

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
LIGHTING			
	DOWNLIGHT LIGHTING FIXTURE		GROUND ROD
	LINEAR FLUORESCENT LIGHTING FIXTURE		GROUNDING TEST WELL
	LINEAR FLUORESCENT LIGHTING EMERGENCY FIXTURE		AIR TERMINAL
	EXIT LIGHTING FIXTURE. ARROW, WHEN USED, INDICATES DIRECTION. TYPE "X" U.O.N. FILLED-IN QUADRANT(S) OF SYMBOL INDICATES NUMBER AND ORIENTATION OF ILLUMINATED FACES.		TELECOM GROUND BAR
	SINGLE POLE SWITCH, 20 A, 120/277 V.		SERVICE ENTRANCE MASTER GROUND BAR
	THREE-WAY SWITCH, 20 A, 120/277 V.	EQUIPMENT CONNECTIONS	
	OCCUPANCY SENSOR, WALL MOUNTED.		EQUIPMENT CONNECTION
	OCCUPANCY SENSOR; ACTUAL QUANTITY, TYPE MOUNTING CONFIGURATION, AND LAYOUT AS RECOMMENDED BY MANUFACTURER. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.		MOTOR CONNECTION
	DAYLIGHTING SENSOR		4" X 4" SQUARE JUNCTION BOX UON
POWER DEVICES			
	DUPLEX CONVENIENCE RECEPTACLE, 20 A, 125 VAC, MOUNT 18" AFF UON.		DISCONNECT SWITCH, 600V IN NEMA 1 ENCLOSURE UON. . 60A = SWITCH RATING, 3P = NO. OF POLES, 40A = FUSE RATING (NF INDICATES NON-FUSIBLE).
	GFI RECEPTACLE ABOVE COUNTER, MOUNT 48" AFF OR 6" ABOVE BACKSPASH OR COUNTER TOP WHERE COUNTER IS INDICATED.		INTEGRAL DISCONNECT/STARTER
	DUPLEX CONVENIENCE RECEPTACLE WITH INTERNAL GROUND FAULT PROTECTION. 20 A, 125 VAC.		WALL MOUNTED JUNCTION BOX W/ CONDUIT BUSHING FACEPLATE FOR POWER WHIP CONNECTION TO MODULAR FURNITURE. COORDINATE LOCATION AND FINAL POWER REQUIREMENTS WITH MODULAR FURNITURE VENDOR PRIOR TO INSTALLATION. MT = 18" AFF.
	DUPLEX CONVENIENCE RECEPTACLE WITH INTERNAL GROUND FAULT PROTECTION. 20 A, 125 VAC. COORDINATE MOUNTING LOCATION WITH EQUIPMENT.	WIRE, CONDUIT AND RACEWAY	
	QUADRUPLEX CONVENIENCE RECEPTACLE MOUNTED IN TWO-GANG OUTLET BOX - RATED 20A, 125 VOLTS WITH SINGLE COVER PLATE.		BRANCH CIRCUIT OR FEEDER WIRING IN CONDUIT. PROVIDE 2#12, 1#12 GND, 1/2" UON. TICK MARKS, WHEN SHOWN, INDICATE NUMBER OF #12 CONDUCTORS IF OTHER THAN THREE. (+) INDICATES GROUND.
	JUNCTION BOX UNDER SLAB FOR FUTURE POWER TO FURNITURE. PROVIDE 6" BRANCH CIRCUIT CONDUCTOR PIGTAIL IN JUNCTION BOX FOR FUTURE POWER CONNECTIONS. FINAL BRANCH CIRCUIT CONNECTIONS TO FURNITURE IS BY OTHERS.		CONDUIT TURNED UP
	JUNCTION BOX UNDER SLAB FOR FUTURE DATA/TELECOM CABLEING TO FURNITURE. FINAL CONNECTION TO FURNITURE IS BY OTHERS. ROUTE MIN 1-1/2" TO INTERSTITIAL SPACE. COORDINATE FINAL LOCATION WITH FURNITURE VENDOR PRIOR TO INSTALLATION.		CONDUIT TURNED DOWN
	SPECIAL PURPOSE RECEPTACLE. RATING AS INDICATED, MOUNT TO SUIT EQUIPMENT.	DISTRIBUTION	
	NEMA 14-50 RANGE OUTLET. PROVIDE 3#6, 1#10GND IN 3/4" C BRANCH CIRCUIT.		PANELBOARD - 480Y/277V
	RANGE		PANELBOARD - 208Y/120V
SYSTEMS			
	VOICE AND DATA COMM OUTLET		
	VOICE WALL COMM OUTLET		
	DATA COMM OUTLET		
	VOICE COMM OUTLET		
	DATA COMM OUTLET MOUNTED IN CEILING. COORDINATE LOCATION PRIOR TO ROUGH-IN.		
	MODULAR FURNITURE VOICE AND DATA FURNITURE FEED OUTLET. PROVIDE JB WALL MOUNTED FOR VOICE/DATA CONNECTION TO INTEGRAL MODULAR FURNITURE VOICE/DATA OUTLET(S). ROUTE MIN 1-1/2" TO INTERSTITIAL SPACE. COORDINATE FINAL LOCATION WITH FURNITURE VENDOR PRIOR TO INSTALLATION.		
	CATV OUTLET. ROUTE 3/4" TO CABLE TRAY SERVING SPACE UON.		
	48-PORT PATCH PANEL(S)		
	110 BLOCK(S)		
	VFI NETWORK SWITCH		
	FIBER CABINET ENCLOSURE		
	CARD READER		
	PA/INTERCOM SPEAKER, FLUSH CEILING MOUNTED WITH BACKCAN AND WHITE SOUND GRILL		
	PA AMPLIFIER		
	VOLUME CONTROLLER		
	CCTV SECURITY CAMERA. COORDINATE EXACT LOCATION, MOUNTING HEIGHT AND PROVISIONS WITH FACILITY SECURITY CONSULTANT. PROVIDE JUNCTION BOX WITH 3/4" EMPTY CONDUIT TO INTERSTITIAL SPACE CABLE TRAY.		
	NURSE CALL		
	NURSE CALL DOME LIGHT, MT ABOVE DOOR WAY UON.		
	NURSE CALL PANEL		
	DURESS ALARM/ IR SENSOR, MOUNT 42" AFF. ROUTE 3/4" TO INTERSTITIAL SPACE CABLE TRAY FOR DURESS ALARM WIRING.		
	DURESS ALARM MASTER STATION, COORDINATE FINAL LOCATION WITH VA PERSONNEL		
	DURESS ALARM LIGHT		

