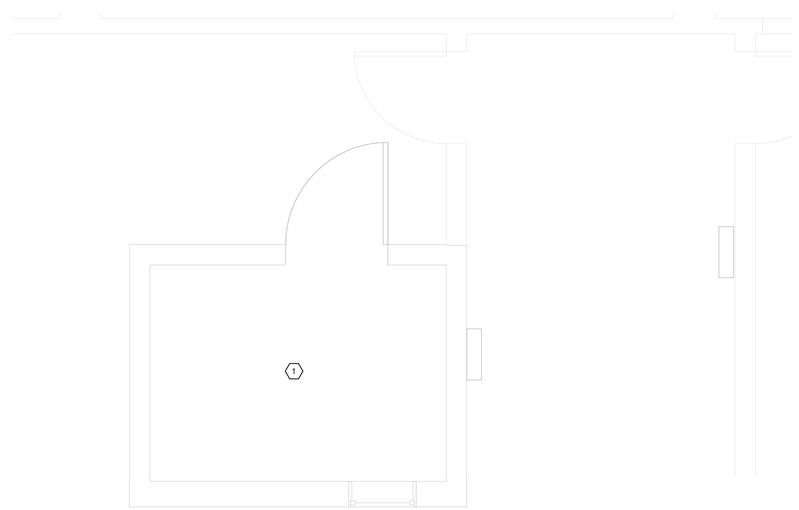
KEY NOTES

1. THERE ARE NO MECHANICAL SYSTEMS IN THIS AREA TO BE DEMOLISHED.

1 BLDG 112 - FIRST FLOOR - OVERALL MECHANICAL DEMOLITION
1/8" = 1'-0"



2 BLDG 112 - FIRST FLOOR - ENLARGED MECHANICAL DEMOLITION - ROOM 115
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

WISCONSIN 9/5/25 ARON G. WIECZOREK #42666-6 SWISHER IOWA PROFESSIONAL ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 112 - FIRST FLOOR OVERALL & ENLARGED - MECHANICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 112
		Issue Date: SEPTEMBER 5, 2025 / Checked: AGW / Drawn: HWG	Drawing Number: 112-MD101

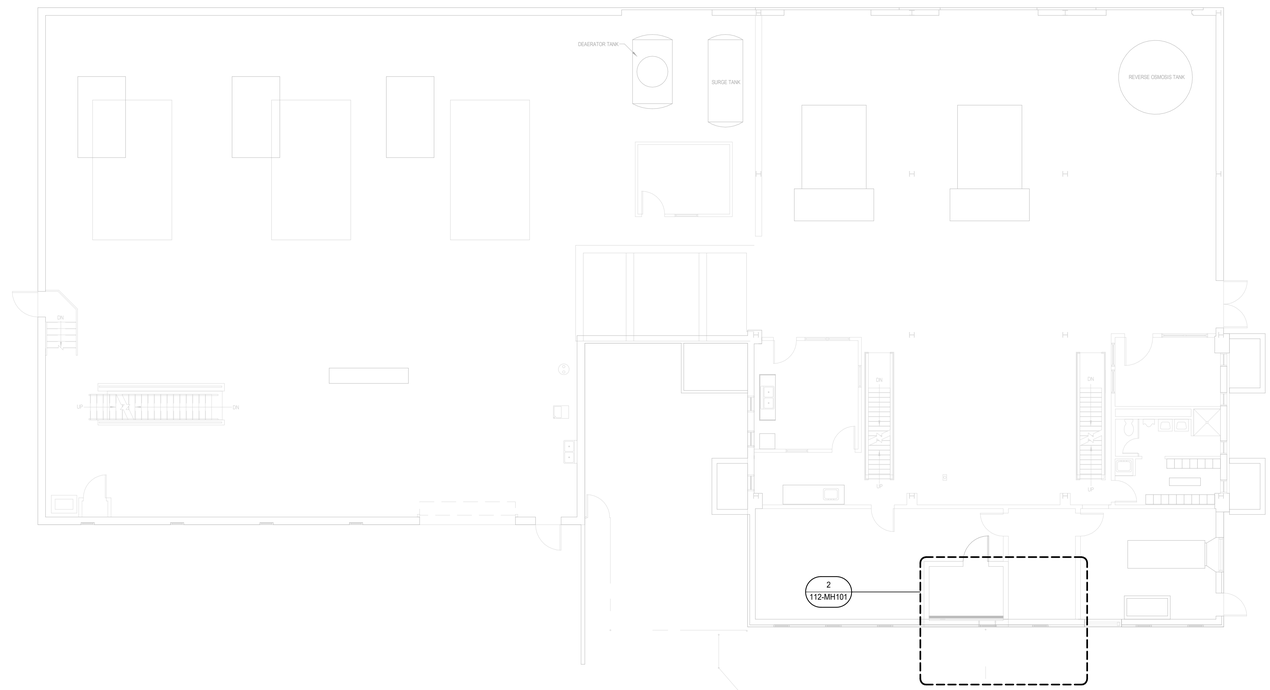
VA FORM 08 - 6231

8/30/2025 10:26:10 AM

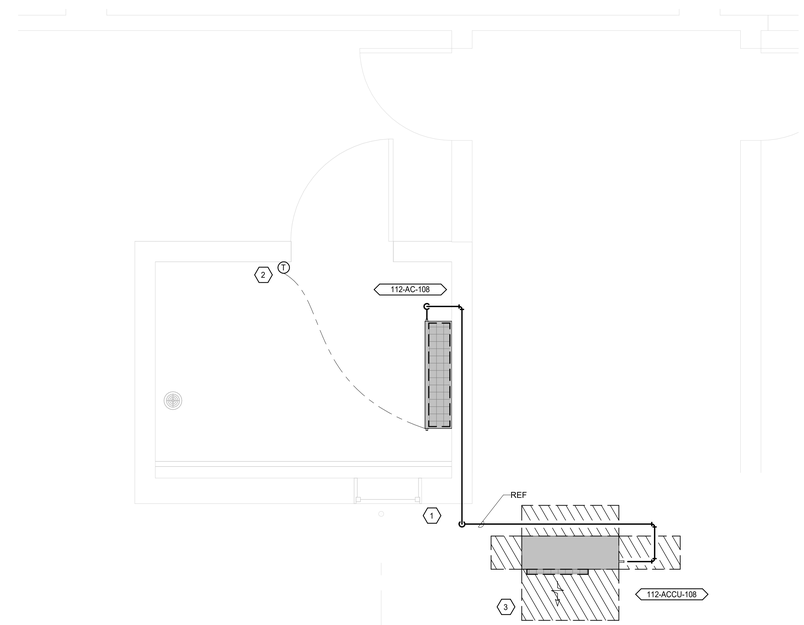
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

KEY NOTES

1. ROUTE REFRIGERANT PIPE LOW ALONG WALL, THEN OUT AND DOWN EXTERIOR WALL TO CONDENSING UNIT.
2. TEMPERATURE CONTROLS. REFERENCE MECHANICAL CONTROL PLANS FOR CONTROLS AND MONITORING.
3. SHADED AREA INDICATES RECOMMENDED 36" CLEARANCE FOR DX UNIT.



1 BLDG 112 - FIRST FLOOR - OVERALL MECHANICAL
1/8" = 1'-0"



2 BLDG 112 - FIRST FLOOR - ENLARGED PLAN MECHANICAL
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

WISCONSIN 9/5/25 ARCO G. WIECZOREK #42666-6 SWISHER IOWA PROFESSIONAL ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

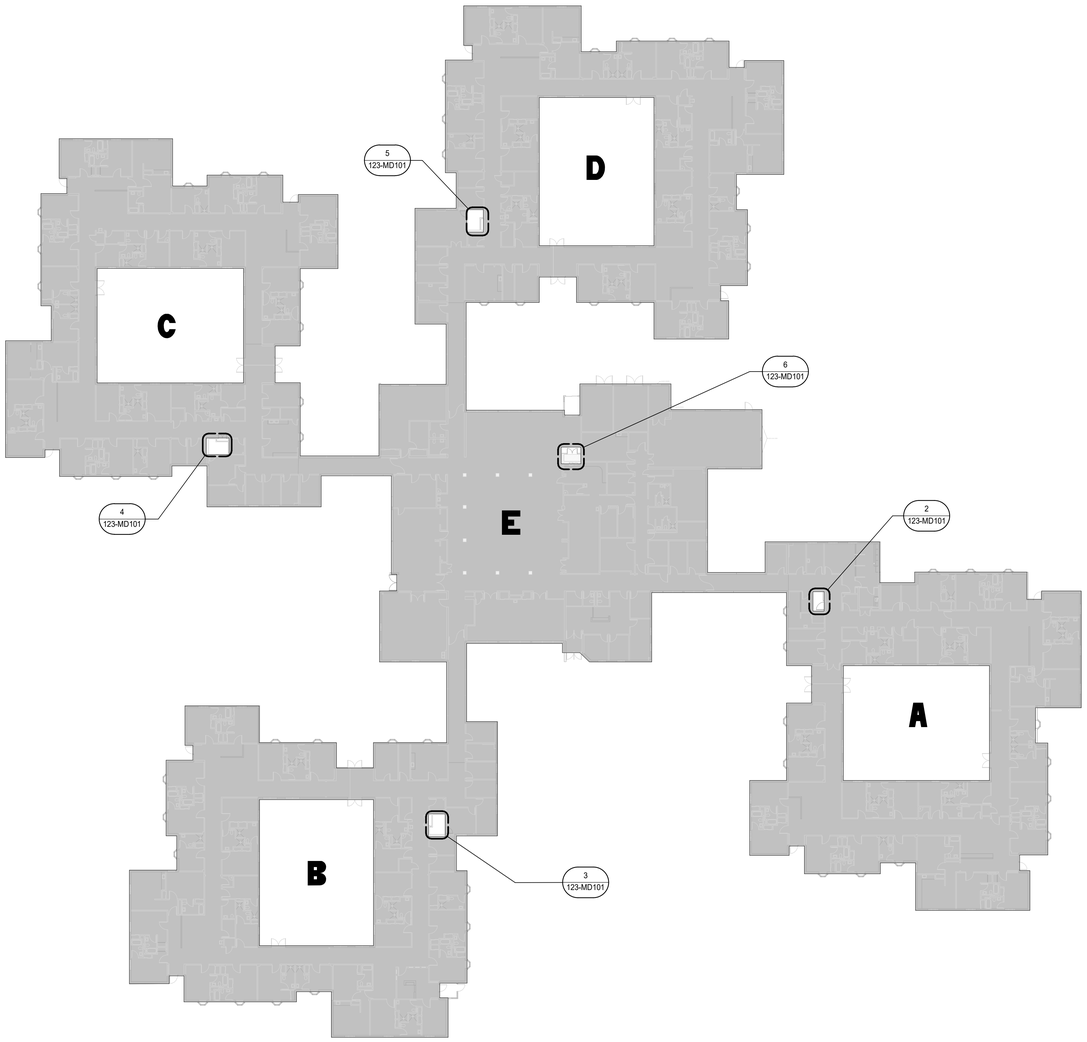
Drawing Title: BLDG 112 - FIRST FLOOR OVERALL AND ENLARGED - MECHANICAL	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 112
		Issue Date: SEPTEMBER 5, 2025 / Checked: AGW / Drawn: HWG	Drawing Number: 112-MH101

VA FORM 08 - 6231

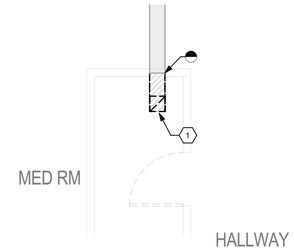
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/30/2025 10:26:12 AM

KEY NOTES

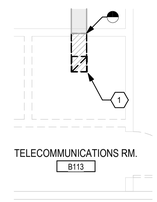
1. DEMOLISH GRILLE AND DUCT BRANCH. CAP DUCT AT MAIN CONNECTION OUTSIDE OF ROOM.



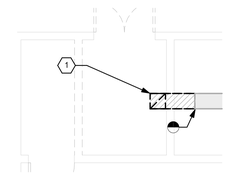
1 BUILDING 123 LEVEL 01 FLOOR PLAN - MECHANICAL DEMOLITION
1" = 30'-0"



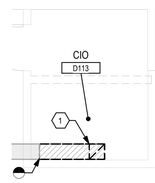
2 RM. A107 ENLARGED PLAN - MECHANICAL DEMOLITION
1/4" = 1'-0"



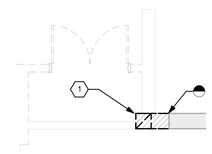
3 RM. B113 ENLARGED PLAN - MECHANICAL DEMOLITION
1/4" = 1'-0"



4 RM. C113 ENLARGED PLAN - MECHANICAL DEMOLITION
1/4" = 1'-0"



5 RM. D113 ENLARGED PLAN - MECHANICAL DEMOLITION
1/4" = 1'-0"



6 RM. E105E ENLARGED PLAN - MECHANICAL DEMOLITION
1/4" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

WISCONSIN 9/5/25 ARON G. WIECZOREK #42666-6 SWISHER IOWA PROFESSIONAL ENGINEER

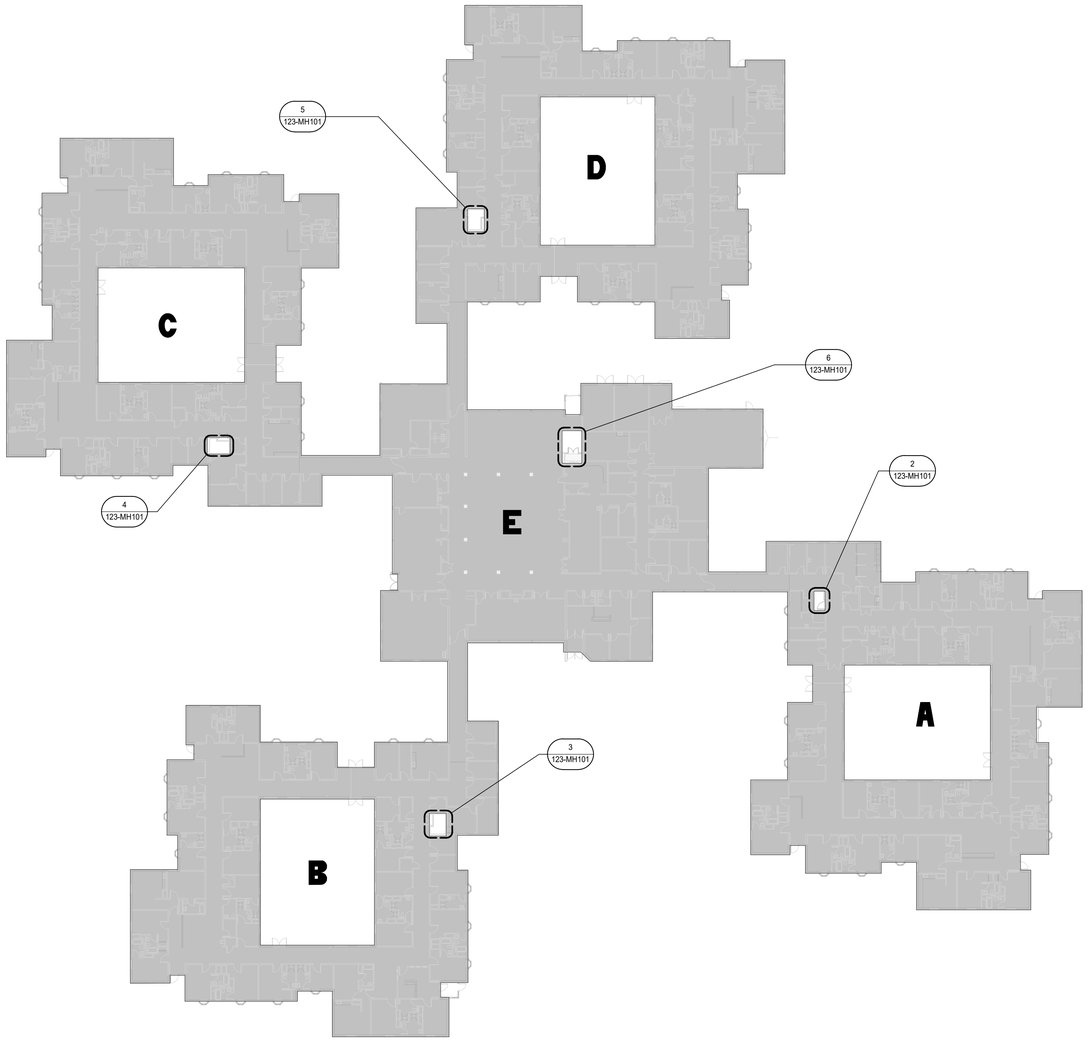
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

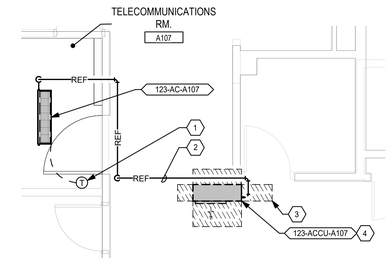
Drawing Title: BUILDING 123 LEVEL 01 - MECHANICAL DEMOLITION PLAN	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 123
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 123-MD101
		Issue Date: SEPTEMBER 5, 2025 / Checked: AGW / Drawn: HWG	

VA FORM 08 - 6231

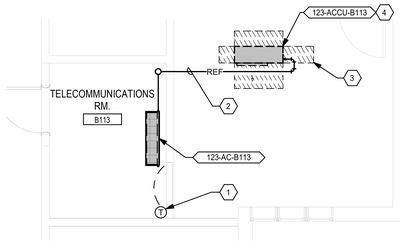
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/30/2025 10:26:18 AM



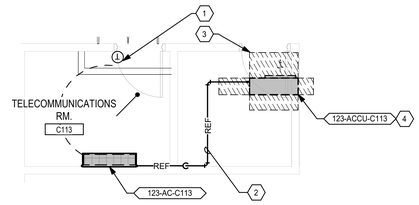
1 BUILDING 123 LEVEL 01 FLOOR PLAN - MECHANICAL
1" = 30'-0"



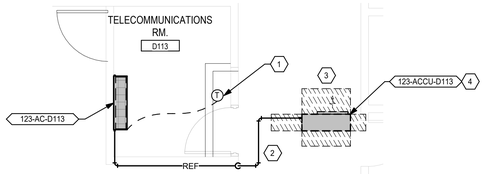
2 RM. A107 ENLARGED PLAN - MECHANICAL
1/4" = 1'-0"



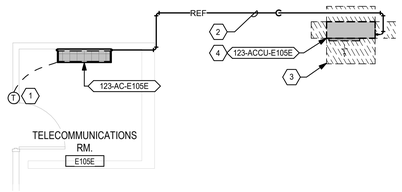
3 RM. B113 ENLARGED PLAN - MECHANICAL
1/4" = 1'-0"



4 RM. C113 ENLARGED PLAN - MECHANICAL
1/4" = 1'-0"



5 RM. D113 ENLARGED PLAN - MECHANICAL
1/4" = 1'-0"



6 RM. E105E ENLARGED PLAN - MECHANICAL
1/4" = 1'-0"

KEY NOTES

1. TEMPERATURE CONTROL. REFERENCE MECHANICAL CONTROL PLANS FOR CONTROLS AND MONITORING.
2. ROUTE REFRIGERANT PIPING ABOVE CEILING AND UP THROUGH ROOF. PROVIDE SEALED ROOF BOOT AND SEAL EXTERIOR PENETRATIONS WEATHER TIGHT.
3. HATCHED AREA INDICATES MANUFACTURER'S RECOMMENED CLEARANCE FOR THE EQUIPMENT.
4. MOUNT CONDENSING UNIT ON ROOF ABOVE AT APPROXOMATE LOCATION SHOW. COORDINATE EXACT LOCATION WITH EXISTING ROOF PENETRATIONS, ROOF DRAINAGE, AND EQUIPMENT. PROVIDE GUARDRAILS AROUND CONDENSING UNIT IF WITHIN 10'-0" OF ROOF EDGE.

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

WISCONSIN
9/5/25
ARDO G. WIECZOREK
#42666-6
SWISHER
IOWA
PROFESSIONAL ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 123 LEVEL 01 - MECHANICAL PLAN	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number:
		Issue Date: SEPTEMBER 5, 2025 / Checked: AGW / Drawn: HWG	Drawing Number: 123-MH101

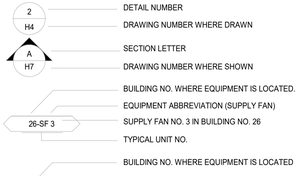
VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/30/2025 10:26:24 AM

ELECTRICAL ABBREVIATIONS

1PH	SINGLE-PHASE	G	ELECTRICAL GROUND
1P	SINGLE POLE	GEN	GENERATOR
2/C	TWO-CONDUCTOR	GFI	GROUND FAULT CIRCUIT INTERRUPTER
3/C	THREE-CONDUCTOR		
3PH	THREE-PHASE	H	HOSPITAL GRADE
4/C	FOUR-CONDUCTOR	HID	HIGH INTENSITY DISCHARGE
4W	FOUR-WIRE	HOA	HAND-OFF-AUTOMATIC
A/C	UNIT AIR CONDITIONING UNIT	IG	ISOLATED GROUND
AAP	ALARM ANNUNCIATOR PANEL	IMC	INTERMEDIATE METAL CONDUIT
AC	ALTERNATING CURRENT OR ARMORED CABLE	INCAND	INCANDESCENT
ACC	ACCESSIBLE	IR	INFRARED
ADDL	ADDITIONAL		
ADJ	ADJACENT, ADJOINING	J-BOX	JUNCTION BOX
AF	AMPERE FRAME OR AMP FUSE		
AFC	ABOVE FINISHED COUNTER	kV	KILOVOLT
AFCI	ARC-FAULT CURRENT INTERRUPTER	kVA	KILOVOLT AMPERE
Ah	AMPERE HOUR	kVAh	KILOVOLT AMPERE PER HOUR
AHJ	AUTHORITY HAVING JURISDICTION	kVAR	KILOVOLT AMPERE REACTIVE
AIC	AMPERE INTERRUPTING CAPACITY	kW	KILOWATT
ALT	ALTERNATE AMP AMPERE	kWh	KILOWATT HOUR
ASC	AMPS SHORT CIRCUIT	kWhM	KILOWATT HOUR METER
AT	AMPERE TRIP		
ATS	AUTOMATIC TRANSFER SWITCH	LED	LIGHT EMITTING DIODE
AUTO	AUTOMATIC	LPS	LOW PRESSURE SODIUM
AV	AUDIO VISUAL	LRA	LOCKED ROTOR AMPS
		LT	LIGHT
BAT	BATTERY	LTG	LIGHTING
BD	BOARD	LTG PNL	LIGHTING PANEL
BFF	BELOW FINISH FLOOR	LTNG	LIGHTNING
BRKR	BREAKER	LV LOW V	OLTAGE
BYP	BY PASS		
		MC	METAL-CLAD
C	CONDUIT	MCA	MINIMUM CIRCUIT AMPS
CAB	CABINET	MCB	MAIN CIRCUIT BREAKER
CALC	CALCULATE	MCC	MOTOR CONTROL CENTER
CAP	CAPACITY	MOCP	MAXIMUM OVERCURRENT PROTECTION
CAT	CATALOG		
CATV	COMMUNITY ANTENNA TELEVISION	MLO	MAIN LUGS ONLY
CCR	CONTROL CONTACTOR	MT	MOUNT MTD MOUNTED
CCTV	CLOSED CIRCUIT TELEVISION	MTG	MOUNTING
cd	CANDELA	MTS	MANUAL TRANSFER SWITCH
CF	CONTRACTOR FURNISHED	MV	MEDIUM VOLTAGE
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	MVA	MEGAVOLT-AMPERE
CF/OI	CONTRACTOR FURNISHED/OWNER INSTALLED	MW	MEGAWATT
CFE	CONTRACTOR FURNISHED EQUIPMENT		
CHW	CHILLED WATER	NC	NORMALLY CLOSED
CHWP	CHILLED WATER PUMP	NEUT	NEUTRAL (OR N)
CKT	CIRCUIT	NL	NIGHT LIGHT
CKT BRKR	CIRCUIT BREAKER OR C/B	NO	NORMALLY OPEN
CLF	CURRENT LIMITING FUSE CLG CEILING		
COAX	COAX CABLE	OL	OVERLOAD
COMM	COMMUNICATION		
COMPT	COMPARTMENT	P	POLE
CONC	CONCRETE	PB	PULL BOX
CONT	CONTINUE	RCP	REFLECTED CEILING PLAN
CONTR	CONTRACTOR	PEC	PHOTOELECTRIC CELL
COORD	COORDINATE	PED	PEDESTAL
CPT	CONTROL POWER TRANSFORMER	PEND	PENDANT
CRI	COLOR RENDERING INDEX	PF	POWER FACTOR
CT	CURRENT TRANSFORMER	PH	PHASE
CTV	CABLE TELEVISION	PNL	PANEL
CU	COPPER	PT	POTENTIAL TRANSFORMER
CUR	CURRENT	PTZ	PAN, TILT, ZOOM TYPE CAMERA
		PVC	POLYVINYL CHLORIDE (PLASTIC)
DC	DIRECT CURRENT	PWR	POWER
DCP	DIMMER CONTROL PANEL		
DIAG	DIAGRAM		
DISC	DISCONNECT	REC	RECESSED
DISTR PNL	DISTRIBUTION PANEL	RECEP	RECEPTACLE
DMR SW	DIMMER SWITCH	RMS	ROOT MEAN SQUARE
DPDT	DOUBLE POLE, DOUBLE THROW		
DPST	DOUBLE POLE, SINGLE THROW	SCC	SHORT CIRCUIT CAPACITY
DRSW	DOOR SWITCH DS DISCONNECT SWITCH	SD	SMOKE DETECTOR
		SPST	SINGLE POLE, SINGLE THROW
E	EMERGENCY	SURF	SURFACE
ELEC	ELECTRIC OR ELECTRICAL	SW	SWITCH
ELEV	ELEVATOR	SWBD	SWITCHBOARD
EMER	EMERGENCY	SWGR	SWITCHGEAR
EMI	ELECTROMAGNETIC INTERFERENCE		
EMT	ELECTRICAL METALLIC TUBING	T	TAMPER RESISTANT
ENCL	ENCLOSURE	TEL	TELEPHONE
EPO	EMERGENCY POWER OFF	TV	TELEVISION
EPRF	EXPLOSION PROOF		
ESC	ESCUTCHEON	UFD	UNDERFLOOR DUCT
EWC	ELECTRIC WATER COOLER	UGND	UNDERGROUND
EWH	ELECTRIC WATER HEATER	UON	UNLESS OTHERWISE NOTED
EX	EXISTINGS	UPS	UNINTERRUPTIBLE POWER SUPPLY
FA	FIRE ALARM		
FAAP	FIRE ALARM ANNUNCIATOR PANEL	V	VOLT
FACP	FIRE ALARM CONTROL PANEL	VA	VOLT AMPERE
FC	FOOTCANDLE	VAR	VOLT AMPERE REACTIVE
FIXT	FIXTURE	VFD	VARIABLE FREQUENCY DRIVE
FLA	FULL LOAD AMPS	VOLT	VOLTAGE
FLUOR	FLUORESCENT		
FP FIRE	PROTECTION	W	WALL MOUNTEDS
FU SW	FUSED SWITCH	WH	WATER HEATER
FVNR	FULL VOLTAGE NON-REVERSING	WP	WEATHERPROOF
FVR	FULL VOLTAGE REVERSING		
		XFMR	TRANSFORMER

DRAWING SYMBOLS



DETAIL NUMBER
DRAWING NUMBER WHERE DRAWN
SECTION LETTER
DRAWING NUMBER WHERE SHOWN
BUILDING NO. WHERE EQUIPMENT IS LOCATED.
EQUIPMENT ABBREVIATION (SUPPLY FAN)
SUPPLY FAN NO. 3 IN BUILDING NO. 26
TYPICAL UNIT NO.
BUILDING NO. WHERE EQUIPMENT IS LOCATED
ITEM (TERMINAL UNIT SHOWN)
ITEM NUMBER (TERMINAL UNIT NO. 1)
SERVED BY AIR HANDLER UNIT NO. 1

ELECTRICAL GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE APPLICABLE EDITIONS OF THE 2017 NATIONAL ELECTRICAL CODE, THE STATE BUILDING CODE, AND ANY OTHER LOCAL, STATE, OR FEDERAL CODES, ORDINANCES, OR AUTHORITATIVE INTERPRETATIONS THAT MAY APPLY. A CERTIFICATE OF FINAL ELECTRICAL INSPECTION SHALL BE OBTAINED BY THE CONTRACTOR AT THE COMPLETION OF THE WORK AND PRESENTED TO BOTH THE OWNER AND THE A/E.
2. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. CIRCUIT NUMBERS, INTERCONNECTIONS, HOME RUNS, AND SWITCH LEGS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. SPECIAL SYSTEMS DEVICES (COMMUNICATIONS, SECURITY, ETC.) HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES.
3. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK. IT IS THE CONTRACTORS' RESPONSIBILITY TO COORDINATE SUBSTITUTIONS WITH OTHER TRADES.
4. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION UNLESS OTHERWISE NOTED.
5. VERIFY LOCATIONS OF LIGHTING FIXTURES WITH ARCHITECTURAL REFLECTED CEILING PLANS AND THE PLANS OF ALL OTHER TRADES. COORDINATE FIXTURE RECESSING DEPTHS WITH MECHANICAL WORK AND COORDINATE ACCORDINGLY.
6. ALL WIRING FOR POWER AND LIGHTING SYSTEMS SHALL BE INSTALLED IN METALLIC RACEWAY SYSTEMS UNLESS OTHERWISE NOTED. ALL CONDUCTORS SHALL BE COPPER, SHALL BE # 12AWG MINIMUM, AND SHALL HAVE 600V TYPE THHN/THWN INSULATION, UNLESS OTHERWISE NOTED. ALL RACEWAYS AND CIRCUITS SHALL INCLUDE INSULATED GROUND CONDUCTORS SIZED AS INDICATED OR AS REQUIRED BY THE NEC. MINIMUM RACEWAY SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED.
7. RACEWAYS SHALL NOT CONTAIN MORE THAN THREE PHASE CONDUCTORS, THREE NEUTRALS, AND ONE GROUND CONDUCTOR, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL PROVIDE SEPARATE NEUTRALS FOR ALL 20A/1P CIRCUIT BREAKERS. PROVIDING MULTI-POLE CIRCUIT BREAKERS IN CONJUNCTION WITH SHARED NEUTRALS IN A MULTI-WIRE CIRCUIT IN ACCORDANCE WITH 2017 NEC 210.4 SHALL BE APPROVED BY THE ENGINEER.
8. EXPOSED RACEWAY UP TO 8'-0" ABOVE FINISHED FLOOR OR GRADE ELEVATION, OR ANY RACEWAY SUBJECT TO DAMAGE, SHALL BE RMC. MASS NOTIFICATION PANELS WITH PAGING MICROPHONES SHALL MEET ADA MOUNTING HEIGHT REQUIREMENTS.
9. ALL CONNECTIONS FOR ELECTRICALLY POWERED EQUIPMENT, INCLUDING BUT NOT LIMITED TO MECHANICAL AND OWNER SUPPLIED EQUIPMENT, SHALL BE FURNISHED AND INSTALLED. WHERE NOT INDICATED AS BEING PROVIDED WITH THE EQUIPMENT, ALL REQUIRED DISCONNECTING MEANS SHALL BE FURNISHED AND INSTALLED AS A PART OF THE ELECTRICAL WORK. COORDINATE LOCATIONS OF DISCONNECTING AND CONTROLLING MEANS WITH EQUIPMENT TO MAINTAIN CODE AND INSTALLATION REQUIREMENTS. DEDICATED WORKING SPACE FOR MOTOR CONTROLLERS AND SAFETY SWITCHES SHALL BE PER NEC 110.26 REQUIREMENTS.
10. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES, AND MAY BE INSTALLED EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING, WHETHER CONCEALED OR EXPOSED, SHALL BE RUN EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
11. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
12. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
13. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT.
14. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
15. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
16. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
17. TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE, ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE. PROVIDE ARC FLASH LABELS FOR ALL SWITCHBOARDS, PANELBOARDS, AND MOTOR CONTROL CENTERS.
18. IF THE CONTRACTOR SUBSTITUTES EQUIPMENT WITH DIFFERENT CHARACTERISTICS THAN WHAT IS SPECIFIED, INCLUDING ELECTRICAL CHARACTERISTICS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THESE DIFFERENCES WITH OTHER TRADES.
19. INSTALL CEILING MOUNTED OCCUPANCY SENSORS AT LEAST 6" AWAY FROM AIR DIFFUSERS.
20. IN SPACES WITH WALL-MOUNTED TILE WORK, COORDINATE EXACT LOCATION OF ELECTRICAL ROUGH-IN WITH PROPOSED TILE PATTERN TO MINIMIZE THE AMOUNT OF TILE CUTTING REQUIRED.
21. RECEPTACLES INSTALLED IN BATHROOMS SHALL BE GROUND FAULT - CIRCUIT INTERRUPTER TYPE.
22. DEVICE BOXES SHALL BE MOUNTED FLUSH IN WALLS UNLESS OTHERWISE NOTED OR REQUIRED. FLUSH SHALL BE DEFINED AS EVEN WITH THE FACE OF THE WALL, OR RECESSED NO MORE THAN 1/16". J-BOXES INSTALLED WITH PLASTER RINGS TO BE FLUSH WITH WALL. EXAMPLE: WALLS WITH 5/8" THICK SHEET ROCK REQUIRES 3/4" PLASTER RING. PROVIDE PLASTER RINGS AS REQUIRED FOR VARYING WALL THICKNESS COVERINGS. J-BOXES TO BE SUPPORTED WITH STUD-TO-STUD BACK BOX BRACING.
23. WALL BOXES FOR SINGLE AND TWO-GANG SWITCHES, CONVENIENCE OUTLETS, SHALL BE 4" SQUARE. TELECOMMUNICATION OR DATA WALL BOXES SHALL BE 4-11/16" SQUARE BY 2-1/8" DEEP. WALLS WITH 5/8 THICK SHEET ROCK REQUIRE 3/4" PLASTER RING. PROVIDE SINGLE OR DOUBLE GANG PLASTER RINGS OF CORRECT DEPTH FOR WALL CONSTRUCTION FOR VARYING WALL THICKNESS COVERINGS. J-BOXES TO BE SUPPORTED WITH STUD-TO-STUD BACK BOX BRACING. SECTIONAL OR MULTI-GANG BOXES WITH APPROPRIATE PLASTER RINGS SHALL BE USED FOR MULTI-GANG APPLICATIONS.
24. WHERE 20A, 120V LIGHTING AND POWER CIRCUIT LENGTHS ARE GREATER THAN 100 FEET AND HAVE A CONNECTED LOAD OF GREATER THAN 8 AMPS, PROVIDE #10 PHASE AND NEUTRAL CONDUCTORS WITH #10 GND IN MIN. 3/4" CONDUIT.
25. WHERE 20A, 120V LIGHTING AND POWER CIRCUIT LENGTHS ARE GREATER THAN 175 FEET AND HAVE A CONNECTED LOAD OF GREATER THAN 8 AMPS, PROVIDE #8 PHASE AND NEUTRAL CONDUCTORS WITH #8 GND IN MIN. 3/4" CONDUIT.
26. PROVIDE POWER CONNECTION TO CONTROL PANELS, TRANSFORMERS, AND OTHER ITEMS FURNISHED BY MECHANICAL CONTRACTOR FOR HVAC CONTROL. COORDINATE LOCATIONS OF DEVICES REQUIRING POWER CONNECTIONS WITH MECHANICAL CONTRACTOR.
27. LABEL OUTLET WALL PLATES WITH CORRESPONDING PANEL AND CIRCUIT NUMBER.
28. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
29. ELECTRICAL CONTRACTOR SHALL COORDINATE REQUIREMENTS OF ALL EQUIPMENT PROVIDED BY OTHER TRADES PRIOR TO ROUGH-IN.
30. DO NOT SCALE DRAWINGS. IF EXACT LOCATION OF EQUIPMENT CANNOT BE DETERMINED CONTACT THE ARCHITECT/ENGINEER FOR DIRECTION.
31. ALL SIZES ARE BASED ON COPPER CONDUCTORS. SIZES SHALL NOT BE LESS THAN INDICATED.
32. POWER OUTLETS AND J-BOXES ON EMERGENCY POWER SHALL BE RED AND WITH RED COVERPLATES.
33. PROVIDE HOUSE KEEPING PAD FOR ALL FLOOR MOUNTED ELECTRICAL SWITCHGEAR, PANELS, ATS, AND TRANSFORMERS.
34. ALL RECEPTACLES AND OUTLETS SHALL BE HOSPITAL GRADE.
35. WHERE LIGHTING CONTROLS ARE ADJACENT TO EACH OTHER, PROVIDE COMMON COVERPLATE FOR ALL CONTROLS. PROVIDE BARRIER WHERE NORMAL AND EMERGENCY CIRCUITS ARE IN SAME BACKBOX.
36. PROVIDE BARRIERS WHERE NORMAL AND EMERGENCY CIRCUITS ARE IN COMMON BACKBOX.
37. PROVIDE PULL BOXES FOR FEEDER RUNS PER NEC CODE REQUIREMENTS.
38. PROVIDE A/C GRADE 3/4" TRADE SIZE PLYWOOD BACKBOARD PAINTED WITH TWO COATS OF FIRE RESISTANT BRIGHT HIGH-GLOSS WHITE PAINT IN ALL FOUR WALLS ON TR ROOMS. FOR TR ROOMS WITH TE ENCLOSURES, PROVIDE PLYWOOD BACKBOARD ON THE WALL WITH TE ENCLOSURE.
39. PROVIDE IDENTIFICATION AND LABELING FOR ALL UPS, PDU'S, PANELS, AND POWER STRIPS PER ISTS V4.0 REQUIREMENTS.

