CG

Renovate 4E NMAL Office Suite

SI PROJECT NUMBER: 2466904

DRAWING LIST	
SHEET NUMBER	**SHEET NAME**
GENERAL	
G-001CS	COVER SHEET
G-002GI	DRAWING ABBREV. & SYMBOLS
G-100VP	CODE ANALYSIS
ARCHITECTURAL	
AD101DP	DEMOLITION PLAN - PARTIAL LEVEL 4 - NORTH
AD103DP	DEMOLITION REFLECTED CEILING PLAN - PARTIAL LEVEL 4 - NORTH
A-101FP	FLOOR PLAN - PARTIAL LEVEL 4 - NORTH
A-103CP	REFLECTED CEILING PLAN - PARTIAL LEVEL 4 - NORTH
A-105NP	FINISH PLAN - PARTIAL LEVEL 4 - NORTH
A-401EP	ENLARGED VIEWS (COMBINED PLANS, RCPs, & ELEVATIONS)
A-406EP	INTERIOR ELEVATIONS
A-501DT	INTERIOR DETAILS
A-503DT	MILLWORK DETAILS
A-504DT	MILLWORK DETAILS
A-505DT	MILLWORK DETAILS
A-507DT	GLAZING DETAILS
A-601SH	PARTITION SCHEDULE & DETAILS
A-902SH	FINISH SCHEDULE & DETAILS
A-903SH	DOOR SCHEDULE & DETAILS
MECHANICAL	
M-001SH	MECHANICAL LEGEND
MD101DP	MECHANICAL PLAN - PARTIAL LEVEL 4 - NORTH - DEMOLITION
M-101FP	MECHANICAL PLAN - PARTIAL LEVEL 4 - NORTH - NEW WORK
M-501DT	MECHANICAL DETAILS
M-601SH	MECHANICAL SCHEDULES AND SPECIFICATIONS
PLUMBING	
P-001SH	PLUMBING LEGEND AND SPECIFICATIONS
PD101DP	PLUMBING PLAN - PARTIAL LEVEL 4 - NORTH - DEMOLITION
P-101FP	PLUMBING PLAN - PARTIAL LEVEL 4 - NORTH - NEW WORK
FIRE ALARM	
FA001CS	FIRE ALARM REFERENCE SHEET
FA101DP	4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - FIRE ALARM
FA111FP	4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - FIRE ALARM
FA501DT	FIRE ALARM DETAILS
FA601SH	FIRE ALARM RISER DIAGRAM AND MATRIX
FIRE PROTECTION	
FX001CS	SPRINKLER REFERENCE SHEET
FX101DP	4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - SPRINKLER
FX111FP	4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - SPRINKLER
FX501DT	SPRINKLER DETAILS
ELECTRICAL	
E-001SH	ELECTRICAL LEGEND
ED101DP	ELECTRICAL DEMOLITION PLAN
E-101LP	LIGHTING PLAN - PARTIAL LEVEL 4 - NORTH - NEW WORK
E-101PP	POWER PLAN - PARTIAL LEVEL 4 - NORTH - NEW WORK
E-501DT	ELECTRICAL DETAILS
E-601SH	ELECTRICAL SCHEDULES
E-602SH	PANELBOARD SCHEDULES
E-603SH	PANELBOARD SCHEDULES
E-901SS	ELECTRICAL SPECIFICATIONS
E-902SS	ELECTRICAL SPECIFICATIONS
E-903SS	ELECTRICAL SPECIFICATIONS
AUDIOVISUAL	
TA001CS	AUDIOVISUAL NOTES AND ABBREVIATIONS
TA002CS	AUDIOVISUAL SYMBOLS
TA101DP	4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - AUDIOVISUAL
TA102DP	4TH FLOOR PARTIAL RCP DEMOLITION PLAN - NORTH - AUDIOVISUAL
TA111FP	4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - AUDIOVISUAL
TA112FP	4TH FLOOR PARTIAL RCP NEW WORK PLAN - NORTH - AUDIOVISUAL
TA301EL	4TH AV FLOOR ELEVATIONS
TA501DT	AUDIOVISUAL - DETAILS
TA502DT	AUDIOVISUAL - DETAILS
SECURITY	
TY001SH	SECURITY NOTES, SYMBOLS, AND ABBREVIATIONS
TY101DP	4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - SECURITY
TY111FP	4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - SECURITY
TY501DT	SECURITY DETAILS
TY502DT	SECURITY DETAILS
TY601DG	SECURITY DIAGRAMS
TY701	SECURITY SCHEDULES
TELECOM	
TN001CS	TELECOM NOTES AND ABBREVIATIONS
TN002CS	TELECOM SYMBOLS
TN101DP	4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - TELECOM
TN102DP	4TH FLOOR PARTIAL RCP DEMOLITION PLAN - NORTH - TELECOM
TN111FP	4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - TELECOM
TN112FP	4TH FLOOR PARTIAL RCP NEW WORK PLAN - NORTH - TELECOM
TN401EP	TELECOM ENLARGED PLANS
TN501DT	TELECOM - DETAILS
TN502DT	TELECOM - DETAILS
TN503DT	TELECOM - DETAILS
TN504DT	TELECOM - DETAILS
TN505DT	TELECOM - DETAILS
TN506DT	TELECOM - RACK DETAILS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP 1 | STAMP 2 | STAMP 3 | STAMP 4

SMITHSONIAN FACILITIES APPROVAL BLOCK

DM: _____

DESIGN CHIEF: _____

R.E.: _____

OPPM: _____

OFM&R: _____

OSHEM: _____

OPS: _____

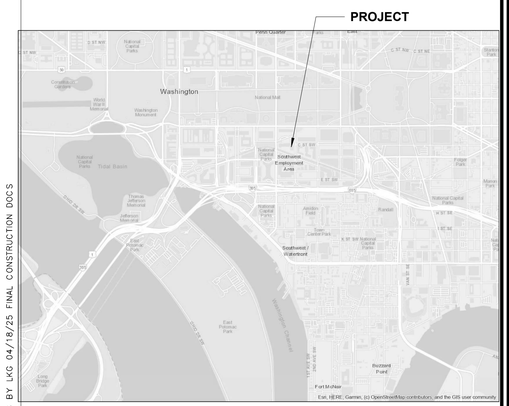
THIS PROJECT IS APPROVED AS BEING IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF SMITHSONIAN INSTITUTION DIRECTIVE 410. Andrew Scott 5/9/2025

MICHAEL J. CARRANCHO, P.E., ASSOCIATE DIRECTOR, OEDC

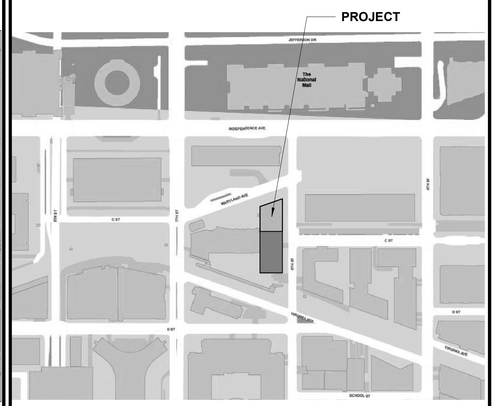
DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION #	DATE	REVISION DESCRIPTION

VICINITY MAP



LOCATION MAP



PROJECT TEAM

ARCHITECTURAL

AYERS SAINT GROSS
1100 FIRST STREET NE, SUITE 800
WASHINGTON, DC 20011
202-628-1033

MECHANICAL, ELECTRICAL, PLUMBING

MUELLER ASSOCIATES, INC.
1306 CONCOURSE DRIVE, SUITE 100
LINTHICUM, MD 21090
410-646-4500

FIRE ALARM, SPRINKLER, TELECOMMUNICATIONS, SECURITY

GHD, INC.
14585 AVION PARKWAY, SUITE 150
CHANTILLY, VA 20151
571-325-5000

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	COVER SHEET
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	1 OF 75
	G-001CS (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

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C-001CS BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

#	Pound OR Number
&	And
@	At
ACT	Acoustic Ceiling Tile
AD	Area Drain
AF	Access Floor
AFF	Above Finished Floor
ALUM	Aluminum
ANC	Anchor
ANOD	Anodized
APC	Acoustic Panel Ceiling
APW	Acoustic Wall Panel
ARW	Acrylic Panel
BBW	Bulletin Board
BOT	Bottom
BSMT	Basement
BYND	Beyond
℄	Center Line
CFMF	Cold Formed Metal Framing
CHNL	Channel
CIP	Cast in Place
CJ	Control Joint
CLG	Ceiling
CLR	Clear
CMU	Concrete Masonry Unit
COL	Column
COMPR	Compressible
CONC	Concrete
CONT	Continuous
CPT	Carpet
CS	Cast Stone
CT	Countertop
CTW	Ceramic Wall Tile
CTYD	Courtyard
DBL	Double
DEMO	Demolish or Demolition
DIA	Diameter
DIM	Dimension
DIMS	Dimensions
DN	Down
DR	Door
DS	Downspout
DWG	Drawing
EA	Each
EFG	Entry Floor Grate
EJ	Expansion Joint
EL	Elevation
ELEC	Electrical
ELEV	Elevator or Elevation
EPDM	Ethylene Propylene Diene M-Class (Roofing)
EPF	Epoxy Flooring
EQ	Equal
ETA	Engineered Transition Assembly
EX	Existing
EXP	Exposed
EXP JT	Expansion Joint
EXT	Exterior
FAB	Fabric
FB	Face Brick
FCO	Finished Concrete
FD	Floor Drain or Fire Department
FE	Finished End Panel
FEC	Fire Extinguisher Cabinet
FIXT	Fixture
FLEX FL	Flexible Flashing
FLR	Floor
FM	Filled Metal
FND	Foundation
FO	Face Of
FRG	Fire Rated Glass
FRT	Fire Retardant Treated
FRW	Fiber Reinforced Wall Panel
GA	Gauge
GALV	Galvanized
GFW	Glass Film
GL	Glazing
GLW	Back Painted Glass
GWB	Gypsum Wall Board
HC	Hollow Core
HI	High
HM	Hollow Metal
HMF	Hollow Metal Frame
HP	High Point
HR	Hour
HVAC	Heating, Ventilating, And Air Conditioning
IG	Insulated Glass
ILO	In Lieu Of
INSUL	Insulated or Insulation
INT	Interior
IRGWB	Impact Resistant Gypsum Wall Board
JT	Joint
JT SEAL	Joint Sealant
LAM	Laminate
LG	Laminated Glass
LO	Low
LVR	Louver
LVT	Luxury Vinyl Tile
MAX	Maximum
MECH	Mechanical
MEMBR	Membrane
MIN	Minimum

MIR	Mirror
MO	Masonry Opening
MRGWB	Moisture-Resistant Gypsum Wall Board
MTB	Metal Wall Base
MTL	Metal
MTL FL	Metal Flashing
NIC	Not in Contract
NO	Number
NOM	Nominal
OC	On Center
OH	Overhang OR Opposite Hand
OPP	Opposite OR Opposite Hand
OZ	Ounce
PC	Precast Concrete
PCO	Polished Concrete
PLAM	Plastic Laminate
PLUMB	Plumbing
PLYD	Plywood
PNT	Paint or Painted
PT	Preservative Pressure Treated
PTB	Porcelain Tile Wall Base
PTF	Porcelain Floor Tile
PTW	Porcelain Wall Tile
PVC	Polyvinyl Chloride
QTF	Quarry Tile Flooring
QTZ	Quartz
RBB	Rubber Wall Base
RBF	Rubber Flooring
RBR	Rubber
RCP	Reflected Ceiling Plan
RD	Roof Drain
REQD	Required
RM	Room
RSF	Resinous Flooring
SCO	Sealed Concrete
SHTG	Sheathing
SIM	Similar
SPEC	Specified OR Specification
SPK	Sprinkler or Speaker
STW	Stone (Wall)
SS	Stainless Steel
SSM	Solid Surface Material
STC	Sound Transmission Coefficient
STL	Steel
STL PL	Steel Plate
STN	Stone
STRUCT	Structure or Structural
T	Tempered Glass
T&G	Tongue and Groove
T/D	Telephone/Data
TBW	Tackboard
TELE	Telephone
TER	Terrazzo
TLT	Toilet
TME	To Match Existing
TO	Top of
TOC	Top of Concrete
TOS	Top of Steel
TPD	Toilet Paper Dispenser
TYP	Typical
U/S	Underside
UNO	Unless Noted Otherwise
VCT	Vinyl Composite Tile
VIF	Verify in Field
VIN	Vinyl Sheet Flooring
VP	Vision Panel
W/	With
WBS	Blackout Roller Shade
WCW	Wallcovering
WD	Wood
WD BLKG	Wood Blocking
WDB	Wood Wall Base
WDC	Wood Ceiling
WDF	Wood Flooring
WDW	Wood Wall Panel
WHB	Horizontal Blinds
WIN	Window
WP	Waterproofing
WSS	Solar Roller Shade
XPS	Extruded Polystyrene

ABBREVIATIONS



KEY PLAN - LEVEL 4
1" = 20'-0"

AREA NOT IN SCOPE

COLUMN / CONSTRUCTION GRIDLINES

LEVEL MARKER (Name / Elevation)

PLAN OR DETAIL CALLOUT (1 / A101)

EXTERIOR ELEVATION (1 / A1.01)

INTERIOR ELEVATION (D5 / A101)

BUILDING SECTION (A / A101)

WALL SECTION (A / A101)

DETAIL SECTION (A / A101)

NORTH ARROW

SPOT COORDINATE

SPOT ELEVATION

ALIGN

CENTERLINE

CARD READER

CEILING TAG (TYPE & HEIGHT) (ACP-1 / 8'-0" A.F.F.)

DOOR TAG (2244A)

DOOR EGRESS TAG (V / W | X | Y / Z)

EGRESS STAIR TAG (A / B / C / D)

ROOM TAG (Room Name / W-1508-6A)

ROOM FINISHES TAG (ROOM NAME / ROOM NUMBER / FLOOR / BASE / WALL)

DRAWING REVISION TAG (1)

WALL TAG (E4 R)

WINDOW TAG (A)

OCCUPANCY TAG (000 SF / 00 / 35 NSF)

DRAWING SYMBOLS

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G-002GI BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	DRAWING ABBREV. & SYMBOLS
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	2 OF 75
	G-002GI (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

PROJECT OWNER

SMITHSONIAN INSTITUTION
600 MARYLAND AVENUE S.W. SUITE 5001
WASHINGTON, DC 20024

PROJECT NAME & ADDRESS

CG RENOVATE 4E NMAL OFFICE SUITE
600 MARYLAND AVENUE S.W.
LEVEL 4
WASHINGTON, DC 20024

PROJECT DESCRIPTION:

THIS PROJECT INCLUDES THE RENOVATION AND INTERIOR ALTERATIONS TO APPROX. 14,471 SF ON LEVEL FOUR WITHIN AN EXISTING FULLY SPRINKLERED BUILDING. THERE IS NO CHANGE TO THE OVERALL OCCUPANCY TYPE (B) AS A RESULT OF THIS PROJECT. MOST PRIVATE OFFICES AND SPACES ALONG THE PERIMETER OF THE FLOOR WILL REMAIN WHILE INTERIOR SPACES WILL BE REDESIGNED TO ALLOW FOR OPEN WORKSTATION AREA. NO MAJOR WORK ON THE EXTERIOR OF THE BUILDING OR TO THE VERTICAL CIRCULATION WILL BE COMPLETED.

APPLICABLE CODES

2024 International Building Code
2024 International Existing Building Code
2024 International Mechanical Code
2024 NFPA 101 Life Safety Code
2024 International Plumbing Code
2024 International Fire Code
2024 National Electrical Code

2021 SI Design Standards

MEANS OF EGRESS:

A. Maximum Floor Area Allowance per Occupant (NFPA 101 7.3.1.2)
   a. Business Areas - 150 sf gross
   b. Business - Collaboration Rooms < 450 sf - 30 sf gross
   c. Business - Collaboration Rooms > 450 sf - 15 sf gross
   d. Accessory Storage Areas, Mechanical Equipment Rooms - 500 sf gross
A. Egress Width in occupancies other than Hazardous: (NFPA 101)
   a. Stairways: .3"/occupant (NFPA 101, 7.3.3.1, 38.2.3.1)
   b. Doors: .2"/occupant (NFPA 101, 7.3.3.1, 38.2.3.1)
C. Stairway Width
   a. A clear width of 48 inches not required in buildings equipped throughout with an automatic sprinkler system. (IBC 1009.3 Exception 2) Refer to occupant load per floor for required width.
D. Exit Access (Section IBC 1016)
   a. Exit Access Travel Distance 250 feet (with sprinkler system) (IBC Table 1017.2)
      • Note: Travel Distance 300 feet (with sprinkler system) (NFPA101 38.2.6.3) is superseded by more stringent IBC requirement
   b. Corridor Fire-Resistance Rating – 0 (IBC Table 1020.1)
   c. B Common path of travel spaces w/ one means of egress: 75 feet (IBC Table 1006.2.1, NFPA101 38.2.5.3.1)
E. Spaces w/ one means of egress – Group B, Max. 49 occupants (IBC Table 1006.2.1)
F. Dead end Corridors: 50 feet in length (IBC 1020.4 Exception 2, NFPA101 38.2.5.3.2)

EGRESS DOOR OCCUPANCY LOADING SUMMARY

DOOR NO.	ROOM NO.	ROOM NAME	EGRESS WIDTH	EGRESS WIDTH PER OCCUPANT	EXIT CAPACITY	NUMBER OF OCCUPANTS USING EXIT
04_Floor						
EX	STAIR 4B	STAIR 4B	2' - 9 1/2"	0.20"	168	153
EX	STAIR 4C	STAIR 4C	2' - 9 1/2"	0.20"	168	153
ST-4A	4CR05E	CORRIDOR	2' - 9 1/2"	0.20"	168	153

BUILDING OCCUPANCY SUMMARY

FUNCTION OF SPACE	OCCUPANCY CALCULATION SF/OCC	NSF/GSF	OCCUPANCY AREA	Code Occ Load
04_Floor				
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOMS	500 SF	GROSS	2,115.51 SF	19
ASSEMBLY - UNCONCENTRATED (TABLES AND CHAIRS)	15 SF	NET	1,012.18 SF	49
BUSINESS - COLLABORATION < 450 SF	30 SF	GROSS	1,978.80 SF	71
BUSINESS - COLLABORATION > 450 SF	15 SF	GROSS	1,957.67 SF	131
BUSINESS AREAS	150 SF	GROSS	28,592.36 SF	192
			35,656.52 SF	462
NMAL SUITE				
BUSINESS AREAS	150 SF	GROSS	12,645.61 SF	85
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOMS	500 SF	GROSS	590.99 SF	2
BUSINESS COLLABORATION LESS THAN 450 SF	30 SF	GROSS	576.75 SF	19
BUSINESS COLLABORATION MORE THAN 450 SF	15 SF	GROSS	656.92 SF	44
			14,470.27 SF	150

EXIT ACCESS - TRAVEL DISTANCE SUMMARY

EGRESS PATH	TOTAL DISTANCE
04_Floor	
EXIT 4A_1	138' - 5"
EXIT 4A_2	123' - 9"
EXIT 4A_3	94' - 5"
EXIT 4B_1	97' - 9"
EXIT 4B_2	195' - 5"

LIFE SAFETY PLAN SHEETS MUST BE PRINTED AND VIEWED IN COLOR

1 HOUR RATED FIRE BARRIER
2 HOUR RATED FIRE BARRIER
REFER TO FLOOR PLANS FOR PARTITION TYPES AND PARTITION SCHEDULE FOR SPECIFIC UL ASSEMBLIES
45 MINUTE FIRE LABEL DOOR
90 MINUTE FIRE LABEL DOOR

EGRESS DOOR SYMBOL
V = "ACTUAL EXIT LOAD": PROPOSED NUMBER OF OCCUPANTS USING EXIT
W = WIDTH OF LIMITING COMPONENT IN INCHES.
DOOR CALCULATION = [ACTUAL WIDTH - (DOOR THICKNESS + STOP DEPTH)] \ X
X = MINIMUM EGRESS WIDTH PER OCCUPANT SERVED (INCHES PER OCCUPANT) PER TABLE 1005.1
Y = DOOR NUMBER (AS IT APPEARS IN THE DOOR SCHEDULE)
Z = "CALCULATED EXIT CAPACITY": MAXIMUM NUMBER OF OCCUPANTS EXIT CAN ACCOMMODATE = W / X

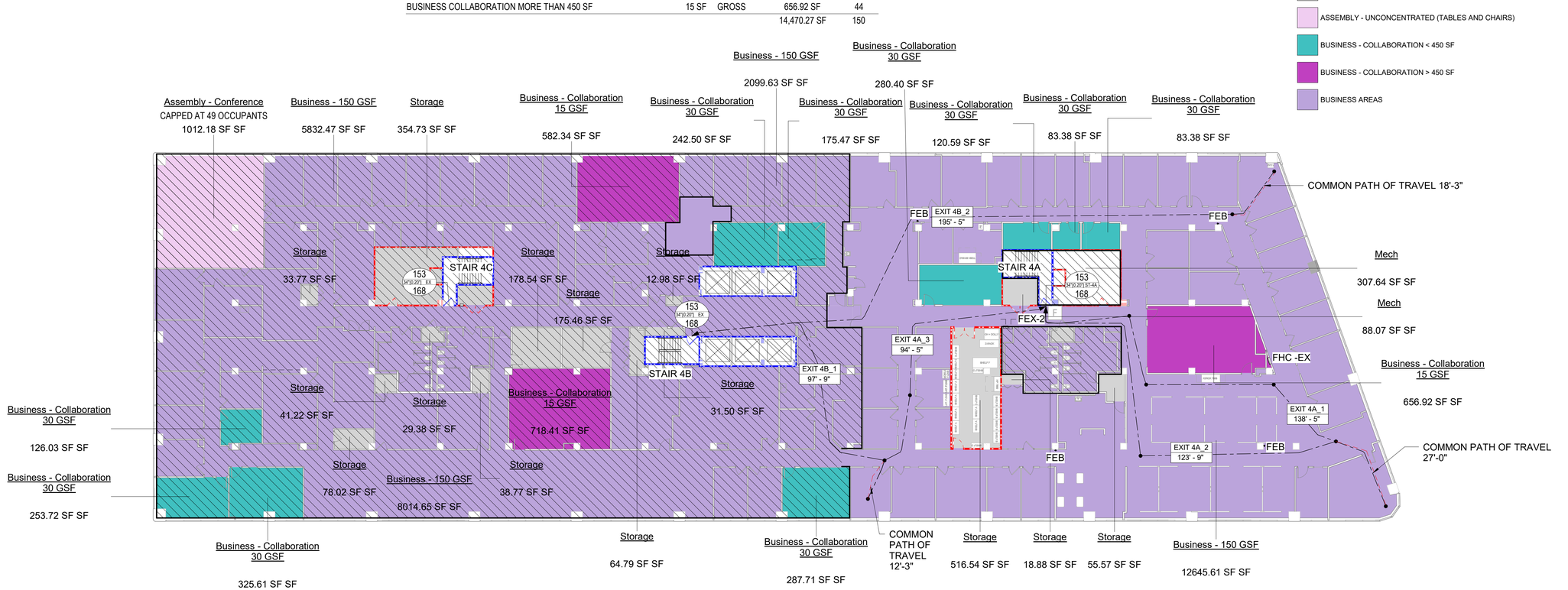
SAMPLE AREA NAME
150 SF — TOTAL AREA OF SPACE

ROOM NAME
101 — INDIVIDUAL ROOM NAMES / INDIVIDUAL ROOM NUMBERS

TRAVEL DISTANCE - PATH OF TRAVEL
COMMON PATH OF TRAVEL, X'-X"

KEYNOTE	TYPE/ATTACHMENT	DEVICE DETAILS
FEB	FIRE EXTINGUISHER, BY GC BRACKET MOUNTED	TYPE 2-A
FHC-EX	EXISTING FIRE HOSE CONNECTION - RELOCATED	
FEX-2	EXISTING RECESSED FIRE EXTINGUISHER CABINET	

(FE) FIRE EXTINGUISHER & (AED) AUTOMATED EXTERNAL DEFIBRILATOR LEGEND



LIFE SAFETY PLAN - LEVEL 4

A1 / G-100VP — SCALE = 1/16" = 1'-0"

OCCUPANCY TYPE LEGEND

- ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOMS
- ASSEMBLY - UNCONCENTRATED (TABLES AND CHAIRS)
- BUSINESS - COLLABORATION < 450 SF
- BUSINESS - COLLABORATION > 450 SF
- BUSINESS AREAS

0 8' 16' 32'
1/16"=1'-0"
GRAPHIC SCALE(S)

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — BENJAMIN WILCOX — REGISTERED — ARCHITECT

STAMP

KEY PLAN

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
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SHEET NO.	3 OF 75
DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE	G - 100 VP

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION #	DATE	REVISION DESCRIPTION

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G-100VP BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

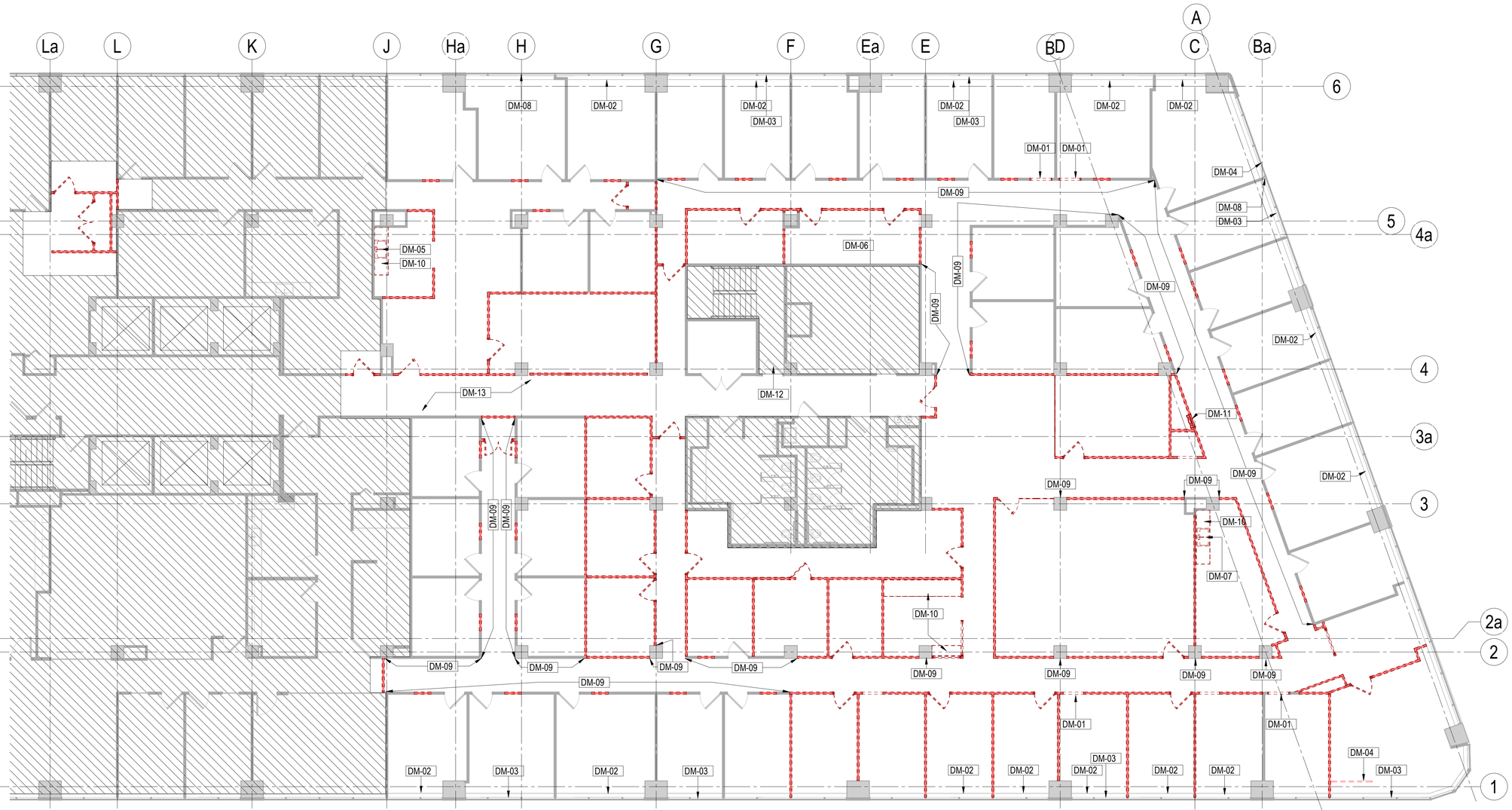
GENERAL NOTES - DEMOLITION

1. THE GENERAL CONTRACTOR (GC) SHALL VISUALLY INSPECT ALL EXISTING CONDITIONS AND SHALL COORDINATE ANY OUTSTANDING DEMOLITION ISSUES WITH THE SI COTR PRIOR TO BEGINNING WORK; ALL BASE FRAMES, WINDOW SILLS, AND CORE PARTITIONS TO BE FREE FROM MASTIC OR OTHER BUILDING RESIDUE AND READY TO RECEIVE FINISH.
2. CONSULT ENGINEERING NOTES FOR EXTENT OF EXISTING BUILDING SYSTEMS TO BE REMOVED OR TO BE RELOCATED. REMOVAL WORK IS INTENDED TO INCLUDE ALL ASSOCIATED BUILT-IN ITEMS SUCH AS ELECTRICAL, DATA OUTLETS, SWITCHES, CONDUITS, CONTROLS, PIPING, MOUNTING BLOCKS, ETC, UNO. REFER TO MEP DRAWINGS FOR PROCEDURES CONCERNING THESE TRADES IN DEMOLITION AREAS.
3. GC IS RESPONSIBLE FOR THE REPLACEMENT OF ANY BASE BUILDING FINISHES THAT ARE DAMAGED AS A RESULT OF DEMOLITION. GC IS TO INCLUDE IN THE PRICING A CONTINGENCY FOR ALL BASE BUILDING REPAIRS THAT MAY OCCUR. GC TO COORDINATE ALL BASE BUILDING FINISHES WITH THE SI COTR. PROTECT ALL INTERIOR AND EXTERIOR WALLS, CEILING AND FLOORS TO REMAIN FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION.
4. GC SHALL REMOVE ALL EXISTING CONDUIT AND ASSOCIATED WIRING NOT USED, UNO, BACK TO PANEL. COORDINATE ALL EXISTING DATA WITH SI COTR.
5. GC SHALL REMOVE EXISTING WALLS AND DOORS WITHIN THE AREAS OF CONSTRUCTION IN COMPLIANCE WITH THE DRAWINGS. GC TO VERIFY ANY CHASE EQUIPMENT WITHIN WALLS SHOWN TO BE REMOVED.
6. GC SHALL SAVE EXISTING DOORS, FRAMES AND HARDWARE FOR RE-INSTALLATION WHERE NOTED ON DRAWINGS.
7. PROVIDE DUMPSTER FOR DEBRIS REMOVAL. COORDINATE LOCATION WITH SI COTR. DEMOLITION MATERIAL REMOVAL TO BE COORDINATED WITH SI COTR.
8. GC TO PROVIDE FILTERS ON ALL OPEN DUCTWORK FROM AREA OF WORK FOR DURATION OF CONSTRUCTION.
9. IF TEMPORARY CONNECTIONS ARE NECESSARY TO ASSURE THE CONTINUITY OF SERVICES, THEY SHALL BE FURNISHED BY THE GC. WITHOUT ANY ADDITIONAL CHARGE TO THE SI COTR AND SHALL BE REMOVED WHEN NO LONGER NECESSARY.
10. GC SHALL REMOVE ALL EXISTING FLOOR FINISHES AND WALL BASE THROUGHOUT AREA OF WORK.
11. GC SHALL CONDUCT PRECONSTRUCTION TESTING TO DETERMINE AIRFLOW VOLUME, STATIC PRESSURE AND AIR TEMPERATURE FOR ALL DUCTWORK PASSING THROUGH THE AREA OF WORK AND SERVING AIR DEVICES IN ADJACENT SPACES. AIRFLOW MEASUREMENTS SHALL BE USED TO REBALANCE EXISTING TO REMAIN AIR DEVICES UPON COMPLETION OF CONSTRUCTION.
12. BUILDING EGRESS TO BE MAINTAINED DURING CONSTRUCTION. GC TO PHASE AND COORDINATE WORK AROUND EXIT AND EXIT ACCESS WITH SI COTR.
13. EXISTING BLINDS TO REMAIN, UNO. PROTECT EXISTING BLINDS IN PLACE DURING CONSTRUCTION.
14. REFER TO MEP, FIRE PROTECTION, TELECOM, AND SECURITY PLANS AND NOTES FOR ADDITIONAL INFORMATION REGARDING DEMOLITION OF THESE RESPECTIVE DISCIPLINES' SCOPE ITEMS.

Key Value	KEYNOTE TEXT
DM-01	NO EXISTING FRAME EXISTS. DOOR AND HINGES ARE INSIDE ROOM
DM-02	REPAIR / CLEAN DAMAGED WINDOW SILL.
DM-03	REPAIR / REPLACE DAMAGED BLINDS.
DM-04	REMOVE CONNECTRAC. PATCH OR REPAIR ANY FLOOR DAMAGE.
DM-05	REMOVE EXISTING PLUMBING FIXTURE AND ACCESSORIES. EXISTING PLUMBING TO REMAIN AND BE RE-USED AT NEW FIXTURE. REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION.
DM-06	REMOVE PLYWOOD AND ANY REMAINING ELECTRICAL EQUIPMENT ON IN THIS ROOM. REPAIR AND PREPARE EXISTING WALLS TO REMAIN FOR NEW FINISHES.
DM-07	REMOVE AND CAP EXISTING PLUMBING.
DM-08	REPAIR DAMAGED MULLION AND/OR MULLION TAPE AS REQUIRED.
DM-09	REMOVE EXISTING TEXTURED WALL PAINT.
DM-10	REMOVE ALL MILLWORK INCLUDING COUNTERTOPS, BACKSPLASHES, VERTICAL PANELS AND ANY ACCESSORIES, UNO.
DM-11	REMOVE AND SALVAGE EXISTING FIRE HOSE CABINET FOR RE-INSTALLATION IN NEARBY LOCATION.
DM-12	REMOVE EXISTING HARDWARE SCHEDULED TO BE REPLACED IN NEW WORK PHASE. REFER TO DOOR HARDWARE SCHEDULE TO COORDINATE. EXISTING DOOR TO REMAIN. EXISTING FIRE RATING ON DOOR SHALL REMAIN AND NOT BE COMPROMISED BY ANY NEW HARDWARE.
DM-13	SALVAGE AREA OF EXISTING CARPET LARGE ENOUGH TO PATCH AREA IN PUBLIC CORRIDOR IN NEW PHASE. SELECT AREA OF CARPET IN BEST CONDITION.

DEMOLITION PLAN LEGEND

- AREA NOT IN SCOPE
- EXISTING WALL TO BE REMOVED
- EXISTING WALL TO REMAIN



A1 / AD101DP

DEMOLITION PLAN - LEVEL 4 - NORTH

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

4/18/2025 2:43:01 PM
AD101DP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — BENJAMIN WILSON — REGISTERED — ARCHITECT

STAMP

KEY PLAN

0 8' 16' 32'
1/16"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	DEMOLITION PLAN – PARTIAL LEVEL 4 – NORTH
WORKING STAFF	Designer (DESIGNED BY) / Author (DRAWN BY) / Checker (CHECKED BY)
SHEET NO.	4 OF 75
	AD 1 0 1 DP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

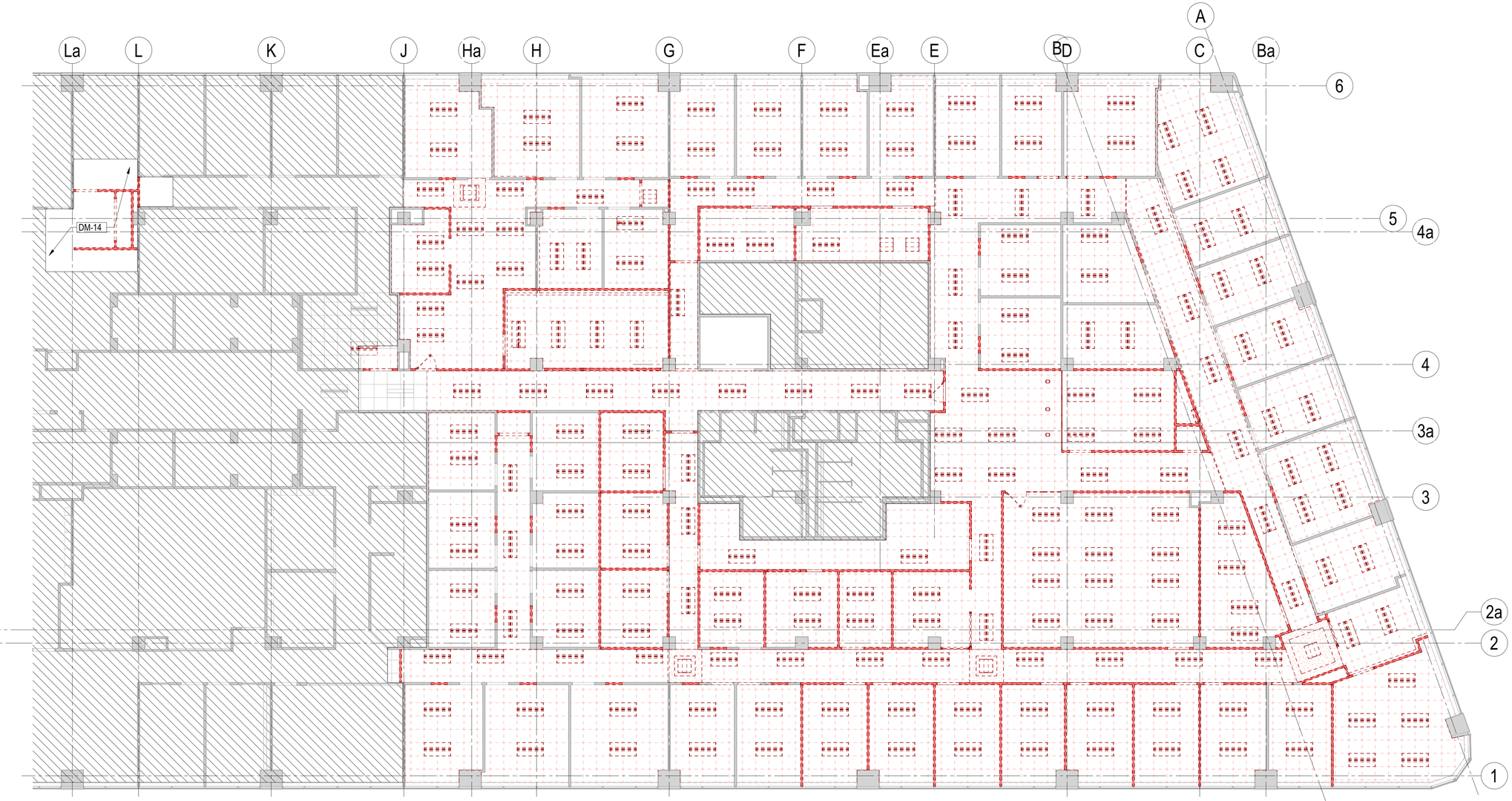
GENERAL NOTES - RCP DEMOLITION

1. THE GENERAL CONTRACTOR (GC) SHALL VISUALLY INSPECT ALL EXISTING CONDITIONS AND SHALL COORDINATE ANY OUTSTANDING DEMOLITION ISSUES WITH THE SI COTR PRIOR TO BEGINNING WORK; ALL BASE FRAMES, WINDOW SILLS, AND CORE PARTITIONS TO BE FREE FROM MASTIC OR OTHER BUILDING RESIDUE AND READY TO RECEIVE FINISH.
2. CONSULT ENGINEERING NOTES FOR EXTENT OF EXISTING BUILDING SYSTEMS TO BE REMOVED OR TO BE RELOCATED. REMOVAL WORK IS INTENDED TO INCLUDE ALL ASSOCIATED BUILT-IN ITEMS SUCH AS ELECTRICAL, DATA OUTLETS, SWITCHES, CONDUITS, CONTROLS, PIPING, MOUNTING BLOCKS, ETC, UON. REFER TO MEP DRAWINGS FOR PROCEDURES CONCERNING THESE TRADES IN DEMOLITION AREAS.
3. GC IS RESPONSIBLE FOR THE REPLACEMENT OF ANY BASE BUILDING FINISHES THAT ARE DAMAGED AS A RESULT OF DEMOLITION. GC IS TO INCLUDE IN THE PRICING A CONTINGENCY FOR ALL BASE BUILDING REPAIRS THAT MAY OCCUR. GC TO COORDINATE ALL BASE BUILDING FINISHES WITH THE SI COTR. PROTECT ALL INTERIOR AND EXTERIOR WALLS, CEILING AND FLOORS TO REMAIN FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION.
4. GC SHALL REMOVE ALL EXISTING CONDUIT AND ASSOCIATED WIRING NOT USED, UON, BACK TO PANEL. COORDINATE ALL EXISTING DATA WITH SI COTR.
5. PROVIDE DUMPSTER FOR DEBRIS REMOVAL. COORDINATE LOCATION WITH SI COTR. DEMOLITION MATERIAL REMOVAL TO BE COORDINATED WITH SI COTR.
6. GC TO PROVIDE FILTERS ON ALL OPEN DUCTWORK FROM AREA OF WORK FOR DURATION OF CONSTRUCTION.
7. IF TEMPORARY CONNECTIONS ARE NECESSARY TO ASSURE THE CONTINUITY OF SERVICES, THEY SHALL BE FURNISHED BY THE GC. WITHOUT ANY ADDITIONAL CHARGE TO THE SI COTR AND SHALL BE REMOVED WHEN NO LONGER NECESSARY.
8. GC SHALL CONDUCT PRECONSTRUCTION TESTING TO DETERMINE AIRFLOW VOLUME, STATIC PRESSURE AND AIR TEMPERATURE FOR ALL DUCTWORK PASSING THROUGH THE AREA OF WORK AND SERVING AIR DEVICES IN ADJACENT SPACES. AIRFLOW MEASUREMENTS SHALL BE USED TO REBALANCE EXISTING TO REMAIN AIR DEVICES UPON COMPLETION OF CONSTRUCTION.
9. BUILDING EGRESS TO BE MAINTAINED DURING CONSTRUCTION. GC TO PHASE AND COORDINATE WORK AROUND EXIT AND EXIT ACCESS WITH SI COTR.
10. REFER TO MEP, FIRE PROTECTION, TELECOM, AND SECURITY PLANS AND NOTES FOR DEMOLITION FOR ADDITIONAL INFORMATION REGARDING DEMOLITION OF THESE RESPECTIVE DISCIPLINES' SCOPE ITEMS.

Key Value	KEYNOTE TEXT
DM-14	EXISTING CEILING TO REMAIN. PATCH CEILING AS REQUIRED WHERE WALL DEMOLITION OCCURRED.

DEMOLITION RCP LEGEND

- AREA NOT IN SCOPE
- EXISTING WALL TO BE REMOVED
- EXISTING WALL TO REMAIN
- EXISTING CEILING TILE AND GRID TO BE REMOVED
- EXISTING GYPSUM BOARD CEILING TO BE REMOVED
- EXISTING 2X4 LIGHTING TO BE REMOVED
- EXISTING 2X2 LIGHTING TO BE REMOVED
- EXISTING LINEAR LIGHTING TO BE REMOVED
- EXISTING DOWNLIGHT TO BE REMOVED



A1 / AD103DP

DEMOLITION REFLECTED CEILING PLAN - LEVEL 4 - NORTH

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

4/18/2025 2:43:11 PM
AD103DP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

0 8' 16' 32'
1/16"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	DEMOLITION REFLECTED CEILING PLAN – PARTIAL LEVEL 4 – NORTH
WORKING STAFF	Designer (DESIGNED BY) / Author (DRAWN BY) / Checker (CHECKED BY)

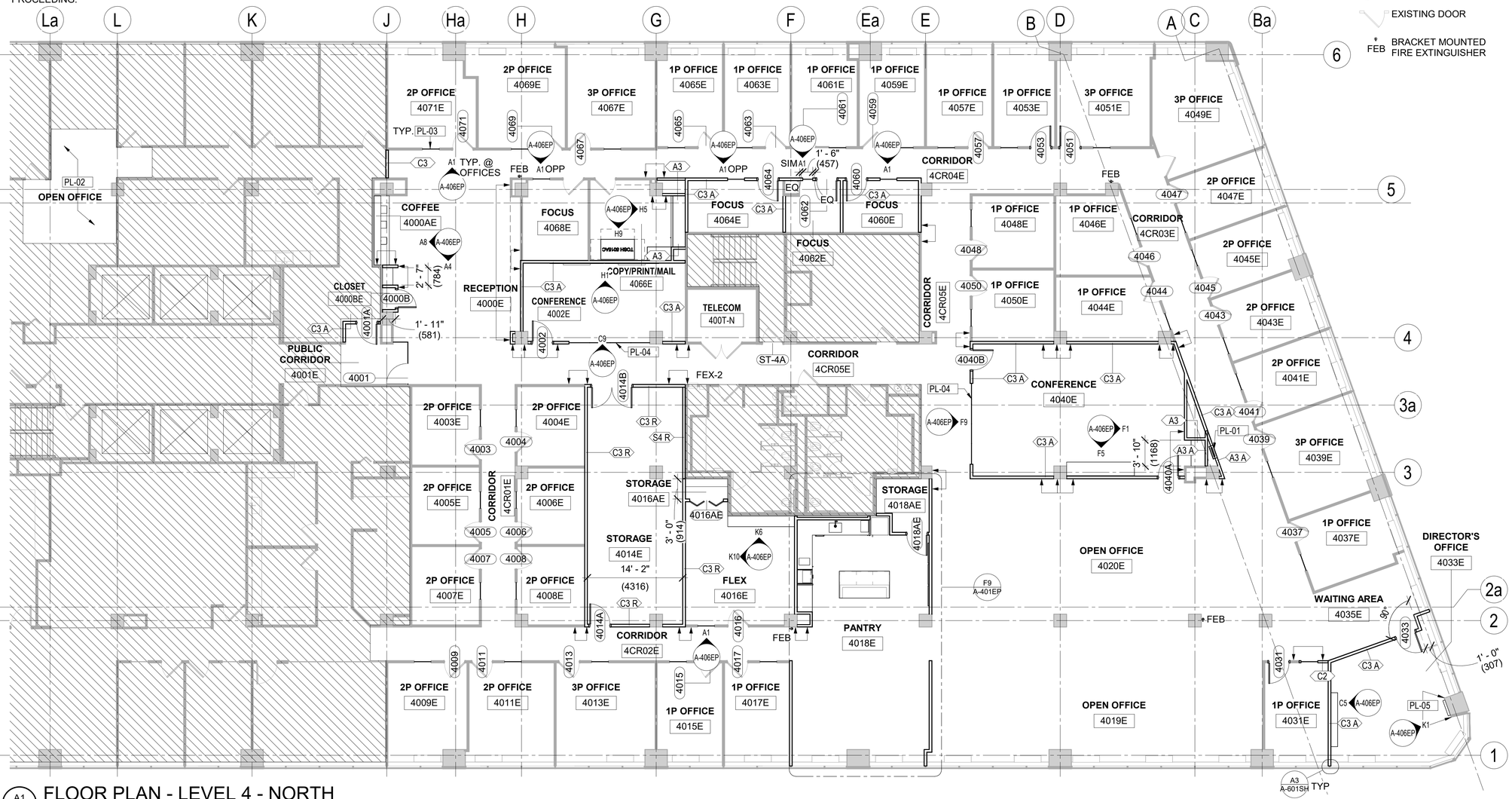
SHEET NO. 5 OF 75

AD 103 DP
DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE

GENERAL NOTES - NEW WORK

1. DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS, BOUNDARIES, AND CONSTRUCTION AND IMMEDIATELY REPORT ANY DISCREPANCIES TO THE SI COTR BEFORE PROCEEDING WITH THE WORK.
2. SI COTR IS NOT RESPONSIBLE FOR CONSTRUCTION THAT IS STARTED PRIOR TO PERMIT BEING ISSUED.
3. WOOD BLOCKING, FRAMING AND PLYWOOD SHEATHING SHALL BE FIRE RETARDANT TREATED (F.R.T.) UNLESS OTHERWISE NOTED, IN ACCORDANCE WITH THE LATEST AWPA STANDARDS FOR PLYWOOD AND LUMBER, APPLICABLE BUILDING CODES, AND UNLESS OTHERWISE NOTED.
4. DIMENSIONS, NOTES, FINISHES AND FIXTURES SHOWN ON TYPICAL FLOOR PLANS, SECTIONS OR DETAILS SHALL APPLY TO SIMILAR, SYMMETRICAL OR OPPOSITE HAND PLANS, SECTIONS OR DETAILS.
5. TYPICAL OR "TYP" SHALL MEAN THAT THE CONDITION IS REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT, UNLESS OTHERWISE NOTED. DETAILS MAY BE KEYED AND NOTED "TYP" ONLY ONE TIME, WHEN THEY FIRST OCCUR.
6. IMMEDIATELY NOTIFY THE SI COTR IN WRITING OF ANY DISCREPANCIES IN THE CONTRACT DOCUMENTS INCLUDED IN THE PROJECT MANUAL, LARGE SCALE DRAWINGS, SMALL SCALE DRAWINGS AND DETAILS. THE CONTRACTOR SHALL NOT PROCEED WITH AFFECTED WORK UNTIL SI COTR PROVIDES CLARIFICATION.
7. PROVIDE APPROVED THROUGH-PENETRATION FIRE STOPPING SYSTEM AT RATED WALL OR FLOOR PENETRATIONS. MAINTAIN PROPER FIRE AND SOUND RATINGS WHEN PENETRATING THROUGH WALLS, FLOORS OR CEILINGS.
8. APPLY, INSTALL, CONNECT, CLEAN AND/OR CONDITION MANUFACTURED ARTICLES, MATERIALS AND/OR EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS. IN CASE OF CONFLICT BETWEEN MANUFACTURER'S INSTRUCTIONS AND THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL OBTAIN WRITTEN CLARIFICATION FROM THE SI COTR BEFORE PROCEEDING.
9. DOOR HARDWARE SHALL COMPLY WITH ADA (AMERICANS WITH DISABILITIES ACT) REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO:
   1. MAXIMUM 1/2" THRESHOLD WITH 1:2 SLOPE
   2. PUSH/PULL HANDLES OR LEVERS
   3. DOOR CLOSERS MEET ADA FORCE AND SWEEP PERIOD REQUIREMENTS
10. COORDINATE ALL DIMENSIONS CONCERNING DOORS AND THEIR OPENINGS WITH PRODUCT MANUFACTURER'S PRIOR TO FABRICATION AND CONSTRUCTION.
11. PAINT FERROUS OR GALVANIZED METAL EXPOSED TO VIEW IN FINISHED CONSTRUCTION, OTHER THAN COMPLETELY FACTORY PREFINISHED ITEMS SPECIFIED.
12. LOCATE THERMOSTATS ADJACENT TO SWITCH PLATES WHERE POSSIBLE. VERIFY LOCATION WITH THE SI COTR PRIOR TO INSTALLATION TO AVOID CONFLICTS WITH BUILT-INS OR SYSTEMS FURNITURE OR DESIGN ELEMENTS.
13. ALIGN OUTLETS, WALL SWITCHES, TEL-DATA JACKS, ETC., INDICATED TO BE MOUNTED AT NEAR EQUIVALENT ELEVATIONS.
14. JUNCTION BOXES FOR SECURITY/TELECOMMUNICATIONS/ELECTRICAL, ETC., DEVICES LOCATED WITHIN ACOUSTICALLY RATED PARTITIONS BUT SERVING SEPARATE ROOMS SHALL BE LOCATED IN SEPARATE STUD BAYS. INSTANCES WHERE THE DOCUMENTS LOCATE DEVICES BACK TO BACK, NOTIFY SI COTR IN WRITING FOR DIRECTION.
15. ALL DOORS SHALL BE LOCATED 6" OFF OF THE ADJACENT WALL, UNLESS OTHERWISE NOTED.
16. DIMENSIONS ARE FROM FACE OF WALL TO FACE OF WALL, (I.E. FACE OF GYPSUM BOARD OR MASONRY) OR FROM FACE OF EXISTING CONDITION OR FROM COLUMN CENTERLINE, UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLEAR" SHALL BE FROM FINISH FACE TO FINISH FACE, (I.E. FACE OF CERAMIC TILE TO FACE OF CERAMIC TILE). VERIFY ALL EXISTING DIMENSIONS IN THE FIELD.
17. ALL COLUMNS SHALL BE ENCLOSED IN GWB. WHERE EXPOSED COLUMN FACES EXIST, CONTRACTOR SHALL INSTALL PARTITION TYPE A2 TO ENCLOSE COLUMN AND ALIGN WITH NEW PARTITIONS.
18. PROVIDE FIRE-TREATED WOOD BLOCKING OR MINIMUM 0.0312-INCH THICK STEEL FLAT STRAP AND BACKING PLATE AT, BUT NOT LIMITED TO, THE FOLLOWING LOCATIONS: TOILET ACCESSORIES, CASEWORK, MILLWORK, DOOR WALL BUMPERS, AND ALL OTHER WALL MOUNTED EQUIPMENT OR DEVICES. REFER TO PLAN FOR ADDITIONAL LOCATIONS.
19. FLOOR PATCH AND FLOOR LEVELING: REPAIR EXISTING TOPPING SLAB AND CONCRETE FLOOR AT DEMOLITION OF WALLS AND AT ALL OTHER LOCATIONS AS REQUIRED.
20. PATCH TO MATCH EXISTING:
    A. PROVIDE ALL OPENINGS REQUIRED FOR ALL TRADES AND PATCH TO MATCH EXISTING, AT EXISTING CONSTRUCTION ALTERED OR DISTURBED BY THE INSTALLATION, RELOCATION, OR REMOVAL OF HEATING, VENTILATING, AIR CONDITIONING, PLUMBING AND/OR ELECTRICAL EQUIPMENT AND DEVICES.
    B. PATCH TO MATCH EXISTING (PTME), ALL AREAS ADJACENT TO, OR DISTURBED BY, NEW CONSTRUCTION OR EXISTING CONSTRUCTION TO BE REMOVED. PATCH TO MATCH INCLUDES FINISH MATERIAL (PAINT OR CERAMIC TILE... ETC.) TO MATCH EXISTING.
    C. PATCH ALL DEFECTS IN, AND FINISH TO MATCH EXISTING, ALL AREAS WHICH ARE TO RECEIVE NEW MATERIALS, FINISHES AND ITEMS CALLED FOR IN THE CONTRACT DOCUMENTS. PREPARE ALL EXISTING SURFACES TO RECEIVE NEW FINISHES AS REQUIRED.

Key Value	KEYNOTE TEXT
PL-01	RE-INSTALL FIRE HOSE CONNECTION IN NEW LOCATION.
PL-02	PATCH AND REPAIR EXISTING PARTITIONS TO REMAIN WHERE DEMOLITION OCCURRED.
PL-03	PROVIDE BID OPTION TO PROVIDE AND INSTALL NEW GLASS SIDELITE, TYP.
PL-04	PROVIDE BID OPTION TO PROVIDE AND INSTALL GLAZING IN CHANNELS AS SHOWN.
PL-05	IF NEW POWER RECEPTACLE AND ASSOCIATED WIRING CANNOT BE CONCEALED IN EXISTING COLUMN FURRING, INSTALL NEW A3 PARTITION TYPE AT FACE OF COLUMN TO ALLOW FOR CONCEALMENT.



A1 / A-101FP — FLOOR PLAN - LEVEL 4 - NORTH

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

FLOOR PLAN LEGEND

- AREA NOT IN SCOPE
- EXISTING WALL TO REMAIN
- NEW WALL
- NEW DOOR
- EXISTING DOOR
- FEB BRACKET MOUNTED FIRE EXTINGUISHER

KEY PLAN

0 8' 16' 32'

1/16"=1'-0"

GRAPHIC SCALE(S)

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — BENJAMIN WILCOX — REGISTERED ARCHITECT

STAMP

DATE 04/18/25 — SUBMISSION FINAL CONSTRUCTION DOCS

REVISION # DATE — REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS: CAPITAL GALLERY ADMIN HQ, EAST — 600 MARYLAND AVE, SW

PROJECT TITLE: RENOVATE 4E NMAL OFFICE SUITE

SI PROJECT NUMBER: 2466904

A/E PROJECT NUMBER: ASG 3000738.00

DRAWING TITLE: FLOOR PLAN – PARTIAL LEVEL – NORTH

WORKING STAFF — DESIGNED BY: JR — DRAWN BY: KR — CHECKED BY: SS

SHEET NO. 6 OF 75

A-101FP (DISCIPLINE – TYPE – SEQUENCE – DRAWING TYPE)

4/18/2025 2:43:21 PM
A-101FP BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

GENERAL NOTES - RCP

1. DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS, BOUNDARIES, AND CONSTRUCTION AND IMMEDIATELY REPORT ANY DISCREPANCIES TO THE SI COTR BEFORE PROCEEDING WITH THE WORK.
2. SI COTR IS NOT RESPONSIBLE FOR CONSTRUCTION THAT IS STARTED PRIOR TO PERMIT BEING ISSUED.
3. CENTER CEILING GRID IN CENTER OF ROOM, UNLESS NOTED OTHERWISE WITH DIMENSIONS ON PLANS OR KEYNOTES.
4. DIMENSIONS, NOTES, FINISHES AND FIXTURES SHOWN ON TYPICAL FLOOR PLANS, SECTIONS OR DETAILS SHALL APPLY TO SIMILAR, SYMMETRICAL OR OPPOSITE HAND PLANS, SECTIONS OR DETAILS.
5. THIS ARCHITECTURAL REFLECTED CEILING PLAN IS TO BE USED FOR THE APPROXIMATE LOCATION OF LIGHT FIXTURE. REFER TO THE ELECTRICAL LIGHTING PLANS AND SPECIFICATION FOR ALL SPECIFICATIONS, CIRCUITING AND POWER REQUIREMENTS, AS WELL AS SWITCH LOCATIONS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN REFLECTED CEILING PLANS AND ELECTRICAL LIGHTING PLANS OR DIMENSIONS AND OBTAIN CLARIFICATION BEFORE COMMENCING INSTALLATION
6. LOCATE DOWNLIGHTS IN CENTER OF CEILING TILE, UNO.
7. LIGHT FIXTURES ARE DIMENSIONED FROM CENTERLINE OF FIXTURE, UNO
8. TYPICAL GWB CEILING TO BE PAINTED PNT-1, UNO. REFER TO FINISH PLAN AND FINISH SCHEDULE FOR ACCENT PAINT COLORS AND LOCATIONS FOR CEILINGS.
9. ALL ACOUSTICAL PANEL CEILINGS ARE APC-1 AT 8'- 4" AFF, UNO.

Key Value	KEYNOTE TEXT
CL-01	CENTER CEILING TILE IN THE WIDTH OF THE CORRIDOR.
CL-02	ALIGN / EXTEND NEW CEILING TILE AND GRID FROM EXISTING TILE AND GRID IN EXISTING SUITE.
CL-03	PATCH AND REPAIR EXISTING CEILING WHERE DEMOLITION OF PARTITIONS OCCURRED.

RCP LEGEND

- AREA NOT IN SCOPE
- EXISTING WALL TO REMAIN
- NEW WALL
- NEW GWB CEILING
- EXISTING GWB CEILING
- NEW 2X2 ACT CEILING
- EXISTING CEILING TILE AND GRID TO REMAIN
- NEW 2X4 LED LIGHT FIXTURE
- NEW 2X2 LED LIGHT FIXTURE
- EXISTING 2X4 LIGHTING TO REMAIN
- NEW RECESSED LED CAN LIGHT FIXTURE
- NEW MECHANICAL DIFFUSERS
- NEW LINEAR DIFFUSERS
- NEW MECHANICAL RETURNS



A1 / A-103CP — REFLECTED CEILING PLAN - LEVEL 4 - NORTH

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

4/18/2025 2:44:06 PM
A-103CP BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — JOSEPH BENJAMIN WILCOX — REGISTERED ARCHITECT

STAMP

KEY PLAN

0 8' 16' 32'

1/16"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION #	DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	REFLECTED CEILING PLAN – PARTIAL LEVEL 4 – NORTH
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	7 OF 75
	A – 103 CP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

GENERAL NOTES - FINISH

1. ENSURE SURFACES TO RECEIVE FINISHES ARE CLEAN, TRUE, AND FREE OF IRREGULARITIES. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED
2. REPAIR EXISTING SURFACES TO REMAIN AS REQUIRED FOR APPLICATION OF NEW FINISHES. PROVIDE LEVEL 4 GWB FINISH ON ALL PARTITIONS, UNO
3. PROVIDE MINIMUM 3-COAT PAINT SYSTEMS FOR EACH SUBSTRATE, UNO.
4. PROVIDE PAINT PNT-1 ON ALL WALLS, UNO.
5. PROVIDE BASE RBB-1 ON ALL WALLS, UNO.
6. FLOOR FINISH TO RUN CONTINUOUS UNDER MILLWORK
7. GC TO BE RESPONSIBLE FOR THE REMOVAL OF HARDWARE, OUTLET COVERS, ELEVATOR ACCESSORIES AND SWITCHES PRIOR TO PAINTING AND REINSTALLATION OF THE SAME AFTER PAINTING.
8. ALL FLOOR TRANSITIONS TO REFER TO SHEET A501DT FOR MORE INFO.
9. WINDOW TREATMENTS ARE EXISTING TO REMAIN, UNO. PROVIDE COVERS TO PROTECT THEM DURING CONSTRUCTION.
10. PAINT ALL DOORS - EXISTING AND NEW - PNT-1, SEMI-GLOSS FINISH.

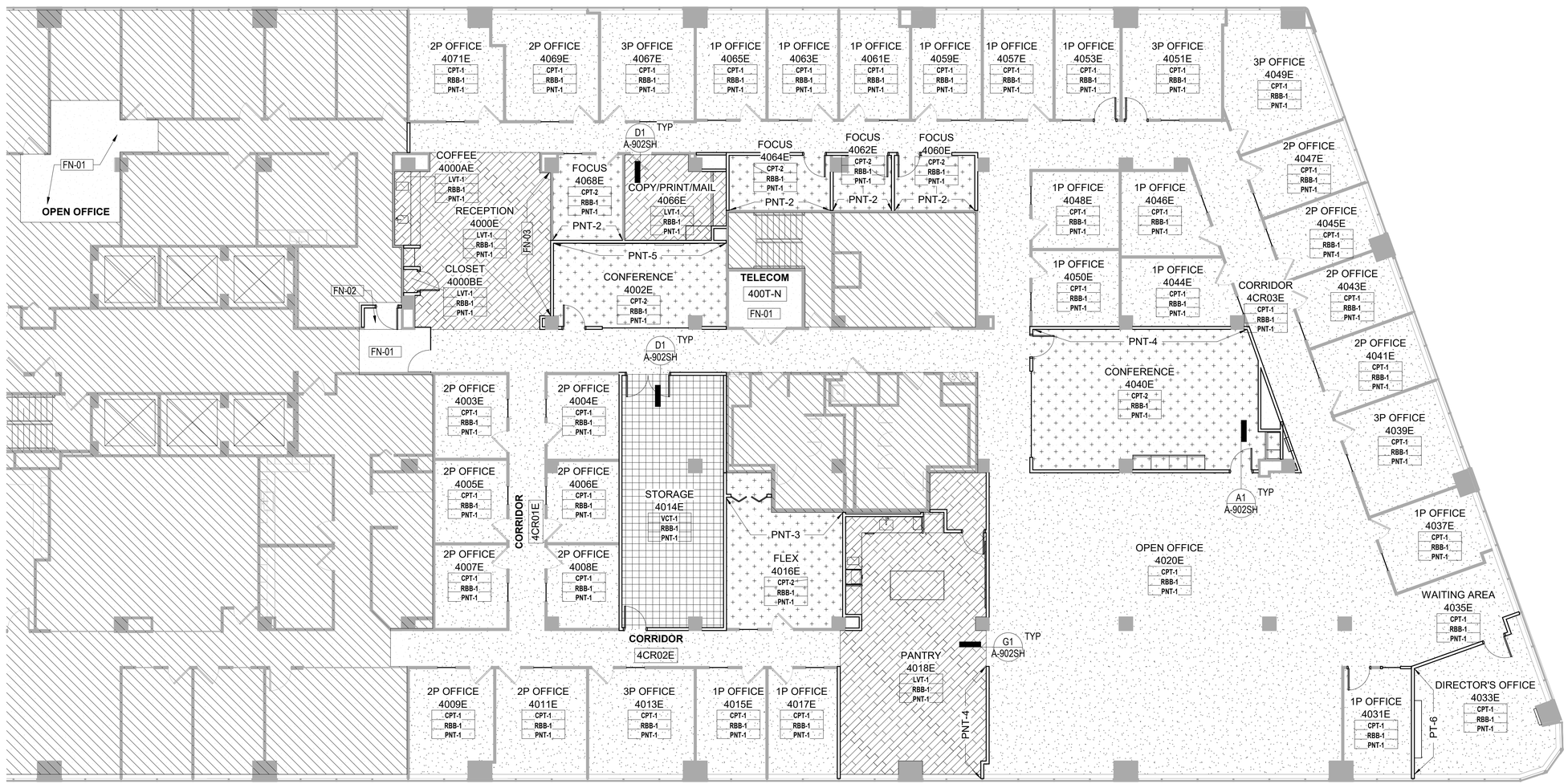
Key Value	KEYNOTE TEXT
FN-01	EXISTING FLOOR, BASE AND WALL FINISHES TO REMAIN.
FN-02	USE SALVAGED CARPET FROM PUBLIC CORRIDOR TO INFILL THIS AREA TO MATCH / ALIGN WITH EXISTING.
FN-03	PROVIDE LEVEL 5 FINISH AT THIS WALL IN PREPARATION FOR OWNER INSTALLED GRAPHICS

FINISH PLAN LEGEND

- CPT-1 CARPET
- CPT-2 CARPET
- LVT LUXURY VINYL TILE
- VCT VINYL COMPOSITE TILE
- INSTALLATION DIRECTION OF FLOOR FINISH

FINISH ROOM KEY LEGEND

ROOM NAME
ROOM NUMBER
FLOOR
BASE
WALL



A1 A-105NP

FINISH PLAN - LEVEL 4 - NORTH

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

4/18/2025 2:44:12 PM
A-105NP BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — CHRISTOPHER WILSON — REGISTERED — ARCHITECT

STAMP

KEY PLAN

0 8' 16' 32'
1/16"=1'-0"

GRAPHIC SCALE(S)

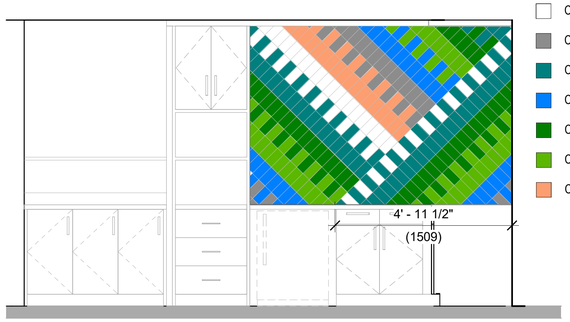
DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

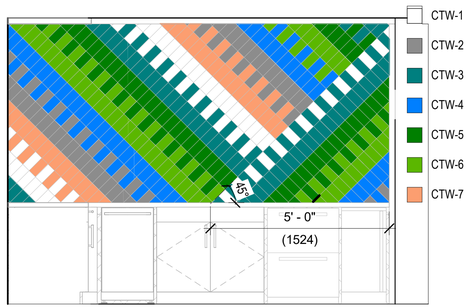
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	FINISH PLAN – PARTIAL LEVEL 4 – NORTH
WORKING STAFF	JR (DESIGNED BY) KR (DRAWN BY) SS (CHECKED BY)
SHEET NO.	8 OF 75
	A – 105NP (DISCIPLINE – TYPE – SEQUENCE – DRAWING TYPE)



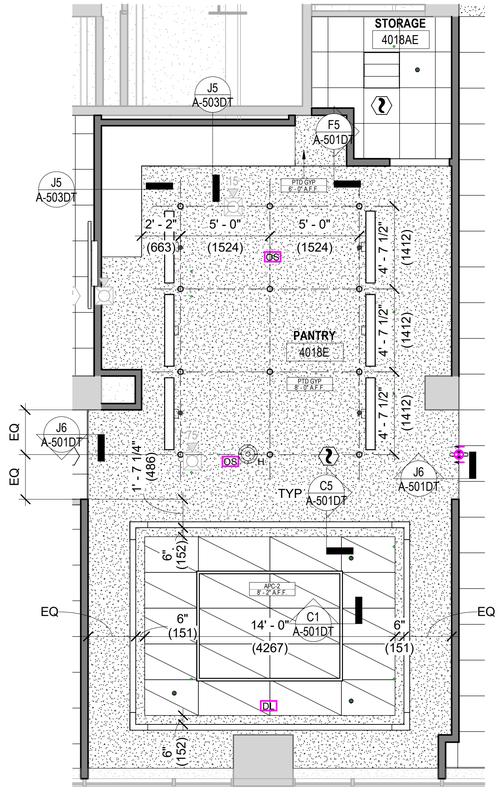
J1 A-401EP — ELEVATION - PANTRY 4018E - WEST TILE PATTERN

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



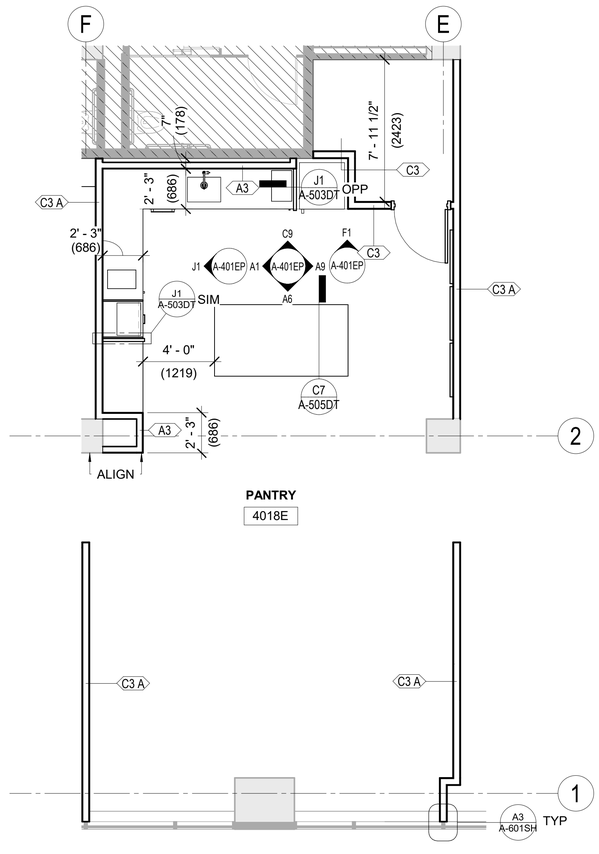
F1 A-401EP — ELEVATION - PANTRY 4018E - NORTH TILE PATTERN

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



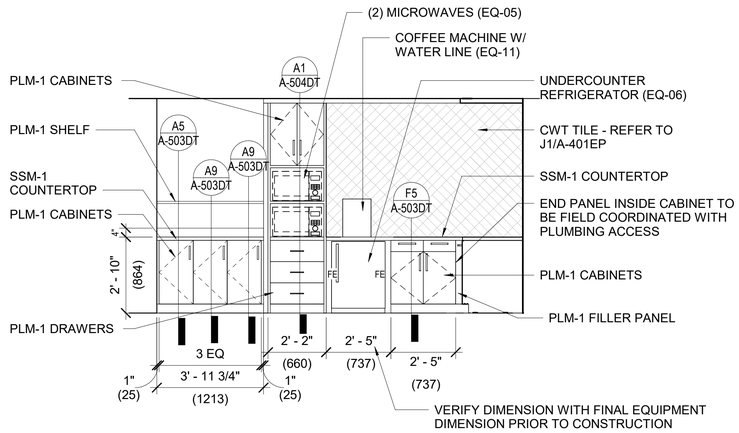
F5 A-401EP — REFLECTED CEILING PLAN - LEVEL 4 - NORTH - ENLARGED

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



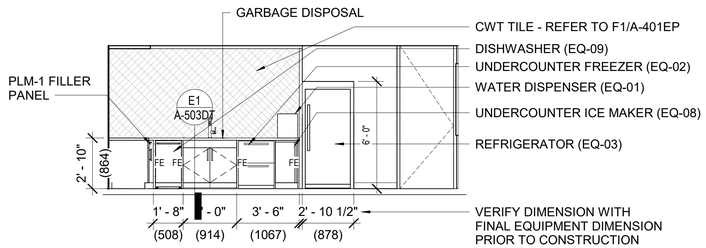
F9 A-401EP — FLOOR PLAN - LEVEL 4 - NORTH - ENLARGED

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



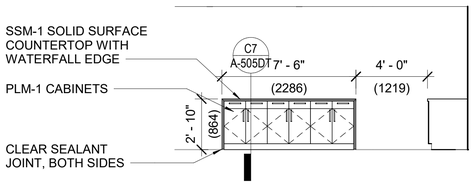
A1 A-401EP — ELEVATION - PANTRY 4018E - WEST

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



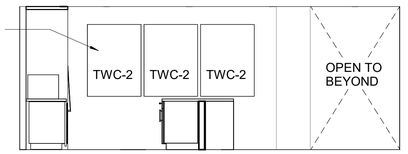
C9 A-401EP — ELEVATION - PANTRY 4018E - NORTH

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



A6 A-401EP — ELEVATION - PANTRY 4018E - SOUTH

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



A9 A-401EP — ELEVATION - PANTRY 4018E EAST

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

4/18/2025 2:44:19 PM
A-401EP BY LKG 04/16/25 FINAL CONSTRUCTION DOCS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — JOSEPH BENJAMIN WILCOX — REGISTERED ARCHITECT

STAMP

KEY PLAN

0 2' 4' 8'
1/4"=1'-0"

GRAPHIC SCALE(S)

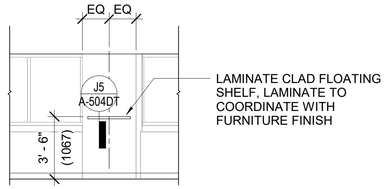
DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

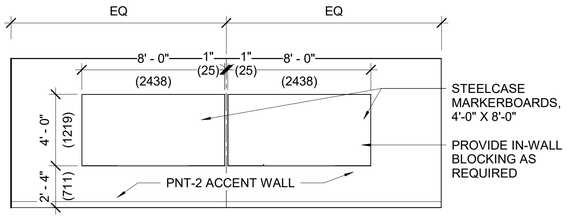
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ENLARGED VIEWS (COMBINED PLANS, RCPs, & ELEVATIONS)
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	9 OF 75
	A - 401 EP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



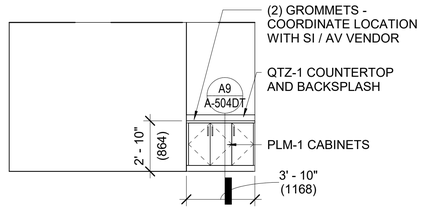
K1 A-406EP ELEVATION - DIRECTOR'S OFFICE 4033E EAST

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



H1 A-406EP ELEVATION - CONFERENCE 4002E PLAN NORTH

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



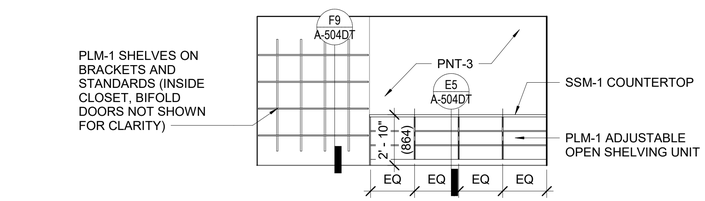
F1 A-406EP ELEVATION - CONFERENCE 4040E - EAST (2)

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

PROVIDE BID OPTION TO PROVIDE AND INSTALL SIDELITES AS SHOWN ON PLAN.

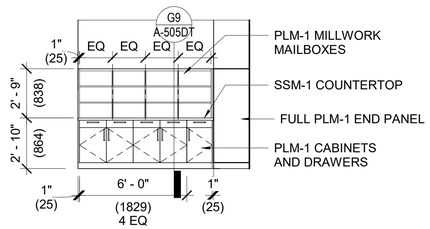
A1 A-406EP ELEVATION - TYPICAL SIDELITE

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



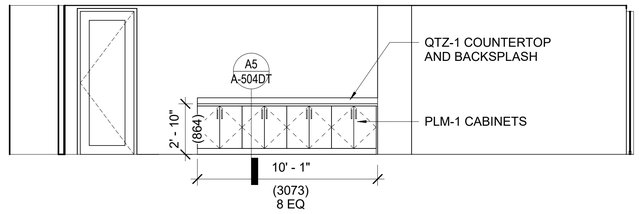
K6 A-406EP ELEVATION - FLEX 4016E - NORTH

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



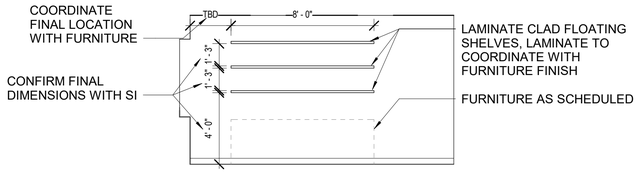
H5 A-406EP ELEVATION - COPY/MAIL - 4066E EAST

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



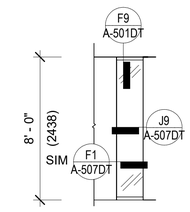
F5 A-406EP ELEVATION - CONFERENCE 4040E - SOUTH

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



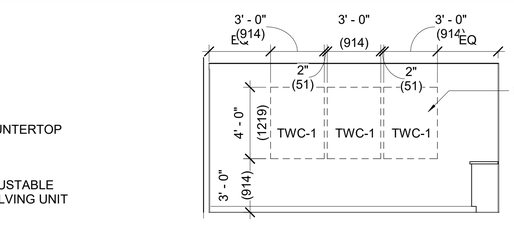
C5 A-406EP ELEVATION - OFFICE 4033E WEST

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



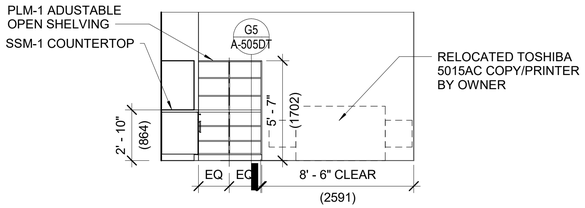
A4 A-406EP ELEVATION - RECEPTION 4000E SOUTH

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



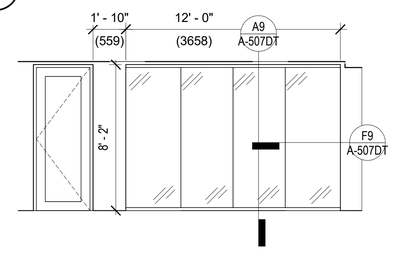
K10 A-406EP ELEVATION - FLEX 4016E WEST

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



H9 A-406EP ELEVATION - COPY/MAIL 4066E - SOUTH

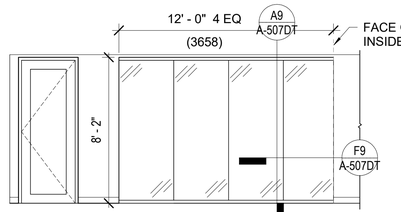
SCALE = 1/4" = 1'-0"



PROVIDE BID OPTION TO PROVIDE AND INSTALL GLAZING.

F9 A-406EP ELEVATION - CONFERENCE 4040E - EAST (1)

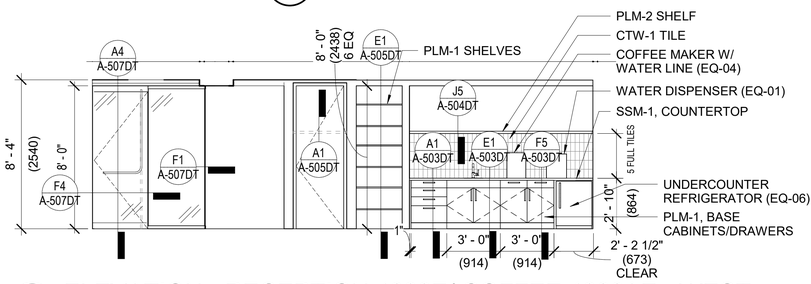
SCALE = 1/4" = 1'-0"



PROVIDE BID OPTION TO PROVIDE AND INSTALL GLAZING.

