONDUCTOR FROM GROUND BAR TO BUILDING STRUCTURAL STEEL. BOND CABINET TO PERIMETER GROUND ELECTRODE. BOND EACH POWERED PIECE OF EQUIPMENT IN THE CABINET TO THE GROUND BAR WITH A DEDICATED #12 BONDING CONDUCTOR.

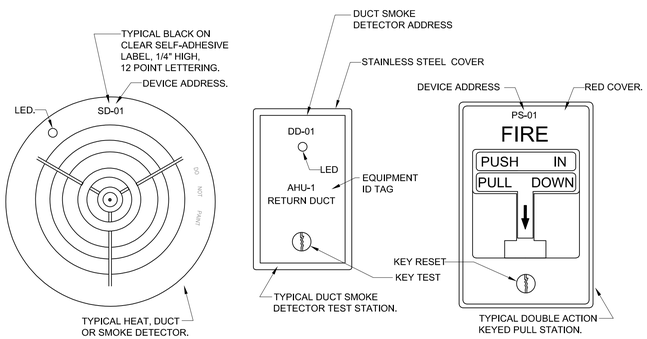


FIRE ALARM RISER DIAGRAM

NO SCALE

NOTES:
1. PROVIDE DEVICES AS SHOWN ON FLOOR PLANS.
2. CABLES SHALL BE PLENUM RATED, SIZE AND TYPE AS RECOMMEND BY MANUFACTURER, UNLESS SPECIFICATION ARE MORE STRINGENT.
3. PROVIDE MONITORING VIA CELLULAR DIAL OUT WITH NETWORK MONITORING AS REDUNDANT BACKUP.

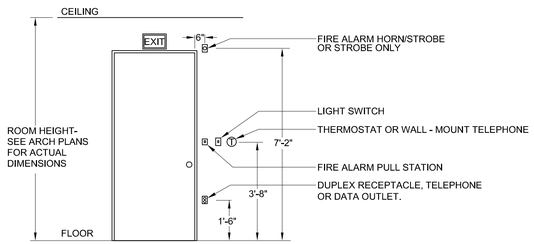




TYPICAL FIRE ALARM DEVICE DETAIL

NOT TO SCALE

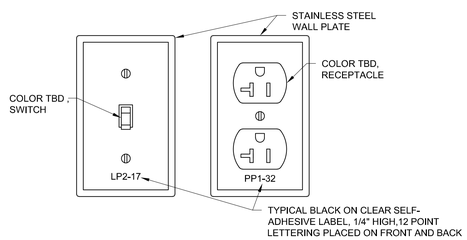
NOTES:
1. IDENTIFY ALL NEW AND EXISTING NON-ADDRESABLE FIRE ALARM DEVICES WITH THE NON-ADDRESS LOOP NUMBER.
2. IDENTIFY ALL NEW AND EXISTING ADDRESSABLE DEVICES WITH DEVICE ADDRESS.
3. INCREASE TEXT SIZE FOR DEVICES LOCATED ABOVE 10' AFF TO 1/2" HIGH 14 POINT LETTERING.



TYPICAL COMMON AREA DEVICE LAYOUT

0 6" 1' 2' 4'

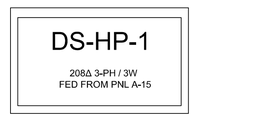
SCALE: 3/8" = 1'-0"

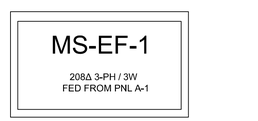


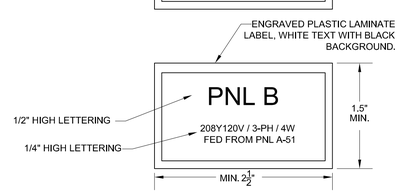
TYPICAL WIRING DEVICE DETAIL

0 1" 2" 3" 6"

Scale: 6" = 1'-0"







TYPICAL EQUIPMENT LABEL DETAIL

NOT TO SCALE

NOTE: IDENTIFY PANELBOARDS, SAFETY SWITCHES, MOTOR STARTERS WITH ENGRAVED LABELS. VOLTAGE AND LOCATION EQUIPMENT IS FED FROM.

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

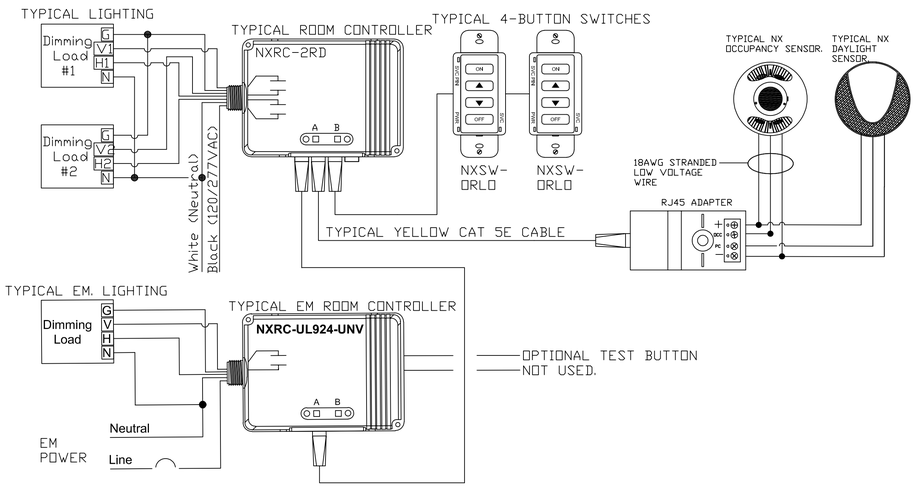
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title: DETAILS

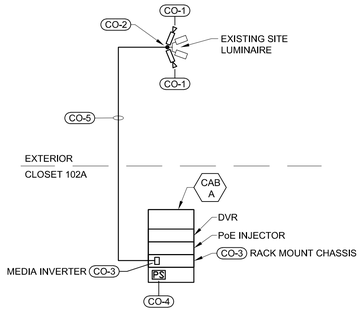
Sheet No. E7.2



TYPICAL ROOM LIGHTING CONTROLS

NO SCALE

NOTES:
1. TYPICAL DEVICES SHOWN ABOVE, PROVIDE ALL DEVICES AND LIGHTING SHOWN ON DRAWINGS.
2. CABLES SHALL BE PLENUM RATED.
3. IN GANG TOILET ROOMS, LOBBY AREA AND THE GYM PROVIDE KEY SWITCHES. WHERE MORE THAN ONE SWITCH IS SHOW IN THE SAME LOCATION, LOCATE SWITCHES UNDER A SINGLE COVERPLATE.



TYPICAL SITE CAMERA WIRING DIAGRAM

NO SCALE

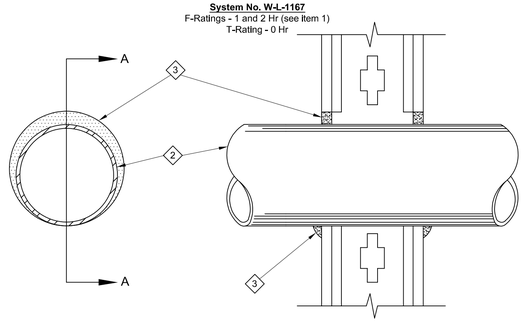
NOTES:
1. BASE BID SHOWN.
2. UNDER ALTERNATE, MAINTAIN CAMERA & MEDIA CONVERTER. PROVIDE NEW FIBER (CO-5) BETWEEN EACH CAMERA AND NVR.

Camera Equipment Schedule

Tag	*Equipment Type	Description	Mounting	Comments
CO-1	Pole Mounted Security Camera	New security camera mounted to existing pole	Arm-mounted to surveillance cabinet	Surveillance cabinet mounted to pole.
	Surveillance Cabinet	8" x 10" NEMA 4X rated IK10 impact-resistant	Mounted to pole	Used to house media converter.
CO-2	OmniConverter Media Converter Model #: 9519B-0-29W	2 Port OmniConverter GHPoEBT/S 2x10/100/1000T HPoEBT/PSE (60W per port) to 100/1000BASE-X SFP ;48VDC Wide Temp (-40 to 60 deg C)	In surveillance cabinet	Provide cat 6A cables between media converter and new cameras. Terminate fiber & power to converter.
CO-3	miConverter Rack Mount Chassis Model #: 1020-1	18-Slot miConverter Powered Chassis Universal 100-240VAC	Mount in CAB-A	Provide (2) 1093-1 blank panels for unused modules.
	miConverter Media Converter Model #: 1219-0-0	miConverter GX; 1000BT RJ45 to 1000B-X SFP, No Pwr	Mount in chassis	Provide cat 6A cable jumper from media converter to switch. Terminate fiber, extend power conductors to power supply.
CO-4	Mean Well 960W Power Supply Model #: 9170-PS-960	Mean Well Single Output Industrial DIN RAIL mount; 180-264VAC input, 254-370VDC Input, 960W , 48VDC output	DIN rail	Mount in back of CAB-A, provide DIN rail terminal blocks for wiring from power supply to media converters.
CO-5	CommScope Powered Fiber Cable Model #: PFC-302012	Hybrid Fiber Cable with Copper, OPC		2-strand, OM3, 2-#12 copper conductors, LC fitting in raceway.

*Basis of design as indicated, or approved equal.

System No. W-L-1167
F-Ratings - 1 and 2 Hr (see Item 1)
T-Rating - 0 Hr



FIRE-RATED PENETRATION DETAIL

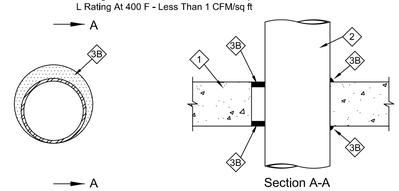
NO SCALE

KEY NOTES

1. Wall Assembly - The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   - A Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-1/2 in. wide by 1-3/8 in. deep channels spaced max 24 in. OC.
   - B Gypsum Board* - The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 14 in. The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is Installed.
2. Through Penetrant - One metallic pipe, conduit or tubing Installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (point contact) to max 1-3/8 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   - A Steel Pipe - Nom 12 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
   - B Iron Pipe - Nom 12 In. diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 In. diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
   - C Conduit - Nom 6 in. diam (or smaller) steel conduit or nom 4 in. diam (or smaller) steel electrical metallic tubing.
   - D Copper Tubing - Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.
   - E Copper Pipe - Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.
3. Fill Void or Cavity Materials* - Caulk - Min 5/8 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. Min 1/2 in. diam bead of caulk applied to the penetrant/wallboard interface at the point contact location on both sides of wall. MINNESOTA MINING & MFG CO - FD-150+

*Bearing the UL Classification Mark

System No. C-AJ-1080
F-Rating - 3 Hr
T-Rating - 0 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft
L Rating At 400 F - Less Than 1 CFM/sq ft



FIRE-RATED PENETRATION DETAIL

NO SCALE

1 Floor or Wall Assembly - Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks* . Max diam of opening is 32 in. See Concrete Block (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2 Through Penetrants - One metallic pipe, conduit or tubing to be centered within the firestop system. The annular space shall range from min 0 in. (point contact) to max 2 in. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   - A Steel Pipe - Nom 30 in. diam (or smaller) Schedule 5 (or heavier) steel pipe.
   - B Iron Pipe - Nom 30 in. diam (or smaller) cast or ductile iron pipe.
   - C Conduit - Nom 4 in. diam (or smaller) electrical metallic tubing or nom 6 in. diam (or smaller) rigid galv steel conduit.
   - D Copper Tubing - Nom 6 in. diam (or smaller) Type M (or heavier) copper tubing.
   - E Copper Pipe - Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.