ELECTRICAL DEMOLITION NOTES

1. ALL ELECTRICAL ITEMS INSTALLED IN WALLS, FLOORS, OR CEILINGS TO BE DEMOLISHED SHALL BE REMOVED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED OR REQUIRED BY OTHER CONDITIONS IN THESE DOCUMENTS. SEE DRAWINGS OF ALL OTHER TRADES FOR EXTENT OF DEMOLITION WORK. ELECTRICAL ITEMS SHALL INCLUDE POWER, LIGHTING, AND SPECIAL SYSTEMS. REFER ALL QUESTIONS OF APPLICABILITY TO THE A/E PRIOR TO BID FOR CLARIFICATION; OTHERWISE, FIELD DECISIONS BY THE A/E SHALL BE BINDING.
2. IT IS NOTED THAT THESE DRAWINGS DEPICT THE GENERAL INTENT OF THE SCOPE OF THE DEMOLITION WORK AND THAT NOT ALL ITEMS OF ELECTRICAL DEMOLITION ARE NECESSARILY SHOWN. THE CONTRACTOR SHALL BE REQUIRED TO FIELD VERIFY AND FIELD DETERMINE THE SCOPE OF THE DEMOLITION WORK PRIOR TO BID. REFER ALL QUESTIONS TO THE A/E PRIOR TO BID FOR CLARIFICATION.
3. PHASING OF ELECTRICAL DEMOLITION SHALL FOLLOW THAT OF THE GENERAL CONTRACTOR. COORDINATE REMOVAL OF ELECTRICAL WORK WITH OTHER CONSTRUCTION ACTIVITIES AND THE REQUIREMENTS OF THE OWNER.
4. THE OWNER SHALL HAVE SALVAGE RIGHTS TO ANY ITEMS THAT ARE TO BE DEMOLISHED. ITEMS SUCH AS SPEAKERS AND CAMERAS AND OTHER ITEMS THAT THE OWNER WISHES TO SALVAGE SHALL BE CAREFULLY REMOVED AND STORED IN A LOCATION AS DIRECTED BY THE OWNER. ALL OTHER ITEMS OF DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
5. WHERE DEMOLITION WORK WILL INTERRUPT CIRCUIT CONTINUITY TO OTHER AREAS OF THE FACILITY THAT ARE TO REMAIN IN OPERATION, THEN RACEWAY AND WIRING SHALL BE INSTALLED TO MAINTAIN THOSE AREAS IN COMPLETE OPERATION. PROVIDE TEMPORARY CONNECTIONS AS REQUIRED. CONTRACTOR SHALL SUBMIT A REQUEST FOR ANY INTERRUPTIONS OR OUTAGES TO THE OWNER AT LEAST FIFTEEN (15) WORKING DAYS IN ADVANCE AND ACCOMMODATE THE OWNER'S NEEDS AS REQUIRED.
6. ELECTRICAL CIRCUITS THAT ARE TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY. CONDUCTORS SHALL BE REMOVED FROM THE ITEM TO BE DEMOLISHED TO THE SOURCE OVERCURRENT DEVICE. RACEWAYS WHICH ARE INSTALLED IN OR BELOW FLOORS OR WITHIN WALLS MAY BE ABANDONED, BUT ALL OVERHEAD OR EXPOSED RACEWAYS SHALL BE REMOVED. EXPOSED RACEWAYS TO BE ABANDONED SHALL BE REMOVED AND SHALL BE CUT OR CHISELED AT LEAST 2" INTO THE WALL OR FLOOR AND THE OPENING GROUTED SMOOTH.
7. WHERE EXISTING DEVICE OR JUNCTION BOXES MUST REMAIN IN EXISTING WALLS OR CEILINGS (SUCH AS FOR CIRCUITS THAT MUST BE MAINTAINED TO OTHER AREAS), THEN THEY SHALL BE FITTED WITH BLANK COVERPLATES.
8. WHERE DISTRIBUTION OR BRANCH CIRCUIT EQUIPMENT (PANELBOARDS, SWITCHBOARDS, ETC.) IS TO BE REMOVED, THEN ALL CIRCUITS WHICH FEED ITEMS TO REMAIN SHALL BE RECONNECTED TO NEW DISTRIBUTION OR BRANCH CIRCUIT EQUIPMENT. REFER ALL QUESTIONS TO THE A/E FOR CLARIFICATION.
9. IF HAZARDOUS MATERIALS (I.E. ASBESTOS, PCB's, ETC.) ARE ENCOUNTERED AT ANY TIME DURING CONSTRUCTION IN THE WORK AREA, STOP WORK IMMEDIATELY AND CONTACT THE A/E OR THE OWNER.
10. REMOVE ALL DEVICES SHOWN ON DEMOLITION PLAN UNLESS OTHERWISE NOTED.
11. REMOVE CABLING BACK TO SOURCE FOR ALL TEL/DATA OUTLETS BEING REMOVED.
12. ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR UPDATING SCHEDULES FOR ANY SWITCHBOARDS AND PANELBOARDS THAT ARE AFFECTED BY THIS PROJECT AND ARE TO BE TYPEWRITTEN.
13. THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR REQUIRED WORK OUTSIDE THIS PROJECT BOUNDARY NECESSARY TO ENSURE ADJACENT SERVICES REMAIN ENERGIZED DURING CONSTRUCTION OF THE RENOVATION PROJECT.
14. ALL EXISTING BRANCH CIRCUITS NOT USED ARE TO BE REMOVED BACK TO THE PANEL. THE CIRCUIT BREAKERS ARE TO BE LABELED AS SPARE. EXISTING CONDUITS FROM PANEL ARE TO REMAIN TO ABOVE CEILING.
15. ELECTRICAL CONTRACTOR TO PROVIDE COVERS FOR ANY EXISTING OPEN BUSSING IN PANELBOARDS THAT ARE AFFECTED BY THIS PROJECT.
16. ELECTRICAL CONTRACTOR TO REMOVE ANY AND ALL UNUSED OR ABANDONED ELECTRICAL EQUIPMENT THAT RESIDES WITHIN THE AREAS OF THE PROJECT SCOPE.
17. REPAIR OR REPLACE BUILDING ELEMENTS WHICH ARE DAMAGED AS PART OF DEMOLITION WORK.
18. DISCONNECT MECHANICAL EQUIPMENT BEING REMOVED BY MECHANICAL CONTRACTOR. COORDINATE EQUIPMENT REMOVAL LOCATIONS WITH MECHANICAL DRAWINGS.
19. COORDINATE DEMOLITION WITH THE WORK OF OTHER TRADES.
20. PROVIDE BLANK COVERPLATES FOR ABANDONED RECESSED JUNCTION BOXES.
21. COORDINATE DEMOLITION OF TELECOMMUNICATIONS CABLING WITH OWNER AND GENERAL CONTRACTOR.
22. COORDINATE ANY AND ALL OUTAGES AT LEAST 14 DAYS WITH THE OWNER PRIOR TO ANY DISRUPTION OF POWER.
23. EXISTING ELECTRICAL SYSTEM IS TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED. ALL CIRCUITS WHICH ARE DISTURBED BY DEMOLITION OR NEW CONSTRUCTION ARE TO BE RECONNECTED AT NO ADDITIONAL COST TO THE OWNER.
24. REMOVE ALL DEVICES INDICATED BY DARKENED OR DASHED LINES AND ASSOCIATED KEYED NOTES. REMOVE ALL DEVICES IN WALLS AND CEILINGS WHICH ARE SHOWN TO BE DEMOLISHED ON ARCHITECTURAL PLANS, WHETHER OR NOT SUCH DEVICES ARE SHOWN ON THESE PLANS.
25. REMOVE ALL DEVICES, CONDUIT AND CONDUCTORS COMPLETE TO SOURCE ASSOCIATED WITH MECHANICAL EQUIPMENT WHICH IS BEING DEMOLISHED. COORDINATE WITH MECHANICAL PLANS FOR DETAILED INFORMATION.
26. WHERE CIRCUITS ARE REMOVED COMPLETELY, RELABEL EXISTING CIRCUIT BREAKER AS "SPARE".
27. EXISTING LIGHTING AND LIGHTING CONTROLS ARE TO REMAIN UNLESS OTHERWISE NOTED ON THE LIGHTING PLANS.

ELECTRICAL LEGEND NOTES

1. ALL SYMBOLS INDICATED ARE NOT NECESSARILY USED ON PLANS.
2. ALL MOUNTING DIMENSIONS GIVEN ARE TO THE CENTERLINE (CL) OF THE DEVICE AND ABOVE FINISHED FLOOR (A.F.F.) OR ABOVE FINISHED GRADE (A.F.G.) UNLESS OTHERWISE NOTED.
3. WALL MOUNTED LIGHT SWITCHES ARE TO BE LOCATED 46" A.F.F. AND 2" FROM EDGE OF DOOR FRAME TO EDGE OF DEVICE PLATE.
4. OUTLETS INDICATED AS BEING FOR WALL MOUNTED TELEPHONES SHALL BE LOCATED 54" A.F.F. UNLESS OTHERWISE NOTED.
5. WALL MOUNTED FIRE ALARM MANUAL PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 72" OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
6. FIRE ALARM VISUAL NOTIFICATION APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS BETWEEN 80" AND 96" A.F.F..
7. CONVENIENCE OUTLETS SHALL BE MOUNTED 18" A.F.F. AND SHALL BE ALIGNED VERTICALLY. PROVIDE HORIZONTAL INSTALLATIONS ONLY WHEN SPACE IS LIMITED, SUCH AS BETWEEN MIRRORS AND CABINET BACKSPLASHES. THE GROUND PIN SHALL BE ORIENTED IN THE UP POSITION.
8. CONVENIENCE OUTLETS LOCATED IN MECHANICAL AND BOILER ROOMS SHALL BE LOCATED 46" A.F.F.
9. CONVENIENCE OUTLETS LOCATED OUTSIDE SHALL BE GFI AND WEATHERPROOF RATED, FURNISHED WITH A WEATHERPROOF "WHILE-IN- USE" COVER AND MOUNTED 24" A.F.F. OR A.F.G.. EXTERIOR CONVENIENCE OUTLETS SHALL BE INSTALLED WITHIN 25 FEET AND ON THE SAME LEVEL AS HEATING, AIR CONDITIONING AND REFRIGERATION EQUIPMENT.
10. OUTLETS FOR WALL MOUNTED TELECOMMUNICATIONS OR COMPUTER DEVICES SHALL BE LOCATED 18" A.F.F. AND SHALL BE ALIGNED VERTICALLY. PROVIDE HORIZONTAL INSTALLATIONS ONLY WHEN SPACE IS LIMITED, SUCH AS BETWEEN MIRRORS AND CABINET BACKSLASHES.
11. MISCELLANEOUS WALL MOUNTED CONTROL DEVICES, SUCH AS SPEAKER VOLUME CONTROLS, DOOR BELLS, AUTOMATIC DOOR PUSH PADS, ETC. SHALL BE MOUNTED AT 46" A.F.F.
12. WALL MOUNTED LIGHTING FIXTURES SHALL BE MOUNTED AS INDICATED ON THE DRAWINGS.
13. PANELBOARDS, NETWORK CABINETS, FIRE ALARM CONTROL CABINETS, AND OTHER SIMILAR CABINETS SHALL BE MOUNTED 72" A.F.F. TO THE TOP.
14. MOTOR CONTROLLERS AND SAFETY SWITCHES SHALL BE MOUNTED 90" A.F.F.
15. CEILING MOUNTED SMOKE DETECTORS SHALL BE LOCATED NO MORE THAN 30' ON CENTER FROM EACH AND NO MORE THAN 15' FROM THE END OF A CORRIDOR OR SMOKE PARTITION. SMOKE DETECTORS SHALL ALSO NOT BE PLACED WITHIN 3' OF SUPPLY OR RETURN AIR DIFFUSERS, ADJUST SPACING SHOWN ON DRAWINGS AS REQUIRED.
16. DEVICE BOXES SHALL BE MOUNTED FLUSH IN WALLS UNLESS OTHERWISE NOTED OR REQUIRED. FLUSH SHALL BE DEFINED AS EVEN WITH THE FACE OF THE WALL, OR RECESSED NO MORE THAN 1/16".
17. WALL BOXES FOR SINGLE AND TWO-GANG SWITCH, CONVENIENCE OUTLET, OR TELECOMMUNICATIONS OR DATA INSTALLATIONS SHALL BE 4" SQUARE WITH APPROPRIATE SINGLE OR DOUBLE GANG PLASTER RINGS OF CORRECT DEPTH FOR WALL CONSTRUCTION. SECTIONAL OR MULTI-GANG BOXES WITH APPROPRIATE PLASTER RINGS SHALL BE USED FOR MULTI-GANG APPLICATIONS.
18. WHERE DEVICES CONNECTED TO NORMAL AND EMERGENCY POWER SYSTEMS ARE LOCATED IN THE SAME BOX, PROVIDE LISTED METALIC BARRIERS AND SEPARATE RACEWAYS. BOXES SHALL BE PROPERLY CONFIGURED TO ACCEPT BARRIERS.

ELECTRICAL PHASING NOTES

1. THE EXISTING CAMPUS SUPPORT CENTER (MAIN SERVER ROOM), MAIN TELEPHONE EQUIPMENT ROOM, AND TR ROOMS WILL NEED TO REMAIN OPERATIONAL DURING CONSTRUCTION. EXISTING ELECTRICAL PANELS AND CONNECTIVITY SHALL REMAIN. PROVIDE TEMPORARY ELECTRICAL PANELS AND CIRCUITS WHERE EXISTING ELECTRICAL PANELS WILL BE AFFECTED. COORDINATE WITH VA COR AND SCHEDULES FROM OTHER TRADES FOR EXACT ELECTRICAL WORK.
2. COORDINATE WITH THE VA FOR ELECTRICAL WORK PHASES. IN GENERAL, LONG LEAD TIME ITEMS, SUCH AS NEW ELECTRICAL SUBSTATION, ELECTRICAL EQUIPMENT SERVING ICC, NEW DISTRIBUTION TYPE EQUIPMENT, AND NEW GENERATOR AND RELATED SITE ELECTRICAL WORK SHALL BE PERFORMED AHEAD OF OTHERS WORK.
3. NEW ELECTRICAL SUBSTATION IN BUILDING 111 SERVES NEW TR RO

LIGHT FIXTURE SCHEDULE

TYPE MARK	DESCRIPTION	MANUFACTURER	MODEL	LAMP	CCT	MIN. CRI	VOLTAGE	WATTS	MOUNTING	COMMENTS
A	4' LED STRIP LIGHT	LITHONIA LIGHTING	CLX-L48-5000LM-HEF-RDL-40K-90CRI-HC36	LED	4000K	90	MVOLT	43.9 W	SUSPENDED	BASIS OF DESIGN
AE	4' LED STRIP LIGHT WITH EMERGENCY POWER PACK	LITHONIA LIGHTING	CLX-L48-5000LM-HEF-RDL-40K-90CRI-PS1050-HC36	LED	4000K	90	MVOLT	43.9 W	SUSPENDED	BASIS OF DESIGN
B	2' LED STRIP LIGHT	LITHONIA LIGHTING	CLX-L24-5000LM-HEF-RD-40K-90CRI-HC36	LED	4000K	90	MVOLT	38.1 W	SUSPENDED	BASIS OF DESIGN
BE	2' LED STRIP LIGHT WITH EMERGENCY POWER PACK	LITHONIA LIGHTING	CLX-L24-5000LM-HEF-RDL-40K-90CRI-PS1050-HC36	LED	4000K	90	MVOLT	38.1 W	SUSPENDED	BASIS OF DESIGN
D	4' LED STRIP LIGHT	LITHONIA LIGHTING	CLX-L48-5000LM-HEF-RDL-40K-90CRI-HC36	LED	4000K	90	MVOLT	43.9 W	SUSPENDED	BASIS OF DESIGN
F	LED WALLPACK, WITH BATTERY PACK, WET LOCATION LISTED	ACUITY LIGHTING	FFW1212-NODIM-40W-3800LM-40K-120-EMB125R-WL	LED	4000K	90	120V	40.0 W	WALL MOUNTED	BASIS OF DESIGN

GENERAL NOTES:

1. MOUNT SUSPENDED FIXTURES AT 9'-0" AFF TO BOTTOM OF FIXTURE, UON. ADJUST FIXTURE LOCATION WITH CABLE TRAYS, RACKS, AND MECHANICAL EQUIPMENT. COORDINATE WITH EQUIPMENT IN ROOM FOR EXACT HANGING LENGTH.
2. PROVIDE NECESSARY ACCESSORIES FOR A COMPLETE INSTALLATION, INCLUDING, BUT NOT LIMITED TO POWER SUPPLIES, OCCUPANCY SENSORS, CONTROLS, LOW VOLTAGE WIRING, MOUNTING BRACKETS, ETC.
3. LIGHTING SYSTEMS IN TR ROOMS SHALL BE CONTROLLED FOR TWO LEVEL LIGHTING PROTOCOL:
   LEVEL 1: UNOCCUPIED MODE - SET DIMMERS AT 20% OUTPUT FOR LIGHTING FIXTURES TO ALLOW ENOUGH LIGHT LEVEL FOR CCTV CAMERA TO FUNCTION
   LEVEL 2: OCCUPIED MODE - 100% OUTPUT, LIGHTS SHALL BE ALL ON AND PROVIDE MINIMUM 500 LUX IN THE HORIZONTAL PLANE AND 200 LUX IN THE VERTICAL PLANE, MEASURED 3FT ABOVE THE FINISHED FLOOR IN FRONT AND BACK OF CABINETS/RACKS, OR THE MIDDLE OF ALL AISLES BETWEEN CABINETS.
4. LIGHTING FIXTURES WITH BATTERY PACKS SHALL BE PROVIDED WITH TEST SWITCH AND BATTERY PACK.
5. LIGHTING FIXTURES ARE BASIS OF DESIGN, CONTRACTOR CAN SUBMIT AN ALTERNATIVE EQUAL PRODUCT FOR VA APPROVAL.
6. STANDARD DIMMING FOR ALL FIXTURES REQUIRING DIMMING.

ROOMS IN SCOPE - ELECTRICAL

Level	Number	Name	ELECTRICAL DEMO REQUIRED	ELECTRICAL NEW REQUIRED
BUILDING 03				
LEVEL 01	1454	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 04				
LEVEL 02	2110	TELECOMMUNICATIONS RM	Yes	Yes
BUILDING 05				
LEVEL 01	117	EXISTING TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 02	204	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 06				
Not Placed	D206	STORAGE	Yes	Yes
LEVEL 01	6-1-C013	STORAGE	Yes	Yes
LEVEL 01	6-1-D-007	MEN'S TOILET	Yes	Yes
LEVEL 01	A104	OI&T	Yes	Yes
LEVEL 01	B103	VACANT OFFICE	Yes	Yes
LEVEL 02	D203	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 03	C302	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 07				
BASEMENT	B09	EXISTING TELECOMMUNICATION RM.	Yes	Yes
BUILDING 20				
LEVEL 01	20-1-030	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 43				
LEVEL 01	A156	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 02	A201	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 70				
LEVEL 01	B-39	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	C-17EC	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	D-125	EXISTING TELECOMMUNICATION RM.	Yes	Yes
LEVEL 01	E-2B	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 97				
LEVEL 01	005	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 102				
BASEMENT	B100FC	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	100FC	EXISTING TELECOMMUNICATION RM.	Yes	Yes
LEVEL 01	144	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 107				
LEVEL 02	200	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 108				
LEVEL 02	200	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 109				
BASEMENT	B001	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 111				
BASEMENT	B0423	TELECOMMUNICATIONS RM.	Yes	Yes
BASEMENT	B0610E	TELECOMMUNICATIONS RM.	Yes	Yes
BASEMENT	B0622	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	1180	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	1470	DEMARC ROOM	Yes	Yes
LEVEL 01	1472	ELECTRICAL ROOM	Yes	Yes
LEVEL 01	1473	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	1474J	MCR	Yes	Yes
LEVEL 01	1537B	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 02	2235	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 02	2428A	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 02	2557	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 03	3308	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 04	4315	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 05	5311	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 06	6410A	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 07	7409	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 08	8409	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 09	9409	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 10	10409	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 112				
LEVEL 01	108	EXISTING TELECOMMUNICATION RM.	Yes	Yes
BUILDING 113				
BASEMENT	106	REFRIGERATION ROOM	Yes	Yes
BUILDING 123				
LEVEL 01	A107	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	B113	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	C113	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	D113	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	E105E	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 144				
BASEMENT	G22	TELEPHONE RM.	Yes	Yes
BASEMENT	G68	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	146	TELECOMMUNICATIONS RM.	Yes	Yes
LEVEL 01	175	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 146				
BASEMENT	005	EXISTING TELECOMMUNICATION RM.	Yes	Yes
BUILDING 147				
BASEMENT	002	TELECOMMUNICATIONS RM.	Yes	Yes
BUILDING 148				
BASEMENT	002	TELECOMMUNICATIONS RM.	Yes	Yes

480 VOLT AND BELOW ELECTRICAL PANEL AND SWITCHBOARD NAMING SCHEME:

EUL-LS-A2-70-1

- SEQUENTIAL NUMBER IF MULTIPLE PANELS WITH SAME ID ON A FLOOR
- IDENTIFIES BUILDING PANEL IS LOCATED IN
- FLOOR PANEL IS LOCATED ON
- IDENTIFIES AREA WHERE PANEL IS LOCATED
- TYPE OF EMERGENCY POWER:
  - (BLANK) IF NORMAL POWER PANEL
  - (LS) FOR LIFE SAFETY BRANCH
  - (CR) FOR CRITICAL BRANCH
  - (Q) FOR EQUIPMENT BRANCH
  - (TR) FOR PANELS IN TELECOM ROOMS
- VOLTAGE OF PANEL:
  - (H) FOR 277/480 VOLTS
  - (L) FOR 120/208 VOLTS
- TYPE OF LOAD TYPICALLY FED FROM PANEL:
  - (L) FOR LIGHTING
  - (U) FOR RECEPTACLES AND NON-LIGHTING LOADS - "UTILITY"
  - (D) PANEL FEEDS OTHER PANELS - "DISTRIBUTION"
  - (MDP) SERVICE ENTRANCE PANEL OR SWITCHBOARD FOR BUILDING
- IDENTIFIES IF PANEL IS ON NORMAL BRANCH OR ESSENTIAL BRANCH OF ELECTRICAL POWER DISTRIBUTION SYSTEM:
  - (BLANK) IF NORMAL POWER PANEL
  - (E) FOR ESSENTIAL BRANCH (GENERATOR BACKED UP)

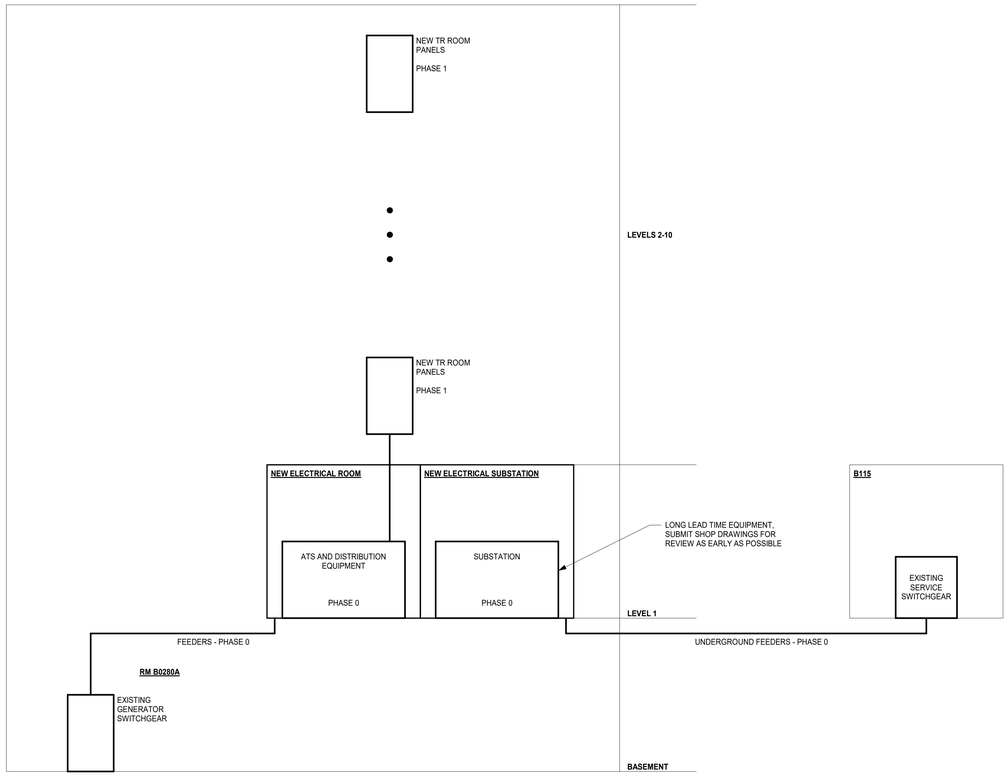
EACH PANEL SHALL HAVE THE VA SPECIFICATION REQUIRED LAMINATED LABEL WITH INFORMATION NOTED IN SPECIFICATION. THE ADHESIVE LABEL AS NOTED BELOW WILL BE INSTALLED BY THE VHA SHOPS.

EUL-LS-A2-70-1 ← NEW PANEL NAME - 1/2" LETTERS/NUMBERS

OLD NAME: "G HALL PANEL" ← OLD PANEL NAME - 1/8" LETTERS/NUMBERS

SOUTH EAST/BUILDING 70E TG0/MDP-70-E #10DL-BEN-70-1 #8UL-2EN-70-4 ← RISER DESCRIPTION LISTING ALL PANELS/SWITCHBOARDS/SWITCHGEAR FROM PANEL TO ELECTRICAL SERVICE ENTRANCE TO BUILDING (NORMAL POWER PATH ONLY) - 1/8" LETTER/NUMBERS

1 VA PANEL NAMING CONVENTION DETAIL
NTS

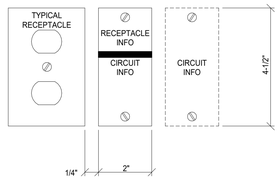


4 ELECTRICAL PHASING/SEQUENCING PLAN - B111
NTS

REQUIRED LABELS FOR ALL RECEPTACLES:

FIRST PART OF LABEL INDICATES RECEPTACLE INFORMATION SUCH AS RECEPTACLE ID NO, TYPE, VOLTS, AMPS, PHASE, PANEL BOARD, CIRCUIT NO, PANEL BOARD ROOM NO.

SECOND PART OF CIRCUIT INDICATES CIRCUIT INFORMATION SUCH AS IDENTITY OF RECEPTACLES ON THE SAME CIRCUIT, PANEL BOARD, AND CIRCUIT I.D. PROVIDE SECOND LABEL AS REQUIRED.



ALL LABELS TO BE 1/16" PHENOLIC PLASTIC, RECEPTACLES ON EMERGENCY POWER TO USE RED PLASTIC WITH WHITE LETTERING. RECEPTACLES ON NORMAL POWER TO USE BLACK PLASTIC WITH WHITE LETTERING TO BE 3/16" HIGH. LOCATION OF LABELS AS SHOWN OR AS DIRECTED BY COR. SCREW LABELS TO WALL WITH #6 X3/4" LENGTH SCREW, SET IN PLASTIC DRYWALL TYPE ANCHORS.

2 RECEPTACLE LABEL DETAIL
NTS

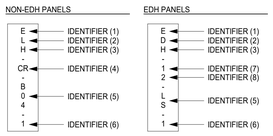
PANEL NOMENCLATURE

TYPICAL PANEL DESCRIPTION - OTHER THAN EDH PANELS

E (1) - EMERGENCY SUPPLY; FOR NORMAL SUPPLY "E" IS DROPPED
U (2) - "L" = LIGHTING; "U" = UTILITY; "P" - POWER; "D" - DISTRIBUTION
L (3) - H - 277/480V; L - 120/208V;
-
CR(4) - LS = LIFE SAFETY; CR = CRITICAL; Q = EQUIPMENT
-
22(5) - PANEL LOCATION BY FLOOR AND AREA (I.E. LEVEL 02 "A" WING NORTH
-
1(6) - MULTIPLE PANEL NAME IDENTIFIER

TYPICAL EDH PANEL DESCRIPTION

E (1) - EMERGENCY SUPPLY; FOR NORMAL SUPPLY "E" IS DROPPED
D (2) - "L" = LIGHTING; "U" = UTILITY; "P" - POWER; "D" - DISTRIBUTION
H(3) - H - 277/480V; L - 120/208V;
-
1(7) - FEEDING SWITCHBOARD NUMBER
2(8) - CIRCUIT FROM FEEDING SWITCHBOARD
-
LS(4) - LS = LIFE SAFETY; CR = CRITICAL; Q = EQUIPMENT
-
1(6) - MULTIPLE PANEL NAME IDENTIFIER



3 PANEL NOMENCLATURE
NTS

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL LEGENDS, SCHEDULES AND ABBREVIATIONS

Approved:

Phase: FINAL BID DOCUMENTS

Sprinklered: FULLY SPRINKLERED

Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI

Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI

Issue Date: SEPTEMBER 5, 2025 | Checked: YW | Drawn: SM

Project Number: 695-21-700

Building Number:

Drawing Number: E-002

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

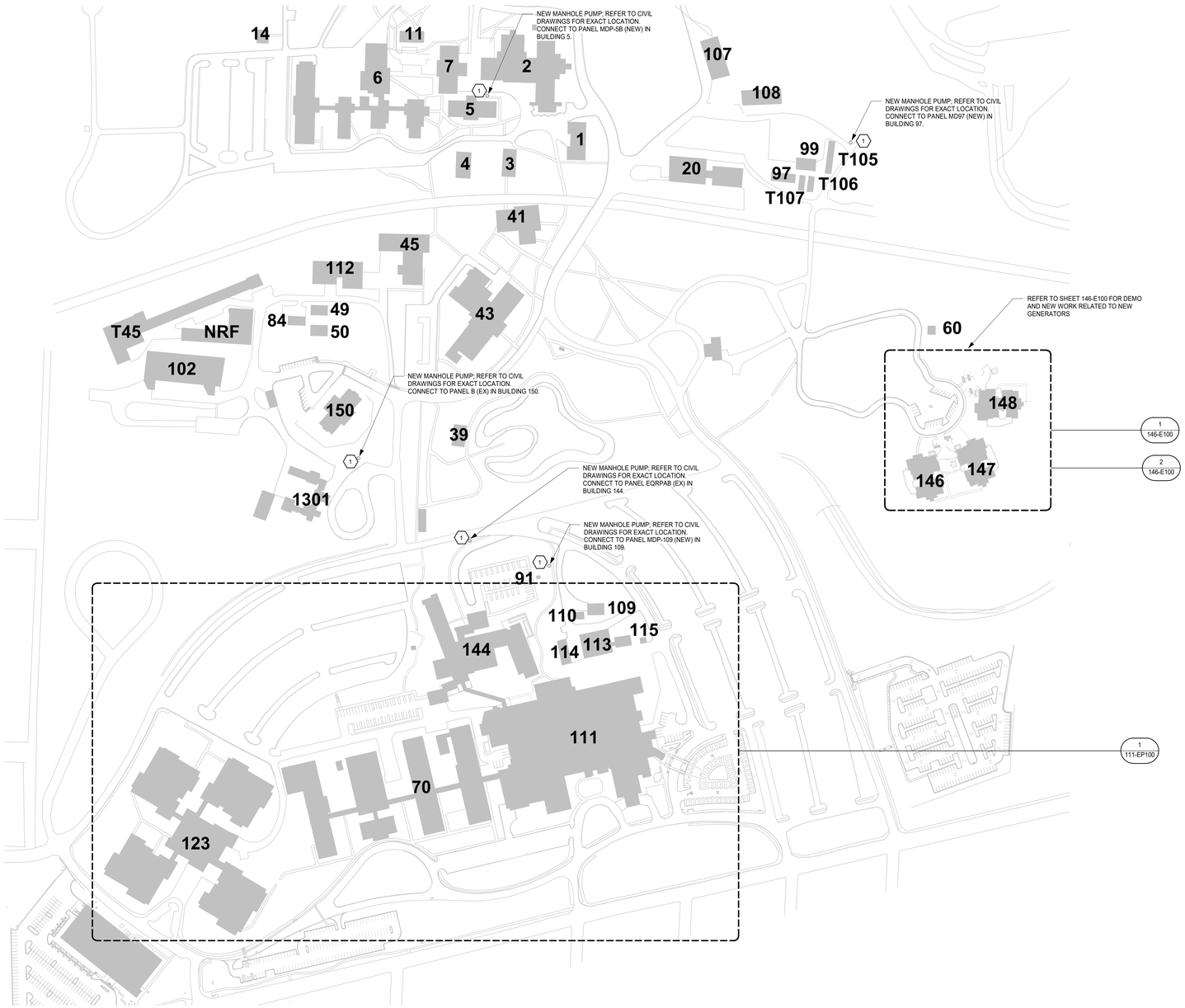
8/28/2025 9:23:49 AM

ELEC. NEW WORK SITE GENERAL NOTES

1. COORDINATE WITH CIVIL FOR EXACT LOCATION AND REQUIREMENTS.

ELEC. NEW WORK SITE KEYNOTES

1. PROVIDE NEW 30A/2P, 240V CIRCUIT BREAKER IN EXISTING PANEL AND CONNECT TO THE PUMP CONTROLLER IN MANHOLE. POWER DISCONNECT SWITCH SHALL BE FURNISHED WITH PUMP ASSEMBLY. FEEDER SHALL BE MINIMUM (2)#6, #10G, 1" C. PROVIDE LARGER FEEDERS WHERE NEEDED TO COMPLY WITH VOLTAGE DROP REQUIREMENTS. SEAL WALL PENETRATIONS AS REQUIRED PER WALL TYPE AND LOCATION. PROVIDE FIRE STOPPING WHERE PASSING RATED WALLS.



1 ELECTRICAL SITE PLAN
1" = 100'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

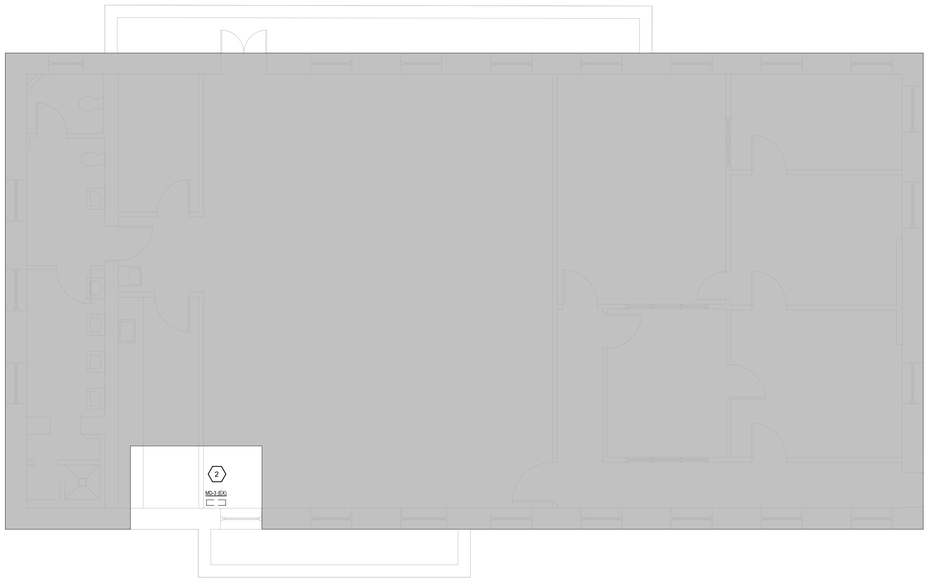
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

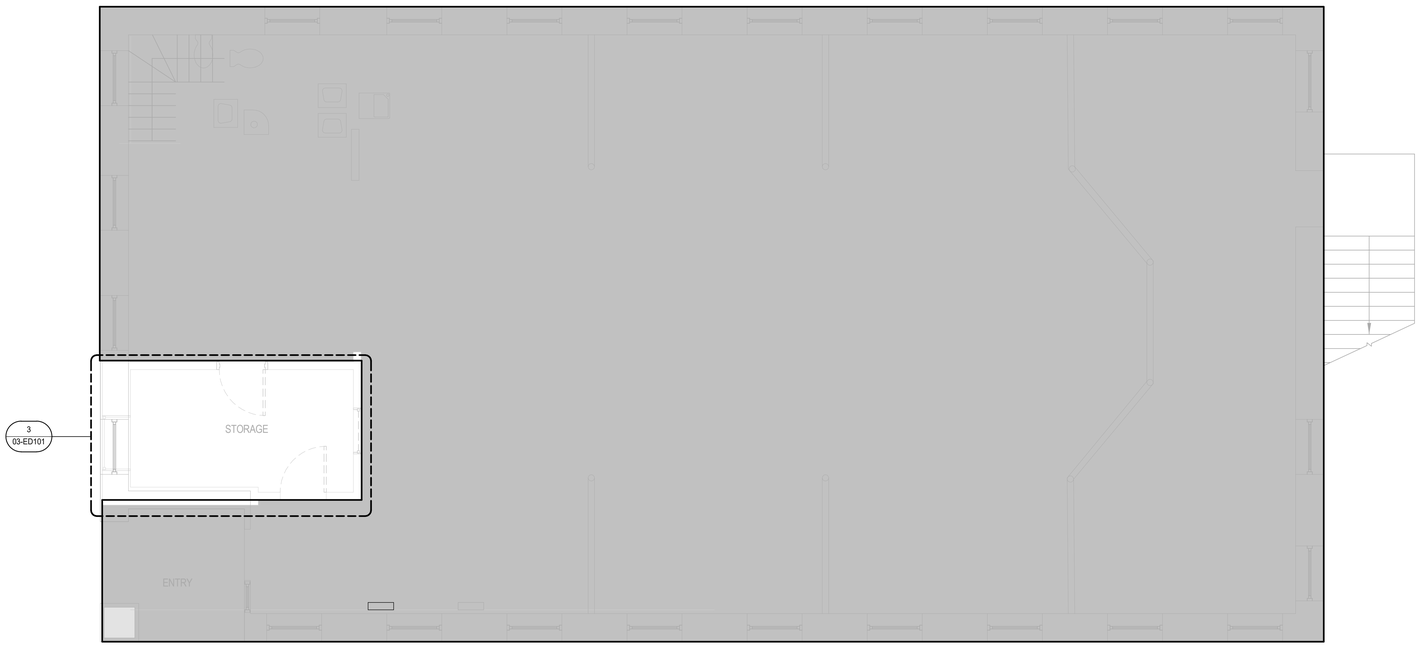
Drawing Title: ELECTRICAL SITE PLAN	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number:
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: ES-100
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: PP	

VA FORM 08 - 6231

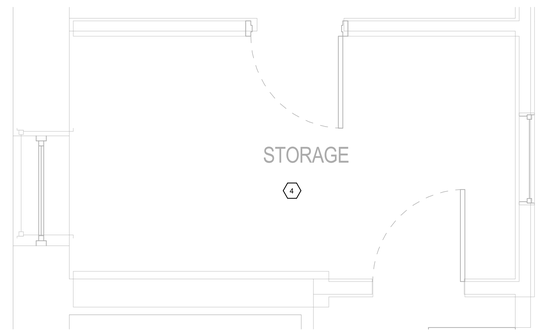
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:25:50 AM



1 BLDG 3 - BASEMENT - OVERALL ELECTRICAL DEMO WORK
3/16" = 1'-0"



2 BLDG 3 - FIRST FLOOR - OVERALL ELECTRICAL DEMOLITION
1/4" = 1'-0"



3 BLDG 3 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 1454
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.

