

Kettering Government Center Security Upgrades

3600 Shroyer Rd, Kettering, OH 45429



ARCHITECT

App Architecture

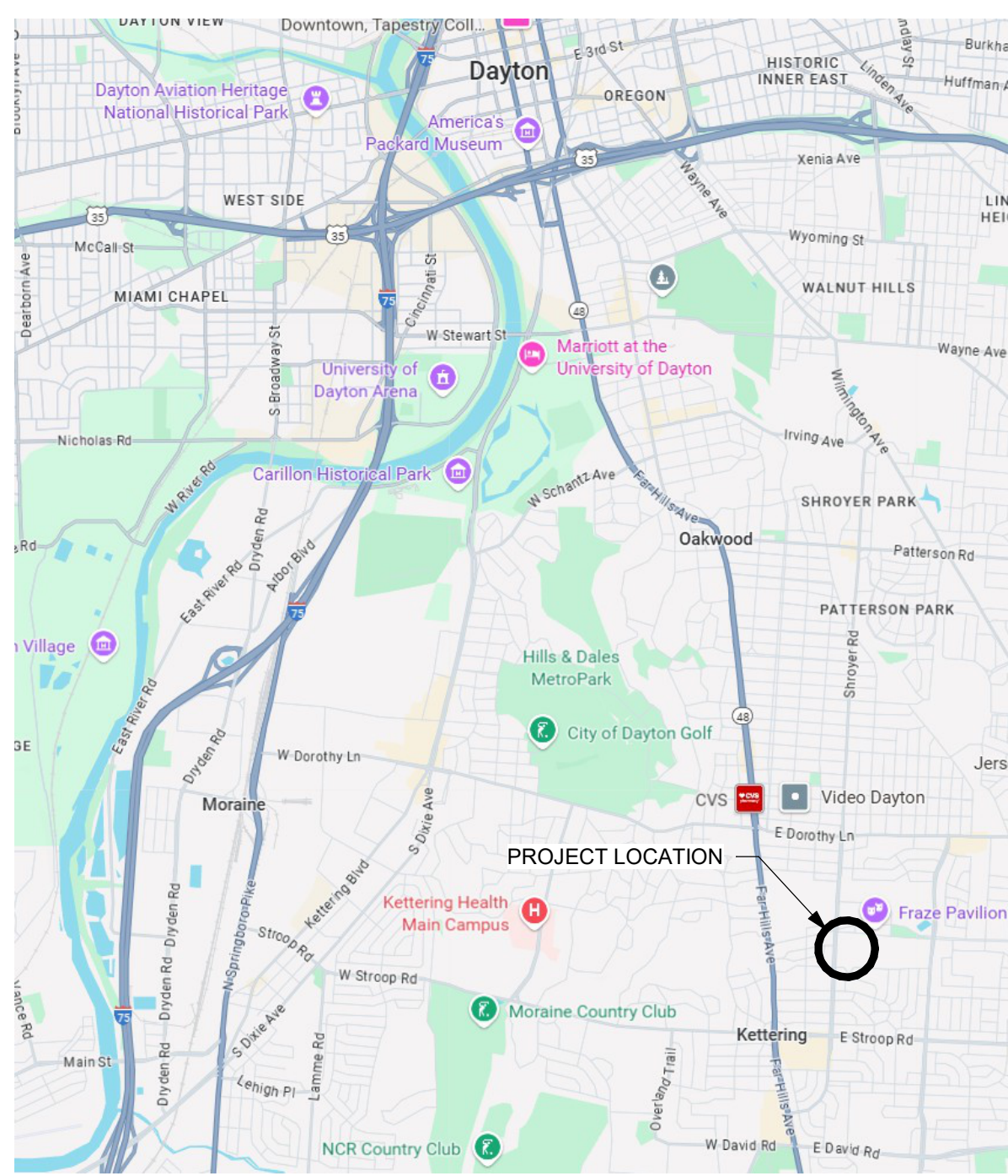
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MECHANICAL & ELECTRICAL ENGINEERS

Heapy Engineering

1400 West Dorothy Lane
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(937) 224-0861

VICINITY MAP



CODE INFORMATION

(OBC 2024)

2024 OHIO EXISTING BUILDING CODE (OEBC)

COMPLIANCE METHOD:

SECTION 301.3.1 PRESCRIPTIVE COMPLIANCE METHOD
ACCORDING TO OEBC SECTIONS 302-309 AND CHAPTER 5.

2024 OHIO BUILDING CODE (OBC)

PROJECT DESCRIPTION

SECURITY UPGRADES TO THE NORTH AND SOUTH BUILDINGS WHICH INCLUDES KEY FOB AND ASSOCIATED DOOR HARDWARE ADDED TO EXISTING AND PROVIDED AT NEW DOORS. PROJECT ALSO INCLUDES SECURITY ACCESS CONTROL EQUIPMENT, AND NEW ALUMINUM STOREFRONT ASSEMBLIES WITH IMPACT RESISTANT FILM.

USE GROUP CLASSIFICATION

OBC (302) USE GROUP = B - BUSINESS USE (NO CHANGE)

CONSTRUCTION TYPE CLASSIFICATION

OBC (602) CONSTRUCTION TYPE = IIB (NO CHANGE)
2 STORIES ABOVE GRADE (NO CHANGE)

FIRE PROTECTION

BUILDING DESCRIPTION : BUILDING IS NOT SUPPRESSED

MEANS OF EGRESS

EXISTING MEANS OF EGRESS ARE BEING MAINTAINED.
NO CHANGE TO OCCUPANT LOAD

ACCESSIBILITY STANDARD

EXISTING BUILDINGS: OBC 2024, CHAPTER 11, ACCESSIBILITY AND ICC A117.1-2009

DRAWING INDEX

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G0.1 COVER SHEET

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**Kettering Government Center
Security Upgrades**

3600 Shroyer Rd, Kettering, OH 45429

ISSUE

NO.	DATE	DESCRIPTION
09/18/2025	BID / PERMIT	

DATE 09-18-2025

JOB NO. 4322.00

DRAWN DAW

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TITLE
COVER SHEET

SHEET NO.

G0.1

ABBREVIATIONS

SYMBOL	
@ & L O C E R	AT AND ANGLE DIAMETER CENTER LINE PLATE

A	
ABV	ABOVE
A/C	AIR CONDITIONING
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLER UNIT
AL	ALUMINUM
ALT	ALTERNATE
ANOD	ANODIZED
ANCH	ANCHOR
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATELY
ARCH	ARCHITECT OR ARCHITECTURAL
ATTEN	ATTENUATED
AUTO	AUTOMATIC
AVG	AVERAGE

B	
BLDG	BUILDING
BLK	BLOCK
BLCKG	BLOCKING
BOT	BOTTOM
BRG	BEARING
BSMT	BASEMENT

C	
CAB	CABINET
CB	CATCH BASIN
C/C	CENTER TO CENTER
CF	CUBIC FOOT
CFCI	CONTRACTOR FURNISH, CONTRACTOR INSTALL
CFOI	CONTRACTOR FURNISH, OWNER INSTALL
CG	CORNER GUARD
CJ	CONTROL JOINT
CLG	CEILING
CL	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS OR CONTINUE
CPU	CENTRAL PROCESSING UNIT (COMPUTER)
CY	CUBIC YARD

D	
DBL	DOUBLE
DEMO	DEMOLISH, DEMOLITION
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DS	DOWNSPOUT
DWG	DRAWING
DTL	DETAIL

E	
EA	EACH
EC	ELECTRICAL CONTRACTOR
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATION OR ELEVATOR
EMERG	EMERGENCY
EQ	EQUAL
EQUIP	EQUIPMENT
EW	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR

F	
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FIN	FINISH OR FINISHED
FLR	FLOOR
FND	FOUNDATION
FRT	FIRE RETARDANT TREATED WOOD
FS	FILLER STRIP
FT	FOOT OR FEET OR FULLY TEMPERED
FTG	FOOTING
FUR	FURRING
FV	FIELD VERIFY
FOW	FACE OF WALL

G	
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GD	GRADE OR GRADING
GL	GENERAL
GND	GLASS OR GLAZING
GND	GROUND
GYP	GYPNUM
GWB	GYPNUM BOARD
GWT	GLAZED WALL TILE

H	
HB	HOSE BIBB
HDW	HARDWARE
HU	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HWD	HARDWARE

I	
ID	INSIDE DIAMETER
IN	INCH
INCL	INCLUDE (D) (ING)
INT	INTERIOR
INV	INVERT

J	
JB	JUNCTION BOX
JC	JANITOR CLOSET

L	
L	LONG
LAV	LAVATORY
LBS	POUNDS
LH	LEFT HAND
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LTL	LINTEL
LVR	LOUVER

M	
M	MEN OR METER
MAS	MASONRY
MAT	MATERIAL
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MOUNTING HEIGHT, MANHOLE
MIL	THOUSANDTHS OF AN INCH
MM	MILLIMETER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL

N	
N	NORTH OR NITROGEN
NC	NURSE CALL
NIC	NOT IN CONTRACT
NO	NUMBER OR NITROUS OXIDE
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE

O	
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISH, CONTRACTOR INSTALL
OFOI	OWNER FURNISH, OWNER INSTALL
OFVI	OWNER FURNISH, VENDOR INSTALL
OH	OVERHEAD
OHD	OVERHEAD DOOR
OPNG	OPENING
OPP	OPPOSITE
O ₂	OXYGEN

P	
PAR	PARALLEL
PC	PLUMBING CONTRACTOR
PCF	POUNDS PER CUBIC FOOT
PL	PLATE OR PROPERTY LINE
PLBG	PLUMBING
PLWD	PLYWOOD
PME	PLUMBING, MECHANICAL & ELECTRICAL
PML	PANEL
PR	PAIR
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE

Q	
QTY	QUANTITY
R	

R	RADIUS
RA	RETURN AIR
RB	RUBBER BASE
RD	ROOF DRAIN
RECEPT	RECEPTACLE
REF	REFERENCE
REINF	REINFORCE
REQD	REQUIRED
RET	RETURN
REV	REVISION
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY

S	
S	SOUTH
SAN	SANITARY
SB	SINK BASE
SCHED	SCHEDULE
SEAL	SEALANT
SECT	SECTION
SF	SQUARE FEET
SG	SAFETY GLASS
SH	SPRINKLER HEAD OR SHOWER HEAD
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SPEC	SPECIFICATION(S)
SPK	SPEAKER
SQ	SQUARE
ST	STREET
STC	SOUND TRANSMISSION CLASSIFICATION
STD	STANDARD
STL	STEEL
STR	STRUCTURAL
SUSP	SUSPENDED
SV	SHEET VINYL
SYS	SYSTEM

T	
T & G	TONGUE & GROOVE
TB	TOWEL BAR
T&B	TOP AND BOTTOM
TEL	TELEPHONE
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TOM	TOP OF MASONRY
TOW	TOP OF WALL
TRANS	TRANSFORMER
TV	TELEVISION
TYP	TYPICAL

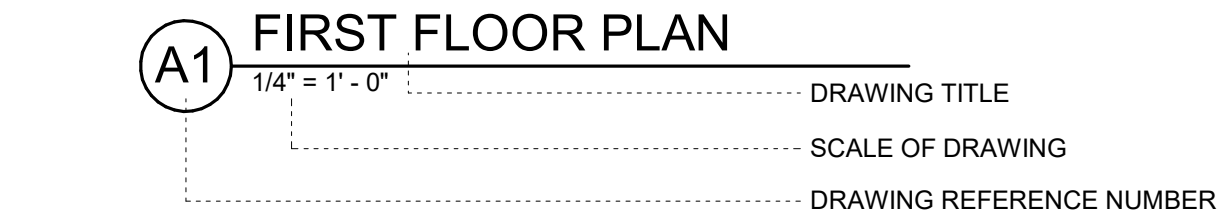
U	
UC	UNDER CABINET OR COUNTER
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE

V	
V	VACUUM
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VS	VACUUM SLIDE

W	
W	WIDE OR WEST OR WOMEN
WI	WITH
W/O	WITHOUT
WC	WATER CLOSET OR WALL CABINET
WD	WOOD
WIN	WINDOW
WP	WORK POINT
WPT	WOOD PRESERVATIVE TREATMENT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

REFERENCE SYMBOLS

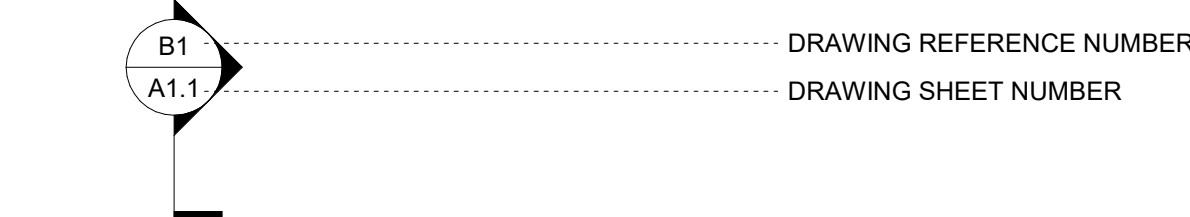
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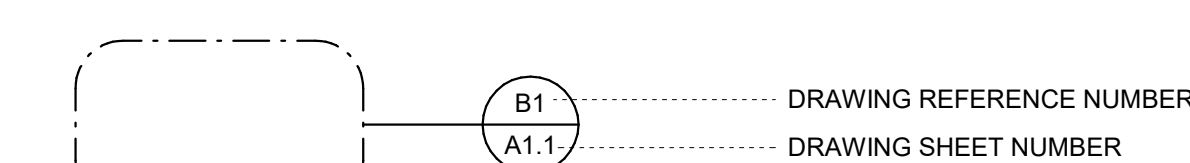
INTERIOR ELEVATIONS



BUILDING/DETAIL SECTION



ENLARGED DETAIL



EXTERIOR ELEVATIONS



MATCH LINE

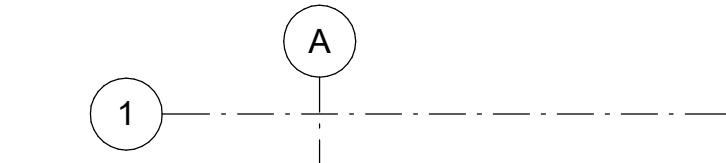


MATERIAL SYMBOLS IN SECTION

	EARTH		LOOSE OR BATT INSULATION		BRICK
	GRANULAR FILL		RIGID INSULATION		SOLID SURFACE
	CONCRETE		STEEL		GYPNUM / PLASTER
	CMU BLOCK		PLYWOOD		WOOD, FINISHED
	BLOCKING / SHIM		WOOD, DIMENSIONAL		

DRAWING SYMBOLS

COLUMN CENTER LINES

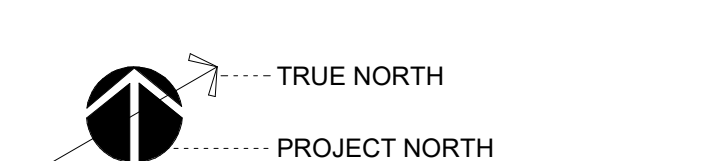


ROOM SYMBOL

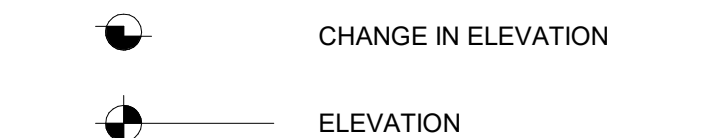


PLAN SYMBOLS

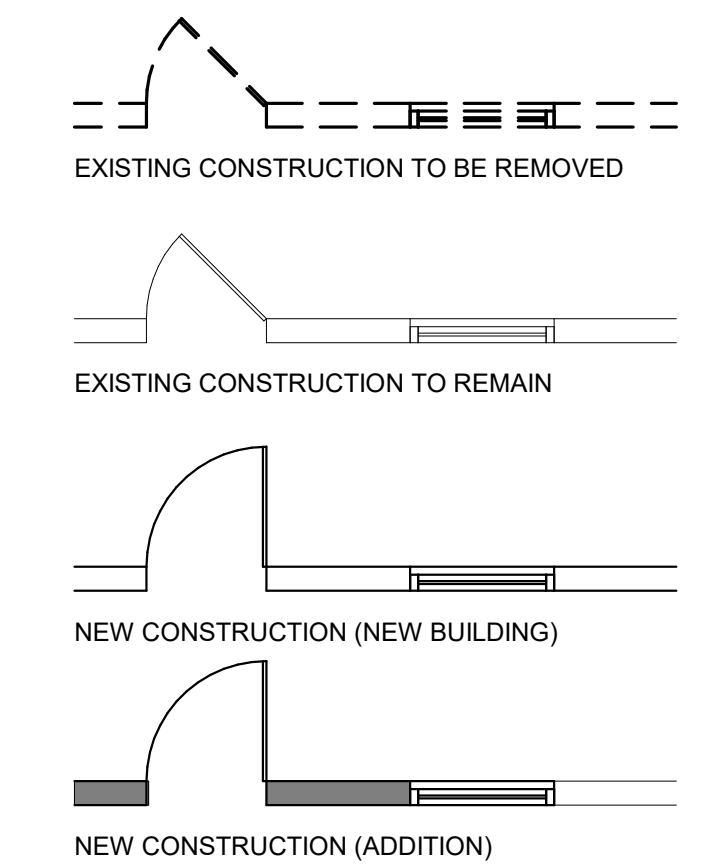
	CONSTRUCTION NOTES
	DEMOLITION NOTES
	ACCESSORIES (LETTERS)
	DOOR NUMBER SYMBOL
	WINDOW SYMBOL
	WALL TYPE
	REVISION / CHANGE
	CORNER GUARD
	END WALL PROTECTOR
	FIRE EXTINGUISHER CABINET



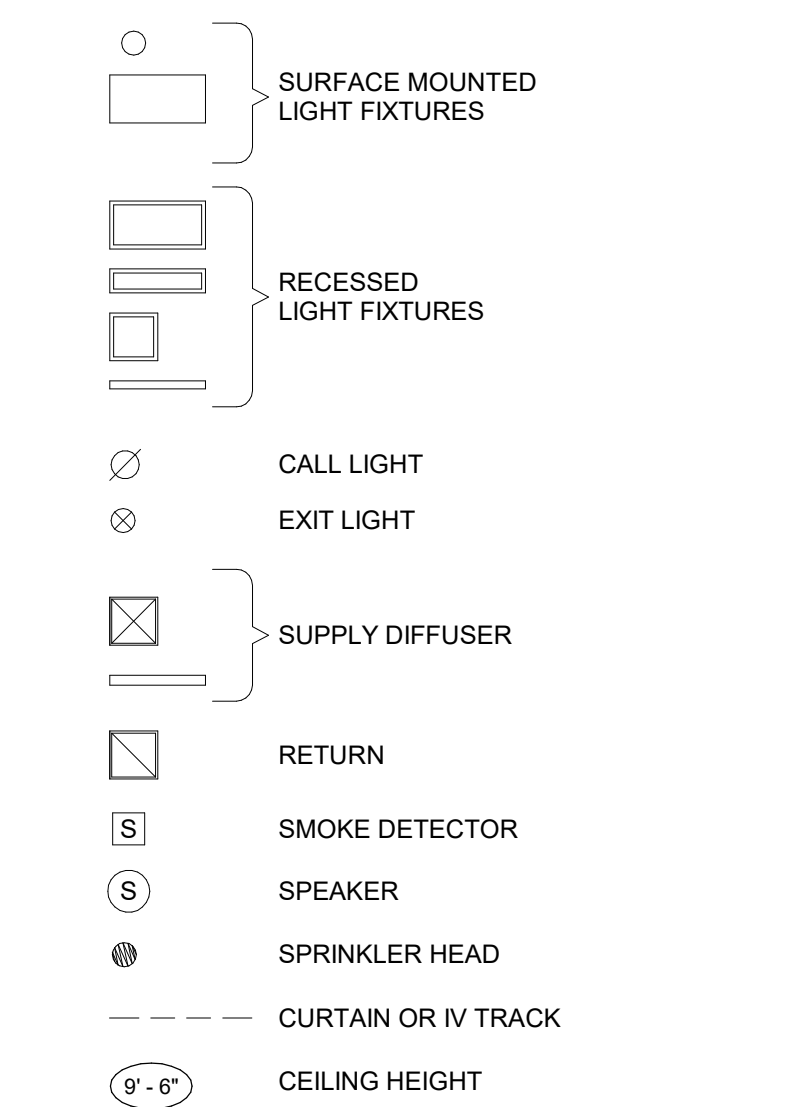
ELEVATION SYMBOLS



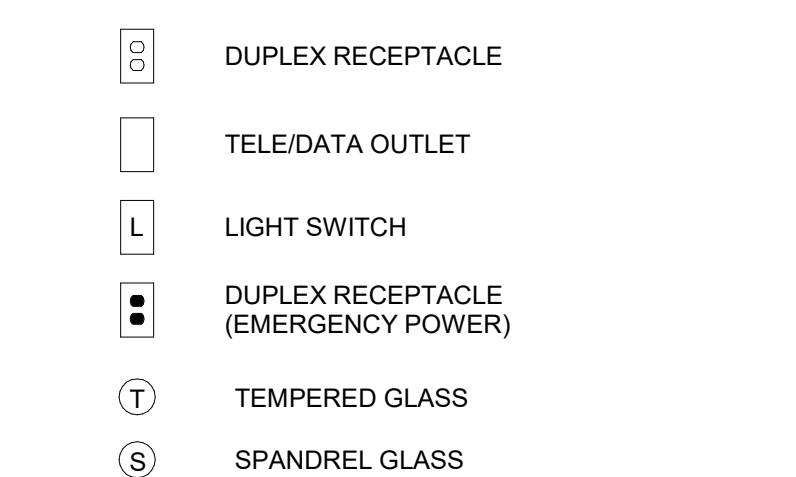
TYPICAL WALL CONVENTIONS



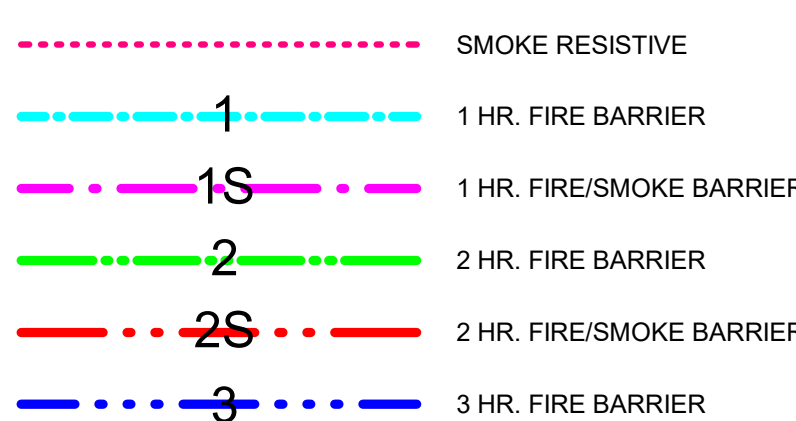
REFLECTED CEILING SYMBOLS



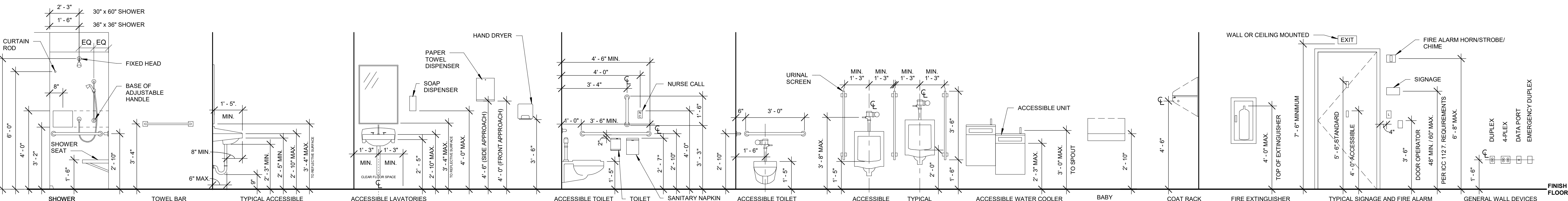
INTERIOR ELEVATION SYMBOLS



FIRE BARRIER LEGEND



ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.
ADDITIONAL SYMBOLS OR ABBREVIATIONS MAY APPEAR ON SUBSEQUENT SHEETS.

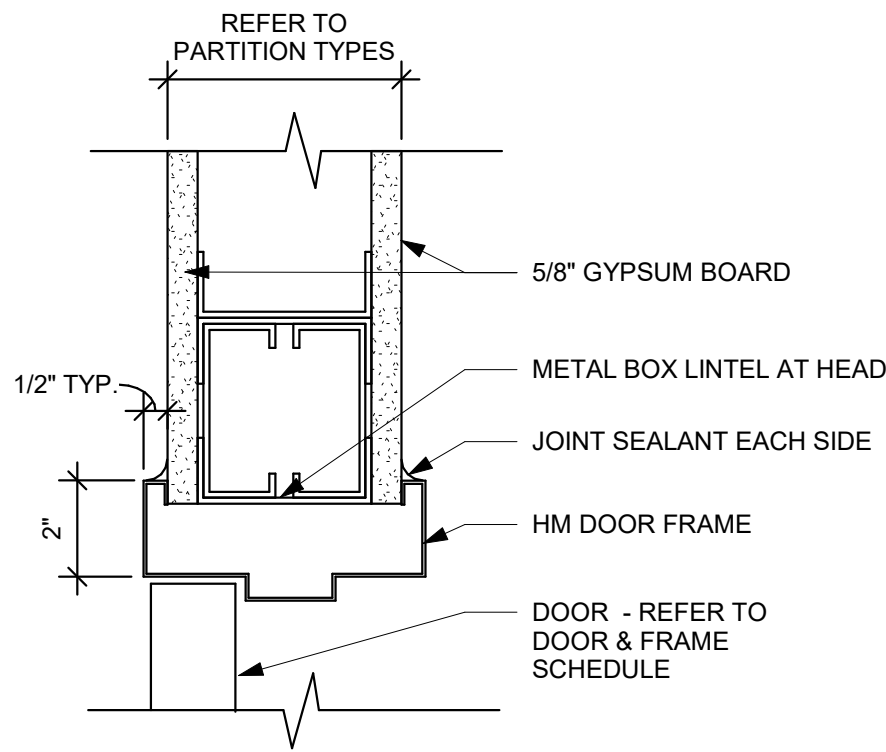


MOUNTING & CLEARANCE STANDARDS N.T.S.

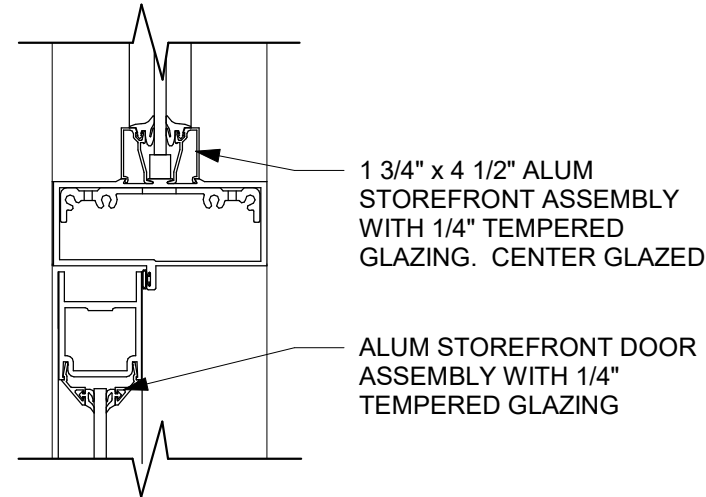
(FOLLOW THESE UNLESS NOTED OTHERWISE)

ACCESSIBLE FIXTURES, ACCESSORIES & DIMENSIONS ARE BASED ON: ICC 117.1 - 2017 FOR NEW CONSTRUCTION AND ICC 117.1 - 2009 FOR EXISTING BUILDINGS.