3 Firestop System - The firestop system shall consist of the following:
   - A Packing Material - (Optional, Not Shown) - Mineral wool batt insulation, polyethylene backer rod or glass fiber batt insulation friction fitted into annular space. Packing material to be recessed from top surface of floor or both surfaces of wall as required to accommodate the required thickness of fill material.
   - B Fill, Void or Cavity Material* - Caulk - Min 1/2 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. At point contact location, apply min 1/4 in. diam bead of sealant at the pipe/concrete interface on the top surface of the floor or both surfaces of wall.
     SPECIFIED TECHNOLOGIES INC - SpecSeal 100, 101, 102, 105, 120 or 129 Sealant

*Bearing the UL Classification Mark

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD -VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title: DETAILS

Sheet No. E7.3

A — 208 Y/120V, 3Ø, 4W — Mech 113

Circuit Num.	Poles	Size	Load (VA)	Description	A	B	C	Description	Load (VA)	Size	Poles	Circuit Num.
1	3	125	11529	DOAS-1 (outdoor HVAC unit)	12537			AHU-1, AHU-2B	1009	20	2	2
3			11529	(Electrical Heating & Cooling)		12537			1009			4
5			11529				14649	DS-HP-1	3120	40	2	6
7	3	15	633	Kitchen Make-Up Air-1 (MAU-1)	3753				3120			8
9			633	(Electrical Heating & Cooling)		2089		DS-HP-3	1456	30	2	10
11			633				2089		1456			12
13	3	20	720	Musco Pole Lights P-01, P-02	3840			DS-HP-4	3120	45	2	14
15			720			3840			3120			16
17			720				2720	Humidifier-H1	2000	25	3	18
19	3	20	360	Musco Pole Lights P-03	2360				2000			20
21			360			2360			2000			22
23			360				2193	HWH-1	1833	20	3	24
25	2	20	1009	AHU-2A & AHU-4	2842				1833			26
27			1009			2842			1833			28
29	3	60	3723	HP-2			4083	Hot water circulation pumps (2)	360	20	1	30
31			3723		3903			Musco Control Panel Power	180	20	1	32
33			3723			9056		Duct Coil DC-1	5333	60	3	34
35	3	20	0	Spare			5333	16kW	5333			36
37			0		5333				5333			38
39			0			5		Integral SPD	5	30	3	40
41	1	20	0	Spare			5	200kA	5			42
43	3	125	0	Spare	5				5			44
45			0			0		Spare	0	30	2	46
47			0				0		0			48
49	3	200	9080	PNL-B	18990			PNL-C	9910	200	3	50
51			9000			19704			10704			52
53			9900				20476		10576			54

Engraved panel label
Totals: 53563 | 52433 | 51548
Metal circuit directory holder. Totals derated: 52668 | 51190 | 50010
Circuit breaker panelboard
Hinged door-in-door cover — Balanced connected load: 437 A
Bolt-on breakers — Balanced derated load: 427 A
600A MLO
NEMA 1, surface-mounted enclosure
25kA SCCR (Minimum)
Ground bar

Fed from ECB-A

B — 208 Y/120V, 3Ø, 4W — General Storage 104

Circuit Num.	Poles	Size	Load (VA)	Description	A	B	C	Description	Load (VA)	Size	Poles	Circuit Num.
1	1	20	720	Recept. - Gym 105	1080			Recept. - Women 106	360	20	1	2
3	1	20	720	Recept. - Gym 105		1080		Recept. - Men 107	360	20	1	4
5	1	20	360	Recept. - Vest. 100, JC 108			1080	Recept. - Multi-Purpose 109	720	20	1	6
7	1	20	720	Recept. - Lobby 101	1260			Recept. - Multi-Purpose 109	540	20	1	8
9	1	20	540	Recept. - Office 102		1260		Recept. - Maker Space 110	720	20	1	10
11	1	20	720	Recept. - Office 102			1440	Recept. - Maker Space 110	720	20	1	12
13	1	20	720	Recept. - 102B, 105A	1260			Recept. - Exterior	540	20	1	14
15	1	20	540	Recept. - Mech 112		900		Recept. - Mech 113	360	20	1	16
17	1	20	360	Recept. - Multi-Purpose 109			720	Recept. - Gym Storage 105B	360	20	1	18
19	1	20	360	Recept. - Multi-Purpose 109	720			E.W.C.s Vestibule 100 & Lobby 101	360	20	1	20
21	1	20	180	Recept. - Maker Space 110		1680		Electric Wall Heaters - EWH-1	1500	20	2	22
23	1	20	540	Recept. - Restroom 103, Stor. 104			2040		1500			24
25	1	20	180	Recept. - Gen Stor 104	1680			Electric Wall Heaters - EWH-2	1500	20	2	26
27	1	20	180	Recept. - Gen Stor 104		1680			1500			28
29	1	20	360	Hand dryer - Restroom 103			1860	Electric Wall Heaters - EWH-3	1500	20	2	30
31	1	20	360	Hand dryer - Mens 107	1860				1500			32
33	1	20	360	Hand dryer - Womens 106		1860		Electric Wall Heaters - EWH-4	1500	20	2	34
35	1	20	360	Recept. - Maker Space 110			1860		1500			36
37	1	20	360	Recept. - Maker Space 110	960			Fire alarm panel - Gen. Stor 104	600	20*	1	38
39	1	20	360	Recept. - Maker Space 110		540		Inverter INV-H - Gen. Stor 104	180	20*	1	40
41	1	20	0	Spare			900	Gym - Powered Backstop	900	20	1	42
43	1	20	260	Lts - Mech 112, & Mech 113	260			Spare	0	20	1	44
45	1	20	0	Spare		0		Spare	0	20	1	46
47	1	20	0	Spare			0	Spare	0	20	1	48
49	1	20	0	Spare	0			Spare	0	20	1	50
51	1	20	0	Spare		0		Spare	0	20	1	52
53	1	20	0	Spare			0	Spare	0	20	1	54

*Provide handle lock, label lock
Engraved panel label — Totals: 9080 | 9000 | 9900
Metal circuit directory holder. Totals derated: 8407 | 8327 | 9227
Circuit breaker panelboard
Hinged door-in-door cover — Balanced connected load: 78 A
Bolt-on breakers — Balanced derated load: 72 A — reduced receptacle load based on NEC Table 220.44
225A MLO
NEMA 1 surface-mounted enclosure — **Bold description and load** indicates existing circuit.
10kA SCCR — Extend and refeed existing circuit from new breaker.
Ground bar

Fed from PNL-A

C — 208 Y/120V, 3Ø, 4W — General Storage 104

Circuit Num.	Poles	Size	Load (VA)	Description	A	B	C	Description	Load (VA)	Size	Poles	Circuit Num.
1	1	20	1100	Reach-In Refrigerator	1100			Spare	0	20	1	2
3	1	20	1000	Reach-In Freezer		1000		Spare	0	20*	1	4
5	1	20	540	General Purpose Receptacles			720	Dishwasher	180	20	1	6
7	1	20	180	General Purpose Receptacles	360			General Purpose Receptacles	180	20*	1	8
9	1	20	180	General Purpose Receptacles		180		Spare	0	20*	1	10
11	1	20	180	General Purpose Receptacles			1020	Recept. Kitchen	840	20	1	12
13	1	20	180	General Purpose Receptacles	4713			Range	4533	*50	3	14
15	3	15	900	Kitchen Fan		5433		*Circuit thru shunt trip ECB-RNG*	4533			16
17			900	3/4hp			5433	*shunt control from hood (3 #12 in 3/4"C.)*	4533			18
19			900		900			Spare	0	*50	3	20
21	1	20	170	Lts - Rms 102, 103, 104, 102A, 105A		170			0			22
23	1	20	225	wreadsfd			225		0			24
25	1	20	1152	Lights - Gym 105	1252			Lights - Exterior Sconce	100	20	1	26
27	1	20	1638	Lights - Multi-purpose 109		2430		Food Waste Disposer	792	*20	3	28
29	1	20	945	Lights - Rms 109A, 110 & 111			1737	2hp	792			30
31	1	20	242	Lights - Rms 105B, 106, 107, 108	1034				792			32
33	1	20	120	**Existing Exterior Security Lighting**		940		Kitchen hood	820	20	1	34
35	1	20	120	**Existing Exterior Security Lighting**			940	Kitchen hood	820	20	1	36
37	1	20	120	**Existing Exterior Security Lighting**	300			Kitchen hood	180	20	1	38
39	2	20	120	**Existing Exterior Security Lighting**		300		Kitchen hood Ansul system	180	20	1	40
41	1	20	0	Spare			0	Spare	0	20	1	42
43	1	20	0	Spare	0			Spare	0	20	1	44
45	1	20	0	Spare		0		Spare	0	20	1	46
47	2	20	125	**Existing Exterior Sports Lighting**			250	**Existing Exterior Sports Lighting**	125	20	2	48
49			125	*See new/Musco lighting loads in PNL A*	250			*See new/Musco lighting loads in PNL A*	125			50
51	2	20	125	**Existing Exterior Sports Lighting**		250		**Existing Exterior Sports Lighting**	125	20	2	52
53			125	*See new/Musco lighting loads in PNL A*			250	*See new/Musco lighting loads in PNL A*	125			54

*GFI type breaker for kitchen equipment.
Engraved panel label — Totals: 9910 | 10704 | 10576 — *GFI type breaker
Metal circuit directory holder. Totals derated: 9888 | 10134 | 9712
Circuit breaker panelboard
Hinged door-in-door cover — Balanced connected load: 87 A
Bolt-on breakers — Balanced derated load: 82 A — Reduced kitchen and receptacle loads based on NEC Table 220.44 & Table 220.56
225A MLO
NEMA 1 surface-mounted enclosure — **Bold description and load** indicates existing circuit.
10kA SCCR — Extend and refeed existing circuit from new breaker.
Ground bar

Fed from PNL-A

Lighting Control Panel LCA

Relay	Circuit	Load (VA)	Zone	Description	*Initial Time Schedule	Notes
1	C-47,49	2000		Existing Exterior Sports Lighting	Manual On, Off 10PM	
2	C-48,50	2000		Existing Exterior Sports Lighting	Manual On, Off 10PM	
3	C-51,53	2000		Existing Exterior Sports Lighting	Manual On, Off 10PM	
4	C-52,54	2000		Existing Exterior Sports Lighting	Manual On, Off 10PM	
5	C-33	120		Existing Exterior Security Lighting	Manual On, Off 10PM	Track Lights
6	C-35	120		Existing Exterior Security Lighting	Manual On, Off 10PM	Track Lights
7	C-37	120		Existing Exterior Security Lighting	Manual On, Off 10PM	Playground Lights
8	C-39	120		Existing Exterior Security Lighting	Manual On, Off 10PM	Playground Lights
9				Spare		
10				Spare		
11				Spare		
12				Spare		

*Time schedule shown for reference only. Provide Owner furnished time schedule.