Graphic Scale : 1/16" = 1'-0"
Graphic Scale : 1/8" = 1'-0"
Graphic Scale : 3/32" = 1'-0"
Graphic Scale : 1/4" = 1'-0"
Graphic Scale : 3/16" = 1'-0"
Graphic Scale : 1/2" = 1'-0"
Graphic Scale : 3/4" = 1'-0"
Graphic Scale : 1" = 1'-0"
Graphic Scale : 1 1/2" = 1'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E11391
STATE OF NEBRASKA
9.5.2025

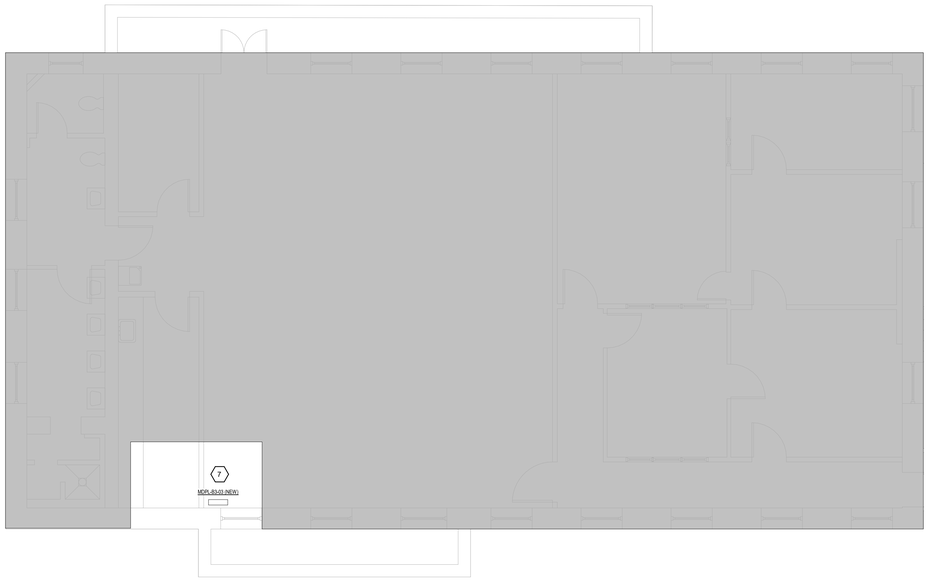
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

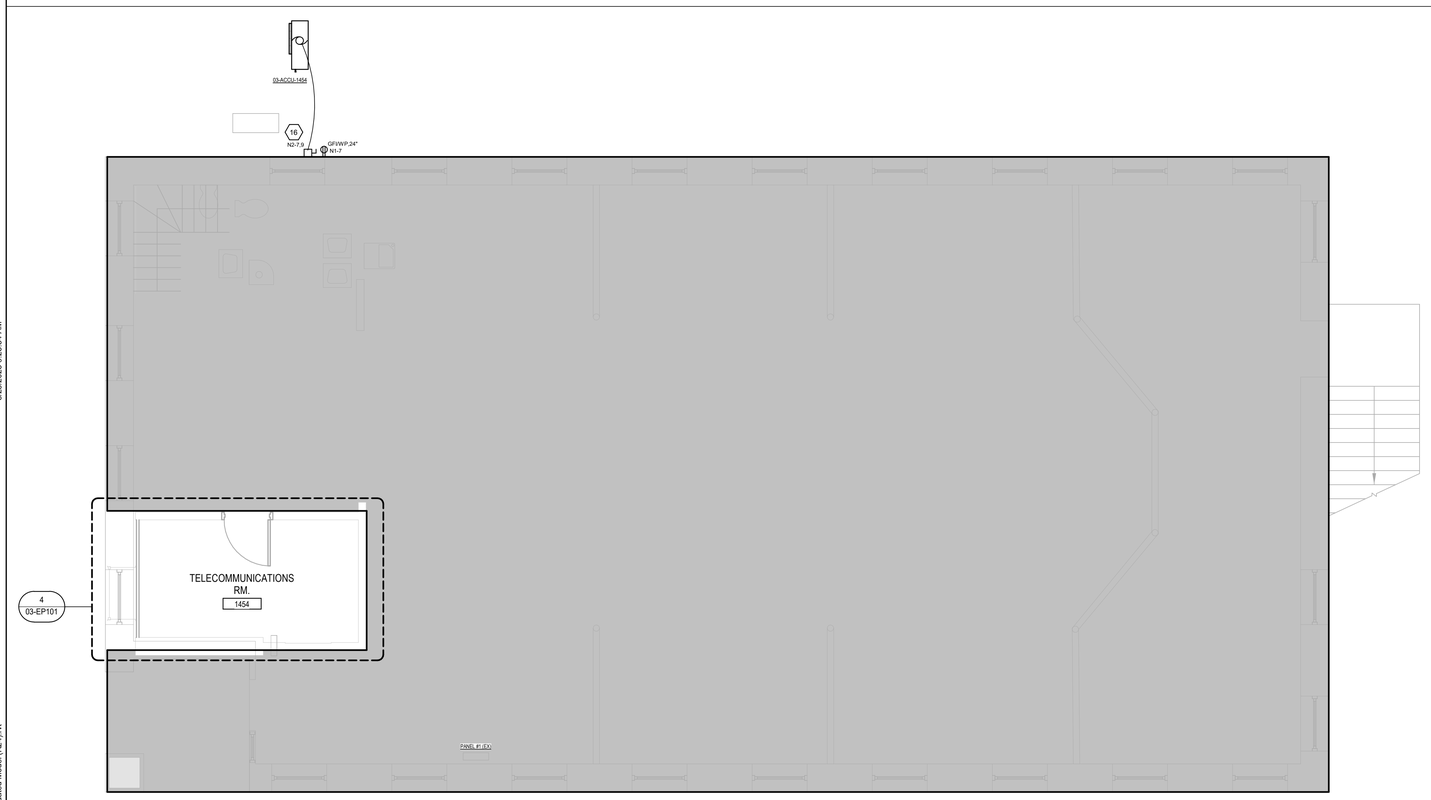
Drawing Title	BLDG 3 - FIRST FLOOR OVERALL AND ENLARGED - ELECTRICAL DEMOLITION
Approved:	
Phase	FINAL BID DOCUMENTS
Sprinklered	
Project Title	EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location	5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date	SEPTEMBER 5, 2025
Checked	YW
Drawn	SM
Project Number	695-21-700
Building Number	03
Drawing Number	03-ED101

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:25:52 AM



1 BLDG 3 - BASEMENT - OVERALL ELECTRICAL NEW WORK
3/16" = 1'-0"



2 BLDG 3 - FIRST FLOOR - OVERALL ELECTRICAL NEW WORK
1/4" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

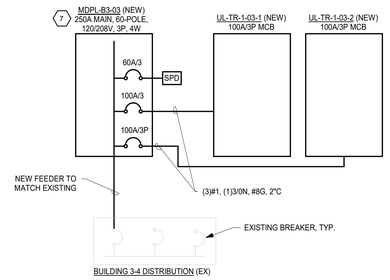
BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

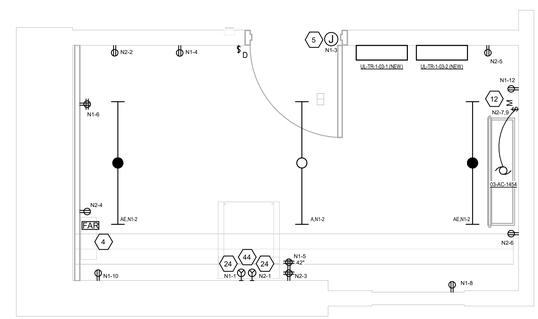
   208/120V PANEL:
   UL-TR-1-03-1 - NORMAL POWER
   UL-TR-1-03-2 - NORMAL POWER

ELEC. NEW WORK KEYNOTES

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.



3 BLDG 3 - FIRST FLOOR - PARTIAL ONE LINE DIAGRAM
NTS



4 BLDG 3 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 1454
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 3 - BASEMENT/FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 03
Approved:	Sprinklered	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 03-EP101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:25:54 AM

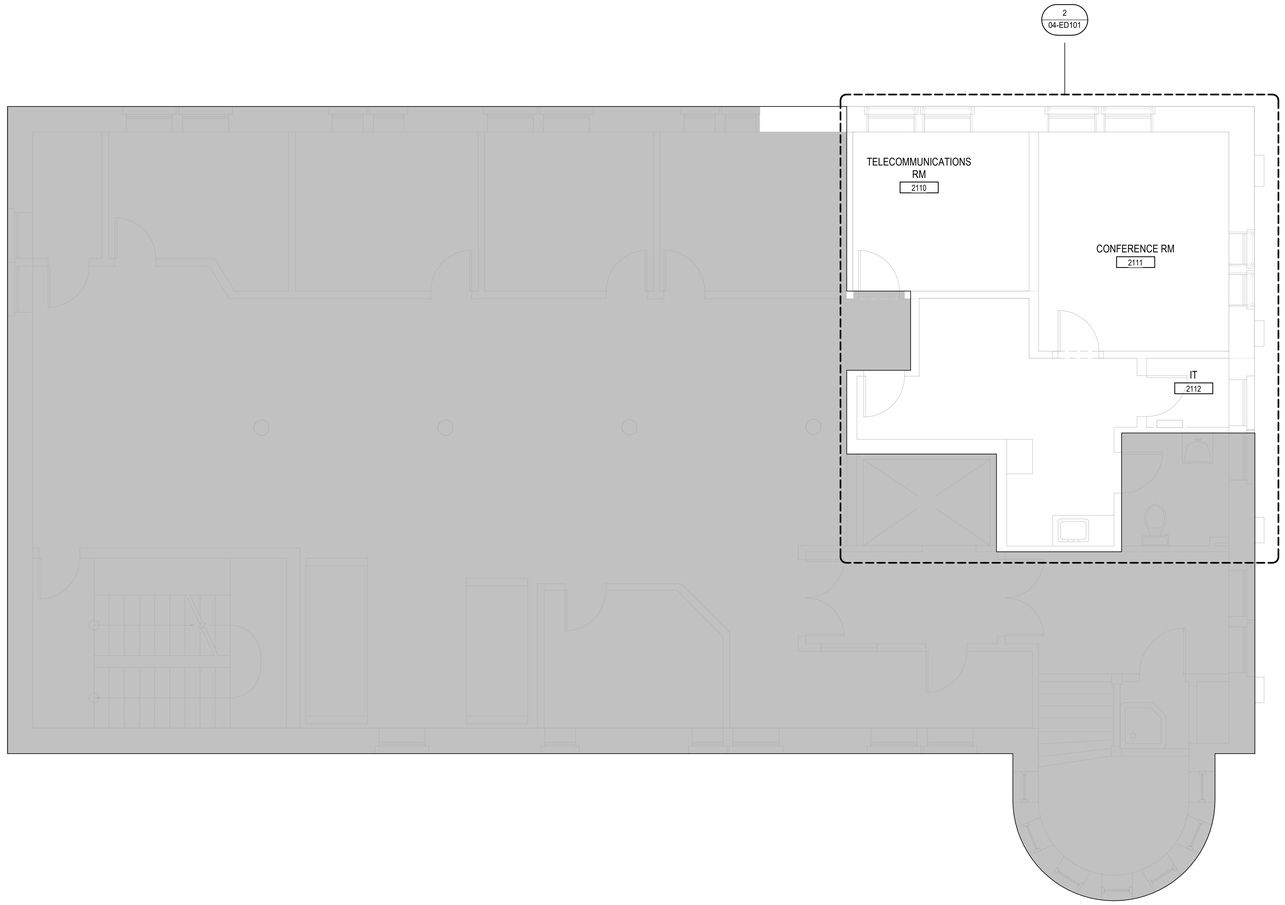
Graphic Scale : 11/8" = 1'-0"
Graphic Scale : 1/8" = 1'-0"
Graphic Scale : 3/32" = 1'-0"
Graphic Scale : 1/4" = 1'-0"
Graphic Scale : 3/16" = 1'-0"
Graphic Scale : 1/2" = 1'-0"
Graphic Scale : 3/4" = 1'-0"
Graphic Scale : 1" = 1'-0"
Graphic Scale : 1 1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

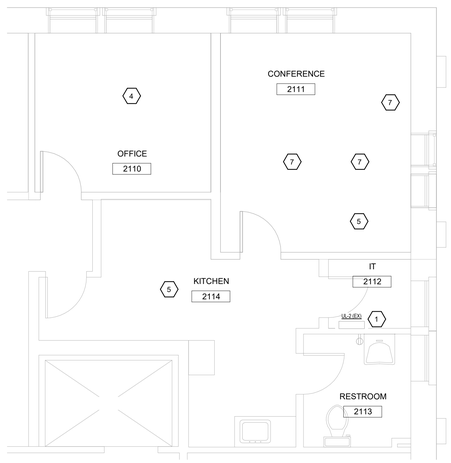
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 4 - SECOND FLOOR - OVERALL ELECTRICAL DEMOLITION
1/4" = 1'-0"



2 BLDG 4 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 2110-2112
1/4" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

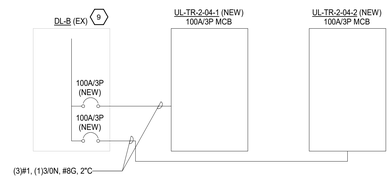
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

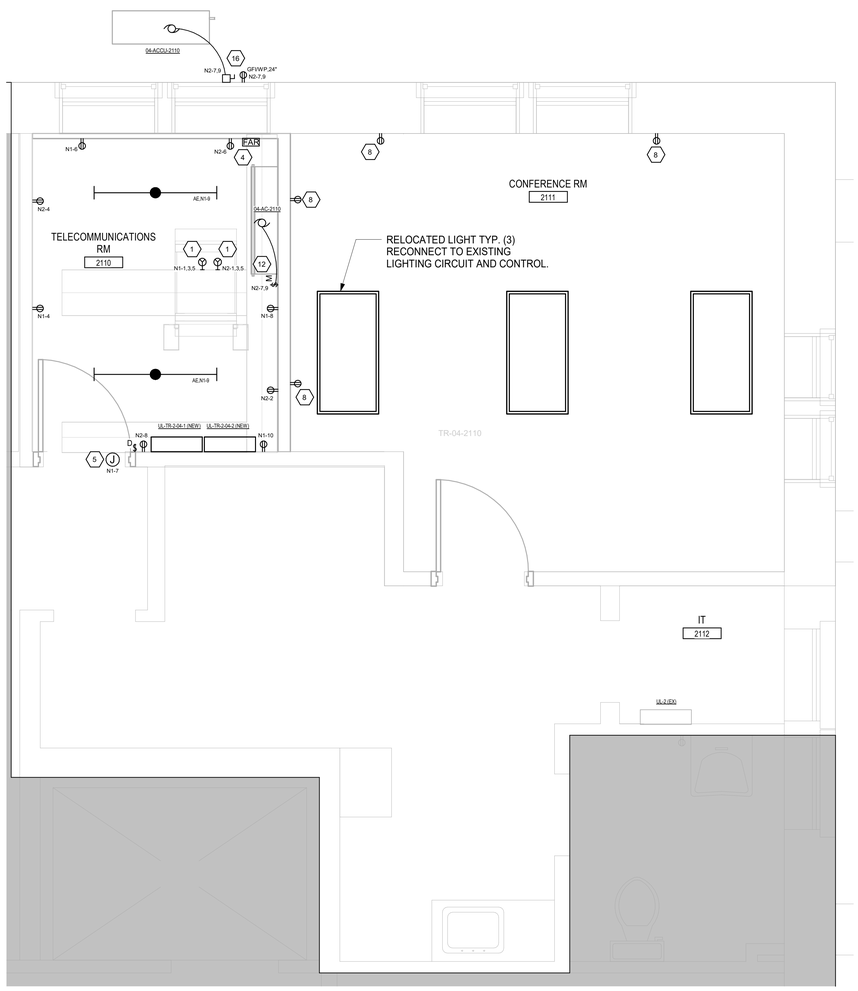
Drawing Title: BLDG 4 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 04
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 04-ED101

VA FORM 08 - 6231

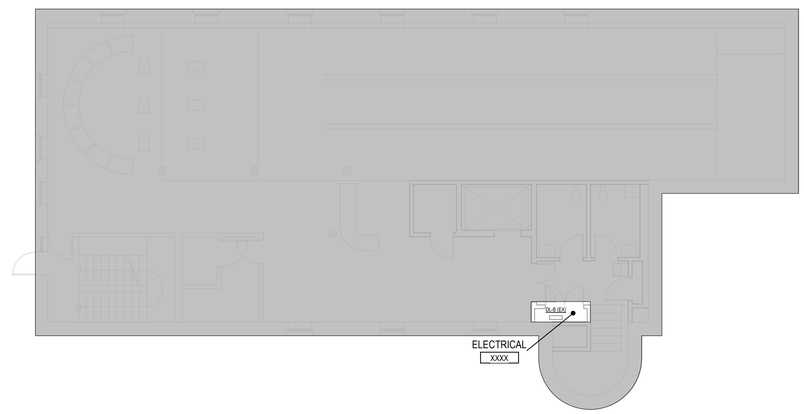
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:23:55 AM



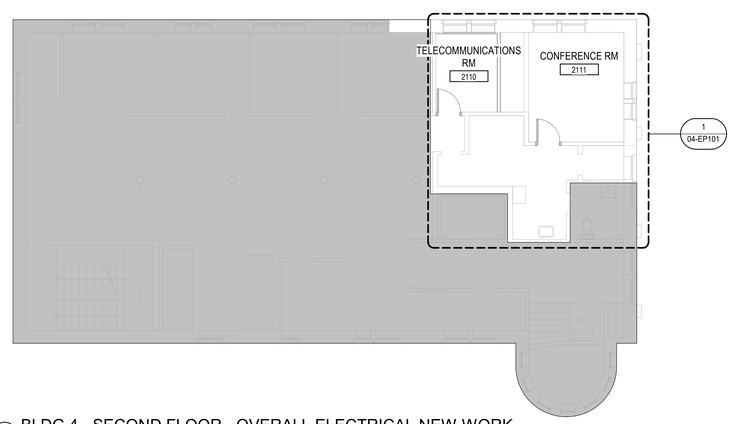
4 BLDG 4 - PARTIAL ONE LINE DIAGRAM
NTS



1 BLDG 4 - SECOND FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 2110-2112
1/2" = 1'-0"



2 BLDG 4 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"



3 BLDG 4 - SECOND FLOOR - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

   208/120V PANEL:
   UL-TR-2-04-1 -NORMAL POWER
   UL-TR-2-04-2 -NORMAL POWER

ELEC. NEW WORK KEYNOTES

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

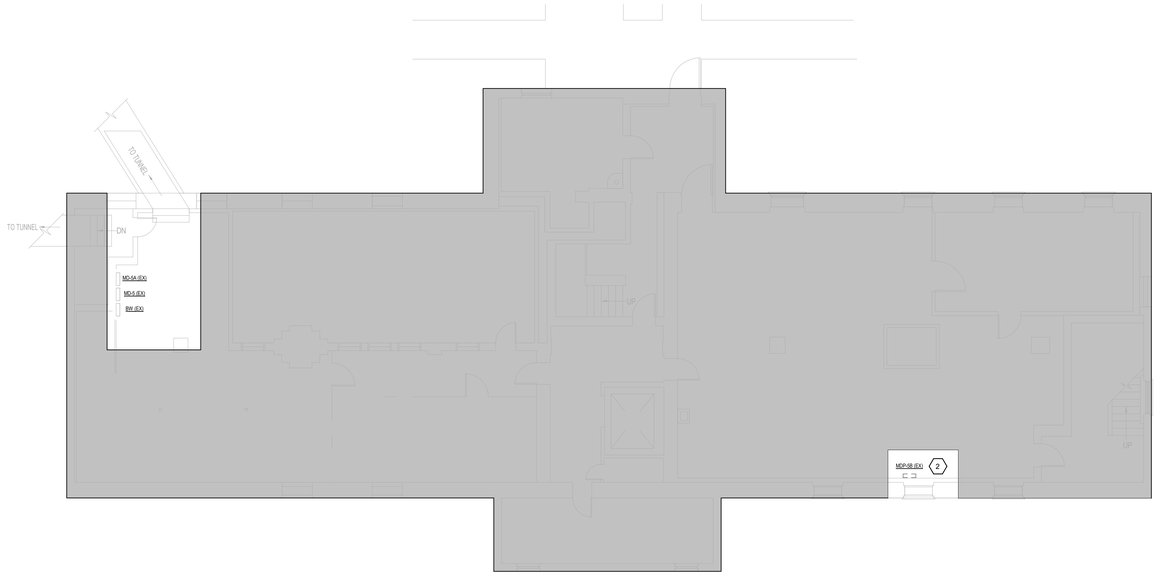
STAMP
PROFESSIONAL ELECTRICAL ENGINEER YUMEI WANG E-11391 STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

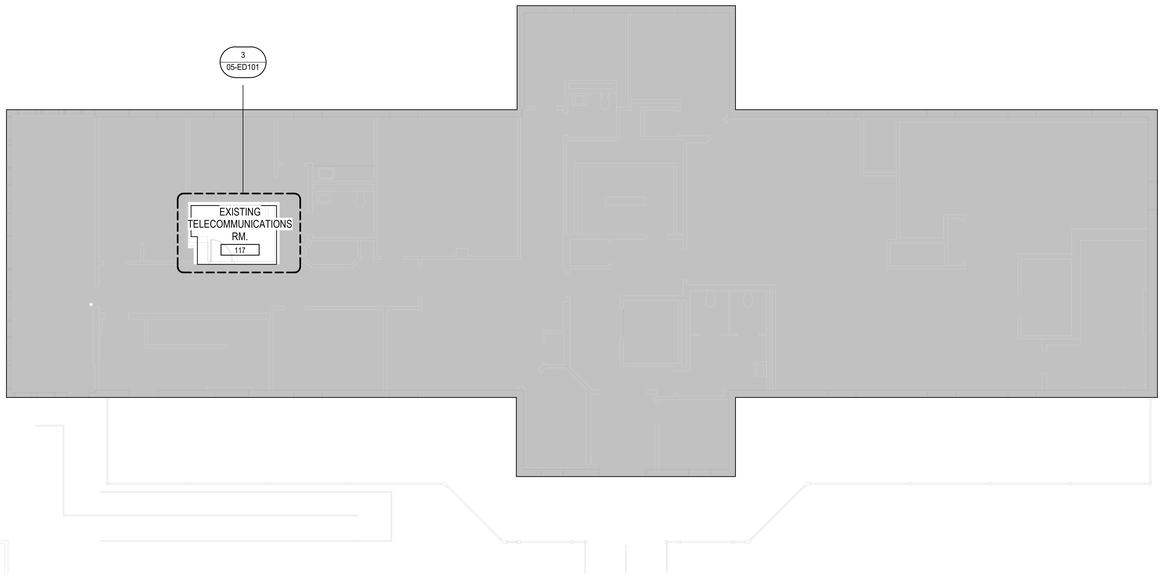
Drawing Title: BLDG 4 - BASEMENT/SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 04
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 04-EP101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

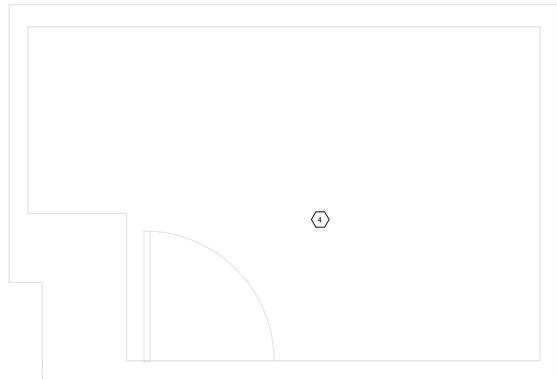
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:25:57 AM



1 BLDG 5 - BASEMENT - OVERALL MECHANICAL NEW WORK
1/8" = 1'-0"



2 BLDG 5 - FIRST FLOOR - OVERALL ELECTICAL DEMOLITION
1/8" = 1'-0"



3 BLDG 5 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 117
3/4" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 5 - BASEMENT/FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL DEMO	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 05
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 05-ED101

VA FORM 08 - 6231

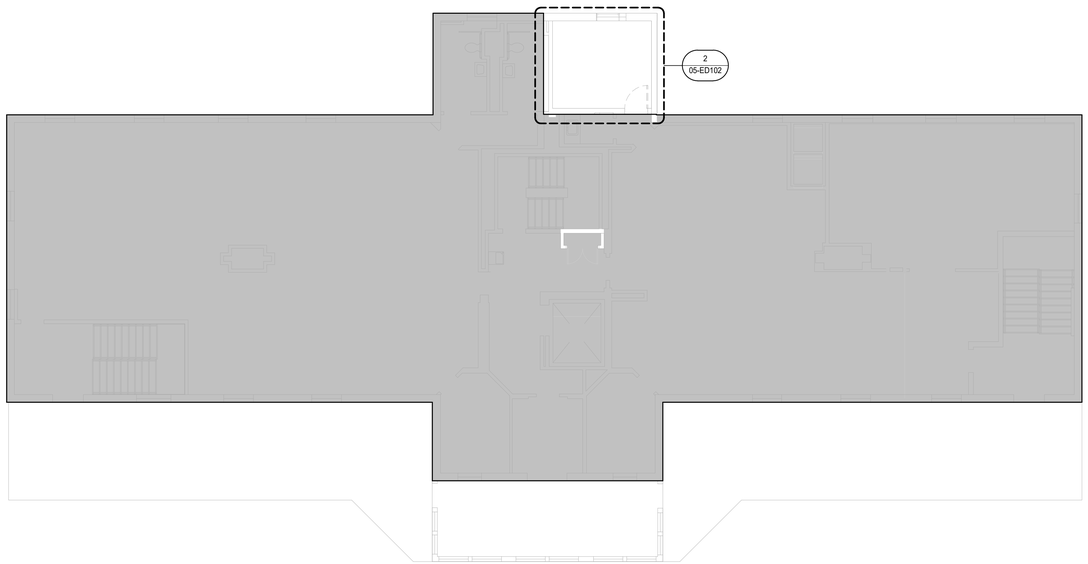
8/28/2025 9:25:59 AM
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

ELEC. DEMO GENERAL NOTES

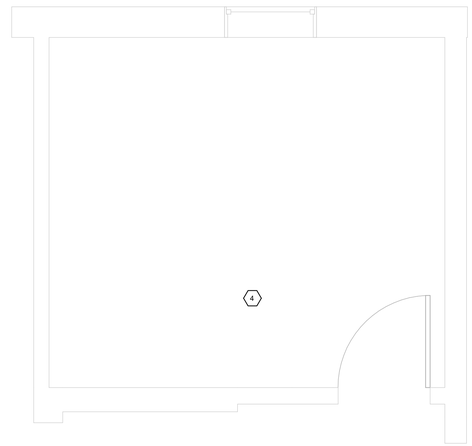
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 5 - SECOND FLOOR - OVERALL ELECTRICAL DEMOLITION
1/8" = 1'-0"



2 BLDG 5 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 204
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Graphic Scale: 3/32" = 1'-0"
Graphic Scale: 1/8" = 1'-0"
Graphic Scale: 1/4" = 1'-0"
Graphic Scale: 3/16" = 1'-0"
Graphic Scale: 1/2" = 1'-0"
Graphic Scale: 3/4" = 1'-0"
Graphic Scale: 1" = 1'-0"
Graphic Scale: 1 1/2" = 1'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 5 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL DEMO

Approved:

Phase: FINAL BID DOCUMENTS

Sprinklered: FULLY SPRINKLERED

Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI

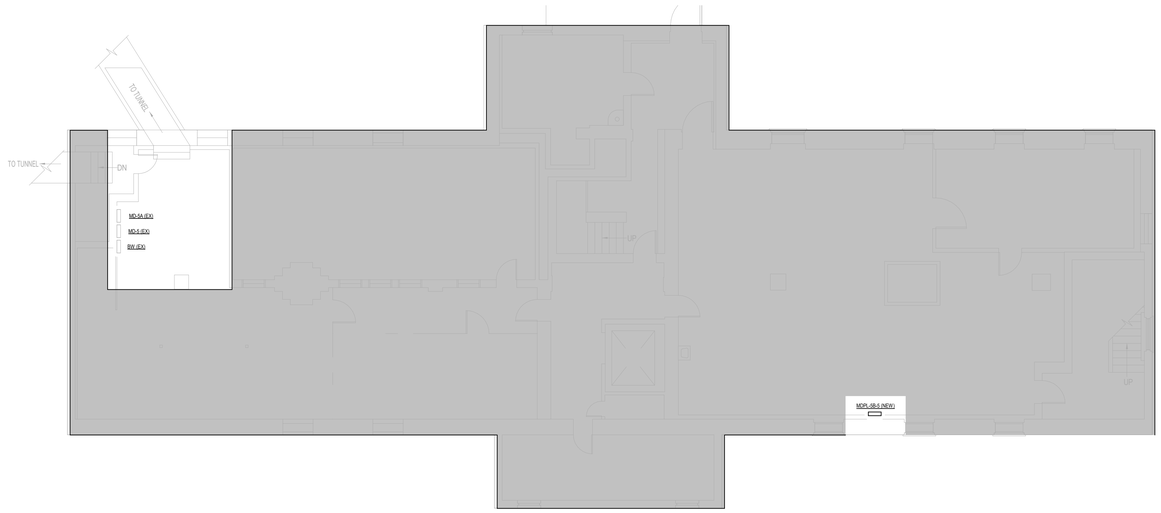
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI

Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM

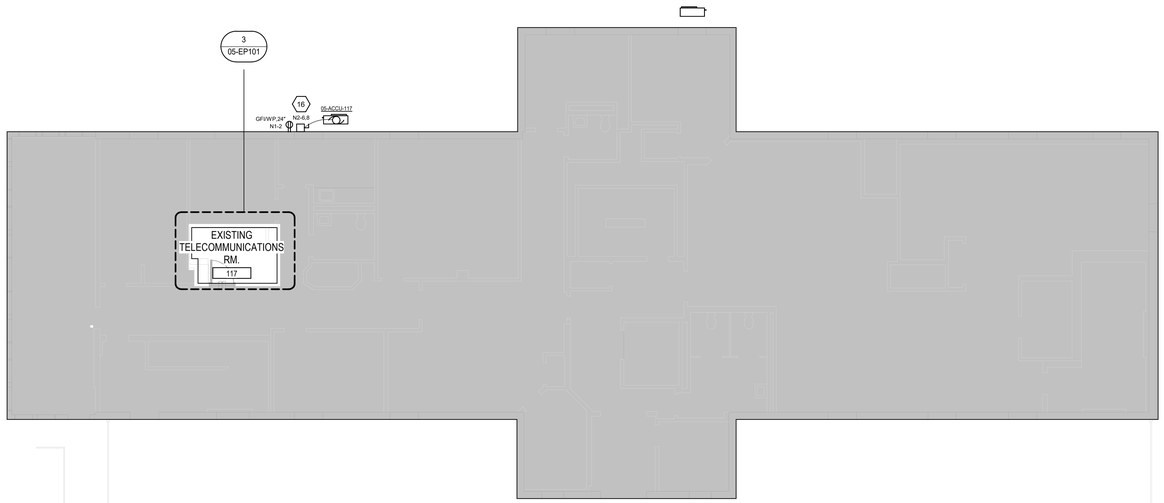
Project Number: 695-21-700
Building Number: 05
Drawing Number: 05-ED102

VA FORM 08 - 6231

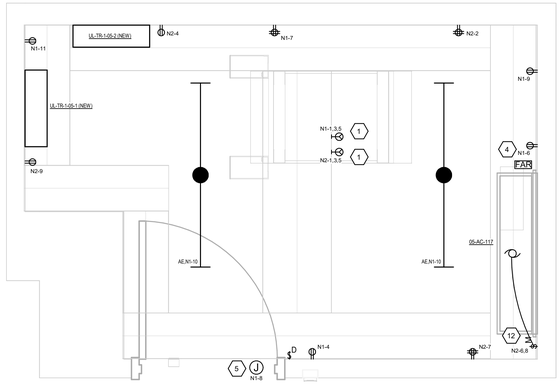
8/28/2025 9:28:00 AM
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt



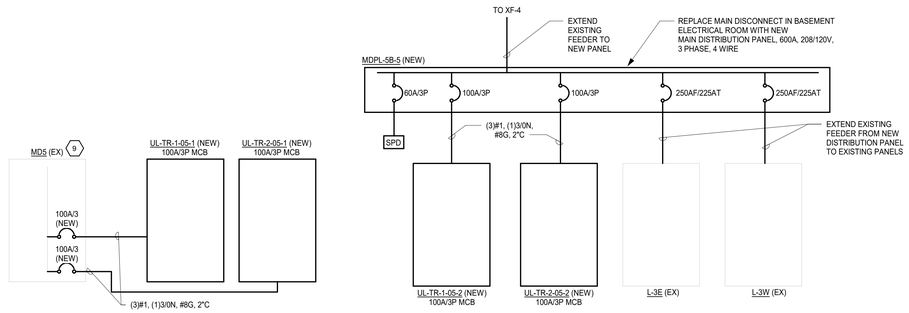
1 BLDG 5 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"



2 BLDG 5 - FIRST FLOOR - OVERALL MECHANICAL NEW WORK
1/8" = 1'-0"



3 BLDG 5 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 117
3/4" = 1'-0"



4 BLDG 5 - FIRST FLOOR - PARTIAL ONE LINE DIAGRAM
1" = 1'-0"

TRUE NORTH
PLAN NORTH

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

   208/120V PANEL:
   UL-TR-2-04-1 -NORMAL POWER
   UL-TR-2-04-2 -NORMAL POWER

ELEC. NEW WORK KEYNOTES

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

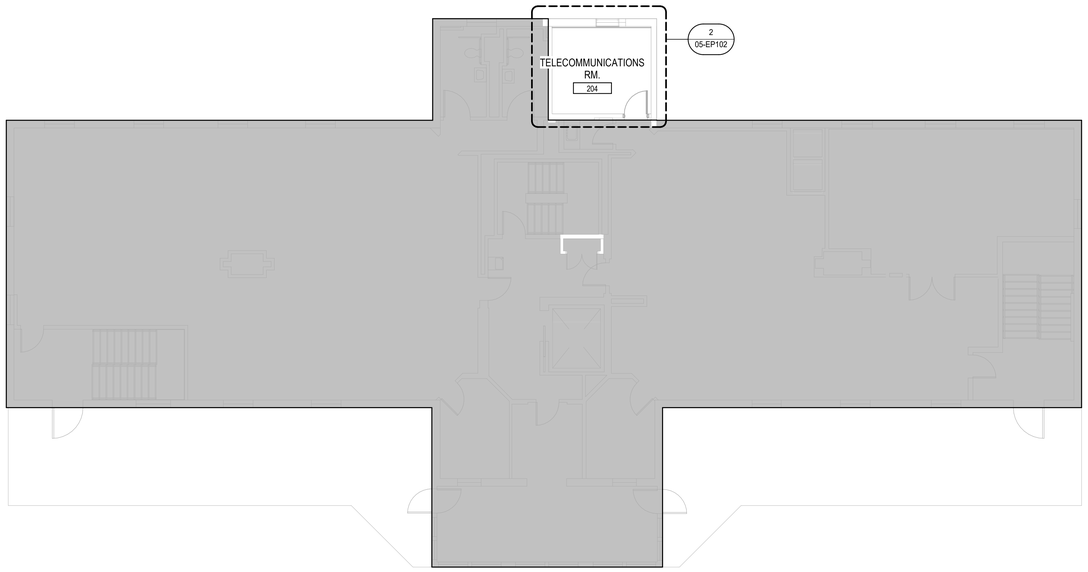
VA U.S. Department of Veterans Affairs

Drawing Title	Phase	Project Title	Project Number
BLDG 5 - BASEMENT/FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	FINAL BID DOCUMENTS	EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 04
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 05-EP101

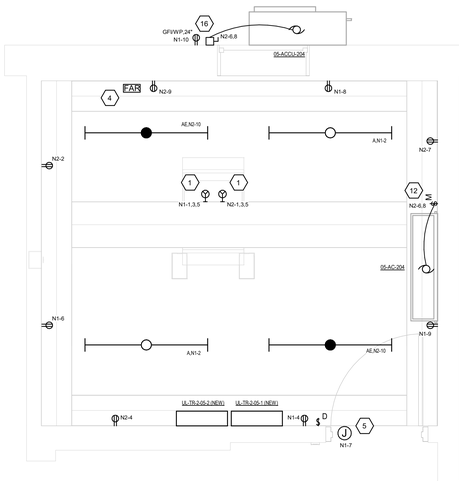
VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

8/28/2025 9:28:02 AM



1 BLDG 5 - SECOND FLOOR - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"



2 RM. 204 ENLARGED PLAN - ELECTRICAL
1/2" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

208/120V PANEL:
UL-TR-2-04-1 -NORMAL POWER
UL-TR-2-04-2 -NORMAL POWER

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1) #10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 5 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 04
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 05-EP102
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

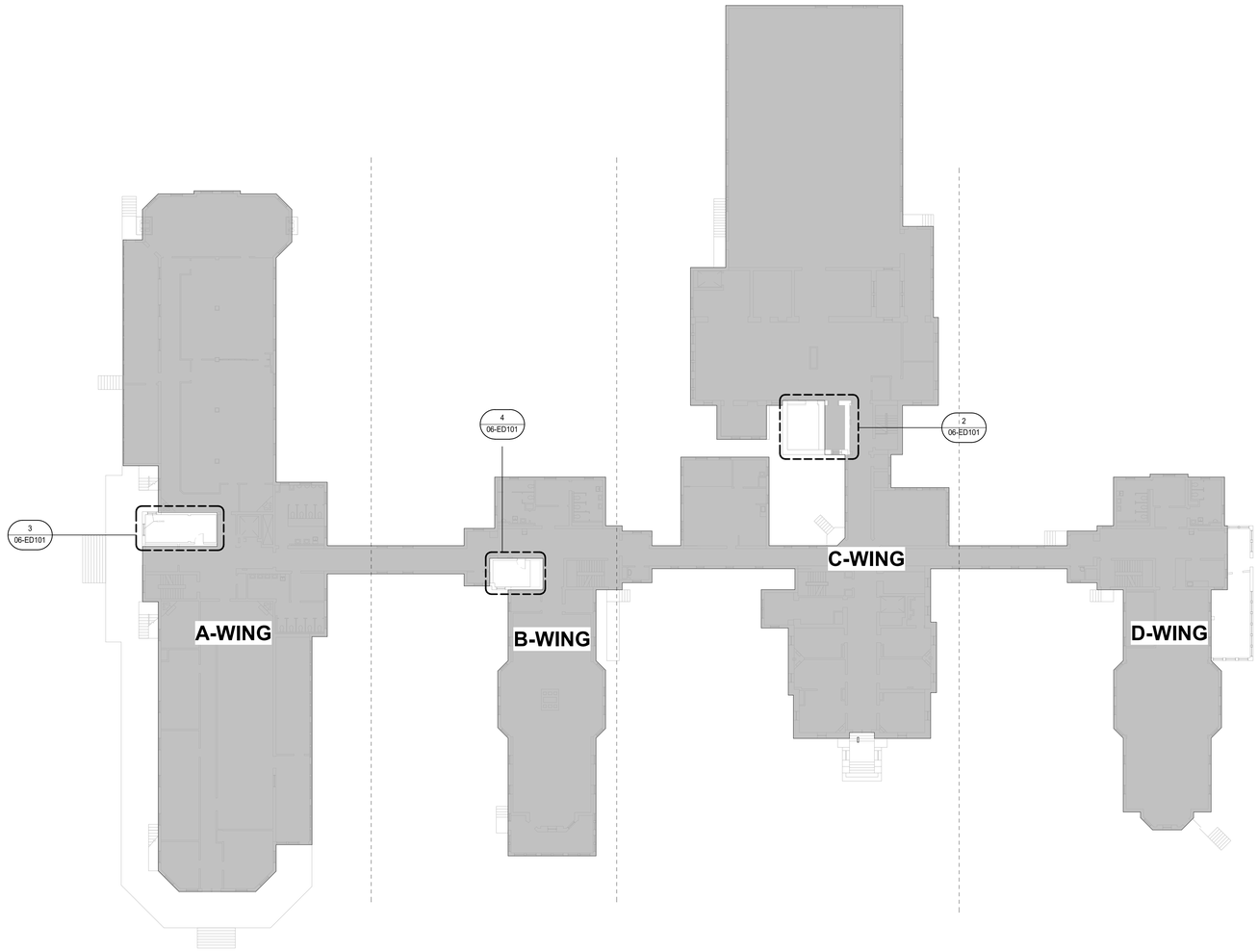
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:03 AM

ELEC. DEMO GENERAL NOTES

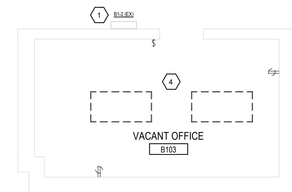
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

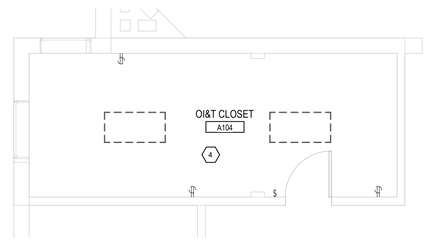
1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