ABBREVIATIONS

A	AMPERE	KWH	KILOWATT HOUR
A/C	AIR CONDITIONING	KVA	KILOVOLT AMPERE
AC	ABOVE COUNTER	LAN	LOCAL AREA NETWORK
AFF	ABOVE FINISHED FLOOR	LTG	LIGHTING
AT	AMPERE TRIP	MCB	MAIN CIRCUIT BREAKER
ATC	AUTOMATIC TEMPERATURE CONTROL	MLO	MAIN LUG ONLY
ATS	AUTOMATIC TRANSFER SWITCH	MT	MOUNT
AWG	AMERICAN WIRE GAUGE	MTD	MOUNTED
BKBD	BACKBOARD	MTG HT	MOUNTING HEIGHT
BLDG	BUILDING	N/C	NORMALLY CLOSED
BMS	BALANCED MAGNETIC SWITCH	NF	NON-FUSED
BRKR	BREAKER	N/O	NORMALLY OPEN
C	CONDUIT	NEU	NEUTRAL
CB	CIRCUIT BREAKER	NIC	NOT IN CONTRACT
CH	CONTINUOUS HOT	P	POLE
CCTV	CLOSED CIRCUIT TELEVISION	PA	PUBLIC ADDRESS
CKT	CIRCUIT	PH	PHASE
DISC SW	DISCONNECT SWITCH	PNL	PANEL
DWG	DRAWING	PVC	POLY VINYL CHLORIDE
EC	EMPTY CONDUIT	QTY	QUANTITY
EF	EXHAUST FAN	RE	RELOCATE
EMT	ELECTRICAL METALLIC TUBING	RF	RETURN FAN
EQ	EQUIPMENT	RECEPT	RECEPT
EWC	ELECTRIC WATER COOLER	REQ'D	REQUIRED
EWH	ELECTRIC WATER HEATER	SC	SPLIT CIRCUIT
EX	EXISTING TO REMAIN	SF	SUPPLY FAN
FACP	FIRE ALARM CONTROL PANEL	S/N	SOLID NEUTRAL
FCU	FAN COIL UNIT	SW	SWITCH
FF	FURNITURE FEED	TEL	TELEPHONE
FLA	FULL LOAD AMPS	TGB	TELEPHONE GROUNDING BUSBAR
FLUOR	FLUORESCENT	TTB	TELEPHONE TERMINAL BOARD
GFI	GROUND FAULT INTERRUPTER	TR	TELECOMMUNICATIONS ROOM
GND	GROUND	TV	TELEVISION
GRS	GALVANIZED RIGID STEEL	UH	UNIT HEATER
HP	HORSEPOWER	UON	UNLESS OTHERWISE NOTED
IAW	IN ACCORDANCE WITH	V	VOLTS
IDS	INTRUSION DETECTION SYSTEM	VAC	VOLTS ALTERNATING CURRENT
KAIC	THOUSAND AMP INTERRUPTING CAPACITY, RMS SYMMETRICAL	VFCI	VA FURNISHED, CONTRACTOR INSTALLED
KCMIL	THOUSAND CIRCULAR MILS	VFI	VA FURNISHED, VA INSTALLED
		W	WIRE
		WH	WATER HEATER
		WP	WEATHERPROOF
		XFMR	TRANSFORMER

