REFURBISH ELEVATORS AND REPLACE CONTROLS

FARGO VA HEALTH CARE SYSTEM
DEPARTMENT OF VETERAN'S AFFAIRS
2101 ELM STREET
FARGO, NORTH DAKOTA 58102

PROJECT NO. 437-22-101

VA | U.S DEPARTMENT OF VETERAN'S AFFAIRS
VETERAN'S HEALTH ADMINISTRATION

Revisions:	Date

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Drawing Title: COVER SHEET
Approved: Project Director: FARGO VAMC
Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS
Location: 2101 ELM STREET FARGO, ND 58102
Date: 12.20.22
Checked: JS
Drawn: JE
Project Number: 437-22-101
Building Number: 1,9,46
Drawing Number: G0.00
Dwg. 1 of 41

Office of Construction and Facilities Management
Department of Veterans Affairs

5/11/2023 8:22:01 AM

VA FORM 08-6231

one foot = one inch
one foot = three inches

one and one half inches = one foot

one foot one inch = one foot

three quarters inch = one foot

one half inch = one foot

three eighths inch = one foot

one quarter inch = one foot

one eighth inch = one foot

5/11/2023 8:33:04 AM

DRAWING ABBREVIATIONS

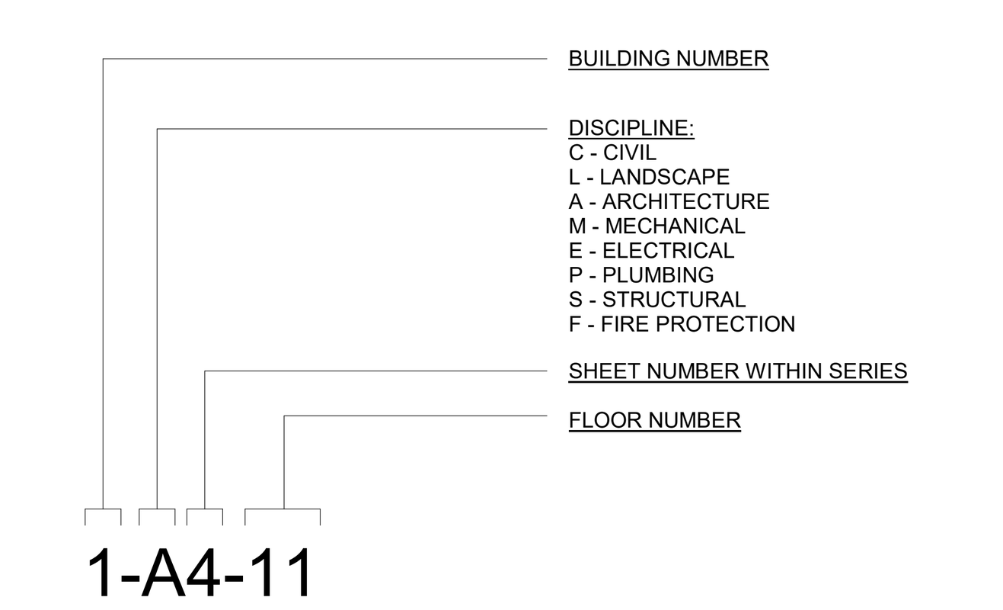
A	--------------------
A LABEL	CLASS A DOOR
A/C	AIR CONDITION
A/C UNIT	AIR CONDITIONING UNIT
A/E	ARCHITECT/ENGINEER
AB	ANCHOR BOLT
ACC	ACCESSIBLE
ACS	AUTOMATIC CONTROL SYSTEM
ACS DR	ACCESS DOOR
ACS PNL	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
ADMIN	ADMINISTRATION
AFC	ABOVE FINISHED COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AGGR	AGGREGATE
AHU	AIR HANDLING UNIT
AIB	AIR INFILTRATION BARRIER
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZE
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATE
AR	AS REQUIRED
ARCH	ARCHITECT
ASC	ABOVE SUSPENDED CEILING
ASSY	ASSEMBLY
ATC	ACOUSTICAL TILE CEILING
AVG	AVERAGE
AW	ARCHITECTURAL WOODWORK
AWT	ACOUSTICAL WALL TREATMENT
B	--------------------
B LABEL	CLASS B DOOR
BALC	BALCONY
BB	BASEBOARD
BC	BOOKCASE
BD	BOARD
BDRY	BOUNDARY
BFF	BELOW FINISH FLOOR
BHMA	BUILDER'S HARDWARE MANUFACTURER'S ASSOCIATION
BLDG	BUILDING
BLKG	BLOCKING
BN	BULLNOSE
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BP	BUILDING PAPER
BRKT	BRACKET
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
C	--------------------
C CONC	CAST CONCRETE
C LABEL	CLASS C DOOR
CAB	CABINET
CATW	CATWALK
CAV	CAVITY
CBB	CEMENTITIOUS (BACKER) BOARD
CD	CONSTRUCTION DOCUMENTS
CDW	CHILLED DRINKING WATER
CEM PLAS	CEMENT PLASTER
CF	CONTRACTOR FURNISHED
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
CFE	CONTRACTOR FURNISHED EQUIPMENT
CFLG	COUNTERFLASHING
CFM	CUBIC FEET PER MINUTE
CFMF	COLD-FORMED METAL FRAMING
CFS	CUBIC FEET PER SECOND
CG	CORNER GUARD
CI	CAST IRON
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLG DIFF	CEILING DIFFUSER
CLG HT	CEILING HEIGHT
CLL	COLUMN LINE
CLO	CLOSET
CLR	COLOR
CLRM	CLASSROOM
CMU	CONCRETE MASONRY UNIT
CNDS	CONDENSATE
CDR	CARD READER
CO	CLEANOUT
COL	COLUMN
COMM	COMMUNICATION
CONC	CONCRETE
CONC FLR	CONCRETE FLOOR
CONF	CONFERENCE
CONT	CONTINUE
COORD	COORDINATE
CORR	CORRIDOR
CP	CONCRETE PIPE
CPT	CARPET
CR	CONTROL ROOM
CS	CAST STONE
CSWK	CASEWORK
CT	CERAMIC TILE
CTB	CERAMIC TILE BASE
CTF	CERAMIC TILE FLOOR
CTR	CENTER
CU FT	CUBIC FEET
CW	CASEMENT WINDOW
D	--------------------
D	DEPTH
D LABEL	CLASS D DOOR
DBL	DOUBLE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DIR	DIRECTION
DIST	DISTANCE
DOC	DOCUMENT
DR	DOOR
DS	DOWNSPOUT
E	--------------------
E LABEL	CLASS E DOOR
EA	EACH
EF	EACH FACE
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
ES	EACH SIDE
EL	ELEVATION
ELEV	ELEVATOR
ENTR	ENTRANCE
EPS	EXPANDED POLYSTYRENE BOARD
EQ	EQUAL
EWC	ELECTRIC WATER COOLER
EXP	EXPOSED
EXT	EXTERIOR

H	------------
HB	HOSE BIBB
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HARDWARE
HDWD	HARDWOOD
HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
HM	HOLLOW METAL
HMD	HOLLOW METAL DOOR
HORIZ	HORIZONTAL
HT	HEIGHT
HYDR	HYDRAULIC
F	--------------------
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FAS BD	FASCIA BOARD
FC BRK	FACE BRICK
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FED	FEDERAL
FF	FINISH FACE
FF EL	FINISH FLOOR ELEVATION
FF INSUL	FOIL BACKED INSULATION
FGL	FIBERGLASS
FH	FIRE HOSE
FHP	FULL HEIGHT PARTITION
FIN	FINISH
FIN BS	FINISH BOTH SIDES
FIN FLR	FINISH FLOOR
FIN GR	FINISH GRADE
FIXT	FIXTURE
FLDG	FOLDING
FLEX	FLEXIBLE
FLG	FLOORING
FLMT	FLUSH MOUNT
FLR	FLOOR
FM	FACTORY MUTUAL
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FR	FIRE RESISTANT
FRG	FIBER REINFORCED GYPSUM
FRMG	FRAMING
FRP	FIBERGLASS REINFORCED PLASTIC
FRTW	FIRE RETARDANT TREATED WOOD
FS	FEDERAL SPECIFICATION
FSTNR	FASTENER
FT	FEET
FTG	FOOTING
FWC	FABRIC WALLCOVERING
G	--------------------
G	NATURAL GAS
GALV	GALVANIZED
GB	GRAB BAR
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GFGI	GOVERNMENT INSTALLED FURNISHED INSTALLED BY GOVERNMENT
GFRG	GLASS-FIBER-REINFORCED GYPSUM
GLZ	GLAZING
GR FL	GROUND FLOOR
GUT	GUTTER
GYP BD	GYPSUM BOARD
GYP PL	GYPSUM PLASTER
H	--------------------
HB	HOSE BIBB
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HARDWARE
HDWD	HARDWOOD
HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
HM	HOLLOW METAL
HMD	HOLLOW METAL DOOR
HORIZ	HORIZONTAL
HT	HEIGHT
HYDR	HYDRAULIC
I	--------------------
IBC	INTERNATIONAL BUILDING CODE
INSUL	INSULATION
INT	INTERIOR
ILO	IN LIEU OF
J	--------------------
JAN	JANITOR
K	--------------------
KPD	KEYPAD
KIT	KITCHEN
KPL	KICKPLATE
L	--------------------
LAM	LAMINATE
LAV	LAVATORY
LBR	LUMBER
LBS	POUND
LDG	LANDING
LF	LINEAR FEET (FOOT)
LIB	LIBRARY
LIN	LINEAR
LKR	LOCKER
LOC	LOCATION
LT	LIGHT
LVDR	LOUVER DOOR
LVR	LOUVER
M	--------------------
MACH RM	MACHINE ROOM
MATL	MATERIAL
MAX	MAXIMUM
MC	MOISTURE CONTENT
MD	METAL DECK
MECH	MECHANICAL
MECH RM	MECHANICAL ROOM
MEMB	MEMBRANE
MF	MILL FINISH
MFR	MANUFACTURER
MID	MIDDLE
MIL STD	MILITARY STANDARD
MIN	MINIMUM, MINUTE
MIRR	MIRROR
MISC	MISCELLANEOUS
MLDG	MOLDING (MOULDING)
MO	MASONRY OPENING
MOD	MODIFY
MB	MOISTURE BARRIER
MTG	MOUNTING
MTL	METAL
MVBL	MOVABLE
MWP	MEMBRANE WATERPROOFING
N	--------------------
N	NORTH
NA	NOT APPLICABLE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NP	NO PAINT
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE

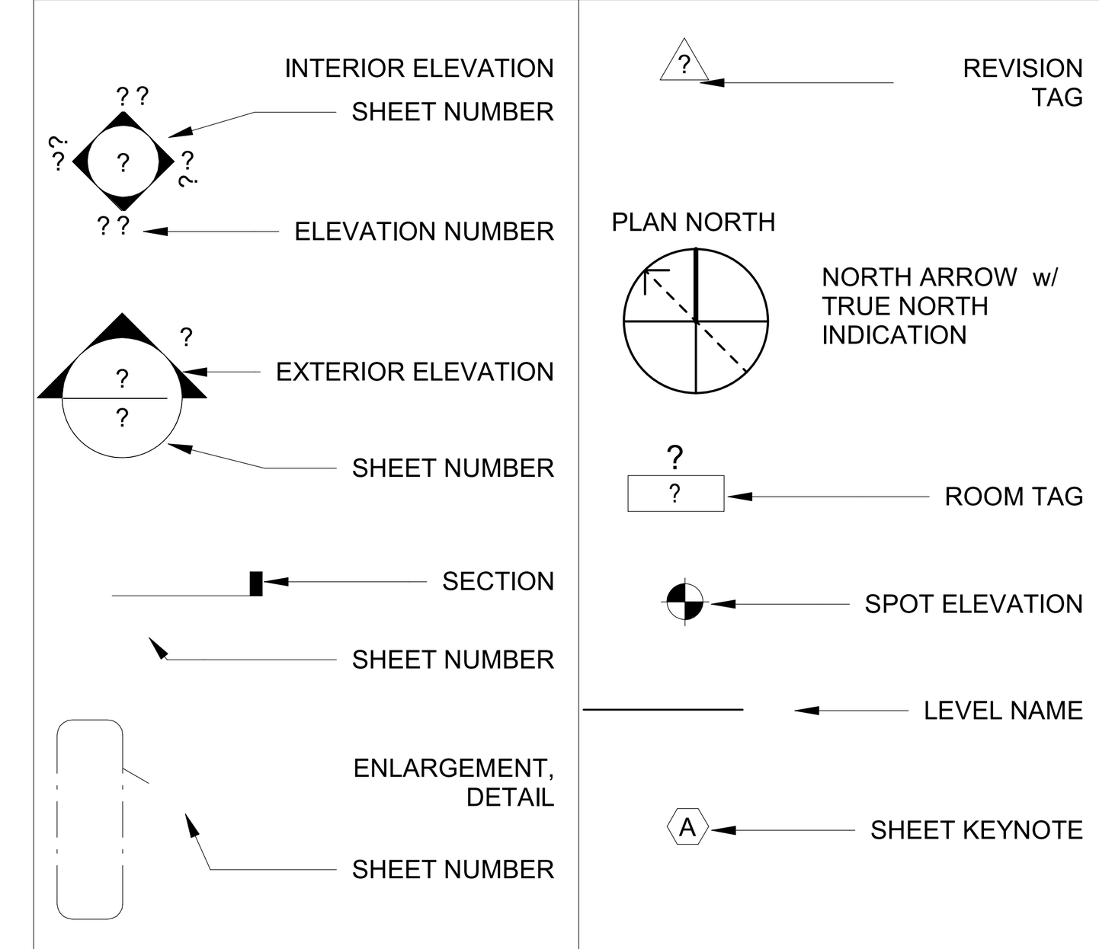
O	-------------------
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFD	OVERFLOW DRAIN
OFF	OFFICE
OGL	OBSCURE GLASS
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OPQ	OPAQUE
OWSJ	OPEN WEB STEEL JOIST
OPR	OPERABLE
ORD	OVERFLOW ROOF DRAIN
ORIG	ORIGINAL
P	--------------------
PA	PUBLIC ADDRESS
PAR	PARAPET
PAT	PATTERN
PB	PULL BOX
PBD	PARTICLEBOARD
PCC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PCT	PERCENT
PERF	PERFORATED
PERIM	PERIMETER
PH	PHASE
PIL	PILASTER
PL	PROPERTY LINE
PL GL	PLATE GLASS
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLG	PILING
PLYWD	PLYWOOD
PNL	PANEL
PP PL	PUSH/PULL PLATE
PR	PAIR
PRCST	PRECAST
PRKG	PARKING
PS CON	PRESTRESSED CONCRETE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTDR	PAPER TOWEL DISPENSER AND RECEPTACLE
PTN	PARTITION
PWR	POWER
Q	--------------------
QT	QUARRY TILE
QTY	QUANTITY
R	--------------------
RB	RESILIENT BASE
RBM	REINFORCED BRICK MASONRY
RBR	RUBBER
RC	REINFORCED CONCRETE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RDG INS	RIGID INSULATION, SOLID
REC	RECESSED
REF	REFERENCE
REM	REMOVABLE
REP	REPAIR
REPL	REPLACE
REQ	REQUIRE
REQD	REQUIRED
RESIL	RESILIENT
REST	RESTROOM
RF	RESILIENT FLOORING
RFG	ROOFING
RH	ROOF HATCH
RHR	RIGHT HAND REVERSE
RL	ROOF LEADER
RLG	RAILING
RM	ROOM
RO	ROUGH OPENING
RSD	ROLLING STEEL DOOR
RV	ROOF VENT
RVL	REVEAL
S	--------------------
SB	SPLASH BLOCK
SCHED	SCHEDULE
SD	SMOKE DETECTOR
SF	SQUARE FOOT (FEET)
SFTWD	SOFTWOOD
SGL	SINGLE
SHT MTL FLASH	SHEET METAL (FLASHING)
SHTHG	SHEATHING
SHV	SHELVING
SIM	SIMILAR
SJ	SCORED JOINT
SKLT	SKYLIGHT
SLNT	SEALANT
SMK	SMOKE
SMLS	SEAMLESS
SP EL	SPOT ELEVATION
SPEC	SPECIFICATION
SQ	SQUARE
SQ IN	SQUARE INCH
SQ YD	SQUARE YARD
SST	STAINLESS STEEL
ST	STAIRS
STD	STANDARD
STL JST	STEEL JOIST
STL RF DK	STEEL ROOF DECK
STOR	STORAGE
STR	STRINGERS
STRB/HRN	STROBE/HORN
SUB FL	SUBFLOOR
SV	SHEET VINYL
SW	SIDEWALK
T	--------------------
T	TREAD
T/S	TUB/SHOWER
TC	TERRA COTTA
TD	TRENCH DRAIN
TEL	TELEPHONE
TEMP	TEMPORARY
TER	TERRAZZO
TFF	TOP OF FINISH FLOOR
THK	THICKNESS
TK BD	TACKBOARD
TMPD GL	TEMPERED GLASS
TN	TRUE NORTH
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOPO	TOPOGRAPHY
TOS	TOP OF SLAB
TRANS	TRANSOM
TRTD	TREATED
TV	TELEVISION

DRAWINGS SYMBOLS

NUMBERING SYSTEM:



ANNOTATION CALLOUTS/DRAWING SYMBOLS



MATERIAL LEGEND

PLAN AND SECTION

- ▩ EXISTING TO REMAIN
- ▧ BRICK/MASONRY
- ▨ CONCRETE MASONRY
- ⊠ WOOD (ROUGH)
- ◺ WOOD (ROUGH) BLOCKING OR SHIM
- ▨ STEEL/METAL
- ▦ RIGID INSULATION
- ▨ BATT INSULATION
- ▩ WOOD SUBSTRATE

ELEVATION

- ▨ CONCRETE
- ▦ BRICK/MASONRY
- ▩ EXISTING TO REMAIN

LINE SYMBOLS

- CENTER LINE
- CUT LINE
- GRID LINE
- DEMOLISH
- PROPERTY LINE
- BID ALTERNATE

GENERAL NOTES

1. SHEET SIZE FOR PROPER SCALE IS 30"X42", CONTRACTOR SHALL NOT SCALE DRAWINGS BUT REQUEST THE DESIRED DIMENSIONS FROM THE CONTRACTING OFFICER REPRESENTATIVE.
2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND TAKE PRECAUTIONARY MEASURES TO PROTECT AND MAINTAIN THEIR FUNCTION THROUGHOUT CONSTRUCTION.
3. ALL EXISTING AREAS AFFECTED BY THE SCOPE OF THIS WORK SHALL BE PATCHED AND/OR PAINTED AS REQUIRED TO MATCH THE EXISTING CONDITIONS. PAINTING SHALL BE CARRIED BACK TO THE NEAREST CORNER, CEILING, DOOR FRAME, ETC.
4. ALL WORK SHALL CONFORM TO THE CURRENT EDITION OF ALL APPLICABLE BUILDING CODES AND ALL VA STANDARDS AND REGULATIONS. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIAL NECESSARY TO COMPLY WITH SUCH CODES, STANDARDS AND REGULATIONS.
5. ELEVATOR SHAFTS CANNOT BE LEFT UNPROTECTED (OPEN) AT THE END OF WORK ON ANY DAY. IF WORK WILL COMPROMISE THE FIRE RESISTANCE OF THE SHAFT, COORDINATE AND VERIFY 2-HOUR RATING FIRE/SMOKE RATED PARTITIONS ARE REQUIRED.
6. CONTRACTOR SHALL PROTECT ADJACENT ROOMS FROM DAMAGE DURING CONSTRUCTION. REPAIR ANY DAMAGED ITEMS AND ASSEMBLIES TO PRE-PROJECT CONDITION IF DAMAGED DURING CONSTRUCTION.
7. SEE MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
8. THE WORK SHALL BE COMPLETED IN A MANNER TO AVOID DISRUPTION OF PATIENT AND/OR STAFF ACCESS TO THE ELEVATORS FROM ANY LOBBY/FLOOR. THE VAMC WILL BE FULLY OCCUPIED AND OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL FULLY COORDINATE PHASING AND SCHEDULES WITH THE CONTRACTING OFFICER PRIOR TO BEGINNING WORK.
9. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE COR IN ADVANCE. THE COR SHALL BE GIVEN ADVANCE NOTICE FOR ALL SITE VISITS BY THE CONTRACTOR AND THEIR SUBCONTRACTORS.
10. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING DOORS AS REQUIRED FOR REMOVAL AND INSTALLATION OF NEW ELEVATOR EQUIPMENT.

SHEET INDEX

Revisions: Date

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DATE: 12 / 20 / 2022
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Drawing Title
SHEET INDEX, ABBREVIATIONS AND SYMBOLS

Approved: Project Director
FARGO VAMC

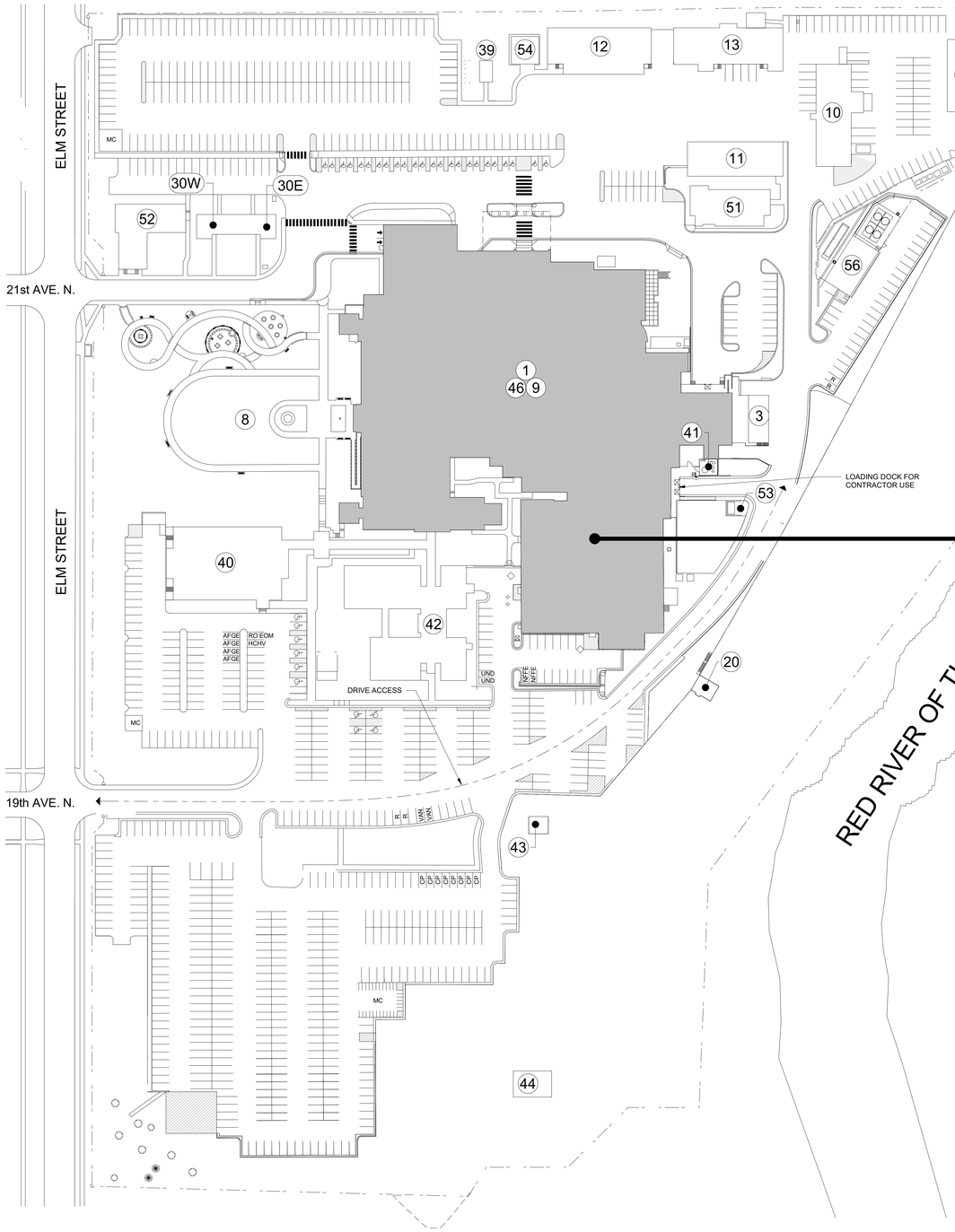
Project Title
REFURBISH ELEVATORS AND REPLACE CONTROLS

Location 2101 ELM STREET
FARGO, ND 58102

Date 12.20.22 | Checked JS | Drawn JE

Project Number 437-22-101
Building Number 1,9,46
Drawing Number G0.01
Dwg. 2 of 41

Office of Construction and Facilities Management
Department of Veterans Affairs



1 SITE PLAN
1/64" = 1'-0"

BLDG. NO.

1 MEDICAL CENTER - PROJECT BUILDING
3 ADMINISTRATION OFFICE
8 FLAGPOLE
9 MEDICAL CENTER - PROJECT BUILDING
10 BOILER PLANT
11 MAINTENANCE GARAGE
12 WAREHOUSE
13 LAUNDRY
20 GATE WELL
30 ADMINISTRATION OFFICE
39 HIGH VOLTAGE SWITCHGEAR BLDG
40 VBA REGIONAL OFFICE
41 OXYGEN STORAGE TANK
42 UND SCHOOL OF MEDICINE
43 PICNIC SHELTER AND PATIO
44 XCEL ENERGY BLDG (NATURAL GAS)
46 MEDICAL CENTER - PROJECT BUILDING
50 COLD STORAGE BUILDING
51 HRMS
52 ADMINISTRATION OFFICE
53 HAZMAT STORAGE BUILDING
54 PANDEMIC FLU STORAGE BUILDING
56 CHILLER PLANT

MC- MOTORCYCLE PARKING
- HANDICAPPED PARKING
CP- CAR/VAN POOL PARKING
R- RESERVED PARKING
UND- UNIVERSITY OF NORTH DAKOTA
AFGE- AMERICAN FEDERATION GOVERNMENT EMPLOYEE
RO EOM- REGIONAL OFFICE EMPLOYEE OF THE MONTH
HCHV- HEALTH CARE HOMELESS VETERANS
NFFE- NATIONAL FEDERATION FEDERAL EMPLOYEE

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30X42.
2. SEE SHEET G0.01 FOR GENERAL NOTES

MAP LEGEND

PROJECT BUILDING.

MATERIAL DELIVERY ROUTE

CONTRACTOR SHARED PARKING AND STAGING AREA

Revisions:	Date

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Drawing Title: LOCATION MAP / CONTRACTOR STAGING AREA AND ACCESS

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: G0.02

Dwg. 3 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

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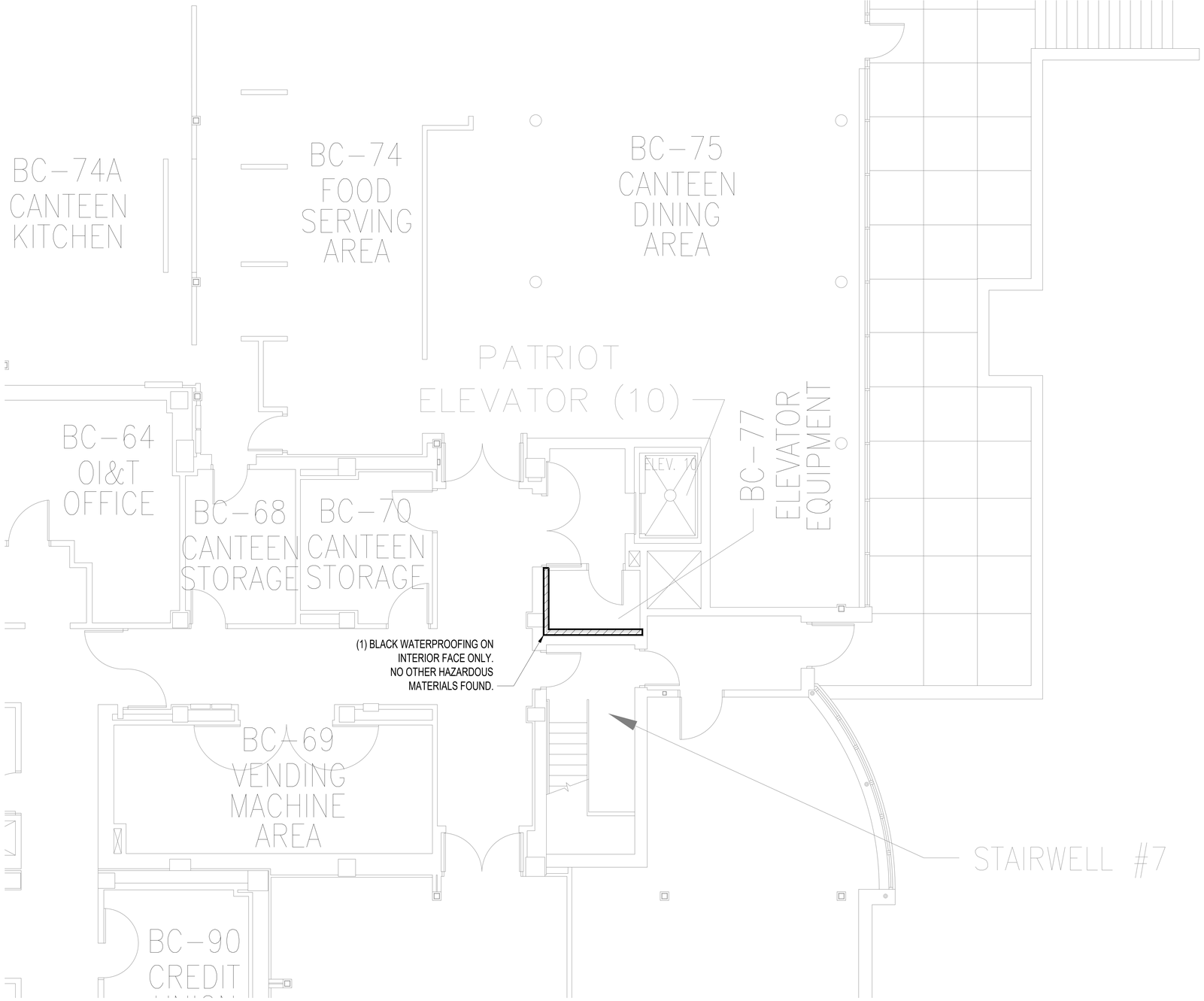

ASBESTOS NOTES

GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC AND FOR GENERAL IDENTIFICATION OF ASBESTOS-CONTAINING MATERIALS (ACM) SUBJECT TO REMOVAL OR DISTURBANCE. THEIR ACCURACY IS NOT GUARANTEED. LOCATIONS AND QUANTITIES SHOWN OF ACM TO BE REMOVED ARE REPRESENTATIVE BASED ON RECENT AND PREEXISTING SITE SURVEY INFORMATION. THE ABATEMENT CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL MATERIAL LOCATIONS AND REMOVAL QUANTITIES, AND EXISTING SITE CONDITIONS.
2. ASBESTOS REMOVAL IS BEING PERFORMED PURSUANT TO RENOVATION OF THE PROJECT AREAS. REMOVE AND DISPOSE OF ALL ACM IN ACCORDANCE WITH APPLICABLE REGULATIONS, PROJECT SPECIFICATIONS, AND THE APPROVED ASBESTOS HAZARD ABATEMENT PLAN (AHAP). IF SUSPECT ACMS ARE ENCOUNTERED DURING CONSTRUCTION AND DEMOLITION THAT ARE NOT IDENTIFIED ON THE ASBESTOS ABATEMENT DRAWINGS, STOP WORK AND CONTACT THE PROJECT MANAGER AND VPIH.
3. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS; PROJECT SPECIFICATIONS, THE APPROVED WORK PLAN, AND ACCEPTED INDUSTRY PRACTICE. WHEN REQUIREMENTS OVERLAP OR CONFLICT, THE MOST STRINGENT REQUIREMENT SHALL APPLY. ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE OWNER, THE OWNER'S CONSULTANTS, AND REGULATORY PERSONNEL.
4. DEMOLITION OF NON-ACM BUILDING MATERIALS MAY BE REQUIRED TO ACCESS REGULATED MATERIALS, INCLUDING, BUT NOT LIMITED TO, CABINETS, RAISED FLOORING, GYPSUM WALLBOARD, EXPANDED METAL OR WOOD LATH AND PLASTER WALLS AND CEILINGS, WALL FRAMING, CARPET, CERAMIC AND VINYL FLOOR COVERINGS, WOOD, ETC. THE ABATEMENT CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION OF NON-ACM MATERIALS AS NEEDED TO ACCESS REGULATED MATERIALS FOR ABATEMENT, AND FOR COORDINATING THE LIMITS OF DEMOLITION AND ABATEMENT WITH THE GENERAL CONTRACTOR.
5. ALL COSTS ASSOCIATED WITH EXPLORATORY DEMOLITION AND DEMOLITION OF NON-ACM MATERIALS NEEDED TO ACCOMPLISH ABATEMENT SHALL BE INCLUDED IN THE ABATEMENT CONTRACTOR'S LUMP SUM PRICE FOR THE PROJECT. NO ADDITIONAL COMPENSATION SHALL BE CONSIDERED FOR THIS WORK.

ASBESTOS NOTES:

1. THE PROJECT AREA WAS RECENTLY SURVEYED FOR ACM. REFER TO THE HAZARDOUS BUILDING MATERIALS INSPECTION REPORT BY AMI ENVIRONMENTAL, DATED AUGUST 26, 2022 FOR MORE INFORMATION ABOUT ACMS IDENTIFIED IN THE PROJECT AREA.
2. CONCEALED ACM PIPE INSULATION (TSI) MAY EXIST WITHIN WALLS, PIPE CHASES AND ABOVE RIGID CEILINGS. COORDINATE ACCESS WITH DEMOLITION DRAWINGS AND THE GENERAL CONTRACTOR. SOME EXPLORATORY DEMOLITION MAY BE REQUIRED TO DETERMINE IF CONCEALED ACM IS PRESENT.
3. IF SUSPECT ACM IS DISCOVERED IN CONSTRUCTION, STOP WORK AND CONTACT GENERAL CONTRACTOR, VA REPRESENTATIVES AND VPIH.
4. GASKETS AND PACKINGS ARE CONCEALED IN VALVES, EQUIPMENT, STEAM TRAPS, BOILERS AND FLUES AND ARE INACCESSIBLE FOR SAMPLING. GASKETS AND PACKINGS ARE ASSUMED AS ACM UNLESS SAMPLED, ANALYZED, AND DETERMINED TO BE NON-ASBESTOS.
5. ESTABLISH REGULATED AREAS (RA) AND NEGATIVE PRESSURE ENCLOSURES (NPE) AND PERFORM REMOVAL IN ACCORDANCE WITH APPLICABLE SPECIFICATION SECTIONS: TRADITIONAL ASBESTOS ABATEMENT; SEC 02 82 13-19.
6. FINALIZE LIMITS OF REGULATED AREAS, LOCATIONS OF NEGATIVE AIR MACHINES (NAM), PERSONAL DECONTAMINATION FACILITIES (PDF), AND WASTE DECONTAMINATION FACILITIES (WDF) BASED ON SITE CONDITIONS, BEST PRACTICES AND PHASING REQUIREMENTS.
7. ASSUME 50% EFFICIENCY WHEN CALCULATING NAM REQUIREMENTS FOR ACHIEVING FOUR (4) AIR CHANGES PER HOUR AND PROVIDED GREATER THAN -0.02" WCG PRESSURE. CONFIGURE AND PLACE NAMS AS NEEDED TO MAXIMIZE AIR MOVEMENT AND PREVENT DEAD AIR SPACE. COORDINATE NEGATIVE AIR DISCHARGE LOCATIONS WITH GENERAL CONTRACTOR, OWNER'S REPRESENTATIVE, AND VPIH, IF NEEDED.

ASBESTOS ABATEMENT PHASING:

1. THE ABATEMENT CONTRACTOR SHALL WORK CLOSELY WITH THE GENERAL CONTRACTOR, CONTRACTING OFFICER, OWNER OR OWNER'S REPRESENTATIVE, AND/OR THE VPIH TO COORDINATE REMOVAL OF ACM IN ACCORDANCE WITH PROJECT SCHEDULING, SEQUENCING, AND PHASING REQUIREMENTS. SOME AFTER HOURS AND WEEK-END WORK MAY BE REQUIRED. PHASING IS SUBJECT TO CHANGE TO ACCOMMODATE SITE CONDITIONS AND FACILITY OPERATIONS.

SUMMARY OF ASBESTOS CONTAINING MATERIALS

KEY NOTE	DESCRIPTION	FRIABLE	QTY	HATCHING
1	(BLACK) WALL SURFACING	NF	70 SF	

Revisions:	Date

CONSULTANTS:

AMI ENVIRONMENTAL
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8802 S 135TH STREET
OMAHA, NE 68138
PHONE: (402) 397-5001

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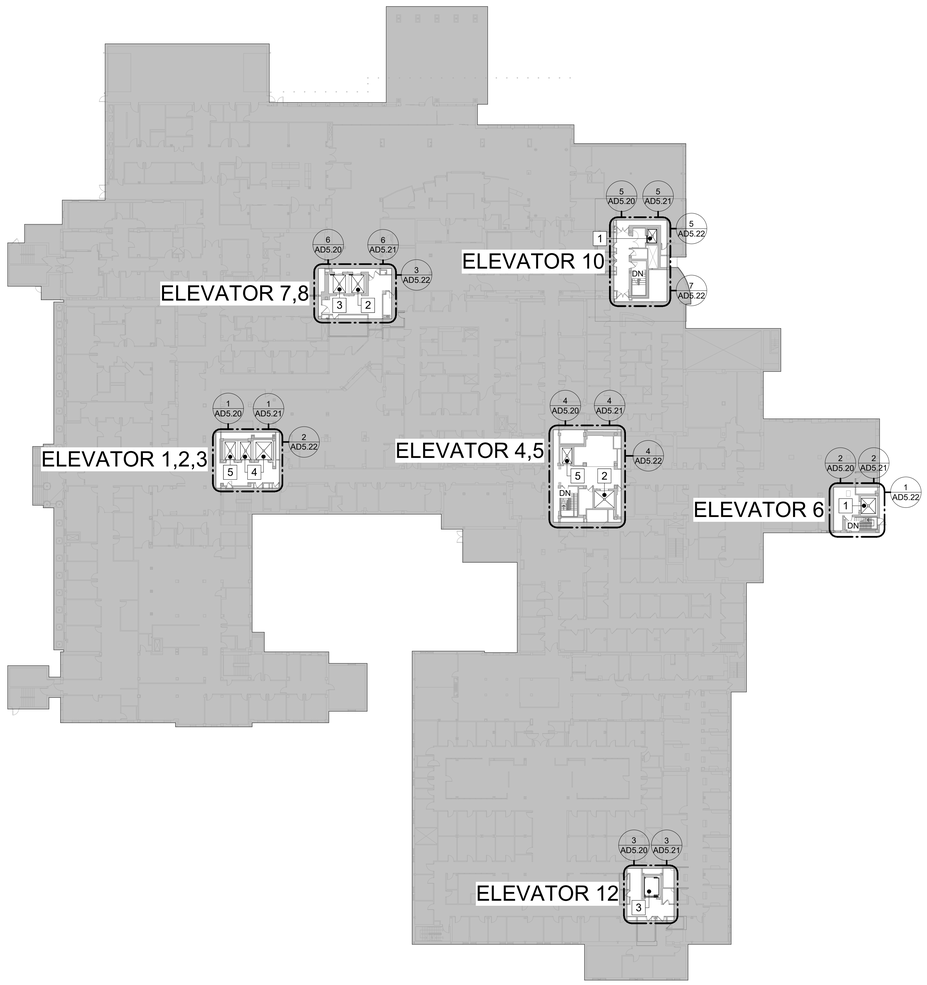
Drawing Title: BASEMENT FLOOR - HAZARDOUS MATERIALS - ASBESTOS
Approved: Project Director: TODD DALZELL
Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS
Location: 2101 ELM STREET FARGO, ND 58102
Date: 12-20-2022
Checked: C.L.
Drawn: MET
Project Number: 437-22-101
Building Number:
Drawing Number: HA101
Dwg. 4 of 41

Office of Construction and Facilities Management

8/23/2021 11:16:54 AM

VA FORM 08-6231



1 FLOOR PLAN - LEVEL 1 DEMOLITION - OVERALL REFRENCE PLAN
1/32" = 1'-0"

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30"X42", CONTRACTOR SHALL NOT SCALE DRAWINGS BUT REQUEST THE DESIRED DIMENSIONS FROM THE CONTRACTING OFFICER REPRESENTATIVE.
2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND TAKE PRECAUTIONARY MEASURES TO PROTECT AND MAINTAIN THEIR FUNCTION THROUGHOUT CONSTRUCTION.
3. ALL EXISTING AREAS AFFECTED BY THE SCOPE OF THIS WORK SHALL BE PATCHED AND/OR PAINTED AS REQUIRED TO MATCH THE EXISTING CONDITIONS. PAINTING SHALL BE CARRIED BACK TO THE NEAREST CORNER, CEILING, DOOR FRAME, ETC.
4. ALL WORK SHALL CONFORM TO THE CURRENT EDITION OF ALL APPLICABLE BUILDING CODES AND ALL VA STANDARDS AND REGULATIONS. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIAL NECESSARY TO COMPLY WITH SUCH CODES, STANDARDS AND REGULATIONS.
5. ELEVATOR SHAFTS CANNOT BE LEFT UNPROTECTED (OPEN) AT THE END OF WORK ON ANY DAY. IF WORK WILL COMPROMISE THE FIRE RESISTANCE OF THE SHAFT, COORDINATE AND VERIFY 2-HOUR RATING FIRE/SMOKE RATED PARTITIONS ARE REQUIRED.
6. CONTRACTOR SHALL PROTECT ADJACENT ROOMS FROM DAMAGE DURING CONSTRUCTION. REPAIR ANY DAMAGED ITEMS AND ASSEMBLIES TO PRE-PROJECT CONDITION IF DAMAGED DURING CONSTRUCTION.
7. SEE MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
8. THE WORK SHALL BE COMPLETED IN A MANNER TO AVOID DISRUPTION OF PATIENT AND/OR STAFF ACCESS TO THE ELEVATORS FROM ANY LOBBY/FLOOR. THE VAMC WILL BE FULLY OCCUPIED AND OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL FULLY COORDINATE PHASING AND SCHEDULES WITH THE CONTRACTING OFFICER PRIOR TO BEGINNING WORK.
9. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE COR IN ADVANCE. THE COR SHALL BE GIVEN ADVANCE NOTICE FOR ALL SITE VISITS BY THE CONTRACTOR AND THEIR SUBCONTRACTORS.
10. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING DOORS AS REQUIRED FOR REMOVAL AND INSTALLATION OF NEW ELEVATOR EQUIPMENT.