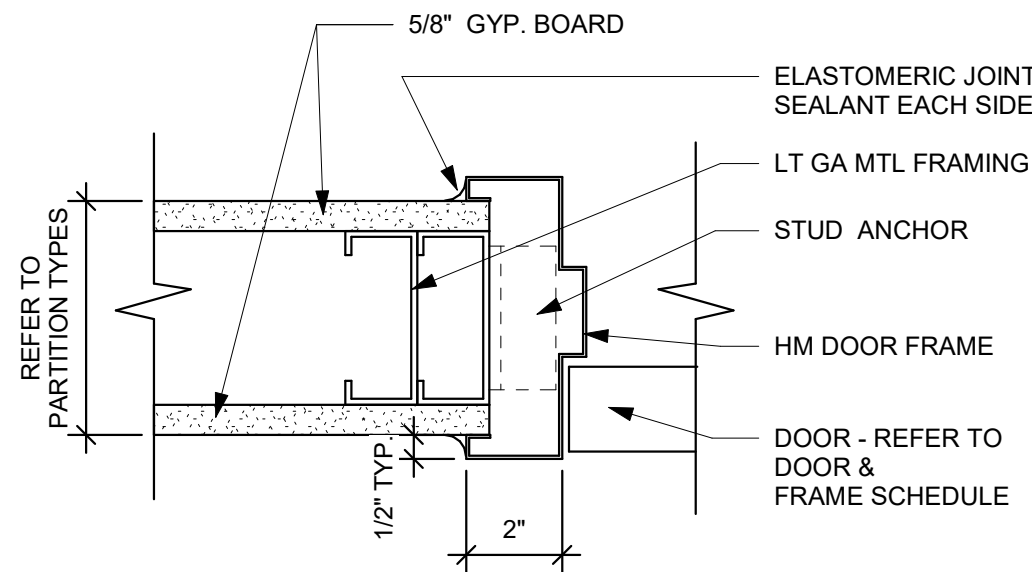
A



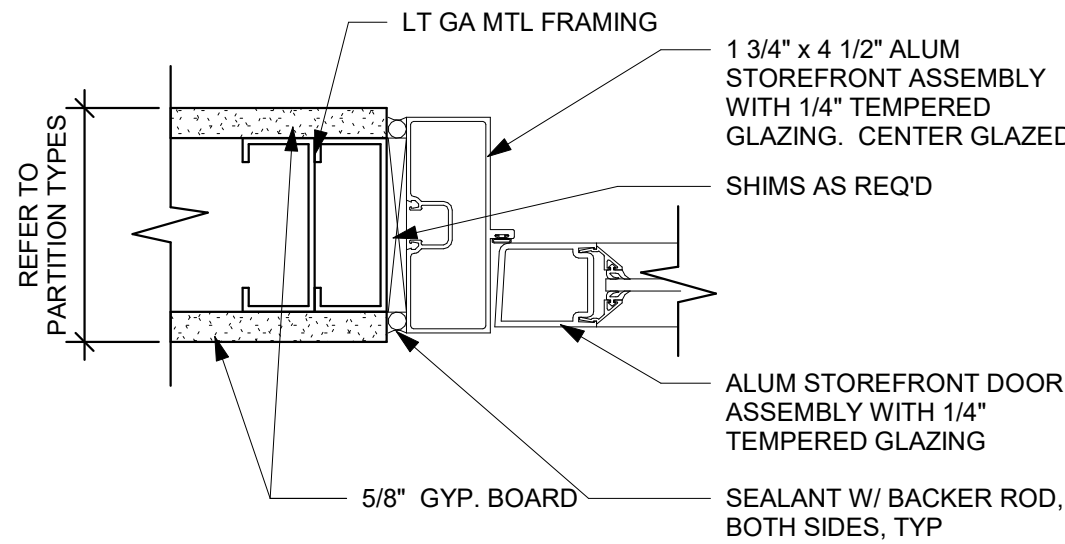
B1 HEAD DETAIL @ HM DOOR
3" = 1'-0"



B2 HEAD DETAIL @ STOREFRONT DOOR
3" = 1'-0"



C1 JAMB DETAIL @ HM DOOR
3" = 1'-0"



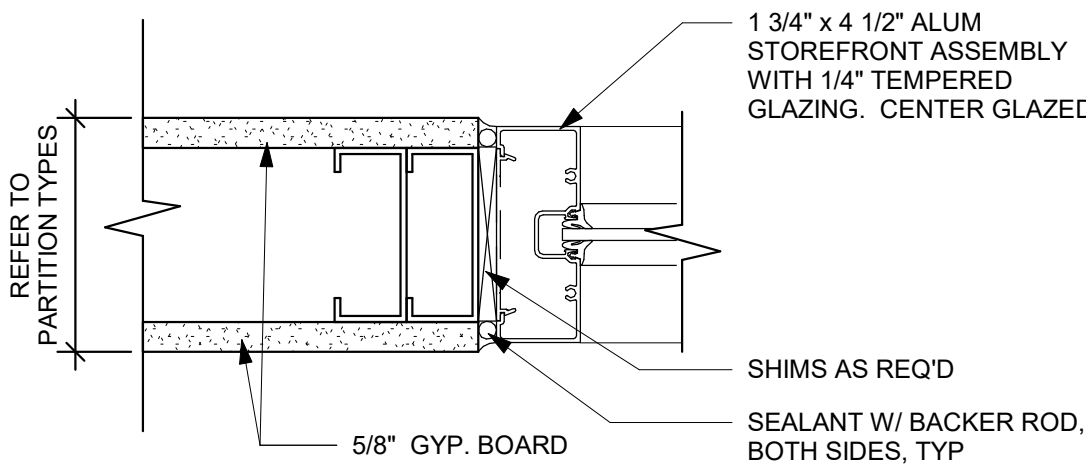
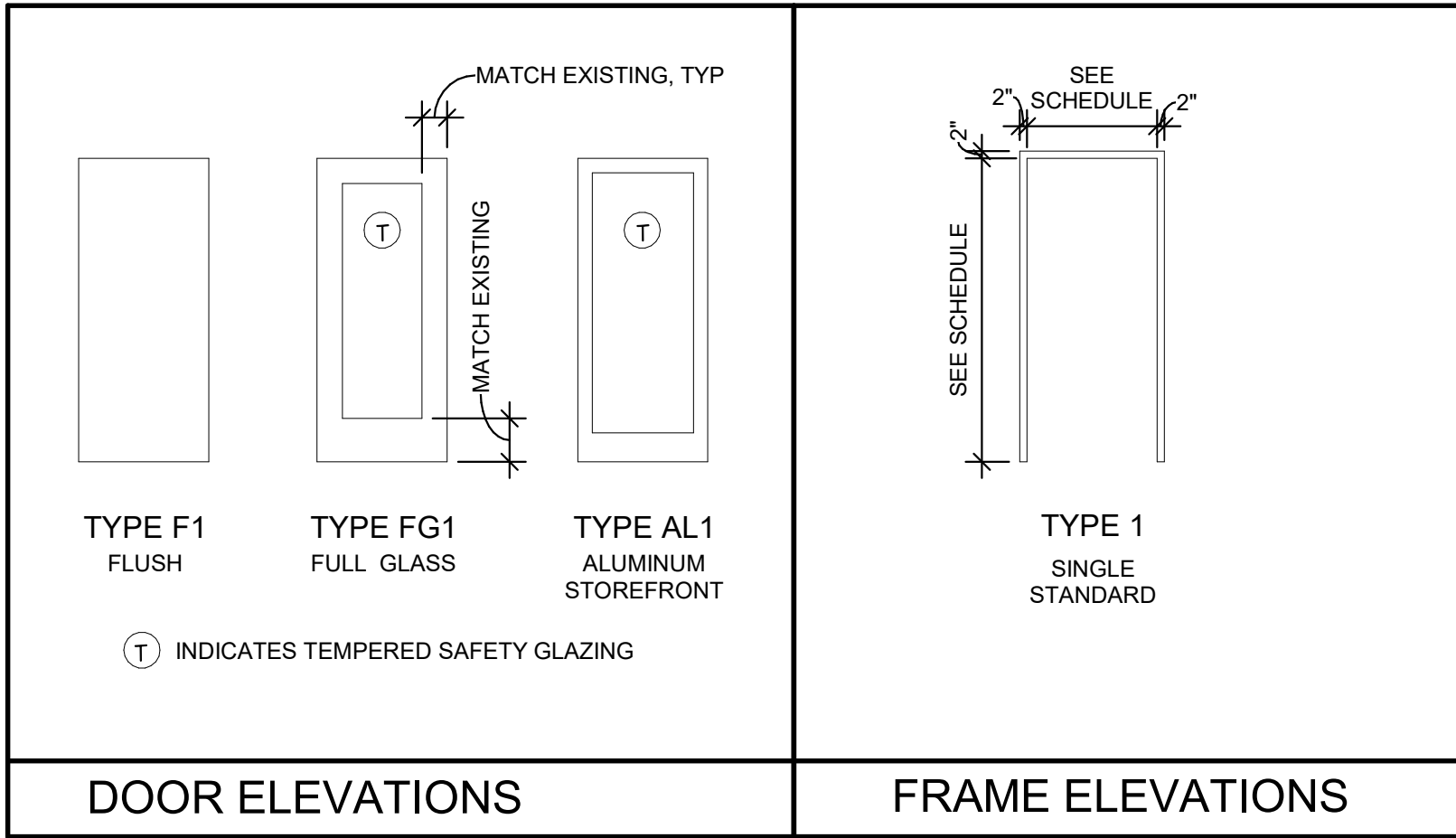
C2 JAMB DETAIL @ STOREFRONT DOOR
3" = 1'-0"

DOOR AND FRAME SCHEDULE															
DOOR No.	ROOM NAME	HDW. SET	DOOR						FRAME					FIRE RTG.	REMARKS
			SIZE			MAT.	TYPE	FIN.	MAT.	TYPE	FIN.	DETAILS			
			W	H	T							HEAD	JAMB		
001.1	CORRIDOR (EX)	7.0	3'-6"	6'-9"	1 3/4"	WD	F1	STAIN	HM	1	PAINT	B1	C1	-	
001.2	CORRIDOR (EX)	7.0	3'-6"	7'-0"	1 3/4"	WD	F1	STAIN	HM	1	PAINT	B1	C1	-	
101B.1	SECURITY VESTIBULE	1.0	3'-6"	7'-0"	1 3/4"	ALUM	AL1	ANOD	ALUM	1	ANOD	B2	C2	-	1,2
101B.2	SECURITY VESTIBULE	4.0	3'-6"	7'-0"	1 3/4"	ALUM	AL1	ANOD	ALUM	1	ANOD	B2	C2	-	
106.1	LOBBY (EX)	2.0	3'-0"	7'-0"	1 3/4"	ALUM	AL1	ANOD	ALUM	1	ANOD	B2	C2 SIM	-	2
136.1	LOBBY (EX)	3.0	3'-0"	7'-0"	1 3/4"	ALUM	AL1	ANOD	ALUM	1	ANOD	B2	C2	-	2
202.1	LOBBY (EX)	8.0	3'-0"	7'-0"	1 3/4"	WD	F1	STAIN	HM	1	PAINT	B2	C2	-	
228A	LOBBY	6.0	3'-6"	7'-0"	1 3/4"	WD	FG1	STAIN	ALUM	1	ANOD	B2	C2 SIM	-	
242	WAITING (E)	5.0	3'-0"	7'-0"	1 3/4"	WD	FG1	STAIN	ALUM	1	ANOD	B2	C2	-	2

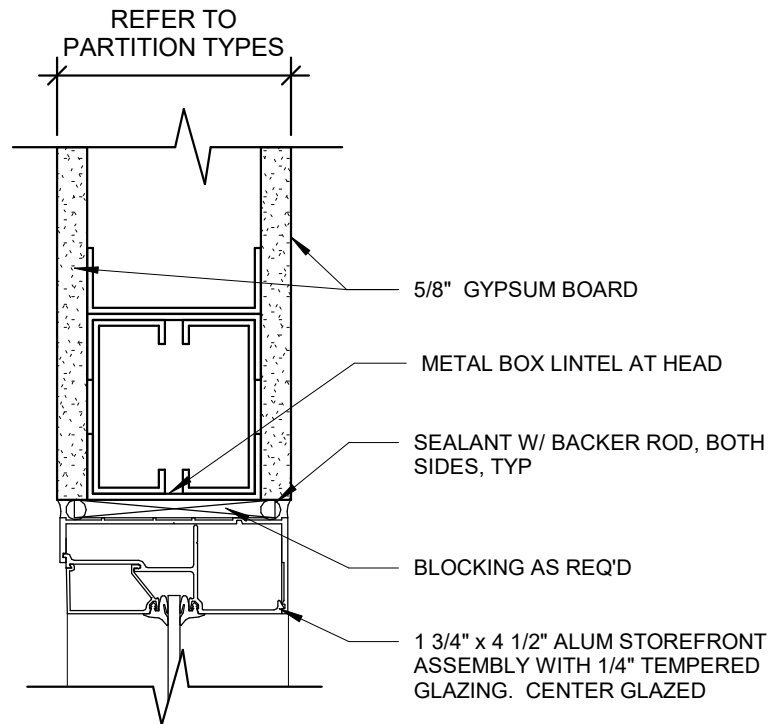
DOOR AND FRAME REMARKS	
No.	REMARK
1	AUTOMATIC DOOR OPENER ACTIVATED BY CARD READER ON VESTIBULE SIDE WITH DOOR RELEASE BUTTON AT RECEPTION DESK
2	CARD READER ON WAITING / VESTIBULE SIDE WITH DOOR RELEASE BUTTON(S) AT ADJACENT DESK

DOOR & FRAME GENERAL NOTES:

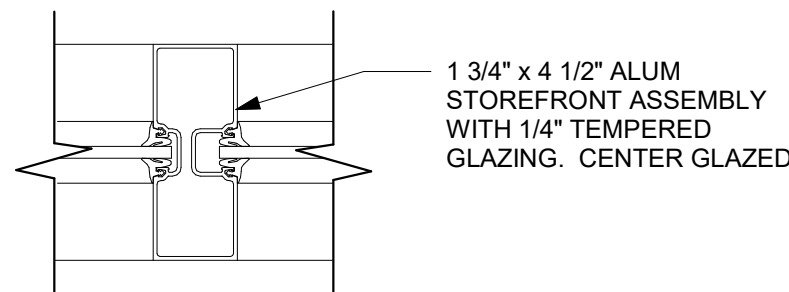
- ALL DOORS SHALL BE FREE TO EXIT AT ALL TIMES.
- CONDUITS AND WIRING FOR POWER & SIGNAL FEEDS TO DOOR ACCESS HARDWARE SHALL BE CONCEALED WHERE POSSIBLE. PATCH & RESTORE DISTURBED FINISHES TO MATCH. PROVIDE ACCESS PANELS IF REQUIRED. ACCESS PANELS SHALL BE PAINTED TO MATCH ADJACENT SURFACE.



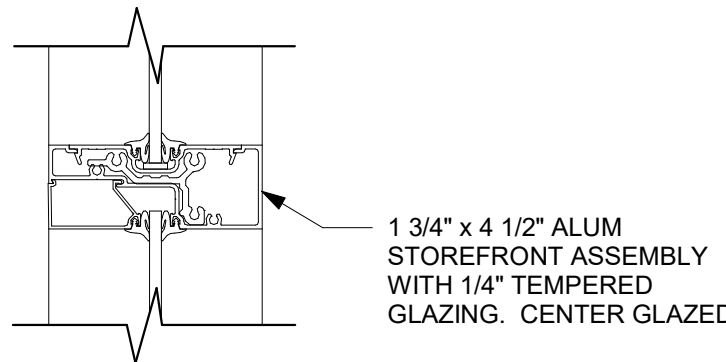
D4 JAMB DETAIL @ STOREFRONT
3" = 1'-0"



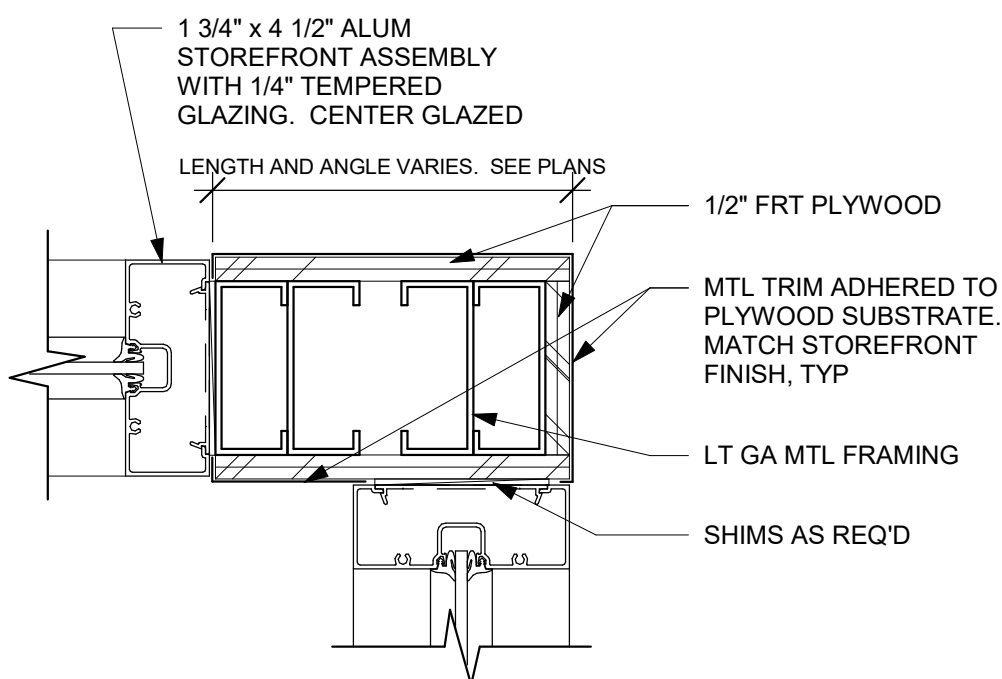
D6 HEAD DETAIL @ STOREFRONT
3" = 1'-0"



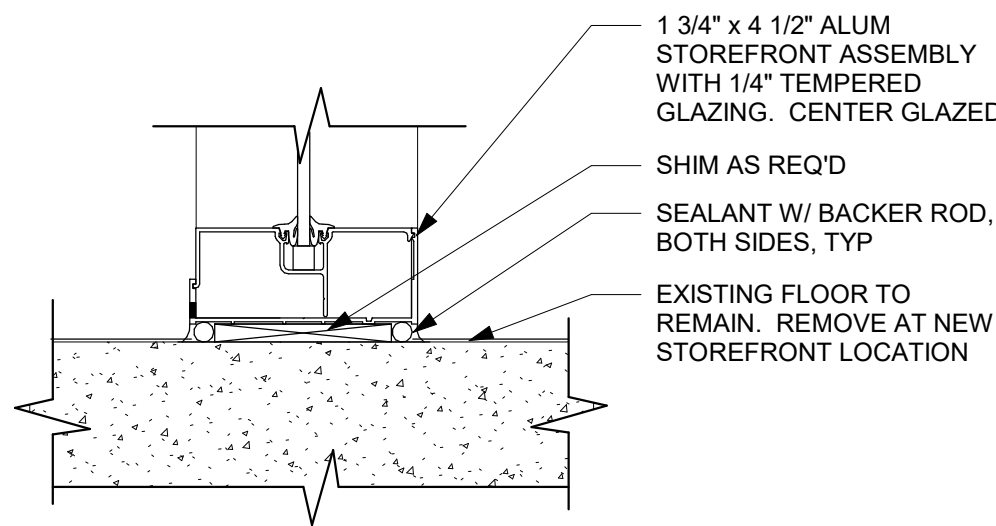
E4 VERT MULLION DETAIL @ STOREFRONT
3" = 1'-0"



E6 HOR MULLION DETAIL @ STOREFRONT
3" = 1'-0"



F4 TYP STOREFRONT CORNER DETAILS (UNO)
3" = 1'-0"



F6 SILL DETAIL @ STOREFRONT
3" = 1'-0"

A

B

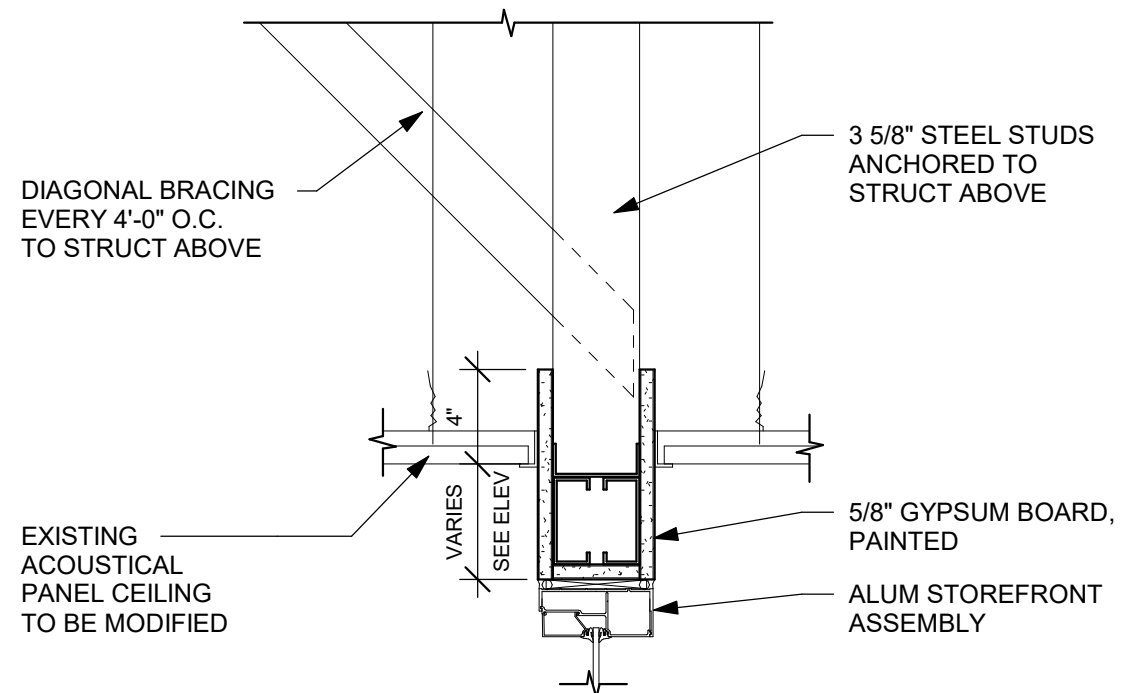
C

D

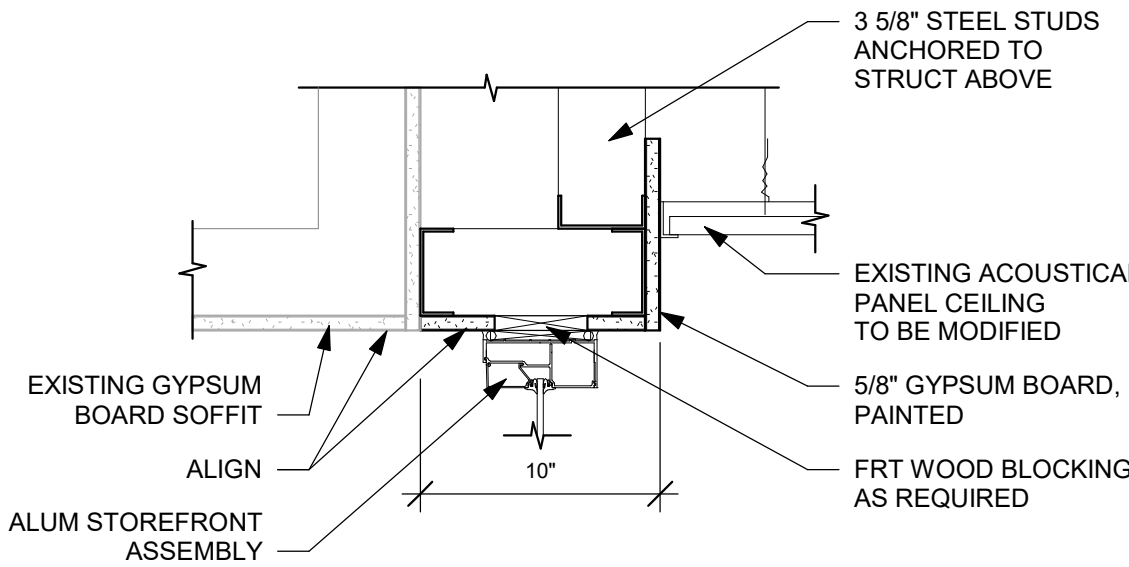
E

F

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B4 TYP HEADER DETAIL
1 1/2" = 1'-0"



C4 GYP BD SOFFIT / CEILING DETAIL
1 1/2" = 1'-0"

INTERIOR WALL TYPES SCHEDULE

TYPE	BASE WALL WIDTH	FIRE RATING TESTING AGENCY, ASSEMBLY NO.	DETAILS & NOTES
A1	3 5/8"		DECK 4 7/8" CEILING FLOOR DEFLECTION TRACK AT HEAD BRACE TO DECK AT 48" O.C. 5/8" TYPE "X" GYPSUM BOARD 3 5/8" STEEL STUDS @ 16" O.C. 5/8" TYPE "X" GYPSUM BOARD
A2	3 5/8"		4 7/8" 1 1/2" FLOOR 8" STEEL STUD BOX HEADER ALUM REVEAL ADD'L LAYER 5/8" TYPE "X" GYPSUM BOARD AT HEADER 5/8" TYPE "X" GYPSUM BOARD 3 5/8" STEEL STUDS @ 16" O.C. 5/8" TYPE "X" GYPSUM BOARD (TOP OF STOREFRONT) 8'-0"
B1	2 1/2"		DECK CEILING FLOOR EXISTING WALL 2 1/2" HAT CHANNEL @ 16" O.C. 5/8" TYPE "X" GYPSUM BOARD

GENERAL NOTES

- A. PROVIDE & INSTALL DEFLECTION TRACK AT ALL INTERIOR WALLS THAT EXTEND TO DECK.
B. STEEL STUD PARTITIONS SHALL BE BRACED TO STRUCTURE ABOVE.
C. REFER TO FLOOR PLANS FOR LOCATIONS OF INTERIOR PARTITIONS.

App Architecture

creative focused design

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STATE OF OHIO
TIMOTHY J. BEMENT
REGISTERED ARCHITECT
12305
Expiration Date 12/31/2025

Timothy J. Bement
Architect #12305
Expiration Date 12/31/2025

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ISSUE		
NO.	DATE	DESCRIPTION
	09/18/2025	BID / PERMIT

DATE	09-18-2025
JOB NO.	4322.00
DRAWN	DAW
CHECKED	TJB

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TITLE
WALL TYPES & DETAILS

SHEET NO.

A0.3

09/17/2025 4:26:13 PM

A

B

C

D

E

F

1

2

3

4

5

6

7

1

2

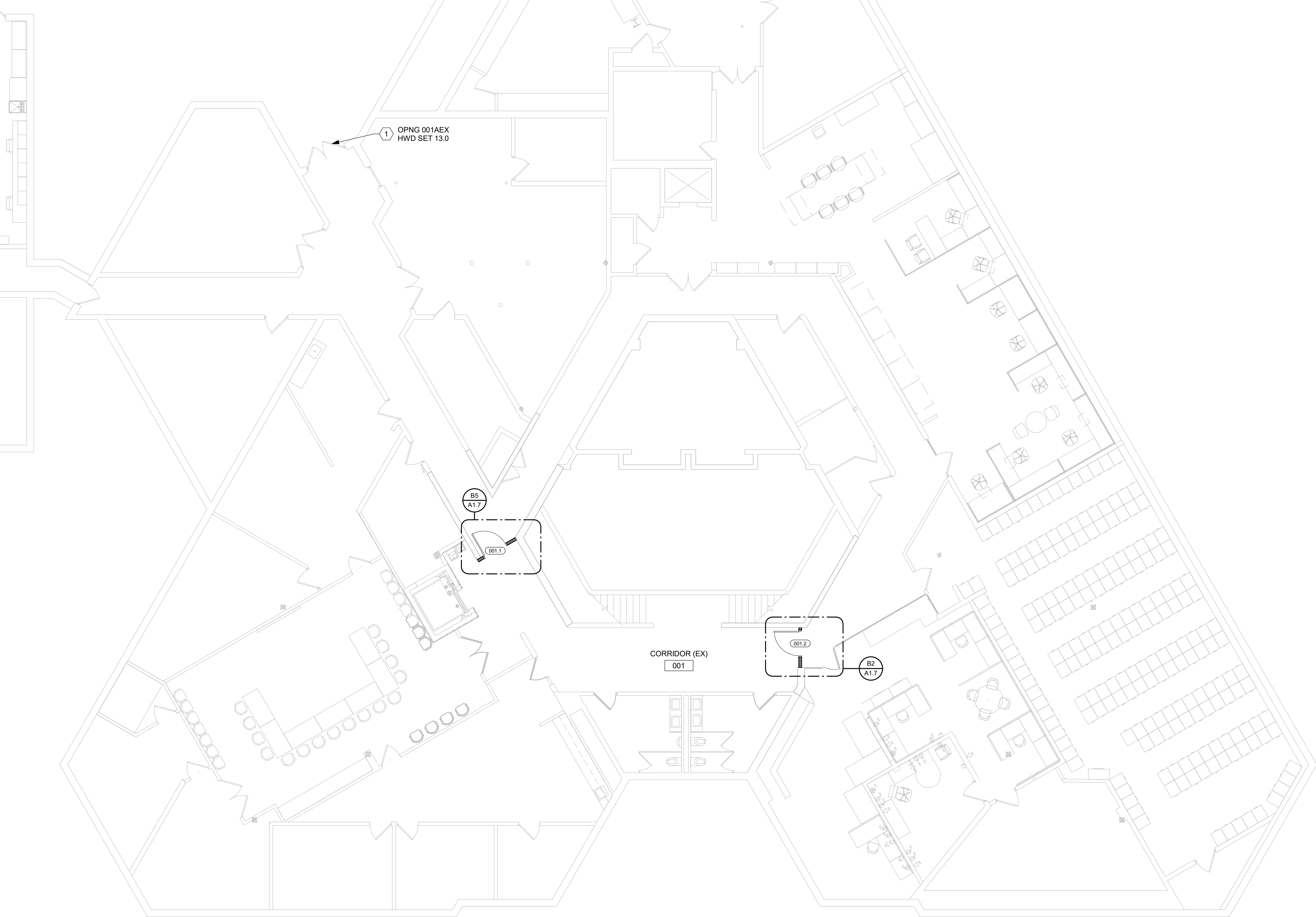
3

4

5

6

7



F1 SOUTH BUILDING - OVERALL PLAN - LOWER LEVEL
1/8" = 1'-0"

CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

- 1 EXISTING DOOR(S) TO BE MODIFIED TO RECEIVE FOB ACCESS DOOR HARDWARE.

GENERAL NOTES

- A. CONDUITS AND WIRING FOR POWER & SIGNAL FEEDS TO DOOR ACCESS HARDWARE SHALL BE CONCEALED WHERE POSSIBLE. PATCH & RESTORE DISTURBED FINISHES TO MATCH. PROVIDE FLUSH METAL ACCESS PANELS IF REQUIRED. ACCESS PANELS SHALL BE PAINTED TO MATCH ADJACENT SURFACE.

A

B

C

D

E

F



Kettering Government Center Security Upgrades

3600 Shroyer Rd, Kettering, OH 45429

ISSUE		
NO.	DATE	DESCRIPTION
01	09/18/2025	BID / PERMIT

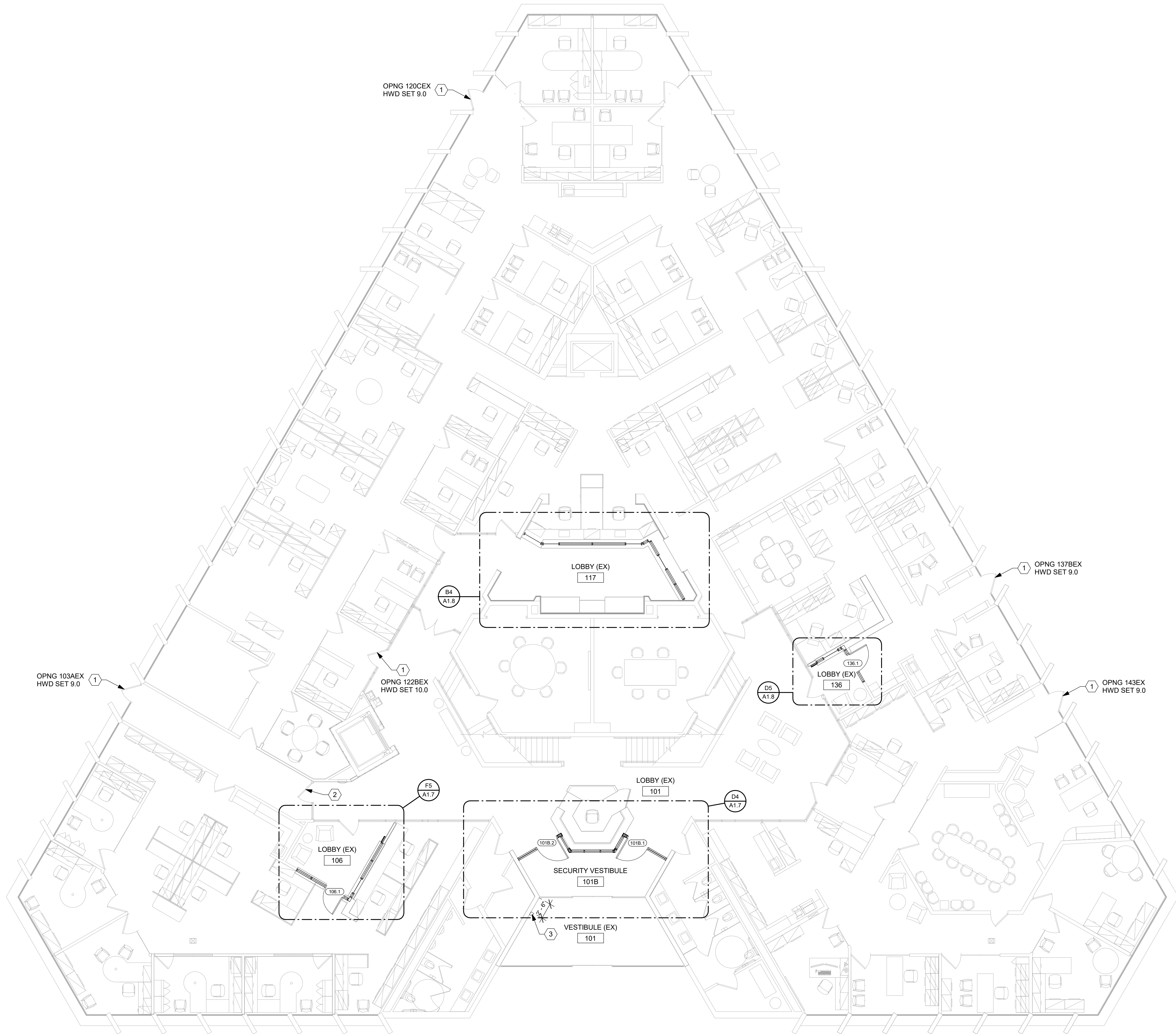
DATE	09-18-2025
JOB NO.	4322.00
DRAWN	DAW
CHECKED	TJB

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TITLE
SOUTH BLDG - OVERALL
PLAN - LOWER LEVEL

SHEET NO.