ELECTRICAL NOTES

- GENERAL
- PRIORITIZE THE USE OF PRE-EXISTING BRANCH CIRCUITS MADE AVAILABLE DURING THE DEMOLITION PROCESS
 - CIRCUITING DESIGNATIONS INDICATED ON PLANS ARE BASED ON EXISTING PANELBOARD DIRECTORY PER ONSITE FIELD SURVEY AND IS FOR REFERENCE ONLY. FIELD VERIFY AVAILABILITY OF BRANCH CIRCUITS AND RECONFIGURE PANELBOARD CIRCUITING AS REQUIRED FOR A COMPLETE INSTALLATION. WHERE DEEMED FEASIBLE, PRIORITIZE THE USE OF PRE-EXISTING BRANCH CIRCUITING SERVING SPACE.
 - VISIT SITE PRIOR TO SUBMISSION OF BID FOR A THOROUGH REVIEW OF EXISTING CONDITIONS THAT MAY AFFECT WORK. CONTRACTOR SHALL NOTIFY ENGINEER OF EXISTING CONDITIONS THAT MAY REQUIRE WORK NOT IDENTIFIED WITHIN DOCUMENTS PRIOR TO BID. COORDINATE WITH VAMC FACILITY ENGINEER WHERE WORK REQUIRES DISRUPTION OF POWER SERVICE OF ANY AREAS OUTSIDE OF AREA OF WORK. PROVIDE A WRITTEN NOTICE TO VAMC FACILITY ENGINEER A MINIMUM OF SEVEN DAYS PRIOR TO OUTAGE INDICATING REQUIRED OUTAGE AND DURATION AS AGREED UPON WITH THE VAMC FACILITY ENGINEER.
 - PROVIDE ALL DISCONNECTION AND RECONNECTION OF EXISTING EQUIPMENT REQUIRED BY ALL TRADES.
 - ALL WORK SHALL COMPLY WITH VA REGULATIONS AND REQUIREMENTS.
 - WHERE WORK DISRUPTS EXISTING CONDITIONS, RESTORE EXISTING EQUIPMENT AND RESTORE ALL WALLS, FLOORS, CEILINGS, ETC. AND TO ORIGINAL CONDITION. REPAIR, PATCHING AND PAINTING OF WALLS, FLOORS AND CEILINGS SHALL BE PROVIDED PER ARCHITECTURAL SPECIFICATIONS. DISCONNECT AND RECONNECT ALL EXISTING EQUIPMENT AND DEVICES TO REMAIN AS REQUIRED TO RESTORE TO EXISTING OPERATING CONDITIONS.
 - PROVIDE ONE SET OF REPRODUCIBLE AS-BUILT DOCUMENTS INDICATING ALL DEVIATIONS FROM THE CONTRACT DOCUMENTS.
 - UPDATE PANEL SCHEDULES IN EXISTING PANELBOARDS AFFECTED BY THE PROJECT RENOVATION PER VA DESIGN MANUAL 1.14.9. INDICATING ACCURATE CIRCUIT DESCRIPTION, ROOM LOCATION AND CIRCUIT BREAKER FOR EACH AFFECTED CIRCUIT POSITION. PROVIDE TYPED PANEL SCHEDULES. HAND-WRITTEN PANEL SCHEDULES ARE NOT PERMITTED.
- DEMOLITION
- EQUIPMENT INDICATED FOR DEMOLITION, SUCH AS LIGHTING FIXTURES, WIRING DEVICES, CONDUITS, ETC., SHOWN ON PLANS ARE TO BE COMPLETELY REMOVED. CUT/CAP CONDUITS AT THE AREA OF WORK PERIMETER AND REMOVE CONDUIT WITHIN THE WORK AREA, DISCONNECT WIRING AT THE OVERCURRENT PROTECTIVE DEVICE AND REMOVE WIRING COMPLETELY FROM THE ABANDONED CONDUITS.
 - REMOVE ALL ACCESSIBLE ABANDONED WIRING OF ALL TYPES, OR CAP AND LABEL IN JUNCTION BOX FOR RE-USE, IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE.
 - MAINTAIN BRANCH CIRCUIT CONTINUITY AND/OR RESTORE, IF INTERRUPTED, ALL CONDUITS AND CONDUCTORS PASSING THROUGH RENOVATED AREAS AND SERVING UNDISTURBED AREAS NOT IN THE SCOPE OF WORK.
- POWER
- PROVIDE FINAL CONNECTION TO MODULAR WORKSTATION SYSTEMS FURNITURE AFTER MODULAR FURNITURE IS INSTALLED. COORDINATE POWER CONNECTION REQUIREMENTS WITH MODULAR WORKSTATION SYSTEMS FURNITURE VENDOR PRIOR TO INSTALLATION.
 - FOR ACCIDENT PREVENTION, ALL RECEPTACLES SHALL BE INSTALLED WITH THE GROUND PIN UP.
 - RECEPTACLES, WALL MOUNTED OCCUPANCY SENSORS AND TOGGLE SWITCH COVER PLATES SHALL BE PROVIDED WITH A LABEL THAT INDICATES THE PANELBOARD AND CIRCUIT NUMBER THAT SERVES EACH DEVICE.
 - DEVICE PLATES INSTALLED IN WET LOCATIONS SHALL BE GASKETED AND UL LISTED FOR "WET LOCATIONS".