MAP LEGEND

PHASE 1	1
PHASE 2	2
PHASE 3	3
PHASE 4	4
PHASE 5	5

Revisions:	Date

CONSULTANTS:

SUMMIT FIRE PROTECTION

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LICENSED ARCHITECT
JOEL P. SIMONAR
(3784)
DATE: 12 / 20 / 2022
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Drawing Title: DEMOLITION PLAN

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: AD1.00

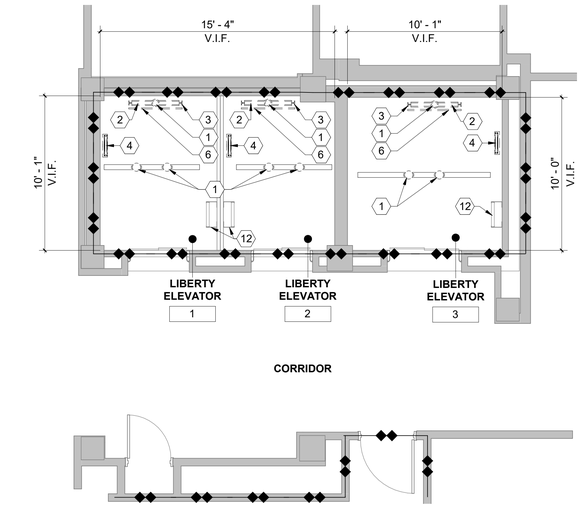
Dwg. 5 of 41

Office of Construction and Facilities Management

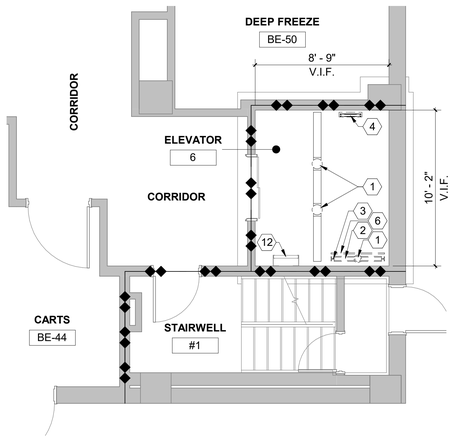
Department of Veterans Affairs

5/11/2023 8:32:57 AM

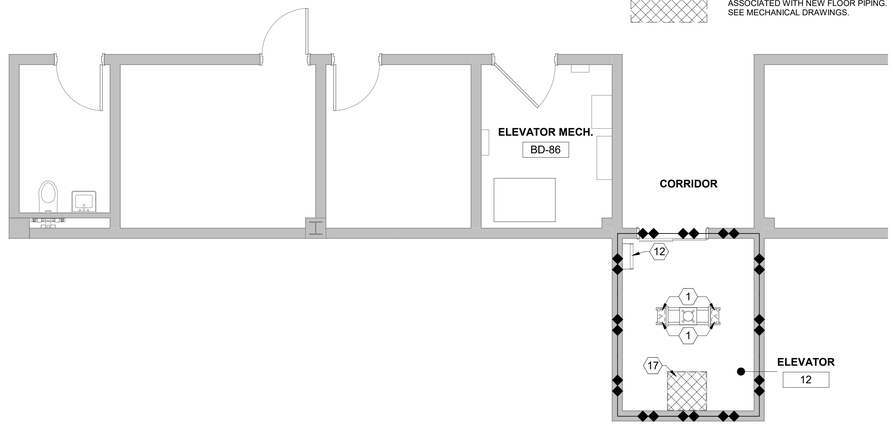
VA FORM 08-6231



1 FLOOR PLAN - LIBERTY 1,2,3 - PIT DEMOLITION
1/4" = 1'-0"



2 FLOOR PLAN - ELEVATOR 6 - PIT DEMOLITION
1/4" = 1'-0"



3 FLOOR PLAN - ELEVATOR 12 - PIT DEMOLITION
1/4" = 1'-0"

DEMOLITION LEGEND

SCOPE OF CEILING DEMOLITION WORK ASSOCIATED WITH NEW ABOVE CEILING PIPING. SEE MECHANICAL DRAWINGS.

SCOPE OF FLOOR DEMOLITION WORK ASSOCIATED WITH NEW FLOOR PIPING. SEE MECHANICAL DRAWINGS.

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30"X42". CONTRACTOR SHALL NOT SCALE DRAWINGS BUT REQUEST THE DESIRED DIMENSIONS FROM THE CONTRACTING OFFICER REPRESENTATIVE.
2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND TAKE PRECAUTIONARY MEASURES TO PROTECT AND MAINTAIN THEIR FUNCTION THROUGHOUT CONSTRUCTION.
3. ALL EXISTING AREAS AFFECTED BY THE SCOPE OF THIS WORK SHALL BE PATCHED AND/OR PAINTED AS REQUIRED TO MATCH THE EXISTING CONDITIONS. PAINTING SHALL BE CARRIED BACK TO THE NEAREST CORNER, CEILING, DOOR FRAME, ETC.
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5. ELEVATOR SHAFTS CANNOT BE LEFT UNPROTECTED (OPEN) AT THE END OF WORK ON ANY DAY. IF WORK WILL COMPROMISE THE FIRE RESISTANCE OF THE SHAFT, COORDINATE AND VERIFY 2-HOUR RATING FIRE/SMOKE RATED PARTITIONS ARE REQUIRED.
6. CONTRACTOR SHALL PROTECT ADJACENT ROOMS FROM DAMAGE DURING CONSTRUCTION. REPAIR ANY DAMAGED ITEMS AND ASSEMBLIES TO PRE-PROJECT CONDITION IF DAMAGED DURING CONSTRUCTION.
7. SEE MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
8. THE WORK SHALL BE COMPLETED IN A MANNER TO AVOID DISRUPTION OF PATIENT AND/OR STAFF ACCESS TO THE ELEVATORS FROM ANY LOBBY/FLOOR. THE VAMC WILL BE FULLY OCCUPIED AND OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL FULLY COORDINATE PHASING AND SCHEDULES WITH THE CONTRACTING OFFICER PRIOR TO BEGINNING WORK.
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10. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING DOORS AS REQUIRED FOR REMOVAL AND INSTALLATION OF NEW ELEVATOR EQUIPMENT.

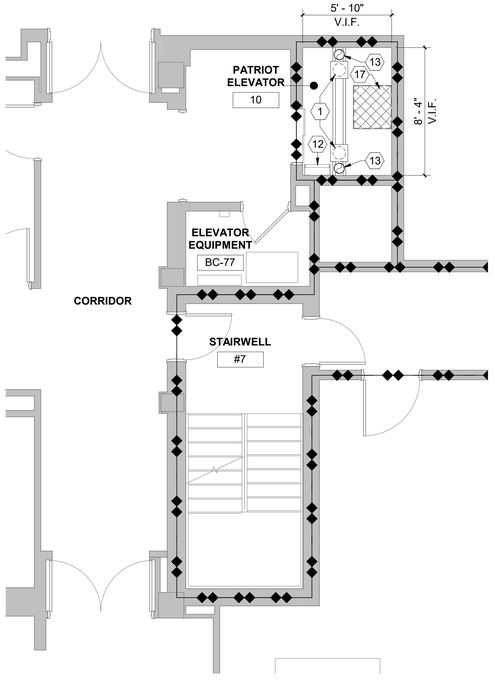
KEYNOTES: (#)

1. REMOVE AND DISPOSE OF EXISTING OIL BUFFERS.
2. COMPENSATION ASSEMBLY TO REMAIN AND BE REFURBISHED.
3. EXISTING GUIDE RAILS TO REMAIN AND BE REFURBISHED. REALIGN TO COORDINATE WITH NEW EQUIPMENT AND TIGHTEN ALL MOUNTING BRACKETS., TYPICAL AT ALL CAR AND COUNTERWEIGHT GUIDE RAILS.
4. REMOVE AND DISPOSE OF EXISTING GOVERNOR TENSION SHEAVE ASSEMBLY.
5. NOT USED.
6. EXISTING COUNTERWEIGHT PIT GUARD TO REMAIN.
7. EXISTING COUNTERWEIGHT ASSEMBLY TO REMAIN. REBALANCE COUNTERWEIGHT AS REQUIRED. REFURBISH AND REFINISH TO LIKE NEW CONDITION.
8. REMOVE EXISTING CAR PLATFORM AND ENCLOSURE AND PROVIDE NEW CAR PLATFORM AND ENCLOSURE. PASSENGER CAR FRAMES SHALL REMAIN AND BE REFURBISHED.
9. REMOVE AND DISPOSE OF EXISTING HOISTWAY DOOR PANELS. ENTRANCE FRAMES TO REMAIN AND BE REFURBISHED. FULLY CLEAN AND BUFF OUT ALL SCRATCHES. ALSO REMOVE ANY ADHESIVE FROM PREVIOUSLY MOUNTED SIGNAGE. TYPICAL FOR ALL ENTRANCES.
10. CAREFULLY REMOVE EXISTING HALL CALL STATIONS AND PREPARE SUBSTRATE FOR NEW HALL CALL STATIONS. SEE LOBBY ELEVATIONS ON SHEET A5.30.
11. CAREFULLY REMOVE EXISTING LANDING POSITION INDICATORS. TYPICAL FOR ALL HOISTWAY ENTRANCES. SEE LOBBY ELEVATIONS ON SHEET A5.30.
12. EXISTING METAL PIT LADDER TO REMAIN.
13. EXISTING HYDROLIC PISTON TO BE REUSED.
14. NOT USED.
15. EXISTING GUIDE RAILS TO BE REMOVED AND REPLACED. INSTALL TO COORDINATE WITH OTHER NEW EQUIPMENT, PROVIDE NEW MOUNTING BRACKETS, APPLIES TO ELEVATOR 7 AND 8 ONLY DUE TO WATER DAMAGE.
16. EXISTING COUNTERWEIGHT RAILS AND PIT GUARD TO BE REMOVED AND REPLACED. INSTALL TO COORDINATE WITH OTHER NEW EQUIPMENT. PROVIDE NEW MOUNTING BRACKETS, APPLIES TO ELEVATOR 7 AND 8 ONLY DUE TO WATER DAMAGE.
17. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR WORK ASSOCIATED WITH NEW SUMP PITS.

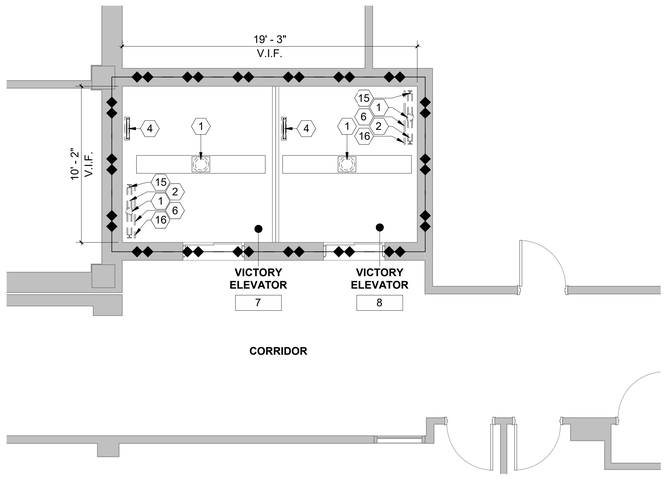
FIRE BARRIER LEGEND

EXISTING 2 HOUR FIRE RATED PARTITION

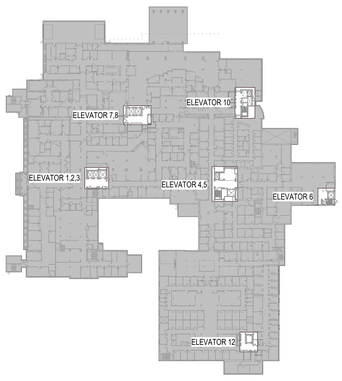
4 FLOOR PLAN - INDEPENDENCE 4,5 - PIT DEMOLITION
1/4" = 1'-0"



5 FLOOR PLAN - PATRIOT ELEVATOR 10 - PIT DEMOLITION
1/4" = 1'-0"



6 FLOOR PLAN - VICTORY ELEVATOR 7,8 - PIT DEMOLITION
1/4" = 1'-0"



KEY PLAN

Revisions:	Date

CONSULTANTS:

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SUMMIT FIRE CONSULTING
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LICENSED ARCHITECT
JOEL P. SIMONAR
(3980)
DATE: 12 / 20 / 2022
STATE OF NORTH DAKOTA

ARCHITECT/ENGINEERS

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Drawing Title: ENLARGED PLANS - ELEVATOR PITS - DEMOLITION

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: AD5.20

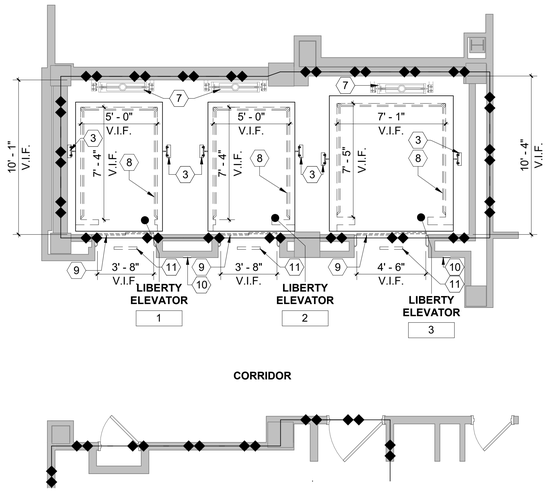
Dwg. 6 of 41

Office of Construction and Facilities Management

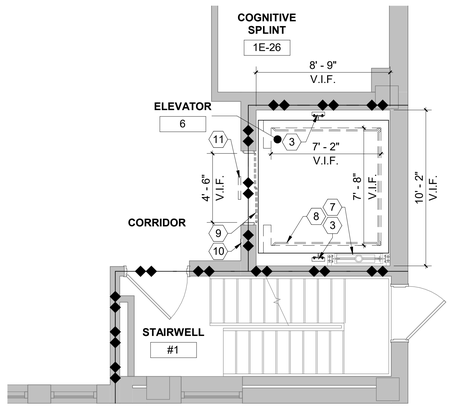
Department of Veterans Affairs

5/11/2023 8:32:59 AM

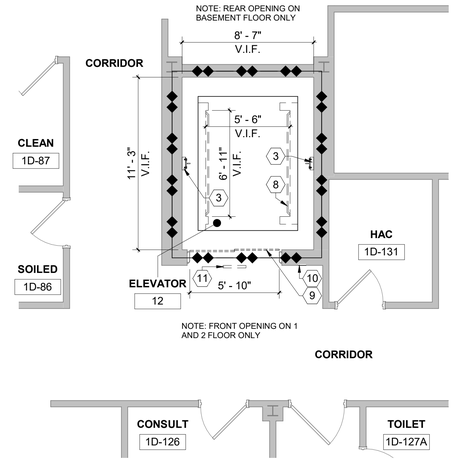
VA FORM 08-6231



1 FLOOR PLAN - LIBERTY 1,2,3 - DEMOLITION TYPICAL
1/4" = 1'-0"



2 FLOOR PLAN - ELEVATOR 6 - DEMOLITION TYPICAL
1/4" = 1'-0"



3 FLOOR PLAN - ELEVATOR 12 - DEMOLITION TYPICAL
1/4" = 1'-0"

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KEYNOTES: (#)

1. REMOVE AND DISPOSE OF EXISTING OIL BUFFERS.
2. COMPENSATION ASSEMBLY TO REMAIN AND BE REFURBISHED.
3. EXISTING GUIDE RAILS TO REMAIN AND BE REFURBISHED. REALIGN TO COORDINATE WITH NEW EQUIPMENT AND TIGHTEN ALL MOUNTING BRACKETS., TYPICAL AT ALL CAR AND COUNTERWEIGHT GUIDE RAILS.
4. REMOVE AND DISPOSE OF EXISTING GOVERNOR TENSION SHEAVE ASSEMBLY.
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7. EXISTING COUNTERWEIGHT ASSEMBLY TO REMAIN. REBALANCE COUNTERWEIGHT AS REQUIRED. REFURBISH AND REFINISH TO LIKE NEW CONDITION.
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11. CAREFULLY REMOVE EXISTING LANDING POSITION INDICATORS. TYPICAL FOR ALL HOISTWAY ENTRANCES. SEE LOBBY ELEVATIONS ON SHEET A5.30.
12. EXISTING METAL PIT LADDER TO REMAIN.
13. NOT USED.
14. REPLACE EXISTING COUNTERWEIGHT ASSEMBLY IN ELEVATOR 7 AND 8. BALANCE COUNTERWEIGHT AS REQUIRED.
15. REPLACE EXISTING GUIDE RAILS DUE TO WATER DAMAGE, APPLIES TO ELEVATOR 7 AND 8 ONLY.

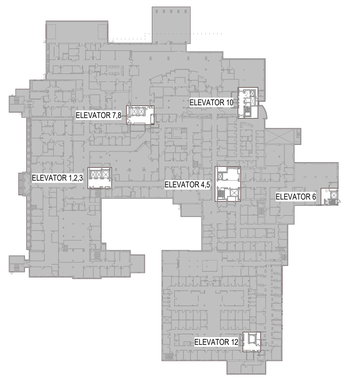
FIRE BARRIER LEGEND

EXISTING 2 HOUR FIRE RATED PARTITION

4 FLOOR PLAN - INDEPENDENCE 4,5 - DEMOLITION TYPICAL
1/4" = 1'-0"

5 FLOOR PLAN - PATRIOT ELEVATOR 10 - DEMOLITION TYPICAL
1/4" = 1'-0"

6 FLOOR PLAN - VICTORY ELEVATOR 7,8 - DEMOLITION TYPICAL
1/4" = 1'-0"



KEY PLAN

Revisions:	Date

CONSULTANTS:

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LICENSED ARCHITECT JOEL P. SIMINOE (3984) STATE OF NORTH DAKOTA — 12 / 20 / 2022

ARCHITECT/ENGINEERS

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Drawing Title: ENLARGED PLANS - DEMOLITION

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: AD5.21

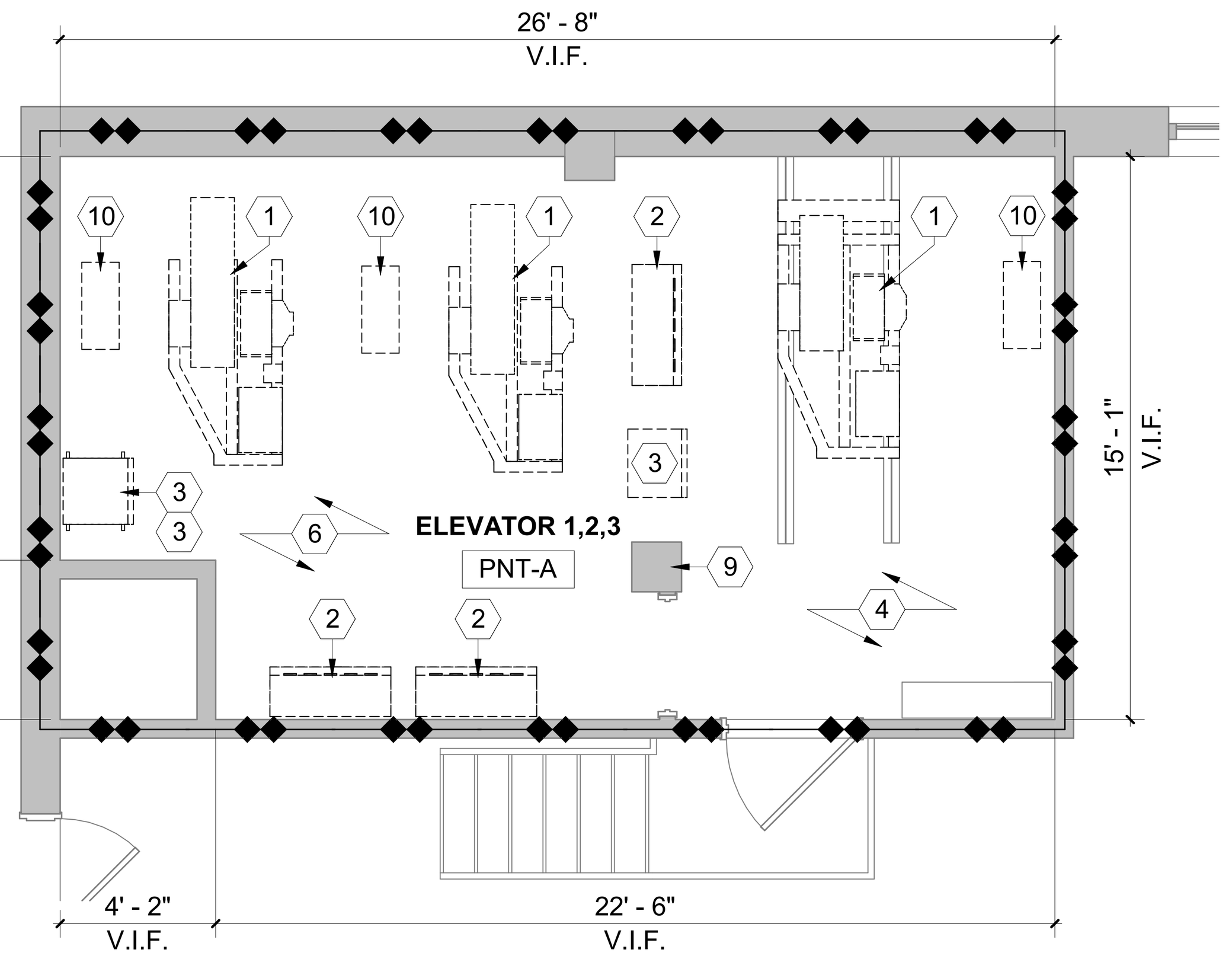
Dwg. 7 of 41

Office of Construction and Facilities Management

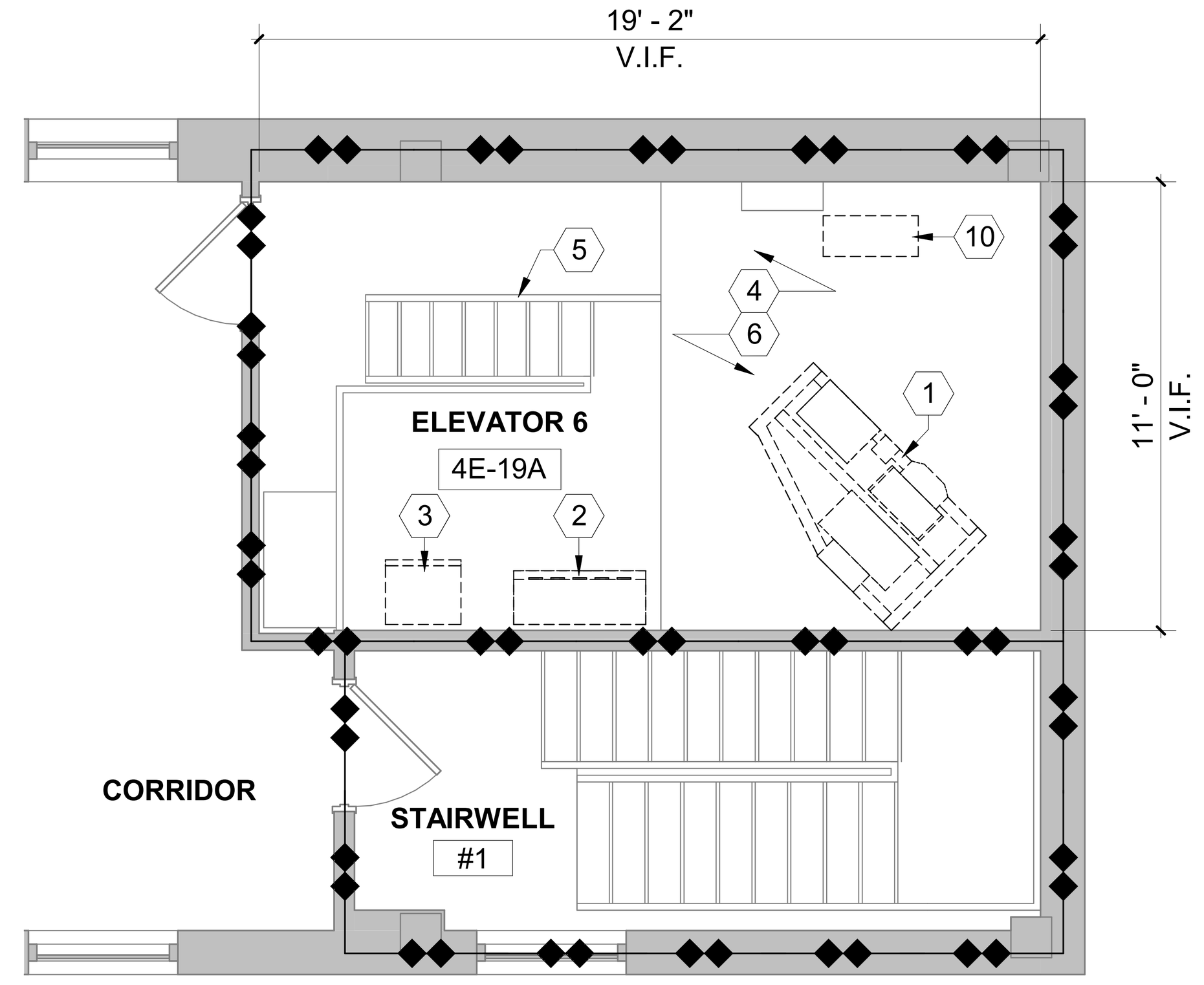
Department of Veterans Affairs

5/11/2023 8:33:01 AM

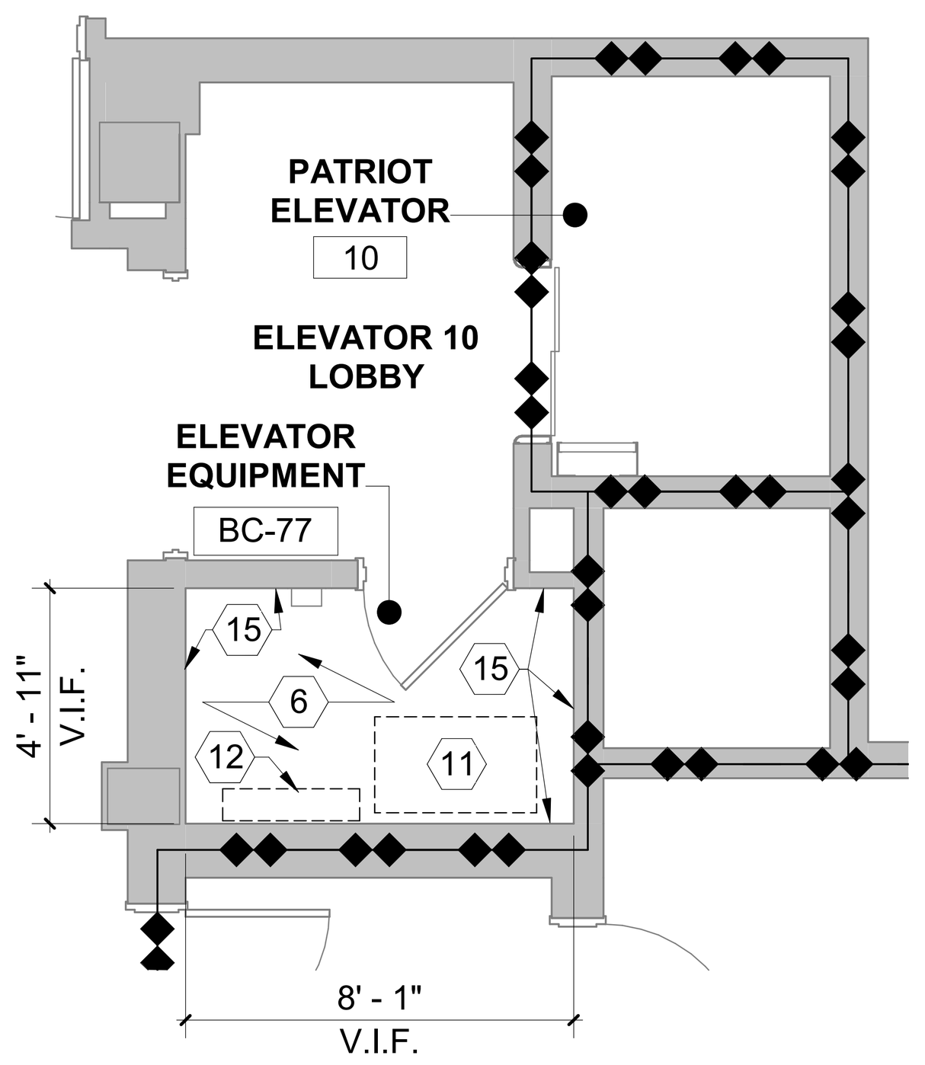
VA FORM 08-6231



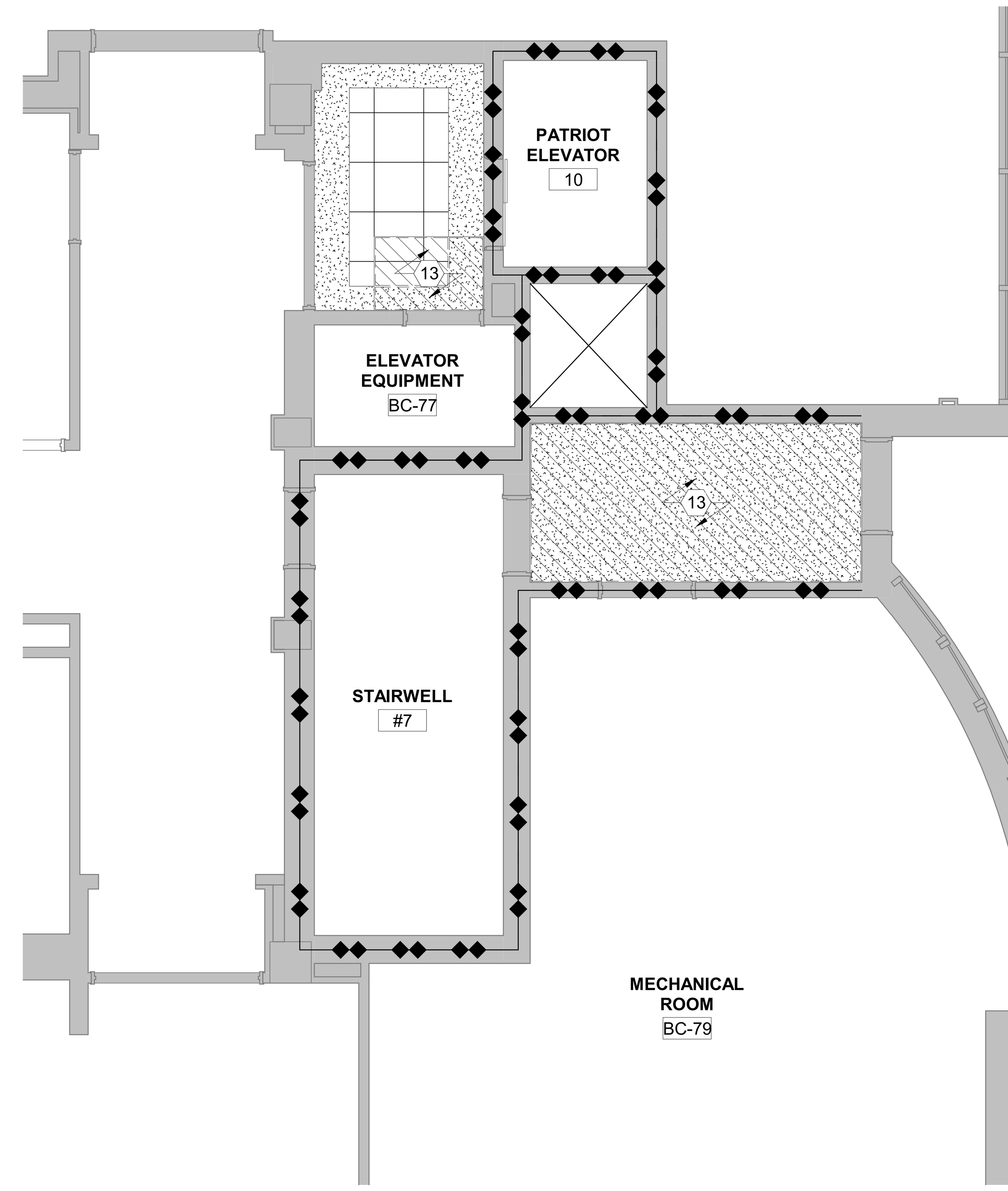
2 FLOOR PLAN - LIBERTY 1,2,3 - PENTHOUSE DEMOLITION
1/4" = 1'-0"



1 FLOOR PLAN - ELEVATOR 6 DEMOLITION - PENTHOUSE - TYPICAL
1/4" = 1'-0"



5 FLOOR PLAN - ELEVATOR 10 DEMOLITION - EQUIPMENT ROOM
1/4" = 1'-0"



7 RCP - ELEVATOR 10 DEMOLITION - EQUIPMENT ROOM
1/4" = 1'-0"

GENERAL NOTES:

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10. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING DOORS AS REQUIRED FOR REMOVAL AND INSTALLATION OF NEW ELEVATOR EQUIPMENT.

KEYNOTES:

1. REMOVE AND DISPOSE OF EXISTING HOISTWAY DC MOTOR AND PREPARE EXISTING MOUNTING LOCATION AS REQUIRED TO ACCOMMODATE THE INSTALLATION OF THE NEW AC GEARLESS HOISTWAY MOTOR.
2. REMOVE AND DISPOSE OF EXISTING ELEVATOR CONTROLLER AND ASSOCIATED RACEWAY.
3. REMOVE AND DISPOSE OF EXISTING ELECTRICAL ISOLATION TRANSFORMER.
4. PROTECT AND MAINTAIN EXISTING AIR HANDLER AND ALL ASSOCIATED ELECTRICAL.
5. CAREFULLY REMOVE EXISTING RAILING AS REQUIRED FOR REMOVAL AND REPLACEMENT OF HOISTWAY MOTORS. REINSTALL TO MATCH CURRENT CONDITION.
6. PROTECT AND MAINTAIN EXISTING SEALED CONCRETE FLOORS THROUGHOUT THE PROJECT. FLOORS SHALL MATCH CURRENT CONDITION UPON COMPLETION.
7. EXISTING FLOOR HATCH.
8. NOT USED.
9. EXISTING CONCRETE COLUMN.
10. REMOVE AND DISPOSE OF EXISTING GOVERNOR.
11. REMOVE AND DISPOSE OF EXISTING HYDROLIC PUMP ASSEMBLY. SEE MEP DRAWINGS FOR FURTHER DETAIL.
12. REMOVE AND DISPOSE OF EXISTING HYDROLIC ELEVATOR CONTROLLER. SEE MEP DRAWINGS FOR FURTHER DETAIL.
13. REMOVE EXISTING PAINTED GYPSUM BOARD CEILING TO THE EXTENT SHOWN ON DRAWINGS
14. CONTRACTOR TO SAWCUT AND REMOVE EXISTING FLOOR SLAB AS REQUIRED FOR THE PLUMBER TO INSTALL UNDERSLAB DRAINAGE LINE. SEE MECH.
15. EXISITNG WALL SURFACE WILL BE REMOVED PER THE ASBESTOS ABATEMENT PLAN ON DRAWING SHEET HA101.

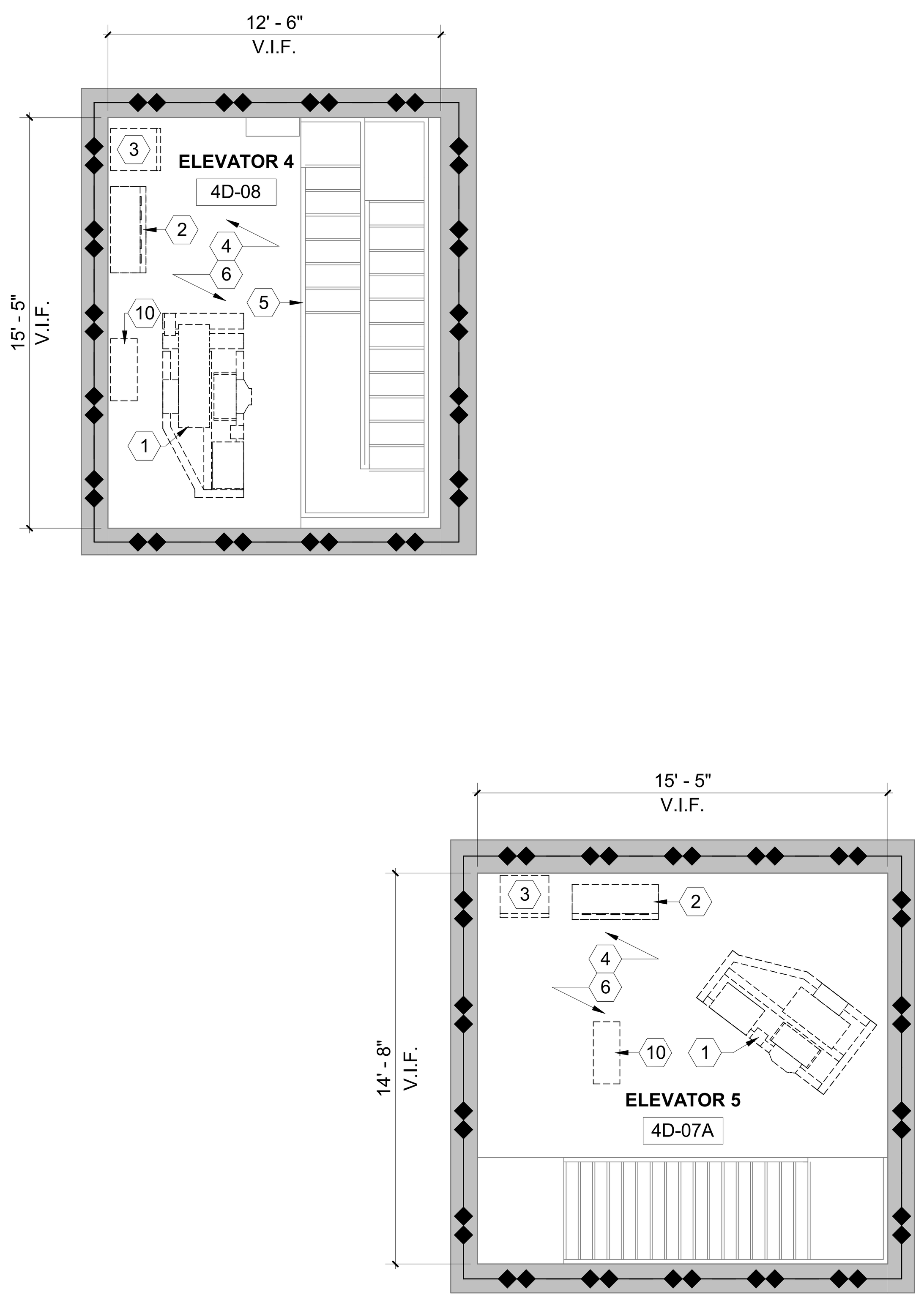
FIRE BARRIER LEGEND

EXISTING 2 HOUR FIRE RATED PARTITION ◆◆ ◆◆ ◆◆ ◆◆

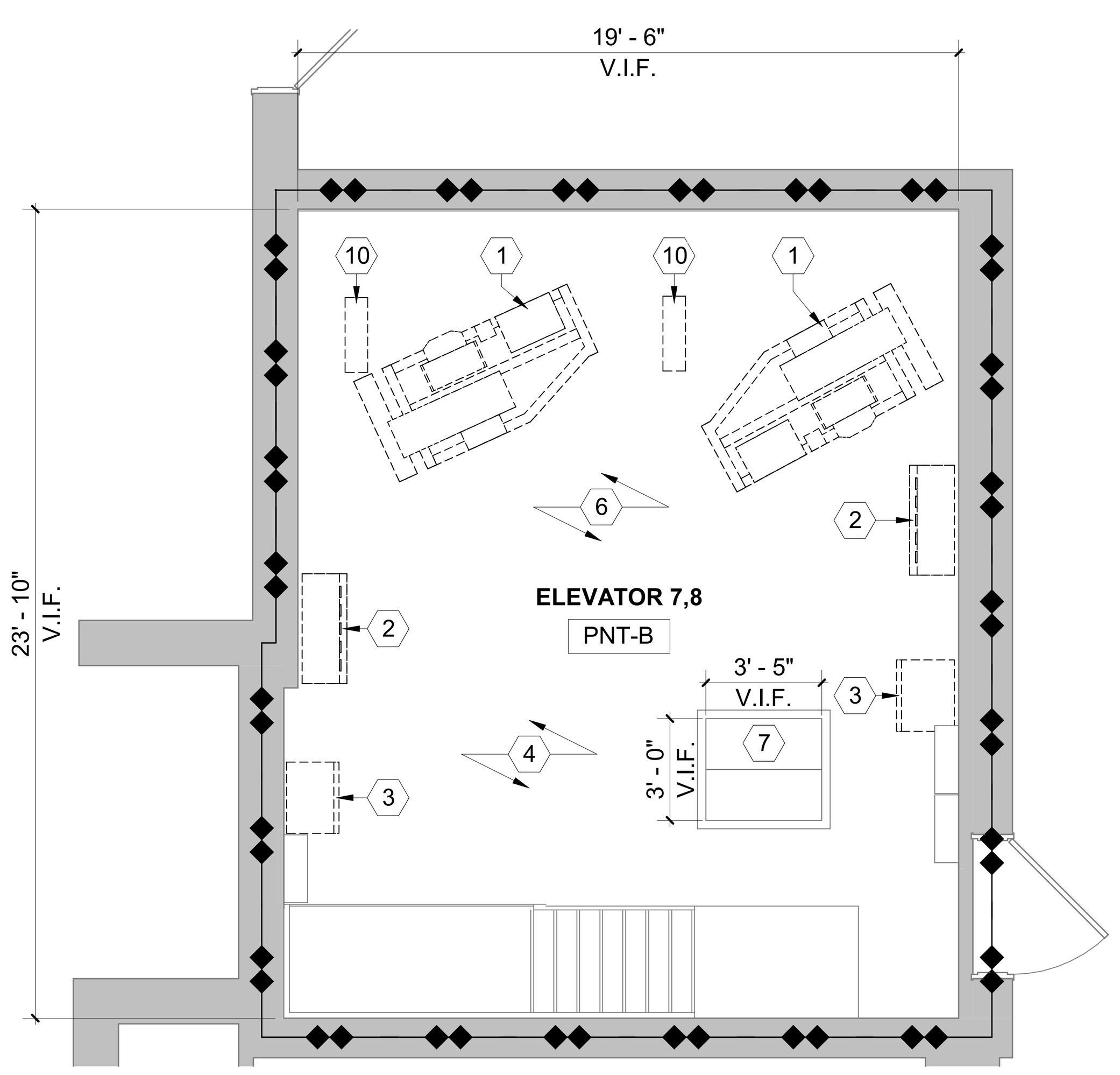
DEMOLITION LEGEND

▨ SCOPE OF CEILING DEMOLITION WORK ASSOCIATED WITH NEW ABOVE CEILING PIPING. SEE MECHANICAL DRAWINGS.