A1.3

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F1 SOUTH BUILDING - OVERALL PLAN - MAIN LEVEL
1/8" = 1'-0"

CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

- EXISTING DOOR(S) TO BE MODIFIED TO RECEIVE FOB ACCESS DOOR HARDWARE.
- EXISTING DOOR TO RECEIVE DECORATIVE WINDOW FILM ON CORRIDOR SIDE. FILM SHALL BE EQUAL TO DECORATIVE FILMS, SOLYX SXL-1022. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- SURFACE MOUNTED KNOX BOX. MOUNT AT 42" ABOVE CONC WALK. PROVIDE KNOX BOX MODEL NO. 3200. COLOR: DARK BRONZE.

GENERAL NOTES

- A. CONDUITS AND WIRING FOR POWER & SIGNAL FEEDS TO DOOR ACCESS HARDWARE SHALL BE CONCEALED WHERE POSSIBLE. PATCH & RESTORE DISTURBED FINISHES TO MATCH. PROVIDE FLUSH METAL ACCESS PANELS IF REQUIRED. ACCESS PANELS SHALL BE PAINTED TO MATCH ADJACENT SURFACE.

ISSUE

NO.	DATE	DESCRIPTION
01	09/18/2025	BID / PERMIT

DATE	09-18-2025
JOB NO.	4322.00
DRAWN	DAW
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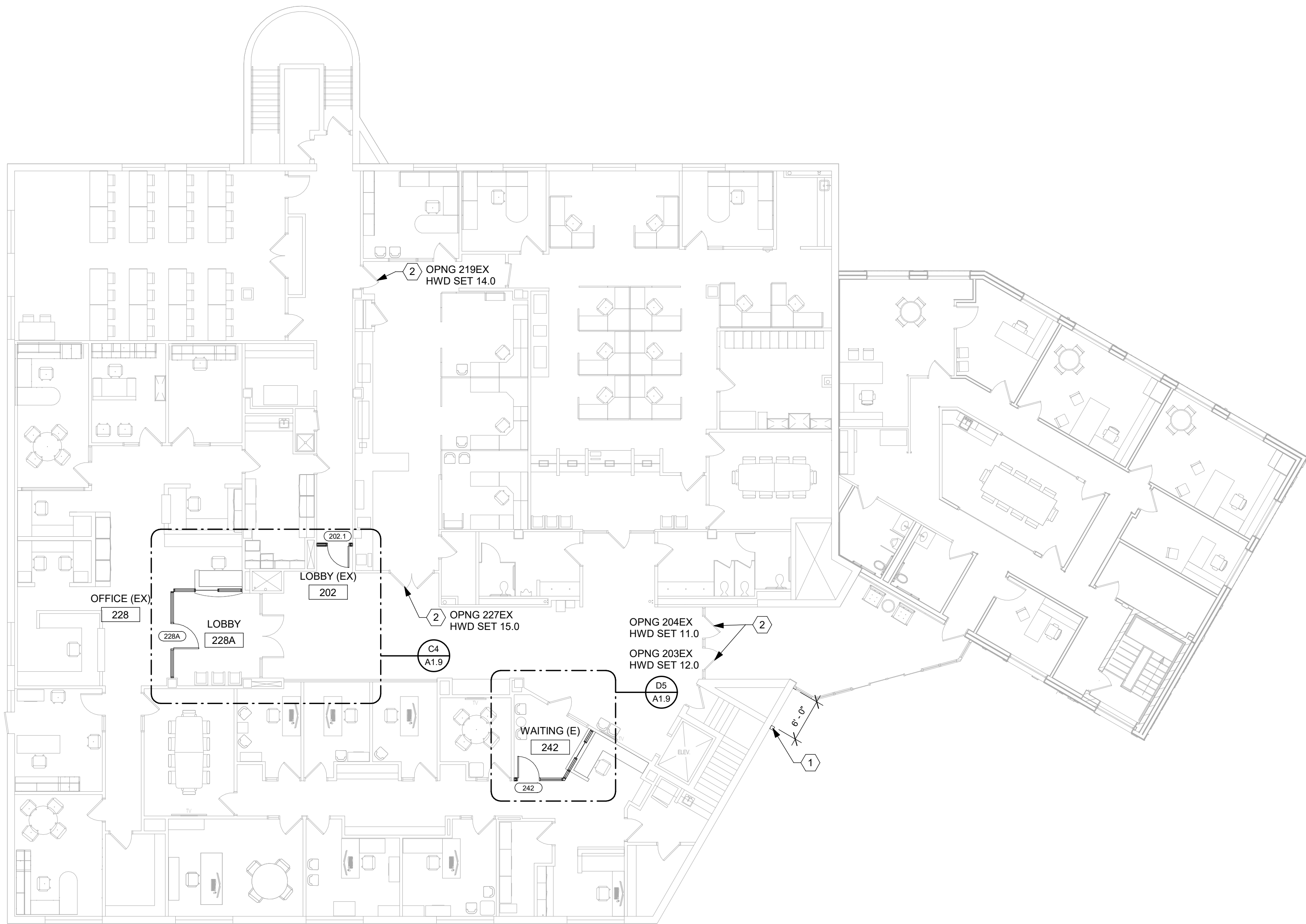
TITLE
**SOUTH BLDG - OVERALL
PLAN - MAIN LEVEL**

SHEET NO.

A1.4

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F1 NORTH BLDG - OVERALL PLAN - MAIN LEVEL
3/32" = 1'-0"



CONSTRUCTION NOTES

(00) INDICATES CONSTRUCTION NOTE.

- 1 SURFACE MOUNTED KNOX BOX. MOUNT AT 42" ABOVE CONC WALK. PROVIDE KNOX BOX MODEL NO. 3200. COLOR: DARK BRONZE.
- 2 EXISTING DOOR(S) TO BE MODIFIED TO RECEIVE FOB ACCESS DOOR HARDWARE.

GENERAL NOTES

- A. CONDUITS AND WIRING FOR POWER & SIGNAL FEEDS TO DOOR ACCESS HARDWARE SHALL BE CONCEALED WHERE POSSIBLE. PATCH & RESTORE DISTURBED FINISHES TO MATCH. PROVIDE FLUSH METAL ACCESS PANELS IF REQUIRED. ACCESS PANELS SHALL BE PAINTED TO MATCH ADJACENT SURFACE.

ISSUE

NO.	DATE	DESCRIPTION
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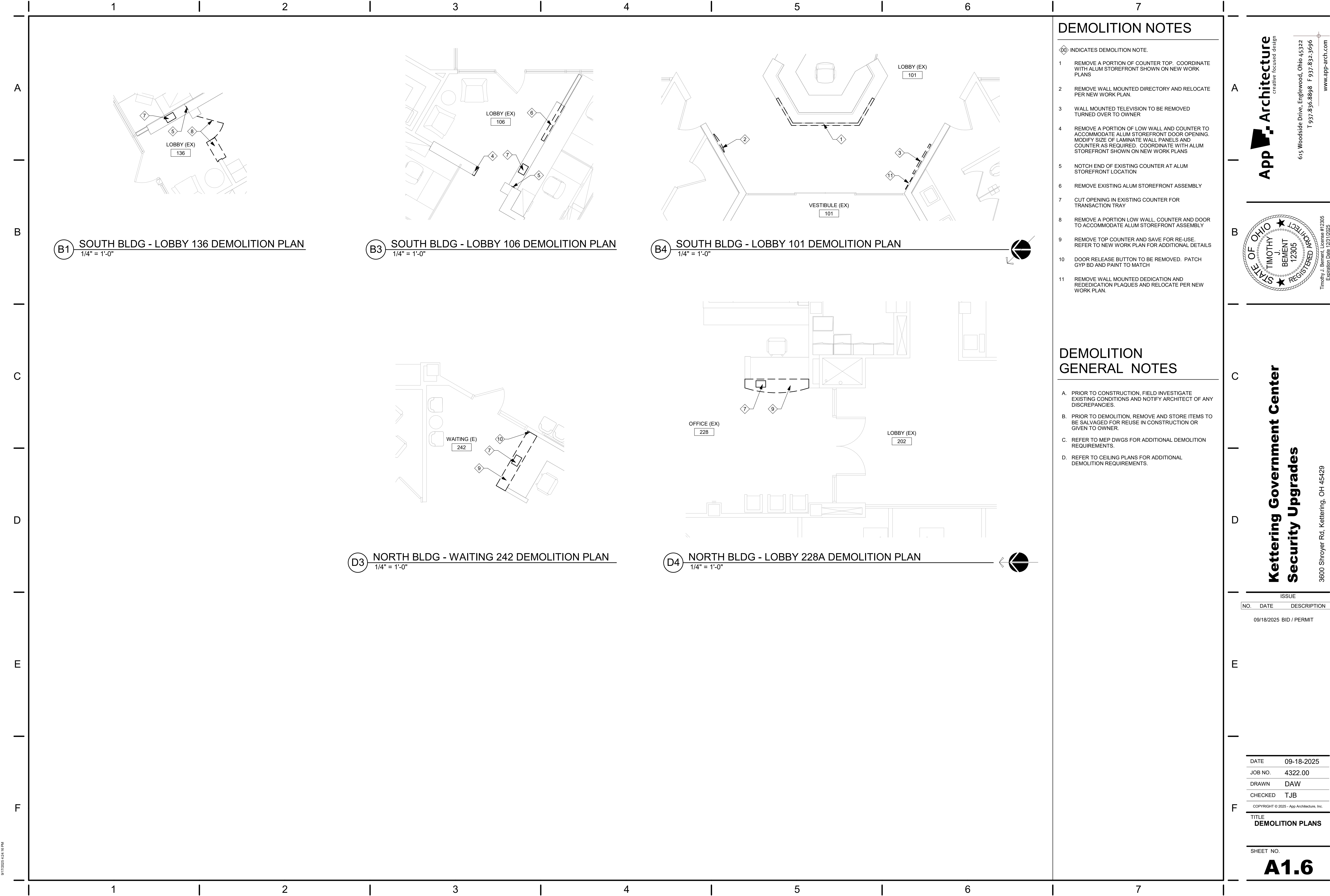
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TITLE
**NORTH BLDG - OVERALL
PLAN - MAIN LEVEL**

SHEET NO.

A1.5



DEMOLITION NOTES

- INDICATES DEMOLITION NOTE.
- REMOVE A PORTION OF COUNTER TOP. COORDINATE WITH ALUM STOREFRONT SHOWN ON NEW WORK PLANS
 - REMOVE WALL MOUNTED DIRECTORY AND RELOCATE PER NEW WORK PLAN.
 - WALL MOUNTED TELEVISION TO BE REMOVED TURNED OVER TO OWNER
 - REMOVE A PORTION OF LOW WALL AND COUNTER TO ACCOMMODATE ALUM STOREFRONT DOOR OPENING. MODIFY SIZE OF LAMINATE WALL PANELS AND COUNTER AS REQUIRED. COORDINATE WITH ALUM STOREFRONT SHOWN ON NEW WORK PLANS
 - NOTCH END OF EXISTING COUNTER AT ALUM STOREFRONT LOCATION
 - REMOVE EXISTING ALUM STOREFRONT ASSEMBLY
 - CUT OPENING IN EXISTING COUNTER FOR TRANSACTION TRAY
 - REMOVE A PORTION LOW WALL, COUNTER AND DOOR TO ACCOMMODATE ALUM STOREFRONT ASSEMBLY
 - REMOVE TOP COUNTER AND SAVE FOR RE-USE. REFER TO NEW WORK PLAN FOR ADDITIONAL DETAILS
 - DOOR RELEASE BUTTON TO BE REMOVED. PATCH GYP BD AND PAINT TO MATCH
 - REMOVE WALL MOUNTED DEDICATION AND REDEDICATION PLAQUES AND RELOCATE PER NEW WORK PLAN.

DEMOLITION GENERAL NOTES

- PRIOR TO CONSTRUCTION, FIELD INVESTIGATE EXISTING CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- PRIOR TO DEMOLITION, REMOVE AND STORE ITEMS TO BE SALVAGED FOR REUSE IN CONSTRUCTION OR GIVEN TO OWNER.
- REFER TO MEP DWGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
- REFER TO CEILING PLANS FOR ADDITIONAL DEMOLITION REQUIREMENTS.

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TITLE
DEMOLITION PLANS

SHEET NO.
A1.6

A

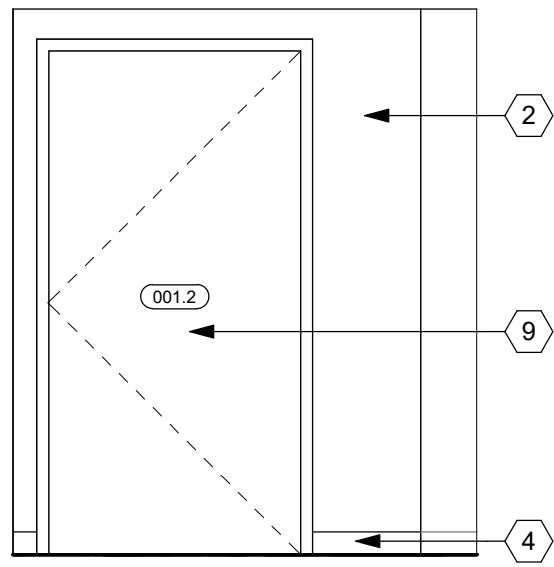
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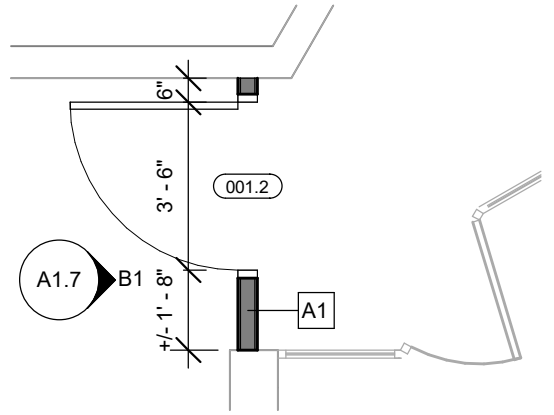
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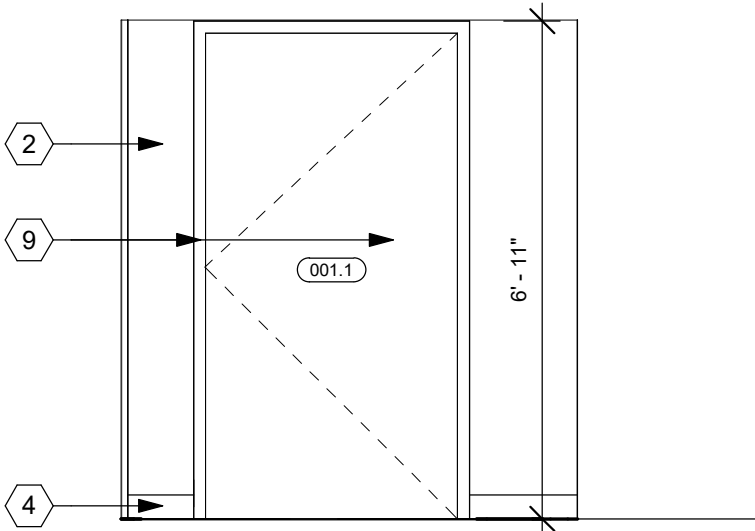
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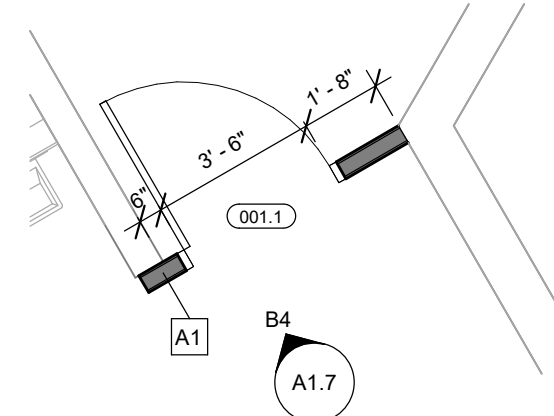
B1 CORRIDOR 001 ELEVATION - NORTH
3/8" = 1'-0"



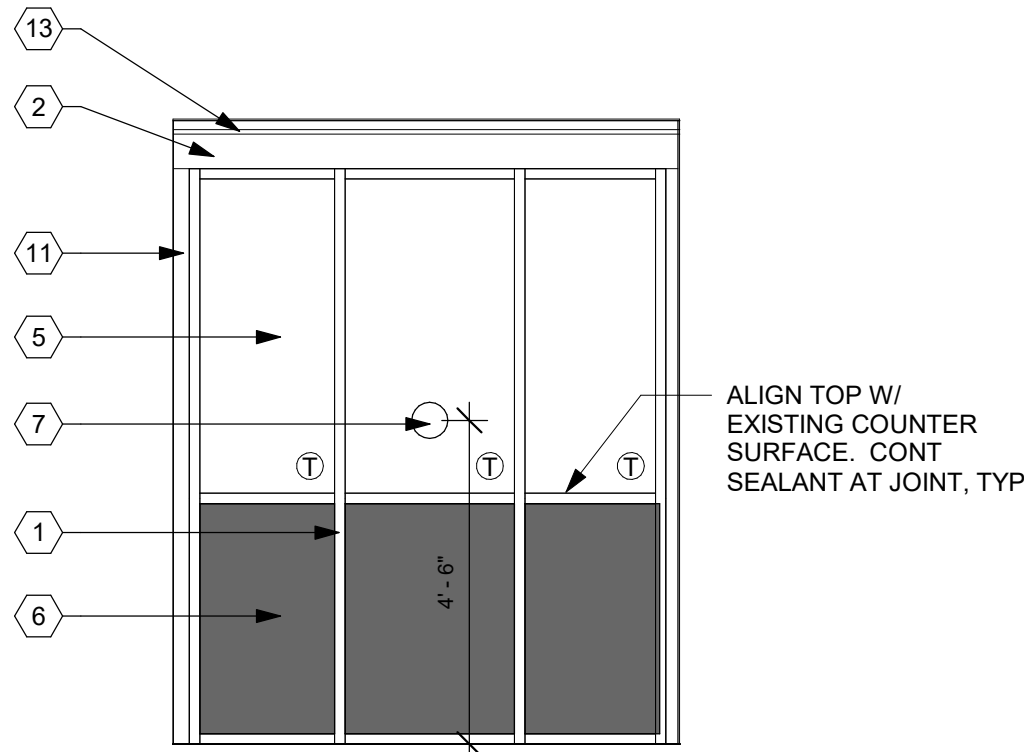
B2 CORRIDOR 001 ENLARGED PLAN OPNG 001.2
1/4" = 1'-0"



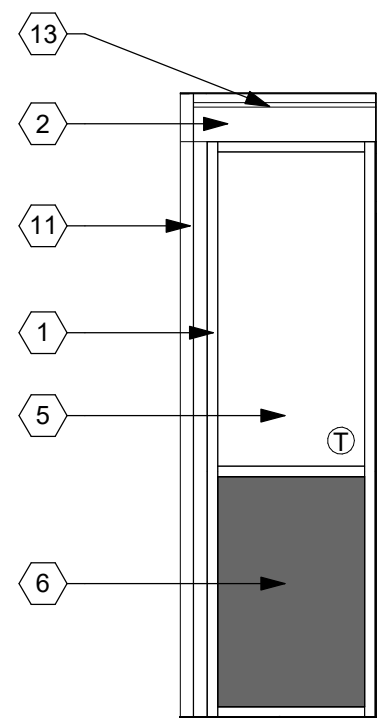
B4 CORRIDOR 001 ELEVATION - EAST
3/8" = 1'-0"



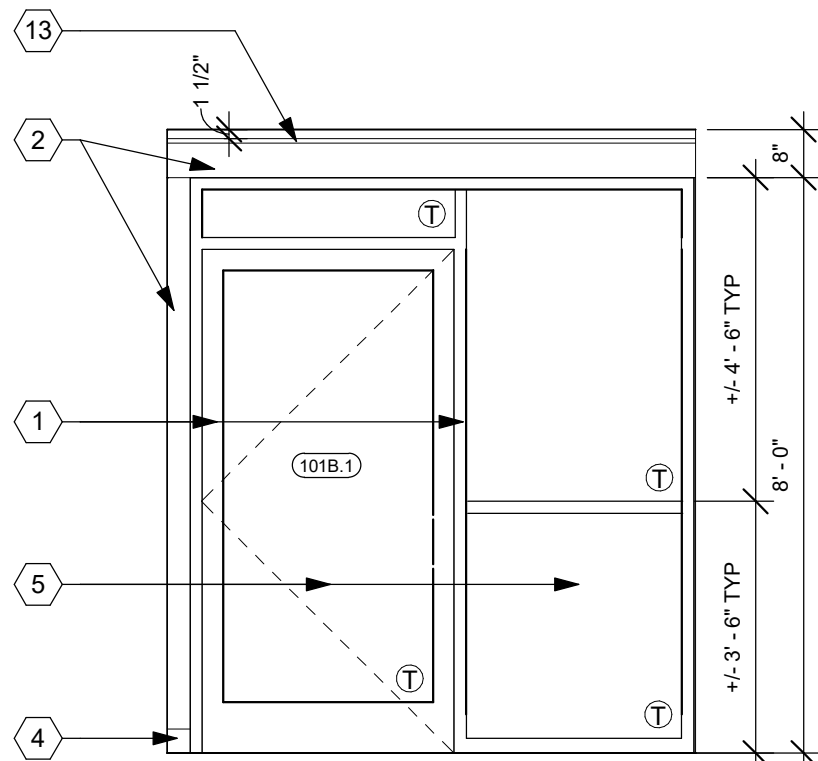
B5 CORRIDOR 001 ENLARGED PLAN OPNG 001.1
1/4" = 1'-0"



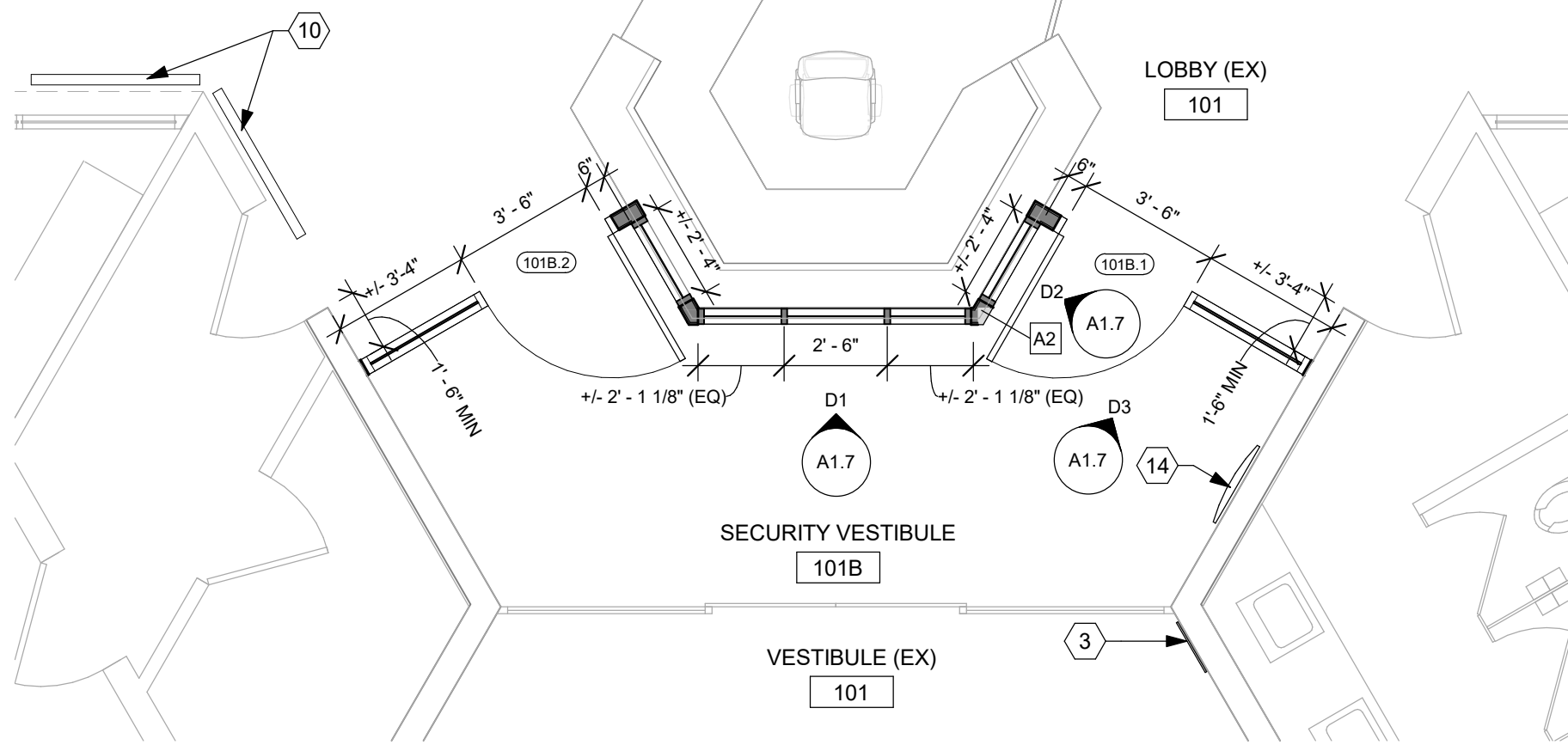
D1 LOBBY 101 ELEVATION - SOUTHEAST
3/8" = 1'-0"



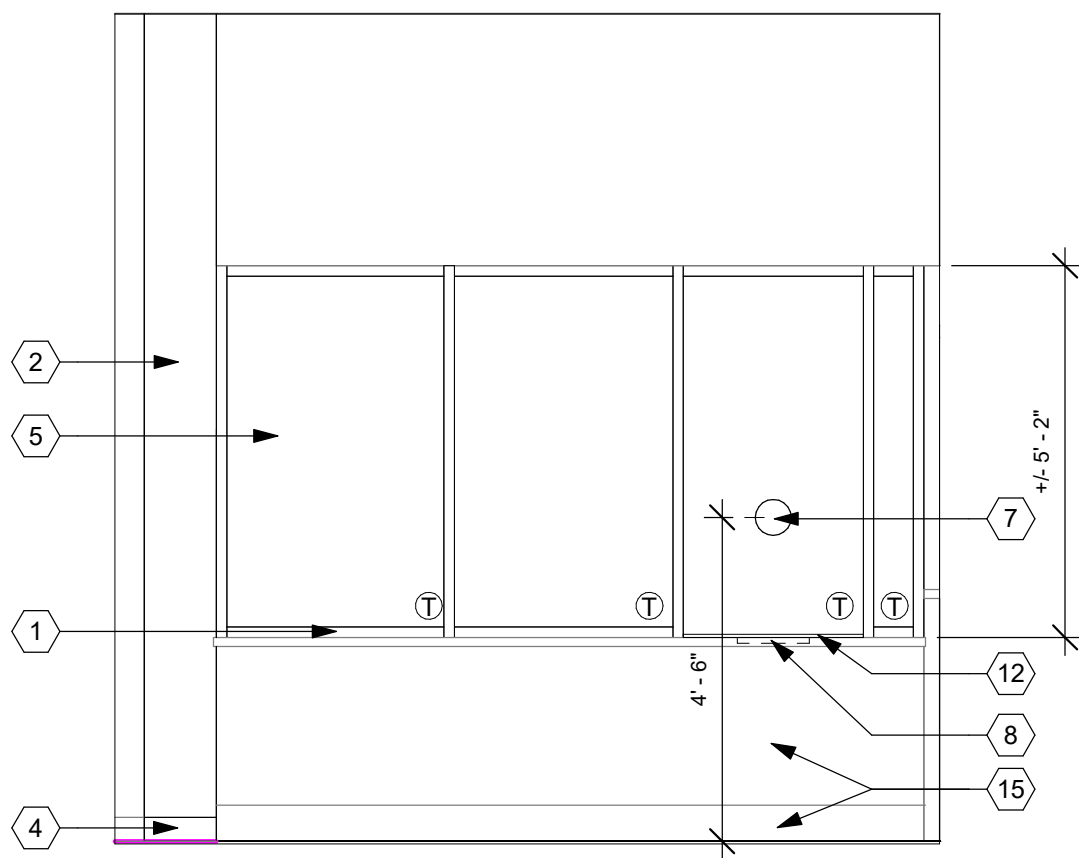
D2 LOBBY 101 ELEVATION - EAST
3/8" = 1'-0"
(TYP OF 2)