 - PROVIDE IDENTIFICATION OF PANEL AND CIRCUIT NUMBER ON DEVICE PLATE USING 1/8" HIGH BLACK LETTERS (#10 SIZE), WITH A TIMES NEW ROMAN FONT, IN ALL CAPITALS AND BOLD ON POLYESTER ADHESIVE-TAPE, 1.77" WIDE X 0.59" HIGH.
 - WIRE AND CONDUIT FOR MOTOR AND EQUIPMENT LOADS SHALL BE CONTINUOUS IN SIZE FROM SOURCE TO FINAL CONNECTION.
 - FOR NEW-TO-EXISTING CONNECTIONS, PROVIDE MATERIALS (JUNCTION BOXES, CONDUIT, WIRE, ETC.) AND LABOR AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM INSTALLATION.
 - COORDINATE EXACT LOCATION OF CEILING MOUNTED LIGHTING FIXTURES, RECEPTACLES, AND SPEAKERS WITH ARCHITECTURAL REFLECTED CEILING PLANS.
 - FIRE STOP ALL FIRE RATED WALL AND FLOOR PENETRATIONS TO MEET CODE REQUIREMENTS. ANY OPENINGS CREATED IN A FIRE OR SMOKE RATED WALL BY PROVISION OF ANY ELECTRICAL DEVICE OR CONDUIT, SHALL BE SEALED WITH A UL APPROVED FIRE/SMOKE SEALANT APPROPRIATE TO RE-ESTABLISH THE PREVIOUS RATING OF THE WALL. SEE G1101 FOR FIRE RATED WALLS/FLOORS AND RATING. PROVIDE VA STANDARD CONTOLCHES, RECEPTACLES AND COVERPLATES UON. COORDINATE FINISH REQUIREMENTS WITH ARCHITECT.
 - ALL CONDUIT SHALL BE CONCEALED UON. MINIMUM CONDUIT SIZE SHALL BE 1/2" CONDUIT. MINIMUM HOMERUN CONDUIT SIZE SHALL BE 3/4".
 - MOUNT DEVICES AS INDICATED ON AE002.
 - PROVIDE WEATHERPROOF RECEPTACLES WITH GFI.
- GROUNDING
- WHERE UTILIZED FOR CONNECTION TO RECEPTACLES OR EQUIPMENT, FLEXIBLE CABLE SHALL HAVE EQUIPMENT GROUND WIRE AND THE METALLIC SHEATH ASSEMBLY SHALL BE LISTED FOR USE AS AN EQUIPMENT GROUNDING RETURN PATH PER NEC ARTICLE 517.
 - PROVIDE A SEPARATE GREEN INSULATED GROUND WIRE IN ALL CONDUIT. PROVIDE REDUNDANT GROUND PATH FOR CIRCUITING TO ALL RECEPTACLES AND EQUIPMENT PER NEC ARTICLE 517.
- COMMUNICATIONS AND SYSTEMS
- SEE E5700 SERIES DRAWINGS FOR COMMUNICATIONS AND SPECIAL SYSTEMS DESIGN
 - INSTALL CABLEING IN ACCORDANCE WITH TIA/EIA 568B.1, B.2 AND ALL LOCAL AND NATIONAL FIRE CODES.
 - TELECOM JACKS: DATA JACKS = RJ 45, VOICE JACKS = RJ 11. COORDINATE FINAL VOICE JACK TYPE WITH FACILITY IT PERSONNEL.
 - CATV OUTLET: 2-PORT WALL OUTLET WITH F-TYPE CONNECTOR. ROUTE RG 6 COAX CABLE TO RESPECTIVE FLOOR TR ROOM VIA INTERSTITIAL SPACE CABLE TRAY.
 - DATA AND VOICE OUTLET: QUAD FACEPLATE, PROVIDE 3 DATA JACKS AND 1 VOICE JACK.
 - VOICE OUTLET: PROVIDE 1 VOICE JACK.
 - DATA OUTLET: PROVIDE 2 DATA JACKS.
 - PROVIDE HORIZONTAL COMM CABLE HOMERUN TO RESPECTIVE FLOOR LAN ROOM FOR EACH COMM OUTLET JACK SPECIFIED. EXAMPLE: 3 DATA JACKS AND 1 VOICE JACK PER OUTLET = TOTAL OF FOUR (4) HOMERUNS TO RESPECTIVE FLOOR LAN ROOM PATCH PANEL.
 - PROVIDE BLUE CABLEING FOR VOICE AND YELLOW FOR DATA.
 - PROVIDE 4-PAIR CAT 6 PLENUM RATED COMM HORIZONTAL CABLES FOR DATA AND VOICE.
 - TELECOM RACK: 19"x7" 45U STANDARD FLOOR MOUNT RACK (BASIS OF DESIGN = B-LINE SB556084XUFB). PROVIDE WITH RACK ANCHOR KIT (BASIS OF DESIGN = B-LINE SB8588A). PROVIDE WITH MINIMUM TWO (2) VERTICAL CABLE MANAGERS (BASIS OF DESIGN = PANDUIT WMP45E) AND HORIZONTAL CABLE MANAGERS AS REQUIRED (BASIS OF DESIGN = PANDUIT).
 - FIBER CABINET ENCLOSURE: 4U RACK SPACE, 144 MAX DENSITY, BASIS OF DESIGN = CORNING #CCH-04U. PROVIDE WITH SM, LC FIBER CABINET ENCLOSURE CONNECTOR PANELS, BASIS OF DESIGN = CORNING #CCH-CP24-A9 AND MM, LC FIBER CABINET ENCLOSURE CONNECTOR PANELS, BASIS OF DESIGN = CORNING #CCH-CP12-48.