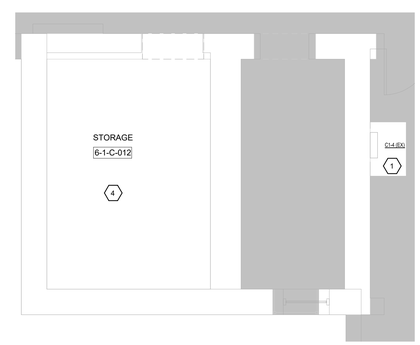
1 BLDG 6 - FIRST FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 20'-0"



4 BLDG 6 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM B103
1/4" = 1'-0"



3 BLDG 6 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM A104
1/4" = 1'-0"



2 BLDG 6 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 6-1-C-012, 6-1-C-013
1/4" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 6 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 06
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 06-ED101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:05 AM

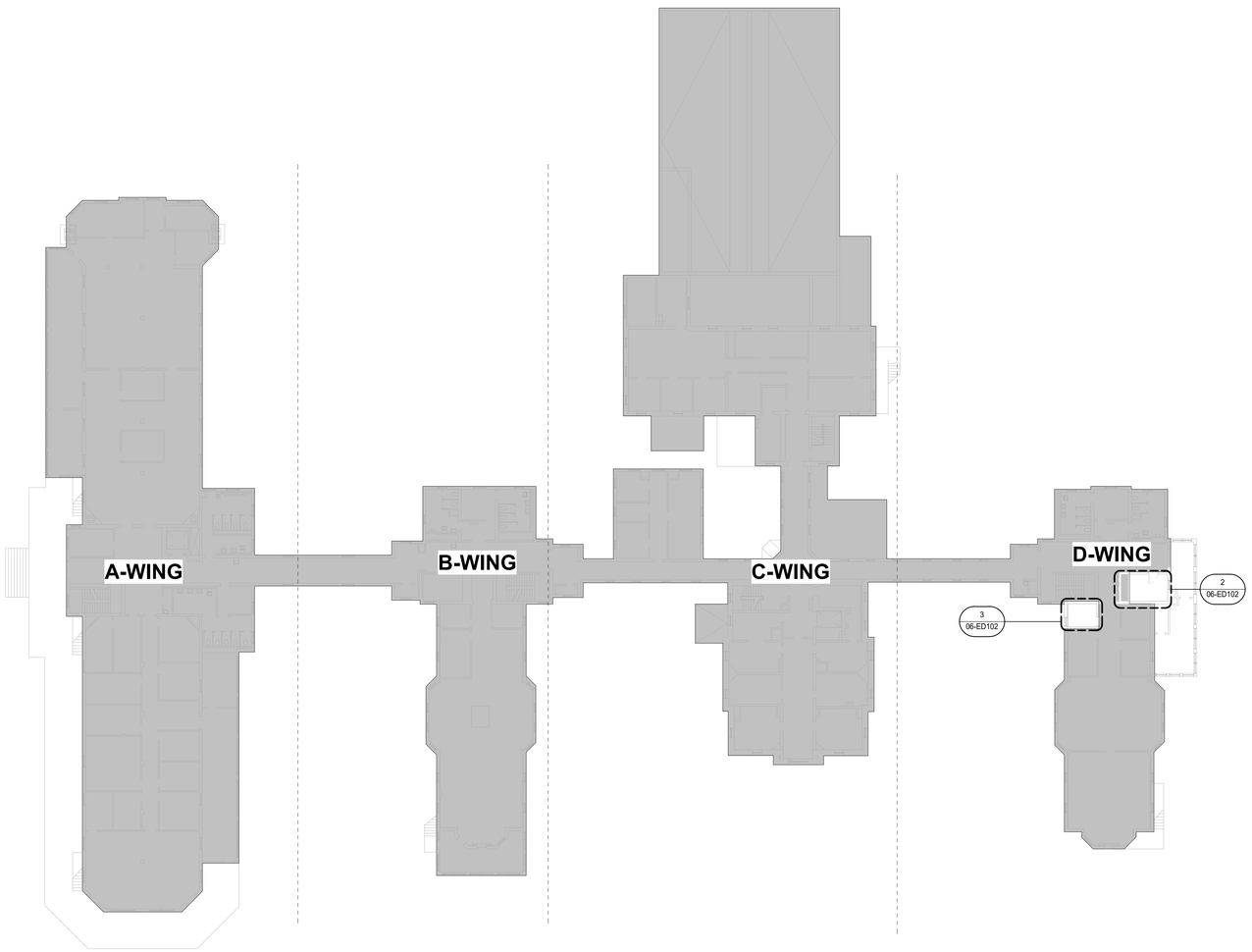
Graphic Scale: 1/16" = 1'-0"
Graphic Scale: 1/8" = 1'-0"
Graphic Scale: 3/32" = 1'-0"
Graphic Scale: 1/4" = 1'-0"
Graphic Scale: 1/2" = 1'-0"
Graphic Scale: 3/4" = 1'-0"
Graphic Scale: 1" = 1'-0"
Graphic Scale: 1 1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

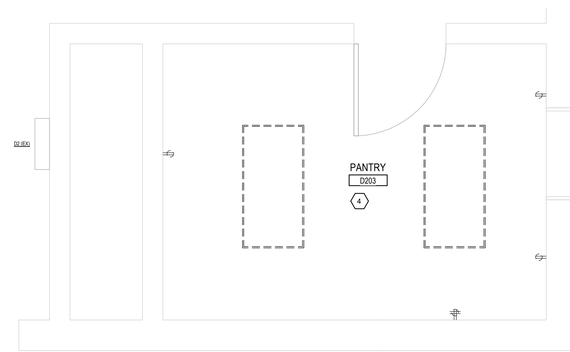
ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 6 - SECOND FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 20'-0"

3 BLDG 6 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM D206
1/2" = 1'-0"



2 BLDG 6 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM D203
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 6 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 06
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 06-ED102

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

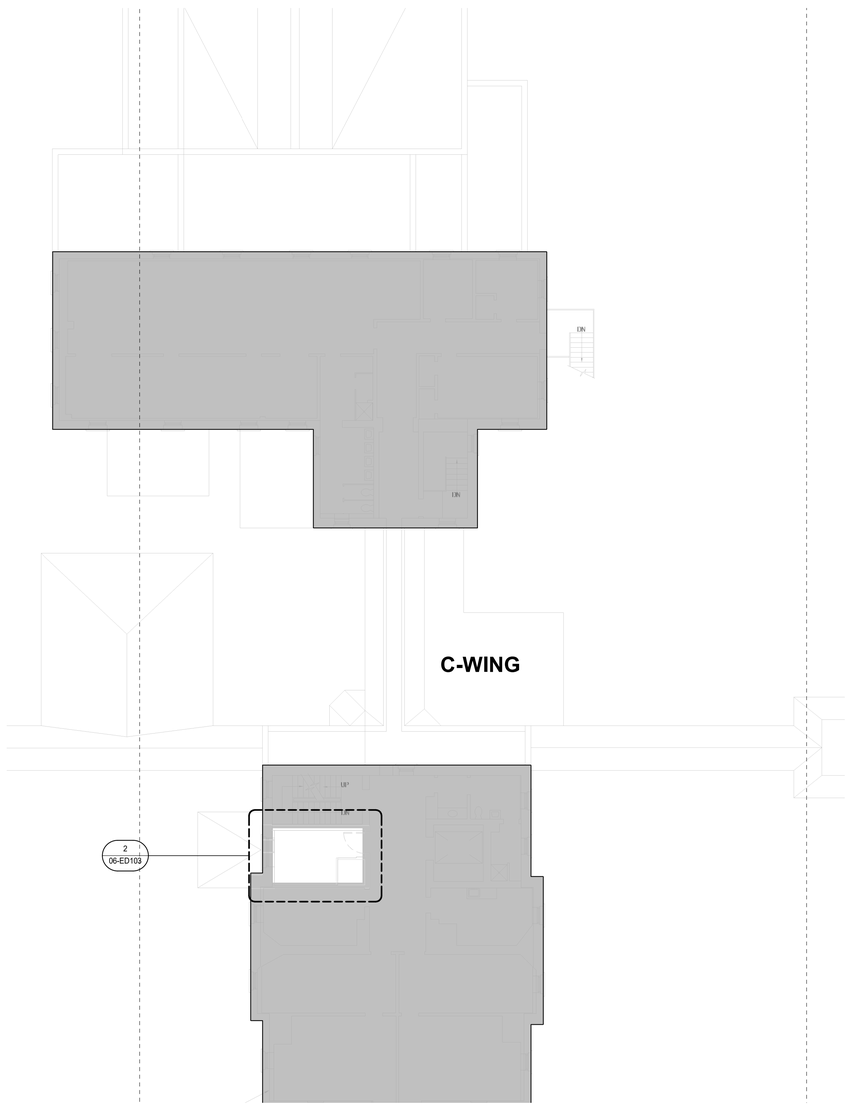
8/28/2025 9:26:06 AM

ELEC. DEMO GENERAL NOTES

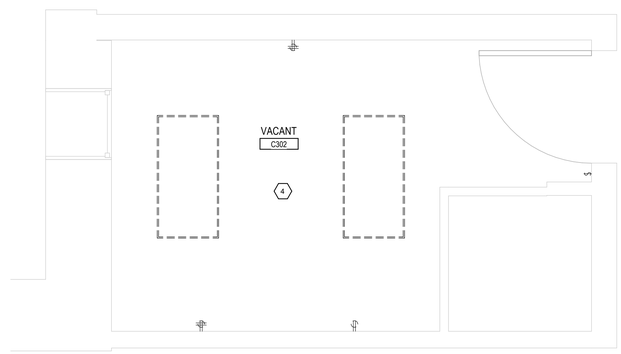
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 6 - THIRD FLOOR - OVERALL ELECTRICAL DEMOLITION
3/32" = 1'-0"



2 BLDG 6 - THIRD FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM C303
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

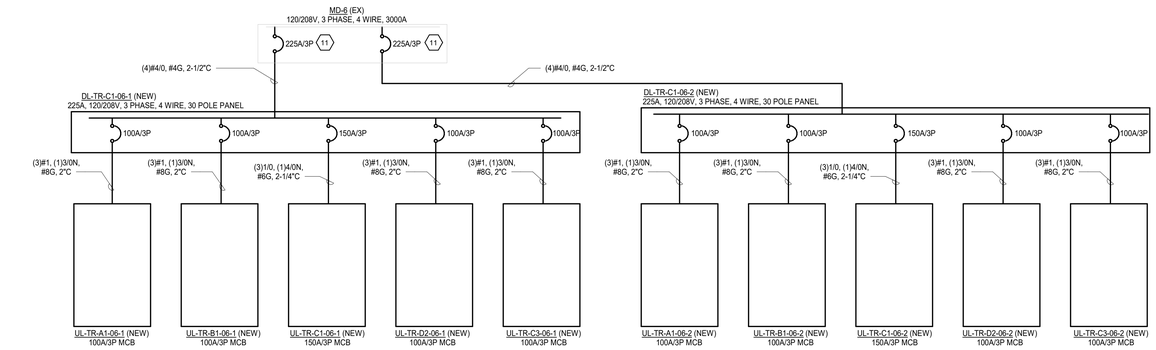
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 6 - THIRD FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 06
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 06-ED103
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

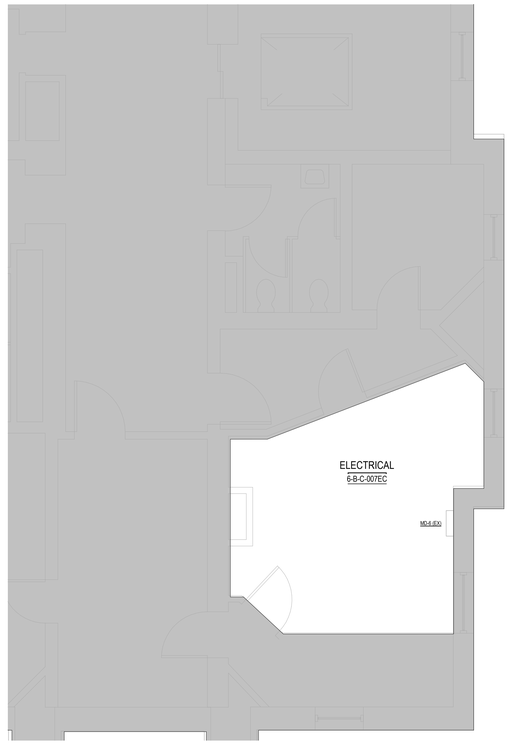
VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:10 AM



3 BLDG 6 - PARTIAL ONE LINE DIAGRAM
NTS

1 BLDG 6 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1" = 20'-0"



2 BLDG 6 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM 6-B-C-007EC
1/4" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3) #12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60A/5N/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30A/5N/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH
0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT
IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD
Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

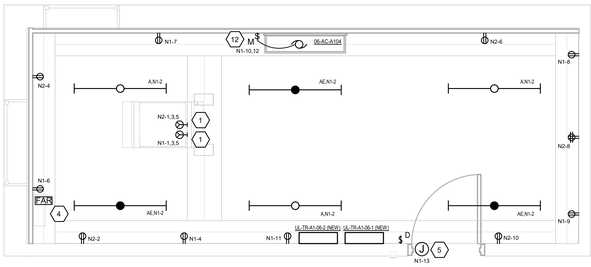
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

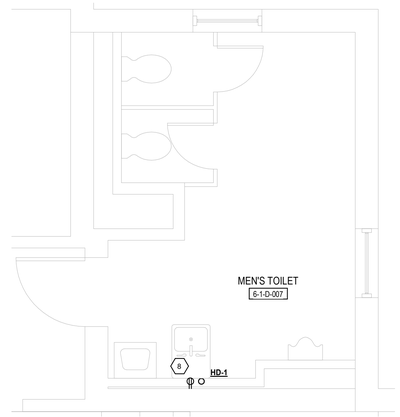
Drawing Title: BLDG 6 - BASEMENT OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 06
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 06-EP100
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:11 AM



5 BLDG 6 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM A104
3/8" = 1'-0"



4 BLDG 6 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 6-1-D-007J
3/8" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

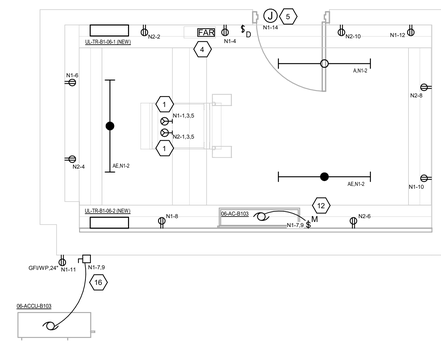
1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

208/120V PANEL
UL-TR-A1-06-1 - NORMAL POWER
UL-TR-A1-06-2 - NORMAL POWER
UL-TR-B1-06-1 - NORMAL POWER
UL-TR-B1-06-2 - NORMAL POWER
UL-TR-C1-06-1 - NORMAL POWER
UL-TR-C1-06-2 - NORMAL POWER

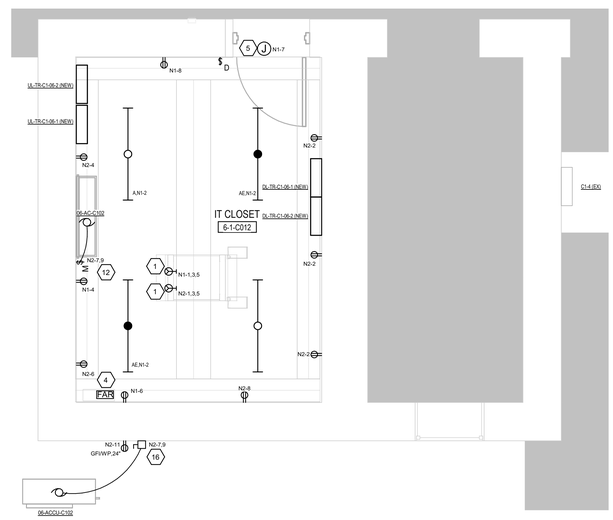
ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60A5NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30A5NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

1 BLDG 6 - FIRST FLOOR - OVERALL ELECTRICAL NEW WORK
1" = 20'-0"



3 BLDG 6 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM B103
3/8" = 1'-0"



2 BLDG 6 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 6-1-C-012
3/8" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

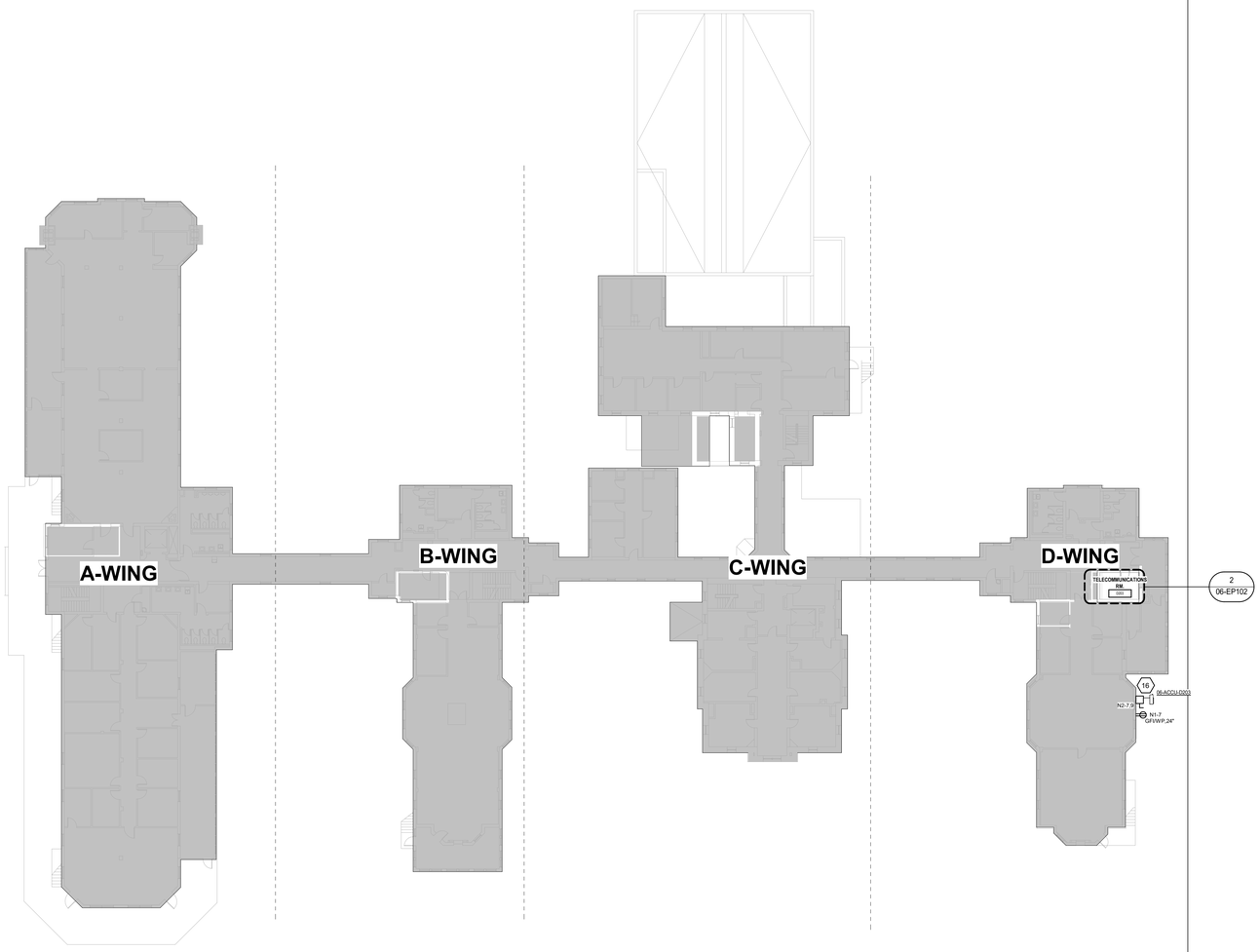
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

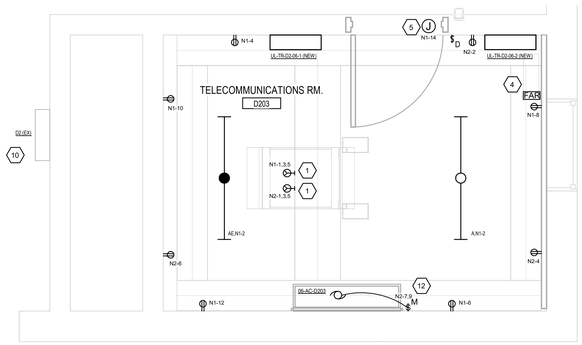
Drawing Title: BLDG 6 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 06
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 06-EP101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:14 AM



1 BLDG 6 - SECOND FLOOR - OVERALL ELECTRICAL NEW WORK
1" = 20'-0"



2 BLDG 6 - SECOND FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM D203
1/2" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

<u>208/120V PANEL</u>
UL-TR-2-06-1 - NORMAL POWER
UL-TR-2-06-2 - NORMAL POWER

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD .
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 6 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 06
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 06-EP102
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:16 AM

Graphic Scale : 1/8" = 1'-0"
Graphic Scale : 3/32" = 1'-0"
Graphic Scale : 1/4" = 1'-0"
Graphic Scale : 3/16" = 1'-0"
Graphic Scale : 1/2" = 1'-0"
Graphic Scale : 3/4" = 1'-0"
Graphic Scale : 1" = 1'-0"
Graphic Scale : 1 1/2" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

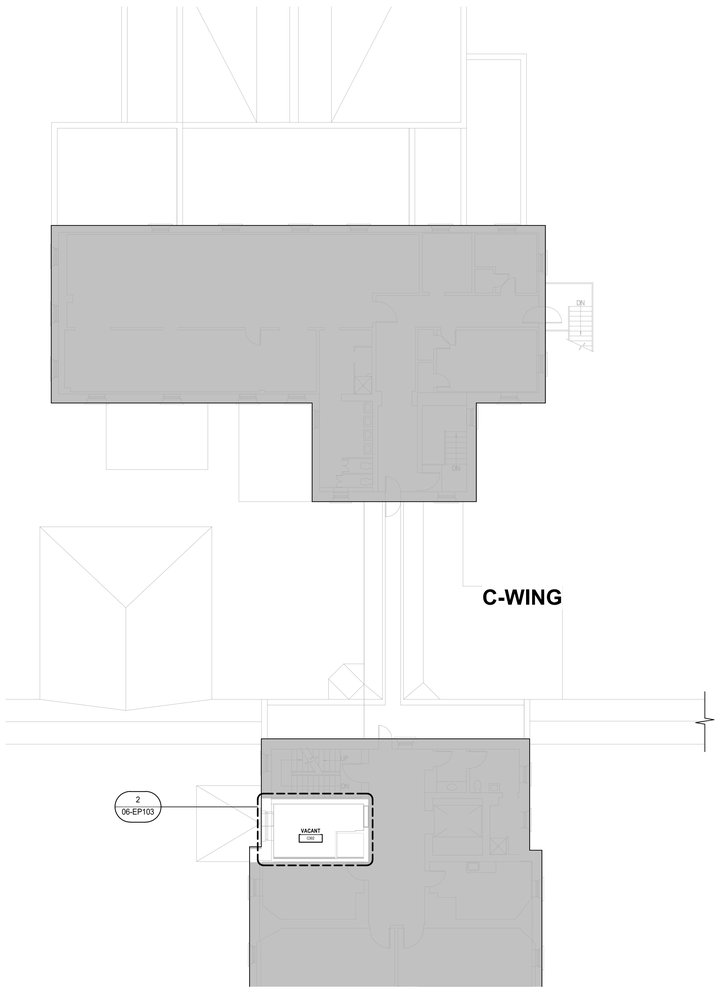
BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

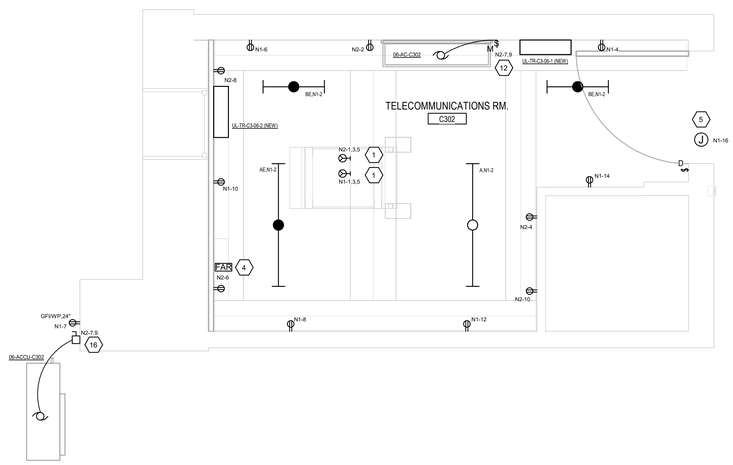
   208/120V PANEL:
   UL-TR-3-06-1 - NORMAL POWER
   UL-TR-3-06-2 - NORMAL POWER

ELEC. NEW WORK KEYNOTES (#)

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.



1 BLDG 6 - THIRD FLOOR - OVERALL ELECTRICAL NEW WORK
3/32" = 1'-0"



2 BLDG 6 - THIRD FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM C303
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

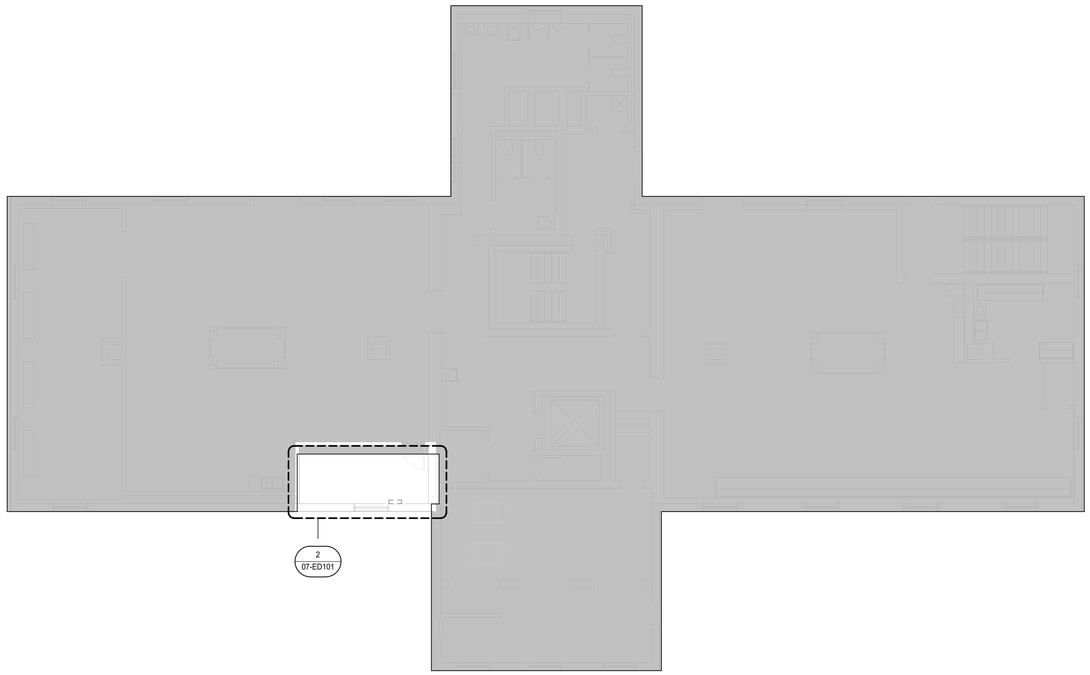
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 6 - THIRD FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI		Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI		Building Number: 06
		Issue Date: SEPTEMBER 5, 2025	Checked: YW / Drawn: SM	Drawing Number: 06-EP103

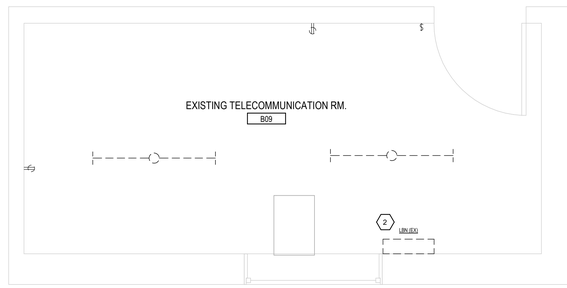
VA FORM 08 - 6231

8/28/2025 9:26:17 AM

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt



1 BLDG 7 - BASEMENT - OVERALL ELECTRICAL DEMOLITION
1/8" = 1'-0"



2 BLDG 7 - BASEMENT - ENLARGED ELECTRICAL DEMOLITION - ROOM B09
1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

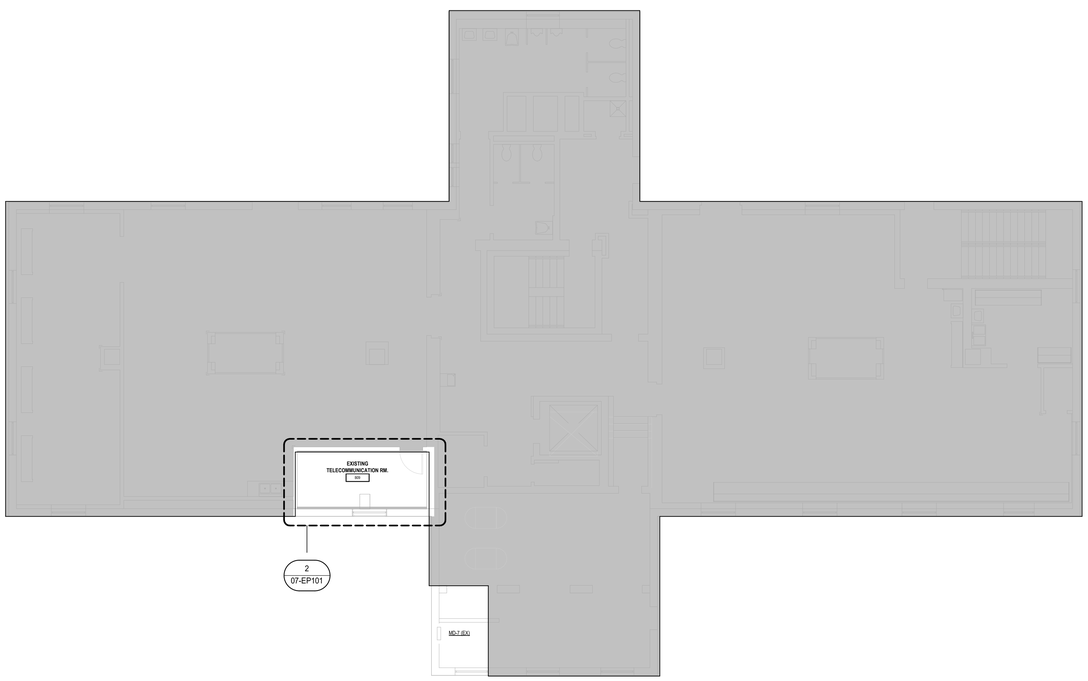
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

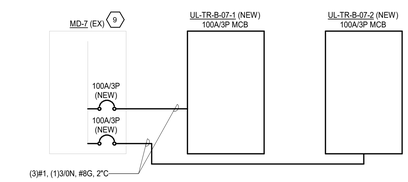
Drawing Title: BLDG 7 - BASEMENT OVERALL & ENLARGED - ELECTRICAL DEMO	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 07
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 07-ED101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

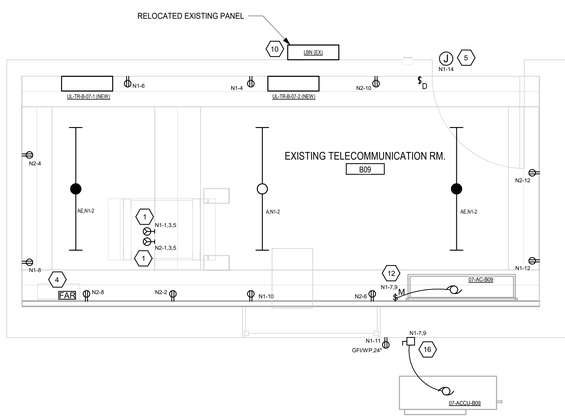
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:28:19 AM



1 BLDG 7 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"



3 BLDG 7 - BASEMENT - PARTIAL ONE LINE DIAGRAM
NTS



2 BLDG 7 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM B09
1/2" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

208/120V PANEL:
UL-TR-1-07-1 - NORMAL POWER
UL-TR-1-07-2 - NORMAL POWER

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 7 - BASEMENT OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 07
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 07-EP101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

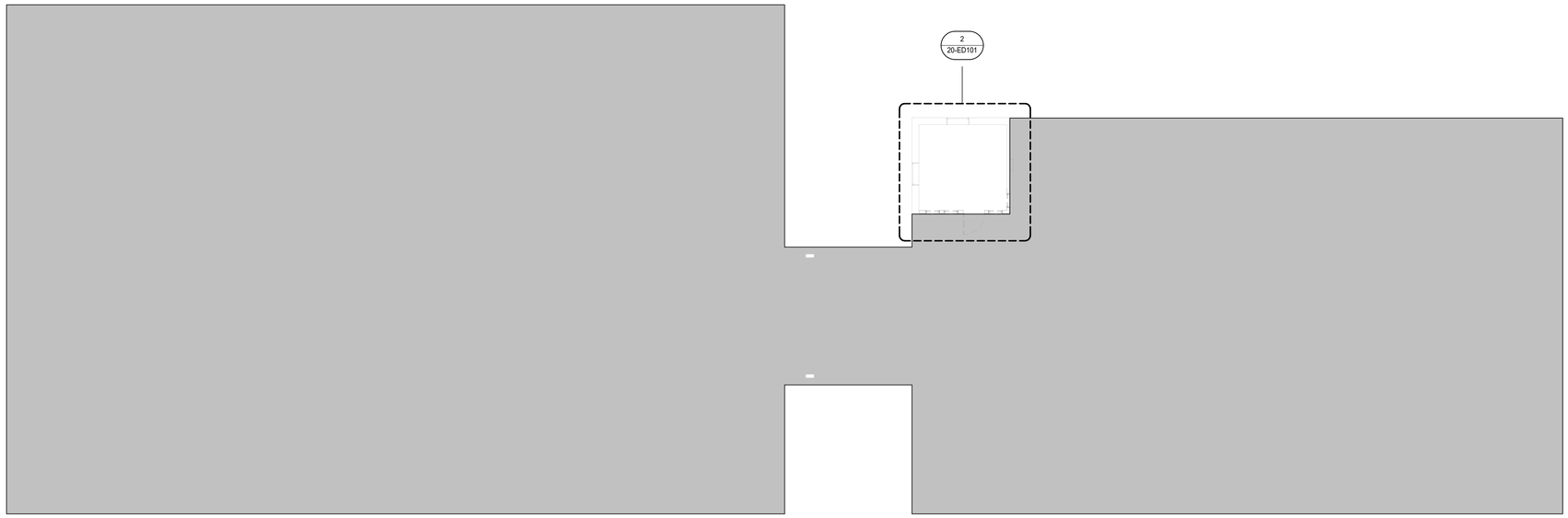
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:21 AM

ELEC. DEMO GENERAL NOTES

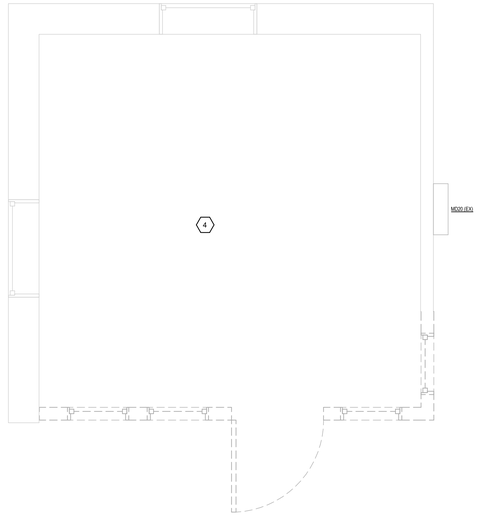
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 20 - SECOND FLOOR - OVERALL ELECTRICAL DEMOLITION
1/8" = 1'-0"



2 BLDG 20 - SECOND FLOOR - OVERALL ELECTRICAL DEMOLITION
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

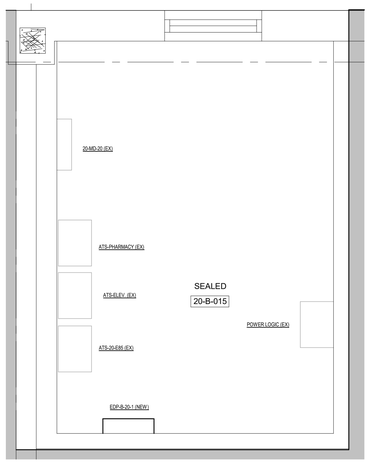
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

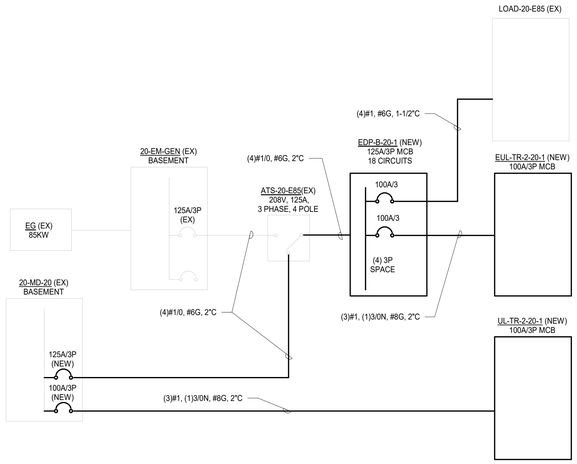
Drawing Title: BLDG 20 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL DEMO	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 07
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 20-ED101

VA FORM 08 - 6231

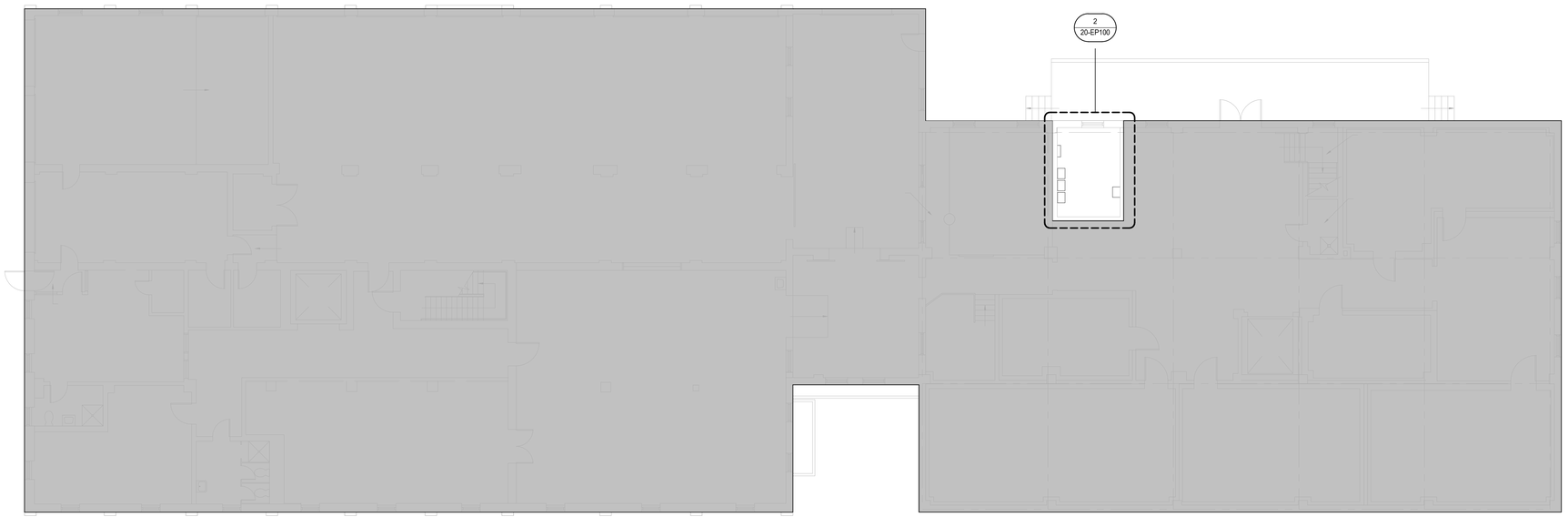
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:22 AM