Luminaire Schedule

1. All luminaires must be listed and labeled by an NRTL, as required by the NEC.

Type	Manuf.	Model	Mounting	Description	Source	Color	CRI	Lumens	Lumen Maint	Driver	Voltage	VA	W
**A4	Axis	SLIM 2xSurroundLite	Pendant	4' L x 8" W, direct/indirect linear fixture, clear top cover with batwing distribution, 2 circuits for direct/indirect, frosted lower lens, mounting height and mounting hardware as coordinated with architectural drawings and architect, aluminum or other standard finish selection by Architect, grey cord, stainless steel adjustable cable, sloped ceiling mounting hardware.	LED	3500K	80	4000 up / 3000 dwn	L70 60,000hr	0-10V dim	120-277V	91	79.5
	Litecontrol	SAE104											
**A8	Axis	SLIM 2xSurroundLite	Pendant	8' L x 8" W, Direct/indirect linear single section fixture, clear top cover with batwing distribution, 2 circuits for direct/indirect, frosted lower lens, mounting height and mounting hardware as coordinated with architectural drawings and architect, aluminum or other standard finish housing and canopy cover selection by Architect, grey cord, stainless steel adjustable cable, sloped ceiling mounting hardware.	LED	3500K	80	8000 up / 6000 dwn	L70 60,000hr	0-10V dim	120-277V	183	159
	Litecontrol	SAE104											
**B	Lithonia	CSS	Surface	4' single strip LED fixture, high gloss baked white enamel finish, diffused acrylic lens, wire guard, welded end caps, adjustable aircraft cable hangers, 131L/W	LED	3500K	80	4,732	L70 60,000hr	0-10V dim	120-277V	41	36
	Columbia	LCL											
	Satco	NUVO											
**C	1st Source	LHB2	Surface (see description)	2'x2' LED gym linear high bay fixture, white aluminum housing, coated white wire cage, diffused acrylic lens, safety cable for luminaire and cage secured to structure, provide surface mounted fixture secured to slotted steel supports between joists or pendant mounted fixture with adjustable aircraft cable at 4 points to building structure/support hardware above as directed by architect	LED	3500K	80	15,528	L70 60,000hr	0-10V dim	120-277V	144	125
	Columbia	CLB											
	Lithonia	IBE											
**D1	Gotham	EVO45Q	Recessed	4" architectural square downlight, wide distribution, semi-specular reflector finish, new construction housing, custom RAL color flange, wet location under canopy listed, bar hangers supported to structure	LED	3500K	80	1000	L80 60,000hr	0-10V dim	120-277V	15	12
	Kirlin	LRC-04CDN											
	Lightolier	C4SDL (4S)											
	Prescolite	LDSQ4C											
*D2	Gotham	EVO45Q	Recessed	4" architectural square downlight, medium distribution, semi-specular reflector, custom RAL color flange, wet location under canopy listed, gasketed, remote driver, new construction housing	LED	3500K	80	1,500	L80 60,000hr	0-10V dim	120-277V	24	19
	Kirlin	LRC-04CDN											
	Lightolier	C4SDL (4S)											
	Prescolite	LDSQ4C											
*E	Emergi-Lite	Preceptor	Surface	Single-faced exit sign, universal mount, white die-cast aluminum housing or as directed, red lettering, concealed chevron knockouts, AC-only, white wire guard option for signs located in the gym	LED	-	-	-	-	-	120-277V	3	3
	Lithonia	LE											
	Sure-Lites	CX											
E2	Emergi-Lite	Preceptor	Surface	Double-faced exit sign, universal mount, white die-cast aluminum housing or as directed, red lettering, concealed chevron knockouts, AC-only, white wire guard option for signs located in the gym	LED	-	-	-	-	-	120-277V	3	3
	Lithonia	LE											
	Sure-Lites	CX											
F	Axis	Beam 4	Recessed	Linear with flush diffuse lens, 4" aperature, length, lumens, and drivers as noted below, direct distribution, flat end caps, single circuit, visible flange mounting unless directed otherwise by Architect, custom color finish as directed by Architect, 102L/W, threaded rod support from building structure above	LED	3500K	80	-	L70 60,000hr	0-10V dim	120-277V	-	-
	Finelite	HP-4											
	Focal Point	Seem 4											
F6	Axis	Beam 4	Recessed	Luminare type F, 500L/FT, 6' length. Provide 2 additional full length lens as attic stock.	LED	3500K	80	3,000	L70 60,000hr	0-10V dim	120-277V	30	29.4
	Finelite	HP-4											
	Focal Point	Seem 4											
*F8	Axis	Beam 4	Recessed	Luminare type F, 725L/FT, 8' length. Provide 2 additional full length lens as attic stock.	LED	3500K	80	5,800	L70 60,000hr	0-10V dim	120-277V	60	56.8
	Finelite	HP-4											
	Focal Point	Seem 4											
F10	Axis	Beam 4	Recessed	Luminare type F, 500L/FT, 10' length, 1 driver for normal lighting (50% output) and 1 driver for emergency lighting (50% output). Provide 2 additional full length lens as attic stock.	LED	3500K	80	5,000	L70 60,000hr	0-10V dim	120-277V	50	49
	Finelite	HP-4											
	Focal Point	Seem 4											
*F12	Axis	Beam 4	Recessed	Luminare type F, 500L/FT, 12' length. Provide 2 additional full length lens as attic stock.	LED	3500K	80	6,000	L70 60,000hr	0-10V dim	120-277V	60	58.8
	Finelite	HP-4											
	Focal Point	Seem 4											
*G	Lithonia	WDGE1	Surface	LED architectural wall sconce, rectilinear design, visual comfort wide throw distribution, 0-10V dimming standard color selection by Architect, B.(0) U.(0) G.(0) rating, mounting height as coordinated	LED	4000K	80	1,200	L70 60,000hr	0-10V dim	120-277V	13	10
H	Emergi-Lite	EM1U-1000-4-LD-AD	Surface	1000W high capacity mini inverter, high efficiency sine wave inverter, temperature compensated charger, replacable charger output fuse protection, low battery voltage disconnect, UL 924 listed, advanced diagnostics - audible, 4-ouputs, 12V valve regulated lead-calcium (VRLA) batteries, see INV-H schedule	-	-	-	-	-	-	120-277V	115	100
J12	Axis		Pendant	12' L x 3" W, direct/indirect linear consisting of 2 6' sections joined, clear high efficiency top cover; 2 circuits for direct/indirect, high efficiency lower lens, mounting height and mounting hardware as coordinated with architectural drawings and architect, aluminum or other standard finish housing and canopy cover selection by Architect, grey cord, stainless steel adjustable cable, hard sloped ceiling mounting hardware suiteable for ceiling shown on architectural drawings	LED	3500K	80	9000 dwn / 6000 up	L70 60,000hr	0-10V dim	120-277V	132	115.2
	Pinnacle	EX3DI-HE-finish-FSD-2-xx											

* Provide 2 additional luminaires as attic stock
** Provide 3 additional luminaires as attic stock
See architectural drawings for luminaire mounting heights.

INV H — 120 /120V, 1000W — General Storage 104

Circuit Num.	Poles	Size	Load (VA)	Description	Phase	Description	Load (VA)	Size	Poles	Circuit Num.
1	1	5	164	Exit Signs and Emergency Lights - Lobby	346	Emergency Light - Mult-purpose 109	182	20	1	2
3	1	20	288	Emergency Light - Gym 105	343	Emergency Light - Restrooms 106,107	55	20	1	4
5	1	20	150	Emergency Light - Lobby 101, Vest 100	224	Emergency Light - Exterior	74	20	1	6
7	1	20	0	Spare	0	Spare	0	20	1	8

Engraved label — Totals: 913 — See type H on Luminaire Schedule for additional requirements
Circuit directory — Balanced connected load: 8 A — Emergency wiring shall be #10 AWG
1000VA inverter
20A MLO — Provide 90 minutes of illumination at 1000VA output
NEMA 1 wall/surface-mounted enclosure — Emergency wiring shall not share common
10kA SCCR — raceways and boxes with normal wiring
Ground bar

Fed from PNL B

Room Controller Schedule

Room Name	Number of 0-10V Relays (Normal/Emergency)	Zones	Manual Controls	Automatic Controls	Comments
Multi-Purpose 109	2 / 1	Z2E	On/off/raise/lower	Motion sensors on/off	Quick dim, UL924 emergency override, automatic on/off, 15 minute off delay.
Maker Space 110	2 / 0	Z2	On/off/raise/lower	Motion sensors on/off	Quick dim, automatic on/off, 15 minute off delay.
Community Kitchen 111	2 / 0	Z2	On/off/raise/lower	Motion sensors on/off	Quick dim, automatic on/off, 15 minute off delay.
Office 102	2 / 0	Z1	On/off/raise/lower	Motion sensors on/off	Quick dim, automatic on/off, 15 minute off delay.
All-Gender Restroom 103	1 / 1	Z1	Key switch	Motion sensors on/off	Quick dim, automatic on/off, 15 minute off delay.
Women 106	1 / 1	Z1	Key switch	Motion sensors on/off (Ultrasonic)	Quick dim, UL924 emergency override, automatic on/off, 30 minute off delay.
Men 107	1 / 1	Z1	Key switch	Motion sensors on/off (Ultrasonic)	Quick dim, UL924 emergency override, automatic on/off, 30 minute off delay.
Lobby 101	1 / 1	Z2	Key switch	Motion sensors on/off	Normal: automatic on/off, 30 minute off delay. Em: on 5am to 10pm (sensor override) and automatic on/off, 30 minute off delay.

See lighting floor plans and electrical notes for device quantities, locations and additional requirements. Provide attic stock as follows: 2 of each switch, sensor and controller.
Power and low-voltage terminations shall be located a junction box or enclosure either in accessible above ceiling space, or in a storage room. Each controller and junction box shall have printed circuit labels and r
Zones
Z1 = 1 direct lighting zone.
Z2E = 1 indirect lighting zone (normal lighting) & 1 direct lighting zone (normal and emergency lighting).
Z2 = 1 indirect lighting zone & 1 direct lighting zone.

Motor Starter Schedule

Tag	Type	Size	Voltage	Fuses	Enclosure	Phase Wires	Ground	Conduit	Auto. Control	Notes
MS-EF-1	FVNR Combination	NEMA 0	208Δ	4.5A	NEMA 1	3#10	#10	.75"	Hood Controls	CPT, HOA switch, PTT LED run indicator lamp, over/under voltage relays, phase loss relay, electronic overload, aux contact
Notes 1	Provide class R fuse rejection kits, blown fuse indication, 3 spare fuses, and engraved label.									

Enclosed Circuit Breaker Schedule

Tag	Voltage	Size	Trip	SCCR Rating	Enclosure	Phase Wires	Ground	Conduit	Comments
ECB-A	208Y/120V	600A	600A	25k AIC	NEMA 3R	See Single Line Diagram - Power			Service entrance listed with bonding termination.
ECB-RNG	208Y/120V	60A	50A	10k AIC	NEMA 1	See Kitchen Electrical Equipment Schedule			Range, shunt trip type, shunt trip voltage as coordinated. control via the hood.
Notes: 1	Breaker to be capable of accepting a padlock in both on and off positions. NEMA 3R covers shall have hasp lock used to prevent unauthorized access and engraved label on cover.								
2	Provide ground lugs and neutral kit.								
3	Provide thermal magnetic breaker with adjustable instantaneous trip setting.								

Disconnect Switch Schedule

Tag	Voltage	Size	Fuses	Enclosure	Phase Wires	Ground	Conduit	Comments
DS-AHU-3	208V	30A	NF	NEMA 1	3#10	#10	3/4"	Provide wiring from HP-3 thru DS-AHU-3 to AHU-3.
DS-DC-1	208V	60A	NF	NEMA 1	3#6	#8	1"	Disconnect by HC. EC to provide circuiting through disconnect to equipment
DS-DOAS-1	208Δ	200A	125A	NEMA 3R	3#1	#6	1.5"	Disconnect by HC. EC to provide circuiting through disconnect to equipment
DS-MAU-1	208Δ	30A	8A	NEMA 1	3#12	#12	0.75	Disconnect by HC. EC to provide circuiting through disconnect to equipment
DS-HP-1	208V	60A	40A	NEMA 3R	2#8	#10	1"	
DS-HP-2	208Δ	60A	60A	NEMA 3R	3#6	#8	1"	
DS-HP-3	208V	30A	30A	NEMA 3R	2#10	#10	.75"	
DS-HP-4	208V	60A	45A	NEMA 3R	2#8	#10	.75"	
Notes: 1	For all switches, provide hasp for padlocking in both on and off positions and engraved label on face of disconnect, or HVAC equipment cover.							
2	For all switches, provide ground lugs.							
3	For all outdoor switches, provide watertight threaded conduit hub kit.							
4	For fused switches, provide class R fuse rejection kit.							
5	For all fuses, verify fuse sizes match equipment nameplate and fuses have blown fuse indication.							
6	For all switches, provide clear shield kits with probe holes for user testing over live terminations.							

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD –VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101–27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date: 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JCR | Appd.: MCD