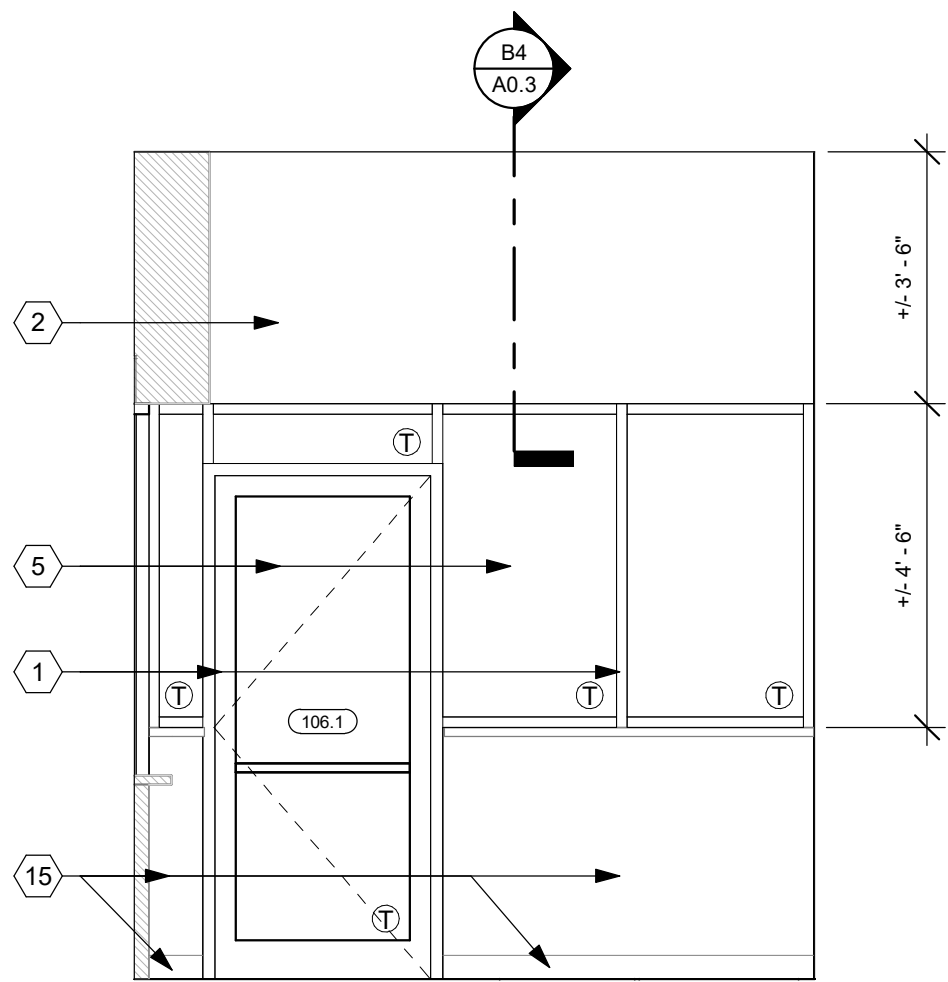
D3 LOBBY 101 ELEVATION - SOUTH
3/8" = 1'-0"
(OPNG 101B.2 SIM, OPP)



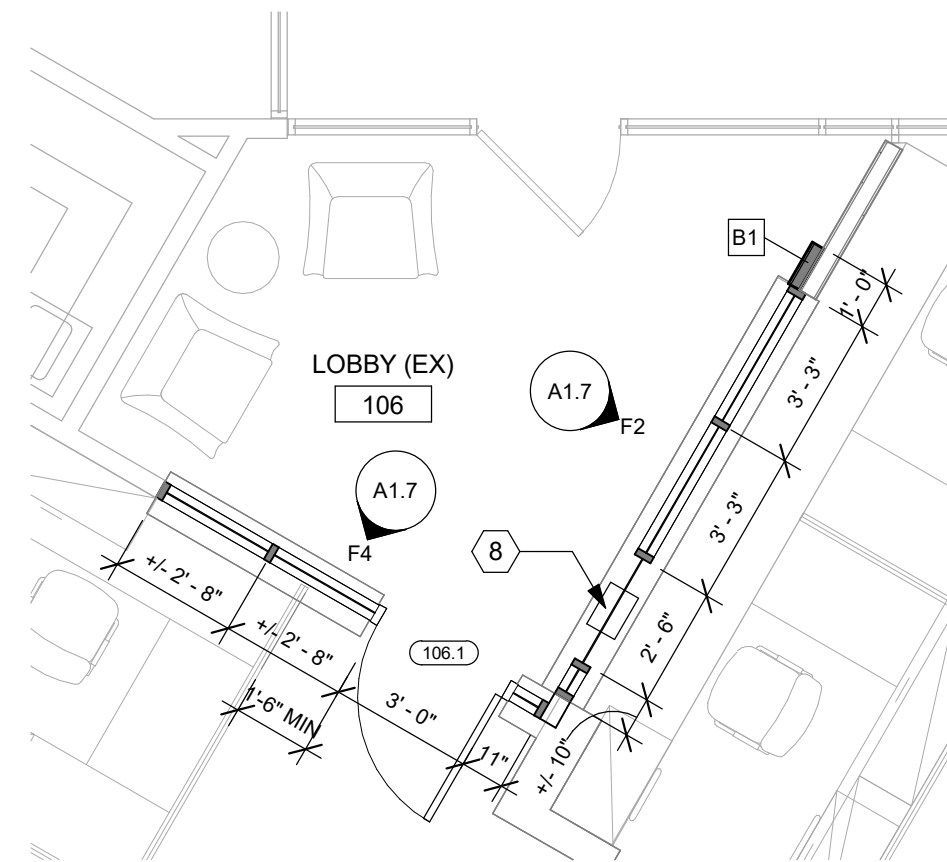
D4 SECURITY VESTIBULE 101B ENLARGED PLAN
1/4" = 1'-0"



F2 LOBBY 106 ELEVATION - WEST
3/8" = 1'-0"



F4 LOBBY 106 ELEVATION - NORTH
3/8" = 1'-0"



F5 LOBBY 106 ENLARGED FLOOR PLAN
1/4" = 1'-0"

CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

- 1 ALUM STOREFRONT ASSEMBLY WITH 1/4" TEMPERED GLAZING.
- 2 GYP BD PARTITION. PAINT TO MATCH ADJACENT WALL FINISH, TYP.
- 3 RELOCATE DEDICATION AND REDEDICATION PLAQUES. MATCH EXISTING MOUNTING HEIGHT.
- 4 RUBBER BASE TO MATCH EXISTING, TYP.
- 5 INSTALL IMPACT RESISTANT FILM ON SECURE VESTIBULE SIDE. PROVIDE LUMER SOL SR PS8 OR EQUAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS, TYP.
- 6 METAL INFILL PANEL.
- 7 NATURAL SPEAK THRU. PROVIDE TOTAL SECURITY SOLUTIONS MODEL MK1 W/ BRUSHED STAINLESS STEEL FINISH OR EQUAL.
- 8 RECESSED TRANSACTION TRAY (12" x 8" x 1 1/2") WITH TRAP FRAME BY TOTAL SECURITY SOLUTIONS. CUT INTO EXISTING COUNTER.
- 9 HOLLOW METAL FRAME WITH PREFIN WOOD DOOR.
- 10 55" TELEVISION WITH TILT BRACKET. PROVIDE LG 4K (2160p) QNED WITH A MINIMUM OF (1) LAN INPUT. MOUNT CENTERED BETWEEN TOP OF DOOR FRAME AND WALL WASH FIXTURE ABOVE. TELEVISION SHALL BE PROVIDED AND INSTALLED BY OHIO VALLEY INTEGRATION SERVICES, INC.
- 11 MTL TRIM ADHERED TO PLYWOOD SUBSTRATE. MATCH STOREFRONT FINISH, TYP.
- 12 1/2" HIGH ALUM U-CHANNEL AT BOTTOM EDGE OF GLASS. MATCH STOREFRONT FINISH, TYP.
- 13 CLR ANODIZED REVEAL. PROVIDE FRY REGLET #FDM-625-75 F REVEAL OR EQUAL. INSTALL ON BOTH SIDES OF HEADER, TYP.
- 14 RELOCATE DIRECTORY. MATCH EXISTING MOUNTING HEIGHT.
- 15 EXISTING LAMINATE AND BASE TO REMAIN.

GENERAL NOTES

- A. DOORS ARE 4" FROM FINISHED FACE OF WALL TO HINGE SIDE OF DOOR OPENING U.N.O.
- B. WALL DIMENSIONS ARE FROM FINISH FACE TO FINISH FACE U.N.O.
- C. ALIGN FINISH SURFACES WHERE NEW WALL CONSTRUCTION MEETS OR IS ADJACENT TO EXISTING WALL CONSTRUCTION.
- D. PATCH AND REPAIR ALL EXISTING FLOOR, WALL AND CEILING FINISHES WHERE ITEMS HAVE BEEN REMOVED AND NEW WORK DOES NOT CONCEAL DEMO.
- E. REFER TO A0.2 FOR TYPICAL STOREFRONT DETAILS.
- F. PROVIDE FRT WOOD BLOCKING / MTL FRAMING TO SUPPLEMENT AND BRACE EXISTING CONSTRUCTION AS REQUIRED AT STOREFRONT ANCHOR LOCATIONS.

A

B

C

D

E

F

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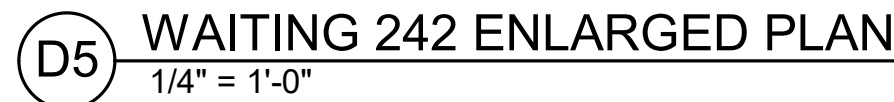
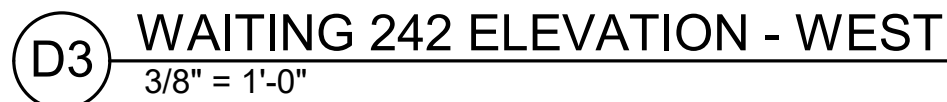
STATE OF OHIO
TIMOTHY J. BEMENT
REGISTERED ARCHITECT
12305
Expiration Date 12/31/2025

Kettering Government Center
Security Upgrades

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TITLE
SOUTH BLDG -
ENLARGED PLANS &
INTERIOR ELEVATIONS
SHEET NO.

A1.7



- A. DOORS ARE 4" FROM FINISHED FACE OF WALL TO HINGE SIDE OF DOOR OPENING U.N.O.
- B. WALL DIMENSIONS ARE FROM FINISH FACE TO FINISH FACE U.N.O.
- C. ALIGN FINISH SURFACES WHERE NEW WALL CONSTRUCTION MEETS OR IS ADJACENT TO EXISTING WALL CONSTRUCTION.
- D. PATCH AND REPAIR ALL EXISTING FLOOR, WALL AND CEILING FINISHES WHERE ITEMS HAVE BEEN REMOVED AND NEW WORK DOES NOT CONCEAL DEMO.
- E. REFER TO A0.2 FOR TYPICAL STOREFRONT DETAILS.
- F. PROVIDE FRF WOOD BLOCKING / MTL FRAMING TO SUPPLEMENT AND BRACE EXISTING CONSTRUCTION AS REQUIRED AT STOREFRONT ANCHOR LOCATIONS.

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TITLE
NORTH BLDG -
ENLARGED PLANS &
INTERIOR ELEVATIONS

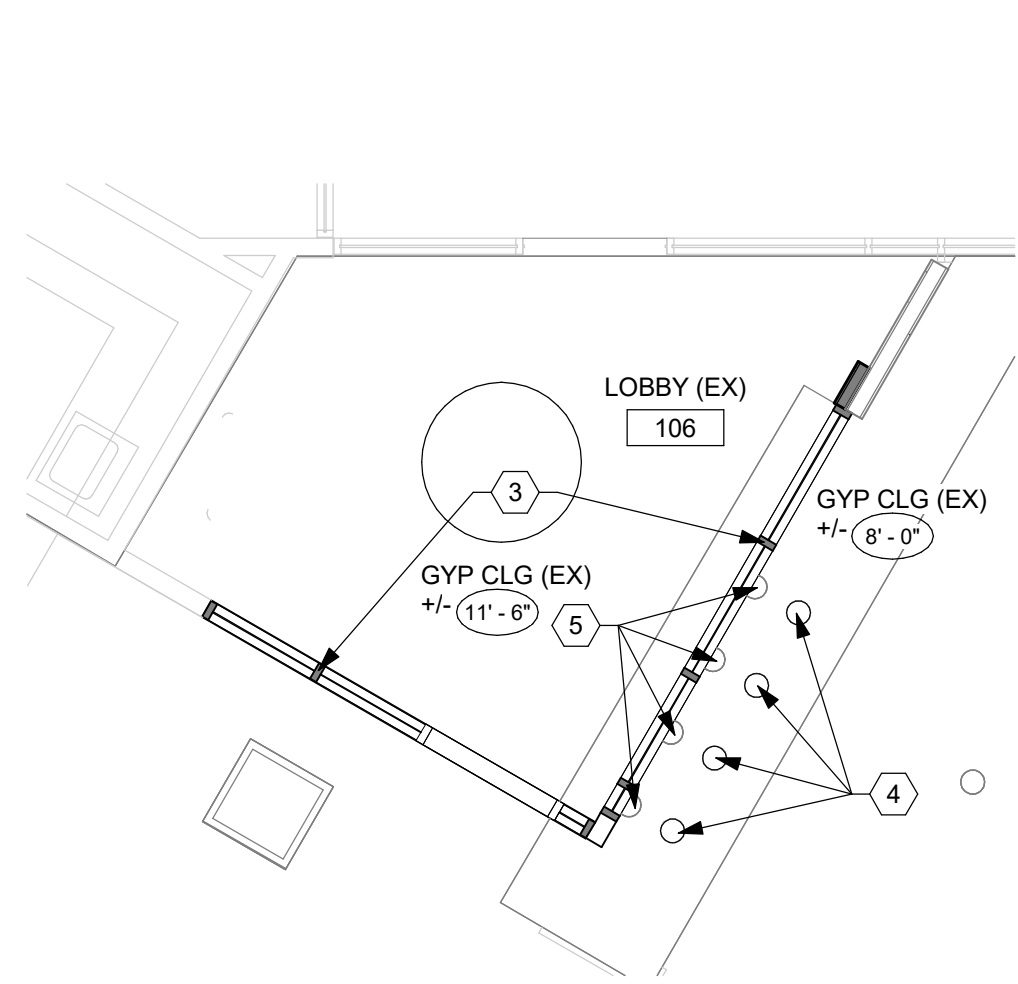
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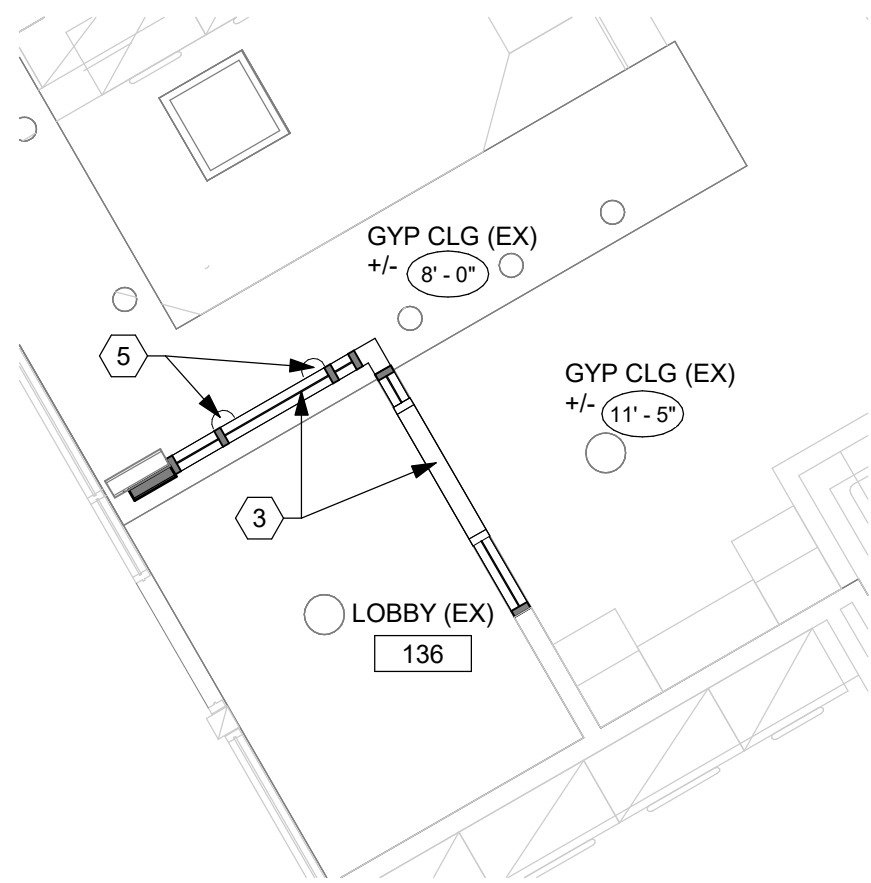
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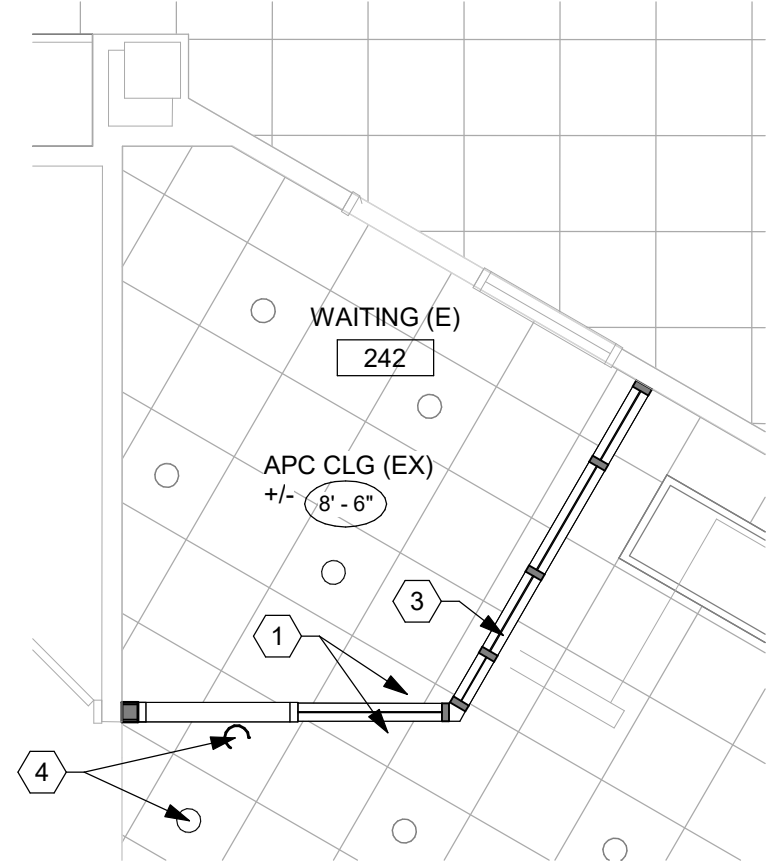
B2 SOUTH BLDG - LOBBY 106 REFLECTED CLG PLAN
1/4" = 1'-0"



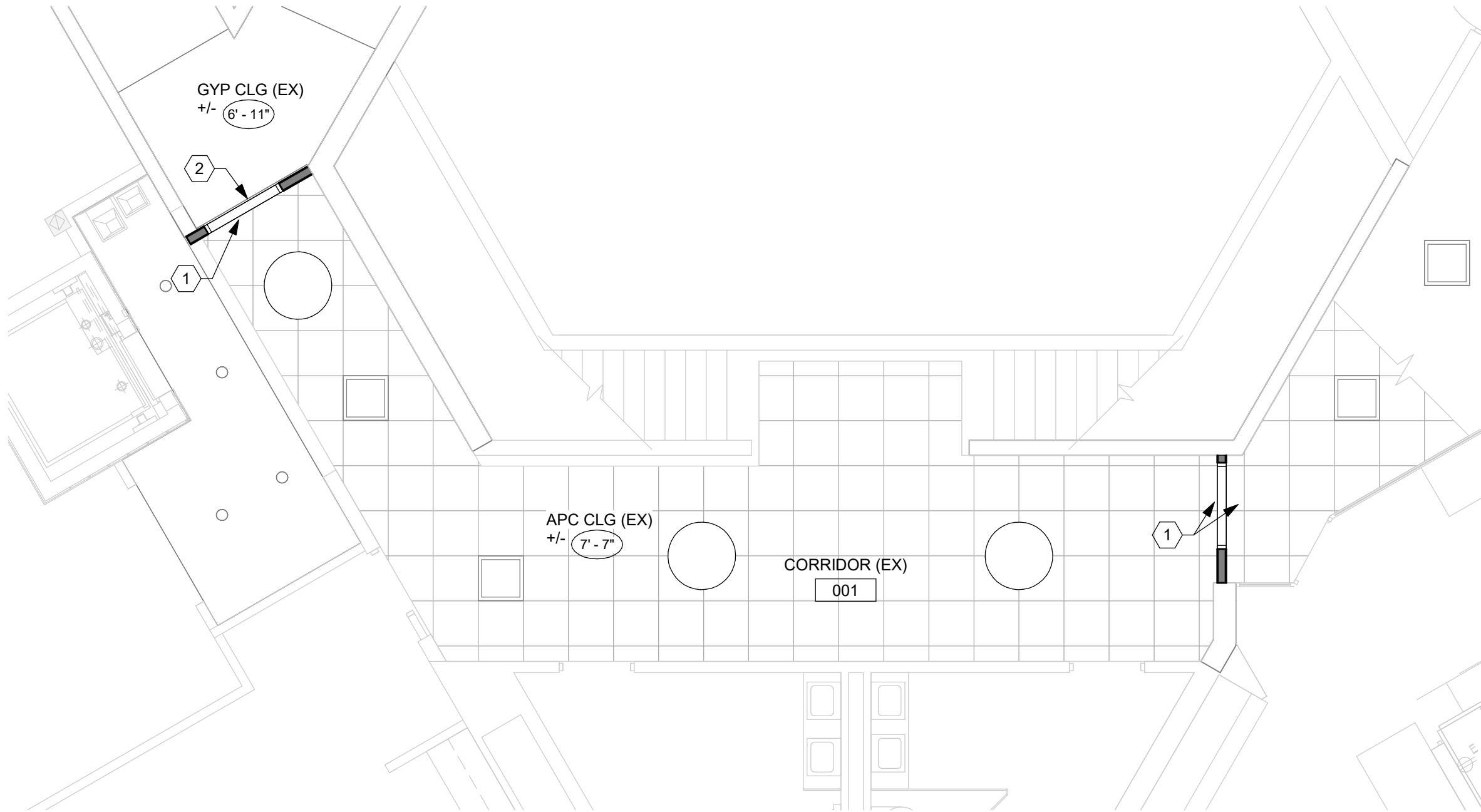
D2 SOUTH BLDG - LOBBY 136 REFLECTED CLG PLAN
1/4" = 1'-0"



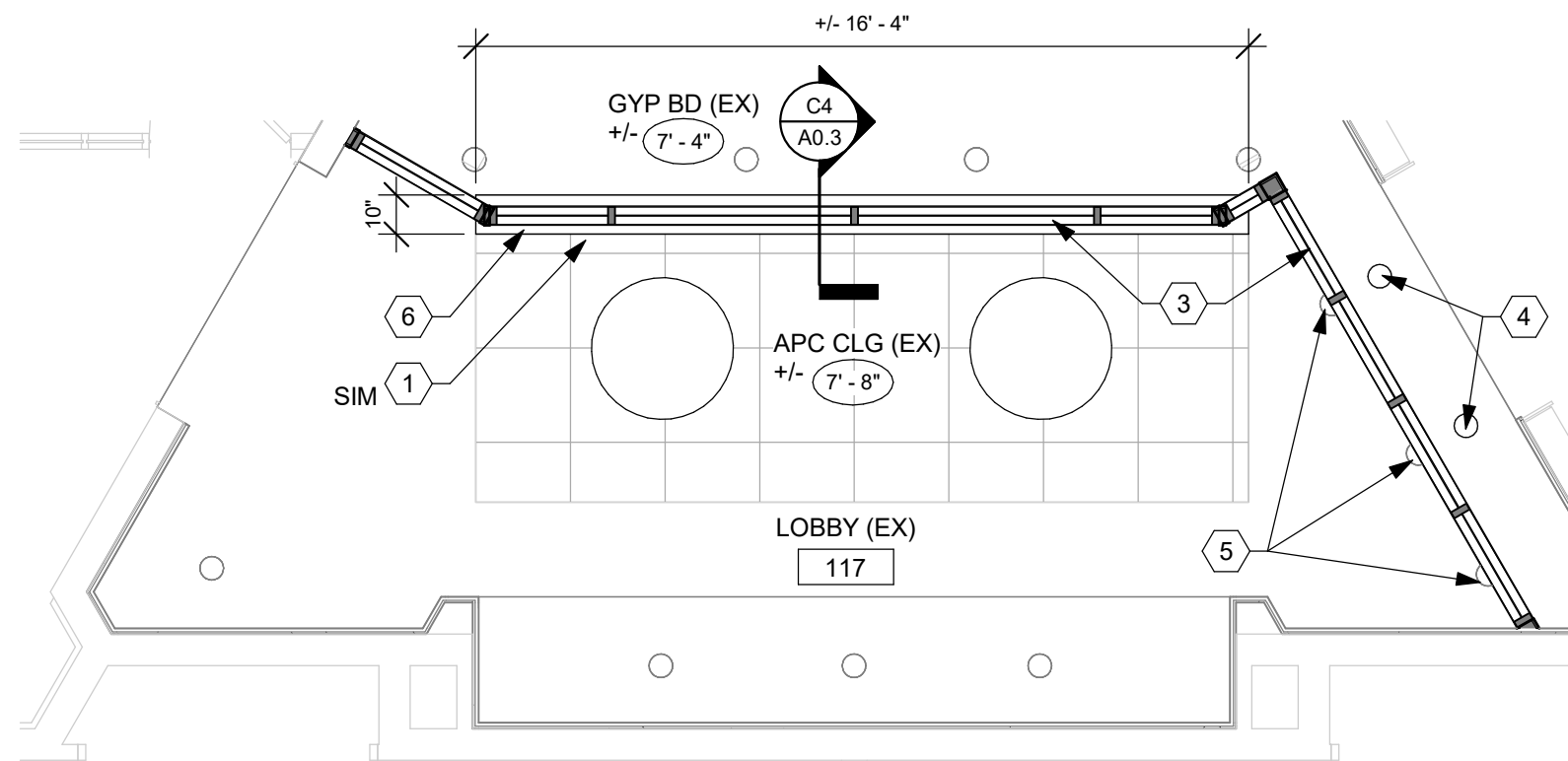
F2 NORTH BLDG - WAITING 242 PARTIAL REFLECTED CLG PLAN
1/4" = 1'-0"



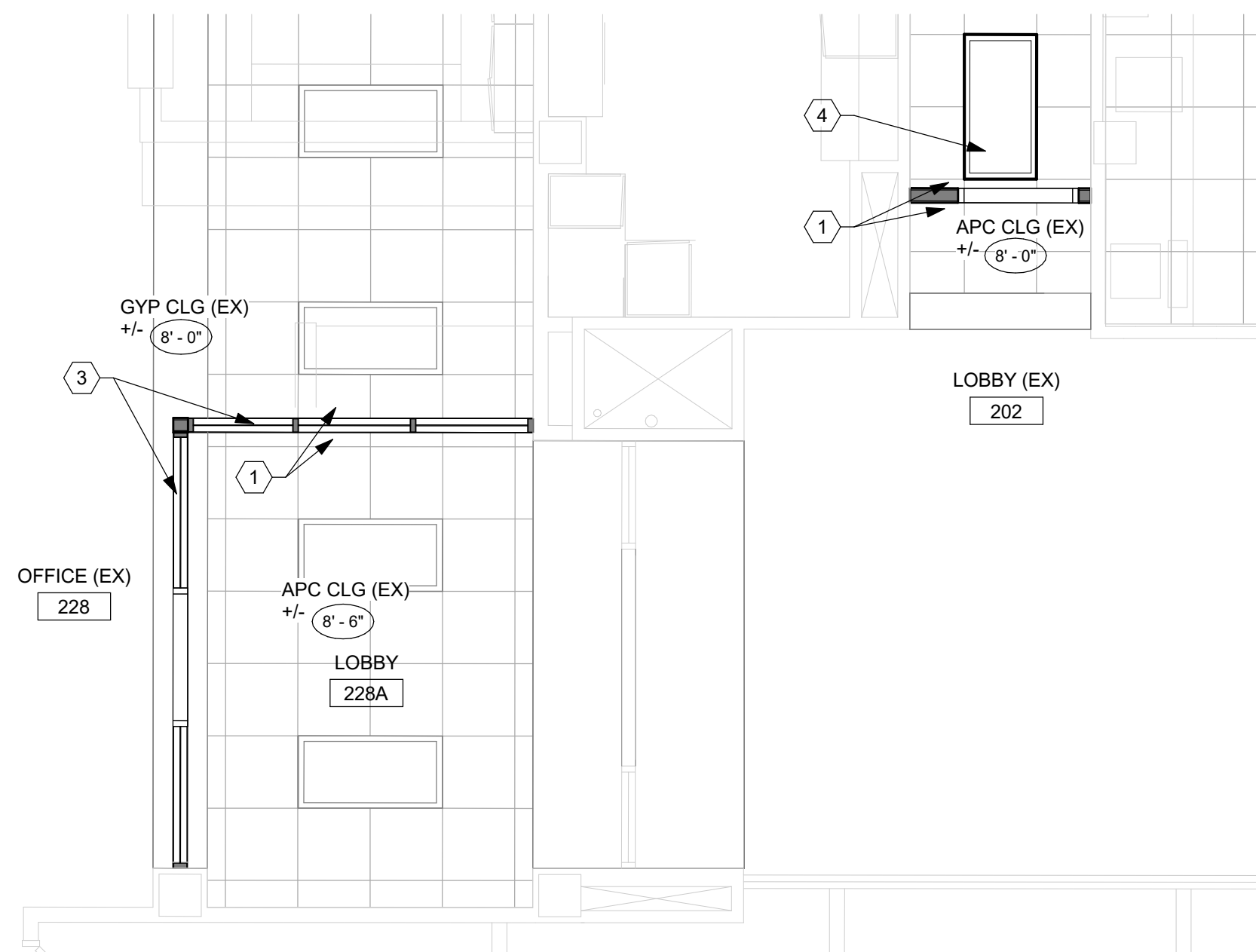
F1 SOUTH BLDG - PARTIAL REFLECTED CEILING PLAN - LOWER LEVEL
3/16" = 1'-0"



D4 SOUTH BLDG - LOBBY 117 REFLECTED CLG PLAN
1/4" = 1'-0"



F4 NORTH BLDG - LOBBY 228A PARTIAL REFLECTED CLG PLAN
1/4" = 1'-0"



CONSTRUCTION NOTES

00 INDICATES CONSTRUCTION NOTE.

- 1 MODIFY EXIST APC AT NEW PARTITION LOCATION.
- 2 INFILL GYP BD CEILING TO MATCH EXISTING.
- 3 ALUM STOREFRONT ASSEMBLY WITH 1/4" TEMPERED GLAZING.
- 4 RELOCATE EXISTING LIGHT FIXTURE. REFER TO ELEC DWGS FOR ADDITIONAL DETAILS.
- 5 LIGHT FIXTURE TO BE REMOVED. PATCH GYP BD AND FINISH TO MATCH. REFER TO ELEC DWGS FOR ADDITIONAL DETAILS.
- 6 GYP BD CEILING TO ALIGN WITH EXISTING. FINISH AND PAINT TO MATCH.