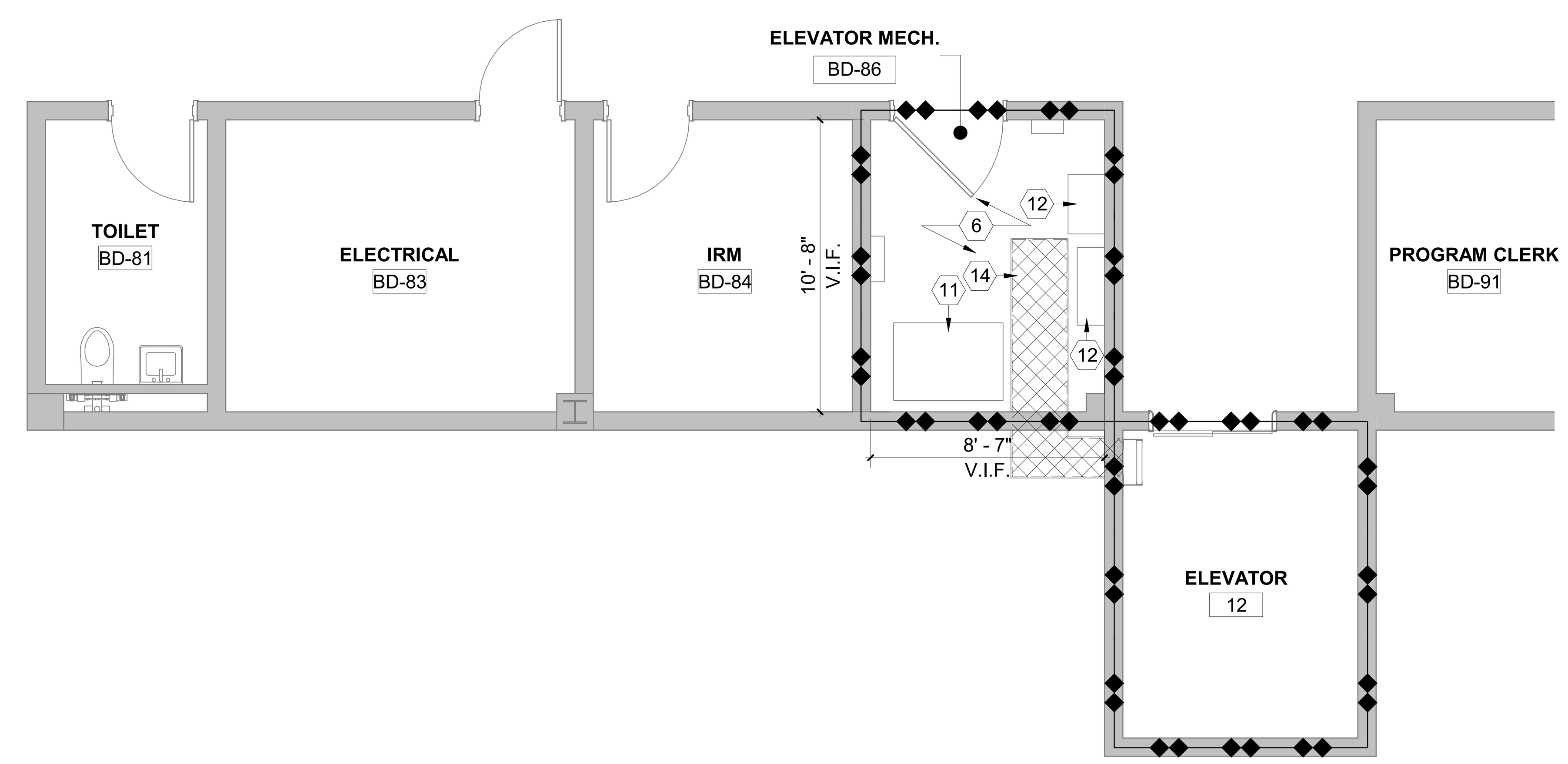
▩ SCOPE OF FLOOR DEMOLITION WORK ASSOCIATED WITH NEW FLOOR PIPING. SEE MECHANICAL DRAWINGS.



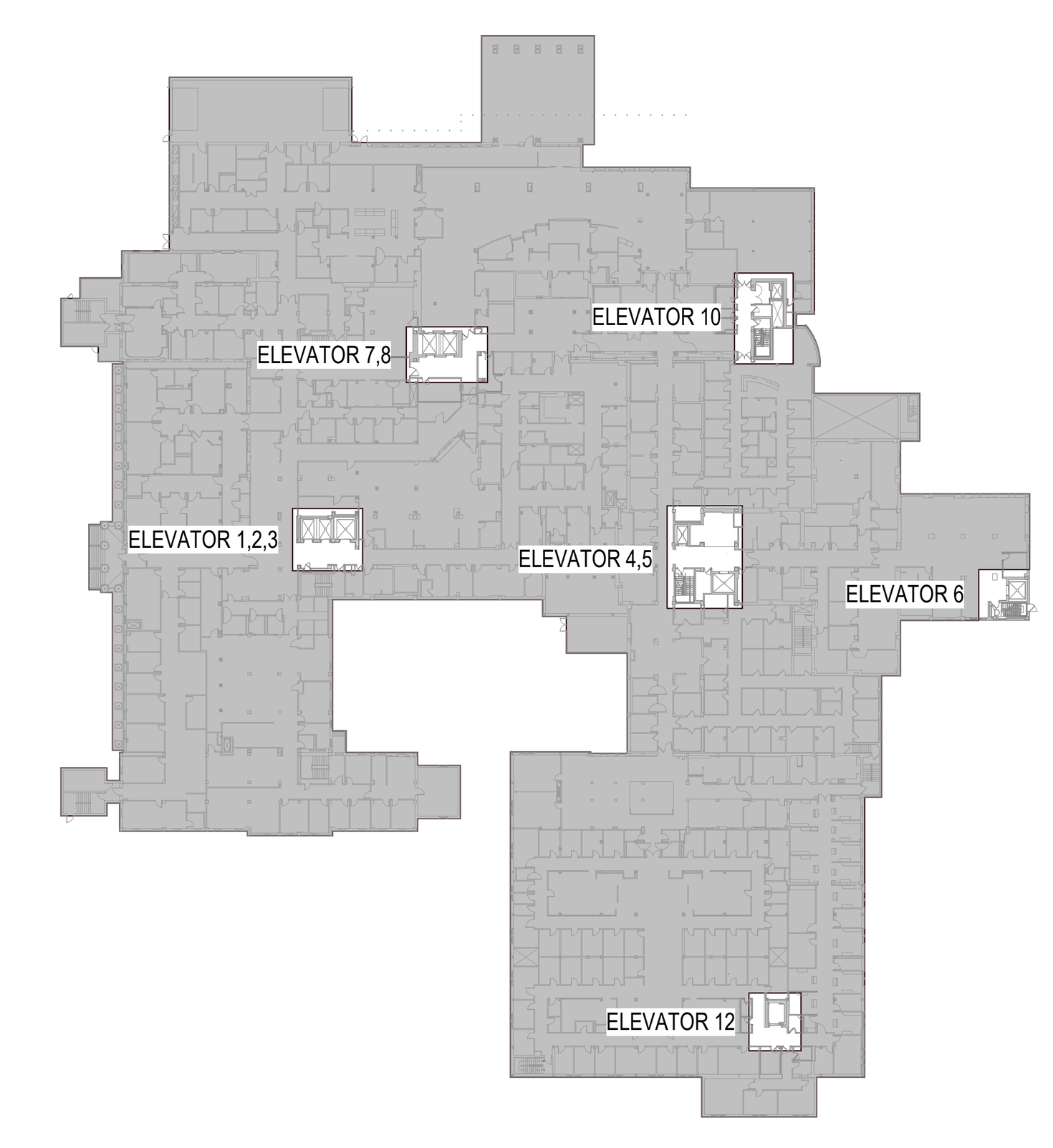
4 FLOOR PLAN - INDEPENDENCE 4,5 - PENTHOUSE DEMOLITION
1/4" = 1'-0"



3 FLOOR PLAN - VICTORY ELEVATOR 7,8 - PENTHOUSE DEMOLITION
1/4" = 1'-0"



6 FLOOR PLAN - ELEVATOR 12 DEMOLITION - EQUIPMENT ROOM
1/4" = 1'-0"



KEY PLAN

Revisions:	Date

CONSULTANTS:

SUMMIT FIRE PROTECTION
SUMMIT FIRE CONSULTING
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ST. PAUL, MINNESOTA 55103
(612) 387-7050

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(3184)
DATE: 12 / 20 / 2022
STATE OF NORTH DAKOTA

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Drawing Title: ENLARGED PLANS - PENTHOUSE / EQUIPMENT ROOMS - DEMOLITION

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET, FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: AD5.22

Dwg. 8 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

5/11/2023 8:33:03 AM

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30"X42", CONTRACTOR SHALL NOT SCALE DRAWINGS BUT REQUEST THE DESIRED DIMENSIONS FROM THE CONTRACTING OFFICER REPRESENTATIVE.
2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND TAKE PRECAUTIONARY MEASURES TO PROTECT AND MAINTAIN THEIR FUNCTION THROUGHOUT CONSTRUCTION.
3. ALL EXISTING AREAS AFFECTED BY THE SCOPE OF THIS WORK SHALL BE PATCHED AND/OR PAINTED AS REQUIRED TO MATCH THE EXISTING CONDITIONS. PAINTING SHALL BE CARRIED BACK TO THE NEAREST CORNER, CEILING, DOOR FRAME, ETC.
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5. ELEVATOR SHAFTS CANNOT BE LEFT UNPROTECTED (OPEN) AT THE END OF WORK ON ANY DAY. IF WORK WILL COMPROMISE THE FIRE RESISTANCE OF THE SHAFT, COORDINATE AND VERIFY 2-HOUR RATING FIRE/SMOKE RATED PARTITIONS ARE REQUIRED.
6. CONTRACTOR SHALL PROTECT ADJACENT ROOMS FROM DAMAGE DURING CONSTRUCTION. REPAIR ANY DAMAGED ITEMS AND ASSEMBLIES TO PRE-PROJECT CONDITION IF DAMAGED DURING CONSTRUCTION.
7. SEE MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
8. THE WORK SHALL BE COMPLETED IN A MANNER TO AVOID DISRUPTION OF PATIENT AND/OR STAFF ACCESS TO THE ELEVATORS FROM ANY LOBBY/FLOOR. THE VAMC WILL BE FULLY OCCUPIED AND OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL FULLY COORDINATE PHASING AND SCHEDULES WITH THE CONTRACTING OFFICER PRIOR TO BEGINNING WORK.
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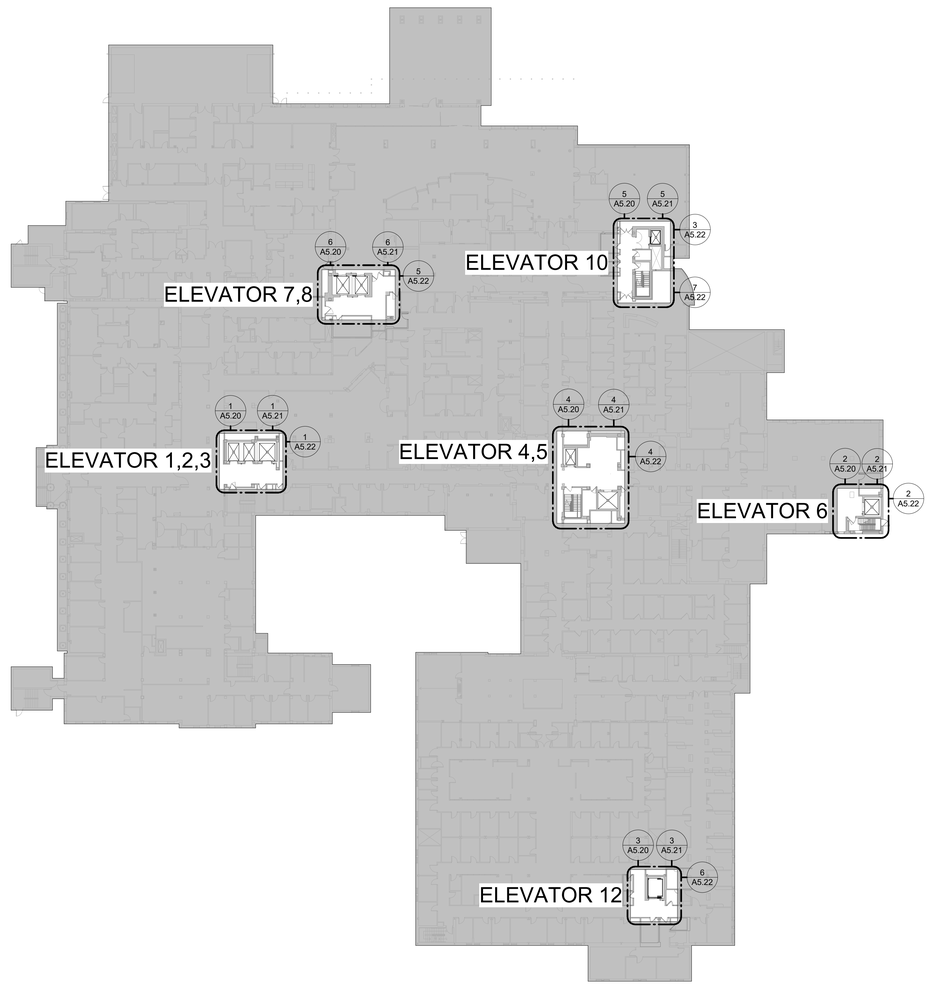
10. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING DOORS AS REQUIRED FOR REMOVAL AND INSTALLATION OF NEW ELEVATOR EQUIPMENT.



1 FLOOR PLAN - LEVEL 1 - OVERALL REFRENCE PLAN
1/32" = 1'-0"

ELEVATOR SCHEDULE

ELEVATOR NUMBER	TYPE (PASSENGER/SERVICE)	NUMBER OF FLOORS SERVICED	WEIGHT CAPACITY	SPEED (FPM)	DIMENSIONS (APPROXIMATE)	DRIVE HYDRAULIC/ ELECTRICAL TRACTION	DOOR SIDE OPENING / CENTER OPENING	COMMENTS
ELEVATOR 1	PASSENGER	BASEMENT THRU FOURTH (5 FLOORS)	4000	200	7' - 4" x 5' - 0"	ELECTRICAL TRACTION	SIDE OPENING DOOR	-
ELEVATOR 2	PASSENGER	BASEMENT THRU FOURTH (5 FLOORS)	4000	200	7' - 4" x 5' - 0"	ELECTRICAL TRACTION	SIDE OPENING DOOR	-
ELEVATOR 3	SERVICE	BASEMENT THRU FOURTH (5 FLOORS)	6000	150	7' - 5" x 7' - 1"	ELECTRICAL TRACTION	CENTER OPENING DOOR	-
ELEVATOR 4	PASSENGER	BASEMENT THRU FOURTH (5 FLOORS)	2500	200	4' - 6" x 6' - 6"	ELECTRICAL TRACTION	SIDE OPENING DOOR	-
ELEVATOR 5	PASSENGER	BASEMENT THRU FOURTH (5 FLOORS)	3000	300	7' - 8" x 7' - 0 3/4"	ELECTRICAL TRACTION	CENTER OPENING DOOR	-
ELEVATOR 6	PASSENGER	BASEMENT THRU THIRD (4 FLOORS)	3000	300	7' - 2" x 7' - 8"	ELECTRICAL TRACTION	CENTER OPENING DOOR	-
ELEVATOR 7	PASSENGER	BASEMENT THRU FOURTH (5 FLOORS)	5000	300	7' - 9" x 6' - 4"	ELECTRICAL TRACTION	CENTER OPENING DOOR	-
ELEVATOR 8	PASSENGER	BASEMENT THRU FOURTH (5 FLOORS)	5000	300	7' - 8" x 6' - 4"	ELECTRICAL TRACTION	CENTER OPENING DOOR	-
ELEVATOR 10	PASSENGER	BASEMENT THRU GROUND (2 FLOORS)	3500	200	6' - 8" x 4' - 2"	HYDRAULIC	SIDE OPENING DOOR	-
ELEVATOR 12	PASSENGER	BASEMENT THRU SECOND (3 FLOORS)	5000	200	6' - 11" x 5' - 6"	HYDRAULIC	SIDE OPENING DOOR	-

Revisions:	Date

CONSULTANTS:

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575 MINNEHAHA AVE WEST
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LICENSED ARCHITECT
JOEL P. SIMPSON
(3786)
DATE: 10 / 20 / 2022
STATE OF NORTH DAKOTA

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Drawing Title: FLOOR PLAN / ELEVATOR SCHEDULE

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: A1.00

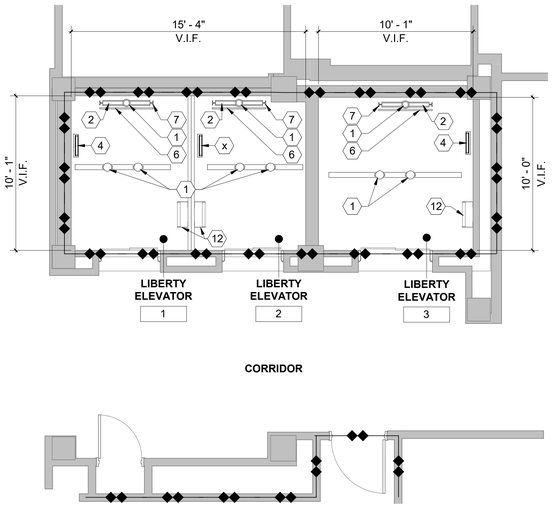
Dwg. 9 of 41

Office of Construction and Facilities Management

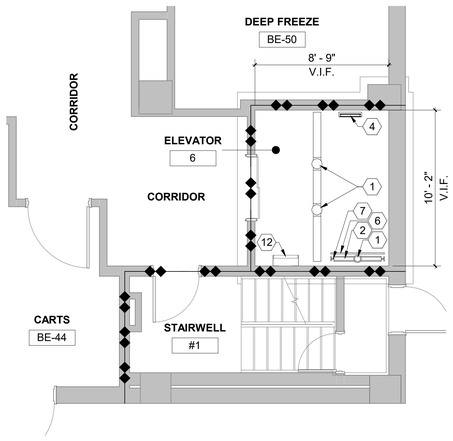
Department of Veterans Affairs

5/11/2023 8:32:44 AM

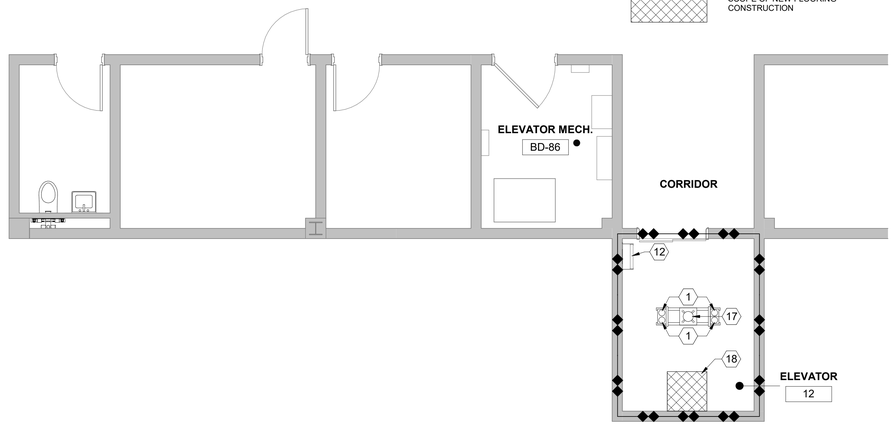
VA FORM 08-6231



1 FLOOR PLAN - LIBERTY 1,2,3 - PIT
1/4" = 1'-0"



2 FLOOR PLAN - ELEVATOR 6 - PIT
1/4" = 1'-0"



3 FLOOR PLAN - ELEVATOR 12 - PIT
1/4" = 1'-0"

FLOOR PLAN LEGEND

SCOPE OF NEW CEILING CONSTRUCTION

SCOPE OF NEW FLOORING CONSTRUCTION

GENERAL NOTES:

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5. ELEVATOR SHAFTS CANNOT BE LEFT UNPROTECTED (OPEN) AT THE END OF WORK ON ANY DAY. IF WORK WILL COMPROMISE THE FIRE RESISTANCE OF THE SHAFT, COORDINATE AND VERIFY 2-HOUR RATING FIRE/SMOKE RATED PARTITIONS ARE REQUIRED.
6. CONTRACTOR SHALL PROTECT ADJACENT ROOMS FROM DAMAGE DURING CONSTRUCTION. REPAIR ANY DAMAGED ITEMS AND ASSEMBLIES TO PRE-PROJECT CONDITION IF DAMAGED DURING CONSTRUCTION.
7. SEE MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
8. THE WORK SHALL BE COMPLETED IN A MANNER TO AVOID DISRUPTION OF PATIENT AND/OR STAFF ACCESS TO THE ELEVATORS FROM ANY LOBBY/FLOOR. THE VAMC WILL BE FULLY OCCUPIED AND OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL FULLY COORDINATE PHASING AND SCHEDULES WITH THE CONTRACTING OFFICER PRIOR TO BEGINNING WORK.
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10. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING DOORS AS REQUIRED FOR REMOVAL AND INSTALLATION OF NEW ELEVATOR EQUIPMENT.

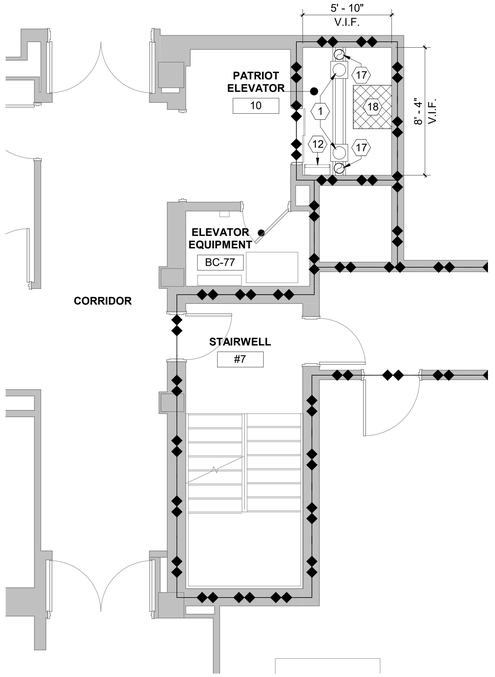
KEYNOTES: (#)

1. NEW OIL BUFFERS.
2. COMPENSATION ASSEMBLY TO REMAIN AND BE REFURBISHED.
3. EXISTING GUIDE RAILS TO REMAIN AND BE REFURBISHED. REALIGN TO COORDINATE WITH NEW EQUIPMENT AND TIGHTEN ALL MOUNTING BRACKETS., TYPICAL AT ALL CAR AND COUNTERWEIGHT GUIDE RAILS.
4. NEW GOVERNOR TENSION SHEAVE ASSEMBLY.
5. NOT USED.
6. EXISTING COUNTERWEIGHT PIT GUARD TO REMAIN.
7. EXISTING COUNTERWEIGHT ASSEMBLY TO REMAIN. REBALANCE COUNTERWEIGHT AS REQUIRED. REFURBISH AND REFINISH TO LIKE NEW CONDITION.
8. NEW CAR PLATFORM AND ENCLOSURE. CAR FRAMES SHALL REMAIN AND BE REFURBISHED. SEE DETAILS ON SHEETS A5.40.
9. NEW HOISTWAY DOOR PANELS. ENTRANCE FRAMES TO REMAIN AND BE REFURBISHED. FULLY CLEAN AND BUFF OUT ALL SCRATCHES. ALSO REMOVE ANY ADHESIVE FROM PREVIOUSLY MOUNTED SIGNAGE. TYPICAL FOR ALL ENTRANCES.
10. NEW HALL CALL STATIONS. SEE LOBBY ELEVATIONS ON SHEET A5.30 AND DETAILS ON A5.40.
11. NEW DIGITAL LANDING LANTERNS. TYPICAL FOR ALL HOISTWAY ENTRANCES. SEE LOBBY ELEVATIONS ON SHEET A5.30.
12. EXISTING METAL PIT LADDER TO REMAIN.
13. NOT USED.
14. RESILIENT TILE FLOORING, SEE SPECIFICATIONS.
15. NEW GUIDE RAILS. INSTALL TO COORDINATE WITH OTHER NEW EQUIPMENT, PROVIDE NEW MOUNTING BRACKETS, APPLIES TO ELEVATOR 7 AND 8 ONLY DUE TO WATER DAMAGE
16. NEW COUNTERWEIGHT RAILS AND PIT GUARD. INSTALL TO COORDINATE WITH OTHER NEW EQUIPMENT. PROVIDE NEW MOUNTING BRACKETS, APPLIES TO ELEVATOR 7 AND 8 ONLY DUE TO WATER DAMAGE.
17. EXISTING HYDROLIC PISTON TO BE REUSED.
18. PATCH AND REPAIR FLOOR SLAB TO MATCH EXISTING CONDITIONS.

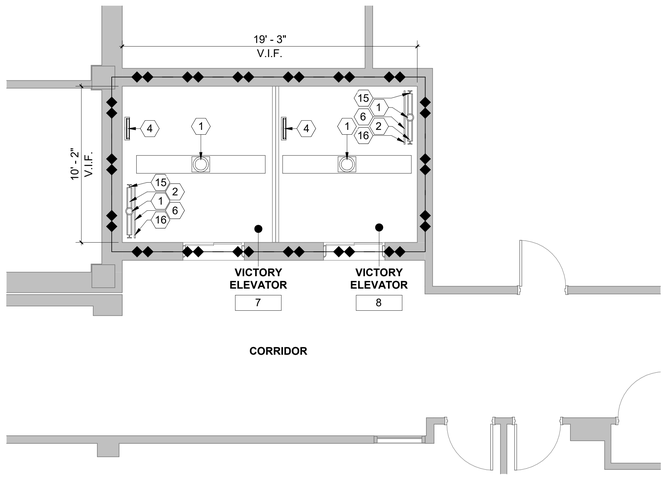
FIRE BARRIER LEGEND

EXISTING 2 HOUR FIRE RATED PARTITION

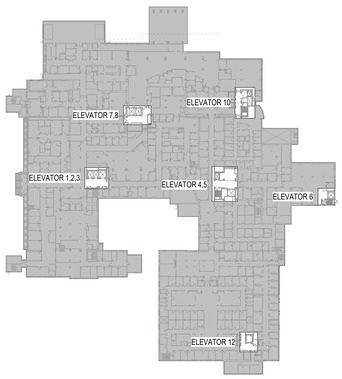
4 FLOOR PLAN - INDEPENDENCE 4,5 - PIT
1/4" = 1'-0"



5 FLOOR PLAN - PATRIOT ELEVATOR 10 - PIT
1/4" = 1'-0"



6 FLOOR PLAN - VICTORY ELEVATOR 7,8 - PIT
1/4" = 1'-0"



KEY PLAN

Revisions:	Date

CONSULTANTS:

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(612) 387-7050

LICENSED ARCHITECT JOEL P. SIMONAR (3980) DATE: 12 / 20 / 2022 STATE OF NORTH DAKOTA

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Drawing Title: ENLARGED PLANS - ELEVATOR PITS

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Project Number: 437-22-101

Building Number: 1,9,46

Approved: Project Director: FARGO VAMC

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Drawing Number: A5.20

Dwg. 10 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

5/11/2023 8:32:46 AM

VA FORM 08-6231

FIRE BARRIER LEGEND

EXISTING 2 HOUR FIRE RATED PARTITION

GENERAL NOTES:

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KEYNOTES: (#)

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5. NOT USED.
6. EXISTING COUNTERWEIGHT PIT GUARD TO REMAIN.
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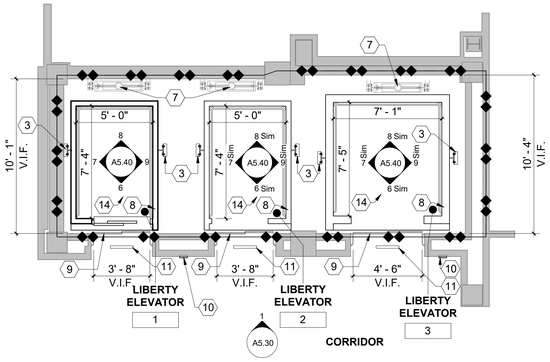
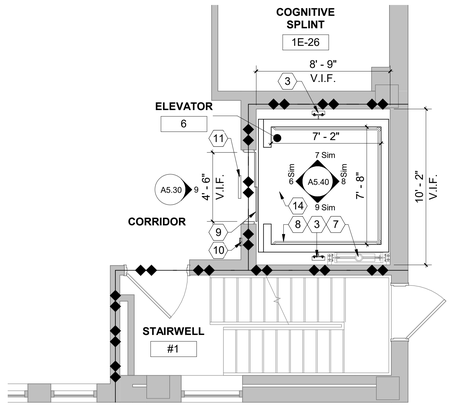
11. NEW DIGITAL LANDING LANTERNS. TYPICAL FOR ALL HOISTWAY ENTRANCES. SEE LOBBY ELEVATIONS ON SHEET A5.30.
12. EXISTING METAL PIT LADDER TO REMAIN.
13. NOT USED.
14. RESILIENT TILE FLOORING, SEE SPECIFICATIONS.
15. REPLACE EXISTING GUIDE RAILS DUE TO WATER DAMAGE, APPLIES TO ELEVATOR 7 & 8 ONLY



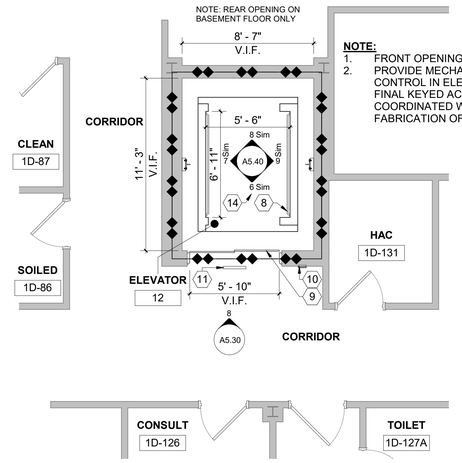
NOTE: PROVIDE MECHANICAL KEYED ACCESS CONTROL IN ELEVATOR 3 AT ALL FLOORS. FINAL KEYED ACCESS CONTROL SHALL BE COORDINATED WITH THE VA PRIOR TO FABRICATION OF THE CONTROL PANELS.

1 FLOOR PLAN - LIBERTY 1,2,3 - TYPICAL
1/4" = 1'-0"



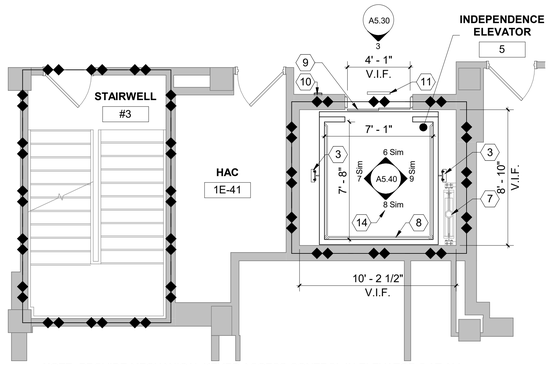
NOTE: PROVIDE MECHANICAL KEYED ACCESS CONTROL IN ELEVATOR 6 AT ALL FLOORS. FINAL KEYED ACCESS CONTROL SHALL BE COORDINATED WITH THE VA PRIOR TO FABRICATION OF THE CONTROL PANELS.

2 FLOOR PLAN - ELEVATOR 6 - TYPICAL
1/4" = 1'-0"



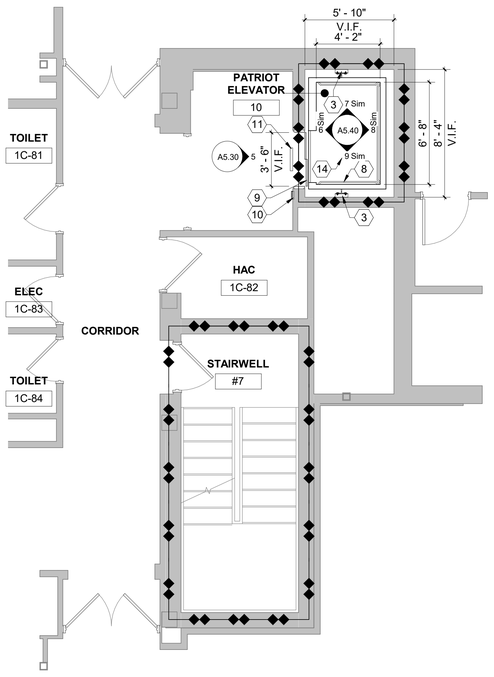
NOTE:
1. FRONT OPENING ON 1 AND 2 FLOOR ONLY
2. PROVIDE MECHANICAL KEYED ACCESS CONTROL IN ELEVATOR 12 AT ALL FLOORS. FINAL KEYED ACCESS CONTROL SHALL BE COORDINATED WITH THE VA PRIOR TO FABRICATION OF THE CONTROL PANELS.

3 FLOOR PLAN - ELEVATOR 12 - TYPICAL
1/4" = 1'-0"

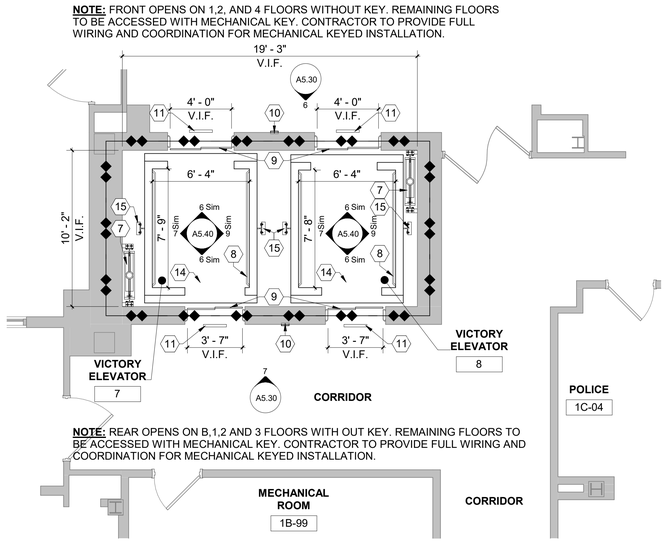


NOTE: PROVIDE MECHANICAL KEYED ACCESS CONTROL IN ELEVATOR 5 AT ALL FLOORS. FINAL KEYED ACCESS CONTROL SHALL BE COORDINATED WITH THE VA PRIOR TO FABRICATION OF THE CONTROL PANELS.

4 FLOOR PLAN - INDEPENDENCE 4,5 - TYPICAL
1/4" = 1'-0"



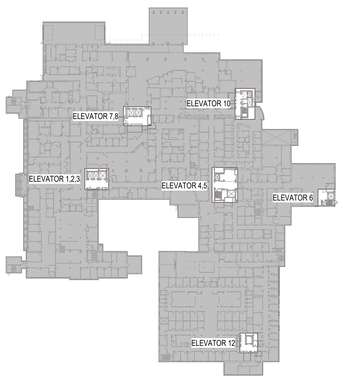
5 FLOOR PLAN - PATRIOT ELEVATOR 10 - TYPICAL
1/4" = 1'-0"



NOTE: FRONT OPENS ON 1,2, AND 4 FLOORS WITHOUT KEY. REMAINING FLOORS TO BE ACCESSED WITH MECHANICAL KEY. CONTRACTOR TO PROVIDE FULL WIRING AND COORDINATION FOR MECHANICAL KEYED INSTALLATION.

NOTE: REAR OPENS ON B,1,2 AND 3 FLOORS WITH OUT KEY. REMAINING FLOORS TO BE ACCESSED WITH MECHANICAL KEY. CONTRACTOR TO PROVIDE FULL WIRING AND COORDINATION FOR MECHANICAL KEYED INSTALLATION.