C9 A-406EP ELEVATION - CONFERENCE 4002E - SOUTH

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



A8 A-406EP ELEVATION - RECEPTION 4000E/ COFFEE 4000AE - WEST

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

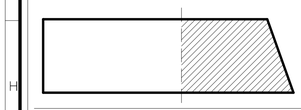
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A-406EP BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION





KEY PLAN

0 2' 4' 8'
1/4"=1'-0"

GRAPHIC SCALE(S)

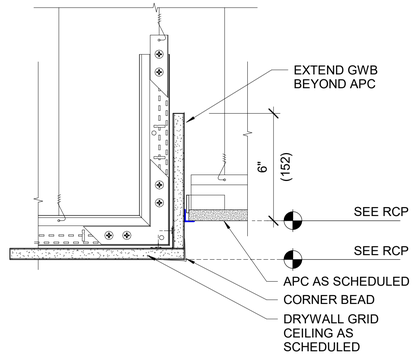
DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION #	DATE	REVISION DESCRIPTION

Smithsonian Institution

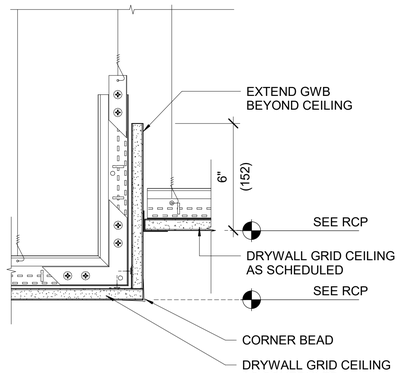
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

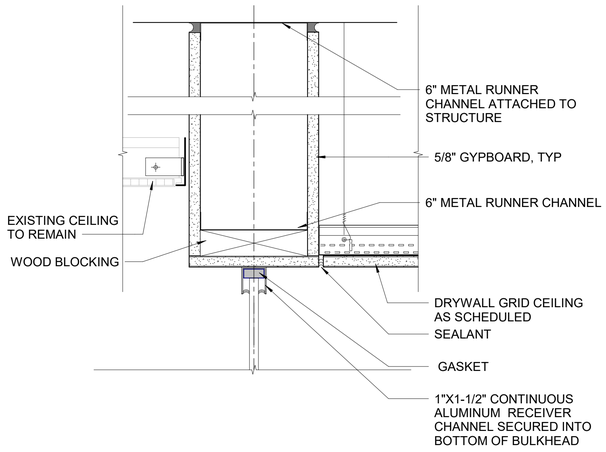
BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	INTERIOR ELEVATIONS
WORKING STAFF	JR (DESIGNED BY) · KR (DRAWN BY) · SS (CHECKED BY)
SHEET NO.	10 OF 75
	A-406EP (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)

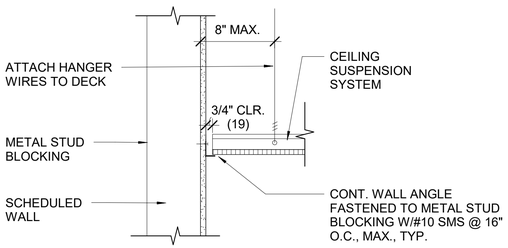


J6 / A-501DT — CEILING DETAIL - GWB TO APC

SCALE = 3" = 1'-0"







F1 / A-501DT — CEILING DETAIL - ACOUSTIC TILE @ WALL

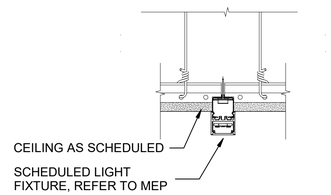
SCALE = 1 1/2" = 1'-0"

F5 / A-501DT — CEILING DETAIL - GWB TO GWB

SCALE = 3" = 1'-0"

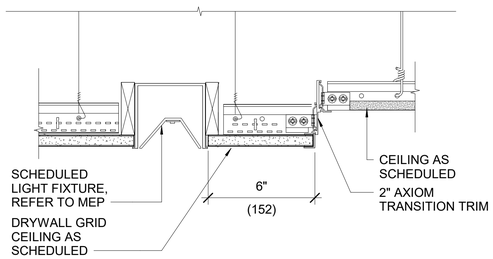
F9 / A-501DT — CEILING DETAIL - GWB @ SUITE ENTRY DOOR

SCALE = 3" = 1'-0"



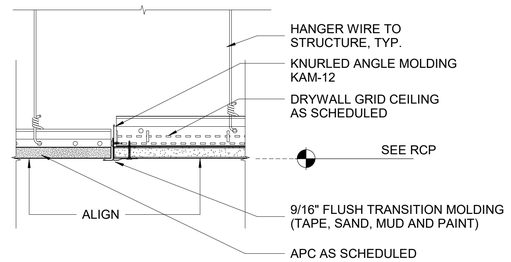
C1 / A-501DT — CEILING DETAIL - LIGHT @ ACOUSTICAL GRID

SCALE = 3" = 1'-0"



C5 / A-501DT — CEILING DETAIL - LIGHTCOVE IN GWB CEILING

SCALE = 3" = 1'-0"



C9 / A-501DT — CEILING DETAIL - GWB TO APC - FLUSH

SCALE = 3" = 1'-0"

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — BENJAMIN WILSON — REGISTERED — ARCHITECT

STAMP

KEY PLAN

0 1/2' 1' 1 1/2'

1 1/2"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

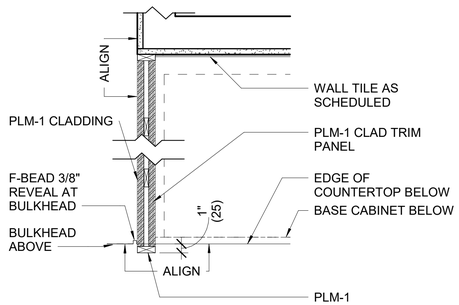
REVISION # DATE	REVISION DESCRIPTION

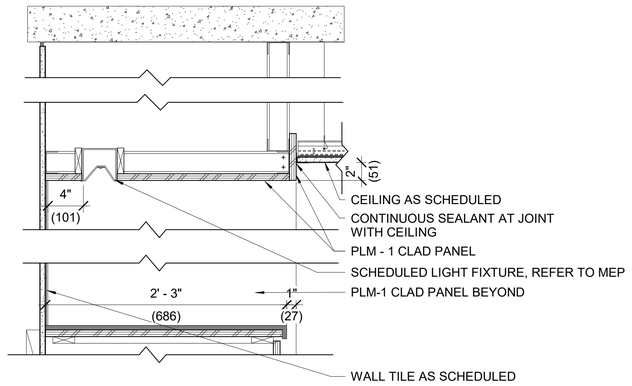
Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	INTERIOR DETAILS
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	11 OF 75
	A-501DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

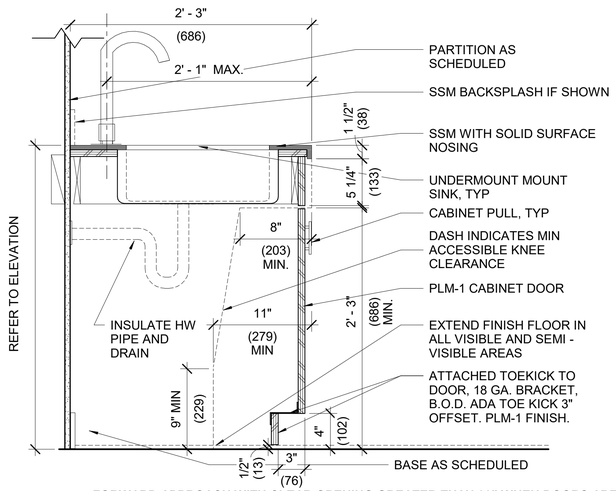
4/18/2025 2:44:28 PM
A-501DT BY LKG 04/18/25 FINAL CONSTRUCTION DOCS





J1 / A-503DT PLAN DETAIL - VERTICAL TRIM @ PANTRY

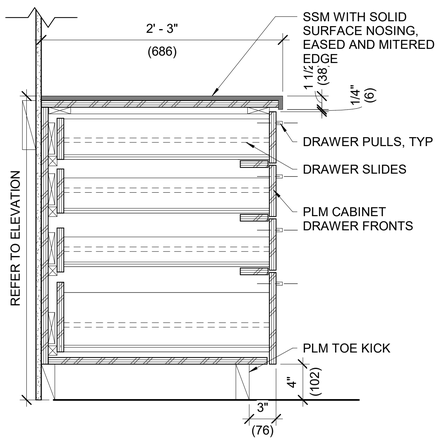
SCALE = 1 1/2" = 1'-0"



FORWARD APPROACH WITH CLEAR OPENING GREATER THAN 30" WHEN DOORS ARE OPEN

E1 / A-503DT BASE - ADA SINK CABINET

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

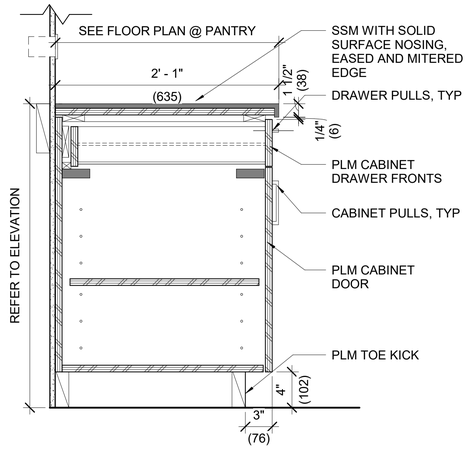


A1 / A-503DT BASE - FOUR DRAWERS

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

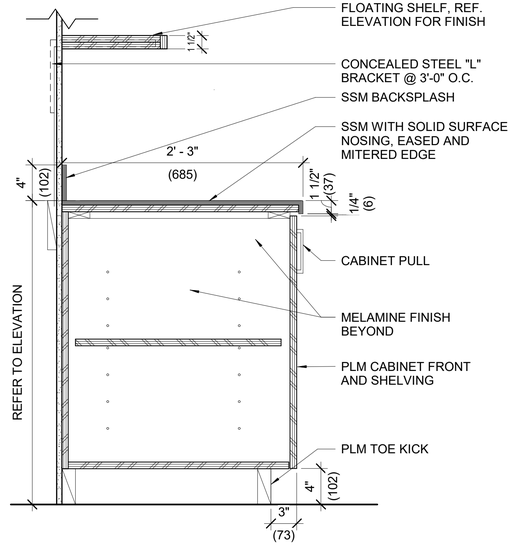
J5 / A-503DT SECTION DETAIL - HORIZONTAL TRIM @ PANTRY

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



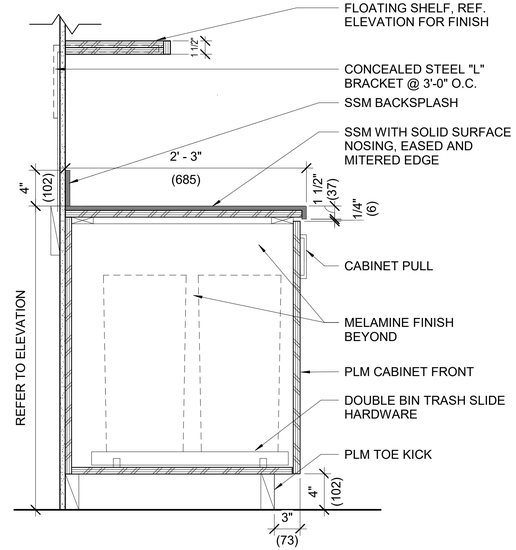
F5 / A-503DT BASE - DOOR/DRAWER BASE CABINET

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



A5 / A-503DT BASE - CABINET ONLY

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



A9 / A-503DT BASE - CABINET WITH TRASH SLIDES

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

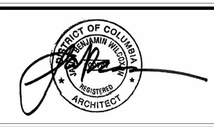
GENERAL NOTES - MILLWORK

1. ALL MILLWORK, STANDING AND RUNNING TRIM, CASEWORK AND PLASTIC LAMINATE WORK SHALL CONFORM TO THE ARCHITECTURAL WOODWORK INSTITUTE (AWI) STANDARD "CUSTOM GRADE" UNLESS OTHERWISE NOTED.
2. ALL MILLWORK, CASEWORK AND PLASTIC LAMINATE WORK SHALL CONFORM TO THE AMERICANS W/DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES U.O.N.
3. ALL MILLWORK AND FINISH CARPENTRY FABRICATION SHALL BE FABRICATED FROM FIELD MEASUREMENTS WITH PROVISION FOR SCRIBING AS REQUIRED TO MEET FIELD CONDITIONS.
4. INSTALL ALL CASEWORK AND FINISH CARPENTRY PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTIONS OR WRAPS. PROVIDE SUPPORT FOR COUNTERTOPS AS NECESSARY TO INSURE SECURE INSTALLATION.
5. ADJUST CABINETWORK AND HARDWARE SO THAT DOORS AND DRAWERS OPERATE SMOOTHLY WITHOUT WARP OR BIND. LUBRICATE OPERATING HARDWARE AS RECOMMENDED BY HARDWARE MANUFACTURER.
6. PROTECT INSTALLED CASEWORK AND PANELWORK IMMEDIATELY AFTER INSTALLATION AGAINST SOILING AND DAMAGE. REMOVE PROTECTION JUST TO PRIOR TO OWNER ACCEPTANCE AND MOVE-IN AND CLEAN ALL SURFACES.
7. ALL DOORS AND DRAWER FACES SHALL BE ADJUSTED AND ALIGNED PRIOR TO OWNER ACCEPTANCE.
8. CONCEALED, SELF CLOSING, HINGES SHALL BE USED THROUGHOUT, UNLESS OTHERWISE NOTED,
9. FULL- EXTENSION BALL- BEARING GLIDES SHALL HAVE A 75lbs RATING. FILE DRAWER GLIDES SHALL HAVE A 150lbs RATING.
10. VERIFY IN FIELD ALL DIMENSIONS PRIOR TO FABRICATION.
11. ALL SUBSTRATES IN PANTRIES AND BATHROOM TO BE MOISTURE-RESISTANT MEDIUM-DENSITY FIBERBOARD. ALL OTHER SUBSTRATES TO BE MEDIUM DENSITY FIBERBOARD.
12. ALL EXPOSED AND SEMI-EXPOSED MILLWORK EDGES TO BE EDGE BANDED TO MATCH ADJACENT FACE.

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION





KEY PLAN

0 1/2' 1' 1 1/2'

1 1/2"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

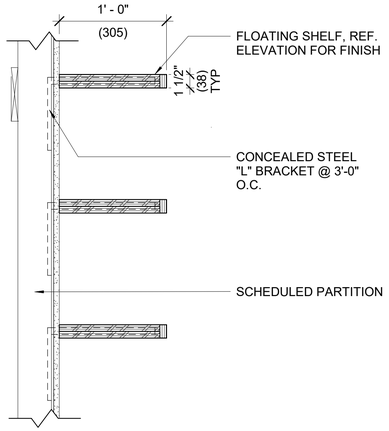
REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	MILLWORK DETAILS
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	12 OF 75
	A-503DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

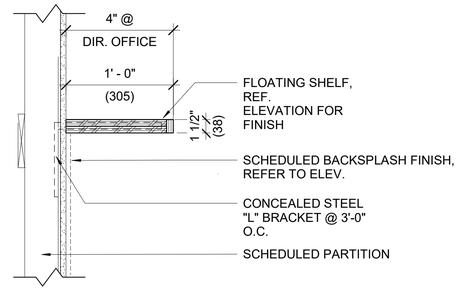
4/18/2025 2:44:31 PM
A-503DT BY LKG 04/18/25 FINAL CONSTRUCTION DOCS



J1 FLOATING SHELVES (DIR OFFICE)

A-504DT

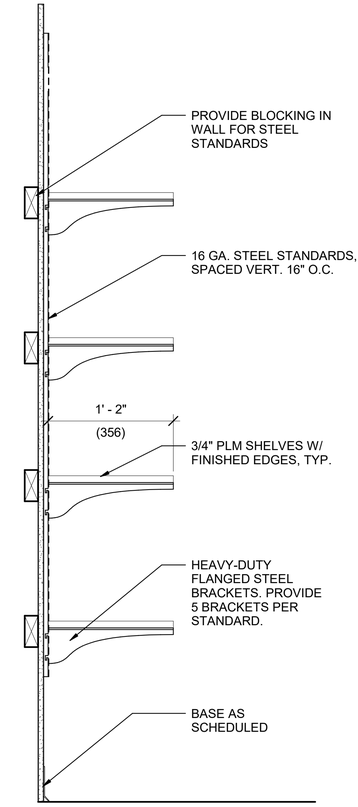
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J5 SECTION DETAIL - FLOATING SHELF

A-504DT

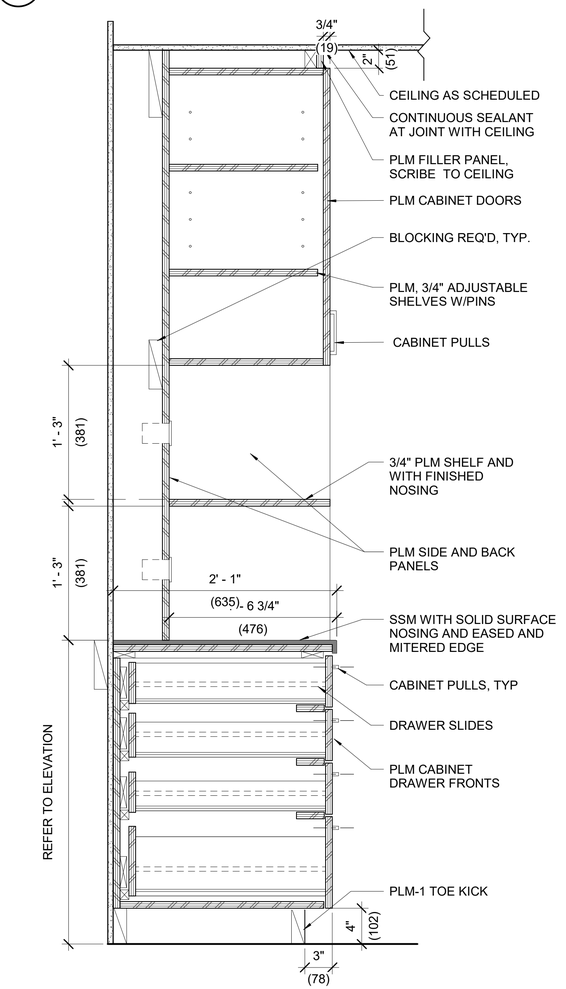
SCALE = 1 1/2" = 1'-0"



F9 FULL WALL SHELVING - PLM

A-504DT

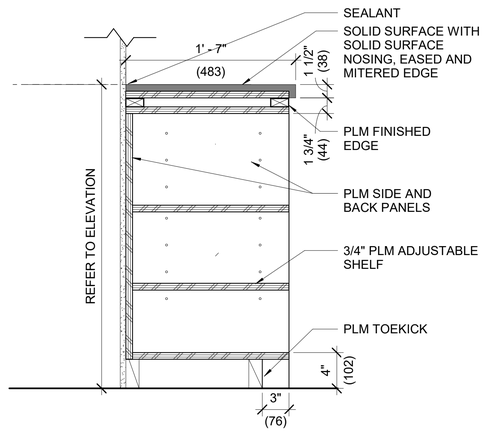
SCALE = 1 1/2" = 1'-0"



A1 FULL HEIGHT TOWER

A-504DT

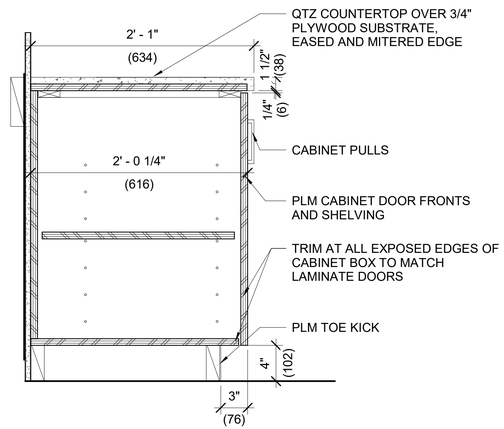
SCALE = 1 1/2" = 1'-0"



E5 BASE - OPEN SHELVING

A-504DT

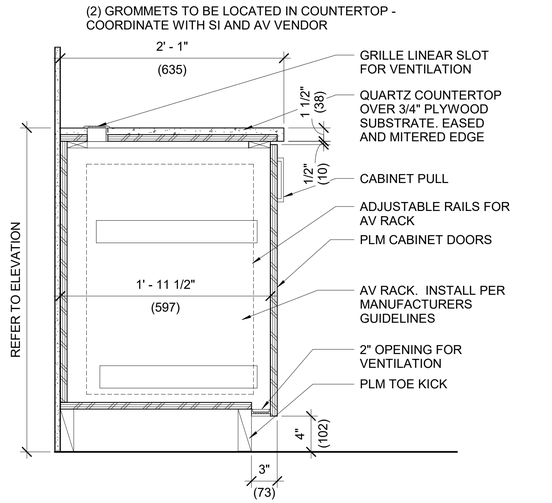
SCALE = 1 1/2" = 1'-0"



A5 BASE - CABINET ONLY - QTZ

A-504DT

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



A9 BASE - CABINET VENTED FOR A/V - QTZ

A-504DT

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

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A-504DT BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — CHRISTOPHER JAMES GRAHAM — REGISTERED — ARCHITECT

STAMP

KEY PLAN

0 1/2' 1' 1 1/2'

1 1/2"=1'-0"

GRAPHIC SCALE(S)

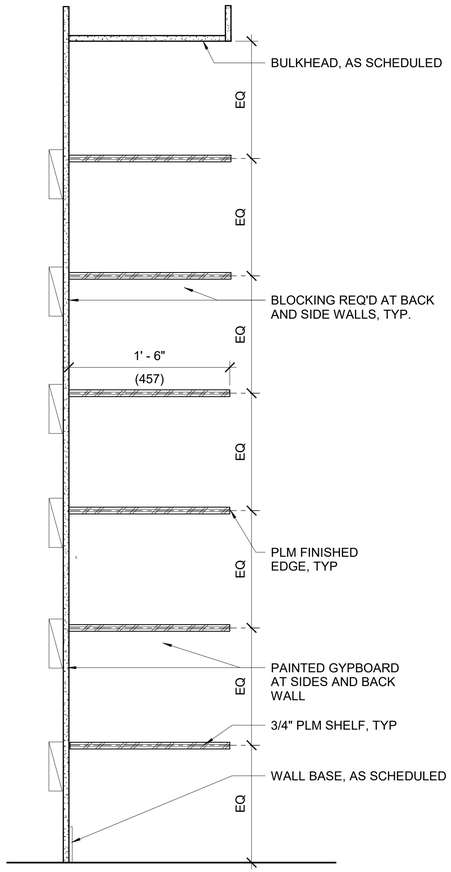
DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

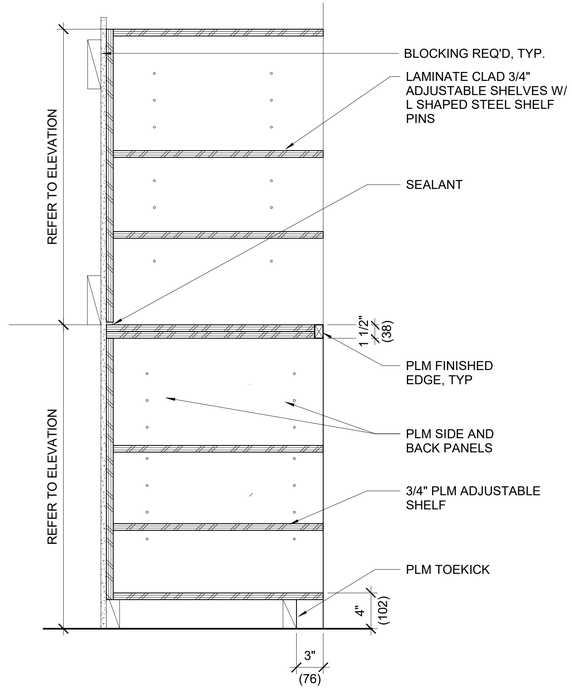
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	MILLWORK DETAILS
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	13 OF 75
	A - 504 DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



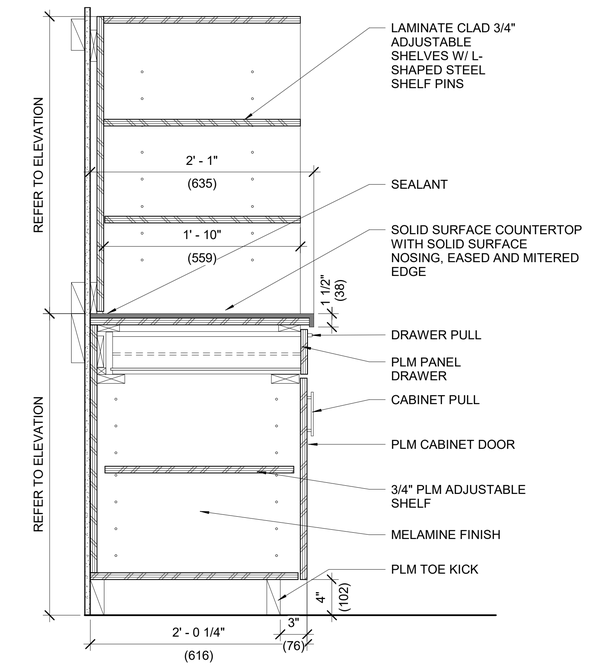
E1 A-505DT MILLWORK - BUILT-IN SHELVING

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



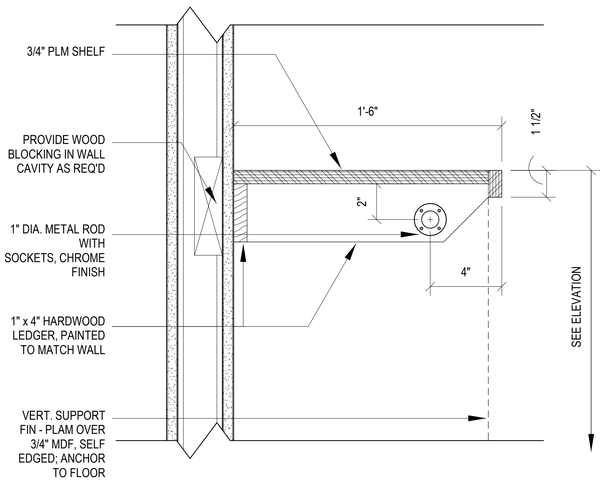
G5 A-505DT MILLWORK - OPEN SHELVING

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



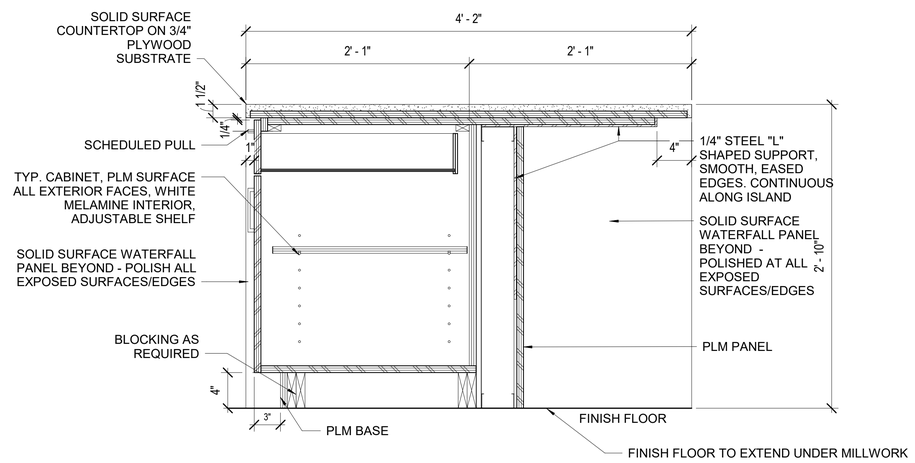
G9 A-505DT MILLWORK - COUNTERTOP MAILBOXES

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



A1 A-505DT MILLWORK - COAT ROD SHELF SECTION

SCALE = 3" = 1'-0"



C7 A-505DT MILLWORK - PANTRY ISLAND

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

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A-505DT BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

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STAMP

KEY PLAN

0 1/2' 1' 1 1/2'

1 1/2"=1'-0"

GRAPHIC SCALE(S)

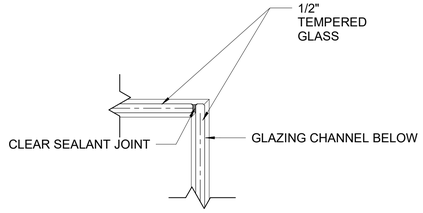
DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

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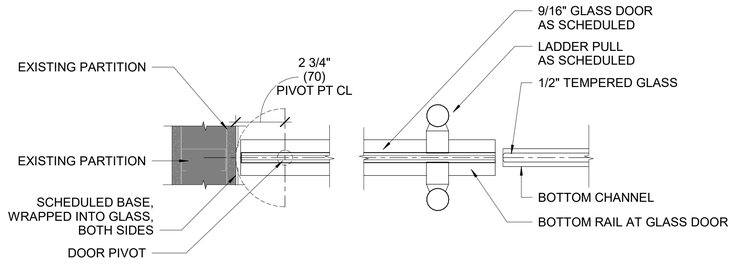
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	MILLWORK DETAILS
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	14 OF 75
	A-505DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



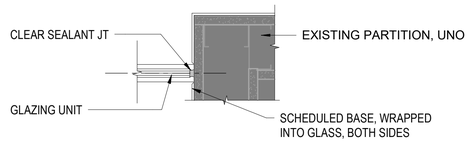
F1 PLAN DETAIL - BUTT JOINTED CORNER

F1 / A-507DT — SCALE = 3" = 1'-0"



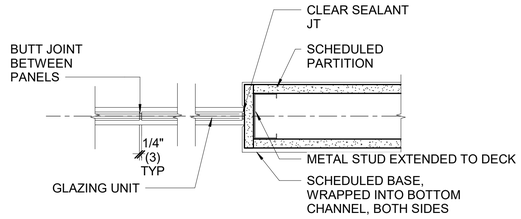
F4 PLAN DETAIL - GLASS DOOR PIVOT & LATCH SIDE JAMB

F4 / A-507DT — SCALE = 3" = 1'-0"



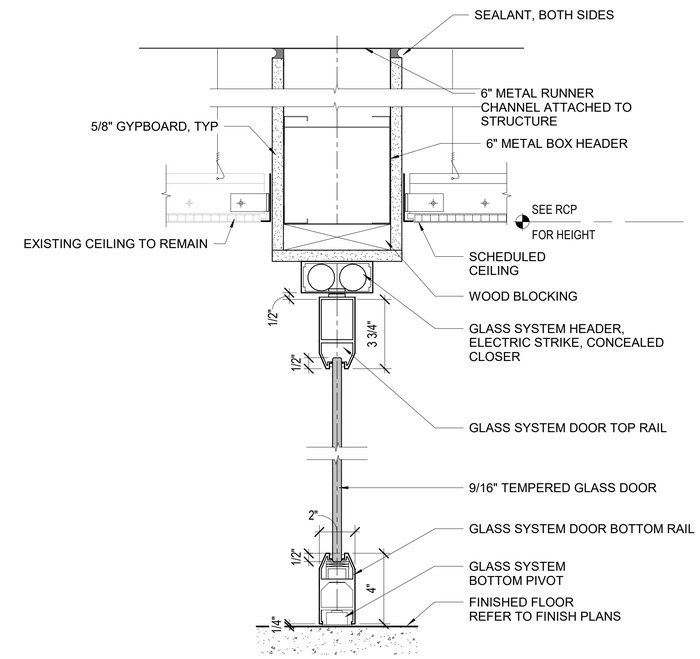
J9 PLAN DETAIL - GLASS BUTT JOINT @ WALL

J9 / A-507DT — SCALE = 3" = 1'-0"



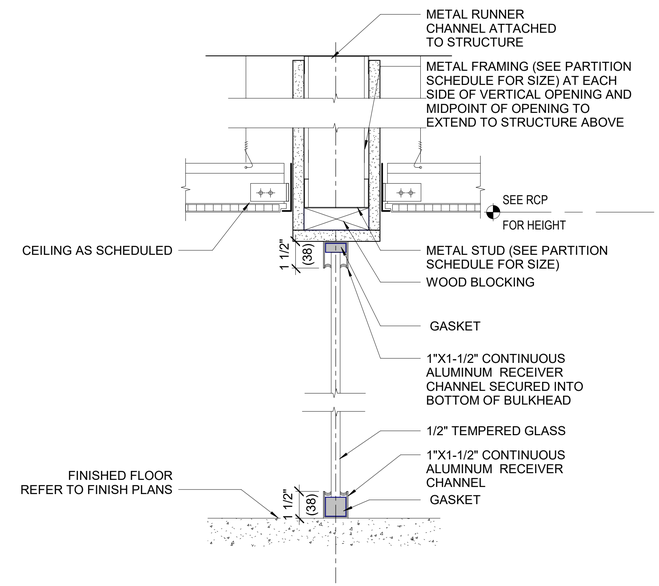
F9 PLAN DETAIL - GLASS BUTT JOINT AND JAMB

F9 / A-507DT — SCALE = 3" = 1'-0"



A4 GLASS DOOR DETAIL @ RECESSED HEADER AND BASE

A4 / A-507DT — SCALE = 3" = 1'-0"



A9 GLASS SIDELITE DETAIL @ HEADER AND BASE

A9 / A-507DT — SCALE = 3" = 1'-0"

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

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

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

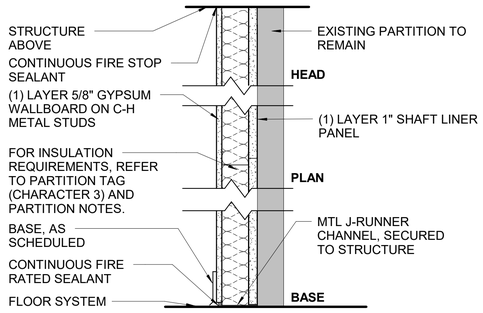
REVISION # DATE	REVISION DESCRIPTION

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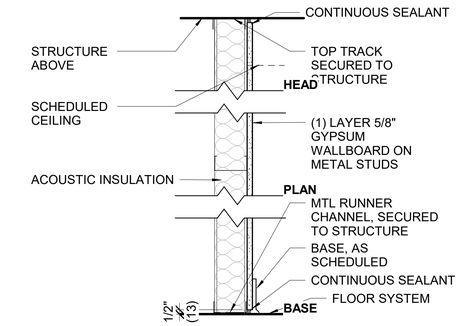
BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	GLAZING DETAILS
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	15 OF 75

A - 5 0 7 D T
DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE



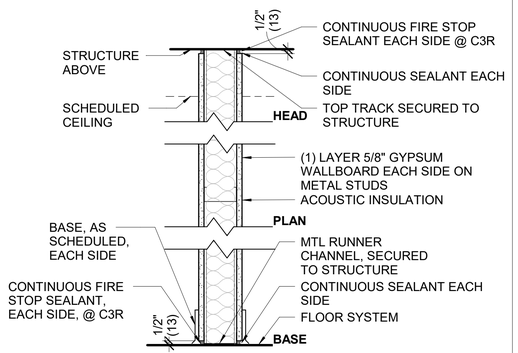
TYPE		STUD SIZE	PARTITION WIDTH	FIRE RATING (HRS)	FIRE RESIST TEST	STC RATING
S4	R	4" CH	4 5/8"	1	UL U415	--

PARTITION TYPE - S



TYPE		STUD SIZE	PARTITION WIDTH	FIRE RATING (HRS)	FIRE RESIST TEST	STC RATING
A2		2 1/2"	3 1/8"	0	--	--
A3		3 5/8"	4 1/4"	0	--	--
A3	A	3 5/8"	4 1/4"	0	--	34 (NGC 2013012)

PARTITION TYPE - A

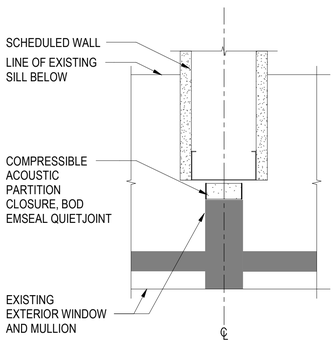


TYPE		STUD SIZE	PARTITION WIDTH	FIRE RATING (HRS)	FIRE RESIST TEST	STC RATING
C2		2 1/2"	3 3/4"	0	--	--
C3		3 5/8"	4 7/8"	0	--	--
C3	A	3 5/8"	4 7/8"	0	--	49 (SA-870717)
C3	R	3 5/8"	4 7/8"	1	UL U419	--
C6	A	6"	7 1/4"	0	--	49 (SA-870717)

PARTITION TYPE - C

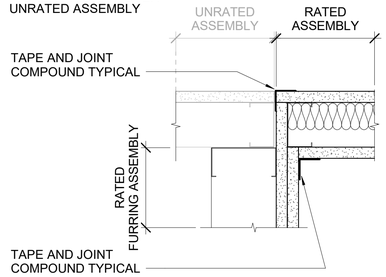
1. INTERIOR PARTITIONS ARE DISTINGUISHED ON FLOOR PLANS BY SYMBOL, GRAPHIC DESIGNATION, OR A COMBINATION OF BOTH. SEE GENERAL NOTES - PARTITION TAGS BELOW.
2. PARTITION TYPES ARE CONTINUOUS ACROSS DOOR AND WINDOW OPENINGS AND AROUND CORNERS, U.N.O.
3. SEE LIFE SAFETY PLANS FOR EXTENT OF FIRE RATED PARTITIONS.
4. HARDENING TYPE (FIELD MIX) COMPOUND TO BE USED FOR TAPE/TRIM BASE COATS.
5. WHERE GWB EXTENDS TO THE UNDERSIDE OF STRUCTURE, STOP GWB 1/2" BELOW LINE OF STRUCTURE AND SEAL AS REQUIRED.
6. DO NOT INSTALL GWB IN DIRECT CONTACT WITH THE FLOOR. SHIM GWB 1/2" OFF THE FLOOR W/ NON-POROUS SHIMS. PLASTIC NON-POROUS HORSESHOE SHIMS ARE RECOMMENDED. GWB SHIMS ARE NOT ACCEPTABLE.
7. MATERIALS AND CONSTRUCTION OF FIRE-RATED PARTITIONS, INCLUDING TAPING AND FINISHING OF GWB FOR FULL HEIGHT, SHALL BE IN ACCORDANCE WITH DESIGNATED FIRE TEST AND MANUFACTURER'S DIRECTIONS TO ACHIEVE FIRE RESISTANCE RATING INDICATED. SEAL PERIMETERS AND ALL PENETRATIONS THROUGH FIRE-RATED PARTITIONS WITH SPECIFIED FIRE RESISTANT RATED MATERIALS. REFER TO PARTITION TYPE DETAILS FOR MORE INFORMATION.
8. INSTALL FRAMING AND GWB TO OFFSET AROUND STRUCTURAL MEMBERS OR OTHER OBSTRUCTIONS TO MAINTAIN FIRE RESISTIVE RATINGS.
9. AT STUD PARTITIONS AND FURRED WALLS, PROVIDE MOISTURE RESISTANT GWB AT ALL MECHANICAL EQUIPMENT ROOMS AND WITHIN 10 FT OF ANY PLUMBING FIXTURE LOCATION UNLESS OTHERWISE NOTED.
10. AT STUD PARTITIONS AND FURRED WALLS, PROVIDE SUITABLE TILE BACKING BOARD (TYPE X @ RATED WALLS) OVER MINIMUM 0.0312" THICK METAL STUD FRAMING BEHIND CERAMIC, PORCELAIN AND STONE TILE WALL FINISH. REFER TO FINISH SCHEDULE.
11. REFER TO MECHANICAL DRAWINGS FOR DETAILS ON PIPE PENETRATIONS THROUGH ACOUSTICAL PARTITIONS AS WELL AS RATED PARTITIONS.
12. PROVIDE CONTROL JOINTS IN ALL PARTITIONS
    - 30'-0" O.C. MAX FOR GWB PARTITIONS
13. PROVIDE RATED CONTROL JOINTS IN ALL RATED PARTITIONS.
14. ACOUSTIC INSULATION ASTM C 655, TYPE I UNFACED BATTS OF GLASS FIBER, SLAG WOOL, OR ROCK WOOL. FRICTION FIT TO FILL ENTIRE CAVITY.

GENERAL NOTES - PARTITIONS



A3 / A-601SH — PLAN DETAIL - MULLION TRIM, TYP.
SCALE = 3" = 1'-0"

NOTES:
1. SEE PLANS FOR ASSEMBLY TYPES
2. SEE PARTITION TYPES FOR INSULATION REQUIREMENTS
3. RATED ASSEMBLY TO HAVE HIGHER PRIORITY OVER UNRATED ASSEMBLY

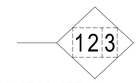


A6 / A-601SH — PLAN DETAIL - RATED-TO-UNRATED WALL, TYPICAL
SCALE = 3" = 1'-0"

PARTITION TAGS ARE READ LEFT TO RIGHT.

FIRST & SECOND CHARACTER TOGETHER ARE "TYPE" IN THE PARTITION TYPE DETAILS

1. THE FIRST CHARACTER IN THE TAG INDICATES WHICH DETAIL TO REFERENCE FOR THE PARTITION CONSTRUCTION.
2. IN ALL CASES EXCEPT TYPE G, THE SECOND CHARACTER IN THE TAG INDICATES A REFERENCE FOR THE STRUCTURAL MEMBER (METAL STUD OR CMU) THICKNESS.
3. IF THIRD CHARACTER LEFT BLANK THEN NO INSULATION OR OTHER SPECIAL CONDITIONS ARE REQUIRED. IF THIRD CHARACTER IS SHOWN THEN THE THIRD CHARACTER IN THE TAG INDICATES:



"A" FOR ACOUSTIC PARTITION
"R" FOR FIRE RATED PARTITION
"S" FOR SMOKE PARTITION
"T" FOR FIRE RATED / ACOUSTIC PARTITION
"V" FOR FIRE RATED / SMOKE PARTITION
"W" FOR ACOUSTIC / SMOKE PARTITION
"Z" FOR FIRE RATED / ACOUSTIC / SMOKE PARTITION

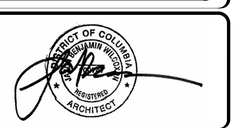
GENERAL NOTES - PARTITION TAGS

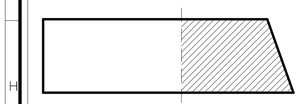
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A-601SH BY LKO 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION





KEY PLAN

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

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	PARTITION SCHEDULE & DETAILS
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	16 OF 75
	A-601SH (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

INTERIOR FINISHES ABBREVIATION KEY						
MARK	**MANUFACTURER**	**MATERIAL**	**SERIES / STYLE**	**COLOR**	**LOCATION**	**REMARKS**

1 FLOOR COVERING SCHEDULE

CPT-1	PATCRAFT	CARPET TILE	24"X24" SCAFFOLD IO519	00530 CUSTOM - TRYK # F947700	THROUGHOUT, UNO	ASHLAR INSTALLATION; CUSTOM YARN E - 5597D LOOP
CPT-2	PATCRAFT	CARPET TILE	24"X24" TRANSVERSE IO520	00530 CUSTOM - TRYK # F949322	CONFERENCE, FLEX, FOCUS	ASHLAR INSTALLATION; CUSTOM YARN E - 5597D LOOP
LVT-1	SHAW	LUXURY VINYL TILE	6"x36" UNVEIL	CHAR	COPY, PANTRY	ASHLAR INSTALLATION, 45 DEGREE INSTALL UNO; REFER TO FINISH PLANS
VCT-1	ARMSTRONG	VINYL COMPOSITE TILE	12"x12" PREMIUM EXCELON STONETEX	52125 GRANITE GREY	STORAGE 430	STRAIGHT STACK

2 WALL BASE SCHEDULE

RBB-1	TARKETT	RUBBER BASE	4" COVE	63 BURNT UMBER	THROUGHOUT, UNO	
WDB-1		MDF	4" FLAT STOCK MDF - 1/4" THICK	PTD TO MATCH WALL	PUBLIC CORRIDOR	

3 WALL COVERING SCHEDULE

CTW-1	DALTILE	CERAMIC WALL TILE	3"X6" COLOR WHEEL	1090 ARCTIC WHITE	PANTRY BACKSPLASH, COFFEE BACKSPLASH	MATTE FINISH; GROUT MAPEI #19
CTW-2	DALTILE	CERAMIC WALL TILE	3"X6" COLOR WHEEL	0782 SUEDE GREY	PANTRY BACKSPLASH	MATTE FINISH; GROUT MAPEI #19
CTW-3	DALTILE	CERAMIC WALL TILE	3"X6" COLOR WHEEL	1049 OCEAN BLUE	PANTRY BACKSPLASH	GLOSSY FINISH; GROUT MAPEI#19
CTW-4	DALTILE	CERAMIC WALL TILE	3"X6" COLOR WHEEL	1174 SEA BREEZE	PANTRY BACKSPLASH	GLOSSY FINISH; GROUT MAPEI #19
CTW-5	DALTILE	CERAMIC WALL TILE	3"X6" COLOR WHEEL	0115 EMERALD	PANTRY BACKSPLASH	GLOSSY FINISH; GROUT MAPEI #19
CTW-6	DALTILE	CERAMIC WALL TILE	3"X6" COLOR WHEEL	1098 KEY LIME	PANTRY BACKSPLASH	GLOSSY FINISH; GROUT MAPEI #19
CTW-7	DALTILE	CERAMIC WALL TILE	3"X6" COLOR WHEEL	1012 MUSTARD	PANTRY BACKSPLASH	GLOSSY FINISH; GROUT MAPEI #19
TWC-1	MAHARAM	TACKABLE WALL COVERING	TEK WALL HALE	002 ELEVATE	FLEX	FWP-1; REFER TO ELEVATION
TWC-2	MAHARAM	TACKABLE WALL COVERING	TEK WALL TINT	002 SHIMMER	PANTRY	FWP-1; REFER TO ELEVATION

4 CEILING SCHEDULE

APC-1	ARMSTRONG	ACOUSTIC PANEL CEILING	CALLA HIGH CAC TEGULAR 8807 2'X2'	WHITE	THROUGHOUT, UNO	GRID: SILHOUETTE XL 1/8" REVEAL 9/16"
APC-2	ARMSTRONG	ACOUSTIC PANEL CEILING	CALLA SHAPES FOR DESIGNFLEX 100106, PATTERN SH16	WHITE	PANTRY	GRID: SUPRAFINE XM 9/16" WITH 2" AXIOM TRANSITIONS AND DRYWALL BOTTOM TRIM
APC-3	MATCH EXISTING	ACOUSTIC PANEL CEILING	MATCH EXISTING		PUBLIC CORRIDOR	MATCH EXISTING GRID
GBC-1	ARMSTRONG	GYPSUM BOARD	DRYWALL FLAT CEILING SUSPENSION SYSTEM	PAINTED PNT-1, UNO	SEE RCP	SEE FINISH PLAN FOR ACCENT PAINT COLORS, FLAT FINISH

5 MILLWORK SCHEDULE

PLM-1	WILSONART	PLASTIC LAMINATE		LINEN D427-60	MILLWORK VERTICAL SURFACES THROUGHOUT	
PLM-2	WILSONART	PLASTIC LAMINATE		RAW CHESTNUT 7975K-12	SHELF	
QTZ-1	CORIAN	QUARTZ	2CM	SNOW WHITE	NEW COUNTERTOPS @ CONFERENCE	POLISHED FINISH
SSM-1	CORIAN	SOLID SURFACE	1/2"	CARBON CONCRETE	NEW COUNTERTOPS THROUGHOUT, UNO	

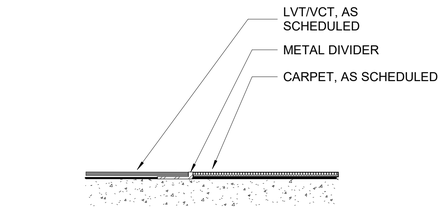
6 PAINT SCHEDULE

PNT-1	SHERWIN WILLIAMS	PAINT		SW7005 PURE WHITE	THROUGHOUT, UNO	EGGSHELL FINISH @ WALLS; FLAT @ CEILINGS
PNT-2	SHERWIN WILLIAMS	PAINT		SW6725 PICKLE		EGGSHELL FINISH @ WALLS
PNT-3	SHERWIN WILLIAMS	PAINT		SW6671 CURRY		EGGSHELL FINISH @ WALLS
PNT-4	SHERWIN WILLIAMS	PAINT		SW6488 GRAND CANAL		EGGSHELL FINISH @ WALLS; FLAT @ CEILINGS
PNT-5	SHERWIN WILLIAMS	PAINT		SW 6485 RAINDROP		EGGSHELL FINISH
PNT-6	SHERWIN WILLIAMS	PAINT		TBD	DIRECTOR'S OFFICE	EGGSHELL FINISH

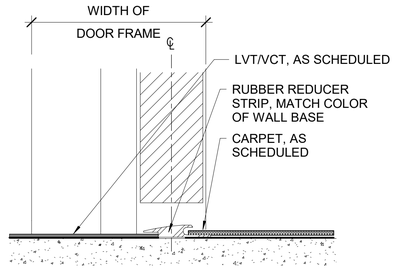
8 FABRIC WRAPPED PANEL

FWP-1	ACCUTRACK SYSTEMS	ACCUSNAP	1/2" ACOUSTICAL & TACKABLE PANEL .55 NRC RATING	REFER TO ELEVATION	REFER TO ELEVATIONS	SQUARE EDGE

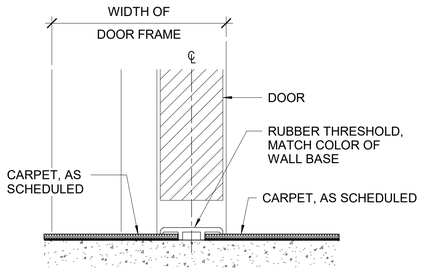
EQUIPMENT SCHEDULE							
#	TYPE	LOCATION	MANUFACTURER	MODEL #	DESCRIPTION	COMMENT	COLOR
EQ-01	WATER DISPENSER	PANTRY, COFFEE BAR	NATURAL CHOICE	TS 400	COUNTERTOP WATER DISPENSER WITH INTEGRAL FILTER	PURCHASED BY GC; INSTALLED BY GC	TITANIUM/CHARCOAL TRIM
EQ-02	UNDERCOUNTER FREEZER	PANTRY	PERLICK	HA24FB-4-5	24" SLIDE IN FREEZER DRAWERS, ADA COMPLIANT	PURCHASED BY GC; INSTALLED BY GC	STAINLESS STEEL
EQ-03	REFRIGERATOR	PANTRY	WHIRLPOOL	WSR57R18D	RIGHT DOOR SWING REFRIGERATOR	PURCHASED BY GC; INSTALLED BY GC	STAINLESS STEEL
EQ-04	COFFEE MACHINE	COFFEE BAR	KEURIG	K-3500	COFFEE MACHINE, REQUIRES A DIRECT WATER LINE	PURCHASED BY GC; INSTALLED BY GC	BLACK
EQ-05	MICROWAVE	PANTRY	GE	PEB9159SJSS	MIRCROWAVE OVEN	PURCHASED BY OWNER; INSTALLED BY OWNER	STAINLESS STEEL
EQ-06	UNDERCOUNTER REFRIGERATOR	PANTRY, COFFEE BAR	PERLICK	HA2RB-4-1L	24" SLIDE IN REFRIGERATOR, ADA COMPLIANT	PURCHASED BY GC; INSTALLED BY GC	STAINLESS STEEL
EQ-08	UNDERCOUNTER ICE MAKER	PANTRY	PERLICK	H50IMS-ADL	15" SLIDE IN ICE MAKER, ADA COMPLIANT	PURCHASED BY GC; INSTALLED BY GC	STAINLESS STEEL
EQ-09	DISHWASHER	PANTRY	GE	PDT145SSLSS	18" SLIDE IN DISHWASHER, ADA COMPLIANT	PURCHASED BY GC; INSTALLED BY GC	STAINLESS STEEL
EQ-11	ESPRESSO MACHINE	PANTRY	ZULAY KITCHEN	MAGIA SUPER AUTOMATIC	ESPRESSO MACHINE, DOES NOT REQUIRE A DIRECT WATER LINE	PURCHASED BY GC; INSTALLED BY GC	BLACK, MIDNIGHT SILVER TRIM



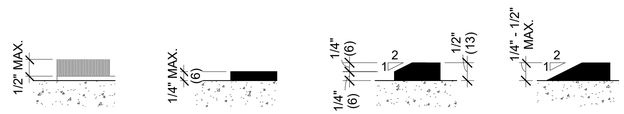
G1 A-902SH — TRANSITION - LVT/VCT TO CARPET
SCALE = 6" = 1'-0"



D1 A-902SH — THRESHOLD - CARPET TO LVT/VCT
SCALE = 6" = 1'-0"



A1 A-902SH — THRESHOLD - CARPET TO CARPET
SCALE = 6" = 1'-0"



ACCESSIBLE CARPET PILE HEIGHT | ACCESSIBLE MAX. VERTICAL CHANGE IN LEVEL | ACCESSIBLE MAX. BEVELED CHANGE IN LEVEL

NOTES:
1. VERTICAL LEVEL CHANGES OF 1/4" MAXIMUM ARE PERMITTED WITHOUT EDGE TREATMENT.

A5 A-902SH — FLOOR TRANSITION NOTES
SCALE = 6" = 1'-0"

4/18/2025 2:44:48 PM
A-902SH BY LKG 04/18/25 FINAL CONSTRUCTION DOC'S

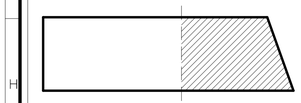
CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — BENJAMIN WILSON — REGISTERED — ARCHITECT

STAMP



KEY PLAN

0 1" 2" 3" 4"
6"=1'-0"
GRAPHIC SCALE(S)

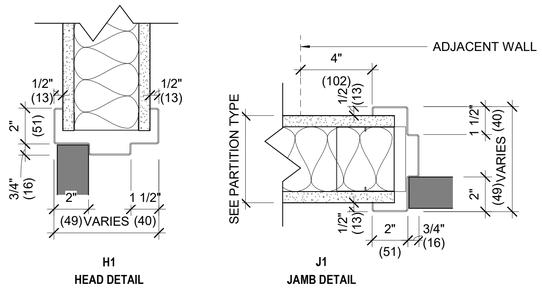
DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOC'S

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	FINISH & EQUIPMENT SCHEDULE & DETAILS
WORKING STAFF	JR (DESIGNED BY) / KR (DRAWN BY) / SS (CHECKED BY)
SHEET NO.	17 OF 75
	A-902SH (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

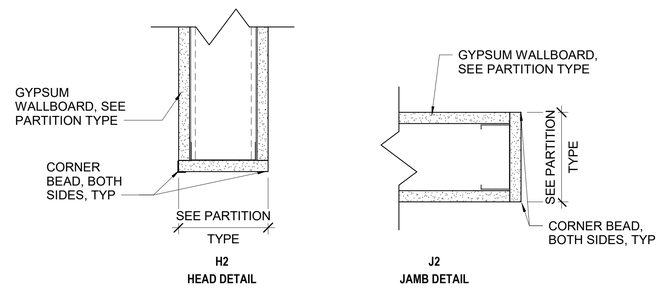


H1 HEAD DETAIL

J1 JAMB DETAIL

K1 A-903SH TYP HM INTERIOR JAMB & HEAD DETAILS

SCALE = 3" = 1'-0"

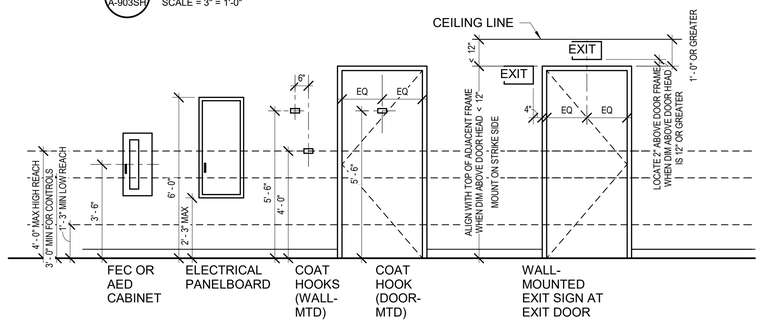


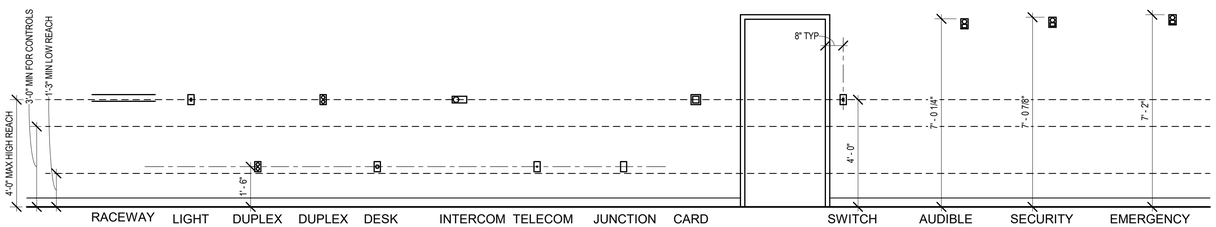
H2 HEAD DETAIL

J2 JAMB DETAIL

1G A-903SH TYP GYP CASED OPENING JAMB & HEAD DETAIL

SCALE = 3" = 1'-0"

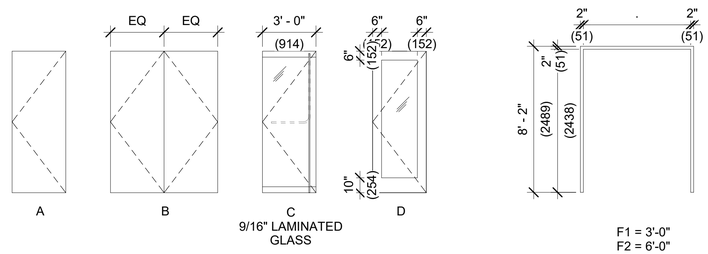




A1 A-903SH TYPICAL CORRIDOR ITEMS MOUNTING HEIGHTS

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

SCHEDULE OF UNIQUE DOORS														SCHEDULE OF UNIQUE DOORS
		DIMENSIONS		FRAME			DOOR							
DOOR NO.	ROOM NAME	WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	PAIR	THICKNESS	TYPE	MATERIAL	FINISH	FIRE RATING (IN MIN.)	HARDWARE	COMMENTS
04_Floor														
4000B	CLOSET	2' - 8"	8' - 0"	F	HM		No	1 3/4"	A	WD			7.0	
4001	CORRIDOR	3' - 0"	7' - 8"	H2	GYP			9/16"	C	GL			2.0	
4001A	PUBLIC CORRIDOR	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	A	WD			12.0	
4002	CONFERENCE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	D	WD			6.0	
4003	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4004	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4005	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4006	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4007	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4008	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4009	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4011	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4013	3P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4014A	STORAGE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	A	WD		45	3.0	
4014B	STORAGE	6' - 0"	8' - 0"	F2	HM		Yes	1 3/4"	B	WD		45	5.0	
4015	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4016	FLEX	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			8.0	
4016AE	FLEX	5' - 0"	8' - 0"	H2	GYP		Yes	1 1/2"	A	WD			13.0	
4017	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4018AE	STORAGE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	A	WD			4.0	
4031	1P OFFICE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	A	WD			9.0	
4033	DIRECTOR'S OFFICE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	A	WD			9.0	
4037	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4039	3P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4040A	CONFERENCE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	D	WD			6.0	
4040B	CONFERENCE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	D	WD			6.0	
4041	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4043	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4044	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4045	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4046	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4047	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4048	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4050	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4051	3P OFFICE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	A	WD			9.0	
4053	1P OFFICE	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	A	WD			9.0	
4057	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4059	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4060	FOCUS	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	D	WD			7.0	
4061	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4062	FOCUS	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	D	WD			7.0	
4063	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4064	FOCUS	3' - 0"	8' - 0"	F1	HM		No	1 3/4"	D	WD			7.0	
4065	1P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4067	3P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4069	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
4071	2P OFFICE	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX			10.0	
ST-4A	STAIR 4A	3' - 0"	8' - 0"	EX	EX		No	1 3/4"	EX	EX		90	1.0	



A8 A-903SH DOOR TYPES

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

A11 A-903SH FRAME TYPES

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

DOOR GENERAL NOTES

1. ALL NEW HOLLOW METAL (HM) FRAMES FOR NEW DOORS INSTALLED IN NEW PARTITIONS TO BE WELDED FRAMES.
2. ALL FIRE RATED DOORS AND FRAMES SHALL BE LABELED PER THE INDICATED FIRE RATING, REF AL001AL.
3. ALL DOORS CALLED OUT WITH FINISH LABEL "PNT" SHALL RECEIVE PNT-1.

CG

Renovate 4E NMAL
Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	DOOR SCHEDULE & DETAILS
WORKING STAFF	JR (DESIGNED BY) KR (DRAWN BY) SS (CHECKED BY)
SHEET NO.	18 OF 75
	A-903SH (DISCIPLINE TYPE SEQUENCE DRAWING TYPE)

4/18/2025 2:44:54 PM
A-903SH BY LKG 04/18/25 FINAL CONSTRUCTION DOCS

ABBREVIATIONS

ABBREV	ABBREVIATION
ABD	ABANDONED
ABV	ABOVE
A/C	AIR CONDITIONING
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
APD	AIR PRESSURE DROP
APPROX	APPROXIMATE
ARCH	ARCHITECT, ARCHITECTURAL
ARRG	ARRANGEMENT
AST	ABOVEGROUND STORAGE TANK
ATC	AUTOMATIC TEMPERATURE
ATM	ATMOSPHERE
ATR	AIR TEMPERATURE
ATU	AIR TERMINAL UNIT
AVG	AVERAGE
AWT	AVERAGE WATER TEMPERATURE
BAS	BUILDING AUTOMATION SYSTEM
BWV	BACK WATER VALVE
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOP	BOTTOM OF PIPE
BTM	BOTTOM
BTUH	BRITISH THERMAL UNITS PER HOUR
BFP	BACKFLOW PREVENTER
°C	DEGREES CELSIUS
CAV	CONSTANT AIR VOLUME
CC	COOLING COIL
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
CO	CLEANOUT / CARBON MONXIDE
CO2	CARBON DIOXIDE
COMP	COMPRESSED
CONC	CONCRETE
CONN	CONNECTION, CONNECT
CONT	CONTINUATION
CP	CONDENSATE PUMP
CRAC	COMPUTER ROOM AIR CONDITIONER
CRU	CONDENSATE RETURN UNIT
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CX	CONNECT TO EXISTING
CW	DOMESTIC COLD WATER PIPE
D	DRAIN OR DEPTH
DB	DRY BULB OR DECIBEL
DBA	DECIBEL (REFERENCE "A" SCALE)
DBL	DOUBLE
DCP	DIGITAL CONTROL PANEL
DDC	DIRECT DIGITAL CONTROL
DESIG	DESIGNATION
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNITS
DIA	DIAMETER
DIFF	DIFFUSER
DN	DOWN
DW	DOMESTIC WATER
DWG	DRAWING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB
EFF	EFFICIENCY
EG	ETHYLENE GLYCOL
EJ	EXPANSION JOINT
ELEC	ELECTRICAL, ELECTRIC
ELEV	ELEVATION OR ELEVATOR
EMD	END OF MAIN DRIP
ENT	ENTERING
ESP	EXTERNAL STATIC PRESSURE
ETC	ET CETERA
EW	EYE WASH
EWB	ENTERING WET BULB
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EX	EXISTING
EXP	EXPOSED
°F	DEGREES FAHRENHEIT
F&T	FLOAT & THERMOSTATIC TRAP
FCU	FAN COIL UNIT
FCVA	FLOOR CONTROL VALVE ASSEMBLY
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FHC	FIRE HOSE CABINET
FHV	FIRE HOSE VALVE
FL	FLOOR
FND	FOUNDATION DRAINAGE
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FT HD	FEET OF HEAD PRESSURE
FTR	FINNED TUBE RADIATION
GA	GAGE
GAL	GALLON
GALV	GALVANIZED
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HEIGHT
HED	HOSE END DRAIN
HORIZ	HORIZONTAL
HP	HORSEPOWER
H.P.	HIGH PRESSURE
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HW	DOMESTIC HOT WATER PIPE
HWR	DOMESTIC HOT WATER RECIRCULATING PIPE
HZ	HERTZ

ABBREV	ABBREVIATION
IB	INVERTED BUCKET TRAP
I.L.	INTERMEDIATE LANDING
IN	INCH OR INCHES
INV	INVERT ELEVATION
KVA	KILOVOLT AMPERES
KW	KILOWATT
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LB(S)	POUND(S)
LDB	LEAVING DRY BULB
LF	LINEAR FEET
L.P.	LOW PRESSURE
LVG	LEAVING
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MECH	MECHANICAL
MBH	THOUSAND BTU'S PER HOUR
MFR	MANUFACTURER
MIN	MINIMUM
MO	MOTOR OPERATOR
MS	MOP SINK
MTD	MOUNTED
NAT	NATURAL
NC	NOISE CRITERIA
N.C.	NORMALLY CLOSED
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NO.	NUMBER
OA	OUTDOOR AIR
OC	ON CENTER
OED	OPEN ENDED DUCT
OFD	OVERFLOW DRAIN
OS&Y	OUTSIDE SCREW AND YOKE
PD	PRESSURE DROP
PF	POWER FACTOR
PG	PROPYLENE GLYCOL
PH	PHASE
PHC	PREHEAT COIL
PLBG	PLUMBING
PPH	POUNDS PER HOUR (STEAM)
PPM	PARTS PER MILLION
PRESS.	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI(G)	POUNDS PER SQUARE INCH (GAGE)
PUH	PROPELLER UNIT HEATER
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
R	RADIUS
RA	RETURN AIR
RAD	RADIATED
RD	ROOF DRAIN
REQ'D	REQUIRED
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RHP	RADIANT HEATING PANEL
RL	RAINLEADER
RLF	RELIEF AIR
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RX	REMOVE EXISTING
SA	SUPPLY AIR
SF	SQUARE FEET
SH	SENSIBLE HEAT OR SHOWER
SL	SOUND LINING
SP	STATIC PRESSURE
SPEC	SPECIFICATION/PROJECT MANUAL
SQ	SQUARE
SRD	SECONDARY (OVERFLOW) ROOF DRAIN
SRL	SECONDARY (OVERFLOW) RAIN LEADER
S/S	STAINLESS STEEL
STL	STEEL
STRUCT	STRUCTURAL
TEMP	TEMPERATURE
TH	TOTAL HEAT
TD	TRENCH DRAIN
THD	THERMODYNAMIC TRAP
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	DOOR UNDER CUT
UH	UNIT HEATER
UON	UNLESS OTHERWISED NOTED
UST	UNDERGROUND STORAGE TANK
V	VOLTS
VA	VOLT AMPERES
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFC	VARIABLE FREQUENCY CONTROLLER
VTR	VENT THRU ROOF
W	WIDTH
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAGE
W/	WITH
W/O	WITHOUT
WPD	WATER PRESSURE DROP
WSHP	WATER SOURCE HEAT PUMP

SYMBOLS

SUPPLY AIR DUCT (UP,DOWN)

RETURN/OUTDOOR/RELIEF AIR DUCT (UP,DOWN)

EXHAUST AIR DUCT (UP,DOWN)

FIRE DAMPER WITH ACCESS DOOR

SMOKE DAMPER WITH ACCESS DOOR

COMBINATION FIRE AND SMOKE DAMPER WITH ACCESS DOOR

MANUAL VOLUME DAMPER

FLEXIBLE CONNECTION (DUCT)

DUCT SILENCER

SOUND LINED DUCTWORK

TRANSITION ROUND TO RECTANGULAR

DUCT (SIZE IN INCHES; FIRST FIGURE IS SIDE SHOWN)

DUCT OFFSET UP IN DIRECTION OF ARROW

DUCT OFFSET DOWN IN DIRECTION OF ARROW

ROUND FLEXIBLE DUCT

SUPPLY AIR TERMINAL UNIT

SUPPLY AIR TERMINAL UNIT WITH REHEAT COIL

FAN POWERED AIR TERMINAL UNIT WITH HEATING COIL

DUCT MOUNTED REHEAT COIL

SUPPLY AIR DEVICE

RETURN AIR DEVICE

EXHAUST AIR DEVICE

LINEAR SLOT DIFFUSER WITH PLENUM

SIDEWALL DIFFUSER W/ FIELD FABRICATED PLENUM

DUCT OR WALL MOUNTED AIR DEVICE

PROPELLER UNIT HEATER

FINNED TUBE RADIATION OR RADIANT HEATING PANEL

RETURN AIR FLOW DIRECTION

SUPPLY AIR FLOW DIRECTION

DIAMETER

CUBIC FEET PER MINUTE

CENTER LINE

FLAT OVAL

AREA DRAIN

FLOOR DRAIN

ROOF DRAIN/SECONDARY (OVERFLOW) ROOF DRAIN

FLOOR SINK

TRENCH DRAIN

INVERT ELEVATION

CLEANOUT IN HORIZONTAL

CLEANOUT IN VERTICAL

DOMESTIC WATER BACKFLOW PREVENTER

BACK WATER VALVE (ARROW INDICATES DIRECTION OF FLOW)

SHOCK ABSORBER

HOSE BIBB

NON-FREEZE CONCEALED OUTLET WALL HYDRANT

TRAP PRIMER PIPE

SPACE TEMPERATURE SENSOR OR THERMOSTAT

SPACE HUMIDITY SENSOR OR HUMIDISTAT

SPACE CARBON DIOXIDE SENSOR

DUCT OR PIPE MOUNTED TEMPERATURE SENSOR/TRANSMITTER

DUCT MOUNTED HUMIDITY SENSOR/TRANSMITTER

DUCT MOUNTED CARBON DIOXIDE SENSOR/TRANSMITTER

DUCT MOUNTED SMOKE DETECTOR

FREEZESTAT

CONTROL DAMPER

STATIC PRESSURE SENSOR/AIR FLOW STATION

FAN INLET AIR FLOW MEASURING STATION

TWO WAY CONTROL VALVE

THREE WAY CONTROL VALVE

FLOW SWITCH

DIFFERENTIAL PRESSURE SWITCH

DIFFERENTIAL PRESSURE TRANSMITTER

CURRENT SENSING RELAY

MANUAL OVERRIDE SWITCH

MAGNAHELIC PRESSURE GAGE

BOUNDARY LINE

SANITARY/WASTE PIPE

CHEMICAL RESISTANT WASTE PIPE

A/C CONDENSATE AND EQUIPMENT DRAIN PIPE

VENT PIPE

CHEMICAL RESISTANT VENT PIPE

STORM WATER PIPE

SECONDARY (OVERFLOW) STORM WATER PIPE

FOUNDATION DRAIN PIPE

SANITARY PUMPED DISCHARGE PIPE

STORM WATER PUMPED DISCHARGE PIPE

DOMESTIC COLD WATER PIPE

DOMESTIC HOT WATER PIPE (TEMP. IF INDICATED)

DOMESTIC HOT WATER RECIRCULATING PIPE

NON-POTABLE WATER PIPE

TREATED WATER PIPE

TEMPERED WATER PIPE

REVERSE OSMOSIS WATER SUPPLY PIPE

REVERSE OSMOSIS WATER RETURN PIPE

DEIONIZED WATER SUPPLY PIPE

DEIONIZED WATER RETURN PIPE

COMPRESSED AIR PIPE

NATURAL GAS PIPE

VACUUM PIPE

VACUUM EXHAUST PIPE

NITROGEN GAS PIPE

NITROUS OXIDE GAS PIPE

OXYGEN GAS PIPE

SPECIALTY GAS PIPE

FIRE SUPPRESSION AND WET-PIPE SPRINKLER PIPE

DRY-PIPE FIRE SUPPRESSION PIPE

PREACTION FIRE SUPPRESSION PIPE

CHILLED WATER SUPPLY PIPE

CHILLED WATER RETURN PIPE

CHILLED WATER (GLYCOL) SUPPLY PIPE

CHILLED WATER (GLYCOL) RETURN PIPE

CONDENSER WATER SUPPLY PIPE

CONDENSER WATER RETURN PIPE

HEATING WATER SUPPLY PIPE

HEATING WATER RETURN PIPE

PRIMARY HEATING WATER SUPPLY PIPE

PRIMARY HEATING WATER RETURN PIPE

HIGH PRESSURE STEAM PIPE (PSIG)

HIGH PRESSURE CONDENSATE RETURN PIPE

MEDIUM PRESSURE STEAM PIPE (PSIG)

MEDIUM PRESSURE CONDENSATE RETURN PIPE

LOW PRESSURE STEAM PIPE (PSIG)

LOW PRESSURE CONDENSATE RETURN PIPE

HUMIDIFICATION STEAM PIPE

PUMPED CONDENSATE RETURN PIPE

STEAM VAPOR VENT PIPE

REFRIGERANT RELIEF PIPE

REFRIGERANT SUCTION PIPE

REFRIGERANT LIQUID PIPE

HOT GAS REFRIGERANT PIPE

FUEL OIL SUPPLY PIPE

FUEL OIL RETURN PIPE

HIGH TEMPERATURE HOT WATER SUPPLY PIPE

HIGH TEMPERATURE HOT WATER RETURN PIPE

DUAL TEMPERATURE SUPPLY

DUAL TEMPERATURE RETURN

FLOW DIRECTION ARROW

PIPE UP

PIPE DOWN

PIPE/DUCT CAP

UNION

FLANGED CONNECTION

PIPE ANCHOR

PIPE GUIDE

CONCENTRIC REDUCER

ECCENTRIC REDUCER

FLEXIBLE CONNECTION (PIPING)

SHUTOFF VALVE (IN HORIZONTAL / IN VERTICAL)

THROTTLING VALVE

MANUAL BALANCING VALVE

AUTOMATIC BALANCING VALVE

CHECK VALVE (ARROW INDICATES DIRECTION OF FLOW)

PRESSURE REDUCING VALVE

PRESSURE RELIEF VALVE

HOSE END DRAIN

PRESSURE GAGE WITH ISOLATION VALVE

TEMPERATURE GAGE/THERMOMETER

FLOW METER FITTING

COMBINATION BALANCING VALVE & FLOW METER FITTING

PRESSURE AND TEMPERATURE PLUG

AUTOMATIC AIR VENT

MANUAL AIR VENT

STRAINER WITH BLOW DOWN VALVE

STEAM TRAP

FIRE SUPPRESSION INDICATING VALVE W/TAMPER SWITCH

FIRE DEPARTMENT VALVE

ALARM CHECK VALVE

DRY PIPE VALVE

DRY PIPE VALVE W/ACCELERATOR

PREACTION VALVE

DELUGE VALVE

FIRE SUPPRESSION FLOW SWITCH

FIRE SUPPRESSION PRESSURE SWITCH

FIRE SUPPRESSION DOUBLE CHECK BACKFLOW PREVENTER

FIRE DEPARTMENT SIAMESE WALL CONNECTION

FIRE DEPARTMENT SIAMESE FREESTANDING CONNECTION

WATER MOTOR GONG

PUMP

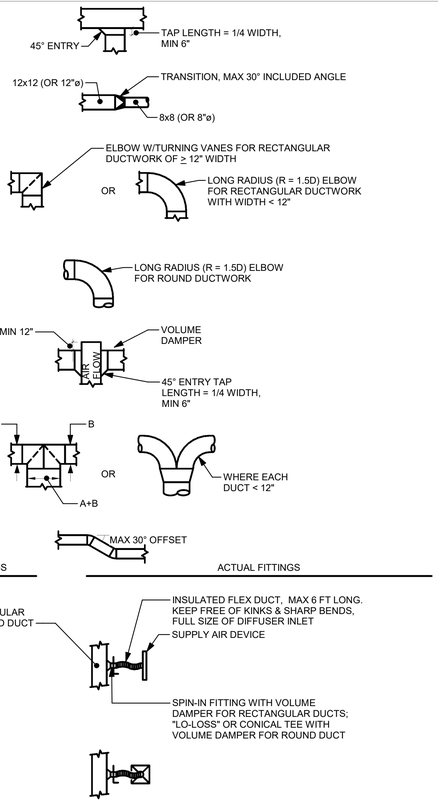
FLOW METER

DRAWING CONVENTIONS

SYMBOL	DESCRIPTION
	INDICATES DIRECTION OF CUTTING PLANE
A / MX.XX	NUMBER OR LETTER INDICATES SECTION OR ELEVATION; DRAWING NUMBER WHERE ELEVATION OR SECTION IS TAKEN OR DRAWN
S X	SANITARY RISER NUMBER
W X	DOMESTIC WATER RISER NUMBER
F X	FIRE PROTECTION RISER NUMBER
P-CHX	EQUIPMENT DESIGNATION; NUMERICAL DESIGNATION; EQUIPMENT SERVICE DESIGNATION; EQUIPMENT TYPE DESIGNATION
	PLUMBING FIXTURE DESIGNATION, P-X

SYMBOL	DESCRIPTION
	POINT OF CONNECTION, NEW TO EXISTING
	DEMOLITION WORK TERMINATION POINT
X	INDICATES AIR DEVICE; NUMBER INDICATES AIR DEVICE DESIGNATION. REFER TO SCHEDULE FOR SIZE AND TYPE
1	INDICATES SPECIAL NOTE; NUMBER INDICATES SPECIAL NOTE DESIGNATION. REFER TO SPECIAL NOTE LIST ON DRAWING FOR DESCRIPTION OF ITEM
XXXX	SUPPLY AIR TERMINAL UNIT DESIGNATION; SUPPLY AIR TERMINAL UNIT SEQUENTIAL DESIGNATION; DESIGNATES FLOOR LOCATION OF SUPPLY AIR TERMINAL UNIT ("1" FOR FIRST, "2" FOR SECOND, "3" FOR THIRD, ETC.); DESIGNATES AHU NUMBER
	HEAVY LINE WEIGHT DESIGNATES NEW WORK ON NEW WORK PLANS, AND REMOVAL WORK ON DEMOLITION PLANS
	LIGHT LINE WEIGHT DESIGNATES EXISTING WORK TO REMAIN

DUCTWORK CONVENTIONS



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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA · THOMAS SYVERSON · PE4000103 · 8/18/25 · MECHANICAL · PROFESSIONAL ENGINEER

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GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

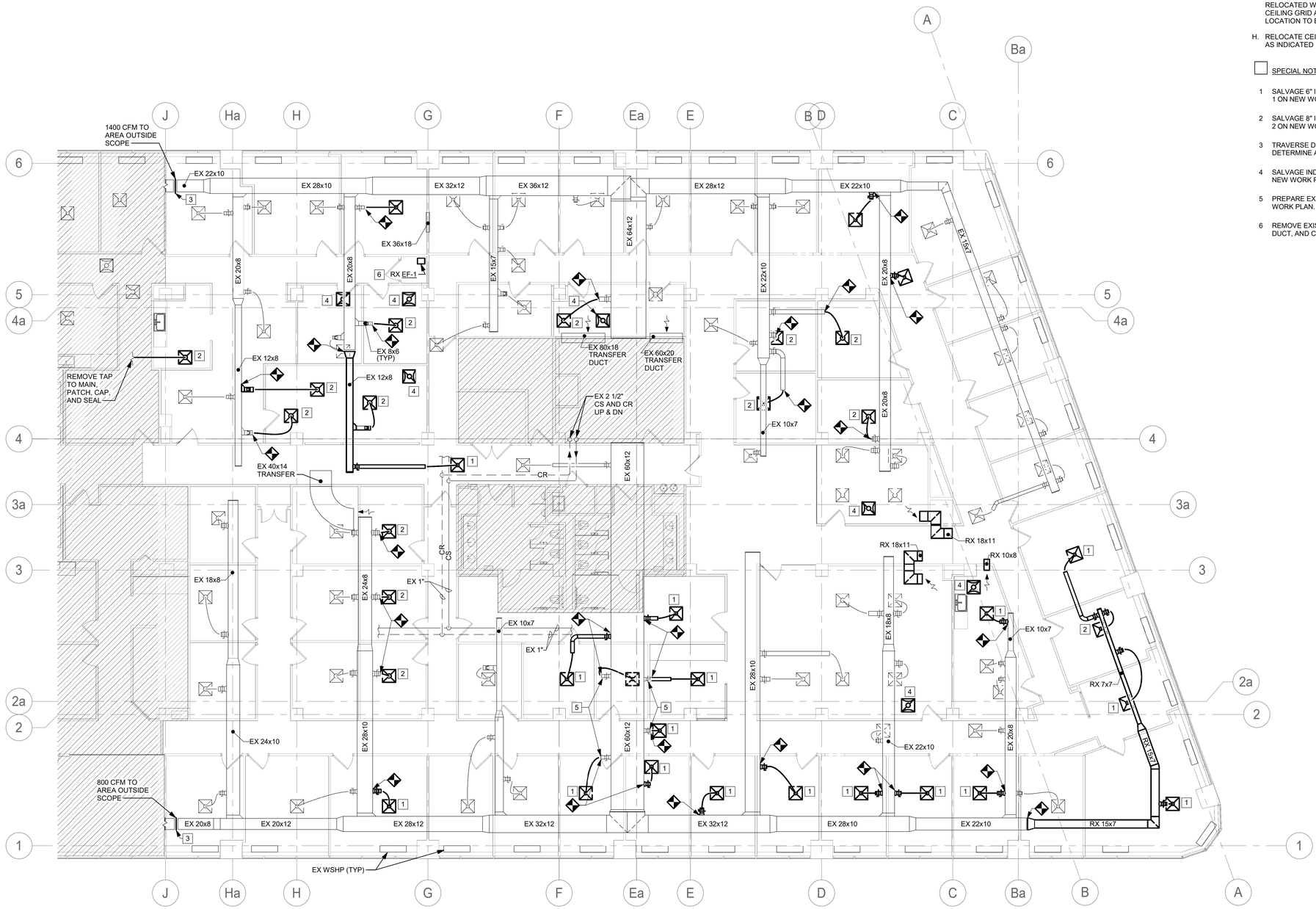
REVISION #	DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	MECHANICAL LEGEND
WORKING STAFF	TAS (DESIGNED BY) · AEL (DRAWN BY) · TAS (CHECKED BY)
SHEET NO.	19 OF 75
	M-001SH (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)

4/16/2025 2:01:15 PM
M-001SH BY Approver 04/18/25 FINAL CONSTRUCTION DOCS



1 MECHANICAL PLAN - PARTIAL LEVEL 4 - NORTH - DEMOLITION
MD101DP 1/8" = 1'-0"

DRAWING NOTES:

A. REFER TO DRAWING M-001SH FOR SYMBOLS, LEGEND, ABBREVIATIONS, AND DRAWING CONVENTIONS.

B. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND AVAILABLE DOCUMENTATION. VERIFY ALL EXISTING CONDITIONS WHETHER INDICATED OR NOT.