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TITLE
**ENLARGED REFLECTED
CEILING PLANS**

SHEET NO.

A2.1

HVAC SPECIFICATIONS (DIVISION 23)

1. PROVIDE A COMPLETE HVAC SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN. WORK INCLUDES, BUT IS NOT NECESSARILY LIMITED TO, THE FOLLOWING PRINCIPAL CATEGORIES:
- A. AIR DISTRIBUTION SYSTEMS, INCLUDING AIR SUPPLY, RETURN AND EXHAUST DUCTWORK AND ASSOCIATED AIR DISTRIBUTION AND TERMINAL DEVICES.
- B. ALTERATION WORK IN THE EXISTING BUILDING.
2. OBTAIN AND PAY FOR ALL PERMITS. UPON COMPLETION, PROVIDE A CERTIFICATE OF APPROVAL FROM THE GOVERNING INSPECTION AUTHORITY.
3. DURING THE BIDDING PERIOD, INSPECT THE SITE AND PREMISES OF THE PROPOSED WORK. REPORT IMMEDIATELY ANY SIGNIFICANT OBSERVED DISCREPANCIES AS RELATED TO THE PLANS OR THE REQUIRED WORK. ALL WORK SHALL COMPLY WITH OHIO BUILDING CODE, OHIO MECHANICAL CODE AND ALL OTHER APPLICABLE CODES, LAWS AND ORDINANCES.
4. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, EQUIPMENT, AND MATERIAL ENTERING INTO THIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE. ANY WORK PROVEN TO BE DEFECTIVE DURING THIS PERIOD SHALL BE MADE GOOD BY THIS CONTRACTOR WITHOUT EXPENSE TO THE OWNER.
5. EQUIPMENT CONTROL PANELS CONTAINING POWER CONTROL COMPONENTS SHALL BE MARKED WITH THE MINIMUM SCOR RATING. THE RATING SHALL NOT BE LESS THAN THE AVAILABLE FAULT CURRENT. REFER TO THE ELECTRICAL DRAWINGS FOR THE CALCULATED AVAILABLE FAULT AT THE DISTRIBUTION PANEL, MCC OR PANELBOARD SERVING THE EQUIPMENT. INCLUDE CONFIRMATION OF BEING PROTECTED FROM THE FAULT CURRENT IN THE EQUIPMENT SHOP DRAWING SUBMITTAL.
6. WHERE TRADE NAMES, BRANDS OR MANUFACTURERS ARE LISTED, ANY ONE OF THE SEVERAL NAMED ARE CONSIDERED EQUALLY ACCEPTABLE. NO UNNAMED PRODUCT OR MATERIAL SHALL BE USED UNLESS APPROVED IN WRITING BY THE ENGINEER. SUBMIT ELECTRONIC SHOP DRAWINGS ON MAJOR ITEMS OF EQUIPMENT AND MATERIALS.
7. PLAN WORK AS TO PROVIDE REASONABLE CONTINUOUS SERVICE OF EXISTING SYSTEMS. SHUTDOWN OF SYSTEMS SHALL BE BID OUTSIDE OF NORMAL WORKING HOURS.
8. WORKMANSHIP SHALL BE FIRST CLASS. THE ARCHITECT'S OR ENGINEER'S JUDGMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.
9. PROTECT MATERIALS AND EQUIPMENT AFTER DELIVERY TO THE JOB SITE. RESPECT OTHER TRADES AS RELATED TO PROTECTING THEIR WORK AND TO AVOID CONSTRUCTION INTERFERENCES. CALL ATTENTION TO PROBLEMS RELATING TO SPACE REQUIREMENTS SO EARLY RESOLUTION MAY BE OBTAINED. RESPECT OWNER'S PROPERTY AT ALL TIMES. TEMPORARILY REMOVE, STORE AND RE-INSTALL CEILINGS WHEN REQUIRED TO PREFORM WORK.
10. CUT AND PATCH TO INSTALL WORK OR PAY OTHERS TO PERFORM SUCH WORK. CONCRETE SHALL BE SAW CUT OR CORE DRILLED. WORKMANSHIP SHALL BE FIRST CLASS. THE ARCHITECT'S OR ENGINEER'S JUDGMENT SHALL PREVAIL IF THE QUALITY IS SUSPECT.
11. IN ALTERATION AND REMODELING WORK, PERFORM ALL REMOVAL AND RELOCATION WORK KINDRED TO THE HVAC WORK. LEAVE ALL EXISTING SYSTEMS CONTINUOUS AND FUNCTIONAL. REMOVE EXTRANEOUS PIPING AND EQUIPMENT. NO REMOVED MATERIAL SHALL BE REUSED UNLESS EXPRESSLY SHOWN.
12. EACH CONTRACTOR SHALL MAINTAIN A SEPARATE SET OF AS-BUILT PRINTS OF THE CONTRACT DOCUMENTS AND SHALL SHOW ANY SIGNIFICANT CHANGES OR VARIATIONS WHICH ARE MADE DURING CONSTRUCTION. UPON COMPLETION OF THE WORK, THESE DRAWINGS SHALL BE TURNED OVER TO THE ARCHITECT.
13. FIRESTOPPING ASSEMBLIES SHALL BE PROVIDED AT PENETRATIONS OF NON-FIRE DAMPPED DUCTS THRU FIRE RATED FLOORS, FIRE RATED FLOOR-CEILING AND ROOF CEILING ASSEMBLIES, FIRE & SMOKE RATED WALLS AND PARTITIONS AND FIRE & SMOKE RATED SHAFT WALLS AND PARTITIONS. IN ADDITION, FIRESTOPPING ASSEMBLIES SHALL BE PROVIDED AT PENETRATIONS THRU 6-HOUR RATED FLOORS. REFER TO THE ARCHITECTURAL DRAWINGS FOR FIRE AND SMOKE RATED BUILDING ELEMENTS AND HVAC DRAWINGS FOR PIPE AND DUCT LAYOUTS.
14. SUPPORT EQUIPMENT AND DUCTWORK FROM STRUCTURAL STEEL MEMBERS OR CONCRETE ONLY, NOT FROM METAL DECKS.
15. PROVIDE 24" X 24" SIZE ACCESS DOORS WITH CONCEALED HINGE, SCREWDRIVER LOCK, TYPE M BY MILCOR, OR APPROVED EQUIVALENT, WHERE REQUIRED FOR DEVICE OR EQUIPMENT ACCESS.
16. PAINT ALL UNPAINTED OR RUSTY SURFACES ON SUPPORTS, HANGERS AND EQUIPMENT WITH ONE (1) COAT BLACK RUSTOLEUM.
17. TOUCH-UP OR REFINISH EQUIPMENT WHERE FACTORY FINISH HAS DETERIORATED DUE TO EXPOSURE.
18. PAINT DULL BLACK ALL VISIBLE METAL BEHIND GRILLES AND REGISTERS.
19. REFER TO DUCT CONSTRUCTION & SEALING SCHEDULE ON THE DRAWINGS.
- A. PATCH ALL DUCTWORK THAT IS ALTERED DURING CONSTRUCTION.
- B. DUCTWORK SHALL BE LOCK FORMING QUALITY GALVANIZED STEEL, ASTM A294/A294M AND A653/A653M, G60 COATING DESIGNATION, 24 GAUGE MINIMUM SHEET METAL, RECTANGULAR, FLAT OVAL AND ROUND AS SHOWN ON THE DRAWINGS.
- C. FLEXIBLE DUCT SHALL BE INSTALLED AS DETAILED ON THE DRAWINGS AND SHALL NOT PASS THROUGH ANY WALL, FLOOR, OR CEILING. FLEXIBLE DUCTS AND AIR CONNECTORS SHALL NOT PASS THROUGH ANY FIRE-RESISTANCE-RATED ASSEMBLY.
1. FLEXIBLE AIR (DUCT) CONNECTORS FOR GALVANIZED STEEL DUCTWORK SHALL BE:
- a. CONSTRUCTED OF GALVANIZED STEEL SPIRAL WIRE MECHANICALLY LOCKED TO AN AIRTIGHT LAMINATED ALUMINUM FOIL, FIBERGLASS AND ALUMINIZED POLYESTER DUCT FABRIC. DUCT SHALL BE RATED AT A MINIMUM OF 10 INCHES W.C. POSITIVE PRESSURE AND 4 INCHES W.C. NEGATIVE PRESSURE, UNLESS OTHERWISE DETAILED ON THE DRAWINGS. LENGTH SHALL BE LIMITED TO 4 FEET FOR AIR TERMINAL UNITS AND 5 FEET FOR AIR DEVICES.
- b. INSULATED FLEXIBLE DUCT SHALL HAVE 1 INCH THICK R-4.2 FIBROUS GLASS INSULATION AND .10 PERM POLYETHYLENE VAPOR BARRIER OUTER JACKET, EQUAL TO FLEXMASTER TYPE 5B OR .05 PERM REINFORCED METALIZED VAPOR BARRIER OUTER JACKET, EQUAL TO FLEXMASTER 5M. INSULATED DUCT ASSEMBLY SHALL CONFORM TO BE UL 181 AND LISTED AS CLASS I FLEXIBLE AIR CONNECTOR.
- D. INTERIOR DUCT LINER FOR ACOUSTICAL AND THERMAL INSULATING PURPOSES SHALL CONFORM TO ASTM C1071 AND SHALL BE GREENGUARD CERTIFIED FOR LOW FORMALDEHYDE AND LOW VOC EMISSIONS. LINER SHALL BE 1 INCH THICK R-4.2 FLEXIBLE FIBERGLASS BONDED WITH THERMOSETTING RESIN. THE INTERIOR (AIRSIDE) SURFACE SHALL BE COVERED WITH A DURABLE MAT FACING, WHICH SHALL ENCAPSULATE THE LINER MATERIALS, PROVIDE A SMOOTH FACE TO THE AIRSTREAM AND PROTECT THE LINER FROM CUTS AND ABRASIONS. THE FACING SHALL BE TREATED WITH AN EPA REGISTERED ANTI-MICROBIAL AGENT TO REDUCE THE POTENTIAL FOR MICROBIAL GROWTH. EDGES OF THE LINER SHALL BE COVERED WITH AN ENCAPSULATING COATING TO SEAL TRANSVERSE LINER EDGES AND PREVENT SURFACE FLARING DUE TO AIRSTREAM. NOISE REDUCTION COEFFICIENT (NRC) FOR THE LINER SHALL BE 0.70 OR BETTER. LINER SHALL NOT EXCEED 2500 FOR FLAME SPREAD/SMOKE DEVELOPED PER ASTM E84. LINER SHALL BE RATED FOR AIR VELOCITIES UP TO 5000 FEET PER MINUTE AND OPERATING TEMPERATURES UP TO 250 DEGREES F. NOTE THAT DUCT SIZES INDICATED ON THE DRAWINGS ARE INSIDE CLEAR DIMENSIONS, AND THAT SHEET METAL DIMENSIONS ARE 2 INCHES GREATER IN EACH DIMENSION FOR RECTANGULAR DUCTWORK, AND 2 INCHES GREATER DIAMETER FOR ROUND DUCTWORK. LINER SHALL BE CERTAINTED "TOUGHGUARD R", OR EQUIVALENT, JOHNS MANVILLE OR KNAUF.
- E. RECTANGULAR DUCTWORK: ELBOWS SHALL HAVE AN INSIDE RADIUS EQUAL TO THE DUCT WIDTH. WHERE 90° ELBOWS ARE SHOWN TO BE SQUARE ON THE DRAWINGS, THEY SHALL BE SQUARE (MITERED) WITH TURNING VANES. SINGLE VANE TYPE IN LENGTHS 32" AND LESS, DOUBLE WALL IN LONGER VANES, INSTALLED AND SUPPORTED PER SMACNA. ELBOWS LESS THAN 90° SHALL BE RADIOUS. NON-RADIOUS ELBOWS LESS THAN 90° WITH OR WITHOUT TURNING VANES, ARE NOT PERMITTED.
- F. OFFSETS AND TRANSITIONS SHALL CONFORM TO SMACNA. TRANSITION ANGLES SHALL BE LIMITED TO 30 DEGREES ON CONVERGING TRANSITIONS AND 20 DEGREES ON DIVERGING TRANSITIONS.
- G. BRANCH TAKE-OFFS, WHERE NOT DETAILED OTHERWISE, SHALL BE WITH A STATIC BOOT (45° CLINCH COLLAR) PER SMACNA. STRAIGHT TAP TAKE-OFFS ARE NOT PERMITTED.
- H. DIVIDED FLOW BRANCHES SHALL CONFORM TO SMACNA. BULL HEAD TEES WITHOUT VANES ARE NOT PERMITTED.
- I. MANUFACTURED DUCT CONNECTORS EQUAL TO DUCTMATE INDUSTRIES' 25", 35" AND 45" MAY BE USED ON RECTANGULAR DUCTWORK EXCEPT WHERE WELDING OR BRAZING IS SPECIFICALLY REQUIRED. ADHERE STRICTLY TO MANUFACTURER'S INSTRUCTIONS. SMACNA DUCT GAUGE THICKNESS SHALL BE MAINTAINED WHEN USING THIS JOINING METHOD OR ADDITIONAL CROSS BRACING AND STIFFENERS SHALL BE UTILIZED TO PREVENT DUCT "OIL CANNING". CONNECTOR COMPONENTS SHALL BE CONSTRUCTED FROM SAME MATERIAL AS THE DUCT SECTION BEING CONNECTED.
- J. LOW PRESSURE, ROUND, SINGLE WALL. FOLLOW SMACNA STANDARDS.
- K. ROUND AND FLAT OVAL DUCT: SHALL BE FACTORY OR SHOP FORMED SPIRAL LOCK SEAM, UNITED MCGILL AIR PRODUCTS "UNI SEAL" OR "UNI RIB" OR EQUAL BY SEMCO, TANGENT AIR OR APPROVED EQUAL.
- L. ELBOWS AND FITTINGS FOR SPIRAL LOCK SEAM ROUND AND FLAT OVAL DUCTWORK SHALL BE FACTORY SOLID WELDED, EQUAL TO UNITED MCGILL AIR PRODUCTS "UNI SEAL" WITH BEADED SLEEVE TRANSVERSE JOINT CONNECTORS. ELBOWS SHALL BE LONG RADIUS TYPE AND, WHERE SHOWN, MITERED WITH TURNING VANES. BRANCH TAKE OFFS SHALL BE STREAMLINED CONICAL TYPE WITH T OR Y BRANCHES TO MINIMIZE PRESSURE LOSSES. OFFSETS AND TRANSITIONS SHALL CONFORM TO SMACNA. TRANSITION ANGLES SHALL BE LIMITED TO 30 DEGREES ON CONVERGING TRANSITIONS AND 20 DEGREES ON DIVERGING TRANSITIONS. DIVIDED FLOW BRANCHES SHALL CONFORM TO SMACNA. BULL HEAD TEES WITHOUT VANES ARE NOT PERMITTED.
- M. CONSTRUCTION, RE-ENFORCING, SUPPORTS, ETC. SHALL EITHER CONFORM TO SMACNA OR TO THE DUCT MANUFACTURER'S STANDARDS, WHICHEVER IS MORE STRINGENT.
- N. ROUND DUCT OF 1" AND LESS (POSITIVE AND NEGATIVE) STATIC PRESSURE CONSTRUCTION CLASS MAY BE LONGITUDINAL SEAM. ELBOWS FOR LONGITUDINAL SEAM ROUND DUCTWORK SHALL BE FACTORY OR SHOP FORMED SEGMENTED STANDING SEAM OR PLEATED. OTHER FITTINGS SHALL BE COMPARABLE TO THE ELBOWS.
- O. JOINTS SHALL BE HELD IN PLACE BY THE USE OF SCREWS OR SPOT WELDING. SOCKET TYPE, OVERLAPPING JOINTS SHALL BE USED. DUCT SEALER SHALL BEAR UL LABEL EQUAL TO CHEM-CON "HARDCAST" MINERAL FIBER TAPE.
- P. SOLVENT BASED SEALERS ARE PROHIBITED, AS ARE DUCT SEALANTS CONTAINING ASBESTOS. DUCT SEALANT MATERIALS SHALL BE ONE OR MORE OF THE FOLLOWING (COMPATIBLE WITH THE APPLICATION):
1. WATER BASE DUCT SEALERS AND MASTICS EQUAL TO UNITED MCGILL, WHEN THE INSTALLATION ENVIRONMENT IS ABOVE 40°F.
2. ACETONE BASED DUCT SEALERS AND MASTICS, EQUAL TO PRECISION ADHESIVES, WHEN THE INSTALLATION ENVIRONMENT IS BETWEEN 0°F AND 40°F, ZERO REPORTABLE V.O.C.'S.
3. MINERAL IMPREGNATED FIBER TAPE WITH LIQUID SEALANT DUCT JOINT SEALER EQUAL TO THAT MANUFACTURED BY HARDCAST, INC., TWO PART I SEALING SYSTEM, MAXIMUM V.O.C. OF 135 GL.

- Q. AIR DEVICE DUCT CONNECTIONS FOR ROUND DUCT BRANCH CONNECTIONS TO RECTANGULAR SHEET METAL DUCTS SHALL BE 24 GAUGE SHEET METAL, EQUAL TO FLEXMASTER SERIES FL, STRAIGHT SIDE. WITH AND WITHOUT MANUAL DAMPER, AS DESCRIBED ON THE DRAWINGS. AIR TERMINAL UNIT DUCT CONNECTIONS FOR ROUND DUCT BRANCH CONNECTIONS TO RECTANGULAR SHEET METAL DUCTS SHALL BE 24 GAUGE SHEET METAL CONICAL TYPE EQUAL TO FLEXMASTER SERIES CB. CONNECTORS INSTALLED ON INTERIOR LINED RECTANGULAR DUCT SHALL HAVE AN INTEGRAL INSULATION GUARD SLEEVE. RECTANGULAR TAP-TO-ROUND BRANCH CONNECTION WITH STATIC BOOT CONFIGURATION SHALL BE EQUAL TO FLEXMASTER TYPE STO, BUCKLEY "AIR-TITE" FITTINGS OR SIMILAR BY "SNAP RITE" EQUAL TO THE SPECIFIED FLEXMASTER FITTINGS, WITH NEOPRENE GASKET AND ADHESIVE FACING, ADDITIONALLY SECURED WITH MINIMUM FOUR SHEETMETAL SCREWS, MAY BE USED FOR AIR DEVICE DUCT TAPS TO RECTANGULAR SHEET METAL DUCT WHICH IS NOT INTERNALLY LINED.
20. AIR DISTRIBUTION DEVICES ARE SPECIFIED ON THE DRAWINGS. MANUFACTURER LISTED IS INTENDED AS A STANDARD TO SUPPLEMENT THE DEVICE DESCRIPTION. DEVICES EQUAL TO THOSE CATALOG NUMBERS, AS MANUFACTURED BY PRICE, TITUS OR KRUEGER ARE ACCEPTABLE.
21. BALANCING DAMPERS, IN ADDITION TO THOSE INCORPORATED IN AIR DISTRIBUTION DEVICES, SHALL BE SINGLE CROSS-BLADE UP TO 12" BLADE WIDTH AND MULTI-BLADE IN LARGER SIZES. DAMPERS MOUNTED IN DUCTS SHALL BE CONTROLLED BY A LOCKING QUADRANT POSITIONER WITH HANDLE. FOR DUCTS WITH EXTERIOR INSULATION, PROVIDE SUITABLE EXTENSIONS FOR POSITIONERS EQUAL TO VENTLOCK 637. MULTI-BLADE DAMPERS SHALL BE OPPOSED BLADE TYPE WITH ADEQUATE LOCKING MEANS FOR STABLE POSITIONING. FURNISH ACCESS PANELS WHERE REQUIRED FOR ACCESS TO DAMPERS.
22. FIRE DAMPERS SHALL BE PROVIDED WHERE NOTED ON THE DRAWINGS AND WHERE OTHERWISE REQUIRED TO CONFORM TO NATIONAL FIRE CODE REQUIREMENTS AND REQUIREMENTS OF THE GOVERNING AUTHORITY. CONSTRUCTION OF DAMPERS SHALL CONFORM TO NFPA 90A AND SHALL BE UL LABELED. DAMPERS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND SMACNA STANDARDS, INCLUDING HEAVY GAUGE SLEEVES AND WALL FRAMES.
23. ACCESS DOORS SHALL BE PROVIDED WHERE REQUIRED FOR ACCESS TO FIRE DAMPERS OR OTHER DEVICES WITHIN DUCTS WHICH REQUIRE ACCESS. THESE SHALL BE 14" X 14" SIZE UNLESS DUCT SIZE LIMITS HEIGHT. DOORS IN UNINSULATED DUCTS SHALL HAVE HINGED DOOR, CAM LOCKS AND GASKET. DOORS IN INSULATED DUCTS SHALL BE INSULATED TYPE WITH HINGE AND CAM LOCK, WHERE FIRE DAMPER LINKS OCCUR, ACCESS DOORS SHALL HAVE A PLEXIGLASS VISION PORT.
24. LOCATE DAMPERS AND ACCESS DOORS TO BE ACCESSIBLE. DEMONSTRATE TO THE OWNER THE ACCESSIBILITY TO ALL FIRE DAMPER LINKS.
25. PREPARE SHEET METAL DRAWINGS FOR REVIEW, COORDINATE DUCT LAYOUT CAREFULLY WITH OTHER TRADES TO AVOID CONFLICT WITH STRUCTURAL ELEMENTS, LIGHTING AND PLUMBING-HEATING PIPING. HAVING DUCTWORK FABRICATED AND DELIVERED IN ADVANCE SHALL NOT BE JUSTIFICATION FOR INTERFERENCE WITH OTHER TRADES.
26. DUCT INSULATION SHALL BE MANUFACTURED BY MANVILLE, OWENS-CORNING KNAUF, OR CERTAINTED, INSTALLED BY TRAINED INSTALLERS, IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. EACH COMPOSITE INSULATION ASSEMBLY SHALL MEET NFPA 255 REQUIREMENTS, NOT EXCEEDING A FLAME SPREAD RATING OF 25, OR A SMOKE DEVELOPMENT OF 50. CONFORM TO CODE REQUIREMENTS REGARDING LABELING OF INSULATION AT REGULAR INTERVALS, STATING MANUFACTURER, FIRE AND SMOKE RATINGS AND THICKNESS.
- A. ALL SUPPLY AIR, FRESH AIR, AND MIXED AIR DUCTS SHALL BE INSULATED UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- B. DUCT INSULATION R-VALUE SHALL BE IN ACCORDANCE WITH ASHRAE 90.1, LATEST PUBLISHED EDITION, BUT MINIMUM R-3.7 1'-12" THICK, 34 LB. DENSITY FLEXIBLE FIBROUS GLASS BLANKET WITH ALUMINUM VAPOR BARRIER AND KRAFT PAPER JACKET, GREENGUARD CERTIFIED.
- C. ADHERE INSULATION ON DUCTS WITH NON-ORGANIC HOT OR COLD ADHESIVE APPLIED TO THE BOTTOM SIDE ONLY OR IMPALING PINS. JOINTS SHALL BE TAPED TO OVERLAP FOR VAPOR BARRIER. VAPOR BARRIERS SHALL BE CONTINUOUS TO PREVENT CONDENSATION.
- D. PATCH ALL DUCT INSULATION THAT IS REMOVED FOR ALTERATION OF DUCTWORK OR DAMAGED DURING CONSTRUCTION.
27. AS EACH SYSTEM IS PUT INTO OPERATION, ALL ITEMS OF EQUIPMENT INCLUDED THEREIN SHALL BE ADJUSTED TO PERFECT WORKING ORDER. THIS SHALL INCLUDE BALANCING AIR AND ADJUSTING FAN SPEEDS, BELTS, PULLEYS, TIGHTENING PACKING GLANDS, OILING AND ADJUSTING ALL OPERATING EQUIPMENT.
28. VERSE THE OWNER'S REPRESENTATIVES IN ALL MATTERS PERTAINING TO THE PROPER OPERATION AND MAINTENANCE OF EQUIPMENT WHICH IS FURNISHED UNDER THIS CONTRACT. INSTALLATION, MAINTENANCE AND OPERATING INSTRUCTION PAMPHLETS, OR BROCHURES AND WARRANTIES, SHALL BE OBTAINED FROM EACH MANUFACTURER OF THE PRINCIPAL ITEMS OF EQUIPMENT, AND THESE SHALL BE TURNED OVER TO THE ARCHITECT. IN ADDITION, THE CONTRACTOR SHALL PREPARE A CHART LISTING ALL ITEMS OF EQUIPMENT WHICH ARE FURNISHED UNDER THEIR CONTRACT AND INDICATING THE NATURE OF MAINTENANCE REQUIRED, THE RECOMMENDED FREQUENCY OF CHECKING THESE POINTS AND THE TYPE OF LUBRICATING MEDIA OR REPLACEMENT MATERIAL REQUIRED. THREE (3) SET OF OPERATING AND MAINTENANCE INSTRUCTIONS AND WIRING DIAGRAMS SHALL BE FURNISHED ON EACH PIECE OF EQUIPMENT.
29. AFTER ALL EQUIPMENT HAS BEEN ADJUSTED, THE CONTRACTOR SHALL MAKE A TRIAL RUN AND DEMONSTRATE TO THE ARCHITECT AND THE OWNER THAT THE REQUIREMENTS OF THE CONTRACT HAVE BEEN FULFILLED. DURING THIS RUN, THE CONTRACTOR SHALL EXPLAIN TO THE OWNER'S REPRESENTATIVE THE COMPLETE OPERATION OF THE SYSTEM AND THE FUNCTION OF ALL MAJOR ITEMS OF EQUIPMENT. A PERIOD OF 48 HOURS OF CONTINUOUS TROUBLE-FREE OPERATION ON ALL PARTS OF THE WORK SHALL BE CONSIDERED THE MINIMUM REQUIREMENT TO DEMONSTRATE THAT THE SYSTEM IS SATISFACTORY AND MEETS FULLY THE REQUIREMENTS OF THE CONTRACT.
30. AN AIR AND WATER BALANCE SHALL BE PERFORMED BY A SEPARATE SUB-CONTRACTOR SPECIALIZING IN THIS FIELD. THE BALANCE CONTRACTOR SHALL BE AN ACTIVE, FULLY CERTIFIED MEMBER OF THE ASSOCIATED AIR BALANCE COUNCIL OR N.E.B.B. SYSTEMS SHALL BALANCED TO DELIVER THE QUANTITIES INDICATED (WITHIN PLUS OR MINUS 10 PERCENT).
31. PROVIDE ALL ELECTRICAL WIRING, BOTH LINE VOLTAGE AND LOW VOLTAGE, WHICH IS REQUIRED TO PERFORM THE AUTOMATIC CONTROL FUNCTIONS. WIRING BOTH LINE AND LOW VOLTAGE SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC) AND SHALL BE SUBJECT TO APPROVAL OF THE LOCAL CODE ENFORCING AUTHORITIES.
- A. COMMUNICATION WIRE SHALL BE CATEGORY 6 PLENUM RATED, 4 TWISTED PAIR, NON-SHIELDED (UTP) STATION CABLE (CAPABLE OF TRANSMISSION SPEEDS UP TO 100 MB/S) SHALL BE USED FOR CONTROL, SYSTEM NETWORKING. CABLE SHALL BE INSULATED WITH FEP MATERIAL, AND SEQUENTIALLY MARKED AT 2 FOOT INTERVALS. COLOR AS SELECTED BY OWNER.
- B. ALL LINE VOLTAGE WIRING AND LOW VOLTAGE WIRING (EXCEPT AS STATED BELOW) SHALL BE RUN IN CONDUIT. LOW VOLTAGE WIRING CONCEALED ABOVE ACCESSIBLE CEILINGS MAY BE RUN WITHOUT CONDUIT. OPEN WIRING DROPPING INTO WALLS SHALL BE RUN IN CONDUIT. THERMOSTATS SHALL BE INSTALLED ON A SINGLE GANG BOX AND CONDUIT SHALL BE INSTALLED TO EXTEND INTO THE PLENUM. OPEN WIRING SHALL BE BUNDLED AND SUPPORTED AT 3 FT. MAXIMUM INTERVALS WITH A SYSTEM OF J-HOOKS. OPEN WIRING IN AIR PLENUMS SHALL BE RATED FOR SUCH USE AND SO LABELED.
- C. THERMOSTATS AND OTHER WALL MOUNTED SENSORS SHALL BE INSTALLED ON A SINGLE GANG BOX. EXIT CONDUIT SHALL BE INSTALLED FROM THE WALL BOX TO THE PLENUM, CABLING WITHIN THE WALL SHALL BE IN CONDUIT.
- D. PROVIDE ELECTRICAL CIRCUITS FROM THE NEAREST APPROPRIATE EMERGENCY ELECTRICAL PANEL TO SERVE CONTROL PANELS, TRANSFORMERS, AND OTHER CONTROL EQUIPMENT AND DEVICES. CIRCUITS SERVING CONTROL PANELS AND TRANSFORMERS FOR LOW VOLTAGE SERVICE SHALL BE INDEPENDENT AND USED FOR NO OTHER PURPOSE. CIRCUITS FOR VAV DDC CONTROLLERS AND OTHER UNITARY TYPE CONTROLS NEED NOT BE ON EMERGENCY POWER. PROVIDE CIRCUIT WIRING FROM THE ELECTRICAL PANEL. THESE CIRCUITS SHALL BE CLEARLY IDENTIFIED AT THE PANELS. COORDINATE WITH THE ELECTRICAL CONTRACTOR.

AIR TERMINAL UNITS - HOT WATER HEAT

GENERAL NOTES:
A. TYPES: "V.V." - VARIABLE VOLUME;
"V.V.R." - VARIABLE VOLUME REHEAT;
"C.V.R." - CONSTANT VOLUME REHEAT;
"V.V.E." - VARIABLE VOLUME EXHAUST;
"C.V.E." - CONSTANT VOLUME EXHAUST.
B. 0.50" MAX. S.P. DROP THRU UNIT & COIL
AT MAX. CFM.
C. REHEAT COIL CAPACITIES BASED ON HEATING MAX.
CFM, 55°F ENT. AIR & 140°F ENT. WATER.

NOTES:
1. UNIT IS EXISTING TO REMAIN. REPROGRAM COOLING
MAXIMUM AND HEATING MAXIMUM PER THIS CRITERIA.

MARK	TYPE	MINIMUM INLET SIZE		CFM		REHEAT COIL		AUTO CONTROL VALVE		SEISMIC RESTRAINTS		REFER TO NOTE			
		DIAMETER	WIDTH	HEIGHT	COOLING MAXIMUM	HEATING MAXIMUM	MBH	GPM	PIPE RUNOUT SIZE	PRESSURE DEPENDENT	PRESSURE DEPENDENT CV		PRESSURE INDEPENDENT (PICV)	REQUIRED	IMPORTANCE FACTOR
2-9	VVR	5"			230	115	3.4	0.5	0.5"	•	0.24	-	-	-	1

DUCT CONSTRUCTION, SEALING, AND INSULATION

GENERAL NOTES:
A. REFER TO SPECIFICATIONS FOR DUCT CONSTRUCTION: SHEET METAL DUCT; INTERIOR LINING; EXTERIOR INSULATION; FIBERGLASS DUCTBOARD; ETC.
B. DUCT CONSTRUCTION AND SEALING SHALL BE PER LATEST S.M.A.C.N.A. STANDARDS.