2 BLDG 20 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM 20-B-014
1/2" = 1'-0"



3 BLDG 20 - PARTIAL ONE LINE DIAGRAM
NTS



1 BLDG 20 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 LS-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT
IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD
Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

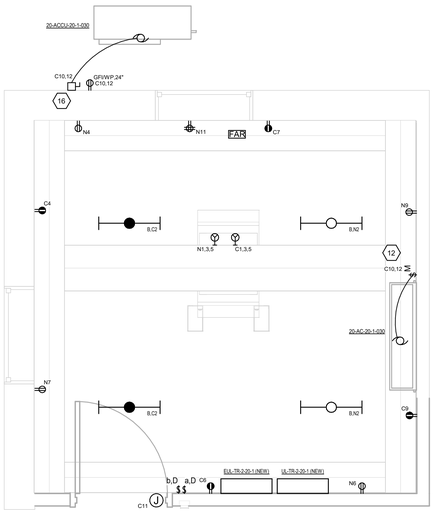
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

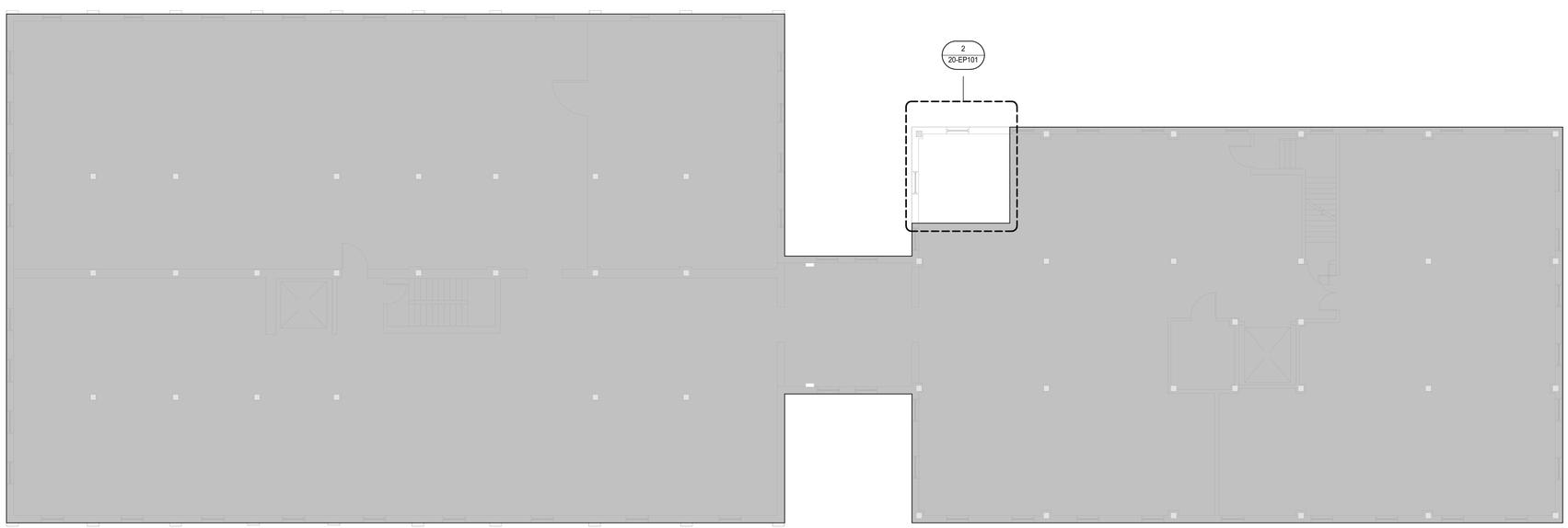
Drawing Title: BLDG 20 - BASEMENT OVERALL & ENLARGED - ELECTRICAL NEW WORK
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 20
Drawing Number: 20-EP100

VA FORM 08 - 6231

8/28/2025 9:26:24 AM
Autodesk Docs://OCFN East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt



2 BUILDING 20 - SECOND FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 20-1-030
1/2" = 1'-0"



1 BUILDING 20 - SECOND FLOOR - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1) #10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 20 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 20
Drawing Number: 20-EP101

VA FORM 08 - 6231

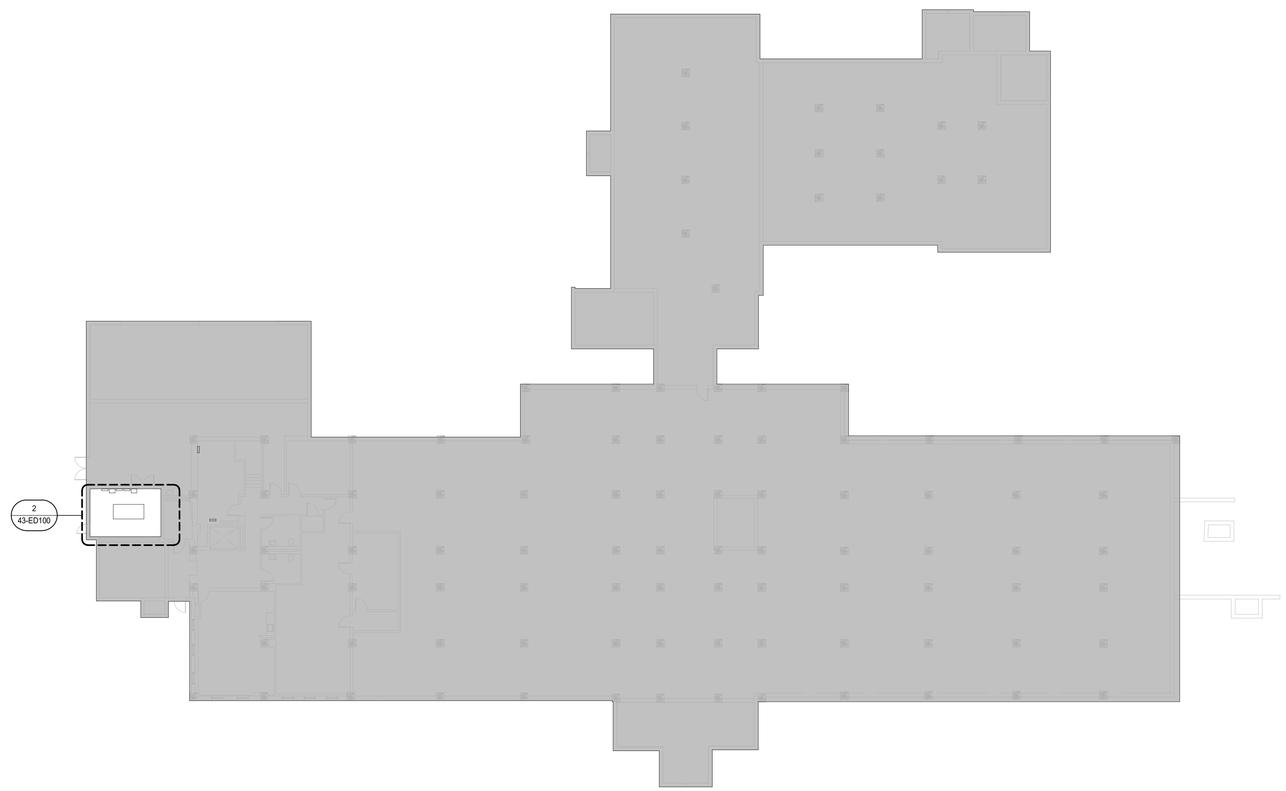
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:25 AM

ELEC. DEMO GENERAL NOTES

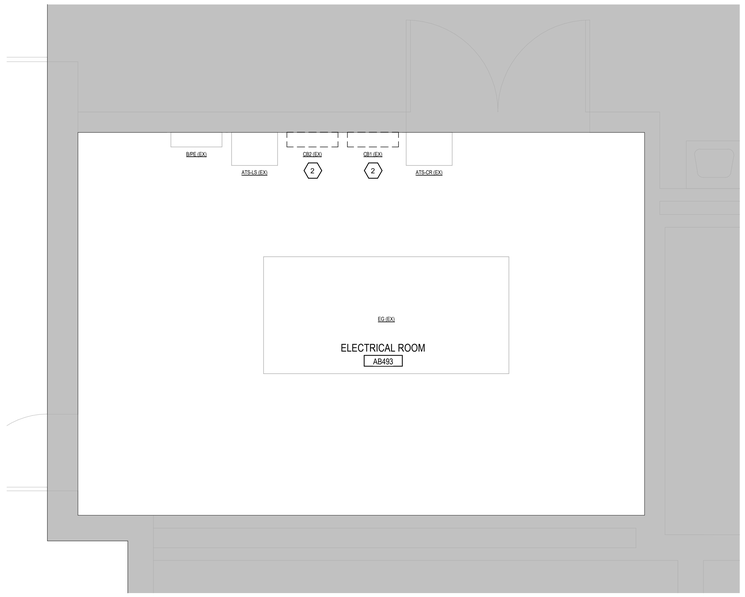
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1. EXISTING PANEL TO REMAIN.
2. DISCONNECT AND REMOVE PANEL.
3. NO WORK IN SPACE.
4. REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5. DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6. DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7. LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8. CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9. DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10. PULLBOX AND CONDUIT TO REMAIN.
11. DISCONNECT AND REMOVE ABANDONED PANELS.
12. EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 43 - BASEMENT - OVERALL ELECTRICAL DEMOLITION
1/16" = 1'-0"



2 BLDG 43 - BASEMENT - ENLARGED ELECTRICAL DEMOLITION - ROOM AB94C
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 43 - BASEMENT - OVERALL & ENLARGED - ELECTRICAL DEMO	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 43
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 43-ED100

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

8/28/2025 9:26:27 AM

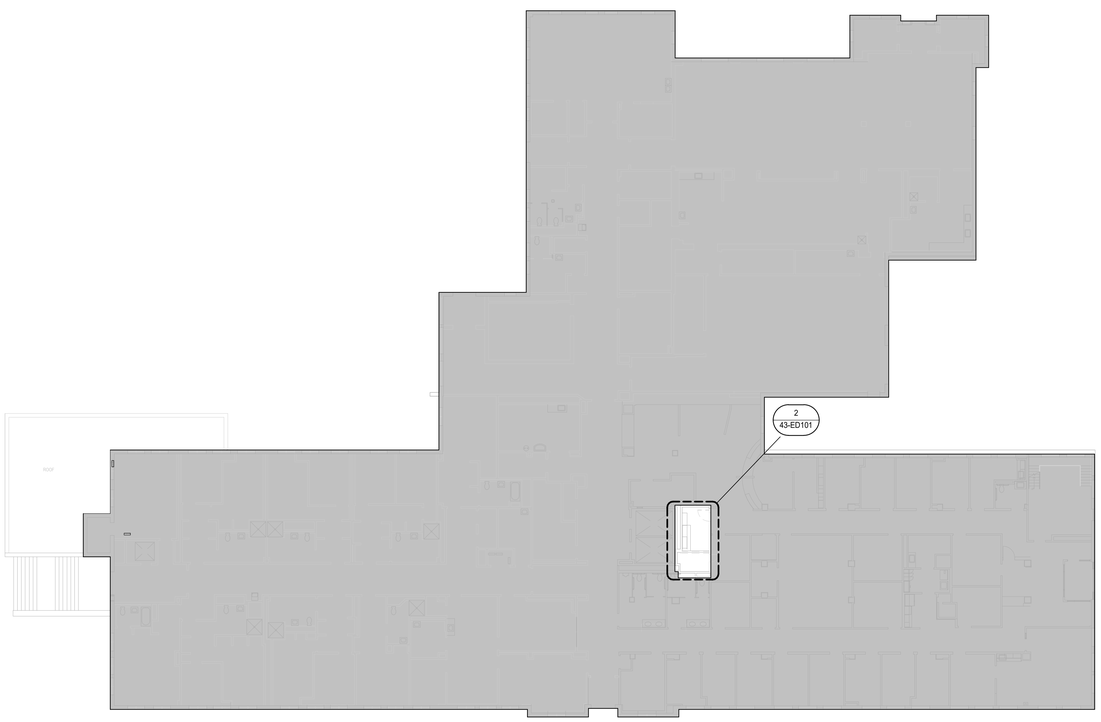
Graphic Scale: 3/16" = 1'-0"
Graphic Scale: 1/8" = 1'-0"
Graphic Scale: 3/32" = 1'-0"
Graphic Scale: 1/4" = 1'-0"
Graphic Scale: 1/2" = 1'-0"
Graphic Scale: 3/4" = 1'-0"
Graphic Scale: 1" = 1'-0"
Graphic Scale: 1 1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

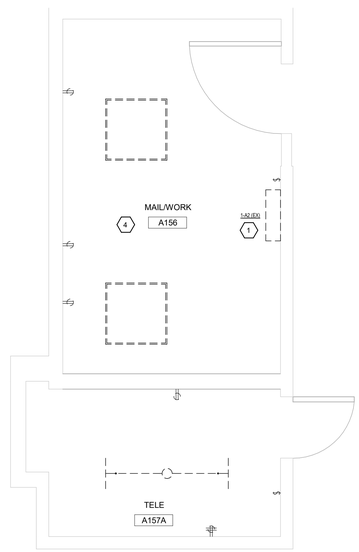
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 43 - FIRST FLOOR - OVERALL ELECTRICAL DEMOLITION
1/16" = 1'-0"



2 BLDG 43 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM A156,A157A
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

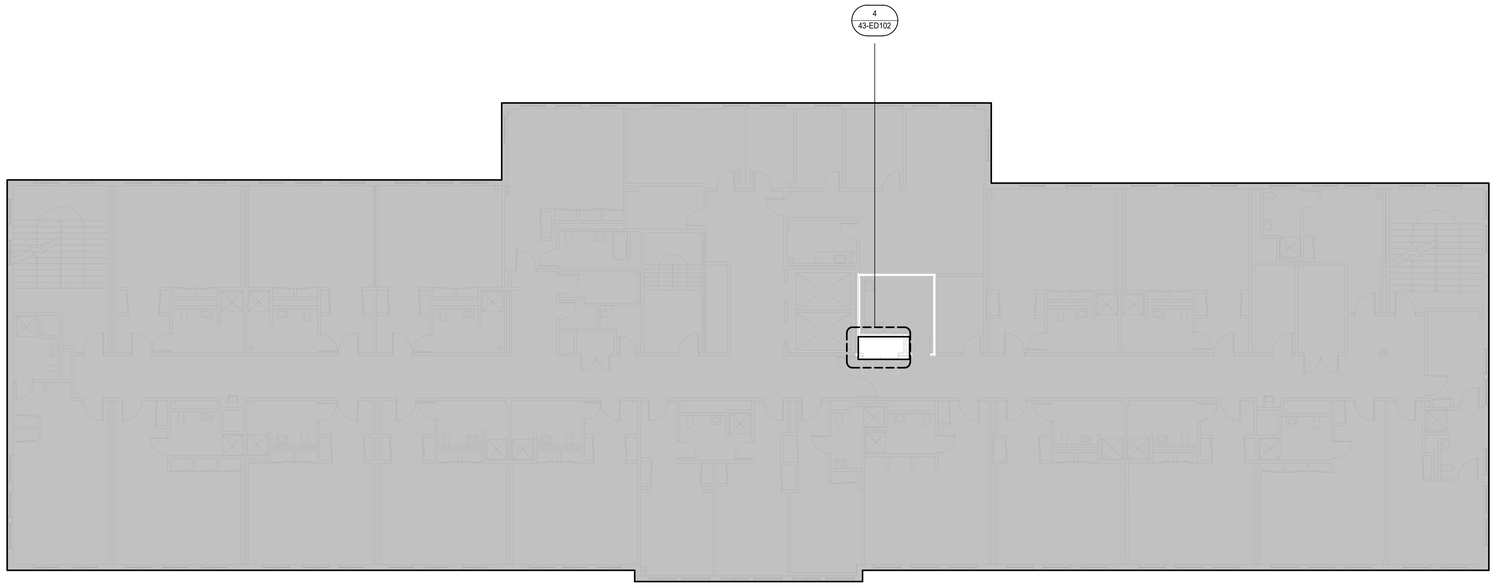
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 43 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL DEMO	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 43
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 43-ED101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

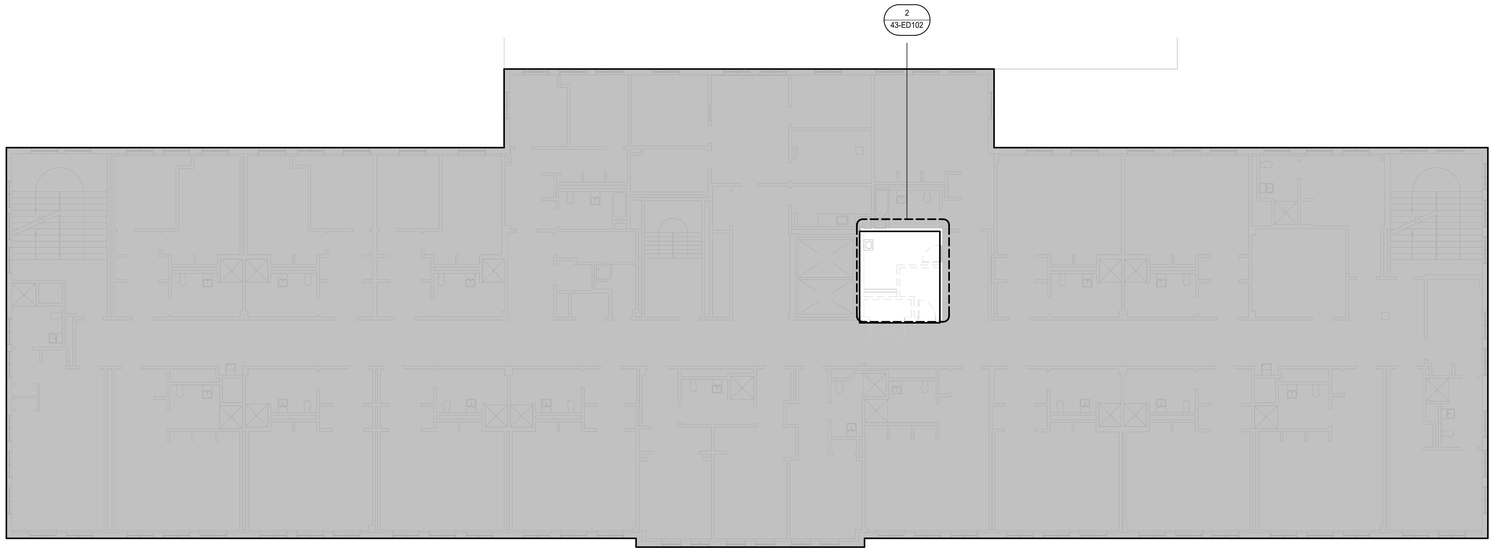
VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:28:29 AM

Graphic Scale: 3/2" = 1'-0"
Graphic Scale: 1/16" = 1'-0"
Graphic Scale: 1/8" = 1'-0"
Graphic Scale: 3/32" = 1'-0"
Graphic Scale: 1/4" = 1'-0"
Graphic Scale: 3/16" = 1'-0"
Graphic Scale: 1/2" = 1'-0"
Graphic Scale: 3/4" = 1'-0"
Graphic Scale: 1" = 1'-0"
Graphic Scale: 1 1/2" = 1'-0"



3 BLDG 43 - THIRD FLOOR - OVERALL ELECTRICAL DEMOLITION
3/32" = 1'-0"



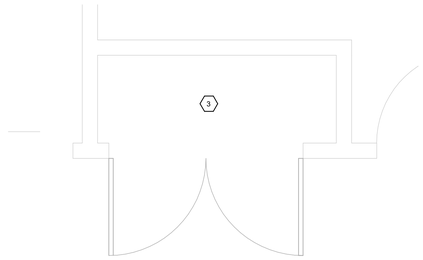
1 BLDG 43 - SECOND FLOOR - OVERALL ELECTRICAL DEMOLITION
3/32" = 1'-0"

ELEC. DEMO GENERAL NOTES

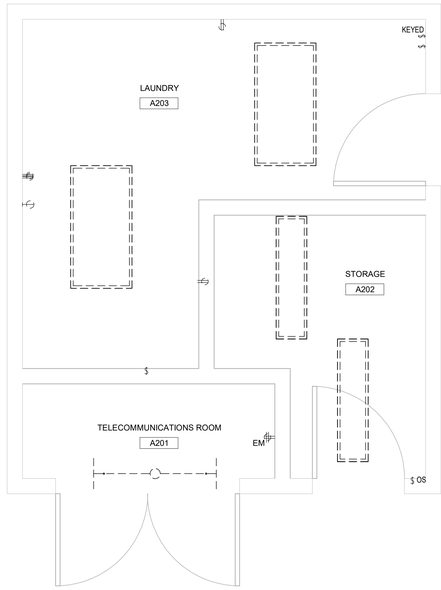
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



4 BLDG 43 - THIRD FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM A303
1/2" = 1'-0"



2 BLDG 43 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM A201, A202, A203
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

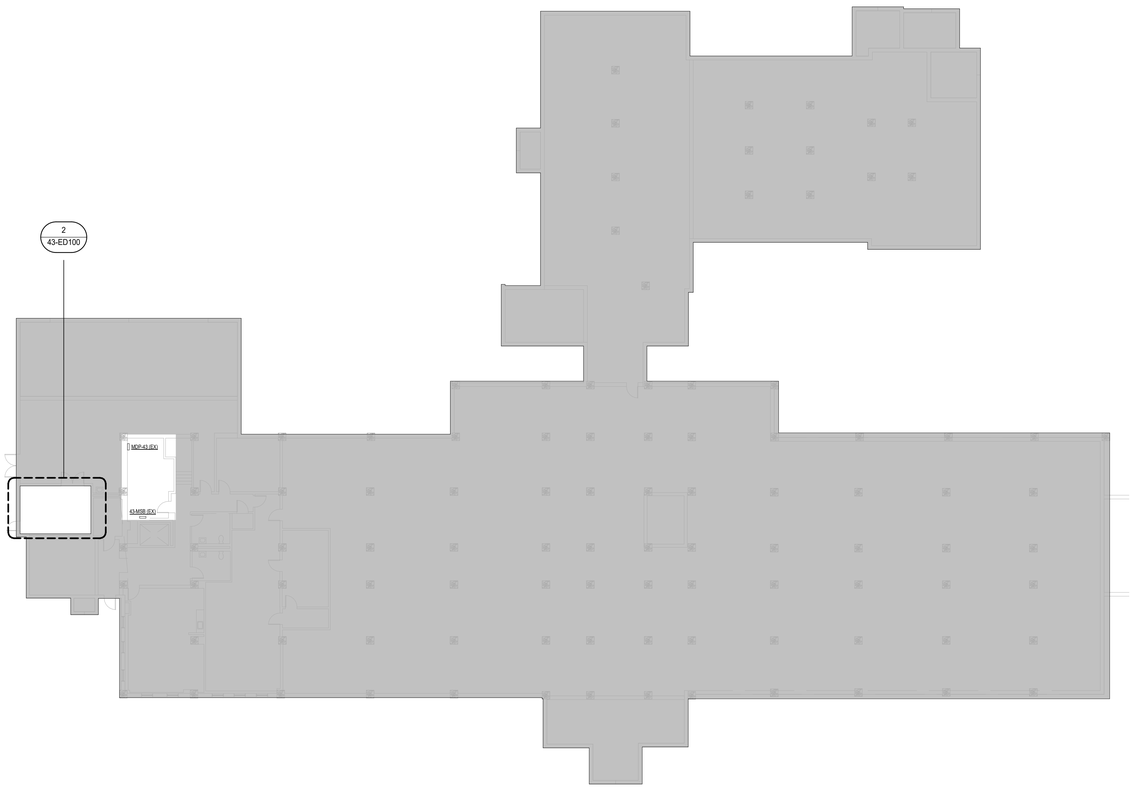
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF MISSOURI, USA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

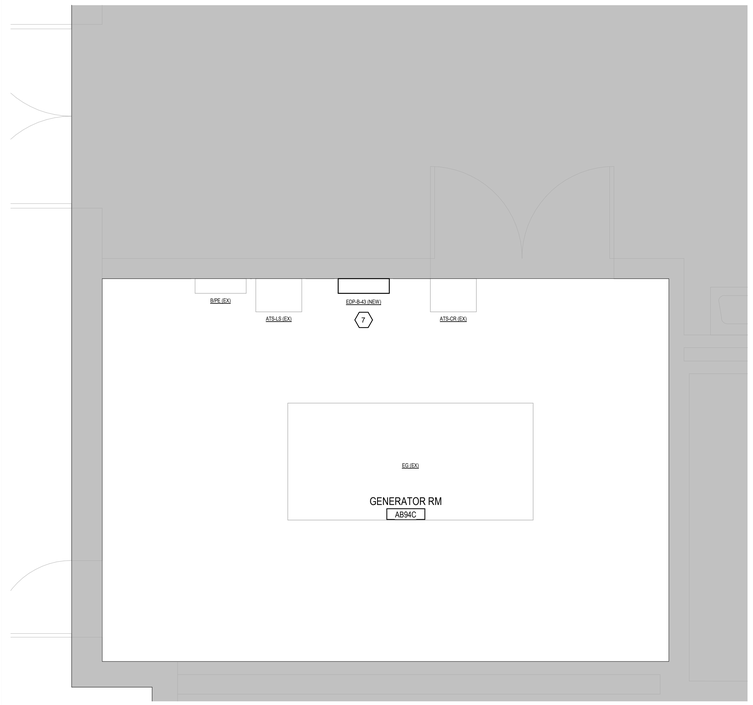
Drawing Title: BLDG 43 - SECOND & THIRD FLOOR OVERALL & ENLARGED - ELECTRICAL DEMO
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 43
Drawing Number: 43-ED102

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:31 AM



1 BLDG 43 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1/16" = 1'-0"



2 BLDG 43 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM AB94C
1/2" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

ELEC. NEW WORK KEYNOTES

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1) #10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

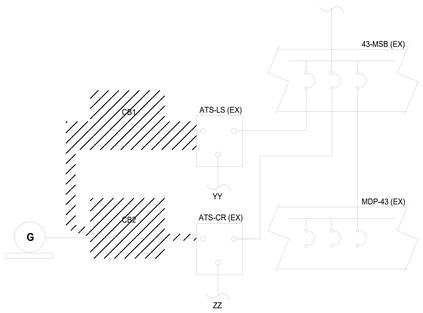
VA U.S. Department of Veterans Affairs

Drawing Title	BLDG 43 - BASEMENT - OVERALL & ENLARGED - ELECTRICAL NEW WORK
Phase	FINAL BID DOCUMENTS
Approved:	
Sprinklered	FULLY SPRINKLERED
Project Title	EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location	5000 W. NATIONAL AVENUE MILWAUKEE, WI
Project Number	695-21-700
Building Number	43
Drawing Number	43-EP100
Issue Date	SEPTEMBER 5, 2025
Checked	YW
Drawn	SM

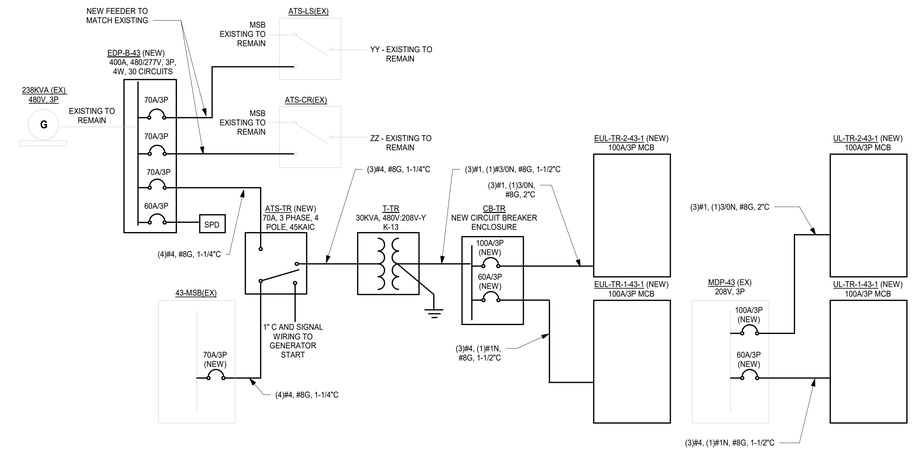
VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

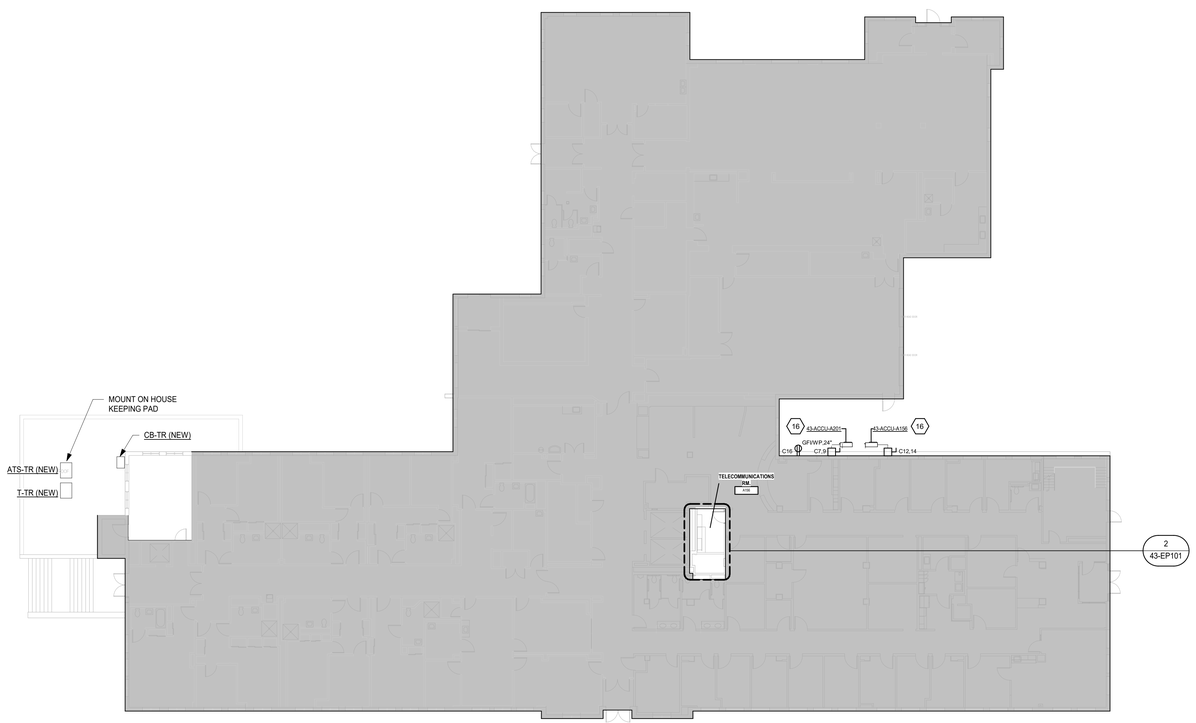
8/28/2025 9:28:33 AM



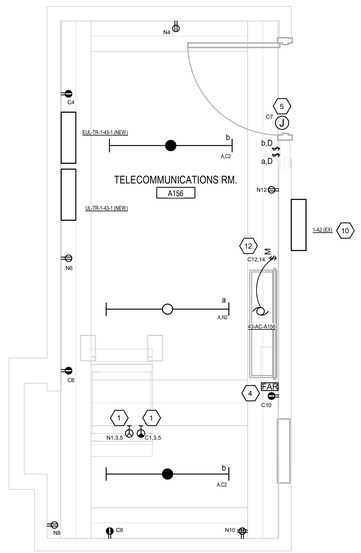
3 BLDG 43 - ELECTRICAL DEMO - PARTIAL ONE LINE DIAGRAM
NTS



4 BLDG 43 - ELECTRICAL NEW WORK - PARTIAL ONE LINE DIAGRAM
NTS



1 BLDG 43 - FIRST FLOOR - OVERALL ELECTRICAL NEW WORK
1/16" = 1'-0"



2 BLDG 43 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM A156
1/2" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

208/120V PANEL:
UL-TR-1-43-1 - NORMAL POWER
EUL-TR-1-43-1 - CRITICAL POWER

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT
IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD
Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

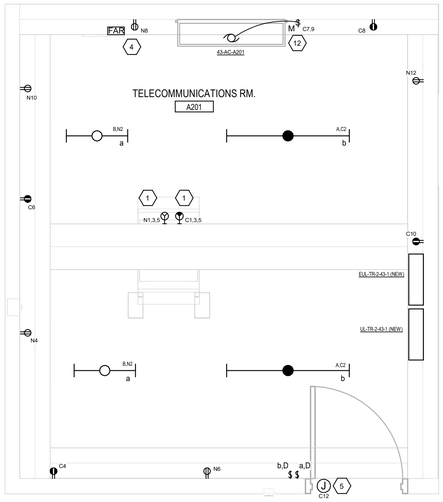
STAMP
PROFESSIONAL ELECTRICAL ENGINEER YUMEI WANG E-11391 STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

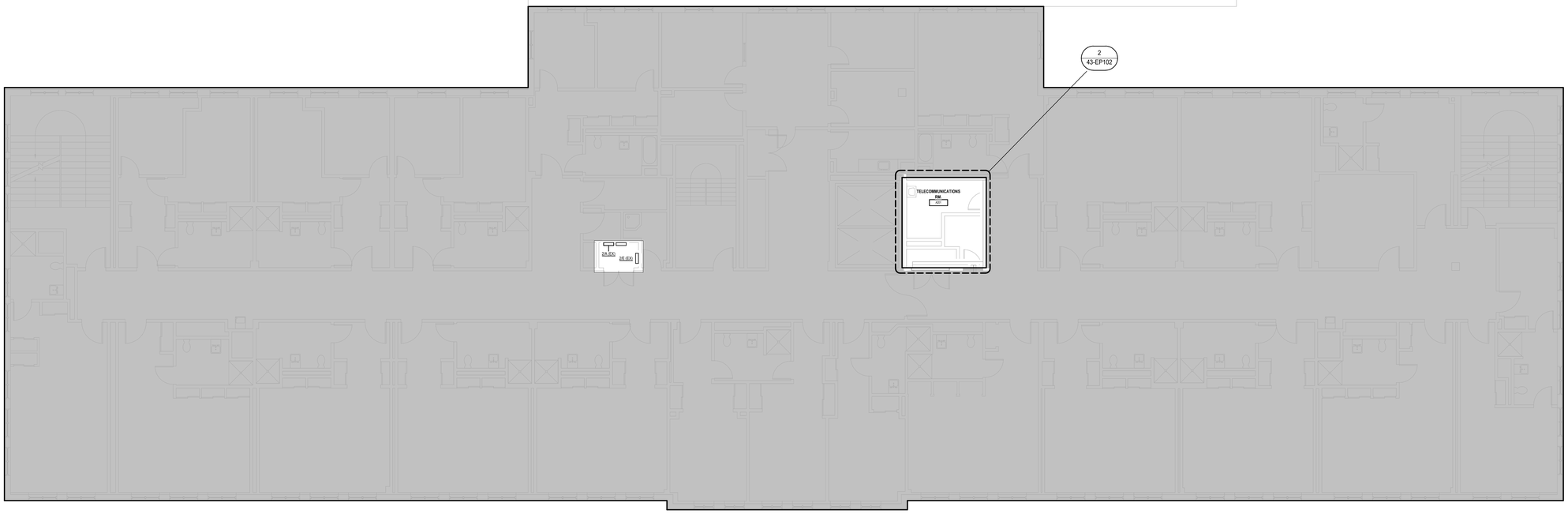
Drawing Title: BLDG 43 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 43
Drawing Number: 43-EP101

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:28:34 AM



2 BLDG 43 - SECOND FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM A201
1/2" = 1'-0"



1 BLDG 43 - SECOND FLOOR - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

   208/120V PANEL :
   UL-TR-2-43-1 - NORMAL POWER
   EUL-TR-2-43-1 - CRITICAL POWER

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

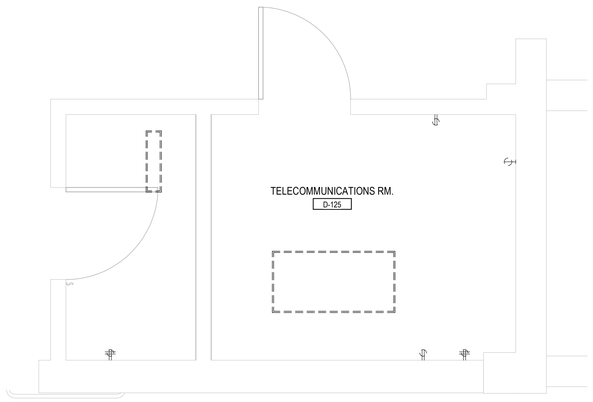
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

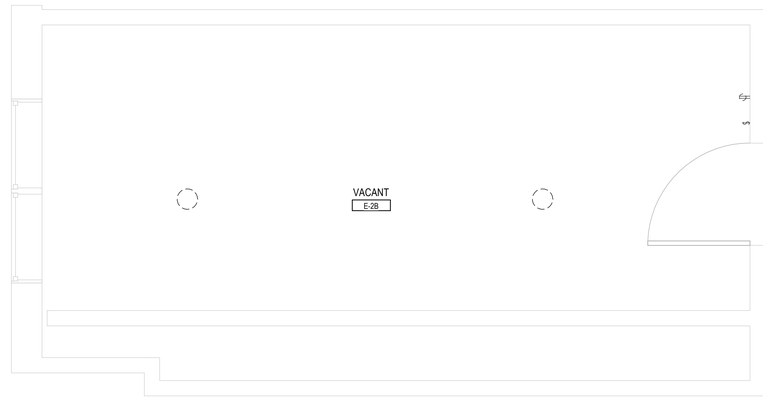
Drawing Title: BLDG 43 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 43
Drawing Number: 43-EP102