Sheet Title: SCHEDULES

Sheet No. E8.1

GENERAL PLUMBING NOTES

1. PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN THIS SECTION OF WORK IN ACCORDANCE WITH ALL APPLICABLE CODES.
2. THE PLUMBING DRAWINGS SHALL BE CONSIDERED AS BEING DIAGRAMMATIC AND ARE NOT TO BE SCALED FOR THE ACCURATE CUTTING OF PIPE OR ITS EXACT PLACEMENT, BUT THEY SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHER TRADES WILL PERMIT. BEFORE ANY PIPING IS INSTALLED, CONFER WITH ALL OTHER CONTRACTORS IN ORDER TO ESTABLISH THE LOCATIONS OF THEIR PIPING, CONDUIT, DUCTWORK, GRILLES, FOUNDATIONS, STRUCTURAL STEEL, LIGHTING FIXTURES AND OTHER EQUIPMENT SO AS TO AVOID INTERFERENCE. FAILURE TO COORDINATE SHALL NOT RESULT IN ANY ADDITIONAL EXPENSE TO THE OWNER.
3. ALL FIXTURES SHALL BE COMPLETE AND INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAILPIECES, ESCUTCHEONS, ETC. TRAPS FOR ALL LAVATORIES AND SINKS SHALL BE REMOVABLE. LOCATE VALVES IN A READILY ACCESSIBLE LOCATION. ALL EXPOSED WASTE AND SUPPLY PIPING LOCATED IN FINISHED AREAS SHALL BE CHROME PLATED BRASS.
4. REFER TO THE RISER DIAGRAMS FOR ALL PIPE SIZES AND PIPING NOT SHOWN ON THE PLANS. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL WASTE PIPING BELOW GRADE SHALL BE A MINIMUM OF 2" IN SIZE.
5. SECURE ALL PERMITS, INSPECTION CERTIFICATES, METER DEPOSITS, TAPS AND TAP FEES, ETC., AND PAY ALL CHARGES CONNECTED WITH SAME.
6. ALL MATERIALS SHALL BE NEW AND SHALL FIT THE SPACE AVAILABLE. VERIFY DIMENSIONS AT SITE.
7. ALL PIPING, APPARATUS, EQUIPMENT, ETC. SHALL BE PROPERLY SUPPORTED, BRACED VERTICALLY AND HORIZONTALLY IN ACCORDANCE WITH APPLICABLE CODES AND AS REQUIRED TO PREVENT EXCESSIVE MOVEMENT DURING SEISMIC CONDITIONS.
8. ALL VALVES, CLEANOUTS, ETC., SHALL BE LOCATED AND INSTALLED TO PERMIT ACCESS FOR SERVICE WITHOUT DAMAGE TO BUILDING OR FINISHED MATERIALS.
9. PROVIDE CLEANOUTS ON ALL ACCESSIBLE TRAPS, AT THE BASE OF ALL SOIL/WASTE STACKS AND RAINWATER CONDUCTORS, AT EACH CHANGE OF DIRECTION OF PIPING GREATER THAN 45 DEGREES AND LOCATED AT INTERVALS NOT TO EXCEED THE MAXIMUM PERMITTED BY THE APPLICABLE PLUMBING CODE AND AS INDICATED ON THE DRAWINGS.
10. STERILIZE NEW DOMESTIC WATER PIPING AND PORTIONS OF THE EXISTING PIPING THAT HAVE BEEN ALTERED, EXTENDED, OR REPAIRED PRIOR TO USING. COMPLY WITH PURGING AND DISINFECTING PROCEDURES PRESCRIBED BY AUTHORITIES HAVING JURISDICTION OR, IN THE ABSENCE OF PRESCRIBED METHOD, THE PROCEDURES DESCRIBED IN EITHER AWWA C651 OR AWWA C652, OR AS DESCRIBED IN THE APPLICABLE PLUMBING CODE. FURNISH STERILIZATION REPORT TO ENGINEER UPON COMPLETION.
11. ALL DOMESTIC WATER PIPING SHALL BE HUNG LEVEL WITHOUT PITCH.
12. COPPER PIPING SHALL BE PROTECTED AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON IRON TRAPEZE HANGERS WITH OTHER PIPING, SATISFACTORY AND PERMANENT ELECTROLYTIC ISOLATION MATERIAL SHALL PREVENT CONTACT WITH OTHER METALS.
13. WATER PIPING SHALL NOT BE RUN IN AREAS SUBJECT TO FREEZING TEMPERATURES. WATER PIPING IN EXTERIOR WALLS SHALL BE RUN ON CONDITIONED SIDE OF THE INSULATION.
14. ALL WATER PIPING SHALL BE INSULATED AND ALL WATER PIPING INSTALLED ABOVE THE CEILING SHALL BE BELOW THE BUILDING INSULATION.
15. PROVIDE WATER HAMMER ARRESTERS AS REQUIRED AND AS SHOWN ON THE DRAWINGS.
16. PROVIDE DRAIN VALVES AT ALL LOW POINTS OF DOMESTIC WATER PIPING SYSTEMS FOR COMPLETE DRAINAGE AND INDICATE LOCATION OF SAME ON RECORD DRAWINGS.
17. PROVIDE VACUUM BREAKERS AS REQUIRED BY CODE.
18. ALL PLUMBING FIXTURES MUST BE VENTED IN ACCORDANCE WITH APPLICABLE PLUMBING CODE INCLUDING LOCAL CODES.
19. REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, FIXTURES, WALL DIMENSIONS, ETC.
20. THE ARCHITECTURAL DRAWINGS, INCLUDING INTERIOR ELEVATIONS, SHALL GOVERN THE ARRANGEMENT, LOCATION, AND MOUNTING HEIGHTS OF ALL FIXTURES AND EQUIPMENT, BUT NOT TO THE EXTENT OF PERMITTING ANY OMISSIONS OF FIXTURES OR EQUIPMENT SHOWN ON THE PLUMBING DRAWINGS. ANY DISCREPANCY BETWEEN THE DRAWINGS, OR BETWEEN THE DRAWINGS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND ENGINEER.
21. ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE SEALED WITH FIRE RESISTANT CAULKING/MATERIALS.
22. COORDINATE FINAL FLOOR DRAIN LOCATIONS WITH ALL EQUIPMENT CONCRETE PADS, TOILET ROOM PARTITIONS, FURNITURE, ETC. OBTAIN EXACT LOCATIONS FROM ALL OTHER CONTRACTORS PRIOR TO INSTALLING DRAINS.
23. CAULK AROUND ALL PLUMBING FIXTURES INSTALLED. CAULK SHALL BE NON-HARDENING, NON-YELLOWING, MILDEW RESISTANT SILICONE AND IN A COLOR SELECTED BY THE ARCHITECT.
24. ANY REFERENCE TO "GC" OR "GENERAL CONTRACTOR" SHALL MEAN THE APPROPRIATE GENERAL TRADES CONTRACTOR. THIS REFERENCE IS NOT TO OUTLINE WORK AMONG GENERAL TRADES CONTRACTORS, BUT TO NOTE WHAT WORK IS NOT A PART OF THE PLUMBING CONTRACT.
25. ALL POTABLE WATER PIPING, DEVICES AND EQUIPMENT SHALL BE NSF-61 COMPLIANT.
26. NO DEAD-LEG SUPPLY (3X PIPE DIA. MAXIMUM) SHALL BE IN PLACE UPON COMPLETION OF PROJECT.
27. ACCESS TO BOTH EXISTING AND NEW VALVES AND TO EQUIPMENT WHICH WILL REQUIRE ROUTINE MAINTENANCE WILL BE THRU ACOUSTIC CEILINGS WHEREVER POSSIBLE. LOCATE VALVES AND EQUIPMENT TO FACILITATE SUCH ACCESS. WHERE ACCESS CANNOT BE GAINED THRU SUSPENDED CEILINGS, GC IS TO PROVIDE ACCESS PANELS OR DOORS FLUSH WITH CEILING.

PLUMBING SYMBOLS

DOMESTIC COLD WATER	BACKFLOW PREVENTER
DOMESTIC HOT WATER	BACKWATER VALVE
DOMESTIC HOT WATER RETURN	BALL/BUTTERFLY VALVE
EXIST DOMESTIC COLD WATER	GATE VALVE
EXIST DOMESTIC HOT WATER	GLOBE VALVE
EXIST DOMESTIC HOT WATER RETURN	CHECK VALVE
TW — TEPID WATER	SOLENOID VALVE
SANITARY/WASTE UNDERGROUND	BALANCING VALVE WITH MEMORY STOP
SANITARY/WASTE ABOVEGROUND	PRESSURE TEMPERATURE RELIEF VALVE
EXIST SANITARY/WASTE UNDERGROUND	MIXING VALVE
EXIST SANITARY/WASTE ABOVEGROUND	CIRCUIT SOLVER THERMOSTATIC RECIRCULATION VALVE
RW — RAIN/STORM WATER UNDERGROUND	GAS SHUT-OFF VALVE
RW — RAIN/STORM WATER ABOVE GROUND	WATER HAMMER ARRESTER
ERW — EXIST RAIN/STORM WATER UNDERGROUND	STRAINER
ERW — EXIST RAIN/STORM WATER ABOVEGROUND	UNION
VENT	THERMOMETER
G — GAS	PRESSURE GAUGE
EG — EXIST GAS	PRESSURE REGULATOR
AT — AIRTIGHT CONDUIT	PRESSURE REDUCING VALVE
GW — GREASE WASTE UNDERGROUND	WALL HYDRANT
GW — GREASE WASTE ABOVEGROUND	FLOOR CLEANOUT
AV — ACID VENT	PLUG CLEANOUT
TP — TRAP PRIMER	PIPE CAP
CA — COMPRESSED AIR	PIPE RISE
MA — MEDICAL AIR	PIPE DROP
OX — OXYGEN	DIRECTION OF FLOW
VAC — VACUUM	EXPANSION JOINT
N2O — NITROUS OXIDE	FLEXIBLE CONNECTION
WAGD — WASTE ANESTHESIA GAS DISPOSAL	MOMENT GUIDE
N — NITROGEN	PIPE ANCHOR
CO2 — CARBON DIOXIDE	SUPPORT CURB
DE — DEIONIZED WATER	SUPPORT CURB W/ANCHOR
AC — ACETYLENE	ROOF DRAIN
AR — ARGON	FLOOR DRAIN
LCW — LAB COLD WATER	FLOOR SINK
	AIR STATION

PLUMBING ABBREVIATIONS

AD	AREA DRAIN	INSUL	INSULATION
AFG	ABOVE FINISHED GRADE	INT	INTERIOR
AFR	ABOVE FINISHED ROOF	INV	INVERT
AV	ACID VENT	IW	INDIRECT WASTE
AW	ACID WASTE	KW	KILOWATT
BFG	BELOW FINISHED GRADE	LAV	LAVATORY
BFP	BACKFLOW PREVENTER	LBS	POUNDS
BLW	BELOW	LMB	LAUNDRY MACHINE BOX
BOP	BOTTOM OF PIPE	MFG	MANUFACTURER
BOTT	BOTTOM	MB	MOP BASIN
BTUB	BATHTUB	MBH	1,000 BTU
CA	COMPRESSED AIR	MV	MIXING VALVE
CD	CONDENSATE DRAIN	OD	OUTSIDE DIAMETER
CFH	CUBIC FEET PER HOUR	ORD	OVERFLOW ROOF DRAIN
CIP	CAST IRON PIPE	P	PRESSURE GAUGE
CO	CLEAN OUT	PD	PRESSURE DROP
CW	COLD WATER	PRV	PRESSURE REDUCING VALVE
DF	DRINKING FOUNTAIN	PSIG	POUNDS PER SQUARE INCH GAUGE
DIP	DUCTILE IRON PIPE	RCP	REINFORCED CONCRETE PIPE
DS	DOWNSPOUT	RD	ROOF DRAIN
DSN	DOWNSPOUT NOZZLE	RP	RECIRCULATING PUMP
EEW	EMERGENCY EYEWASH	RPM	REVOLUTIONS PER MINUTE
ESH	EMERGENCY SHOWER	RWC	RAINWATER CONDUCTOR
ESE	EMERGENCY SHOWER/EYEWASH	S	SOIL LINE/STACK
EWC	ELECTRIC WATER COOLER	SAN	SANITARY SEWER
EXT	EXTERIOR	SK	SINK
FD	FLOOR DRAIN	SH	SHOWER
FDN	FOUNDATION	SI	SOLIDS INTERCEPTOR
FS	FLOOR SINK	SS	SERVICE SINK
FT	FEET	T	THERMOMETER
FT HD	FEET OF HEAD	TD	TRENCH DRAIN
FTG	FOOTING	TW	TEPID WATER
GALV	GALVANIZED	UR	URINAL
GH	GROUND HYDRANT	V	VENT
GI	GREASE INTERCEPTOR	VER	VERTICAL
GS	GREASE SEPARATOR	VTR	VENT THRU ROOF
GSV	GAS SOLENOID VALVE	W	WASTE
HB	HOSE BIBB	WC	WATER CLOSET
HOR	HORIZONTAL	WCO	WALL CLEAN OUT
HTG	HEATING	WF	WASHFOUNTAIN
HW	HOT WATER	WH	WALL HYDRANT
HWH	HOT WATER HEATER	WHA	WATER HAMMER ARRESTER
HWR	HOT WATER RETURN	WSV	WATER SOLENOID VALVE
ID	INSIDE DIAMETER		

COMMON ABBREVIATIONS

A/E	ARCHITECT/ENGINEER	HC	HVAC CONTRACTOR
AB CLG	ABOVE CEILING	HCP	HANDICAPPED
ABV	ABOVE	HGT	HEIGHT
AFF	ABOVE FINISHED FLOOR	HR	HOUR
AFI	ARC-FAULT INTERRUPTER	IR	INFRARED
AFR	ABOVE FINISHED ROOF	JB	JUNCTION BOX
ALT	ALTERNATE	KES	KITCHEN EQUIPMENT SUPPLIER
ATS	AUTOMATIC TRANSFER SWITCH	LV	LOW-VOLTAGE
BFC	BELOW FINISHED CEILING	MC	MECHANICAL CONTRACTOR
C/G	COUNTERTOP GFI	MCA	MINIMUM CIRCUIT AMPACITY
CD	CORD DROP	MOCP	MAXIMUM OVERCURRENT PROTECTION
CL	CENTERLINE	MT	MULTITECHNOLOGY
CLG	CEILING	MO	MICROWAVE OVEN
CM	CEILING MOUNTED	NA	NOT APPLICABLE
COL	COLUMN	NE	NORMAL/EMERGENCY (NORMALLY ON)
CT	COUNTERTOP HEIGHT-44" AFF UNO OR CURRENT TRANSFORMER	NIC	NOT IN CONTRACT
CR	CORD REEL	NTS	NOT TO SCALE
DBF	DOWN BELOW FLOOR	OFCI	OWNER FURNISHED-CONTRACTOR INSTALLED
DET	DETAIL	PC	PLUMBING CONTRACTOR
DIA	DIAMETER	PIR	PASSIVE INFRARED
DIM	DIMENSION	REC	RECESSED
DL	DOOR LOUVER	SE	SERVICE ENTRANCE
DN	DOWN	SECT	SECTION
DW	DISHWASHER	SHT	SHEET
DWG	DRAWING	SIM	SIMILAR
EC	ELECTRICAL CONTRACTOR	SPD	SURGE PROTECTION DEVICE
EL	ELEVATION	SPEC	SPECIFICATION
ELEV	ELEVATOR	SS	SERVICE SINK
EMER	EMERGENCY	STD	STANDARD
EO	EMERGENCY ONLY (NORMALLY OFF)	SUSP	SUSPENDED
EWC	ELECTRIC WATER COOLER (PROVIDE GFI RECEPTACLE)	TBR	TO BE REMOVED
EX	EXISTING	TL	TASK LIGHT
FA	FIRE ALARM	TR	TAMPER RESISTANT
FBO	FURNISHED BY OWNER	TSTAT	THERMOSTAT
FLR	FLOOR	UNO	UNLESS NOTED OTHERWISE
FPC	FIRE PROTECTION CONTRACTOR	US	ULTRASONIC
FSC	FOOD SERVICE CONTRACTOR	W/	WITH
GC	GENERAL CONTRACTOR	W/O	WITHOUT
GFI	GROUND-FAULT INTERRUPTER	W	WALL-MOUNTED
GND	GROUND	WP	WEATHERPROOF