NOTES:
1. ROUND SHEET METAL RUN-OUTS TO AIR DEVICES DOWNSTREAM OF VAV BOXES SHALL BE EXTERNALLY INSULATED.
2. RETURN DUCTWORK WITHIN 15' OF AIR HANDLING UNIT SHALL BE INTERNALLY LINED.
3. REFER TO DETAIL 4 ON SHEET M0.3.
4. CONCEALED ROUND RUNOUT DUCTS TO AIR DEVICES MAY BE 1" S.P. CLASS.

DUCT SYSTEM	S.M.A.C.N.A. CLASS.									
	S.P. CON-STRUCT.	SEAL CLASS	LEAKAGE CLASS		INTERNALLY LINED	EXTERNAL INSULATION	DOUBLE WALL INSULATED	NOT INSULATED	SEE NOTE	
			RECT	RND						
SUPPLY DUCTWORK DOWNSTREAM OF VAV BOXES	+1"	A	16	8	-	•	-	-	-	1
RETURN DUCTWORK	-2"	A	16	8	-	-	-	•	-	2,4
TRANSFER/RETURN AIR SOUND BOOT	-1"	A	16	-	•	-	-	-	-	3

HVAC DESIGN DATA

GENERAL NOTES:
A. OUTDOOR DESIGN CONDITIONS:
92°F DB SUMMER
74°F WB SUMMER
1°F DB WINTER
B. DESIGN ALTITUDE: 850 FT.

NOTES:
1. LISTED RH IS MAXIMUM ANTICIPATED AT LISTED DB TEMPERATURE.
2. "FLOATING" MEANS THERE IS NO ACTIVE CONTROL.

SPACE NAME / TYPE	INTERIOR DESIGN DATA				SEE NOTE
	SUMMER		WINTER		
	°F DB	% RH (NOTE 1)	°F DB	% RH	
OFFICES	74	55	72	FLOATING	2
DATA CLOSETS	78	50	68	FLOATING	2
ALL OTHER SPACES	74	55	72	FLOATING	2
	-	-	-	-	-

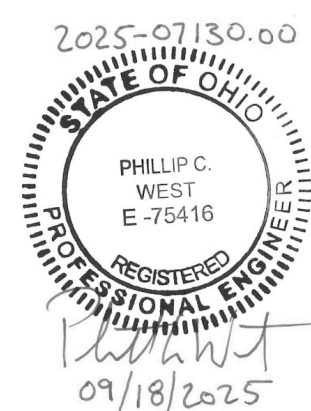
AIR DISTRIBUTION DEVICES

GENERAL NOTES:
A. ALL LAY-IN AIR DEVICES SHALL FIT IN 24"x24" LAY-IN CLG SYSTEM. VERIFY GRID TYPE AND COORDINATE AIR DEVICE COMPATIBILITY.
B. FINISH KEY: "W.B.E." - WHITE BAKED ENAMEL; "E.C.L." - ETCHED CLEAR LACQUER OR ANODIZED; "C.C.B.A." - CUSTOM COLOR SELECTED BY ARCHITECT.
C. SUPPLY AIR DIFFUSERS SHALL BE 4-WAY BLOW, UNLESS INDICATED OTHERWISE BY ARROWS ON DRAWINGS.
D. PROVIDE AUX. FRAMES FOR AIR DEVICES IN PLASTER, GYPSUM BOARD, TILE OR OTHER HARD SURFACES.

NOTES:
1. PROVIDE FRAME FOR SURFACE MOUNTING.
2. PROVIDE RETURN AIR SOUND BOOT PER DETAIL 4 ON SHEET M0.3.
3. PROVIDE INSULATED PLENUM AND END BORDERS FOR FULLY FINISHED INSULATION.

MARK	DESCRIPTION	MOUNTING TYPE		SLOTS	MATERIAL	FINISH	OPPOSED BLADE DAMPER SQ.-TO-RO NECK ADAPTOR	BASIS OF DESIGN		SEE NOTE
		LAY-IN	SURFACE					MANUFACTURER	MODEL	
A1	STANDARD SQ. CONE - ROUND NECK - 24 X 24	•	•		•	•		PRICE	SCD	
A2	STANDARD SQ. CONE - ROUND NECK - 20 X 20	•	•		•	•		PRICE	SCD	1
J1	RETURN LAY IN CEILING DIFFUSER - 22 X 12	•	•		•	•		PRICE	80	2
S1	LINEAR SLOT DIFFUSER	•	•	3	1"	•		PRICE	SDS100	3





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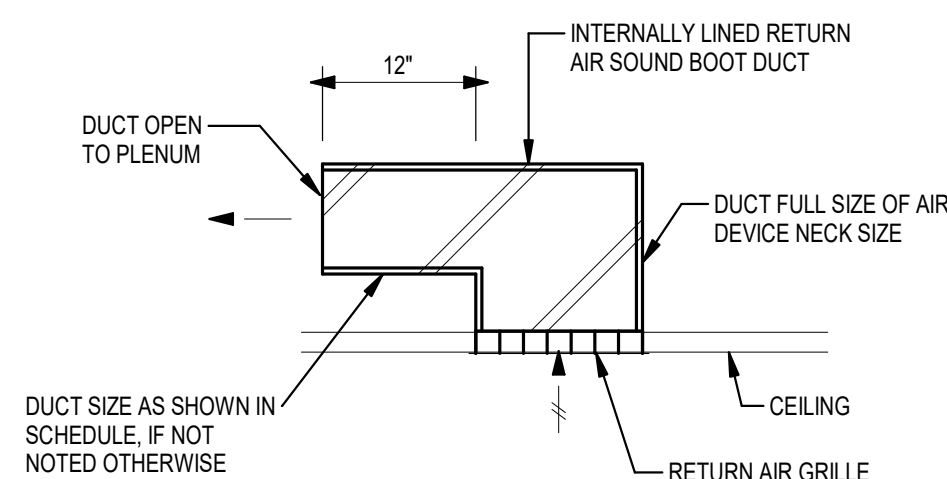
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TITLE	DETAILS
1. Introduction	Overview of the project and its objectives.
2. Methodology	Description of the research methods and data collection techniques.
3. Results	Summary of the findings and statistical analysis.
4. Conclusion	Final thoughts and recommendations based on the study.

SHEET NO.

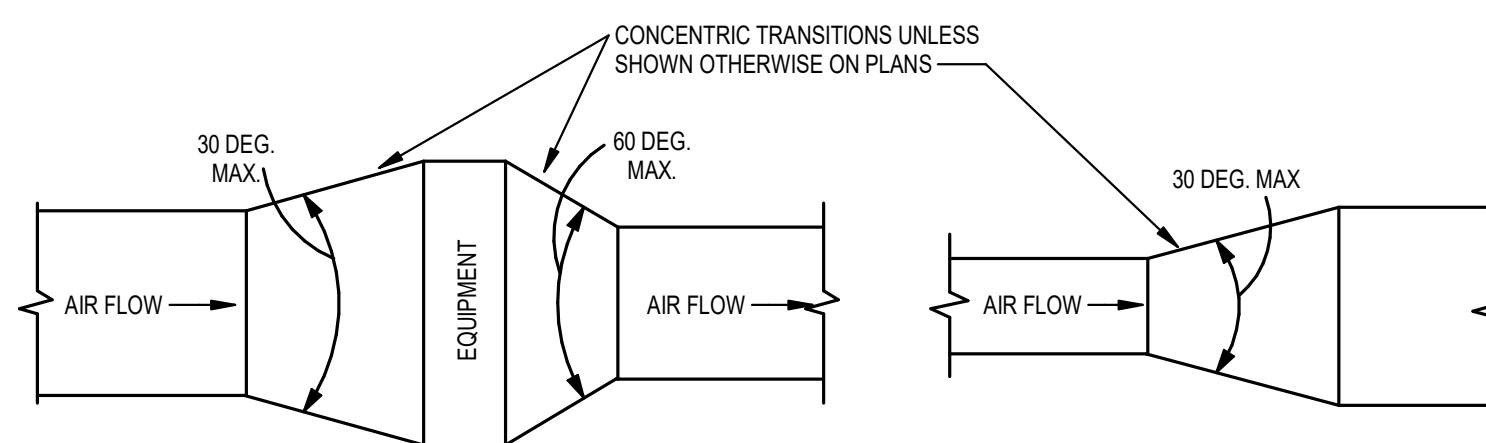
MO.3



AIR DEVICE SIZE	DUCT SIZE
12x12	12x10
24x12	12x12
24x24	24x12

④ **RETURN AIR SOUND BOOT**

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



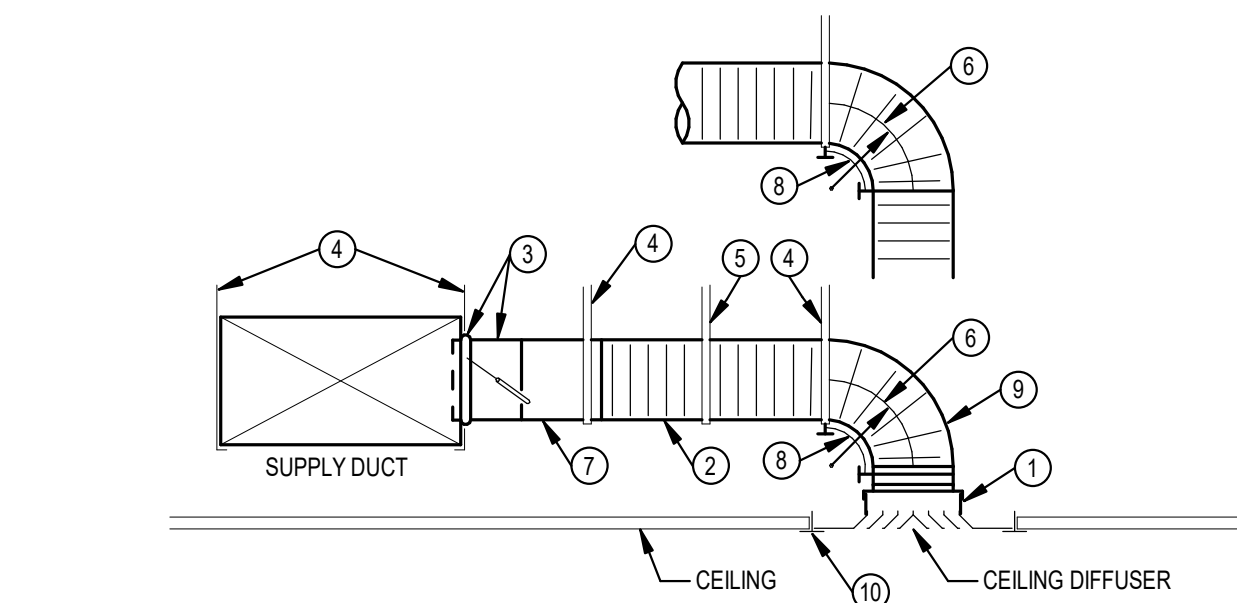
TYPICAL DUCTWORK
TRANSITION WITH EQUIPMENT
MOUNTED IN DUCT PLAN OR
SIDE VIEW

TYPICAL DUCTWORK
TRANSITION PLAN OR SIDE
VIEW

NOTE:
A. UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.
B. TRANSITION ANGLES IN AND OUT OF FANS SHALL BE 50% OF THOSE SHOWN ABOVE.

5 DUCTWORK TRANSITIONS

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

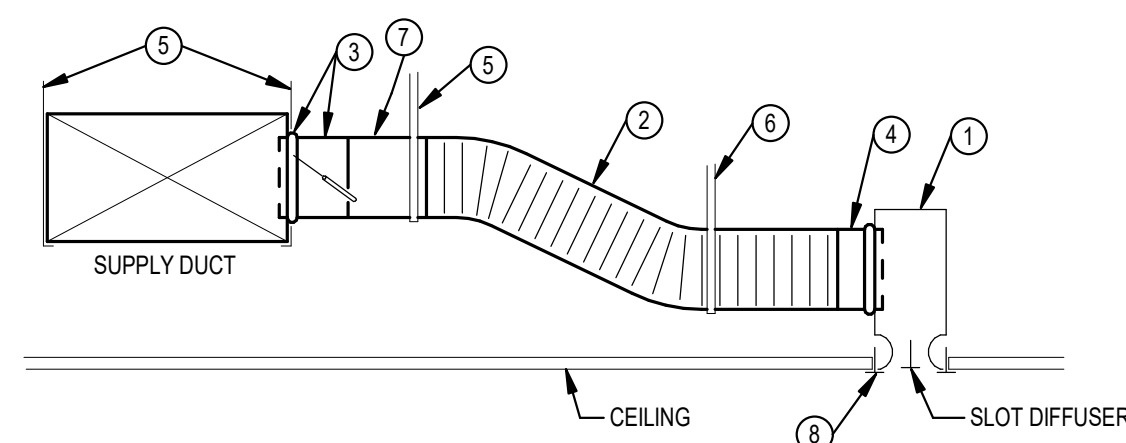


○ NOTES

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| 1. SQUARE-TO-ROUND ADAPTER IF DIFFUSER NECK IS SQUARE. CONNECT ADAPTER TO DIFFUSER, SEAL TO AIR DUCT. SEAL CLASS A. INSULATE ADAPTER AND EXPOSED BACKSIDE SURFACES OF AIR DUCT. | 6. MINIMUM CENTERLINE RADIUS EQUAL TO DUCT DIAMETER. |
| 2. INSULATED FLEXIBLE DUCT WITH 12" DIAMETER AS BRANCH DUCT. 4" F.T. MAXIMUM TOTAL LENGTH PER AIR DUCT. STRETCH FLEXIBLE DUCT TO AT LEAST 60% OF FULLY EXTENDED LENGTH. | 7. ROUND SHEET METAL BRANCH DUCT, SAME SIZE AS DIFFUSER INLET UNLESS NOTED OTHERWISE. |
| 3. SPIN-IN BRANCH TAP FITTING, STRAIGHT SIDE WITH MANUAL DAMPER. DAMPER SHAFT IN HORIZONTAL POSITION. INTEGRAL INSULATION GUARD SLEEVE REQUIRED FOR TAP FITTING TO MAIN DUCT WITH INTERNAL INSULATION, AND EXTENDED DAMPER SHAFT AND HANDLE WITH STAND-OFF TO ACCOMMODATE EXTERNAL INSULATION. | 8. FLEXIBLE DUCT ELBOW SUPPORT, INSTALLED WITH NYLON BANDING PER MANUFACTURER'S INSTRUCTIONS. |
| 4. DUCT STRAP-HANGER. ATTACH TO STRUCTURE. | 9. A RADIUS SHEET METAL ELBOW MAY BE USED IN LIEU OF A FLEXIBLE ELBOW SUPPORT WHEN CONNECTED DIRECTLY TO AIR DUCT. |
| 5. STRAP HANGER REQUIRED IF LENGTH OF FLEXIBLE DUCT IS LONGER THAN 4 FT. | 10. CEILING T-BAR SUPPORT (FOR LAY-IN APPLICATIONS). COORDINATE AND VERIFY T-BAR TYPE FOR COMPATIBILITY WITH DIFFUSER. |

1 CEILING DIFFUSER DUCT CONNECTION

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

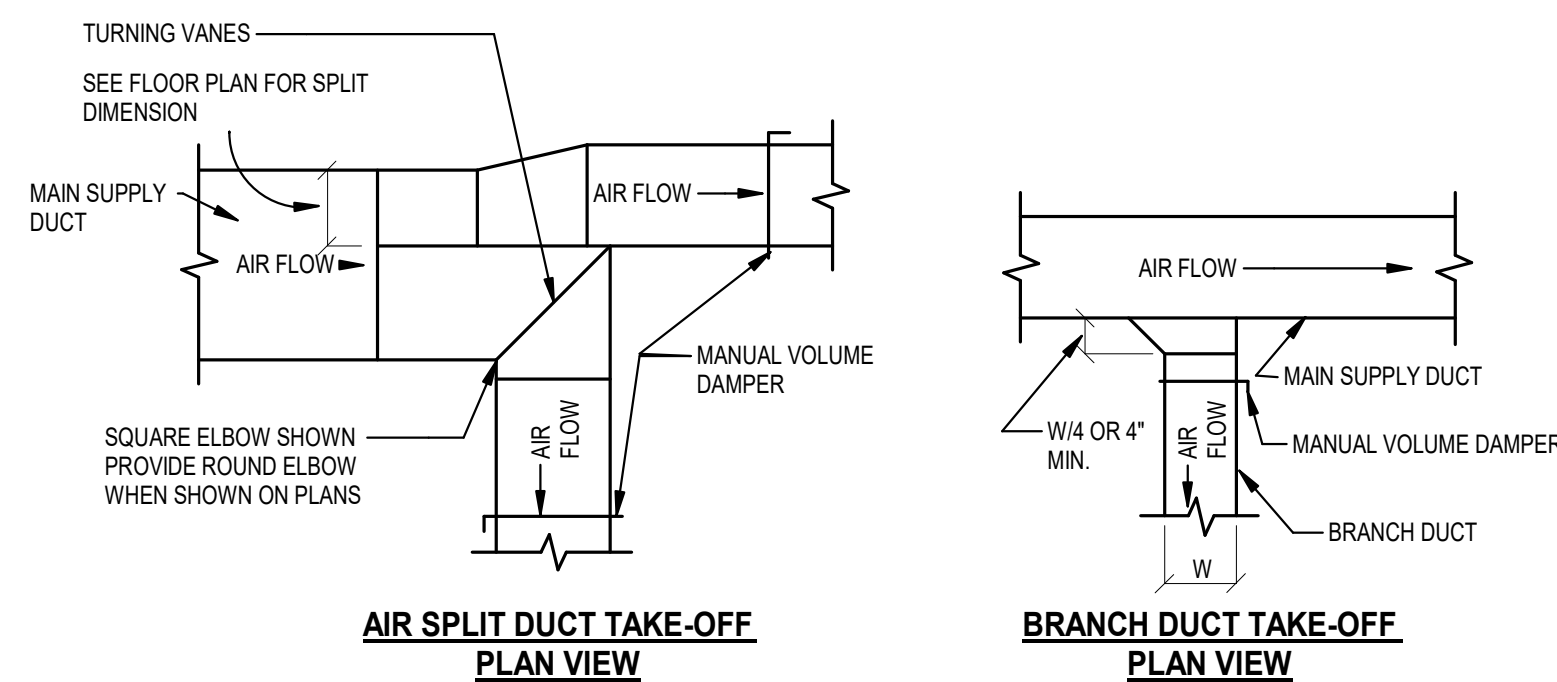


○ NOTES

1. SLOT DIFFUSER ASSEMBLY AND PLENUM WITH SAME INTERNAL OR EXTERNAL INSULATION AS MAIN SUPPLY DUCT. CONNECT PLENUM TO DIFFUSER. SEAL PLENUM TO DIFFUSER. SEAL CLASS A. INSULATE BACKSIDE SURFACES OF DIFFUSER.
2. INSULATED FLEXIBLE DUCT SAME DIAMETER AS MAIN SUPPLY DUCT. MINIMUM LENGTH OF 5 FT. MAXIMUM TOTAL LENGTH OF 10 FT. MATCH FLEXIBLE DUCT TO MAIN SUPPLY DUCT. INSULATE FLEXIBLE DUCT WITH AT LEAST 90% OF FULLY EXPANDED LENGTH.
3. SPIN-IN BRANCH PLAT FITTING. STRAIGHT SIDE WITH MANUAL DAMPER. DAMPER SHAFT IN HORIZONTAL. INTERNAL INSULATION GUARD SLEEVE REQUIRED FOR PLAT FITTING TO MAIN DUCT WITH INTERNAL INSULATION, AND EXTENDED DAMPER SHAFT AND HANDLE WITH STAND-OFF TO ACCOMMODATE EXTERNAL INSULATION.
4. SPIN-IN PLAT FITTING SIMILAR TO ③ EXCEPT NO DAMPER.
5. DUCT STRAP HANGER ATTACH TO STRUCTURE.
6. STRAP HANGER REQUIRED IF LENGTH OF FLEXIBLE DUCT IS LONGER THAN 4 FT.
7. ROUND SHEET METAL BRANCH DUCT. SAME SIZE AS DIFFUSER INLET UNLESS NOT OTHERWISE SPECIFIED. 1.5 BAR SUPPLY DUCT (ALL APPLICATIONS). COORDINATE AND VERIFY 1.5-BAR TYPE FOR COMPATIBILITY WITH DIFFUSER.

② SLOT DIFFUSER DUCT CONNECTION

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



AIR SPLIT DUCT TAKE-OFF
PLAN VIEW

BRANCH DUCT TAKE-OFF
PLAN VIEW

THE BRANCH DUCT TAKE-OFF MAY BE USED FOR UP TO 15% OF THE MAIN DUCT CFM, AND UP TO 40% WHEN THE MAIN DUCT VELOCITY IS 1000 FPM OR LESS. THE AIR SPLIT DUCT TAKE-OFF SHALL BE USED IN ALL OTHER CASES.

2 SUPPLY DUCTWORK BRANCH TAKE-OFFS

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

1 2 3 4 5 6 7

A

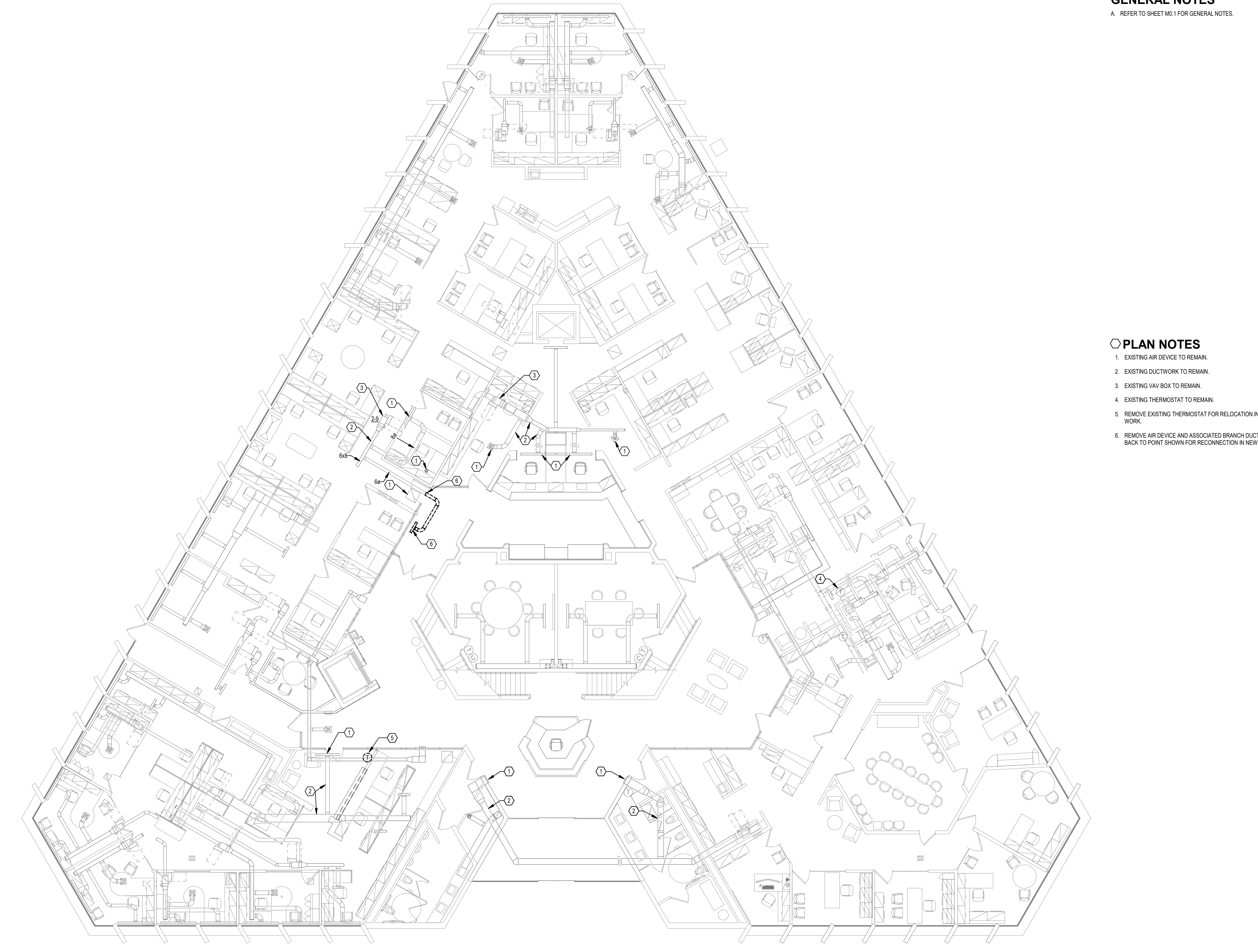
B

C

D

E

F



GENERAL NOTES

A. REFER TO SHEET M0.1 FOR GENERAL NOTES.

PLAN NOTES

- EXISTING AIR DEVICE TO REMAIN.
- EXISTING DUCTWORK TO REMAIN.
- EXISTING VAV BOX TO REMAIN.
- EXISTING THERMOSTAT TO REMAIN.
- REMOVE EXISTING THERMOSTAT FOR RELOCATION IN NEW WORK.
- REMOVE AIR DEVICE AND ASSOCIATED BRANCH DUCTWORK BACK TO POINT SHOWN FOR RECONNECTION IN NEW WORK.

1 SOUTH BUILDING - MAIN LEVEL - HVAC DEMO
SCALE: 1/8" = 1'-0"



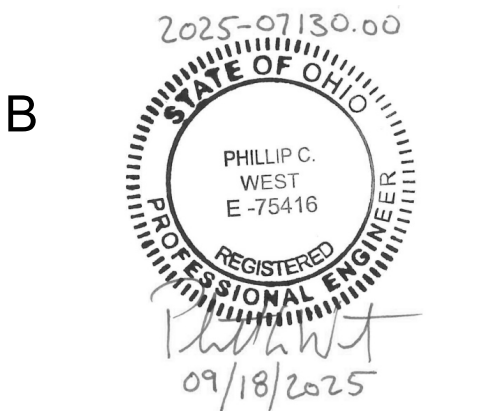
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TITLE	SOUTH BLDG - OVERALL HVAC PLAN - MAIN LEVEL - DEMO
SHEET NO.	M1.1

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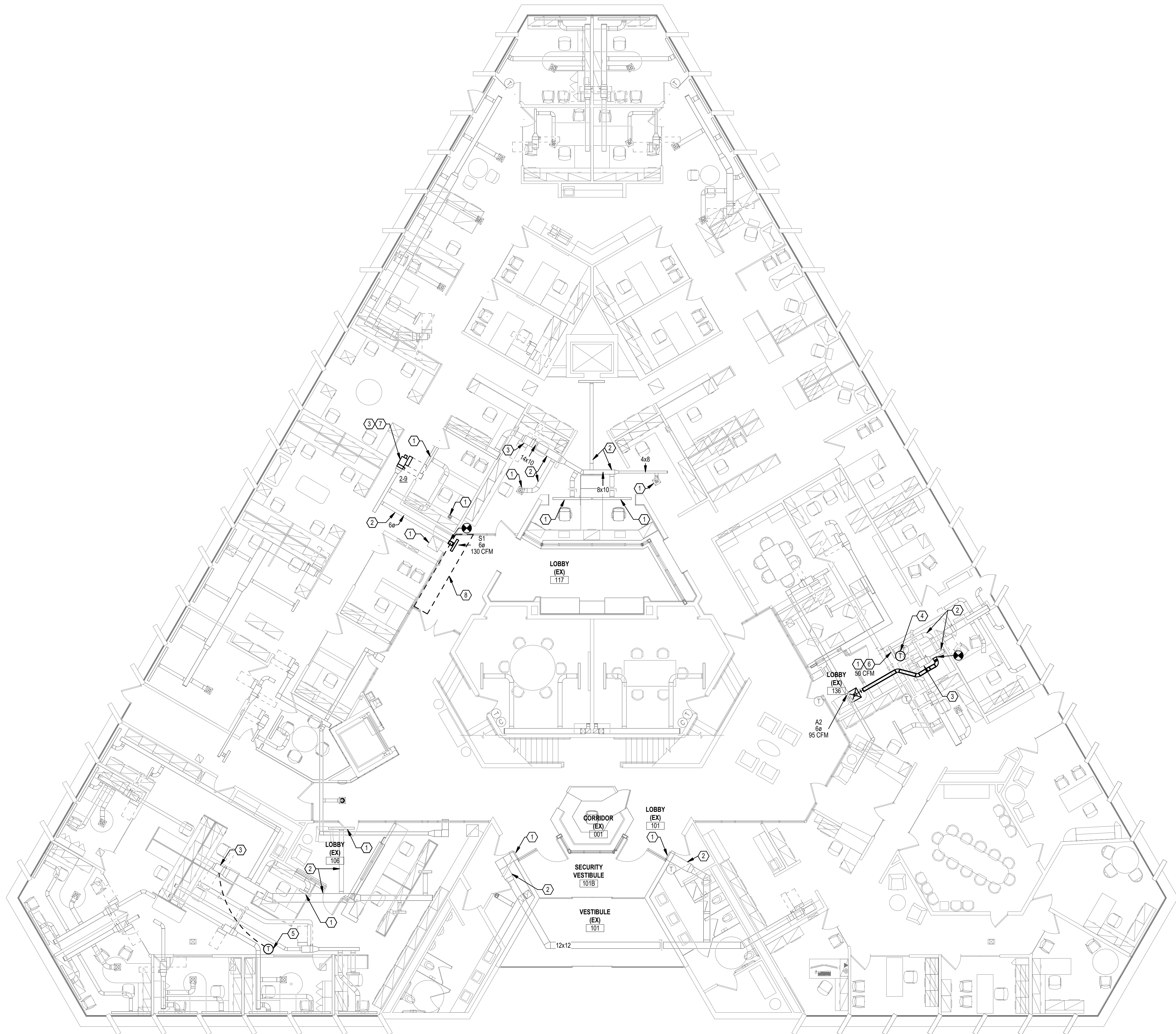
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GENERAL NOTES

A. REFER TO SHEET M0.1 FOR GENERAL NOTES.

PLAN NOTES

- EXISTING AIR DEVICE TO REMAIN.
- EXISTING DUCTWORK TO REMAIN.
- EXISTING VAV BOX TO REMAIN.
- EXISTING THERMOSTAT TO REMAIN.
- RELOCATE EXISTING THERMOSTAT TO THIS APPROXIMATE LOCATION. PROVIDE NEW WIRING CONNECTION TO VAV CONTROLLER.
- REBALANCE EXISTING AIR DEVICE TO CFM LISTED.
- RE-PROGRAM VAV BOX AIR FLOWS TO CFM SCHEDULED.
- REFRAME, REPAIR, REFINISH DRYWALL CEILING IN THIS AREA TO ACCOMMODATE AIR DEVICE/DUCTWORK REPLACEMENT. PAINT TO MATCH EXISTING.