C. COORDINATE DEMOLITION WORK WITH NEW WORK CONSTRUCTION.

D. PROVIDE FILTERS ON OPEN DUCTWORK FROM AREA OF WORK FOR DURATION OF CONSTRUCTION.

E. WHERE DUCT BRANCHES/TAPS ARE INDICATED TO BE REMOVED AND NOT REPLACED, REMOVE BACK TO MAIN, PATCH, CAP, AND SEAL AIR-TIGHT. REPAIR INSULATION TO MATCH EXISTING CONDITIONS.

F. CONDUCT PRECONSTRUCTION TESTING FOR SUPPLY DUCTWORK. MEASURE THE AIRFLOW VOLUME, SUPPLY AIR TEMPERATURE, AND STATIC PRESSURE. PROVIDE A REPORT WITH THESE VALUES TO THE COTR.

G. CEILINGS WITHIN PROJECT AREA TO BE REPLACED. ALL CEILING-MOUNTED AIR DEVICES THAT ARE NOT SHOWN TO BE REMOVED OR RELOCATED WILL NEED TO BE REMOVED FROM THE DEMOLISHED CEILING GRID AND PLACED WITHIN THE NEW GRID IN CLOSEST TILE LOCATION TO EXISTING CONDITION. REFER TO NEW WORK PLAN.

H. RELOCATE CEILING MOUNTED AIR DEVICES MARKED FOR DEMOLITION AS INDICATED IN NEW WORK PLAN.

SPECIAL NOTES:

1 SALVAGE 6" INLET DIFFUSER FOR RELOCATION. SEE SPECIAL NOTE 1 ON NEW WORK PLAN.

2 SALVAGE 8" INLET DIFFUSER FOR RELOCATION. SEE SPECIAL NOTE 2 ON NEW WORK PLAN.

3 TRAVERSE DUCTWORK DURING PRE-CONSTRUCTION TAB TO DETERMINE AIRFLOW AND STATIC PRESSURE.

4 SALVAGE INDICATED RETURN AIR DEVICE FOR RELOCATION. SEE NEW WORK PLAN FOR NEW LOCATION.

5 PREPARE EXISTING TAP FOR NEW CONNECTION. REFER TO NEW WORK PLAN.

6 REMOVE EXISTING CEILING-MOUNTED EXHAUST FAN, ASSOCIATED DUCT, AND CONTROLS.

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PROJECT NORTH
TRUE NORTH

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
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Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	MECHANICAL PLAN – PARTIAL LEVEL 4 – NORTH – DEMOLITION
WORKING STAFF	TAS (DESIGNED BY) · AEL (DRAWN BY) · TAS (CHECKED BY)
SHEET NO.	20 OF 75
	MD 101 DP (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)

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MD101DP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

DRAWING NOTES:

A. REFER TO DRAWING M-001SH FOR SYMBOLS, LEGEND, ABBREVIATIONS, AND DRAWING CONVENTIONS.

B. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND AVAILABLE DOCUMENTATION. VERIFY ALL EXISTING CONDITIONS WHETHER INDICATED OR NOT.

C. LOCATE THERMOSTATS ADJACENT TO SWITCH PLATES WHERE POSSIBLE. VERIFY LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION TO AVOID CONFLICTS WITH BUILT-INS OR SYSTEMS FURNITURE OR DESIGN ELEMENTS.

D. BALANCE SUPPLY AIR SYSTEMS AT EACH DEVICE TO AIRFLOWS INDICATED. BALANCE THE TWO SUPPLY DUCT BRANCHES LEAVING THE AREA OF WORK TO THEIR PRE-CONSTRUCTION AIRFLOWS TO ENSURE NEW WORK DOES NOT IMPACT OTHER PORTIONS OF THE BUILDING.

E. NEW FLEXIBLE DUCT LENGTHS SHALL NOT EXCEED 6 FEET.

F. CEILINGS WITHIN PROJECT AREA TO BE REPLACED. ALL CEILING-MOUNTED AIR DEVICES THAT ARE NOT SHOWN TO BE REMOVED OR RELOCATED WILL NEED TO BE REMOVED FROM THE DEMOLISHED CEILING GRID AND PLACED WITHIN THE NEW GRID IN CLOSEST TILE LOCATION TO EXISTING CONDITION.

SPECIAL NOTES:

1 RELOCATED 6" INLET DIFFUSER FROM DEMOLITION STAGE AND NEW FLEX DUCT CONNECTION.

2 RELOCATED 8" INLET DIFFUSER FROM DEMOLITION STAGE AND NEW FLEX DUCT CONNECTION.

3 EXISTING DIFFUSER MAY BE REUSED. NEW CONNECTION TO MAIN REQUIRED.

4 APPROXIMATE AIRFLOW TO ADJACENT AREA INDICATED. BALANCE TO PRE-CONSTRUCTION TESTING AIRFLOW.

4 1400 CFM TO AREA OUTSIDE SCOPE

4 800 CFM TO AREA OUTSIDE SCOPE

EX WSHP (TYP)

1 MECHANICAL PLAN - PARTIAL LEVEL 4 - NORTH - NEW WORK
M-101FP 1/8" = 1'-0"

4/16/2025 2:01:49 PM
M-101FP BY TAS 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA · THOMAS SYVERSON · PE4000109 · MECHANICAL · PROFESSIONAL ENGINEER
STAMP

PROJECT NORTH
TRUE NORTH

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

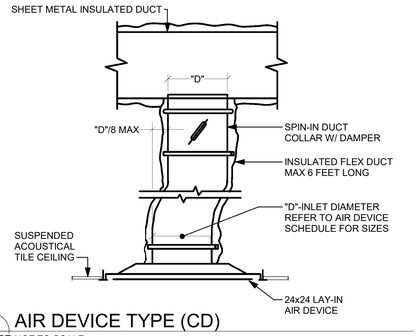
DATE	SUBMISSION
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Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

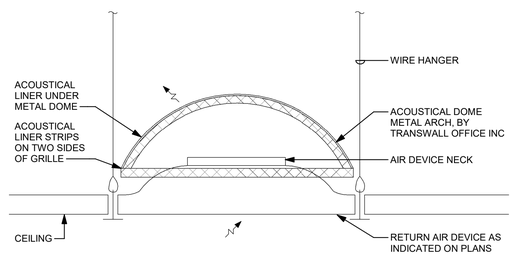
BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	MECHANICAL PLAN – PARTIAL LEVEL 4 – NORTH – NEW WORK
WORKING STAFF	TAS (DESIGNED BY) · AEL (DRAWN BY) · TAS (CHECKED BY)
SHEET NO.	21 OF 75
	M – 101 FP (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)



1 AIR DEVICE TYPE (CD)
M-501DT NOT TO SCALE

NOTE:

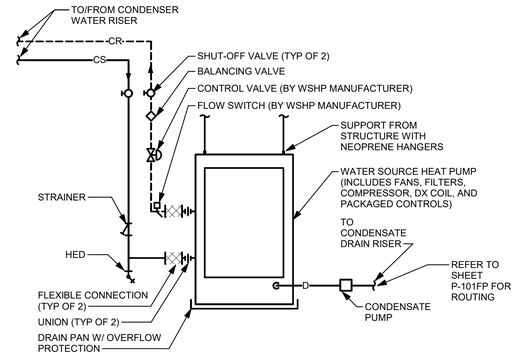
1. RECTANGULAR DUCT SHOWN; ROUND DUCT SIMILAR, WITH VOLUME DAMPER AFTER LOW LOSS TEE OFF SUPPLY MAIN.



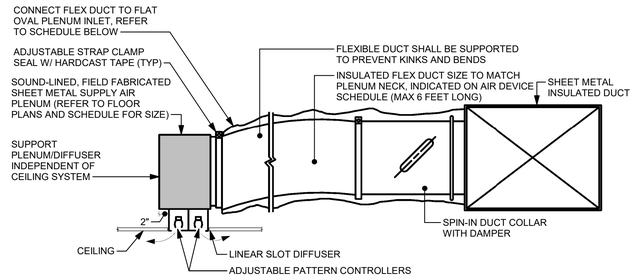
2 RETURN AIR DEVICES IN PLENUM CEILINGS WITH ACOUSTIC DOME (TYPE CR)
M-501DT NOT TO SCALE

NOTE:

1. SUPPORT AIR DEVICE AND DUCTWORK INDEPENDENT OF CEILING.
2. INSTALL ACOUSTIC DOMES SUCH THAT AIR OPENINGS ARE PERPENDICULAR TO ADJACENT DOMES OR TRANSFER DUCT OPENINGS.



5 WATER SOURCE HEAT PUMP
M-501DT NOT TO SCALE



NOTES:

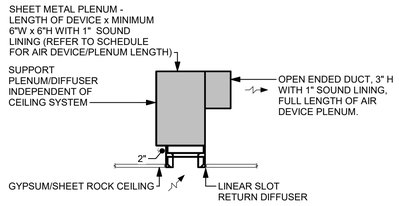
1. RECTANGULAR DUCT SHOWN; ROUND DUCT SIMILAR, WITH VOLUME DAMPER AFTER LOW LOSS TEE OFF SUPPLY MAIN.
2. AIR DEVICE TYPE (LS) SHOWN, (PSD) SIMILAR EXCEPT FACTORY FABRICATED PLENUM IS PROVIDED BY AIR DEVICE MANUFACTURER AND DEVICE DESIGNED FOR LAY-IN CEILINGS.

FLAT OVAL INLET SCHEDULE

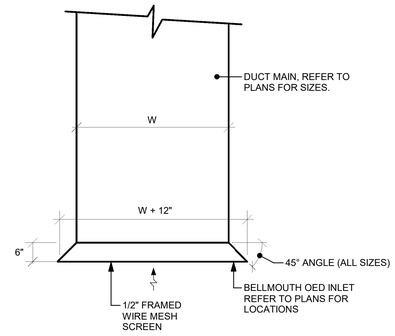


FLEX DUCT	A	B
6"ø	6 1/4"	5 1/4"
8"ø	9 3/8"	5 1/4"
10"ø	12 1/2"	5 1/4"
12"ø	14 1/8"	7 1/8"

3 LINEAR SLOT AIR DEVICE TYPE (LS)
M-501DT NOT TO SCALE



4 LINEAR RETURN AIR DEVICE IN PLENUM CEILINGS (TYPE LR)
M-501DT NOT TO SCALE



6 BELLMOUTH DUCT INLET
M-501DT NOT TO SCALE

NOTE:

1. DRAWINGS INDICATE OPEN ENDED WITH W x H DIMENSIONS. OVERALL DIMENSIONS OF BELLMOUTH ARE W+12" x H+12".

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

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THOMAS SYVERSEN — DISTRICT OF COLUMBIA — PE#0001036 — MECHANICAL — PROFESSIONAL ENGINEER

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

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Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

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ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	MECHANICAL DETAILS
WORKING STAFF	TAS (DESIGNED BY) / AEL (DRAWN BY) / TAS (CHECKED BY)
SHEET NO.	22 OF 75
	M-501DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

4/16/2025 2:01:27 PM
M-501DT BY: TAS 04/18/25 FINAL CONSTRUCTION DOCS

WATER SOURCE HEAT PUMPS

DESIG	NOMINAL TONNAGE	LOCATION	SERVICE	AIR FLOWRATE (CFM)	COOLING CAPACITY										HEATING CAPACITY								ELECTRICAL				REMARKS
					TOTAL (MBH)	SENS. (MBH)	HEAT REJECTED (MBH)	ENTERING AIR (°F)		LEAVING AIR (°F)		EWT (°F)	LWT (°F)	WATER FLOWRATE (GPM)	MAX WPD (FT HD)	MIN EER	TOTAL (MBH)	HEAT EXTRACTED (MBH)	ENTERING AIR DB (°F)	LEAVING AIR DB (°F)	EWT (°F)	LWT (°F)	WATER FLOWRATE (GPM)	MAX WPD (FT HD)	MIN COP	SYSTEM VOLTAGE	PH	HZ	MINIMUM CIRCUIT AMPACITY	
								DB	WB	DB	WB																		
WSHP-1	1.5	LEVEL 4 CORRIDOR	CONFERENCE ROOM 424	600	19.6	12.8	22.5	75	63	55	50	85	95	4.5	8.1	15.9	22.0	18.9	68	88	70	61.6	4.5	8.1	5.1	265	1	60	5.7	MODEL 018E
WSHP-2	1.0	LEVEL 4 CORRIDOR	CONFERENCE ROOM 442	400	11.7	7.6	15.0	75	63	55	50	85	95	3.0	8.5	13.5	15.2	12.6	68	88	70	61.6	3.0	8.5	4.3	265	1	60	8.2	MODEL 012E

AIR DEVICES

DESIG	TYPE (SEE SPEC)	SERVICE	AIRFLOW RANGE		NOMINAL SIZE (IN)	INLET/NECK SIZE (IN)	REMARKS
			MIN CFM	MAX CFM			
1	CD	SUPPLY	0	100	24 x 24	6"ø	
2	CD	SUPPLY	105	200	24 x 24	8"ø	
3	LS	SUPPLY	0	100	48"L	6"	
4	CR	RETURN	105	205	24 x 24	8"ø	
5	CR	RETURN	505	600	24 x 24	14"ø	
6	LR	RETURN	0	200	48"L	6"	

DUCT SILENCERS

NOTES:

1. SCHEDULED SILENCER LENGTHS ARE MINIMUMS.
2. SCHEDULED PRESSURE DROPS INCLUDE UPSTREAM AND DOWNSTREAM FACTORS FOR ACTUAL LOCATION OF SILENCER.

DESIG	SERVICE	SIZE (IN) LxWxH	AIRFLOW (CFM)	MAX APD (IN WG)	DYNAMIC INSERTION LOSS (dB)								REMARKS
					63HZ	125HZ	250HZ	500HZ	1,000HZ	2,000HZ	4,000HZ	8,000HZ	
DS-1	WSHP-1	36x12x10	600	0.30	3	6	14	26	38	32	23	15	
DS-2	WSHP-2	36x12x10	400	0.30	3	6	14	26	38	32	23	15	

MECHANICAL SPECIFICATIONS

1. GENERAL MECHANICAL:
   A. ALL MATERIALS, EQUIPMENT, ETC. PROVIDED BY THE GENERAL CONTRACTOR AND/OR HIS SUBCONTRACTORS SHALL BE WARRANTED AND GUARANTEED TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF TWO (2) YEARS FROM THE DATE OF SUBSTANTIAL OF COMPLETION AND ACCEPTANCE OF WORK BY OWNER. ANY DEFECTS IN WORKMANSHIP, MATERIALS, OR PERFORMANCE WHICH APPEAR WITHIN THE GUARANTEE PERIOD SHALL BE CORRECTED BY THE CONTRACTOR WITHOUT COST TO THE OWNER, WITHIN A REASONABLE TIME, TO BE SPECIFIED BY OWNER. IN DEFAULT THEREOF, OWNER MAY HAVE SUCH WORK DONE AND CHARGE THE COST OF SAME TO THE CONTRACTOR. IN ADDITION TO THE ABOVE STATEMENT THE WARRANTY/GUARANTEE PERIOD SHALL ALSO INCLUDE ALL LABOR COST RELATED TO ALL WARRANTY WORK. FOR COMPRESSORIZED EQUIPMENT INCLUDE AN ADDITIONAL THREE (3) YEAR WARRANTY/GUARANTEE PERIOD FOR A TOTAL OF FIVE (5) YEARS.
   B. PATCHING OF AREAS DISTURBED BY INSTALLATION OF NEW WORK AND/OR REQUIRED DEMOLITION SHALL MATCH EXISTING ADJACENT SURFACES AS TO MATERIAL, TEXTURE, AND COLOR.
   C. SEAL PIPING AND DUCTWORK PENETRATIONS THROUGH FULL-HEIGHT WALLS TO MAINTAIN ACOUSTIC SEPARATION ABOVE CEILINGS, MAINTAIN INDICATED FIRE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT PIPE PENETRATIONS. SEAL PIPE PENETRATIONS WITH FIRESTOP MATERIALS.
   D. CONTRACTOR SHALL PROVIDE START-UP SERVICE FOR NEW EQUIPMENT, USING MANUFACTURER'S START-UP FORMS, VERIFYING OPERATION AND FUNCTION. PROVIDED COMPLETED FORMS TO COTR FOR RECORD.

2. TESTING AND BALANCING:
   A. TEST AND BALANCE AIR SYSTEMS IN ACCORDANCE WITH AABC STANDARDS, AND SUBMIT A WRITTEN REPORT OF EACH TEST TO THE COTR.
   B. PROVIDE PRE-CONSTRUCTION AIRFLOW READINGS OF ALL OUTLETS AND TRAVERSES WHERE INDICATED ON PLANS, AS WELL AS SYSTEM TOTAL AIRFLOW AND STATIC PRESSURE AT UNIT DISCHARGE AND WHERE INDICATED ON PLANS. SUBMIT TO COTR.
   C. BALANCE EACH SCHEDULED NEW AND EXISTING AIR DEVICE WITH INDICATED AIRFLOW TO +/- 10% OF STATED FLOW.
   D. BALANCE EACH HYDRONIC SYSTEM (NEW WATER-SOURCE HEAT PUMPS) TO +/- 5% OF SCHEDULED FLOW.
   E. CONTRACTOR SHALL COORDINATE AND SCHEDULE THE WORK OF THE TEST & BALANCE SUBCONTRACTOR.

3. IDENTIFICATION FOR MECHANICAL:
   A. EQUIPMENT NAMEPLATES SHALL BE PLASTIC, WITH DATA ENGRAVED WITH WHITE LETTERING ON A BLACK BACKGROUND, FOR PERMANENT ATTACHMENT ON EQUIPMENT. INCLUDE UNIT DESIGNATION MATCHING SCHEDULE. MINIMUM SIZE SHALL BE 2-1/2-INCH BY 3/4-INCH, WITH 1/4-INCH HIGH LETTERS.
   B. PROVIDE SELF-ADHESIVE PIPE LABELS WITH DIRECTIONAL ARROWS SPACED AT MAXIMUM 25-FOOT INTERVALS, AND WITHIN EACH SEPARATE ROOM. LABELS FOR CONDENSER WATER PIPING SHALL BE GREEN WITH WHITE LETTERING.

4. MECHANICAL INSULATION:
   A. SUPPLY DUCTWORK SHALL BE INSULATED WITH 2" THICK MINERAL-FIBER BLANKET, MIN R-6, WITH FSK JACKET AND VAPOR RETARDER EQUAL TO MICROLITE BY JOHNS MANVILLE. FULLY TAPE AND SEAL JOINTS TO MAINTAIN CONTINOUS VAPOR BARRIER.
   B. CONDENSER WATER PIPING SHALL BE INSULATED WITH 1" THICK PRE-FORMED MINERAL-FIBER BLANKETWITH ALL-SERVICE JACKET. PROVIDE PRE-FORMED PVC COVERS AT ELBOWS.

5. METAL DUCTS:
   A. RECTANGULAR DUCTS SHALL BE FABRICATED IN ACCORDANCE WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE", CHAPTER 2 "RECTANGULAR DUCTS" (LATEST EDITION) AND COMPLYING WITH REQUIREMENTS FOR METAL THICKNESS, REINFORCING TYPES AND INTERVALS, TIE-ROD APPLICATIONS, AND JOINT TYPES, INTERVALS, AND SUPPORTS.
   B. ROUND SPIRAL DUCTS SHALL BE FABRICATED IN ACCORDANCE WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE", CHAPTER 3, "ROUND, OVAL, AND FLEXIBLE DUCT" (LATEST EDITION) AND COMPLYING WITH REQUIREMENTS FOR METAL THICKNESS, REINFORCING TYPES AND INTERVALS, TIE-ROD APPLICATIONS, AND JOINT TYPES, INTERVALS, AND SUPPORTS FOR ROUND DUCTS.
   C. DUCTWORK SHALL BE G90 GALVANIZED STEEL CONSTRUCTION WITH FORMED ON FLANGES OR SLIDE ON FLANGES BY DUCTMATE OR EQUAL FOR SUPPLY DUCTWORK; TRANSFER DUCTWORK MAY USE SLIP-AND-DRIVE CONNECTIONS AT CONTRACTOR'S OPTION.
   D. SUPPLY DUCTWORK SHALL BE SMACNA PRESSURE CLASS +2" W.C., AND SMACNA SEAL CLASS A.
   E. TRANSFER DUCTWORK SHALL BE SMACNA PRESSURE CLASS +1" W.C.
   F. DUCT LINER SHALL BE 1" THICK FIBROUS-GLASS LINER WITH CLOTH FACE SIMILAR TO OWENS CORNING QUIETER DUCT LINER, MIN R-3.5.

6. INSULATED FLEXIBLE DUCTS:
   A. INSULATED, FLEXBILE DUCT: UL 181, CLASS 1 DUCT COMPLYING WITH NFPA 90A. FLEXIBLE AIR CONNECTORS SHALL NOT BE ACCEPTABLE. MANUFACTURERS: FLEXMASTER, THERMAFLEX, WIREBOLD, OR CLEVAFLEX.

7. AIR DUCT ACCESSORIES:
   A. ROUND MANUAL VOLUME DAMPERS SHALL BE SINGLE BLADE WITH STANDARD LEAKAGE RATING. DAMPER BLADES, AXLES, AND TIE BARS SHALL BE GALVANIZED STEEL. DAMPER SIZE SHALL MATCH DUCT RUNOUT TO INDIVIDUAL AIR DEVICE. COMBINATION CONCIAL TAP / DAMPER ASSEMBLY ("SPIN-IN" FITTINGS) ARE ACCEPTABLE.
   B. RECTANGULAR MANUAL VOLUME DAMPERS SHALL BE SINGLE BLADE WITH STANDARD LEAKAGE RATING. DAMPER BLADES, AXLES, AND TIE BARS SHALL BE GALVANIZED STEEL. DAMPER SIZE SHALL MATCH DUCT RUNOUT TO INDIVIDUAL AIR DEVICE.
   C. DUCT SILENCERS SHALL BE FACTORY-FABRICATED G90 GALVANIZED SHEET METAL, MINIMUM 22-GAUGE, RECTANGULAR WITH SPLITTERS OR BAFFLES. FILL MATERIAL SHALL BE INERT AND VERMIN-PROOF FIBROUD MATERIAL WITH FIBERGLASS CLOTH LINING. SILENCERS SHALL BE MANUFACTURED BY VIBRO-ACOUSTICS OR APPROVED EQUAL.

8. DIFFUSERS:
   A. AIR DEVICE TYPE CD AND CR SHALL BE 0.034 INCH THICK STEEL, 24X24 INCH FACE, SINGLE PIECE REMOVABLE PERFORATED PANEL WITH 4-WAY DISCHARGE PATTERN (SUPPLY ONLY) AND BAKED ENAMEL FINISH (COLOR SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD LIST). BASIS OF DESIGN: TITUS PAS MODEL. PROVIDE ACOUSTIC DOME, MANUFACTURERED BY TRANSWALL, FOR ALL NEW AND REUSED PERFORATED RETURN AIR DEVICES.
   B. AIR DEVICE TYPES "LS" AND "LR" SHALL HAVE ALUMINUM SHELL, PATTERN CONTROLLER AND TEES. 2-WAY DISCHARGE PATTERN AND BAKED ENAMEL FINISH (COLOR SELECTED BY ARCHITECT). SLOT WIDTH, SLOT QUANTITY, AND LENGTH AS SCHEDULED. BASIS OF DESIGN: TITUS ML-38, WITH ACCESSORIES PER DETAIL.

9. ALTERATIONS AND REMOVAL:
   A. SCHEDULE AND PERFORM DEMOLITION WORK AS REQUIRED TO KEEP EXISTING BUILDING SERVICES AND SYSTEMS IN OPERATION AND TO MINIMIZE DISRUPTION TO OCCUPANTS. WHEN SHUTDOWN OF SYSTEM OR SERVICE IS REQUIRED COORDINATE TIME WITH OWNER.
   B. REMOVE WORK BY HAND AS FAR AS POSSIBLE. POWER DRIVEN EQUIPMENT, WHEN REQUIRED, SHALL BE USED SUBJECT TO THE APPROVAL OF THE OWNER.
   C. CAP, SEAL, OR PLUG ALL ABANDONED WORK. REMOVE TO THE EXTENT REQUIRED TO ALLOW CONCEALMENT BEHIND NEW FINISH MATERIALS.
   D. WHERE EQUIPMENT OR FIXTURES ARE INDICATED TO BE REMOVED, REMOVE ALL RELATED SUPPORTS, CURBS, HANGERS, PIPING, WIRING, DUCTS, CONTROLS, INSULATION, ETC., UNLESS NOTED OTHERWISE.
   E. EXISTING MECHANICAL EQUIPMENT, PIPING AND DUCTWORK, ETC., AFFECTED BY REMOVAL OR NEW WORK INSTALLATION AND REQUIRED TO REMAIN IN SERVICE SHALL BE REINSTALLED OR SUPPORTED AS REQUIRED IN ACCORDANCE WITH NEW WORK SPECIFICATION. ALL WORK SHALL BE COMPLETED TO THE OWNER'S SATISFACTION.
   F. EXISTING CONDITIONS INDICATED (I.E., DUCTWORK, PIPING, EQUIPMENT, ETC.), WERE OBTAINED FROM AVAILABLE RECORD DRAWINGS AND LIMITED FIELD SURVEY AND ARE NOT WARRANTED TO BE COMPLETE OR CORRECT. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL DUCTWORK, PIPING, ETC., IN THE FIELD PRIOR TO STARTING OR FABRICATING NEW WORK.
   G. SHOULD THE CONTRACTOR ENCOUNTER ANY EXISTING DUCTWORK, PIPING, CONDUITS OR OTHER OBSTRUCTIONS WHICH INTERFERES WITH THE NEW WORK, CONTRACTOR SHALL REMOVE, REARRANGE OR RELOCATE SAME AS REQUIRED TO THE SATISFACTION OF THE OWNER, OR CONTRACTOR SHALL REARRANGE OR RELOCATE THE WORK IN ACCORDANCE WITH INSTRUCTIONS PROVIDED BY THE OWNER. ALL WORK SHALL BE DONE AT NO COST TO THE OWNER.
   H. REFER TO DRAWINGS FOR REMOVAL REQUIREMENTS AND NOTES.
   I. DELIVER TO OWNER AT LOCATION DESIGNATED BY CONTRACTOR ALL MATERIALS AND EQUIPMENT DESIGNATED OR DIRECTED BY OWNER TO BE SALVAGED. ALL OTHER MATERIALS OR EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE.

10. HANGERS AND SUPPORTS
    A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AN ADEQUATE PIPE SUSPENSION SYSTEM IN ACCORDANCE WITH RECOGNIZED ENGINEERING PRACTICES, USING STANDARD, COMMERCIALLY ACCEPTED PIPE HANGERS AND SUSPENSION EQUIPMENT. THE DESIGN OF ALL HANGERS AND SUPPORTS SHALL BE IN ACCORDANCE WITH THE PROVISION OF CURRENT ISSUE OF MSS-SP-58 AND SP-69 DOCUMENT DEVELOPED AS A STANDARD BY THE MANUFACTURERS' STANDARDIZATION SOCIETY.
    B. DUCT HANGERS AND SUPPORTS:
       i. CADMIUM-PLATED STEEL HANGER RODS AND NUTS.
       ii. COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," TABLE 5-1, "RECTANGULAR DUCT HANGERS MINIMUM SIZE," AND TABLE 5-2, "MINIMUM HANGER SIZES FOR ROUND DUCT."
       iii. STEEL CABLES: GALVANIZED STEEL COMPLYING WITH ASTM A603.
       iv. STEEL CABLE END CONNECTIONS: CADMIUM-PLATED STEEL ASSEMBLIES WITH BRACKETS, SWIVEL, AND BOLTS DESIGNED FOR DUCT HANGER SERVICE; WITH AN AUTOMATIC LOCKING AND CLAMPING DEVICE.
       v. DUCT ATTACHMENTS: SHEET METAL SCREWS, BLIND RIVETS, OR SELF-TAPPING METAL SCREWS; COMPATIBLE WITH DUCT MATERIALS.
       vi. TRAPEZE AND RISER SUPPORTS: GALVANIZED STEEL SHAPES AND PLATES.
    C. STAINLESS-STEEL PIPE HANGERS AND SUPPORTS:
       i. MSS SP-58, TYPES 1 THROUGH 58, STAINLESS-STEEL, FACTORY-FABRICATED COMPONENTS. CONTINUOUS-THREAD ROD, NUTS, AND WASHER MADE OF STAINLESS-STEEL.
    D. COPPER PIPE HANGERS:
       MSS SP-58, TYPES 1 THROUGH 58, COPPER-COATED STEEL, FACTORY-FABRICATED COMPONENTS. CONTINUOUS-THREAD ROD, NUTS, AND WASHER MADE OF COPPER-COATED STEEL.
    E. ON PIPING SYSTEMS REQUIRING INSULATION, HANGERS AND SUPPORTS SHALL BE INSTALLED EXTERNAL TO THE INSULATION MATERIAL. PROVIDE SHEET METAL SADDLES BETWEEN HANGERS AND INSULATED PIPING. MINIMUM SADDLE LENGTH SHALL BE 12".

11. PIPING, VALVES, AND APPURTENANCES
    A. CONDENSER WATER PIPING: SEAMLESS COPPER WATER TUBE, ASTM B88, TYPE L, HARD TEMPERED WITH WROUGHT COPPER SOLDER JOINT FITTINGS, 150 LB. WATER, ANSI B16.22. JOINTS SHALL BE SOLDERED, ASTM B32 TIN-ANTIMONY 95-5.
    B. INSTALL ALL PIPING SYSTEMS LEVEL AND PARALLEL TO THE BUILDING WALLS, AND PARTITIONS. WHERE HORIZONTAL PIPING OFFSETS TO CLEAR OBSTRUCTIONS SUCH AS DUCTWORK, STRUCTURAL MEMBERS AND WORK INSTALLED BY OTHER TRADES PROVIDE DRAIN VALVES AND AIR VENTS IN LOCATIONS WHERE THEY CAN BE ACCESSED.
    C. ISOLATION VALVES: BALL VALVES SHALL BE USED FOR SHUT-OFF SERVICE. BALL VALVES SHALL BE OF THE 2-PIECE DESIGN SUITABLE FOR 250 PSIG WATER. VALVES SHALL COMPRISE OF ASTM B254 BRONZE BODY WITH THREADED OR SOLDERED END CONNECTIONS, 316 STAINLESS STEEL STANDARD PORT BALL, STAINLESS STEEL STEM, REINFORCED TEFLON SEAT AND THRUST WASHER, TEFLON BODY SEAL, MULTIPLE PIECE V-RING OR GRAPHITE STEM PACKING, AND THREADED HEXAGONAL GLAND FOLLOWER. BALL VALVES SHALL BE AS MANUFACTURED BY MILWAUKEE, APOLLO, JAMESBURY OR WORCESTER. STEM SHALL BE BLOWOUT PROOF. STEM PACKING SHALL BE EXTERNALLY ADJUSTABLE TO COMPENSATE FOR WEAR. VALVE SHALL BE EQUIPPED WITH VINYL COVERED LEVER HANDLE WHICH SHALL INDICATE POSITION OF BALL ORIFICE AND SHALL HAVE STOPS FOR FULLY OPEN AND CLOSED POSITION. LEVER SHALL BE PROVIDED WITH LOCKABLE DEVICE WHICH CAN LOCK VALVE IN EITHER THE OPEN OR CLOSED POSITION. PROVIDED EXTENTION NECKS FOR INSULATED PIPING. VALVE SHALL BE SUITABLE FOR FLOW IN EITHER DIRECTION AND SHALL BE LEAK PROOF AT DESIGN OPERATING CONDITIONS IN THE OPEN OR SHUT POSITION.
    D. AUTOMATIC BALANCING VALVE: CARTRIDGE-TYPE WITH BRONZE BODY AS MANUFACTURED BY FLOW DESIGN, GRISWOLD CONTROLS, OR NUTECH HYDRONIC SPECIALTY PRODUCTS. PISTON-SPRING ASSEMBLY SHALL BE STAINLESS STEEL, SELF-CLEANING, AND REMOVABLE. PROVIDE WITH INTEGRAL BALL VALVE, UNION, AND P/T PORTS.
    E. STRAINER: Y-PATTERN-TYPE, BRONZE BODY, 125 PSIG CWP RATED, WITH END CONNECTIONS MATCHING ADJACENT PIPING. SCREEN SHALL BE STAINLESS STEEL, 60-MESH WITH 30.5-PERCENT OPEN AREA.
    F. DRAIN/BLOWDOWN VALVES: HOSE END TYPE AND SHALL BE PROVIDED AT LOW POINTS OF ALL PIPING SYSTEMS AND WHERE INDICATED. VALVES SHALL BE 3/4-INCH MINIMUM BALL TYPE VALVES AS SPECIFIED ABOVE. PROVIDE EACH DRAIN VALVE WITH THREADED CAP AND CHAIN.
    G. CHECK VALVES: UTILIZE SPRING LOADED, LIFT DISC CHECK VALVES AT PUMP DISCHARGES. VALVES SHALL BE TYPE III, GLOBE STYLE LIFT-DISC CHECKS WITH CAST IRON BODY FLANGED ENDS, AND CENTER GUIDED BRONZE PLUG, BUSHING AND SEAT RING, AS MANUFACTURED BY MUELLER STEAM SPECIALTY, OR MILWAUKEE, EQUAL TO MUELLER MODEL 103M-AP.
    H. FLEXIBLE HOSE ASSEMBLY: FLEXIBLE HOSE ASSEMBLIES SHALL BE THE SAME DIAMETER AS THE PIPING IT CONNECTS TO AND HAVE AN OUTER STAINLESS STEEL BRAIDING, EPDM RUBBER LINER, DOUBLE CRIMP STAINLESS STEEL FERRULES AND A CONE SEAT SWIVEL END WITH MNPT ADAPTORS WITH THREADED CONNECTIONS AND BE A MAXIMUM LENGTH OF TWELVE (12) INCHES. HOSE DIAMETERS LESS THAN THE PIPE DIAMETER WILL NOT BE ACCEPTABLE. HOSES WITH PIPE CLAMPS AT EACH END ARE NOT ACCEPTABLE.
    I. VALVES SHALL BE PLACED IN SUCH MANNER AS TO BE EASILY ACCESSIBLE FOR SMOOTH AND EASY OPERATION AND MAINTENANCE.
    J. SHUT OFF VALVES SERVING EQUIPMENT AND/OR CONTROL VALVES SHALL BE INSTALLED FULL SIZE AT THE EQUIPMENT CONNECTION.

12. WATER SOURCE HEAT PUMP
    A. WATER-SOURCE HEAT PUMP SHALL BE COMPLETE SYSTEM COMPRISED OF FAN, COMPRESSOR, REFRIGERATION CIRCUIT, FILTERS, WIRING AND CONTROLS WITHIN HEAVY-GAUGE GALVANIZED STEEL INSULATED ENCLOSURE IN HORIZONTAL CONFIGURATION WITH LEFT RETURN, STRAIGHT FREE-DISCHARGE SUPPLY AIR AS MANUFACTURED BY CLIMATEMASTER (BASIS OF DESIGN: TRANQUILITY TC MODEL), DAIKIN, OR TRANE. MANUFACTURER SHALL WARRANTY EQUIPMENT FOR A MINIMUM OF 12 MONTHS FROM START-UP. UNIT SHALL BE ARI CERTIFIED AND GAPABLE OF OPERATING WITH CONDENSER WATER TEMPERATURES OF 20 DEG F TO 120 DEG F. PROVIDE INLET AND OUTLET FLANGES FOR DUCTED UNITS.
    B. COMPRESSOR SHALL BE LOCATED IN SEGREGATED COMPARTMENT FROM THE FAN COMPARTMENT WITH MINIMUM 1/2-INCH INTERNAL INSULATION. COMPRESSOR SHALL BE HIGH-EFFICIENCY SCROLL OR ROTARY TYPE, USING HFC-410A REFRIGERANT, WITH INTERNAL VIBRATION ISOLATION. REFRIGERATION SYSTEM SHALL BE COMPLETE WITH EXPANSION VALVE, WATER-COOLED CONDENSING UNIT WITH FLOW SWITCH, AND REFRIGERANT TO AIR HEAT EXCHANGER COMPRISED OF COPPER TUBES AND ALUMINUM FINS. REFRIGERANT CIRCUIT CONTROL SAFETIES SHALL INCLUDE HIGH/LOW PRESSURE, AND LOW AIR AND WATER COIL TEMPERATURE SENSORS.
    C. FAN AND MOTOR ASSEMBLY SHALL BE INTERNALLY ISOLATED WITH RUBBER GROMMETS AND FAN SHALL BE ECM TYPE WITH VARIABLE SPEED BALL BEARING PERMANENTLY LUBRICATED MOTOR WITH THERMAL OVERLOAD PROTECTION. FAN COMPARTMENT SHALL BE INTERNALLY INSULATED WITH FOIL FACING.
    D. UNIT SHALL HAVE FILTER RAILS WITH 1-INCH MERV-8 FILTERS FACTORY INSTALLED WITH FACTORY UNIT-MOUNTING BRACKETS. PROVIDE ONE SPARE SET OF FILTERS WITH FURNISHED UNIT.
    E. DRAIN PAN SHALL BE FULLY INSULATED STAINLESS STEEL WITH SOLID-STATE ELECTRONIC CONDENSATE OVERFLOW PROTECTION PROVIDED TO STOP UNIT OPERATION AND ALARM IN OVERFLOW CONDITION (REFER TO BUILDING CONTROLS SECTION).
    F. ELECTRICAL SYSTEM SHALL BE SINGLE POINT CONNECTION WITH INTERNAL TRANSFORMER, FACTORY WIRING, TERMINAL BLOCK FOR THERMOSTAT WIRING, AND SOLID-STATE CONTROLLER FOR COMPLETE UNIT OPERATION. UNIT SHALL BE FURNISHED WITH NON-FUSED MOTOR DISCONNECT.
    G. PROVIDE FACTORY CONTROLS PACKAGE WITH STANDARD UNIT SAFETIES AND BACNET MS/TP INTERFACE FOR REMOTE MONITORING AND ALARMS. PROVIDE SLOW-ACTING MOTORIZED CONDENSER WATER CONTROL VALVE (SHIPPED LOOSE, CONTRACTOR INSTALLED) FOR CONDENSER WATER CONTROL. PROVIDE WALL-MOUNTED THERMOSTAT WITH LED BACK-LIT SCREEN WITH TEMPERATURE DISPLAY, SET POINT ADJUSTMENT, AND DISPLAY OF ANY FAULTS/ALARMS.

13. CONDENSATE PUMPS
    A. PROVIDE PACKAGED UNITS BY LITTLE GIANT, HARTELL, BECKETT, OR MEPCO, WITH CORROSION-RESISTANT PUMP, PLASTIC TANK WITH COVER, AND AUTOMATIC CONTROLS. MINIMUM FLOW OF 1 GPM AT 10 FEET OF HEAD. 1/30 HP MOTOR, 120 V / 1 PH / 60 HZ. INCLUDE FACTORY OR FIELD INSTALLED CHECK VALVE AND HARD-WIRED ELECTRICAL CONNECTION. CONDENSATE PUMPS SHALL BE RATED FOR USE IN PLENUMS. PLASTIC TANK USED IN THE CONDENSATE PUMP PACKAGE SHALL BE TESTED AND COMPLY WITH UNDERWRITER'S LABORATORY UL STANDARD 2043 "FIRE TEST FOR HEAT AND VISIBLE SMOKE RELEASE FOR DISCRETE PRODUCTS AND THEIR ACCESSORIES INSTALLED IN AIR HANDLING SPACES."

14. BUILDING CONTROLS
    A. THE CONTROL SYSTEM SHALL CONNECT TO, SHARE POINTS WITH, AND COMMUNICATE WITH THE EXISTING AUTOMATED LOGIC SYSTEM AND SHALL INCLUDE ALL REQUIRED CONTROLLERS, SENSORS, ACTUATORS, NETWORK AND CONTROL WIRING, HARDWARE, SOFTWARE, PROGRAMMING, ETC., AS REQUIRED FOR A COMPLETE SYSTEM AND TO ACHIEVE THE SEQUENCES OF CONTROL DESCRIBED. ALL HARDWARE AND SOFTWARE SHALL BE STANDARD PRODUCTS OF THE MANUFACTURER. TEST AND DEMONSTRATE DDC CONTROL SYSTEM AS REQUIRED FOR OWNER'S ACCEPTANCE.
    B. SYSTEM SHALL BE INSTALLED BY AN ORGANIZATION REGULARLY ENGAGED IN THE INSTALLATION OF AUTOMATIC TEMPERATURE CONTROL SYSTEMS, AND SHALL BE AS APPROVED BY THE OWNER.
    C. MECHANICAL CONTRACTOR SHALL COORDINATE AND SCHEDULE WORK OF THE ATC SUBCONTRACTOR.
    D. PROVIDE ALL CONTROL AND SIGNAL WIRING AS REQUIRED. WIRING SHALL COMPLY WITH NEC AND ALL GOVERNING CODES. INSTALL ALL WIRING IN CONDUIT, MINIMUM 3/4-INCH. OBTAIN CONTROL POWER FROM SOURCE APPROVED BY OWNER. PROVIDE ALL TRANSFORMERS, RELAYS, ETC., REQUIRED. OPERATE CONTROLS AT MAXIMUM 120 VOLTS OR LESS. ALL SIGNAL AND COMMUNICATIONS WIRING SHALL BE PROPERLY SHIELDED AND GROUNDED.
    E. CONFERENCE ROOM WSHP SHALL COMMUNICATE WITH BAS FOR MONITORING AND ALARMS, HOWEVER WILL OPERATE BASED ON ITS INTERNAL CONTROLS TO MAINTAIN SPACE SET POINT SENSED BY UNIT-PROVIDED WALL-MOUNTED THERMOSTAT. SUPPLEMENTAL CONDITIONING UNITS FOR CONFERENCE ROOMS SHALL MAINTAIN ROOM TEMPERATURES BETWEEK 70 DEG F, AND 75 DEG F, ADJUSTABLE, FOR A 5 DEGREE DEADBAND BETWEEN HEATING AND COOLING OPERATION.
    F. PROVIDE FLOAT SWITCH IN WSHP DRAIN PANS, MONITORED BY THE BAS, TO DISABLE COOLING UPON DETECTION OF HIGH-WATER CONDITION. FAN SHALL CONITNUE TO OPERATE AND ALARM SHALL BE ANNUNCIATED THROUGH THE BAS.

15. CONSTRUCTION DUST CONTROL:
    A. PROVIDE PLASTIC COVERINGS FOR SUPPLY DUCT OPENINGS, AND MINIMUM MERV-8 CONSTRUCTION FILTERS FOR RETURN AND TRANSFER AIR PATHS TO MITIGATE CONSTRUCTION DUST MIGRATION.

16. SUBMITTALS:
    A. SUBMIT ALL SUBMITTALS, WHICH INCLUDES SHOP DRAWINS, PRODUCT DATA, RELATED OPERATION AND MAINTENANCE MANUALS, WARRANTY DOCUMENTATION AND ALL OTHER PERTINENT INFORMATION ELECTRONICALLY BY THE MANUFACTURER, TRADE CONTRACTORS, AND CONSTRUCTION MANAGER AS A "PDF" FILE TO THE OWNER TO DEMONSTRATE COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
    B. SUBMITTALS SHALL INCLUDE THE MANUFACTURER'S NAME, TRADE NAME, CATALOG MODEL OR NUMBER, NAMEPLATE DATA, SIZE, LAYOUT DIMENSIONS, CAPACITY, PROJECT SPECIFICATION AND PARAGRAPH REFERENCE, APPLICABLE PUBLICATION REFERENCES, YEARS OF SATISFACTORY SERVICE, AND OTHER INFORMATION NECESSARY TO ESTABLISH CONTRACT COMPLIANCE OF EACH ITEN THE CONTRACTOR PROPOSES TO FURNISH. SUBMITTAL SHALL CONFIRM EQUIPMENT FITS WITHIN AVAILABLE SPACE FOR INSTALLATION.
    C. PROVIDE SUBMITTALS TO THE OWNER OF THE FOLLOWING EQUIPMENT:
       1) DUCTWORK, INSULATION, AND ALL RELATED ACCESSORIES
       2) OVERHEAD WATER SOURCE HEAT PUMPS AND BAS TIE-IN (ATC SUBMITTAL)
       3) AIR DEVICES
    D. OWNER SHALL HAVE 2 WEEKS TO REVIEW AND PROVIDE ANY COMMENTS OR OBJECTIONS TO THE SUBMITTED EQUIPMENT.

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA · THOMAS SYVERSON · PE400010 · 4/18/25 · MECHANICAL · PROFESSIONAL ENGINEER

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GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION #	DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	MECHANICAL SCHEDULES AND SPECIFICATIONS
WORKING STAFF	DESIGNED BY: TAS · DRAWN BY: AEL · CHECKED BY: TAS
SHEET NO.	23 OF 75
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ABBREVIATIONS

ABBREV	ABBREVIATION
ABD	ABANDONED
ABV	ABOVE
A/C	AIR CONDITIONING
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
APPROX	APPROXIMATE
ARCH	ARCHITECT, ARCHITECTURAL
ARRG	ARRANGEMENT
AST	ABOVEGROUND STORAGE TANK
ATC	AUTOMATIC TEMPERATURE CONTROL
ATM	ATMOSPHERE
AVG	AVERAGE
AWT	AVERAGE WATER TEMPERATURE
BAS	BUILDING AUTOMATION SYSTEM
BWV	BACK WATER VALVE
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOP	BOTTOM OF PIPE
BTM	BOTTOM
BTUH	BRITISH THERMAL UNITS PER HOUR
BFP	BACKFLOW PREVENTER
°C	DEGREES CELSIUS
CAV	CONSTANT AIR VOLUME
CC	COOLING COIL
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
CO	CLEANOUT / CARBON MONXIDE
COMP	COMPRESSED
CONC	CONCRETE
CONN	CONNECTION, CONNECT
CONT	CONTINUATION
CP	CONDENSATE PUMP
CRAC	COMPUTER ROOM AIR CONDITIONER
CU FT	CUBIC FEET
CX	CONNECT TO EXISTING
CW	DOMESTIC COLD WATER PIPE
D	DRAIN OR DEPTH
DBL	DOUBLE
DCP	DIGITAL CONTROL PANEL
DDC	DIRECT DIGITAL CONTROL
DESIG	DESIGNATION
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNITS
DIA	DIAMETER
DN	DOWN
DW	DOMESTIC WATER
DWG	DRAWING
EFF	EFFICIENCY
EJ	EXPANSION JOINT
ELEC	ELECTRICAL, ELECTRIC
ELEV	ELEVATION OR ELEVATOR
EMD	END OF MAIN DRIP
ENT	ENTERING
ETC	ET CETERA
EW	EYE WASH
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EX	EXISTING
EXP	EXPOSED
°F	DEGREES FAHRENHEIT
F&T	FLOAT & THERMOSTATIC TRAP
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FL	FLOOR
FND	FOUNDATION DRAINAGE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FT HD	FEET OF HEAD PRESSURE
GA	GAGE
GAL	GALLON
GALV	GALVANIZED
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HEIGHT
HED	HOSE END DRAIN
HORIZ	HORIZONTAL
HP	HORSEPOWER
H.P.	HIGH PRESSURE
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HW	DOMESTIC HOT WATER PIPE
HWR	DOMESTIC HOT WATER RECIRCULATING PIPE
HZ	HERTZ
I.L.	INTERMEDIATE LANDING
IN	INCH OR INCHES
INV	INVERT ELEVATION
KVA	KILOVOLT AMPERES
KW	KILOWATT
L	LENGTH
LB(S)	POUND(S)
LF	LINEAR FEET
L.P.	LOW PRESSURE
LVG	LEAVING
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MECH	MECHANICAL
MBH	THOUSAND BTU'S PER HOUR
MFR	MANUFACTURER
MIN	MINIMUM
MO	MOTOR OPERATOR
MS	MOP SINK
MTD	MOUNTED
NAT	NATURAL
N.C.	NORMALLY CLOSED
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NO.	NUMBER
OC	ON CENTER
OFD	OVERFLOW DRAIN
OS&Y	OUTSIDE SCREW AND YOKE
PD	PRESSURE DROP
PF	POWER FACTOR
PG	PROPYLENE GLYCOL
PH	PHASE
PLBG	PLUMBING
PPH	POUNDS PER HOUR (STEAM)
PPM	PARTS PER MILLION
PRESS.	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI(G)	POUNDS PER SQUARE INCH (GAGE)
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
R	RADIUS
RAD	RADIATED
RD	ROOF DRAIN
REQ'D	REQUIRED
RL	RAINLEADER
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RX	REMOVE EXISTING
SF	SQUARE FEET
SH	SENSIBLE HEAT OR SHOWER
SPEC	SPECIFICATION/PROJECT MANUAL
SQ	SQUARE
SRD	SECONDARY (OVERFLOW) ROOF DRAIN
SRL	SECONDARY (OVERLFOW) RAIN LEADER
S/S	STAINLESS STEEL
STL	STEEL
STRUCT	STRUCTURAL
TEMP	TEMPERATURE
TH	TOTAL HEAT
TD	TRENCH DRAIN
TYP	TYPICAL
UON	UNLESS OTHERWISED NOTED
UST	UNDERGROUND STORAGE TANK
V	VOLTS
VA	VOLT AMPERES
VEL	VELOCITY
VFC	VARIABLE FREQUENCY CONTROLLER
VP	VENT PIPE
VTR	VENT THRU ROOF
W	WIDTH
WC	WATER COLUMN
W/	WITH
W/O	WITHOUT
WPD	WATER PRESSURE DROP

SYMBOLS

ø	DIAMETER
℄	CENTER LINE
	AREA DRAIN
	FLOOR DRAIN
	ROOF DRAIN/SECONDARY (OVERFLOW) ROOF DRAIN
	FLOOR SINK
	TRENCH DRAIN
XX.XX	INVERT ELEVATION
CO	CLEANOUT IN HORIZONTAL
CO	CLEANOUT IN VERTICAL
	DOMESTIC WATER BACKFLOW PREVENTER
	BACK WATER VALVE (ARROW INDICATES DIRECTION OF FLOW)
SA	SHOCK ABSORBER
HB	HOSE BIBB
WH	NON-FREEZE CONCEALED OUTLET WALL HYDRANT
	BOUNDARY LINE
SAN	SANITARY/WASTE PIPE
	VENT PIPE
HW	DOMESTIC HOT WATER PIPE (TEMP, IF INDICATED)
CW	DOMESTIC COLD WATER PIPE
	FLOW DIRECTION ARROW
	PIPE UP
	PIPE DOWN
	PIPE/DUCT CAP
	UNION
	FLANGED CONNECTION
	PIPE ANCHOR
	PIPE GUIDE
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	FLEXIBLE CONNECTION (PIPING)
/	SHUTOFF VALVE (IN HORIZONTAL / IN VERTICAL)
	THROTTLING VALVE
	MANUAL BALANCING VALVE
	AUTOMATIC BALANCING VALVE
	CHECK VALVE (ARROW INDICATES DIRECTION OF FLOW)
	PRESSURE REDUCING VALVE
	PRESSURE RELIEF VALVE
	HOSE END DRAIN
	PRESSURE GAGE WITH ISOLATION VALVE
	TEMPERATURE GAGE/THERMOMETER

SPECIFICATIONS

PLUMBING SPECIFICATIONS

1. GENERAL PLUMBING:
   - A. ALL MATERIALS, EQUIPMENT, ETC. PROVIDED BY THE GENERAL CONTRACTOR AND/OR HIS SUBCONTRACTORS SHALL BE WARRANTED AND GUARANTEED TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF TWO (2) YEARS FROM THE DATE OF SUBSTANTIAL OF COMPLETION AND ACCEPTANCE OF WORK BY OWNER. ANY DEFECTS IN WORKMANSHIP, MATERIALS, OR PERFORMANCE WHICH APPEAR WITHIN THE GUARANTEE PERIOD SHALL BE CORRECTED BY THE CONTRACTOR WITHOUT COST TO THE OWNER, WITHIN A REASONABLE TIME, TO BE SPECIFIED BY OWNER. IN DEFAULT THEREOF, OWNER MAY HAVE SUCH WORK DONE AND CHARGE THE COST OF SAME TO THE CONTRACTOR. IN ADDITION TO THE ABOVE STATEMENT THE WARRANTY/GUARANTEE PERIOD SHALL ALSO INCLUDE ALL LABOR COST RELATED TO ALL WARRANTY WORK.
   - B. PATCHING OF AREAS DISTURBED BY INSTALLATION OF NEW WORK AND/OR REQUIRED DEMOLITION SHALL MATCH EXISTING ADJACENT SURFACES AS TO MATERIAL, TEXTURE, AND COLOR.
   - C. SEAL PIPING AND DUCTWORK PENETRATIONS THROUGH FULL-HEIGHT WALLS TO MAINTAIN ACOUSTIC SEPARATION ABOVE CEILINGS_MAINTAIN INDICATED FIRE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT PIPE PENETRATIONS. SEAL PIPE PENETRATIONS WITH FIRESTOP MATERIALS.
   - D. REFER TO "ALTERATIONS AND REMOVAL" IN THE MECHANICAL SPECIFICATIONS, AS WELL AS DIVISION 1 SECTIONS, FOR ADDITIONAL GENERAL REQUIREMENTS.

2. PLUMBING FIXTURES AND EQUIPMENT:
   - A. EXCEPT AS OTHERWISE SPECIFIED, PLUMBING FIXTURES SHALL BE EQUAL TO AMERICAN STANDARD, JUST, KOHLER, SLOAN OR ELKAY AS HEREIN SPECIFIED. TRIM SHALL BE TOTO, CHICAGO, SPEAKMAN, ENGINEERED BRASS COMPANY, MCGUIRE, BRASSCRAFT, OR TRUEBRO, EQUAL TO THE MODEL NUMBERS SPECIFIED HEREIN.
   - B. (P-1) PANTRY ROOM SINK:
     1. SINGLE COMPARTMENT, SEAMLESS DIE-DRAWN 18 GAUGE TYPE 304, 18-8 STAINLESS STEEL, UNDER-COUNTER MOUNTED, NOMINAL 16-IN X 28-IN X 5.5-IN DEEP, CUP STRAINER DRAIN, TRAP WITH NIPPLE, AND SUPPLIES WITH STOPS AND ESCHUTCHEONS.
        - a. FIXTURE: JUST MODEL # US-ADA-1830-A-18 GA
        - a. FAUCET: DELTA MODEL # 9159-LS-DST 7.25" RIGID/SWING GOOSENECK W/ 1.5 GPM SOFTFLO AERATOR.
        - b. P-TRAP: MCGUIRE MODEL # 8912
        - c. DISPOSAL: INSINKERATOR ADVANCED SERIES EVOLTION 0.75 HP WITH WALL SWITCH AND DISHWASHER INLET CONNECTION.
        - d. SUPPLIES: MCGUIRE MODEL # LF2165LK
        - f. THERMOSTATIC MIXING VALVE:
          1. ASSE 1070 CERTIFIED, LEAD-FREE SOLID BRONZE CONSTRUCTION WITH ADVANCED THERMAL ACTUATOR FOR LOW FLOW PERFORMANCE (0.5GPM), ADJUSTABLE TEMPERATURE SELECTION WITH LOCK-DOWN CAPABILITIES, UNION CONNECTIONS FOR EASY MAINTENANCE AND WITH INTEGRAL CHECK-STOPS AND SCREENS FOR PREVENTING CROSS-FLOW AND CONTAMINATION. VALVE SHALL BE BY POWERS, MODEL LFE480 OR EQUAL BY LAWLER.
   - C. (P-2) BREAK ROOM SINK:
     1. SINGLE COMPARTMENT, SEAMLESS DIE-DRAWN 18 GAUGE TYPE 304, 18-8 STAINLESS STEEL, UNDER-COUNTER MOUNTED, NOMINAL 14-IN X 18.5-IN X 5.375-IN DEEP, CUP STRAINER DRAIN, DISPOSAL, TRAP WITH NIPPLE, AND SUPPLIES WITH STOPS AND ESCHUTCHEONS.
        - a. FIXTURE: ELKAY MODEL # ELUHAD111655PD
        - b. FAUCET: DELTA MODEL # 1959LF 7.25" RIGID/SWING GOOSENECK W/ 1.5 GPM AERATOR AND SPRAYHEAD WAND.
        - c. P-TRAP: MCGUIRE MODEL # 8912
        - d. SUPPLIES: MCGUIRE MODEL # LF2165LK
        - e. THERMOSTATIC MIXING VALVE:
          1. ASSE 1070 CERTIFIED, LEAD-FREE SOLID BRONZE CONSTRUCTION WITH ADVANCED THERMAL ACTUATOR FOR LOW FLOW PERFORMANCE (0.5GPM), ADJUSTABLE TEMPERATURE SELECTION WITH LOCK-DOWN CAPABILITIES, UNION CONNECTIONS FOR EASY MAINTENANCE AND WITH INTEGRAL CHECK-STOPS AND SCREENS FOR PREVENTING CROSS-FLOW AND CONTAMINATION. VALVE SHALL BE BY POWERS, MODEL LFG48010 OR EQUAL BY LAWLER.
   - D. (P-3) COFFEE MAKER OUTLET BOX, (P-4) DISHWASHER OUTLET BOX, (P-5) ICE MAKER OUTLET BOX, (P-6) WATER DISPENSER OUTLET BOX:
     1. WALL MOUNTED OUTLET BOX FOR COFFEE MAKERS AND REFRIGERATORS COMPLETE WITH WHITE POWDER COATED STEEL BOX AND FACEPLATE. PROVIDE WITH 1/4-TURN BALL VALVE WITH WATER TUBING OUTLET. SUPPLY SHALL BE PROVIDED WITH AN ASSE 1024 INLINE DUAL CHECK VALVE BACKFLOW PREVENTER LOCATED IN AN ACCESSIBLE LOCATION FOR TESTING.
        - a. FIXTURE: OATEY MODEL # 39140
        - b. COORDINATE INSTALLATION HEIGHT WITH COUNTERTOPS. DISHWASHER AND ICEMAKER SHALL BE IN WALL BELOW COUNTER.
   - E. CLEANOUTS SHALL BE JOSAM, JAY R. SMITH, OR WATTS EQUAL TO JOSAM SERIES 58500 IN HORIZONTAL PIPING WITH BRONZE THREADED PLUG.
   - F. WATER FILTERS: PROVIDE BELOW-COUNTER FILTRATION KIT MANUFACTURERED BY 3M (AQUAPURE MODEL AP217), OR SIMILAR BY T&S BRASS, OR PENTAIR, COMPLETE WITH COUNTING BRACKET AND SUPPLY HOSES. FILTER CARTRIDGE SHALL FLOW A MINIMUM OF 2 GPM, AND COMPLY WITH NSF/ANSI 42 AND 53 FOR LEAD, CLASS 1 PARTICULATES, CHLORINE, AND TASTE AND ODOR. ROUTE COLD WATER THROUGH FILTER UPSTREAM OF FAUCET, COFFEE MAKER, AND ICE MAKER OUTLET BOXES. PROVIDE ISOLATION VALVE ARRANGEMENT ON FAUCET SUPPLY SUCH THAT THE FAUCET MAY BE SERVED DIRECTLY FROM THE COLD WATER SUPPLY, BYPASSING THE FILTER. ENSURE FILTER DOES NOT IMPEDE ADA ACCESS CLEARANCE BELOW EACH SINK -- REFER TO ARCHITECTURAL DRAWINGS FOR CLEARANCE REQUIREMENTS.

3. PLUMBING PIPING:
   - A. INSTALL PIPING CONCEALED ABOVE SUSPENDED CEILINGS UNLESS OTHERWISE INDICATED.
   - B. INSTALL ALL PIPING, REGARDLESS OF EXPOSURE OR CONCEALMENT, AT RIGHT ANGLES OR PARALLEL TO BUILDING WALLS. DIAGONAL RUNS ARE PROHIBITED UNLESS SPECIFICALLY INDICATED OTHERWISE.
   - C. INSTALL PIPING AT REQUIRED SLOPES, AND FREE OF SAGS AND BENDS.
   - D. INSTALL PIPING TO ALLOW APPLICATION OF INSULATION.
   - E. SELECT SYSTEM COMPONENTS WITH PRESSURE RATING EQUAL TO OR GREATER THAN 1.25 TIMES SYSTEM OPERATING PRESSURE.
   - F. REAM ENDS OF PIPES AND TUBES AND REMOVE BURRS. BEVEL PLAIN ENDS OF STEEL PIPE. REMOVE SCALE, SLAG, DIRT, AND DEBRIS FROM INSIDE AND OUTSIDE OF PIPE AND FITTINGS BEFORE ASSEMBLY.
   - G. ALL PIPING, FITTINGS, VALVES AND OTHER COMPONENTS INSTALLED WITHIN A POTABLE WATER DISTRIBUTION SYSTEM SHALL COMPLY WITH NSF 61 "*DRINKING WATER SYSTEM COMPONENTS-HEALTH EFFECTS.*"
   - H. ALL PIPING, FITTINGS, VALVES AND OTHER COMPONENTS INSTALLED WITHIN A POTABLE WATER SYSTEM INTENDED FOR HUMAN CONSUMPTION SHALL COMPLY WITH NSF 61 ANNEX G "*DRINKING WATER SYSTEM COMPONENTS-LEAD CONTENT*" OR NSF 372 "*DRINKING WATER SYSTEM COMPONENTS-LEAD CONTENT.*"
   - I. EQUIPMENT DRAIN PIPING: COPPER DRAINAGE TUBING, DWV, ASTM B306 WITH WROUGHT COPPER AND BRONZE DRAINAGE FITTINGS, ANSI B16.29; WITH ASME B16.18 CAST COPPER ALLOY OR ASME B16.22 WROUGHT COPPER SOLDER-JOINT FITTINGS. JOINTS SHALL BE SOLDERED TO ASTM B32, LEAD FREE.
     1. DOMESTIC WATER PIPING (HOT, AND COLD): HARD COPPER TUBE, ASTM B 88, TYPE L, WATER TUBE, LEAD-FREE SOLDER JOINT FITTINGS.
        - a. COPPER PRESSURE FITTINGS: ASME B 16.18, CAST COPPER ALLOY, OR ASME B 16.22, WROUGHT COPPER, LEAD FREE SOLDER JOINT FITTINGS. FURNISH WROUGHT COPPER FITTINGS IF INDICATED.
   - J. SANITARY AND VENT PIPE AND FITTINGS:
     1. GENERAL REQUIREMENTS
        - a. INSTALL PIPING AS FOLLOWS:
     2. HORIZONTAL SANITARY DRAINAGE PIPING: 2 PERCENT DOWNWARD IN DIRECTION OF FLOW.
     3. VENT PIPING: 1 PERCENT DOWN TOWARD VERTICAL FIXTURE VENT OR TOWARD VENT STACK.
     4. ABOVEGROUND PIPE AND FITTINGS (UNPRESSURIZED)
        - a. PIPING AND FITTINGS SHALL BE ASTM A888, CISPI 301, CAST IRON, SERVICE WEIGHT NO-HUB PIPING AS MANUFACTURED BY CHARLOTTE PIPE OR APPROVED EQUAL WITH EXTRA WIDE, HEAVY DUTY, STAINLESS STEEL CORRUGATED SHIELDED COUPLINGS, HUSKY SD-4000 OR APPROVED EQUAL. ALL CAST IRON PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INDUSTRY (CISPI).

4. IDENTIFICATION FOR PLUMBING:
   - A. PROVIDE SELF-ADHESIVE PIPE LABELS WITH DIRECTIONAL ARROWS SPACED AT MAXIMUM 25-FOOT INTERVALS, AND WITHIN EACH SEPARATE ROOM. LABELS FOR DOMESTIC WATER PIPING, CONDENSATE DRAIN PIPING, SANITARY, AND VENT PIPING SHALL BE GREEN WITH WHITE LETTERING.

5. VALVES:
   - A. VALVES SHALL BE PROVIDED AS HEREIN SPECIFIED. VALVES SHALL BE PLACED IN SUCH A MANNER AS TO BE EASILY ACCESSIBLE FOR OPERATION AND MAINTENANCE. VALVE PIPE CONNECTIONS SHALL BE SCREWED OR FLANGED WITH CONNECTIONS TO PIPING SYSTEM CONSISTENT WITH OTHER PARTS OF THE PIPING SYSTEM.
   - B. ALL VALVES INSTALLED IN INSULATED PIPING SYSTEMS SHALL BE PROVIDED WITH MINIMUM 2-INCH EXTENSION NECKS.

6. HANGERS AND SUPPORTS:
   - A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AN ADEQUATE PIPE SUSPENSION SYSTEM IN ACCORDANCE WITH RECOGNIZED ENGINEERING PRACTICES, USING STANDARD, COMMERCIALLY ACCEPTED PIPE HANGERS AND SUSPENSION EQUIPMENT. THE DESIGN OF ALL HANGERS AND SUPPORTS SHALL BE IN ACCORDANCE WITH THE PROVISION OF CURRENT ISSUE OF MSS-SP-58 AND SP-69 DOCUMENT DEVELOPED AS A STANDARD BY THE MANUFACTURERS' STANDARDIZATION SOCIETY.
   - B. USE CARBON-STEEL PIPE HANGERS AND SUPPORTS, METAL TRAPEZE PIPE HANGERS AND METAL FRAMING SYSTEMS AND ATTACHMENTS FOR GENERAL SERVICE APPLICATIONS.
   - C. PIPE HANGERS IN CONTACT WITH COPPER PIPE SHALL BE COPPER PLATED.
   - D. ATTACH PUMPED APPLIANCE DISCHARGE PIPING FROM DISHWASHER AND ICEMAKER TO UNDERSIDE OF COUNTER PRIOR TO INDIRECT DISCHARGE TO SINK DRAIN TAILPIECE OR WASTE DISPOSAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

7. INSULATION:
   - A. ALL INSULATION AND FINISHES SHALL BE INSTALLED BY SKILLED WORKMEN REGULARLY ENGAGED IN THIS TYPE OF WORK AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' PUBLISHED INSTRUCTIONS.
   - B. INSULATION SHALL BE CONTINUOUS AT ALL HANGERS, SLEEVES, AND OPENINGS. VAPOR SEALS SHALL BE PROVIDED FOR ALL COLD SURFACES AND SHALL BE CONTINUOUS.
   - C. INSULATION MATERIALS SHALL BE AS MANUFACTURED BY ARMSTRONG, MANVILLE, OWENS/CORNING, CERTAIN-TEED OR KNAUF DOMESTIC HOT, COLD, AND RECIRCULATION PIPING INSULATION SHALL BE HEAVY DUTY FIBERGLASS PIPE INSULATION, 1-INCH THICKNESS, WITH VAPOR BARRIER JACKET EQUAL TO MANVILLE MICRO-LOK 650 WITH APT ALL SERVICE JACKET AND PRESSURE SENSITIVE SELF-SEALING LAPS. K-FACTOR SHALL NOT EXCEED 0.23 AT 75 DEGREES F MEAN TEMPERATURE. ALL LONGITUDINAL LAPS SHALL BE STAPLED EVERY SIX (6) INCHES. ALL BUTT JOINTS SHALL BE WRAPPED WITH A 3-INCH MINIMUM WIDE STRIP OF JACKETING MATERIAL SECURELY SEALED IN PLACE.CONDENSATE PIPING INSULATION SHALL BE CLOSED CELL ELASTOMER TUBULAR INSULATION WITH BUILT-IN VAPOR BARRIER, 1-INCH THICKNESS, ASTM C 534, TYPE I (TUBULAR GRADE). INSULATION SHALL BE EQUAL TO ARMSTRONG SELF SEAL AP ARMAFLEX SS, 25/50 RATED.
   - D. REPLACE AND REPAIR EXISTING INSULATION DISTURBED OR DAMAGED BY WORK UNDER THIS CONTRACT.
   - E. PROVIDE HIGH DENSITY PIPE INSERTS WITH GALVANIZED METAL PIPE SHIELDS AT ALL POINTS OF SUPPORT OF PIPING SYSTEMS. DIAMETER OF INSERT SHALL MATCH INSULATION THICKNESS AND ENCOMPASS 50% OF THE SURFACE. ON COLD SYSTEMS SEAL INSERT VAPOR TIGHT. WOOD BLOCKING AND METAL INSERTS ARE UNACCEPTABLE.

8. SUBMITTALS:
   - A. SUBMIT ALL SUBMITTALS, WHICH INCLUDES SHOP DRAWINS, PRODUCT DATA, RELATED OPERATION AND MAINTENANCE MANUALS, WARRANTY DOCUMENTATION AND ALL OTHER PERTINENT INFORMATION ELECTRONICALLY BY THE MANUFACTURER, TRADE CONTRACTORS, AND CONSTRUCTION MANAGER AS A "PDF" FILE TO THE OWNER TO DEMONSTRATE COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
   - B. SUBMITTALS SHALL INCLUDE THE MANUFACTURER'S NAME, TRADE NAME, CATALOG MODEL OR NUMBER, NAMEPLATE DATA, SIZE, LAYOUT DIMENSIONS, CAPACITY, PROJECT SPECIFICATION AND PARAGRAPH REFERENCE, APPLICABLE PUBLICATION REFERENCES, YEARS OF SATISFACTORY SERVICE, AND OTHER INFORMATION NECESSARY TO ESTABLISH CONTRACT COMPLIANCE OF EACH ITEN THE CONTRACTOR PROPOSES TO FURNISH. SUBMITTAL SHALL CONFIRM EQUIPMENT FITS WITHIN AVAILABLE SPACE FOR INSTALLATION.
   - C. PROVIDE SUBMITTALS TO THE OWNER OF THE FOLLOWING EQUIPMENT:
     1) FIXTURES
     2) PIPING, INSULATION, AND ALL RELATED ACCESSORIES
        OWNER SHALL HAVE 2 WEEKS TO REVIEW AND PROVIDE ANY COMMENTS OR OBJECTIONS TO THE SUBMITTED EQUIPMENT

DRAWING CONVENTIONS

SYMBOL	DESCRIPTION
A / MX.XX	INDICATES DIRECTION OF CUTTING PLANE NUMBER OR LETTER INDICATES SECTION OR ELEVATION DRAWING NUMBER WHERE ELEVATION OR SECTION IS TAKEN OR DRAWN
S / X	SANITARY RISER NUMBER
CRW / X	CORROSIVE WASTE RISER NUMBER
W / X	DOMESTIC WATER RISER NUMBER
IW / X	INDUSTRIAL WATER RISER NUMBER
SW / X	STORM WATER RISER NUMBER
V / X	VACUUM RISER NUMBER
A / X	COMPRESSED AIR RISER NUMBER
P-CHX	EQUIPMENT DESIGNATION NUMERICAL DESIGNATION EQUIPMENT SERVICE DESIGNATION EQUIPMENT TYPE DESIGNATION
P-X	PLUMBING FIXTURE DESIGNATION, P-X
	POINT OF CONNECTION, NEW TO EXISTING
	DEMOLITION WORK TERMINATION POINT
1	INDICATES SPECIAL NOTE NUMBER INDICATES SPECIAL NOTE DESIGNATION. REFER TO SPECIAL NOTE LIST ON DRAWING FOR DESCRIPTION OF ITEM
	HEAVY LINE WEIGHT DESIGNATES NEW WORK ON NEW WORK PLANS, AND REMOVAL WORK ON DEMOLITION PLANS
	LIGHT LINE WEIGHT DESIGNATES EXISTING WORK TO REMAIN

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA · THOMAS SYVERSON · PE40001036 · 4/16/25 · MECHANICAL · PROFESSIONAL ENGINEER

STAMP

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	PLUMBING LEGEND AND SPECIFICATIONS
WORKING STAFF	TAS (DESIGNED BY) · AEL (DRAWN BY) · TAS (CHECKED BY)
SHEET NO.	24 OF 75
	P-001SH (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)

4/16/2025 2:01:31 PM
P-001SH BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

DRAWING NOTES:

A. REFER TO DRAWING P-001SH FOR SYMBOLS, ABBREVIATIONS, AND DRAWING CONVENTIONS.

B. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND AVAILABLE DOCUMENTATION. VERIFY ALL EXISTING CONDITIONS WHETHER INDICATED OR NOT.

C. COORDINATE ALL DEMOLITION WORK WITH NEW WORK.

SPECIAL NOTES:

1 REMOVE EXISTING SINK, FAUCET, SANITARY WASTE AND VENT FITTING, MIXING VALVE, AND HOT AND COLD SUPPLY CONNECTIONS. REMOVE PIPING UP TO CEILING PLENUM. CAP AND SEAL COLD WATER AND VENT PIPES ABOVE CEILING AND SANITARY WASTE PIPING FLUSH WITH FLOOR.

2 REMOVE SINK, FAUCET, WASTE AND SUPPLY FITTINGS BELOW COUNTER. LEAVE ROUGH-IN CONNECTIONS FOR COORDINATION WITH NEW WORK.

EX DWH-4-1
RX SINK
EX P-3
EX D UP & DN
FROM EX WATER HEATER
EX 1"
EX 4"
SAN
RX CO
RX DWH-4-2
EX 3/4"
EX 1 1/2"
RX SINK

1 PLUMBING PLAN - PARTIAL LEVEL 4 - NORTH - DEMOLITON
PD101DP 1/8" = 1'-0"

4/16/2025 2:01:57 PM
PD101DP BY CJS 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA · THOMAS SYVERSEN · PE400010036 · MECHANICAL · PROFESSIONAL ENGINEER
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PROJECT NORTH
TRUE NORTH

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

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Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

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ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	PLUMBING PLAN – PARTIAL LEVEL 4 – NORTH – DEMOLITION
WORKING STAFF	TAS (DESIGNED BY) · AEL (DRAWN BY) · TAS (CHECKED BY)
SHEET NO.	25 OF 75
	PD 101 DP (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)

PLUMBING FIXTURE SCHEDULE

DESIG	DESCRIPTION	FIXTURE UNITS		ROUGH-IN CONNECTION (IN)				REMARKS
		WASTE	WATER	SAN	VENT	CW	HW	
P-1	PANTRY SINK	2	2	1 1/2"	1 1/2"	1/2"	1/2"	
P-2	BREAK ROOM SINK	2	2	1 1/2"	1 1/2"	1/2"	1/2"	
P-3	COFFEE MAKER OUTLET BOX	0	0.25	---	---	1/2"	---	PROVIDE ASSE 1024 BACKFLOW PREVENTER.
P-4	DISHWASHER OUTLET BOX	1.5	1.5	---	---	1/2"	1/2"	PROVIDE ASSE 1024 BACKFLOW PREVENTER.
P-5	ICE MAKER OUTLET BOX	0.25	0.25	---	---	1/2"	---	PROVIDE ASSE 1024 BACKFLOW PREVENTER.
P-6	WATER DISPENSER OUTLET BOX	0.25	0.25	---	---	1/2"	---	PROVIDE ASSE 1024 BACKFLOW PREVENTER.

DRAWING NOTES:

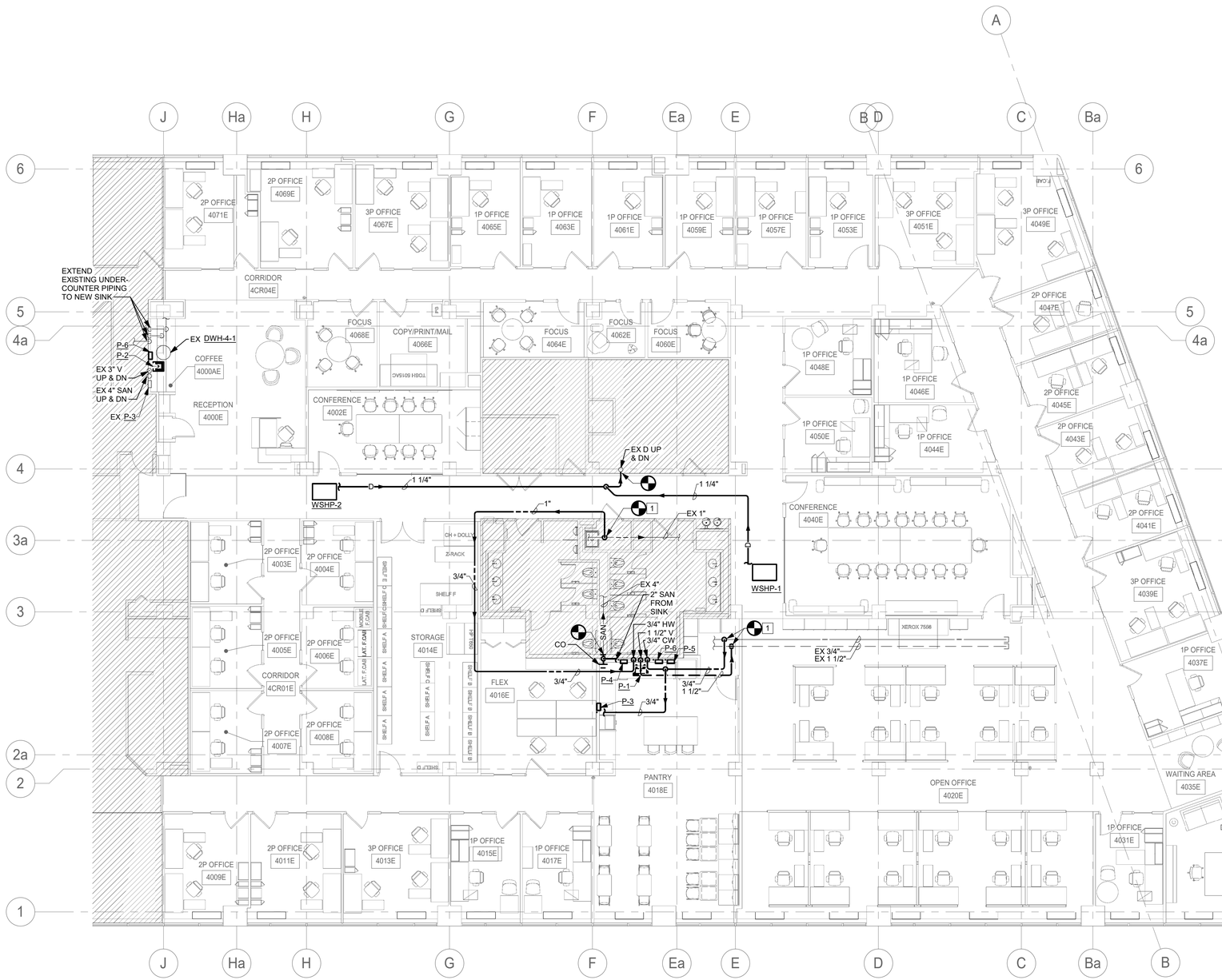
A. REFER TO DRAWING P-001SH FOR SYMBOLS, ABBREVIATIONS, AND DRAWING CONVENTIONS.

B. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND AVAILABLE DOCUMENTATION. VERIFY ALL EXISTING CONDITIONS WHETHER INDICATED OR NOT.

C. REFER TO PLUMBING FIXTURE SCHEDULE FOR PLUMBING FIXTURE IDENTIFICATIONS AND UTILITY ROUGH-IN SIZES.

SPECIAL NOTES:

1 CONNECT TO HOT WATER SUPPLY PIPE DOWNSTREAM OF EXISTING DOMESTIC WATER HEATER IN JANITOR'S CLOSET.



1 P-101FP PLUMBING PLAN - PARTIAL LEVEL 4 - NORTH - NEW WORK
1/8" = 1'-0"

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP
DISTRICT OF COLUMBIA
THOMAS SYVERSON
PE40001036
MECHANICAL
PROFESSIONAL ENGINEER

PROJECT NORTH
TRUE NORTH

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

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600 Maryland Avenue S.W. Suite 5001
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WORKING STAFF	TAS (DESIGNED BY) / AEL (DRAWN BY) / TAS (CHECKED BY)
SHEET NO.	26 OF 75
	P – 101 FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

4/16/2025 2:51:52 PM
P-101FP BY CJS 04/18/25 FINAL CONSTRUCTION DOCS

FIRE ALARM GENERAL NOTES

1. THE SCOPE OF THIS PROJECT INCLUDES MODIFICATION OF THE EXISTING NOTIFIER NFS-3030 VOICE COMMUNICATION FIRE ALARM SYSTEM ON PORTIONS OF THE FOURTH FLOOR, EAST TOWER OF CAPITAL GALLERY, AS DESCRIBED HEREIN. THE EXISTING FIRE ALARM SYSTEM COMPONENTS WITHIN THE AREA OF WORK SHALL BE REMOVED, EXISTING TO REMAIN, MODIFIED, AND PROTECTED IN PLACE TO ACCOMMODATE THE RENOVATION. NECESSARY FIRE ALARM SYSTEM MODIFICATIONS, INCLUDING ALL WIRING, RACEWAYS, PULL BOXES, TERMINAL CABINETS, OUTLET AND MOUNTING BOXES, CONTROL EQUIPMENT, ALARM AND SUPERVISORY SIGNALS, INITIATING DEVICES, ALARM NOTIFICATION APPLIANCES, NOTIFICATION APPLIANCE BOOSTER PANELS, INTERFACE EQUIPMENT, AND ALL OTHER ACCESSORIES AND MISCELLANEOUS ITEMS INCLUDING SOFTWARE, SYSTEM PROGRAMMING INCLUDING THE EXISTING HEAD END NFS-3030 FACP, TESTING AND CONSTRUCTION PERMITS REQUIRED FOR A COMPLETE OPERATING SYSTEM THROUGHOUT WHETHER SPECIFICALLY NOTED OR NOT. ALL SYSTEMS SHALL COMPLY WITH THE INTERNATIONAL BUILDING CODE (IBC)-2021 EDITION, INTERNATIONAL FIRE CODE (IFC)-2021 EDITION, NFPA STANDARDS 13 (2022), 70 (2023) AND 72 (2022), SMITHSONIAN INSTITUTION OSHEM FIRE PROTECTION & LIFE SAFETY DESIGN MANUAL (2021), AND SMITHSONIAN INSTITUTION CODE, STANDARDS AND GUIDELINES 2021. THE PROJECT SHALL ALSO COMPLY WITH 2017 DC CONSTRUCTION CODES. THE EQUIPMENT PROVIDED SHALL BE LISTED FOR THE INTENDED PURPOSE BY A NATIONAL RECOGNIZED TESTING LABORATORY. PROVIDE SOFTWARE, SYSTEM PROGRAMMING, TESTING AND CONSTRUCTION PERMITS REQUIRED FOR A COMPLETE OPERATING SYSTEM AND SHALL SECURE ALL NECESSARY CONSTRUCTION PERMITS, INSPECTIONS AND FINAL SYSTEM ACCEPTANCE FROM BUILDING OFFICIALS (AHJ). CONTRACTOR TO CONFORM TO CURRENT SI GUIDE SPECIFICATION 283111 AVAILABLE ONLINE VIA THE SMITHSONIAN INSTITUTION WEBSITE.
2. INFORMATION CONTAINED IN THESE DRAWINGS IS BASED ON EXISTING DOCUMENTS, LIMITED FIELD SURVEYS, AND EXISTING ARCHITECTURAL AND STRUCTURAL INFORMATION. THE INFORMATION CONTAINED HEREIN MAY REQUIRE ADJUSTMENTS AND/OR MODIFICATIONS TO CONFORM TO EXISTING AND NEW RENOVATION CONDITIONS. ALL ELEVATIONS ABOVE THE FINISHED FLOOR (AFF) INDICATED FOR STRUCTURAL MEMBERS, CEILINGS, DEVICES, AND/OR OBSTRUCTIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED. NOTIFY THE CONTRACTING OFFICER IF ANY DISCREPANCY IN BUILDING CONDITION SHOULD PROHIBIT EXECUTION OF THE DESIGN INTENT OF THESE DRAWINGS.
3. ALL CONTRACT DRAWINGS AND ALL CONTRACT SPECIFICATIONS ARE COMPLEMENTARY AND MUST BE USED IN CONJUNCTION TO OBTAIN COMPLETE CONSTRUCTION INFORMATION. QUESTIONS REGARDING DESIGN INTENT OR SYSTEM OPERATION SHALL BE PROMPTLY BROUGHT TO CONTRACTING OFFICER'S ATTENTION. IN ADDITION, ANY INFORMATION CONFLICTS BETWEEN THE SPECIFICATIONS AND DRAWINGS SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION. DO NOT PROCEED WITH ANY WORK, EXCEPT AT THEIR OWN RISK, UNTIL CLARIFICATIONS OF THE CONFLICTS ARE ISSUED TO THE CONTRACTOR BY THE CONTRACTING OFFICER.
4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT JOB BEFORE PROCEEDING WITH PURCHASING, FABRICATION OR INSTALLATION OF NEW WORK.
5. AVOID ALL CONFLICTS WITH LIGHT FIXTURES, HVAC DIFFUSERS, GRILLS, ACCESS DOORS, SPRINKLERS, DUCTS, CONDUIT, RACKS, STORAGE UNITS, STORAGE PIPING OR OTHER OBSTRUCTIONS ENCOUNTERED. COORDINATE ALL WORK WITH FIELD CONDITIONS. NOTIFY THE CONTRACTING OFFICER PRIOR TO INITIATING WORK IF ANY MOUNTING LOCATIONS ARE OBSTRUCTED AND/OR IF ANY MOUNTING CONFLICTS OR PROBLEMS ARE DISCOVERED, AS A RESULT OF ANY FIELD INVESTIGATION.
6. MOUNT ALL VISUAL WARNING STROBE/AUDIBLE NOTIFICATION APPLIANCES TO ACHIEVE MAXIMUM AUDIBILITY AND VISIBILITY IN ACCORDANCE WITH CURRENT NFPA 72 GUIDELINES. PROVIDE CARE IN LOCATING VISUAL WARNING STROBE APPLIANCES TO ENSURE VISIBILITY AND AVOID OBSTRUCTIONS. SYNCHRONIZATION IS REQUIRED FOR AREAS WHERE MORE THAN ONE VISUAL NOTIFICATION APPLIANCE IS LOCATED.
7. STROBE NOTIFICATION APPLIANCE CIRCUIT POWER REQUIREMENTS AND CONDUCTOR SIZES SHALL NOT EXCEED A 10% VOLTAGE DROP. EACH VISUAL NOTIFICATION APPLIANCE CIRCUIT SHALL NOT EXCEED 80% OF ITS RATED OUTPUT, WHICH IS REQUIRED TO ASSUME THE MAXIMUM LOAD OF THE PANEL IS DISTRIBUTED EQUALLY OVER THE AVAILABLE CIRCUITS.
8. PROVIDE SIGNALING LINE CIRCUITS AND NOTIFICATION APPLIANCE CIRCUITS WITH 20 PERCENT SPARE CAPACITY. PROVIDE AMPLIFIERS WITH 20 PERCENT SPARE CAPACITY. BATTERY SIZE SHALL BE A MINIMUM OF 125% OF THE CALCULATED REQUIREMENT AND SHALL ALSO INCLUDE A 20% BATTERY DERATING FACTOR.
9. LOCATE SMOKE DETECTORS IN ACCESSIBLE LOCATIONS FOR TESTING AND MAINTENANCE AND ACCESS SHALL BE PER OSHA STANDARDS. ADDITIONAL AND/OR RELOCATED DETECTORS MAY BE REQUIRED BASED ON OSHEM PERSONNEL AND SUCH DEVICES SHALL BE PART OF THE BASE CONTRACT. IN AREAS WHRE DETECTORS ARE NOT ACCESSIBLE, PROVIDE REMOTE TEST STATIONS AND INDICATING LAMPS IN ACCESSIBLE LOCATIONS APPROVED BY OSHEM.
10. CONDUCT AUDIBILITY TESTING INCLUDING PRE-TESTS AND FINAL TESTING FOR OSHEM. THE TESTS SHALL CONFIRM THE REQUIRED AUDIBILITY PER NFPA AND OSHEM. IN LOCATIONS WHERE MINIMUM AUDIBILITY IS NOT MET, PROVIDE ADDITIONAL DEVICES AS PART OF THE BASE CONTRACT.
11. DUCTWORK, PIPING, MECHANICAL EQUIPMENT, CEILINGS, FURNISHINGS AND FIXTURES SHALL NOT BE UTILIZED AS LADDERS, SCAFFOLDING OR WORK PLATFORMS.
12. ALL PENETRATIONS IN WALLS, FLOORS AND CEILINGS SHALL BE PROTECTED WITH UL LISTED THROUGH-PENETRATION FIRE-STOP SYSTEMS OF EQUAL OR GREATER FIRE RESISTANCE RATING TO THE ASSEMBLY PENETRATED. PENETRATIONS INTO NON-FIRE-RESISTANCE RATED ASSEMBLIES SHALL BE SEALED TO BE SMOKE-TIGHT, AT A MINIMUM.
13. ALL DAMAGE TO WALLS, CEILINGS AND FLOORS FROM PENETRATIONS, INSTALLATIONS OR OTHER ACTIONS OF THE CONTRACTOR SHALL BE PATCHED, REPAIRED AND PAINTED WITH NEW MATERIALS BY THE CONTRACTOR TO MATCH ADJACENT WORK, WHETHER SPECIFICALLY NOTED OR NOT.
14. ALL NEW FIRE ALARM CIRCUITS SHALL BE SUPERVISED AS FOLLOWS IN ACCORDANCE WITH NFPA 72:
    INITIATING DEVICE CIRCUITS - CLASS B
    SIGNALING LINE CIRCUITS - CLASS B
    NOTIFICATION APPLIANCE CIRCUITS - CLASS B, SYNCHRONIZED
    PANEL-TO-PANEL COMMUNICATING NETWORK - CLASS X
    PATHWAY SURVIVABILITY LEVEL-1 OTHER THAN ALL NOTIFICATION AND INITIATING DEVICE RISERS, WHICH SHALL BE PATHWAY SURVIVABILITY LEVEL 2.
15. THE PROJECT ELECTRICAL CONDUIT STANDARD IS ELECTRICAL METALLIC TUBING (EMT), FOR ALL WORK WITHIN THE FIRE ALARM CONTROL CLOSET AND ANY RISER UP THROUGHOUT THE BUILDING. EMT OR METAL CLAD (MC) FIRE RATED CABLE IS PERMISSIBLE FOR USE FROM THE FIRE ALARM PANEL ROOM TO SERVE SLC, NAP AND SPEAKER CIRCUITS INTO THE RENOVATED AREAS. ALL EXPOSED FIRE ALARM CONDUIT SHALL BE PAINTED RED. CONCEAL ALL ELECTRICAL CONDUITS ABOVE CEILINGS, BELOW FLOORS AND BEHIND WALLS, EXCEPT IN UNFINISHED AREAS WHERE CONDUIT MAY BE SURFACE MOUNTED, UNLESS OTHERWISE SPECIFIED.
16. IN AREAS WITHOUT CEILINGS, PROVIDE CONDUIT AS UNOBTRUSIVELY AS POSSIBLE, AS CLOSE AS POSSIBLE TO FLOOR/ CEILING SLAB AND PARALLEL AND AT RIGHT ANGLES TO STRUCTURAL STEEL OR CONCRETE ELEMENTS. THESE DRAWINGS ARE DIAGRAMMATIC TO SHOW DESIGN INTENT ONLY.
17. PROVIDE SIGNALING LINE, NOTIFICATION APPLIANCE AND POWER CIRCUITS EACH IN SEPARATE CONDUIT OR MC CABLE.
18. PROVIDE SMOKE DETECTORS A MINIMUM 3-FEET FROM AIR DIFFUSERS.
19. PAINT ALL FIRE ALARM JUNCTION BOXES AND COVERS RED IN ALL AREAS UNFINISHED AND FINISHED (I.E., ABOVE CEILINGS, BELOW FLOORS, IN MECHANICAL ROOMS, ETC).
20. PROVIDE ELECTRICAL BOXES AS FOLLOWS:
    U.N.O. CAST METAL BELL TYPE BOXES WITH THREADED HUBS SHALL BE PROVIDED ON EXPOSED WORK, EXCEPT WHERE FACTORY BOXES ARE PROVIDED. CONCEALED BOXES MAY BE STAMPED STEEL BOXES.
22. BOTH EXPOSED AND CONCEALED CONDUIT INCLUDING RISERS UP TO 2 INCHES IN DIAMETER SHALL UTILIZE COMPRESSION TYPE STEEL FITTINGS AND CONNECTORS. UNLESS OTHERWISE NOTED. ALL CONDUIT PROVIDED SHALL BE 3/4 INCH MINIMUM EMT TRADE SIZE. VERTICAL RISERS SHALL BE ONE INCH DIAMETER EMT MINIMUM. PROVIDE WIRING CONDUCTORS INSTALLED IN EMT FOR THE FOLLOWING CIRCUITS:
    SIGNALING LINE CIRCUITS, 16/2 AWG, SOLID COPPER, UNSHIELDED
    SPEAKER, 16/2 AWG, SOLID COPPER, TWISTED PAIR, UNSHIELDED
    STROBE, 12/2 AWG, SOLID COPPER, TWISTED PAIR, UNSHIELDED
    CONTROL, 16/2 AWG, SOLID COPPER, SHIELDED
    INTERFACED CIRCUITS, 16/2 AWG, SOLID COPPER, SHIELDED
    120 VAC, 12 AWG WITH NO 12 AWG EQUIPMENT GROUND, 600VAC RATED MINIMUM, SOLID COPPER
23. PROVIDE INITIATING DEVICES AND NOTIFICATION APPLIANCES MOUNTED IN SUSPENDED CEILINGS IN THE CENTER OF TILE IN BOTH DIRECTIONS.
24. THE TERM "PROVIDE" SHALL MEAN THE CONTRACTOR SHALL FURNISH NEW, INSTALL AND CONNECT FOR A COMPLETE AND OPERATIONAL SYSTEM.
25. THE TERM "REMOVE" SHALL MEAN CONTRACTOR SHALL DISCONNECT, REMOVE FROM SITE AND LEGALLY DISPOSE.
26. EXISTING FIRE ALARM NOTIFICATION ZONING SHALL BE EXISTING TO REMAIN.
27. CONTRACTOR TO PROVIDE UL LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM FOR ANY PENETRATIONS THROUGH ANY FIRE RATED CONSTRUCTION.
28. CONTRACTOR TO FIELD VERIFY FIRE RATED CONSTRUCTION FOR FIRE STOPPING APPLICATION.
29. CONTRACTOR TO VERIFY THE CURRENT DRAW FOR ALL EXISTING NOTIFICATION APPLIANCE CIRCUITS (STROBES) CONNECTED TO THE NEW NOTIFICATION APPLIANCE PANEL USING A MULTIMETER EMANATING FROM THE FOURTH FLOOR NOTIFIER FCPS-S8. DOCUMENT CURRENT DRAWS IN AN ELECTRONIC SPREADSHEET TABLE NOTING THE CIRCUIT NUMBER, FLOOR COVERED AND THE TOTAL CURRENT DRAW FOR EACH CIRCUIT. THIS IS TO BE COMPLETED AND SENT TO AE, OSHEM, OFMR FIRE SHOP AND COTR BEFORE ANY DEMOLITION OR NEW WORK IS STARTED.
30. CONTRACTOR TO VERIFY THE TOTAL RESISTANCE, IMPEDANCE, AND WATTAGE USING AN IMPEDANCE METER (NTI MR-PRO OR EQUAL) FOR ALL NOTIFICATION APPLIANCE CIRCUITS (SPEAKERS) EMANATING FROM THE FOURTH FLOOR NOTIFIER XPIQ AMPLIFIERS. DOCUMENT VALUES IN AN ELECTRONIC SPREADSHEET TABLE NOTING THE CIRCUIT NUMBER, FLOOR COVERED AND THE TOTAL WATTAGE, RESISTANCE, AND IMPEDANCE FOR EACH CIRCUIT. THIS IS TO BE COMPLETED AND SENT TO AE, OSHEM, OFMR FIRE SHOP AND COTR BEFORE ANY DEMOLITION OR NEW WORK IS STARTED.

SYMBOLS LIST

- LINE TYPE - EXISTING TO REMAIN
- LINE TYPE - EXISTING TO REMOVED
- LINE TYPE - NEW WORK
- [F] MANUAL PULL STATION
- VISUAL NOTIFICATION APPLIANCE
  X=MOUNTING LOCATION XX - CANDELA RATING
- SPEAKER NOTIFICATION APPLIANCE
  X=MOUNTING LOCATION
- SPEAKER/STROBE NOTIFICATION APPLIANCE
  X=MOUNTING LOCATION XX - CANDELA RATING
- [VS] VALVE TAMPER SWITCH - CONNECTION ONLY
- [WF] WATERFLOW SWITCH - CONNECTION ONLY
- 120VAC EMERGENCY BACKED - PRIMARY POWER CONNECTION
- [AIM] FIRE ALARM ADDRESSABLE INPUT MODULE
- [AOM] FIRE ALARM ADDRESSABLE OUTPUT MODULE
- XX / X SMOKE DETECTOR - ADRESSABLE
  X=MOUNTING LOCATION, S=STAIR PRESSURIZATION
  E=ELEVATOR INTERFACE
- SMOKE DETECTOR - DUCT MOUNTED
- [FACP] FIRE ALARM CONTROL PANEL
- [FAA] FIRE ALARM ANNUNCIATOR PANEL
- [NAP] NOTIFICATION APPLIANCE PANEL
- [FASUB] FIRE ALARM SUB PANEL
- [EAP] ELEVATOR ANNUNCIATOR PANEL
- DETAIL IDENTIFICATION NUMBER
  DETAIL IDENTIFICATION BUBBLE
  SHEET DETAIL IS SHOWN ON
  SHEET DETAIL IS TAKEN FROM
- SECTION IDENTIFICATION NUMBER
  SECTION IDENTIFICATION BUBBLE
  SHEET SECTION IS SHOWN ON
  SHEET SECTION IS TAKEN FROM

ABREVIATIONS

ABBREV	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AIM	ADDRESSABLE INTERFACE MODULE
AOM	ADDRESSABLE OUTPUT MODULE
AR	ADDRESSABLE RELAY
AWG	AMERICAN WIRE GAUGE
AMP	AMPERE
AHJ	AUTHORITY HAVING JURISDICTION
BM	BEAM
BFC	BELOW FINISHED CEILING
BOS	BOTTOM OF STEEL
COTR	CONTRACTING OFFICE TECHNICAL REPRESENTATIVE
DN	DOWN
EMT	ELECTRICAL METALLIC TUBING
EC	ELEVATOR CONTROL
EAP	ELEVATOR ANNUNCIATOR PANEL
EOL	END OF LINE SUPERVISION DEVICE
EQUIP	EQUIPMENT
EXST, (E)	EXISTING
EXP	EXPOSED
FT	FEET
FACP	FIRE ALARM CONTROL PANEL
FASUB	FIRE ALARM SUB PANEL
FL	FLOOR
GSF	GROSS SQUARE FEET
GYP	GYPSUM BOARD
IN	INCH
IDC	INITIATING DEVICE CIRCUIT
I/F	INTERFACE
LAT	LAY-IN ACOUSTICAL TILE
MECH	MECHANICAL
MC	METAL CLAD
NEC	NATIONAL ELECTRICAL CODE - NFPA 70
NFAC	NATIONAL FIRE ALARM CODE - NFPA 72
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NAC	NOTIFICATION APPLIANCE CIRCUIT
NAP	NOTIFICATION APPLIANCE PANEL
NO	NUMBER
OSHEM	OFFICE OF SAFETY HEALTH AND ENVIRONMENTAL MANAGEMENT
OA	OUTSIDE AIR
PLS	PLASTER CEILING
PIV	POST INDICATING VALVE
RCP	REMOTE CONTROL PANEL
R	RETURN
RF	RETURN FAN
RMC	RIGID METAL CONDUIT
RM	ROOM
SLC	SIGNALING LINE CIRCUIT
SPDT	SINGLE POLE, DOUBLE THROW
SI	SMITHSONIAN INSTITUTION
SPL	SPLINE CEILING
STR	STAIRS
S	SUPPLY
TC	TERMINAL CABINET
TOS	TOP OF STEEL
TYP	TYPICAL
UD	UNDER DUCT
UNO	UNLESS NOTED OTHERWISE
VAC	VOLTS ALTERNATING CURRENT
VDC	VOLTS DIRECT CURRENT
W	WATT
ZN	ZONE

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — JESSE R. STATTON — 19696 — PE — 04/04/25 — FIRE PROTECTION — PROFESSIONAL ENGINEER

STAMP

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

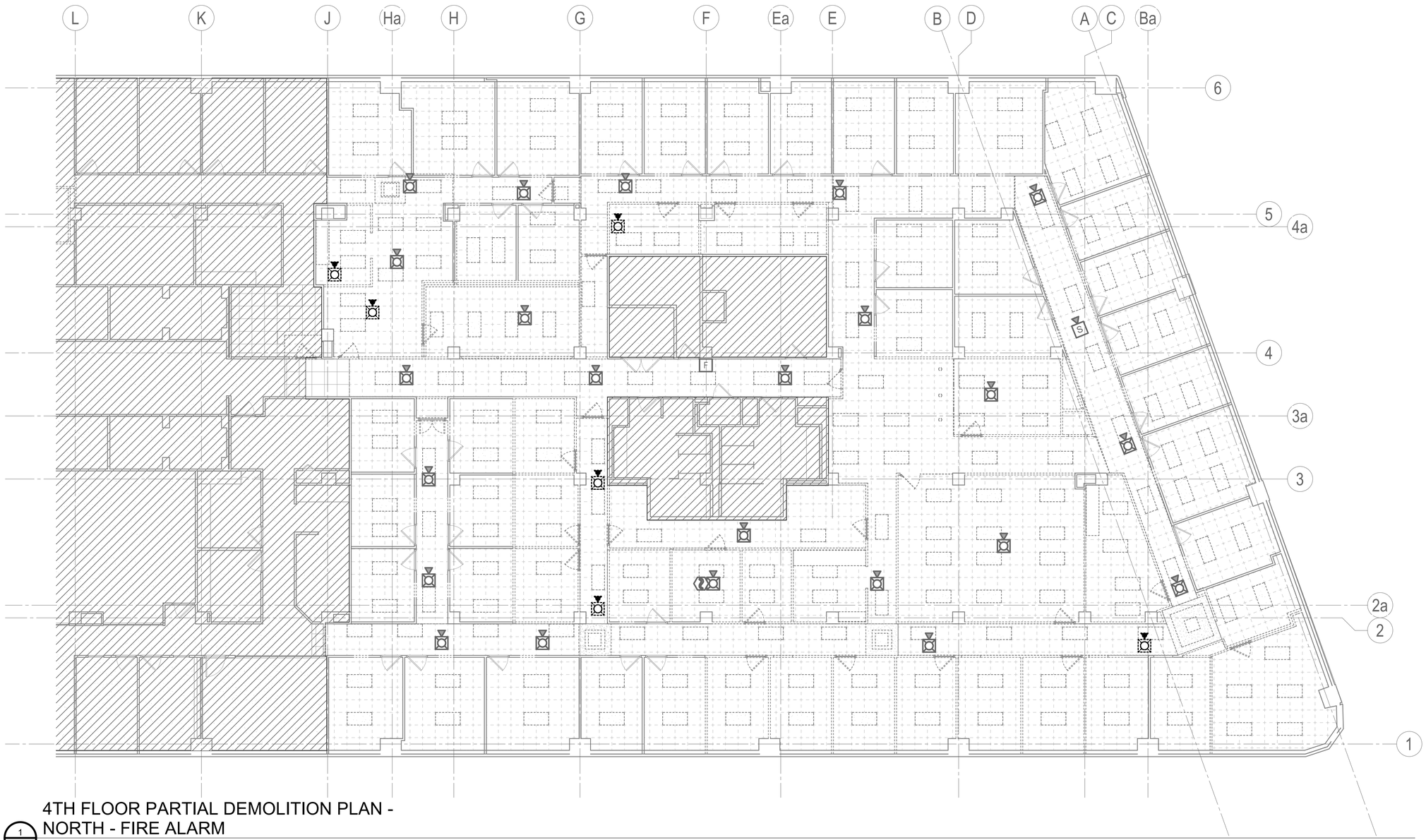
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	FIRE ALARM REFERENCE SHEET
WORKING STAFF	DESIGNED BY: MWF; DRAWN BY: MWF; CHECKED BY: JS
SHEET NO.	27 OF 75
	FA 001 CS (DISCIPLINE TYPE SEQUENCE DRAWING TYPE)

4/16/2025 4:25:29 PM
FA001CS BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

SHEET NOTES

1. ALL EXISTING FIRE ALARM DEVICES IN WORK AREA ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
2. EXISTING TO REMAIN FIRE ALARM DEVICES IN THE RENOVATION AREAS SHALL BE PROTECTED IN PLACE.
3. THERE ARE EXISTING TO REMAIN FIRE ALARM APPLIANCES INSIDE AND OUTSIDE WORK AREAS WHICH ARE ON FIRE ALARM CIRCUITS WHICH WILL BE DISTURBED BY THE RENOVATION ACTIVITIES IN THE WORK AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SYSTEM INTEGRITY TO THOSE FIRE ALARM APPLIANCES. AT NO TIME SHALL THE AREAS BE LEFT WITHOUT FIRE ALARM SYSTEM DETECTION AND/OR NOTIFICATION UNLESS A FIRE SYSTEM IMPAIRMENT PLAN HAS BEEN APROVED FOR IMPLEMENTATION WITH PROPER INTERIM PROTECTIVE MEASURES.



4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - FIRE ALARM

1 / FA101DP — SCALE = 1/8" = 1'-0"

4/16/2025 4:25:31 PM
FA101DP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — JASON R. STATTON — 15609 — REGISTERED — 04/18/25 — FIRE PROTECTION PROFESSIONAL ENGINEER

STAMP

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

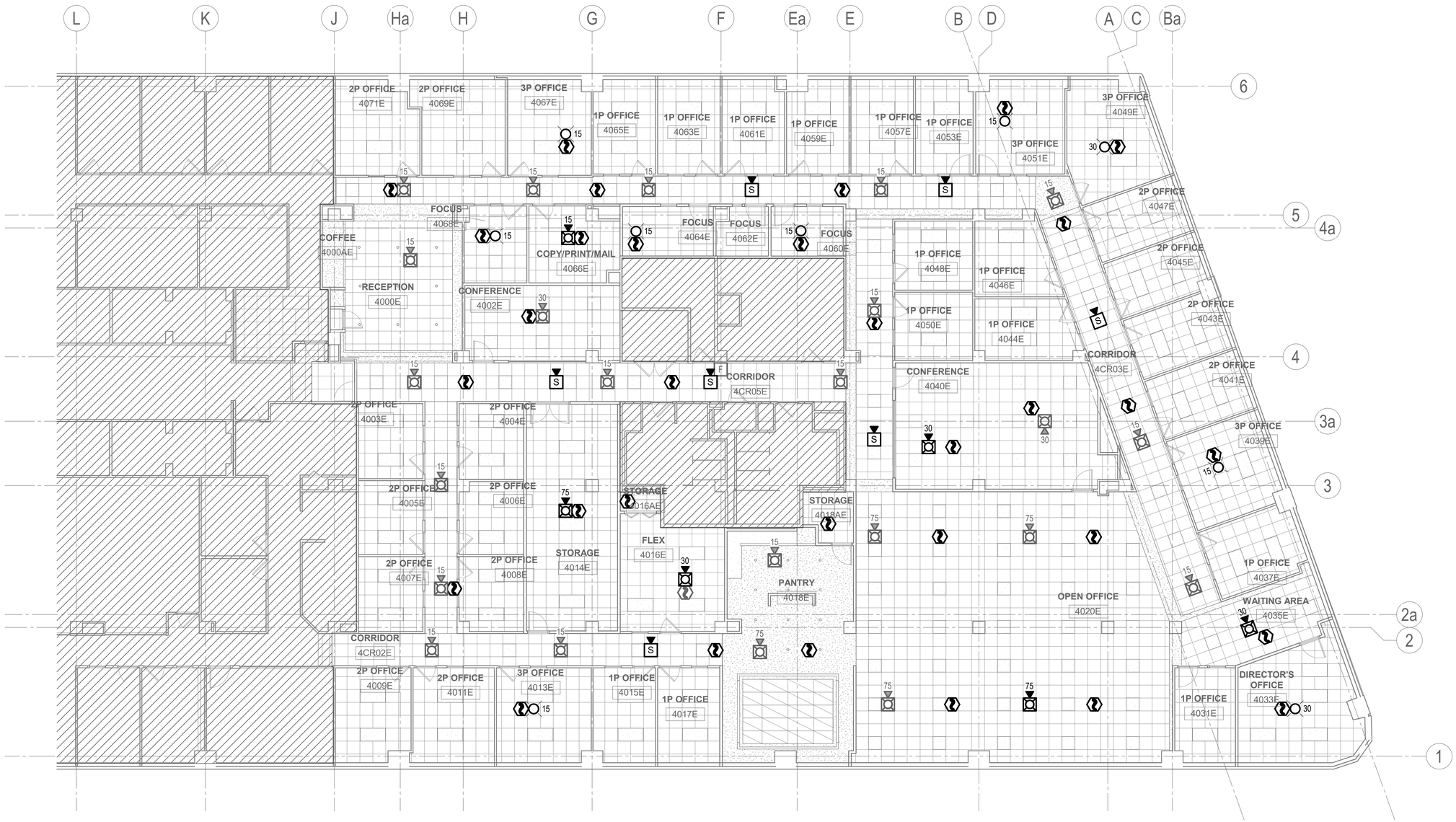
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600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL DEMOLITION PLAN – NORTH – FIRE ALARM
WORKING STAFF	DESIGNED BY: MWF — DRAWN BY: MWF — CHECKED BY: JS
SHEET NO.	28 OF 75
DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE	FA 101 DP

SHEET NOTES

1. PROVIDE REVISION TO LOCATIONS OF ALL EXISTING TO REMAIN APPLIANCES TO CENTER OF TILE IN THE LOCATION SHOWN.
2. PROVIDE CANDELA RATING FOR FIRE ALARM NOIITIFICATION APPLIANCES AS INDICATED ON DRAWINGS. CONTRACTOR TO VERIFY CANDELA RATING OF EXISTING TO REMAIN DEVICES AND MODIFY AS REQUIRED.
3. PROVIDE SMOKE DETECTION THROUGHOUT PUBLIC AND COMMON SPACES. PRIVATE OFFICES WILL NOT BE PROVIDED WITH SMOKE DETECTION.
4. PROVIDE ALL NEW CIRCUITS IN EMT CONDUIT OR MC FIRE RATED CABLE. INITIATING AND NOTIFICATION CIRCUITS TO BE PROVIDED IN SEPARATE CONDUIT.
5. PROVIDE THIS AREA WITH AUDIBLE AND VISUAL NOTIFICATION. COMBINATION SPEAKER/STROBES SHALL BE PROVIDED FOR THE SPACES WITHIN THE WORK AREA TO ASSURE MINIMUM AUDIBILTY REQUIREMENTS. STROBES SHALL BE PROVIDED FOR ALL PUBLIC AREAS OCCUPIED BY MORE THAN 2 PERSONS WITH SPACING IN ACCORDANCE WITH NFPA 72.
6. PROVIDE CONNECTION OF SMOKE DETECTORS TO CONTRACTOR PROVIDED LCM-320 LOOP CARD PROVIDED AS PART OF PREVIOUS 4TH FLOOR WORK.



4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - FIRE ALARM

1 FA111FP SCALE = 1/8" = 1'-0"

4/16/2025 4:25:38 PM
FA111FP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — JESSE R. SILVESTRI — PE006414 — 04/18/25 — FIRE PROTECTION — PROFESSIONAL ENGINEER

STAMP

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

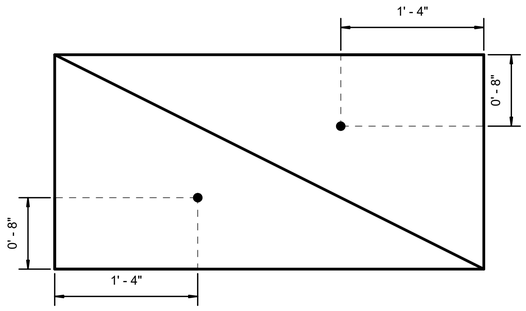
REVISION #	DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL NEW WORK PLAN – NORTH – FIRE ALARM
WORKING STAFF	MWF (DESIGNED BY) / MWF (DRAWN BY) / JS (CHECKED BY)
SHEET NO.	29 OF 75

FA 111 FP
DISCIPLINE TYPE SEQUENCE DRAWING TYPE



J1
FA501DT

FIRE ALARM MOUNTING LOCATION IN TRIANGLE CEILING TILES

SCALE =NTS

4/16/2025 4:25:39 PM
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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA
JASON R. SLATTERY
PE000414
04/18/25
FIRE PROTECTION
PROFESSIONAL ENGINEER

STAMP

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

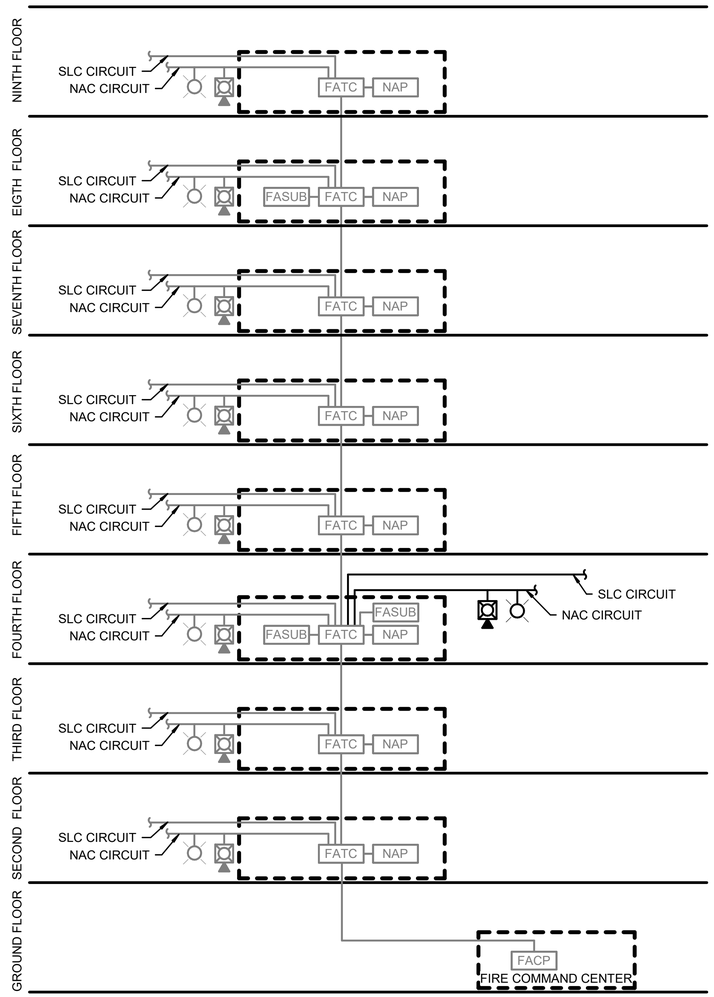
REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	FIRE ALARM DETAILS
WORKING STAFF	MWF (DESIGNED BY) / MWF (DRAWN BY) / JS (CHECKED BY)
SHEET NO.	30 OF 75

FA501DT
DISCIPLINE TYPE SEQUENCE DRAWING TYPE



A1 / FA601SH — FIRE ALARM RISER DIAGRAM

SCALE =NTS

SYSTEM INPUTS	PANEL FUNCTIONS: The Red "ALARM" LED Will Illuminate At The Main Building FACP	PANEL FUNCTIONS: The Sonalert On The Main Building FACP Will Sound A Distinct ALARM Tone.	PANEL FUNCTIONS: The General ALARM Relay In The Main Building FACP Will Activate, Thus Activating The DACT	PANEL FUNCTIONS: The "SUPERVISORY" LED Will Illuminate At The Main Building FACP.	PANEL FUNCTIONS: The Sonalert On The Main Building FACP Will Sound A Distinct SUPERVISORY Tone.	PANEL FUNCTIONS: Initiate Closure Of The General SUPERVISORY Relay In The Main Building FACP, Thus Activating The DACT	ANNUNCIATION: Display An Alpha-Numeric Message At The Main Building FACP Describing The Device Activated, Along With It's Location, Time Of Occurrence, And Current Status.	ANNUNCIATION: The Main Building FACP Will Record The Event (As Shown On The Display) In The History Buffer.	ANNUNCIATION: Illuminate The Appropriate LED's At The Graphic Annunciator So As To Display The Type Of Device Activated And It's Location Within The Building.	ANNUNCIATION: Illuminate The Local LED Thus Indicating Activation (And Relative Location) Of The Device.	NOTIFICATION: Broadcast The Audible Evacuation Message Throughout The Building.	All Fire Alarm Strobes Throughout The Building Will Flash Continuously (In Synchronization).	AUX: Transmit A Signal To Adjacent Building System.
Manual Pull Station	X	X	X				X	X	X	X	X	X	X
Smoke Detector	X	X	X				X	X	X	X	X	X	X
Duct Smoke Detector - AHU Return	X	X	X				X	X	X	X	X	X	X
Sprinkler Water Flow Switch	X	X	X				X	X	X	X	X	X	X
Sprinkler Valve Tamper Switch				X	X	X	X	X	X	X			X

Notes:
1. Existing fire alarm sequences to remain.

**SEQUENCE OF OPERATIONS SHOWN ABOVE WAS OBTAINED FROM EXSTING SHOP DRAWING DOCUMENTATION AND WAS NOT FIELD VERIFIED. CONTACTOR SHALL FIELD VERIFY THE EXISTING FIRE ALARM SEQUENCE OF OPERATIONS AND PROVIDE UPDATED MATRIX AS PART OF SHOP DRAWINGS/AS-BUILT DOCUMENTS.

A5 / FA601SH — PARTIAL FIRE ALARM MATRIX

SCALE = 12" = 1'-0"

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

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DISTRICT OF COLUMBIA — JASON D. SLATTERY — PE000414 — 04/18/25 — FIRE PROTECTION — PROFESSIONAL ENGINEER

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	FIRE ALARM RISER DIAGRAM AND MATRIX
WORKING STAFF	MWF (DESIGNED BY) / MWF (DRAWN BY) / JS (CHECKED BY)
SHEET NO.	31 OF 75
	FA 601 SH (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

4/16/2025 4:25:40 PM
FA601SH BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

FIRE SUPPRESSION GENERAL NOTES

1. THE SCOPE OF THIS PROJECT IS TO PROVIDE MODIFICATION OF THE EXISTING SPRINKLER SYSTEM ON PORTIONS OF THE FOURTH FLOOR OF THE EAST TOWER OF THE CAPITAL GALLERY BUILDING. THE ANTICIPATED SYSTEM MODIFICATIONS INCLUDE REPLACEMENT OF ALL STANDARD RESPONSE SPRINKLERS WITH QUICK RESPONSE SPRINKLERS THROUGHOUT ALL AREAS AND THE ADDITION OF SPRINKLERS TO ADDRESS WALL AND CEILING MODIFICTIONS AS REQUIRED. THE CONTRACTOR SHALL PROVIDE A COMPLETE AUTOMATIC, HYDRAULICALLY CALCULATED SPRINKLER SYSTEMS THROUGHOUT THE MODIFIED PORTIONS OF THE BUILDING INCLUDING ALL REQUIRED EQUIPMENT FOR THE SYSTEM. ALL WORK AND INSTALLATION SHALL CONFORM WITH THE APPLICABLE PROVISIONS OF THE INTERNATIONAL BUILDING CODE (IBC)-2021 EDITION, INTERNATIONAL FIRE CODE (IFC)-2021 EDITION, NFPA 13-2022, SMITHSONIAN INSTITUTION OSHEM FIRE PROTECTION & LIFE SAFETY DESIGN MANUAL (2019), AND SMITHSONIAN INSTITUTION CODE, STANDARDS AND GUIDELINES (2021). CONTRACTOR TO CONFORM TO CURRENT SI GUIDE SPECIFICATION 211311 AVAILABLE ONLINE VIA THE SMITHSONIAN INSTITUTION WEBSITE.
2. INFORMATION CONTAINED IN THESE DRAWINGS IS BASED ON EXISTING DOCUMENTS AND FIELD MEASUREMENTS. THE INFORMATION CONTAINED HEREIN MAY REQUIRE ADJUSTMENTS AND/OR MODIFICATIONS TO CONFORM TO EXISTING CONDITIONS. IN ADDITION, THE CONTRACTOR SHALL NOTIFY CONTRACTING OFFICER IF ANY DISCREPANCY IN EXISTING CONDITION SHOULD PROHIBIT EXECUTION OF THE DESIGN INTENT OF THESE DRAWINGS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT JOB SITE CONCERNING EXISTING AND NEW WORK BEFORE PROCEEDING WITH EITHER FABRICATION OR INSTALLATION OF NEW WORK.
3. ALL CONTRACT DRAWINGS (INCLUDING ALL DISCIPLINES, I.E.: ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC.) AND ALL CONTRACT SPECIFICATIONS ARE COMPLEMENTARY AND MUST BE USED IN CONCERT TO OBTAIN COMPLETE CONSTRUCTION INFORMATION. CONTRACTOR SHALL COORDINATE ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. QUESTIONS REGARDING DESIGN INTENT OR SYSTEM OPERATION SHALL BE PROMPTLY BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION.
4. ANY INFORMATION THAT CONFLICTS OR OTHER TECHNICAL ISSUES SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION. THE CONTRACTOR(S) SHALL NOT PROCEED WITH ANY WORK, EXCEPT AT THEIR OWN RISK, UNTIL CLARIFICATIONS OF THE CONFLICTS ARE ISSUED TO THE CONTRACTOR(S) BY THE CONTRACTING OFFICER.
5. SPRINKLER SYSTEM SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED PRIOR TO THE PURCHASE, FABRICATION OR INSTALLATION OF ANY EQUIPMENT.
6. ALL SPRINKLER SYSTEM PIPING INDICATED ON THE DRAWINGS IS EITHER EXISTING-TO-REMAIN OR IS TO BE REMOVED AND REPLACED AS INDICATED.
7. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO WELDING AND CUTTING OPERATIONS.
8. CONTRACTOR SHALL NOT INFRINGE ON ANY REQUIRED CLEARANCES OF EXISTING ELECTRICAL PANELS.
9. ALL WALL PENETRATIONS SHALL BE CORE-DRILLED. ALL PENETRATIONS IN WALLS AND CEILINGS SHALL BE PROTECTED WITH UL LISTED THROUGH-PENETRATION FIRE-STOP SYSTEMS OF EQUAL OR GREATER FIRE RESISTANCE RATING TO THE PENETRATING MEMBER. IN ADDITION, ALL EXISTING PENETRATIONS LEFT AS A RESULT OF THE DEMOLITION OF THE EXISTING SPRINKLER SYSTEMS SHALL BE PROTECTED WITH UL LISTED THROUGH-PENETRATION FIRE-STOP SYSTEMS OF EQUAL OR GREATER FIRE RESISTANCE RATING TO THE PENETRATING MEMBER.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EQUIPMENT, FURNISHINGS, FIXTURES AND CONTENTS OF EACH SPACE FROM DAMAGE, DUST AND DEBRIS ASSOCIATED WITH NEW WORK. EXTREME CARE AND CAUTION RELATED TO THE EXISTING SPACES SHALL BE PROVIDED THROUGHOUT THE CONSTRUCTION PROCESS. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE MUSEUM DURING CONSTRUCTION. WORK IN OCCUPIED AREAS SHALL BE PROPERLY SECURED WITH BARRIERS SO AS NOT TO CREATE A SAFETY HAZARD. PROVIDE DROP CLOTH OR OTHERWISE PROTECT BUILDING FINISHES FROM ALL CONSTRUCTION DEBRIS AND DUST. REMOVE ALL TRASH AND DEBRIS ON A DAILY BASIS AND RESTORE AREAS TO PRE-CONSTRUCTION CONDITION AS WORK IS COMPLETED. CONTRACTOR IS RESPONSIBLE FOR DAILY CLEAN UP, INCLUDING THE REMOVAL OF DEBRIS AND CONSTRUCTION MATERIAL.
11. NO STRUCTURAL MEMBERS OR STRUCTURAL SYSTEMS SHALL BE CUT, DRILLED, BURNED OR MODIFIED IN ANY WAY.
12. SPRINKLERS INSTALLED IN PROXIMITY TO DUCTS, PIPES, LIGHTS OR OTHER OBSTRUCTIONS SHALL BE LOCATED TO MINIMIZE OBSTRUCTION TO DISCHARGE IN ACCORDANCE WITH NFPA 13.
13. SPRINKLERS SHALL BE PROVIDED BELOW ALL OBSTRUCTIONS WIDER THAN 48 INCHES OR ALL GROUPS OF OBSTRUCTIONS IN CLOSE PROXIMITY TO EACH OTHER WITH A COMBINED WIDTH OF OVER 48 INCHES.
14. ALL SPRINKLER PIPING SHALL BE INSTALLED SO THAT ALL PORTIONS OF THE SYSTEM CAN BE DRAINED BACK THROUGH THE DRAIN VALVE(S). ALL SYSTEM PIPING SHALL BE PITCHED IN ACCORDANCE WITH NFPA 13 REQUIREMENTS. WHERE PIPING CANNOT BE DRAINED BACK TO ZONE CONTROL DRAIN VALVES, PROVIDE AUXILIARY DRAIN(S) IN ACCORDANCE WITH NFPA 13.
15. ALL SPRINKLERS SUBJECT TO MECHANICAL DAMAGE SHALL BE PROTECTED WITH GUARDS IN ACCORDANCE WITH NFPA 13, INCLUDING ELECTRICAL EQUIPMENT ROOMS AND ALL AREAS WHERE SPRINKLERS ARE INSTALLED AT OR BELOW 7 FEET AFF.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING ALL CONFLICTS WITH LIGHTING FIXTURES, DIFFUSERS, GRILLS, DUCTS, STRUCTURAL MEMBERS, PIPES AND OTHER OBSTRUCTIONS ENCOUNTERED.
17. ALL DAMAGE TO EXISTING WALLS, CEILINGS, FLOORS, AND STRUCTURAL MEMBERS FROM PENETRATIONS, REMOVALS, INSTALLATIONS OR OTHER ACTIONS OF THE CONTRACTOR SHALL BE PATCHED, REPAIRED AND PAINTED WITH NEW MATERIALS BY THE CONTRACTOR TO MATCH ADJACENT WORK, WHETHER SPECIFICALLY NOTED OR NOT.
18. DUCTWORK, PIPING, MECHANICAL EQUIPMENT AND CEILINGS SHALL NOT BE UTILIZED AS LADDERS, SCAFFOLDING OR WORK PLATFORMS.
19. CONTRACTOR IS RESPONSIBLE FOR DRAINING DOWN AND RE-FILLING THE EXISTING SPRINKLER SYSTEM(S) IN THE WORK AREAS. CONTRACTOR SHALL CONTACT THE CONTRACTING OFFICER NO LESS THAN 5 DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF SPRINKLER SERVICE. THE CONTRACTOR IS RESPONSIBLE FOR REQUESTING THIS OUTAGE, THROUGH THE CONTRACTING OFFICER, AND FOR OBTAINING THE SERVICES OF AN APPROVED FIRE ALARM COMPANY TO MONITOR THE FIRE ALARM PANEL DURING THE OUTAGE.
20. THE TERM "PROVIDE" SHALL MEAN THE CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT FOR A COMPLETE AND OPERATIONAL SYSTEM IN ACCORDANCE WITH MANUFACTURER'S CRITERIA, NFPA STANDARDS AND FEDERAL STANDARDS AND REGULATIONS.
21. THE TERM "REMOVE" SHALL MEAN CONTRACTOR SHALL DISCONNECT AND CLEAR FROM SITE.
22. ONLY LISTED HANGERS AND SUPPORTS SHALL BE USED FOR FIRE PROTECTION EQUIPMENT.
23. HANGERS FOR FIRE PROTECTION PIPING AND EQUIPMENT SHALL ONLY BE USED FOR SUPPORTING THE PIPE OR EQUIPMENT. OTHER MECHANICAL, PLUMBING OR ELECTRICAL SYSTEMS AND EQUIPMENT SHALL NOT BE SUPPORTED BY FIRE PROTECTION SYSTEM SUPPORTS. FIRE PROTECTION SUPPORTS SHALL BE DIRECTLY CONNECTED TO THE STRUCTURE AND SHALL NOT BE CONNECTED TO OTHER EQUIPMENT, EQUIPMENT SUPPORTS, OR EQUIPMENT SUCH AS TRAPEZE HANGERS WHICH ARE NOT DEDICATED FOR THE SOLE USE OF THE FIRE PROTECTION SYSTEMS.
24. ALL SPRINKLERS SHALL BE QUICK RESPONSE TYPE EXCEPT AS NOTED OR WHERE QUICK RESPONSE TYPES ARE NOT LISTED FOR USE.
25. ALL QUICK RESPONSE GLASS BULB SPRINKLERS SHALL BE EQUIPPED WITH A PROTECTIVE DEVICE TO REDUCE DAMAGE PRIOR TO INSTALLATION. THE PROTECTIVE DEVICE SHALL ONLY BE REMOVED AFTER SPRINKLERS ARE INSTALLED AND CONSTRUCTION ACTIVITIES IN THE VICINITY OF THE SPRINKLER HAVE BEEN COMPLETED.
26. WHERE THE MAXIMUM STATIC OR FLOWING PRESSURE APPLIED TO A SPRINKLER EXCEEDS 100 PSI (6.9 BARS), UNSUPPORTED LENGTHS OF PIPES AND ARM-OVERS SHALL BE SUPPORTED AND RESTRAINED FROM UPWARD MOVEMENT AS REQUIRED BY NFPA 13. UNSUPPORTED LENGTHS OF PIPE SHALL BE WITHIN THE LIMITATIONS OF NFPA 13.
27. HANGER LOCATIONS SHALL BE PER NFPA 13 AND SHALL MEET THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
28. PLAIN-END FITTINGS WITH MECHANICAL COUPLINGS, HOLE-CUT MECHANICAL THREADED OUTLET FITTINGS, HOLE-CUT MECHANICAL GROOVED OUTLET FITTINGS, AND HOLE-CUT SADDLE CLAMP OUTLET FITTINGS ARE NOT PERMITTED FOR NEW SYSTEMS OR FOR MODIFICATIONS TO EXISTING SYSTEMS. THE ABOVE FITTING TYPES ARE ONLY PERMITTED ON A CASE-BY-CASE BASIS WHEN APPROVED BY OSHEM.

SYMBOLS LIST

- SPRINKLER PIPING / EQUIPMENT - EXISTING TO REMAIN
- SPRINKLER PIPING / EQUIPMENT - EXISTING TO BE REMOVED
- SPRINKLER PIPING / EQUIPMENT - NEW WORK
- 90° ELBOW TURNED AWAY FROM VIEWER
- TEE TURNED AWAY FROM VIEWER
- CAPPED SPRINKLER PIPING
- PIPE CONTINUATION
- SPRINKLER / STANDPIPE RISER
- ZONE CONTROL ASSEMBLY WITH INDICATING TYPE VALVE WITH SUPERVISORY SWITCH (SUPERVISED OPEN), CHECK VALVE, WATERFLOW SWITCH & TEST/DRAIN VALVE
- FIRE HOSE VALVE
- EXISTING SPRINKLER ARMOVER CONNECTION POINT
- PENDENT SPRINKLER
- QUICK RESPONSE CONCEALED PENDENT SPRINKLER
- QUICK RESPONSE RECESSED PENDENT SPRINKLER
- KEY NOTE INDICATOR
- START OF WORK INDICATOR
- DETAIL IDENTIFICATION NUMBER / DETAIL IDENTIFICATION BUBBLE / SHEET DETAIL IS SHOWN ON / SHEET DETAIL IS TAKEN FROM
- SECTION IDENTIFICATION NUMBER / SECTION IDENTIFICATION BUBBLE / SHEET SECTION IS SHOWN ON / SHEET SECTION IS TAKEN FROM

ABREVIATIONS

ABBREV	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ATC	ACOUSTICAL TILE CEILING
BM	BEAM
BOB	BOTTOM OF BEAM
CON	CONCRETE
CONC	CONCRETE SLAB AND BEAMS
CONF	CONFERENCE
COTR	CONTRACTING OFFICER TECHNICAL REPRESENTATIVE
DEMO	DEMOLITION
DN	DOWN
ELEC	ELECTRICAL
EXST	EXISTING
FL	FLOOR
FM	FACTORY MUTUAL
FS	FLOW SWITCH
FT	FEET
GPM	GALLONS PER MINUTE
GYP	GYPSUM BOARD ON WOOD OR METAL JOISTS
IN	INCH
LAT	LAY-IN ACOUSTICAL TILE - SUSPENDED
LPM, L/MIN	LITERS PER MINUTE
LTH	LIGHT HAZARD
M	METER
M.SQ	METER SQUARE
MECH	MECHANICAL
MIN	MINUTE
MM	MILLIMETER
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OH-1	ORDINARY HAZARD GROUP 1
OH-2	ORDINARY HAZARD GROUP 2
OSHEM	OFFICE OF SAFETY, HEALTH AND ENVIRONMENTAL MANAGEMENT
OTA	OPEN TO ABOVE
PSI	POUND PER SQUARE INCH
QRS	QUICK RESPONSE SPRINKLER
RM	ROOM
SEC	SECOND
SERV	SERVICE
SP	STANDPIPE
SQ	SQUARE
SR	STANDARD RESPONSE
SSP	SPRINKLER / STANDPIPE (COMBINED)
ST	STEEL DECK
TBD	TO BE DETERMINED
TELE	TELEPHONE
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED

NFPA 13 HAZARD CLASSIFICATIONS

ALL AREAS ARE TO BE CONSIDERED LIGHT HAZARD (0.10 GPM/SQ FT OVER 1500 SQ FT) UNLESS NOTED OTHERWISE.

OH1 ORDINARY HAZARD GROUP 1
0.15 GPM/SQ FT OVER 1500 SQ FT

OH2 ORDINARY HAZARD GROUP 2
0.20 GPM/SQ FT OVER 1500 SQ FT

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	SPRINKLER REFERENCE SHEET
WORKING STAFF	MWF (DESIGNED BY) / MWF (DRAWN BY) / JS (CHECKED BY)
SHEET NO.	32 OF 75
	FX 001 CS (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

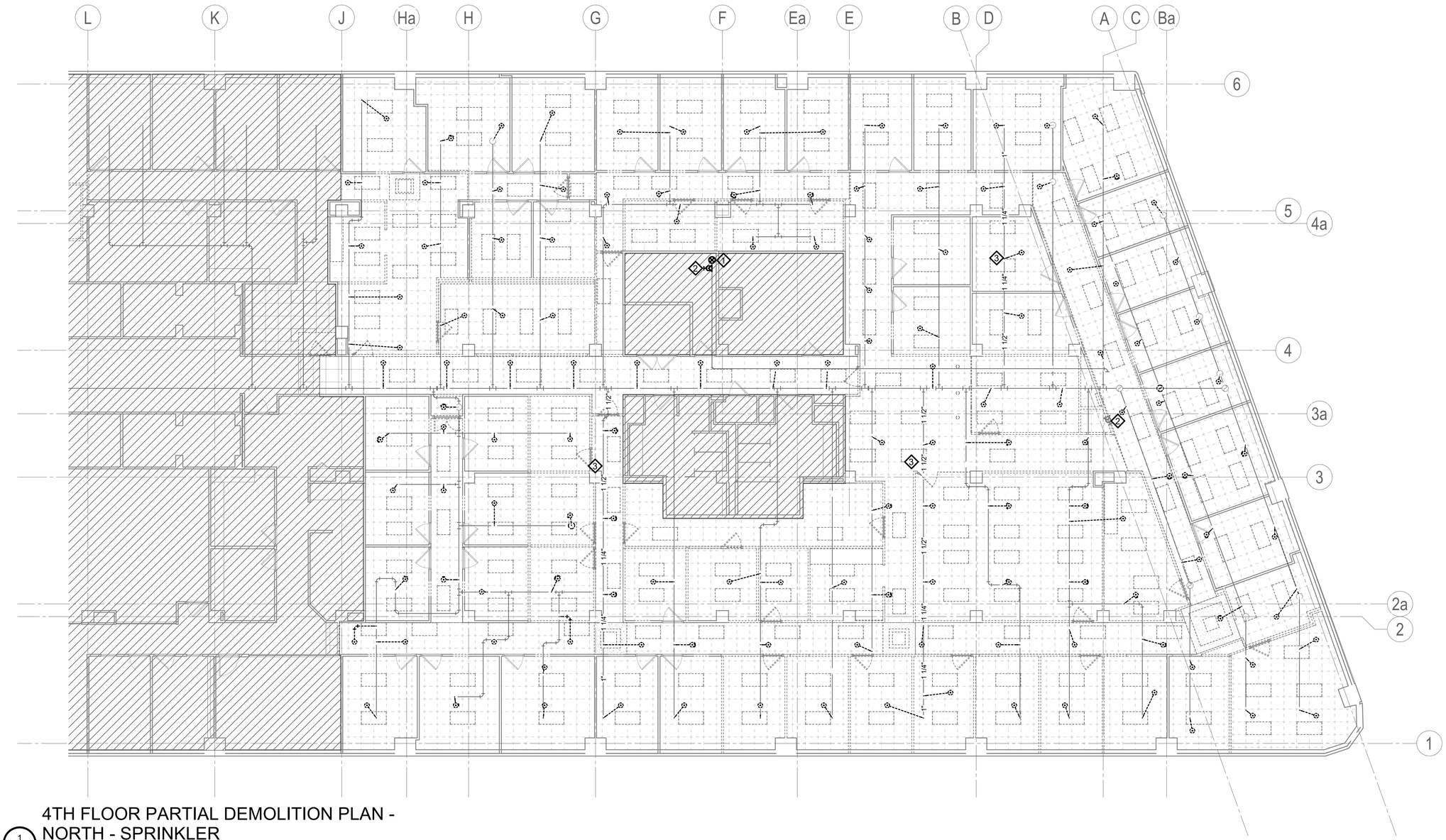
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FX001CS BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

SHEET NOTES

1. ALL NEW SPRINKLER BRANCH LINE PIPING SHALL BE SIZED TO MATCH THE EXISTING SYSTEM PIPE SCHEDULE.
2. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL WALL AND CEILING INFORMATION.
3. REMOVE EXISTING ARMOVER, DROP, SPRINKLER HEAD, AND ASSOCIATED COMPONENTS UNLESS NOTED OTHERWISE.
4. MODIFICATIONS OF THE EXISTING SPRINKLER SYSTEM ARE LIMITED TO THE RENOVATION WORK AREAS. MODIFICATIONS OR CHANGES TO THE EXISTING SPRINKLER SYSTEMS OUTSIDE THE AREAS OF WORK ARE NOT ANTICIPATED.
5. THE EXISTING SPRINKLER SYSTEM INSIDE AND OUTSIDE THE RENOVATION WORK AREAS SHALL REMAIN ACTIVE AND IN SERVICE THROUGHOUT CONSTRUCTION, EXCEPT FOR THE SCHEDULED SHUTDOWN REQUIRED TO REMOVE THE EXISTING PENDENT SPRINLKERS AND THE SHUTDOWN REQUIRED TO PROVIDE NEW PENDENT SPRINKLERS IN THE RENOVATED CEILINGS.
6. PLAIN-END FITTINGS WITH MECHANICAL COUPLINGS, HOLE-CUT MECHANICAL THREADED OUTLET FITTINGS, HOLE-CUT MECHANICAL GROOVED OUTLETFITTINGS, AND HOLE-CUT SADDLE CLAMP OUTLET FITTINGS ARE NOT PERMITTED FOR NEW SYSTEMS OR FOR MODIFICATIONS TO EXISTING SYSTEMS. THE ABOVE FITTING TYPES ARE ONLY PERMITTED ON A CASE-BY-CASE BASIS WHEN APPROVED BY OSHEM.

KEY NOTES

1. EXISTING 6" SPRINKLER-STANDPIPE RISER TO REMAIN.
2. EXISTING 2 1/2" FIRE HOSE VALVE TO BE RELOCATED.
3. TYPICAL PIPE SCHEDULE FOR SPRINKLER BRANCHLINES. CONTRACTOR TO FIELD VERIFY ALL PIPE SIZING PRIOR TO SPRINKLER INSTALLATION.



1 FX101DP — 4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - SPRINKLER

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

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FX101DP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

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04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

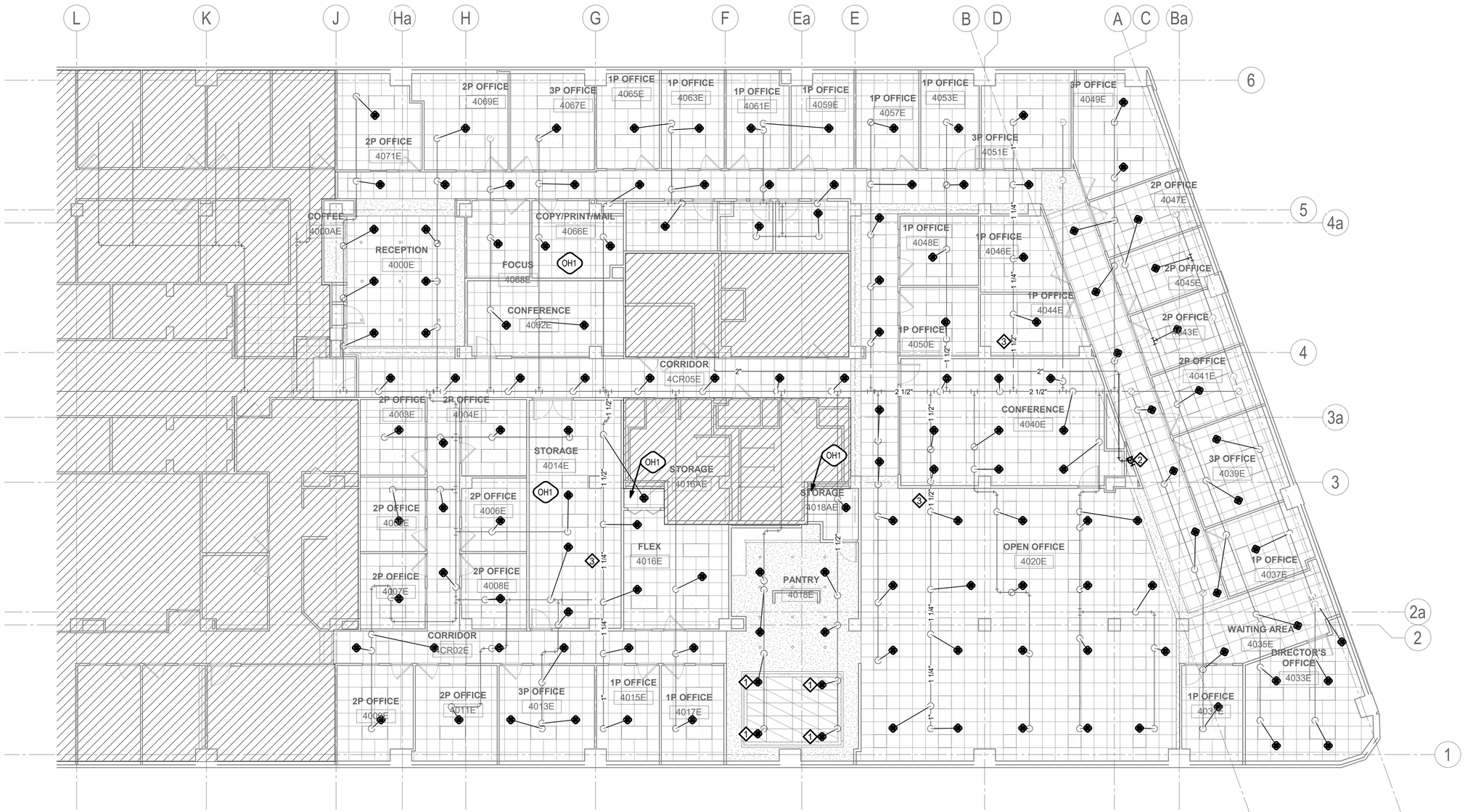
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PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL DEMOLITION PLAN – NORTH – SPRINKLER
WORKING STAFF	MWF (DESIGNED BY) / MWF (DRAWN BY) / JS (CHECKED BY)
SHEET NO.	33 OF 75
	FX101DP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

SHEET NOTES

1. CONTRACTOR TO REPLACE ALL EXISTING AUTOMATIC SPRINKLER HEADS WITH RECESSED QUICK RESPONSE SPRINKLERS.
2. CONTRACTOR TO ENSURE SPRINKLER COVERAGE PROVIDED IS IN ACCORDANCE WITH NFPA 13 LIGHT HAZARD DESIGN UNLESS SPECIFICALLY NOTED AS ORDINARY HAZARD GROUP 1 OR 2. LIGHT HAZARD SPACING HAS BEEN REDUCED UTILIZING EXISTING SPRINKLER OUTLETS WITHOUT ADDING ADDITIONAL SPRINKLERS TO PROVIDE FOR FUTURE FLEXIBILITY.
3. THE CONTRACTOR SHALL PROVIDE WORKING SHOP DRAWINGS FOR REVIEW AND APPROVAL
4. THE CONTRACTOR SHALL PRVOIDE HYDRAULIC CALCULATIONS FOR THE HYDRAULICALLY MOST REMOTE AREA OF THE RENOVATED SPACE FOR REVIEW AND APPROVAL.
5. THE CONTRACTOR SHALL FIELD VERIFY THE SPRNKLER PIPPING LAYOUT, PIPE SIZES AND ASSOCIATED CONFIGURATION TO ENSURE ACCURACY FOR SHOP DRAWINGS AND HYDRAULIC CALCULATIONS.
6. CAP OR PLUG ALL EXISTING SPRINKLER PIPE OUTLETS NOT BEING REUSED.
7. PROVIDE SPRINKLER ARMOVER, DROP, SPRINKLER, AND ASSOCIATED COMPONENTS UNLESS NOTED OTHERWISE.
8. PLAIN-END FITTINGS WITH MECHANICAL COUPLINGS, HOLE-CUT MECHANICAL THREADED OUTLET FITTINGS, HOLE-CUT MECHANICAL GROOVED OUTLETFITTINGS, AND HOLE-CUT SADDLE CLAMP OUTLET FITTINGS ARE NOT PERMITTED FOR NEW SYSTEMS OR FOR MODIFICATIONS TO EXISTING SYSTEMS. THE ABOVE FITTING TYPES ARE ONLY PERMITTED ON A CASE-BY-CASE BASIS WHEN APPROVED BY OSHEM.

KEY NOTES

1. REFER TO DETAIL E1 ON SHEET FX501DT FOR SPRINKLER MOUNTING LOCATION.
2. RELOCATE 2 1/2" FIRE HOSE VALVE TO THE LOCATION INDICATED.
3. TYPICAL PIPE SCHEDULE FOR SPRINKLER BRANCHLINES. CONTRACTOR TO FIELD VERIFY ALL PIPE SIZING PRIOR TO SPRINKLER INSTALLATION.