COMMON SYMBOLS

- PLAN NORTH
- SECTION ID / SHEET NO. WHERE SECTION IS / DIRECTIONAL VIEW OF SECTION
- REVISION CLOUD
- REVISION NUMBER
- ELEVATION 100.00'
- DIRECTION OF VIEW / SHEET NO. WHERE EL. IS DRAWN / ELEVATION ID
- KEYNOTE
- DETAIL ID / SHEET NO. WHERE DETAIL IS
- 101 — ROOM/SPACE NO.
- TYPE ID — EQUIPMENT TAG SHOWING TYPE AND ID. SEE EQUIPMENT SCHEDULES FOR DETAILS
- PROVIDE NEW
- EXISTING TO REMAIN
- REMOVE EXISTING
- CONNECT TO EXISTING
- EXISTING TO BE REMOVED

DRAWING LIST

P0.1	COVER SHEET
P1.1	SITE PLAN
P2.1	FLOOR PLAN–DRAINAGE
P2.2	ROOF & MEZZANINE PLANS
P3.1	FLOOR PLAN–SUPPLY
P7.1	DETAILS
P8.1	SCHEDULES
H0.1	COVER SHEET
H2.1	FLOOR PLAN
H2.2	ROOF PLAN
H7.1	DETAILS
H8.1	DETAILS & SCHEDULES
E0.1	COVER SHEET
E0.2	ELECTRICAL NOTES
E0.3	SITE PLAN - DEMOLITION
E0.4	SITE PLAN - NEW
E2.1	FLOOR PLAN - LIGHTING
E3.1	FLOOR PLAN - POWER
E4.1	FLOOR PLAN - LOW-VOLTAGE
E5.1	MEZZANINE PLANS
E7.1	DETAILS
E7.2	DETAILS
E7.3	DETAILS
E8.1	SCHEDULES

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD –VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

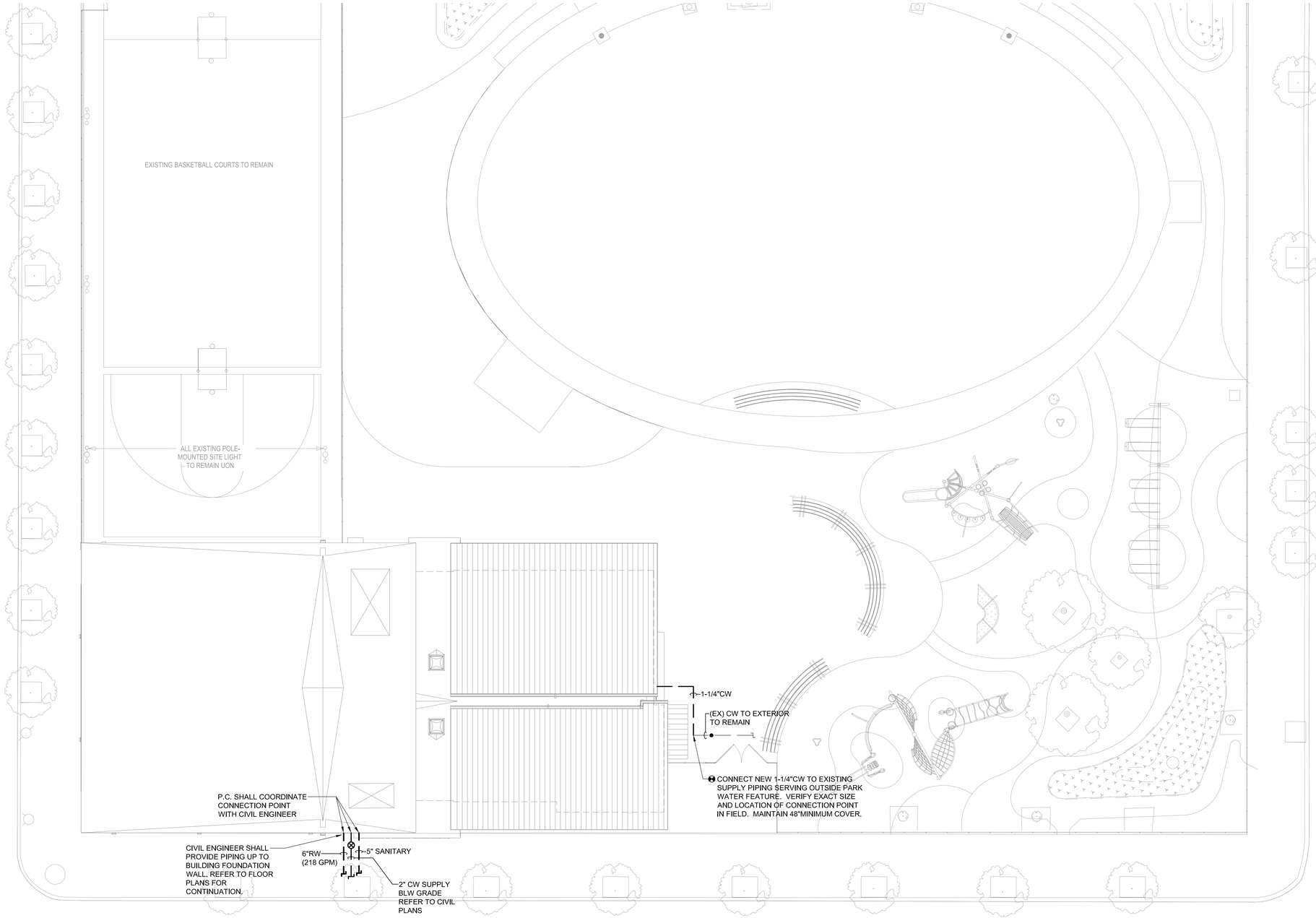
VERIFY SCALE
0 — 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JH | Appd.: NRZ

Sheet Title:
COVER SHEET

Sheet No.
P0.1



N

SITE PLAN

0 2' 5' 10' 20'

Scale: 1" = 10'-0"

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
DEI
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD -VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

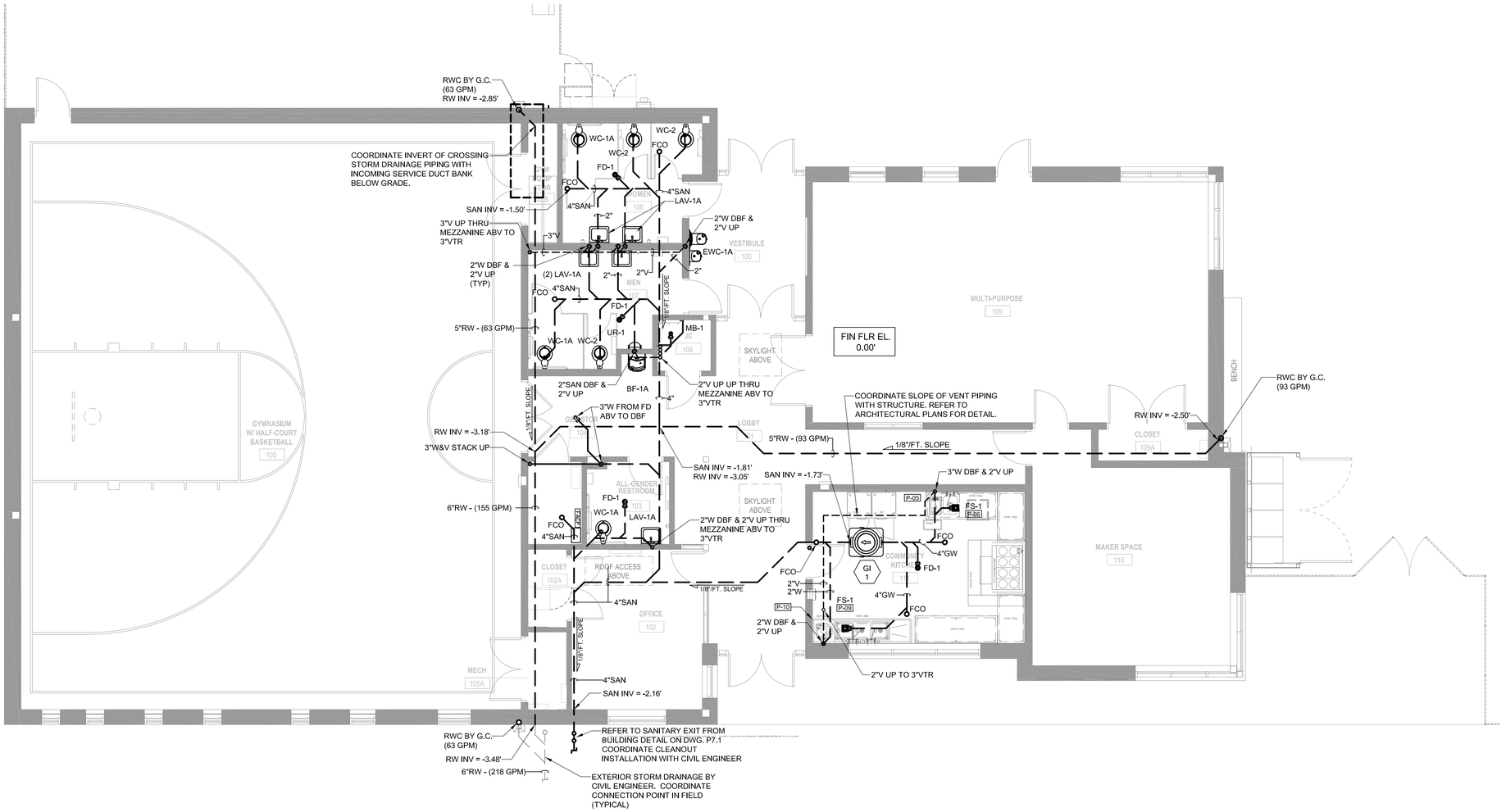
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JH | Appd.: NRZ

Sheet Title:
SITE PLAN

Sheet No.
P1.1

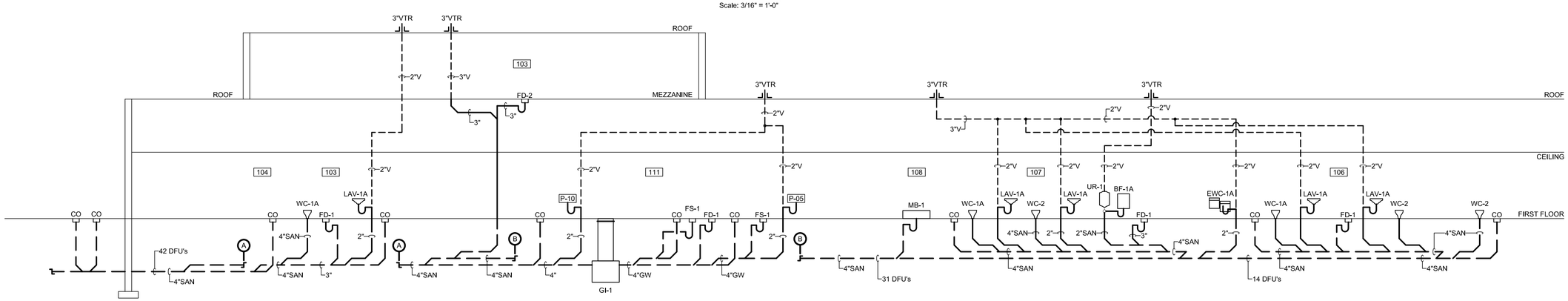


FLOOR PLAN - DRAINAGE

N

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"