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:36 AM



2 BLDG 70 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM D-125
1/2" = 1'-0"



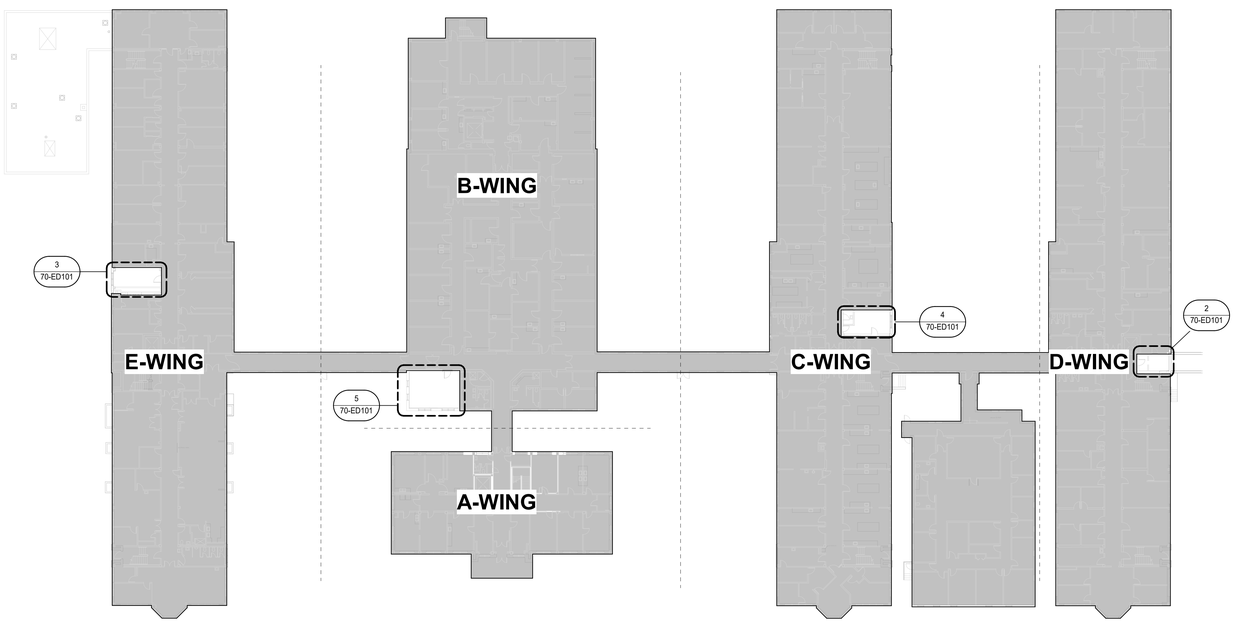
3 BLDG 70 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM E-104HC
1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

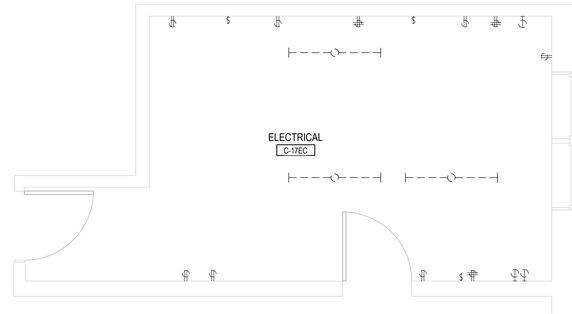
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

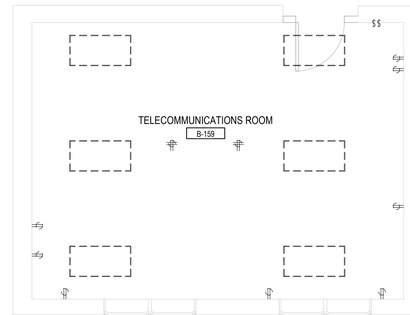
1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 70 - FIRST FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



4 BLDG 70 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM C-126
3/8" = 1'-0"



5 BLDG 70 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM B-159
1/4" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

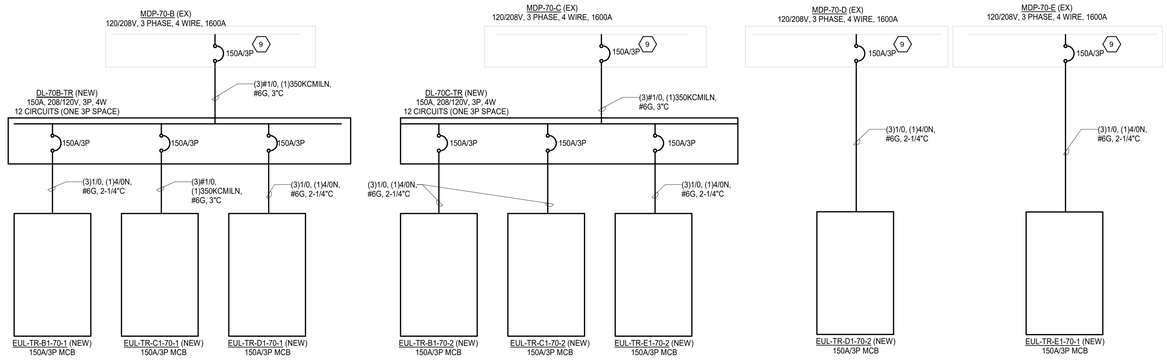
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

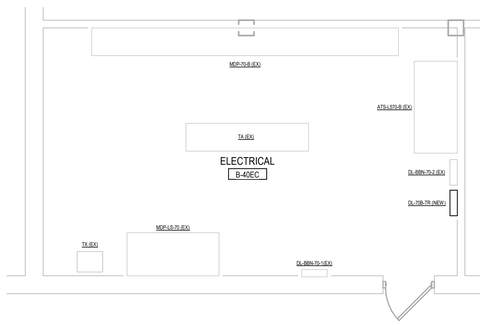
Drawing Title	Phase	Project Title	Project Number
BLDG 70 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	FINAL BID DOCUMENTS	EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 70
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 70-ED101

VA FORM 08 - 6231

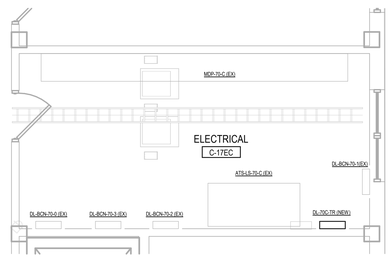
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:39 AM



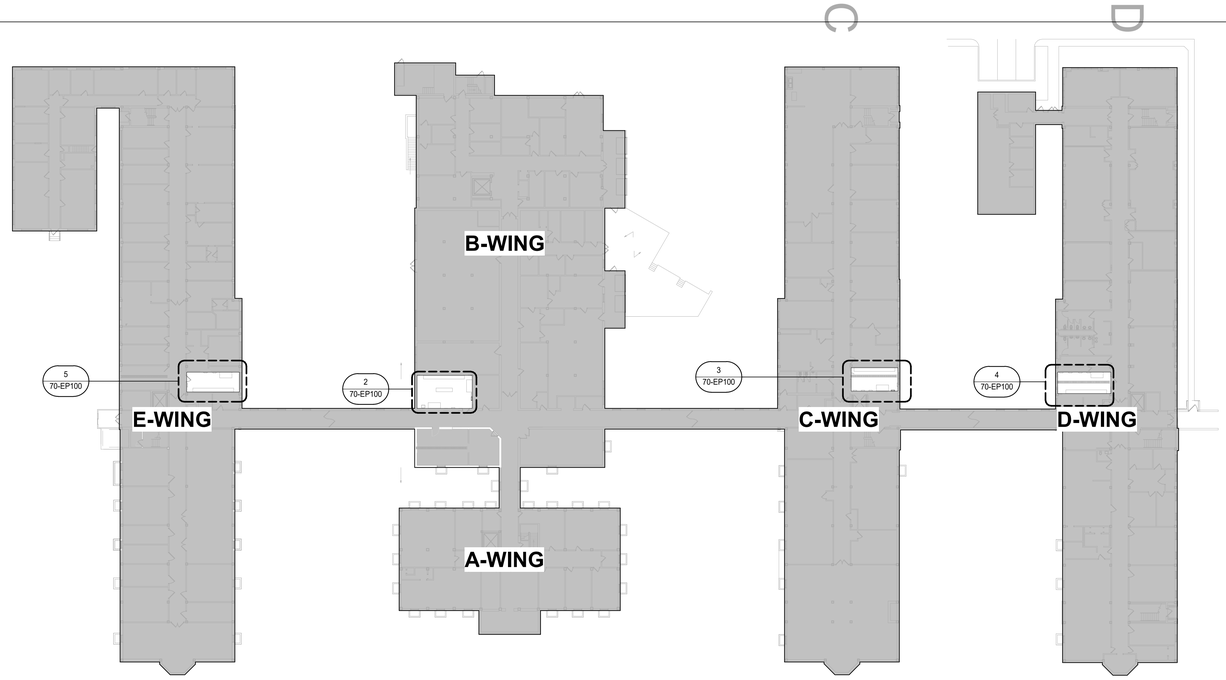
6 BLDG 70 - BASEMENT - PARTIAL ONE LINE DIAGRAM
NTS



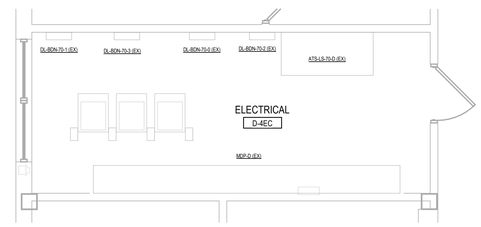
2 BLDG 70 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM 0-B40
1/4" = 1'-0"



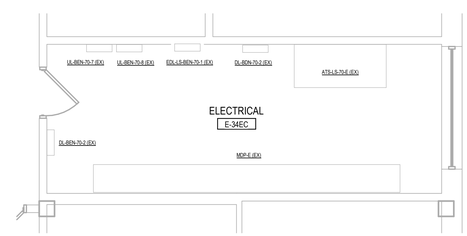
3 BLDG 70 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM C-17
1/4" = 1'-0"



1 BLDG 70 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1" = 30'-0"



4 BLDG 70 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM D-4EC
1/4" = 1'-0"



5 BLDG 70 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM E-34
1/4" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

ELEC. NEW WORK KEYNOTES

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#10N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#10N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60A/5N/F/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30A/5N/F/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. LS-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD .
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER YUMEI WANG E-11391 STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 70 - BASEMENT OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 70
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 70-EP100

VA FORM 08 - 6231

8/28/2025 9:26:42 AM
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

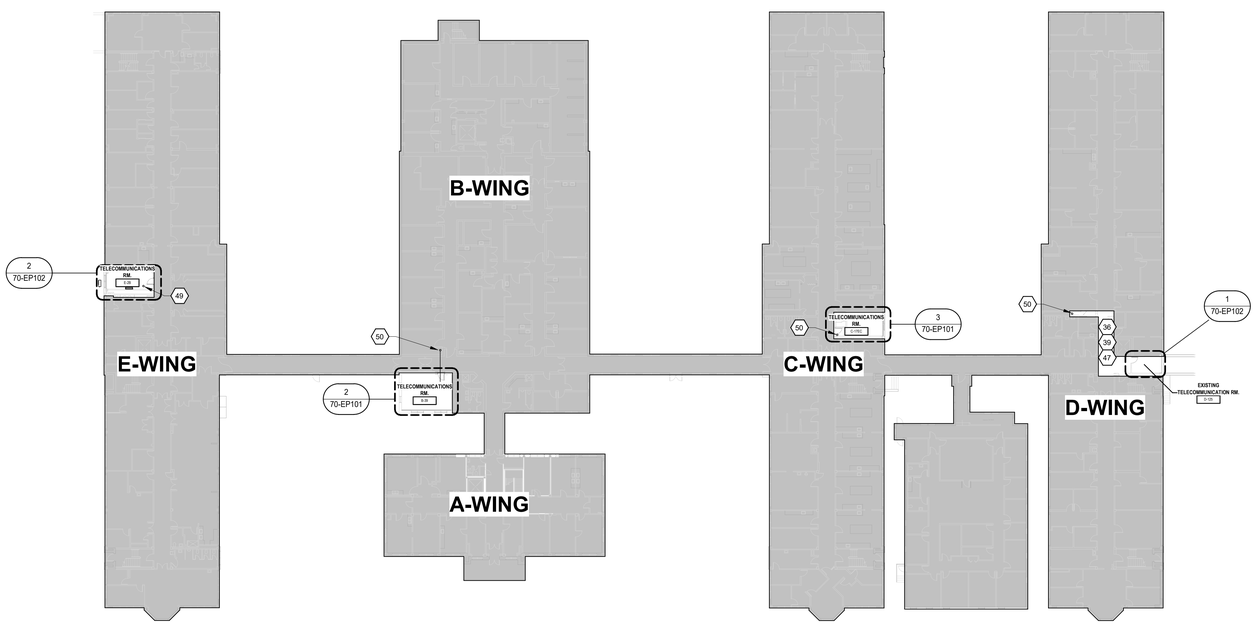
BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

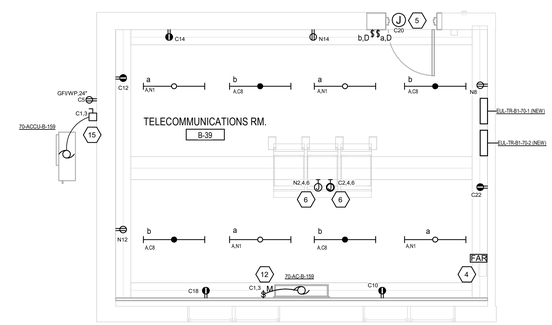
208/120V PANEL:
UL-TR-B1-70 - NORMAL POWER
EUL-TR-B1-70 - CRITICAL POWER
UL-TR-C1-70 - NORMAL POWER
EUL-TR-C1-70 - CRITICAL POWER

ELEC. NEW WORK KEYNOTES (#)

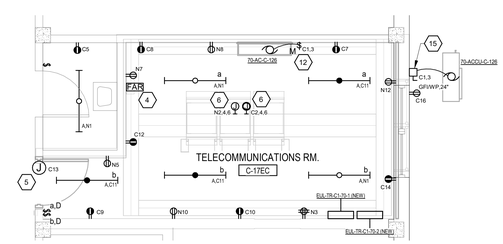
1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1) #10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD .
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.



1 BLDG 70 - FIRST FLOOR - OVERALL ELECTRICAL NEW WORK
1" = 30'-0"



2 BLDG 70 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM B-159
1/4" = 1'-0"



3 BLDG 70 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM C-126
1/4" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 10' 20' 40'
Graphic Scale : 1" = 20'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER YUMEI WANG E-13391 STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 70 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 70
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 70-EP101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:45 AM

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

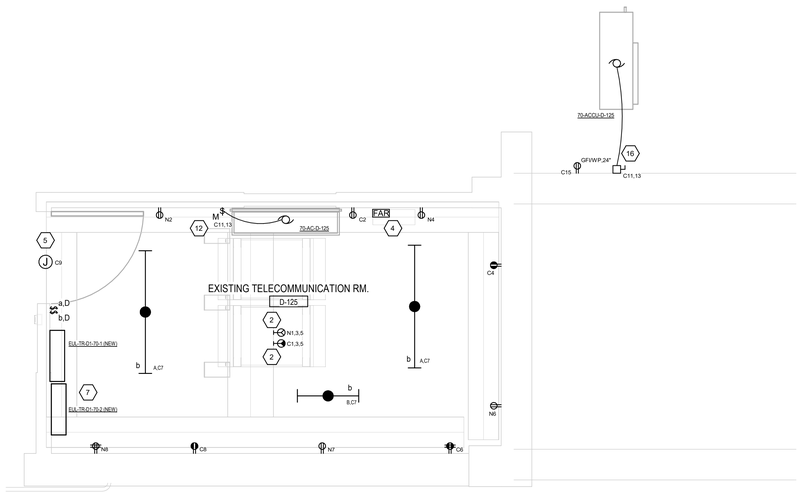
BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

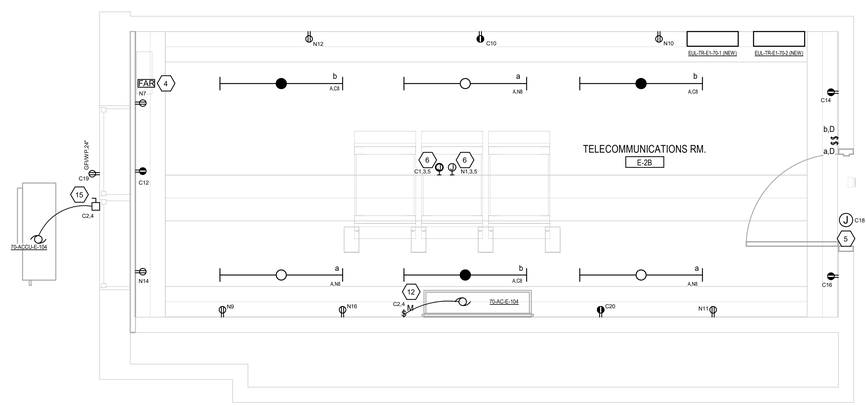
   208/120V PANEL:
   UL-TR-D1-70 - NORMAL POWER
   EUL-TR-D1-70 - CRITICAL POWER
   UL-TR-E1-70 - NORMAL POWER
   EUL-TR-E1-70 - CRITICAL POWER

ELEC. NEW WORK KEYNOTES

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1) #10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.



1 BLDG 70 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM D-125
1/2" = 1'-0"



2 BLDG 70 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM E-104
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 70 - FIRST FLOOR ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 70
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 70-EP102
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

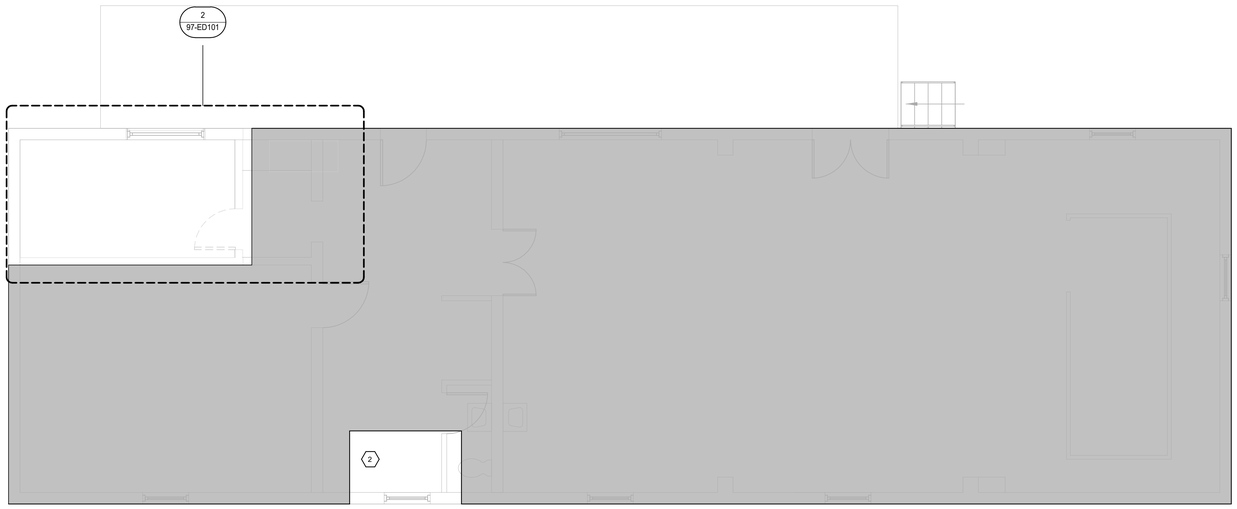
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:47 AM

ELEC. DEMO GENERAL NOTES

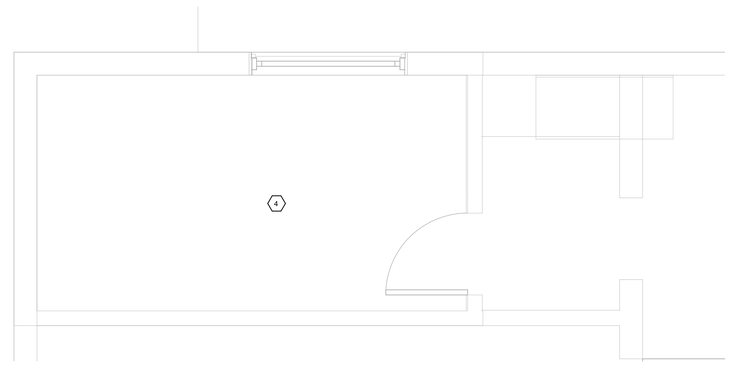
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 97 - FIRST FLOOR - OVERALL ELECTRICAL DEMOLITION
1/4" = 1'-0"



2 BLDG 97 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 005
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11291
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 97 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 97
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 97-ED101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:28:48 AM

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

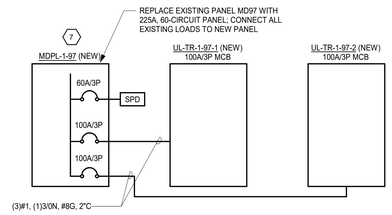
BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

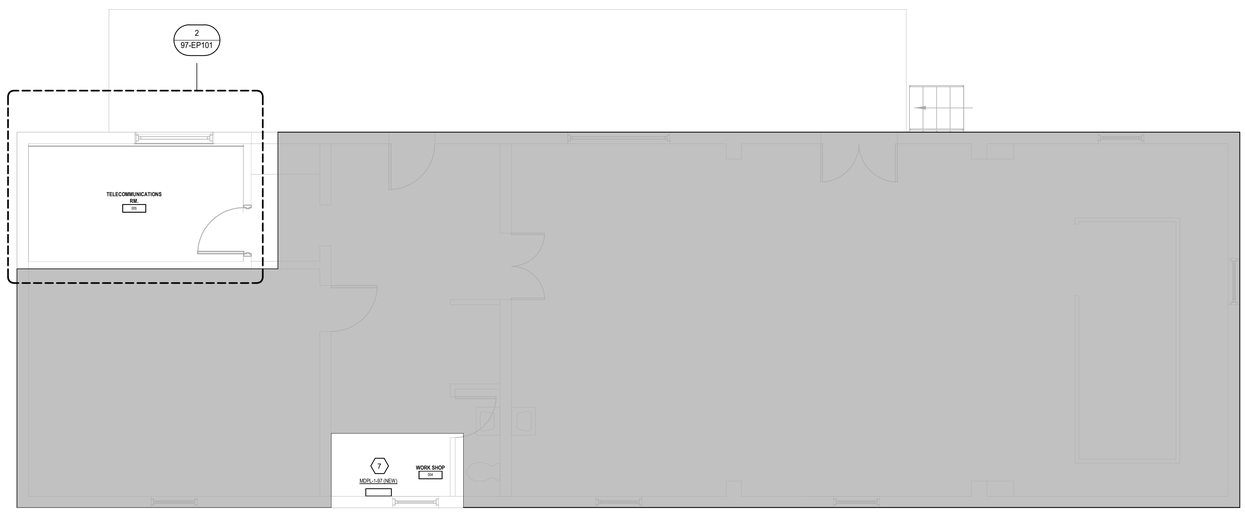
   208/120V PANEL:
   UL-TR-1-97-1 - NORMAL POWER
   UL-TR-1-97-2 - NORMAL POWER

ELEC. NEW WORK KEYNOTES (#)

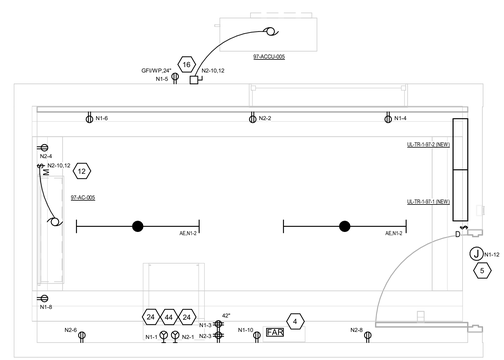
1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.



3 BLDG 97 - FIRST FLOOR - PARTIAL ONE LINE DIAGRAM
NTS



1 BLDG 97 - FIRST FLOOR - OVERALL ELECTRICAL NEW WORK
1/4" = 1'-0"



2 BLDG 97 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 005
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

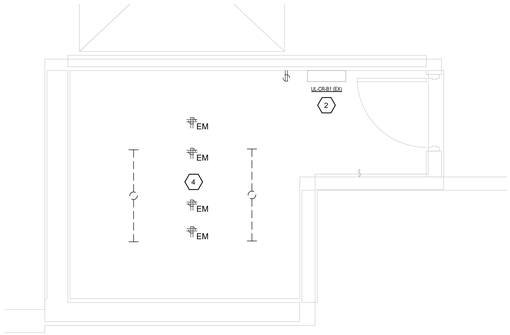
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 97 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 97
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 97-EP101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:50 AM



2 BLDG 102 - BASEMENT - ENLARGED ELECTRICAL DEMOLITION - ROOM B100FC
3/8" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.

1 BLDG 102 - BASEMENT - OVERALL ELECTRICAL DEMOLITION
1/8" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

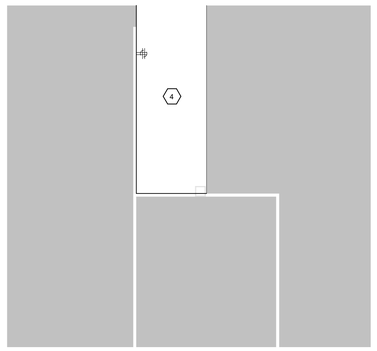
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

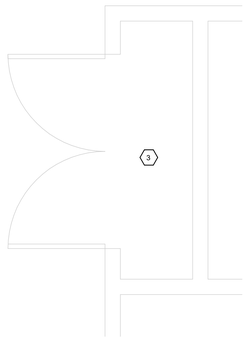
Drawing Title: BLDG 102 - BASEMENT OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 102
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 102-ED101

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:28:51 AM



3 BLDG 102 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 144
1/8" = 1'-0"



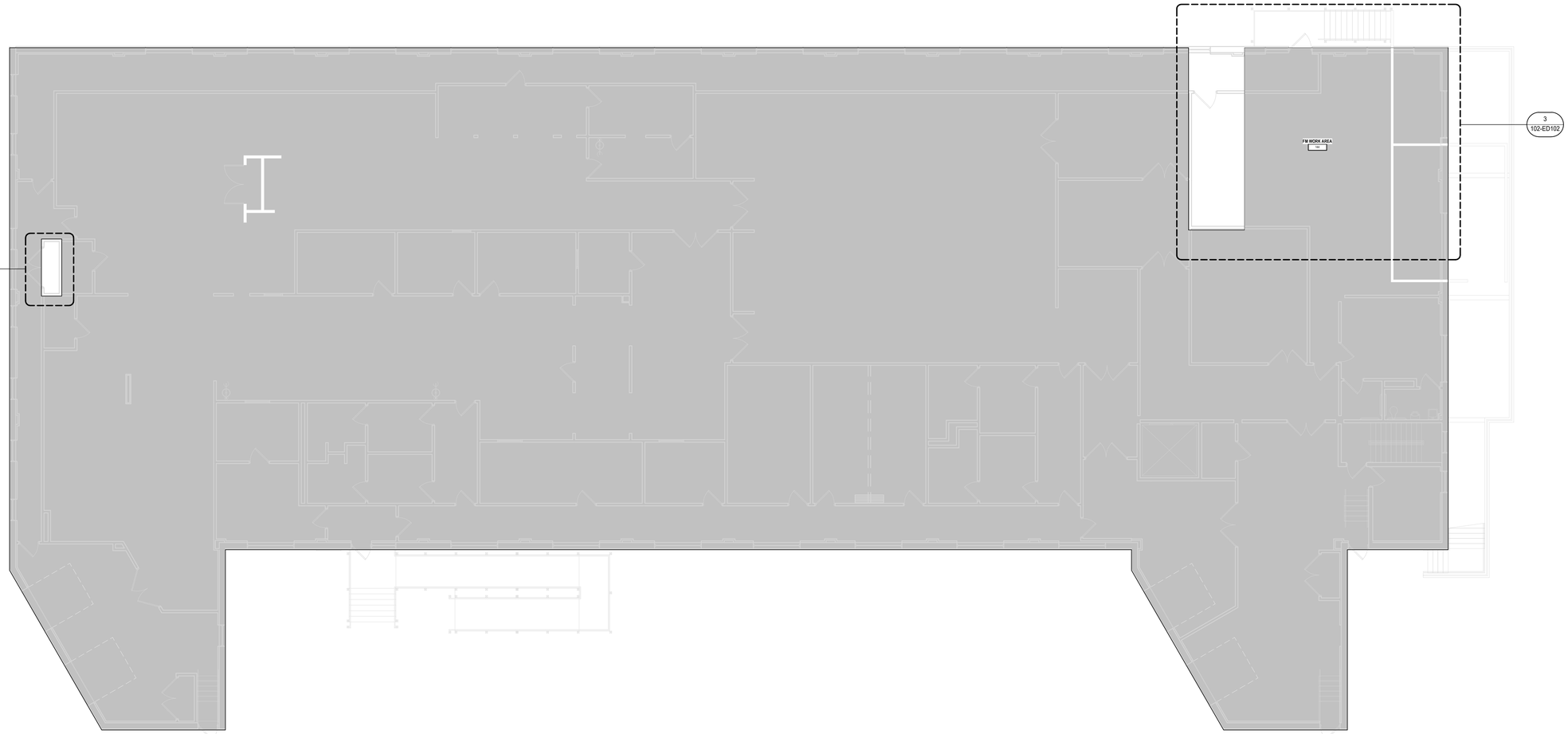
2 BLDG 102 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 100FC
1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 102 - FIRST FLOOR - OVERALL ELECTRICAL DEMOLITION
1/8" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

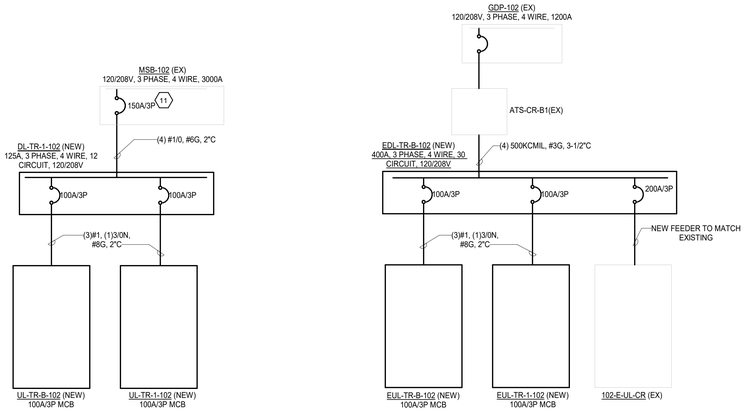
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

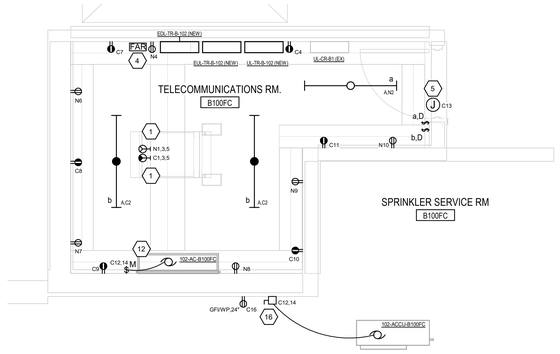
Drawing Title: BLDG 102 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 102
Drawing Number: 102-ED102

VA FORM 08 - 6231

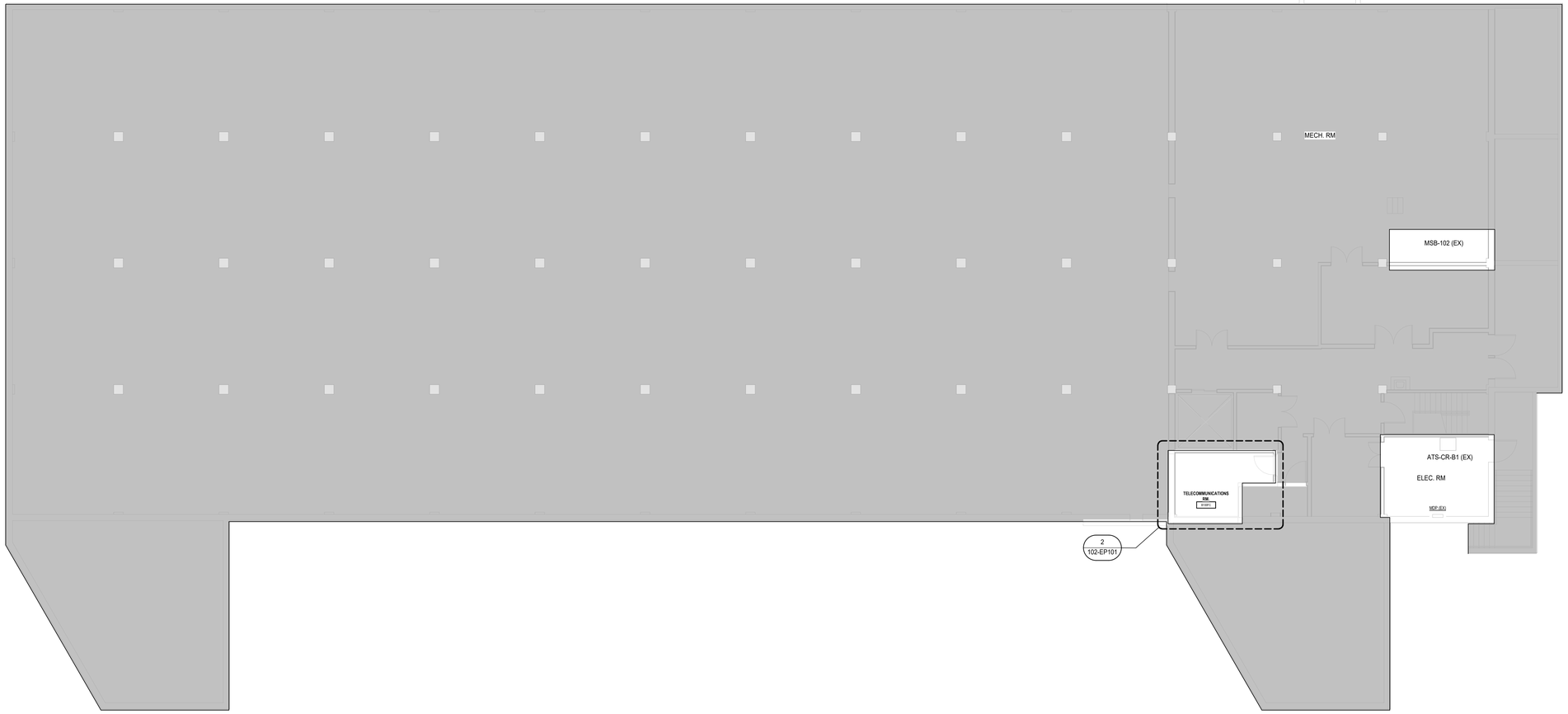
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:26:53 AM



3 BLDG 102 - PARTIAL ONELINE DIAGRAM
NTS



2 BLDG 102 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM B100FC
3/8" = 1'-0"



1 BLDG 102 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1/8" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

   208/120V PANEL :
   UL-TR-B-102-1 - NORMAL POWER
   EUL-TR-B-102-1 - CRITICAL POWER

ELEC. NEW WORK KEYNOTES

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3) #12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1) #10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#10N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#10N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELEGOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11991
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	BLDG 102 - BASEMENT OVERALL & ENLARGED - ELECTRICAL NEW WORK
Phase	FINAL BID DOCUMENTS
Approved:	
Sprinklered	FULLY SPRINKLERED
Project Title	EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location	5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date	SEPTEMBER 5, 2025
Checked	YW
Drawn	SM
Project Number	695-21-700
Building Number	102
Drawing Number	102-EP101

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

8/28/2025 9:28:55 AM

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

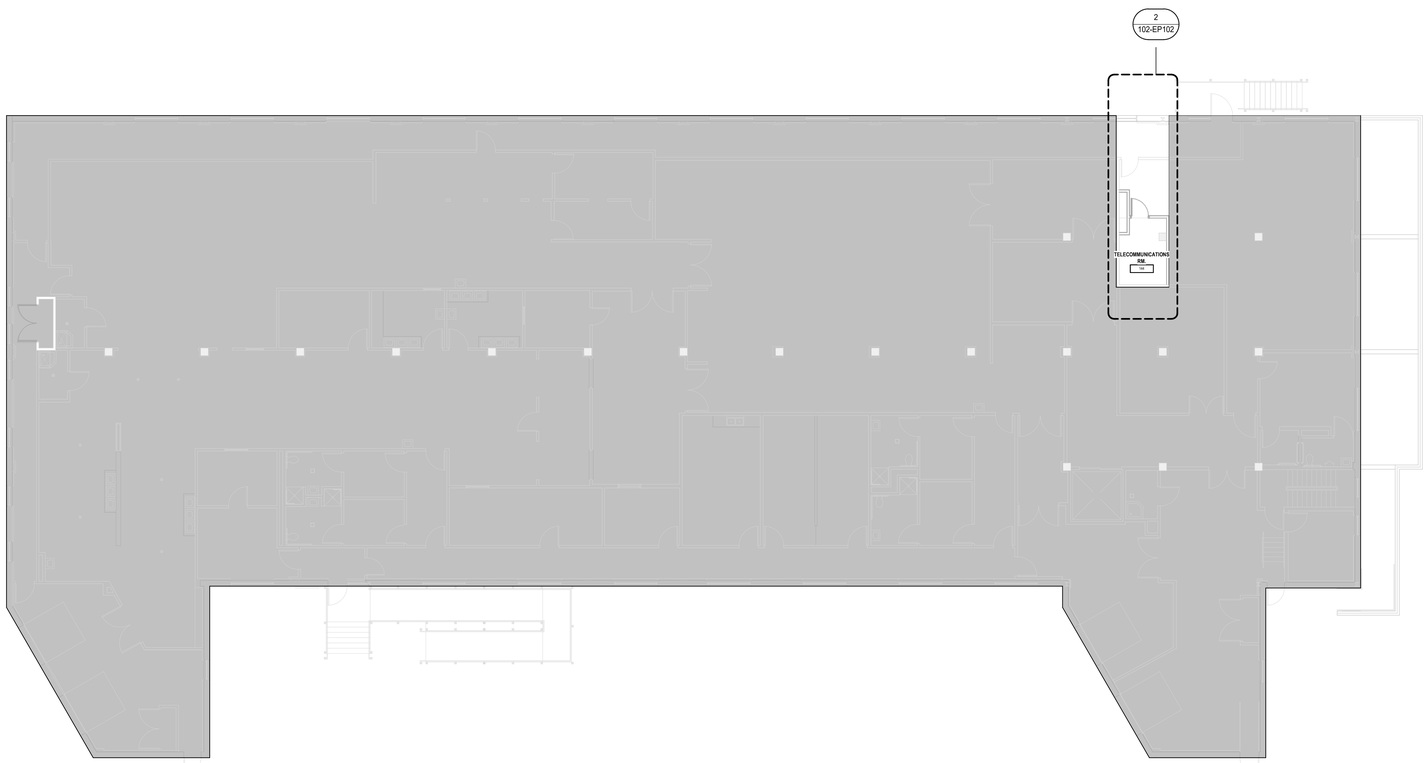
BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

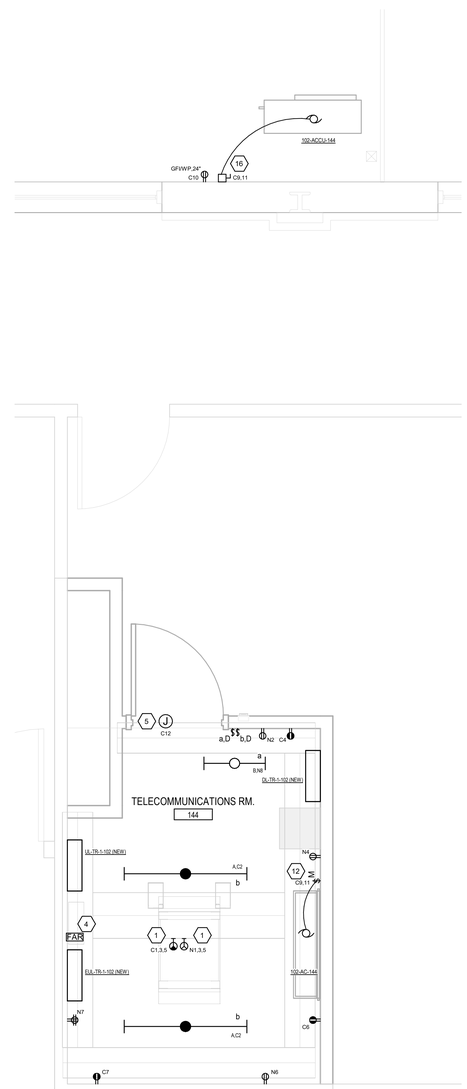
   208/120V PANEL:
   UL-TR-1-102-1 - NORMAL POWER
   EUL-TR-1-102-1 - CRITICAL POWER

ELEC. NEW WORK KEYNOTES (#)

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1) #10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD .
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.