4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - SPRINKLER

1 FX111FP SCALE = 1/8" = 1'-0"

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FX111FP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

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DISTRICT OF COLUMBIA — JASON W. STATTON — PE005414 — 04/18/25 — FIRE PROTECTION — PROFESSIONAL ENGINEER

STAMP

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

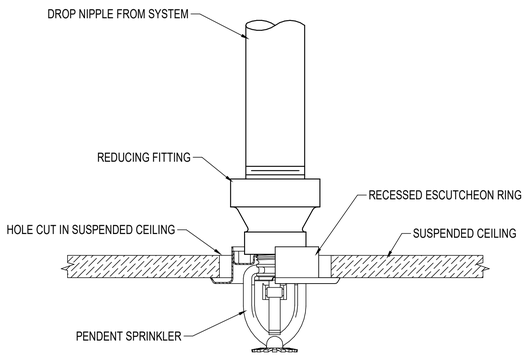
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04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

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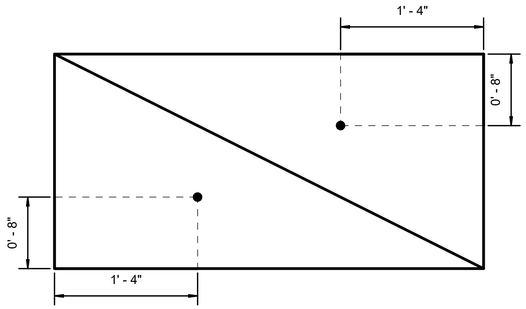
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

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A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL NEW WORK PLAN – NORTH – SPRINKLER
WORKING STAFF	MWF (DESIGNED BY) / MWF (DRAWN BY) / JS (CHECKED BY)
SHEET NO.	34 OF 75
	FX 1 1 1 FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



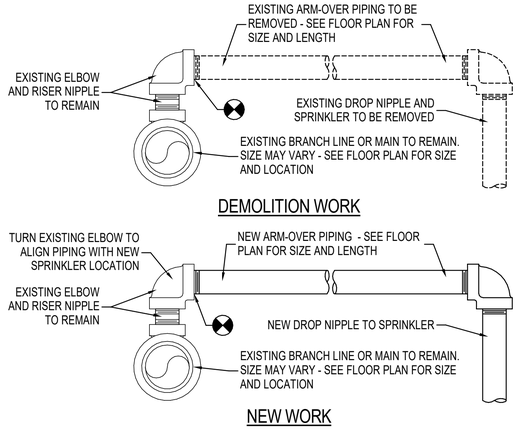
H1 FX501DT RECESSED PENDENT SPRINKLER

SCALE =NTS



E1 FX501DT SPRINKLER MOUNTING LOCATION IN TRIANGLE CEILING TILES

SCALE =NTS



H7 FX501DT CONNECTION OF NEW SPRINKLER ARM-OVER1

SCALE =NTS

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Renovate 4E NMAL Office Suite

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SI PROJECT NUMBER	2566904
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DRAWING TITLE	SPRINKLER DETAILS
WORKING STAFF	MWF (DESIGNED BY) · MWF (DRAWN BY) · JS (CHECKED BY)
SHEET NO.	35 OF 75
	FX501DT (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)

ABBREVIATIONS

A	AMPERE(S)
AC	ALTERNATING CURRENT
ACU	AIR CONDITIONING UNIT
ADA	AMERICANS WITH DISABILITIES ACT
AF	AMPERES FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERES INTERRUPTING CAPACITY
ARCH	ARCHITECTURAL
AT	AMPERES TRIP
ATC	AUTOMATIC TEMPERATURE CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIOVISUAL
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CCT	CORRELATED COLOR TEMPERATURE
CKT	CIRCUIT
CLG	CEILING
CM	CUSTOMER METER
CMMS	COMBINATION MAGNETIC MOTOR STARTER
CPT	CONTROL POWER TRANSFORMER
CRI	COLOR RENDERING INDEX
CT	CURRENT TRANSFORMER
CX	CONNECT TO EXISTING
DC	DIRECT CURRENT
DESIG	DESIGNATION
DIST	DISTRIBUTION
DN	DOWN
DWG	DRAWING
DX	DISCONNECT EXISTING
EA	EACH
EC	EMPTY CONDUIT
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
EH	ELECTRIC HEATER
ELEC	ELECTRIC
ELV	ELECTRONIC LOW VOLTAGE
EMH	ELECTRIC MANHOLE
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EX	EXISTING
F	FUSE
FDAS	FIRE DETECTION ALARM SYSTEM
FDR	FEEDER
FLA	FULL LOAD AMPERES
FMC	FLEXIBLE METAL CONDUIT
FMMS	FRACTIONAL MANUAL MOTOR STARTER
FS	FUSED SWITCH
FT	FOOT OR FEET
FVNR	FULL VOLTAGE NON-REVERSING
GFCI	GROUND FAULT CIRCUIT INTERRUPTER (5 MILLIAMPS)
GFEP	GROUND FAULT EQUIPMENT PROTECTION (30 MILLIAMPS)
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
HV	HIGH VOLTAGE
HZ	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT(S)
KVA	KILOVOLT-AMPERE(S)
KW	KILOWATT(S)
LED	LIGHT EMITTING DIODE
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
LTG	LIGHTING
MAFC	MAKE ALL FINAL CONNECTIONS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MH	MOUNTING HEIGHT
MLO	MAIN LUGS ONLY
MOA	MULTI-OUTLET ASSEMBLY
MS	MANUAL STARTER
MTD	MOUNTED
MV	MEDIUM VOLTAGE
N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFS	NON-FUSED SWITCH
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
OL	OVERLOAD
P	POLE
PH	PHASE
PIR	PASSIVE INFRARED
PNL	PANEL
PVC	POLYVINYL CHLORIDE
REC	RECEPTACLE(S)
REQD	REQUIRED
REL	RELOCATE OR RELOCATED
RF	RETURN FAN
RMC	RIGID METAL CONDUIT
RM(S)	ROOM(S)
RVAT	REDUCED VOLTAGE AUTOTRANSFORMER
RX	REMOVE EXISTING
SF	SUPPLY FAN
SMR	SURFACE METAL RACEWAY
SPD	SURGE PROTECTIVE DEVICE
ST	SHUNT TRIP
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TA	TRIP AMPERES
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
V	VOLT(S)
VA	VOLT-AMPERE(S)
VFC	VARIABLE FREQUENCY CONTROLLER
VT	VOLTAGE TRANSFORMER
W	WIRE
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER

SYMBOLS

LIGHTING

- SINGLE POLE SWITCH MOUNTED 48" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. SUBSCRIPTS ARE AS FOLLOWS:
  3 - THREE WAY SWITCH
  4 - FOUR WAY SWITCH
  D - DIMMER SWITCH
  P - SWITCH WITH PILOT LIGHT
  K - KEY-OPERATED SWITCH
  T - TIME SWITCH
  WP - SWITCH WITH WEATHERPROOF COVER
  OS - OCCUPANCY SENSOR
  a - LOWER CASE LETTER INDICATES SWITCH LEG
- CEILING MOUNTED LIGHTING FIXTURE
- PENDANT MOUNTED LIGHTING FIXTURE
- WALL MOUNTED LIGHTING FIXTURE
- INDUSTRIAL LIGHTING FIXTURE
- LIGHTING TRACK
- TRACK MOUNTED LIGHTING FIXTURE
- CEILING MOUNTED DOWNLIGHT
- CEILING MOUNTED WALL WASHER
- CEILING SURFACE MOUNTED DECORATIVE LIGHTING FIXTURE
- PENDANT MOUNTED DECORATIVE LIGHTING FIXTURE
- WALL MOUNTED SCONCE OR WALL PACK
- WALL MOUNTED, SINGLE-FACE EXIT SIGN WITH CHEVRON AS SHOWN
- CEILING OR PENDANT MOUNTED, SINGLE-FACE EXIT SIGN WITH CHEVRON AS SHOWN
- CEILING OR PENDANT MOUNTED, DUAL-FACE EXIT SIGN WITH CHEVRONS AS SHOWN
- EMERGENCY LIGHTING UNIT MOUNTED 90" AFF
- CONTACTOR MOUNTED 5'-6" TO TOP OF ENCLOSURE
- PC PHOTOELECTRIC CONTROL SWITCH
- TC TIME CLOCK
- MC MODULAR LIGHTING CONTROLLER
- SS SINGLE SPACE CONTROL STATION
- MS MULTISPACE CONTROL STATION FOR CORRIDORS, STAIRWELLS, AND CIRCULATION SPACES UNLESS OTHERWISE NOTED
- OS CEILING MOUNTED OCCUPANCY OR VACANCY SENSOR AS REQUIRED TO MEET LIGHTING CONTROL INTENT
- DL DAYLIGHT SENSOR

FIRE DETECTION AND ALARM SYSTEMS

- FACP FIRE ALARM PANELS AND SWITCHES
  AM - ADDRESSABLE MODULE
  EGS - EMERGENCY GENERATOR STATUS
  ESR - ELEVATOR STATUS/RECALL
  FAA - FIRE ALARM ANNUNCIATOR PANEL
  FACP - FIRE ALARM CONTROL PANEL
  FATC - FIRE ALARM TERMINAL CABINET
  FPS - FIRE PUMP STATUS
  NAC - NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL
  VS - VALVE TAMPER SWITCH CONNECTION
  WF - WATER FLOW SWITCH CONNECTION
- SMOKE DETECTOR - PHOTOELECTRIC TYPE WITHOUT SUBSCRIPT. SUBSCRIPTS ARE AS FOLLOWS:
  E - PHOTOELECTRIC FOR ELEVATOR RECALL
  BR - BEAM RECEIVER
  BT - BEAM TRANSMITTER
  I - IONIZATION
- DUCT SMOKE DETECTOR
- HEAT DETECTOR - COMBINATION RATE OF RISE & FIXED TEMPERATURE TYPE WITHOUT SUBSCRIPT. SUBSCRIPTS ARE AS FOLLOWS:
  R/C - RATE COMPENSATION
  F - FIXED TEMPERATURE
  R - RATE OF RISE
- F MANUAL PULL STATION WALL MOUNTED AT 48" AFF
- F AUDIBLE DEVICE WALL MOUNTED 6" BELOW CEILING OR AT 90" AFF, WHICHEVER IS LOWER
- 15 COMBINATION AUDIBLE DEVICE AND STROBE LIGHT WALL MOUNTED 6" BELOW CEILING OR AT 80" AFF, WHICHEVER IS LOWER. SUBSCRIPT INDICATES CANDELA RATING
- 15 COMBINATION AUDIBLE DEVICE AND STROBE LIGHT MOUNTED ON DROPPED CEILING OR JUNCTION BOX IN OPEN CEILINGS. SUBSCRIPT INDICATES CANDELA RATING
- 15 STROBE LIGHT MOUNTED 6" BELOW CEILING OR AT 80" AFF, WHICHEVER IS LOWER. SUBSCRIPT INDICATES CANDELA RATING
- MAGNETIC DOOR HOLDER

TELECOMMUNICATIONS

- DATA OUTLET BOX WITH 1" C TO ABOVE ACCESSIBLE CEILING
- VOICE OUTLET BOX WITH 1" C TO ABOVE ACCESSIBLE CEILING
- VOICE/DATA OUTLET BOX WITH 1" C TO ABOVE ACCESSIBLE CEILING
- DATA JACK MOUNTED IN PEDESTAL
- SPEAKER
- M MICROPHONE JACK
- V VOLUME CONTROL SWITCH MOUNTED 48" AFF
- CABLE TRAY

POWER - FLOOR PLANS

- NEMA 5-20R DUPLEX RECEPTACLE. SUBSCRIPTS APPLY TO ALL RECEPTACLE TYPES WHERE INDICATED ON FLOOR PLANS. SUBSCRIPTS ARE AS FOLLOWS:
  G - GROUND FAULT CIRCUIT INTERRUPTER TYPE
  IG - ISOLATED GROUND
  C - BOTTOM HALF CONTROLLED BY LOCAL OCCUPANCY SENSOR
  U - RECEPTACLE WITH TWO USB OUTLETS
  WC - FOR WATER COOLER. PROVIDE GFCI PROTECTION AT CIRCUIT BREAKER
  AV - RECEPTACLE FOR AV EQUIPMENT. REFER TO AV DRAWINGS FOR EXACT LOCATION AND ADDITIONAL REQUIREMENTS.
  84" - MOUNTING HEIGHT AS INDICATED
- NEMA 5-20R SINGLE RECEPTACLE
- NEMA 5-20R QUAD RECEPTACLE
- NEMA L5-20R SINGLE RECEPTACLE. SUBSCRIPTS INDICATE DIFFERENT NEMA CONFIGURATIONS. SUBSCRIPTS ARE AS FOLLOWS:
  A - NEMA 6-20R, PROVIDE 20.2.0
  LA - NEMA L6-20R, PROVIDE 20.2.0
  B - NEMA 6-30R, PROVIDE 30.2.0
  LB - NEMA L6-30R, PROVIDE 30.2.0
- NEMA 5-20R DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER BACKSPLASH
- J JUNCTION BOX
- 208Y/120V SURFACE MOUNTED PANELBOARD
- 208Y/120V FLUSH MOUNTED PANELBOARD
- 480Y/277V SURFACE MOUNTED PANELBOARD
- 480Y/277V FLUSH MOUNTED PANELBOARD
- DUPLEX RECEPTACLES MOUNTED IN MULTI-OUTLET ASSEMBLY
- FB FLOOR BOX CONTAINING TWO NEMA 5-20R DUPLEX RECEPTACLES
  D - CONTAINS DATA. SEE TN SERIES DRAWINGS FOR SPECIFICATION AND LOCATION
- PT POKE-THRU CONTAINING TWO NEMA 5-20R DUPLEX RECEPTACLES
- W SYSTEMS FURNITURE WHIP. FEED TWO ADJACENT WORKSTATIONS PER CIRCUIT. GROUP AND ROUTE WIRING OF UP TO THREE CIRCUITS PER FITTING.
- P CEILING PROJECTOR CONNECTION. PROVIDE DUPLEX RECEPTACLE MOUNTED FLUSH IN CEILING.
- M MOTOR CONNECTION
- PUSHBUTTON
- ENCLOSED CIRCUIT BREAKER
- M FRACTIONAL MANUAL MOTOR STARTER MOUNTED 5'-0" AFF
- MAGNETIC MOTOR STARTER
- COMBINATION MAGNETIC MOTOR STARTER
- NON-FUSIBLE SWITCH
- FUSIBLE SWITCH
- S ELEVATOR SHUNT-TRIP FUSIBLE SWITCH
- ELEVATOR CAB LIGHT FUSIBLE SWITCH
- T TRANSFORMER
- VFC VARIABLE FREQUENCY CONTROLLER
- GROUND ROD
- UNDERGROUND DUCT BANK
- BUSWAY

POWER - ONE-LINE

- SHUNT-TRIP CIRCUIT BREAKER
- STATIONARY CIRCUIT BREAKER
- M CIRCUIT BREAKER METERED ON LOAD SIDE
- DRAW-OUT CIRCUIT BREAKER
- BUSWAY PLUG-IN CIRCUIT BREAKER
- NETWORK PROTECTOR
- DISCONNECT SWITCH
- FUSE
- FUSED DISCONNECT SWITCH
- BUSWAY PLUG-IN FUSED DISCONNECT SWITCH
- FUSED CUTOUT
- K KEY OPERATED MECHANICAL INTERLOCK
- GROUND
- CURRENT TRANSFORMER
- VOLTAGE TRANSFORMER
- THERMAL OVERLOADS
- CONTACTS
- U UTILITY METER
- M CUSTOMER METER
- G ENGINE GENERATOR SET
- TRANSFORMER
- TRANSFER SWITCH

DRAWING CONVENTIONS

- POINT OF CONNECTION - NEW TO EXISTING
- DEMOLITION WORK TERMINATION POINT
- 1 INDICATES SPECIAL NOTE
  NUMBER INDICATES SPECIAL NOTE DESIGNATION REFER TO SPECIAL NOTE LIST ON DRAWING FOR DESCRIPTION OF ITEM
- SYMBOLS WITH STEMS REPRESENT DEVICES WALL MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED
- J SYMBOLS WITHIN SQUARES REPRESENT FLOOR DEVICES IN RECESSED FLOOR BOXES UNLESS OTHERWISE NOTED
- J SYMBOLS WITHIN CIRCLES REPRESENT FLUSH CEILING MOUNTED DEVICES IN DROPPED CEILINGS UNLESS OTHERWISE NOTED
- XX LIGHTING FIXTURE TYPE, REFER TO LIGHTING FIXTURE SCHEDULE
  LIGHTING FIXTURE
  YY SWITCH DESIGNATION IN LOWER CASE
- DIAGONAL LINE INDICATES EMERGENCY LIGHTING FIXTURE
- X INDICATES DETAIL DESIGNATION
  EXX DRAWING WHERE DETAIL IS DRAWN
- INDICATES DIRECTION CUTTING PLANE
  A NUMBER OR LETTER INDICATES SECTION OR ELEVATION
  XX DRAWING NUMBER WHERE ELEVATION OR SECTION IS DRAWN
- XXX/X PANELBOARD NAME AND CIRCUIT NUMBER. PANELBOARD NAME DISTINGUISHES BETWEEN NORMAL AND GENERATOR POWER SYSTEMS
  BRANCH CIRCUIT HOME RUN: ARROWHEADS INDICATE NUMBER OF CIRCUITS. INCLUDE ONE EQUIPMENT GROUND CONDUCTOR.
  PROVIDE DEDICATED NEUTRAL WITH EACH BRANCH CIRCUIT
- CONDUIT RUN CONCEALED IN WALL OR CEILING IN FINISHED AREAS, EXPOSED IN UNFINISHED AREAS
- CONDUIT UNDERGROUND OR UNDER SLAB
- CONDUIT UP
- CONDUIT DOWN
- HEAVY LINE WEIGHT DESIGNATES NEW WORK ON NEW WORK PLANS, REMOVAL WORK ON DEMOLITION PLANS
- LIGHT LINE WEIGHT DESIGNATES EXISTING WORK TO REMAIN

BRANCH CIRCUIT WIRE SIZING STANDARD

PROVIDE #12 WIRE FOR 20A, 120V CIRCUITS UP TO 75' LONG
PROVIDE #10 WIRE FOR 20A, 120V CIRCUITS LONGER THAN 75' UP TO 120'
PROVIDE #8 WIRE FOR 20A, 120V CIRCUITS LONGER THAN 120' UP TO 190'

PROVIDE #12 WIRE FOR 20A, 277V CIRCUITS UP TO 150' LONG
PROVIDE #10 WIRE FOR 20A, 277V CIRCUITS LONGER THAN 150' UP TO 260'
PROVIDE #8 WIRE FOR 20A, 277V CIRCUITS LONGER THAN 260' UP TO 400'

PANELBOARD NAMING CONVENTION:

T - E B1 L 4 B 1
- SEQUENTIAL NUMBER
- A = NORTH ELECTRICAL ROOM STACK
- B = SOUTH ELECTRICAL ROOM STACK
- 2 = 208Y/120V
- 4 = 480Y/277V
- D = DISTRIBUTION
- F = FIRE ALARM
- L = LIGHTING
- M = MECHANICAL
- R = RECEPTACLE
- T = TELECOM
- TWO DIGIT FLOOR NUMBER
- E = EMERGENCY
- S = LEGALLY REQUIRED STANDBY
- Z = OPTIONAL STANDBY
- FIELD USED TO DESIGNATE TRANSFORMERS, ENCLOSED CIRCUIT BREAKERS, AND AUTOMATIC TRANSFER SWITCHES SERVING PANELBOARDS

FEEDER AND BRANCH CIRCUIT TAGGING CONVENTION:

REFER TO FEEDER AND BRANCH CIRCUIT SCHEDULE

XX . T . AAAA . P . N
- NUMBER OF NEUTRAL CONDUCTORS
- NUMBER OF PHASE CONDUCTORS
- AMPERE RATING
- DENOTES TRANSFORMER SECONDARY FEEDER
- NOT USED EXCEPT AS NOTED BELOW
  MI = MI CABLE, 2-HOUR RATED, NO CONDUIT
  BW = BUSWAY, NO CONDUIT

SINGLE MOTOR BRANCH CIRCUIT TAGGING CONVENTION:

REFER TO SINGLE MOTOR BRANCH CIRCUIT SCHEDULE

XX . R (HP) . V . PH
- MOTOR PHASE (SINGLE- OR THREE- PHASE)
- VOLTAGE
  1 = 120V
  2 = 208V
  4 = 480V
- MOTOR HORSEPOWER RATING
- INDICATES MOTOR BRANCH CIRCUIT
- NOT USED EXCEPT AS NOTED BELOW
  MI = MI CABLE, 2-HOUR FIRE RATED, NO CONDUIT

GENERAL CIRCUIT TAGGING CONVENTION

2 SETS (4-3/0 + 1-3 GND IN 2 1/2" C)
- CONDUIT SIZE
- SIZE OF GROUND CONDUCTORS IN AWG OR KCMIL
- QUANTITY OF GROUND CONDUCTORS
- SIZE OF PHASE AND NEUTRAL CONDUCTORS IN AWG OR KCMIL
- QUANTITY OF PHASE AND NEUTRAL CONDUCTORS
- QUANTITY OF SETS - NOT USED IF ONLY ONE SET

GENERAL NOTES

1. GENERAL NOTES APPLY TO ALL ELECTRICAL DRAWINGS. GENERAL EXISTING CONDITION NOTES APPLY WHERE EXISTING CONDITIONS ARE SHOWN ON ELECTRICAL DRAWINGS. GENERAL DEMOLITION NOTES APPLY TO ALL ELECTRICAL DEMOLITION DRAWINGS. DRAWING NOTES APPLY TO THE DRAWING THEY ARE ON. SPECIAL NOTES APPLY SPECIFICALLY TO THE ITEM EACH NOTE POINTS TO. NOTES PROVIDE INFORMATION IN ADDITION TO WHAT IS SHOWN ON PLANS, RISERS, AND SCHEDULES.
2. PERFORM WORK AS REQUIRED BY APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES HAVING JURISDICTION.
3. INSTALL ELECTRICAL WORK IN A NEAT, CAREFUL, AND WORKMANLIKE MANNER. RECTILINEAR TO BUILDING STRUCTURE. INSTALL RACEWAYS PARALLEL OR PERPENDICULAR TO WALLS, CEILINGS, OR FLOORS AS APPLICABLE, AND TIGHT TO STRUCTURAL CEILINGS AND AS HIGH AS POSSIBLE WITHIN CEILING SPACES TO MAINTAIN MAXIMUM AMOUNT OF CLEAR SPACE BELOW RACEWAY.
4. COORDINATE AND PROVIDE ALL WORK SHOWN ON PLANS, PART PLANS, ELEVATIONS, ONE-LINE DIAGRAMS, RISER DIAGRAMS, DETAILS, SCHEDULES, AND SPECIFICATIONS. ELECTRICAL SYSTEM COMPONENTS MAY BE SHOWN OR SPECIFIED IN ONE BUT NOT ALL PARTS OF THE CONTRACT DOCUMENTS.
5. CONTRACT DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT.
6. RACEWAY ROUTING SHOWN IS DIAGRAMMATIC. NOT ALL RACEWAY OFFSETS, RISES AND DROPS HAVE BEEN INDICATED. CONTRACTOR MUST CAREFULLY INVESTIGATE THE CONDITIONS AFFECTING THE WORK, AND ARRANGE RACEWAYS ACCORDINGLY, PROVIDING NECESSARY FITTINGS AND ACCESSORIES THAT MAY BE NEEDED TO MEET SUCH CONDITIONS.
7. DO NOT ROUTE CIRCUITS THROUGH STAIRWELLS, ELEVATOR SHAFTS, ELEVATOR ROOMS, ELECTRICAL ROOMS, IT ROOMS, FIRE PUMP ROOMS, AND OTHER DEDICATED SPACES UNLESS THE CIRCUITS SERVE THOSE SPACES.
8. COORDINATE ELECTRICAL WORK WITH OTHER TRADES' DRAWINGS AND SPECIFICATIONS. PHASE ELECTRICAL WORK AS NEEDED TO SUPPORT WORK INDICATED ON OTHER TRADES' DRAWINGS AND SPECIFICATIONS.
9. DEVICE AND EQUIPMENT LOCATIONS SHOWN ON PLANS ARE APPROXIMATE. COORDINATE THE LOCATION OF ELECTRICAL DEVICES AND EQUIPMENT WITH ARCHITECTURAL DRAWINGS, OTHER TRADES' DRAWINGS, AND FIELD CONDITIONS.
10. REFER TO OTHER TRADES' DRAWINGS AND SPECIFICATIONS (E.G. AV, TELECOM, SECURITY, FIRE ALARM, ETC.) FOR ADDITIONAL ELECTRICAL REQUIREMENTS NOT SHOWN ON ELECTRICAL DRAWINGS. PROVIDE DEDICATED RACEWAYS AND BOXES AS NEEDED FOR ALL DEVICES AND EQUIPMENT SHOWN ON OTHER TRADES DRAWINGS AND SPECIFICATIONS. COORDINATE LOCATION OF DEVICES AND EQUIPMENT SHOWN ON ELECTRICAL DRAWINGS WITH REQUIREMENTS ON OTHER TRADES' DRAWINGS.
11. CORE DRILL CONCRETE WALLS AND FLOORS TO PROVIDE OPENINGS FOR CONDUIT INSTALLATION. MAXIMUM CORE DRILL SIZE FOR CONDUIT PENETRATIONS SHALL BE 5-INCH DIAMETER. SPACE CORE DRILL LOCATIONS A MINIMUM OF 6" FROM EACH OTHER, MEASURED FROM EDGE OF CORE DRILL OPENINGS. PROPERLY SEAL OPENINGS ACCORDING TO LOCATION AND APPLICATION.
12. WHERE ELECTRICAL WORK PENETRATES WALLS, PARTITIONS, FLOORS OR CEILINGS, PROVIDE SLEEVES AS SPECIFIED. PATCH, SEAL AND FINISH TO MATCH SURFACE PENETRATED. DO NOT CUT/PENETRATE STRUCTURAL MEMBERS. REFER TO STRUCTURAL DRAWINGS FOR NEW OPENINGS.
13. PROVIDE FIREPROOFING FOR ELECTRICAL PENETRATIONS. PROPERLY SEAL OPENINGS ACCORDING TO LOCATION AND APPLICATION.
14. PROVIDE PULL CORDS IN ALL EMPTY CONDUITS.
15. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES HAVING JURISDICTION.
16. PROVIDE MATERIAL AND EQUIPMENT LISTED AND LABELED BY NATIONALLY RECOGNIZED TESTING LABORATORIES FOR INTENDED SERVICE.

GENERAL DEMOLITION NOTES

1. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO DEMOLITION. REFER TO DIVISION 02 FOR SELECTIVE DEMOLITION REQUIREMENTS.
2. INFORMATION PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS AND GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF WORK AS INDICATED, IMMEDIATELY NOTIFY THE OWNER AND CONSTRUCTION MANAGER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
3. WHEN WORKING IN AND AROUND THE BUILDING, EXTREME CARE SHALL BE EXERCISED ABOUT PROTECTION OF THE EXISTING STRUCTURE, FINISHES, AND OTHER TRADES' SYSTEMS. REPAIR OR REPLACE EXISTING WORK DAMAGED IN THE PERFORMANCE OF THE WORK TO THE SATISFACTION OF THE OWNER AND CONSTRUCTION MANAGER. REFER TO DIVISION 01 FOR PROTECTION REQUIREMENTS.
4. THE EXISTING FIRE DETECTION AND ALARM SYSTEM SHALL REMAIN ACTIVE AN IN SERVICE THROUGHOUT THE CONSTRUCTION PROJECT UNTIL THE NEW BUILDING FIRE ALARM SYSTEM IS INSTALLED AND TESTED TO ENSURE PROPER PERFORMANCE.
5. THE TERM "ELECTRICAL SYSTEMS" REFERS TO ELECTRICAL PANELS, DEVICES, LIGHTING FIXTURES, EQUIPMENT, SWITCHES, BREAKERS, CONTROLS, CONDUIT, CONDUCTORS, HANGERS, SUPPORTS, HOUSEKEEPING PADS, AND APPURTENANCES.
6. PRIOR TO PREPARING THE BID, VISIT THE SITE AND OBSERVE EXISTING CONDITIONS, AND BECOME COMPLETELY FAMILIAR WITH ALL RELATED REQUIREMENTS OF THE PROJECT THAT WILL AFFECT WORK UNDER THIS CONTRACT. MAKE NECESSARY INVESTIGATIONS OF EXISTING ELECTRICAL SYSTEMS, MECHANICAL SYSTEMS, PLUMBING SYSTEMS, AND OTHER TRADES' SYSTEMS TO BE REMOVED, AND OTHER MATTERS WHICH CAN AFFECT THE WORK UNDER THE CONTRACT. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR BECAUSE OF FAILURE TO OBSERVE EXISTING CONDITIONS UNDER WHICH THE WORK MUST BE PERFORMED.
7. PRIOR TO BEGINNING DEMOLITION, REFER TO DEMOLITION DRAWINGS AND NEW WORK DRAWINGS TO IDENTIFY SYSTEMS TO REMAIN, MARK AND PROTECT THESE SYSTEMS IN THE FIELD. REFER TO OTHER TRADES' DEMOLITION DRAWINGS FOR ADDITIONAL DEMOLITION WORK.
8. FIELD VERIFY CONDUITS, ELECTRICAL CONDUCTORS AND CABLES, FIBER OPTIC CABLES, DATA AND TELEPHONE CABLES, SECURITY CABLES, ETC., THAT PASS THROUGH DEMOLITION AREAS AND SERVE AREAS OUTSIDE THE SCOPE OF WORK. MAINTAIN CONTINUITY OF SYSTEMS. PROTECT OR RELOCATE SYSTEMS TO PREVENT DAMAGE. RESTORE SYSTEMS TO NORMAL OPERATION.
9. REFER TO OTHER TRADES' NEW WORK PLANS FOR EXTENT OF EXISTING MECHANICAL, PLUMBING, AND OTHER TRADES' SYSTEMS TO BE RETAINED OR REUSED. EXISTING SYSTEMS AFFECTED BY REMOVAL WORK AND REQUIRED TO REMAIN IN SERVICE SHALL BE REINSTALLED AND RECONNECTED AS REQUIRED IN ACCORDANCE WITH GENERALLY ACCEPTED PRACTICE.
10. IN AREAS REQUIRING THE PERFORMANCE OF OTHER TRADES' WORK, CAREFULLY DISCONNECT, MAKE SAFE, REMOVE, AND STORE EXISTING ELECTRICAL SYSTEMS IN PATH OF WORK. REINSTALL AND RECONNECT SAME ELECTRICAL SYSTEMS AFTER COMPLETION OF OTHER TRADES' WORK. COORDINATE REMOVAL OF ELECTRICAL SYSTEMS WITH OTHER TRADES PRIOR TO REMOVAL.
11. WHERE MECHANICAL, PLUMBING, AND OTHER TRADES' SYSTEMS ARE REMOVED, REMOVE ASSOCIATED ELECTRICAL SYSTEMS.
12. REMOVE INDICATED ELECTRICAL SYSTEMS BY HAND AS FAR AS POSSIBLE. POWER-DRIVEN EQUIPMENT SHALL BE USED AS A LAST RESORT AND SHALL NOT BE EMPLOYED WITHOUT CONSENT OF THE OWNER. SCHEDULE DEMOLITION WORK TO THE SATISFACTION OF THE OWNER AND CONSTRUCTION MANAGER.
13. REMOVE EXISTING ELECTRICAL SYSTEMS EXCEPT WHERE INDICATED TO BE RETAINED. VERIFY SOURCE AND END POINT OF BRANCH CIRCUITS AND FEEDERS INDICATED TO BE REMOVED BEFORE REMOVING THEM.
14. COMPLETELY REMOVE ALL INDICATED EXISTING ELECTRICAL SYSTEMS UNLESS OTHERWISE NOTED. MATERIALS AND EQUIPMENT WHICH ARE REMOVED AND NOT DESIRED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE PREMISES. DO NOT ABANDON DEMOLISHED ELECTRICAL COMPONENTS ON THE PROJECT SITE. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT REMOVAL AS INDICATED, IMMEDIATELY NOTIFY THE OWNER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
15. EXISTING MATERIALS AND EQUIPMENT WHICH ARE REMOVED AND ARE DESIRED BY THE OWNER OR ARE INDICATED TO REMAIN AS PROPERTY OF THE OWNER SHALL BE DELIVERED ON SITE TO THE OWNER BY THE CONTRACTOR AS DIRECTED BY THE OWNER.
16. EXISTING ABANDONED ELECTRICAL SYSTEMS SHALL BE REMOVED UNLESS OTHERWISE INDICATED. EXISTING ELECTRICAL SYSTEMS NO LONGER REQUIRED TO REMAIN SHALL BE DISCONNECTED AND REMOVED BACK TO SOURCE. CONDUITS LOCATED BENEATH SLABS ON GRADE THAT WOULD REQUIRE SAW CUTTING SLABS AND EXCAVATION TO REMOVE AND ARE NOT REQUIRED TO BE REMOVED TO FACILITATE NEW WORK CAN BE ABANDONED IN PLACE. ABANDONED CONDUIT SHALL BE CUT SO THAT THE ENDS ARE WELL BELOW THE SLAB AND SHALL BE CAPPED, PLUGGED, OR OTHERWISE SEALED.
17. PLAN THE WORK TO MINIMIZE AND CONSOLIDATE ELECTRICAL OUTAGES. COORDINATE TYPE, DURATION, AND SCHEDULE OF OUTAGES WITH OWNER AND CONSTRUCTION MANAGER. PERFORM WORK ON PREMIUM TIME IF REQUIRED TO SATISFY REQUIREMENTS.
18. PERFORM WORK IN A NEAT, CAREFUL, AND WORKMANLIKE MANNER. REPAIR OR REPLACE EXISTING ELECTRICAL SYSTEMS DAMAGED DURING CONSTRUCTION. REFER TO DIVISION 01 FOR CUTTING AND PATCHING REQUIREMENTS.
19. HAZARDOUS MATERIALS MAY EXIST WITHIN THE BUILDING. NOTIFY OWNER AND CONSTRUCTION MANAGER IF HAZARDOUS MATERIALS ARE UNCOVERED. REFER TO HAZARDOUS MATERIALS DRAWINGS AND DIVISION 01 FOR ABATEMENT AND REMOVAL REQUIREMENTS.
20. FIRE SEAL PENETRATIONS MADE ON FIRE RATED WALLS. RESTORE RATING OF ALL RATED WALLS AFFECTED BY DEMOLITION.
21. COORDINATE DEMOLITION WORK WITH NEW WORK REQUIREMENTS AND PROJECT PHASING REQUIREMENTS. PROVIDE TEMPORARY ELECTRICAL SYSTEMS AND POWER AS NEEDED TO SATISFY PROJECT PHASING REQUIREMENTS.

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — CHRISTOS CARPENTER — No. PE40000280 — 05/16/2025 — PROFESSIONAL ENGINEER

STAMP

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ELECTRICAL LEGEND
WORKING STAFF	ARF (DESIGNED BY) / SBP (DRAWN BY) / POC (CHECKED BY)
SHEET NO.	33 OF 75
	E - 001 SH (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

4/16/2025 1:12:53 PM
E-001SH BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

DRAWING NOTES:

A. REFER TO DRAWING E-001SH FOR SYMBOLS LEGEND, ABBREVIATIONS AND DRAWING CONVENTIONS.

B. HEAVY LINE WEIGHT INDICATES DEMOLITION WORK AND LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN.

C. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND EXISTING DOCUMENTATION. VERIFY ALL EXISTING CONDITIONS WHETHER INDICATED OR NOT.

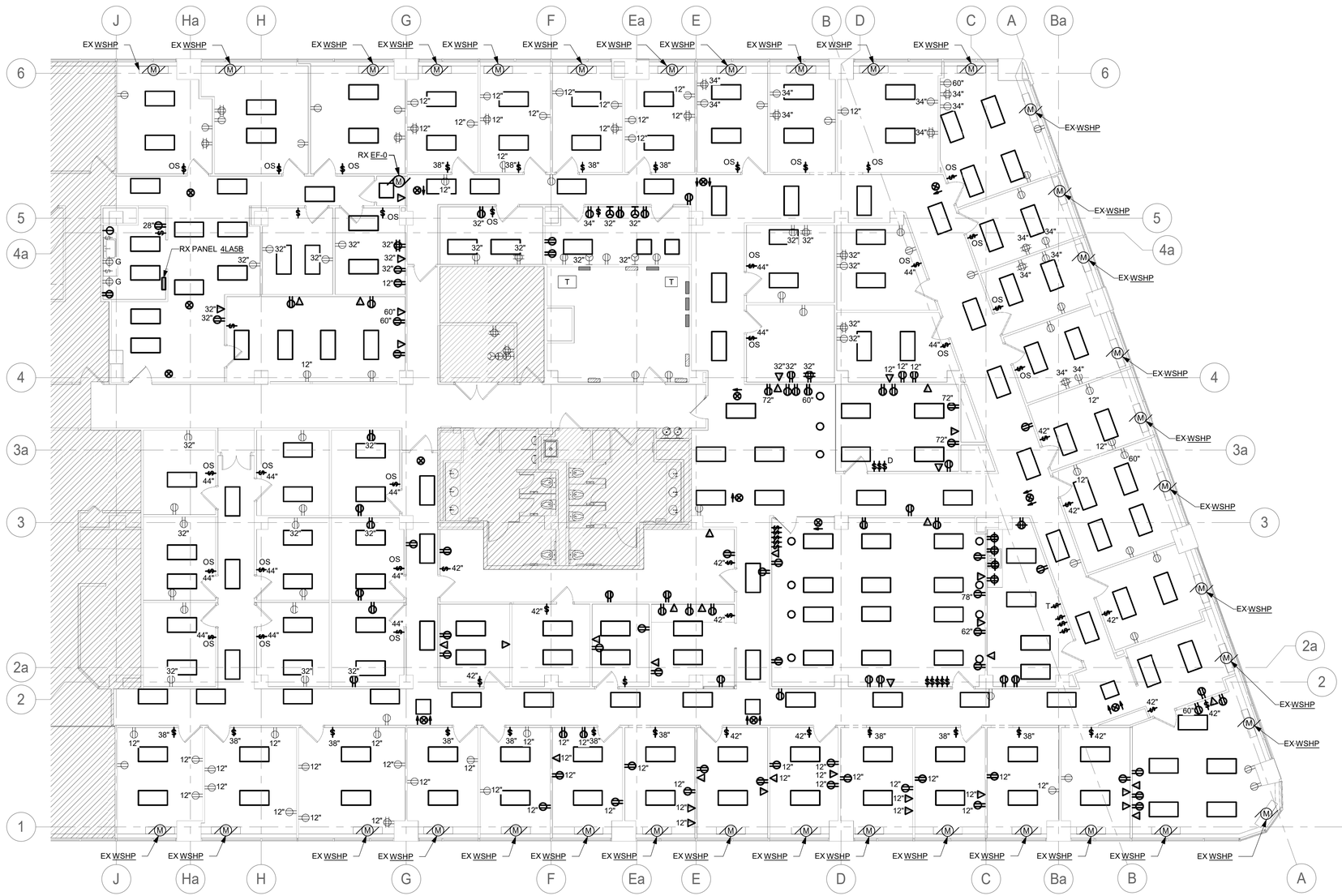
D. RELOCATE ITEMS MARKED WITH "REL" AS INDICATED UNDER NEW WORK. MATCH AND EXTEND ALL ASSOCIATED WIRING AND CONDUIT AND RELOCATE ALL ASSOCIATED EQUIPMENT TO NEW LOCATION.

E. REFER TO MECHANICAL AND OTHER TRADES' DRAWINGS FOR EQUIPMENT BEING DEMOLISHED. DISCONNECT AND MAKE SAFE EQUIPMENT PRIOR TO ITS DEMOLITION.

F. FOR ALL DEMOLISHED ITEMS, REMOVE ALL ASSOCIATED SUPPORTS, HANGERS, WIRING AND CONDUIT BACK TO SOURCE UNLESS OTHERWISE NOTED. LABEL SOURCE CIRCUIT BREAKER AS SPARE AND PROVIDE NEW, UPDATED, TYPED CIRCUIT DIRECTORY FOR SOURCE EQUIPMENT.

G. TEST EACH EXISTING RECEPTACLE FOR POLARITY AND GROUNDING. CORRECT INSTANCES OF REVERSED POLARITY. FOR INSTANCES WHERE NO GROUND IS PRESENT, PROVIDE NEW GROUND CONDUCTOR.

H. MAINTAIN EXISTING NORMAL AND EMERGENCY LIGHTING CIRCUITS FOR REUSE UNDER NEW WORK.



1 FLOOR PLAN - LEVEL 4 - ELECTRICAL DEMOLITION
ED101DP 1/8" = 1'-0"

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ED101DP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

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DISTRICT OF COLUMBIA · CARLOS CARRERA · No. PEA000003865 · LICENSED · PROFESSIONAL ENGINEER

STAMP

PROJECT NORTH

TRUE NORTH

KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

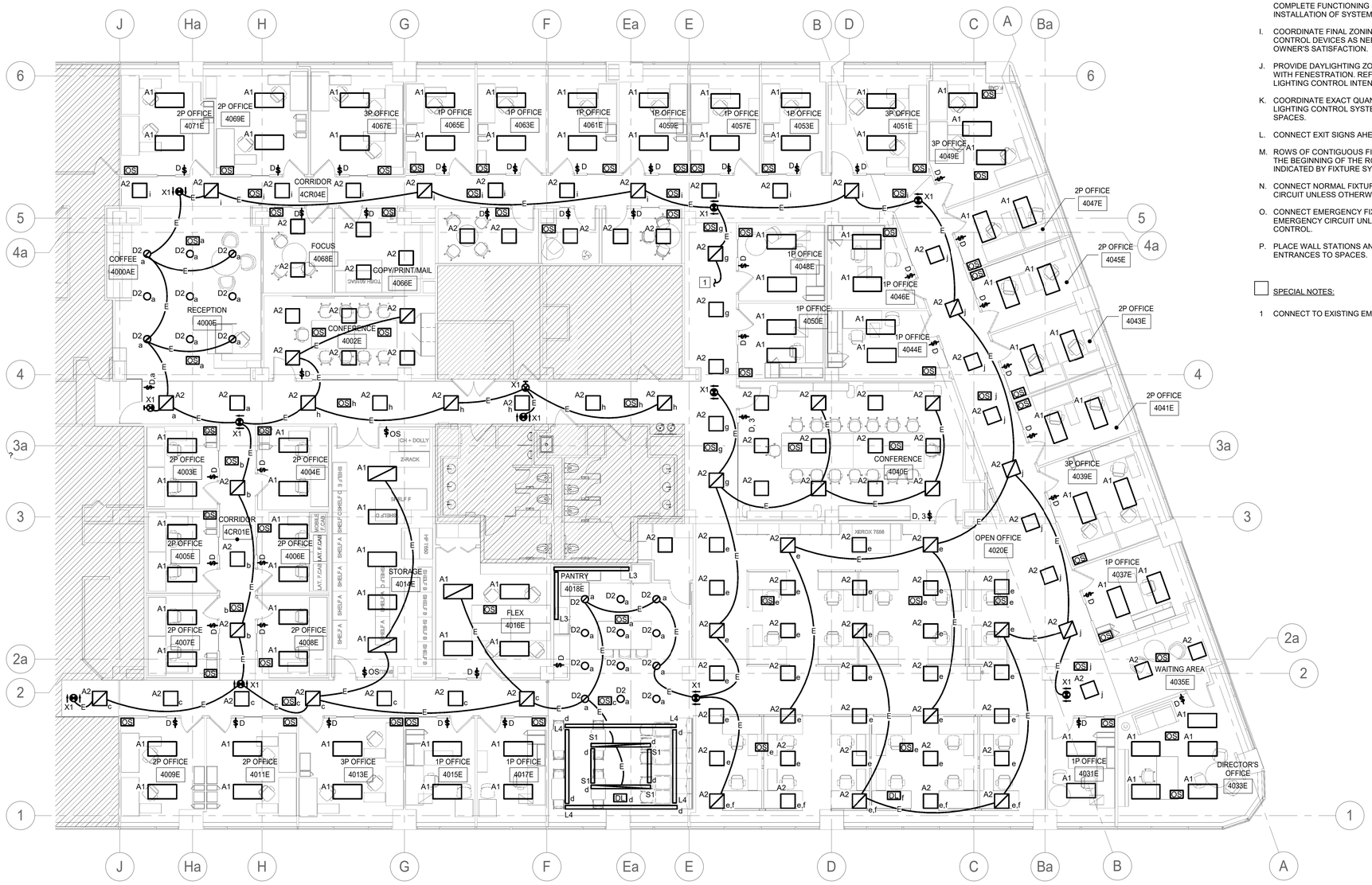
Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ELECTRICAL DEMOLITION PLAN
WORKING STAFF	ARF (DESIGNED BY) · SBP (DRAWN BY) · POC (CHECKED BY)

SHEET NO. 34 OF 75

ED 101 DP
DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE



1 FLOOR PLAN - LEVEL 4 - ELECTRICAL LIGHTING
E-101LP 1/8" = 1'-0"

DRAWING NOTES:

A. REFER TO DRAWING E-001SH FOR SYMBOLS LEGEND, ABBREVIATIONS AND DRAWING CONVENTIONS.

B. HEAVY LINE WEIGHT INDICATES NEW WORK AND LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN.

C. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND EXISTING DOCUMENTATION. VERIFY ALL EXISTING CONDITIONS WHETHER INDICATED OR NOT.

D. CONNECT NEW LIGHTING FIXTURES TO NEAREST EXISTING LIGHTING FIXTURE CIRCUIT, UNLESS OTHERWISE NOTED. MAKE CONNECTIONS USING MC CABLE. CONTRACTOR IS RESPONSIBLE FOR TRACING EXISTING LIGHTING CIRCUITS TO BE USED UNDER NEW WORK. EXISTING LIGHTING CIRTCUITS ARE ASSUMED TO ORIGINATE FR4OM PANELS IN NORTH MECHANICAL ROOM.

E. PROVIDE EMERGENCY LIGHTING BYPASS DEVICES IN EACH SPACE WITH EMERGENCY AND NORMAL LIGHTING PRESENT WITHIN THE SPACE. EMERGENCY LIGHTING FIXTURES SHALL BE CONTROLLED IN THE SAME MANNER AS NORMAL LIGHTING FIXTURES WITHIN THE SAME SPACE. REFER TO EMERGENCY LIGHTING BYPASS DEVICE DETAIL FOR TYPICAL WIRING OF DEVICE. PROVIDE ADDITIONAL CONNECTIONS REQUIRED FOR PROPER OPERATION OF BYPASS DEVICE.

F. REFER TO LIGHTING FIXTURE SCHEDULE FOR LIGHTING FIXTURE TYPE INFORMATION AND REQUIREMENTS.

G. REFER TO LIGHTING CONTROL INTENT SCHEDULE FOR LIGHTING CONTROL REQUIREMENTS IN EACH SPACE TYPE.

H. LIGHTING CONTROLS SHOWN ARE DIAGRAMMATIC AND DO NOT INDICATE EVERY PIECE OF HARDWARE AND SOFTWARE REQUIRED TO MEET CONTROL INTENT. SUBMIT COMPLETE SHOP DRAWINGS INCLUDING WIRING DIAGRAMS AND BILL OF MATERIALS INCLUDING ALL HARDWARE AND SOFTWARE FOR COMPLETE FUNCTIONING SYSTEM THAT MEETS CONTROL INTENT PRIOR TO INSTALLATION OF SYSTEM.

I. COORDINATE FINAL ZONING AND SCENES WITH OWNER. PROVIDE ADDITIONAL CONTROL DEVICES AS NEEDED. PROVIDE ZONING AND SCENES TO THE OWNER'S SATISFACTION.

J. PROVIDE DAYLIGHTING ZONES PER ASHRAE 90.1, CHAPTER 9, IN ALL SPACES WITH FENESTRATION. REFER TO AUTOMATIC DAYLIGHT DIMMING NOTE IN THE LIGHTING CONTROL INTENT SCHEDULE NOTES.

K. COORDINATE EXACT QUANTITY AND LOCATION OF OCCUPANCY SENSORS WITH LIGHTING CONTROL SYSTEM VENDOR TO PROVIDE PROPER DETECTION IN ALL SPACES.

L. CONNECT EXIT SIGNS AHEAD OF SWITCHING AND DIMMING CONTROLS.

M. ROWS OF CONTIGUOUS FIXTURES OF THE SAME TYPE ARE TAGGED ONLY AT THE BEGINNING OF THE ROW. PROVIDE SEPARATE FIXTURES IN ROWS AS INDICATED BY FIXTURE SYMBOLS.

N. CONNECT NORMAL FIXTURES ON THE SAME ROW TO THE SAME NORMAL CIRCUIT UNLESS OTHERWISE NOTED OR REQUIRED FOR CONTROL.

O. CONNECT EMERGENCY FIXTURES ON THE SAME ROW TO THE SAME EMERGENCY CIRCUIT UNLESS OTHERWISE NOTED OR REQUIRED FOR CONTROL.

P. PLACE WALL STATIONS AND SWITCHES AS CLOSE AS POSSIBLE TO ENTRANCES TO SPACES.

SPECIAL NOTES:

1 CONNECT TO EXISTING EMERGENCY LIGHTING BRANCH CIRCUIT

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

PROJECT NORTH

TRUE NORTH

KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

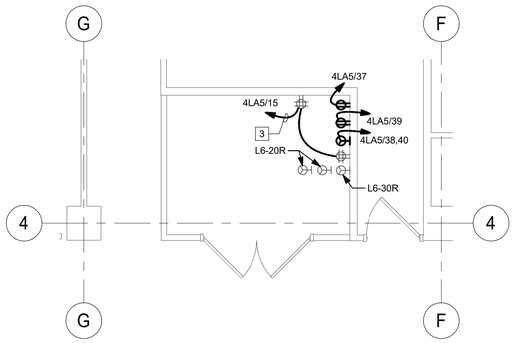
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Smithsonian Institution

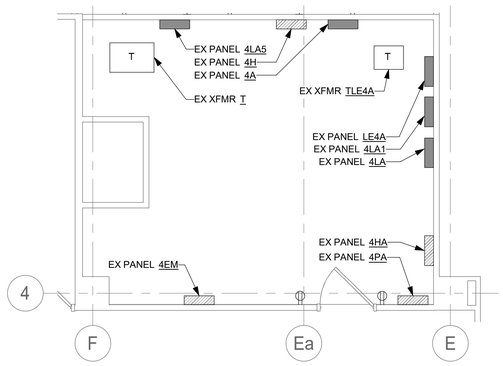
Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ELECTRICAL LIGHTING PLAN– PARTIAL LEVEL 4 – NORTH
WORKING STAFF	ARF (DESIGNED BY) / SBP (DRAWN BY) / POC (CHECKED BY)
SHEET NO.	35 OF 75
	E-101LP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

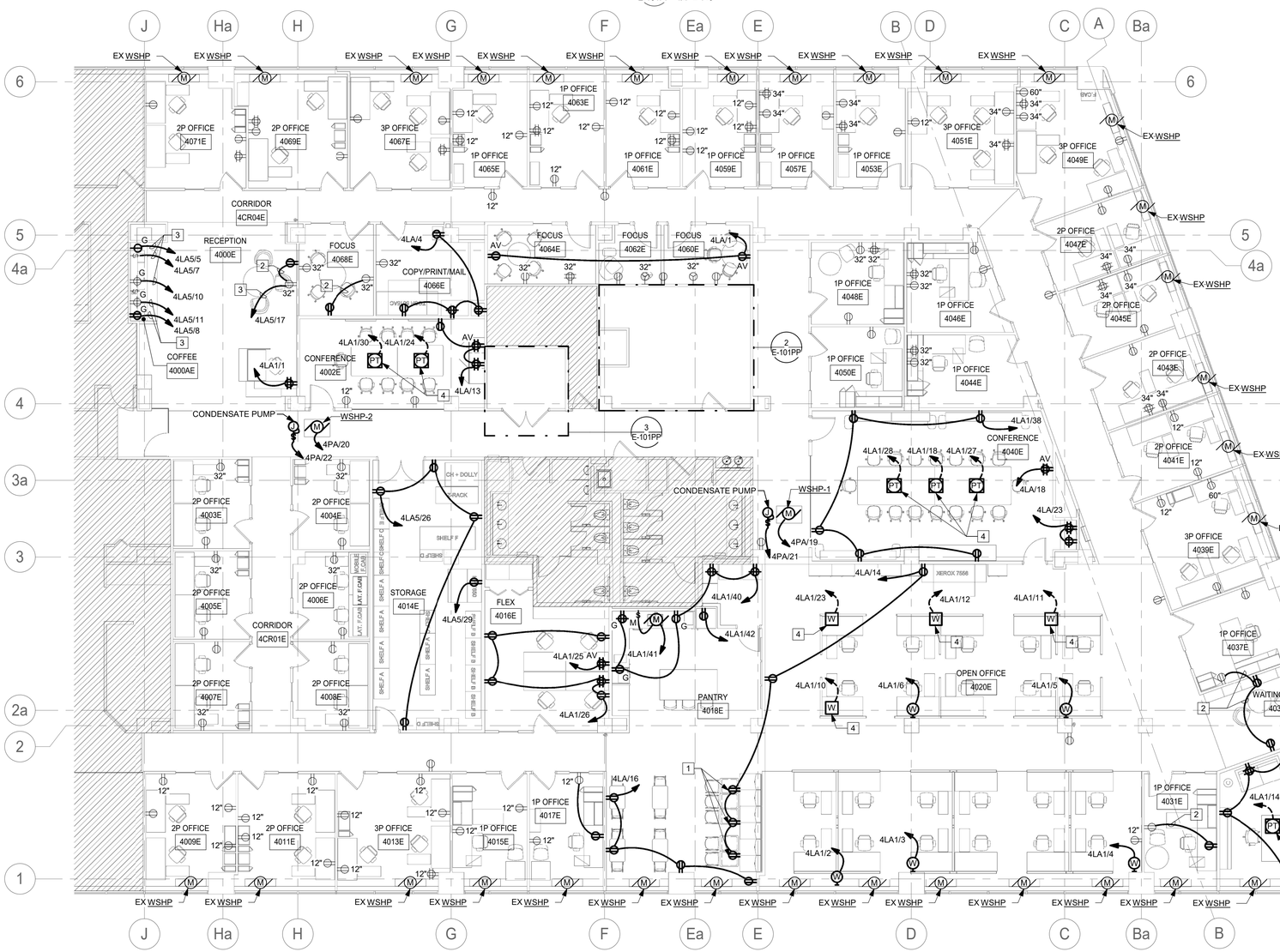
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E-101LP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS



3 NORTH TELECOM ROOM
E-101PP 1/4" = 1'-0"



2 NORTH MECH ROOM
E-101PP 1/4" = 1'-0"



1 FLOOR PLAN - LEVEL 4 - ELECTRICAL POWER
E-101PP 1/8" = 1'-0"

DRAWING NOTES:

A. REFER TO DRAWING E-001SH FOR SYMBOLS LEGEND, ABBREVIATIONS AND DRAWING CONVENTIONS.

B. HEAVY LINE WEIGHT INDICATES NEW WORK AND LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN.

C. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND EXISTING DOCUMENTATION. VERIFY ALL EXISTING CONDITIONS WHETHER INDICATED OR NOT.

D. REFER TO MECHANICAL AND OTHER TRADES' DRAWINGS FOR EXACT LOCATION OF EQUIPMENT.

E. VERIFY EXACT LOCATION OF EQUIPMENT CONNECTION POINTS IN FIELD.

F. PROVIDE FIELD WIRING AND FIELD CONNECTIONS AS REQUIRED BY EQUIPMENT MANUFACTURERS.

G. COORDINATE EXACT LOCATION OF SAFETY SWITCHES, ENCLOSED CIRCUIT BREAKERS AND MOTOR CONTROLLERS IN FIELD TO MAINTAIN CODE REQUIRED WORKING CLEARANCES.

H. MAINTAIN WORKING CLEARANCE IN FRONT OF AND DEDICATED SPACE ABOVE AND BELOW ELECTRICAL EQUIPMENT AS REQUIRED BY THE NEC.

I. PROVIDE STRUCTURAL CHANNEL SUPPORTS FOR SAFETY SWITCHES, ENCLOSED CIRCUIT BREAKERS, AND MOTOR CONTROLLERS SHOWN ON MECHANICAL EQUIPMENT AND IN THE MIDDLE OF THE FLOOR.

J. PROVIDE POWER FOR BAS PANELS FROM AVAILABLE SPARES OR SPACES IN NEAREST OPTIONAL STANDBY PANELBOARDS. PROVIDE 2 CIRCUITS. PROVIDE 20A CIRCUIT BREAKER WITH 2-10 + 1-10 GROUND IN 3/4" CONDUIT PER CIRCUIT. COORDINATE EXACT LOCATIONS TO WHICH THE CIRCUITS SHOULD BE EXTENDED AND EXACT CIRCUIT QUANTITIES IN FIELD WITH BAS EQUIPMENT VENDOR AND INSTALLER.

K. TEST EACH EXISTING RECEPTACLE FOR POLARITY AND GROUNDING. CORRECT INSTANCES OF REVERSED POLARITY. FOR INSTANCES WHERE NO GROUND IS PRESENT, PROVIDE NEW GROUND CONDUCTOR.

L. NEW AND EXISTING WALL-MOUNTED RECEPTACLES INDICATED ONLY IN NORTH TELECOM ROOM. EXISTING LIGHTING AND OTHER POWER CONNECTIONS FOR EQUIPMENT AND MISC SYSTEMS NOT SHOWN AS PART OF SCOPE

SPECIAL NOTES:

1 MOUNT RECEPTACLE INTEGRAL TO FURNITURE.

2 CONNECT TO EXISTING RECEPTACLE BRANCH CIRCUIT.

3 RECONNECT CIRCUIT FROM DEMOLISHED PANEL 4LA5B TO EXISTING PANEL 4LAB.

4 COORDINATE POKE-THRU LOCATIONS WITH SI AND FURNITURE.

CG

Renovate 4E NMAL Office Suite

NOT FOR CONSTRUCTION

DISTRICT OF COLUMBIA — CHRISTOPHER A. GRAY — No. PE900000085 — LICENSED — PROFESSIONAL ENGINEER

STAMP

PROJECT NORTH

TRUE NORTH

KEY PLAN

0 2' 4' 8'
1/4"=1'-0"
0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

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04/18/25	FINAL CONSTRUCTION DOCS

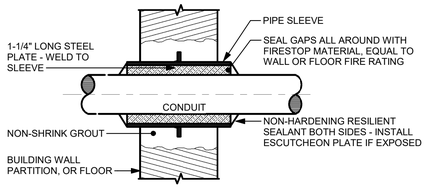
REVISION # DATE	REVISION DESCRIPTION

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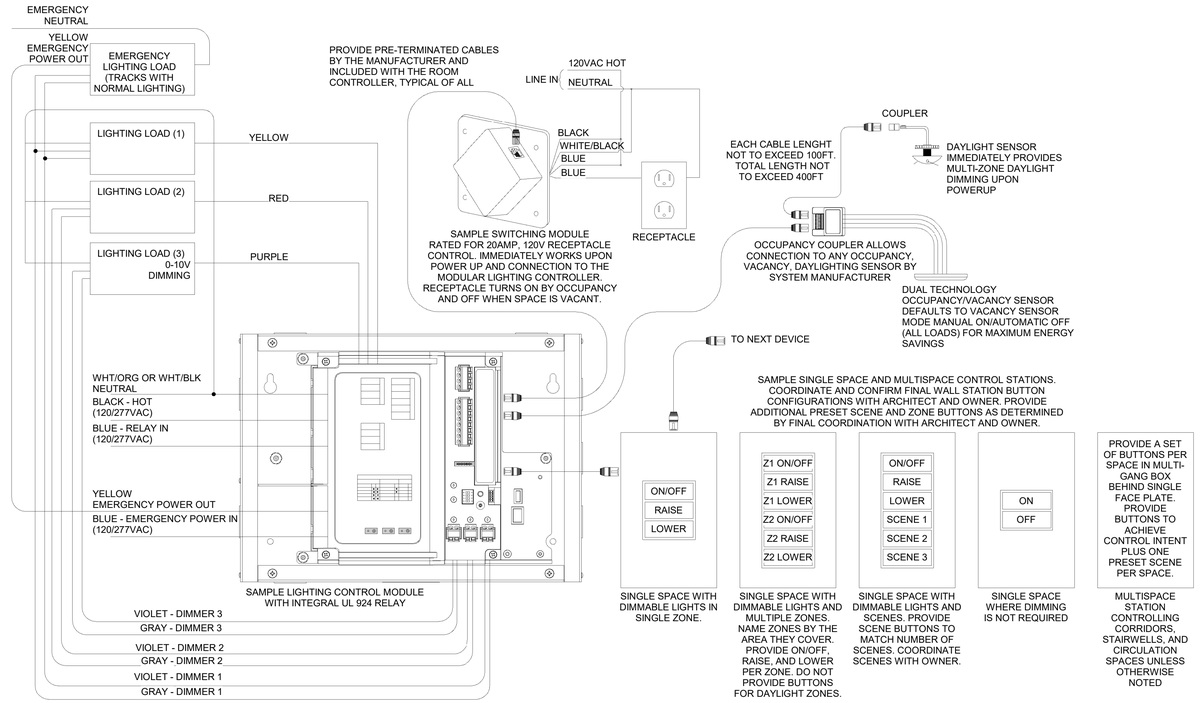
Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ELECTRICAL POWER PLAN– PARTIAL LEVEL 4 – NORTH
WORKING STAFF	ARF (DESIGNED BY) / SBP (DRAWN BY) / POC (CHECKED BY)
SHEET NO.	36 OF 75
	E – 1 0 1 PP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

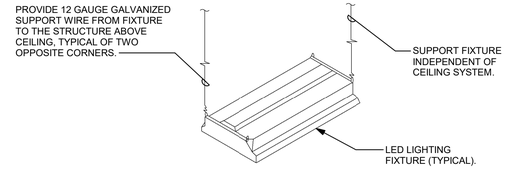
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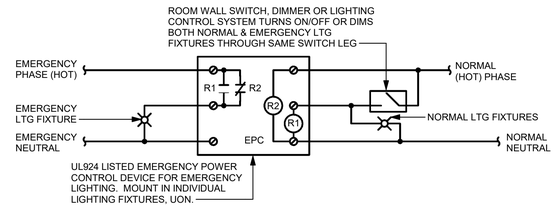
1 E-501DT MASONARY PENETRATION NOT TO SCALE



4 E-501DT SCHEMATIC LIGHTING CONTROL SYSTEM DIAGRAM 1/8" = 1'-0"



2 E-501DT LIGHTING FIXTURE SUPPORT NOT TO SCALE



NOTES:
1. DURING NORMAL POWER OUTAGE, EMERGENCY LIGHTING FIXTURES (FED FROM EMERGENCY GENERATOR DISTRIBUTION SYSTEM) WILL ILLUMINATE AUTOMATICALLY REGARDLESS OF ROOM SWITCH ON/OFF OR DIM POSITION.

3 E-501DT EMERGENCY LIGHTING BYPASS DEVICE - BACK OF HOUSE NOT TO SCALE

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E-501DT BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA · CHRIS CARLSON · No. PE40000385 · CIVIL · LICENSED · PROFESSIONAL ENGINEER

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600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ELECTRICAL DETAILS
WORKING STAFF	ARF (DESIGNED BY) · SBP (DRAWN BY) · POC (CHECKED BY)
SHEET NO.	37 OF 75
	E - 501 DT (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	MOUNTING	MANUFACTURERS	CATALOG NUMBER	LAMPS	VOLTAGE	DESCRIPTION
A1	CEILING RECESSED	LITHONIA COOPER LIGHTING HUBBELL LIGHTING	2RTL4-_40L-_-GZ10-LP835	LED (INCLUDED)	277	2'X4' LED RECESSED FIXTURE, COLD ROLLED STEEL HOUSING, ACRYLIC PRISMATIC REFLECTOR, WHITE POLYESTER POWDER PAINT FINISH, DRIVER 0-10V DIMMING TO 10%, 3500K CCT, 82 CRI, 4840 LUMENS, 39.4W.
A2	CEILING RECESSED	LITHONIA COOPER LIGHTING HUBBELL LIGHTING	2RTL2-_40L-_-GZ10-LP835	LED (INCLUDED)	277	2'X2' LED RECESSED FIXTURE, COLD ROLLED STEEL HOUSING, ACRYLIC PRISMATIC REFLECTOR, WHITE POLYESTER POWDER PAINT FINISH, DRIVER 0-10V DIMMING TO 10%, 3500K CCT, 82 CRI, 4840 LUMENS, 41.4W.
D2	CEILING RECESSED	PRESCOLITE COOPER LIGHTING LITHONIA	LTR-4RD-H-SL-10L-DM01-LTR-ARD-T-SL-35K-8-WD	LED (INCLUDED)	277	4" ROUND LED DOWNLIGHT, WIDE DISTRIBUTION, GALVANIZED STEEL HOUSING, WHITE MATTE DIFFUSE FINISH, DRIVER 0-10V DIMMING TO >1%, 3500K CCT, 80 CRI, 1062 LUMENS, 12W.
L3	CEILING RECESSED	LITECONTROL COOPER LIGHTING LITHONIA	4L-SS-D-_-04-ASYM-C1-35K-D030-D01-1C-UNV	LED (INCLUDED)	277	RECESSED LINEAR LED LIGHTING FIXTURE, EXTRUDED ALUMINUM HOUSING, MATTE WHITE FINISH, ASSYMETRIC DIFFUSE LENS, DRIVER 0-10V DIMMING TO 1%, PROVIDE MITERED CORNERS TO CREATE SEAMLESS RECTANGULAR SHAPE. LENGTHS AS INDICATED ON DRAWINGS. 3500K CCT, 90 CRI, 300 LUMENS PER FOOT, 2.5W PER FOOT.
L4	CEILING RECESSED	LITECONTROL COOPER LIGHTING LITHONIA	4L-SS-D-_-04-SOF-C1-35K-D030-D01-1C-UNV	LED (INCLUDED)	277	2" APERTURE RECESSED LINEAR LED LIGHTING FIXTURE, EXTRUDED ALUMINUM HOUSING, MATTE WHITE FINISH, SOFT DIFFUSE LENS, DRIVER 0-10V DIMMING TO 1%. PROVIDE MITERED CORNERS TO CREATE SEAMLESS RECTANGULAR SHAPE. LENGTHS AS INDICATED ON DRAWINGS. 3500K CCT, 90 CRI, 300 LUMENS PER FOOT, 2.5W PER FOOT.
S1	CEILING RECESSED	INTERLUX COLUMBIA LITHONIA	WG-20LDL-SM-GT9T-S-H-935-D010-OD-W-C4	LED (INCLUDED)	277	GRID CLIP RECESSED LINEAR LED LIGHTING FIXTURE, WHITE FINISH, SATIN OPAL DIFFUSER, DRIVER 0-10V DIMMING TO 10%. LENGTHS AS INDICATED ON DRAWINGS. 3500K CCT, 90 CRI, 796 LUMENS PER FOOT, 10W PER FOOT.
X1	CEILING OR WALL	LITHONIA COOPER LIGHTING HUBBELL LIGHTING LIGHTALARMS	EDG-_-1-GMR	LED (INCLUDED)	277	EDGE LIT EXIT SIGN, GREEN LETTERS ON MIRRORED BACKGROUND, EXTRUDED BRUSHED ALUMINUM FINISH, UL DAMP LOCATION LISTED. PROVIDE MOUNTING AND NUMBER OF FACES AND CHEVRONS AS INDICATED ON PLANS. AC VOLTAGE ONLY. WALL MOUNTED EXIT SIGNS ABOVE DOORS SHALL BE 6" ABOVE TOP OF DOOR FRAME, MEASURED FROM BOTTOM OF EXIT SIGN, UNLESS OTHERWISE NOTED. 4.5W

EQUIPMENT CIRCUIT SCHEDULE

DESIGNATION	LOAD			VOLTAGE	PH	LOCAL DISCONNECT			CONTROLLER					CIRCUIT			REMARKS
	HP	KVA	AMPS			AMPS	DEVICE	NEMA / UL ENCLOSURE	DISCONNECT AMPS	DISCONNECT DEVICE	TYPE	NEMA SIZE	AUXILIARIES	NEMA / UL ENCLOSURE	WIRE	GND	C"	
WSHP-1	1/3	1.3	4.7	277	1	-	BY DIV 23	-	-	-	BY DIV 23	-	-	-	2#12	#12	3/4	
WSHP-2	1/3	1.9	6.8	277	1	-	BY DIV 23	-	-	-	BY DIV 23	-	-	-	2#12	#12	3/4	

LIGHTING FIXTURE SCHEDULE NOTES:

1. LISTED CATALOG NUMBER IS FOR FIRST NAMED MANUFACTURER. FIRST NAMED MANUFACTURERS AND LISTED FIXTURES CONSTITUTE THE BASIS OF DESIGN.
2. LISTING OF ALTERNATE MANUFACTURER'S NAMES DOES NOT IMPLY ACCEPTANCE OF THEIR STANDARD PRODUCTS. PROVIDE BASIS OF DESIGN FIXTURES OR FIXTURES BY LISTED MANUFACTURERS THAT ARE EQUAL TO OR BETTER THAN THE BASIS OF DESIGN IN ALL ASPECTS.
3. SUBSTITUTION OF FIXTURES PROVIDED BY MANUFACTURERS NOT LISTED IN THE SCHEDULE DUE TO VENDOR AGREEMENTS WILL BE REVIEWED UNLESS OTHERWISE NOTED. PROVIDE FIXTURES THAT ARE EQUAL TO OR BETTER THAN THE BASIS OF DESIGN IN ALL ASPECTS. FIXTURES NOT COMPLYING WITH THIS REQUIREMENT WILL BE REJECTED.
4. LIGHTING FIXTURE SUBMITTALS SHALL INCLUDE, AS A MINIMUM:
   -FIXTURE TYPE, DIMENSIONS, & FINISH.
   -DRIVER DATA FOR EACH FIXTURE TYPE & FIXTURE VOLTAGE.
5. VERIFY ALL LIGHTING FIXTURE VOLTAGES, CEILING TRIM, AND OTHER ACCESSORIES FOR COMPATIBILITY WITH CIRCUITS, CEILING TYPES AND OTHER CONDITIONS PRESENT WHERE LIGHTING FIXTURES WILL BE INSTALLED PRIOR TO PURCHASE AND INSTALLATION OF LIGHTING FIXTURES.
6. COORDINATE LIGHTING CONTROL SYSTEM SHOP DRAWINGS WITH LIGHTING FIXTURE SHOP DRAWINGS. VERIFY COMPATIBILITY WITH LED DIMMING DRIVERS WITH LIGHTING CONTROL EQUIPMENT PRIOR TO PURCHASE AND INSTALLATION.
7. MOUNTING HEIGHTS SHOWN ARE TO BOTTOM OF FIXTURES.
8. PROVIDE ACCESSORIES AS NEEDED FOR PROPER INSTALLATION.
9. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF FIXTURES.

EQUIPMENT CIRCUIT SCHEDULE NOTES:

1. PROVIDE MOTOR CIRCUIT PROTECTORS AS REQUIRED BY THE EQUIPMENT MANUFACTURER.
2. SIZE AND PROVIDE FUSES FOR FUSED SAFETY SWITCHES AS RECOMMENDED AND REQUIRED BY MANUFACTURER OF EQUIPMENT SERVED.

AUXILIARIES:

A. 480-120V CONTROL POWER TRANSFORMER.
B. RED "ON" INDICATING LIGHT.
C. GREEN "OFF" INDICATING LIGHT.
D. HAND-OFF-AUTOMATIC SELECTOR SWITCH.
E. START-STOP PUSH BUTTON.
F. POWER FACTOR CORRECTION CAPACITORS.

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

GRAPHIC SCALE(S)

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BUILDING NAME / ADDRESS: CAPITAL GALLERY ADMIN HQ, EAST — 600 MARYLAND AVE, SW

PROJECT TITLE: RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER: 2466904
A/E PROJECT NUMBER: ASG 3000738.00

DRAWING TITLE: ELECTRICAL SCHEDULES
WORKING STAFF: ARF (DESIGNED BY) | SBP (DRAWN BY) | POC (CHECKED BY)

SHEET NO. 38 OF 75

E - 601SH (DISCIPLINE - TYPE SEQUENCE - DRAWING TYPE)

4/16/2025 1:13:41 PM
E-601SH BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

PANELBOARD:	4HA	BUS RATING:	100 A	MAIN:	100A MCB
MIN AIC:	FIELD VERIFY	VOLTS:	480Y/277V	PHASES: 3	WIRES: 4
ENCLOSURE:	NEMA 1	MOUNTING:	SURFACE	FED FROM:	FIELD VERIFY
LOCATION:	NORTH MECH ROOM	NOTES:	EXISTING		

CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)		BØ (KVA)		CØ (KVA)		CB TA	CB P	ITEM SERVED	CKT #
1	BUILDING CORE LIGHTS	1	20	0.0	0.0					20	1	LS TECH/WATER HEATER	2
3	HALL LIGHTS	1	20			0.0	0.0			20	1	LIGHTS IN SM. ROOM. A.O.	4
5	LIGHTS AMERICAN OPTOMETRIC	1	20					0.0	0.0	20	1	LIGHTS AMERICAN OPTOMETRIC	6
7	NORTHWEST LIGHTS	1	20	0.0	0.0					20	1	LIGHTS AMERICAN OPTOMETRIC	8
9	LS TECHNOLOGIES	1	20			0.0	0.0			20	1	LIGHTS AMERICAN OPTOMETRIC	10
11	MUELLER OFFICE LIGHTS	1	20					0.0	0.0	20	1	EAST LIGHTS	12
13	SPARE	1	20	0.0	0.0					20	1	SOUTHWEST LIGHTS	14
15	440 LIGHTS	1	20			0.0	0.0			30	1	INSTA-HOT ARCHITECTURE TECH	16
17	SPARE	1	20					0.0	0.0	20	1	SPARE IN CEILING	18
	TOTAL PER PHASE:			0.0		0.0		0.0					
	TOTAL CONNECTED:			0.0 kVA		0 A							

PANELBOARD:	4LA	BUS RATING:	400 A	MAIN:	3P 200A CB
MIN AIC:	22,000	VOLTS:	208Y/120V	PHASES: 3	WIRES: 4
ENCLOSURE:	NEMA 1	MOUNTING:	SURFACE	FED FROM:	FIELD VERIFY
LOCATION:	NORTH MECH ROOM	NOTES:	EXISTING		

CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)		BØ (KVA)		CØ (KVA)		CB TA	CB P	ITEM SERVED	CKT #
1	**AV RECEPT - FOCUS ROOMS**	1	20	0.4	0.0					20	1	JMA SOLUTIONS RECEPTACLE	2
3	SPARE	1	20			0.0	0.7			20	1	**RECEPT - COPY/PRINT/MAIL 4066E**	4
5	JMA SOLUTIONS RECEPTACLE	1	20					0.0	0.0	20	1	JMA SOLUTIONS RECEPTACLE	6
7	JMA SOLUTIONS RECEPTACLE	1	20	0.0	0.0					20	1	JMA SOLUTIONS RECEPTACLE	8
9	JMA SOLUTIONS RECEPTACLE	1	20			0.0	0.0			20	1	JMA SOLUTIONS RECEPTACLE	10
11	JMA SOLUTIONS RECEPTACLE	1	20					0.0	0.0	20	1	JMA SOLUTIONS RECEPTACLE/LS TECH	12
13	**RECEPT - CONFERENCE 4002E**	1	20	0.5	0.9					20	1	**RECEPT - OPEN OFFICE 4020E**	14
15	JMA SOLUTIONS RECEPTACLE	1	20			0.0	0.7			20	1	**RECEPT - OPEN OFFICE 4020E**	16
17	JMA SOLUTIONS RECEPTACLE	1	20					0.0	0.2	20	1	**AV RECEPT - CONFERENCE 4040E**	18
19	JMA SOLUTIONS RECEPTACLE	1	20	0.0	0.0					20	1	JMA SOLUTIONS RECEPTACLE	20
21	JMA SOLUTIONS RECEPTACLE	1	20			0.0	0.0			20	1	LS TECHNOLOGIES	22
23	**RECEPT - CONFERENCE 4040E**	1	20					0.4	0.2	20	1	**AV RECEPT - DIRECTOR'S OFFICE 4033E**	24
25				0.0	0.0								26
27	4LA1	3	20			0.0	0.0			20	3	4LA4	28
29								0.0	0.0				30
31				0.0	0.0					20	1	JMA SOLUTIONS RECEPTACLE	32
33	4LA2	3	20			0.0	0.7			20	1	**RECEPT - DIRECTOR'S OFFICE 4033E**	34
35								0.0	0.0	20	1	JMA SOLUTIONS RECEPTACLE	36
37				0.0	0.0					20	1	JMA SOLUTIONS RECEPTACLE	38
39	4LA3	3	20			0.0	0.0			20	1	JMA SOLUTIONS RECEPTACLE	40
41								0.0	0.0	20	1	CONDEN. PUMP	42
	TOTAL PER PHASE:			1.8		2.2		0.7					
	TOTAL CONNECTED:			4.7 kVA		13 A							

PANELBOARD:	4LA1	BUS RATING:	225 A	MAIN:	3P 200A CB
MIN AIC:	22,000	VOLTS:	208Y/120V	PHASES: 3	WIRES: 4
ENCLOSURE:	NEMA 1	MOUNTING:	SURFACE	FED FROM:	FIELD VERIFY
LOCATION:	NORTH MECH ROOM	NOTES:	EXISTING		

CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)		BØ (KVA)		CØ (KVA)		CB TA	CB P	ITEM SERVED	CKT #
1	**FURNITURE WHIP - RECEPTION 4000E**	1	20	0.4	0.4					20	1	**FURNITURE WHIP - OPEN OFFICE 4020E**	2
3	**FURNITURE WHIP - OPEN OFFICE 4020E**	1	20			0.4	0.4			20	1	**FURNITURE WHIP - OPEN OFFICE 4020E**	4
5	**FURNITURE WHIP - OPEN OFFICE 4020E**	1	20					0.4	0.4	20	1	**FURNITURE WHIP - OPEN OFFICE 4020E**	6
7	PRINTER RECEPTACLE (SAAB)	1	20	0.0	0.0					20	1	JMA SOLUTIONS RECEPTACLE	8
9	GFCI PANTRY (SAAB)	1	20			0.0	0.4			20	1	**FURNITURE POKETHRU - OPEN OFFICE 4020E**	10
11	**FURNITURE POKETHRU - OPEN OFFICE 4020E**	1	20					0.4	0.4	20	1	**FURNITURE POKETHRU - OPEN OFFICE 4020E**	12
13	JMA SOLUTIONS RECEPTACLE	1	20	0.0	0.4					20	1	**POKETHRU - DIRECTOR'S OFFICE**	14
15	JMA SOLUTIONS RECEPTACLE	1	20			0.0	0.0			20	1	JMA SOLUTIONS RECEPTACLE	16
17	SPARE	1	20					0.0	0.4	20	1	**POKETHRU - CONFERENCE 4040E**	18
19	SPARE	1	20	0.0	0.0					20	1	LS TECHNOLOGIES	20
21	GFCI PANTRY (SAAB)	1	20			0.0	0.0			20	1	JMA SOLUTIONS RECEPTACLE	22
23	**FURNITURE POKETHRU - OPEN OFFICE 4020E**	1	20					0.4	0.4	20	1	**POKETHRU - CONFERENCE 4002E**	24
25	**RECEPT - FLEX 4016E**	1	20	0.2	0.9					20	1	**RECEPT - FLEX 4016E**	26
27	**POKETHRU - CONFERENCE 4040E**	1	20			0.4	0.4			20	1	**POKETHRU - CONFERENCE 4040E**	28
29	REFRIGERATOR (SAAB)	1	20					0.0	0.4	20	1	**POKETHRU - CONFERENCE 4002E**	30
31	RECEPTACLE (SAAB)	1	20	0.0	0.0					20	2	SPARE	32
33	RECEPTACLE (SAAB)	1	20			0.0	0.0						34
35	LS TECHNOLOGIES	1	20					0.0	0.0	20	1	JMA SOLUTIONS RECEPTACLE	36
37	SPARE	2	20	0.0	0.9					20	1	**RECEPT - CONFERENCE 4040E**	38
39						0.0	0.9			20	1	**RECEPT - PANTRY 4018E**	40
41	**GARBAGE DISPOSAL - PANTRY 4018E**	1	20					1.7	0.2	20	1	**REFRIGERATOR - PANTRY 4018E**	42
	TOTAL PER PHASE:			3.1		2.7		4.7					
	TOTAL CONNECTED:			10.5 kVA		29 A							

PANELBOARD:	4EM	BUS RATING:	225 A	MAIN:	100 A
MIN AIC:	FIELD VERIFY	VOLTS:	480Y/277V	PHASES: 3	WIRES: 4
ENCLOSURE:	NEMA 1	MOUNTING:	SURFACE	FED FROM:	FIELD VERIFY
LOCATION:	NORTH MECH ROOM	NOTES:	EXISTING		

CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)		BØ (KVA)		CØ (KVA)		CB TA	CB P	ITEM SERVED	CKT #
1	EXISTING LOAD	1	20	0.0	0.0					20	1	EXISTING LOAD	2
3	EXISTING LOAD	1	20			0.0	0.0			20	1	EXISTING LOAD	4
5	EXISTING LOAD	1	20					0.0	0.0	20	1	EXISTING LOAD	6
7	EXISTING LOAD	1	20	0.0	0.0					20	1	EXISTING LOAD	8
9	EXISTING LOAD	1	20			0.0	0.0			20	1	EXISTING LOAD	10
11	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	12
13	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	14
15	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	16
17	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	18
19	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	20
21	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	22
23	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	24
25	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	26
27	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	28
29	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	30
	TOTAL PER PHASE:			0.0		0.0		0.0					
	TOTAL CONNECTED:			0.0 kVA		0 A							

PANELBOARD:	4LA5	BUS RATING:	225 A	MAIN:	150 A MCB
MIN AIC:	FIELD VERIFY	VOLTS:	208Y/120V	PHASES: 3	WIRES: 4
ENCLOSURE:	NEMA 1	MOUNTING:	SURFACE	FED FROM:	PANEL 4H
LOCATION:	NORTH MECH ROOM	NOTES:	EXISTING		

CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)		BØ (KVA)		CØ (KVA)		CB TA	CB P	ITEM SERVED	CKT #
1	ROOF TOP RECEPTACLE	1	20	0.0	0.0								2
3	CONF RM 402 RECEPTACLE	1	20			0.0	0.0			80	3	PANEL "4LA6"	4
5	**REFRIGERATOR - REL**	1	20					0.2	0.0				6
7	**GARBAGE DISPOSAL - REL**	1	20	0.0	0.2					20	1	**DISHWASHER - REL**	8
9	CONF RM 402 FLR POWER	1	20			0.0	0.2			20	1	**NEW GFCI RECP - REL**	10
11	**MICROWAVE - REL**	1	20					0.2	0.0	20	1	CONF RM 403 FLR POWER	12
13	RECEPTACLES	1	20	0.0	0.0					20	1	DEDIC RECEPTACLE RECEP 401	14
15	**LAN RM RECP - REL**	1	20			0.7	0.0			20	1	CONF RM 402 FLR POWER	16
17	**RECEPTION AREA RECP - REL**	1	20					0.5	0.0	20	1	CONF RM 403 RECEPTACLE	18
19				0.0	0.0					20	1	**EXHAUST FAN LAN RM - REL**	20
21	EMON - DMON	3	20			0.0	0.0			20	1	CONF RM 402 RECEPTACLE	22
23								0.0	0.0	20	1	CONF RM 403 RECEPTACLE	24
25	RECEPTACLES	1	20	0.0	0.7					20	1	**RECEPT - STORAGE 4014E**	26
27	RECEPTACLES	1	20			0.0	0.0			20	1	OFFICE 402 FLR POWER	28
29	**PLOTTER - STORAGE 4014E**	1	20					0.2	0.0	20	1	CONF RM 403 RECEPTACLE	30
31				0.0	0.0					20	1	EXHAUST FAN	32
33	LS TECHNOLOGIES SUB PANEL	3	60			0.0	0.0			20	1	PROJE & SCREEN CONF RM 402	34
35								0.0	0.0	20	1	CONF RM 403 RECEPTACLE	36
37	**RECEPT - TELECOM 400T-N**	1	20	0.2	0.1					20	2	**NEMA RECEPT - TELECOM 400T-N**	38
39	**RECEPT - TELECOM 400T-N**	1	20			0.2	0.1						40
41	SPARE	1	20					0.0	0.0	20	1	CONF RM 403 FLR POWER	42
	TOTAL PER PHASE:			1.2		1.2		1.1					
	TOTAL CONNECTED:			3.4 kVA		9 A							

DRAWING NOTES:

A. INFORMATION IN EXISTING SCHEDULES HAS BEEN OBTAINED FROM GENERAL FIELD OBSERVATIONS. DETERMINE EXACT CIRCUIT CONDITIONS FOR EACH EXISTING PANELBOARD, MOTOR CONTROL CENTER, SWITCHBOARD, AND SWITCHGEAR IN FIELD. IF CONDITIONS ARISE THAT PRECLUDE WORK INDICATED, NOTIFY ENGINEER IMMEDIATELY AND WAIT FOR DIRECTION.

B. FOR EXISTING SCHEDULES, CIRCUITS WITH DESIGNATIONS IN REGULAR TEXT ARE EXISTING TO REMAIN. NEW CIRCUITS ARE SHOWN IN BOLD TEXT. PROVIDE NEW CIRCUIT BREAKERS WHERE BREAKER AMPERAGE IS IN BOLD TEXT. DESCRIPTIONS OF CIRCUITS THAT HAVE BECOME SPARES AFTER DEMOLITION ARE SHOWN IN BOLD TEXT.

C. WHERE NEW CIRCUIT BREAKERS ARE INDICATED IN EXISTING SCHEDULES, MATCH MANUFACTURER AND AIC RATING OF EXISTING CIRCUIT BREAKERS IN SAME DISTRIBUTION EQUIPMENT.

D. PROVIDE UPDATED TYPED DIRECTORIES FOR ALL EXISTING AND RELOCATED PANELBOARDS INDICATING NEW AND EXISTING LOADS AFTER COMPLETION OF WORK. HANDWRITTEN DIRECTORIES ARE NOT ACCEPTABLE.

E. PROVIDE FULL-HEIGHT PHASE, NEUTRAL AND GROUND BUS PROVISIONS FOR ALL AVAILABLE SPACES.

SPECIAL NOTES:

1 PROVIDE GFCI BREAKER.

2 RECONNECT CIRCUIT FROM DEMOLISHED 4LA5B PANEL.

4HA	4EM
4LA1	4LA5
4LA1	-------

4/16/2025 1:13:59 PM
E-602SH BY Approver: 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA — CHRISTOS CARPENIS — No. PE40000385 — LICENSED — PROFESSIONAL ENGINEER

STAMP

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	PANELBOARD SCHEDULES
WORKING STAFF	ARF (DESIGNED BY) / SBP (DRAWN BY) / POC (CHECKED BY)
SHEET NO.	42 OF 75
	E-602SH (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

PANELBOARD:	4H			BUS RATING:	225 A						MAIN:	200 A											
MIN AIC:	FIELD VERIFY			VOLTS:	480Y/277V						PHASES:	3	WIRES:	4									
ENCLOSURE:	NEMA 1			MOUNTING:	SURFACE						FED FROM:	FIELD VERIFY											
LOCATION:	NORTH MECH ROOM			NOTES:	EXISTING																		
CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)		BØ (KVA)		CØ (KVA)		CB TA	CB P	ITEM SERVED	CKT #										
1	SPARE	1	20	0.0	0.0					15	1	AC4-1	2										
3	AC4-2	1	15			0.0	0.0						4										
5	ROOF MOUNTED DRYCOOLER AND PUMPS (DC-1 AND DP-1)	3	20					0.0	0.0	20	3	AC4-3	6										
7				0.0	0.0								8										
9						0.0	0.0						10										
11	HWH-1	1	25					0.0	0.0	20	3	EMON - DMON	12										
13	SPARE	1	20	0.0	0.0								14										
15	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	16										
17	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	18										
19	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	20										
21	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	22										
23	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	24										
25	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	26										
27	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	28										
29	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	30										
31	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	32										
33	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	34										
35	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	36										
37				1.2	--					--	1	SPACE WITH PROVISIONS	38										
39	PANEL "4LA5" AND "4LA6" - 45 KVA TRANSFORMER	3	20			1.2	--			--	1	SPACE WITH PROVISIONS	40										
41								1.1	--	--	1	SPACE WITH PROVISIONS	42										
	TOTAL PER PHASE:			1.2		1.2		1.1															
	TOTAL CONNECTED:			3.4 kVA				4 A															

PANELBOARD:	4PA			BUS RATING:	225 A						MAIN:	200A MCB											
MIN AIC:	FIELD VERIFY			VOLTS:	480Y/277V						PHASES:	3	WIRES:	4									
ENCLOSURE:	NEMA 1			MOUNTING:	SURFACE						FED FROM:	FIELD VERIFY											
LOCATION:	NORTH MECH ROOM			NOTES:	EXISTING																		
CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)		BØ (KVA)		CØ (KVA)		CB TA	CB P	ITEM SERVED	CKT #										
1				0.0	0.0								2										
3	WESTWALL HEAT PUMPS	3	30			0.0	0.0			30	3	NORTHEAST WALL HEAT PUMPS	4										
5								0.0	0.0				6										
7				0.0	0.0								8										
9	NORTHWALL HEAT PUMPS	3	30			0.0	0.0			30	3	NORTHEAST WALL HEAT PUMPS	10										
11								0.0	0.0				12										
13				0.0	0.0								14										
15	EAST WALL HEAT PUMPS	3	30			0.0	0.0			25	3	SPARE	16										
17								0.0	0.0				18										
19	**WSHP-1**	1	20	1.3	1.9					20	1	**WSHP-2**	20										
21	**WSHP-1 CONDENSATE PUMP**	1	20			0.4	0.4			20	1	**WSHP-2 CONDENSATE PUMP**	22										
23	SPARE	1	20					0.0	0.0	20	1	SPARE	24										
25	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	26										
27	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	28										
	TOTAL PER PHASE:			3.2		0.7		0.0															
	TOTAL CONNECTED:			3.9 kVA				5 A															

PANELBOARD:	4LA5B			BUS RATING:	225 A						MAIN:	60 A											
MIN AIC:	FIELD VERIFY			VOLTS:	208Y/120V						PHASES:	3	WIRES:	4									
ENCLOSURE:	NEMA 1			MOUNTING:	SURFACE						FED FROM:	FIELD VERIFY											
LOCATION:	RECEPTION 4000E			NOTES:	EXISTING TO BE DEMOLISHED																		
CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)		BØ (KVA)		CØ (KVA)		CB TA	CB P	ITEM SERVED	CKT #										
1	NEW GFCI RECP	1	20	0.0	0.0					20	1	RECEPTION AREA RECP	2										
3	DISHWASHER	1	20			0.0	0.0			20	1	LAN RM RECP	4										
5	GARBAGE DISPOSAL	1	20					0.0	0.0	20	1	EXHAUST FAN LAN RM	6										
7	MICROWAVE RECP	1	20	0.0	0.0					20	1	REFRIGERATOR	8										
9	SPARE	1	20			0.0	0.0			20	1	SPARE	10										
11	SPARE	1	20					0.0	0.0	20	1	SPARE	12										
13	SPARE	1	20	0.0	0.0					20	1	SPARE	14										
15	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	16										
17	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	18										
19	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	20										
21	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	22										
23	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	24										
25	SPACE WITH PROVISIONS	1	--	--	--					--	1	SPACE WITH PROVISIONS	26										
27	SPACE WITH PROVISIONS	1	--			--	--			--	1	SPACE WITH PROVISIONS	28										
29	SPACE WITH PROVISIONS	1	--					--	--	--	1	SPACE WITH PROVISIONS	30										
	TOTAL PER PHASE:			0.0		0.0		0.0															
	TOTAL CONNECTED:			0.0 kVA				0 A															

1

DRAWING NOTES:

A. INFORMATION IN EXISTING SCHEDULES HAS BEEN OBTAINED FROM GENERAL FIELD OBSERVATIONS. DETERMINE EXACT CIRCUIT CONDITIONS FOR EACH EXISTING PANELBOARD, MOTOR CONTROL CENTER, SWITCHBOARD, AND SWITCHGEAR IN FIELD. IF CONDITIONS ARISE THAT PRECLUDE WORK INDICATED, NOTIFY ENGINEER IMMEDIATELY AND WAIT FOR DIRECTION.