DRAINAGE RISER DIAGRAM

NOT TO SCALE

VENTING METHODS USED (IPC 2018):
SECTION 911 - COMMON VENT
SECTION 912 - WET VENTING
SECTION 915 - COMBINATION WASTE AND VENT SYSTEM

2

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD -VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

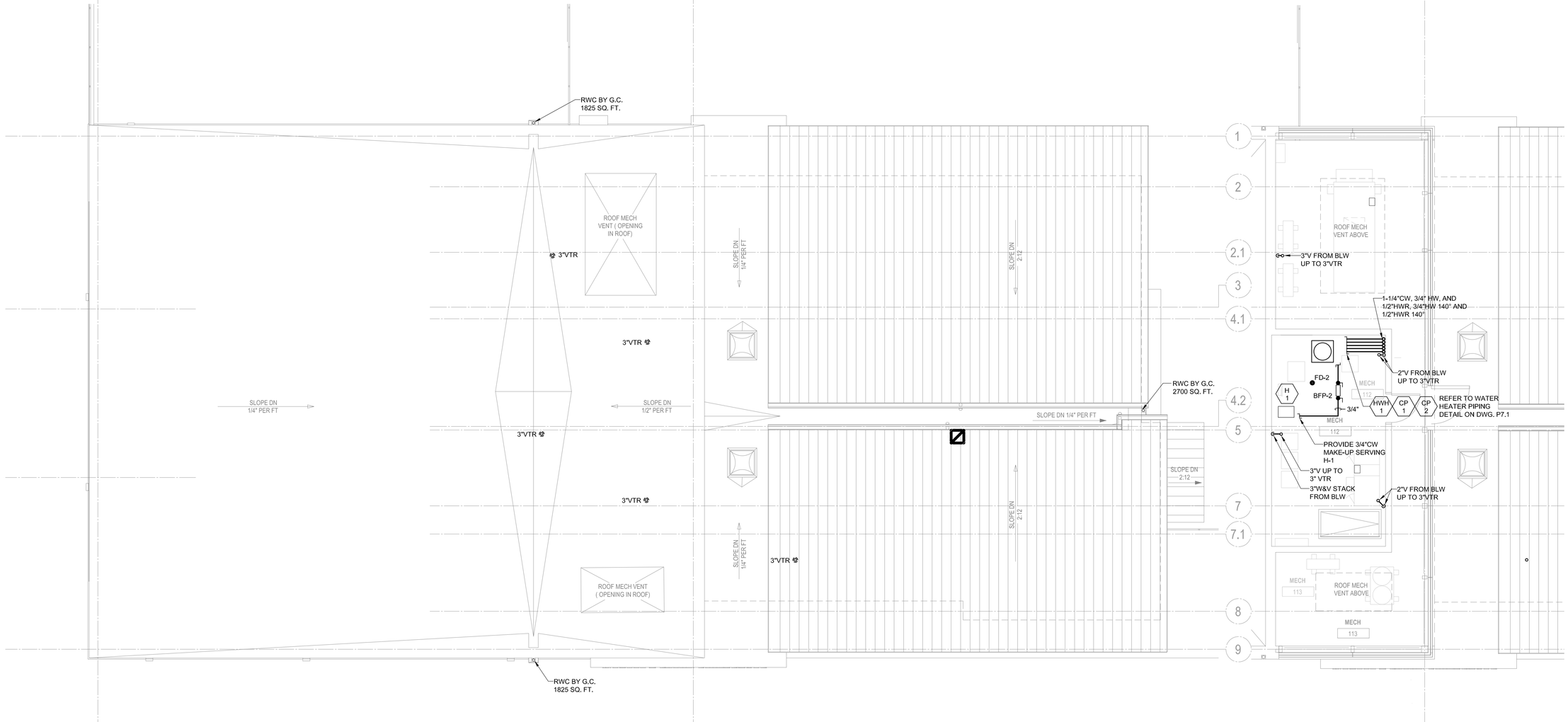
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Description	By	Date
2.	Bid Addendum 2		03/01/2024

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JH | Appd.: NRZ

Sheet Title:
FLOOR PLAN - DRAINAGE

Sheet No.
P2.1



N **ROOF PLAN**

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

N **MEZZANINE PLAN**

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.

CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering

DEI

One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND

for

PPR/REBUILD PHILADELPHIA

3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE

0 1

BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024

Scale: AS NOTED

Job No. 725002

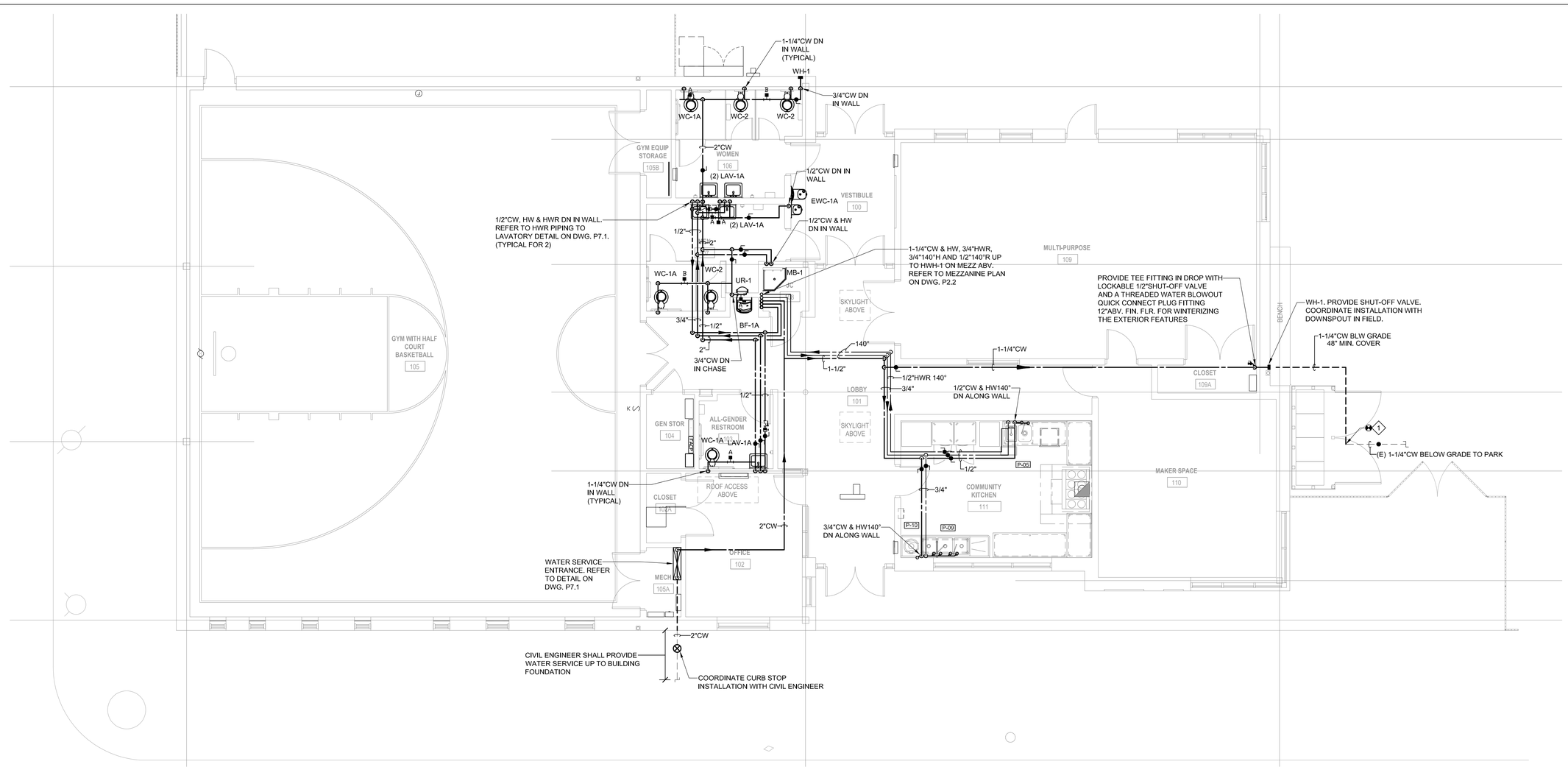
Drawn: JH | Appd.: NRZ

Sheet Title:

ROOF & MEZZANINE PLANS

Sheet No.

P2.2



N

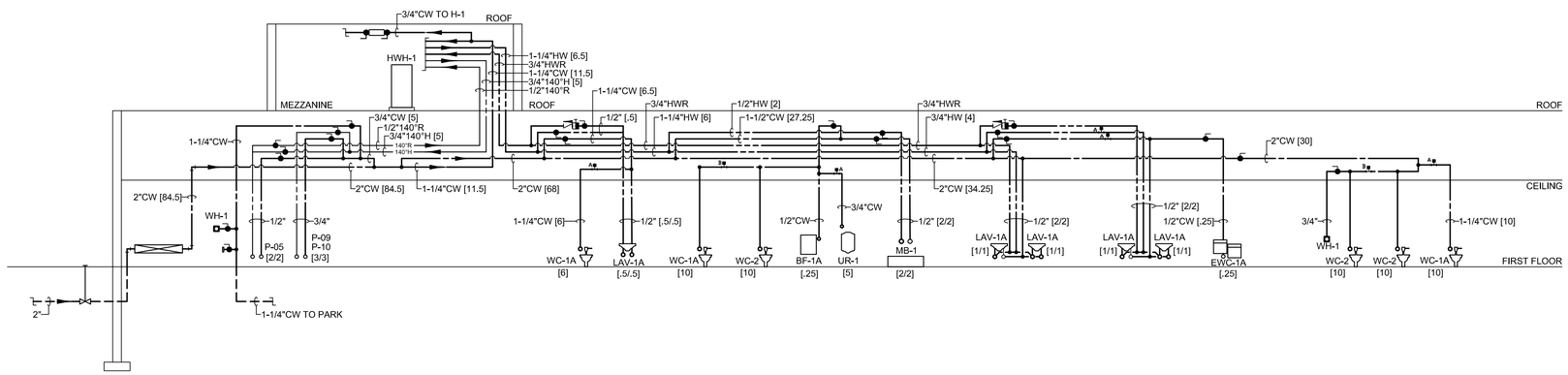
FLOOR PLAN - SUPPLY

0 1' 3' 6' 10'

Scale: 3/16" = 1'-0"

KEYNOTES:

1. CONNECT NEW 1-1/4"CW TO EXISTING SUPPLY PIPING SERVING OUTSIDE PARK WATER FEATURE. VERIFY EXACT SIZE AND LOCATION OF CONNECTION POINT IN FIELD. MAINTAIN 48"MINIMUM COVER.



DOMESTIC SUPPLY RISER DIAGRAM

NOT TO SCALE

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD - VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

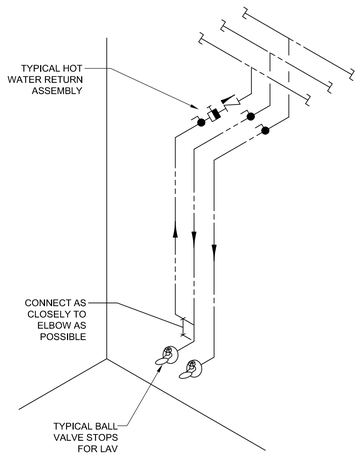
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Description	By	Date

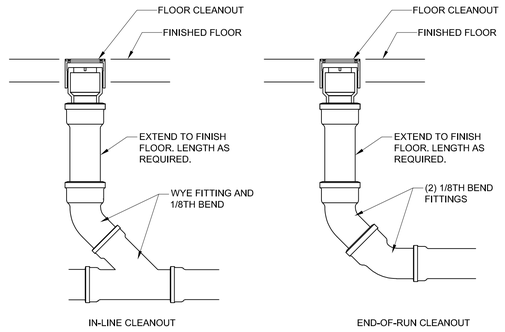
Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JH | Appd.: NRZ

Sheet Title:
FLOOR PLAN - SUPPLY

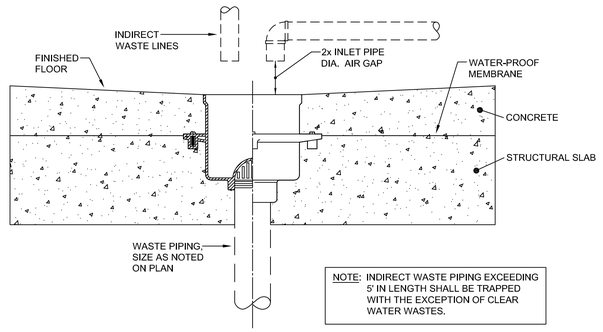
Sheet No.
P3.1



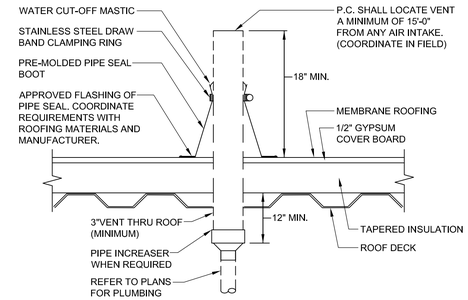
HWR PIPING TO LAVATORY DETAIL
NOT TO SCALE