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JOB NO.	4322.00
DRAWN	BPO
CHECKED	PCW

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TITLE
**SOUTH BLDG - OVERALL
HVAC PLAN - MAIN LEVEL
- NEW**

SHEET NO.

M1.2

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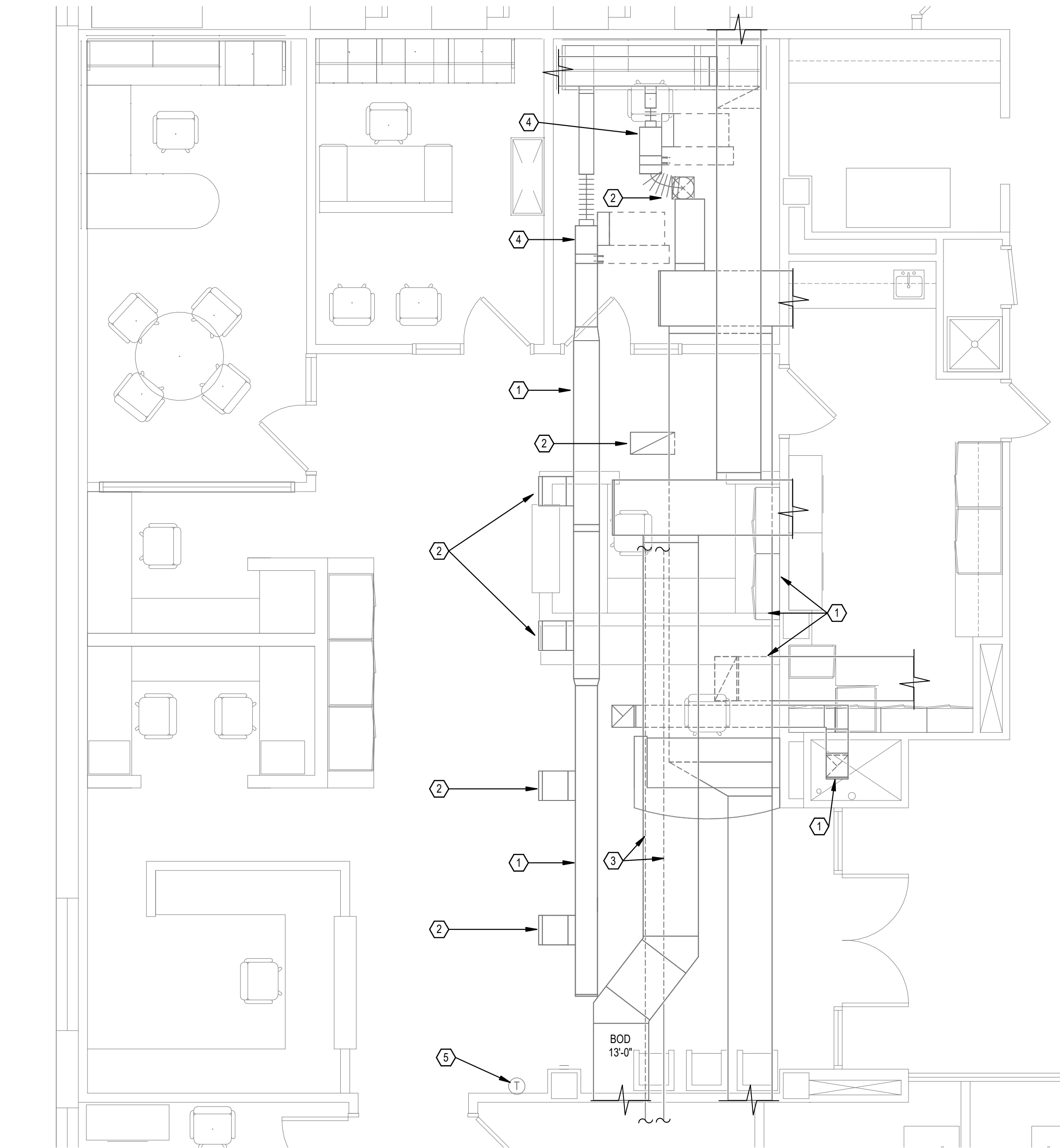
7

GENERAL NOTES

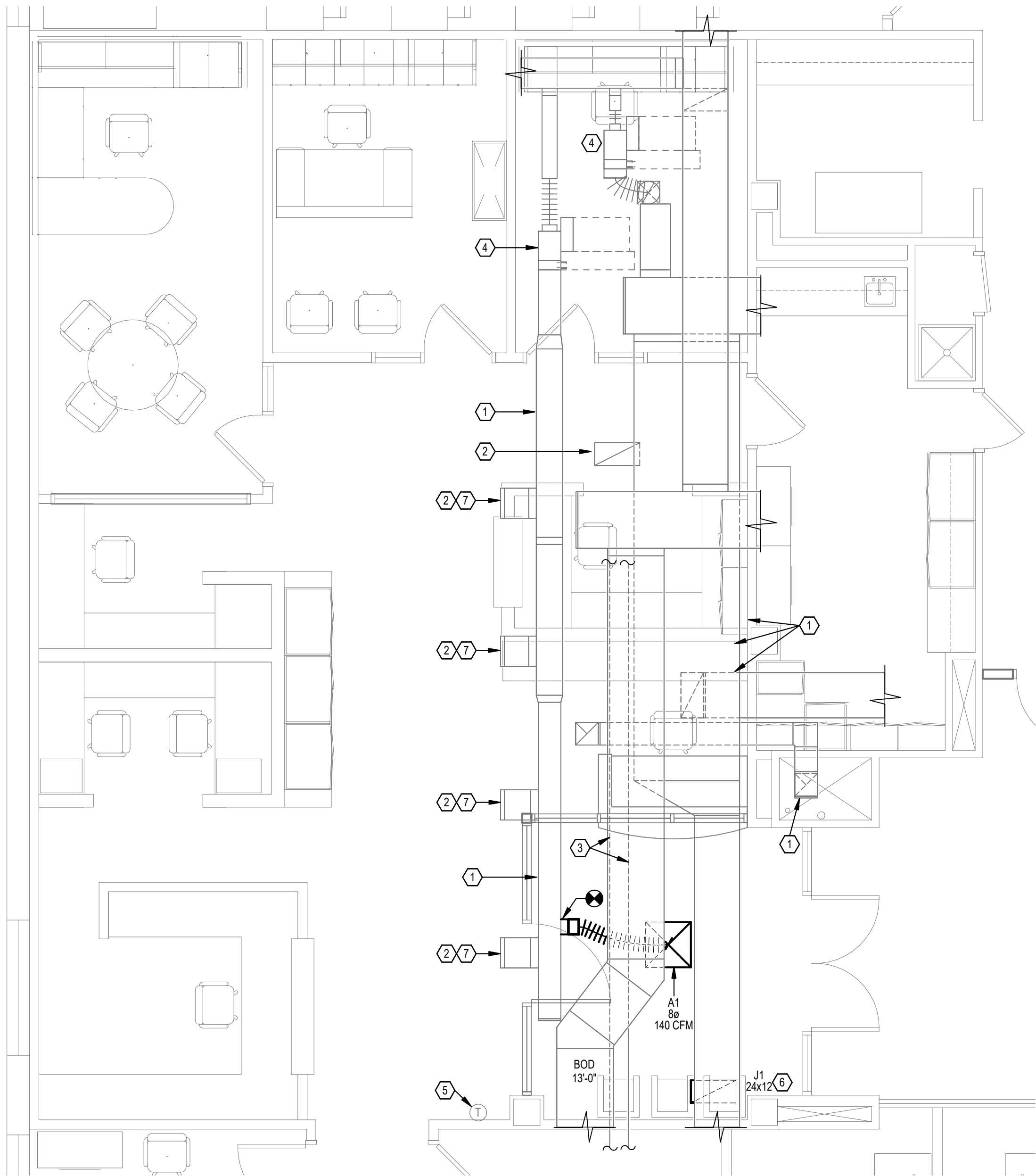
A. REFER TO SHEET M0.1 FOR GENERAL NOTES.

PLAN NOTES

- EXISTING DUCTWORK TO REMAIN.
- EXISTING AIR DEVICE TO REMAIN.
- EXISTING PIPING TO REMAIN.
- EXISTING VAV BOX TO REMAIN
- EXISTING THERMOSTAT TO REMAIN.
- PROVIDE RETURN AIR SOUND BOOT PER DETAIL 4 ON SHEET M0.3.
- REBALANCE EXISTING AIR DEVICE TO 290 CFM.



1 NORTH BUILDING - MAIN LEVEL - HVAC DEMO
SCALE: 1/4" = 1'-0"



2 NORTH BUILDING - MAIN LEVEL - HVAC NEW WORK
SCALE: 1/4" = 1'-0"

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ISSUE		
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TITLE	
NORTH BLDG - OVERALL	
HVAC PLAN - MAIN LEVEL	
- DEMO AND NEW	
SHEET NO.	

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GENERAL NOTES (APPLIES TO ALL DIVISION 26 SHEETS)

- A. ALL CONDUCTORS WILL BE COPPER IN CONDUIT.
- B. ALL WORK WILL BE DONE IN ACCORDANCE WITH THE NEC AND ALL APPLICABLE GOVERNING AUTHORITIES FOR A COMPLETE AND OPERATIONAL INSTALLATION.
- C. PROVIDE A SEPARATE NEUTRAL CONDUCTOR WITH EACH 20A, 120V. POWER CIRCUIT - GROUND TOTAL SYSTEM PER NEC 250.
- D. ALL 20 AMP, 120 VOLT POWER CIRCUITS SHALL CONSIST OF #12 AWG CONDUCTORS UNLESS INDICATED OTHERWISE.
- E. ALL EMPTY CONDUITS SHALL BE INSTALLED WITH PULLWIRE PER SPECIFICATIONS.
- F. ALL SURFACE PATCHING AND FINISHING WILL BE BY THE ELECTRICAL CONTRACTOR OR TO POINT CONSISTENT WITH G.C. RESPONSIBILITIES.
- G. ALL WIRING AND CONDUIT SHALL BE INSTALLED CONCEALED ABOVE ALL LAY-IN CEILING SYSTEMS. WHERE WIRING IS REQUIRED TO BE RUN EXPOSED ALONG WALLS AND CEILINGS, IT SHALL BE RUN IN METAL SURFACE RACEWAY (WIREMOLD UNLESS INDICATED OTHERWISE - COORDINATE EXACT SERIES NUMBER WITH OWNER AND PROVIDE ACCORDINGLY) MOUNTED TIGHT TO EXISTING SURFACE MATCHING CONTOUR OF BUILDING LINES AND PAINTED TO MATCH SURFACES ON WHICH THEY ARE MOUNTED. COORDINATE ALL LOCATIONS AND ROUTES WITH ENGINEER PRIOR TO ROUGH-IN.
- H. ALL ELECTRICAL SPLICES FOR WIRE SIZES 6 AWG AND LARGER SHALL BE HYDRAULIC CRIMP TYPE.
- I. E.C. IS RESPONSIBLE FOR REMOVALS/RELOCATIONS OF ALL WIRING/CONDUIT, ETC., WHICH HAS COME INTO CONFLICT WITH NEW WORK. E.C. IS RESPONSIBLE FOR REMOVAL OF ALL BRANCH CIRCUITS AND FEEDERS SERVING SPECIFIC ITEMS OF MECH./MISC. EQUIPMENT TO BE REMOVED BY OTHERS. COORDINATE WITH OTHER TRADES. NOT ALL REMOVAL WORK OR DEVICES ARE NECESSARILY SHOWN ON DRAWINGS.
- J. ALL EXPOSED CONDUIT ABOVE GRADE WILL BE RIGID GALVANIZED METALLIC WITH ALL STEEL FITTING, PAINTED TO MATCH SURFACES ON WHICH THEY ARE MOUNTED.
- K. PROVIDE NEW CONDUITS TO ALLOW FOR PROPER BENDING RADIUS OF ALL SYSTEMS CABLING AND WIRING INSTALLED UNDER THIS CONTRACT AS RECOMMENDED BY MANUFACTURERS OF EACH CABLE TYPE.
1 WHERE EXISTING CONDUITS AND UNDERGROUND DUCTBANKS ARE UTILIZED, EXTREME CARE MUST BE TAKEN TO PROTECT CABLES DURING INSTALLATION.
2 WHERE EXISTING ACCESSIBLE CONDUITS ARE UTILIZED, REPLACE EXISTING ELBOWS AND OTHER OFFSETS AS REQUIRED TO MEET BENDING RADIUS REQUIREMENTS.
- L. E.C. IS RESPONSIBLE TO PROVIDE ALL LOW VOLTAGE WIRING TO ALL INTERIOR MOUNTED FIXTURES THAT ARE INDICATED TO BE RUN THROUGH THE LIGHTING CONTROL SYSTEM OR INDICATED TO BE DIMMED. COORDINATE EXACT WIRING REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
- M. ALL OCCUPANCY SENSORS REQUIRING A POWER PACK AND POWER SHALL TAP THEIR POWER FEED AHEAD OF ANY/ALL SWITCHING. IN CORRIDORS AND PUBLIC SPACES CONTROLLED BY THE LIGHTING AUTOMATION SYSTEM THE POWER PANEL SHALL BE FED FROM THE NEAREST EMERGENCY EXIT LIGHT CIRCUIT (NON-SWITCHED).
- N. ALL WIRING AND CABLING MOUNTED ABOVE CEILINGS SHALL BE PLENUM RATED.
- O. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES. WHERE REFLECTED CEILING PLANS INDICATE A LARGER QUANTITY OF LIGHTING FIXTURES THAN THAT SHOWN ON THE ELECTRICAL DRAWINGS FOR A PARTICULAR SPACE, THE REFLECTED CEILING PLANS SHALL BE FOLLOWED FOR THAT SPACE.
- P. THE NOTES AND SYMBOLS SET DOWN ON THESE DRAWINGS ARE FOR THE GUIDANCE OF ALL TRADES INVOLVED IN THE PROJECT AND MUST BE FOLLOWED TO EXECUTE THE WORK AS INTENDED.
- Q. STAGGER RECEPTACLES AND OTHER RECESSED OUTLETS WHEN LOCATED ON OPPOSITE SIDES OF PARTITION TO ELIMINATE SOUND TRANSMISSION FROM ONE SPACE TO THE OTHER. CENTER DEVICES WHERE APPLICABLE IN EACH WALL SECTION.
- R. EXACT LOCATION OF ALL DEVICES SERVING EQUIPMENT TO BE VERIFIED AT SITE WITH OWNER'S REPRESENTATIVE AND/OR ARCHITECT PRIOR TO ROUGH-IN.
- S. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL NEW ELECTRICAL DEVICES WITH THE ARCHITECT PRIOR TO ROUGH-IN. DEVICES SHALL INCLUDE ALL NEW WORK INDICATED ON THE DRAWINGS; INCLUDING BUT NOT LIMITED TO POWER RECEPTACLES, TV OUTLET, LIGHTING CONTROLS AND SWITCHES, MOTOR CONTROLLERS, FA COMPONENTS, INTERCOM/PAGING COMPONENTS AND SECURITY/CCTV EQUIPMENT.
- T. E.C. IS RESPONSIBLE TO COORDINATE ALL DEVICE LOCATIONS WITH CASEWORK DRAWINGS AND ARCHITECT PRIOR TO ROUGH-IN TO AVOID CONFLICTS. ANY DEVICE LOCATION NOT PROPERLY COORDINATED WITH CASEWORK, FURNITURE, ETC SHALL BE THE COST RESPONSIBILITY OF THE E.C. TO RELOCATE PROPERLY.
- U. BRANCH CIRCUIT WIRE SIZING CHART TO BE UTILIZED AS GUIDELINE FOR VOLTAGE DROP COMPENSATION. INCREASE CONDUIT SIZING PER WIRE SIZE.
A) 20A-120V CIRCUITS
1) #12 WIRE - 60' LENGTH MAX.
2) #10 WIRE - 94' LENGTH MAX.
3) #8 WIRE - 137' LENGTH MAX.
4) #6 WIRE - 218' LENGTH MAX.
B) 20A-208V CIRCUITS
1) #12 WIRE - 138' LENGTH MAX.
2) #10 WIRE - 219' LENGTH MAX.
3) #8 WIRE - 318' LENGTH MAX.
4) #6 WIRE - 504' LENGTH MAX.
- V. E.C. IS RESPONSIBLE TO WARRANTY WORK FOR A ONE YEAR PERIOD STARTING ON THE DATE OF SUBSTANTIAL COMPLETION. E.C. SHALL SCHEDULE A ONE YEAR WALK-THROUGH WITH THE OWNER AND ENGINEER 6 MONTHS FROM THE SUBSTANTIAL COMPLETION DATE (3 MONTHS PRIOR TO END OF THE ONE YEAR WARRANTY PERIOD). E.C. IS RESPONSIBLE AT THAT TIME TO REPLACE/REPAIR ANY NON-WORKING EQUIPMENT OR DEVICES COVERED UNDER THE WARRANTY AS DESCRIBED IN THE CONTRACT SPECIFICATIONS.
- W. DRAWINGS INDICATE EQUIPMENT AND DEVICES BUT MINIMAL WIRING; E.C. IS RESPONSIBLE TO PROVIDE WIRING, BRANCH CIRCUITRY CABLING ETC... TO EVERY ELECTRICAL DEVICE INDICATED ON THESE PLANS.
- X. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. SEE SPECIFICATIONS FOR MORE SPECIFIC DETAILS ON RESPONSIBILITIES.
- Y. FIELD VERIFY DIMENSIONAL INFORMATION PRIOR TO ORDERING EQUIPMENT. DO NOT SCALE DRAWINGS.
- Z. DIMENSIONS ARE TYPICALLY INDICATED TO THE FINISHED FACE OF WALLS OR PARTITIONS AND CENTER LINES OF COLUMNS UNLESS OTHERWISE INDICATED.
- AA. TITLES, CAPTIONS, HEADINGS, ETC. ARE INTENDED FOR GENERAL REFERENCE AND ARE NOT INTENDED TO LIMIT THE WORK REQUIRED IN ANY WAY.
- BB. EACH CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHERS. HE SHALL KEEP HIMSELF INFORMED OF THE PROGRESS AND DETAIL DEVELOPMENT OF THE WORK OF OTHERS AND SHALL BE RESPONSIBLE FOR COORDINATING AND EXPEDITING HIS WORK WITH OTHERS SO THAT THE PROGRESS OF THE TOTAL WORK SHALL BE KEPT ON SCHEDULE.
- CC. EACH CONTRACTOR AND/OR TRADE FITTING OR PLACING HIS WORK INTO OR ON THE WORK OF OTHERS DOES SO WITH THE UNDERSTANDING THAT THE INSTALLATION OF HIS WORK CONSTITUTES HIS ACCEPTANCE OF THE SUITABILITY OF THE WORK IN PLACE. IF THE WORK OF OTHERS IS NOT ACCEPTABLE, HE SHALL NOTIFY THE CM AND SUCH WORK SHALL BE CORRECTED. ANY NEW WORK INSTALLED IN UNSUITABLE EXISTING WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR TRADE INSTALLING THE NEW WORK. NO CLAIMS FOR ADDITIONAL COMPENSATION FOR CORRECTING WORK INSTALLED IN UNSUITABLE EXISTING CONDITIONS WILL BE CONSIDERED.
- DD. ANY STRUCTURAL MECHANICAL, ELECTRICAL, FIRE PROTECTION, OR PLUMBING INFORMATION INDICATED ON THE ARCHITECTURAL DRAWINGS IS FOR REFERENCE PURPOSES ONLY UNLESS OTHERWISE INDICATED.
- EE. FIRESTOPPING ASSEMBLIES SHALL BE PROVIDED AT PENETRATIONS OF CONDUITS AND OTHER ELECTRICAL ITEMS THRU FIRE RATED FLOORS, FIRE RATED WALLS AND PARTITIONS AND FIRE RATED SHAFT WALLS AND PARTITIONS. ALL PENETRATIONS THROUGH 0-HOUR RATED WALLS SHALL BE CALKED SMOKE-TIGHT.
- FF. PROVIDE ACOUSTICAL OUTLET BACKER PUTTY PAD ON DEVICE JUNCTION BOXES AND BACK BOXES MOUNTED IN A/C (ACOUSTICALLY ISOLATED CONSTRUCTION) WALLS. SEALANT TO BE MANUFACTURED BY KINETICS (ISO BACKER), ACOUSTICAL SOLUTIONS (QUIET PUTTY) OR SOUND PROOFING COMPANY (PUTTY PADS). PENETRATIONS IN ACOUSTICAL WALLS DENOTED ON ARCHITECTURAL DRAWINGS AND/OR DEVICE MOUNTING ON IN ACOUSTICAL WALLS TO BE COORDINATED WITH ARCHITECT.

ELECTRICAL SYMBOLS

	DASH SYMBOL INDICATES PARTICULAR OUTLET OR DEVICE TO BE REMOVED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED.
	EXISTING OUTLET OR DEVICE TO REMAIN. MAINTAIN EXISTING CIRCUITING.
	ELECTRICAL CONNECTION.
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE).
	20A-125V SINGLE RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE).
	SPECIAL PURPOSE RECEPTACLE. REFER TO NOTE ON PLAN.
	20A-125V DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R, (18" MH UNLESS NOTED OTHERWISE) TWO GANG ASSEMBLY.
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (46" MH UNLESS NOTED OTHERWISE).
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R WITH 2 INTEGRAL USB CHARGERS (18" MH UNLESS NOTED OTHERWISE).
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE).
	20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE), WITH TAYMAC #MM420G EXTRA DUTY GRAY COVER, VERTICAL MOUNT.
	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, ON EMERGENCY POWER (18" MH UNLESS NOTED OTHERWISE).
	FLOOR BOX, # INDICATES TYPE, REFER TO FLOOR BOX (FB) SCHEDULE. PROVIDE CARPET FLANGE WHERE REQD. SUBSCRIPT "GF" INDICATES ALL RECEPTACLES IN FLOOR BOX SHALL BE GF/C TYPE.
	FIRE RATED POKE-THRU, # INDICATES TYPE, REFER TO POKE-THRU (PT) SCHEDULE. PROVIDE CARPET FLANGE WHERE REQD. SUBSCRIPT "GF" INDICATES ALL RECEPTACLES IN POKE THRU SHALL BE GF/C TYPE.
	20-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH ISOLATED GROUND (18" MH UNLESS NOTED OTHERWISE).
	20A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-20R (18" MH UNLESS NOTED OTHERWISE).
	30A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-30R (18" MH UNLESS NOTED OTHERWISE).
	50A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-50R (18" MH UNLESS NOTED OTHERWISE).
	20A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-20R (18" MH UNLESS NOTED OTHERWISE).
	30A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-30R (18" MH UNLESS NOTED OTHERWISE).
	50A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-50R (18" MH UNLESS NOTED OTHERWISE).
	JUNCTION BOX.
	MULTI-OUTLET RECEPTACLES ASSEMBLY, NEMA 5-15R (SINGLE OUTLETS ON 18" CENTERS) (46" MH UNLESS NOTED OTHERWISE).
	WIREMOLD RACEWAY, AS NOTED ON PLANS.
	CLOCK HANGER OUTLET, SINGLE NEMA 5-15R RECESSED IN COVER PLATE (84" MH UNLESS NOTED OTHERWISE).
	SINGLE POLE SWITCH (46" MH UNLESS NOTED OTHERWISE).
	TWO POLE WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
	MULTI-WAY WALL SWITCH, # INDICATES NUMBER OF WAYS (46" MH UNLESS NOTED OTHERWISE).
	KEY OPERATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
	LOW-VOLTAGE MOMENTARY WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
	LIGHTING DIMMER SWITCH (46" MH UNLESS NOTED OTHERWISE) 1000 WATTS UNLESS OTHERWISE INDICATED.
	FLUSH FRACTIONAL HORSEPOWER MOTOR STARTER WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).
	HP RATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
	ELECTRICAL PANEL OR SWITCHBOARD PER DRAWINGS.
	PULL BOX.
	DISCONNECT SWITCH.
	MOTOR STARTER.
	COMBINATION MOTOR STARTER AND DISCONNECT SWITCH.
	ELECTRIC MOTOR.
	CORD REEL. BASIS OF DESIGN IS HUBBELL #HBL25123R220M1. REFER TO DETAIL 2 ON SHEET E0.07 FOR MORE INFORMATION.
	POWER POLE.
	INTERCOM SPEAKER FLUSH MOUNT IN CEILING.
	PUSHBUTTON (46" MH UNLESS NOTED OTHERWISE). REFER TO INSTANCES ON PLANS, NOTES AND DETAILS FOR SPECIFIC PUSHBUTTON TYPE AND INTENT.
	PHOTOELECTRIC SENSOR.
	LIGHTING CONTACTOR.
	CEILING MOUNTED OCCUPANCY SENSOR.
	WALL MOUNTED OCCUPANCY SENSOR.
	CEILING MOUNTED DAYLIGHT SENSOR.
	OCCUPANCY SENSOR POWER PACK.

AV/SECURITY SYMBOLS WITH ELECTRICAL REQUIREMENTS

	AI PHONE
	MICROPHONE JACK PLATE (18" MH UNLESS NOTED OTHERWISE). "F"=NUMBER OF GANG, "X"=NUMBER OF JACKS IF OTHER THAN TWO (2). PROVIDE 0.75" CONDUIT FOR 1-GANG BOX OR 1" CONDUIT FOR 2-GANG AND LARGER BOX TO ABOVE ACCESSIBLE CEILING PER DIV 26. JACKS, FACEPLATE AND CABLING PER DIV 27.
	CARD READER. PROVIDE 1-GANG BOX WITH 0.75" FROM BOX TO ABOVE ACCESSIBLE CEILING. COORDINATE MOUNTING LOCATION OF BOX AND CONDUIT RUN WITH ARCHITECT PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY. ALL WIRING RUNS FOR CARD READERS TO BE COORDINATED WITH ARCHITECT AND OVIS AT PRE-BID WALK-THROUGH OR PRIOR TO BIDDING. PANIC SYSTEM SIREN STROBE BY OVIS. SHOWN ON FLOOR PLANS FOR REFERENCE. INSTALLATION AND WIRING OF THIS DEVICE BY OVIS.
	CEILING MOUNTED CAMERA. PROVIDE 1-GANG BOX WITH 0.75" FROM BOX TO ABOVE ACCESSIBLE CEILING. COORDINATE MOUNTING LOCATION OF BOX AND CONDUIT RUN WITH ARCHITECT PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY. ALL WIRING RUNS FOR CAMERAS TO BE COORDINATED WITH ARCHITECT AND OVIS AT PRE-BID WALK-THROUGH OR PRIOR TO BIDDING.

FIRE ALARM SYMBOLS

	FIRE ALARM CONTROL PANEL.
	REMOTE ANNUNCIATOR PANEL.
	NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL.
	AIR SAMPLING SMOKE DETECTOR BASE UNIT.
	FIRE ALARM SPEAKER & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
	FIRE ALARM BELL & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
	FIRE ALARM CHIME & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
	FIRE ALARM HORN & SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
	FIRE ALARM BELL (88" AFF UNLESS NOTED OTHERWISE). SUBSCRIPT "W" INDICATES EXTERIOR WEATHERPROOF UNIT.
	FIRE ALARM SIGNAL LIGHT (88" AFF). # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
	CEILING MOUNTED FIRE ALARM SPEAKER & SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
	CEILING MOUNTED FIRE ALARM HORN & SIGNAL LIGHT. # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
	SURFACE MOUNTED FIRE ALARM SPEAKER (88" AFF). SUBSCRIPT "R" INDICATES RECESSED MOUNTING.
	FIRE ALARM MANUAL STATION (46" MH UNLESS NOTED OTHERWISE). SUBSCRIPT "K" INDICATES KEY OPERATED.
	CEILING MOUNTED SMOKE DETECTOR.
	CEILING MOUNTED HEAT DETECTOR.
	DUCT MOUNTED SMOKE DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICATES RETURN.
	DUCT MOUNTED HEAT DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICATES RETURN.
	BEAM DETECTOR. SUBSCRIPT "T" INDICATES TRANSMITTER FUNCTION. SUBSCRIPT "R" INDICATES RECEIVER FUNCTION.
	ELECTRIC RELEASE DOOR CLOSER.
	ELECTRO-MAGNETIC DOOR HOLDER.
	WATER FLOW SWITCH.
	VALVE SUPERVISORY SWITCH.
	CEILING MOUNTED REMOTE TEST STATION AND ALARM INDICATOR LIGHT FOR DUCT DETECTOR. SUBSCRIPT "W" INDICATES WALL MOUNTED.
	SMOKE DAMPER.
	FIRE FIGHTER'S TELEPHONE (60" MH UNLESS NOTED OTHERWISE).
	PRESSURE SWITCH.
	ADDRESSABLE MODULE. SUBSCRIPT "I" INDICATES INPUT. SUBSCRIPT "C" INDICATES CONTROL.
	POST INDICATOR VALVE.
	KNOX BOX (46" MH UNLESS NOTED OTHERWISE). SUBSCRIPT "S" INDICATES SUPERVISED UNIT.
	GAS SENSOR.
	CARBON MONOXIDE DETECTOR.