B. FOR EXISTING SCHEDULES, CIRCUITS WITH DESIGNATIONS IN REGULAR TEXT ARE EXISTING TO REMAIN. NEW CIRCUITS ARE SHOWN IN BOLD TEXT. PROVIDE NEW CIRCUIT BREAKERS WHERE BREAKER AMPERAGE IS IN BOLD TEXT. DESCRIPTIONS OF CIRCUITS THAT HAVE BECOME SPARES AFTER DEMOLITION ARE SHOWN IN BOLD TEXT.

C. WHERE NEW CIRCUIT BREAKERS ARE INDICATED IN EXISTING SCHEDULES, MATCH MANUFACTURER AND AIC RATING OF EXISTING CIRCUIT BREAKERS IN SAME DISTRIBUTION EQUIPMENT.

D. PROVIDE UPDATED TYPED DIRECTORIES FOR ALL EXISTING AND RELOCATED PANELBOARDS INDICATING NEW AND EXISTING LOADS AFTER COMPLETION OF WORK. HANDWRITTEN DIRECTORIES ARE NOT ACCEPTABLE.

E. PROVIDE FULL-HEIGHT PHASE, NEUTRAL AND GROUND BUS PROVISIONS FOR ALL AVAILABLE SPACES.

SPECIAL NOTES:

1 EXISTING PANEL TO BE DEMOLISHED. RECONNECT CIRCUITS TO PANEL 4LA5 AS SHOWN.

4H	4LA5B
4PA	-------
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CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

DISTRICT OF COLUMBIA · CHRISTOS CARPENTER · No. PE40000385 · CIVIL · LICENSED · PROFESSIONAL ENGINEER

STAMP

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	PANELBOARD SCHEDULES
WORKING STAFF	ARF (DESIGNED BY) · SBP (DRAWN BY) · POC (CHECKED BY)
SHEET NO.	43 OF 75
	E-603SH (DISCIPLINE · TYPE · SEQUENCE · DRAWING TYPE)

4/16/2025 1:14:04 PM
E-603SH BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

DIVISION 26 - **ELECTRICAL SPECIFICATIONS**

PART 1 - GENERAL REQUIREMENTS

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING THE GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 CODES & REGULATIONS

A. ALL MATERIALS FURNISHED AND ALL WORK INSTALLED SHALL COMPLY WITH THE LATEST RULES, REGULATIONS, AND RECOMMENDATIONS OF THE FOLLOWING BODIES:

1. INTERNATIONAL BUILDING CODE
2. INTERNATIONAL MECHANICAL CODE
3. NATIONAL ELECTRICAL CODE
4. NATIONAL FIRE PROTECTION ASSOCIATION
5. UNDERWRITERS LABORATORIES
6. NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION
7. NATIONAL ELECTRICAL TESTING AGENCY
8. INSULATED CABLE ENGINEERS ASSOCIATION

1.3 CONTRACT DOCUMENTS

A. CONTRACT DRAWINGS FOR ELECTRICAL WORK ARE DIAGRAMMATIC, INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT.

B. CORRECTION OF FAULTY WORK DUE TO RESOLVING DISCREPANCIES WITHOUT AUTHORIZATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

C. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES OR OMISSIONS ON THE DRAWINGS OR IN THE SPECIFICATIONS, HE SHALL NOTIFY THE ENGINEER OF SUCH CONDITIONS PRIOR TO THE BID DATE. OTHERWISE, IT WILL BE UNDERSTOOD THAT THE DRAWINGS AND SPECIFICATIONS ARE CLEAR AS TO WHAT IS INTENDED AND SHALL BE AS INTERPRETED BY THE ENGINEER.

1.4 SUBMITTALS

A. GENERAL:

1. SUBMIT ALL SUBMITTALS, WHICH INCLUDES SHOP DRAWINGS, PRODUCT DATA, RELATED OPERATION AND MAINTENANCE MANUALS, WARRANTY DOCUMENTATION AND ALL OTHER PERTINENT INFORMATION ELECTRONICALLY BY THE MANUFACTURER, TRADE CONTRACTORS, AND CONSTRUCTION MANAGER AS A "PDF" FILE.
2. AFTER CONTRACT AWARD AND BEFORE MATERIAL IS ORDERED SUBMIT ELECTRICALLY ALL SHOP DRAWINGS, DRAWINGS AND SUCH OTHER DESCRIPTIVE DATA AS THE ENGINEER MAY REQUIRE TO DEMONSTRATE COMPLIANCE WITH THE CONTRACT DOCUMENTS AS REQUIRED BY THE CONTRACT CLAUSES.
3. SUBMITTALS SHALL INCLUDE THE MANUFACTURER'S NAME, TRADE NAME, CATALOG MODEL OR NUMBER, NAMEPLATE DATA, SIZE, LAYOUT DIMENSIONS, CAPACITY, PROJECT SPECIFICATION AND PARAGRAPH REFERENCE, APPLICABLE PUBLICATION REFERENCES, YEARS OF SATISFACTORY SERVICE, AND OTHER INFORMATION NECESSARY TO ESTABLISH CONTRACT COMPLIANCE OF EACH ITEM THE CONTRACTOR PROPOSES TO FURNISH.
4. SUBMITTALS FOR FIRE STOPS AND SMOKE SEALS REQUIRED FOR THE PROJECT SHALL BE BY THE SAME MANUFACTURER. ADDITIONAL REQUIREMENTS SHALL BE AS INDICATED BELOW:

   a. SUBMITTALS FOR FIRE STOPS AND SMOKE SEALS SHALL INCLUDE A CERTIFICATION FROM THE MANUFACTURER THAT EACH SUBMITTED PRODUCT COMPLIES WITH THE LOCAL REGULATIONS CONTROLLING THE USE OF VOLATILE ORGANIC COMPOUNDS (VOC'S) AND OR NON TOXIC TO THE BUILDING.
   b. THESE SUBMITTALS SHALL ALSO INCLUDE DATA, DIAGRAMS AND DETAILS SHOWING THE UL ASSEMBLIES TO BE INSTALLED.
   c. ENGAGE A TECHNICIAN WHO HAS INSTALLATION EXPERIENCE, USING THE APPROVED MATERIALS, TO PROVIDE TRAINING TO THE VARIOUS TRADE PERSONNEL WHO WILL INSTALL THE MATERIALS REQUIRED FOR THE PROJECT. TRAINING PERIOD SHALL BE FOR FOUR (4) HOURS. SUBMIT A CERTIFICATE OF TRAINING FROM THE MANUFACTURER OF THE MATERIAL TO THE OWNER DOCUMENTING THE REQUIRED TRAINING.

5. SUBMITTALS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH DESIGN CONCEPT IN ACCORDANCE WITH CONTRACT DOCUMENTS, BUT DIMENSIONS, QUANTITIES, OR OTHER DETAILS WILL NOT BE VERIFIED.
6. ALL ELECTRICAL EQUIPMENT SHALL BE APPROVED AND LISTED BY UNDERWRITERS' LABORATORIES (U.L.) AND SHALL BEAR NAMEPLATE INDICATING SAME.

1.5 COORDINATION

A. COORDINATE ALL WORK AND COOPERATE WITH ALL OTHER TRADES TO FACILITATE EXECUTION OF WORK.

1.6 SITE EXAMINATION

A. FAILURE TO VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING PROJECT CONDITIONS PRIOR TO BIDDING WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.

1.7 QUALITY ASSURANCE

A. MANUFACTURER'S QUALIFICATIONS: FIRMS REGULARLY ENGAGED IN MANUFACTURE OF ELECTRICAL PRODUCTS, OF TYPES AND SIZES REQUIRED, WHOSE PRODUCTS HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR NOT LESS THAN FIVE (5) YEARS.

B. INSTALLER'S QUALIFICATIONS: FIRMS WITH AT LEAST FIVE (5) YEARS SUCCESSFUL INSTALLATION EXPERIENCE ON PROJECTS WITH ELECTRICAL PRODUCTS SIMILAR TO THAT REQUIRED FOR THIS PROJECT.

1.8 REGULATIONS AND PERMITS

A. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, CERTIFICATES OF INSPECTION, ETC., REQUIRED BY THE AUTHORITIES HAVING JURISDICTION OVER THIS WORK. THE CERTIFICATES SHALL BE DELIVERED TO THE ENGINEER BEFORE THE DATE OF FINAL ACCEPTANCE OF THE PROJECT.

1.9 WORK PERFORMANCE

A. ALL ELECTRICAL WORK MUST COMPLY WITH THE REQUIREMENTS OF NFPA 70 (NEC), NFPA 70B, NFPA 70E, OSHA PART 1910 SUBPART J, OSHA PART 1910 SUBPART S AND OSHA PART 1910 SUBPART K IN ADDITION TO OTHER REFERENCES REQUIRED BY THE CONTRACT.

B. BEFORE INITIATING ANY WORK, A JOB SPECIFIC WORK PLAN MUST BE DEVELOPED BY THE CONTRACTOR. THE WORK PLAN MUST INCLUDE PROCEDURES TO BE USED ON AND NEAR THE LIVE ELECTRICAL EQUIPMENT, BARRIERS TO BE INSTALLED, AND SAFETY EQUIPMENT TO BE USED AND EXIT PATHWAYS.

C. JOB SITE AND WORKER SAFETY ARE THE RESPONSIBILITY OF THE CONTRACTOR.

D. ENERGIZED ELECTRICAL CONDUCTORS AND CIRCUIT PARTS TO WHICH AN EMPLOYEE MIGHT BE EXPOSED SHALL BE PUT INTO AN ELECTRICALLY SAFE WORK CONDITION BEFORE AN EMPLOYEE PERFORMS WORK ANY TIME THE EMPLOYEE IS WITHIN THE LIMITED APPROACH BOUNDARY OR, WHERE AN INCREASED RISK OF INJURY FROM AN EXPOSURE TO AN ARC FLASH HAZARD EXISTS.

E. OUTAGES SHOULD BE SCHEDULED A MINIMUM OF TEN (10) DAYS IN ADVANCE.

F. MANDATORY REQUIREMENTS: THE FOLLOWING REQUIREMENTS ARE MANDATORY:

1. PROTECTIVE EQUIPMENT: ELECTRICIANS MUST USE FULL PROTECTIVE EQUIPMENT (I.E., CERTIFIED AND TESTED INSULATING MATERIAL TO COVER EXPOSED ENERGIZED ELECTRICAL COMPONENTS, CERTIFIED AND TESTED INSULATED TOOLS, ETC.) WHILE WORKING ON ENERGIZED SYSTEMS IN ACCORDANCE WITH NFPA 70E.

1.10 FIELD INSTRUCTION

A. UPON COMPLETION OF WORK, INSTRUCT OWNER'S REPRESENTATIVE IN THE PROPER OPERATION AND MAINTENANCE OF THE ELECTRICAL SYSTEMS.

1.11 GUARANTEE/WARRANTY

A. ALL MATERIALS, EQUIPMENT, ETC. PROVIDED BY THE CONTRACTOR AND/OR HIS SUBCONTRACTORS SHALL BE GUARANTEED AND WARRANTED TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF TWO (2) YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION AND ACCEPTANCE OF WORK. ANY DEFECTS IN WORKMANSHIP, MATERIALS, OR PERFORMANCE WHICH APPEAR WITHIN THE GUARANTEE PERIOD SHALL BE CORRECTED BY THE CONTRACTOR WITHOUT COST TO THE OWNER, WITHIN A REASONABLE TIME, TO BE SPECIFIED BY OWNER. IN DEFAULT THEREOF, OWNER MAY HAVE SUCH WORK DONE AND CHARGE THE COST OF SAME TO THE CONTRACTOR. IN ADDITION TO THE ABOVE STATEMENT THE GUARANTEE/WARRANTY PERIOD SHALL INCLUDE ALL LABOR COST RELATED TO ALL WARRANTY WORK.

B. THE ABOVE SHALL NOT IN ANY WAY VOID OR ABROGATE EQUIPMENT MANUFACTURER'S GUARANTEE OR WARRANTY. CERTIFICATES OF GUARANTEE SHALL BE DELIVERED TO THE OWNER.

1.12 DEMOLITION

A. THE ELECTRICAL DEMOLITION IN THE RENOVATION AREAS INDICATED ON THE DRAWINGS SHALL BE COMPLETE AND INCLUDE ALL ELECTRICAL WORK IN THE AREA UNLESS NOTED OTHERWISE.

B. EXISTING ELECTRICAL SYSTEMS PASSING THROUGH AREAS OF DEMOLITION TO SERVE EQUIPMENT BEYOND THE DEMOLITION AREAS SHALL REMAIN IN SERVICE, OR BE SUITABLY RELOCATED AND RESTORED TO NORMAL OPERATION, THROUGHOUT THE DEMOLITION AND RECONSTRUCTION OF THE AREA. THE CONTRACTOR SHALL INVESTIGATE AND IDENTIFY SUCH EQUIPMENT PRIOR TO DEMOLITION.

C. PROVIDE TEMPORARY ELECTRICAL SERVICE TO EQUIPMENT DISTURBED BY THE DEMOLITION UNTIL SUCH TIME AS THE PERMANENT SERVICE CAN BE RESTORED.

D. WHERE CONDUIT AND WIRING TO REMAIN ARE INADVERTENTLY DAMAGED OR DISTURBED, CUT OUT AND REMOVE DAMAGED PORTION AND ALL DAMAGED WIRING FROM THE SOURCE SWITCHBOARD, PANELBOARD OR PULLBOX TO THE DESTINATION CONNECTION POINT. PROVIDE NEW WIRING OF EQUAL CAPACITY.

E. EXPOSED CONDUIT TO BE DEMOLISHED SHALL BE REMOVED IN ITS ENTIRETY. CONCEALED CONDUIT, ABANDONED IN PLACE, SHALL BE CUT OUT APPROXIMATELY 2 INCHES BEYOND THE FACE OF ADJACENT CONSTRUCTION, PLUGGED, AND THE ADJACENT SURFACE PATCHED TO MATCH EXISTING.

F. WIRING TO BE DEMOLISHED SHALL BE REMOVED FROM BOTH CONCEALED AND EXPOSED CONDUIT. NO WIRING WHICH BECOMES UNUSED AS A RESULT OF THE CONTRACT SHALL BE ABANDONED IN PLACE.

G. EQUIPMENT SPECIFIED OR INDICATED TO BE DEMOLISHED, SHALL BE REMOVED FROM THE PROJECT SITE AND SHALL NOT BE REUSED.

1.13 FIRE STOPS & SMOKE SEALS

A. PROVIDE FIRE STOPS AND SMOKE SEALS FOR ALL MECHANICAL SERVICES INSTALLED AND EXISTING SERVICES IN THE PROJECT AREA THAT PASS THROUGH FIRE RATED PARTITIONS, WALL, FLOORS ETC. SERVICES SHALL INCLUDE ALL DUCTWORK, CONDUIT, METAL AND PLASTIC PIPING, CABLES, ETC. THE AREA AROUND PENETRATIONS INCLUDING ANY VOIDS BETWEEN THEM MUST BE FILLED IN AND SEALED WITH UL FIRE RATED MATERIALS EQUAL TO THE ADJOINING MATERIALS. ALL FIRE STOP INSULATION DEVICES AND SEALANTS SHALL MAINTAIN THE FIRE RESISTANCE INTEGRITY OF THE FLOOR, WALL PARTITION, ETC. AND MEET ASTM 814-83 F&T RATING FOR TIME, HOURS AND TEMPERATURE RISE. ALL FIRE STOPPING AND SEALANTS SHALL ALLOW FOR EXPANSION AND CONTRACTION MOVEMENT WITHOUT PUMPING FREE OF OPENINGS. PROVIDE UL SYSTEM NUMBERS IN PRODUCT SUBMITTALS FOR EACH FIRE STOP & SMOKE SEAL APPLICATION.

B. THE INSTALLER OF FIRE STOP AND SMOKE SEAL MATERIALS SHALL BE A FIRM LICENSED OR OTHERWISE APPROVED BY THE MANUFACTURER OF THE MATERIALS AND HAVE AT LEAST FIVE (5) YEARS' EXPERIENCE INSTALLING FIRE STOP AND SMOKE SEAL MATERIALS. INSTALLER SHALL COMPLY WITH THE MATERIAL MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION REQUIREMENTS AND ASTM AND APPLICABLE CODE REQUIREMENTS.

C. ALL FIRE STOP AND SMOKE SEAL MATERIALS SHALL BE AS MANUFACTURED BY ANY ONE OF THE FOLLOWING MANUFACTURERS:

1. SPECIFIED TECHNOLOGIES INC. (STI)
2. DOW CORNING CORP.
3. 3M INC.
4. HILTI

1.14 CUTTING AND PATCHING

A. CUTTING AND PATCHING ASSOCIATED WITH THE WORK IN THE EXISTING STRUCTURE SHALL BE PERFORMED A NEAT AND WORKMANLIKE MANNER. EXISTING SURFACES THAT ARE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR PROVIDED WITH NEW MATERIALS TO MATCH EXISTING.

B. STRUCTURAL MEMBERS SHALL NOT BE CUT OR PENETRATED. HOLES CUT THROUGH CONCRETE AND/OR MASONRY TO ACCOMMODATE NEW WORK SHALL BE CUT BY RECIPROCATING OR ROTARY, NON-PERCUSSIVE METHODS.

C. PATCHING OF AREAS DISTURBED BY INSTALLATION OF NEW WORK AND/OR REQUIRED DEMOLITION SHALL MATCH EXISTING ADJACENT SURFACES AS TO MATERIAL, TEXTURE AND COLOR.

1.15 OUTAGES

A. FOR ALL WORK REQUIRING AN OUTAGE, THE CONTRACTOR SHALL SUBMIT AN OUTAGE REQUEST TO THE OWNER. THE EXISTING MECHANICAL/ELECTRICAL SYSTEMS SHALL REMAIN OPERATIONAL UNLESS TURNED OFF BY OWNER DURING THE CONSTRUCTION OF THE PROJECT.

B. UNLESS OTHERWISE SPECIFIED, OUTAGES OF ANY SERVICES REQUIRED FOR THE PERFORMANCE OF THIS CONTRACT AND AFFECTING AREAS OTHER THAN THE IMMEDIATE WORK AREA SHALL BE SCHEDULED AT LEAST TEN (10) DAYS IN ADVANCE WITH THE OWNER. ALL SUCH OUTAGES SHALL BE PERFORMED ON OTHER THAN NORMAL WORK HOURS.

C. THE CONTRACTOR SHALL INCLUDE IN HIS PRICE THE COST OF ALL PREMIUM TIME REQUIRED FOR OUTAGES AND OTHER WORK WHICH INTERFERES WITH THE NORMAL USE OF THE BUILDING, WHICH WILL BE PERFORMED, IN MOST CASES, DURING OTHER THAN NORMAL WORK TIME AND AT THE CONVENIENCE OF THE OWNER.

D. THE OPERATION OF VALVES OR SWITCHES; REQUIRED TO ACHIEVE AN OUTAGE MUST BE ACCOMPLISHED BY THE CONTRACTOR. PROSPECTIVE SUBCONTRACTORS UNDER THIS SECTION ARE CAUTIONED THAT THE UNAUTHORIZED OPERATION OF VALVES, POWER SWITCHES, OR OTHER CONTROL DEVICES BY THEIR PERSONNEL CAN RESULT IN EXTREMELY SERIOUS CONSEQUENCES FOR WHICH THE CONTRACTOR WILL BE HELD ACCOUNTABLE.

E. THE CONTRACTOR SHALL ADVISE THE OWNER TEN (10) DAYS IN ADVANCE FOR ALL WORK REQUIRING OUTAGES.

1.16 OPERATION AND MAINTENANCE MANUAL ELECTRONIC FILES

A. ELECTRICAL O & M MANUAL FILE: PROVIDE ONE (1) ELECTRONIC FILE "PDF FORMAT" FOR THE PROJECTS ELECTRICAL OPERATION AND MAINTENANCE MANUAL FOR THE MATERIAL AND EQUIPMENT INSTALLED IN THE PROJECT INCLUDED IN DIVISION 26 ON A CD-R. THE ELECTRONIC ELECTRICAL O & M MANUAL SHALL INCLUDE ONE COPY OF EACH APPROVED SUBMITTAL, ANY MANUFACTURER'S MAINTENANCE MANUALS, ALL WARRANTY CERTIFICATES, ARRANGED IN FILE FOLDERS FOR EACH SUBMITTAL. ALSO INCLUDE THE ADDRESS, PHONE NUMBER AND CONTACT PERSON FOR EACH SUPPLIER. FILES SHALL BE STACKED AND INCLUDE BOTH A BOOK MARK AND TREE STRUCTURE FOR ACCESSING EACH SUBMITTAL FILE AS INDICATED IN DIVISION 01 CLOSEOUT PROCEDURES.

B. ALTERNATE O & M FILE: THE CM/GENERAL CONTRACTOR HAS THE OPTION TO INCLUDE ALL DISCIPLINES IN A SINGLE O&M MANUAL FILE FOR SMALLER TYPE RENOVATION PROJECTS. THE ELECTRONIC O & M MANUAL SHALL INCLUDE ONE COPY OF EACH APPROVED SUBMITTAL, APPROVED TAB REPORT, ANY MANUFACTURERS MAINTENANCE MANUALS, ALL WARRANTY CERTIFICATES, ARRANGED IN FILE FOLDERS UNDER EACH DISCIPLINE FOR EACH SUBMITTAL. FILES SHALL BE STACKED AND INCLUDE BOTH A BOOK MARK AND TREE STRUCTURE FOR ACCESSING EACH SUBMITTAL FILE. THE ELECTRONIC FILE STRUCTURE FOR THE SINGLE FILE SHALL BE AS FOLLOWS:

1. COVER SHEET
2. FORWARD
3. GENERAL INFORMATION
4. SUBCONTRACTORS LIST
5. SUPPLIERS LIST
6. GENERAL WARRANTY STATEMENT – INCLUDE THE MANUFACTURER'S WARRANTY WITH THE EQUIPMENT SUBMITTAL IN THE APPROPRIATE DISCIPLINE.
7. ARCHITECTURAL: GROUP ALL ARCHITECTURAL DATA UNDER THIS HEADING WITH A TREE STRUCTURE.
8. MECHANICAL: GROUP ALL MECHANICAL DATA UNDER THIS HEADING WITH A TREE STRUCTURE.
9. ELECTRICAL: GROUP ALL ELECTRICAL DATA UNDER THIS HEADING WITH A TREE STRUCTURE.
10. FIRE PROTECTION: GROUP ALL FIRE PROTECTION DATA UNDER THIS HEADING WITH A TREE STRUCTURE.
11. AS BUILT DRAWINGS: CONTRACTORS MARKUPS.

1.17 CLEAN – UP

A. EXCESSIVE DEBRIS AND DIRT, SUCH AS OCCURS FROM CUTTING THROUGH MASONRY OR PLASTER WALLS SHALL BE CLEANED UP FROM THE EQUIPMENT AND REMOVED IMMEDIATELY AFTER THE WORK OF CUTTING THROUGH THE WALLS.

B. DEBRIS SHALL BE REMOVED FROM THE PROPERTY.

C. CEILING PANELS SHALL BE REPLACED AS SOON AS WORK IS FINISHED IN THE AREA, AND SHALL BE KEPT FREE OF DIRTY FINGER PRINTS. WHERE WORK IS BEING DONE IN CORRIDORS USED BY PATIENTS AND VISITORS, CEILING PANELS SHALL BE REPLACED AT THE CLOSE OF THE DAYS WORK EVEN IF WORK IS AT THE PARTICULAR LOCATION IS INCOMPLETE.

D. ALL AREAS SHALL BE LEFT BROOM-CLEAN AT THE END OF THE WORK PERIOD.

1.18 HAZARDOUS MATERIALS

A. IDENTIFICATION AND REMOVAL OF HAZARDOUS MATERIALS (ASBESTOS, LEAD PAINT, PCBS) IS NOT PART OF THIS CONTRACT. IF QUESTIONABLE MATERIAL IS ENCOUNTERED, NOTIFY THE OWNER IN WRITING IMMEDIATELY. THE OWNER SHALL THEN ARRANGE FOR INVESTIGATION AND POSSIBLE ABATEMENT OF THE MATERIAL. CONTRACTOR SHALL SCHEDULE HIS WORK TO ACCOMMODATE HAZARDOUS MATERIAL REMOVAL BY THE OWNER.

1.19 GENERAL

A. GENERAL PROVISIONS OF THE CONTRACT APPLY. ALL WORK PERFORMED AND MATERIALS PROVIDED SHALL CONFORM TO ALL APPLICABLE CODES AND STANDARDS AND THE NATIONAL ELECTRICAL CODE (NEC).

B. PRIOR TO STARTING WORK, CAREFULLY INSPECT THE INSTALLED WORK OF ALL OTHER TRADES AND VERIFY THAT ALL SUCH WORK IS COMPLETE TO THE POINT WHERE THIS INSTALLATION MAY PROPERLY COMMENCE.

C. AVOID INTERFERENCE WITH STRUCTURE AND WITH WORK OF OTHER TRADES, PRESERVING ADEQUATE HEADROOM AND CLEARING ALL DOORS AND PASSAGEWAYS.

D. CONFIRM THE LOCATIONS OF ALL EXISTING UTILITIES. REPAIR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY CONSTRUCTION FORCES.

E. LEAVE ALL AREAS BROOM CLEAN DAILY. REMOVE ALL CONSTRUCTION DEBRIS AND TRASH FROM THE SITE DAILY.

F. BEFORE ORDERING ANY MATERIALS OR EQUIPMENT, SUBMIT TO THE ENGINEER DATA FOR ALL MATERIALS AND EQUIPMENT. CHECK EQUIPMENT DIMENSIONS OF PROPOSED SUBSTITUTE EQUIPMENT. THE COST OF ANY REDESIGNING CAUSED BY A SUBSTITUTION SHALL BE BORNE BY THE CONTRACTOR.

G. CONTRACTOR SHALL DO ALL CUTTING, DRILLING AND PATCHING REQUIRED BY HIS WORK. ALL REPAIRS TO FINISH SHALL BE OF LIKE KIND, COLOR AND QUALITY AS EXISTING. STRUCTURAL MEMBERS SHALL NOT BE CUT WITHOUT APPROVAL FROM THE ARCHITECT.

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CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ELECTRICAL SPECIFICATIONS
WORKING STAFF	ARF (DESIGNED BY) / SBP (DRAWN BY) / POC (CHECKED BY)
SHEET NO.	39 OF 75
	E - 901 SS (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

H. PROVIDE TEMPORARY POWER AS MAY BE REQUIRED FOR CONSTRUCTION OR AS MAY BE REQUIRED TO MAINTAIN CRITICAL OPERATIONS DURING CHANGEOVER OF FEEDERS OR SERVICES. PROVIDE ALL EQUIPMENT, MAKE ALL ARRANGEMENTS, AND MAKE ALL CONNECTIONS REQUIRED FOR TEMPORARY POWER. REMOVE ALL PROVISIONS FOR TEMPORARY POWER UPON COMPLETION OF THE PROJECT.

I. SCHEDULE IN ADVANCE ALL OUTAGES OF BUILDING UTILITIES. OUTAGES SHALL BE AS SHORT AS POSSIBLE. ALL SERVICES SHALL BE RESTORED AND PLACED IN OPERATION WHEN CONTRACTOR'S PERSONNEL LEAVE THE SITE EACH DAY.

J. TAKE NECESSARY PRECAUTIONS TO PROTECT BUILDING'S OCCUPANTS AND CONTENTS, AND PREVENT THE SPREAD OF DUST AND DIRT INTO OCCUPIED AREAS.

PART 2 - PRODUCTS

2.1 RACEWAY

A. FOR INDOORS ABOVE FLOOR SLAB, USE EMT CONDUIT WITH COMPRESSION FITTINGS WITH A MINIMUM SIZE OF 3/4 INCH (REGARDLESS OF FUNCTION/PURPOSE) AND MAXIMUM SIZE OF 2 INCHES. ABOVE 2 INCHES, CONDUIT SHALL BE RIGID STEEL CONDUIT, ZINC COATED WITH THREADED TYPE FITTINGS.

1. FOR LOW-VOLTAGE, SPECIAL SYSTEMS PROVIDE THE FOLLOWING COLOR-COATED EMT RACEWAY:

a. FIRE ALARM - RED.
b. TELECOMMUNICATIONS - GREEN.
c. SECURITY - WHITE.

B. NON-METALLIC RACEWAY: PROVIDE EXPANSION JOINTS IN EVERY 20 FOOT OF RUN AND AT LEAST ONCE IN EVERY RUN IN ALL OUTDOOR, ROOFTOP, AND GARAGE LOCATIONS. PROVIDE PVC 40 CONDUIT, NON-METALLIC NEMA 4X BOXES AND NON-METALLIC NEMA 4X ENCLOSURES SUPPORTED VIA NON-METALLIC FIBERGLASS STRUT AND/OR PIPE CLAMPS AT THE FOLLOWING LOCATIONS:

1. ALL OUTDOOR LOCATIONS INCLUDING, BUT NOT LIMITED TO, INSIDE GARAGES AND ON ROOFTOPS.
2. EMBEDDED IN CONCRETE, BRICK, CMU OR OTHER STRUCTURAL MATERIAL.
3. BELOW-SLAB AND –GRADE.
4. ALL UNCONDITIONED-AIR SPACES/ROOMS IN PARKING GARAGES.

C. UTILIZE RIGID GALVANIZED STEEL IN EXTERIOR LOCATIONS ABOVE GRADE WHERE THERE IS A POTENTIAL FOR DAMAGE OR BELOW 8 FEET IN VEHICLE/CART TRAFFIC AREAS AND WHERE OTHERWISE REQUIRED BY THE NEC.

D. FLEXIBLE METAL CONDUIT: PROVIDE FLEXIBLE METAL CONDUIT (LIQUID-TIGHT IN OUTDOOR OR UNDERFLOOR LOCATIONS) FOR THE FOLLOWING INSTALLATIONS:

1. VIBRATING EQUIPMENT (MOTORS, TRANSFORMERS, ETC.) – LIMITED TO THE LAST 36 INCHES PRIOR TO TERMINATION.
2. EMBEDDED IN CMU WALLS.
3. FLEXIBLE CONNECTIONS TO MOTORS SHALL CONTAIN A 90 DEGREE BEND.

E. SUPPORTS – FOR ALL INDOOR, CONDITIONED-SPACE LOCATIONS UTILIZE CONDUIT CLAMPS, CONDUIT STRAPS, BEAN CLAMPS, ETC. AND/OR CHANNEL STRUT SUPPORTS. FOR ALL OUTDOOR APPLICATIONS PROVIDE ONLY GALVANIZED STEEL CONDUIT SUPPORTS AND/OR CHANNEL STRUT. SUPPORT CONDUITS AT A MINIMUM OF TWO (2) TIMES PER 10 FT. LENGTH AND AT A FREQUENCY RATE AS DIRECTED BY THE NEC.

F. BUSHINGS – PROVIDE ONLY THREADED TYPE FOR IMC AND RGS RACEWAY. PROVIDE ONLY STEEL COMPRESSION TYPE FOR ALL EMT RACEWAY SYSTEMS. PROVIDE INSULATED-THROAT, THREADED TYPE BUSHINGS FOR ALL TEL/DATA RACEWAY SYSTEMS.

G. RACEWAYS BELOW RAISED FLOOR SHALL BE LIQUID-TIGHT FLEXIBLE CONDUIT OR EMT WITH LIQUID-TIGHT COMPRESSION FITTINGS.

H. SURFACE METAL RACEWAYS SHALL BE USED ONLY IN FINISHED AREAS AND ONLY WHERE SPECIFICALLY NOTED ON THE DRAWINGS. SURFACE MOUNTED RACEWAYS SHALL BE WIREMOLD 500, 700, 1000, OR 4000 SERIES OR PRE-APPROVED EQUIVALENT WITH BUFF FINISH USED AS FOLLOWS:

1. # 500: 2-#10 OR 3-#12 WIRES MAXIMUM.
2. # 700: 3-#10 OR 4-#12 WIRES MAXIMUM.
3. #1000: 9-#10 OR 12-#12 WIRES MAXIMUM.
4. OTHER COMBINATIONS OF CONDUCTORS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED DATA AND THE NATIONAL ELECTRICAL CODE.
5. ALL ELBOWS, BOXES FITTINGS SUPPORTS, ETC., SHALL BE BY THE RACEWAYS MANUFACTURER. FINISH SHALL MATCH THAT OF THE RACEWAY.
6. WIRE TROUGH SHALL BE STEEL ENCLOSED WIREWAY MEETING ALL UL REQUIREMENTS.

I. SURFACE MOUNTED RACEWAYS AT LABORATORY BENCHES SHALL BE WIREMOLD V3000 SERIES OR PRE-APPROVED EQUIVALENT WITH A GRAY FINISH AS FOLLOWS:

1. STEEL CONSTRUCTION, GRAY, SCRATCH RESISTANT FINISH.
2. TWO PIECE SEPARABLE BASE AND COVER PLATE.
3. COMPLETE WITH ENTRANCE JUNCTION BOXES, WIRE RETAINER CLIPS, DEVICE BRACKETS, END PLATES, ETC.
4. POWER OUTLETS. NEMA TYPE, AT LOCATIONS INDICATED ON THE CD'S.
5. POWER OUTLETS WITHIN SIX FEET OF THE SINK SHALL BE GFCI TYPE.
6. EACH RECEPTACLE SHALL BE NEATLY MARKED ON THE INSIDE COVER WITH INDELIBLE MARKER IDENTIFYING THE PANEL AND BREAKER FROM WHICH IT IS FED AND DURABLE MARKERS OR TAG INSIDE OUTLET BOX. THIS TO ENSURE THE CORRECT COVERS ARE RESTORED AFTER ROOM RENOVATIONS AND/OR PAINTING. IN ADDITION TO MARKING CIRCUIT IDENTIFICATION INSIDE THE COVER, ALSO PROVIDE LAMINATED LABEL WITH CIRCUIT NUMBER ON DEVICE COVER PLATES.

J. ALL NEW RACEWAYS IN FINISHED AREAS SHALL BE CONCEALED UNLESS SPECIFICALLY NOTED OTHERWISE.

K. GROUT AROUND ALL CONDUITS AT CEILING, FLOOR, AND WALL PENETRATIONS TO PROVIDE AIRTIGHT SEAL. ALL FLOOR SLAB AND FIRE-RATED WALL PENETRATIONS SHALL BE SEALED WITH A RATED SYSTEM/INSTALLATION THAT IS PRE-APPROVED BY THE FIRE MARSHAL. SUBMIT MANUFACTURER'S ENGINEERING DRAWING OF THE PROPOSED FIRE-PROOFING SYSTEM TO THE ENGINEER FOR APPROVAL.

L. GROUP TOGETHER EXPOSED CONDUIT INSOFAR AS POSSIBLE. INSTALL ALL CONDUITS PARALLEL OR PERPENDICULAR TO THE BUILDING SURFACES. MAINTAIN MINIMUM 6 INCH SPACING FROM PARALLEL FLUES, STEAM PIPES, OR HOT WATER PIPES AND 2 INCHES FROM PERPENDICULAR FLUES, STEAM OR HOT WATER PIPES.

M. ALL CONDUITS SHALL BE RIGIDLY SUPPORTED TO BUILDING STRUCTURE. CONDUITS SHALL NOT BE SUPPORTED FROM SUSPENDED CEILING SUPPORT WIRES.

N. ALL CONDUIT BENDS SHALL BE MADE WITH AN APPROVED CONDUIT BENDER AND NO BEND SHALL HAVE A CENTERLINE RADIUS LESS THAN SIX TIMES THE DIAMETER OF THE CONDUIT.

O. CORE DRILLING/FLOOR PENETRATIONS: IF DETERMINED NECESSARY, PROVIDE X-RAY EXAMINATION OF THE FLOOR STRUCTURE TO LOCATE STRUCTURAL STEEL FOR AVOIDANCE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING STRUCTURAL INTEGRITY OF ALL FLOORS AND WALLS AFTER CORE DRILLS FOR CONDUITS ARE MADE.

2.2 BOXES AND ENCLOSURES

A. INTERIOR OUTLET BOXES SHALL BE GALVANIZED STEEL, MINIMUM 14 GAUGE, NO LESS THAN 4 INCHES SQUARE WITH EXTENSION RINGS AND MOUNTING BRACKETS.

B. BOXES BELOW RAISED FLOORS SHALL BE CAST-METAL, THREADED HUB TYPE UNLESS THE BOX IS MOUNTED 1-1/2 INCHES OR MORE ABOVE THE SLAB, IN WHICH CASE NEMA 1 BOXES OR INTERIOR OUTLET BOXES MAY BE USED.

C. OUTLET BOXES SHALL BE RIGIDLY AND SECURELY FASTENED IN PLACE. OUTLET BOXES IN FINISHED AREAS SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED.

D. BOXES SHALL BE SIZED IN ACCORDANCE WITH NEC ARTICLE 370.

E. ALL CONDUIT CONNECTORS AND ENTRY HUBS SHALL BE INSULATED OR HAVE INSULATED BUSHINGS.

F. OUTLETS SHOWN ADJACENT TO ONE ANOTHER ON THE PLANS AT THE SAME MOUNTING HEIGHT SHALL BE GANGED EXCEPT WHERE NOTED.

G. OUTLETS SHOWN ADJACENT TO ONE ANOTHER ON THE PLANS AT DIFFERENT MOUNTING HEIGHTS SHALL BE LOCATED WITH THE UPPER OUTLET CENTERED DIRECTLY OVER THE LOWER OUTLET.

2.3 WIRE AND CABLE

A. ALL WIRE SHALL BE COPPER WITH INSULATION RATED AT 600 VOLTS, 75ºC MINIMUM. ALUMINUM WIRE IS STRICTLY PROHIBITED.

B. MINIMUM WIRE SIZES SHALL BE #12 AWG FOR POWER WIRING, #14 AWG FOR CONTROL WIRING AND AS SPECIALLY NOTED FOR SYSTEMS WIRING.

C. WIRE SHALL BE SOLID TYPE THHN OR THWN-2 UP TO SIZE 10 AWG AND STRANDED TYPE THWN-2 OR THHN FOR SIZE 8 AWG AND LARGER. (UNLESS NOTED OTHERWISE.) UNLESS DIRECTED OTHERWISE, DO NOT EXCEED 40% CONDUIT FILL.

D. MC CABLE - TYPE STEEL-CLAD MC CABLE WITH SEPARATE, ISOLATED GROUND CONDUCTOR (I.E. DO NOT USE THE JACKET FOR THE GROUND CONDUCTOR) MAY BE USED IN CONCEALED LOCATIONS FOR LIGHTING AND RECEPTACLE CIRCUITS OR AS OTHERWISE DIRECTED ON THE CONTRACT DRAWINGS. INDIVIDUAL CONDUCTOR COLOR-CODING SCHEME MUST FOLLOW COLOR-CODE SCHEME DESCRIBED BELOW. FOR RENOVATION PROJECTS, THE APPLICATION OF MC CABLE SHALL MIRROR THE STANDARDS FOLLOWED FOR THE BUILDING'S ORIGINAL ELECTRICAL RACEWAY SYSTEM FIT-OUT. DO NOT RUN MC CABLE IN EXPOSED LOCATIONS (E.G. ALL OPEN CEILING LOCATIONS, MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, IT ROOMS, ETC.).
1. MC CABLE INSTALLATION REQUIREMENTS: INDEPENDENTLY SUPPORT ALL MC CABLE RUNS; DO NOT PIGGY-BACK ON PLUMBING/HVAC, LIGHTING FIXTURE, AND/OR CEILING GRID SUPPORTS. DO NOT BUNDLE MORE THAN THREE (3) RUNS TOGETHER FOR SUPPORTING PURPOSES.

E. MOLDED CONNECTORS (WIRE NUTS) MAY BE USED FOR SPLICING SIZE 10 AWG OR SMALLER WIRES ON LIGHTING AND RECEPTACLE CIRCUITS ONLY. "SCOTCH BLOCKS" MUST BE SUBMITTED FOR PRIOR APPROVAL. ALL OTHER WIRING SHALL BE SPLICED ONLY WITH LUGS AND/OR TERMINAL BLOCKS.

F. TERMINAL LUGS SHALL BE MECHANICAL CLAMP OR COMPRESSION TYPE UNLESS PART OF A CIRCUIT BREAKER OR SWITCH ASSEMBLY.

G. SPECIAL LUGS MAY BE REQUIRED TO ACCOMMODATE CONDUCTOR SIZES SHOWN ON THE DRAWINGS. CONTRACTOR SHALL VERIFY LUG REQUIREMENTS FOR ALL CIRCUIT BREAKERS AND EQUIPMENT TERMINALS AND SHALL PROVIDE CORRECT LUGS AS REQUIRED.

H. UNDER NO CIRCUMSTANCES SHALL FEEDERS BE SPLICED AND/OR TAPPED.

I. LIGHTING AND RECEPTACLE BRANCH CIRCUIT HOME RUNS OVER 100 FEET LONG SHALL BE SIZE 10 AWG MINIMUM.

J. COLOR CODE THE ENTIRE POWER WIRING SYSTEM AS FOLLOWS:

208/120 VOLT SYSTEM	480/277 VOLT SYSTEM
PHASE A - BLACK	PHASE A - BROWN
PHASE B - RED	PHASE B - ORANGE
PHASE C - BLUE	PHASE C - YELLOW
NEUTRAL - WHITE	NEUTRAL - GRAY
GROUND - GREEN	GROUND - GREEN

2.4 GROUNDING

A. PROVIDE A COMPLETE EQUIPMENT SAFETY GROUND SYSTEM ("GREENWIRE" GROUND) FOR THE ENTIRE ELECTRICAL SYSTEM AS REQUIRED BY ARTICLE 250 OF THE NEC, AND AS SPECIFIED HEREIN.

B. PROVIDE ADDITIONAL GROUNDING AS INDICATED ON THE PLANS.

C. ALL GROUNDING WIRE, LUGS, JUMPERS AND BUS SHALL BE COPPER.

D. ALL FEEDER AND BRANCH CIRCUITS SHALL CONTAIN AN EQUIPMENT GROUND WIRE. NO CONDUIT OR RACEWAY OF ANY KIND OR LENGTH SHALL BE USED AS THE EQUIPMENT GROUNDING CONDUCTOR.

E. EQUIPMENT GROUNDING CONDUCTORS AND STRAPS SHALL BE SIZED IN ACCORDANCE WITH THE NEC. REFER TO FEEDER SCHEDULES FOR GROUND WIRE REQUIREMENTS WHICH MAY EXCEED THE NEC. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL BE PROVIDED WITH GREEN INSULATION EQUIVALENT TO THE INSULATION ON THE ASSOCIATED PHASE CONDUCTORS.

F. THE EQUIPMENT GROUNDING SYSTEM SHALL BE INSTALLED SO ALL METALLIC STRUCTURES, ENCLOSURES, RACEWAYS, PIPING, SYSTEMS. JUNCTION BOXES, OUTLET BOXES, CABINETS, MACHINE FRAMES AND PORTABLE EQUIPMENT FRAMES OPERATE CONTINUOUSLY AT GROUND POTENTIAL AND PROVIDE A LOW IMPEDANCE PATH FOR GROUND FAULT CURRENTS.

G. WHERE PARALLEL FEEDERS ARE USED, EACH RACEWAY SHALL CONTAIN AN EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH NEC 250-95 FOR THE COMBINED PARALLEL CIRCUIT AMPERAGE.

H. GROUNDING CONDUCTORS SHALL BE CONTINUOUS AND NO SPLICING SHALL BE ALLOWED.

I. RECEPTACLES SHALL BE BONDED TO THEIR OUTLET BOXES WITH #12 AWG COPPER STRAPS.

J. EXCEPTIONS:
1. STRAPS MAY BE OMITTED IF SELF-GROUNDING DEVICES ARE UTILIZED.

K. BOND ALL SEPARATELY DERIVED POWER SOURCES IN ACCORDANCE WITH NEC 250. ONLY BOND WATER SERVICE AT NO MORE THAN 5 FEET UPON ENTERING BUILDING (NEC 250.52) AND ONLY TO BUILDING'S UNDERGROUND GRID (I.E. DO NOT INTERCONNECT SEPARATELY DERIVED SYSTEM GROUNDED CONDUCTOR WITH BUILDING'S WATER PIPING). FOR SEPARATELY-DERIVED SYSTEMS/SERVICES, INTERCONNECT THE GROUNDED CONDUCTOR WITH THE BUILDING'S GROUNDING ELECTRODE VIA ONE OF THE FOLLOWING MEANS:

1. STRUCTURAL STEEL STRUCTURES – INTERCONNECT WITH STRUCTURAL STEEL MEMBER OR WITH COMMON GROUNDING ELECTRODE RISER (TYPICALLY IN STACKED ELECTRIC CLOSETS).
2. POURED-CONCRETE, WOOD FRAMING, ETC. TYPE STRUCTURES – INTERCONNECT WITH COMMON GROUNDING ELECTRODE RISER. IF RISER DOES NOT EXIST, PROVIDE DEDICATED GROUNDING ELECTRODE CONDUCTOR TO ELECTRICAL SERVICE ENTRANCE GROUND BUS.

L. PROVIDE FLEXIBLE GROUNDING JUMPERS BETWEEN EACH PIECE OF COMPUTER EQUIPMENT AND THE RAISED FLOOR. PROVIDE TWO GROUNDING JUMPERS PER CABINET, ATTACHED AT OPPOSITE CORNERS. IF SEVERAL CABINETS ARE BOLTED TOGETHER IN A STRING, ONLY ONE JUMPER AT EACH END OF THE STRING IS REQUIRED. SOLIDLY BOLT EACH END OF THE GROUNDING JUMPER. AT THE COMPUTER CABINETS END, BOLT TO A METAL FRAME MEMBER. AT THE RAISED FLOOR END, BOLT TO A PEDESTAL. DO NOT USE STRINGER BOLT FOR ATTACHING GROUNDING JUMPER. GROUNDING JUMPER SHALL BE #8 AWG STRANDED COPPER.

2.5 ENCLOSED SWITCHES AND DISCONNECTS

A. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL EQUIPMENT SHOWN ON THE DRAWINGS. ALL MANUFACTURERS' SPECIFICATIONS SHALL BE FOLLOWED IN REGARD TO THE INSTALLATION OF ALL EQUIPMENT. ANY SPECIAL MANUFACTURERS' REQUIREMENTS NECESSARY FOR PROPER OR SAFE INSTALLATION OF EQUIPMENT REGARDLESS OF WHETHER THE AFOREMENTIONED SPECIAL REQUIREMENTS ARE INDICATED ON THE DRAWINGS SHALL BE AT THE EXPENSE AND RESPONSIBILITY OF THE CONTRACTOR.

B. THE CONTRACTOR IS RESPONSIBLE FOR THE PURCHASE, RIGGING, ERECTION, INSTALLATION, AND FUNCTIONAL OPERATION OF ALL ELECTRICAL EQUIPMENT EXCEPT WHERE NOTED. ALL MATERIALS AND EQUIPMENT SHALL, WHEN A LISTING IS NORMAL FOR THE PARTICULAR CLASS OF MATERIAL OR EQUIPMENT, BE LISTED AND LABELED BY UL OR A NRTL.

C. MAKE FINAL ELECTRICAL CONNECTIONS TO ALL ITEMS OF MECHANICAL EQUIPMENT.

D. ALL LOCATIONS OF EQUIPMENT AND FIXTURES ARE APPROXIMATE AND MAY REQUIRE MINOR ADJUSTMENT TO SUIT FIELD CONDITIONS.

E. NOT ALL LOCATIONS WHERE MOTOR DISCONNECT SWITCHES ARE REQUIRED MAY BE SHOWN ON THE DRAWINGS. PROVIDE DISCONNECTS AT ALL LOCATIONS REQUIRED BY CODE AND/OR BY THE EQUIPMENT MANUFACTURER THE ELECTRIC SERVICE WILL SUPPORT WHETHER OR NOT THEY ARE ACCOUNTED FOR ON THE CONTRACT DRAWINGS. WHEN REQUIRED, EACH MOTOR SHALL BE EQUIPPED WITH A TWO OR THREE POLE FUSED (OR NON-FUSED LOAD-BREAK), HEAVY-DUTY DISCONNECT SWITCH AS DIRECTED ON THE CONTRACT DRAWINGS.

F. EXCEPTION: FRACTIONAL HP MOTORS SHALL BE EQUIPPED WITH TOGGLE-TYPE DISCONNECT SWITCHES. EQUIPMENT WITH INTEGRAL DISCONNECTING MEANS THAT SATISFY NEC AND LOCAL AUTHORITY REQUIREMENTS FOR MOTOR SAFETY DISCONNECTS SHALL NOT REQUIRE A SEPARATE DISCONNECT SWITCH.

G. DISCONNECT SWITCHES SHALL BE HEAVY-DUTY, HORSEPOWER RATED, QUICK-MAKE, QUICK-BREAK TYPE WITH SPRING REINFORCED WIRE GRIPS AND SELF-ALIGNING SWITCH CONTACTS. SWITCHES SHALL BE ENCLOSED IN A HEAVY SHEET METAL ENCLOSURE WITH HINGED INTERLOCKING COVER WHICH SHALL PREVENT THE COVER BEING OPENED WHEN SWITCH IS "ON".

H. LOCATIONS AND RATINGS – PROVIDE NEMA 1 OR 12 SWITCH AND DISCONNECT ENCLOSURES FOR ALL INDOOR, DRY LOCATIONS WHERE ONLY EMT, OR RGS CONDUIT AND GALVANIZED STEEL SUPPORT SYSTEMS ARE UTILIZED.

1. WEATHERPROOF NEMA 3R
a. ALL LOCATIONS WHERE THE BOX OR ENCLOSURE IS TIED INTO A GALVANIZED STEEL PIPING RACEWAY SYSTEM.

I. COORDINATE ALL RECEPTACLES, PLUGS, WIRING AND LOCATIONS WITH THE EQUIPMENT PROVIDED PRIOR TO ROUGH-IN.

J. ONLY PROVIDE DISCONNECTS THAT ARE SIZED APPROPRIATELY FOR THE APPLICATION. DISCONNECTS WITH SPARE OR UNUSED POLES ARE STRICTLY PROHIBITED.

2.6 DEVICES

A. ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE.

B. THE CONTRACTOR SHALL VERIFY COLOR, LOCATION AND MOUNTING HEIGHT OF ALL DEVICES PRIOR TO INSTALLATION.

C. RECEPTACLES SHALL BE FLUSH, DUPLEX, GROUNDING TYPE, 20A, 2P, 3W, 125VAC, NEMA 5-20R STRAIGHT BLADE, IVORY NYLON OR HIGH-STRENGTH THERMOPLASTIC MATERIAL UNLESS INDICATED AS SPECIAL PURPOSE OUTLET. RECEPTACLES SHALL BE DESIGNED TO ACCEPT STANDARD TWO-WIRE PARALLEL CONNECTOR CAPS AND SHALL GRIP BOTH SIDES OF THE CONNECTOR WIRE.

D. SINGLE THROW LIGHTING SWITCHES SHALL BE QUIET TYPE, 20A, 1P, 120/277VAC, IVORY HANDLE ABLE TO ACCOMMODATE UP TO #10 AWG CONDUCTORS AND DESIGNED FOR INDUCTIVE LIGHTING LOADS. FOR RENOVATION PROJECTS, MATCH EXISTING SWITCHES.

E. THREE (3) WAY AND FOUR (4) WAY TOGGLE SWITCHES SHALL BE QUIET TYPE, 20A, 120/277VAC, IVORY HANDLE. SWITCHES SHALL BE POSITIVE ACTION TYPE AND SHALL NOT PERMIT A MAINTAINED NEUTRAL POSITION. FOR RENOVATION PROJECTS, MATCH EXISTING SWITCHES.

F. CONVENIENCE RECEPTACLES SERVING BATHROOMS, TOILETS, OUTDOOR AND WET LOCATIONS AND CONSTRUCTION SITES SHALL BE GROUND FAULT (WHERE REQUIRED BY THE NEC) INTERRUPTER TYPE, 20A, 2P, 3W, 125VAC, NEMA 5-20R, STRAIGHT BLADE, IVORY HANDLE OR HIGH-STRENGTH THERMOPLASTIC MATERIAL.

G. PROVIDE 0.04 INCH THICK SATIN FINISH, TYPE 302, STAINLESS STEEL PLATES AT ALL RECEPTACLE AND SWITCH OUTLETS UNLESS OTHERWISE SPECIFIED. PROVIDE GALVANIZED STEEL PLATES IN UNFINISHED SPACES.

H. ALL WALL BOX DIMMERS SHALL BE UL LISTED SPECIFICALLY FOR THE REQUIRED LOADS (I.E. INCANDESCENT, FLUORESCENT, LOW VOLTAGE, ELECTRONIC LOW VOLTAGE). UNIVERSAL DIMMERS SHALL NOT BE ACCEPTABLE. DIMMERS SHALL INCORPORATE AN AIR GAP, WHICH SHALL BE ACCESSIBLE WITHOUT REMOVING THE FACEPLATE. DIMMERS SHALL PROVIDE POWER FAILURE MEMORY. DIMMERS SHALL MEET ANSI/IEEE STANDARD C62.41-1991, TESTED TO WITHSTAND VOLTAGE SURGES OF UP TO 6000V AND CURRENT SURGES OF UP TO 200A WITHOUT DAMAGE. DIMMER CONTROL SHALL BE LINEAR SLIDE AND SHALL PROVIDE A SMOOTH AND CONTINUOUS SQUARE LAW DIMMING CURVE. DIMMERS AND FACEPLATES SHALL BE LUTRON NOVA T STYLE, OR APPROVED EQUIVALENT.

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DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ELECTRICAL SPECIFICATIONS
WORKING STAFF	ARF (DESIGNED BY) / SBP (DRAWN BY) / POC (CHECKED BY)
SHEET NO.	40 OF 75
	E - 902 SS (DISCIPLINE - TYPE - SEQUENCE - DRAWING TYPE)

I. RECEPTACLES SHALL BE MOUNTED WITH THE BOTTOM OF THE RECEPTACLE 18 INCHES ABOVE THE FINISHED FLOOR UNLESS OTHERWISE NOTED. GANG MULTIPLE OUTLETS AT ONE LOCATION UNDER A SINGLE MULTI-GANG COVER PLATE.

J. SWITCHES SHALL BE VERTICALLY ALIGNED WITH THERMOSTATS, OTHER WALL SWITCHES, FIRE ALARM DEVICES WITH THE TOP OF THE SWITCH 48 INCHES ABOVE THE FINISHED FLOOR UNLESS OTHERWISE INDICATED. NOTIFY ENGINEER OF ANY DISCREPANCIES BEFORE ROUGHING IN OUTLET AND OBTAIN A NEW LOCATION. GANG MULTIPLE SWITCHES AT ONE LOCATION UNDER A SINGLE MULTI-GANG PLATE. LOCATE SWITCHES ON STRIKE SIDE OF DOOR BETWEEN 6 INCHES AND 12 INCHES FROM EDGE OF DOOR FRAME.

K. DEVICE PLATES SHALL BE FITTED TIGHT TO THE WALL.

L. DELAY INSTALLATION OF DEVICE PLATES UNTIL PAINTING IS COMPLETE.

M. PROVIDE RED DEVICES WHEN SUPPLIED BY EMERGENCY POWER. FOR SPECIAL TYPE RECEPTACLES ON EMERGENCY POWER, PROVIDE RED COVER PLATE.

2.7 IDENTIFICATION

A. COORDINATE NAMES, ABBREVIATIONS AND OTHER DESIGNATIONS USED IN ELECTRICAL WORK WITH CORRESPONDING DESIGNATIONS SHOWN, SPECIFIED OR SCHEDULED. PROVIDE NUMBERS, LETTERING AND WORDING AS RECOMMENDED BY MANUFACTURERS OR AS REQUIRED FOR PROPER IDENTIFICATION AND OPERATION/MAINTENANCE OF ELECTRICAL SYSTEMS AND EQUIPMENT.

B. DELAY INSTALLATION OF IDENTIFICATION UNTIL PAINTING IS COMPLETE.

C. COMPLY WITH GOVERNING REGULATIONS AND REQUESTS OF GOVERNING AUTHORITIES FOR IDENTIFICATION OF ELECTRICAL WORK.

D. INSTALL ENGRAVED PLASTIC-LAMINATE NAMEPLATES ON ALL SWITCHBOARDS, MOTOR CONTROL CENTERS, STARTERS, PANELBOARDS, TELEPHONE CABINETS, DISCONNECT SWITCHES AND OTHER ELECTRICAL BOXES AND CABINETS INSTALLED UNDER THIS CONTRACT (BLACK LETTERS ON WHITE BACKGROUND).

E. INSTALL ENGRAVED PLASTIC-LAMINATE NAMEPLATES AT EACH PROTECTIVE DEVICE IN ALL SWITCHBOARDS IDENTIFYING CIRCUIT SERVICE (BLACK LETTERS ON WHITE BACKGROUND).

F. WHERE ELECTRICAL CONDUIT IS EXPOSED, APPLY IDENTIFICATION (E.G. NOTING VOLTAGE, SERVICE/SIGNAL TYPE, EMERGENCY POWER, ETC.) ON CONDUIT. EXCEPT AS OTHERWISE INDICATED, USE PERMANENT VINYL, SELF-ADHERING MARKERS WITH BLACK LETTERS ON ORANGE BACKGROUND.

G. APPLY SELF-ADHERING VINYL OR HEAT-SHRINK PLASTIC CABLE/CONDUCTOR IDENTIFICATION MARKERS ON EACH CABLE AND CONDUCTOR IN EACH BOX, ENCLOSURE OR CABINET WHERE WIRES OF MORE THAN ONE CIRCUIT ARE PRESENT, EXCEPT WHERE ANOTHER FORM OF IDENTIFICATION (SUCH AS COLOR-CODED CONDUCTORS) IS PROVIDED. MATCH IDENTIFICATION WITH MARKING SYSTEM USED IN PANELBOARDS, SHOP DRAWINGS AND CONTRACT DOCUMENTS.

H. WHEREVER REASONABLY REQUIRED TO ENSURE SAFE AND EFFICIENT OPERATION AND MAINTENANCE OF ELECTRICAL SYSTEMS AND ELECTRICALLY CONNECTED MECHANICAL SYSTEMS, INSTALL SELF-ADHESIVE PLASTIC SIGNS WITH APPROPRIATE INSTRUCTIONS OR WARNINGS. WHERE DETAILED INSTRUCTIONS OR EXPLANATIONS ARE NEEDED, PROVIDE PLASTICIZED TAGS WITH CLEARLY WRITTEN MESSAGES ADEQUATE FOR INTENDED PURPOSES.

I. INSTALL WARNING SIGNS AT THE ENTRANCES TO ALL ROOMS AND SPACES IN WHICH ELECTRICAL CONDUCTORS OR EQUIPMENT ARE INSTALLED (WHITE LETTERS ON RED BACKGROUND).

J. ALL FIELD INSTALLED CONTROL CIRCUITS SHALL HAVE TUBULAR SLEEVE-TYPE WIRE MARKERS AT EACH END OF THE CIRCUIT AND AT ALL SPLICE POINTS. WIRE MARKERS SHALL BE PERMANENTLY STAMPED WITH A NUMBERING SYSTEM SELECTED BY THE CONTRACTOR. THE NUMBERING SYSTEM SHALL BE THOROUGHLY DOCUMENTED AND PROVIDED TO THE ENGINEER.

K. EACH RECEPTACLE SHALL BE NEATLY MARKED ON THE INSIDE COVER WITH INDELIBLE MARKER IDENTIFYING THE PANEL AND BREAKER FROM WHICH IT IS FED AND DURABLE MARKERS OR TAG INSIDE OUTLET BOX. THIS TO ENSURE THE CORRECT COVERS ARE RESTORED AFTER ROOM RENOVATIONS AND/OR PAINTING.

L. DYMO (OR EQUIVALENT) LABELS SHALL NOT BE USED.

2.8 MOTOR CONTROLLERS

A. INSTALL MOTOR STARTERS AND CONTROLLERS AS INDICATED ON THE DRAWINGS, IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS, AND IN COMPLIANCE WITH RECOGNIZED INDUSTRY PRACTICES.

B. INSTALL FUSES OR CURRENT LIMITERS WHEN REQUIRED BY THE EQUIPMENT SPECIFICATIONS.

C. TIGHTEN CONNECTIONS AND TERMINATIONS IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES OR IN ACCORDANCE WITH UL STANDARD 486A AND B WHEN MANUFACTURER'S VALUES ARE NOT INDICATED.

D. PRIOR TO ENERGIZING EQUIPMENT, CHECK POWER AND CONTROL WIRING FOR CORRECT INSTALLATION. AFTER ENERGIZING EQUIPMENT, CHECK EACH MOTOR FOR PROPER PHASE ROTATION, CORRECT WHERE NECESSARY, AND DEMONSTRATE OPERATION OF STARTER AND ACCESSORIES.

E. SET ALL MCPS IN ACCORDANCE WITH THE MOTOR MANUFACTURER'S INSTRUCTIONS. SET ALL OVERLOADS IN ACCORDANCE WITH MOTOR MANUFACTURER INSTRUCTIONS.

F. ENCLOSURE LOCATIONS AND RATINGS – PROVIDE NEMA 1 OR 12 ENCLOSURES FOR ALL INDOOR, DRY LOCATIONS WHERE ONLY EMT, IMC AND/OR RGS CONDUIT AND GALVANIZED STEEL SUPPORT SYSTEMS ARE UTILIZED.

1. WEATHERPROOF NEMA 3R
   a. ALL LOCATIONS WHERE THE BOX OR ENCLOSURE IS TIED INTO A GALVANIZED STEEL PIPING RACEWAY SYSTEM.

G. FRACTIONAL HORSEPOWER STARTERS:

1. FRACTIONAL HORSEPOWER MANUAL STARTERS SHALL BE USED FOR SINGLE PHASE MOTORS EXCEPT WHERE OTHERWISE INDICATED. SINGLE PHASE STARTERS SHALL PROVIDE ACROSS THE LINE STARTING AND OVERLOAD PROTECTION. SINGLE POLE AND DOUBLE POLE STARTERS SHALL BE USED AS REQUIRED AND SHALL BE RATED NOT LESS THAN ONE (1) HORSEPOWER.
2. SINGLE PHASE MANUAL STARTERS SHALL FEATURE SNAP ACTION DOUBLE-BREAK CONTACTS, MOTOR RUNNING INDICATING LIGHT AND TRIP FREE MELTING ALLOY OVERLOAD ELEMENTS SELECTED FOR THE SPECIFIC MOTOR APPLICATION.
3. STARTERS LOCATED IN FINISHED AREAS SHALL BE INSTALLED IN A FLUSH OUTLET BOX AND FURNISHED WITH A STAINLESS STEEL PLATE.
4. MANUAL MOTOR STARTERS SHALL BE TOGGLE-TYPE AND SHALL BE ARRANGED SO THEY MAY BE LOCKED WITH A PADLOCK IN THE "OFF" POSITION.
5. OIL-TIGHT HAND-OFF-AUTO SELECTOR SWITCHES SHALL BE PROVIDED WHERE STARTERS ARE CONTROLLED BY AUTOMATIC DEVICES.

2.9 LIGHTING:

A. PROVIDE LIGHTING FIXTURES OF THE SIZES, TYPES AND RATINGS INDICATED ON THE DRAWINGS AND IN THE SCHEDULES. FIXTURES SHALL BE COMPLETE WITH HOUSINGS, ENERGY EFFICIENT DRIVERS, WIRING, LEDS, LENSES, LOUVERS AND REFLECTORS.

B. PROVIDE FOOTCANDLE PLOT DIAGRAMS FOR EXTERIOR AREAS INDICATING FOOT CANDLES ON GRADE RESULTING FROM THE LIGHT SOURCES AT THE LOCATIONS INDICATED ON THE DRAWINGS. INDICATE LOCATIONS, SPACING AND HEIGHT OF FIXTURES.

C. EXIT SIGNS
1. GENERAL REQUIREMENTS FOR EXIT SIGNS: COMPLY WITH UL 924; FOR SIGN COLORS, VISIBILITY, LUMINANCE, AND LETTERING SIZE, COMPLY WITH AUTHORITIES HAVING JURISDICTION.

D. FIXTURES SHALL BE SECURED TO STRUCTURAL SUPPORTS AND SHALL NOT RELY ON CEILING SYSTEMS FOR SUPPORT. PENDANT FIXTURES SHALL BE PLUMB AND LEVEL. PENDANT MOUNTED FIXTURES, LARGER THAN 2 FEET SHALL BE INSTALLED WITH TWO (2) STEM HANGERS. STEM HANGERS SHALL HAVE BALL ALIGNERS AND PROVISIONS FOR MINIMUM ONE INCH VERTICAL ADJUSTMENT. PLASTER FRAMES SHALL BE PROVIDED FOR ALL RECESSED FIXTURES, INSTALLED IN OTHER THAN A SUSPENDED ACCESS CEILING SYSTEM.

E. SURFACE MOUNTED FIXTURES GREATER THAN 2 FEET IN LENGTH SHALL BE SUPPORTED FROM AT LEAST ONE POINT IN ADDITION TO THE FIXTURE OUTLET BOX STUD.

F. SET, AIM AND ADJUST ADJUSTABLE FIXTURES IN ACCORDANCE WITH INSTRUCTION AND GUIDELINES PROVIDED BY THE ARCHITECT. ADJUST LIGHT LEVEL OF PHOTO CONTROL RELAYS IN ACCORDANCE WITH INSTRUCTIONS FROM THE ARCHITECT.

G. LIGHTING CONTROL: PROVIDE LIGHTING CONTROL AS DIRECTED ON THE CONTRACT DRAWINGS. FOR ALL UTILITY CLOSETS, STORAGE ROOMS, TEL/DATA EQUIPMENT ROOMS PROVIDE TWENTY FOUR (24) HOUR TIMER SWITCH WITH LCD DISPLAY AND COUNT-DOWN CAPABILITY; TORK DIGITAL MODEL # SSA-200.

PART 3 - EXECUTION

3.1 TESTING

A. THOROUGHLY CLEAN THE ELECTRICAL EQUIPMENT AND ASSOCIATED ELECTRICAL MATERIALS BEFORE ENERGIZATION OF ANY PART OF THE ELECTRICAL SYSTEM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE ALL THE ELECTRICAL EQUIPMENT, RACEWAYS, CABLING, CABLE INSULATION AND OTHER RELATED ELECTRICAL SYSTEMS TESTED. ALL TEST RESULTS SHALL BE RECORDED, DATED AND SUBMITTED TO THE ENGINEER AND OWNER FOR RECORD. TEST PROCEDURES AND RESULTS SHALL BE PER NETA STANDARDS. IN THE ABSENCE OF RELEVANT NETA STANDARDS, THE CONTRACTOR SHALL SUBSTITUTE APPROPRIATE TEST PROCEDURES FROM IEEE OR ANSI. THE SUBSTITUTE TEST PROCEDURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONDUCTING THE TESTS.

B. THE CONTRACTOR SHALL VERIFY THAT EACH KEY SYSTEM INTERFACES CORRECTLY WITH ALL RELATED SYSTEMS. THE CONTRACTOR SHALL FURNISH ALL TEST DATA TO THE ENGINEER VERIFYING THAT ALL SYSTEMS HAVE BEEN INSTALLED CORRECTLY AND WORK TOGETHER TO PROVIDE A COMPLETELY OPERATIONAL ELECTRICAL POWER SYSTEM AS DESIGNED.

C. THE ENGINEER RESERVES THE RIGHT TO ACCEPT OR REJECT TEST DATA WHICH DOES NOT CONFORM TO THE MANUFACTURER'S DATA OR IS NOT OBTAINED IN ACCORDANCE WITH THESE SPECIFICATIONS.

PART 4 - END OF SECTION

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DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Institution
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2466904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	ELECTRICAL SPECIFICATIONS
WORKING STAFF	ARF (DESIGNED BY) / SBP (DRAWN BY) / POC (CHECKED BY)
SHEET NO.	41 OF 75
	E - 903 SS (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

GENERAL NOTES

1. PROVIDE INFRASTRUCTURE ONLY. AV EQUIPMENT PROVIDED BY OTHERS. SEE SCHEDULE OF RESPONSIBILITY MATRIX FOR MORE INFORMATION.
2. DRAWINGS, SPECIFICATIONS, ADDENDA, SKETCHES, AND OTHER DOCUMENTATION COMPRISE THE PROJECT CONTRACT DRAWINGS AND MUST BE USED IN COMBINATION. PERFORM ALL WORK WHICH IS NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, OR WHICH ARE CUSTOMARILY PERFORMED.
3. USE CONTRACT DOCUMENTS IN COMBINATION TO DEFINE THE WORK REQUIREMENTS. VERIFY ANY CONFLICT WITH THE OWNER TO INITIATING WORK. PROCEEDING WITH WORK IS AT THE CONTRACTORS' OWN RISK, UNTIL CLARIFICATIONS OF CONFLICTS ARE ISSUED TO THE CONTRACTORS BY THE OWNER OR OWNERS AUTHORIZED REPRESENTATIVE.
4. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC AND INDICATE THE GENERAL PROPOSED LOCATION OF EQUIPMENT, CABLE PATHWAYS AND OUTLETS. COORDINATE LOCATION OF EQUIPMENT AND OUTLETS AND OTHER SUPPORTING ITEMS WITH ALL OTHER EXISTING UTILITIES AND TRADES.
5. COORDINATE ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. BRING ANY CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS TO THE OWNER'S ATTENTION IMMEDIATELY. PROCEEDING WITH ANY WORK PRIOR TO THE OWNER ISSUING CLARIFICATION OF CONFLICTS IS AT THE CONTRACTOR(S) OWN RISK.
6. FIELD VERIFY AND COORDINATE DEVICE LOCATIONS AND POWER REQUIREMENTS. WHERE CONFLICTS OCCUR, COORDINATE AND VERIFY FINAL LOCATIONS WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
7. THE TERM "CONTRACTOR" OR "GENERAL CONTRACTOR" MEANS THE PRIME CONTRACTOR RESPONSIBLE FOR ALL WORK DEFINED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS.
8. THE TERM "ELECTRICAL CONTRACTOR" MEANS A LICENSED AND QUALIFIED SUBCONTRACTOR PERFORMING WORK FOR THE CONTRACTOR.
9. THE TERM "AUDIO VISUAL CONTRACTOR" MEANS A LICENSED AND QUALIFIED LOW VOLTAGE COMMUNICATIONS SUBCONTRACTOR PERFORMING WORK FOR THE GENERAL CONTRACTOR.
10. THE TERM "OWNER" MEANS THE OWNER'S AUTHORIZED REPRESENTATIVE.
11. THE TERM "PROVIDE" MEANS FURNISH NEW AND INSTALL, COMPLETE AND READY FOR USE.
12. DETAIL REFERENCES ARE NOT NECESSARILY NUMBERED INCREMENTALLY. A GAP IN NUMBERING DOES NOT INDICATE MISSING INFORMATION. DETAIL NAMES AND NUMBERS ARE SPECIFIC TO THIS DESIGN PACKAGE AND DO NOT CORRESPOND TO OTHER PUBLISHED DOCUMENTS.
13. PROVIDE LABOR, TOOLS, CONTAINERS, AND SERVICES AS REQUIRED TO MAINTAIN A CLEAN AND SAFE WORK SITE. REMOVE ALL EXCESS MATERIAL AND DEBRIS FROM THE WORK SITE. CLEAN THE WORK SITE DAILY.
14. PROVIDE ALL DOCUMENTATION INCLUDING SHOP-DRAWINGS DESIGN DOCUMENTATION, AS-BUILT DOCUMENTATION, PRODUCT CUTSHEETS, PROGRAMMING WORKSHEETS, AND PROJECT COMMUNICATIONS TO THE OWNER FOR APPROVAL BEFORE STARTING WORK.
15. PAY ALL FEES AND OBTAIN ALL PERMITS AND LICENSES REQUIRED TO PERFORM THE WORK DEFINED IN THE CONTRACT DOCUMENTS.
16. PROVIDE NEW MATERIAL AND EQUIPMENT THAT CONFORM TO THE APPLICABLE STANDARDS OF UL, NEC, NEMA, ASTM AND ANSI.
17. PROVIDE 3/4" FIRE RETARDANT PLYWOOD BLOCKING FOR DISPLAYS. BLOCKING MUST ATTACHED TO AT LEAST FOUR STUDS. BLOCKING TO BE INSTALLED BETWEEN STUDS BEHIND THE GYPSUM BOARD. SURFACE MOUNTING THE PLYWOOD ON THE EXTERIOR OF THE GYPSUM BOARD IS NOT ACCEPTABLE.
18. AUDIO VISUAL CONTRACTOR MINIMAL REQUIREMENTS:
    - A. SHALL HAVE AN OFFICE WITHIN 50-MILES OF THE PROJECT SITE.
    - B. AUTHORIZED RESELLER OF ALL PRODUCTS.
    - C. DESIGN ENGINEER SHALL HAVE A CURRENT AVIXA CTS-D AND CRESTRON FLEX CERTIFICATIONS.
    - D. INSTALLATION SUPERVISOR SHALL HAVE A CURRENT AVIXA CTS-I CERTIFICATION.
    - E. FIELD ENGINEER SHALL HAVE A CURRENT AVIXA CTS-I AND CRESTRON FLEX CERTIFICATIONS.
    - F. PROGRAMMER SHALL HAVE A CURRENT CRESTRON FLEX AND ADVANCED SYSTEM PROGRAMMING (OR HIGHER) CERTIFICATIONS.

RACEWAY NOTES

1. PROVIDE CONDUITS AND RACEWAYS FOR A COMPLETE INSTALLATION. WHERE AVAILABLE, AV CABLES WILL BE IN SHARED IT CABLE TRAY. PROVIDE CONDUIT CONCEALED AREAS. IN AREAS WITH ACCESSIBLE CEILING CONDUIT IS NOT REQUIRED.
2. PROVIDE PLASTIC BUSHING AND PULL STRING WITH ALL CONDUITS.
3. PROVIDE CONDUIT AND RACEWAYS THAT COMPLY WITH NEC REQUIREMENTS OR COMPLY WITH LOCAL CODES AND ORDINANCES. THE MOST STRINGENT REQUIREMENTS GOVERN.
4. REGARDLESS OF NEC OR LOCAL CODES AND ORDINANCES, PROVIDE CONDUIT AND RACEWAYS SIZED FOR A MAXIMUM FILL OF 40%.
5. PROVIDE COMPRESSION TYPE CONDUIT FITTINGS. SET SCREW TYPE FITTINGS ARE NOT ACCEPTABLE.
6. REGARDLESS OF NEC OR LOCAL CODES AND CONDUIT FILL REQUIREMENTS, CONDUIT SHALL BE 1 1/4" MINIMUM DIAMETER UNLESS OTHERWISE NOTED.
7. PROVIDE COLOR CODING OF ALL AV CONDUITS AND RACEWAYS. ALL CONDUITS AND RACEWAYS SHALL BE PERMANENTLY MARKED BY A 1 INCH BAND AND I INCH BAND EVERY 10 FEET.
8. PROVIDE SEPARATE RACEWAY. CONDUITS, JUNCTION BOXES AND ENCLOSURES FOR ALL AV WIRE AND CABLE. DO NOT COMBINE 120VAC OR ANY POWER DISTRIBUTION CIRCUIT WITH AV WIRE AND CABLE.
9. ELECTRICAL FEEDS OR LIGHTING ARE NOT TO BE RUN PARALLEL WITH AV LINES OR RACEWAYS. IF ELECTRICAL FEEDS OR LIGHTING MUST RUN PARALLEL TO AV LINES, A MINIMUM OF 4 FT OF SEPARATION MUST BE MAINTAINED.
10. PROVIDE CONDUIT AND CABLE TRAY/LADDER RACK TO MAINTAIN A MINIMUM OF 5" SEPARATION FROM FLUORESCENT LIGHTING.
11. ALL CONDUIT SHALL BE DEBURRED, CLEANED, CAPPED, TAGGED, BUSHED, AND FURNISHED WITH MEASURED PULL STRINGS.
12. PENETRATION IN FIRE RESISTIVE WALLS, FLOORS, CEILINGS, OR ROOF ASSEMBLES SHALL BE PROPERLY CLEANED AND SEALED PER FIRESTOPPING SPECIFICATION.