6 FLOOR PLAN - VICTORY ELEVATOR 7,8 - TYPICAL
1/4" = 1'-0"



KEY PLAN

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LICENSED ARCHITECT — JOEL P. SIMONAK — (3584) — STATE OF NORTH DAKOTA

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Revisions: | Date

Drawing Title: ENLARGED PLANS

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: A5.21

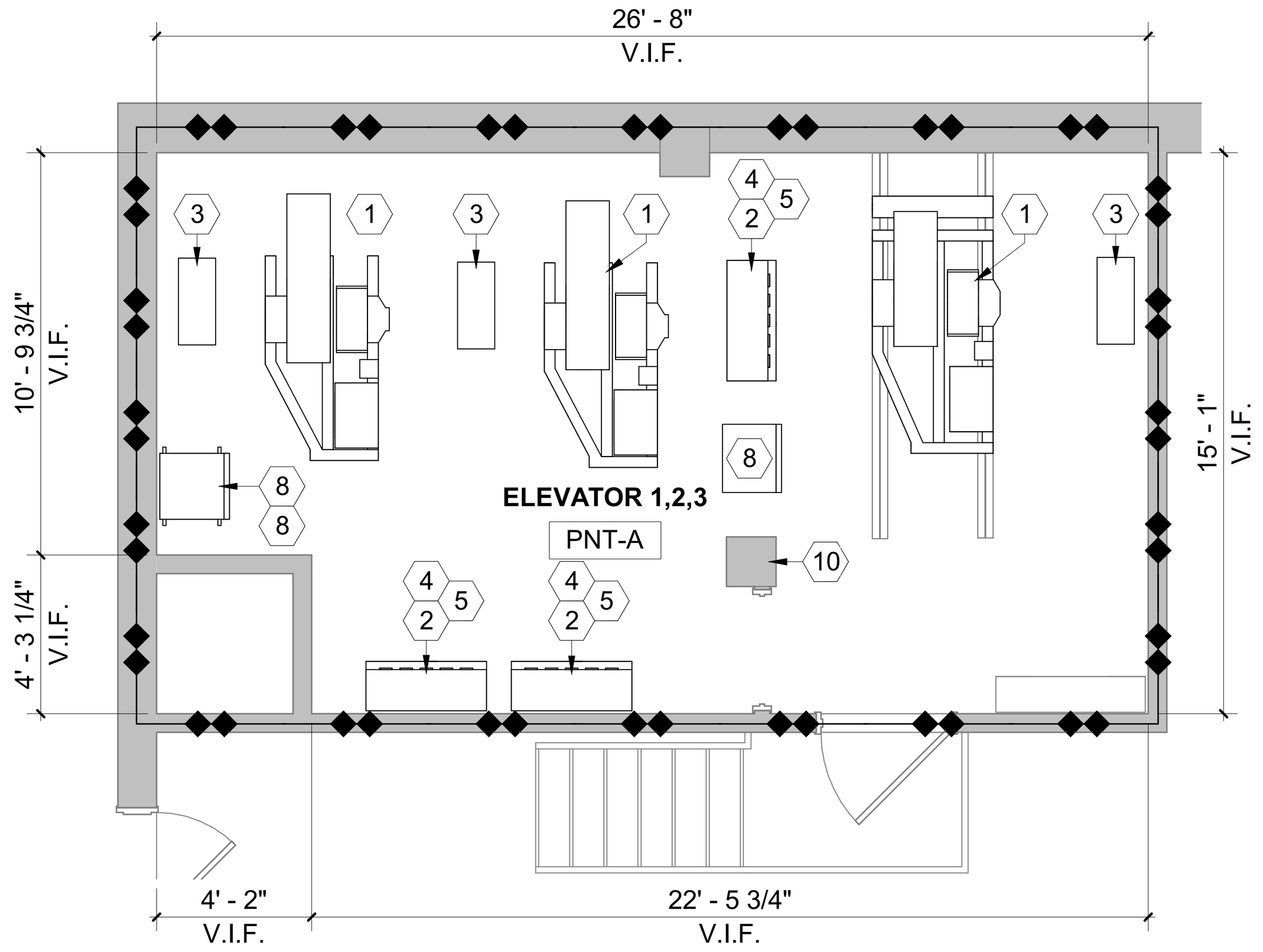
Dwg. 11 of 41

Office of Construction and Facilities Management

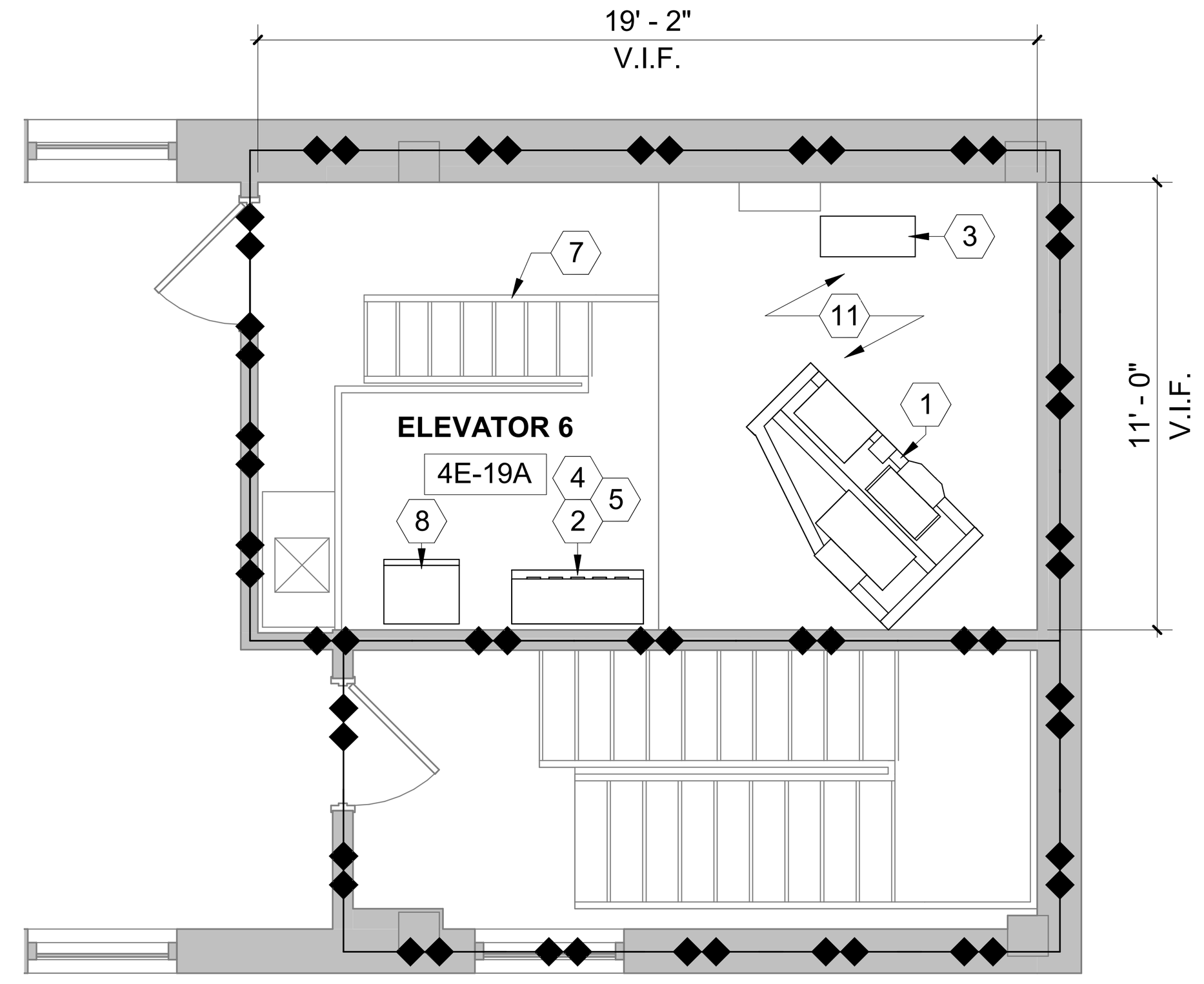
Department of Veterans Affairs

5/11/2023 8:32:49 AM

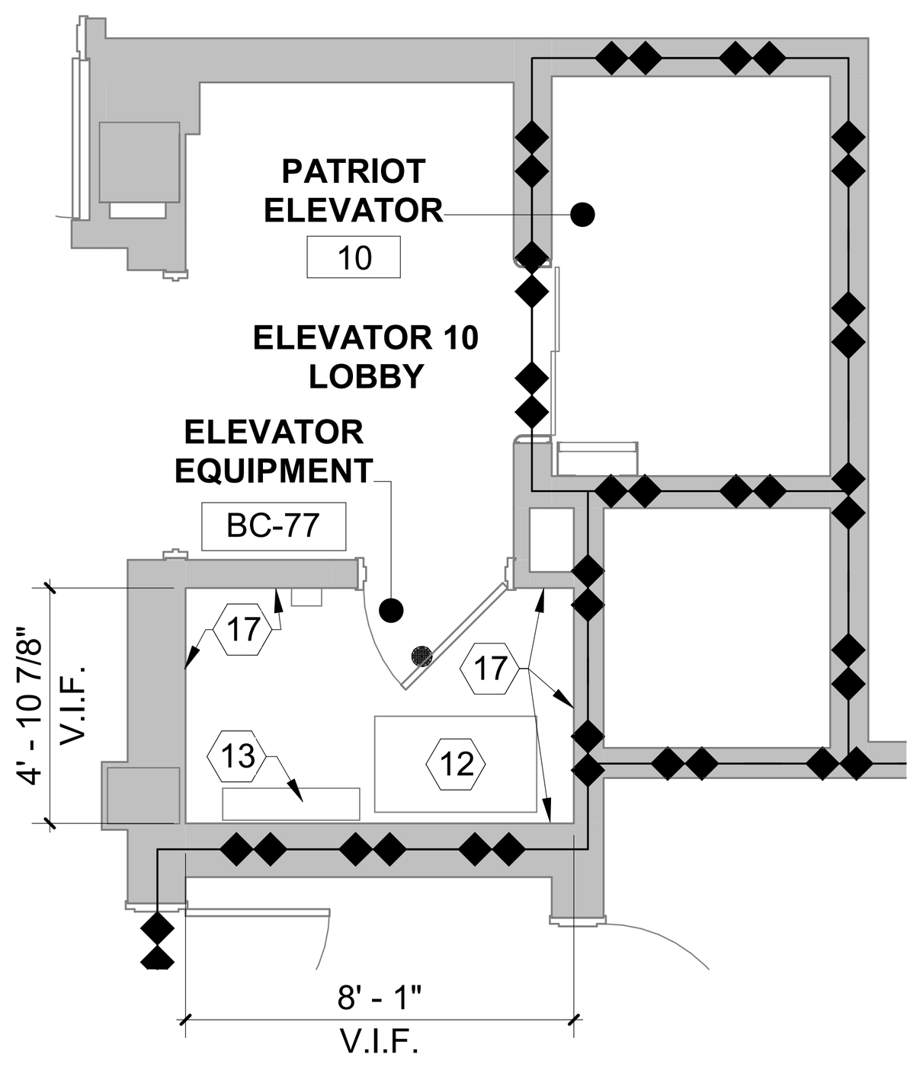
VA FORM 08-6231



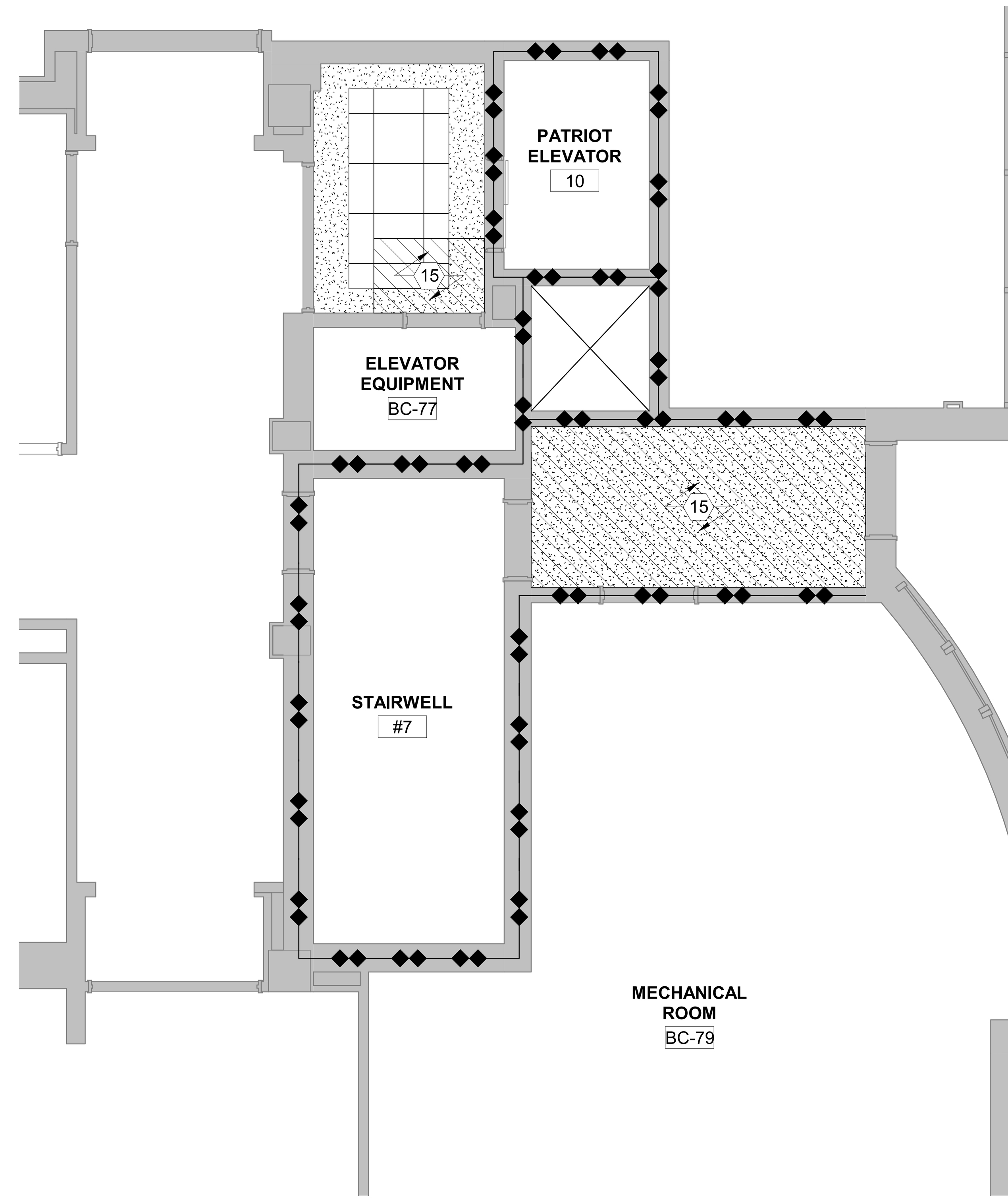
1 FLOOR PLAN - LIBERTY 1,2,3 PENTHOUSE - TYPICAL
1/4" = 1'-0"



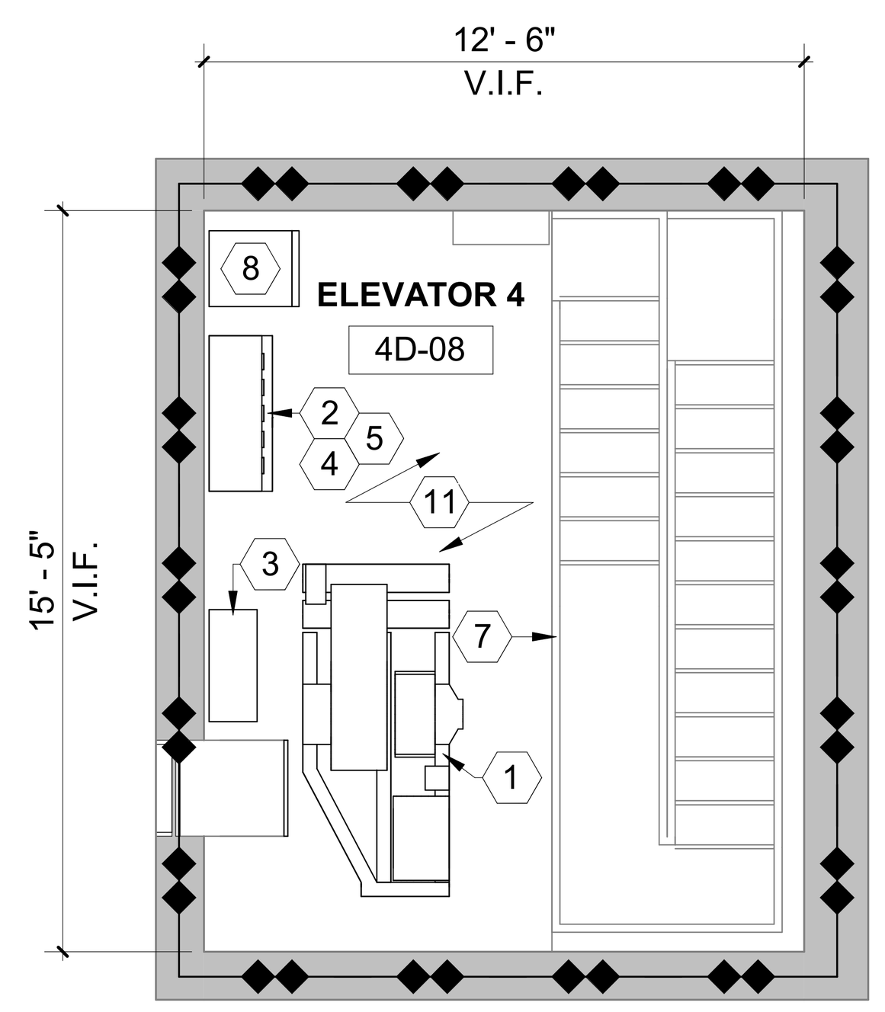
2 FLOOR PLAN - ELEVATOR 6 - PENTHOUSE - TYPICAL
1/4" = 1'-0"

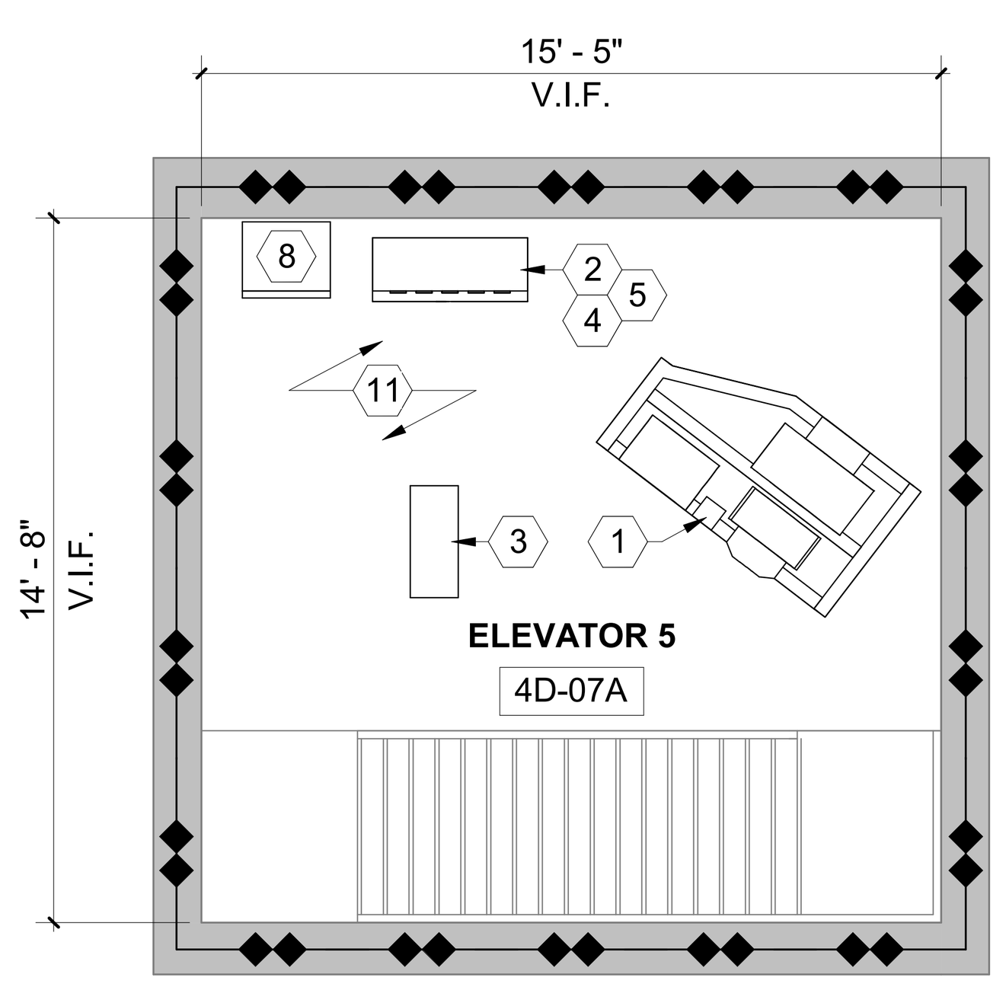


3 FLOOR PLAN - ELEVATOR 10 - EQUIPMENT ROOM
1/4" = 1'-0"

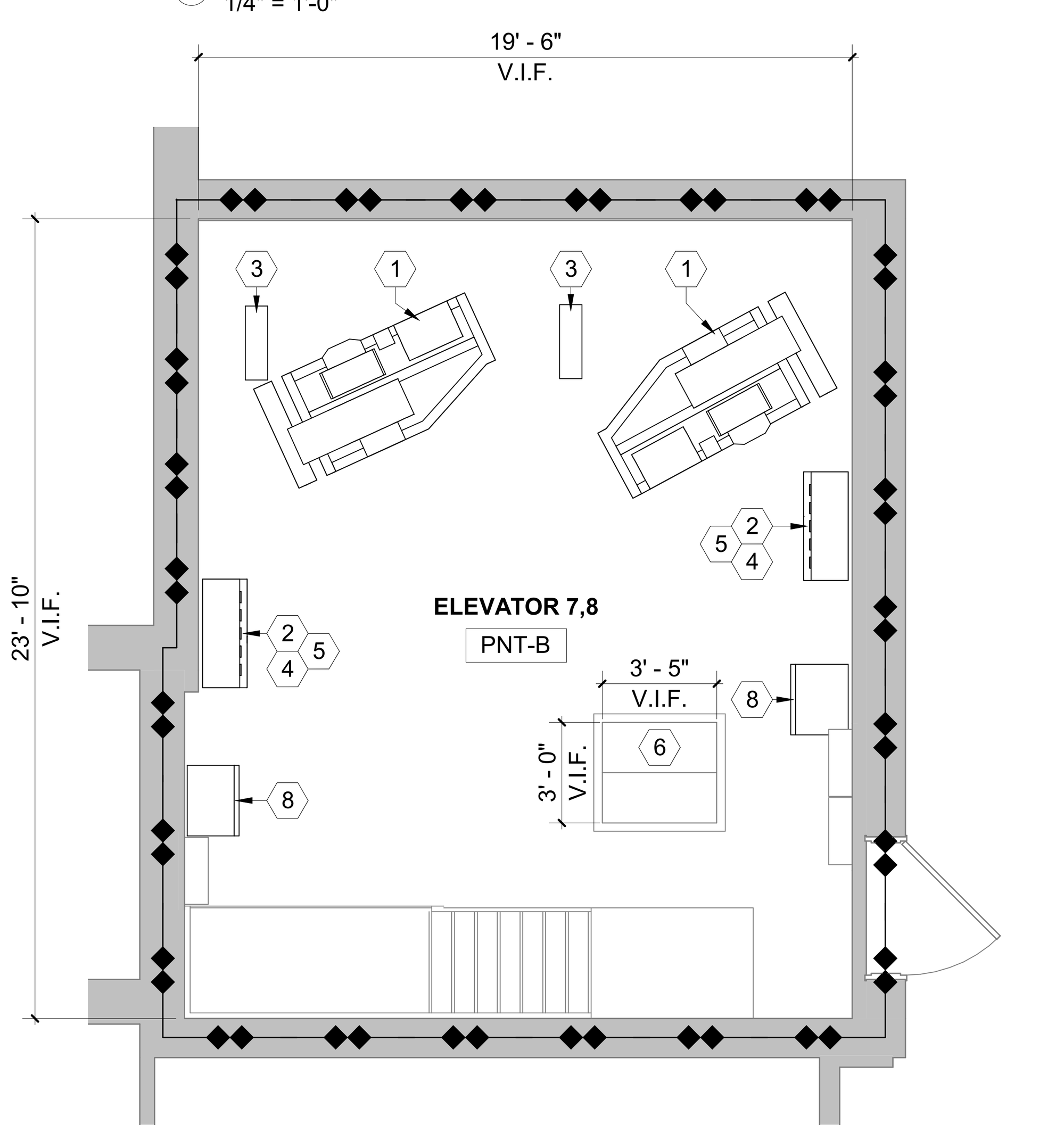


7 RCP - ELEVATOR 10 NEW - EQUIPMENT ROOM
1/4" = 1'-0"

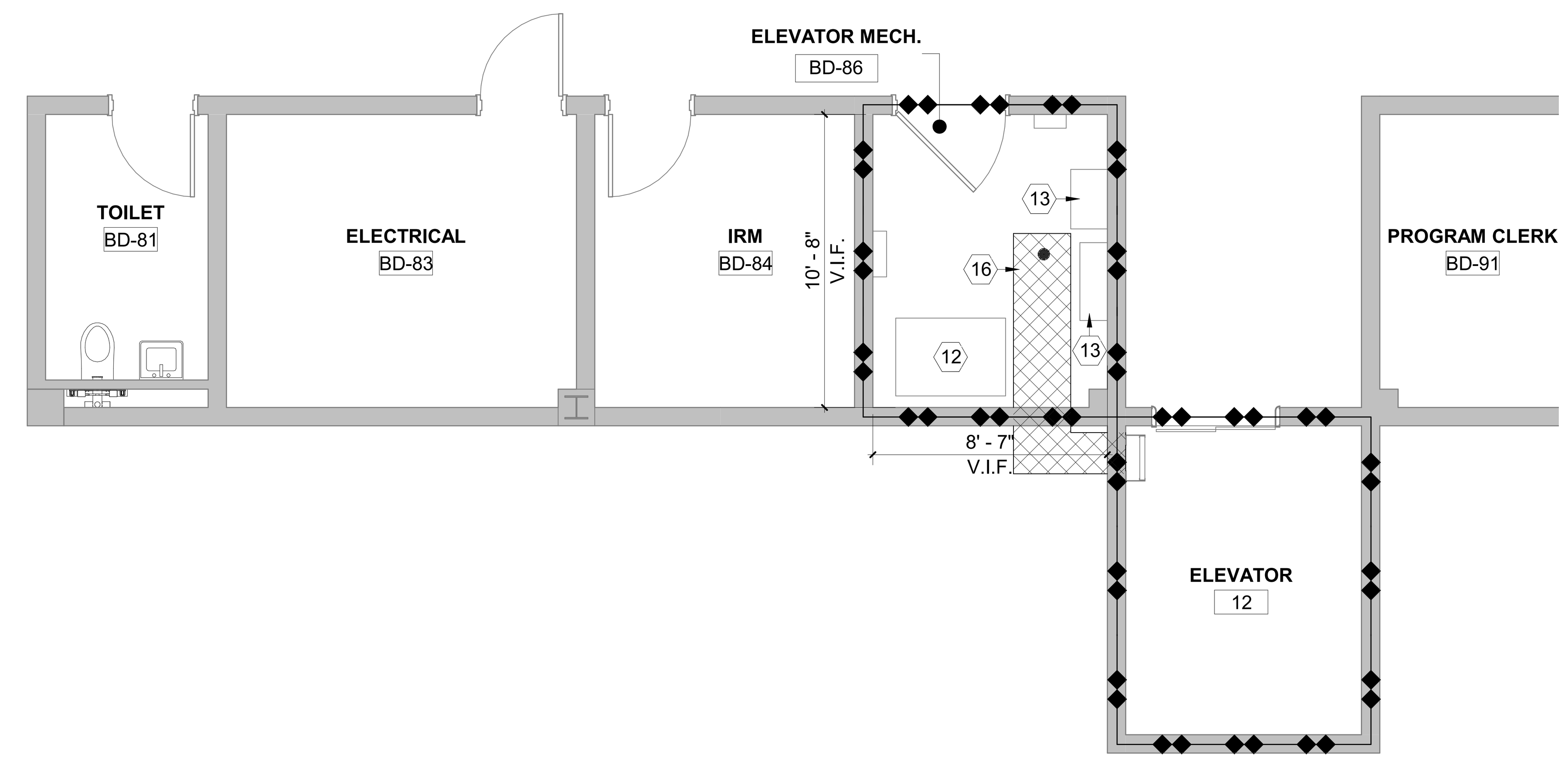




4 FLOOR PLAN - INDEPENDENCE 4,5 - PENTHOUSE - TYPICAL
1/4" = 1'-0"



5 FLOOR PLAN - VICTORY ELEVATOR 7,8 PENTHOUSE - TYPICAL
1/4" = 1'-0"



6 FLOOR PLAN - ELEVATOR 12 - EQUIPMENT ROOM
1/4" = 1'-0"

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30"X42", CONTRACTOR SHALL NOT SCALE DRAWINGS BUT REQUEST THE DESIRED DIMENSIONS FROM THE CONTRACTING OFFICER REPRESENTATIVE.
2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND TAKE PRECAUTIONARY MEASURES TO PROTECT AND MAINTAIN THEIR FUNCTION THROUGHOUT CONSTRUCTION.
3. ALL EXISTING AREAS AFFECTED BY THE SCOPE OF THIS WORK SHALL BE PATCHED AND/OR PAINTED AS REQUIRED TO MATCH THE EXISTING CONDITIONS. PAINTING SHALL BE CARRIED BACK TO THE NEAREST CORNER, CEILING, DOOR FRAME, ETC.
4. ALL WORK SHALL CONFORM TO THE CURRENT EDITION OF ALL APPLICABLE BUILDING CODES AND ALL VA STANDARDS AND REGULATIONS. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIAL NECESSARY TO COMPLY WITH SUCH CODES, STANDARDS AND REGULATIONS.
5. ELEVATOR SHAFTS CANNOT BE LEFT UNPROTECTED (OPEN) AT THE END OF WORK ON ANY DAY. IF WORK WILL COMPROMISE THE FIRE RESISTANCE OF THE SHAFT, COORDINATE AND VERIFY 2-HOUR RATING FIRE/SMOKE RATED PARTITIONS ARE REQUIRED.
6. CONTRACTOR SHALL PROTECT ADJACENT ROOMS FROM DAMAGE DURING CONSTRUCTION. REPAIR ANY DAMAGED ITEMS AND ASSEMBLIES TO PRE-PROJECT CONDITION IF DAMAGED DURING CONSTRUCTION.
7. SEE MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
8. THE WORK SHALL BE COMPLETED IN A MANNER TO AVOID DISRUPTION OF PATIENT AND/OR STAFF ACCESS TO THE ELEVATORS FROM ANY LOBBY/FLOOR. THE VAMC WILL BE FULLY OCCUPIED AND OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL FULLY COORDINATE PHASING AND SCHEDULES WITH THE CONTRACTING OFFICER PRIOR TO BEGINNING WORK.
9. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE COR IN ADVANCE. THE COR SHALL BE GIVEN ADVANCE NOTICE FOR ALL SITE VISITS BY THE CONTRACTOR AND THEIR SUBCONTRACTORS.
10. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING DOORS AS REQUIRED FOR REMOVAL AND INSTALLATION OF NEW ELEVATOR EQUIPMENT.

KEYNOTES:

1. NEW AC GEARED HOISTING MACHINE AND MOTOR.
2. NEW VARIABLE FREQUENCY/VARIABLE DRIVE CONTROLLER. SEE SPECIFICATION.
3. NEW GOVERNORS. VERIFY REQUIRED CLEARANCE.
4. NEW VARIABLE FREQUENCY DRIVE AND ALL ASSOCIATED EQUIPMENT. SEE SPECIFICATION.
5. NEW GROUP CONTROLLER. VERIFY LOCATION WITH OWNER. SEE SPECIFICATION.
6. EXISTING FLOOR HATCH.
7. REINSTALL EXISTING HANDRAIL TO MATCH CURRENT CONDITION.
8. NEW ISOLATION TRANSFORMER FOR THE ELEVATOR CONTROLLER.
9. ELECTRICAL PANEL, RE: ELECTRICAL DRAWINGS.
10. EXISTING CONCRETE COLUMN.
11. PROTECT AND MAINTAIN EXISTING AIR HANDLER AND ALL ASSOCIATED ELECTRICAL.
12. NEW HYDRAULIC PUMP ASSEMBLY. SEE MEP DRAWINGS FOR FURTHER DETAIL.
13. NEW HYDRAULIC ELEVATOR CONTROLLER. SEE MEP DRAWINGS FOR FURTHER DETAIL.
14. NOT USED.
15. REPLACE EXISTING CEILING TO MATCH EXISTING CONDITIONS. EXISTING CEILING IS PAINTED GYPSUM BOARD, COORDINATE WITH EXISTING MECHANICAL AND ELECTRICAL
16. PATCH AND REPAIR FLOOR SLAB TO MATCH EXISTING CONDITIONS.
17. PATCH AND REPAIR EXISTING WALL SURFACE AFTER THE ABATEMENT OF EXISTING BLACK MASTIC AS SHOWN ON HA101. WALL SURFACE SHALL BE FINISHED SMOOTH WITH DRYWALL COMPOUND AND PAINTED.

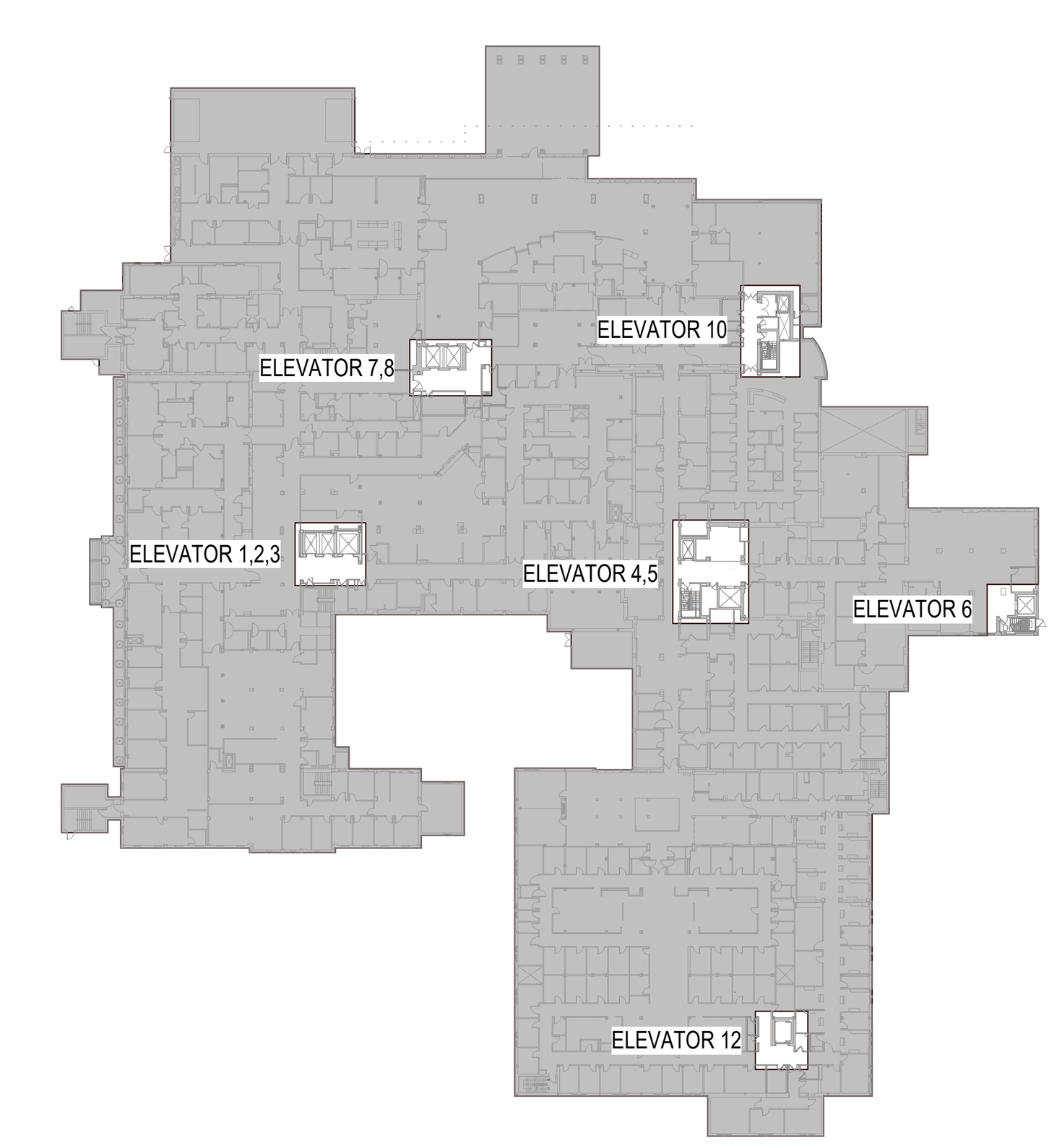
FIRE BARRIER LEGEND

EXISTING 2 HOUR FIRE RATED PARTITION ◆◆—◆◆—◆◆—◆◆

FLOOR PLAN LEGEND

▨ SCOPE OF NEW CEILING CONSTRUCTION

▦ SCOPE OF NEW FLOORING CONSTRUCTION



KEY PLAN

Revisions:	Date

CONSULTANTS:

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LICENSED ARCHITECT
JOEL P. SIMONAK
(3184)
DATE: 12 / 20 / 2022
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Drawing Title
ENLARGED PLANS - PENTHOUSE / EQUIPMENT ROOMS

Approved: Project Director
FARGO VAMC

Project Title
REFURBISH ELEVATORS AND REPLACE CONTROLS

Location 2101 ELM STREET
FARGO, ND 58102

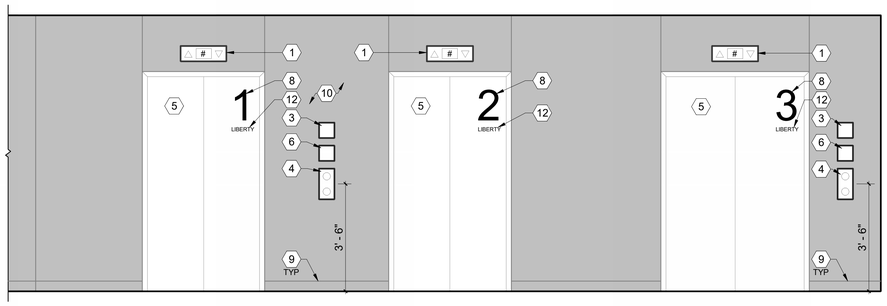
Date 12.20.22
Checked JS
Drawn JE

Project Number 437-22-101
Building Number 1,9,46
Drawing Number A5.22
Dwg. 12 of 41

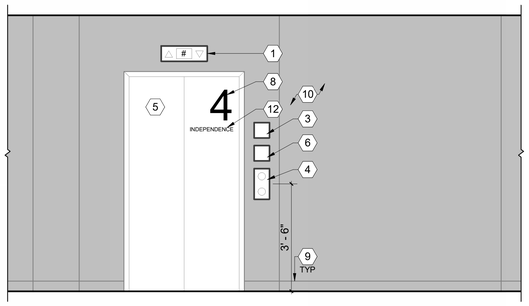
Office of Construction and Facilities Management
Department of Veterans Affairs

5/11/2023 8:32:50 AM

VA FORM 08-6231



1 ELEVATION - LIBERTY 1,2,3 - TYPICAL
1/2" = 1'-0"



2 ELEVATION - INDEPENDENCE 4 - TYPICAL
1/2" = 1'-0"

GENERAL NOTES:

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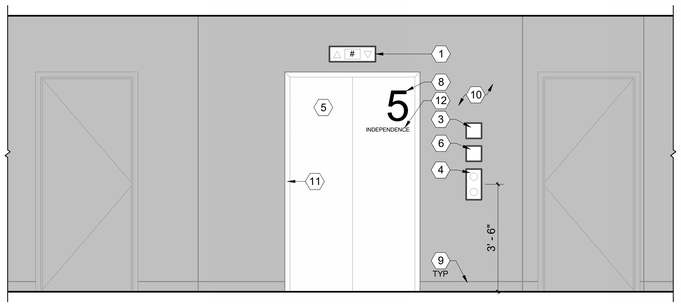
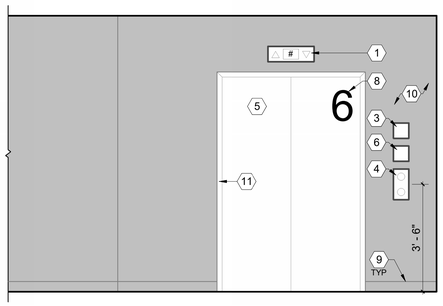
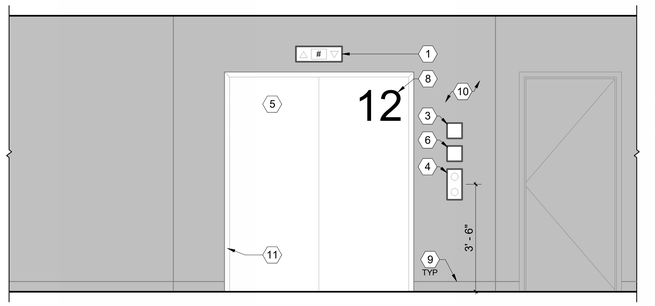
7. SEE MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
8. THE WORK SHALL BE COMPLETED IN A MANNER TO AVOID DISRUPTION OF PATIENT AND/OR STAFF ACCESS TO THE ELEVATORS FROM ANY LOBBY/FLOOR. THE VAMC WILL BE FULLY OCCUPIED AND OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL FULLY COORDINATE PHASING AND SCHEDULES WITH THE CONTRACTING OFFICER PRIOR TO BEGINNING WORK.
9. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE COR IN ADVANCE. THE COR SHALL BE GIVEN ADVANCE NOTICE FOR ALL SITE VISITS BY THE CONTRACTOR AND THEIR SUBCONTRACTORS.
10. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING DOORS AS REQUIRED FOR REMOVAL AND INSTALLATION OF NEW ELEVATOR EQUIPMENT.



3 ELEVATION - INDEPENDENCE 5 - TYPICAL
1/2" = 1'-0"



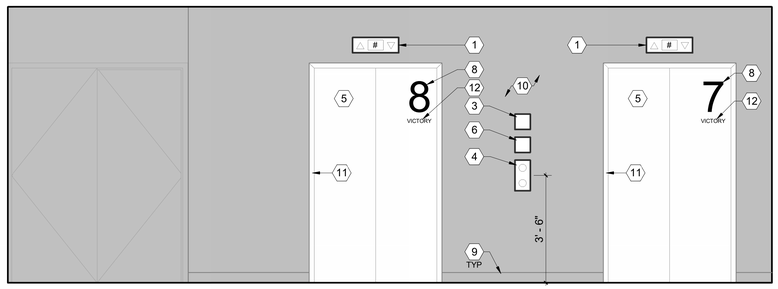
9 ELEVATION - ELEVATOR 6 - TYPICAL
1/2" = 1'-0"



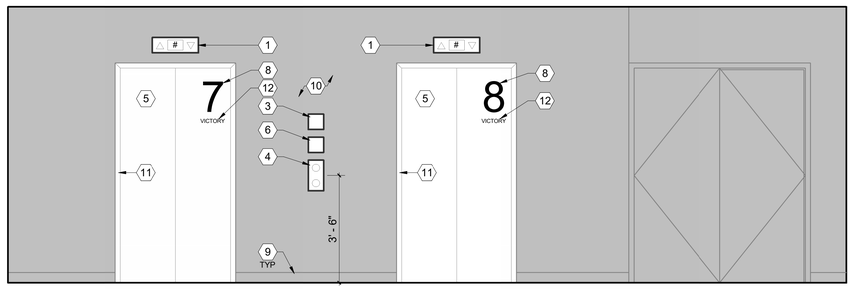
8 ELEVATION - ELEVATOR 12 - TYPICAL
1/2" = 1'-0"

KEYNOTES:

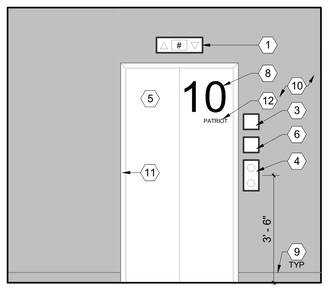
1. NEW DIGITAL LANDING LANTERNS. PATCH AND REPAIR EXISTING ADJACENT GYPSUM BOARD AS REQUIRED AND PAINT TO MATCH.
2. NOT USED.
3. PROVIDE NEW WARNING SIGNS PER A17.1, "SAFETY CODE FOR ELEVATORS AND ESCALATORS."
4. REMOVE EXISTING HALL CALL STATIONS AND PROVIDE NEW HALL CALL STATIONS FOR ALL ELEVATOR LANDINGS. INCORPORATE MEDICAL EMERGENCY SWITCH IN CALL BUTTON FACEPLATE. V.I.F. SIZE TO MATCH EXISTING PANEL. PROVIDE COORESPONDING BRAILLE AT EACH BUTTOM.
5. NEW HOISTWAY DOOR PANELS. EXISTING STAINLESS STEEL ENTRANCE FRAMES AND THRESHOLDS TO REMAIN. AT COMPLETION OF PROJECT, CLEAN STAINLESS STEEL ENTRANCE FRAMES AND CLEAN AND RESTORE THE THRESHOLDS TO BE SMOOTH AND FULLY FINISHED IN THEIR APPEARANCE.
6. REMOVE EXISTING FIREFIGHTERS SERVICE SWITCH AND PROVIDE NEW FIREFIGHTERS SERVICE SWITCH.
7. NOT USED.
8. 12" VINYL SELF-ADHERING DECALS AT EACH LANDING, BLACK COLOR.
9. EXISTING WALL BASE TO REMAIN, TYPICAL.
10. PATCH, REPAIR AND FINISH ALL EXISTING WALLS AS REQUIRED FOR REPLACEMENT OF ALL CONTROLS AND INDICATORS.
11. BUFF, REPAIR AND CLEAN. EXISTING STAINLESS STEEL HOIST WAY ENTRANCE JAMBS.
12. 3" VINYL SALF-ADHEARING DECALS AT EACH _, BLACK COLOR.