TYPICAL FLOOR CLEANOUT DETAIL
NOT TO SCALE

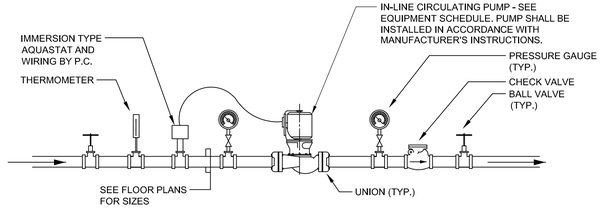


TYPICAL AIR GAP DETAIL
NOT TO SCALE

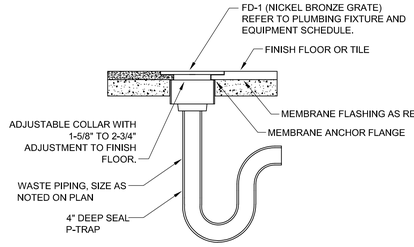


VENT THRU ROOF DETAIL
NOT TO SCALE

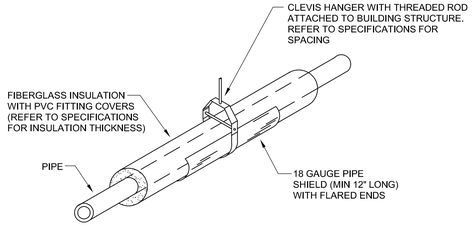
MIXING VALVE DETAIL
NOT TO SCALE



TYPICAL CIRCULATING PUMP PIPING DETAIL
NOT TO SCALE

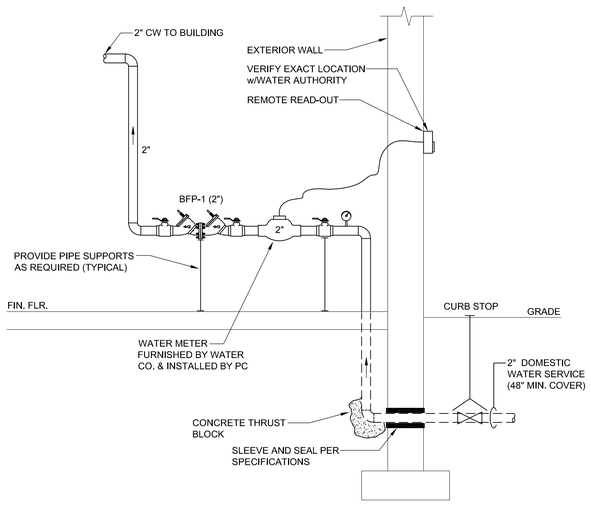


TYPICAL FLOOR DRAIN DETAIL
NOT TO SCALE



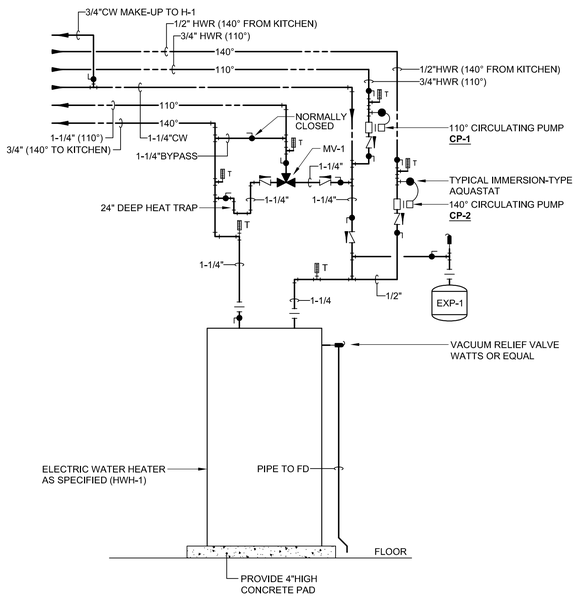
TYPICAL PIPING HANGER DETAIL
NOT TO SCALE

MOP BASIN DETAIL
NOT TO SCALE



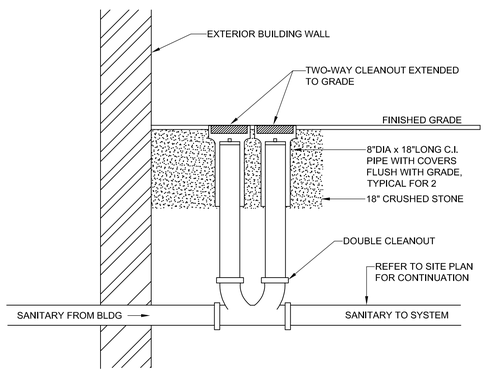
DETAIL AT WATER SERVICE
NOT TO SCALE

NOTE: WATER SERVICE INSTALLATION SHALL BE IN COMPLIANCE WITH ALL WATER AUTHORITY RULES AND REGULATIONS.



WATER HEATER PIPING DETAIL
NOT TO SCALE

HWH 1



SANITARY BUILDING EXIT DETAIL
NOT TO SCALE

NOT FOR CONSTRUCTION

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 · fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JH | Appd.: NRZ

Sheet Title: DETAILS

Sheet No. P7.1

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

WATER CLOSET (WC-1A - ADA)
ZURN, Mo. Z5665-BWL-AM, FLOOR MOUNTED, ELONGATED, TOP SPUD, ADA HEIGHT, ANTIMICROBIAL SURFACE, WHITE WITH:
a. ZURN, AQUAVANTAGE AV Mo. Z6000AV-WS1, LOW CONSUMPTION MANUAL FLUSH VALVE, 1.6 GPF;
b. BEMIS OR EQUAL, WHITE, ELONGATED OPEN FRONT SEAT LESS COVER WITH SELF-SUSTAINING CHECK HINGES;
c. CLOSET FLANGE WITH WAX GASKET OR PROSET SYSTEMS PROSEAL CLOSET ASSEMBLY AS REQUIRED;
d. BOLT CAPS;
e. FLUSH VALVE LEVER SHALL BE LOCATED ON ACCESS SIDE;
f. MOUNTING HEIGHT: 16.75" FROM FINISHED FLOOR TO RIM. VERIFY WITH ARCHITECTURAL DRAWINGS;
g. REFER TO ARCHITECTURAL DRAWINGS FOR SPACING. VERIFY LOCATION OF ADA COMPLIANT FIXTURES SHOWN ON THE PLUMBING DRAWINGS WITH THE ARCHITECTURAL DRAWINGS.

WATER CLOSET (WC-2)
ZURN, Mo. Z5655-BWL-AM, FLOOR MOUNTED, ELONGATED, TOP SPUD, ANTIMICROBIAL SURFACE, WHITE WITH:
a. ZURN, AQUAVANTAGE AV Mo. Z6000AV-WS1, LOW CONSUMPTION MANUAL FLUSH VALVE, 1.6 GPF;
b. BEMIS OR EQUAL, WHITE, ELONGATED OPEN FRONT SEAT LESS COVER WITH SELF-SUSTAINING CHECK HINGES;
c. CLOSET FLANGE WITH WAX GASKET OR PROSET SYSTEMS PROSEAL CLOSET ASSEMBLY AS REQUIRED;
d. BOLT CAPS;
e. FLUSH VALVE LEVER SHALL BE LOCATED ON ACCESS SIDE;
f. REFER TO ARCHITECTURAL DRAWINGS FOR SPACING.

URINAL (UR-1)
ZURN, Mo. Z5730 TOP SPUD, SIPHON JET, WHITE WITH:
a. ZURN AQUAVANTAGE AV Mo. Z6003AV-WS1, MANUAL, EXPOSED DIAPHRAGM FLUSH VALVE, 1.0 GPF;
b. ZURN, Mo. Z1221-EZ URINAL SUPPORT. BOLT SUPPORT TO FLOOR IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS;
c. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS AND SPACING. VERIFY LOCATION OF ADA COMPLIANT FIXTURES SHOWN ON THE PLUMBING DRAWINGS WITH THE ARCHITECTURAL DRAWINGS.

LAVATORY (LAV-1A - ADA)
ZURN, Mo. Z5364 HIGH-BACK WALL HUNG, 4" CENTER FAUCET HOLES, WHITE, WITH:
a. CHICAGO, Mo. 3501-4E39VPABCP DECK MOUNTED 3-HOLE METERING CHROME PLATED FAUCET, VANDAL-PROOF PRESSURE-COMPENSATING 0.35 GPM NON-AERATING SPRAY OUTLET, INTERNAL CONTROL MIXER, AND 4" C.C. DECK COVER PLATE;
b. McGUIRE GRID DRAIN WITH TAILPIECE, (PROWRAP SERIES) MOLDED CLOSED CELL VINYL, ANTIMICROBIAL;
c. McGUIRE, (PROWRAP SERIES) MOLDED, CLOSED CELL VINYL, ANTIMICROBIAL 'P' TRAP (1 1/4" x 1 1/2") TO WALL WITH CLEANOUT;
d. McGUIRE, MODEL LF-8V170 CHROME PLATED ALL BRASS QUARTER-TURN BALL VALVE STOPS WITH CHROME BRAIDED SUPPLIES. (SWEAT WITH EXTENSION TO COMPRESSION OR COMPRESSION TO COMPRESSION PREFERRED);
e. ZURN, Mo. Z1231-EZ UNIVERSAL LAVATORY SUPPORT. BOLT SUPPORT TO FLOOR IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS;
f. MV-2 – WATTS MODEL LFUSG-B-M3. MOUNT HIGH & TIGHT BELOW LAVATORY ON WALL. SET DELIVERY TEMPERATURE TO 95 DEGREES F. VERIFY TEMPERATURE SETTING WITH OWNER;
g. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS AND SPACING. VERIFY LOCATION ADA COMPLIANT FIXTURES SHOWN ON THE PLUMBING DRAWINGS WITH THE ARCHITECTURAL DRAWINGS.

NOTE: INSULATE ALL EXPOSED DRAIN AND WATER PIPING ON ADA COMPLIANT FIXTURES WITH MODEL #PW2000 SEAMLESS PROWRAP INSULATION KITS AS MANUFACTURED BY McGUIRE MFG. CO., INC.

ELECTRIC WATER COOLER (EWC-1A - ADA)
ELKAY, MODEL LVRCTL8WSK, WALL-MOUNTED, VANDAL-RESISTANT BI-LEVEL ADA-COMPLIANT COOLER, EZH20 BOTTLE FILLING STATION, FILTERED, 8.0 GPH CHILLING CAPACITY, GREENSPEC LISTED, DURABLE SATIN FINISH STAINLESS STEEL WITH ALL STANDARD EQUIPMENT. PROVIDE:
a. PVC P-TRAP AS REQUIRED WITH CLEANOUT AND WATER SUPPLY SHUT-OFF VALVE;
b. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS. INSTALL UNITS AT ADULT ADA HEIGHT IN ACCORDANCE WITH THE MANUFACTURER. VERIFY WITH ARCHITECTURAL DRAWINGS;
c. PROVIDE ELKAY MODEL LKAPR2 CANE APRON.

BOTTLE FILLING STATION (BF-1A - ADA)
ELKAY, MODEL LZWSM8K, IN-WALL ADA BARRIER FREE, EZH2O BOTTLE FILLING STATION, FILTERED, 8.0 GPH CHILLING CAPACITY, GREENSPEC LISTED, DURABLE SATIN FINISH STAINLESS STEEL WITH ALL STANDARD EQUIPMENT. PROVIDE:
a. PVC P-TRAP AS REQUIRED WITH CLEANOUT AND WATER SUPPLY SHUT-OFF VALVE;
b. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS. INSTALL UNIT AT ADULT ADA HEIGHT IN ACCORDANCE WITH THE MANUFACTURER.

MOP BASIN (MB-1)
ZURN, Mo. Z1996-24 (24"x 24"x 10") MOP SERVICE BASIN MOLDED HIGH DENSITY COMPOSITE BASIN, PVC DRAIN BODY, STAINLESS STEEL STRAINER 3"GASKETED OUTLET. PROVIDE:
a. CHICAGO, Mo. 445-VBRXKCRCF, CHROME PLATED SERVICE SINK FAUCET WITH VACUUM BREAKER, PAIL HOOK, HOSE THREAD, INTEGRAL SERVICE CHECK STOPS, AND TOP WALL BRACE;
b. ZURN Mo. ZJP1996-HH HOSE AND HOSE BRACKET;
c. ZURN Mo. ZJP1996-MH MOP HANGER LOCATED AS DIRECTED BY THE ARCHITECT;
d. ZURN SILICONE SEALANT;
e. DEEP SEAL P-TRAP ON DRAIN OUTLET.