 - 110-BLOCK(S): ICC 100-PAIR WIRING BLOCKS WITH LEGS. IC110WF100 OR EQUAL.
 - 48-PORT PATCH PANEL(S): 48-PORT, CAT6 RACK MOUNT TIA568A/B PATCH PANEL, LEVITON 69586-U48-LEV OR EQUAL. LABEL EACH PORT OF 48-PORT PATCH PANEL WITH CORRESPONDING COMM OUTLET COMM JACK LABEL LOCATION.
 - PROVIDE FINAL TERMINATIONS FOR HORIZONTAL AND BACKBONE CABLEING.
 - PER SPEC SECTION 271500, TEST ALL COMM CABLEING TO ENSURE TERMINATIONS AND CABLEING ARE IN WORKING CONDITION. TEST RESULTS SHALL BE APPROVED BY THE VA FACILITY IT MANAGER PRIOR TO CLOSE OUT OF PROJECT.
 - PROVIDE MINIMUM 6" OF COMM CABLE SPACK AT LAN ROOM PATCH PANEL.
 - SUPPORT COMM CABLEING WITH J-HOOKS SLACKED AT MAX 48" INTERVALS WHERE NOT ROUTED IN CABLE TRAYS.
 - AT EACH COMMUNICATION OUTLET, PROVIDE A 4" SQUARE JUNCTION BOX WITH 1" CONDUIT ROUTED TO INTERSTITIAL SPACE CABLE TRAY SERVING SPACE UON.
 - PROVIDE PULL STRINGS IN ALL EMPTY CONDUIT.
 - CONTRACTOR SHALL PROVIDE CONDUIT SYSTEMS, GROUNDING AND 120V POWER REQUIRED FOR PROGRAM REQUIRED COMMUNICATIONS AND SECURITY SYSTEMS. COORDINATE WITH RESPECTIVE VENDOR. PROVIDE ALL JUNCTION BOXES, CONDUIT, SLEEVES AND CONDUIT ACCESS TO DOORS AND DEVICES AS REQUIRED FOR EQUIPMENT AND CABLEING.
 - MOUNT DEVICES 18" AFF UON ON PLANS OR SPECIFICATIONS
- LIGHTING AND LIGHTING CONTROL SYSTEM
- PROVIDE LIGHT FIXTURES PER LIGHTING FIXTURE SCHEDULE OR EQUAL, TO MATCH VAMC MCGUIRE HOSPITAL STANDARDS WHERE SPECIFIC FACILITY STANDARDS EXIST.
 - PROVIDE THE FINAL LIGHTING CONTROL SYSTEM PROGRAMMING. COORDINATE THE FINAL SYSTEM PROGRAMMING REQUIREMENTS WITH END USER AND MANUFACTURER PRIOR TO CLOSE OUT OF PROJECT.
 - BRANCH CIRCUITING TO EXIT LIGHTS AND EGRESS LIGHTING SHALL BE CONTINUOUS, UN-SWITCHED, AND CONNECTED AHEAD OF ANY LIGHTING CONTROL DEVICES, UON.
 - PROVIDE A CONTINUOUS PHASED CONDUCTOR TO ALL EGRESS LIGHTING, EXIT SIGNS, AND EMERGENCY LIGHTING BATTERY BACK UP UNITS FROM THE SAME PANEL BOARD SERVING THE LIGHTING IN THE SAME AREA.
 - PROVIDE COMPONENTS, LOW VOLTAGE CONNECTIONS, WIRING, AND ACCESSORIES FOR A COMPLETE INSTALLATION PER MANUFACTURERS RECOMMENDATIONS.
 - PROVIDE SHOP DRAWINGS INCLUDING A MINIMUM OF THE FOLLOWING:
 - WIRING CONTROL DIAGRAMS
 - SYSTEM DEVICE AND COMPONENT CUTSHEETS
 - SYSTEM ZONE CONTROL AND CIRCUITING SCHEDULES
- NURSE CALL SYSTEMS
- PROVIDE SECOND FLOOR NURSE CALL SYSTEM AND ASSOCIATED COMPONENTS TO MATCH EXISTING FACILITY NURSE CALL SYSTEM.
 - EXISTING FIRST FLOOR NURSE CALL SYSTEM & COMPONENTS (WESTCOM 8000) SHALL REMAIN UNLESS INDICATED TO BE REMOVED OR RELOCATED.
 - EXTEND WIRING (IN CONDUIT) FROM FORMER LOCATION OF DEVICE & CONNECT.
 - EXISTING DEVICES & COMPONENTS REMOVED & NOT RELOCATED SHALL BE TURNED OVER TO THE OWNER.
 - UPON COMPLETING THE RELOCATION OF VARIOUS COMPONENTS OF THE EXISTING SYSTEM BY A REPRESENTATIVE OF THE MANUFACTURE THE REPRESENTATIVE SHALL ALIGN AND BALANCE THE SYSTEM AND PERFORM COMPLETE SYSTEM PRETESTING. AFTER PRETESTING, THE SYSTEM SHALL BE FORMALLY TESTED IN THE PRESENCE OF A GOVERNMENT REPRESENTATIVE. DURING THE EXISTING SYSTEM PRETEST, THE CONTRACTOR SHALL VERIFY THAT THE SYSTEM MODIFICATIONS WERE INSTALLED PROPERLY AND IS FULLY OPERATIONAL.