6 ELEVATION - VICTORY ELEVATOR 7,8 NORTH - TYPICAL
1/2" = 1'-0"



7 ELEVATION - VICTORY ELEVATOR 7,8 SOUTH - TYPICAL
1/2" = 1'-0"



5 ELEVATION - PATRIOT ELEVATOR 10 - TYPICAL
1/2" = 1'-0"

Revisions:	Date

CONSULTANTS:

SUMMIT FIRE PROTECTION

SUMMIT FIRE CONSULTING
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LICENSED ARCHITECT
JOEL P. SIMONAR
(3984)
DATE: 12 / 20 / 2022
STATE OF NORTH DAKOTA

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Drawing Title: INTERIOR ELEVATIONS - LOBBIES

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: A5.30

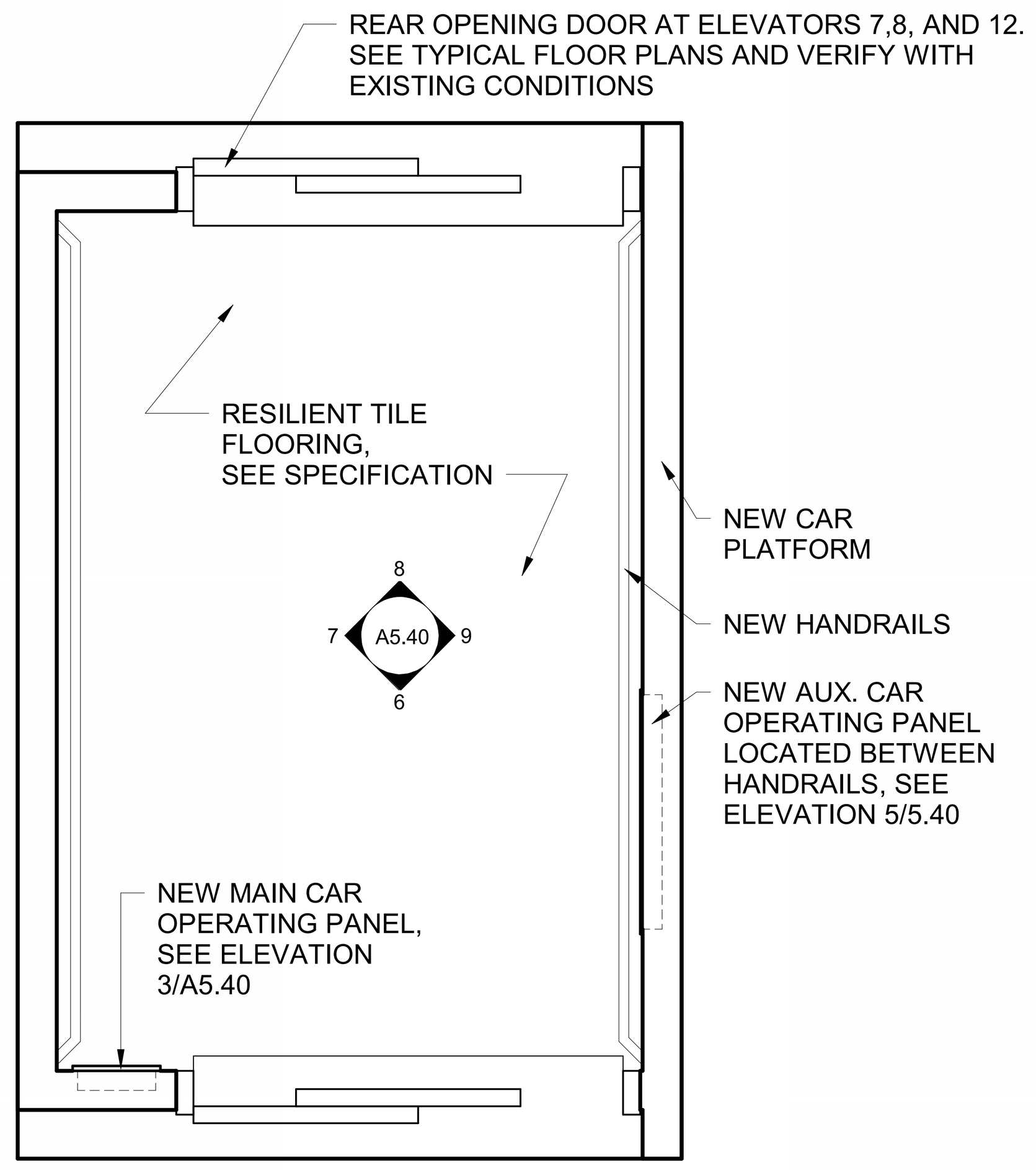
Dwg. 13 of 41

Office of Construction and Facilities Management

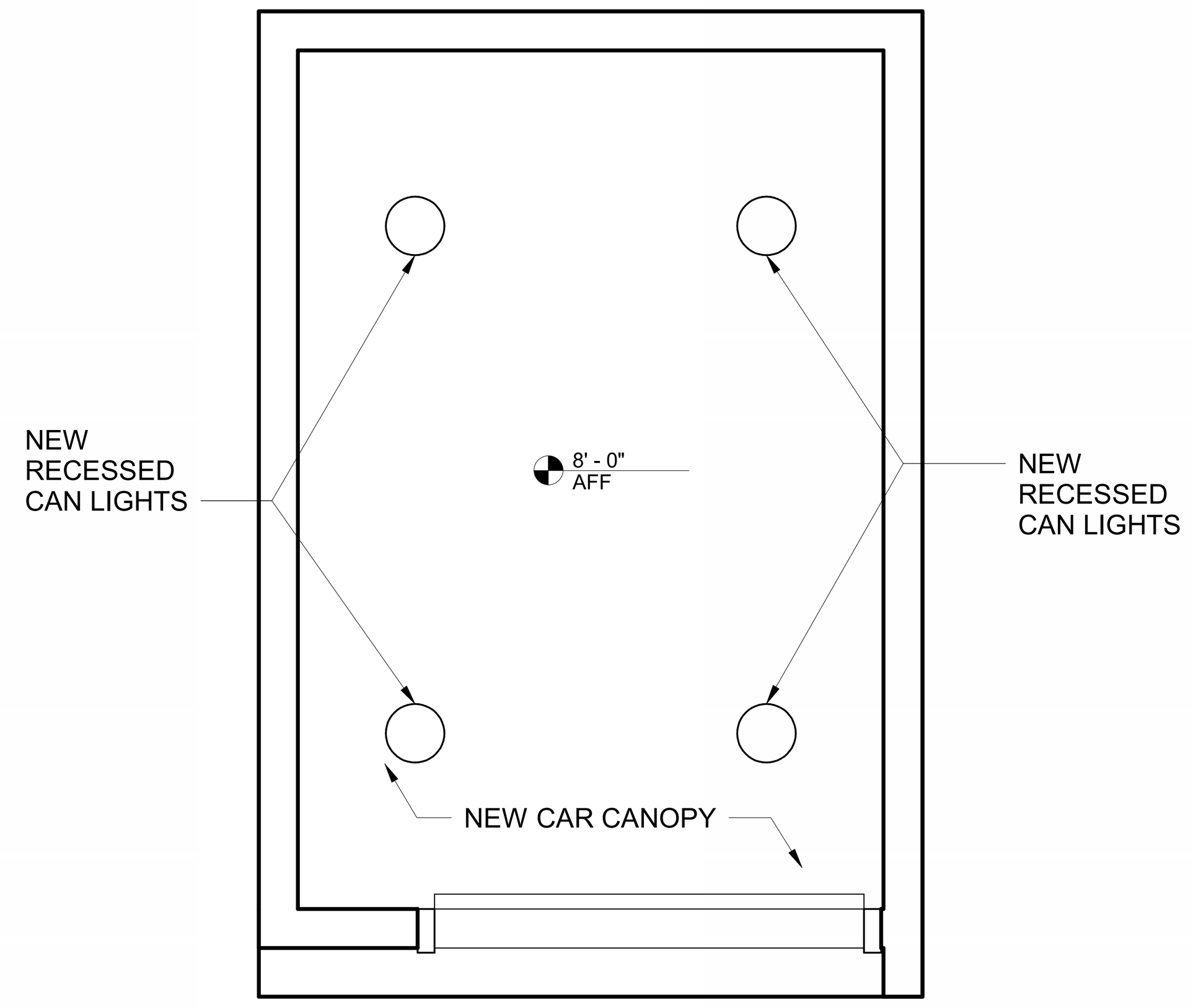
Department of Veterans Affairs

5/11/2023 8:32:54 AM

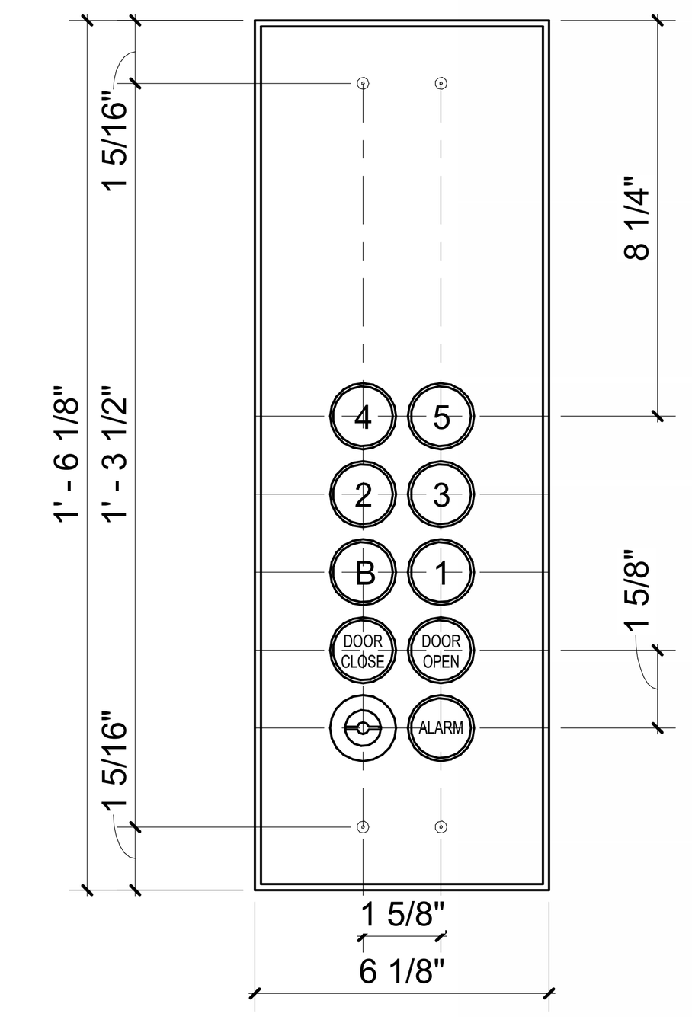
VA FORM 08-6231



1 ENLARGED FLOOR PLAN - TYPICAL ELEVATOR CAB
3/4" = 1'-0"

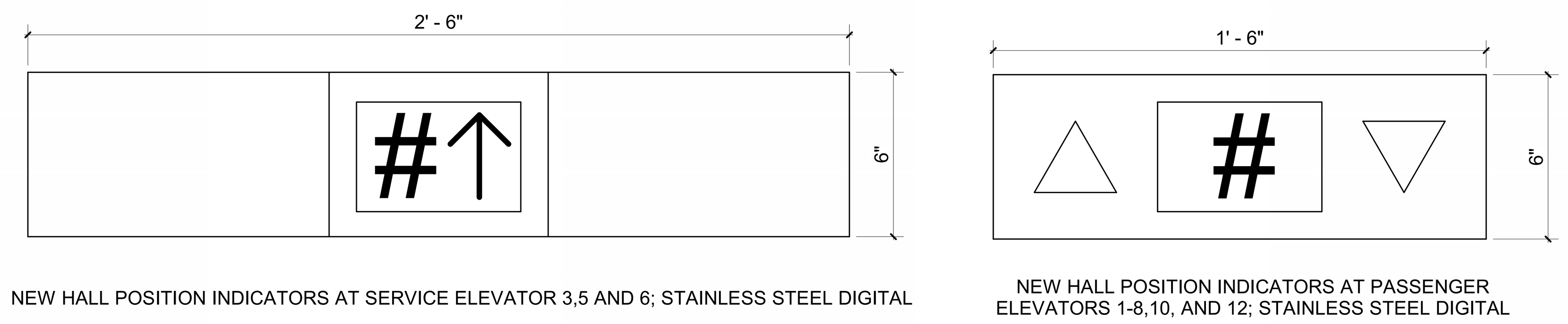


2 ENLARGED REFLECTED CEILING PLAN - TYPICAL ELEVATOR CAB
3/4" = 1'-0"

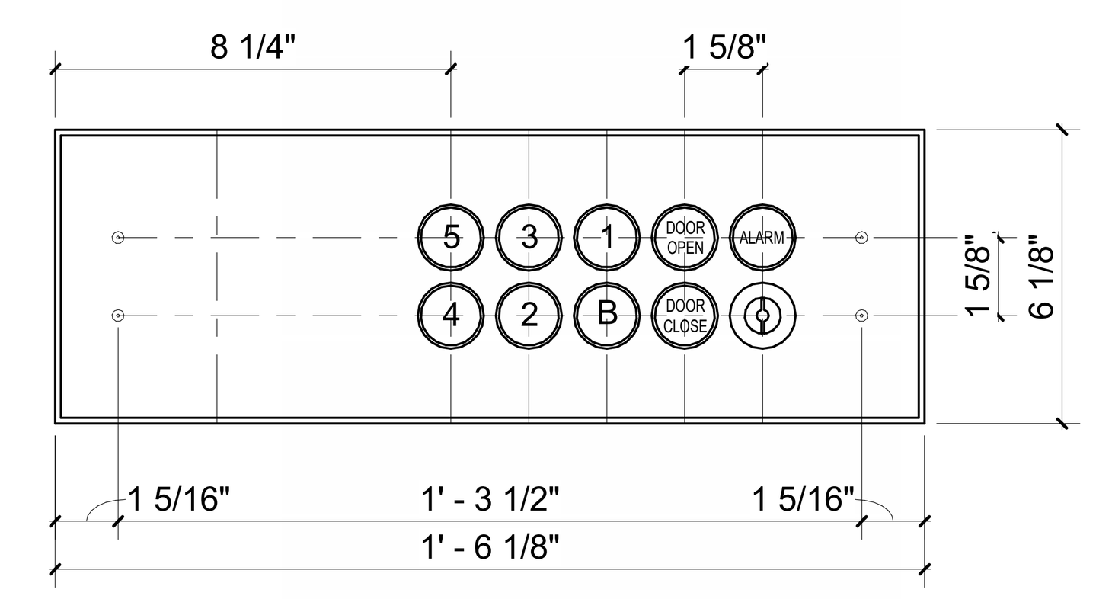


NOTE: PASSENGER ELEVATORS 1-8,10, AND 12
1. ADJUST CONTROL BUTTONS FOR ELEVATORS WITH LESS FLOORS. PROVIDE REAR OPENING BUTTONS WHERE APPLICABLE.
2. PROVIDE COORESPONDING BRAILLE AT EACH BUTTON.
3. SEE FLOOR PLAN NOTES FOR KEYED ACCESS.

3 TYPICAL ELEVATOR OPERATING PANEL ELEVATIONS VERTICAL
3" = 1'-0"

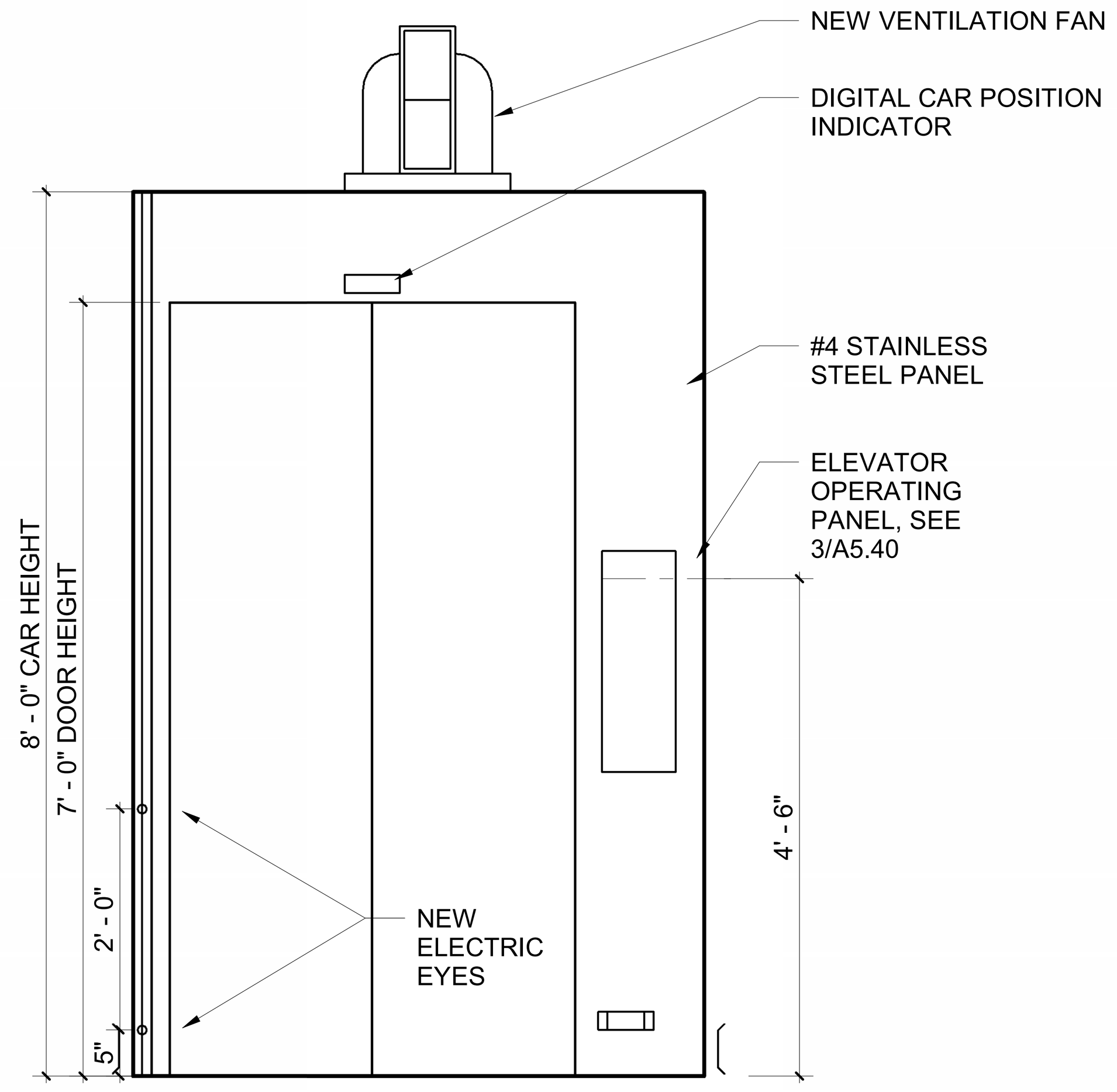


4 HALL POSITION INDICATOR ELEVATIONS
3" = 1'-0"

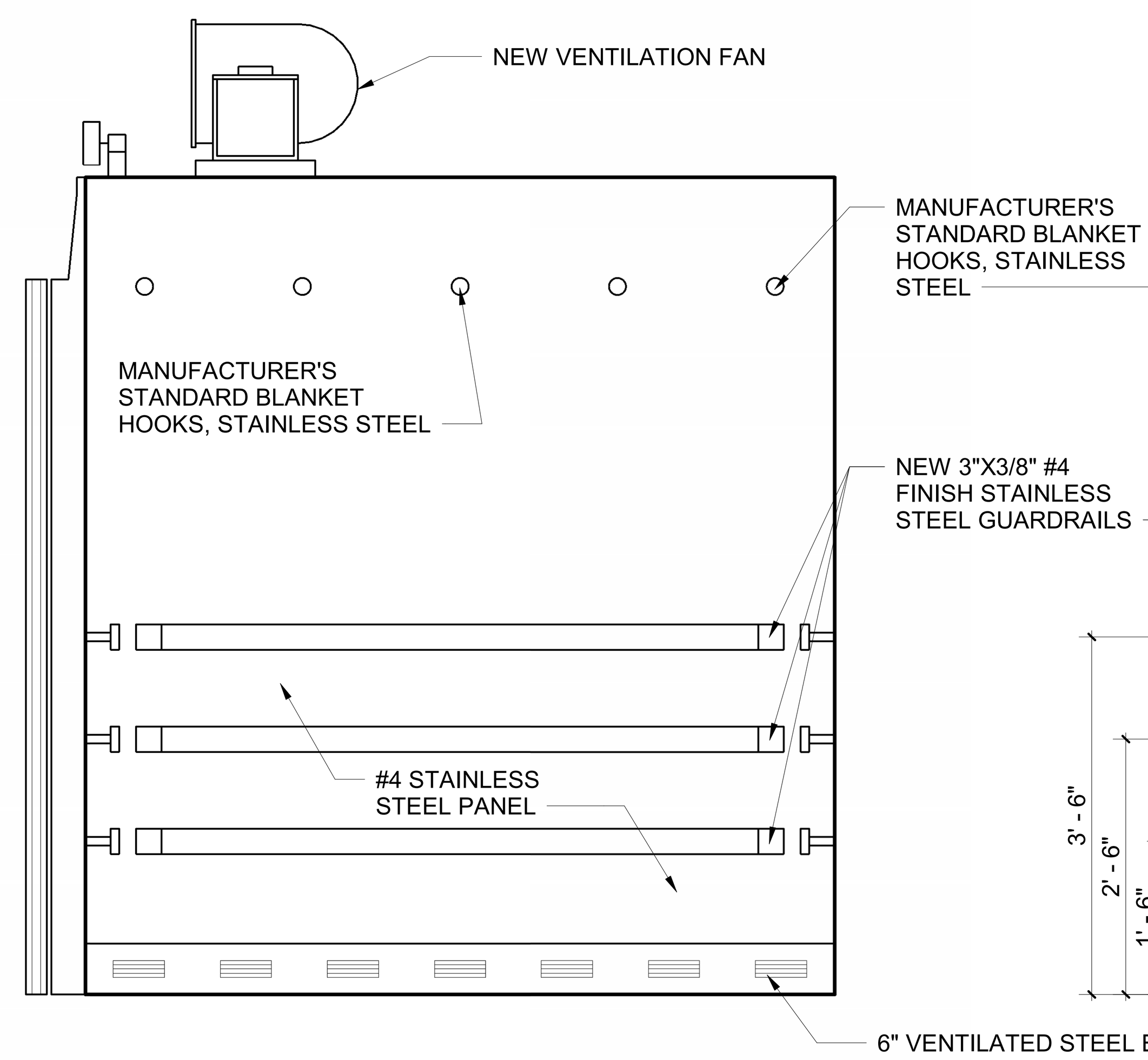


NOTE: PASSENGER ELEVATORS 1-8,10, AND 12
1. ADJUST CONTROL BUTTONS FOR ELEVATORS WITH LESS FLOORS. PROVIDE REAR OPENING BUTTONS WHERE APPLICABLE.
2. PROVIDE COORESPONDING BRAILLE AT EACH BUTTON.
3. SEE FLOOR PLAN NOTES FOR KEYED ACCESS.

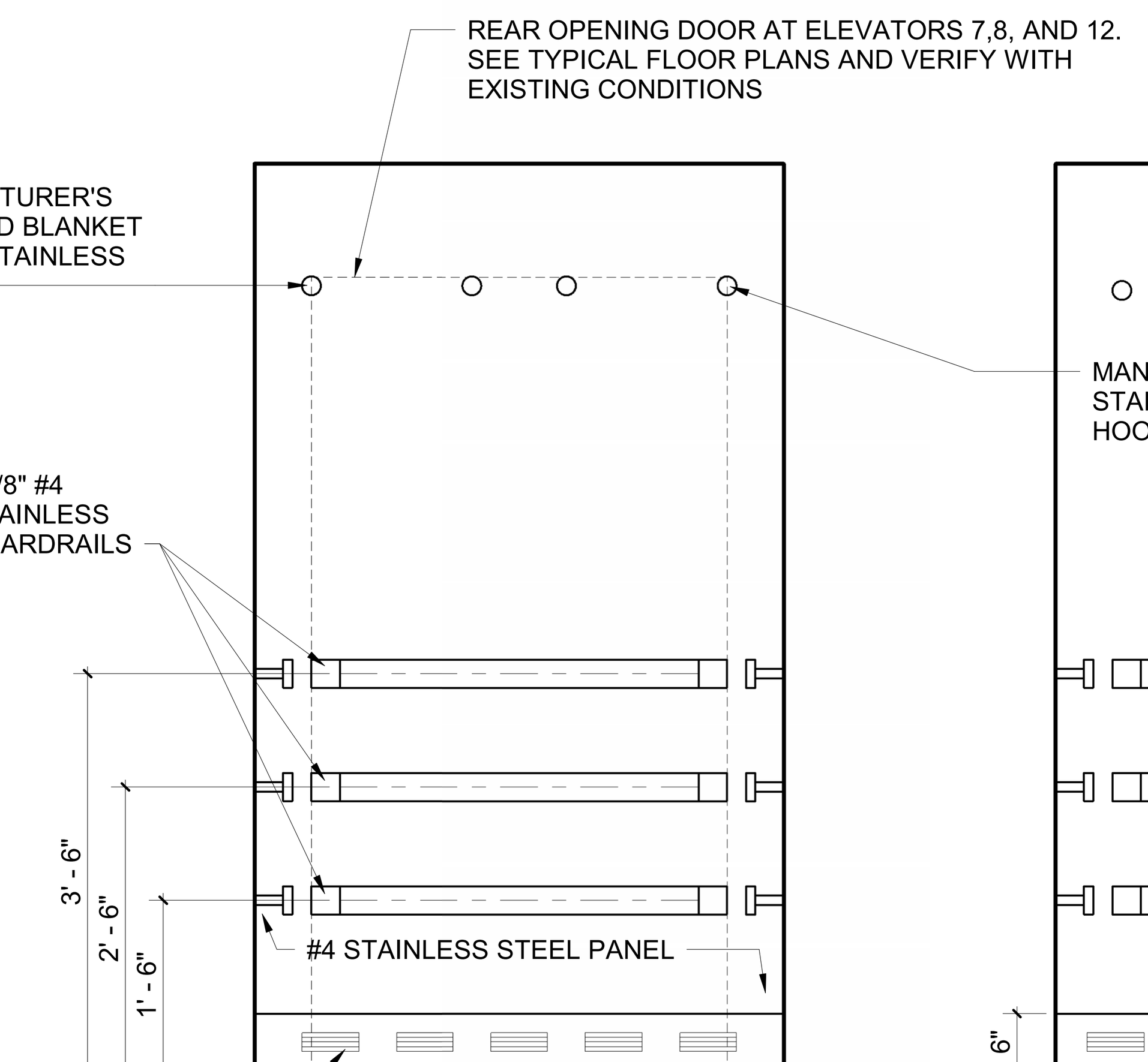
5 TYPICAL ELEVATOR OPERATING PANEL ELEVATION HORIZONTAL
3" = 1'-0"



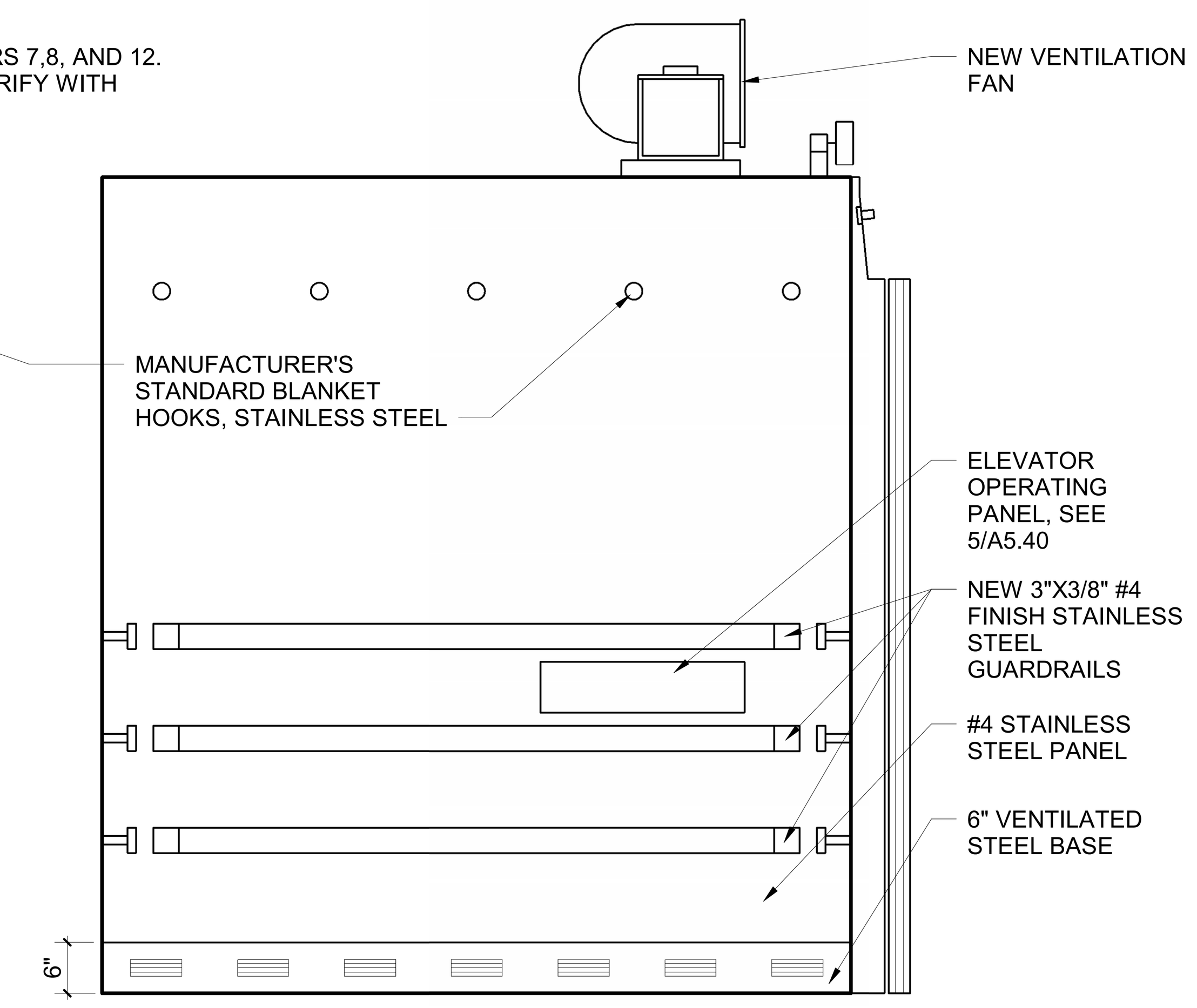
6 TYPICAL ELEVATOR CAB ELEVATION - DOOR
3/4" = 1'-0"



7 TYPICAL ELEVATOR CAB ELEVATION - LEFT
3/4" = 1'-0"



8 TYPICAL ELEVATOR CAB ELEVATION - BACK
3/4" = 1'-0"



9 TYPICAL ELEVATOR CAB ELEVATION - RIGHT
3/4" = 1'-0"

GENERAL NOTES:

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Revisions: | Date

CONSULTANTS:

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Drawing Title: ELEVATOR CAR ENCLOSURE PLANS AND ELEVATIONS

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET, FARGO, ND 58102

Date: 12.20.22 | Checked: JS | Drawn: JE

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: A5.40

Dwg. 14 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

5/11/2023 8:32:56 AM

VA FORM 08-6231

ABBREVIATIONS:

AC	ALTERNATING CURRENT
ADJ.	ADJUSTABLE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AS	AIR SEPARATOR
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
BHP	BRAKE HORSEPOWER
BMS	BUILDING MANAGEMENT SYSTEM
CALC	CALCULATED
CC	CHILLED WATER COOLING COIL - AHU
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
C/L	CENTERLINE
CO	CLEANOUT
COEF	COEFFICIENT
COMLINK	COMMUNICATION LINK
COND	CONDENSATION
CONFIG	CONFIGURED
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CNTRL.	CONTROL
CP	CONDENSATE PUMP
CPVC	CHLORINATED POLYVINYL CHLORIDE
CR	CONDENSATE RETURN
CV	CONTROL VALVE
CV	FLOW COEFFICIENT
DAMP.	DAMPER
DAT	DISCHARGE AIR TEMPERATURE
DB	DRY BULB
DC	DIRECT CURRENT
DCW	DOMESTIC COLD WATER
DEG	DEGREES
DHR	DOMESTIC HOT WATER RETURN
DHW	DOMESTIC HOT WATER
DIFF.	DIFFERENTIAL
DIST	DISTRUBUTION
DS	DOWNSPOUT
DSP	DEHUMIDIFICATION SET POINT
DWV	DRAIN, WASTE AND VENT
(E)	EXISTING
EA	EXHAUST AIR
ECC	ENERGY CONTROL CENTER
ELECT.	ELECTRICAL
ELEV	ELEVATION
ENT	ENTERING
ERC	ENERGY RECOVERY COIL - AHU
ES	END SWITCH
EWC	ELECTRIC WATER COOLER
F	FAHRENHEIT
FD	FLOOR DRAIN
FILT.	FILTER
FPM	FEET PER MINUTE
FT	FEET
GAL	GALLONS
GALV	GALVANIZED
G.C.	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GT	GLYCOL TANK
H	HEIGHT
H	HUMIDIFIER - AHU
HP	HORSEPOWER
HPS	HIGH PRESSURE STEAM
HR	HOUR
HRCR	HEAT RECOVERY RETURN
HRCS	HEAT RECOVERY SUPPLY
HRP	HEAT RECOVERY PUMP
HSP	HUMIDIFICATION SET POINT
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HX	HEAT EXCHANGER
Hz	HERTZ
IBC	INTERNATIONAL BUILDING CODE
ICVAMC	IOWA CITY VETERANS AFFAIRS MEDICAL CENTER
IECC	INTERNAIONAL ENERGY CONSERVATION CODE
IFB	INTEGRAL FACE AND BYPASS
IMC	INTERNATIONAL MECHANICAL CODE
I/O	INPUT/OUTPUT
IPC	INTERNATIONAL PLUMBING CODE
K.O.	COMMANDING OFFICER
L	LENGTH
LBS	POUNDS
LPS	LOW PRESSURE STEAM
LWA	SOUND POWER LEVEL
MAX	MAXIMUM
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MC	MECHANICAL CONTRACTOR
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MFG	MANUFACTURER
MIN	MINIMUM
MIN	MINUTE
mm	MILLIMETER
MPS	MEDIUM PRESSURE STEAM
MT	MOISTURE (HUMIDITY) TRANSMITTER
MV	MANUAL VENT
N.C.	NORMALLY CLOSED
NC	NOISE CRITERIA LEVEL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NG	NATURAL GAS
N.O.	NORMALLY OPEN
NPT	NATIONAL PIPE THREAD
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
ORD	OVERFLOW ROOF DRAIN
OSA	OUTSIDE AIR
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
Pa	PASCAL
PC	PUMPED CONDENSATE
PC	PREHEAT STEAM COIL - AHU
PD	PRESSURE DROP
PDS	PRESSURE DIFFERENTIAL SENSOR
PH	PHASE
PI	PROPORTIONAL INTEGRAL
PID	PROPORTIONAL INTEGRAL DERIVATIVE
PRESS.	PRESSURE
PSH	HIGH PRESSURE SWITCH
PSIG	POUNDS PER SQUARE INCH - GAUGE
PSL	LOW PRESSURE SWITCH
QUANT.	QUANTITY
R	RADIUS
R	RETURN
RA	RETURN AIR
RC	REHEAT STEAM COIL - AHU
RD	ROOF DRAIN
RE	RESIDENT ENGINEER
RFR	REFRIGERANT RETURN
RFS	REFRIGERANT SUPPLY
REQ'D	REQUIRED
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
S	SUPPLY
SA	SUPPLY AIR
SAN	SANITARY
SD	SMOKE DAMPER
SF	FAN SECTION - AHU
SF	SQUARE FEET
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS ASSOCIATION
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SS	STAINLESS STEEL
SST	START/STOP
SUH	STEAM UNIT HEATER
SV	STEAM VALVE
SV	STEAM VENT
T	THERMOSTAT
TEMP.	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TT	TEMPERATURE SENSOR/TRANSMITTER
TYP	TYPICAL
UH	UNIT HEATER
V	VENT
V	VOLTS
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VSMC	VARIABLE SPEED MOTOR CONTROLLER
VTR	VENT THROUGH ROOF
W	WIDTH
W/	WITH
WB	WET BULB
WG	INCHES OF WATER
ZAT	ZONE AIR TEMPERATURE
ZC	VALVE OR DAMPER CONTROLLER

HVAC / MECHANICAL SYMBOLS

- SA — SUPPLY AIR DUCT FROM AHU
- S/A — SUPPLY AIR DUCT FROM VAV
- F/A — FRESH AIR DUCT FROM ERV
- O/A — OUTSIDE AIR DUCT TO AHU OR ERV
- EA — EXHAUST AIR DUCT TO AHU
- E/A — EXHAUST AIR DUCT TO EXTERIOR
- VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)
- VANED RADIUS ELBOW (SHORT RADIUS)
- RADIUS ELBOW (SHORT RADIUS)
- 10X8 — RECTANGULAR DUCT (INSIDE DIMENSIONS: WIDTH / DEPTH)
- 10/8 — OVAL DUCT (INSIDE DIMENSIONS: WIDTH / DEPTH)
- 10"ø — ROUND DUCT (INSIDE DIMENSIONS: WIDTH / DEPTH)
- 10X8 — SUPPLY DUCT UP
- 10X8 — SUPPLY DUCT DOWN
- 10X8 — RETURN DUCT UP
- 10X8 — RETURN DUCT DOWN
- 10X8 — EXHAUST DUCT UP
- 10X8 — EXHAUST DUCT DOWN
- M — MOTORIZED DAMPER W/ ACCESS DOOR
- FD — FIRE DAMPER W/ ACCESS DOOR
- FSD — FIRE AND SMOKE DAMPER W/ ACCESS DOOR
- SD — SMOKE DAMPER W/ ACCESS DOOR
- BD — BACKDRAFT DAMPER W/ ACCESS DOOR
- MANUAL VOLUME DAMPER
- SUPPLY DIFFUSER
- RETURN GRILLE
- EXHAUST GRILLE
- S-1 / 575 CFM — GRILLE / REGISTER / DIFFUSER TAG W/ CFM
- DUCT FLEX CONNECTOR
- FLEX DUCT

- VARIABLE AIR VOLUME BOX (VAV) / TERMINAL UNIT (TU)
- WALL MOUNTED EXHAUST FAN
- DUCT HOT WATER REHEAT COIL
- HEAT EXCHANGER
- STEAM CONDENSATE PUMP
- STEAM FLASH TANK
- EXPANSION TANK
- BALL VALVE
- GATE VALVE (N.O. / N.C.)
- GLOBE VALVE
- CHECK VALVE
- MODULATING CONTROL VALVE (OR)
- PRESSURE REDUCING VALVE
- MANUAL BALANCING / SHUT-OFF VALVE
- PRESSURE GAUGE
- TEMPERATURE GAUGE
- AHU-6 — MECHANICAL EQUIPMENT TAG WITH NUMBER DESIGNATION
- (T) THERMOSTAT
- (TS) TEMPERATURE SENSOR
- (P) PRESSURE SENSOR
- (SP) DIFFERENTIAL PRESSURE SENSOR
- (H) HUMIDITY SENSOR

- HWS — HOT WATER SUPPLY
- HWR — HOT WATER RETURN
- RHWS — REHEAT HOT WATER SUPPLY
- RHWR — REHEAT HOT WATER RETURN
- PHWS — PERIMETER HEATING WATER SUPPLY
- PHWR — PERIMETER HEATING WATER RETURN
- CHS — CHILLED WATER SUPPLY
- CHR — CHILLED WATER RETURN
- RL — REFRIGERANT - LIQUID
- RS — REFRIGERANT - SUCTION
- STM-LP — LOW PRESSURE STEAM
- STM-MP — MEDIUM PRESSURE STEAM
- STM-HP — HIGH PRESSURE STEAM
- CDR-L — LOW PRESSURE STEAM CONDENSATE RETURN
- CDR-M — MEDIUM PRESSURE STEAM CONDENSATE RETURN
- CDR-H — HIGH PRESSSURE STEAM CONDENSATE RETURN
- PC — PUMPED STEAM CONDENSATE RETURN
- STEAM BUCKET TRAP
- FLOAT & THERMOSTATIC TRAP
- STEAM THERMOSTATIC TRAP
- STRAINER
- UNION
- CONCENTRIC PIPE REDUCER
- ECCENTRIC PIPE REDUCER
- PIPE ELBOW
- PIE TEE
- PIPE DOWN
- PIPE UP
- PIPE TEE DOWN
- PIPE TEE UP
- (2) MECHANICAL PLAN NOTE
- POINT OF CONNECTION
- POINT OF DISCONNECTION
- TO BE DEMOLISHED
- S — S — SMOKE BARRIER
- ONE HOUR FIRE BARRIER
- TWO HOUR FIRE BARRIER
- DIRECTION OF AIR FLOW
- LIQUID FLOW DIRECTION

MECHANICAL SHEET INDEX

GENERAL MECHANICAL NOTES:

ALL WORK SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL MECHANICAL CODE (IMC), THE VHA HVAC AND MECHANICAL DESIGN MANUAL.