FLOOR DRAIN - FINISHED AREAS (FD-1)
SMITH, FIG. 2005Y-A WITH 6" DIA. NICKEL BRONZE STRAINER. PROVIDE PROSET SYSTEMS INC. TRAP GUARD IN FLOOR DRAIN STRAINER AND DEEP SEAL P-TRAP ON DRAIN OUTLET. PROVIDE DEEP SEAL P-TRAP WITH CLEANOUT WHERE TRAPS ARE LOCATED ABOVE ACCESSIBLE CEILINGS OR EXPOSED IN MECHANICAL ROOMS.

FLOOR DRAIN - MECHANICAL AREAS (FD-2)
SMITH, FIG. 2508 WITH 6" DIA. NICKEL BRONZE STRAINER. PROVIDE PROSET SYSTEMS INC. TRAP GUARD IN FLOOR DRAIN STRAINER AND DEEP SEAL P-TRAP ON DRAIN OUTLET. PROVIDE DEEP SEAL P-TRAP WITH CLEANOUT WHERE TRAPS ARE LOCATED ABOVE ACCESSIBLE CEILINGS OR EXPOSED IN MECHANICAL ROOMS.

FLOOR CLEANOUT (FCO)
SMITH, FIG. 4028C, INSIDE CAULK OR SPEEDI-SET OUTLET WITH ROUND SCORIATED NICKEL-BRONZE TOP AND TAPER THREAD BRONZE PLUG. PROVIDE CARPET CLAMPING FRAME IN CARPETED FLOORS.

WALL HYDRANT - NON FREEZE (WH-1)
WOODFORD Mo. RB65, AUTOMATIC DRAINING, NON-FREEZE WALL HYDRANT WITH BRONZE RECESSED BOX WITH CHROME PLATED FACE, VACUUM BREAKER, "WATER" CAST ON COVER, WALL CLAMP WHERE APPLICABLE AND CYLINDER LOCK. INSTALL UNIT APPROXIMATELY 24" ABOVE FINISHED GRADE TOTALLY WITHIN THE SAME COLOR MASONRY.

GREASE INTERCEPTOR (GI-1)
SCHIER, MODEL NO. GB-50, HIGH EFFICIENCY INTERCEPTOR, FULLY RECESSED WITH ALL STANDARD EQUIPMENT INCLUDING FACTORY INSTALLED WITH FLOW CONTROL, ENGINEERED 4" INLET AND OUTLET. PROVIDE RISER COLLAR AS REQUIRED. THE ENTIRE EXCAVATION, INSTALLATION AND BACKFILL SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
FLOW RATE: 35 GPM
LIQUID CAPACITY: 35 GALLONS
LBS. GREASE CAPACITY: 142

WATER HEATER (HWH-1)
BRADFORD WHITE, MODEL LE2120T3-3
STORAGE CAPACITY: 119 GALLONS.
RECOVERY: 23 GPH AT 100 DEGREES F. TEMPERATURE RISE.
ELECTRICAL REQUIREMENTS: 5.5kW, 208 VOLTS, THREE PHASE. UNIT TO BE FURNISHED WITH ALL STANDARD EQUIPMENT INCLUDING AN ASME TEMPERATURE AND PRESSURE RELIEF VALVE, OPTIONAL VENT KIT AND ASME CONSTRUCTION. THE HEATER WILL BE FACTORY ASSEMBLED AND TESTED REQUIRING ONLY CONNECTIONS TO WATER AND ELECTRICAL. REFER TO THE DETAIL ON THE DRAWINGS AND THE SPECIFICATIONS FOR ADDITIONAL OPTIONAL EQUIPMENT AND INFORMATION.

EXPANSION TANK (EXP-1)
AMTROL, MODEL ST-12-C

CIRCULATING PUMP (CP-1)
BELL & GOSSETT, MODEL NBF-10S/LW IN-LINE STAINLESS STEEL WITH UNION CONNECTIONS. PUMP MOTOR RATED AT 115 VOLTS, SINGLE PHASE, 1/16 HP. IN THE HOT WATER RETURN LINE TO THE HEATER, PROVIDE AN IMMERSION-TYPE AQUASTAT SET TO START THE PUMP WHEN THE WATER TEMPERATURE IN THE LINE DROPS TO 90 DEGREES F, AND STOP THE PUMP WHEN THE TEMPERATURE REACHES 105 DEGREES F. COORDINATE PUMP SHUT-OFF SETTING WITH THE MIXING VALVE SETTING.

CIRCULATING PUMP (CP-2)
BELL & GOSSETT, MODEL NBF-10S/LW IN-LINE STAINLESS STEEL WITH UNION CONNECTIONS. PUMP MOTOR RATED AT 115 VOLTS, SINGLE PHASE, 1/16 HP. IN THE HOT WATER RETURN LINE TO THE HEATER, PROVIDE AN IMMERSION-TYPE AQUASTAT SET TO START THE PUMP WHEN THE WATER TEMPERATURE IN THE LINE DROPS TO 125 DEGREES F, AND STOP THE PUMP WHEN THE TEMPERATURE REACHES 130 DEGREES F. COORDINATE PUMP SHUT-OFF SETTING WITH THE MIXING VALVE SETTING.

THERMOSTATIC MIXING VALVE (MV-1)
POWERS, MODEL LFMM433 ROUGH BRONZE WITH ALL STANDARD EQUIPMENT INCLUDING PARAFFIN COPPER ACTUATOR, HEAVY DUTY COMBINATION STRAINER CHECKSTOPS AND TAMPER-RESISTANT TEMPERATURE ADJUSTMENT CONTROL. VERIFY TEMPERATURE SETTING WITH THE OWNER.

BACKFLOW PREVENTER (BFP-1)
WATTS, MODEL 719QT2-S DOUBLE CHECK VALVE ASSEMBLY WITH STRAINER.

BACKFLOW PREVENTER (BFP-2)
WATTS, MODEL LF0099-QT-FS, 2", REDUCED PRESSURE ZONE WITH BRONZE STRAINER AND QUARTER-TURN BALL VALVES. EXTEND DRAIN PIPING AS CLOSE AS POSSIBLE TO NEAREST FLOOR DRAIN WITHOUT CREATING A TRIPPING HAZARD. 2

SUBSTITUTIONS
ANY REQUEST FOR A SUBSTITUTION FOR THE PRODUCTS AND MANUFACTURERS SPECIFIED, OR LISTED AS ACCEPTABLE SUBSTITUTES MUST BE MADE IN STRICT ACCORDANCE WITH THE ARCHITECT'S SPECIFICATIONS. SUBSTITUTIONS WILL NOT BE PERMITTED AFTER CONTRACTS ARE AWARDED. ALL SUBSTITUTIONS SHALL BE APPROVED BY OWNER.

THE FOLLOWING MANUFACTURERS ARE CONSIDERED ACCEPTABLE SUBSTITUTES FOR THOSE SPECIFIED, IF APPROVED BY ENGINEER AND OWNER:

PLUMBING FIXTURES: KOHLER, SLOAN
ELECTRIC WATER COOLER: OASIS
DRAINAGE SPECIALTIES : SMITH, JOSAM, WADE
WATER HAMMER ARRESTERS: SMITH, PPP
LAVATORY INSULATION KITS: PLUMBEREX, TRUEBRO
WATER HEATERS: STATE, RHEEM
EXTERIOR WALL HYDRANT: WADE
MIXING VALVE: LEONARD, ACORN, HOLBY
LAVATORY AND SINK FITTINGS: CHICAGO, T & S
WATER CLOSET SEAT: KOHLER, ZURN, SLOAN
FLUSH VALVES: SLOAN
CIRCULATING PUMP: GRUNDFOS, TACO
BACKFLOW PREVENTER: AMES FIRE & WATERWORKS, APOLLO VALVES, ZURN

KITCHEN EQUIPMENT LIST AND CONNECTION SCHEDULE

ITEM	EQUIPMENT DESCRIPTION	WATER HOT	WATER COLD	ROUGH-IN HEIGHT	WASTE	ROUGH-IN HEIGHT	COMMENTS
P-05	TABLE, WORK	1/2"	1/2"	18" AFF	1-1/2"I.D. TO FS-1	-	
	-	1/2"	1/2"	18"" AFF	1-1/2"	24" AFF	
P-09	3-COMPARTMENT SINK	1/2"	1/2"	18" AFF	1-1/2"I.D. TO FS-1	-	
	-	1/2"	1/2"	18" AFF	-	-	
P-10	DISPOSER, GARBAGE	-	1/2"	18" AFF	2"	14" AFF	

NOTES:
1. ALL KITCHEN TAG NUMBERS MATCH KITCHEN CONSULTANT TAG NUMBERS.
2. PLUMBING CONNECTION LOCATIONS SHOWN FOR REFERENCE. COORDINATE ROUGH-IN LOCATIONS WITH KITCHEN EQUIPMENT INSTALLER AND PLUMBING ROUGH-IN KITCHEN DRAWINGS.

PLUMBING FIXTURE CONNECTIONS

ITEM NO.	FIXTURE	MINIMUM PIPING CONNECTIONS TRAP & TRAP ARM	WASTE	VENT	C.W.	H.W.
WC-1A	WATER CLOSET (FLR MTD, MANUAL F.V. - ADA)	-	4"	2"	1 1/4"	-
WC-2	WATER CLOSET (FLR MTD, MANUAL F.V. - STD)	-	4"	2"	1 1/4"	-
UR-1	URINAL (WALL-HUNG, MANUAL F.V. - STD)	2"	2"	2"	3/4"	-
LAV-1A	LAVATORY (WALL HUNG - MANUAL - ADA)	1-1/4" x 1-1/2"	2"	NOTE 2	1/2"	1/2"
EWC-1A	ELECTRIC WATER COOLER (WALL HUNG, DUAL - ADA)	1-1/4"	2"	1-1/2"	1/2"	-
BF-1A	BOTTLE FILLING STATION	1-1/4"	1-1/2"	1-1/2"	1/2"	-
MB-1	MOP BASIN	3"	3"	2"	1/2"	1/2"
SK-1	THREE-COMPARTMENT SINK	1-1/2"	I.D.	1-1/2"	1/2"	1/2"
WH-1	WALL HYDRANT (NON-FREEZE)	-	-	-	3/4"	-
FD-1	FLOOR DRAIN - FINISHED AREAS	3"	3"	NOTE 1	-	-
FD-2	FLOOR DRAIN - MECH. ROOM	3"	3"	NOTE 1	-	-

1. WET VENT OR COMBINATION DRAIN AND VENT. REFER TO FLOOR PLAN.
2. 1-1/2" UNLESS NOTED OTHERWISE.
3. CONNECTION SIZES ARE TO BE AS SHOWN ON SCHEDULE, EXCEPT AS OTHERWISE NOTED OR SHOWN ON PLANS.

WATER HAMMER ARRESTER SCHEDULE

SYMBOL	FIXTURE UNITS	SIOUX CHIEF MODEL NO.	SYMBOL	FIXTURE UNITS	SIOUX CHIEF MODEL NO.
A	1-11	652-A	D	61-113	655-D
B	12-32	653-B	E	114-154	656-E
C	33-60	654-C	F	155-330	657-F

2

PIPE MATERIAL SCHEDULE

REFERENCE BOOK SPECIFICATION SECTIONS: 221316, 221116 & 221413		
SANITARY WASTE & VENT PIPING	CAST IRON	ASTM A74, ASTM A888, CISPI 301
STORM PIPING		
DOMESTIC WATER PIPING	COPPER	ASTM B75, ASTM B88, ASTM B251, ASTM B447
	DUCTILE IRON	AWWA C151/A21.51

D'HUY Engineering, Inc.
CONSULTING ENGINEERS:
Project Management
Facilities Engineering
Structural Design & Analysis
Mechanical/Electrical/Plumbing
Forensic Engineering
One East Broad Street
Suite 310
Bethlehem, PA. 18018
610.865.3000 - fax 610.861.0181
www.dhuy.com

REBUILD – VINCENT G. PANATI PLAYGROUND
for
PPR/REBUILD PHILADELPHIA
3101-27 N 22ND ST, PHILADELPHIA PA 19132

VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
2	03/01/2024		Bid Addendum 2

Date 02/09/2024
Scale: AS NOTED
Job No. 725002
Drawn: JH | Appd.: NRZ

Sheet Title:
SCHEDULES

Sheet No.
P8.1