TECHNOLOGY SYMBOLS WITH ELEC. REQUIREMENTS

	CONDUIT SLEEVE / FIRE RATED SLEEVE ASSEMBLY THRU WALL (1-2" SLEEVE UNLESS NOTED OTHERWISE) PER DIV 26.
	WALL MOUNTED DATA OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT(S) TO ABOVE CORRIDOR CEILING PER DIV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" DESIGNATES QUANTITY OF DATA CABLES. REFER TO FACEPLATE DETAILS.
	WALL MOUNTED VOICE/DATA OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT(S) TO ABOVE CORRIDOR CEILING PER DIV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "XDXY" INDICATES QUANTITY OF DATA/VOICE CABLES. REFER TO FACEPLATE DETAILS.
	WALL MOUNTED PHONE OUTLET (46" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT TO ABOVE ACCESSIBLE CEILING PER DIV 26. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "W" INDICATES WALL PHONE MOUNTING PLATE. REFER TO FACEPLATE DETAILS.
	WALL MOUNTED WIRELESS ACCESS POINT (86" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT TO ABOVE ACCESSIBLE CEILING PER DIV 26. WAP AND CABLING PER DIV 27.
	WALL MOUNTED AV OUTLET (18" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUITS TO ABOVE ACCESSIBLE CEILING PER DIV 26. REFER TO FACEPLATE DETAILS. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION.
	TELECOM BOX AND CONDUIT PER DIV 26, REFER TO PLANS.
	WALL MOUNTED AV OUTLET (84" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT PER DIV 26. REFER TO FACEPLATE DETAILS. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION.
	WALL MOUNTED AV OUTLET (44" MH UNLESS NOTED OTHERWISE). BOX WITH CONDUIT PER DIV 26. REFER TO FACEPLATE DETAILS. JACKS, FACEPLATE AND CABLING PER DIV 27. SUBSCRIPT "X" INDICATES ALTERNATE CONFIGURATION.
	CUSTOM OUTLET IN SURFACE RACEWAY. SURFACE RACEWAY PER DIV 26. OUTLET JACKS, FACEPLATE AND CABLING PER DIV 27.
	FLOOR BOX PER DIV 26. # INDICATES TYPE, REFER TO FLOOR BOX (FB) SCHEDULE. SUBSCRIPT "X" INDICATES TECHNOLOGY DEVICE(S). REFER TO TECHNOLOGY DETAILS.
	POKE-THRU PER DIV 26. # INDICATES TYPE, REFER TO POKE-THRU (PT) SCHEDULE. SUBSCRIPT "X" INDICATES TECHNOLOGY DEVICE(S). REFER TO TECHNOLOGY DETAILS.

LUMINAIRE SYMBOLS

	LIGHTING FIXTURE. CAPITAL LETTER DENOTES FIXTURE TYPE, LOWER CASE LETTER DENOTES SWITCHING ARRANGEMENT.
	LIGHTING FIXTURE ON NIGHT LIGHT AND/OR EMERGENCY CIRCUIT.
	EXIT LIGHTING FIXTURE. ARROWS AS INDICATED.

NOTE: ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.

ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

ABBREVIATIONS

A	-AMPS	HC	-HVAC CONTRACTOR (DIVISION 23)
ACC	-ACCESS	HP	-HORSE POWER
ADJ	-ADJUSTABLE	HVAC	-HEATING, VENTILATING, AND AIR CONDITIONING
AFB	-ABOVE FINISHED FLOOR TO BOTTOM OF ITEM	ID	-INSIDE DIAMETER
AFG	-ABOVE FINISHED GRADE TO BOTTOM OF ITEM	IN	-INCHES
ALT	-ALTERNATE	KEC	-KITCHEN EQUIPMENT CONTRACTOR
AP	-ACCESS PANEL	L	-LENGTH
APPROX	-APPROXIMATE	LBS	-POUNDS
ARCH	-ARCHITECT OR ARCHITECTURAL	MAX	-MAXIMUM
ATS	-AUTOMATIC TRANSFER SWITCH	MFR	-MANUFACTURER
		MH	-MOUNTING HEIGHT TO CENTER LINE OF ITEM
		MIN	-MINIMUM OR MINUTE
		MISC	-MISCELLANEOUS
BLDG	-BUILDING	MTG	-MOUNTING
BOE	-BOTTOM OF EQUIPMENT	MTS	-MANUAL TRANSFER SWITCH
BOF	-BOTTOM	MW	-MICROWAVE
BTWN	-BETWEEN	NIC	-NOT IN CONTRACT
		NOM	-NOMINAL
C	-CONDUIT	NTS	-NOT TO SCALE
CFCI	-CONTRACTOR FURNISHED CONTRACTOR INSTALLED	OD	-OUTSIDE DIAMETER
CMT	-CIRCUIT	OFCI	-OWNER FURNISHED CONTRACTOR INSTALLED
CLG	-CEILING	OFOI	-OWNER FURNISHED OWNER INSTALLED
CMU	-CONCRETE MASONRY UNIT	PC	-PLUMBING CONTRACTOR (DIVISION 22)
CONN	-CONNECT OR CONNECTION	PLBG	-PLUMBING
CONTR	-CONTRACTOR	RAD	-RADIUS
CORR	-CORRIDOR	REC	-RECESSED
CTR	-CENTER	REQD	-REQUIRED
		RF	-REFRIGERATOR
		RI	-ROUGH-IN
D	-DEPTH	S	-SURFACE MOUNTED
DET	-DETAIL	SCH	-SCHEDULE
DFA	-DROP FROM ABOVE	SHT	-SHEET
DA	-DIAMETER	SPEC	-SPECIFICATIONS
DIM	-DIMENSION	SQ	-SQUARE
DIV	-DIVISION	SS	-STAINLESS STEEL
DN	-DOWN	ST	-SHUNT TRIP
DW	-DISHWASHER	STD	-STANDARD
DWG	-DRAWING	TC	-TECHNOLOGY CONTRACTOR
		TEMP	-TEMPERATURE
		TOE	-TOP OF EQUIPMENT
		TYP	-TYPICAL
EA	-EACH	UNO	-UNLESS NOTED OTHERWISE
EC	-ELECTRICAL CONTRACTOR (DIVISION 26)	V	-VOLTS
EJ	-EXPANSION JOINT	VFD	-VARIABLE FREQUENCY DRIVE
ELEC	-ELECTRICAL	W	-WATTS
ELEV	-ELEVATION OR ELEVATOR	WI	-WITH
EM	-EMERGENCY	W/O	-WITHOUT
EQ	-EQUAL	WC	-WATER COOLER
EQS	-EQUIPMENT SUPPLIER	WP	-WEATHERPROOF
EQUIP	-EQUIPMENT		
EIR	-EXISTING TO BE RELOCATED		
EX	-EXISTING TO REMAIN		
EXP	-EXPANSION		
EXT	-EXTERIOR		
FF	-FINISHED FLOOR ELEVATION		
FLR	-FLOOR		
FSC	-FIRE SUPPRESSION CONTRACTOR (DIVISION 21)		
FT	-FEET		
FTG	-FOOTING		
GC	-GENERAL CONTRACTOR		
GF	-GROUND FAULT CIRCUIT INTERRUPTER		
GFCI	-GROUND FAULT CIRCUIT INTERRUPTER		
GGFT	-GROUND FAULT FEED THRU		
GRD	-GROUND		

GENERAL FLOOR PLAN NOTES

	DETAIL: B = DETAIL DESIGNATION E2 = SHEET WHERE DETAIL IS LOCATED
	SECTION: 1 = SECTION DESIGNATION E2 = SHEET WHERE SECTION IS LOCATED
	ELEVATION: 1 = ELEVATION DESIGNATION T2 = SHEET WHERE ELEVATION IS LOCATED
	PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN.
	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
	LIGHTING CONTROL DETAIL NOTE. APPLIES TO THE LIGHTING CONTROL SEQUENCE OF OPERATIONS SCHEDULE FOR ROOM CONTROL.
	DEVICE QUANTITY - POWER NOTE. REFER TO DEVICE QUANTITIES - POWER SCHEDULE.
	LADDER TRAY, 12" x 4" DEEP UNLESS NOTED OTHERWISE.
	CABLE TRAY, 12" x 4" DEEP UNLESS NOTED OTHERWISE.
	WIRE & CONDUIT IN WALL OR ABOVE CEILING.
	WIRE & CONDUIT IN OR BELOW SLAB OR GRADE.
	CONDUIT TO BE REMOVED.
	EXISTING WIRE & CONDUIT TO REMAIN.
	CONDUIT FOR DATA CIRCUITRY.
	WIRE & CONDUIT FOR EMERGENCY CIRCUITRY.
	WIRE & CONDUIT FOR FIRE ALARM CIRCUITRY.
	WIRE RUN IN SURFACE WIREWAY.
	CABLE MANAGEMENT SYSTEM PATHWAY.
	EACH ARROWHEAD REPRESENTS ONE COMPLETE CIRCUIT; "X" DENOTES PANEL NAME; NUMBER(S) DENOTES CIRCUIT(S).

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Kettering Government Center Security Upgrades

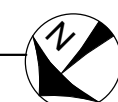
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1 SOUTH BUILDING - OVERALL ELECTRICAL PLAN - LOWER LEVEL

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



HEAPY
PROJECT NO. 2025-07130

GENERAL NOTES

- A. THE LOWER LEVEL AND MAIN LEVEL WILL BE REMODELED UNDER THIS CONTRACT WITH NEW DOORS AND ACCESS CONTROL. REFER TO ARCHITECTURAL DRAWINGS FOR AREAS WHERE DEMO AND NEW WORK WILL OCCUR. E.C. SHALL REMOVE ELECTRICAL DEVICES, SYSTEM COMPONENTS AND OTHER EQUIPMENT ASSOCIATED WITH DIVISION 26, 27, AND 28 TO ACCOMMODATE ALL NEW CONSTRUCTION AND REMODELING IN THESE AREAS. ONLY EXISTING RECESSED DEVICES, DEVICES SERVING EXISTING EQUIPMENT TO REMAIN, AND DEVICES INDICATED AS EXISTING SHALL BE MAINTAINED ACTIVE (UNLESS INDICATED OTHERWISE). REFER TO GENERAL NOTES "I" AND "J", ON SHEET E0.1.
- B. ALL EQUIPMENT, LIGHT FIXTURES, CONDUIT, CONDUCTORS, FIRE ALARM WIRING, AND ANY OTHER ELECTRICAL RELATED EQUIPMENT BEING MOUNTED IN THE CEILING OR ABOVE THE CEILING SHALL BE PLENUM RATED.
- C. ALL EXISTING RECESSED DEVICES TO REMAIN IN AREAS WHERE THERE IS WORK SHALL BE PROVIDED WITH NEW DEVICES AND COVERPLATE. E.C. IS RESPONSIBLE TO VERIFY AND PROVIDE PROPER WIRING (PER NEC) TO EXISTING (TO REMAIN) DEVICES. E.C. SHALL PROVIDE NEW BLANKS OVER RECESSED NON-USED BACK BOXES.
- D. ALL EXISTING TO REMAIN DEVICES LOCATED ON NEWLY FURRED OUT WALLS SHALL BE PROVIDED WITH EXTENSION BOXES AND BE MOUNTED FLUSH IN NEW WALL.
- E. ALL FIRE ALARM WIRING SHALL BE IN CONDUIT.
- F. ALL LIGHTING CONTROL WIRING SHALL BE IN CONDUIT.
- G. E.C. IS RESPONSIBLE FOR REMOVAL OF ANY/ALL CEILINGS TO ACCOMMODATE WORK ASSOCIATED WITH ROUTING OF NEW CONDUIT AND WIRING TO NEW EQUIPMENT/FURNITURE LOCATIONS. E.C. SHALL PROVIDE ALL CORE DRILLS AS REQUIRED TO PROVIDE POWER TO NEW EQUIPMENT/FURNITURE.
- H. WHERE REMOVAL OF ELECTRICAL DEVICES/BOXES OCCURS, PATCH AS REQUIRED AND REFER TO GENERAL NOTE F ON SHEET E0.1 FOR MORE INFORMATION.
- I. NEW FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH AND MATCH EXISTING FIRE ALARM SYSTEM.
- J. UTILIZE EXISTING NORMAL (UNSHADED) AND EMERGENCY (HALF-SHADED) LIGHTING CIRCUITS PREVIOUSLY SERVING REMOVED LIGHT FIXTURES IN THIS SPACE TO SERVE THE NEW LIGHT FIXTURES. PROVIDE CONTROL/SWITCHING AS INDICATED ON PLANS. MARK CIRCUIT NUMBER ON AS-BUILTS.

PLAN NOTES

1. PROVIDE 1-GANG BOX (FOR CARD READER) WITH 0.75" FROM BOX TO ABOVE ACCESSIBLE CEILING. PROVIDE JUNCTION BOX ABOVE CEILING/DOOR WITH 0.75" FROM BOX INTO DOOR FRAME FOR SECURITY WIRING. REFER TO DETAIL 2 ON SHEET E0.2 FOR FURTHER INFORMATION. COORDINATE EXACT ROUGH-IN LOCATIONS FOR BOXES AND CONDUITS WITH ARCHITECT PRIOR TO ROUGH-IN.
2. PROVIDE 20A, 120V CIRCUIT WITH 2-#12, 1-#12 GRD IN 0.75" FOR SECURITY EQUIPMENT. VERIFY EXACT LOCATION OF CIRCUIT IN SPACE WITH OVIS PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
3. PROVIDE 1-GANG BOX (FOR AI PHONE) WITH 0.75" FROM BOX TO ABOVE ACCESSIBLE CEILING. REFER TO DETAIL 2 ON SHEET E0.2 FOR FURTHER INFORMATION. COORDINATE EXACT ROUGH-IN LOCATIONS FOR BOXES AND CONDUITS WITH ARCHITECT PRIOR TO ROUGH-IN.
4. PROVIDE 1-GANG BOX (FOR AI PHONE DOOR RELEASE) WITH 0.75" FROM BOX MOUNTED AT DESK TO ABOVE ACCESSIBLE CEILING. VERIFY EXACT MOUNTING LOCATION OF BOX AND END OF CONDUIT RUN WITH OVIS PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
5. PROVIDE 1-GANG BOX IN CEILING (FOR CAMERA) WITH 0.75" FROM BOX TO ABOVE ACCESSIBLE CEILING. COORDINATE EXACT ROUGH-IN LOCATION FOR BOX AND CONDUIT WITH ARCHITECT PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
6. PROVIDE NEW EXIT SIGN IN INDICATED LOCATION AND CONNECT INTO EXISTING EXIT SIGN CIRCUIT SERVING SPACE. EXTEND CIRCUIT WITH 2-#12, 1-#12 GRD IN 0.75". BASIS OF DESIGN IS DUALLITE #EVE-U-R-W.

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**Kettering Government Center
Security Upgrades**

3600 Stroyer Rd, Dayton, OH 45429

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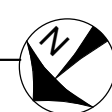
TITLE
**SOUTH BLDG - OVERALL
ELECTRICAL PLAN -
LOWER LEVEL**

SHEET NO.

E1.3

1 SOUTH BUILDING - OVERALL ELECTRICAL PLAN - MAIN LEVEL

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

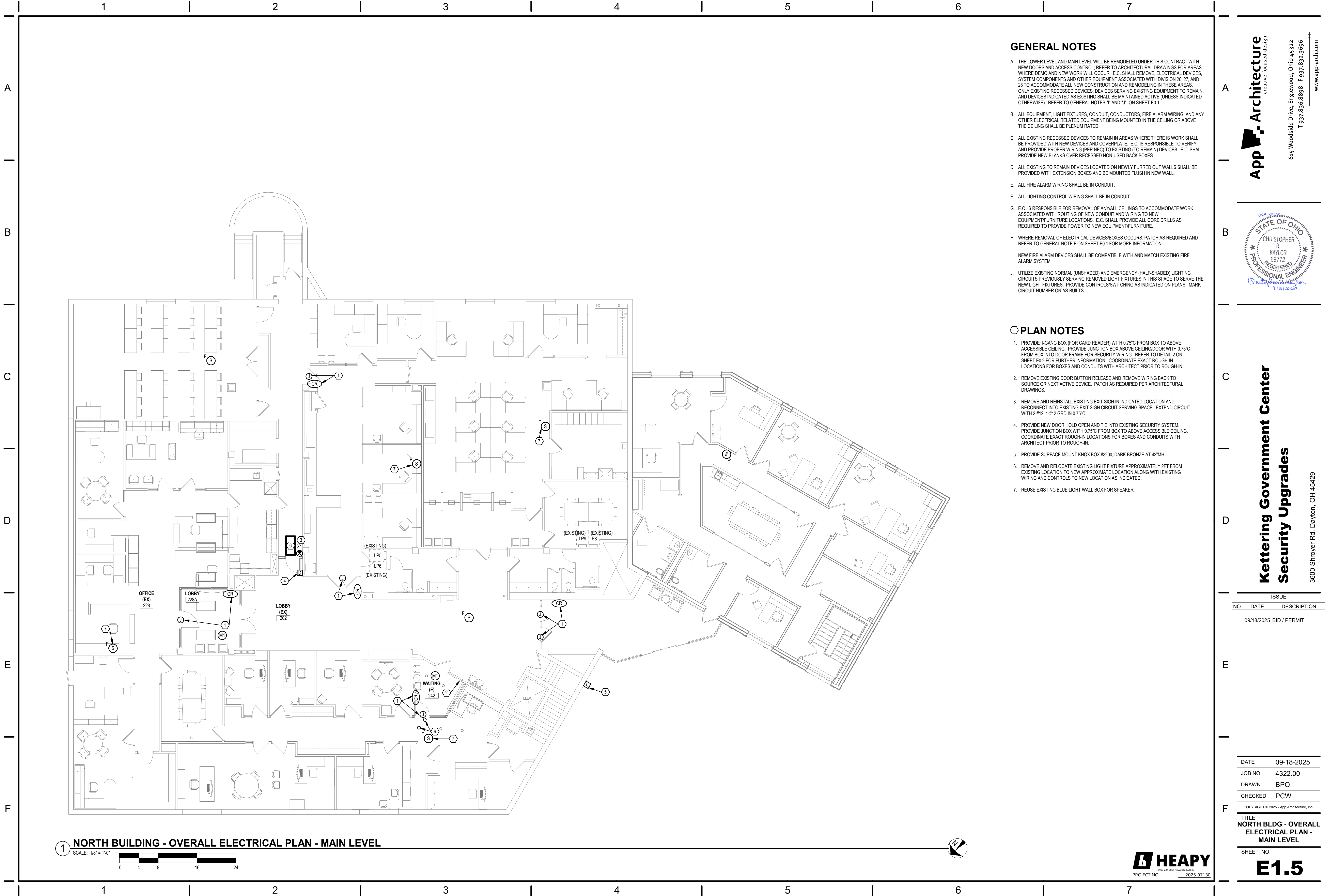


GENERAL NOTES

- A. THE LOWER LEVEL AND MAIN LEVEL WILL BE REMODELED UNDER THIS CONTRACT WITH NEW DOORS AND ACCESS CONTROL. REFER TO ARCHITECTURAL DRAWINGS FOR AREAS WHERE DEMO AND NEW WORK WILL OCCUR. E.C. SHALL REMOVE, ELECTRICAL DEVICES, SYSTEM COMPONENTS AND OTHER EQUIPMENT ASSOCIATED WITH DIVISION 26, 27, AND 28 TO ACCOMMODATE ALL NEW CONSTRUCTION AND REMODELING IN THESE AREAS. ONLY EXISTING RECESSED DEVICES, DEVICES SERVING EXISTING EQUIPMENT TO REMAIN, AND DEVICES INDICATED AS EXISTING SHALL BE MAINTAINED ACTIVE (UNLESS INDICATED OTHERWISE). REFER TO GENERAL NOTES "I" AND "J", ON SHEET E0.1.
- B. ALL EQUIPMENT, LIGHT FIXTURES, CONDUIT, CONDUCTORS, FIRE ALARM WIRING, AND ANY OTHER ELECTRICAL RELATED EQUIPMENT BEING MOUNTED IN THE CEILING OR ABOVE THE CEILING SHALL BE PLENUM RATED.
- C. ALL EXISTING RECESSED DEVICES TO REMAIN IN AREAS WHERE THERE IS WORK SHALL BE PROVIDED WITH NEW DEVICES AND COVERPLATE. E.C. IS RESPONSIBLE TO VERIFY AND PROVIDE PROPER WIRING (PER NEC) TO EXISTING (TO REMAIN) DEVICES. E.C. SHALL PROVIDE NEW BLANKS OVER RECESSED NON-USED BACK BOXES.
- D. ALL EXISTING TO REMAIN DEVICES LOCATED ON NEWLY FURRED OUT WALLS SHALL BE PROVIDED WITH EXTENSION BOXES AND BE MOUNTED FLUSH IN NEW WALL.
- E. ALL FIRE ALARM WIRING SHALL BE IN CONDUIT.
- F. ALL LIGHTING CONTROL WIRING SHALL BE IN CONDUIT.
- G. E.C. IS RESPONSIBLE FOR REMOVAL OF ANY/ALL CEILINGS TO ACCOMMODATE WORK ASSOCIATED WITH ROUTING OF NEW CONDUIT AND WIRING TO NEW EQUIPMENT/FURNITURE LOCATIONS. E.C. SHALL PROVIDE ALL CORE DRILLS AS REQUIRED TO PROVIDE POWER TO NEW EQUIPMENT/FURNITURE.
- H. WHERE REMOVAL OF ELECTRICAL DEVICES/BOXES OCCURS, PATCH AS REQUIRED AND REFER TO GENERAL NOTE F ON SHEET E0.1 FOR MORE INFORMATION.
- I. NEW FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH AND MATCH EXISTING FIRE ALARM SYSTEM.
- J. UTILIZE EXISTING NORMAL (UNSHADED) AND EMERGENCY (HALF-SHADED) LIGHTING CIRCUITS PREVIOUSLY SERVING REMOVED LIGHT FIXTURES IN THIS SPACE TO SERVE THE NEW LIGHT FIXTURES. PROVIDE CONTROLS/SWITCHING AS INDICATED ON PLANS. MARK CIRCUIT NUMBER ON AS-BUILTS.

PLAN NOTES

1. PROVIDE 1-GANG BOX (FOR CARD READER) WITH 0.75" FROM BOX TO ABOVE ACCESSIBLE CEILING. PROVIDE JUNCTION BOX ABOVE CEILING/DOOR WITH 0.75" FROM BOX INTO DOOR FRAME FOR SECURITY WIRING. REFER TO DETAIL 2 ON SHEET E0.2 FOR FURTHER INFORMATION. COORDINATE EXACT ROUGH-IN LOCATIONS FOR BOXES AND CONDUITS WITH ARCHITECT PRIOR TO ROUGH-IN.
2. PROVIDE 20A, 120V CIRCUIT WITH 2-#12, 1-#12 GRD IN 0.75" FOR DOOR POWER/OPERATOR. PROVIDE CIRCUIT FROM NEW 20A/1P BREAKER IN PANEL 1D. NEW BREAKER SHALL MATCH EXISTING MANUFACTURER, RATING AND CHARACTERISTICS. REFER TO DETAIL 2 ON SHEET E0.2 FOR MORE INFORMATION.
3. REMOVE EXISTING RECEPTACLE AND DATA OUTLET SERVING REMOVED TV. REMOVE POWER WIRING BACK TO SOURCE OR NEXT ACTIVE DEVICE. PROVIDE STAINLESS STEEL COVERPLATE OVER EXISTING BACKBOX. UTILIZE EXISTING DATA CABLE AND CONDUIT FOR NEW CAMERA. COORDINATE ALL REQUIREMENTS WITH OWNER.
4. PROVIDE 1-GANG BOX (FOR AI PHONE DOOR RELEASE) WITH 0.75" FROM BOX MOUNTED AT DESK TO ABOVE ACCESSIBLE CEILING. VERIFY EXACT MOUNTING LOCATION OF BOX AND END OF CONDUIT RUN WITH OVIS PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
5. REMOVE ANY/ALL ELECTRICAL DEVICES ON DEMOLISHED WALL(S) IN THIS AREA. REMOVE WIRING BACK TO SOURCE OR NEXT ACTIVE DEVICE. RELOCATE ANY EXISTING WIRING/CONDUITS TO ACCOMMODATE REMOVED WALL.
6. REMOVE EXISTING LIGHT FIXTURE IN APPROXIMATE LOCATION ALONG WITH EXISTING WIRING AND CONTROLS BACK TO NEXT ACTIVE DEVICE. TURN EXISTING LIGHT FIXTURE OVER TO OWNER.
7. PROVIDE SURFACE MOUNT KNOX BOX #3200, DARK BRONZE AT 42"MH.
8. CIRCUITS, CONDUITS, RACEWAYS WIRING, ETC., IN THIS AREA SHALL BE FED FROM BELOW DUE TO WALLS NOT RUNNING UP TO DECK. COORDINATE WIRING AND PATHWAY TO DEVICES AND INTO DOORS/FRAMES WITH ARCHITECT PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
9. PROVIDE 1-GANG BOX (FOR REPEATER) WITH 0.75" FROM BOX MOUNTED AT DESK TO ABOVE ACCESSIBLE CEILING. VERIFY EXACT MOUNTING LOCATION OF BOX AND END OF CONDUIT RUN WITH OVIS PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
10. REMOVE AND RELOCATE EXISTING LIGHT FIXTURE IN APPROXIMATE LOCATION ALONG WITH EXISTING WIRING AND CONTROLS TO NEW LOCATION AS INDICATED.
11. PROVIDE 20A, 120V CIRCUIT WITH 2-#12, 1-#12 GRD IN 0.75", AND 1-GANG BOX WITH 0.75" DATA) FOR TV. PROVIDE CIRCUIT FROM NEW 20A/1P BREAKER IN PANEL 1A. NEW BREAKER SHALL MATCH EXISTING MANUFACTURER, RATING AND CHARACTERISTICS. TV BY OVIS.
12. PROVIDE NEW EXIT SIGN IN INDICATED LOCATION AND CONNECT INTO EXISTING EXIT SIGN CIRCUIT SERVING SPACE. EXTEND CIRCUIT WITH 2-#12, 1-#12 GRD IN 0.75". EXIT SIGN BASIS OF DESIGN IS DUALITE HEVE-U-R-W.
13. PROVIDE 20A, 120V CIRCUIT WITH 2-#12, 1-#12 GRD IN 0.75" FOR SPEAKER/MIC AT GLASS. PROVIDE CIRCUIT FROM NEW 20A/1P BREAKER IN PANEL 1A. SPEAKER/MIC FURNISHED BY OVIS. INSTALLED BY E.C. COORDINATE EXACT CONNECTION TYPE AND ELECTRICAL REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.



GENERAL NOTES

- A. THE LOWER LEVEL AND MAIN LEVEL WILL BE REMODELED UNDER THIS CONTRACT WITH NEW DOORS AND ACCESS CONTROL. REFER TO ARCHITECTURAL DRAWINGS FOR AREAS WHERE DEMO AND NEW WORK WILL OCCUR. E.C. SHALL REMOVE, ELECTRICAL DEVICES, SYSTEM COMPONENTS AND OTHER EQUIPMENT ASSOCIATED WITH DIVISION 26, 27, AND 28 TO ACCOMMODATE ALL NEW CONSTRUCTION AND REMODELING IN THESE AREAS. ONLY EXISTING RECESSED DEVICES, DEVICES SERVING EXISTING EQUIPMENT TO REMAIN, AND DEVICES INDICATED AS EXISTING SHALL BE MAINTAINED ACTIVE (UNLESS INDICATED OTHERWISE). REFER TO GENERAL NOTES "I" AND "J", ON SHEET E0.1.
- B. ALL EQUIPMENT, LIGHT FIXTURES, CONDUIT, CONDUCTORS, FIRE ALARM WIRING, AND ANY OTHER ELECTRICAL RELATED EQUIPMENT BEING MOUNTED IN THE CEILING OR ABOVE THE CEILING SHALL BE PLENUM RATED.
- C. ALL EXISTING RECESSED DEVICES TO REMAIN IN AREAS WHERE THERE IS WORK SHALL BE PROVIDED WITH NEW DEVICES AND COVERPLATE. E.C. IS RESPONSIBLE TO VERIFY AND PROVIDE PROPER WIRING (PER NEC) TO EXISTING (TO REMAIN) DEVICES. E.C. SHALL PROVIDE NEW BLANKS OVER RECESSED NON-USED BACK BOXES.
- D. ALL EXISTING TO REMAIN DEVICES LOCATED ON NEWLY FURRED OUT WALLS SHALL BE PROVIDED WITH EXTENSION BOXES AND BE MOUNTED FLUSH IN NEW WALL.
- E. ALL FIRE ALARM WIRING SHALL BE IN CONDUIT.
- F. ALL LIGHTING CONTROL WIRING SHALL BE IN CONDUIT.
- G. E.C. IS RESPONSIBLE FOR REMOVAL OF ANY/ALL CEILINGS TO ACCOMMODATE WORK ASSOCIATED WITH ROUTING OF NEW CONDUIT AND WIRING TO NEW EQUIPMENT/FURNITURE LOCATIONS. E.C. SHALL PROVIDE ALL CORE DRILLS AS REQUIRED TO PROVIDE POWER TO NEW EQUIPMENT/FURNITURE.
- H. WHERE REMOVAL OF ELECTRICAL DEVICES/BOXES OCCURS, PATCH AS REQUIRED AND REFER TO GENERAL NOTE F ON SHEET E0.1 FOR MORE INFORMATION.
- I. NEW FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH AND MATCH EXISTING FIRE ALARM SYSTEM.
- J. UTILIZE EXISTING NORMAL (UNSHADED) AND EMERGENCY (HALF-SHADED) LIGHTING CIRCUITS PREVIOUSLY SERVING REMOVED LIGHT FIXTURES IN THIS SPACE TO SERVE THE NEW LIGHT FIXTURES. PROVIDE CONTROLS/SWITCHING AS INDICATED ON PLANS. MARK CIRCUIT NUMBER ON AS-BUILTS.

PLAN NOTES

1. PROVIDE 1-GANG BOX (FOR CARD READER) WITH 0.75"C FROM BOX TO ABOVE ACCESSIBLE CEILING. PROVIDE JUNCTION BOX ABOVE CEILING/DOOR WITH 0.75"C FROM BOX INTO DOOR FRAME FOR SECURITY WIRING. REFER TO DETAIL 2 ON SHEET E0.2 FOR FURTHER INFORMATION. COORDINATE EXACT ROUGH-IN LOCATIONS FOR BOXES AND CONDUITS WITH ARCHITECT PRIOR TO ROUGH-IN.
2. REMOVE EXISTING DOOR BUTTON RELEASE AND REMOVE WIRING BACK TO SOURCE OR NEXT ACTIVE DEVICE. PATCH AS REQUIRED PER ARCHITECTURAL DRAWINGS.
3. REMOVE AND REINSTALL EXISTING EXIT SIGN IN INDICATED LOCATION AND RECONNECT INTO EXISTING EXIT SIGN CIRCUIT SERVING SPACE. EXTEND CIRCUIT WITH 2#12, 1-#12 GRD IN 0.75"C.
4. PROVIDE NEW DOOR HOLD OPEN AND TIE INTO EXISTING SECURITY SYSTEM. PROVIDE JUNCTION BOX WITH 0.75"C FROM BOX TO ABOVE ACCESSIBLE CEILING. COORDINATE EXACT ROUGH-IN LOCATIONS FOR BOXES AND CONDUITS WITH ARCHITECT PRIOR TO ROUGH-IN.
5. PROVIDE SURFACE MOUNT KNOX BOX #3200, DARK BRONZE AT 42"MH.
6. REMOVE AND RELOCATE EXISTING LIGHT FIXTURE APPROXIMATELY 2FT FROM EXISTING LOCATION TO NEW APPROXIMATE LOCATION ALONG WITH EXISTING WIRING AND CONTROLS TO NEW LOCATION AS INDICATED.
7. REUSE EXISTING BLUE LIGHT WALL BOX FOR SPEAKER.

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TITLE NORTH BLDG - OVERALL ELECTRICAL PLAN - MAIN LEVEL	
SHEET NO.	

E1.5