ABBREVIATION LIST

ACG	ABOVE CEILING GRID
AFF	ABOVE FINISHED FLOOR
AMP	AMPLIFIER
ANLG	ANALOG
AOIP	AUDIO OVER INTERNET PROTOCOL
ATC	AUDIO TELECONFERENCING
AUD	AUDIO
AV	AUDIOVISUAL
A/V	AUDIOVISUAL
AVOIP	AUDIOVISUAL OVER INTERNET PROTOCOL
BAL	BALANCED AUDIO
BB	BACK BOX
CAM	CAMERA
CAT	CATEGORY
CPC	CATEGORY PATCH CORD
DA	DISTRIBUTION AMPLIFIER
DEC	DECODER
DP	DISPLAYPORT
DS	DIGITAL SIGNAGE
DSP	DIGITAL SIGNAL PROCESSOR
DVI	DIGITAL VIDEO INTERFACE
DVLED	DIRECTVIEW LED
EMT	ELECTRIC METALLIC TUBING
ENC	ENCODER
ER	EQUIPMENT ROOM
F	F STYLE COAX CONNECTOR, OFTEN USED FOR CATV
FAS	FIRE ALARM SYSTEM
FB	FLOOR BOX
FOPP	FIBER OPTIC PATCH PANEL
FPC	FIBER PATCH CORD
HDMI	HIGH DEFINITION MULTI MEDIA INTERFACE
IAW	IN ACCORDANCE WITH
IN	INPUT
IP	INTERNET PROTOCOL
IPTV	INTERNET PROTOCOL TELEVISION
IR	INFRARED
KVM	KEYBOARD VIDEO MOUSE
LAN	LOCAL AREA NETWORK
LCD	LIQUID CRYSTAL DISPLAY
LED	LIGHT EMITTING DIOD
MAX	MAXIMUM
MC	MEDIA CONVERTER
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MMF	MULTIMODE FIBER
NACC	NEAREST ACCESSIBLE CEILING CAVITY
NET	NETWORK
NETSW	NETWORK SWITCH
NTS	NOT TO SCALE
OC	ON CENTER
OEM	ORIGINAL EQUIPMENT MANUFACTURER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFE	SEE OFCI
OFOI	OWNER FURNISHED, OWNER INSTALLED
OUT	OUTPUT
PA	PUBLIC ADDRESS
PC	PERSONAL COMPUTER
POE	POWER OVER ETHERNET
POTS	PLAN OLD TELEPHONE SERVICE
PP	PATCH PANEL
PCPC	PLENUM CATEGORY PATCH CORD
PR	PAIR
PROJ	PROJECTOR
PT	POKE THRU
PTZ	PAN-TILT-ZOOM CAMERA
RM	ROOM
RMU	RACK MOUNTING UNIT (1.75")
RS	ROOM SCHEDULE PANEL
RS232	SERIAL INTERFACE
RU	SEE RMU
RX	RECEIVER
SAT	SATELLITE
SD	STANDARD DEFINITION
SDI	SERIAL DIGITAL INTERFACE
SFP	SMALL FORM-FACTOR PLUGGABLE
SMF	SINGLEMODE FIBER
SPK	SPEAKER
STB	SET TOP BOX
STP	SHIELDED TWISTED PAIR
SW	SWITCH OR SWITCHER
TBD	TO BE DETERMINED
TN	TELECOMMUNICATIONS DRAWINGS
TP	TOUCH PANEL
TR	TELECOMMUNICATIONS ROOM
TV	TELEVISION
TX	TRANSMITTER
TY	SECURITY DRAWINGS
TYP	TYPICAL
UHD	ULTRA HIGH DEFINITION
UNBAL	UNBALANCED AUDIO
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTED POWER SUPPLY
USB	UNIVERSAL SERIAL BUS
UTP	UNSHIELDED TWISTED PAIR
VAC	VOLTS ALTERNATING CURRENT
VCB	VIDEO TELECONFERENCING BAR
VCC	VIDEO TELECONFERENCING CAMERA
VDC	VOLTS DIRECT CURRENT
VGA	VIDEO GRAPHICS ARRAY
VLAN	VIRTUAL LAN
VOIP	VOICE OVER INTERNET PROTOCOL
VTC	VIDEO TELECONFERENCING
WAP	WIRELESS ACCESS POINT
WP	WALL PLATE

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	AUDIOVISUAL NOTES AND ABBREVIATIONS
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	47 OF 75
	TA 001 CS (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

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TA001CS BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

SYMBOL LIST

SYMBOL	USE / DESCRIPTION	AV EQUIPMENT	AV INFRASTRUCTURE
	AV RACK - 12RU X16" DEEP OPEN RACK FRAME MOUNTED IN CREDENZA OR MILLWORK WITH RUNNER (SLIDE) KIT	AV RACK	
	BASIC AV LECTERN. PROVIDED BY FURNITURE CONTRACTOR.		
PT-X	SHARED AUDIOVISUAL, TELECOM, AND ELECTRICAL FLOOR POKE-THRU. X DENOTES FLOOR BOX TYPE. SEE DETAILS FOR MORE INFORMATION PT-1 = ELECTRICAL, TELECOM, AND AUDIOVISUAL. PT-2 & PT-4 = ELECTRICAL, TELECOM, AND AUDIOVISUAL.		PT-1 (1) 1-1/4" EMT TO DISPLAY BACK BOX & (1) 1-1/4" EMT TO CREDENZA BACK BOX.. PT-2 & PT-4 (1) 1-1/4" EMT TO CREDENZA/WP/AC/BB BACK BOX. AT 18" AFF
XX"Y	XX" = SCREEN SIZE Y = DISPLAY FUNCTION DISPLAY FUNCTIONS: DVLED = DIRECT VIEW LED, WALL MOUNTED F = FURNITURE MOUNTED W = WALL MOUNTED	DISPLAY	PROVIDE EACH DISPLAY WITH: 1. 3/4" FIRE RATED PLYWOOD BLOCKING
DB-1	LARGE DISPLAY BACKBOX WITH EMT TO CEILING AND PT/FB		30.38" W X 30.38" H X 3.81" D LARGE DISPLAY BACKBOX. RP VISUAL 32MAXBF-XMS-UNV. WITH (1) 1-1/4" EMT TO NACC AND (1) 1-1/4" EMT TO CLOSET PT OR FB IN ROOM. REFER TO AV ELEVATIONS AND DETAILS FOR MOUNTING HEIGHT.
DB-2	LARGE DISPLAY BACKBOX WITH EMT TO CEILING AND 18" AFF BACK BOX.		30.38" W X 30.38" H X 3.81" D LARGE DISPLAY BACKBOX. RP VISUAL 32MAXBF-XMS-UNV. WITH (1) 1-1/4" EMT TO NACC AND (1) 1-1/4" EMT TO CREDENZA BACK BOX. REFER TO AV ELEVATIONS AND DETAILS FOR MOUNTING HEIGHT.
DB-3	MEDIUM DISPLAY BACKBOX WITH EMT TO CEILING AND PT/FB		30.38" W X 23.34" H X 3.81" D DISPLAY BACKBOX. RP VISUAL 32BF-XMS-UNV. WITH (1) 1-1/4" EMT TO NACC AND (1) 1-1/4" EMT TO CLOSET PT OR FB IN ROOM. REFER TO AV ELEVATIONS AND DETAILS FOR MOUNTING HEIGHT.
DB-4	MEDIUM DISPLAY BACKBOX WITH EMT TO CEILING AND 18" AFF BACK BOX.		30.38" W X 23.34" H X 3.81" D DISPLAY BACKBOX. RP VISUAL 32BF-XMS-UNV. WITH (1) 1-1/4" EMT TO NACC AND (1) 1-1/4" EMT TO CREDENZA, WP, AC, OR BB. REFER TO AV ELEVATIONS AND DETAILS FOR MOUNTING HEIGHT.
DB-5	2-GANG DISPLAY BACK BOX		5" SQUARE 2-7/8" DEEP BACK BOX WITH 2-GANG MUD RING, (1) 1-1/4" EMT CONDUIT TO NACC AND (1) 1-1/4" EMT CONDUIT TO WP BACK BOX BELOW DISPLAY.
DB-6	14.25" WIDE x 14.25" HIGH x 3.5" DEEP DISPLAY BACK BOX		14.25" HIGH X 14.25" WIDE X 3.5" DEEP DISPLAY BACK BOX, (1) 1-1/4" EMT CONDUIT TO NACC AND (1) 1-1/4" EMT CONDUIT TO WP BACK BOX.
AC-1	3-GANG CREDENZA/ WALL BOX BEHIND IN-MILLWORK		7-3/4" WIDE X 4-11/16" HIGH X 3-1/4" DEEP BACK BOX (HUBBLE HBL263) WITH 3-GANG MUD RING (HBL792 FOR 1/2" GYPSUM, HBL793 FOR 5/8" GYPSUM, OR HBL794 FOR 1-1/4" WALL MATERIAL, (1) 1-1/4" (MIN.) EMT CONDUIT TO NACC, AND (1) 1-1/4" CONDUIT TO EACH FB OR PT, TWO TOTAL. (1) 1-1/4" CONDUIT TO COUNTERTOP HEIGHT WP. 18" AFF UON.
AC-2	2-GANG CREDENZA BACK BOX		5" SQUARE 2-7/8" DEEP BACK BOX WITH 2-GANG MUD RING, (1) 1-1/4" (MIN.) EMT CONDUIT TO DISPLAY BACKBOX AND (1) 1-1/4" CONDUIT TO EACH FB OR PT. 18" AFF UON.
AC-3	2-GANG WALL BOX WITH 1-GANG MUD RING.		5" SQUARE 2-7/8" DEEP BACK BOX WITH 1-GANG MUD RING AND 1-1/4" (MIN.) EMT CONDUIT TO NACC AND PT/FB. 18" AFF UON.
WP-1	2-GANG BACK BOX WITH 1-GANG MUD RING.		5" SQUARE 2-7/8" DEEP BACK BOX WITH 1-GANG MUD RING, (1) 1-1/4" EMT CONDUIT TO DISPLAY BACKBOX. 18" AFF UON.
WP-2	2-GANG BACK BOX WITH 1-GANG MUD RING.		5" SQUARE 2-7/8" DEEP BACK BOX WITH 1-GANG MUD RING, (1) 1-1/4" EMT CONDUIT TO CREDENZA BACK BOX. COUNTER TOP HEIGHT. SEE ARCHITECTURE DRAWINGS. TYP 38-42" AFF UON.
WP-3	2-GANG BACK BOX WITH 1-GANG MUD RING.		5" SQUARE 2-7/8" DEEP BACK BOX WITH 1-GANG MUD RING, (1) 1-1/4" EMT CONDUIT TO NACC. COUNTER TOP HEIGHT. SEE ARCHITECTURE DRAWINGS. TYP 38-42" AFF UON.

SCHEDULE OF RESPONSIBILITY

DESCRIPTION	GC / CONTRACTOR		SMITHSONIAN'S AV CONTRACTOR	
	FURNISH	INSTALL	FURNISH	INSTALL
PATHWAYS (CONDUIT, CABLE TRAY, WIRE TROUGHS, RAISED FLOOR, RISER SLEEVES, HORIZONTAL SLEEVES, PULL BOXES, ETC.)	X	X		
FIRE STOP	X	X		
GROUND BUS AND WIRE	X	X		
FLOOR BOXES	X	X		
POKE THRUS	X	X		
WALL BACK BOXES	X	X		
PULL STRING/TAPE	X	X		
¾" FIRE RATED PLYWOOD BLOCKING FOR DISPLAYS AND OTHER WALL MOUNTED AV DEVICES	X	X		
DISPLAY BACK BOX WITH MONITOR MOUNT (DB1-, DB-2, DB-3, AND DB-4)	X	X		
DISPLAY			X	X
DISPLAY MOUNT (DIR. OFFICE)			X	X
UC MOUNTING PLATE			X	X
CONFERENCING SYSTEM/BAR/CAMERA			X	X
SPEAKERS			X	X
MICROPHONES			X	X
AV CABLING ON TA DRAWING			X	X
CABLE CUBBY INSERTS			X	X
ALL OHTER ACTIVE AV EQUIPMENT			X	X

CG

Renovate 4E NMAL
Office Suite

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GRAPHIC SCALE(S)

DATE: 04/18/25
SUBMISSION: FINAL CONSTRUCTION DOCS

REVISION # DATE
REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME: CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS: 600 MARYLAND AVE, SW

PROJECT TITLE: RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER: 2566904
A/E PROJECT NUMBER: ASG 3000738.00

DRAWING TITLE: AUDIOVISUAL SYMBOLS
WORKING STAFF: DWE (DESIGNED BY) | DWE (DRAWN BY) | JDC (CHECKED BY)

SHEET NO. 48 OF 75

TA 002 CS
DISCIPLINE | TYPE | SEQUENCE | DRAWING TYPE

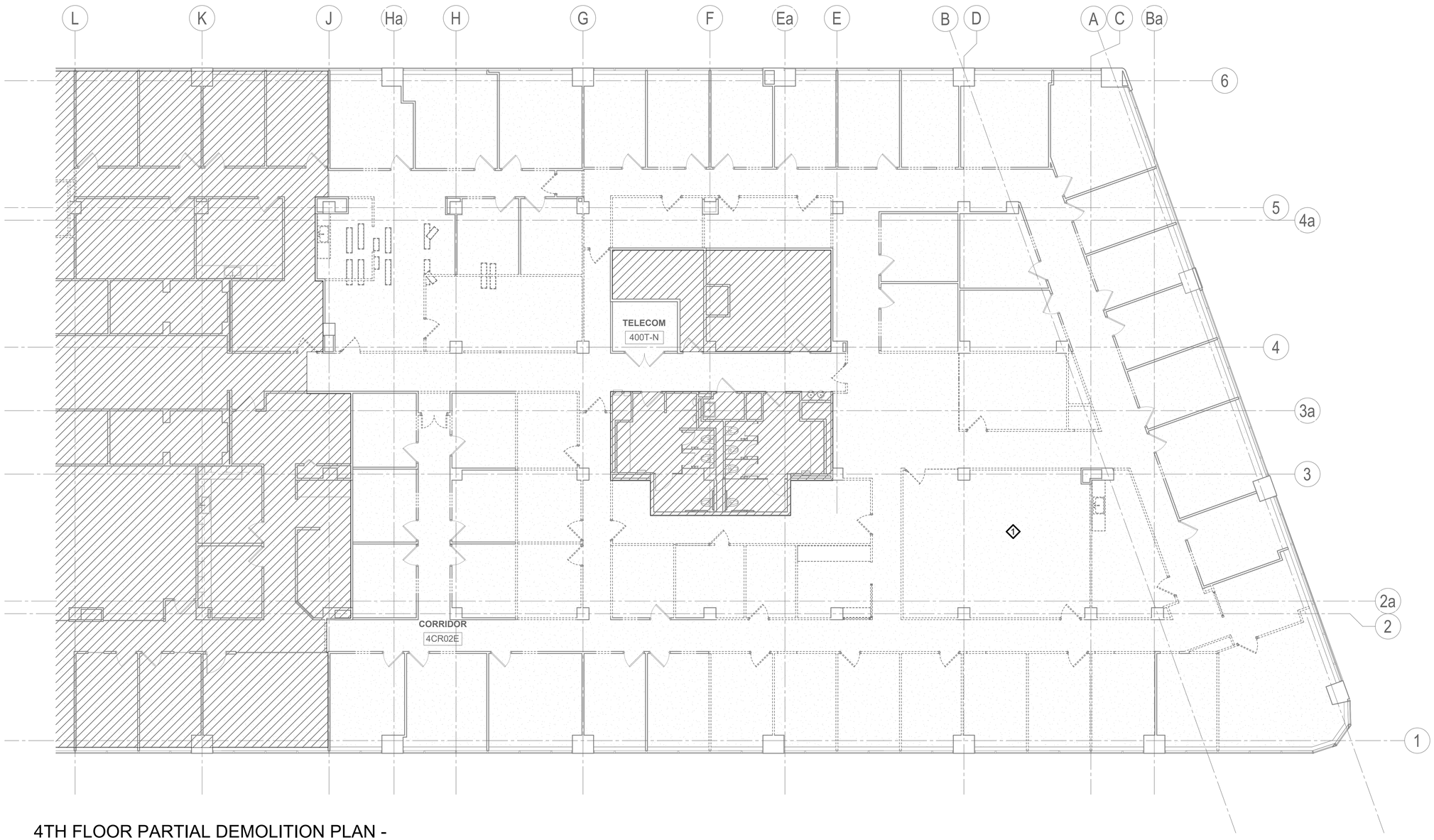
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TA002CS BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

KEY NOTES

1. DEMO AUDIOVISUAL CABING WITHIN ROOM.

SHEET NOTES

1. NOTE HERE.



1 TA101DP — 4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - TELECOM

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

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TA101DP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

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KEY PLAN

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1/8"=1'-0"
GRAPHIC SCALE(S)

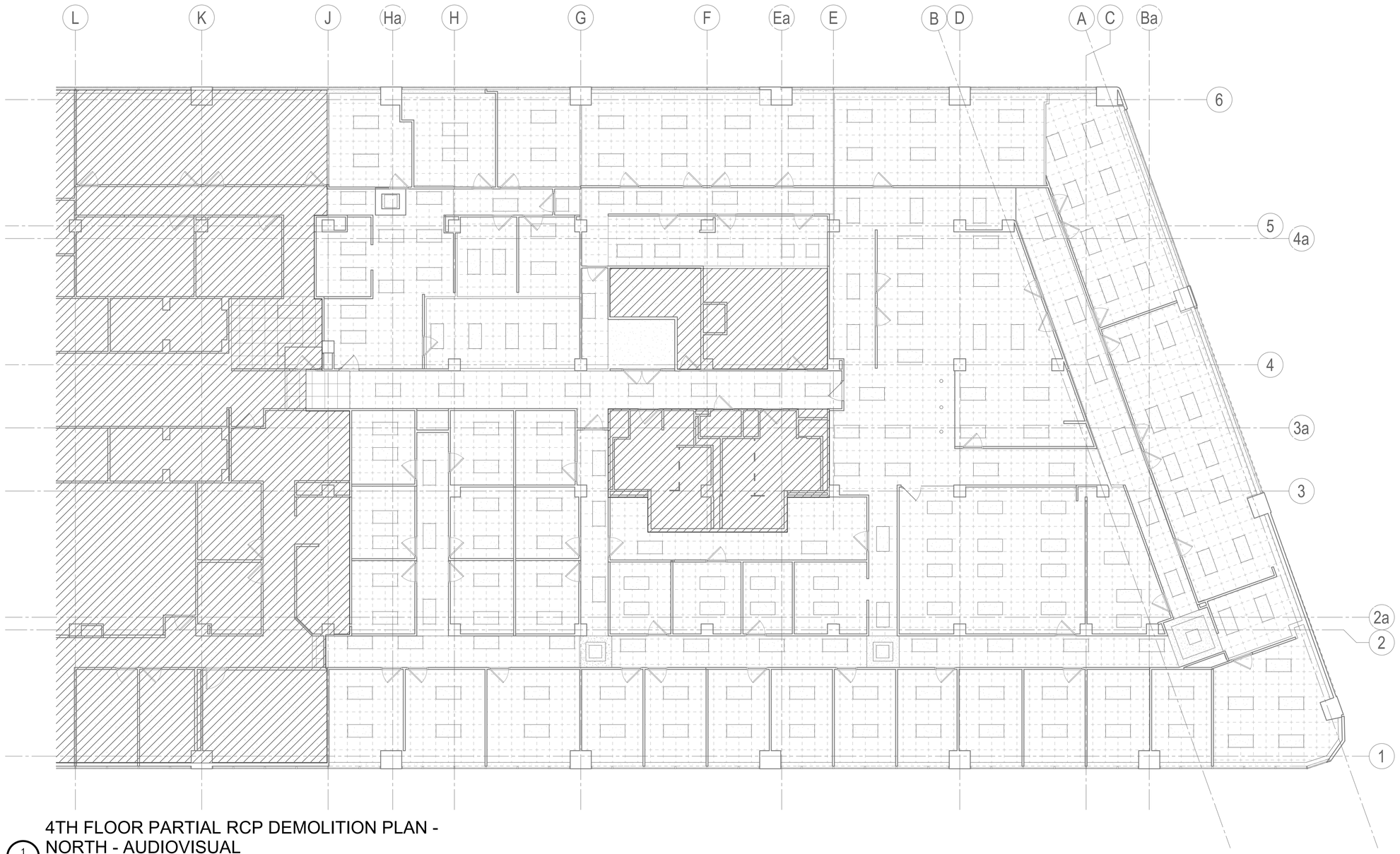
DATE	SUBMISSION
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600 Maryland Avenue S.W. Suite 5001
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SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL DEMOLITION PLAN – NORTH – AUDIOVISUAL
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	49 of 75
	TA 101 DP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



4TH FLOOR PARTIAL RCP DEMOLITION PLAN - NORTH - AUDIOVISUAL

1 / TA102DP — SCALE = 1/8" = 1'-0"

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KEY PLAN

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1/8"=1'-0"
GRAPHIC SCALE(S)

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SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL RCP DEMOLITION PLAN – NORTH – AUDIOVISUAL
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	50 OF 75
	TA 102 DP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

KEY NOTES

1. PROVIDE BLOCKING TO SUPPORT FUTURE 119" DVLED DISPLAY.



4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - AUDIOVISUAL

1 / TA111FP — SCALE = 1/8" = 1'-0"

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KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
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REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

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BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL NEW WORK PLAN – NORTH – AUDIOVISUAL
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	51 OF 75
	TA 1 1 1 FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



4TH FLOOR PARTIAL RCP NEW WORK PLAN - NORTH - AUDIOVISUAL

1 / TA112FP — SCALE = 1/8" = 1'-0"

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KEY PLAN

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GRAPHIC SCALE(S)

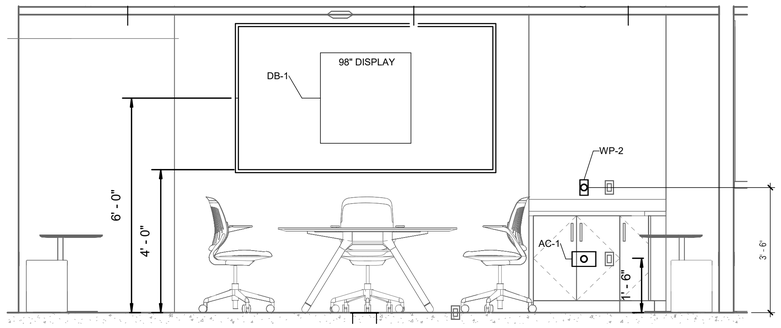
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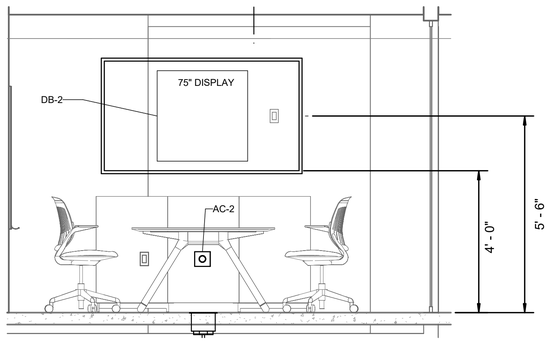
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL RCP NEW WORK PLAN – NORTH – AUDIOVISUAL
WORKING STAFF	DWE / DWE / JDC (DESIGNED BY / DRAWN BY / CHECKED BY)
SHEET NO.	52 of 75
	TA 112 FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



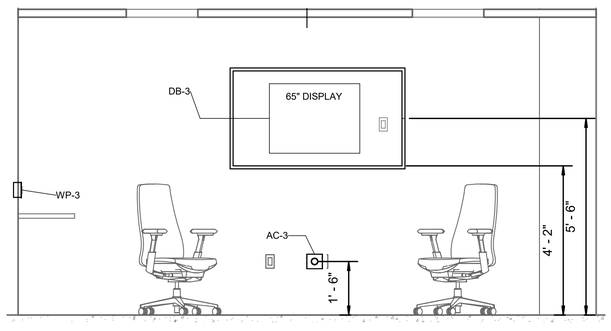
J1 TA301EL AV ELEVATION - CONFERENCE 4040E

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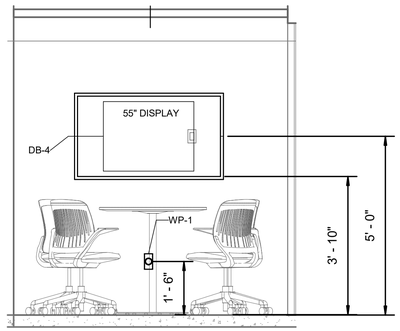
J6 TA301EL AV ELEVATION - CONFERENCE 4002E

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



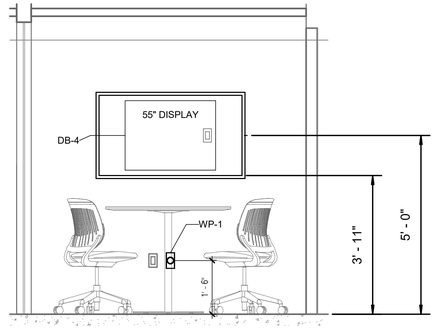
D1 TA301EL AV ELEVATION - FLEX 4016E

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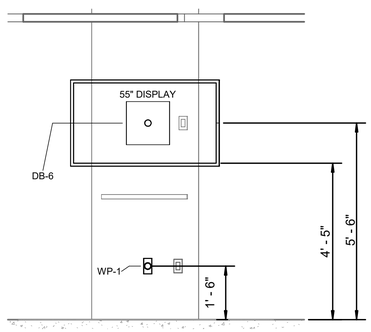
D5 TA301EL AV ELEVATION - FOCUS 4064E

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



D8 TA301EL AV ELEVATION - FOCUS 4060E

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



A1 TA301EL AV ELEVATION - DIRECTOR'S OFFICE 4033E

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

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Renovate 4E NMAL Office Suite

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KEY PLAN

0 1/2' 1' 1 1/2'

1 1/2"=1'-0"

GRAPHIC SCALE(S)

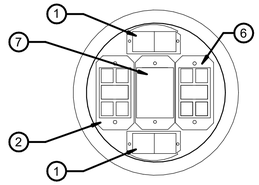
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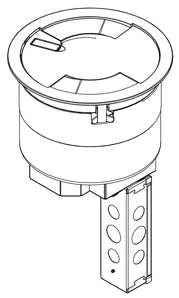
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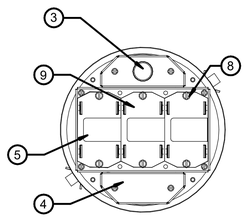
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH AV FLOOR ELEVATIONS
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	53 OF 75
	TA 301 EL (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

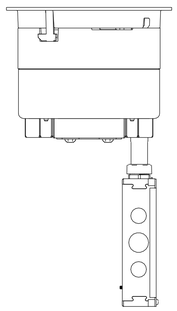


TOP VIEW





BOTTOM VIEW



SYMBOL:

PT-1 PT-2 PT-4

DETAIL NOTES:

A. LEGRANG 8AT
B. 8" POKE THRU
C. 8" CORE HOLE SIZE
D. 9-1/4" DIAMETER COVER
E. 16-3/4" DEEP
F. UL 2-HOUR RATED
G. TRIM FLANGE MEETS ADA ACCESSIBILITY GUIDELINES AS IT PERTAINS TO ADA STANDARD 4.5, WHICH ADDRESSES CHANGES IN FLOOR AND GROUND SURFACE LEVELS.
H. POKE THRU PROVIDED BY DIV 26.
I. ELECTRICAL PROVIDED BY DIV 26.

DETAIL KEY NOTES

1. SEE ELECTRICAL DRAWINGS.
2. SEE TELECOM DRAWINGS.
3. SEE ELECTRICAL DRAWINGS
4. SEE ELECTRICAL DRAWINGS
5. SEE TELECOM DRAWINGS.
6. AUDIOVISUAL - 4-PORT KEYSTONE DEVICE MOUNTING PLATE WITH LABEL - RESERVED FOR TELECOM DROPS. LEGRAND 810J4LB.
7. AUDIOVISUAL - LEGRAND 8B BLANK

TYPICAL OF PT-1 & PT-4

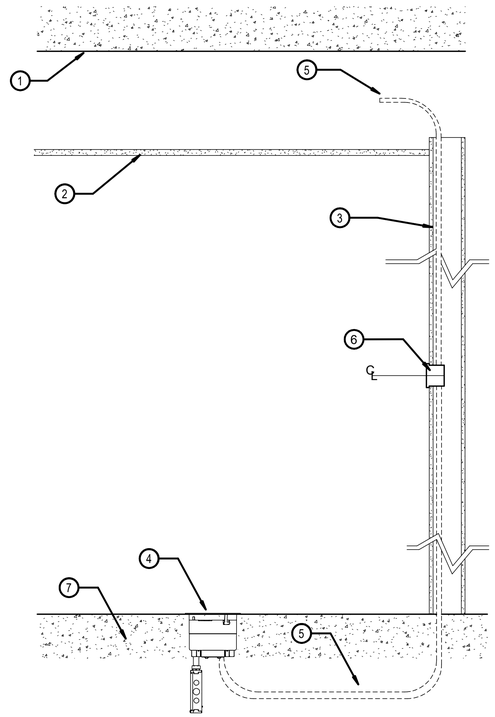
8. AUDIOVISUAL - 1125CHA (1-1/4") BOTTOM HOUSING ASSEMBLY - 1-1/4" CONDUIT TO DISPLAY BACK BOX. DEDCIATED TO AV CABLING ONLY.
9. AUDIOVISUAL - LEGRAND 1BLH BLANK BOTTOM HOUSING ASSEMBLY.

TYPICAL OF PT-2

8. AUDIOVISUAL - 1125CHA (1-1/4") BOTTOM HOUSING ASSEMBLY - 1-1/4" CONDUIT TO ACCESSIBLE CEILING OF ROOM BEING SERVICES BY POKE THRU. DEDCIATED TO AV CABLING ONLY.
9. AUDIOVISUAL - LEGRAND 1BLH BLANK BOTTOM HOUSING ASSEMBLY.

8" POKE THRU DETAIL - PT-1, PT-2, PT-4

A1 TA501DT NTS



DETAIL NOTES:

A. DETAIL IS DIAGRAMMATIC.
B. REFER TO FLOOR PLANS FOR LOCATIONS AND TYPE.
C. COORDINATE FINAL LOCATION WITH ARCHITECT
D. IN AREAS WITH ACCESSIBLE SUSPENDED CEILINGS, J-HOOKS MAY BE USED IN LIEU OF CONDUIT.
E. COORDINATE ELECTRICAL OUTLETS AND INTERIOR FINISHES
F. ELECTRICAL CONDUIT NOT SHOWN.
G. TELECOM CONDUIT NOT SHOWN.

DETAIL KEY NOTES: (#)

1. CEILING SLAB
2. GYPSUM CEILING
3. WALL
4. RECESSED POKE THRU WITH COVER PLATE. MOUNT FLUSH WITH FINISHED FLOOR. REFERENCE FLOOR PLANS FOR LOCATIONS AND TYPES
5. EMT FOR TELECOM CABLING TO NACC, CREDENZA BACK BOX, OR DISPLAY BACK BOX. SEE POKE THRU DETAIL FOR REQUIREMENTS BY TYPE.
6. CREDENZA, WP, BB, OR DB.
7. FINISHED FLOOR

POKE THRU DETAIL (TYPICAL)

A8 TA501DT NTS

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Renovate 4E NMAL Office Suite

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GRAPHIC SCALE(S)

DATE: 04/18/25
SUBMISSION: FINAL CONSTRUCTION DOCS

REVISION # DATE
REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

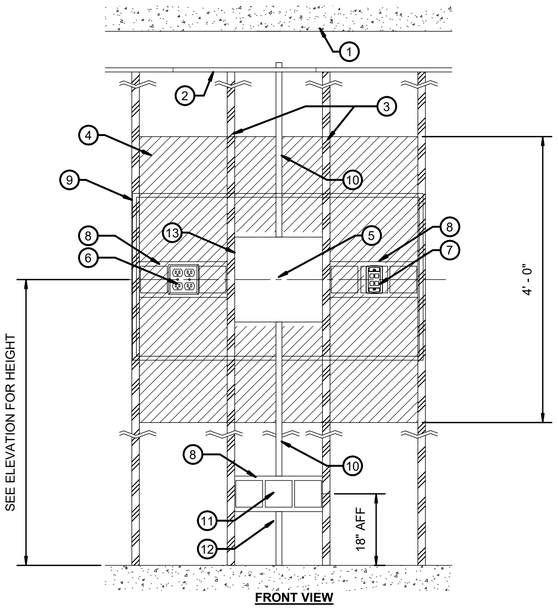
BUILDING NAME: CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS: 600 MARYLAND AVE, SW

PROJECT TITLE: RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER: 2566904
A/E PROJECT NUMBER: ASG 3000738.00

DRAWING TITLE: AUDIOVISUAL – DETAILS
WORKING STAFF: DESIGNED BY DWE | DRAWN BY DWE | CHECKED BY JDC

SHEET NO. 54 OF 75

TA501DT
DISCIPLINE TYPE SEQUENCE DRAWING TYPE



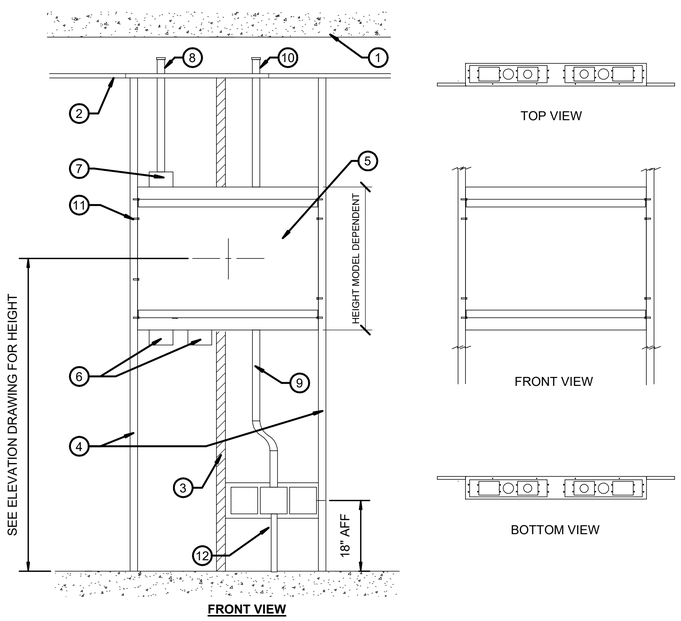
FRONT VIEW

DB-6 - DISPLAY MOUNTING DETAIL - DIRECTOR'S OFFICE

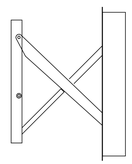
G1 / TA502DT NTS

DETAIL NOTES:
A. MONITOR IN-WALL ENCLOSURE MOUNTING HEIGHT SHOWN ON ELEVATION DRAWINGS.
B. ELECTRICAL WIRING TO BE SEPARATED AT LEAST 12 IN FROM LOW-VOLTAGE AV/IT CABLING.
C. WITH MEDIUM DUAL SWING ARM WALL DISPLAY MOUNT WITH 25 INCH EXTENSION (NOT SHOWN)

DETAIL KEY NOTES: (#)
1. CEILING SLAB
2. SUSPENDED CEILING
3. 14-GAUGE METAL 2X4 STUD
4. 3/4" FIRE RATED PLYWOOD BLOCKING
5. 14.25" WIDE X 14.24" HIGH X 3.5" DEEP DISPLAY BACK BOX. LEGRAND AV FAC526FCW OR APPROVED SIMILAR.
6. QUAD 5-20R ELECTRICAL RECEPTACLE. SEE ELECTRICAL DRAWINGS. 2-GANG BACK BOX WITH 2-GANG MUD RING.
7. TN DROP SET - 2-GANG BACK BOX WITH 1-GANG MUD RING. SEE TN DRAWING FOR CONDUIT REQUIREMENTS.
8. TRIPLE 2-GANG ELECTRICAL BOX MOUNTING BRACKET.
9. FLAT PANEL DISPLAY - SIZE VARIES BY LOCATION. BY OTHERS. SEE FLOOR PLAN.
10. 1-1/4" CONDUIT TO CREDEZA/WALL BACKBOX, WHEN APPLICABLE.
11. 5" SQUARE BACK BOX WITH 1-GANG MUD-RING.
12. 1-1/4" CONDUIT TO FLOOR BOX/ POKE-THRU, WHEN APPLICABLE.
13. ARTICULATING WALL MOUNT WITH 25" DUAL SWING ARM. LEGRAND TS525TU OR APPROVED SIMILAR. PROVIDED BY OTHERS.



FRONT VIEW



SIDE VIEW SHOWN WITH ARM EXTENDED

DETAIL NOTES:
A. DISPLAY MOUNTING HEIGHT SHOWN ON DISPLAY FUNCTION LEGEND.
B. ELECTRICAL WIRING TO BE SEPARATED AT LEAST 12" FROM LOW VOLTAGE CABLING.
C. PROVIDE ALL CONDUITS WITH PULL STRING AND PLASTIC BUSHINGS.
D. SEE RPVISUAL WALLMATE 32 INSTALLATION INSTRUCTIONS FOR MORE DETAILS.
E. VERIFY FASTENING METHOD WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION
F. VERIFY WALL STRENGTH PRIOR TO INSTALLATION
G. USE ALL FASTENING POINTS ON BOTH SIDES OF DISPLAY BACK BOX

DETAIL KEY NOTES: (#)
1. CEILING SLAB
2. SUSPENDED CEILING
3. METAL STUD
4. 14 GAUGE METAL STUD
5. DISPLAY BACK BOX
   A. LARGE - RP VISUAL 32MAXBF-XMS-UNV
   B. MEDIUM - RP VISUAL 32BF-XMS-UNV
6. DUPLEX ELECTRICAL RECEPTACLE PROVIDED BY DIVISION 26.
7. 1-GANG 2.5" DEEP BOX FOR TELECOM. SEE TN DRAWINGS FOR TELECOM CABLING REQUIREMENTS..
8. 1-1/4" EMT CONDUIT FROM DISPLAY BACKBOX TO NEAREST ACCESSIBLE CEILING CAVITY (NACC). THIS CONDUIT IS DEDICATED TO TELECOM CABLING.
9. WHEN APPLICABLE, 1-1/4" EMT CONDUIT TO IN-WALL BOX, FLOOR BOX, POKE-THRU, BACKBOX, OR RACEWAY.
10. 1-1/4" EMT CONDUIT FROM DISPLAY BACK BOX TO NACC. THIS CONDUIT IS DEDICATED TO AUDIOVISUAL CABLING.
11. MOUNT USING APPROVED FASTENERS
12. WHEN APPLICABLE, 1-1/4" EMT CONDUIT TO FLOOR BOX, POKE-THRU, OR RACEWAY.

DB-1 - DISPLAY BACK BOX MOUNTING DETAIL

A1 / TA502DT SCALE =NTS

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DRAWING TITLE	AUDIOVISUAL – DETAILS
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	55 OF 75
	TA 502 DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

GENERAL NOTES

1. THE SCOPE OF THIS PROJECT INCLUDES PROVIDING A NEW COMPLETELY SUPERVISED, ELECTRONIC SECURITY SYSTEM (ESS) CONSISTING OF ACCESS CONTROL, INTRUSION DETECTION, VIDEO, AND INTERCOMMUNICATION SYSTEMS AS SHOWN ON THE DRAWINGS AND DESCRIBED WITHIN THE ACCOMPANYING SPECIFICATIONS FOR THE FACILITY IDENTIFIED. THE SYSTEM IS AN EXTENSION OF THE OWNER'S EXISTING ESS.
2. PERFORM ALL WORK NECESSARY TO CARRY OUT THE INTENT OF THE CONTRACT DOCUMENTS AND PROVIDE COMPLETE SYSTEMS EVEN THOUGH EACH ITEM IS NOT SPECIFICALLY MENTIONED OR DESCRIBED.
3. THE TERM "CONTRACT DOCUMENTS" MEANS THE SPECIFICATIONS, DRAWINGS, ADDENDUMS, SKETCHES, AND OTHER DOCUMENTATION THAT DEFINE THE WORK.
4. THE TERM "PROVIDE" MEANS FURNISH AND INSTALL, COMPLETE AND READY FOR USE.
5. THE TERM "OWNER" MEANS SMITHSONIAN INSTITUTION OR ITS DESIGNATED REPRESENTATIVE OR AGENT
6. THE TERM "CONTRACTOR" OR "GENERAL CONTRACTOR" MEANS THE PRIME CONTRACTOR RESPONSIBLE FOR ALL WORK DEFINED IN THE CONSTRUCTION DOCUMENTS.
7. THE TERM "ELECTRICAL CONTRACTOR" MEANS A LICENSED AND QUALIFIED SUBCONTRACTOR PERFORMING WORK FOR THE CONTRACTOR.
8. THE TERM "SECURITY CONTRACTOR" MEANS AN OWNER APPROVED LICENSED AND QUALIFIED SUBCONTRACTOR PERFORMING WORK FOR THE CONTRACTOR.
9. THE TERM "EXISTING" MEANS EXISTING TO REMAIN.
10. THE TERM "NEW" MEANS CONTRACTOR TO PROVIDE NEW.
11. PROVIDE A FULLY INTEGRATED SYSTEM AS AN EXTENSION OF THE OWNER'S EXISTING SECURITY SYSTEMS.
12. COORDINATE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. BRING CONFLICTS TO THE OWNER'S ATTENTION IMMEDIATELY. PROCEEDING WITH WORK PRIOR TO THE OWNER ISSUING CLARIFICATION IS AT THE CONTRACTOR'S OWN RISK.
13. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, WIRE, CABLE, CONDUITS AND RACEWAYS FOR A COMPLETE INSTALLATION.
14. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC AND DEFINE THE GENERAL ARRANGEMENT.
15. PROVIDE AND MAINTAIN ALL DOCUMENTATION INCLUDING DESIGN DOCUMENTATION, AS-BUILT DOCUMENTATION, PROGRAMMING WORKSHEETS AND PROJECT COMMUNICATIONS.
16. FIELD VERIFY AND COORDINATE ALL DEVICE LOCATIONS. WHERE CONFLICTS OCCUR, COORDINATE AND VERIFY FINAL LOCATIONS WITH THE OWNER PRIOR TO INSTALLATION.
17. PAY ALL FEES AND OBTAIN ALL PERMITS AND LICENSES AS REQUIRED TO PERFORM THE WORK DEFINED IN THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.
18. PROVIDE NEW MATERIAL AND EQUIPMENT CONFORMING TO THE APPLICABLE STANDARDS OF UL, NEC, NEMA, ASTM, ANSI AND OTHERS AS IDENTIFIED IN THE TECHNICAL SPECIFICATIONS.
19. GUARANTEE ALL WORK FOR A MINIMUM OF ONE YEAR COMMENCING ON THE DATE OF FINAL ACCEPTANCE OF THE SYSTEM BY THE OWNER.
20. PROVIDE LABOR, TOOLS, CONTAINERS, AND SERVICES AS REQUIRED TO MAINTAIN A CLEAN AND SAFE WORK SITE. REMOVE EXCESS MATERIAL AND DEBRIS FROM THE WORK SITE. CLEAN THE WORK SITE DAILY.
21. PROVIDE INTEGRATION OF SECURITY DEVICES AND EQUIPMENT WITH BUILDING FIRE ALARM DEVICES AND EQUIPMENT TO COMPLY WITH NFPA, NEC, UL, AND LOCAL CODES AND ORDINANCES.
22. SECURE WORK IN OCCUPIED AREAS WITH BARRIERS TO NOT CREATE A SAFETY HAZARD. KEEP MATERIALS SUCH AS TOOLS, LADDERS AND INSTALLATION MATERIAL TO A MINIMUM AND ALLOW EASY PASSAGE OF BUILDING TENANTS. PROVIDE DROP CLOTHES OR OTHER WISE PROTECT BUILDING FINISHES FROM ALL CONSTRUCTION DEBRIS AND DUST. REMOVE TRASH AND DEBRIS ON A DAILY BASIS AND RESTORE AREAS TO PRE CONSTRUCTION CONDITIONS AS WORK IS COMPLETED.
23. OWNER IS VERY SENSITIVE TO VIBRATION, DUST AND NOISE. ANY WORK ACTIVITIES THAT GENERATE VIBRATION, NEED TO BE TESTED AND SCHEDULED IN ADVANCE. SHOULD ACTIVITIES EXCEED OWNERS SET LIMITS, THE OWNER HAS THE RIGHT TO STOP WORK, PROVIDE AN ALTERNATE DATE AND TIME TO COMPLETE VIBRATION GENERATING WORK.

CONDUIT AND RACEWAY NOTES

1. PROVIDE CONDUITS AND RACEWAYS FOR A COMPLETE INSTALLATION. ROUTE SECURITY WIRE AND CABLE IN CABLE TRAYS, METALLIC CONDUITS, COVERED RACEWAYS, OR CLOSED WIRE TROUGHS. J-HOOKS ARE NOT AUTHORIZED.
2. PROVIDE CONDUITS AND RACEWAYS THAT COMPLY WITH NEC REQUIREMENTS OR COMPLY WITH LOCAL CODES AND ORDINANCES. THE MOST STRINGENT REQUIREMENTS GOVERN.
3. REGARDLESS OF NEC OR LOCAL CODES AND ORDINANCES, PROVIDE CONDUIT AND RACEWAY SIZED FOR A MAXIMUM FILL OF 40%.
4. REGARDLESS OF NEC OR LOCAL CODES AND CONDUIT FILL REQUIREMENTS, THE CONDUIT MINIMUM DIAMETER IS 19mm (3/4").
5. PROVIDE COMPRESSION TYPE CONDUIT FITTINGS. SET SCREW TYPE FITTINGS ARE NOT ACCEPTABLE.
6. PROVIDE COLOR CODING OF SECURITY CONDUITS AND RACEWAYS, PERMANENTLY MARK CONDUITS AND RACEWAYS WITH A 25mm (1") BLUE BAN D EVERY 3 METERS (10 FEET). BLUE BANDING COLOR TO BE BENJAMIN MOORE #791 OR APPROVED EQUIVALENT.
7. PERMANENTLY PAINT JUNCTION BOXES, DEVICE BOXES, TERMINAL CABINETS, AND WIRE THROUGH BLUE, COLOR TO BE BENJAMIN MOORE #791 OR APPROVED EQUIVALENT.
8. PAINT EXPOSED CONDUIT TO MATCH ADJACENT FINISH.
9. CONCEAL CONDUIT AND RACEWAYS TO THE GREATEST EXTENT POSSIBLE. IN AREAS WITHOUT CEILINGS, INSTALL CONDUIT AS UNOBTRUSIVELY AS POSSIBLE, AS CLOSE AS POSSIBLE TO FLOOR/ CEILING SLAB AND PARALLEL AND AT RIGHT ANGLES TO STRUCTURAL STEEL OR CONCRETE ELEMENTS. THESE DRAWINGS ARE DIAGRAMMATIC TO SHOW DESIGN INTENT ONLY. WHERE CONDUITS AND RACEWAYS CANNOT BE CONCEALED, COORDINATE WITH THE OWNER TO OBTAIN APPROVAL PRIOR TO INSTALLATION.
10. PROVIDE SEPARATE RACEWAY, CONDUITS, JUNCTION BOXES, AND ENCLOSURES FOR ALL SECURITY WIRE AND CABLE. USE OF SHARED LOW-VOLTAGE CABLE TRAY IS AUTHORIZED. DO NOT COMBINE 120VAC CONDUCTORS OR ANY POWER DISTRIBUTION CIRCUIT WITH SECURITY WIRE AND CABLE.
11. PROVIDE OWNER APPROVED SECURITY SCREWS AND FASTENERS FOR ALL SECURITY JUNCTION BOXES AND SCREW COVER ENCLOSURES.
12. PROVIDE ACCESS COVERS OR HATCHES FOR ALL SECURITY JUNCTION BOXES CONCEALED IN STRUCTURE. PROVIDE ACCESS TO JUNCTION BOXES AND EQUIPMENT ENCLOSURES LOCATED WITHIN 3 METERS (10 FEET) OF SECURITY DEVICES.
13. PROPERLY CLEAN AND SEAL PENETRATIONS IN FIRE RESISTIVE WALLS, FLOOR, CEILING, OR ROOF ASSEMBLIES TO THE FULL THICKNESS OF THE PENETRATION WITH AN APPROVED THROUGH PENETRATION FIRE STOP SYSTEM. PROVIDE FIRE STOP SYSTEM WITH A FIRE RESISTANCE THAT IS EQUAL TO OR GREATER THAN THAT OF THE PENETRATED ASSEMBLY. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND RATINGS OF FIRE RESISTIVE ASSEMBLIES.
14. CONTRACTOR IS RESPONSIBLE FOR AVOIDING ALL CONFLICTS WITH LIGHT FIXTURES, HVAC DIFFUSERS, GRILLS, DUCTS, CONDUIT AND OTHER PIPING OR OTHER OBSTRUCTIONS ENCOUNTERED. COORDINATE ALL WORK WITH EXISTING FIELD CONDITIONS. PROMPTLY NOTIFY OWNER PRIOR TO INITIATING WORK IF ANY MOUNTING LOCATIONS ARE OBSTRUCTED AND/OR IF ANY MOUNTING CONFLICTS OR PROBLEMS ARE DISCOVERED.

WIRE & CABLE NOTES

1. PROVIDE ALL WIRE AND CABLE FOR A COMPLETE AND FUNCTIONAL SECURITY SYSTEM.
2. PROVIDE WIRE AND CABLE THAT COMPLY WITH NEC AND UL REQUIREMENTS OR COMPLY WITH LOCAL CODES AND ORDINANCES. THE MOST STRINGENT REQUIREMENTS GOVERN.
3. PROVIDE WIRE AND CABLE CONDUCTORS FOR DATA CIRCUITS, CONTROL CIRCUITS AND COMMUNICATIONS WIRING #22 AWG MINIMUM.
4. PROVIDE WIRE AND CABLE CONDUCTORS FOR LOW VOLTAGE POWER DISTRIBUTION AND CONTROL CIRCUIT WIRING #18 AWG MINIMUM. UP SIZE CONDUCTORS AS REQUIRED TO PROVIDE A VOLTAGE DROP LESS THAN 10% UNLESS OTHERWISE NOTED.
5. PROVIDE MANUFACTURER'S INTERNAL INTERCONNECT WIRING UL APPROVED AND SIZED IN ACCORDANCE WITH THE MANUFACTURER'S MINIMUM REQUIREMENTS.
6. PROVIDE SHIELDED CABLE FOR ALL LOW SPEED SERIAL DATA CIRCUITS, CONTROL CIRCUITS, AND COMMUNICATIONS WIRING.
7. PROVIDE UTP CAT 6 CABLE FOR ALL HIGH SPEED DATA CIRCUITS (ETHERNET).
8. GROUND LOOPS ARE NOT PERMITTED. GROUND SHIELD DRAIN WIRES TO VERIFIED EARTH GROUND TERMINAL LUGS AT THE CONTROL CABINET OR ORIGINATING EQUIPMENT. INSULATE SHIELDS AND DRAIN WIRES AT THE DEVICE OR REMOTE TERMINATION POINT USING UL APPROVED INSULATORS. THE USE OF AC POWER NEUTRAL CONDUCTORS FOR GROUND CONNECTIONS IS UNACCEPTABLE.
9. PROVIDE UNSHIELDED TWISTED PAIR CABLE ASSEMBLIES FOR ALL DC LOW VOLTAGE POWER DISTRIBUTION AND CONTROL CIRCUITS.
10. PROVIDE TWISTED SHIELDED PAIR CABLE ASSEMBLIES FOR ALL AC LOW VOLTAGE POWER DISTRIBUTION.

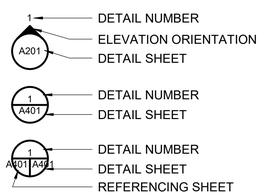
DEMO NOTES

1. PERFORM A "FUNCTIONAL CHECK" OF ALL ESS EQUIPMENT PRIOR TO INITIATING ANY DEMOLITION. COMPILE "FUNCTIONAL CHECK" RESULTS AND DELIVER TO THE OWNER.
2. THE TERM "DEMO" MEANS DISCONNECT AND REMOVED BACK TO SOURCE. STOP REMOVAL WHERE DAMAGE WOULD OCCUR IF FURTHER REMOVAL OCCURRED. CUT CONDUIT OFF AND REMOVE WIRE CONDUCTORS UNDER THESE CONDITIONS.
3. REMOVE SECURITY EQUIPMENT, COMPONENTS, AND DEVICES SCHEDULED FOR DEMOLITION IN A MANNER TO PRESERVE THE APPEARANCE AND OPERABILITY TO THE EXTENT POSSIBLE.
4. INVENTORY EQUIPMENT REMOVED DURING DEMOLITION AND TURN OVER TO OWNER.
5. MAINTAIN EXISTING SECURITY DEVICES OPERATIONALLY AS LONG AS POSSIBLE. COORDINATE SECURITY SYSTEM OUTAGE TIME WITH OWNER AND BUILDING SECURITY.
6. IF SYSTEM OUTAGE EXTENDS BEYOND NORMAL BUSINESS HOURS, THE CONTRACTOR INCURS THE COST FOR UTILIZING THE OWNERS UNIFORMED GUARD SERVICE TO PROVIDE ADDITIONAL SECURITY.

SYMBOL LEGEND

SYMBOL	DEVICE DESCRIPTION
——	NEW DEVICE LINE TYPE
——	EXISTING DEVICE LINE TYPE
– – –	DEMO DEVICE LINE TYPE
NVR	NETWORK VIDEO RECORDER
NS	NETWORK SWITCH
24	POWER SUPPLY, 24VDC
M	CARD READER, M = MULLION
ULTR	DATA GATHERING PANEL - ISTAR ULTRA AND POWER SUPPLY
RM	READER MODULE
REX	REQUEST TO EXIT PIR
E #	ELECTRIFIED LOCKSET, M = ELECTROMAGNETIC LOCK, R=WITH INTEGRATED REX
	LOCAL SOUNDER
	PUSH-TO-EXIT BUTTON
	FIXED DOME CAMERA
	GLASS BREAK DETECTOR
S	DOOR POSITION SWITCH, S= SURFACE MOUNTED
	VIDEO INTERCOM
	INTERCOM MASTER
#	SHEET KEY NOTE, GENERAL NOTE
#	DETAIL KEY NOTE
	CONTINUATION SYMBOL

ELEVATION AND DETAIL CALLOUT



ABBREVIATIONS

AC	ALTERNATING CURRENT
ACS	ACCESS CONTROL SYSTEM
ADA	AMERICANS WITH DISABILITIES
AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	ASTM INTERNATIONAL
C	CONDUIT
CAT	CATEGORY
CM	CEILING MOUNTED
COTR	CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE
CT	CABLE TRAY
DC	DIRECT CURRENT
DE	DELAYED EGRESS
DPDT	DOUBLE POLE DOUBLE THROW
DVR	DIGITAL VIDEO RECORDER
EMI	ELECTRICAL MAGNETIC INTERFERENCE
EMT	ELECTRICAL METALLIC TUBING
ESS	ELECTRONIC SECURITY SYSTEM
FO	FIBER OPTIC
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
IDS	INTRUSION DETECTION SYSTEM
IMT	INTERMEDIATE METALLIC TUBING
LAN	LOCAL AREA NETWORK
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
MM	MULTIMODE
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NMAH	NATIONAL MUSEUM OF AMERICAN HISTORY
NMNH	NATION MUSEUM OF NATURAL HISTORY
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
NVR	NETWORK VIDEO RECORDER
OC	ON CENTER
OSP	OUTSIDE PLANT
PC	PERSONAL COMPUTER
POE	POWER OVER ETHERNET
PP	PATCH PANEL
PR	PAIR
RM	ROOM
RMU	RACK MOUNTING UNIT (1.75")
SCC	SECURITY COMAND/CONTROL CENTER
SER	SECURITY EQUIPMENT ROOM
SI	SMITHSONIAN INSTITUTION
SM	SINGLEMODE
SMS	SECURITY MANAGEMENT SYSTEM
SOC	SECURITY OPERATIONS CENTER
TBD	TO BE DETERMINED
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TR	TELECOMMUNICATIONS ROOM
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTED POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
VAC	VOLTS ALTERNATING CURRENT
VASS	VIDEO ASSESSMENT AND SURVEILANCE SYSTEM
VDC	VOLTS DIRECT CURRENT
VMS	VIDEO MANAGEMENT SYSTEM
VP	VANDAL PROOF
WM	WALL MOUNTED

CAMERA TYPE LEGEND

NUMBER
TYPE
MOUNT

TYPE
3MP 3 MEGAPIXEL CAMERA
12MP 12 MEGAPIXEL CAMERA

MOUNT
CS CEILING SURFACE
CR CEILING RECESSED
CP CEILING PENDANT
CT CABLE TRAY
WS WALL SURFACE
WA WALL ARMATURE
PM POLE MOUNT
PP PARAPET
CM CORNER MOUNT

CABLE LEGEND

TYPE	WIRE SIZE	# OF CONDUCTORS	DESCRIPTION	BELDEN OR EQUAL	SIGNAL
A	22AWG	6	SHIELDED	9942	CARD READER
B	18AWG	2	SHIELDED	8461	POWER
C	22AWG	2	TWISTED SHIELDED PAIR	8442	CONTACT
D	24AWG	4	TWISTED SHIELDED PAIR	9842	CONTROL (RS-485, 4-WIRE)
E	24AWG	2	TWISTED SHIELDED PAIR	9841	CONTROL (RS-485)
F	22AWG	4	TWISTED SHIELDED PAIR	8729	DEVICE WIRING
G	UTP	8	CAT6	7852A	VIDEO, COMMUNICATION
H	MM	6	FIBER OPTIC (50 MICRON)	FD4H0065F	COMMUNICATION
I	SM/MM	12SM/24MM	FIBER OPTIC HYBRID (OS2/OM4)	FIEDH24AJ	COMMUNICATION
J	16AWG	2	SHIELDED	6200UH	POWER

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KEY PLAN

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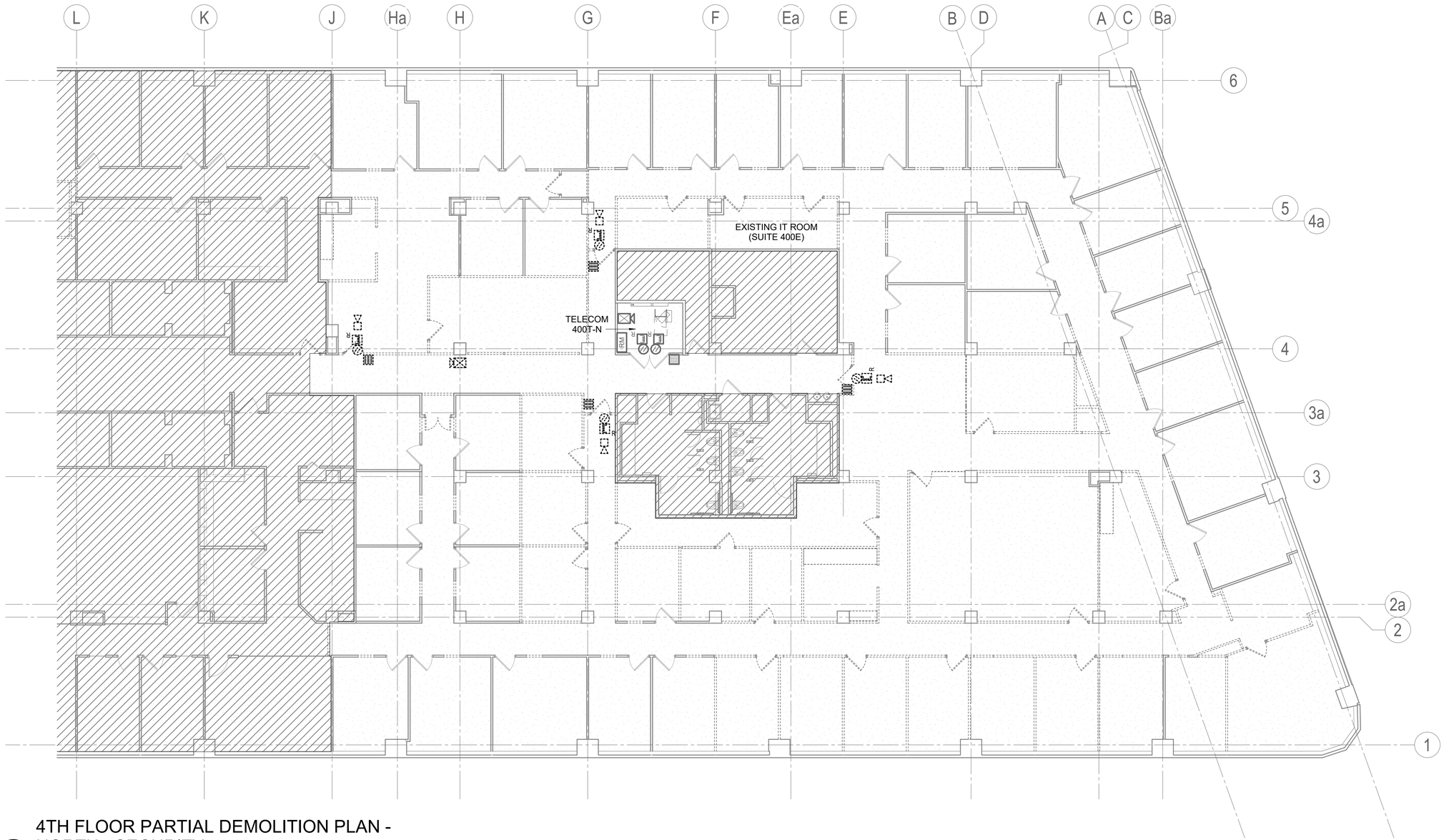
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DRAWING TITLE	SECURITY NOTES, SYMBOLS, AND ABBREVIATIONS
WORKING STAFF	SK (DESIGNED BY) / SK (DRAWN BY) / JDC (CHECKED BY)

SHEET NO. 56 OF 75

TY 001 CS
DISCIPLINE TYPE SEQUENCE DRAWING TYPE

SHEET NOTES

1. DEMO SECURITY CABLES FROM DEMOLISHED SECURITY DEVICES BACK TO SOURCE.



4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - SECURITY

1 / TY101DP — SCALE = 1/8" = 1'-0"

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KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
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A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL DEMOLITION PLAN – NORTH – SECURITY
WORKING STAFF	SK (DESIGNED BY) / SK (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	57 OF 75
	TY 101 DP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

KEY NOTES

1. PROVIDE WALL MOUNT BRACKET.
2. EXISTING ISTAR ULTRA
3. EXISTING READER MODULE ENCLOSURE. ADD READER MODULE FOR STAIR DOOR AS SHOWN IN DETAILS.

SHEET NOTES

1. CONNECT NEW ACCESS CONTROLLED DOOR DEVICES TO THE EXISTING ISTAR ULTRA PANEL LOCATED IN ROOM 400T-N.
2. CONNECT IP CAMERAS AND IP INTERCOMS TO THE NETWORK SWITC IN ROOM 400T-N.
3. COORDINATE INTERCOM PROGRAMMING REQUIREMENTS WITH COTR, SI OPS, AND STAKEHOLDERS.



4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - SECURITY

1 / TY111FP — SCALE = 1/8" = 1'-0"

4/16/2025 4:08:44 PM
TY111FP BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

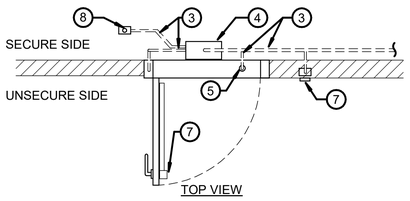
DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

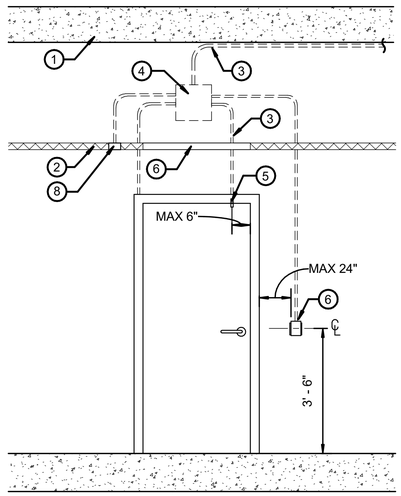
Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL NEW WORK PLAN – NORTH – SECURITY
WORKING STAFF	SK (DESIGNED BY) / SK (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	58 OF 75
	TY 1 1 1 FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



DETAIL NOTES:
A. COORDINATE DOOR & DOOR FRAME PREPARATION WITH DIVISION 8 REQUIREMENTS.
B. ROUTE WIRING TO THE RM ENCLOSURE LOCATED IN ROOM 400T-N.
C. SEAL ALL STAIRWELL WALL PENETRATIONS PER PROJECT SPECIFICATIONS.

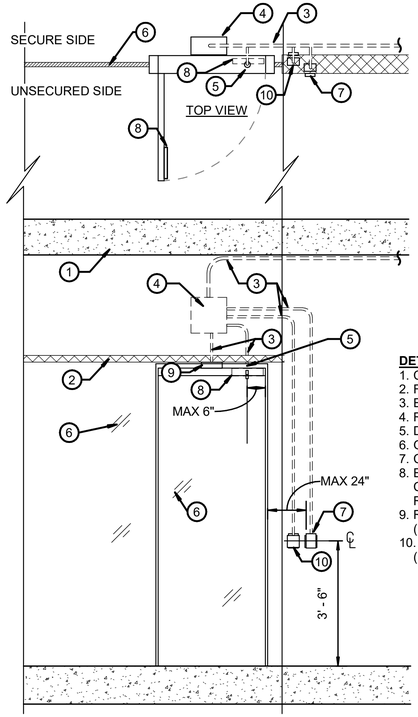


DETAIL KEY NOTES: (#)
1. CEILING SLAB
2. FINISHED CEILING
3. EMT CONDUIT
4. JUNCTION BOX WITH COVER, SIZE AS REQUIRED.
5. DOOR POSITION SWITCH
6. CARD READER WITH BACK BOX
7. ELECTRIFIED EGRESS HARDWARE WITH REQUEST TO EXIT SWITCH.
8. DOOR SOUNDER WITH SINGLE-GANG BACK BOX - SECURE SIDE.

FRONT VIEW; UNSECURE SIDE

SINGLE ACCESS-CONTROLLED DOOR WITH EGRESS HARDWARE

G1 TY501DT SCALE = 1/2" = 1'-0"



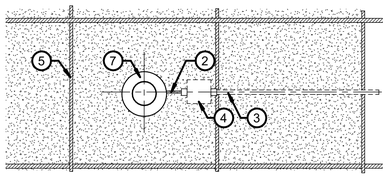
DETAIL NOTES:
A. COORDINATE DOOR & DOOR FRAME PREPARATION WITH DIVISION 8 REQUIREMENTS.
B. REFER TO FLOOR PLAN FOR READER AND PUSH TO EXIT BUTTON LOCATIONS. DETAIL DOES NOT ILLUSTRATE EXACT FIELD LOCATIONS.

DETAIL KEY NOTES: (#)
1. CEILING SLAB
2. FINISHED CEILING
3. EMT CONDUIT
4. READER MODULE ENCLOSURE
5. DOOR POSITION SWITCH
6. GLASS WALL AND DOOR
7. CARD READER WITH BACK BOX
8. ELECTRIFIED MAGNETIC LOCK - COORDINATE WITH DIVISION 8 REQUIREMENTS
9. REQUEST TO EXIT MOTION DETECTOR (SECURE SIDE)
10. REQUEST TO EXIT PUSH BUTTON (SECURE SIDE)

FRONT VIEW; UNSECURE SIDE

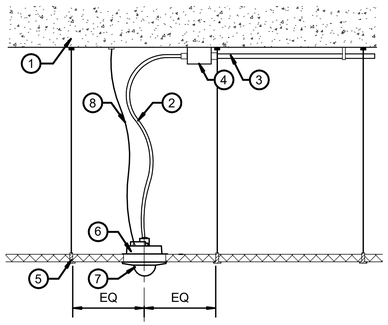
SINGLE ACCESS-CONTROLLED DOOR WITH ELECTROMAGNETIC LOCK

G5 TY501DT SCALE = 1/2" = 1'-0"



BOTTOM VIEW

DETAIL NOTES:
A. MOUNT THE CAMERA IN THE CENTER OF THE CEILING TILE.
B. COORDINATE THE CAMERA LOCATION WITH OTHER DISCIPLINES TO PROVIDE REQUIRED VIDEO COVERAGE.
C. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER.

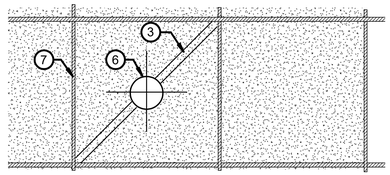


SIDE VIEW

DETAIL KEY NOTES: (#)
1. CEILING SLAB
2. FLEXIBLE METALLIC CONDUIT - SIZE AS REQUIRED
3. EMT CONDUIT - SIZE AS REQUIRED
4. JUNCTION BOX - SIZE AS REQUIRED
5. SUSPENDED CEILING GRID
6. MANUFACTURERS MOUNTING ASSEMBLY
7. INTERIOR DOME CAMERA
8. MINIMUM #12 HANGER WIRE, PER PROJECT SEISMIC REQUIREMENTS

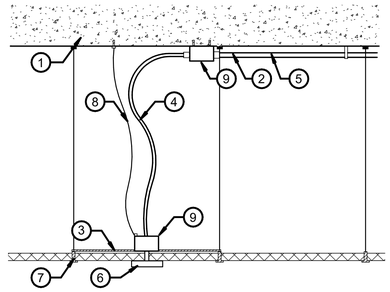
RECESSED CEILING MOUNTED CAMERA

A1 TY501DT NTS



BOTTOM VIEW

DETAIL NOTES:
A. MOUNT THE DETECTOR IN THE CENTER OF THE CEILING TILE.
B. COORDINATE THE DETECTOR LOCATION WITH OTHER DISCIPLINES TO PROVIDE REQUIRED COVERAGE.
C. SECURE DROP-CEILING TILES IF THE AREA ABOVE THE TILES IS USED AS AN AIR RETURN FOR HEATING, VENTILATING, AND AIR CONDITIONING (HVAC) SYSTEMS.
D. REFER TO MANUFACTURERS RECOMMENDATIONS FOR TESTING AND INSTALLATION REQUIREMENTS.



SIDE VIEW

DETAIL KEY NOTES: (#)
1. CEILING SLAB
2. 3/4" EMT CONDUIT
3. SUPPORT PLATE
4. 1/2" FLEXIBLE METALLIC CONDUIT
5. ROUTE TO ___ VIA _____
6. GLASS BREAK DETECTOR
7. SUSPENDED CEILING GRID
8. MINIMUM #12 HANGER WIRE, PER PROJECT SEISMIC REQUIREMENTS
9. JUNCTION BOX

CEILING MOUNTED GLASS BREAK DETECTOR

A5 TY501DT NTS

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FOR CONSTRUCTION

STAMP

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
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REVISION # DATE	REVISION DESCRIPTION

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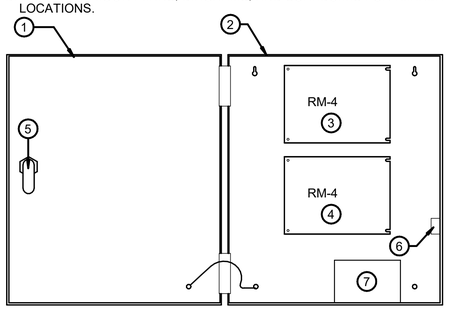
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	SECURITY DETAILS
WORKING STAFF	SK (DESIGNED BY) / SK (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	59 OF 75

TY501DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

DETAIL NOTES:

A. DETAIL IS DIAGRAMMATIC REFER TO MANUFACTURER'S DOCUMENTATION FOR INSTALLATION REQUIREMENTS.
B. PROVIDE A NEW READER MODULE FOR STAIRWELL DOOR INSIDE EXISTING READER MODULE ENCLOSURE LOCATED IN THE TELECOM CLOSET.
C. PROVIDE A NEW READER MODULE ENCLOSURE WITH READER MODULE FOR MAIN SUITE ENTRANCE DOOR.
D. REFER TO FLOOR PLANS, DIAGRAMS, AND SCHEDULES FOR ALARM POINT ASSIGNMENT AND DOOR LOCATIONS.

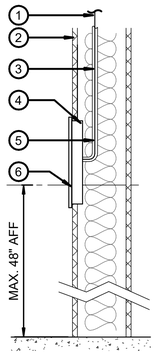


DETAIL KEY NOTES: (#)

1. ENCLOSURE DOOR
2. SOFTWARE HOUSE RM-DCM-2 ENCLOSURE 12"W X 14"H X 3.5"D
3. RM-4 READER MODULE - EXISTING TO REMAIN (SECURITY ROOM ONLY)
4. NEW RM-4 READER MODULE
5. ENCLOSURE LOCK
6. TAMPER SWITCH
7. 12V BATTERY BACKUP (AS APPLICABLE)

SOFTWARE HOUSE RM-DCM WITH READER MODULE

A1 / TY502DT — SCALE =NTS



DETAIL NOTES
A. ADJUST INTERCOM MOUNTING HEIGHT PER MANUFACTURERS RECOMENDATIONS

DETAIL NOTES
1. INTERCOM WIRING - ROUTE TO NETWORK SWITCH
2. WALL - DIAGRAMMATIC
3. EMT, MINIMUM 3/4"
4. BACK BOX
5. VIDEO INTERCOM
6. PUSH-TO-TALK BUTTON - MAX HEIGHT PER ADA REQUIREMENTS

WALL MOUNTED VIDEO INTERCOM

A5 / TY502DT — SCALE = 1 1/2" = 1'-0"

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

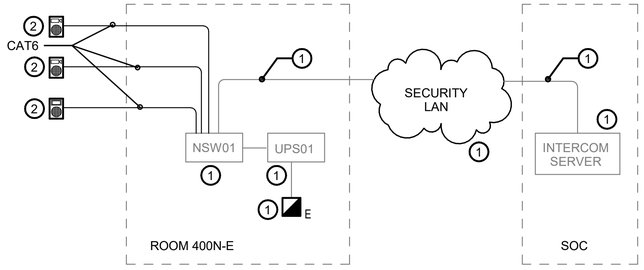
Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	SECURITY DETAILS
WORKING STAFF	SK (DESIGNED BY) / SK (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	60 OF 75
DRAWING TYPE	TY 502 DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

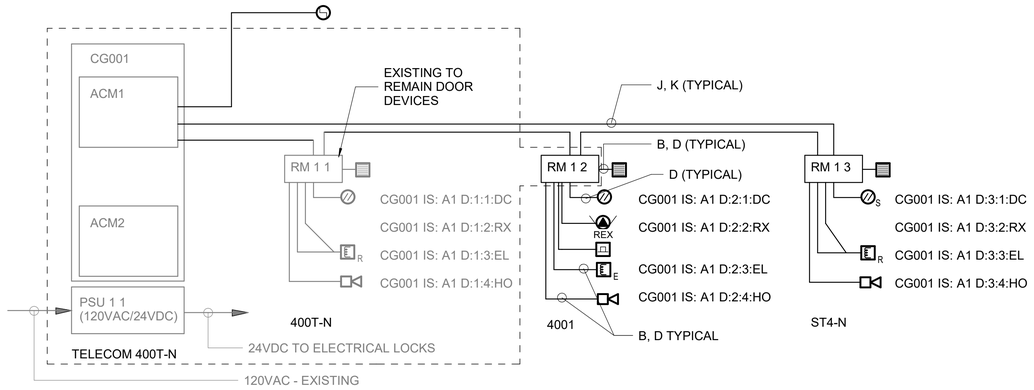
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TY502DT BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

DETAIL NOTES:
A. DRAWING IS DIAGRAMMATIC. REFER TO PLANS FOR DEVICE LOCATIONS.
B. NETWORK SWITCH AND UPS INSTALLED IN RECENT PROJECT. CONTRACTOR TO CONFIRM THE INSTALLATION AND EXISTING SWITCH SPARE CAPACITY.



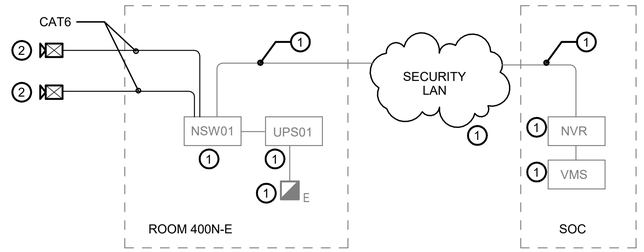
DETAIL KEY NOTES: (#)
1. EXISTING OR PROVIDED BY SI
2. NEW DEVICE PROVIDED BY PROJECT

F1 TY601DG INTERCOM SYSTEM DIAGRAM
SCALE =NTS



A1 TY601DG ACCESS CONTROL AND INTRUSION DETECTION SYSTEM DIAGRAM - SECURITY 4A
SCALE =SCALE: NTS

DETAIL NOTES:
A. DRAWING IS DIAGRAMMATIC. REFER TO CAMERA SCHEDULE FOR CAMERA LOCATION, TYPE AND PORT NUMBER.



DETAIL KEY NOTES: (#)
1. EXISTING OR PROVIDED BY SI
2. NEW CAMERA PROVIDED BY PROJECT

A8 TY601DG VIDEO SURVEILLANCE SYSTEM DIAGRAM
SCALE =NTS

4/16/2025 4:08:44 PM
TY601DG BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
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Smithsonian Institution
Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	SECURITY DIAGRAMS
WORKING STAFF	SK (DESIGNED BY) / SK (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	61 OF 75
	TY 601 DG (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

DOOR SCHEDULE												
DOOR NUMBER	READER TYPE						DOOR POSITION SWITCH		ELECTRIFIED LOCKSET			
	PROXIMITY (P)	PROXIMITY MID RANGE (P-MR)	PROXIMITY MULLION MOUNT (PM)	PROXIMITY LONG RANGE (P-LR)	PROXIMITY WITH KEYPAD (PK)	PROXIMITY WITH KEYPAD AND LCD (PKL)	RECESSED	SURFACE	NO REQUEST TO EXIT	WITH REQUEST TO EXIT	ELECTROMAGNETIC LOCK	DOOR SOUNDER
04_Floor												
400T-N	1	0	0	0	0	0	2	0	2	0	0	0
4001	1	0	0	0	0	0	1	0	0	0	1	0
ST4-A	1	0	0	0	0	0	0	1	1	0	0	0
Total: 18	3	0	0	0	0	0	3	1	3	0	1	0

NETWORK SWITCH NS401 SCHEDULE									
SWITCH NUMBER	PORT #	DEVICE SUBSYSTEM	UNIT NUMBER	CAMERA NUMBER	LEVEL	ROOM NUMBER	POWER (POE)	DESCRIPTION	COMMENTS
NS401	03	VASS		C01	04_Floor	4CR05E		5MP Recessed Ceiling Fixed Dome Indoor Camera	
NS401	05	VASS		C03	04_Floor	4CR05E		5MP Recessed Ceiling Fixed Dome Indoor Camera	
NS401	06	INTERCOM	IC01		04_Floor			VIDEO INTERCOM	
NS401	07	INTERCOM	IM01		04_Floor	4000E		INTERCOM MASTER STATION DESK MOUNT	
NS401	08	INTERCOM	IC02		04_Floor	4020E		VIDEO INTERCOM	

0 VA

CAMERA SCHEDULE							
CAMERA NUMBER	SWITCH NUMBER	PORT #	LEVEL	ROOM NUMBER	POWER	DESCRIPTION	FOV DESCRIPTION
C01	NS401	03	04_Floor	4CR05E		5MP Recessed Ceiling Fixed Dome Indoor Camera	SUITE ENTRANCE DOOR
C03	NS401	05	04_Floor	4CR05E		5MP Recessed Ceiling Fixed Dome Indoor Camera	CORRIDOR 4CR05E

Grand total: 2

DGP 001 Inputs							
FACILITY BUILDING ABBREVIATION	DGP NUMBER	ACM NUMBER	ACM INPUT	DEVICE TYPE ABBREVIATION	DESCRIPTION	ROOM NUMBER	LEVEL
001							
	001	1	5	GB	GLASS BREAK DETECTOR - CEILING MOUNT	4CR05E	04_Floor

1; 1

Grand total: 1

DGP 001 RS485							
FACILITY BUILDING ABBREVIATION	DGP NUMBER	ACM NUMBER	RS485 PORT	DESCRIPTION	DOOR NUMBER	ROOM NUMBER	LEVEL
001							
	001	1	1	Reader Module in DCM-02 Enclosure	ST4-A	400T-N	04_Floor
	001	1	2	Reader Module in DCM-02 Enclosure	4001	4000E	04_Floor

001: 2

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TY701SC BY Approver 04/18/25 FINAL CONSTRUCTION DOCS

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Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

STAMP

KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

GRAPHIC SCALE(S)

DATE: 04/18/25

SUBMISSION: FINAL CONSTRUCTION DOCS

REVISION # DATE

REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME: CAPITAL GALLERY ADMIN HQ, EAST

ADDRESS: 600 MARYLAND AVE, SW

PROJECT TITLE: RENOVATE 4E NMAL OFFICE SUITE

SI PROJECT NUMBER: 2566904

A/E PROJECT NUMBER: ASG 3000738.00

DRAWING TITLE: SECURITY SCHEDULES

WORKING STAFF: SK (DESIGNED BY) | SK (DRAWN BY) | JDC (CHECKED BY)

SHEET NO. 62 OF 75

TY 701 SC
DISCIPLINE | TYPE | SEQUENCE | DRAWING TYPE

GENERAL NOTES

1. DRAWINGS, SPECIFICATIONS, ADDENDUMS, SKETCHES AND OTHER DOCUMENTATION COMPRISE THE PROJECT CONTRACT DOCUMENTS AND MUST BE USED IN COMBINATION. PERFORM ALL WORK WHICH IS NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, OR WHICH ARE CUSTOMARILY PERFORMED.
2. THE DRAWINGS INDICATE THE GENERAL PROPOSED LOCATION OF EQUIPMENT, CABLE PATHWAYS AND OUTLETS. COORDINATE LOCATION OF EQUIPMENT AND OUTLETS AND OTHER SUPPORTING ITEMS WITH ALL OTHER EXISTING UTILITIES AND TRADES.
3. THE TERM "CONTRACTOR" MEANS THE PRIME CONTRACTOR RESPONSIBLE FOR ALL WORK DEFINED IN THE DRAWINGS AND SPECIFICATIONS.
4. THE TERM "OWNER" MEANS THE OWNER'S AUTHORIZED REPRESENTATIVE.
5. THE TERM "PROVIDE" MEANS FURNISH AND INSTALL, COMPLETE AND READY FOR USE.
6. AVOID PLACING BACK-TO-BACK WALL BOXES AT OPPOSITE SIDES OF THE SAME WALL PARTITION.
7. COORDINATE CONSTRUCTION DOCUMENTS PRIOR TO COMMENCING WORK. BRING CONFLICTS TO THE OWNER'S AUTHORISED REPRESENTATIVES ATTENTION IMMEDIATELY. PROCEEDING WITH ANY WORK PRIOR TO THE OWNER'S AUTHORISED REPRESENTATIVE ISSUING CLARIFICATION OF CONFLICTS IS AT THE CONTRACTOR'S OWN RISK.
8. FIELD VERIFY AND COORDINATE DEVICE LOCATIONS. WHERE CONFLICTS OCCUR, COORDINATE AND VERIFY FINAL LOCATIONS WITH THE OWNER PRIOR TO INSTALLATION
9. PROVIDE COORDINATION AND VERIFICATION OF CONDITIONS INCLUDING EQUIPMENT AND DEVICES INSTALLED BY OTHER TRADES, THE WORK OF THE CONTRACTOR AND SUBCONTRACTORS.
10. DETAIL REFERENCES ARE NOT NECESSARILY NUMBERED INCREMENTALLY. A GAP IN NUMBERING DOES NOT INDICATE MISSING INFORMATION. DETAIL NAMES AND NUMBERS ARE SPECIFIC TO THIS DESIGN PACKAGE AND DO NOT CORRESPOND TO OTHER PUBLISHED DOCUMENTS.
11. LABEL ALL RACKS AND CABINETS, FRONT AND REAR, USING PLASTIC ENGRAVED LABELS.