1 BLDG 102 - FIRST FLOOR - OVERALL ELECTRICAL NEW WORK
3/32" = 1'-0"



2 BLDG 102 - FIRST FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 144
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 102 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 102
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 102-EP102
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

8/28/2025 9:26:57 AM

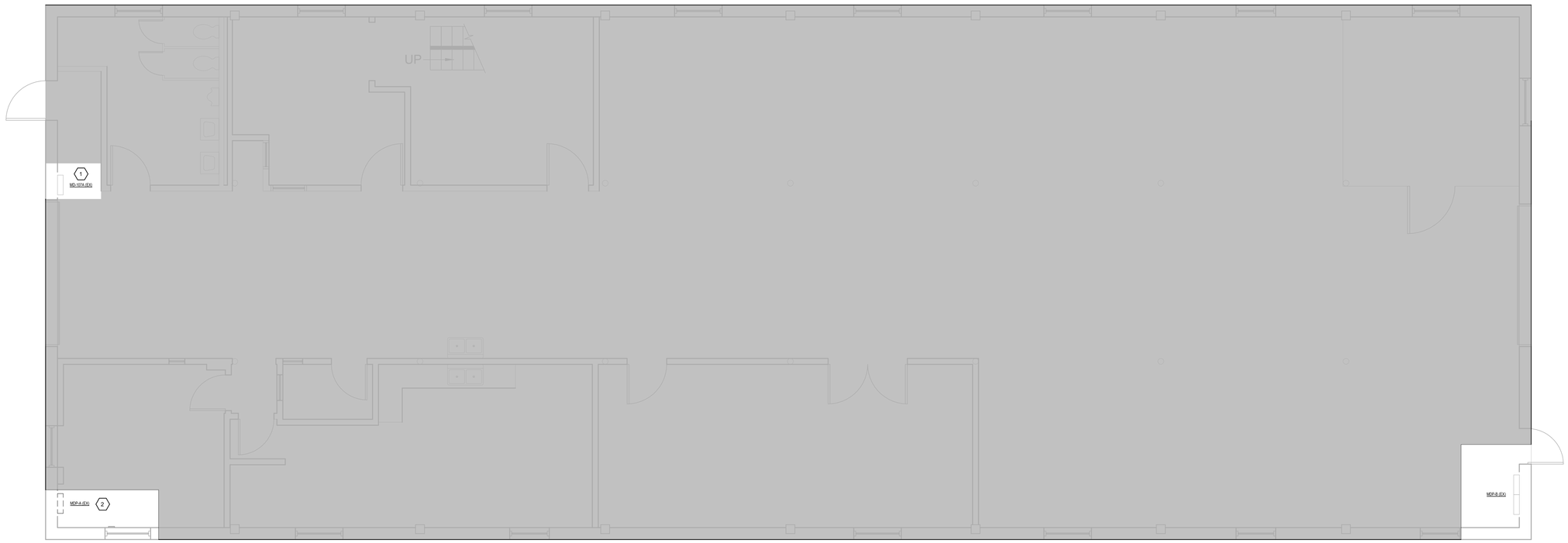
Graphic Scale: 11'6" = 1'-0"
Graphic Scale: 1'8" = 1'-0"
Graphic Scale: 3/32" = 1'-0"
Graphic Scale: 1/4" = 1'-0"
Graphic Scale: 3/16" = 1'-0"
Graphic Scale: 1/2" = 1'-0"
Graphic Scale: 3/4" = 1'-0"
Graphic Scale: 1" = 1'-0"
Graphic Scale: 1 1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1. EXISTING PANEL TO REMAIN.
2. DISCONNECT AND REMOVE PANEL.
3. NO WORK IN SPACE.
4. REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5. DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6. DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7. LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8. CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9. DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10. PULLBOX AND CONDUIT TO REMAIN.
11. DISCONNECT AND REMOVE ABANDONED PANELS.
12. EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 107 - FIRST FLOOR - OVERAL ELECTRICAL DEMOLITION
1/4" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

VA FORM 08 - 6231

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

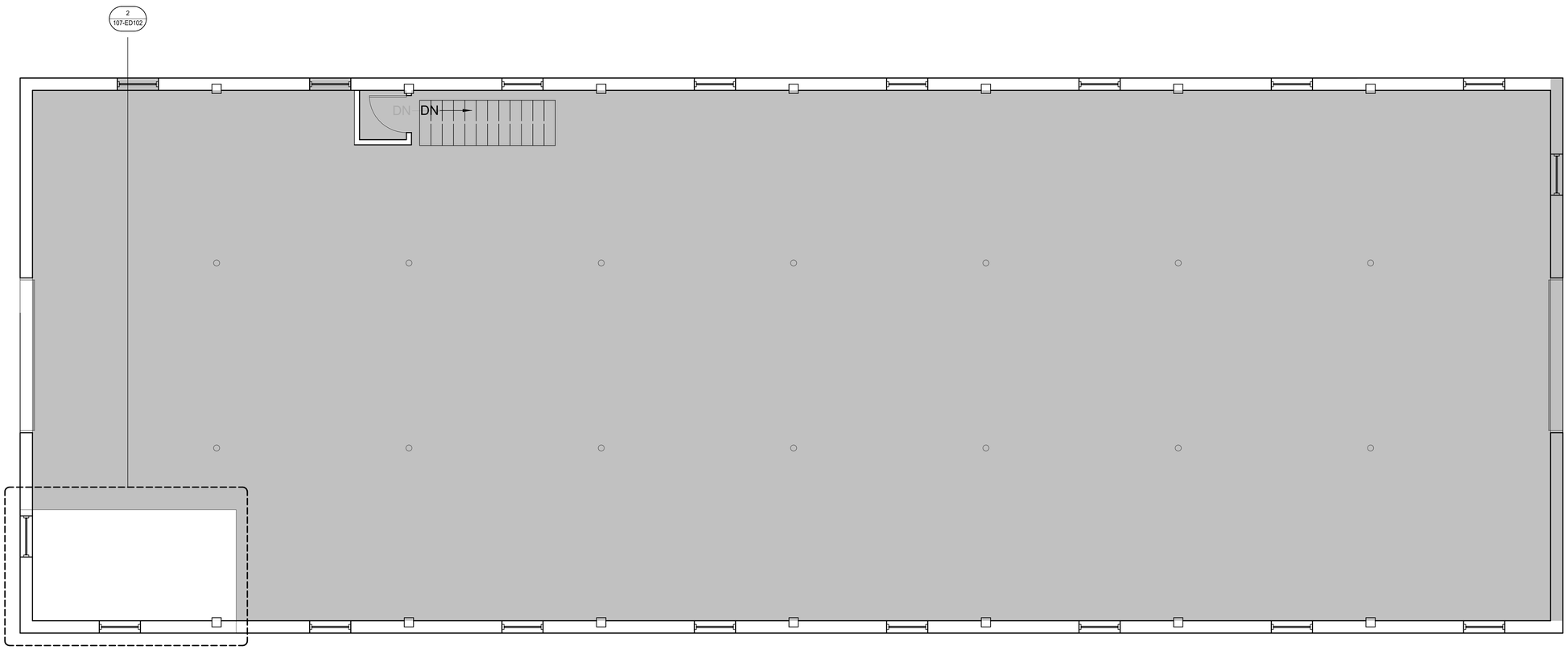
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 107 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 107
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 107-ED101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:28:58 AM

2 BLDG 107 - MEZZANINE - ENLARGED ELECTRICAL DEMOLITION - ROOM 114
3/8" = 1'-0"



1 BLDG 107 - MEZZANINE - OVERALL ELECTRICAL DEMOLITION
1/4" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 107 - MEZZANINE OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 107
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 107-ED102

VA FORM 08 - 6231

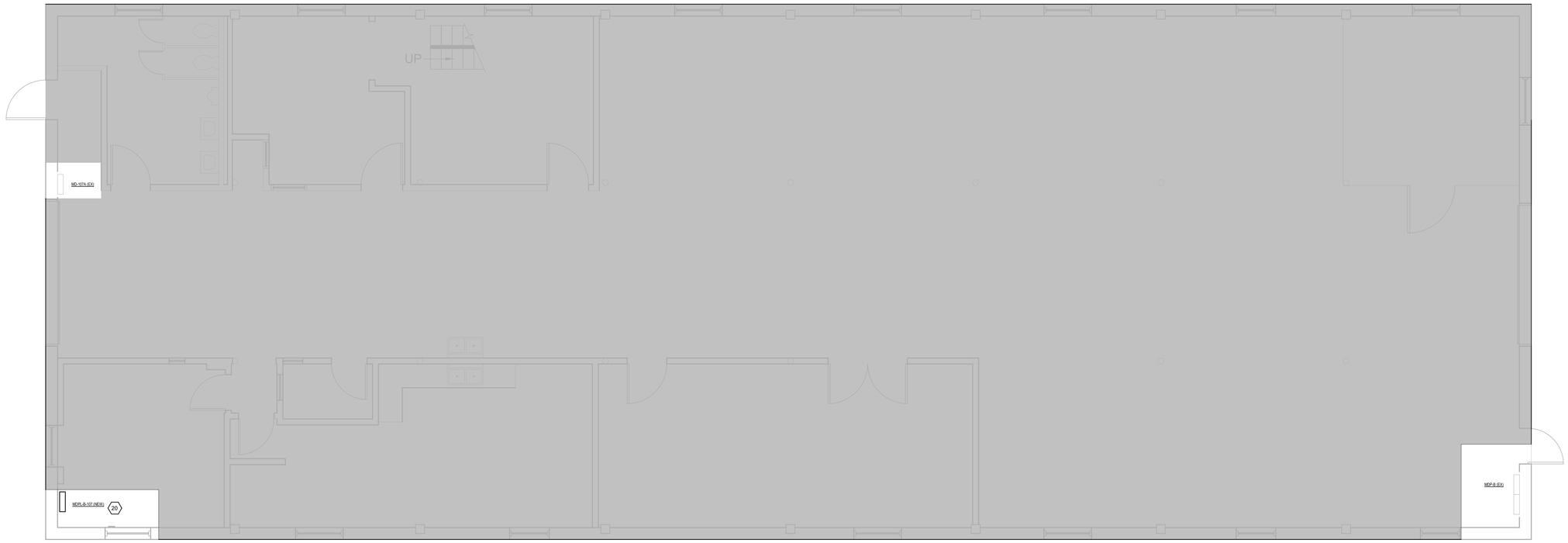
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:28:59 AM

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

ELEC. NEW WORK KEYNOTES (#)

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3) #12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.



1 BLDG 107 - FIRST FLOOR - OVERALL ELECTRICAL NEW WORK
1/4" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 107 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK

Approved:

Phase: FINAL BID DOCUMENTS

Sprinklered: FULLY SPRINKLERED

Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI

Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI

Issue Date: SEPTEMBER 5, 2025 | Checked: YW | Drawn: SM

Project Number: 695-21-700

Building Number: 107

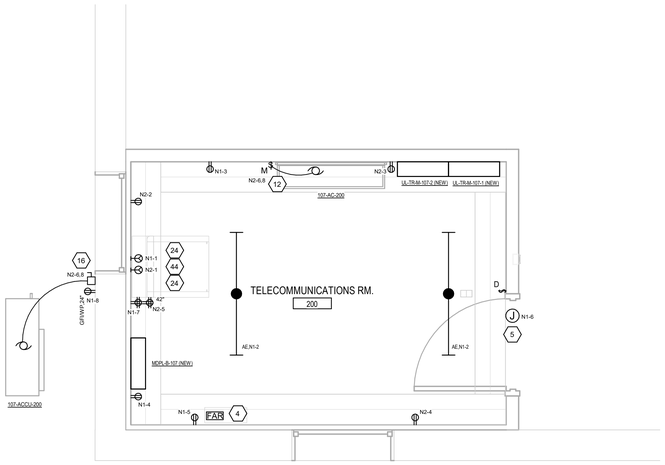
Drawing Number: 107-EP101

VA FORM 08 - 6231

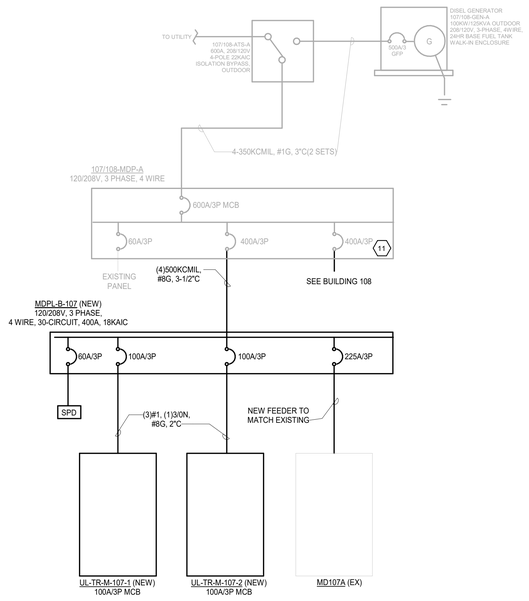
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

8/28/2025 9:27:01 AM

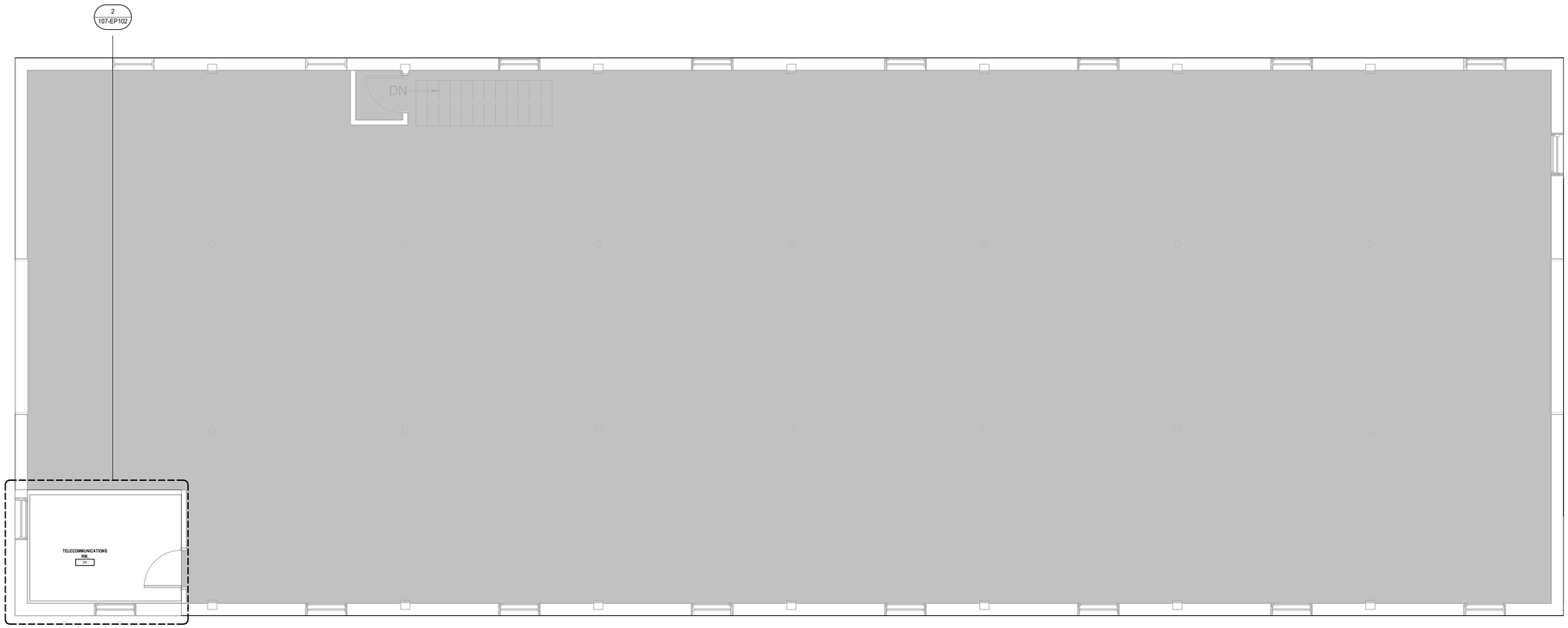
Graphic Scale: 1/16" = 1'-0"
Graphic Scale: 1/8" = 1'-0"
Graphic Scale: 3/32" = 1'-0"
Graphic Scale: 1/4" = 1'-0"
Graphic Scale: 3/16" = 1'-0"
Graphic Scale: 1/2" = 1'-0"
Graphic Scale: 3/4" = 1'-0"
Graphic Scale: 1" = 1'-0"
Graphic Scale: 1 1/2" = 1'-0"



2 BLDG 107 - MEZZANINE - ENLARGED ELECTRICAL NEW WORK - ROOM 200
1/2" = 1'-0"



3 BLDG 107 - PARTIAL ONE LINE DIAGRAM
NTS



1 BLDG 107 - MEZZANINE - OVERALL ELECTRICAL NEW WORK
1/4" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

208/120V PANEL:
UL-TR-B-107-1 -NORMAL POWER
UL-TR-B-107-2 -NORMAL POWER

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60A/3N/F/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30A/3N/F/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 LS-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT
IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD
Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11591
STATE OF NEBRASKA
9.5.2025

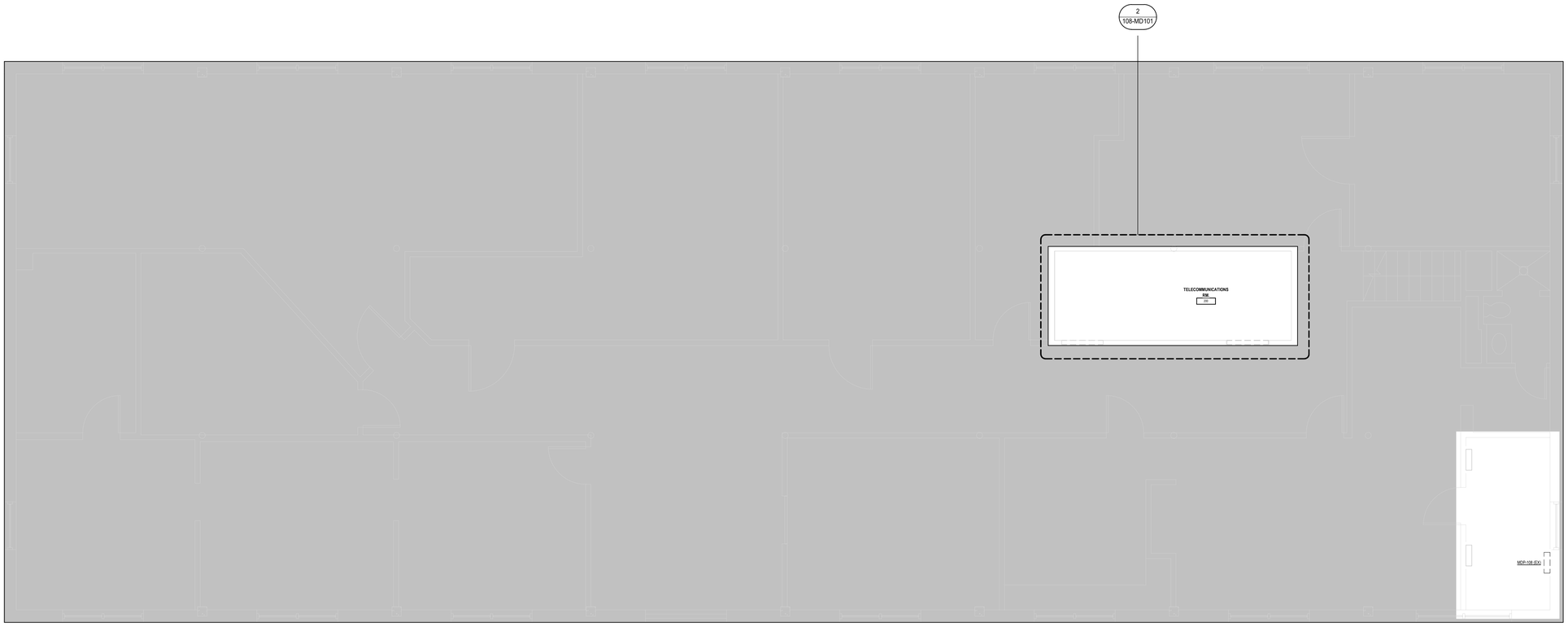
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 107 - MEZZANINE OVERALL & ENLARGED - ELECTRICAL NEW WORK
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 107
Drawing Number: 107-EP102

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:27:02 AM

2 BLDG 108 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 200
1/2" = 1'-0"



1 BLDG 108 - SECOND FLOOR - OVERALL ELECTRICAL DEMOLITION
1/4" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

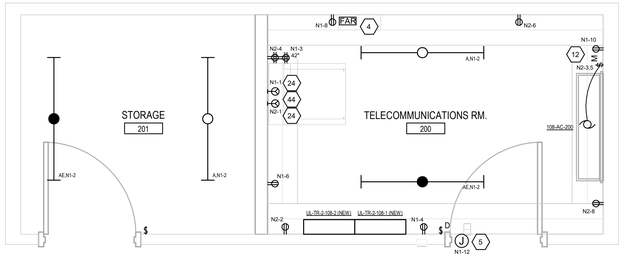
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

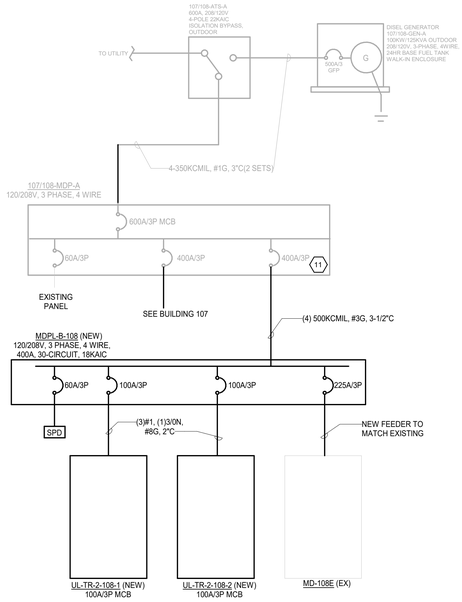
Drawing Title: BLDG 108 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 107
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 108-ED101

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:27:04 AM



2 BLDG 108 - SECOND FLOOR - ENLARGED ELECTRICAL NEW WORK - ROOM 200
1/2" = 1'-0"



3 BLDG 108 - PARTIAL ONE LINE DIAGRAM
NTS

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

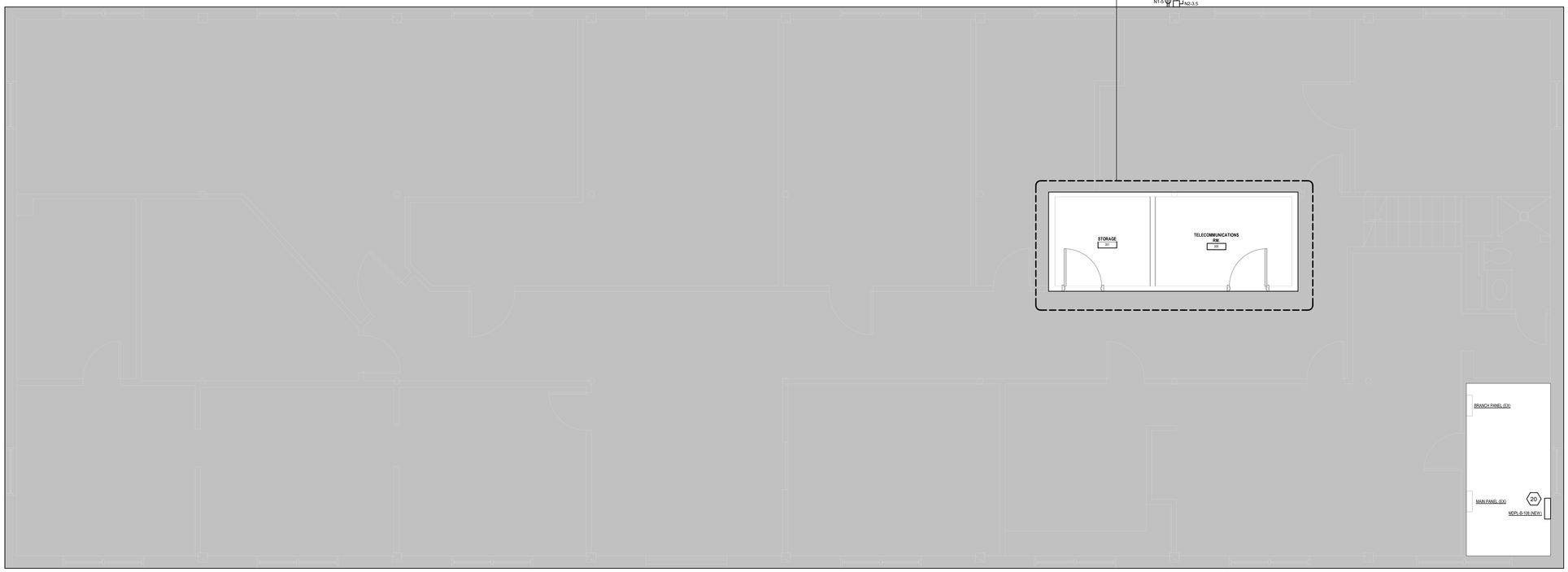
BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

   208/120V PANEL:
   UL-TR-2-108-1 - NORMAL POWER
   UL-TR-2-108-1 - NORMAL POWER

ELEC. NEW WORK KEYNOTES

1. NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2. NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3. SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#10N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4. FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5. J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6. MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#10N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7. NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8. CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9. CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10. RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11. PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12. INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15. 60A/5NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16. 30A/5NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20. NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21. NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22. ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23. STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24. L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25. NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26. SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27. UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28. NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29. MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30. SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34. UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35. RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36. ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39. CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40. MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41. PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43. PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44. INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45. PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46. CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47. CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49. ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50. STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51. CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52. ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53. CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.



1 BUILDING 108 LEVEL 02 FLOOR PLAN - ELECTRICAL
1/4" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 108 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL NEW WORK

Approved:

Phase: FINAL BID DOCUMENTS

Sprinklered: FULLY SPRINKLERED

Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI

Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI

Issue Date: SEPTEMBER 5, 2025 | Checked: YW | Drawn: SM

Project Number: 695-21-700

Building Number: 108

Drawing Number: 108-EP101

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

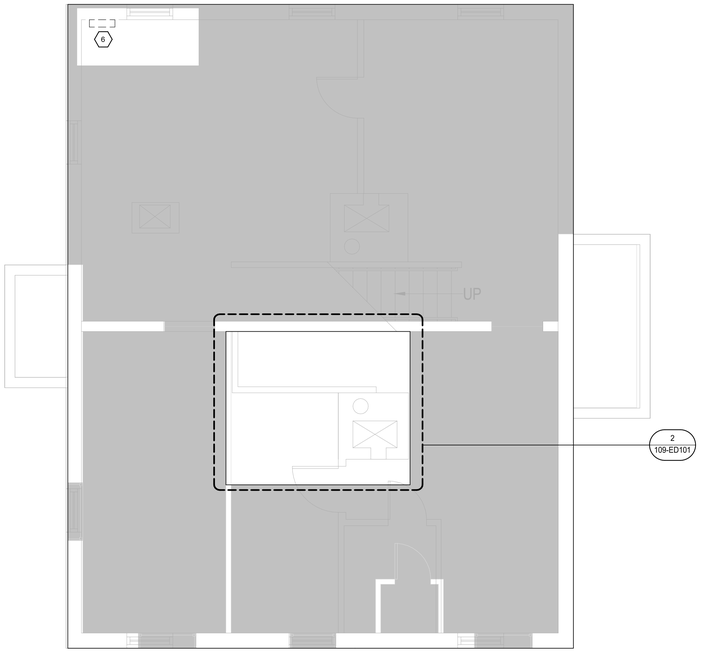
8/28/2025 9:27:06 AM

ELEC. DEMO GENERAL NOTES

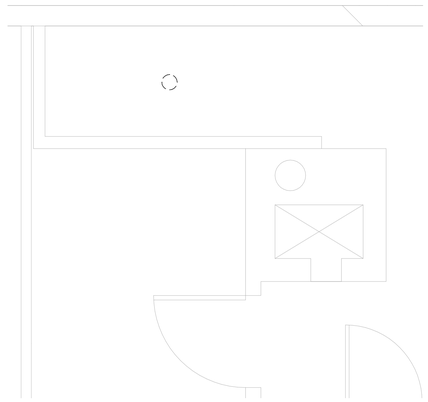
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 109 - BASEMENT - OVERALL ELECTRICAL DEMOLITION
1/4" = 1'-0"



2 BLDG 109 - BASEMENT - ENLARGED ELECTRICAL DEMOLITION - ROOM B001
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

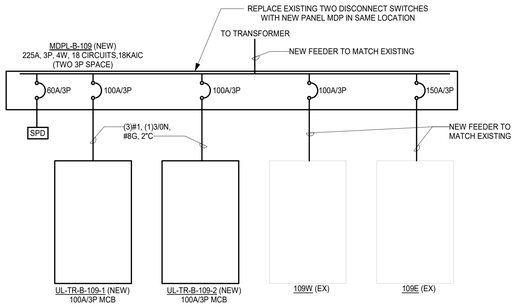
Drawing Title: BLDG 109 - BASEMENT OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 109
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 109-ED101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

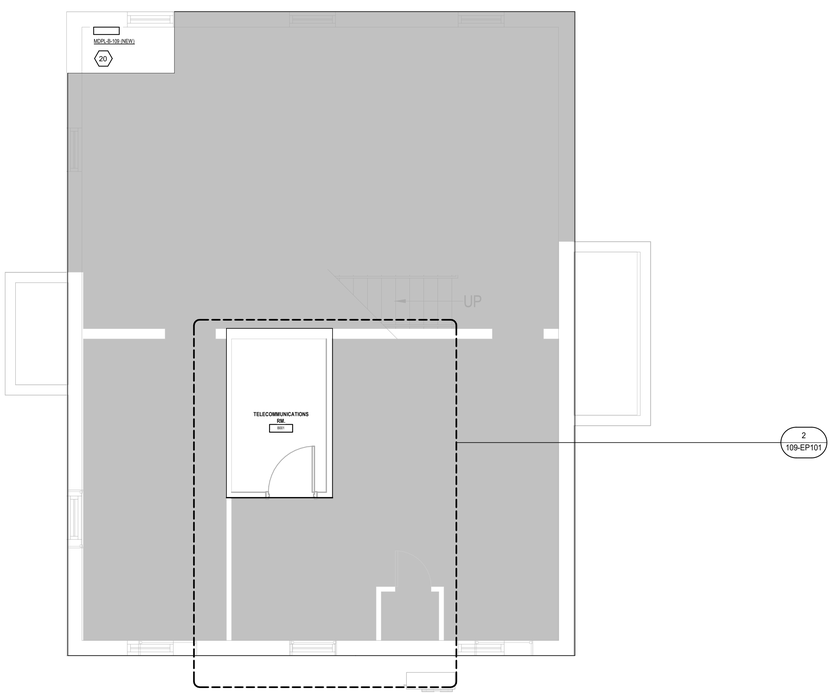
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

8/28/2025 9:27:07 AM

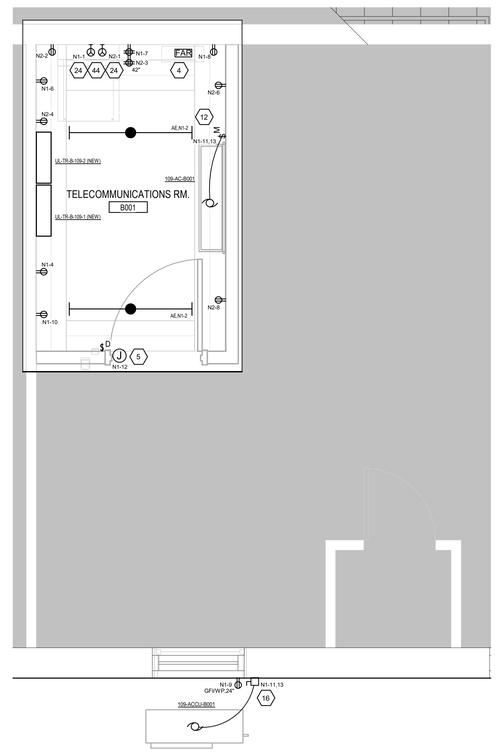
Graphic Scale : 3/2" = 1'-0"
Graphic Scale : 1/16" = 1'-0"
Graphic Scale : 1/8" = 1'-0"
Graphic Scale : 3/32" = 1'-0"
Graphic Scale : 1/4" = 1'-0"
Graphic Scale : 3/16" = 1'-0"
Graphic Scale : 1/2" = 1'-0"
Graphic Scale : 3/4" = 1'-0"
Graphic Scale : 1" = 1'-0"
Graphic Scale : 1 1/2" = 1'-0"



3 BLDG 109 - BASEMENT - PARTIAL ONE LINE DIAGRAM
NTS



1 BLDG 109 - BASEMENT - OVERALL ELECTRICAL NEW WORK
1/4" = 1'-0"



2 BLDG 109 - BASEMENT - ENLARGED ELECTRICAL NEW WORK - ROOM B001
1/2" = 1'-0"

ELEC. NEW WORK GENERAL NOTES

1. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
2. SEE MECHANICAL SHEETS FOR CONTROL WIRING TO MECHANICAL EQUIPMENT.
3. ONE-LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT, DEVICES AND ACCESSORIES.
4. CONTRACTOR TO VERIFY EXISTING EQUIPMENT AND DEVICE LOCATIONS PRIOR TO BID.
5. EXISTING FIRE ALARM AND OTHER LOW VOLTAGE SYSTEM EQUIPMENT IN THE EXISTING TR ROOMS OR SPACES IMPACTED BY THE NEW TR ROOMS SHALL BE COORDINATED WITH THE VA COR FOR WORK REQUIRED.
6. NOT ALL KEYNOTES ARE USED ON THE SHEET.
7. PROVIDE 200% NEUTRAL FOR ALL BRANCH CIRCUITS FEEDING RACKS AND FEEDERS DOWN STREAM FROM K-13 RATED TRANSFORMERS.
8. FOR MECHANICAL INDOOR AND OUTDOOR UNITS FOR TR ROOMS, PROVIDE (1)3/4" CONDUIT FOR CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS. CONTROL WIRING BY MECHANICAL CONTROL CONTRACTOR.
9. FULL TONE, DASHED OR HATCEHD ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.
10. PANELBOARDS SERVING LOADS LOCATED ON ROOF AND BUILDING EXTERIOR SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES.

BRANCH CIRCUITING NOTES

1. UNLESS OTHERWISE NOTED, EXTEND BRANCH CIRCUITS IN THE TR ROOM TO THE FOLLOWING BRANCH PANELBOARDS.

   208/120V PANEL:
   UL-TR-B-109-1 - NORMAL POWER
   UL-TR-B-109-2 - NORMAL POWER

ELEC. NEW WORK KEYNOTES

1 NEMA L21-20R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#12, (1) #10N, (1) #12G 3/4"C.
2 NEMA L21-30R MOUNT ON CABLE TRAY ABOVE RACK. COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. FEEDER: (3)#10, (1) #8N, (1)#10G, 3/4"C.
3 SURFACE MOUNT J-BOX (60A) FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
4 FIRE ALARM RELAY FOR CONNECTION TO ACCESS CONTROL PANEL IN ROOM. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
5 J-BOX FOR POWER TO ACCESS CONTROL POWER SUPPLY AT DOOR. COORDINATE EXACT LOCATION WITH DOOR ACCESS CONTROL AND DOOR HARDWARE.
6 MOUNT J-BOX (60A) ON CABLE TRAY ABOVE RACK FOR POWER TO RACK PDU. FEEDER: (3)#4, (1)#1/0N, (1)#8G, 2"C. MOUNT J-BOX ON CABLE TRAY ABOVE RACK, COORDINATE EXACT LOCATION/PLACEMENT WITH OTHER TRADES. SEE E-500 FOR MORE INFORMATION.
7 NEW PANEL IN EXISTING PANEL LOCATION. RECONNECT ALL EXISTING CIRCUITS TO NEW CIRCUIT BREAKERS IN PANEL. VERIFY EXACT LOAD AND LOCATION IN FIELD.
8 CONNECT NEW RECEPTACLE TO EXISTING POWER PANEL SERVING THE AREA. USE 20AMP SPARE CIRCUIT BREAKER OR PROVIDE NEW AS NEEDED.
9 CONNECT NEW PANEL TO BUILDING DISTRIBUTION PANEL. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. NEW BREAKER TYPE TO MATCH EXISTING.
10 RELOCATED PANEL. RECONNECT ALL CIRCUITS TO EXISTING LOADS. COORDINATE EXACT BRANCH CIRCUIT INFORMATION IN FIELD AND COORDINATE LOCATION/PLACEMENT WITH THE COR.
11 PROVIDE NEW CIRCUIT BREAKER IN AVAILABLE SPACES IN EXISTING DISTRIBUTION. PROVIDE SEPARATE CIRCUIT BREAKER ENCLOSURE IF SPACES ARE NOT AVAILABLE.
12 INDOOR UNIT POWERED BY OUTDOOR UNIT. PROVIDE 20A/2P MOTOR RATED MANUAL TOGGLE CONTROLLER FOR CONTROL OF EQUIPMENT.
15 60AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (3) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUIT FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
16 30AS/NF/2P, NEMA 3R DISCONNECT SWITCH. FEEDER: (2) #10, #10G, 3/4"C. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
18 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION.
20 NEW PANEL AT EXISTING PANEL LOCATION. EXTEND AND RECONNECT EXISTING INCOMING AND OUTGOING FEEDERS. NEW CIRCUIT BREAKER RATING TO MATCH EXISTING.
21 NEW MEDIUM VOLTAGE FEEDER IN EXISTING SPARE CONDUIT BETWEEN THE EXISTING VAULT AND BUILDING 115. PROVIDE NEW CONDUIT IN BUILDING 115 TO THE NEW CIRCUIT BREAKER IN EXISTING MEDIUM VOLTAGE SWITCHGEAR. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
22 ROUTE CONDUIT ON WALL TO A NEW PULLBOX 24"X18"X12" ON CEILING.
23 STUB CONDUIT TO ROOM. SEE SHEET 111-EP114 FOR ADDITIONAL INFORMATION.
24 L5-30R RECEPTACLE MOUNTED ON WALL. COORDINATE LOCATION AND MOUNTING HEIGHT WITH WALL ENCLOSURE PLACEMENT. FEEDER: 2#10, #8N, #10G, 3/4"C.
25 NEW BI-FUEL GENERATOR WITH DIESEL AND NATURAL GAS. SEE MECHANICAL FOR GAS LINE INFORMATION. BASE MOUNTED DIESEL STORAGE TANK AND WEATHERPROOF ENCLOSURE. PROVIDE PLATFORM AND LADDER FOR ACCESS AND MAINTENANCE.
26 SEE CIVIL AND STRUCTURAL FOR FENCE AND PAD DETAILS.
27 UNISTRUT MOUNT PORTABLE GENERATOR AND LOAD BANK CONNECTION BOX. COORDINATE EXACT LOCATION WITH VA COR.
28 NEW NEMA 3R RATED EQUIPMENT MOUNT ON CONCRETE PAD. EXTEND EXISTING CONCRETE PAD.
29 MOUNT GENERATOR DISTRIBUTION PANEL ON CONCRETE PAD.
30 SEE EQUIPMENT SCHEDULE FOR FEEDER AND DISCONNECT INFORMATION. PROVIDE (2) 3/4" CONDUITS FOR CONTROL WIRING AND POWER TO INDOOR UNIT.
32 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (9) 4" AND (3) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
33 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (6) 4" AND (2) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
34 UNDERGROUND CONCRETE ENCASED DUCTBANK WITH (3) 4" AND (1) 1" CONDUITS. SEE SHEET 148-EP101 FOR EXACT CONNECTIONS.
35 RECEPTACLE MOUNTED ON ROOF ADJACENT TO MECHANICAL EQUIPMENT DISCONNECT.
36 ROUTE CONDUIT IN ABOVE CEILING SPACE AND SUPPORT FROM STRUCTURE.
39 CONTRACTOR TO REMOVE CEILING TILES AND/OR CEILING MOUNTED DEVICES AS NEEDED TO ALLOW NEW CONDUIT INSTALLATION. REINSTALL CEILING TILES AND DEVICES AFTER COMPLETE CONDUIT INSTALLATION.
40 MOUNT RECEPTACLE ON EXISTING CABLE TRAY.
41 PROVIDE CONNECTION TO EXISTING LIGHTNING PROTECTION SYSTEM ON ROOF. BONDING CONDUCTOR TO MATCH EXISTING.
42 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
43 PROVIDE LIGHTNING PROTECTION ON GENERATOR ENCLOSURE AND BOND TO FENCE/POST WHERE APPLICABLE. SEE SPECIFICATION SECTION FOR DETAILS.
44 INSTALL BOTH OUTLETS IN COMMON BACKBOX AND COVERPLATE.
45 PENDANT MOUNT TRANSFORMER FROM CEILING. PROVIDE NECESSARY MOUNTING BRACKETS. ELECTRICAL CONTRACTOR TO DETERMINE BEST LOCATION FOR MOUNTING.
46 CONDUITS UP TO CEILING. COORDINATE EXACT LOCATION IN FIELD.
47 CONDUITS ROUTED ABOVE CEILING SPACES. COORDINATE EXACT LOCATION IN FIELD.
49 ROUTE CONDUIT FROM ELEC E-34EC THROUGH BASEMENT CEILING TO BENEATH THE TR AND STUB UP FROM BELOW.
50 STUB UP CONDUITS FROM ELECTRICAL ROOM BELOW TO CEILING OF FIRST FLOOR AND ROUTE TO TELECOM ROOMS.
51 CONDUITS ARE ROUTED UP THE COLUMN TO THE TR ON THE FLOOR ABOVE.
52 ROUTE CONDUITS ON EXTERIOR ROOF AND WALLS. COORDINATE EXACT LOCATION IN FIELD.
53 CONTRACTOR SHALL PROVIDE GENERATOR ENCLOURE AND SETBACK PER VA PSRDM REQUIREMENTS.