CONTRACTOR IS TO VERIFY ALL DRAWING INFORMATION PRIOR TO STARTING WORK. MINOR CHANGES IN ROUTING IS EXPECTED. WHERE WORK VARIES GREATLY FROM THE PLANS CONTRACTOR SHALL CONTACT THE AE IMMEDIATELY BEFORE STARTING WORK.

EXCEPT WHERE INDICATED, ALL EQUIPMENT, MATERIALS, AND ARTICLES INCORPORATED IN THE WORK SHALL BE NEW AND OF COMPARABLE QUALITY AS SPECIFIED. ALL WORKMANSHIP SHALL BE FIRST-CLASS AND SHALL BE PERFORMED BY PERSONNEL SKILLED AND REGULARLY EMPLOYED IN THEIR RESPECTIVE TRADES. ITEMS REUSED AND/OR RELOCATED SHALL BE BROUGHT TO LIKE NEW CONDITION PRIOR TO BEING PLACED INTO SERVICE.

ALL WORK SHALL BE COORDINATED WITH ALL AFFECTED TRADES PRIOR TO STARTING WORK. REWORK REQUIRED DUE TO COORDINATION ISSUES SHALL BE DONE BY THE INSTALLATION CONTRACTOR WITHOUT INCREASED COST TO THE OWNER. CONTRACTOR TO COORDINATE WITH THE OWNER PRIOR TO WORK FOR SCHEDULING OR ANY UTILITY SHUT DOWN.

SYSTEMS DESIGNATED TO BE PROVIDED AND INSTALLED WITHIN THESE CONTRACT DOCUMENTS ARE INTENDED TO BE COMPLETE AND OPERATIONAL. PROVIDE EVERYTHING ESSENTIAL FOR THE COMPLETION OF THE WORK TO MAKE THE SYSTEM READY FOR NORMAL AND PROPER OPERATION. THIS INCLUDES ALL WORK OR MATERIALS NOT DIRECTLY SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS, BUT NECESSARY FOR THE PROPER OPERATION OF THE SYSTEM.

IN GENERAL IT IS THE INTENT OF THESE DRAWINGS:
ITEMS INSTALLED WHERE THE STRUCTURE IS EXPOSED - INSTALLED AS HIGH AS POSSIBLE. ALL VALVES AND CONTROL DEVICES SHOULD BE INSTALLED AS LOW AS POSSIBLE OR WHERE IT WILL BE MAINTAINABLE FROM A LADDER OR LIFT. CLOSE COORDINATION WILL BE REQUIRED IN ORDER TO AVOID ALL CONFLICTS.

ALL DUCT TO BE GALVANIZED STEEL. EXPOSED DUCT SHALL BE OF SPIRAL CONSTRUCTION.

ALL SQUARE THROAT DUCT ELBOWS WITH ANY DIMENSIONS LARGER THAN 6" SHALL HAVE TURNING VANES, WHETHER SHOWN ON THE PLANS OR NOT.

MANUFACTURERS/MODEL NUMBERS INDICATED ON DRAWINGS ARE BASIS OF DESIGN. OTHER MANUFACTURERS/MODEL NUMBERS WILL BE ACCEPTED PROVIDING THEY MEET SPECIFICATIONS AND PERFORMANCE REQUIREMENTS OF THE BASIS OF DESIGN.

Revisions:	Date

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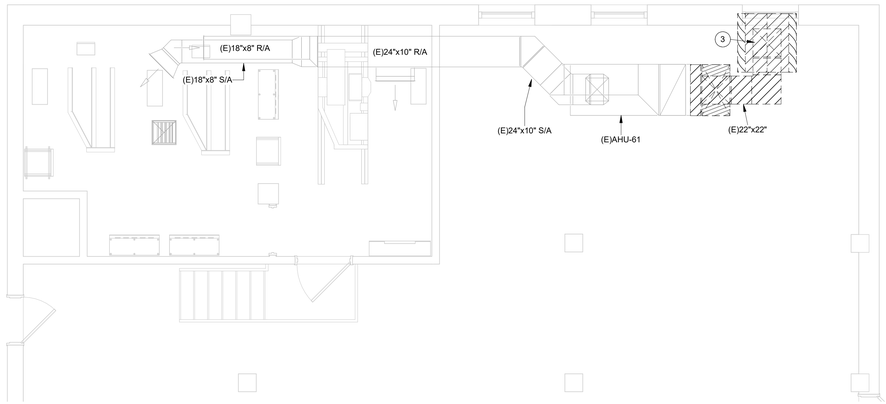
Drawing Title: MECHANICAL ABBREVIATIONS, SYMBOLS, LEGENDS, AND GENERAL NOTES
Approved: Project Director: FARGO VAMC
Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS
Location: 2101 ELM STREET FARGO, ND 58102
Date: 12.20.22 | Checked: RD | Drawn: BM
Project Number: 437-22-101
Building Number: 1,9,46
Drawing Number: M0.00
Dwg. 15 of 41

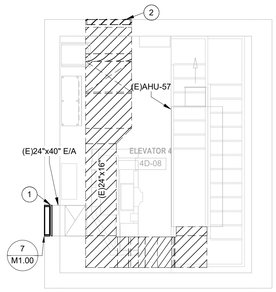
Office of Construction and Facilities Management
Department of Veterans Affairs

5/10/2023 4:17:41 PM

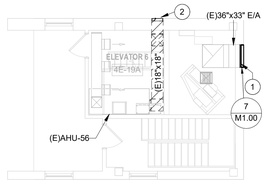
VA FORM 08-6231



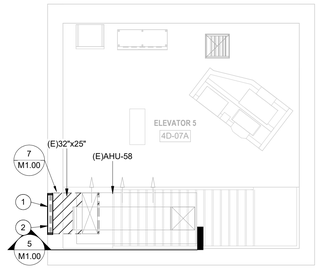
1 ELEVATOR 1 2 3 EQUIP. ROOM HVAC DEMO PLAN
1/4" = 1'-0"



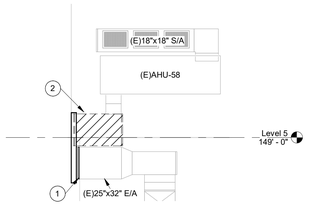
2 ELEVATOR 4 EQUIP. ROOM HVAC DEMO PLAN
1/4" = 1'-0"



3 ELEVATOR 6 EQUIP. ROOM HVAC DEMO PLAN
1/8" = 1'-0"



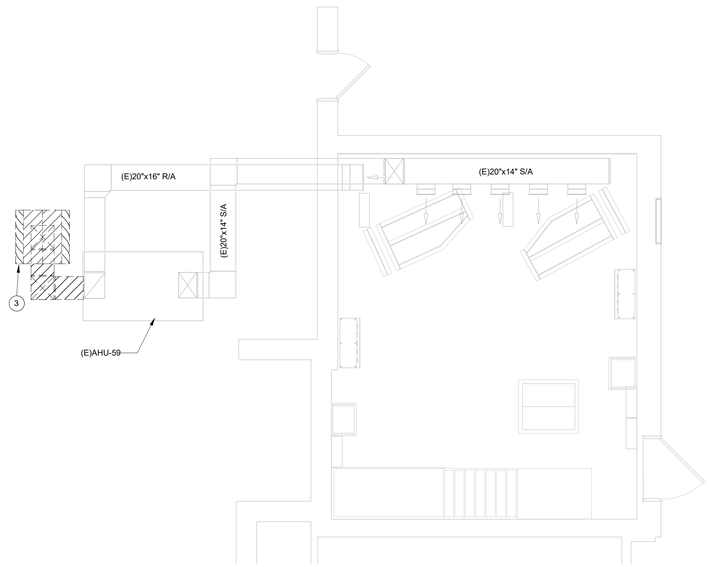
4 ELEVATOR 5 EQUIP. ROOM HVAC DEMO PLAN
1/4" = 1'-0"



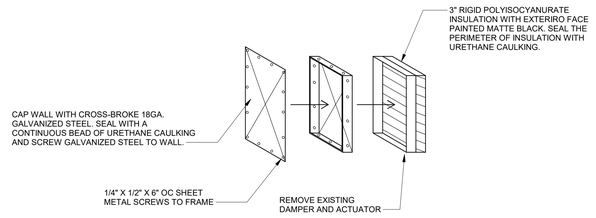
5 ELEVATOR 5 HVAC DEMO SECTION
1/4" = 1'-0"

KEYNOTES:

1. **CAP LOUVER** W/ 19 GA. GALVANIZED STEEL. CAP OPENING IN WALL WITH 20 GA. GALVANIZED STEEL WITH SCREWS INTO WALL AND SEAL W/ URETHANE CAULK. INSULATE SPACE WITH 3" POLYISOCYANURATE INSULATION. SEE DETAIL 4 IN THIS SHEET.
2. **CAP LOUVER** WITH 19 GA. GALVANIZED STEEL. REMOVE EXISTING OUTSIDE AIR DUCT FROM LOUVER TO AIR HANDLER. CAP AND SEAL AIR HANDLER OUTSIDE AIR OPENING.
3. REMOVE INTAKE HOOD. **PATCH AND SEAL ROOF.** REMOVE EXISTING OUTSIDE AIR DUCT TO AIR HANDLER. CAP AND SEAL AIR HANDLER OUTSIDE AIR OPENING.



6 ELEVATOR 7 8 EQUIP. ROOM HVAC DEMO PLAN
1/4" = 1'-0"



7 LOUVER DETAIL
NOT TO SCALE

Revisions:	Date

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Drawing Title: HVAC PLANS

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: RD | Drawn: BM

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: M1.00

Dwg. 16 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

5/10/2023 4:17:41 PM

VA FORM 08-6231

ABBREVIATIONS:

AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
AS	AIR SEPARATOR
A/G	ABOVE GRADE
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
BMS	BUILDING MANAGEMENT SYSTEM
B/G	BELOW GRADE
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CO	CLEANOUT
COND	CONDENSATION
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CP	CIRCULATING PUMP
CR	CONDENSATE RETURN
CV	CONTROL VALVE
DAMP.	DAMPER
DAT	DISCHARGE AIR TEMPERATURE
DB	DRY BULB
DCW	DOMESTIC COLD WATER
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DIFF.	DIFFERENTIAL
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FILT.	FILTER
FPM	FEET PER MINUTE
FT	FEET
GAL	GALLONS
G.C.	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GT	GLYCOL TANK
H	HEIGHT
H	HUMIDIFIER - AHU
HB	HOSE BIBB
HP	HORSEPOWER
HPS	HIGH PRESSURE STEAM
HR	HOUR
HRP	HEAT RECOVERY PUMP
HSP	HUMIDIFICATION SET POINT
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HX	HEAT EXCHANGER
HYL	HYDRAULIC OIL
HYL-D	HYDRAULIC OIL DRAIN
Hz	HERTZ
IBC	INTERNATIONAL BUILDING CODE
IECC	INTERNAIONAL ENERGY CONSERVATION CODE
IFB	INTEGRAL FACE AND BYPASS
IMC	INTERNATIONAL MECHANICAL CODE
I/O	INPUT/OUTPUT
IPC	INTERNATIONAL PLUMBING CODE
L	LENGTH
LA	LABORATORY EQUIPMENT COMPRESSED AIR
LAV	LAVATORY
LV	LABORATORY EQUIPMENT VACUUM
LBS	POUNDS
LPS	LOW PRESSURE STEAM
MA	MEDICAL AIR
MAX	MAXIMUM
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MC	MECHANICAL CONTRACTOR
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MECH	MECHANICAL
MFG	MANUFACTURER
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ORD	OVERFLOW ROOF DRAIN
OSA	OUTSIDE AIR
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OXY	OXYGEN
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PID	PROPORTIONAL INTEGRAL DERIVATIVE
PRESS.	PRESSURE
PSH	HIGH PRESSURE SWITCH
PSIG	POUNDS PER SQUARE INCH - GAUGE
PSL	LOW PRESSURE SWITCH
QUANT.	QUANTITY
R	RADIUS
R	RETURN
RA	RETURN AIR
RC	REHEAT STEAM COIL - AHU
RD	ROOF DRAIN
REQ'D	REQUIRED
RPM	REVOLUTIONS PER MINUTE
S	SINK
SA	SUPPLY AIR
SAN	SANITARY
SCW	SOFT COLD WATER
SD	SMOKE DAMPER
SF	FAN SECTION - AHU
SF	SQUARE FEET
SH	SHOWER
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SS	SANITARY SEWER
SST	START/STOP
SV	STEAM VENT
T	THERMOSTAT
TEMP.	TEMPERATURE
TT	TEMPERATURE SENSOR/TRANSMITTER
TYP.	TYPICAL
UH	UNIT HEATER
V	VENT
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VSMC	VARIABLE SPEED MOTOR CONTROLLER
VTR	VENT THROUGH ROOF
W/	WITH
WB	WET BULB
WC	WATER CLOSET
WD	WATER DISPENSER
ZAT	ZONE AIR TEMPERATURE
ZC	VALVE OR DAMPER CONTROLLER

PLUMBING SYMBOLS

- 3-WAY CONTROL VALVE
- 2-WAY CONTROL VALVE
- CHECK VALVE
- THERMOSTATIC MIXING VALVE
- PRESSURE REDUCING VALVE
- REDUCED PRESSURE ZONE VALVE
- PRESSURE RELIEF VALVE
- SOLENOID VALVE
- PRESSURE GAUGE
- THERMOMETER
- PUMP
- STEAM TRAP
- STRAINER
- CONCENTRIC REDUCER
- CONNECT
- BALL VALVE
- PLUG VALVE
- TEMPERATURE SENSOR
- TRIPLE DUTY VALVE (or)
- VACUUM BREAKER
- TEST PORT
- HAMMER ARRESTOR
- PIPE UNION
- PIPE ELBOW
- PIPE DOWN
- PIPE UP
- PIPE TEE DOWN
- TEE
- (2) PLUMBING PLAN NOTE

PLUMBING SHEET INDEX

GENERAL PLUMBING NOTES:

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL PLUMBING CODE (IPC), INTERNATIONAL FUEL GAS CODE (IFGC), NFPA 101 LIFE SAFETY CODE, AND ANY AUTHORITY HAVING JURISDICTION. THIS IS A FEDERAL PROJECT, AS SUCH ALL CODE REQUIREMENTS ARE REQUIRED.

ALL EQUIPMENT, MATERIALS, AND ARTICLES INCORPORATED IN THE WORK SHALL BE NEW AND OF COMPARABLE QUALITY AS SPECIFIED. ALL WORKMANSHIP SHALL BE FIRST-CLASS AND SHALL BE PERFORMED BY MECHANICS SKILLED AND REGULARLY EMPLOYED IN THEIR RESPECTIVE TRADES.

ALL WORK SHALL BE COORDINATED WITH ALL AFFECTED TRADES PRIOR TO STARTING WORK. REWORK REQUIRED DUE TO COORDINATION ISSUES SHALL BE DONE BY THE INSTALLATION CONTRACTOR WITHOUT INCREASED COST TO THE OWNER. CONTRACTOR TO COORDINATE WITH THE OWNER PRIOR TO WORK FOR SCHEDULING OR ANY UTILITY SHUT DOWN.

THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE. ALTHOUGH EVERY ATTEMPT HAS BEEN MADE TO INDICATE THE EXACT ROUTING AND LOCATION OF PROPOSED SYSTEMS, NOT ALL OFFSETS, REQUIRED FITTINGS AND/OR CONDITIONS CAN BE SHOWN. THE CONTRACTOR SHALL COORDINATE WORK AND MAKE REQUIRED CHANGES TO THE ROUTING IN ORDER TO AVOID CONFLICTS WITHOUT ANY INCREASED COST TO THE OWNER.

SYSTEMS DESIGNATED TO BE PROVIDED AND INSTALLED WITHIN THESE CONTRACT DOCUMENTS ARE INTENDED TO BE COMPLETE AND OPERATIONAL. PROVIDE EVERYTHING ESSENTIAL FOR THE COMPLETION OF THE WORK TO MAKE THE SYSTEM READY FOR NORMAL AND PROPER OPERATION, INCLUDING ALL WORK OR MATERIALS NOT DIRECTLY SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS, BUT NECESSARY FOR THE PROPER OPERATION OF THE SYSTEM.

PLUMBING CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER MAINTENANCE CLEARANCES ARE MAINTAINED. CLOSE COORDINATION WILL BE REQUIRED WITH THE MECHANICAL PIPING, HVAC, FIRE PROTECTION, AND ELECTRICAL CONTRACTOR.

ALL DOMESTIC WATER PIPING ABOVE GRADE IS INTENDED TO BE INSULATED, TYPE K OR L HARD DRAWN COPPER PIPE AS SPECIFIED. TYPE M COPPER PIPE IS NOT ALLOWED.

ALL WASTE AND VENT PIPING ABOVE GRADE IS INTENDED TO BE CAST IRON OR DUCTILE IRON AS SPECIFIED. PVC IS NOT ALLOWED ABOVE GRADE. ALL WASTE AND VENT PIPING BELOW GRADE IS INTENDED TO BE EPOXY COATED STEEL AS SPECIFIED. CAST IRON OR OTHER METAL PIPING IS NOT ALLOWED BELOW GRADE.

FOR PIPE SIZES NOT SHOWN ON FLOOR PLANS SEE PIPING ISOMETRIC DRAWINGS.

Revisions:	Date

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Drawing Title: PLUMBING ABBREVIATIONS, SYMBOLS, LEGENDS, AND GENERAL NOTES

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: RD | Drawn: BM

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: P0.00

Dwg. 17 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

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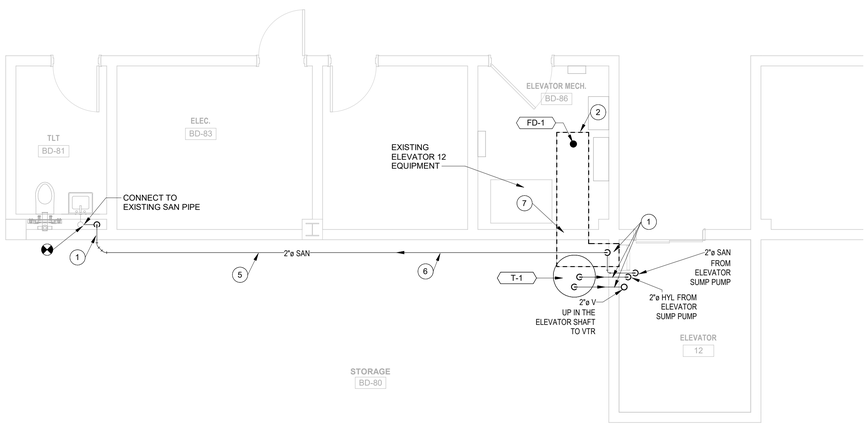
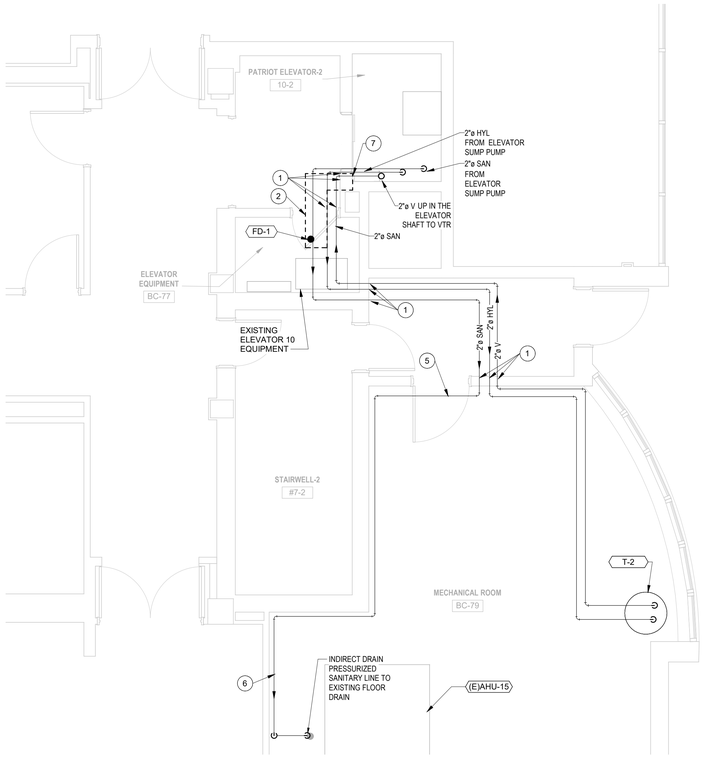
VA FORM 08-6231



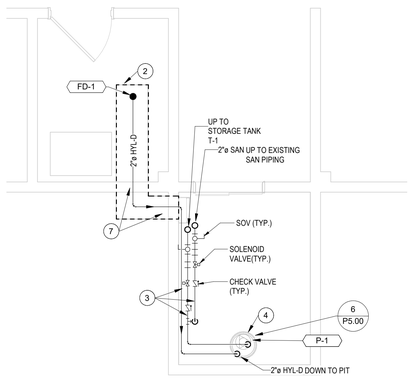
1 ELEVATOR 12 EQUIP ROOM PLUMBING PLAN
1/4" = 1'-0"



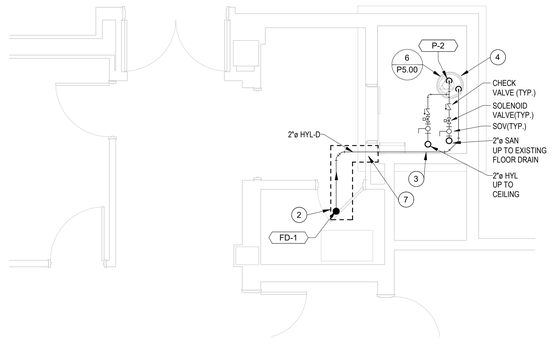
2 ELEVATOR 10 EQUIP ROOM PLUMBING PLAN
1/4" = 1'-0"

KEYNOTES:

1. COREDRILL AND SEAL PENETRATIONS FOR NEW PIPING WITH FIRE CAULK.
2. CONTRACTOR TO CUT CONCRETE FLOOR, INSTALL NEW FLOOR DRAIN AND HYADRAULIC OIL PIPING. PATCH FLOOR AFTER PIPING IS INSTALLED.
3. MOUNT PIPING ON THE WALL. SHOWN HORIZONTAL FOR CLARITY
4. CUT CONCRETE AND REMOVE. EXCAVATE AND INSTALL PUMP. BACKFILL WITH EXISTING MATERIAL.
5. PRESSURIZED SANITARY SEWER. LABEL AS PRESSURIZED SAN EVERY 5 FT.
6. MOUNT PIPING AT 7' AFF MIN. ON WALL. SECURE PIPE WITH UNISTRUT AND CLAMP. COORDINATE ELEVATION WITH EXISTING CONDITIONS. OFFSET AS NECESSARY
7. CUT AND REMOVE WALL AS NECESSARY. PATCH AFTER PIPING IS INSTALLED.



3 ELEVATOR 12 PIT PLUMBING PLAN
1/4" = 1'-0"



4 ELEVATOR 10 PIT PLUMBING PLAN
1/4" = 1'-0"

Revisions:	Date

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Drawing Title: PLUMBING PLANS AND SECTIONS

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: RD | Drawn: BM

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: P1.00

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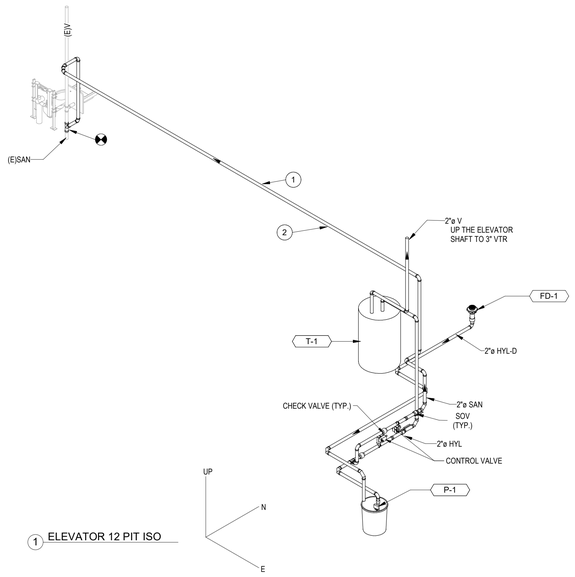
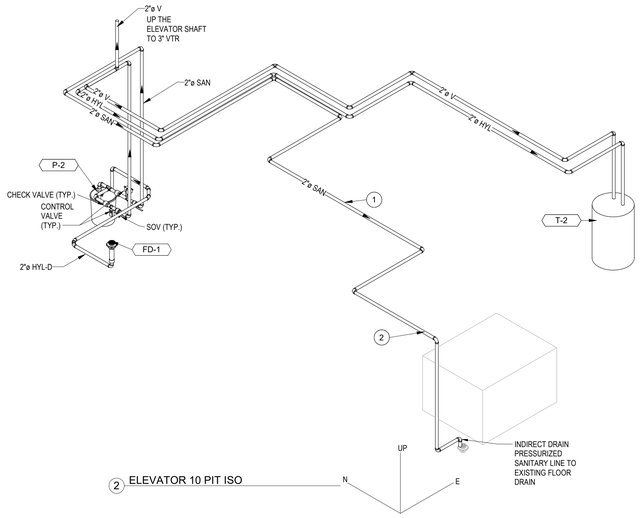


1 ELEVATOR 12 PIT ISO



2 ELEVATOR 10 PIT ISO

KEYNOTES:

1. PRESSURIZED SANITARY SEWER. LABEL AS PRESSURIZED SAN EVERY 5 FT.
2. MOUNT PIPING AT 7' AFF MIN. ON WALL. SECURE PIPE WITH UNISTRUT AND CLAMP. COORDINATE ELEVATION WITH EXISTING CONDITIONS. OFFSET AS NECESSARY

Revisions:	Date

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Drawing Title: PLUMBING ISOMETRIC VIEWS

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: RD | Drawn: BM

Project Number: 437-22-101

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Drawing Number: P2.00

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Office of Construction and Facilities Management

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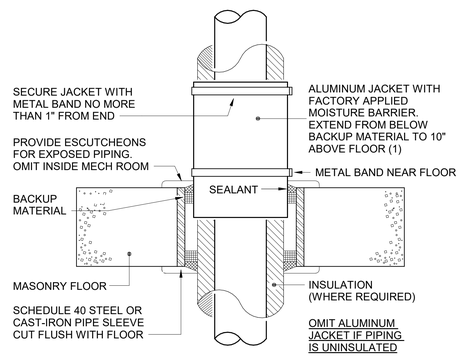
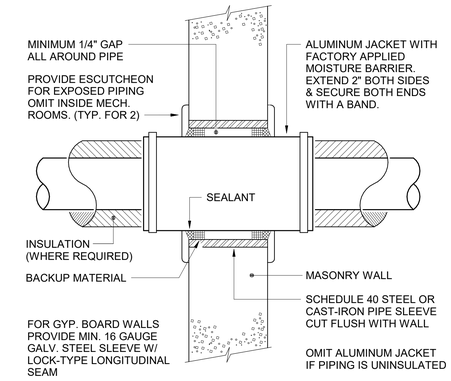
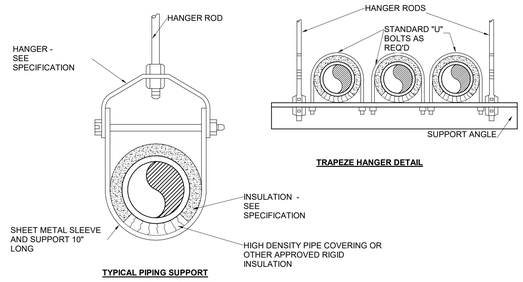


1 FLOOR PIPE PENETRATION DETAIL
12" = 1'-0"



NOTE: PROVIDE FIRE SEAL AROUND ALL WALL PENETRATIONS

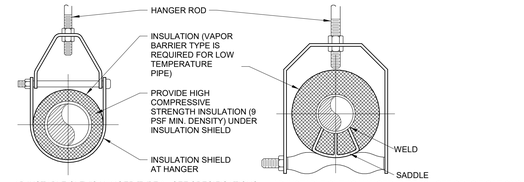
2 PIPE THROUGH WALL PENETRATION DETAIL
12" = 1'-0"



TYPICAL PIPING SUPPORT FOR ALL INSULATED PIPING

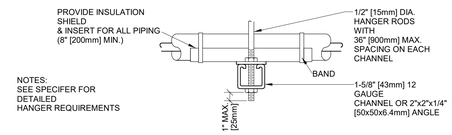
TRAPEZE HANGER DETAIL

3 PIPE HANGER DETAIL
1/8" = 1'-0"



ADJUSTABLE CLEVIS HANGER TYPE 1 - SEE SPECIFICATIONS

ADJUSTABLE CLEVIS HANGER TYPE 43 - SEE SPECIFICATIONS



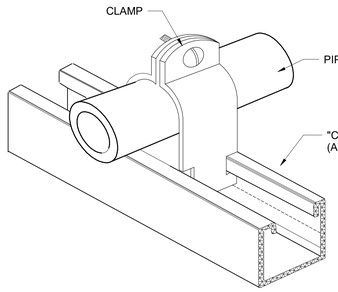
NOTES:
SEE SPECIFER FOR DETAILED HANGER REQUIREMENTS

SIDE VIEW TRAPEZE HANGER FOR UP TO 1000 LB. [453KG] UNIFORM LOAD

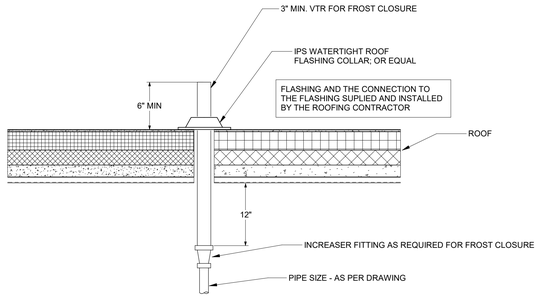
MAXIMUM PIPE/TUBING SUPPORT SPACING

NOM. SIZE	IN. [mm]	THRU 3/4 THRU [20]	1 [25]	1 1/4 [32]	1 1/2 [40]	2 [50]	2 1/2 [65]	3 [75]	4 [100]	5 [125]	6 [150]	8 [200]	10 [250]	12 [300]	14 [350]	16 [400]	18 [450]	20 [500]	24 [600]
PIPE	FT. [mm]	7 [2100]	7 [2100]	7 [2100]	9 [2700]	10 [3000]	11 [3400]	12 [3700]	14 [4100]	16 [4900]	17 [5200]	19 [5800]	22 [6700]	23 [7000]	25 [7600]	27 [8200]	28 [8500]	30 [9100]	32 [9600]
TUBING	FT. [mm]	5 FT [1500]	6 [1800]	7 [2100]	8 [2400]	9 [2700]	10 [3000]	12 [3700]	13 [4000]	14 [4100]	15 [4900]	-	-	-	-	-	-	-	-

NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.



4 WALL PIPE SUPPORT DETAIL
12" = 1'-0"



5 VTR DETAIL
1/4" = 1'-0"

6 ELEVATOR PUMP DETAIL
1/4" = 1'-0"

KEYED ELEVATOR PUMP NOTES:

1. FACTORY DISCONNECT FOR PUMP. HOME RUN NEW 12/2 CU + GRND IN EMT BACK TO PANEL 'HP-2'. CONTRACTOR TO PROVIDE NEW BREAKER AS REQUIRED. INSTALL CONDUCTOR IN SEAL TIGHT RACEWAY CONNECTING TO PUMP. LOCATE IN ELEVATOR EQUIPMENT ROOM 004. COORDINATE MOUNTING LOCATION WITH ELEVATOR EQUIPMENT.
2. NEW FACTORY PACKAGED CONTROL PANEL. HOME RUN NEW 12/2 CU + GRND IN EMT BACK TO PANEL 'HP-2'. LOCATE IN ELEVATOR EQUIPMENT ROOM 004. COORDINATE MOUNTING LOCATION WITH ELEVATOR EQUIPMENT.
3. NEW FACTORY PACKAGED REMOTE ALARM. SURFACE MOUNT AT LOCATION SHOWN. COORDINATE MOUNTING LOCATION WITH ELEVATOR EQUIPMENT.
4. HOME RUN NEW CIRCUIT 12/2 CU + GRND IN EMT BACK TO PANEL 'HP-2'. CONTRACTOR TO PROVIDE NEW BREAKER AS REQUIRED. INSTALL CONDUCTOR IN SEAL TIGHT RACEWAY. COORDINATE MOUNTING LOCATION WITH ELEVATOR EQUIPMENT.
5. LIBERTY PUMPS ELV 280 PUMP SYSTEM. WIRE PACKAGED WATER LEVEL SENSOR, HIGH OIL SWITCH, AND ALARM FLOATS TO FACTORY CONTROL PANEL. ORDER WITH OIL STORAGE TANK.

STORAGE TANK SCHEDULE

TAG	MFR. AND MODEL OR EQUAL	DIMENSIONS (IN.)	CAPACITY (GAL.)	FLUID	NOTES
T-1	SNYDER 5700102N95703	33" Ø x 51" H	120	HYDRAULIC OIL	1
T-2	SNYDER 5700102N95703	33" Ø x 51" H	120	HYDRAULIC OIL	1

NOTES:
1. MANUFACTURER IS ONLY FOR DESIGN BASIS. OTHER MANUFACTURER ALLOWED.

PLUMBING SPECIALTY SCHEDULE

TAG	SPEC REF	DESCRIPTION	MFR. AND MODEL	TYPE	WASTE	VENT	HOT WATER	COLD WATER	NOTES
FD-1	FD-C	FLOOR DRAIN	ZURN Z415BZ	ROUND	2"	2"	-	-	1
FCO-1	FCO	FLOOR CLEANOUT	ZURN ZN1400-SZ	ROUND	2"	-	-	-	1

NOTES:
1. SIZE LISTED ON SCHEDULES APPLY TO ALL FIXTURES ON PROJECT UNLESS OTHERWISE NOTED.

PUMP SCHEDULE

TAG	MFR. & MODEL OR EQUAL	TYPE	SYSTEM	FLUID	PUMP HEAD FT.	GPM	TEMP °F	VOLT/PH/A	NOTES
P-1	LIBERTY ELV 280	SUMP	HYL/SAN	HYDRAULIC OIL/ WATER	15	20	65	115/ 1/ 1.40	1
P-2	LIBERTY ELV 280	SUMP	HYL/SAN	HYDRAULIC OIL/ WATER	20	20	65	115/ 1/ 1.40	1

NOTES:
1. PROVIDE JACKEL SF-22 FIBERGLASS SUMP BASIN.

Revisions:	Date

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Drawing Title: PLUMBING DETAILS AND SCHEDULES

Approved: Project Director: FARGO VAMC

Project Title: REFURBISH ELEVATORS AND REPLACE CONTROLS

Location: 2101 ELM STREET FARGO, ND 58102

Date: 12.20.22 | Checked: RD | Drawn: BM

Project Number: 437-22-101

Building Number: 1,9,46

Drawing Number: P5.00

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Office of Construction and Facilities Management

Department of Veterans Affairs

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ELECTRICAL LEGEND (FLOORPLAN)

SYMBOL	DESCRIPTION
	ITEMS SHOWN IN GRAY ARE EXISTING TO REMAIN
	DASHED ITEMS ARE INSTALLED BELOW REFERENCED PLAN
	DEMOLITION PLANS: SOLID DARK ITEMS ARE TO BE REMOVED OR MODIFIED. NEW PLANS: SOLID DARK ITEMS ARE TO BE ADDED OR MODIFIED.
	MOTOR, SINGLE-PHASE
	MOTOR, THREE-PHASE
T	TRANSFORMER
	WYE CONNECTION
	DUCT, CELL FLOOR HEADER
T T	DUCT, TROLLEY
	DUCT, UNDERFLOOR JUNCTION BOX
	EARTH GROUND
J	JUNCTION BOX
C C	LADDER CABLE TRAY
	BRANCH CIRCUIT HOMERUN. LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS. ONE SEPARATE GREEN GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN; NOT SHOWN
PB	PULL BOX
W W	WIREWAY
RC	RIGID CONDUIT LINE = RC
DB	DIRECT BURIAL CABLE = DB
P	POWER DUCT = P
AV	AUDIO VISUAL LINE = AV
CATV	CABLE TELEVISION LINE = CATV
CCTV	CLOSED CIRCUIT TELEVISION LINE = CCTV
FO	FIBEROPTICS LINE = FO
COM	COMMUNICATIONS LINE = COM
I	INTERCOM LINE = I
NC	NURSE CALL LINE = NC
S	SUBSTATION
HVS	HI VOLTAGE SWITCH ON CONCRETE PAD
LVS	LOW VOLTAGE SWITCH ON CONCRETE PAD
P T	DUAL POWER AND TELECOMMUNICATIONS MANHOLE
B B	BUSWAY
DP#	DISTRIBUTION PANEL
	LIGHTING PANEL
	PANELBOARD CABINET, FLUSH MOUNTED
	PANELBOARD CABINET, SURFACE MOUNTED
C	RECEPTACLE, CLOCK HANGER
	RECEPTACLE, DUPLEX
	RECEPTACLE, DUPLEX ON EMERGENCY POWER
	RECEPTACLE, GFCI DUPLEX
	RECEPTACLE, QUADRAPLEX
A	RECEPTACLE, SPECIAL PURPOSE 120V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 5-20R.
B	RECEPTACLE, SPECIAL PURPOSE 208V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 6-20R.
C	RECEPTACLE, SPECIAL PURPOSE 120V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 5-30R.
D	RECEPTACLE, SPECIAL PURPOSE 208V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 6-30R.
E	RECEPTACLE, SPECIAL PURPOSE 208V, 60A, 1 PHASE, 3-POLE, 4W, NEMA 14-60R.
F	RECEPTACLE, SPECIAL PURPOSE 208V, 30A, 3 PHASE, 3-POLE 4W, NEMA 15-30R.
G	RECEPTACLE, SPECIAL PURPOSE 208V, 50A, 3 PHASE, 3 POLE, 4W, NEMA 15-50R.
H	RECEPTACLE, SPECIAL PURPOSE 208V, 60A, 3 PHASE, 3 POLE, 4W, NEMA 15-60R.
J	RECEPTACLE, SPECIAL PURPOSE 208V, 20A, 3 PHASE, 3 POLE, 4W, NEMA 15-20R.

SYMBOL	DESCRIPTION
S	RECEPTACLE, SWITCHED DUPLEX
	DROP CORD, SINGLE CONVENIENCE OUTLET, 3-WIRE, GROUNDING TYPE, 20A, W/#12 CONDUCTORS IN FLEXIBLE CORD (CENTER LINE OF OUTLET: 6'-6" [1981mm] AFF. MINIMUM).
	ELECTRICAL STRIP MOLD (OUTLETS ON 2'-0" [610mm] CENTERS OR AS DESIGNATED ON DRAWINGS), MTD 3'-6" [1067mm] AFF OR AS INDICATED.
50	INSTANTANEOUS OVERCURRENT RELAY
51	AC-TIME OVERCURRENT RELAY
67	AC-DIRECTIONAL OVERCURRENT RELAY
86	LOCKING OUT RELAY
	DISCONNECT SWITCH, FUSED
	DISCONNECT SWITCH, UNFUSED
	STARTER, COMBINATION WITH DISCONNECT SWITCH
	STARTER OR MOTOR CONTROLLER
VFD	VARIABLE FREQUENCY DRIVE
TC	TIME CLOCK
	RECTIFIER, CATHODIC PROTECTION SANITARY
	VENTILATOR OR FAN COIL UNIT OUTLET
	CONDUIT TERMINATED 6" [152mm] AFF IN STANDARD BOX FOR EXTENSION TO EQUIPMENT AS DIRECTED.
	CONDUIT TERMINATED W/COUPLING (FLUSH W/FINISHED FLOOR) FOR EXTENSION TO EQUIPMENT AS DIRECTED.
$	SWITCH, SPST
$2	SWITCH, DPST
$3	SWITCH, THREE WAY
$3D	SWITCH, THREE WAY DIMMER
$3OS	SWITCH, THREE WAY OCCUPANCY SENSOR
$4	SWITCH, FOUR WAY
$D	SWITCH, DIMMER
$DOOR	SWITCH, DOOR JAMB
$OS	SWITCH, FOUR WAY OCCUPANCY SENSOR
$F	SWITCH, FUSED
$K	SWITCH, KEY OPERATED
$L	SWITCH, LOCK
$LM	SWITCH, LOW VOLTAGE MASTER
$M	SWITCH, MANUAL MOTOR STARTING
$MC	SWITCH, MOMENTARY CONTACT
$MP	SWITCH, MOTOR SNAP WITH PILOT LIGHT (THERMAL TYPE)
$OS	SWITCH, OCCUPANCY SENSOR
$OSD	SWITCH, OCCUPANCY SENSOR DIMMER
$P	SWITCH, WITH PILOT LIGHT
$PB	SWITCH, PUSH BUTTON
$PH	SWITCH, PHOTOCELL
$RC	SWITCH, REMOTE CONTROL
$WP	SWITCH, WEATHER PROOF
$X	SWITCH, EXPLOSION PROOF
C	TELECOMMUNICATIONS MANHOLE
	COMMUNICATIONS FLOOR RECEPTACLE
	COMMUNICATIONS WALL RECEPTACLE
	COMMUNICATIONS CEILING RECEPTACLE
M	TELEVISION FLOOR RECEPTACLE C =CAMERA (CCTV SYSTEM) M =MONITOR (CATV SYSTEM), AV= AUDIO VISUAL (CONFERENCE ROOM CONNECTION RECEPTACLES)
M	TELEVISION WALL RECEPTACLE C =CAMERA (CCTV SYSTEM) M =MONITOR (CATV SYSTEM), AV= AUDIO VISUAL (CONFERENCE ROOM CONNECTION RECEPTACLES)
M	TELEVISION CEILING RECEPTACLE C =CAMERA (CCTV SYSTEM) M =MONITOR (CATV SYSTEM), AV= AUDIO VISUAL (CONFERENCE ROOM CONNECTION RECEPTACLES)
	PAGING SPEAKER, CEILING MOUNTED
	PAGING SPEAKER, WALL MOUNTED
NCS	NURSE'S CALL MASTER STATION
NCT	NURSE CALL TERMINAL CABINET.