 - ACCEPTANCE TESTING: THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER IN WRITING SEVEN DAYS AFTER THE PRETEST HAS BEEN COMPLETED AND 30 DAYS PRIOR TO THE DATE
- ACCEPTANCE TESTING IS EXPECTED TO BEGIN. THE SYSTEM SHALL BE TESTED BY A REPRESENTATIVE OF WESTCOM AND IN THE PRESENCE OF A GOVERNMENT REPRESENTATIVE. THE CONTRACTOR SHALL VERIFY THAT THE TOTAL EXISTING SYSTEM IS FULLY OPERATIONAL.
- THE MODIFIED SYSTEM SHALL BE CERTIFIED PRIOR TO ACCEPTANCE & A REVISED WIRING DIAGRAM INDICATING ALL MODIFICATIONS SHALL BE PROVIDED TO THE OWNER.
 - CONTRACTOR SHALL VERIFY EXACT LOCATION OF SECURITY "CALL" PUSHBUTTON WITH USER PRIOR TO ROUGH-IN.
- PAGING SYSTEM
- SPEAKERS AND VOICE CONTROL DEVICE LOCATIONS ARE INDICATED FOR REFERENCE ONLY. COORDINATE FINAL LOCATIONS WITH VAMMC HOSPITAL FACILITY PERSONNEL.
 - PROVIDE SECOND FLOOR PAGING SYSTEM AND ASSOCIATED COMPONENTS TO MATCH EXISTING FACILITY PAGING SYSTEM.
 - FIRST FLOOR PAGING SYSTEM COMPONENTS SHALL BE RELOCATED AS INDICATED. EXTEND WIRING, ETC., AS REQUIRED FOR A COMPLETE, FUNCTIONING SYSTEM. PROVIDE NEW NURSE CALL COMPONENTS AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
 - UPON COMPLETING THE RELOCATION OF VARIOUS COMPONENTS OF THE EXISTING SYSTEM THE CONTRACTOR SHALL PERFORM COMPLETE SYSTEM PRETESTING. AFTER PRETESTING, THE SYSTEM SHALL BE FORMALLY TESTED IN THE PRESENCE OF A GOVERNMENT REPRESENTATIVE. DURING THE EXISTING SYSTEM PRETEST, THE CONTRACTOR SHALL VERIFY THAT THE SYSTEM MODIFICATIONS WERE INSTALLED PROPERLY, AND IS FULLY OPERATIONAL.
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- FIRE ALARM SYSTEM
- REFER TO FIRE PROTECTION PLANS FOR FIRE ALARM SYSTEM DESIGN AND DEVICE LAYOUT.
- DURESS ALARM SYSTEM
- PROVIDE A COMPLETE AND OPERABLE DURESS ALARM SYSTEM WITH THE FOLLOWING FEATURES:
 - BASIS OF DESIGN: SIMPLEXGRINNELL EZ CARE VITAL TOUCH IR/RF STAFF DURESS/LOCATOR ALERT SYSTEM
 - IF SENSORS PLACED IN ROOMS WHERE INDICATED ON PLANS.
 - RF SENSORS PLACED AS REQUIRED PER MANUFACTURER'S RECOMMENDATIONS.
 - DURASS ALARM MASTER STATION: VITAL TOUCH PC BASED MASTER STATION TO BE LOCATED IN FIRST FLOOR OUTPATIENT MENTAL HEALTH UNIT TO ANNUNCIATE STAFF DURESS CALLS. COORDINATE FINAL LOCATION WITH VA PERSONNEL PRIOR TO INSTALLATION.
 - INTEGRATE SYSTEM WITH EXISTING HOSPITAL WIDE DURESS ALARM SYSTEM. NEW OUTPATIENT MENTAL HEALTH UNIT SHALL ANNUNCIATE AT THE MCGUIRE VA HOSPITAL POLICE DISPATCH DESK.
 - PROVIDE ALL EQUIPMENT TERMINATIONS AND CABLE INSTALLATIONS AS RECOMMENDED BY MANUFACTURER
 - PROVIDE CONDUIT/RACEWAYS, JUNCTION BOXES, NETWORK CONNECTIONS, PATCHING, PAINTING, FIRE CAULKING, AND WALL REPAIR AS REQUIRED FOR A COMPLETE INSTALLATION.
 - PROVIDE SYSTEM WITH FIPS COMPLIANCE.
 - UPON COMPLETING THE RELOCATION OF VARIOUS COMPONENTS OF THE EXISTING SYSTEM THE CONTRACTOR SHALL PERFORM COMPLETE SYSTEM PRETESTING. AFTER PRETESTING, THE SYSTEM SHALL BE FORMALLY TESTED IN THE PRESENCE OF A GOVERNMENT REPRESENTATIVE. DURING THE EXISTING SYSTEM PRETEST, THE CONTRACTOR SHALL VERIFY THAT THE SYSTEM MODIFICATIONS WERE INSTALLED PROPERLY, AND IS FULLY OPERATIONAL.
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 - COORDINATE FINAL INSTALLATION REQUIREMENTS WITH VA MCGUIRE FACILITY ENGINEER.