CONDUIT AND PATHWAY NOTES

1 VERIFY THE SIZE OF ALL CONDUCTORS, CONDUITS, PATHWAYS, CABLE TRAYS, CABLE BASKETS, AND JUNCTION BOXES (40% MAXIMUM FILL RATIO).

2 ALL CONDUITS SHALL BE 3/4" MINIMUM DIAMETER EMT UNLESS OTHERWISE NOTED.

3 ALL CONDUITS SHALL ENTER AND EXIT THE PULL-BOX FROM OPPOSING ENDS. ALL EXCEPTIONS MUST BE REVIEWED AND APPROVED BY THE OWNER'S AUTHORISED REPRESENTATIVE.

4 PROVIDE PLASTIC BUSHINGS ON ALL CONDUITS.

5 PROVIDE COMPRESSION TYPE CONDUIT FITTINGS. SET SCREW TYPE FITTINGS ARE NOT ACCEPTABLE.

6 CONDUITS MUST HAVE NO MORE THAN 100 LINEAR FEET AND/ OR 180 DEGREES OF TOTAL BENDS BETWEEN PULL POINTS/BOXES.

7 ALL CONDUITS SHALL BE PROVIDED WITH APPROPRIATELY RATED PULL-LINE/PULL-TAPE AND BE TIED-OFF AT EACH END. ALL PULL-LINES/TAPES SHALL BE REPLACED WITH EACH SUCCESSIVE CABLE PULL UNTIL THE CONDUIT IS RENDERED FULL.

8 COORDINATE OUTLET LOCATIONS AND MOUNTING HEIGHTS WITH THE ARCHITECTURAL DRAWINGS.

9 PROVIDE MACHINE-PRINTED LABELING AT ALL ENDS TERMINATING IN TELECOMMUNICATIONS SPACES. INSTALL LABELS WITHIN CLEAR VIEW, AND MAKE PERMANENT WITH CLEAR ADHESIVE TAPE OR SIMILAR OVERLAY TO AVOID READING ERRORS. LABELING SYSTEM TO BE APPROVED BY THE OWNER'S REPRESENTATIVE.

10 PROVIDE SEPARATE RACEWAY, CONDUITS, JUNCTION BOXES, AND ENCLOSURES FOR ALL COMMUNICATIONS WIRE AND CABLE. DO NOT COMBINE 120VAC CONDUCTORS OR ANY POWER DISTRIBUTION CIRCUIT WITH COMMUNICATIONS WIRE AND CABLE.

11 PROVIDE UL LISTED FIRE STOP ASSEMBLIES FOR PENETRATIONS THROUGH RATED WALLS, FLOOR AND CEILINGS AND APPROVED BY THE OWNER'S AUTHORISED REPRESENATIVE. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION RATINGS.

12 J-HOOKS MOUNTED DIRECTLY TO THE SLAB MAY BE USED TO EXIT THE BASKET TYPE CABLE TRAY TO THE WAO CONDUIT STUB IN ACCESSBILE CEILINGS. SEE J-HOOK INSTALLATION DETAILS FOR INSTALLATION REQUIRMEENTS.

13 EXTEND WAO CONDUIT STUB TO NACC WHEN WAO IS IN AREA WITH UNACCESSBILE CEILING. .

14 SLEEVES IN WALLS AND FLOORS SHALL EXTEND 1" TO 3" BEYOND THE FINISHED SURFACE. PROVIDE NYLON BUSHING ON ALL ENDS.

15 PENETRATIONS THROUGH ACOUSTICALLY RATED PARTITIONS OR ENCLOSURES SHALL BE ACOUSTICALLY SEALED IN ACCORDANCE WITH THE RATINGS OF THE PARTITION OR ENCLOSURE.

16 PROVIDE BASKET TRAYS WITH VINYL LINERS INSIDE BOTTOM OF TRAY IN EXPOSED AREAS. BASKET TRAYS ABOVE CEILING TILES DO NOT REQUIRE VINYL LINERS.

17 PROVIDE WATER FALLS ON SLEEVES AND CONDUIT ENTERING IT SPACES.

18 PROVIDE WATER FALLS ON CABLE BASKET AND CABLE TRAY WHEN THE CABLE DROP EXCEEDS 2FT.

19 PROVIDE VERTICAL CABLE LADDER WHEN THE DROP EXCEEDS 4FT.

WIRE AND CABLE NOTES

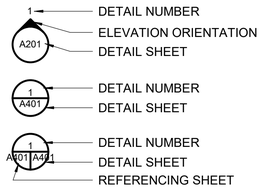
1 PROVIDE UTP CAT6A CABLE FOR ALL ETHERNET CONNECTIONS TERMINATED T568B, UON.

2 GROUND LOOPS ARE NOT PERMITTED. GROUND SHIELD DRAIN WIRES SHALL TERMINATE TO VERIFIED EARTH GROUND TERMINAL LUGS AT THE CONTROL CABINET OR ORIGINATING EQUIPMENT. INSULATE SHIELDS AND DRAIN WIRES AT THE DEVICE OR REMOTE TERMINATION POINT USING UL APPROVED INSULATORS. THE USE OF AC POWER NEUTRAL CONDUCTORS FOR GROUND CONNECTIONS IS UNACCEPTABLE.

3 WIRE AND CABLE SPLICES ARE NOT PERMITTED.

4 TEST CABLE AND TERMINATION FOR DEFECTS AND VERIFY CABLING SYSTEM PERFORMANCE UNDER INSTALLED CONDITIONS ACCORDING TO THE REQUIREMENTS IN THE SPECIFICAITONS.

ELEVATION AND DETAIL CALLOUT



SYMBOL LIST:

———	NEW WORK LINE TYPE
———	EXISTING WORK LINE TYPE
– – – – – – – –	DEMO WORK LINE TYPE
	TELECOMMUNICATIONS RACK, 2-POST RACK WITH VERTICAL CABLE MANAGEMENT. DASHED AREA REPRESENTS MIN 36" WORKING CLEARANCE REQUIREMENT FROM FRONT/REAR EQUIPMENT PLANE.
	EXISTING CABLE TRAY
	NEW CABLE TRAY
#	SHEET KEYNOTE TAG
#	DETAIL KEY NOTE TAG
#	REVISION TAG

SCHEDULE OF RESPONSIBILITY

DESCRIPTION	GC / CONTRACTOR		SMITHSONIAN'S IT CONTRACTOR	
	FURNISH	INSTALL	FURNISH	INSTALL
PATHWAYS (CONDUIT, CABLE TRAY, WIRE TROUGHS, RAISED FLOOR, RISER SLEEVES, HORIZONTAL SLEEVES, PULL BOXES, ETC.)	X	X		
FIRE STOP	X	X		
GROUND BUS AND WIRE	X	X		
FLOOR BOXES	X	X		
POKE THRUS	X	X		
WALL BACK BOXES	X	X		
PULL STRING/TAPE	X	X		
IT RACKS/CABINETS			X	X
CAT6A CABLE AND JACKS			X	X
CAT6A PATCH CORDS			X	X
WALL PLATES/BISCUIT BOXES			X	X
WAPS			X	X
FIBER OPTIC PATCH PANELS			X	X
FIBER OPTIC CABLE			X	X
FIBER OPTIC PATCH CORDS			X	X
NETWORK SWITCH			X	X
UPS			X	X

ABBREVIATIONS

AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AV	AUDIO VISUAL
BCT	BONDING CONDUCTOR FOR TELECOMMUNICATIONS
C	CONDUIT
CAT	CATEGORY
CATV	COMMUNITY ANTENNA TELEVISION
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CM	CEILING MOUNTED
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CPC	CATEGORY PATCH CORD
CT	CABLE TRAY
DAS	DISTRIBUTED ANTENNA SYSTEM
DC	DIRECT CURRENT
EF	ENTRANCE FACILITY
EMI	ELECTRICAL MAGNETIC INTERFERANCE
EMT	ELECTRICAL METALLIC TUBING
ER	EQUIPMENT ROOM
ETR	EXISTING TO REMAIN
FB	FLOOR BOX
FO	FIBER OPTIC
FOPC	FIBER OPTIC PATCH CORD
FOPP	FIBER OPTIC PATCH PANEL
IMT	INTERMEDIATE METALLIC TUBING
ISP	INSIDE PLANT
ITS	INFORMATION TECHNOLOGY SYSTEMS
LAN	LOCAL AREA NETWORK
MAX	MAXIMUM
MFA	MODULAR FURNITURE ACCESS ASSEMBLY
MIN	MINIMUM
MISC	MISCELLANEOUS
MM	MULTIMODE OPTICAL FIBER
MMF	MULTIMODE OPTICAL FIBER
MTD	MOUNTED
NACC	NEAREST ACCESSIBLE CEILING CAVITY
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRATOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OSP	OUTSIDE PLANT
PB	PULL BOX
PC	PATCH CORD
PCPC	PLENUM CATEGORY PATCH CORD
PDU	POWER DISTRIBUTION UNIT
PP	PATCH PANEL
PR	PAIR
PT	POKE-THRU
RCP	REFLECTED CEILING PLAN
RM	ROOM
RMU	RACK MOUNTING UNIT (1.75")
SFP	SMALL FORM-FACTOR PLUGGABLE
SM	SINGLE-MODE OPTICAL FIBER
SMF	SINGLE-MODE OPTICAL FIBER
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBD	TO BE DETERMINED
TE	TELECOMMUNICATION ENCLOSURE
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TR	TELECOMMUNICATIONS ROOM
TYP	TYPICAL
UL	UNDERWRITER'S LABORATORY
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
VAC	VOLTS ALTERNATING CURRENT
VDC	VOLTS DIRECT CURRENT
VP	VANDAL PROOF
WAP	WIRELESS ACCESS POINT
WM	WALL MOUNTED
WOA	WORK AREA OUTLET
WPE	WEATHER PROOF ENCLOSURE

CG

Renovate 4E NMAL Office Suite

FOR CONSTRUCTION

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KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	TELECOM NOTES AND ABBREVIATIONS
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	63 OF 75
	TN001CS (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

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TELECOM SYMBOLS LIST

SYMBOL	DESCRIPTION	BACK BOX	MUD RING	FACEPLATE (WITH ID WINDOW)	CABLING/JACKS TO IDF (SEE DETAILS FOR JACK AND CABLE COLOR)	CONDUIT REQUIREMENTS (MIN.)	HEIGHT AFF (UON)
	WALL MOUNTED PHONE DROP SET	2-GANG	1-GANG	1-GANG FACEPLATE WITH TELEPHONE STUDS.	(1) CAT6A UTP	(1) 3/4" EMT CONDUIT TO NACC.	48"
RS	WALL MOUNTED ROOM SCHEDULE PANEL	3-GANG	2-GANG	N/A	(1) CAT6A UTP	(1) 3/4" EMT CONDUIT TO NACC.	48"
	WALL MOUNTED DATA/VOICE 2-PORT DROP SET	2-GANG	1-GANG	1-GANG 2-PORT KEYSTONE FACEPLATE	(2) CAT6A UTP	(1) 1" EMT CONDUIT TO NACC.	18"
4	WALL MOUNTED DATA/VOICE 4-PORT DROP SET	2-GANG	1-GANG	1-GANG 4-PORT KEYSTONE FACEPLATE	(4) CAT6A UTP	(1) 1" EMT CONDUIT TO NACC.	18"
C	COUNTER TOP HEIGHT WALL MOUNTED DATA/VOICE 2-PORT DROP SET	2-GANG	1-GANG	1-GANG 2-PORT KEYSTONE FACEPLATE	(2) CAT6A UTP	(1) 1" EMT CONDUIT TO NACC.	38-42" SEE ARCHITECTURAL DRAWINGS.
C4	COUNTER TOP HEIGHT WALL MOUNTED DATA/VOICE 4-PORT DROP SET	2-GANG	1-GANG	1-GANG 4-PORT KEYSTONE FACEPLATE	(4) CAT6A UTP	(1) 1" EMT CONDUIT TO NACC.	38-42" SEE ARCHITECTURAL DRAWINGS.
F	FURNITURE MOUNTED DATA/VOICE 2-PORT DROP SET	SEE FURNITURE FEED OR MFA FOR PATHWAY	N/A	2-PORT KEYSTONE FURNITURE FACEPLATE (COORDINATE WITH FURNITURE SUPPLIER)	(2) CAT6A UTP	N/A - SEE FURNITURE FEED OR MFA FOR PATHWAY.	SEE FURNITURE DRAWINGS.
F4	FURNITURE MOUNTED DATA/VOICE 4-PORT DROP SET.	SEE FURNITURE FEED OR MFA FOR PATHWAY	N/A	4-PORT KEYSTONE FURNITURE FACEPLATE (COORDINATE WITH FURNITURE SUPPLIER)	(4) CAT6A UTP	N/A - SEE FURNITURE FEED OR MFA FOR PATHWAY.	SEE FURNITURE DRAWINGS.
	DISPLAY HEIGHT WALL MOUNTED DATA 2-PORT DROP SET	2-GANG	1-GANG	1-GANG 2-PORT KEYSTONE FACEPLATE	(2) CAT6A UTP	(1) 1" EMT CONDUIT TO NACC.	SEE AUDIOVISUAL DRAWINGS
4	DISPLAY HEIGHT WALL MOUNTED DATA 4-PORT DROP SET	2-GANG	1-GANG	1-GANG 4-PORT KEYSTONE FACEPLATE	(4) CAT6A UTP	(1) 1" EMT CONDUIT TO NACC.	SEE AUDIOVISUAL DRAWINGS
	DISPLAY HEIGHT WALL MOUNTED (2) DATA AND (1) COAX	2-GANG	1-GANG	1-GANG 4-PORT KEYSTONE FACEPLATE AND 1 BLANK KEYSTONE	(2) CAT6A UTP AND (1) RG6Q COAX.	(1) 1" EMT CONDUIT TO NACC.	SEE AUDIOVISUAL DRAWINGS
	MODULAR FURNITURE ACCESS (MFA) ASSEMBLY WITH GROMMET FACEPLATE. SEE TN MFA DETAIL.	3-GANG	2-GANG	2-GANG SPLIT WALL PLATE WITH GROMMET. SEE TN MFA DETAIL.	PATHWAY ONLY FOR FURNITURE DROP SETS.	(2) 1-1/2" EMT TO NACC.	18"
	DROP SET IN CEILING FOR WAP ATTACHED TO ACT.	N/A	N/A	1-PORT KEYSTONE BISCUIT BOX IN CEILING	(1) CAT6A UTP	N/A	ABOVE CEILING TILES
	PROVIDE WAP AND DROP SET ABOVE CEILING FOR WAP ATTACHED TO ACT.	N/A	N/A	1-PORT KEYSTONE BISCUIT BOX IN CEILING	(1) CAT6A UTP	N/A	ABOVE CEILING TILES
H	CEILING MOUNTED DROP SET FOR WAP IN HARD CEILING.	5" SQUARE	2-GANG	1-GANG 1-PORT KEYSTONE FACEPLATE	(1) CAT6A UTP	(1) 1" EMT CONDUIT TO NACC.	CEILING
H	PROVIDE WAP AND CEILING MOUNTED DROP SET FOR WAP IN HARD CEILING.	5" SQUARE	2-GANG	1-GANG 1-PORT KEYSTONE FACEPLATE	(1) CAT6A UTP	(1) 1" EMT CONDUIT TO NACC.	CEILING
C	DAS ANTENNA - CELLULAR	N/A	N/A	N/A	N/A	N/A	CEILING
E	DAS ANTENNA - ERRCS	N/A	N/A	N/A	N/A	N/A	CEILING
400	DAS ANTENNA - 400 MHZ	N/A	N/A	N/A	N/A	N/A	CEILING
RS	CEILING MOUNTED DROP SET FOR GLASS-MOUNTED ROOM SCHEDULE PANEL AND AV OCCUPANCY SENSOR	N/A	N/A	2-PORT KEYSTONE BISCUIT BOX IN CEILING	(2) CAT6A UTP	N/A	CEILING
OS	CEILING MOUNTED DROP SET FOR AV OCCUPANCY SENSOR IN CEILING.	N/A	N/A	1-PORT KEYSTONE BISCUIT BOX IN CEILING	(1) CAT6A UTP	N/A	CEILING
FB-1	FB-1 FLOOR BOX - 4-SLOT LEGRAND EFB45S-OG. ELECTRICAL, TELECOM, AND AUDIOVISUAL.	BUILT INTO FLOOR BOX	N/A	1-GANG 2-PORT KEYSTONE FACEPLATE	(2) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY FLOOR BOX.	FLOOR
FB-2	FB-2 FLOOR BOX - 4-SLOT LEGRAND EFB45S-OG. ELECTRICAL, TELECOM, AND AUDIOVISUAL.	BUILT INTO FLOOR BOX	N/A	1-GANG 2-PORT KEYSTONE FACEPLATE	(2) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY FLOOR BOX.	FLOOR
FB-3	FB-3 FLOOR BOX - 4-SLOT LEGRAND EFB45S-OG. ELECRICAL AND TELECOM	BUILT INTO FLOOR BOX	N/A	1-GANG 2-PORT KEYSTONE FACEPLATE	(2) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY FLOOR BOX.	FLOOR
FB-4	FB-4 FLOOR BOX - 4-SLOT LEGRAND EFB45S-OG. ELECRICAL AND TELECOM	BUILT INTO FLOOR BOX	N/A	1-GANG 4-PORT KEYSTONE FACEPLATE	(4) CAT6A UTP	TWO (2) 1" EMT CONDUITS TO NACC OF ROOM BEING SERVICED BY FLOOR BOX.	FLOOR
FB-5	FB-5 FLOOR BOX - 4-SLOT LEGRAND EFB45S-OG. ELECTRICAL AND FUTURE TELECOM	BUILT INTO FLOOR BOX	N/A	N/A	N/A	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY FLOOR BOX.	FLOOR
FB-6	FB-6 FLOOR BOX - 8-SLOT LEGRAND EFB8-OG. ELECTRICAL, TELECOM, AND AUDIOVISUAL.	BUILT INTO FLOOR BOX	N/A	1-GANG 4-PORT KEYSTONE FACEPLATE	(4) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY FLOOR BOX.	FLOOR
FB-FF	FB-FF - FURNITURE FEED FLOOR BOX - LEGRAND EFBFF-OG.	BUILT INTO FLOOR BOX	N/A	N/A	PATHWAY ONLY FOR FURNITURE DROP SETS.	TWO (2) 1-1/4" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY FLOOR BOX	FLOOR
PT-1	PT-1 POKE-THRU - 8" LEGRAND 8AT - ELECTRICAL, TELECOM, AND AUDIOVISUAL	SEE DETAIL	N/A	SEE DETAIL.	(2) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY POKE-THRU.	FLOOR
PT-2	PT-2 POKE-THRU - 8" LEGRAND 8AT - ELECTRICAL, TELECOM, AND AUDIOVISUAL	SEE DETAIL	N/A	SEE DETAIL.	(4) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY FLOOR BOX.	FLOOR
PT-3	PT-3 POKE-THRU - 8" LEGRAND 8AT - ELECTRICAL AND TELECOM	SEE DETAIL	N/A	SEE DETAIL.	(2) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY FLOOR BOX.	FLOOR
PT-4	PT-4 POKE-THRU - 8" LEGRAND 8AT - ELECTRICAL, TELECOM, AND AV	SEE DETAIL	N/A	SEE DETAIL.	(4) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY POKE-THRU.	FLOOR
PT-5	PT-5 POKE-THRU - 6" LEGRAND 6AT - ELECTRICAL AND TELECOM	SEE DETAIL	N/A	SEE DETAIL.	(2) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY POKE-THRU.	FLOOR
PT-6	PT-6 POKE-THRU - 4" LEGRAND 4AT - ELECTRIAL AND TELECOM	SEE DETAIL	N/A	SEE DETAIL.	(2) CAT6A UTP	ONE (1) 1" EMT CONDUIT TO NACC OF ROOM BEING SERVICED BY POKE-THRU.	FLOOR
PT-FF	PT-FF - FURNITURE FEED POKE THRU - LEGRAND 4FFATC15 - ELECTRICAL AND TELECOM	SEE DETAIL	N/A	N/A	PATHWAY ONLY FOR FURNITURE DROP SETS.	ONE (1) 1-1/2" EMT CONDUIT TO NACC OF CEILING BELOW WITH PATHWAY TO IT ROOM 400T-N	FLOOR

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Renovate 4E NMAL
Office Suite

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GRAPHIC SCALE(S)

DATE 04/18/25
SUBMISSION FINAL CONSTRUCTION DOCS

REVISION # DATE
REVISION DESCRIPTION

Smithsonian Institution

600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS 600 MARYLAND AVE, SW

PROJECT TITLE RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER 2566904
A/E PROJECT NUMBER ASG 3000738.00

DRAWING TITLE TELECOM SYMBOLS
WORKING STAFF

DESIGNED BY	DRAWN BY	CHECKED BY
DWE	DWE	JDC

SHEET NO. 64 OF 75

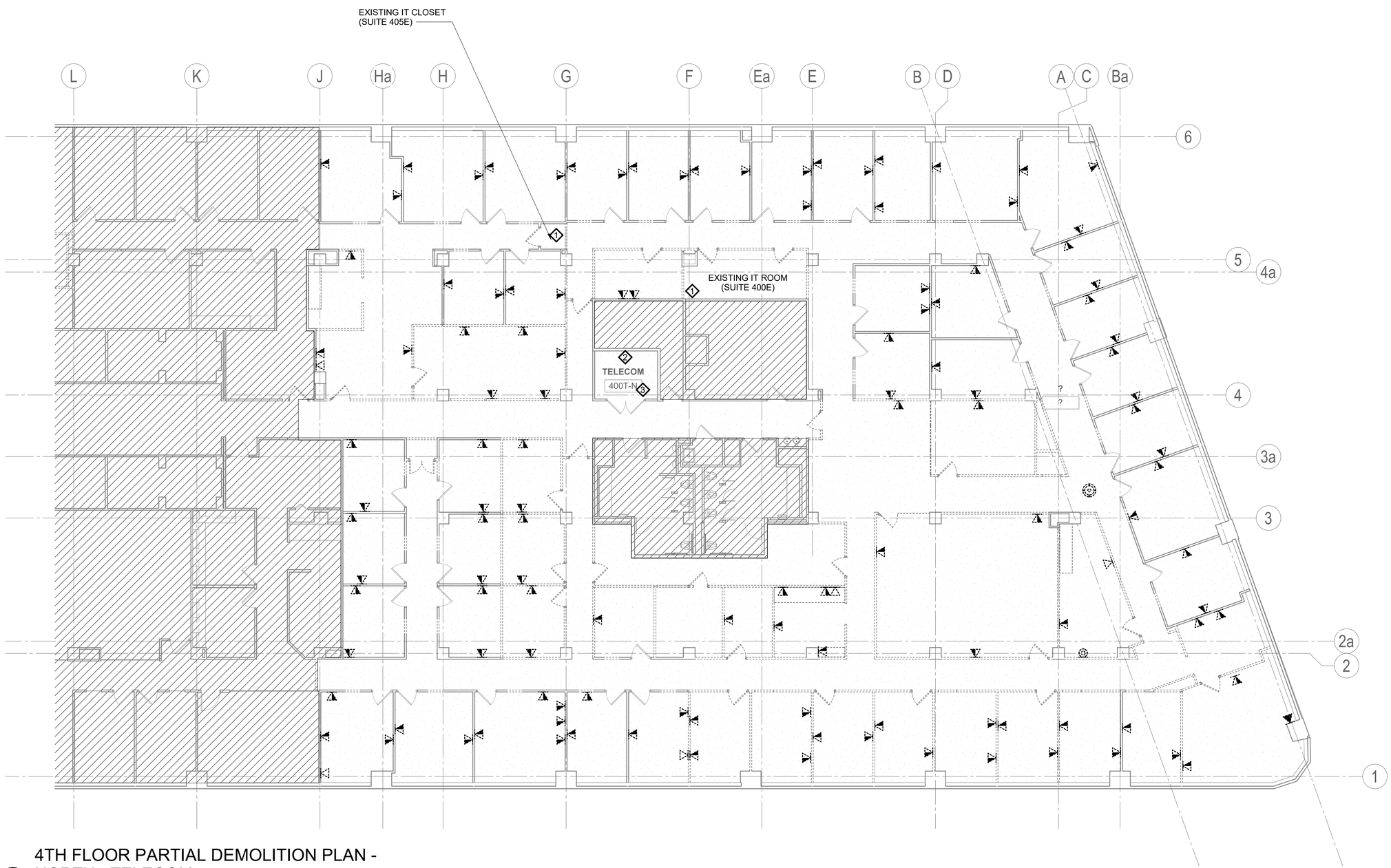
TN 002 CS
DISCIPLINE TYPE SEQUENCE DRAWING TYPE

KEY NOTES

1. DEMO BACKBONE CABLING TO SOURCE.
2. SI TO DEMO UNUSED COPPER AND FIBER CABLING TO SOURCE
3. SI TO DEMO BLUE CABINET.

SHEET NOTES

1. DEMO ALL TELECOM CABLES BACK TO SOURCE.
2. DEMO ALL TELECOM WALLPLATES AND JACKS.
3. LOCATIONS AND QUANTITIES SHOWN ARE APPROXIMATE.



4TH FLOOR PARTIAL DEMOLITION PLAN - NORTH - TELECOM

1 / TN101DP — SCALE = 1/8" = 1'-0"

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KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

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04/18/25	FINAL CONSTRUCTION DOCS

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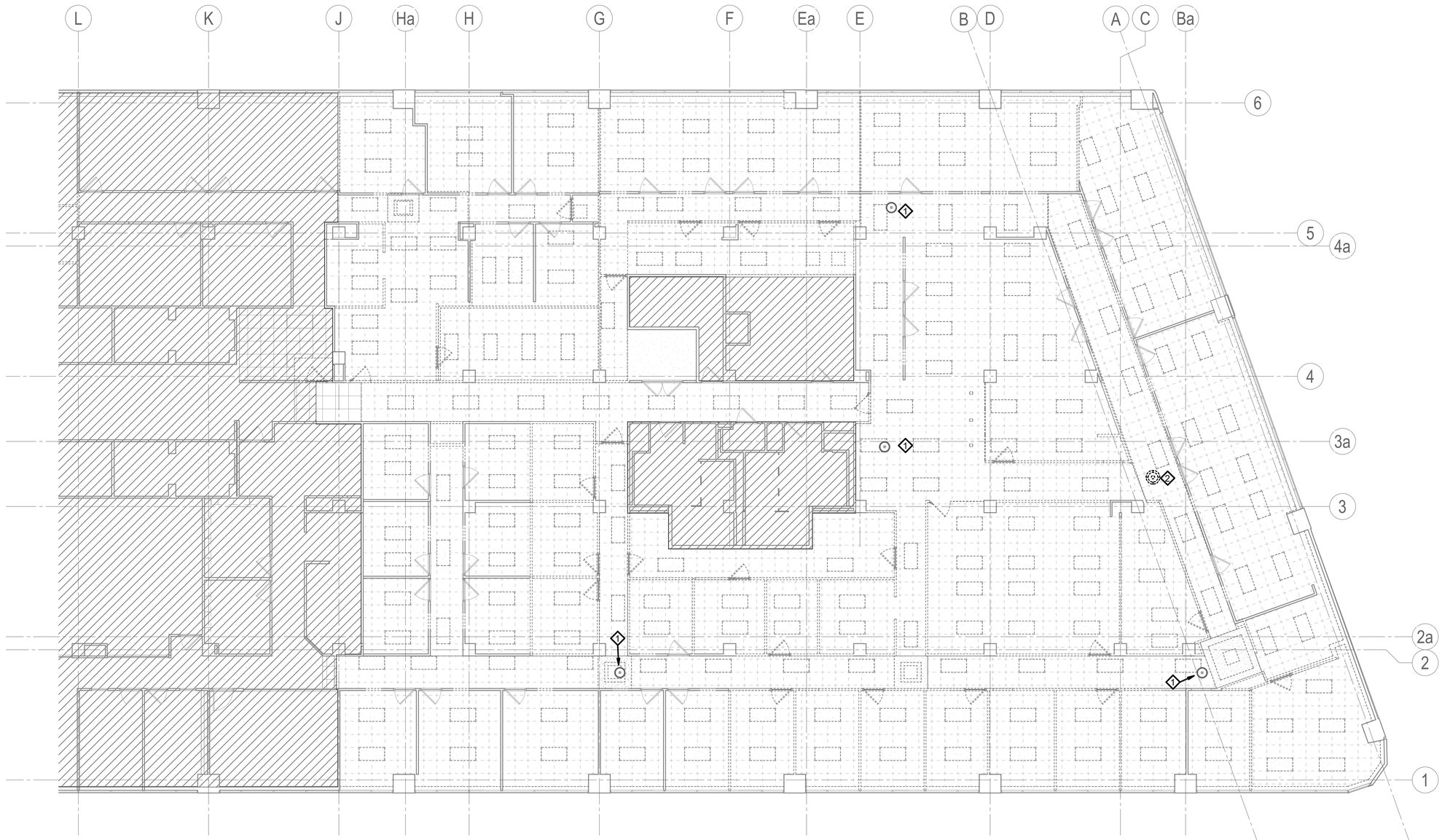
BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL DEMOLITION PLAN – NORTH – TELECOM
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	65 OF 75
	TN 101 DP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

KEY NOTES

1. PROTECT IN PLACE VERIZON (VZW) CELLULAR DISTRIBUTED ANTENNA SYSTEM (DAS) ANTENNA AND CABLING.
2. DEMO WIRELESS ACCESS POINT (WAP) CABLING TO SOURCE.

SHEET NOTES

1. NOTE HERE



4TH FLOOR PARTIAL RCP DEMOLITION PLAN - NORTH - AUDIOVISUAL

1 / TN102DP — SCALE = 1/8" = 1'-0"

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KEY PLAN

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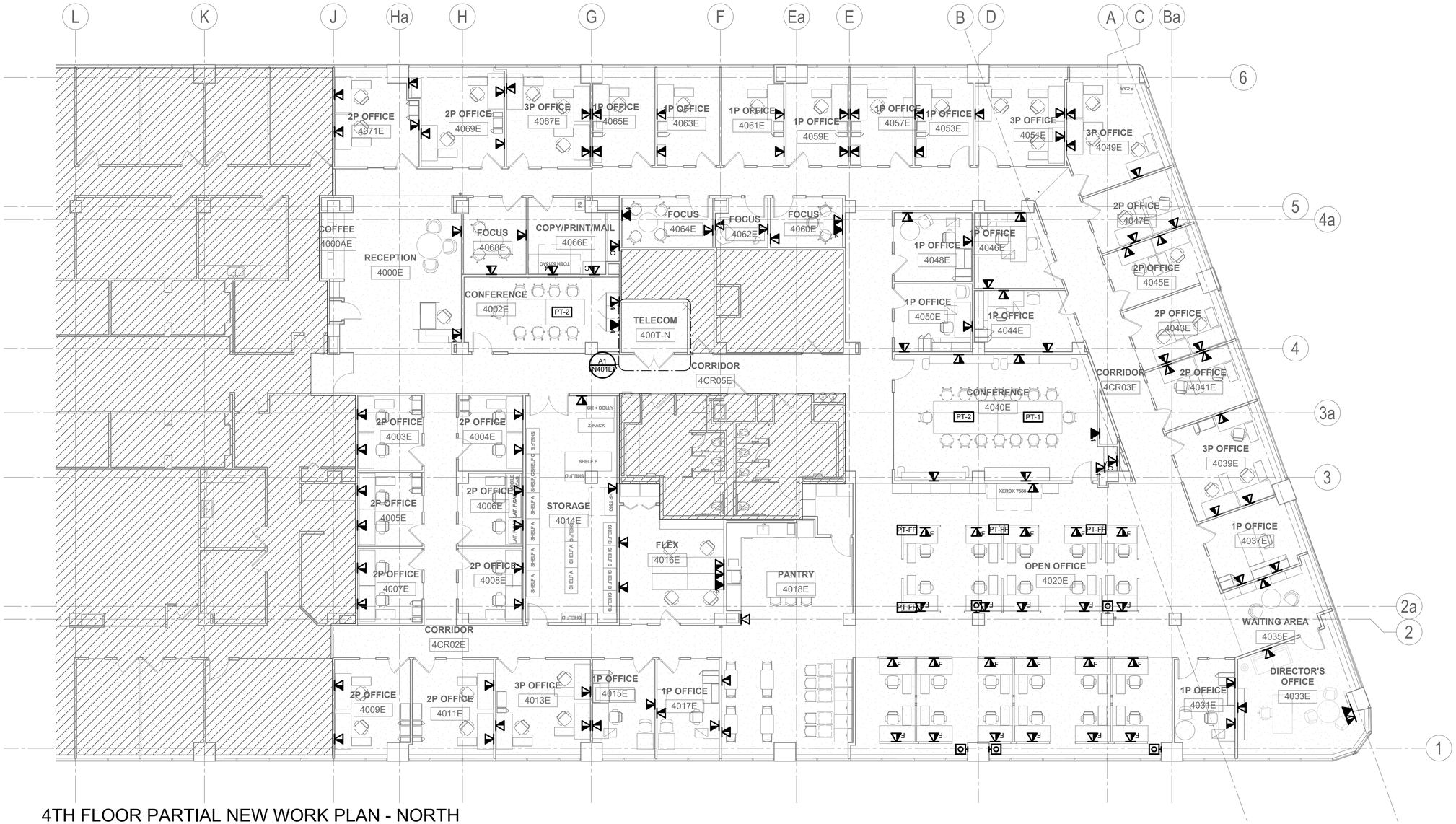
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PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
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A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL RCP DEMOLITION PLAN – NORTH – TELECOM
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	66 OF 75
	TN 102 DP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

SHEET NOTES

1. UTILIZE EXISTING BACK BOXES AND PATHWAYS FROM BACK BOX TO CEILING WHEN POSSIBLE.
2. LOCATE DATA DROPSET ADJACENT TO ELECTRICAL RECEPTACLE WHENEVER POSSIBLE.



4TH FLOOR PARTIAL NEW WORK PLAN - NORTH - TELECOM

1 / TN111FP SCALE = 1/8" = 1'-0"

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BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	4TH FLOOR PARTIAL NEW WORK PLAN – NORTH – TELECOM
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	67 OF 75
	TN 111 FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

KEY NOTES

1. PROTECT IN PLACE VERIZON (VZW) CELLULAR DISTRIBUTED ANTENNA SYSTEM (DAS) ANTENNA AND CABLING.



4TH FLOOR PARTIAL RCP NEW WORK PLAN - NORTH - AUDIOVISUAL

1 / TN112FP — SCALE = 1/8" = 1'-0"

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KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
04/18/25	FINAL CONSTRUCTION DOCS

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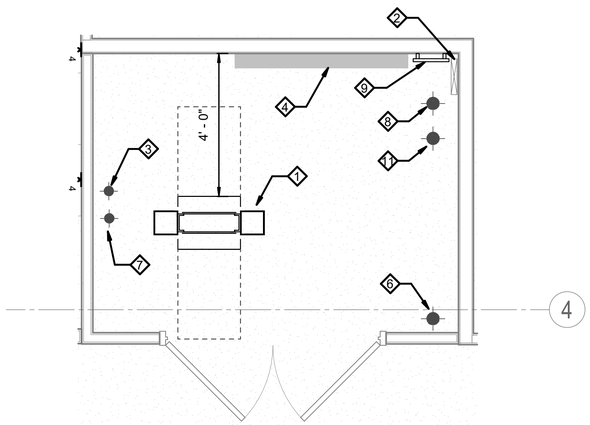
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WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	68 of 75
	TN 112 FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

KEY NOTES

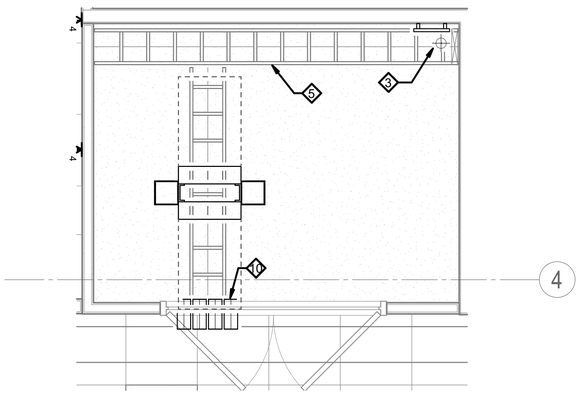
1. 45RU 2-POST RACK WITH (2) VERTICAL CABLE MANAGEMENT (OF/OI)
2. 12" X 2" VERTICAL CABLE LADDER.
3. 3" CONDUIT STUB UP FOR OCIO/OPS SHARED USE
4. RESERVED FOR WALL MOUNTED SECURITY EQUIPMENT.
5. 12" CABLE LADDER TRAY, 7-'6" AFF
6. TWO (2) 6" CORES ETR.
7. 3" CORE ETR.
8. 5" CORE ETR.
9. TELECOM GROUNDING BUSBAR, TGB
10. THREE (3) 4" EZ-PATH SERIES 44+ FIRE RATED-PATHWAY
11. 4" CORE ETR



A1 TN401EP

TELECOM ENLARGED PLAN - FOURTH FLOOR
NORTH LAN ROOM 400T-N

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



A6 TN401EP

TELECOM ENLARGED RCP - FOURTH FLOOR
NORTH LAN ROOM 400T-N

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

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0 1/2' 1' 1 1/2'
1 1/2"=1'-0"
GRAPHIC SCALE(S)

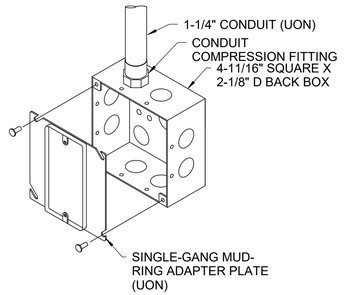
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04/18/25	FINAL CONSTRUCTION DOCS

REVISION # DATE	REVISION DESCRIPTION

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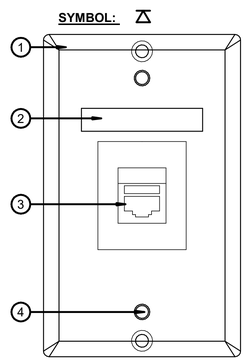
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	TELECOM – ENLARGED PLANS
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	69 OF 75
	TN 401 EP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



TELECOM BACK BOX AND CONDUIT ASSEMBLY

J1 TN501DT NTS



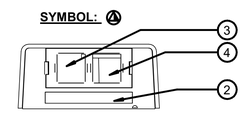
DETAIL NOTES:
A. TYPICAL ELEVATION 48" WHEN WALL MOUNTED UON.
B. SINGLE GANG BACKBOX, WITH SINGLE GANG MUD RING.
C. CABLING TO BE COLOR CODED AS INDICATED UNLESS OTHER COLOR SCHEME REQUIRED BY THE OWNER.

CABLE DESCRIPTION TYPE CABLE:
(1) 4-PAIR CATEGORY 6A UTP/CMP CABLE

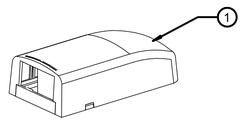
DETAIL KEY NOTES: (#)
1. SINGLE GANG METAL FACE PLATE
2. LABEL WITH CLEAR PLASTIC COVER
3. POSITION 1 - RJ45 JACK (YELLOW)
4. METAL MOUNTING LUGS FOR WALL PHONE

1-PORT PHONE DROP SET

F1 TN501DT NTS



FRONT VIEW



ISOMETRIC VIEW

1-PORT VERSION IS SIMILAR, BUT NOT SHOWN

DETAIL NOTES:
A. COORDINATE EXACT LOCATION OF WAP WITH OWNER.
B. INSTALL WAP BISCUIT, AND PROVIDE 6' OF CABLE SLACK.
C. INDEPENDENTLY SUPPORT BISCUIT ABOVE CEILING GRID.
D. WAP WILL BE PROVIDED BY OWNER.
E. CABLING TO BE COLOR CODED AS INDICATED.
F. PROVIDE (1) 10FT (MIN.) PLENUM RATED PATCH CORD

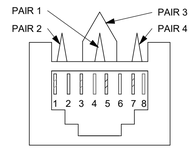
CABLE DESCRIPTION/TYPE:
(2) 4-PAIR CATEGORY 6A UTP/CMP CABLE

DETAIL KEY NOTES: (#)
1. TWO-PORT SURFACE MOUNT (BISCUIT) BOX (PLENUM RATED)
2. LABEL WITH CLEAR PLASTIC COVER. LOCATION AND SIZE VARYS BY MANUFACTUER)
3. RJ45 JACK (BLUE)
4. RJ45 JACK (BLUE)

2 PORT WAP BISCUIT BOX IN CEILING

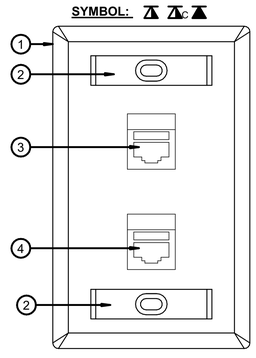
A1 TN501DT NTS

Pin	T568B Pair	10BASE-T 100BASE-TX\	1000BASE-T Signal ID		Wire T568B Color
1	2	TX+	DA+	tip	white/orange stripe
2	2	TX-	DA-	ring	orange solid
3	3	RX+	DB+	tip	white/green stripe
4	1	-	DC+	ring	blue solid
5	1	-	DC-	tip	white/blue stripe
6	3	RX-	DB-	ring	green solid
7	4	-	DD+	tip	white/brown stripe
8	4	-	DD-	ring	brown solid



CAT-6 TERMINATION DETAIL EIA-TIA-568B (TYPICAL)

J5 TN501DT NTS



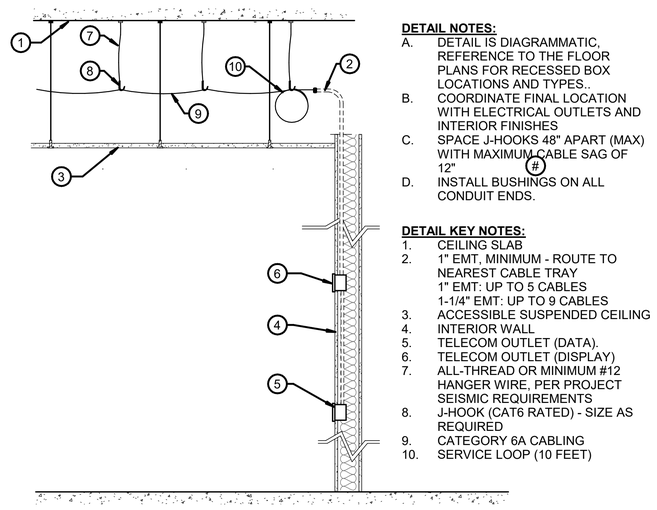
DETAIL NOTES:
A. SEE SYMBOL LIST FOR TYPICAL ELEVATION.
B. 5" SQUARE BACKBOX, WITH SINGLE GANG MUD RING, UON.
C. CABLING TO BE COLOR CODED AS INDICATED.
D. WHEN INSTALLED IN AREAS WITH HIGH END FINISHES COORDINATE THE COVER FINISH WITH THE INTERIOR DESIGNER PRIOR TO INSTALLATION.

CABLE DESCRIPTION/TYPE:
(2) 4-PAIR CATEGORY 6A UTP/CMP CABLE

DETAIL KEY NOTES: (#)
1. SINGLE GANG PLATE
2. LABEL WITH CLEAR PLASTIC COVER
3. POSITION 1 - RJ45 JACK (YELLOW)
4. POSITION 2 - RJ45 JACK (WHITE)

2-PORT TELECOM DROP SET

F5 TN501DT NTS

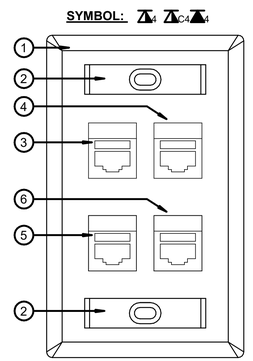


DETAIL NOTES:
A. DETAIL IS DIAGRAMMATIC, REFERENCE TO THE FLOOR PLANS FOR RECESSED BOX LOCATIONS AND TYPES..
B. COORDINATE FINAL LOCATION WITH ELECTRICAL OUTLETS AND INTERIOR FINISHES
C. SPACE J-HOOKS 48" APART (MAX) WITH MAXIMUM CABLE SAG OF 12" (#)
D. INSTALL BUSHINGS ON ALL CONDUIT ENDS.

DETAIL KEY NOTES:
1. CEILING SLAB
2. 1" EMT, MINIMUM - ROUTE TO NEAREST CABLE TRAY
   1" EMT: UP TO 5 CABLES
   1-1/4" EMT: UP TO 9 CABLES
3. ACCESSIBLE SUSPENDED CEILING
4. INTERIOR WALL
5. TELECOM OUTLET (DATA).
6. TELECOM OUTLET (DISPLAY)
7. ALL-THREAD OR MINIMUM #12 HANGER WIRE, PER PROJECT SEISMIC REQUIREMENTS
8. J-HOOK (CAT6 RATED) - SIZE AS REQUIRED
9. CATEGORY 6A CABLING
10. SERVICE LOOP (10 FEET)

TELECOM DROP SET INFRASTRUCTURE - ACCESSBILE CEIILING

A5 TN501DT NTS



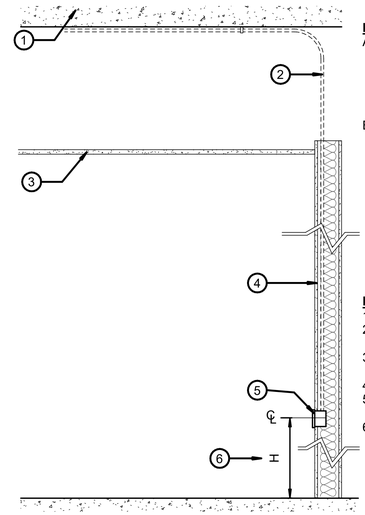
DETAIL NOTES:
A. SEE SYMBOL LIST FOR TYPICAL ELEVATION.
B. 5" SQUARE BACKBOX, WITH SINGLE GANG MUD RING, UON.
C. CABLING TO BE COLOR CODED AS INDICATED.
D. WHEN INSTALLED IN AREAS WITH HIGH END FINISHES COORDINATE THE COVER FINISH WITH THE INTERIOR DESIGNER PRIOR TO INSTALLATION.

CABLE DESCRIPTION/TYPE:
(4) 4-PAIR CATEGORY 6A UTP/CMP CABLE

DETAIL KEY NOTES: (#)
1. SINGLE GANG PLATE
2. LABEL WITH CLEAR PLASTIC COVER
3. POSITION 1 - RJ45 JACK (YELLOW)
4. POSITION 2 - RJ45 JACK (WHITE)
5. POSITION 3 - RJ45 JACK (YELLOW)
6. POSITION 4 - RJ45 JACK (WHITE)

4-PORT TELECOM DROP SET

F9 TN501DT NTS



DETAIL NOTES:
A. DETAIL IS DIAGRAMMATIC, REFERENCE TO THE FLOOR PLANS FOR OUTLET LOCATIONS AND TYPES.
B. IN AREAS WITH ACCESSIBLE SUSPENDED CEILINGS, J-HOOKS MAY BE USED IN LIEU OF CONDUIT, AS ILLUSTRATED IN DETAIL 3

DETAIL KEY NOTES: (#)
1. CEILING SLAB
2. 1-1/4" EMT - ROUTE TO NEAREST CABLE TRAY
3. HARD OR GYPSUM CEILING
4. INTERIOR WALL
5. WALL OUTLET WITH BACK BOX
6. INSTALLATION HEIGHT

TELECOM DROP SET INFRASTRUCTURE - INACCESSBILE CEILING

A9 TN501DT NTS

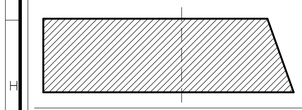
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Renovate 4E NMAL Office Suite

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KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
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REVISION # DATE	REVISION DESCRIPTION

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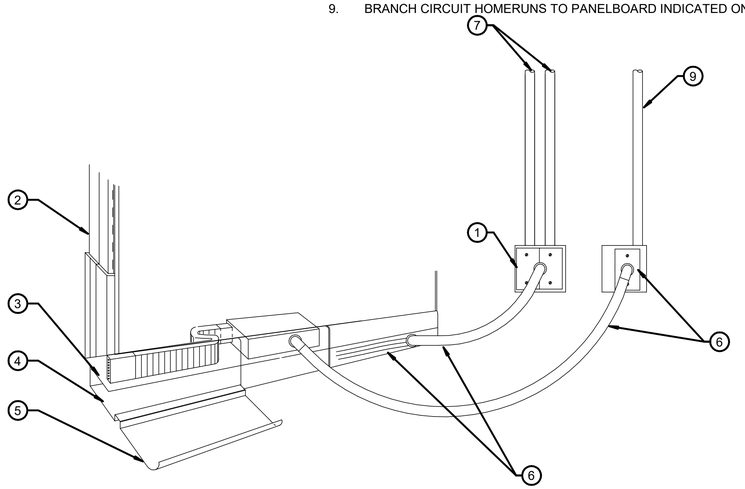
BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	TELECOM – DETAILS
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	70 OF 75
	TN501DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

DETAIL NOTES:

A. USE COMPRESSION TYPE COUPLINGS
B. INCLUDE BUSHINGS AND PULL-LINES IN ALL LOW-VOLTAGE CONDUITS.

DETAIL KEY NOTES: (#)

1. MODULAR FURNITURE ACCESS (MFA). INSTALL FLUSH WALL-MOUNTED 4-11/16" SQUARE x 2-1/8" DEEP BOX TO SERVE AS COMMUNICATIONS INFEED TO THE SYSTEMS FURNITURE RACEWAYS. INCLUDE DUAL-GANG REDUCER AND INSTALL HALF-SPLIT COVER PLATE HAVING 1-1/2" TO 2" RUBBER GROMMET OPENING. FIELD COORDINATE ELEVATION OF MFA TO SPECIFIC MANUFACTURER'S INFEED OPTIONS PER RECOMMENDATIONS FOR THE TYPE AND MODEL# OF FURNITURE TO BE INSTALLED. IF UNDETERMINED, INSTALL AT 18" AFF.
2. FURNITURE SYSTEM PANELS
3. METALLIC DIVIDER BETWEEN ELECTRICAL AND TELECOM RACEWAY COMPARTMENTS
4. COMMUNICATIONS CABLE RACEWAY
5. HINGED COVER (SHOWN OPENED)
6. INSTALL CABLING THROUGH FURNITURE'S COMMUNICATIONS RACEWAY SYSTEM. INCLUDE 1-1/4" OR LARGER SPLIT-LOOM FLEXDUCT OR SPIRAL WRAP TO PROTECT INFEED PORTION OF EXPOSED CABLE BUNDLES. COORDINATE WAO FACEPLATE SIZES AND STYLES WITH AVAILABLE COMMUNICATION RECEPTACLE KNOCKOUTS PER BASELINE OR BELTLINE PREFERENCES.
7. INCLUDE (1 OR 2) 1-1/4" EMPTY CONDUITS FROM J-BOX TO NACC AS FOLLOWS:
   A. IN FIXED CEILINGS AND NON-ACCESSIBLE AREAS, HORIZONTALLY EXTEND CONDUITS TO CABLE TRAY. INCLUDE BUSHING, AND BOND CONDUITS TO TRAY.
   B. ONE CONDUIT TO SERVE CLUSTERS CONSISTING OF 1-4 WAO'S, BASED ON A MAX OF 2 DROPS PER WAO.
   C. TWO CONDUITS TO SERVE CLUSTERS CONSISTING OF 5-6 WAO'S, BASED ON A MAX OF 2 DROPS PER WAO.
   D. ADD EXTRA MFA WHERE DROPS EXCEED 12, OR WAO'S EXCEEDS 6.
8. ELECTRICAL POWER CONNECTIONS AND WHIP ASSEMBLY
9. BRANCH CIRCUIT HOMERUNS TO PANELBOARD INDICATED ON DIV-26 DRAWINGS



MODULAR FURNITURE ACCESS (MFA) FEED-THRU DETAIL

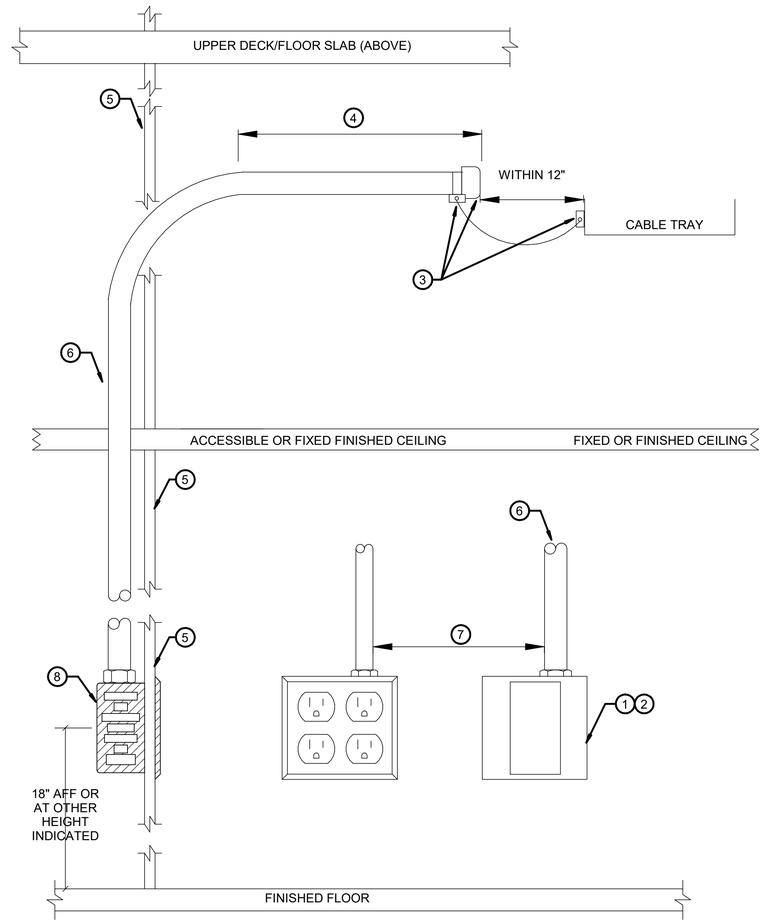
1 TN502DT NTS

DETAIL NOTES:

A. USE COMPRESSION TYPE COUPLINGS
B. INSTALL BOND BUSHINGS ON ALL METAL CONDUIT ENDS
C. CONDUIT AND J-BOXES SHALL BE INSTALLED ACCORDING TO THE FOLLOWING
   a. (1) 1-1/4" MINIMUM TRADE SIZE CONDUIT STUB TO WITHIN 12" OF CABLE TRAY.
   b. 4-11/16" SQUARE x 2-1/8" DEEP WALL BOX WITH SINGLE-GANG MUD-RING FOR LOW-VOLTAGE CABLES (UON)
D. ELECTRICAL OUTLET SHOWN FOR PROXIMITY INFORMATION ONLY

DETAIL KEY NOTES: (#)

1. TYPICAL LOW-VOLTAGE WAO ASSEMBLY
2. (1) 4-11/16" SQUARE x 2-1/8" DEEP WALL-BOX WITH SINGLE-GANG MUD-RING
3. BOND BUSHINGS ON ALL METAL CONDUIT ENDS. INCLUDE #6 AWG GREEN BONDING CONDUCTOR TO GROUND LUG AT EACH LOCATION.
4. EXTEND CONDUITS TO WITHIN 12" OF NEAREST CORRIDOR CABLE TRAY SERVING THE TR ZONE AREA. CODUITS SHALL NOT OVERHANG BEYOND SIDE-RAIL OF TRAY.
5. DRYWALL
6. (1) 1-1/4" EMT CONDUIT
7. MAINTAIN MINIMUM 2" DISTANCE SEPARATION BETWEEN HIGH- AND LOW-VOLTAGE CONDUITS WHEN RUNNING PARALLEL.
8. JUNCTION BOX



TELECOM OUTLET BACK BOX DETAIL

2 TN502DT NTS

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Renovate 4E NMAL Office Suite

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KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
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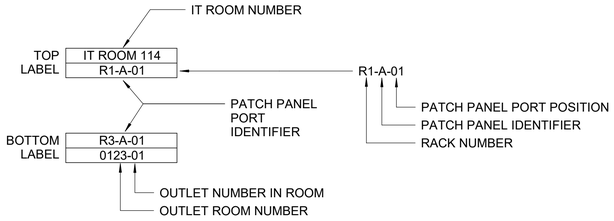
REVISION # DATE	REVISION DESCRIPTION

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Washington, DC 20024-2520

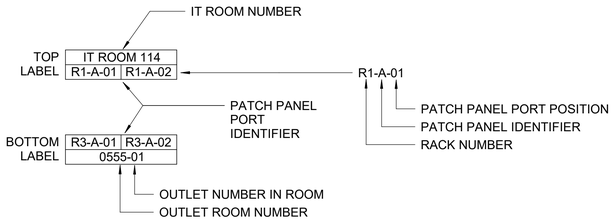
BUILDING NAME / ADDRESS	CAPITAL GALLERY ADMIN HQ, EAST 600 MARYLAND AVE, SW
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SHEET NO.	71 OF 75
	TN502DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

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4 2-PORT WALL PLATE LABELNG

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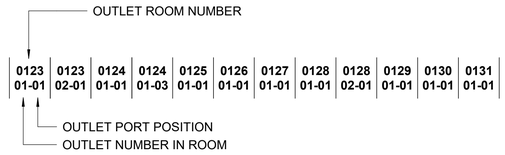
5 4-PORT WALL PLATE LABELNG

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DETAIL NOTES:

A. PRINT PATCH PANEL LABEL USING LASER PRINTER ON HEAVY CARD STOCK.

B. LABEL EACH PATCH PANEL WITH PATCH PANEL'S UNQIUE LETTER USING A PLASTIC INSCRIBED PLATE WITH BLACK BACKGROUND AND WHITE LETTERING. ATTACH TO PATCH PANEL USING SELF-ADHESIVE FROM PLATE OEM. MIN SIZE 3/4" HIGH X 3/4" WIDE.



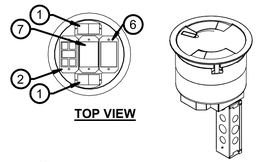
(HALF OF TYPICAL 24 PORT LABEL STRIP SHOWN)

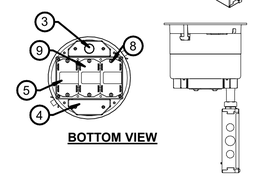
7 TYPICAL RJ45 PATCH PANEL LABELNG

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SHEET NOTES

1. POKE THRUS AND FLOOR BOXES, INCLUDING TRIM FLANGE, SHALL MEET ADA ACCESSIBILITY GUIDELINES AS IT PERTAINS TO ADA STANDARD 4.5, WHICH ADDRESSES CHANGES IN FLOOR AND GROUND SURFACE LEVELS.
2. POKE THRU, FLOOR BOXES, AND ASSOCIATED COVERS/TRIM FLANGES PROVIDED BY DIV 26.
3. ELECTRICAL PROVIDED BY DIV 26.
4. COORDINATE COVER COLOR WITH ARCHITECT, PROVIDED BY DIV 26.
5. LABEL PANELS WITH APPROPRIATE ROOM NUMBER AND PANEL NUMBER USING PLASTIC ENGRAVED LABELS.
6. REFER TO ELECTRICAL DRAWINGS FOR POKE THRU AND FLOOR BOX REQUIREMTENTS.
7. REFER TO ELECTRICAL DRAWINGS FOR POKE THRU AND FLOOR BOX CONDUIT REQUIREMENTS.
8. REFER TO AV DRAWINGS FOR POKE THRU AND FLOOR BOX REQUIREMENTS.
9. REFER TO AV DRAWINGS FOR POKE THRU AND FLOOR BOX CONDUIT REQUIREMENTS.





SYMBOL: PT-1 PT-2

DETAIL NOTES:

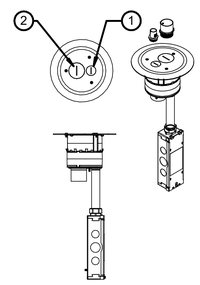
A. LEGRAND 8AT POKE THRU DEVICE.
B. 8" POKE THRU
C. 8" CORE HOLE SIZE
D. 9-1/4" DIAMETER COVER
E. 16-3/4" DEEP
F. UL 2-HOUR RATED

DETAIL KEY NOTES: (#)

1. DUPLEX 5-20R ELECTRICAL RECEPTACLE.
2. 4-PORT KEYSTONE DEVICE MOUNTING PLATE WITH LABEL - RESERVED FOR TELECOM DROPS. LEGRAND 810J4LB.
3. BOTTOM HOUSING ASSEMBLY - SEE ELECTRICAL DRAWINGS FOR DETAILS AND CONDUIT REQUIREMENTS.
4. BOTTOM HOUSING ASSEMBLY - HALF-GANG BLANK. PROVIDE TUNNEL CABLING BETWEEN DUPLEX RECEPTACLES
5. BOTTOM HOUSING ASSEMBLY - MIN 1" CONDUIT TO NACC OR IT ROOM. 1100CHA (1") OR 1125CHA (1-1/4")
6. SEE AV DRAWINGS
7. SEE AV DRAWINGS
8. SEE AV DRAWINGS
9. SEE AV DRAWINGS

1 PT-1, PT-2, PT-3, AND PT-4 - 8" POKE THRU DETAIL

TN503DT NTS



SYMBOL: PT-FF

DETAIL NOTES:

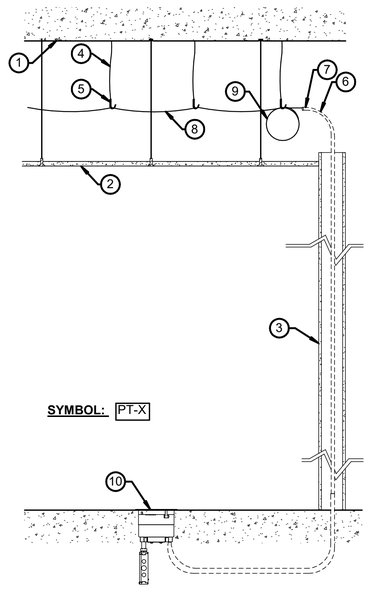
A. LEGRANG 4FFATC15
B. 4" POKE THRU
C. 4" CORE HOLE SIZE
D. 8-1/4" DIAMETER COVER
E. 16-9/16" DEEP
F. POKE THRU PROVIDED BY DIV 26.
G. ELECTRICAL PROVIDED BY DIV 26.

DETAIL KEY NOTES : (#)

1. 3/4" TRADE SIZE EMT CONDUIT FOR ELECTRICAL. SEE DIVISION 26 SPECS AND DRAWINGS.
2. 1-1/2" TRADE SIZE EMT CONDUIT FOR TELECOM.

2 PT-FF - 4" FURNITURE FEED POKE THRU

TN503DT NTS



SYMBOL: PT-X

DETAIL NOTES:

A. DETAIL IS DIAGRAMMATIC.
B. REFER TO FLOOR PLANS FOR POKE-THRU LOCATIONS AND TYPE.
C. COORDINATE FINAL LOCATION WITH ARCHITECT
D. SPACE J-HOOKS 48" APART (MAX) WITH MAXIMUM CABLE SAG OF 12"
E. IN AREAS WITH GYPSUM OR HARD CEILING, EXTEND EMT CONDUIT TO NACC WITH PATHWAY TO IT ROOM.

DETAIL KEY NOTES: (#)

1. CEILING SLAB
2. ACCESSIBLE ACT SUSPENDED CEILING
3. WALL
4. ALL-THREAD OR MINIMUM #12 HANGER WIRE, PER PROJECT SEISMIC REQUIREMENTS
5. J-HOOK (CAT6 RATED) - SIZE AS REQUIRED
6. EMT CONDUIT DEDICATED TO TELECOM CABLING TO NACC. SEE SYMBOL LIST FOR REQUIREMENTS BY TYPE
7. CONDUIT BUSHING.
8. CATEGORY CABLING
9. SERVICE LOOP (10 FEET MIN.)
10. RECESSED POKE THRU WITH COVER PLATE. MOUNT FLUSH WITH FINISHED FLOOR.

3 POKE THRU DETAIL (TYPICAL)

TN503DT NTS

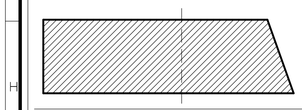
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KEY PLAN

GRAPHIC SCALE(S)

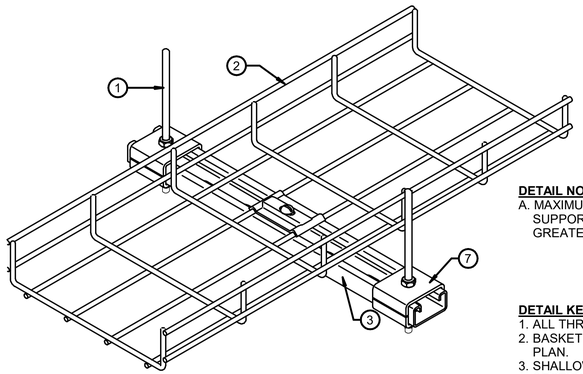
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REVISION # DATE	REVISION DESCRIPTION

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600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

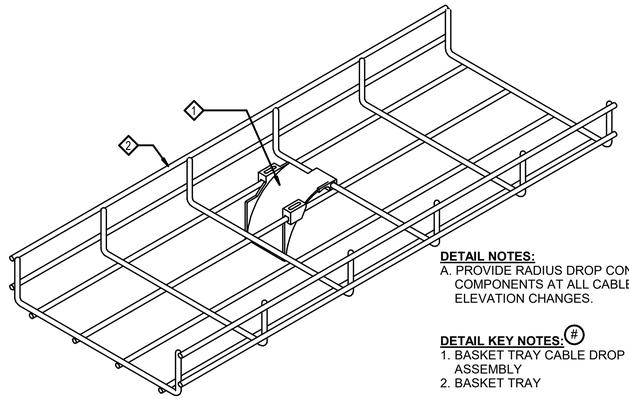
BUILDING NAME	CAPITAL GALLERY ADMIN HQ, EAST
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	RENOVATE 4E NMAL OFFICE SUITE
SI PROJECT NUMBER	2566904
A/E PROJECT NUMBER	ASG 3000738.00
DRAWING TITLE	TELECOM – DETAILS
WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	72 OF 75
	TN503DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



DETAIL NOTES:
A. MAXIMUM DISTANCE BETWEEN SUPPORTS SHALL BE NO GREATER THAN 5'-0"

DETAIL KEY NOTES: (#)
1. ALL THREAD.
2. BASKET TRAY SIZED PER PLAN.
3. SHALLOW SUPPORT CHANNEL SECTION.
4. ASSEMBLY HARDWARE.

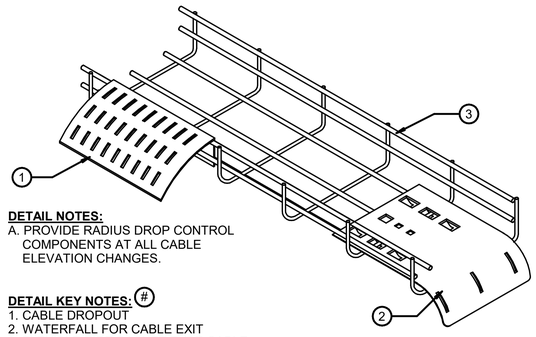
J1 BASKET TRAY TRAPEZE ASSEMBLY
J1 / TN504DT
SCALE =NTS



DETAIL NOTES:
A. PROVIDE RADIUS DROP CONTROL COMPONENTS AT ALL CABLE ELEVATION CHANGES.

DETAIL KEY NOTES: (#)
1. BASKET TRAY CABLE DROP OUT ASSEMBLY
2. BASKET TRAY

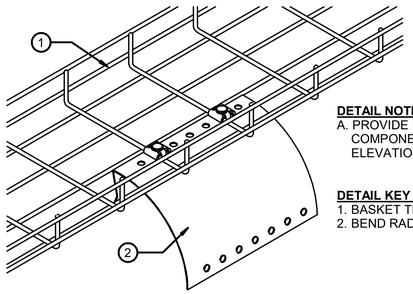
J5 BASKET TRAY INSIDE DROP-OUT
J5 / TN504DT
SCALE =NTS



DETAIL NOTES:
A. PROVIDE RADIUS DROP CONTROL COMPONENTS AT ALL CABLE ELEVATION CHANGES.

DETAIL KEY NOTES: (#)
1. CABLE DROPOUT
2. WATERFALL FOR CABLE EXIT
3. FLEXIBLE EIRE BASKET-TYPE CABLE TRAY

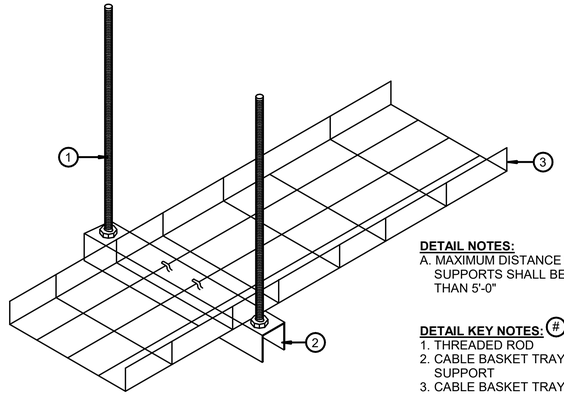
J9 BASKET TRAY EXIT DETAIL
J9 / TN504DT
SCALE =NTS



DETAIL NOTES:
A. PROVIDE RADIUS DROP CONTROL COMPONENTS AT ALL CABLE ELEVATION CHANGES.

DETAIL KEY NOTES: (#)
1. BASKET TRAY
2. BEND RADIUS WATERFALL BRACKET

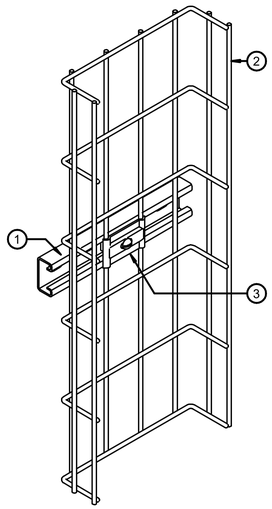
D1 BASKET TRAY DROP OUT DETAIL
D1 / TN504DT
SCALE =NTS



DETAIL NOTES:
A. MAXIMUM DISTANCE BETWEEN SUPPORTS SHALL BE NO GREATER THAN 5'-0"

DETAIL KEY NOTES: (#)
1. THREADED ROD
2. CABLE BASKET TRAY TRAPEZE SUPPORT
3. CABLE BASKET TRAY

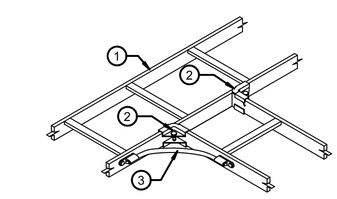
D5 BASKET TRAY MOUNTING DETAIL
D5 / TN504DT
SCALE =NTS



DETAIL NOTES:
A. MAXIMUM DISTANCE BETWEEN SUPPORTS SHALL BE NO GREATER THAN 5'-0"

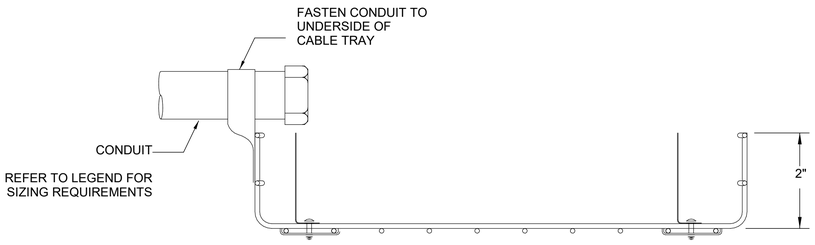
DETAIL KEY NOTES (#)
1. SHALLOW SUPPORT CHANNEL MOUNTED TO WALL
2. BASKET TRAY
3. BASKET TRAY HOLD DOWN PLATE

D9 VERTICAL BASKET ATTACHMENT
D9 / TN504DT
SCALE =NTS



DETAIL KEY NOTES: (#)
1. CABLE TRAY
2. JUNCTION SPLICE KIT
3. #6 AWG BONDING JUMPER

A1 CABLE RUNWAY BONDING
A1 / TN504DT
SCALE =NTS



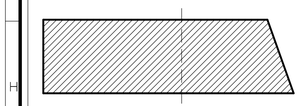
A5 CONDUIT TO WIREMESH (BASKET) TRAY TRANSITION
A5 / TN504DT
SCALE =NTS

CG

Renovate 4E NMAL Office Suite

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KEY PLAN

GRAPHIC SCALE(S)

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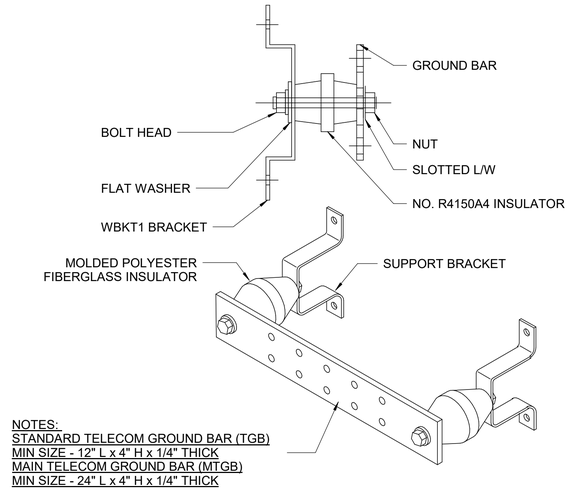
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DRAWING TITLE	TELECOM – DETAILS
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SHEET NO.	73 OF 75
	TN 504 DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

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NOTES:
STANDARD TELECOM GROUND BAR (TGB)
MIN SIZE - 12" L x 4" H x 1/4" THICK
MAIN TELECOM GROUND BAR (MTGB)
MIN SIZE - 24" L x 4" H x 1/4" THICK

NOTE:
1. PROVIDE GROUND BUS WHERE INDICATED ON TN-DETAIL DRAWINGS
2. ATTACH ALL BONDING CONDUCTORS W/ APPROPRIATE 2-HOLE COMPRESSION-TYPE FITTINGS
3. LABEL BUSBAR AND ALL CONDUCTORS IN ACCORDANCE WITH W/TIA-607C AND TIA-606C
4. TIE TO BUILDING'S MAIN ELECTRICAL SERVICE GROUND WITH CONTINUOUS GREEN BONDING CONDUCTOR, SIZED PER CHART IN DETAIL-4.
5. TIE TO DEDICATED PANEL GROUND (INTERNAL TO COMM CLOSET) WITH MINIMUM #6 AWG GREEN BONDING CONDUCTOR
6. SEE SPEC SECTION 270526 FOR ADDITIONAL INFORMATION

H1 TN505DT TELECOM BUSBAR DETAIL

SCALE =NTS

TABLE 1 - TBB/BCC CONDUCTOR SIZE VS LENGTH	
TBB/BBC LINEAR LENGTH M (FT)	CONDUCTOR SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14 - 20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 KCMIL
38 - 46 (126 - 150)	300 KCMIL
46 - 53 (151 - 175)	350 KCMIL
53 - 76 (176 - 250)	500 KCMIL
76 - 91 (251 - 300)	600 KCMIL
GREATER THAN 91 (301)	750 KCMIL

H7 TN505DT TELECOM BONDING CONDUCTOR SIZING

SCALE =NTS

DETAIL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL GROUND LUG KIT. INSTALL THE GROUND LUG AT A CONVENIENT LOCATION AT THE TOP OR BOTTOM OF THE RACK, USING AN EXISTING HOLE IN THE SIDE OR BACK OF THE RACK. IF THERE IS NO CONVENIENT HOLE, DRILL AN 8 mm (5/16 IN.) HOLE IN THE SIDE OR BACK OF THE RACK.

NOTE: THE TOP OR BOTTOM MOUNTING LOCATION SHOULD BE CHOSEN SO THAT THE GROUNDING WIRE TAKES THE SHORTEST ROUTE TO THE GROUND POINT.

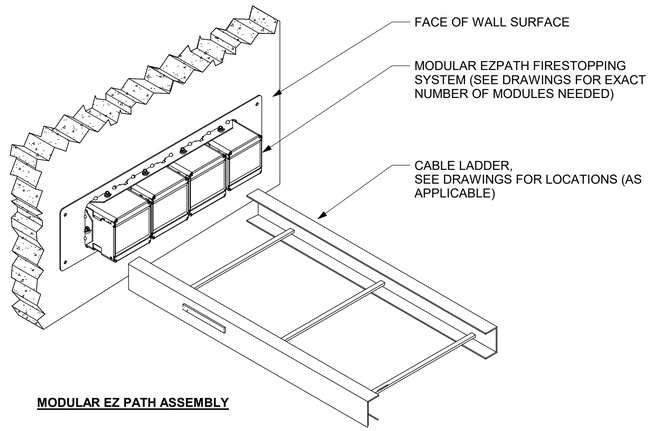
INSTALL THE LUG AS SHOWN. THE STARWASHERS MUST CONTACT THE LUG ON ONE SIDE AND THE MOUNTING RAIL ON THE OTHER SIDE (THE STARWASHERS MUST PIERCE ANY COATING ON THE RACK).

2. CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL A MIN #6-AWG GREEN OR GREEN/YELLOW, INSULATED COPPER WIRE FROM THE RACK GROUND LUG TO THE NEAREST SUITABLE GROUND POINT AS DESCRIBED ABOVE. ACTUAL WIRE SIZE SHALL BE BASED ON PHYSICAL LENGTH OF CONDUCTOR'S LENGTH AS SHOWN IN TABLE 1.

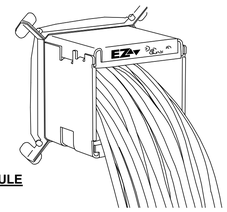
NOTE: INSTALL ONLY ONE GROUND LUG ON THE RACK.

A1 TN505DT TELECOM RACK GROUNDING DETAIL

SCALE =NTS



MODULAR EZ PATH ASSEMBLY



CABLING NOT TO EXCEED 40% FILL RATIO

SINGLE EZ PATH MODULE

A7 TN505DT EZ-PATH WALL PENETRATION

SCALE =NTS

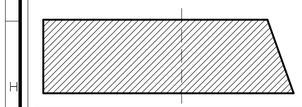
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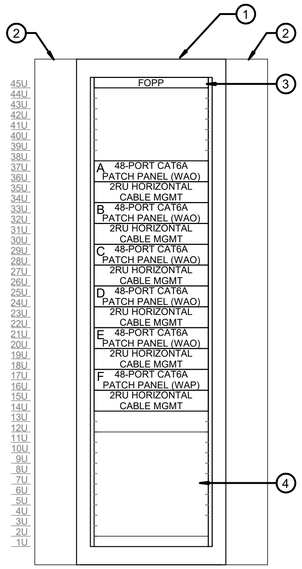
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WORKING STAFF	DWE (DESIGNED BY) / DWE (DRAWN BY) / JDC (CHECKED BY)
SHEET NO.	74 of 75
	TN 505 DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)



DETAIL NOTES:

A. ALL RACKS, PANELS, AND ASSOCIATED CABLING AND HARDWARE PROVIDED (FURNISHED AND INSTALLED) BY OCIO
B. ALL ACTIVE EQUIPMENT PROVIDED BY OCIO
C. FLOOR MOUNTED UPS PROVIDED BY OCIO.

DETAIL KEY NOTES:

1. 45RU 2-POST RACK
2. VERTICAL CABLE MANAGEMENT
3. FIBER OPTIC PATCH PANEL
4. CISCO 9407 (10RU) NETWORK SWITCH PROVIDED BY OCIO

H1
TN506DT

EAST TOWER - 400T-N RACK ELEVATION

SCALE =NTS

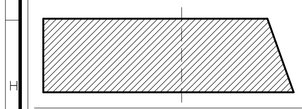
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	TN 506 DT (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)