TRUE NORTH
PLAN NORTH

Revisions:	Date:

CONSULTANT
IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD
Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP
PROFESSIONAL ELECTRICAL ENGINEER YUMEI WANG E-11991 STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 109 - BASEMENT OVERALL & ENLARGED - ELECTRICAL NEW WORK	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 109
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 109-EP101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

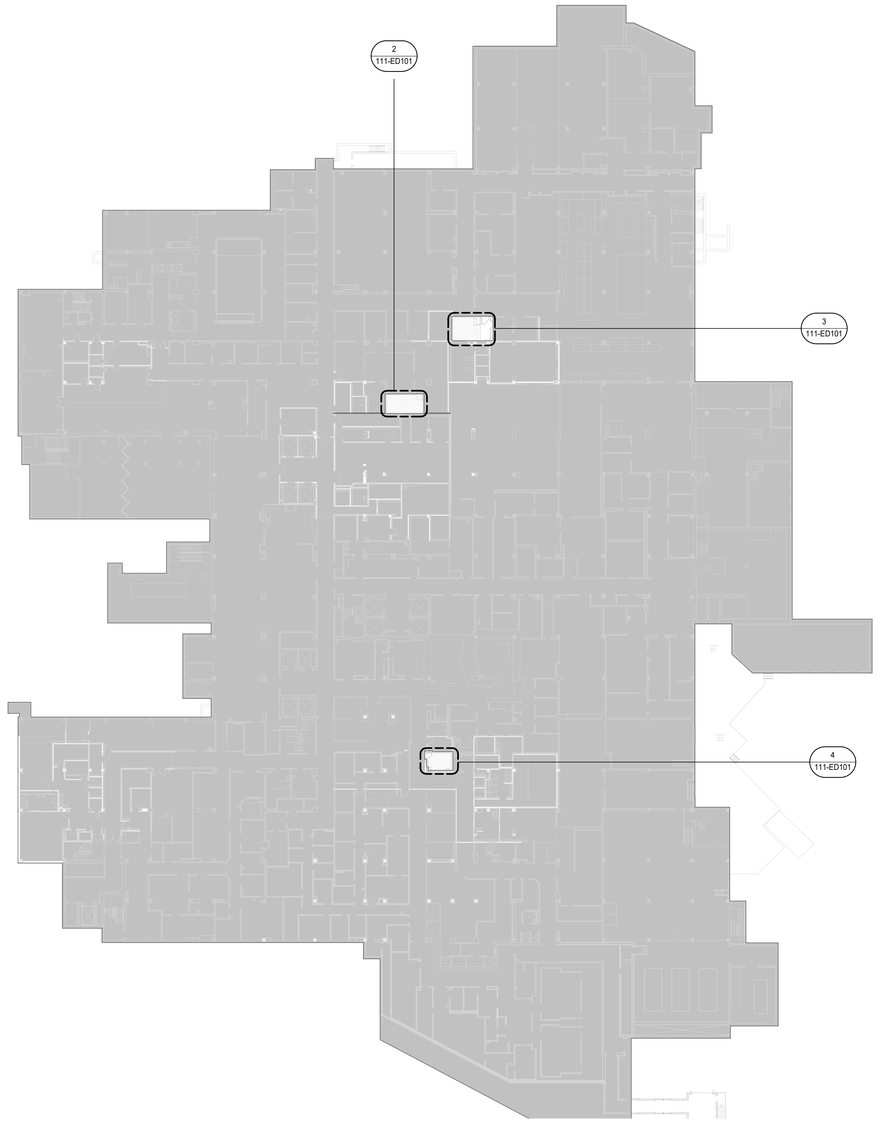
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:27:09 AM

ELEC. DEMO GENERAL NOTES

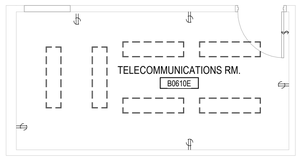
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

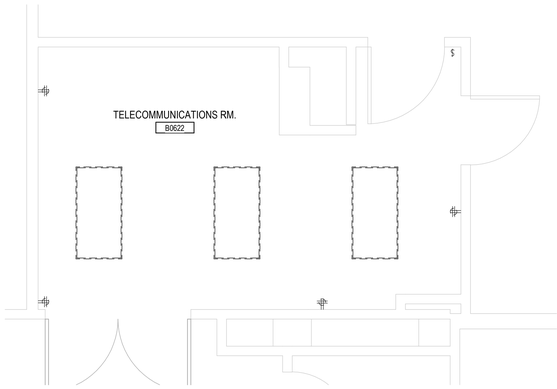
1. EXISTING PANEL TO REMAIN.
2. DISCONNECT AND REMOVE PANEL.
3. NO WORK IN SPACE.
4. REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5. DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6. DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7. LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8. CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9. DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10. PULLBOX AND CONDUIT TO REMAIN.
11. DISCONNECT AND REMOVE ABANDONED PANELS.
12. EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



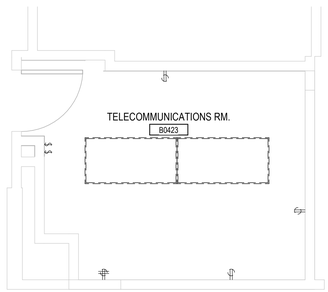
1 BLDG 111 - BASEMENT - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



2 BLDG 111 - BASEMENT - ENLARGED ELECTRICAL DEMOLITION - ROOM B0610E
1/4" = 1'-0"



3 BLDG 111 - BASEMENT - ENLARGED ELECTRICAL DEMOLITION - ROOM B0622
3/8" = 1'-0"



4 BLDG 111 - BASEMENT - ENLARGED ELECTRICAL DEMOLITION - ROOM B0423
3/8" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

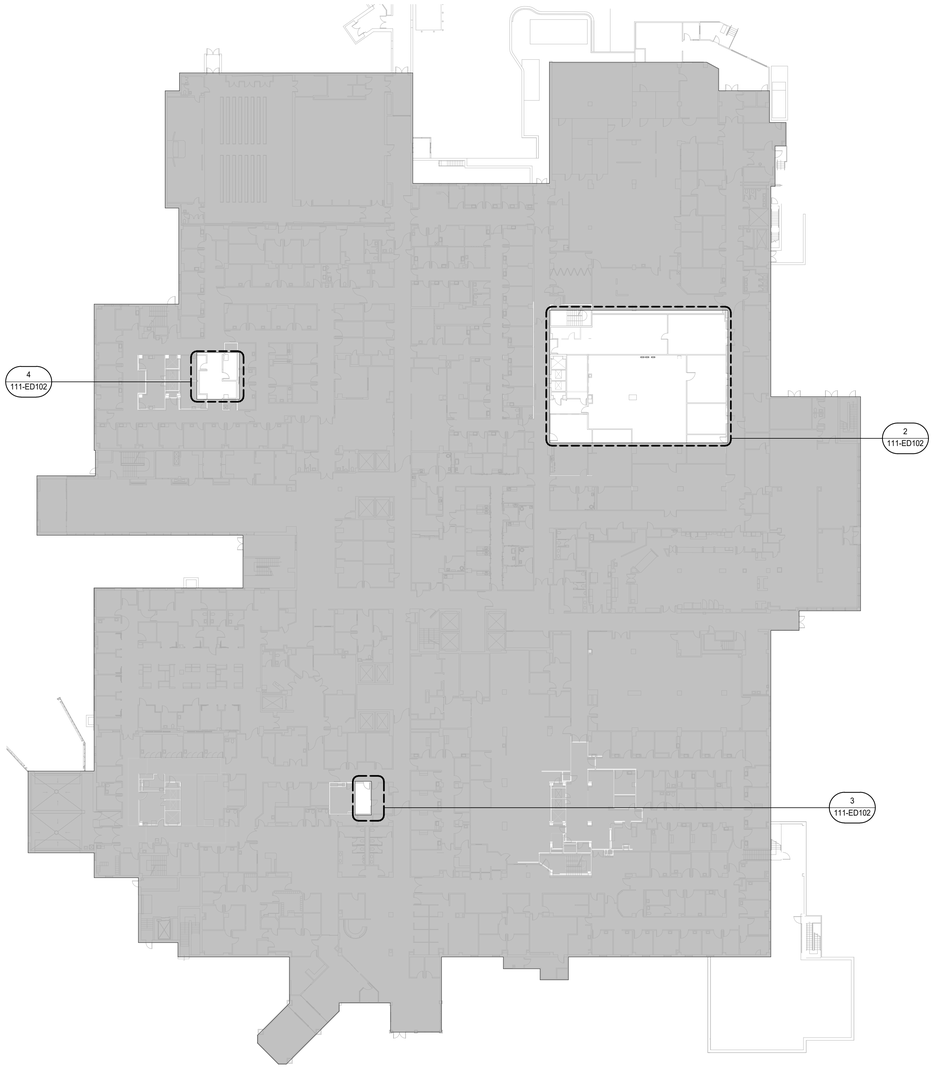
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF MISSISSIPPI
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

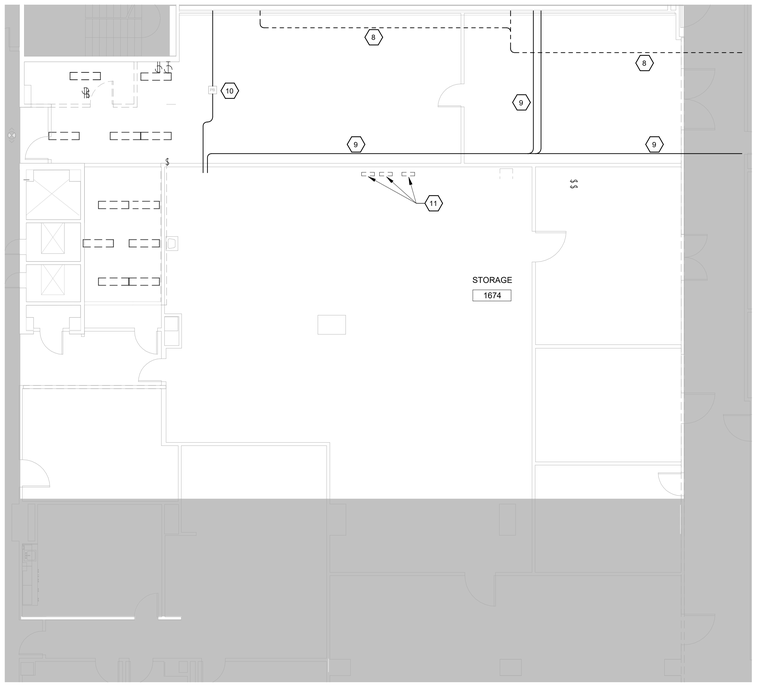
Drawing Title: BLDG 111 - BASEMENT OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 111
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 111-ED101
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

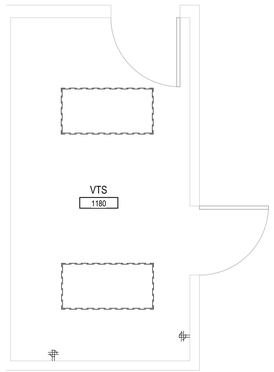
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:27:12 AM



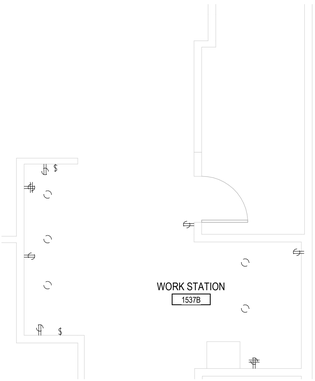
1 BLDG 111 - FIRST FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



2 BLDG 111 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 1659
1/8" = 1'-0"



3 BLDG 111 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 1180
3/8" = 1'-0"



4 BLDG 111 - FIRST FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 1537B
1/4" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

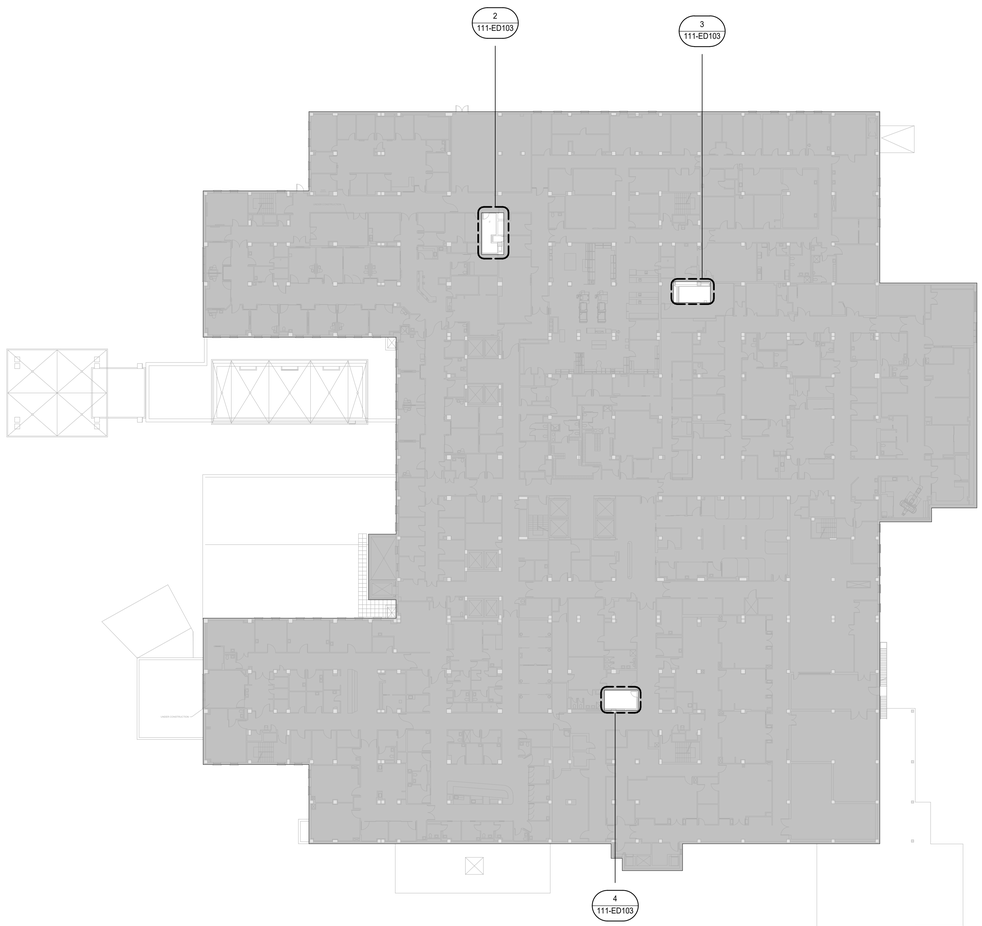
STAMP
PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

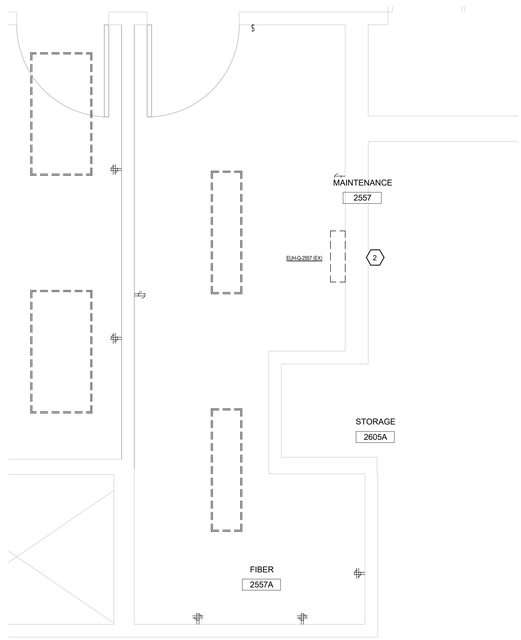
Drawing Title: BLDG 111 - FIRST FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 111
Drawing Number: 111-ED102

VA FORM 08 - 6231

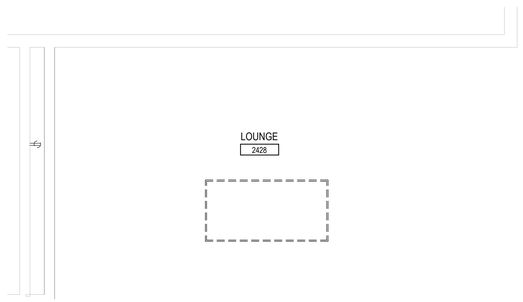
8/29/2025 9:27:15 AM
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt



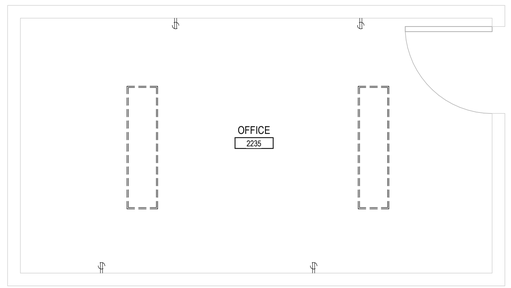
1 BLDG 111 - SECOND FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



2 BLDG 111 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - 2557
1/2" = 1'-0"



3 BLDG 111 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - ROOM 2428
1/2" = 1'-0"



4 BLDG 111 - SECOND FLOOR - ENLARGED ELECTRICAL DEMOLITION - 2235
1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 111 - SECOND FLOOR OVERALL & ENLARGED - ELECTRICAL DEMO

Approved:

Phase: FINAL BID DOCUMENTS

Sprinklered: FULLY SPRINKLERED

Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI

Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI

Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM

Project Number: 695-21-700
Building Number: 111
Drawing Number: 111-ED103

Graphic Scale : 1 1/2" = 1'-0"
Graphic Scale : 3/16" = 1'-0"
Graphic Scale : 1/4" = 1'-0"
Graphic Scale : 3/32" = 1'-0"
Graphic Scale : 1/8" = 1'-0"
Graphic Scale : 1/16" = 1'-0"

8/29/2025 9:27:17 AM
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

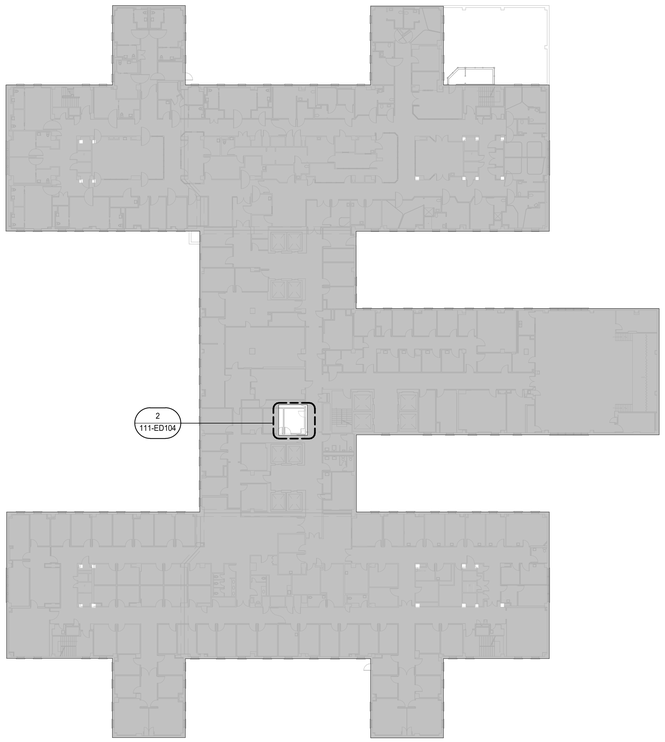
VA FORM 08 - 6231

ELEC. DEMO GENERAL NOTES

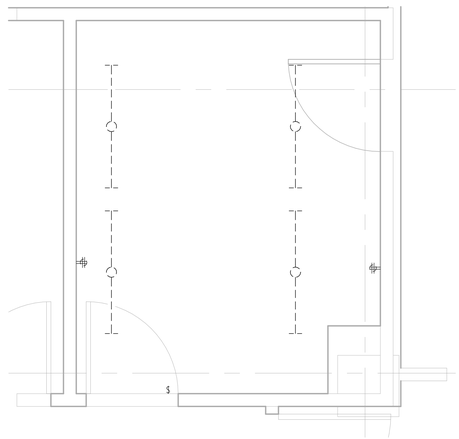
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1. EXISTING PANEL TO REMAIN.
2. DISCONNECT AND REMOVE PANEL.
3. NO WORK IN SPACE.
4. REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5. DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6. DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7. LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8. CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9. DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10. PULLBOX AND CONDUIT TO REMAIN.
11. DISCONNECT AND REMOVE ABANDONED PANELS.
12. EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 111 - THIRD FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



2 BLDG 111 - THIRD FLOOR - ENLARGED ELECTRICAL DEMOLITION - 3308
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 111 - THIRD FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 111
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 111-ED104
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt

8/28/2025 9:27:19 AM

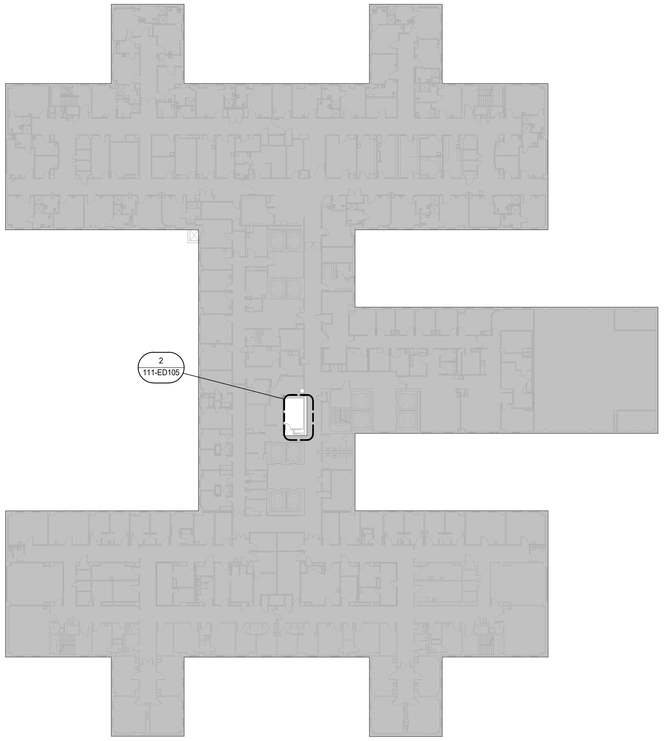
Graphic Scale : 1/16" = 1'-0"
Graphic Scale : 1/8" = 1'-0"
Graphic Scale : 3/32" = 1'-0"
Graphic Scale : 1/4" = 1'-0"
Graphic Scale : 3/16" = 1'-0"
Graphic Scale : 1/2" = 1'-0"
Graphic Scale : 3/4" = 1'-0"
Graphic Scale : 1" = 1'-0"
Graphic Scale : 1 1/2" = 1'-0"

ELEC. DEMO GENERAL NOTES

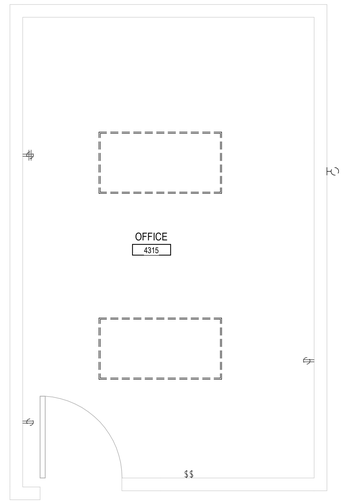
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 111 - FOURTH FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



2 BLDG 111 - FOURTH FLOOR - ENLARGED ELECTRICAL DEMOLITION - 4315
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Graphic Scale : 1/16" = 1'-0"
Graphic Scale : 1/8" = 1'-0"
Graphic Scale : 3/32" = 1'-0"
Graphic Scale : 1/4" = 1'-0"
Graphic Scale : 3/16" = 1'-0"
Graphic Scale : 1/2" = 1'-0"
Graphic Scale : 3/4" = 1'-0"
Graphic Scale : 1" = 1'-0"
Graphic Scale : 1 1/2" = 1'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 111 - FOURTH FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 111
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 111-ED105
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

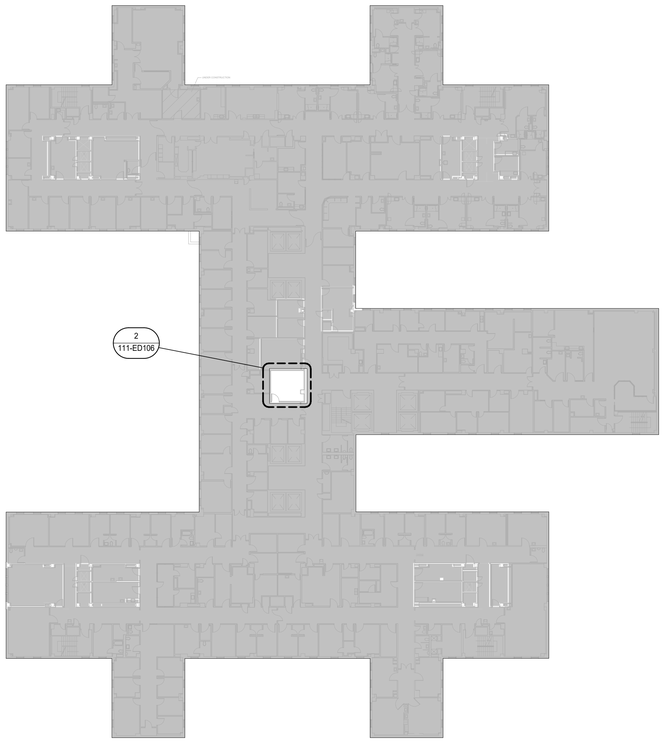
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:27:21 AM

ELEC. DEMO GENERAL NOTES

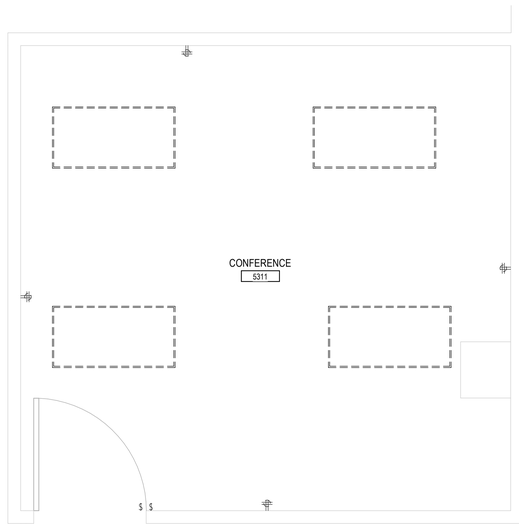
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1. EXISTING PANEL TO REMAIN.
2. DISCONNECT AND REMOVE PANEL.
3. NO WORK IN SPACE.
4. REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5. DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6. DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7. LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8. CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9. DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10. PULLBOX AND CONDUIT TO REMAIN.
11. DISCONNECT AND REMOVE ABANDONED PANELS.
12. EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 111 - FIFTH FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



2 BLDG 111 - FIFTH FLOOR - ENLARGED ELECTRICAL DEMOLITION - 5311
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 111 - FIFTH FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Building Number: 111
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	Drawing Number: 111-ED106

VA FORM 08 - 6231

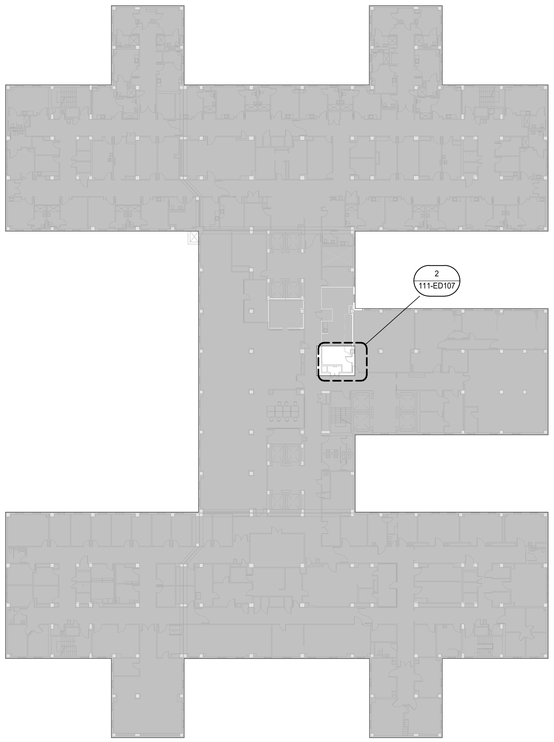
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:27:23 AM

ELEC. DEMO GENERAL NOTES

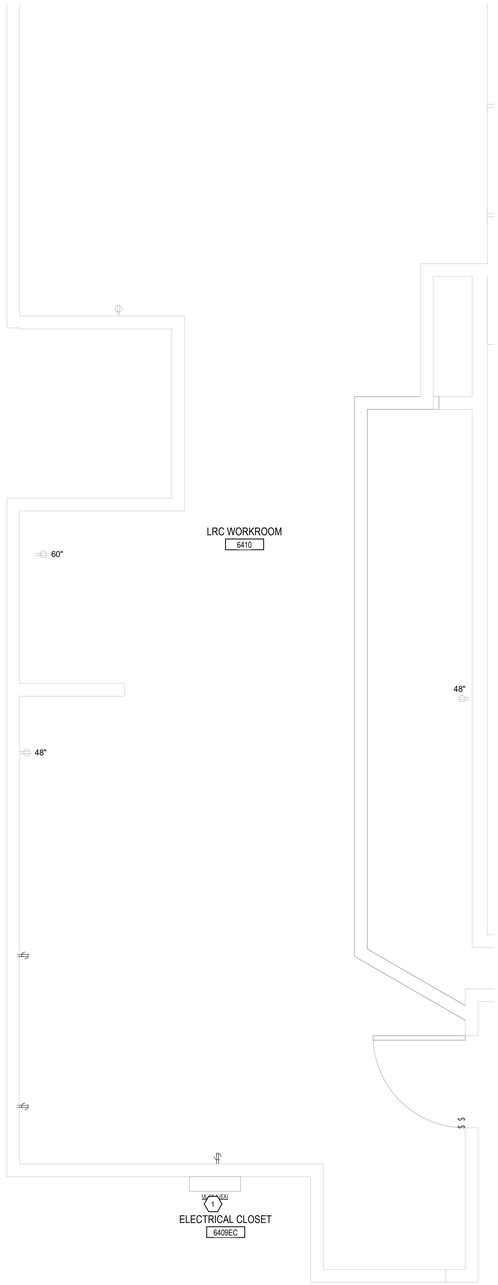
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

#	
1	EXISTING PANEL TO REMAIN.
2	DISCONNECT AND REMOVE PANEL.
3	NO WORK IN SPACE.
4	REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5	DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6	DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7	LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8	CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9	DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10	PULLBOX AND CONDUIT TO REMAIN.
11	DISCONNECT AND REMOVE ABANDONED PANELS.
12	EXISTING CABLE TRAY. REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 111 - SIXTH FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



2 BLDG 111 - SIXTH FLOOR - ENLARGED ELECTRICAL DEMOLITION - 6410
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 111 - SIXTH FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION	Phase: FINAL BID DOCUMENTS	Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI	Project Number: 695-21-700
			Building Number: 111
Approved:	Sprinklered: FULLY SPRINKLERED	Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI	Drawing Number: 111-ED107
		Issue Date: SEPTEMBER 5, 2025 / Checked: YW / Drawn: SM	

VA FORM 08 - 6231

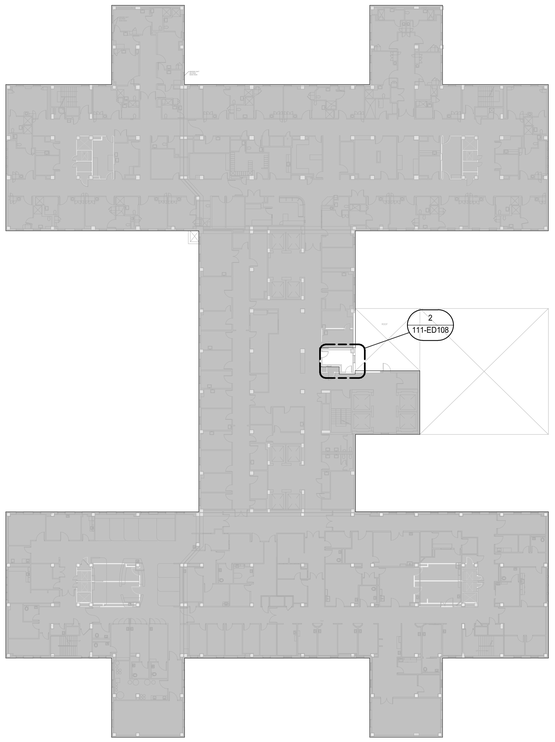
Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:27:24 AM

ELEC. DEMO GENERAL NOTES

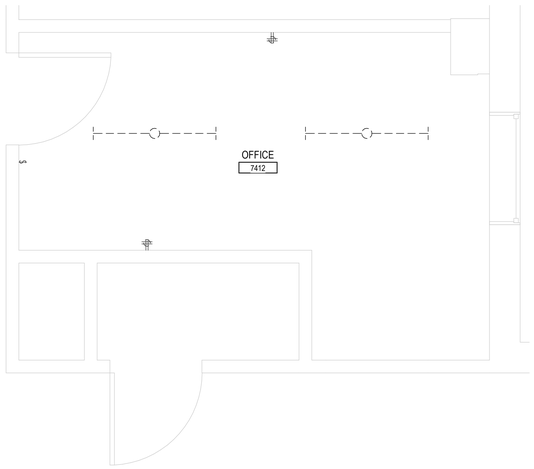
1. SEE SHEET E-001 FOR GENERAL DEMOLITION NOTES.
2. NOT ALL KEYNOTES ARE USED ON THE SHEET.
3. FULL TONE, DASHED OR HATCHED ITEMS INDICATE TO BE DEMOED. HALF TONE ITEMS INDICATE TO REMAIN.

ELEC. DEMO KEYNOTES

1 EXISTING PANEL TO REMAIN.
2 DISCONNECT AND REMOVE PANEL.
3 NO WORK IN SPACE.
4 REMOVE LIGHTING AND WALL POWER OUTLETS IN ROOM.
5 DEVICES ON EXISTING WALLS NOT IMPACTED BY DEMOLITION SHALL REMAIN AND BE PROTECTED DURING DEMOLITION.
6 DISCONNECT AND REMOVE SERVICE DISCONNECT SWITCH, INCOMING FEEDERS TO REMAIN.
7 LIGHTING FIXTURE WILL BE RELOCATED. PROTECT DURING CONSTRUCTION. SEE NEW WORK PLAN OF CORRESPONDING AREA FOR NEW LOCATION.
8 CONTRACTOR TO VERIFY CONDUIT PATH AND DESTINATION. REROUTE CONDUITS TO MAKE SPACE FOR NEW EQUIPMENT AND INSTALLATION.
9 DATA CABLES WILL NEED TO BE RELOCATED OUTSIDE OF ELECTRICAL SPACES.
10 PULLBOX AND CONDUIT TO REMAIN.
11 DISCONNECT AND REMOVE ABANDONED PANELS.
12 EXISTING CABLE TRAY, REFER TO TN SHEETS FOR ADDITIONAL REQUIREMENTS.



1 BLDG 111 - SEVENTH FLOOR - OVERALL ELECTRICAL DEMOLITION
1" = 30'-0"



2 BLDG 111 - SEVENTH FLOOR - ENLARGED ELECTRICAL DEMOLITION - 7412
1/2" = 1'-0"

TRUE NORTH
PLAN NORTH

0' 15' 30' 60'
Graphic Scale : 1" = 30'-0"

Revisions:	Date:

CONSULTANT

IMEG
15 SUNNEN DR SUITE 104
SAINT LOUIS, MO 63143
314.645.1132 FAX: 314.645.1173
www.imegcorp.com # 17002665.02

ARCHITECT/ENGINEER OF RECORD

Romanyk Consulting
Focusing on what matters
Romanyk Consulting Corp. www.romanykconsulting.com
3308 Preston Road, Suite 350-164, Plano, Texas 75093

STAMP

PROFESSIONAL ELECTRICAL ENGINEER
YUMEI WANG
E-11391
STATE OF NEBRASKA
9.5.2025

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BLDG 111 - SEVENTH FLOOR OVERALL & ENLARGED - ELECTRICAL DEMOLITION
Approved:
Phase: FINAL BID DOCUMENTS
Sprinklered: FULLY SPRINKLERED
Project Title: EHRM INFRASTRUCTURE UPGRADES – MILWAUKEE, WI
Location: 5000 W. NATIONAL AVENUE MILWAUKEE, WI
Issue Date: SEPTEMBER 5, 2025
Checked: YW
Drawn: SM
Project Number: 695-21-700
Building Number: 111
Drawing Number: 111-ED108

VA FORM 08 - 6231

Autodesk Docs://OCFM East - Milwaukee EHRM (R24)/Consolidated Model (R24).rvt
8/28/2025 9:27:28 AM