FULLY SPRINKLERED

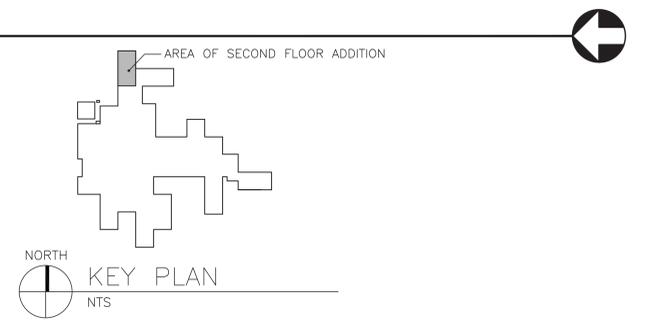
<p>Revisions</p> <table border="1"> <tr> <th>Revisions</th> <th>Date</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	Revisions	Date					<p>CONSULTANT ENGINEER:</p> <p>1111 E MAIN STREET, SUITE 1905 RICHMOND, VA 23219 PHONE: 804.644.4690</p>	<p>ARCHITECT:</p> <p>131 HANBURY ROAD, SUITE C CHESAPEAKE, VA 23322 PHONE: 757.389.5518</p>	<p>Drawing Title ELECTRICAL LEGEND NOTES AND SCHEDULES</p> <p>Approved Project Director</p>	<p>Project Title Mental Health Recovery Enhancement Center HH McGuire VA Medical Center</p> <p>Location Richmond, VA</p> <p>Date 082412 FOR CONSTRUCTION</p> <p>Checked JM</p> <p>Drawn HLB</p>	<p>Project Number 310</p> <p>Building Number 500</p> <p>Drawing Number ES001</p>	<p>Office of Construction and Facilities Management</p>
	Revisions	Date										
<p>VA FORM 08-6231</p>												

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



FIRST FLOOR LIGHTING DEMOLITION PLAN
 1/8"=1'-0"

- NOTES**
- HATCHED FIXTURE INDICATES FIXTURE AND ASSOCIATED CIRCUITING TO BE DEMOLISHED. RECONFIGURE ORIGINAL BRANCH CIRCUITING TO ACCOMMODATE LIGHTING LAYOUT AND SWITCHING SCHEME AS INDICATED ON LIGHTING PLANS.
 - FIXTURE IS EXISTING TO REMAIN, TYPICAL.
 - RELOCATE EXISTING SWITCH, SEE ES111.