SYMBOL	DESCRIPTION
ND	NURSE CALL STATION. D = DUTY STATION. MTD 5' AFF E = MTD 6' AFF FOR SHOWER LOCATION MTD 4'-6" AFF FOR TUB LOCATION MTD 3' AFF FOR TOILET LOCATION P = PSYCHIATRIC CORRIDOR STATION WITH KEY SWITCH S = AUDIO VISUAL STAFF STATION MTD 5' AFF U = UTILITY CALL STATION, MTD 5' AFF
D	NURSE CALL STATION. D = CORRIDOR DOME LIGHT MTD 6" ABOVE DOOR I = AUXILIARY INTERSECTIONAL DOME LIGHT
	TELECOMMUNICATIONS TERMINAL CABINET
TB	TELECOMMUNICATIONS BACKBOARD (WALL MTD)
EH	ELECTRIC POWER HINGE
DC	DOOR CONTACT
MD	MOTION INTRUSION DETECTOR
SSTV	SECURITY SURVEILLANCE TELEVISION
C	CAMERA
C	360 CAMERA
M T	CARD ACCESS READER; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE B-BARCODE M-MAG STRIP F-ELEVATOR FLOOR CALL P-PROXIMITY H-ELEVATOR HALL CALL S-SMART CARD T-TOKEN
M T	ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE D-DEADBOLT H-HYBRID L-LATCH SET M-MAGNETIC S-STRIKE
M T	INTERCOM; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE M-MASTER S-SUBSTATION
	DURESS/PANIC ALARM PUSH BUTTON
	ELECTROMAGNETIC TYPE DOOR HOLDER OUTLET

ELECTRICAL LEGEND (DETAILS)

SYMBOL	DESCRIPTION
	DELTA CONNECTION
	MOTOR, SINGLE-PHASE
	MOTOR, THREE-PHASE
	TRANSFORMER
	WYE CONNECTION
	EARTH GROUND
J	JUNCTION BOX
PB	PULL BOX
	PRESSURE SWITCH-CLOSE ON INCREASE
	PRESSURE SWITCH-OPEN ON INCREASE
	SWITCH, MULTIPOSITION
	SWITCH, NORMALLY CLOSED FLOAT
	SWITCH, NORMALLY CLOSED FOOT OPERATED
	SWITCH, NORMALLY CLOSED LIMIT
	SWITCH, NORMALLY CLOSED TEMPERATURE ACTIVATED
	SWITCH, NORMALLY CLOSED TIME DELAY
	SWITCH, NORMALLY OPEN FLOAT
	SWITCH, NORMALLY OPEN LIMIT
	SWITCH, NORMALLY OPEN TEMPERATURE ACTIVATED
	SWITCH, NORMALLY OPEN TIME DELAY
	SWITCH, SINGLE BREAK
	NORMALLY CLOSED RELAY CONTACT
	NORMALLY OPEN RELAY CONTACT
	FUSE WITH RATING
	MOLDED CASE CIRCUIT BREAKER
	LOW-VOLTAGE DRAWOUT AIR CIRCUIT BREAKER
SF6	HIGH-VOLTAGE OIL CIRCUIT BREAKER
	HIGH-VOLTAGE DRAWOUT AIR CIRCUIT BREAKER
	SWITCH AND FUSE UNIT
	FUSED DRAWOUT POTENTIAL TRANSFORMER
50	INSTANTANEOUS OVERCURRENT RELAY
51	AC-TIME OVERCURRENT RELAY
67	AC-DIRECTIONAL OVERCURRENT RELAY
86	LOCKING OUT RELAY
	DISCONNECT SWITCH, FUSED
	DISCONNECT SWITCH, UNFUSED
	FUSIBLE LINK
	STARTER, COMBINATION WITH DISCONNECT SWITCH
	STARTER OR MOTOR CONTROLLER
TC	TIME CLOCK
G	GENERATOR, POWER
	BATTERY
	CAPACITOR
	POTHEAD
	STRESS CONE
	LIGHTNING ARRESTOR
K	RECTIFIER, CATHODIC PROTECTION SANITARY
M	METER
A	AMMETER
V	VOLTMETER
W	WATTMETER
WH	WATT-HOUR METER

ELECTRICAL ABBREVIATIONS

1PH	SINGLE-PHASE	ELEC	ELECTRIC OR ELECTRICAL	MW	MEGAWATT MICROWAVE
1P	SINGLE POLE	ELEV	ELEVATOR		
2/C	TWO-CONDUCTOR	EMCP	EMERGENCY MONITORING CONTROL PANEL	NA	NOT APPLICABLE
3/C	THREE-CONDUCTOR	EMER	EMERGENCY	NEC	NATIONAL ELECTRICAL CODE
3PH	THREE-PHASE	EMI	ELECTROMAGNETIC INTERFERENCE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
4/C	FOUR-CONDUCTOR	EMT	ELECTRICAL METALLIC TUBING	NEUT OR N	NEUTRAL
4W	FOUR-WIRE	ENCL	ENCLOSURE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
AAP	ALARM ANNUNCIATOR PANEL	EPO	EMERGENCY POWER OFF		
AC	ALTERNATING CURRENT OR ARMORED CABLE	EPRF	EXPLOSION PROOF	NIC	NOT IN CONTRACT
		ESMT	EASEMENT	NL	NIGHT LIGHT
ACC	ACCESSIBLE	EWC	ELECTRIC WATER COOLER	NO	NORMALLY OPEN
ADO	AUTOMATIC DOOR OPENER	EWH	ELECTRIC WATER HEATER	NS	NO SCALE
AFC	ABOVE FINISHED COUNTER, AUTOMATIC FREQUENCY CONTROL, OR AVAILABLE FAULT CURRENT	EXIST	EXISTING	NTS	NOT TO SCALE
		FA	FIRE ALARM	OC	ON CENTER
AFF	ABOVE FINISHED FLOOR	FAAP	FIRE ALARM ANNUNCIATOR PANEL	OD	OUTSIDE DIAMETER
AFG	ABOVE FINISHED GRADE	FABL	FIRE ALARM BELL	OF	OWNER FURNISHED
AH	AMPERE HOUR	FABX	FIRE ALARM BOX	OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED
AHJ	AUTHORITY HAVING JURISDICTION	FACP	FIRE ALARM CONTROL PANEL		
AIC	AMPERE INTERRUPTING CAPACITY	FC	FOOTCANDLE	OF/OI	OWNER FURNISHED/OWNER INSTALLED
AMP	AMPERE	FIXT	FIXTURE	OL	OVERLOAD
ASC	AMPS SHORT CIRCUIT	FLA	FULL LOAD AMPS	OS	OCCUPANCY SENSOR
AT	AMPERE TRIP	FLEX	FLEXIBLE METALLIC CONDUIT		
ATS	AUTOMATIC TRANSFER SWITCH	FLT	FLOODLIGHT	P	POLE
AUTO	AUTOMATIC	FLUOR	FLUORESCENT	PA	PUBLIC ADDRESS
AV	AUDIO VISUAL	FLUOR FIX	FLUORESCENT FIXTURE	PB	PANELBOARD, PULL BOX, OR PUSHBUTTON
		FOUTT	TELEPHONE FLOOR OUTLET		
BAS	BUILDING AUTOMATION SYSTEM	FP	FIRE PROTECTION	PBPU	PREFABRICATED BEDSIDE PATIENT UNIT
BFF	BELOW FINISH FLOOR	FT	FEET OR FOOT	PCB	POLYCHLORINATED BIPHENYL
BLDG	BUILDING	FU SW	FUSED SWITCH	PEC	PHOTOELECTRIC CELL
BPIP	BOILER PLANT INSTRUMENTATION PANEL	FVNR	FULL VOLTAGE NON-REVERSING	PED	PEDESTAL
BRKR	BREAKER	FVR	FULL VOLTAGE REVERSING	PEND	PENDANT
BYP	BY PASS			PF	POWER FACTOR
		G OR GND	GROUND	PH	PHASE
C	CONDUIT	GEN	GENERATOR	PNL	PANEL
CAB	CABINET	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	POD	POWER OPERATED DAMPER
CALC	CALCULATE	GTB	GROUND TERMINAL BOX	PT	POTENTIAL TRANSFORMER
CAP	CAPACITY			PTRV	POWER TYPE ROOF VENTILATION
CAT	CATALOG	HID	HIGH INTENSITY DISCHARGE	PVC	POLYVINYL CHLORIDE (PLASTIC)
CATV	COMMUNITY ANTENNA TELEVISION	HOA	HAND-OFF-AUTOMATIC	PWR	POWER
CCR	CONTROL CONTACTOR	HP	HORSEPOWER		
CCTV	CLOSED CIRCUIT TELEVISION	HT	HEIGHT	RCP	REFLECTED CEILING PLAN
cd	CANDELA	HZ	HERTZ	REC	RECESSED
CD	CONSTRUCTION DOCUMENTS			RECPT	RECEPTACLE
CF	CONTRACTOR FURNISHED	IESNA	ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA	RGS	RIGID GALVANIZED STEEL
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	IMC	INTERMEDIATE METAL CONDUIT	RM	ROOM
		INCAND	INCANDESCENT	RMS	ROOT MEAN SQUARE
CF/OI	CONTRACTOR FURNISHED/OWNER INSTALLED	IR	INFRARED	REQD	REQUIRED
CHW	CHILLED WATER	IWH	INSTANTANEOUS WATER HEATER	SCC	SHORT CIRCUIT CAPACITY
CHWP	CHILLED WATER PUMP			SES	SERVICE ENTRANCE SECTION
CKT	CIRCUIT	J-BOX	JUNCTION BOX	SD	SMOKE DETECTOR
CKT BRKR	CIRCUIT BREAKER			SF	SQUARE FOOT (FEET)
CLF	CURRENT LIMITING FUSE	kV	KILOVOLT	SHT	SHEET
CLG	CEILING	kVA	KILOVOLT AMPERE	SI	INTERNATIONAL SYSTEM OF UNITS
CMU	CONCRETE MASONRY UNIT	kVAH	KILOVOLT AMPERE PER HOUR	SPEC	SPECIFICATION
COAX	COAX CABLE	kVAR	KILOVOLT AMPERE REACTIVE	SPST	SINGLE POLE, SINGLE THROW
COMM	COMMUNICATION	kW	KILOWATT	SPDT	SINGLE POLE, DOUBLE THROW
CONC	CONCRETE	kWH	KILOWATT HOUR	SURF	SURFACE
CONT	CONTINUE	kWHM	KILOWATT HOUR METER	SW	SWITCH
CONTR	CONTRACTOR			SWBD	SWITCHBOARD
COORD	COORDINATE	LED	LIGHT EMITTING DIODE	SWGR	SWITCHGEAR
CPT	CONTROL POWER TRANSFORMER	LF	LINEAR FEET (FOOT)		
CRI	COLOR RENDERING INDEX	LM	LUMEN	TC	TIME CLOCK
CT	CURRENT TRANSFORMER	LP	LIGHT POLE	TEL	TELEPHONE
CTV	CABLE TELEVISION	LPS	LOW PRESSURE SODIUM	TP	TWISTED PAIR
CU	COPPER	LRA	LOCKED ROTOR AMPS	TPS	TWISTED PAIR SHIELDED
CU FT	CUBIC FEET	LTCP	LOCAL TEMPERATURE CONTROL PANEL	TTB	TELEPHONE TERMINAL BOARD
CUR	CURRENT	LT	LIGHT	TV	TELEVISION
		LTG	LIGHTING	TYP	TYPICAL
DAS	DISTRIBUTED ANTENNA SYSTEM	LTG PNL	LIGHTING PANEL		
DB	DECIBEL	LTNG	LIGHTNING	UFD	UNDERFLOOR DUCT
DC	DIRECT CURRENT	LV	LOW VOLTAGE	UGND	UNDERGROUND
DCP	DIMMER CONTROL PANEL			UL	UNDERWRITERS LABORATORY
DEG C	DEGREES CELSIUS	MATV	MASTER ANTENNA TELEVISION SYSTEM	UON	UNLESS OTHERWISE NOTED
DEG F	DEGREES FAHRENHEIT	MAX	MAXIMUM	UPS	UNINTERRUPTIBLE POWER SUPPLY
DEMO	DEMOLITION	MC	METAL-CLAD	UTIL	UTILITY
DIAG	DIAGRAM	MCA	MINIMUM CIRCUIT AMPS		
DISC	DISCONNECT	MCB	MAIN CIRCUIT BREAKER	V	VOLT
DISTR	DISTRIBUTION	MCC	MOTOR CONTROL CENTER	VA	VOLT AMPERE
DISTR PNL	DISTRIBUTION PANEL	MDP	MAIN DISTRIBUTION PANEL	VAR	VOLT AMPERE REACTIVE
DMR SW	DIMMER SWITCH	MECH	MECHANICAL	VFD	VARIABLE FREQUENCY DRIVE
DN	DOWN	MG	MOTOR GENERATOR	VOLT	VOLTAGE
DPDT	DOUBLE POLE, DOUBLE THROW	MH	MANHOLE	VS	VACANCY SENSOR
DPST	DOUBLE POLE, SINGLE THROW	MIN	MINIMUM		
DRSW	DOOR SWITCH	MOCP	MAXIMUM OVERCURRENT PROTECTION	W	WATT
DS	DISCONNECT SWITCH	MLO	MAIN LUGS ONLY	WH	WATER HEATER
DWG	DRAWING	MT	MOUNT	WP	WEATHERPROOF
		MTD	MOUNTED		
EC	EMPTY CONDUIT	MTG	MOUNTING	XFER	TRANSFER
EG	EQUIPMENT GROUND	MTS	MANUAL TRANSFER SWITCH	XFMR	TRANSFORMER
EL	ELEVATION	MVA	MEGAVOLT-AMPERE		

Revisions:	Date

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Drawing Title: ELECTRICAL LEGENDS AND ABBREVIATIONS

Approved: Project Director: TODD DALZELL

Project Title: REFURBISH FARGO ELEVATORS AND REPLACE CONTROLS

Location: FARGO, NORTH DAKOTA

Date: 12/20/2022 | Checked: WW | Drawn: JS

Project Number: 436-20-126

Building Number: 154

Drawing Number: E-000

Dwg. 21 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

DISCONNECT EXISTING HOME RUN WIRING, INSTALL NEW 200 AMP BREAKER AND CONNECT NEW ELEVATOR 4 POWER FEED CONDUCTORS.

DISCONNECT EXISTING HOME RUN WIRING AND CONNECT NEW ELEVATOR 5 POWER FEED CONDUCTORS.

INSTALL NEW 250 AMP BREAKER AND CONNECT NEW ELEVATOR 6 POWER FEEDS.

DISCONNECT EXISTING HOME RUN WIRING, INSTALL NEW 350 AMP BREAKER AND CONNECT NEW ELEVATOR 12 POWER FEED CONDUCTORS.

DISCONNECT EXISTING HOME RUN WIRING, INSTALL NEW 350 AMP BREAKER AND CONNECT NEW ELEVATOR 10 POWER FEED CONDUCTORS.

REMODELED "BUILDING 1 EQUIPMENT BRANCH EMERGENCYSWITCHGEAR"

PANEL LOCATION: BE-99 | L-L VOLT: 208 | PHASE: 3 | MAIN: LUG Y | BREAKER N
MFR/MODEL: SIEMENS | L-N VOLT: 120 | WIRES: 4 | WIRE SIZE: (E) | FED FROM: METER
AIC: 65,000 | RATED AMP: 2500 | NEURAL 100% | COND. SIZE: (E) | MOUNT: SURFACE

DESCRIPTION	BREAKER TYPE	BREAKER POLE	BREAKER AMP	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	BREAKER AMP	BREAKER POLE	BREAKER TYPE	DESCRIPTION
EB13C1		3	200	(E)	(E)	(E)			9014	S	1	A	2	S	9014			(E)	(E)	(E)	200	3		EB14E1
									9014	S	3	B	4	S	9014									
									9014	S	5	C	6	S	9014									
EB12C6 EB151		3	200	(E)	(E)	(E)			9014	S	7	A	8	S	9014			(E)	(E)	(E)	200	3		EB11C3
									9014	S	9	B	10	S	9014									
									9014	S	11	C	12	S	9014									
EB10N2		3	200	(E)	(E)	(E)			9014	S	13	A	14	S	9014			(E)	(E)	(E)	200	3		EB11C1
									9014	S	15	B	16	S	9014									
									9014	S	17	C	18	S	9014									
EB10N1		3	200	(E)	(E)	(E)			9014	S	19	A	20	M	11945			(4)250 KCMIL	THHN	#2	250	3		ELEVATOR 6
									9014	S	21	B	22	M	11945									
									9014	S	23	C	24	M	11945									
ELEVATOR 4		3	200	(4)3/0	THHN	#2			8730	M	25	A	26	S	9014			(E)	(E)	(E)	200	3		EB11E1
									8730	M	27	B	28	S	9014									
									8730	M	29	C	30	S	9014									
EB10S1		3	20	(E)	(E)	(E)			901	S	31	A	32	S	9014			(E)	(E)	(E)	200	3		EB13E1
									901	S	33	B	34	S	9014									
									901	S	35	C	36	S	9014									
EB10C4P		3	20	(E)	(E)	(E)			901	S	37	A	38	M	14106			(4)350 KCMIL	THHN	#1/0	350	3		ELEVATOR 12
									901	S	39	B	40	M	14106									
									901	S	41	C	42	M	14106									
EB10C2		3	20	(E)	(E)	(E)			901	S	43	A	44	S	9014			(E)	(E)	(E)	200	3		EB10E2P
									901	S	45	B	46	S	9014			(E)	(E)	(E)				
									901	S	47	C	48	S	9014			(E)	(E)	(E)				
EB12E1		3	20	(E)	(E)	(E)			901	S	49	A	50	M	14106			(4)350 KCMIL	THHN	#1/0	350	3		ELEVATOR 10
									901	S	51	B	52	M	14106									
									901	S	53	C	54	M	14106									
ELEVATOR 5		3	250	(4)250 KCMIL	THHN	#2			11945	M	55	A	56	S	9014			(E)	(E)	(E)	200	3		EB14C1
									11945	M	57	B	58	S	9014			(E)	(E)	(E)				
									11945	M	59	C	60	S	9014			(E)	(E)	(E)				
SUMMARY CONNECTED LOADS							0	0	62025	M	LOAD (VOLT-AMPERES)			M	120471	0	0							SUMMARY CONNECTED LOADS
									0	A				A	0									
									118980	S				S	189294									
									0	E				E	0									
									0	H				H	0									
									0	T				T	0									
									0	O				O	0									

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	0.0	1.25	0.0
RECEPTACLES (FIRST 10KW)	0.0	1.0	0.0
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	168.4	1.0	168.4
LARGEST MOTOR	14.1	1.25	17.6
APPLIANCES	0.0	1.0	0.0
SUBFEED	308.3	0.8	246.6
EQUIPMENT	0.0	1.0	0.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	0.0	1.0	0.0
TOTAL KVA	490.8 KVA		432.6 KVA
TOTAL AMP	##### AMP		1200.9 AMP
DESIGN (MAX)			2500 AMP
SPARE			1299.1 AMP

AMPERAGE FED TO PANEL 2500 AMP
TOTAL CONNECTED LOAD 1362.2 AMP 490.8 KVA
TOTAL DEMAND LOAD 1200.9 AMP 432.6 KVA
DESIGN (MAX) 2500 AMP 900.7 KVA
SPARE LOAD 1299 AMP 468.0 KVA

CONNECTED LOAD BALANCE SUMMARY
PHASE A 1363.3 AMP 163.59 KVA
PHASE B 1363.3 AMP 163.59 KVA
PHASE C 1363.3 AMP 163.59 KVA

A TO B 0 %
B TO C 0 %
C TO A 0 %

NOTE: ALL BRANCH WIRE SIZING IS BASED ON CIRCUIT SHOWN BEING THE ONLY CIRCUIT WITHIN THE CONDUIT. AT CONTRACTOR OPTION UP TO 3 CIRCUITS MAY BE RUN TOGETHER IN A SINGLE CONDUIT AS LONG AS THEY DO NO SHARE A NEUTRAL AND CONDUCTORS ARE DERATED BASED ON 2016 NEC TABLE 310.15(B)(3)(a)

LEGEND/KEY
T=TRANSFORMER
S=SUBFEED
O=OTHER
M=MOTOR
A=APPLIANCE
E=EQUIPMENT
H-HEATING
R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

NEW HOMERUNS FOR ELEVATOR CAB LIFE SAFETY POWER. REFER TO SINGLE LINE DIAGRAMS ON SHEET E-003

PANEL "EB95C3"

PANEL LOCATION: PENTHOUSE | L-L VOLT: 208 | PHASE: 3 | MAIN: LUG Y | BREAKER N
MFR/MODEL: SQUARE D | L-N VOLT: 120 | WIRES: 4 | WIRE SIZE: (E) | FED FROM: SWGR
AIC: 22,000 | RATED AMP: 200 | NEURAL 100% | COND. SIZE: (E) | MOUNT: SURFACE

DESCRIPTION	BREAKER TYPE	BREAKER POLE	BREAKER AMP	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	BREAKER AMP	BREAKER POLE	BREAKER TYPE	DESCRIPTION
BAS HWP CONTROL PANEL		1	20	(E)	(E)	(E)			1560	S	1	A	2	M	1560			(E)	(E)	(E)	20	1		GLYCOL PUMP
AHU-51		1	20	(E)	(E)	(E)			1560	M	3	B	4								20	1		SPR
AHU-7		1	20	(E)	(E)	(E)			1560	M	5	C	6	S	1560			(E)	(E)	(E)	20	1		ELEVATOR POWER PANEL
EF-73		1	20	(E)	(E)	(E)			1560	M	7	A	8	S	1560			(E)	(E)	(E)	20	1		ELEVATOR POWER PANEL
EF-73		1	20	(E)	(E)	(E)			1560	M	9	B	10	S	1560			(E)	(E)	(E)	20	1		ELEVATOR POWER PANEL
EF-73		1	50	(E)	(E)	(E)			3900	M	11	C	12								30	1		SPR
AHU-32		1	50	(E)	(E)	(E)			3900	M	13	A	14								20	1		SPR
AHU-32		1	20	(E)	(E)	(E)			1560	M	15	B	16								20	1		SPR
AHU-32		1	20	(E)	(E)	(E)			1560	M	17	C	18	M	1560			(E)	(E)	(E)	20	1		A/C ICU
EF-35		1	20	(E)	(E)	(E)			1560	M	19	A	20	M	1560			(E)	(E)	(E)	20	1		A/C ICU
TEMP CONTROL COMP		1	20	(E)	(E)	(E)			1560	M	21	B	22	M	1560			(E)	(E)	(E)	20	1		A/C ICU
TEMP CONTROL COMP		1	20	(E)	(E)	(E)			1560	M	23	C	24	M	1560			(E)	(E)	(E)	20	1		OUTLET-ROOF 208
HONEYWELL		1	20	(E)	(E)	(E)			1560	M	25	A	26	M	1560			(E)	(E)	(E)	20	1		OUTLET-ROOF 208
RADIO/PGER METER ROUTR		1	20	(E)	(E)	(E)			1560	M	27	B	28	M	1560			(E)	(E)	(E)	20	1		AHU-55
EXHAUST FAN-NUCLEAR MED		1	20	(E)	(E)	(E)			1560	M	29	C	30	M	1560			(E)	(E)	(E)	20	1		AHU-4
SUMMARY CONNECTED LOADS							0	0	26520	M	LOAD (VOLT-AMPERES)			M	12480	0	0							SUMMARY CONNECTED LOADS
									0	A				A	0									
									1560	S				S	4680									
									0	E				E	0									
									0	H				H	0									
									0	T				T	0									
									0	O				O	0									

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	0.0	1.25	0.0
RECEPTACLES (FIRST 10KW)	0.0	1.0	0.0
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	35.1	1.0	35.1
LARGEST MOTOR	3.9	1.25	4.9
APPLIANCES	0.0	1.0	0.0
SUBFEED	6.2	0.8	5.0
EQUIPMENT	0.0	1.0	0.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	0.0	1.0	0.0
TOTAL KVA	45.2 KVA		45.0 KVA
TOTAL AMP	125.6 AMP		124.8 AMP
DESIGN (MAX)			200 AMP
SPARE			75.2 AMP

AMPERAGE FED TO PANEL 200 AMP
TOTAL CONNECTED LOAD 125.6 AMP 45.2 KVA
TOTAL DEMAND LOAD 124.8 AMP 45.0 KVA
DESIGN (MAX) 200 AMP 72.1 KVA
SPARE LOAD 75 AMP 27.1 KVA

CONNECTED LOAD BALANCE SUMMARY
PHASE A 136.5 AMP 16.38 KVA
PHASE B 104.0 AMP 12.48 KVA
PHASE C 136.5 AMP 16.38 KVA

A TO B 24 %
B TO C -31 %
C TO A 0 %

NOTE: ALL BRANCH WIRE SIZING IS BASED ON CIRCUIT SHOWN BEING THE ONLY CIRCUIT WITHIN THE CONDUIT. AT CONTRACTOR OPTION UP TO 3 CIRCUITS MAY BE RUN TOGETHER IN A SINGLE CONDUIT AS LONG AS THEY DO NO SHARE A NEUTRAL AND CONDUCTORS ARE DERATED BASED ON 2016 NEC TABLE 310.15(B)(3)(a)

LEGEND/KEY
T=TRANSFORMER
S=SUBFEED
O=OTHER
M=MOTOR
A=APPLIANCE
E=EQUIPMENT
H-HEATING
R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

DISCONNECT EXISTING HOME RUN WIRING, INSTALL NEW 300 AMP BREAKER AND CONNECT NEW ELEVATOR 3 POWER FEED CONDUCTORS.

DISCONNECT EXISTING HOME RUN WIRING, INSTALL NEW 250 AMP BREAKER AND CONNECT NEW ELEVATOR 2 POWER FEED CONDUCTORS.

DISCONNECT EXISTING HOME RUN WIRING, INSTALL NEW 250 AMP BREAKER AND CONNECT NEW ELEVATOR 1 POWER FEED CONDUCTORS.

PANEL "ELEVATOR 1,2,3 MCC"

PANEL LOCATION: ELEVATOR 1,2,3 MACHINE ROOM | L-L VOLT: 208 | PHASE: 3 | MAIN: LUG Y | BREAKER N
MFR/MODEL: SIEMENS | L-N VOLT: 120 | WIRES: 4 | WIRE SIZE: EXISTING | FED FROM: BLDG 9 SWITCHGEAR
AIC: 65,000 | RATED AMP: 600 | NEURAL 100% | COND. SIZE: EXISTING | MOUNT: SURFACE

DESCRIPTION	BREAKER TYPE	BREAKER POLE	BREAKER AMP	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	BREAKER AMP	BREAKER POLE	BREAKER TYPE	DESCRIPTION
ELEVATOR 3		3	300	(4) 350 KCMIL	THHN	#1/0			14106	M	1	A	2											
									14106	M	3	B	4											
									14106	M	5	C	6											
ELEVATOR 2		3	250	(4) 250 KCMIL	THHN	#2			11945	M	7	A	8	M	11945			(4) 250 KCMIL	THHN	#2	250	3		ELEVATOR 1
									11945	M	9	B	10	M	11945									
									11945	M	11	C	12	M	11945									
SUMMARY CONNECTED LOADS							0	0	78153	M	LOAD (VOLT-AMPERES)			M	35835	0	0							SUMMARY CONNECTED LOADS
									0	A				A	0									
									0	S				S	0									
									0	E				E	0									
									0	H				H	0									
									0	T				T	0									
									0	O				O	0									

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	0.0	1.25	0.0
RECEPTACLES (FIRST 10KW)	0.0	1.0	0.0
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	99.9	1.0	99.9
LARGEST MOTOR	14.1	1.25	17.6
APPLIANCES	0.0	1.0	0.0
SUBFEED	0.0	0.8	0.0
EQUIPMENT	0.0	1.0	0.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	0.0	1.0	0.0
TOTAL KVA	114.0 KVA		117.5 KVA
TOTAL AMP	316.4 AMP		326.2 AMP
DESIGN (MAX)			600 AMP
SPARE			273.8 AMP

AMPERAGE FED TO PANEL 600 AMP
TOTAL CONNECTED LOAD 316.4 AMP 114.0 KVA
TOTAL DEMAND LOAD 326.2 AMP 117.5 KVA
DESIGN (MAX) 600 AMP 216.2 KVA
SPARE LOAD 274 AMP 98.6 KVA

CONNECTED LOAD BALANCE SUMMARY
PHASE A 316.6 AMP 37.996 KVA
PHASE B 316.6 AMP 37.996 KVA
PHASE C 316.6 AMP 37.996 KVA

A TO B 0 %
B TO C 0 %
C TO A 0 %

NOTE: ALL BRANCH WIRE SIZING IS BASED ON CIRCUIT SHOWN BEING THE ONLY CIRCUIT WITHIN THE CONDUIT. AT CONTRACTOR OPTION UP TO 3 CIRCUITS MAY BE RUN TOGETHER IN A SINGLE CONDUIT AS LONG AS THEY DO NO SHARE A NEUTRAL AND CONDUCTORS ARE DERATED BASED ON 2016 NEC TABLE 310.15(B)(3)(a)

LEGEND/KEY
T=TRANSFORMER
S=SUBFEED
O=OTHER
M=MOTOR
A=APPLIANCE
E=EQUIPMENT
H-HEATING
R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

DISCONNECT EXISTING HOME RUN WIRING AND CONNECT NEW ELEVATOR 7 POWER FEED CONDUCTORS.

DISCONNECT EXISTING HOME RUN WIRING AND CONNECT NEW ELEVATOR 8 POWER FEED CONDUCTORS.

REMODELED PANEL "EBE"

PANEL LOCATION: BA-01B | L-L VOLT: 208 | PHASE: 3 | MAIN: LUG Y | BREAKER Y
MFR/MODEL: SQUARE D / I-LINE | L-N VOLT: 120 | WIRES: 4 | WIRE SIZE: EXISTING | FED FROM: BLDG 46 SWGR/GEN
AIC: 65,000 | RATED AMP: 800 | NEURAL 100% | COND. SIZE: EXISTING | MOUNT: SURFACE

DESCRIPTION	BREAKER TYPE	BREAKER POLE	BREAKER AMP	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	BREAKER AMP	BREAKER POLE	BREAKER TYPE	DESCRIPTION
ELEVATOR 7		3	450	(8)300 KCMIL	THHN	#2			20508	M	1	A	2	M	5440			(E)	(E)	(E)	400	6		MCC-38 ROOM BA-01
									20508	M	3	B	4	M	5440			(E)	(E)	(E)				
									20508	M	5	C	6	M	5440			(E)	(E)	(E)				
ELEVATOR 8		3	450	(8)300 KCMIL	THHN	#2			20508	M	7	A	8	M	5440			(E)	(E)	(E)				
									20508	M	9	B	10	M	5440			(E)	(E)	(E)				
									20508	M	11	C	12	M	5440			(E)	(E)	(E)				
EB465C3		3	200	(E)	(E)	(E)			5440	S	13	A	14								200	3		SPARE
				(E)	(E)	(E)			5440	S	15	B	16											
				(E)	(E)	(E)			5440	S	17	C	18											
MEDICAL AIR		3	200	(E)	(E)	(E)			5440	M	19	A	20	S	5440			(E)	(E)	(E)	200	3		EB462C2
				(E)	(E)	(E)			5440	M	21	B	22	S	5440			(E)	(E)	(E)				
				(E)	(E)	(E)			5440	M	23	C	24	S	5440			(E)	(E)	(E)				
EB460C1		3	200	(E)	(E)	(E)			5440	S	25	A	26								200	3		SPARE
				(E)	(E)	(E)			5440	S	27	B	28											
				(E)	(E)	(E)			5440	S	29	C	30											
EB463C1		3	200	(E)	(E)	(E)			5440	S	31	A	32	S	5440			(E)	(E)	(E)	200	3		EB461C1
				(E)	(E)	(E)			5440	S	33	B	34	S	5440			(E)	(E)	(E)				
				(E)	(E)	(E)			5440	S	35	C	36	S	5440			(E)	(E)	(E)				
EB465C2		3	200	(E)	(E)	(E)			5440	S	37	A	38	S	5440			(E)	(E)	(E)	200	3		EB460S1
				(E)	(E)	(E)			5440	S	39	B	40	S	5440			(E)	(E)	(E)				
				(E)	(E)	(E)			5440	S	41	C	42	S	5440			(E)	(E)	(E)				
MCC EB462C1		3	200	(E)	(E)	(E)			5440	S	43	A	44											SPACE
				(E)	(E)	(E)			5440	S	45	B	46											
				(E)	(E)	(E)			5440	S	47	C	48											
SUMMARY CONNECTED LOADS							0	0	139368	M	LOAD (VOLT-AMPERES)			M	32640	0	0							SUMMARY CONNECTED LOADS
									0	A				A	0									
									81600	S				S	48960									
									0	E				E	0									
									0	H				H	0									
									0	T				T	0									
									0	O				O	0									

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	0.0	1.25	0.0
RECEPTACLES (FIRST 10KW)	0.0	1.0	0.0
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	151.5	1.0	151.5
LARGEST MOTOR	20.5	1.25	25.6
APPLIANCES	0.0	1.0	0.0
SUBFEED	130.6	0.8	104.4
EQUIPMENT	0.0	1.0	0.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	0.0	1.0	0.0
TOTAL KVA	302.6 KVA		281.6 KVA
TOTAL AMP	839.8 AMP		781.6 AMP
DESIGN (MAX)			800 AMP
SPARE			18.4 AMP

AMPERAGE FED TO PANEL 800 AMP
TOTAL CONNECTED LOAD 839.8 AMP 302.6 KVA
TOTAL DEMAND LOAD 781.6 AMP 281.6 KVA
DESIGN (MAX) 800 AMP 288.2 KVA
SPARE LOAD 18 AMP 6.6 KVA

CONNECTED LOAD BALANCE SUMMARY
PHASE A 840.5 AMP 100.856 KVA
PHASE B 840.5 AMP 100.856 KVA
PHASE C 840.5 AMP 100.856 KVA

A TO B 0 %
B TO C 0 %
C TO A 0 %

NOTE: ALL BRANCH WIRE SIZING IS BASED ON CIRCUIT SHOWN BEING THE ONLY CIRCUIT WITHIN THE CONDUIT. AT CONTRACTOR OPTION UP TO 3 CIRCUITS MAY BE RUN TOGETHER IN A SINGLE CONDUIT AS LONG AS THEY DO NO SHARE A NEUTRAL AND CONDUCTORS ARE DERATED BASED ON 2016 NEC TABLE 310.15(B)(3)(a)

LEGEND/KEY
T=TRANSFORMER
S=SUBFEED
O=OTHER
M=MOTOR
A=APPLIANCE
E=EQUIPMENT
H-HEATING
R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

GENERAL ELECTRICAL PANEL NOTE

EXISTING LOADS ARE ASSUMED BY ENGINEER BASED ON INFORMATION PROVIDED DURING DESIGN AND ON SITE VERIFICATION

DISCONNECT EXISTING HOME RUN WIRING AND MAINTAIN BREAKER FOR FUTURE USE. RE-LABEL AS SPARE.

REMODELED PANEL "M5 SWGR"

PANEL LOCATION: BC-79 | L-L VOLT: 208 | PHASE: 3 | MAIN: LUG Y | BREAKER N
MFR/MODEL: ROCKWELL - ALLEN BRADLEY / CENTERLINE | L-N VOLT: 120 | WIRES: 4 | WIRE SIZE: EXISTING | FED FROM: METER
AIC: 65,000 | RATED AMP: 600 | NEURAL 100% | COND. SIZE: EXISTING | MOUNT: SURFACE

DESCRIPTION	BREAKER TYPE	BREAKER POLE	BREAKER AMP	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	BRANCH WIRE INSULATION	BRANCH WIRE GND	BREAKER AMP	BREAKER POLE	BREAKER TYPE	DESCRIPTION
INCOMING LUGS		3	200	(E)	(E)	(E)			9014	S	1	A	2								0	3		SPR
									9014	S	3	B	4											
									9014	S	5	C	6											
SPARE		3	200								7	A	8	M	6933			(E)	(E)	(E)	200	3		EF-4
											9	B	10	M	6933									
											11	C	12	M	6933									
SPR		3	200								13	A	14								0	3		SPARE
											15	B	16											
											17	C	18											
SPR		3	201								19	A	20	M	6933			(E)	(E)	(E)	200	3		AHU-1
											21	B	22	M	6933									
											23	C	24	M	6933									
SPR		3	202								25	A	26	M	6933			(E)	(E)	(E)	200	3		AHU-2
											27	B	28	M	6933									
											29	C	30	M	6933									
SPR		3	203								31	A	32								0	3		SPARE
											33	B	34											
											35	C	36											
SPC											37	A	38	M	6933			(E)	(E)	(E)	200	3		RAF-1
											39	B	40	M	6933									
											41	C	42	M	6933									
											43	A	44	M	6933			(E)	(E)	(E)	200	3		RAF-2
											45	B	46	M	6933									
											47	C	48	M	6933									
SUMMARY CONNECTED LOADS							0	0	0	M	LOAD (VOLT-AMPERES)			M	103995	0	0							SUMMARY CONNECTED LOADS
									0	A				A	0									
									27042	S				S	0									
									0	E				E	0									
									0	H				H	0									
									0	T				T	0									
									0	O				O	0									

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	0.0	1.25	0.0
RECEPTACLES (FIRST 10KW)	0.0	1.0	0.0
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	97.1	1.0	97.1
LARGEST MOTOR	6.9	1.25	8.7
APPLIANCES	0.0	1.0	0.0
SUBFEED	27.0	0.8	21.6
EQUIPMENT	0.0	1.0	0.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	0.0	1.0	0.0
TOTAL KVA	131.0 KVA		127.4 KVA
TOTAL AMP	363.7 AMP		353.5 AMP
DESIGN (MAX)			600 AMP
SPARE			246.5 AMP

AMPERAGE FED TO PANEL 600 AMP
TOTAL CONNECTED LOAD 363.7 AMP 131.0 KVA
TOTAL DEMAND LOAD 353.5 AMP 127.4 KVA
DESIGN (MAX) 600 AMP 216.2 KVA
SPARE LOAD 246 AMP 88.8 KVA

CONNECTED LOAD BALANCE SUMMARY
PHASE A 364.0 AMP 43.679 KVA
PHASE B 364.0 AMP 43.679 KVA
PHASE C 364.0 AMP 43.679 KVA

A TO B 0 %
B TO C 0 %
C TO A 0 %

NOTE: ALL BRANCH WIRE SIZING IS BASED ON CIRCUIT SHOWN BEING THE ONLY CIRCUIT WITHIN THE CONDUIT. AT CONTRACTOR OPTION UP TO 3 CIRCUITS MAY BE RUN TOGETHER IN A SINGLE CONDUIT AS LONG AS THEY DO NO SHARE A NEUTRAL AND CONDUCTORS ARE DERATED BASED ON 2016 NEC TABLE 310.15(B)(3)(a)

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O=OTHER
M=MOTOR
A=APPLIANCE
E=EQUIPMENT
H-HEATING
R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

Revisions: | Date

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15.2226.M29

Drawing Title: REMODEL ELECTRICAL PANEL SCHEDULES

Approved: Project Director: TODD DALZELL

Project Title: REFURBISH FARGO ELEVATORS AND REPLACE CONTROLS

Location: FARGO, NORTH DAKOTA

Date: 12/20/2022 | Checked: WW | Drawn: JS

Project Number: 436-20-126

Building Number: 154

Drawing Number: E-001

Dwg. 22 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

REMODELED PANEL "EC95C5"

PANEL LOCATION: ELEVATOR 1,2, & 3 PLATFORM — L-L VOLT: 208 — PHASE: 3 — MAIN: LUG Y — BREAKER N
MFR/MODEL: ITE PANELBOARD — L-N VOLT: 120 — WIRES: 4 — WIRE SIZE: (E) — FED FROM: SWGR
AIC: 10,000 — RATED AMP: 200 — NEURAL 100% — COND. SIZE: (E) — MOUNT: SURFACE

REMOVE EXISTING HOME RUN WIRING FOR ELEVATOR SHAFT POWER. CONNECT NEW HOME RUN WIRING FOR ELEVATOR 1,2 & 3 SHAFT LIGHTING AND RECEPTACLE CIRCUIT..

CONNECT NEW HOME RUN WIRING FOR ELEVATOR 2 CAB POWER TO EXISTING SPARE 20 AMP BREAKER.

CONNECT NEW HOME RUN WIRING FOR ELEVATOR 1 CAB POWER TO EXISTING SPARE 20 AMP BREAKER.

REPLACE EXISTING 30 AMP BREAKER WITH NEW 20 AMP BREAKER. CONNECT NEW HOME RUN WIRING FOR ELEVATOR 3 CAB POWER.

DESCRIPTION	BREAKER TYPE	POLE	AMP	BRANCH WIRE SIZE	INSULATION	GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	INSULATION	GND	BREAKER AMP	POLE	TYPE	DESCRIPTION
XCELL CELLMASTER		1	20	(E)	(E)	(E)			1560	M	1	A	2	M	1560			(E)	(E)	(E)	20	1		RADIO
FIRE ALARM PANEL		1	20	(E)	(E)	(E)			1560	S	3	B	4	M	1560			(E)	(E)	(E)	20	1		LIGHTS-ATTIC STAIRWAY
ELEV 1,2,3 SHAFT LTS/ RECPS		1	20	(2)#12	THHN	#12	345	360			5	C	6	M	1560			(E)	(E)	(E)	20	1		CARE CHANELL REC
EMERGENCY LIGHTS		1	20	(E)	(E)	(E)	1920				7	A	8	E	1340		100	(2)#12	THHN	#12	20	1		ELEVATOR 1 CAB POWER
ELEVATOR 2 CAB POWER		1	20	(2)#12	THHN	#12	100		1340	E	9	B	10	E	1340		100	(2)#12	THHN	#12	20	1		ELEVATOR 3 CAB POWER
SPARE		1	50								11	C	12	M	2340			(E)	(E)	(E)	30	1		AIR COMPRESSOR
SPARE		1	50								13	A	14								30	1		SPARE
OUTLETS-S. WALL SURGERY		1	20	(E)	(E)	(E)		1560			15	B	16	M	-			(E)	(E)	(E)	20	1		AIR COMPRESSOR
SPACE											17	C	18	M	1560			(E)	(E)	(E)	20	1		AIR COMPRESSOR
											19	A	20											SPACE
											21	B	22											
											23	C	24											
											25	A	26											
											27	B	28											
											29	C	30											
SUMMARY CONNECTED LOADS							2365	1920	1560 / 0 / 1560 / 1340 / 0 / 0 / 0	M / A / S / E / H / T / O	LOAD (VOLT-AMPERES)			M / A / S / E / H / T / O	8580 / 0 / 0 / 2680 / 0 / 0 / 0	0	200							SUMMARY CONNECTED LOADS

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	2.6	1.25	3.2
RECEPTACLES (FIRST 10KW)	1.9	1.0	1.9
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	7.8	1.0	7.8
LARGEST MOTOR	2.3	1.25	2.9
APPLIANCES	0.0	1.0	0.0
SUBFEED	1.6	0.8	1.2
EQUIPMENT	4.0	1.0	4.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	0.0	1.0	0.0
TOTAL KVA	20.2 KVA		21.1 KVA
TOTAL AMP	56.1 AMP		58.6 AMP
DESIGN (MAX)			200 AMP
SPARE			141.4 AMP

AMPERAGE FED TO PANEL	200 AMP	
TOTAL CONNECTED LOAD	56.1 AMP	20.2 KVA
TOTAL DEMAND LOAD	58.6 AMP	21.1 KVA
DESIGN (MAX)	200 AMP	72.1 KVA
SPARE LOAD	141 AMP	50.9 KVA
CONNECTED LOAD BALANCE SUMMARY		
PHASE A	54.0 AMP	6.48 KVA
PHASE B	63.0 AMP	7.56 KVA
PHASE C	51.4 AMP	6.165 KVA
A TO B	-17 %	
B TO C	18 %	
C TO A	-5 %	

NOTE: ALL BRANCH WIRE SIZING IS BASED ON CIRCUIT SHOWN BEING THE ONLY CIRCUIT WITHIN THE CONDUIT. AT CONTRACTOR OPTION UP TO 3 CIRCUITS MAY BE RUN TOGETHER IN A SINGLE CONDUIT AS LONG AS THEY DO NO SHARE A NEUTRAL AND CONDUCTORS ARE DERATED BASED ON 2016 NEC TABLE 310.15(B)(3)(a)

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H-HEATING
R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

REMODELED PANEL "ES465C1"

PANEL LOCATION: MECHANICAL PLATFORM 7&8 — L-L VOLT: 208 — PHASE: 3 — MAIN: LUG 125 A — BREAKER N
MFR/MODEL: SIEMENS - P1 — L-N VOLT: 120 — WIRES: 4 — WIRE SIZE: (E) — FED FROM: BUILDING 46 SWGR
AIC: 10,000 — RATED AMP: 125 — NEURAL 100% — COND. SIZE: (E) — MOUNT: SURFACE

GENERAL ELECTRICAL PANEL NOTE

EXISTING LOADS ARE ASSUMED BY ENGINEER BASED ON INFORMATION PROVIDED DURING DESIGN AND ON SITE VERIFICATION

DISCONNECT EXISTING HOME RUN WIRING AND CONNECT INDICATED NEW HOME RUN WIRING TO EXISTING 20 AMP BREAKER.

CONNECT INDICATED HOME RUN WIRING TO EXISTING 20 AMP SPARE BREAKER.

DESCRIPTION	BREAKER TYPE	POLE	AMP	BRANCH WIRE SIZE	INSULATION	GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	INSULATION	GND	BREAKER AMP	POLE	TYPE	DESCRIPTION
LTS-ELEVATOR EQUIPM RM		1	20	(E)	(E)	(E)	1560				1	A	2	O	1340		100	(2)#12	THHN	#12	20	1		ELEVATOR 7 CAB POWER
UH-ELEVATOR EQUIPM RM		1	20	(E)	(E)	(E)			1560	M	3	B	4	O	1340		100	(2)#12	THHN	#12	20	1		ELEVATOR 8 CAB POWER
LTS,OUTLETS ELEV SHAFT		1	20	(E)	(E)	(E)	1560				5	C	6			360	290	(2)#12	THHN	#12	20	1		ELEVATOR 7&8 SHAFT PWR
LTS, OUTLETS ELEV SHAFT		1	20	(E)	(E)	(E)	1560				7	A	8								20	1		SPARE
OUTLETS-ELEV EQUIP RM		1	20	(E)	(E)	(E)		1560			9	B	10								20	1		SPARE
DMPER MOTOR-ELEV SHAFT		1	20	(E)	(E)	(E)			1560	M	11	C	12								20	1		SPARE
EF-67		1	20	(E)	(E)	(E)			1560	M	13	A	14								20	1		SPARE
EF-68		1	20	(E)	(E)	(E)			1560	M	15	B	16								20	1		SPARE
EF-69		1	20	(E)	(E)	(E)			1560	M	17	C	18								20	1		SPARE
MCC-ES363C1		3	50	(E)	(E)	(E)			1300		19	A	20								20	3		SPARE
				(E)	(E)	(E)			1300		21	B	22											
				(E)	(E)	(E)			1300		23	C	24											
SPACE											25	A	26											SPACE
											27	B	28											
											29	C	30											
SUMMARY CONNECTED LOADS							4680	1560	7800 / 0 / 0 / 0 / 0 / 0 / 3900	M / A / S / E / H / T / O	LOAD (VOLT-AMPERES)			M / A / S / E / H / T / O	0 / 0 / 0 / 0 / 0 / 0 / 2680	360	490							SUMMARY CONNECTED LOADS

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	5.2	1.25	6.5
RECEPTACLES (FIRST 10KW)	1.9	1.0	1.9
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	6.2	1.0	6.2
LARGEST MOTOR	1.6	1.25	2.0
APPLIANCES	0.0	1.0	0.0
SUBFEED	0.0	0.8	0.0
EQUIPMENT	0.0	1.0	0.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	6.6	1.0	6.6
TOTAL KVA	21.5 KVA		23.2 KVA
TOTAL AMP	59.6 AMP		64.3 AMP
DESIGN (MAX)			125 AMP
SPARE			60.7 AMP

AMPERAGE FED TO PANEL	125 AMP	
TOTAL CONNECTED LOAD	59.6 AMP	21.5 KVA
TOTAL DEMAND LOAD	64.3 AMP	23.2 KVA
DESIGN (MAX)	125 AMP	45.0 KVA
SPARE LOAD	61 AMP	21.9 KVA
CONNECTED LOAD BALANCE SUMMARY		
PHASE A	61.8 AMP	7.42 KVA
PHASE B	61.8 AMP	7.42 KVA
PHASE C	55.3 AMP	6.63 KVA
A TO B	0 %	
B TO C	11 %	
C TO A	-12 %	

NOTE: ALL BRANCH WIRE SIZING IS BASED ON CIRCUIT SHOWN BEING THE ONLY CIRCUIT WITHIN THE CONDUIT. AT CONTRACTOR OPTION UP TO 3 CIRCUITS MAY BE RUN TOGETHER IN A SINGLE CONDUIT AS LONG AS THEY DO NO SHARE A NEUTRAL AND CONDUCTORS ARE DERATED BASED ON 2016 NEC TABLE 310.15(B)(3)(a)

LEGEND/KEY
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O=OTHER
M=MOTOR
A=APPLIANCE
E=EQUIPMENT
H-HEATING
R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

REMODELED PANEL "EB10N1"

PANEL LOCATION: BLDG 1 SWGR — L-L VOLT: 208 — PHASE: 3 — MAIN: LUG Y — BREAKER N
MFR/MODEL: EATON — L-N VOLT: 120 — WIRES: 4 — WIRE SIZE: EXISTING — FED FROM: MCC-EB-1
AIC: 10,000 — RATED AMP: 250 — NEURAL 100% — COND. SIZE: EXISTING — MOUNT: SURFACE

DISCONNECT EXISTING HOME RUN WIRING AND CONNECT INDICATED NEW HOME RUN WIRING TO EXISTING 20 AMP BREAKER.

CONNECT INDICATED HOME RUN WIRING TO EXISTING 20 AMP SPARE BREAKER.

CONNECT INDICATED HOME RUN WIRING TO EXISTING 20 AMP SPARE BREAKER.

DESCRIPTION	BREAKER TYPE	POLE	AMP	BRANCH WIRE SIZE	INSULATION	GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	INSULATION	GND	BREAKER AMP	POLE	TYPE	DESCRIPTION
MCP-12		1	20	(E)	(E)	(E)			1920		1	A	2	E	1340		100	(2)#12	THHN	#12	20	1		ELEVATOR 10 CAB POWER
ELEVATOR 10 PIT POWER		1	20	(2)#12	THWN	#12	85	180			3	B	4	E	1920		1560	(E)	(E)	(E)	20	1		P.A
BC 77 GFI RECPS		1	20	(E)	(E)	(E)		360			5	C	6	E	1920						20	1		CUH
HONEYWELL		1	20	(E)	(E)	(E)			1920	E	7	A	8	E	500		1560	(E)	(E)	(E)	20	1		ACCESS CONTROL
SUMP PUMP P-13 A,B		1	30	(E)	(E)	(E)			2800	M	9	B	10					(E)	(E)	(E)	20	1		SPARE
MCP-11		1	20	(E)	(E)	(E)			1920	E	11	C	12								20	1		SPARE
ELEVATOR PIT SUMP P-2		1	20	(2)#12	THWN	#12			1200	M	13	A	14								20	1		SPARE
SPARE		1	20								15	B	16								20	1		
SPARE											17	C	18								20	1		
											19	A	20											SPACE
SPACE											21	B	22											SPACE
SPACE											23	C	24											SPACE
SPACE											25	A	26											SPACE
SPACE											27	B	28											SPACE
SPACE											29	C	30											SPACE
SUMMARY CONNECTED LOADS							85	540	4000 / 0 / 0 / 3840 / 0 / 0 / 1920	M / A / S / E / H / T / O	LOAD (VOLT-AMPERES)			M / A / S / E / H / T / O	0 / 0 / 0 / 5680 / 0 / 0 / 0	0	3220							SUMMARY CONNECTED LOADS

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	3.3	1.25	4.1
RECEPTACLES (FIRST 10KW)	0.5	1.0	0.5
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	1.2	1.0	1.2
LARGEST MOTOR	2.8	1.25	3.5
APPLIANCES	0.0	1.0	0.0
SUBFEED	0.0	0.8	0.0
EQUIPMENT	9.5	1.0	9.5
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	1.9	1.0	1.9
TOTAL KVA	19.3 KVA		20.8 KVA
TOTAL AMP	53.5 AMP		57.8 AMP
DESIGN (MAX)			125 AMP
SPARE			67.2 AMP

AMPERAGE FED TO PANEL	125 AMP	
TOTAL CONNECTED LOAD	53.5 AMP	19.3 KVA
TOTAL DEMAND LOAD	57.8 AMP	20.8 KVA
DESIGN (MAX)	125 AMP	45.0 KVA
SPARE LOAD	67 AMP	24.2 KVA
CONNECTED LOAD BALANCE SUMMARY		
PHASE A	71.2 AMP	8.54 KVA
PHASE B	54.5 AMP	6.545 KVA
PHASE C	35.0 AMP	4.2 KVA
A TO B	23 %	
B TO C	36 %	
C TO A	-103 %	

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R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

PANEL "ES10S2"

PANEL LOCATION: BD-86 ELEV MECH — L-L VOLT: 208 — PHASE: 3 — MAIN: LUG Y — BREAKER N
MFR/MODEL: EATON — L-N VOLT: 120 — WIRES: 4 — WIRE SIZE: EXISTING — FED FROM: ES10S1
AIC: 10,000 — RATED AMP: 200 — NEURAL 100% — COND. SIZE: EXISTING — MOUNT: SURFACE

CONNECT INDICATED HOME RUN WIRING TO EXISTING 20 AMP SPARE BREAKER.

DISCONNECT EXISTING HOME RUN WIRING AND CONNECT INDICATED NEW HOME RUN WIRING TO EXISTING 20 AMP BREAKER.

CONNECT INDICATED HOME RUN WIRING TO EXISTING 20 AMP SPARE BREAKER.

DESCRIPTION	BREAKER TYPE	POLE	AMP	BRANCH WIRE SIZE	INSULATION	GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	INSULATION	GND	BREAKER AMP	POLE	TYPE	DESCRIPTION
RECEPT - BD-86		1	20	(E)	(E)	(E)		1560			1	A	2			360	145	(2) #12	THWN	#12	20	1		ELEVATOR SHAFT POWER
RECEPT - ELEVATOR PIT		1	20	(E)	(E)	(E)		1560			3	B	4				1560	(E)	(E)	(E)	20	1		LIGHTS - BD-86
ELEV 12 SUMP PUMP		1	20	(2) #12	THWN	#12 CU			1140	M	5	C	6	O	1340		100	(2) #12	THWN	#12	20	1		ELEV 12 CAB POWER
SPARE		1	20								7	A	8				1560	(E)	(E)	(E)	20	1		ELEVATOR CAR LIGHT
SPARE		1	20								9	B	10	M	1560			(E)	(E)	(E)	20	1		ELEVATOR SHUNT 12
SPARE		1	20								11	C	12								20	1		SPARE
SPARE		1	20								13	A	14								20	1		SPARE
SPARE		1	20								15	B	16								20	1		SPARE
SPARE		1	20								17	C	18								20	1		SPARE
SPARE		1	20								19	A	20								20	1		SPARE
SPARE		1	20								21	B	22								20	1		SPARE
SPARE		1	20								23	C	24								20	1		SPARE
SPARE		1	20								25	A	26								20	1		SPARE
SPARE		1	20								27	B	28								20	1		SPARE
SPARE		1	20								29	C	30								20	1		SPARE
SUMMARY CONNECTED LOADS							0	3120	1140 / 0 / 0 / 0 / 0 / 0 / 0	M / A / S / E / H / T / O	LOAD (VOLT-AMPERES)			M / A / S / E / H / T / O	1560 / 0 / 0 / 0 / 0 / 0 / 1340	360	3365							SUMMARY CONNECTED LOADS

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	3.4	1.25	4.2
RECEPTACLES (FIRST 10KW)	3.5	1.0	3.5
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	1.1	1.0	1.1
LARGEST MOTOR	1.6	1.25	2.0
APPLIANCES	0.0	1.0	0.0
SUBFEED	0.0	0.8	0.0
EQUIPMENT	0.0	1.0	0.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	1.3	1.0	1.3
TOTAL KVA	10.9 KVA		12.1 KVA
TOTAL AMP	30.2 AMP		33.6 AMP
DESIGN (MAX)			200 AMP
SPARE			166.4 AMP

AMPERAGE FED TO PANEL	200 AMP	
TOTAL CONNECTED LOAD	30.2 AMP	10.9 KVA
TOTAL DEMAND LOAD	33.6 AMP	12.1 KVA
DESIGN (MAX)	200 AMP	72.1 KVA
SPARE LOAD	166 AMP	59.9 KVA
CONNECTED LOAD BALANCE SUMMARY		
PHASE A	30.2 AMP	3.625 KVA
PHASE B	39.0 AMP	4.68 KVA
PHASE C	21.5 AMP	2.58 KVA
A TO B	-29 %	
B TO C	45 %	
C TO A	-41 %	

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H-HEATING
R=RECEPTACLES
L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

REMODELED PANEL "EB14C1"

PANEL LOCATION: MECH 4D-05 — L-L VOLT: 208 — PHASE: 3 — MAIN: LUG Y — BREAKER N
MFR/MODEL: SQUARE D NQ — L-N VOLT: 120 — WIRES: 4 — WIRE SIZE: (E) — FED FROM: BLDG 1 EM SWGR
AIC: 10,000 — RATED AMP: 225 — NEURAL 100% — COND. SIZE: (E) — MOUNT: SURFACE

CONNECT INDICATED HOME RUN WIRING TO EXISTING 20 AMP SPARE BREAKER.

CONNECT INDICATED HOME RUN WIRING TO EXISTING 20 AMP SPARE BREAKER.

DESCRIPTION	BREAKER TYPE	POLE	AMP	BRANCH WIRE SIZE	INSULATION	GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	INSULATION	GND	BREAKER AMP	POLE	TYPE	DESCRIPTION
HW-42		3	20	(E)	(E)	(E)			1920	S	1	A	2	M	1110			(E)	(E)	(E)	20	3		HW-43
									1920	M	3	B	4	M	1110									
									1920	M	5	C	6	M	1110									
AHU-68 SF		3	60	(E)	(E)	(E)			5700	M	7	A	8	M	1110			(E)	(E)	(E)	30	3		AHU-68 RF
				(E)	(E)	(E)			5700	M	9	B	10	M	1110									
				(E)	(E)	(E)			5700	M	11	C	12	M	1110									
SPARE		3	20							M	13	A	14	E	400			(E)	(E)	(E)	20	1		TEMP CONTROL PANEL
										M	15	B	16				1920	(E)	(E)	(E)	20	1		AHU-67 LIGHTS
										M	17	C	18	E			500	(E)	(E)	(E)	20	1		ATC CIRCUIT #3
1-SUH-1		1	20	(E)	(E)	(E)			800	M	19	A	20	E			500	(E)	(E)	(E)	20	1		ATC CIRCUIT #4
SPARE		1	20	(E)	(E)	(E)				M	21	B	22	E			500	(E)	(E)	(E)	20	1		ATC CIRCUIT #2
SPARE		1	20								23	C	24	E			500	(E)	(E)	(E)	20	1		ATC CIRCUIT #1
ELEVATOR 5 CAB POWER		1	20	(2)#12	THHN	#12	100		1340	E	25	A	26								20	1		SPARE
ELEVATOR 5 SHAFT POWER		1	20	(2)#12	THHN	#12	145	180			27	B	28								20	1		SPARE
SPARE		1	20								29	C	30								20	1		SPARE
SPARE		1	20								31	A	32								20	1		SPARE
SPARE		1	20								33	B	34								20	1		SPARE
SPARE		1	20								35	C	36								20	1		SPARE
SPARE		1	20								37	A	38								20	1		SPARE
SPARE		1	20								39	B	40								20	1		SPARE
SPARE		1	20								41	C	42								20	1		SPARE
SUMMARY CONNECTED LOADS							245	180	21740 / 0 / 1920 / 1340 / 0 / 0 / 0	M / A / S / E / H / T / O	LOAD (VOLT-AMPERES)			M / A / S / E / H / T / O	6660 / 0 / 0 / 400 / 0 / 0 / 0	0	3920							SUMMARY CONNECTED LOADS

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	4.2	1.25	5.2
RECEPTACLES (FIRST 10KW)	0.2	1.0	0.2
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	22.7	1.0	22.7
LARGEST MOTOR	5.7	1.25	7.1
APPLIANCES	0.0	1.0	0.0
SUBFEED	1.9	0.8	1.5
EQUIPMENT	1.7	1.0	1.7
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	0.0	1.0	0.0
TOTAL KVA	36.4 KVA		38.5 KVA
TOTAL AMP	101.1 AMP		106.8 AMP
DESIGN (MAX)			200 AMP
SPARE			93.2 AMP

AMPERAGE FED TO PANEL	200 AMP	
TOTAL CONNECTED LOAD	101.1 AMP	36.4 KVA
TOTAL DEMAND LOAD	106.8 AMP	38.5 KVA
DESIGN (MAX)	200 AMP	72.1 KVA
SPARE LOAD	93 AMP	33.6 KVA
CONNECTED LOAD BALANCE SUMMARY		
PHASE A	108.2 AMP	12.98 KVA
PHASE B	104.9 AMP	12.585 KVA
PHASE C	90.3 AMP	10.84 KVA
A TO B	3 %	
B TO C	14 %	
C TO A	-20 %	

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L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
GFCI=GROUND FAULT CIRCUIT
ST-SHUNT TRIP

REMODELED PANEL "EB14E1"

PANEL LOCATION: MECH 4D-06 — L-L VOLT: 208 — PHASE: 3 — MAIN: LUG Y — BREAKER N
MFR/MODEL: SQUARE D NQ — L-N VOLT: 120 — WIRES: 4 — WIRE SIZE: (E) — FED FROM: BLDG 1 EM SWGR
AIC: 10,000 — RATED AMP: 125 — NEURAL 100% — COND. SIZE: (E) — MOUNT: SURFACE

CONNECT INDICATED HOME RUN WIRING TO EXISTING 20 AMP SPARE BREAKER.

INSTALL NEW 20 AMP BREAKER AND CONNECT INDICATED HOME RUN WIRING.

DESCRIPTION	BREAKER TYPE	POLE	AMP	BRANCH WIRE SIZE	INSULATION	GND	L-LOAD	R-LOAD	O-LOAD	T/S/O/M/A/E/H	PHASE			T/S/O/M/A/E/H	O-LOAD	R-LOAD	L-LOAD	BRANCH WIRE SIZE	INSULATION	GND	BREAKER AMP	POLE	TYPE	DESCRIPTION
AHU-49 SF		3	70	(E)	(E)	(E)			6725	M	1	A	2	M	2880			(E)	(E)	(E)	30	3		RF-49
									6725	M	3	B	4	M	2880									
									6725	M	5	C	6	M	2880									
TEMP PANEL		3	30	(E)	(E)	(E)			250	O	7	A	8								20	3		SPARE
									250	O	9	B	10											
									250	O	11	C	12											
SPARE		1	20								13	A	14	O	1340		100				20	1		ELEVATOR 4 CAB POWER
LIGHTS 4D-06		1	20	(E)	(E)	(E)	1920				15	B	16			540	150				20	1		ELEV 4 SHAFT POWER
OUTLETS 4D-06		1	20	(E)	(E)	(E)		1920			17	C	18	M	1920			(E)	(E)	(E)	20	1		EF-109
SPACE											19	A	20	M	1500			(E)	(E)	(E)	20	2		EF-111
DDC CONTROL PANEL		1	20	(E)	(E)	(E)			250	O	21	B	22	M	1500									
SPACE											23	C	24	O	1340		100				20	1		ELEVATOR 6 CAB POWER
SPACE											25	A	26			540	150				20	1		ELEV 6 SHAFT POWER
SPACE											27	B	28											SPACE
SPACE											29	C	30											SPACE
SPACE											31	A	32											SPACE
SPACE											33	B	34											SPACE
SPACE											35	C	36											SPACE
SPACE											37	A	38											SPACE
SPACE											39	B	40											SPACE
SPACE											41	C	42											SPACE
SUMMARY CONNECTED LOADS							1920	1920	20175 / 0 / 0 / 0 / 0 / 0 / 1000	M / A / S / E / H / T / O	LOAD (VOLT-AMPERES)			M / A / S / E / H / T / O	13560 / 0 / 0 / 0 / 0 / 0 / 2680	1080	500							SUMMARY CONNECTED LOADS

DESCRIPTION	CONN. KVA	D.F	DEM. KVA
LIGHTING	2.4	1.25	3.0
RECEPTACLES (FIRST 10KW)	3.0	1.0	3.0
RECEPTACLES (REMAINDER)	0.0	0.5	0.0
MOTORS	27.0	1.0	27.0
LARGEST MOTOR	6.7	1.25	8.4
APPLIANCES	0.0	1.0	0.0
SUBFEED	0.0	0.8	0.0
EQUIPMENT	0.0	1.0	0.0
HEATING	0.0	1.0	0.0
TRANSFORMER	0.0	1.0	0.0
OTHER	3.7	1.0	3.7
TOTAL KVA	42.8 KVA		45.1 KVA
TOTAL AMP	118.9 AMP		125.2 AMP
DESIGN (MAX)			125 AMP
SPARE			-0.2 AMP

AMPERAGE FED TO PANEL	125 AMP	
TOTAL CONNECTED LOAD	118.9 AMP	42.8 KVA
TOTAL DEMAND LOAD	125.2 AMP	45.1 KVA
DESIGN (MAX)	125 AMP	45.0 KVA
SPARE LOAD	0 AMP	-0.1 KVA
CONNECTED LOAD BALANCE SUMMARY		
PHASE A	112.4 AMP	13.485 KVA
PHASE B	118.5 AMP	14.215 KVA
PHASE C	126.1 AMP	15.135 KVA
A TO B	-5 %	
B TO C	-6 %	
C TO A	11 %	

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L=LIGHTING
CONN.=CONNECTED
DEM.=DEMAND
SPR=SPARE
SPC=SPACE
D.F.=DEMAND FACTOR
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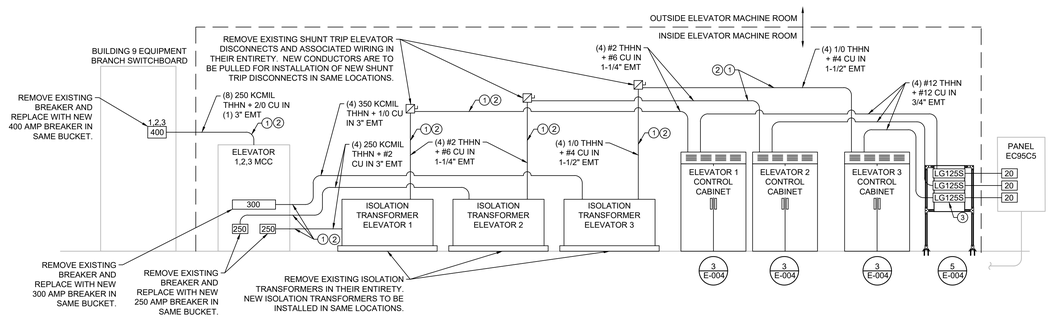
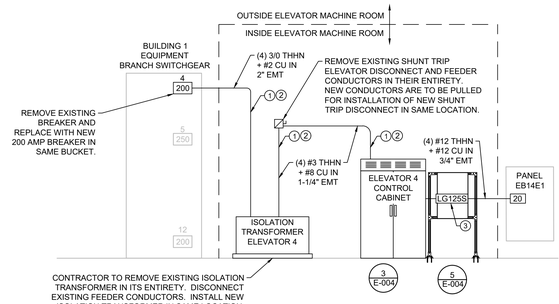
ST-SHUNT TRIP



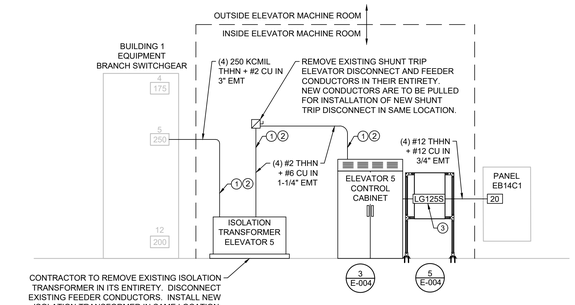
1 E-003 ELEVATORS 1, 2, & 3 - WIRING SCHEMATIC DIAGRAM
SCALE: NTS



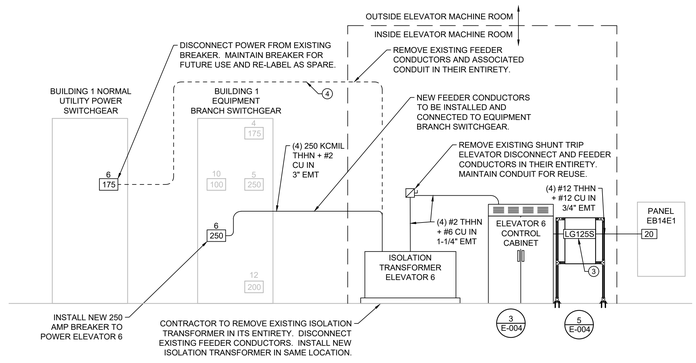
2 E-003 ELEVATOR 4 - WIRING SCHEMATIC DIAGRAM
SCALE: NTS

KEYED ELECTRICAL NOTES

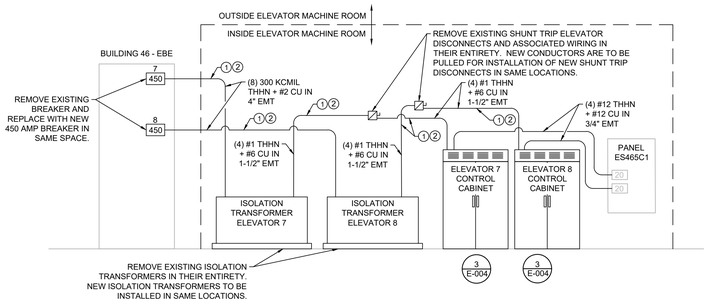
1. REMOVE EXISTING CONDUCTORS IN THEIR ENTIRETY. MAINTAIN CONDUIT FOR REUSE. (DEMOLITION)
2. PULL NEW WIRE IN EXISTING CONDUIT. (NEW CONSTRUCTION)
3. NEW DUAL-LITE LG SERIES LIGHTING INVERTER FOR LIFE SAFETY RATED EGRESS LUMINAIRES IN ELEVATOR CAB. (TYP)
4. REMOVE EXISTING HOME RUN WIRING AND EXISTING CONDUIT IN THEIR ENTIRETY.



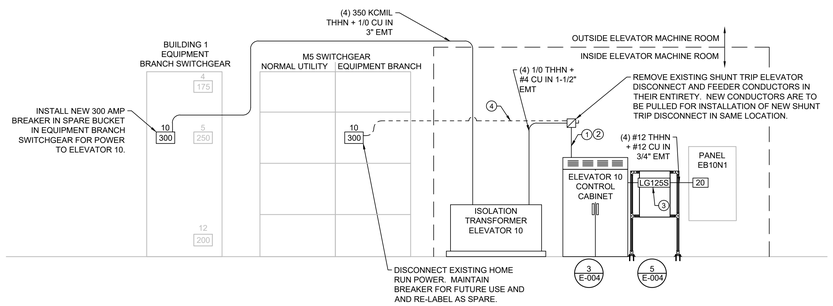
3 E-003 ELEVATOR 5 - WIRING SCHEMATIC DIAGRAM
SCALE: NTS



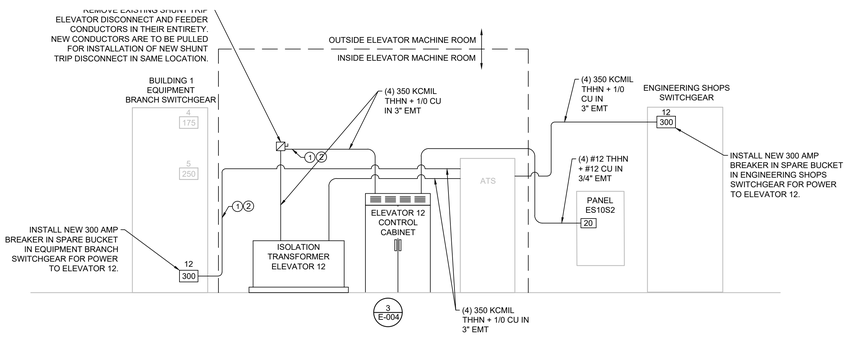
4 E-003 ELEVATOR 6 - WIRING SCHEMATIC DIAGRAM
SCALE: NTS



5 E-003 ELEVATORS 7 & 8 - WIRING SCHEMATIC DIAGRAM
SCALE: NTS



6 E-003 ELEVATOR 10 - WIRING SCHEMATIC DIAGRAM
SCALE: NTS



7 E-003 ELEVATOR 12 - WIRING SCHEMATIC DIAGRAM
SCALE: NTS

Revisions:	Date

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15.2226.M29

Drawing Title: ELECTRICAL SCHEMATIC DIAGRAMS
Approved: Project Director: TODD DALZELL

Project Title: REFURBISH FARGO ELEVATORS AND REPLACE CONTROLS
Location: FARGO, NORTH DAKOTA
Date: 12/20/2022 | Checked: WW | Drawn: JS

Project Number: 436-20-126
Building Number: 154
Drawing Number: E-003
Dwg. 24 of 41

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231

SCHEDULE OF DISCONNECTS

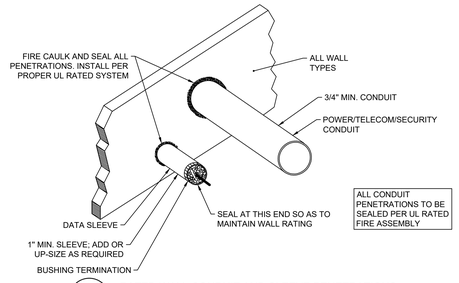
EQUIPMENT	CONNECTED LOAD						DISCONNECT				FUSE			FEEDER			NOTES
	HP	W	FLA	MCA	PH	VOLTS	TYPE	NEMA RATING	MFR.	CATALOG NO.	TYPE	SIZE	POLES	SIZE	TYPE	GRND	
ELEVATORS 1 & 2	25	-	43.1	-	3	480	HD SHUNT TRIP FUSED	1	BUSSMAN	PS-1-T48-R2-K-G-N1-B-F1-T	CARTRIDGE CLASS R	80A	3	(4) #2	THHN	#6	-
ELEVATORS 3	30	-	50.9	-	3	480	HD SHUNT TRIP FUSED	1	BUSSMAN	PS-1-T48-R2-K-G-N1-B-F1-T	CARTRIDGE CLASS R	90A	3	(4) #1/0	THHN	#4	-
ELEVATOR 4	15	-	31.5	-	3	480	HD SHUNT TRIP FUSED	1	BUSSMAN	PS-1-T48-R2-K-G-N1-B-F1-T	CARTRIDGE CLASS R	60A	3	(4) #3	THHN	#8	-
ELEVATOR 5 & 6	25	-	43.1	-	3	480	HD SHUNT TRIP FUSED	1	BUSSMAN	PS-1-T48-R2-K-G-N1-B-F1-T	CARTRIDGE CLASS R	80A	3	(4) #2	THHN	#6	-
ELEVATORS 7 & 8	50	-	74	-	3	480	HD SHUNT TRIP FUSED	1	BUSSMAN	PS-2-T48-R2-K-G-N2-B-F1-T	CARTRIDGE CLASS R	150A	3	(4) #1	THHN	#6	-
ELEVATOR 10	30	-	50.9	-	3	480	HD SHUNT TRIP FUSED	1	BUSSMAN	PS-1-T48-R2-K-G-N1-B-F1-T	CARTRIDGE CLASS R	90A	3	(4) #1/0	THHN	#4	-
ELEVATOR 12	30	-	50.9	-	3	480	HD SHUNT TRIP FUSED	1	BUSSMAN	PS-1-T48-R2-K-G-N1-B-F1-T	CARTRIDGE CLASS R	90A	3	(4) #1/0	THHN	#4	-
PUMP P1, P2	1/2	-	9.8	-	1	120	FACTORY PROVIDED DISCONNECT				-	-		(2) #12	THWN	#12	-

NOTES:
1. CONTRACTOR TO PROVIDE WITH NEMA 5-20P CORD AND PLUG.

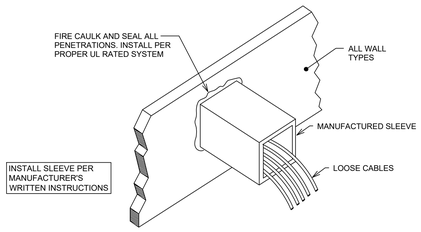
LIGHTING FIXTURE SCHEDULE

SYMBOL	LETTER DESIG	FIXTURE						LAMP				NOTES		HYPERLINK
		MANUFACTURER	DESCRIPTION	CATALOG NO.	LOCATION	TYPE	HEIGHT	TYPE	NO.	WATTS	LUMEN			
	A	LITHONIA LIGHTING	FEM LED LINEAR	FEM-L48-3000LM-IMACD-MD-120-GZ10-35K-80CRI	WALL	SURFACE	*	LED	-	19.9	3000	1,2	-	SPEC
	B	LITHONIA LIGHTING	VAPOR TIGHT LED	OLVTWM	WALL	SURFACE	*	LED	-	15	600	1,2	-	SPEC
	C	-	EXISTING SHAFT LIGHTS	EXISTING	WALL	SURFACE	*	-	-	-	-	-	-	-
	D	-	EXISTING PIT LIGHTS	EXISTING	WALL	SURFACE	*	-	-	-	-	-	-	-

LUMINAIRE NOTES:
1. COLOR/FINISH TO BE DETERMINED BY ARCHITECT.
2. PROVIDE ALL NECESSARY HARDWARE OR KITS FOR MOUNTING LUMINAIRE AS NOTED BY LOCATION AND TYPE.
* REFER TO SECTION VIEW FOR LUMINAIRE MOUNTING HEIGHTS.

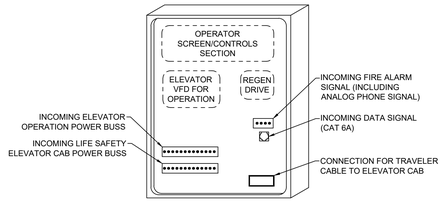


1 E-004 RATED WALL CONDUIT AND SLEEVE PENETRATIONS
SCALE: NTS

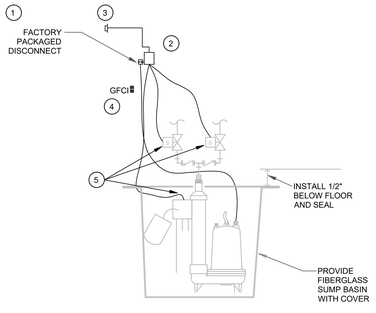


2 E-004 MANUFACTURED SLEEVE WALL PENETRATION
SCALE: NTS

DETAIL IS SCHEMATIC IN NATURE. LOCATION, SIZE AND QUANTITY OF DRAWING ELEMENTS IS NOT MEANT TO ACCURATELY REPRESENT ALL CABINET COMPONENTS.



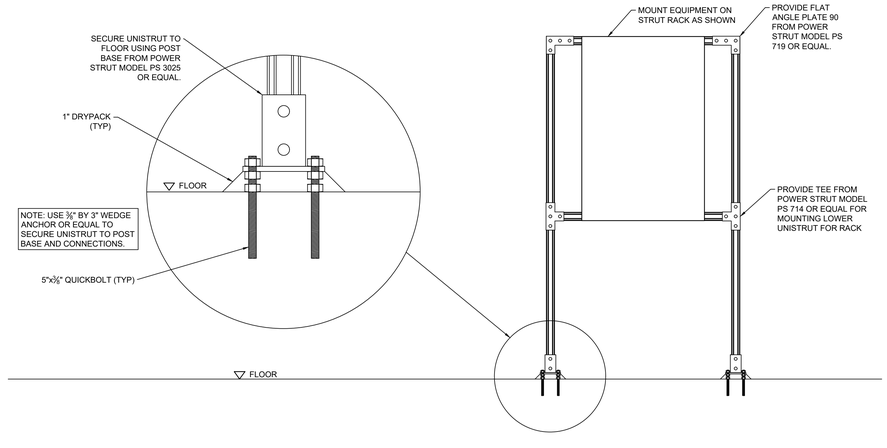
3 E-004 ELEVATOR CONTROL BOX INTERIOR ELECTRICAL CONNECTION DETAIL
SCALE: NTS



4 E-004 ELEVATOR PUMP DETAIL
SCALE: NTS

KEYED ELEVATOR PUMP NOTES:

1. FACTORY DISCONNECT FOR PUMP. HOME RUN NEW 12/2 CU + GRND IN EMT BACK TO PANEL "HP-2". CONTRACTOR TO PROVIDE NEW BREAKER AS REQUIRED. INSTALL CONDUCTOR IN SEAL TIGHT RACEWAY CONNECTING TO PUMP. LOCATE IN ELEVATOR EQUIPMENT ROOM 004. COORDINATE MOUNTING LOCATION WITH ELEVATOR EQUIPMENT.
2. NEW FACTORY PACKAGED CONTROL PANEL. HOME RUN NEW 12/2 CU + GRND IN EMT BACK TO PANEL "HP-2". LOCATE IN ELEVATOR EQUIPMENT ROOM 004. COORDINATE MOUNTING LOCATION WITH ELEVATOR EQUIPMENT.
3. NEW FACTORY PACKAGED REMOTE ALARM. SURFACE MOUNT AT LOCATION SHOWN. COORDINATE MOUNTING LOCATION WITH ELEVATOR EQUIPMENT.
4. HOME RUN NEW CIRCUIT 12/2 CU + GRND IN EMT BACK TO PANEL "HP-2". CONTRACTOR TO PROVIDE NEW BREAKER AS REQUIRED. INSTALL CONDUCTOR IN SEAL TIGHT RACEWAY. COORDINATE MOUNTING LOCATION WITH ELEVATOR EQUIPMENT.
5. LIBERTY PUMPS ELV 280 PUMP SYSTEM. WIRE PACKAGED WATER LEVEL SENSOR, HIGH OIL SWITCH, AND ALARM FLOATS TO FACTORY CONTROL PANEL. ORDER WITH OIL STORAGE TANK.



5 E-004 FLOOR STRUT MOUNT ELECTRICAL EQUIPMENT SUPPORT
SCALE: NTS

Revisions:	Date

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Approved: Project Director: TODD DALZELL
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Dwg. 25 of 41

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