FULLY SPRINKLERED

Revisions	Date

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Drawing Title FIRST FLOOR LIGHTING DEMOLITION PLAN	
Approved Project Director	

Project Title Mental Health Recovery Enhancement Center HH McGuire VA Medical Center		
Location Richmond, VA		
Date 08/24/12 FOR CONSTRUCTION	Checked -	Drawn -

Project Number 310
Building Number 500
Drawing Number ED111

Office of Construction and Facilities Management

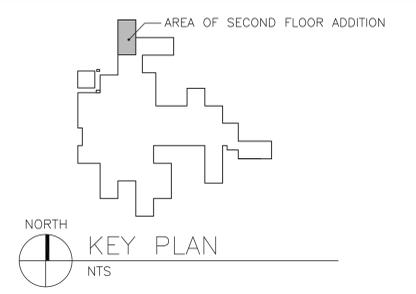
Department of Veterans Affairs

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



FIRST FLOOR POWER AND SYSTEMS DEMOLITION PLAN
 1/8"=1'-0"

- NOTES**
1. HATCHED DEVICE INDICATES DEVICE AND ASSOCIATED CIRCUITING TO BE DEMOLISHED. RECONFIGURE ORIGINAL BRANCH CIRCUITING TO ACCOMMODATE NEW DEVICE LAYOUT.
 2. EXHAUST FAN TO BE DEMOLISHED, SEE M-401.



FULLY SPRINKLERED

Revisions	Date

CONSULTANT ENGINEER:

90 CELEBRATING 90 YEARS
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Drawing Title
 FIRST FLOOR POWER AND SYSTEMS DEMOLITION PLAN

Approved Project Director

Project Title
 Mental Health Recovery Enhancement Center
 HH McGuire VA Medical Center

Location
 Richmond, VA

Date
 08/24/12
 FOR CONSTRUCTION

Checked
 -

Drawn
 -

Project Number
 310

Building Number
 500

Drawing Number
 ED211

Office of Construction and Facilities Management

Department of Veterans Affairs



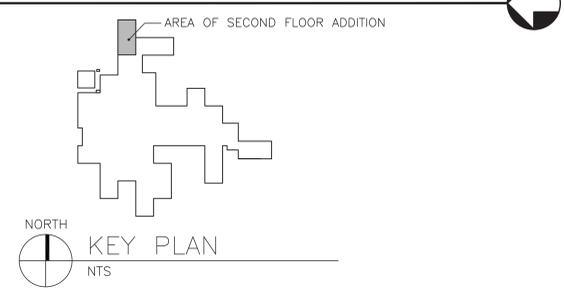
FIRST FLOOR PLAN
1/8"=1'-0"

GENERAL NOTES

1. DOWNLIGHT FIXTURES ARE TYPE "C" UON.

NOTES

1. PROVIDE 277V, 20A BRANCH CIRCUIT CONNECTION FROM BRANCH CIRCUIT SERVING CORRIDOR LIGHTING.
2. PROVIDE NEW LIGHTING IN SPACE WITH SWITCHING SCHEME AS INDICATED. PROVIDE 277V, 20A BRANCH CIRCUIT CONNECTION TO ORIGINAL BRANCH CIRCUIT SERVING EXISTING SPACE.
3. LIGHTING AND LIGHTING CONTROL IN SPACE IS EXISTING TO REMAIN. PRESERVE ORIGINAL CONNECTION TO ORIGINAL LIGHTING BRANCH CIRCUITING.
4. UP TO SECOND FLOOR LIGHTING.
5. PROVIDE LIFE SAFETY BRANCH 277V, 20A/1P BRANCH CIRCUIT CONNECTION FROM EXISTING EMERGENCY EGRESS LIGHTING BRANCH CIRCUIT SERVING "E" WING EMERGENCY EGRESS LIGHTING FIXTURES.
6. PROVIDE 277V, 20A BRANCH CIRCUIT CONNECTION TO EXISTING PANEL P1WB.
7. RELOCATE LIGHTING FIXTURE. EXTEND AND RELOCATE ORIGINAL BRANCH CIRCUIT AS REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION.
8. RELOCATE SWITCH AND RECONNECT EXISTING LIGHTING FOR THIS SPACE.
9. PROVIDE LOW VOLTAGE DIGITAL DIMMER SWITCH. ENSURE COMPATIBILITY WITH ASSOCIATED LIGHT FIXTURES.
10. ENSURE LIGHT FIXTURE IS NOT INSTALLED ABOVE CABLE TRAY.



NORTH
KEY PLAN
NTS

FULLY SPRINKLERED

Revisions	Date

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Drawing Title
FIRST FLOOR PLAN - LIGHTING

Approved Project Director

Project Title
**Mental Health Recovery Enhancement Center
HH McGuire VA Medical Center**

Location
Richmond, VA

Date
**082412
FOR CONSTRUCTION**

Checked
WCM/JR

Drawn
DAR

Project Number
310

Building Number
500

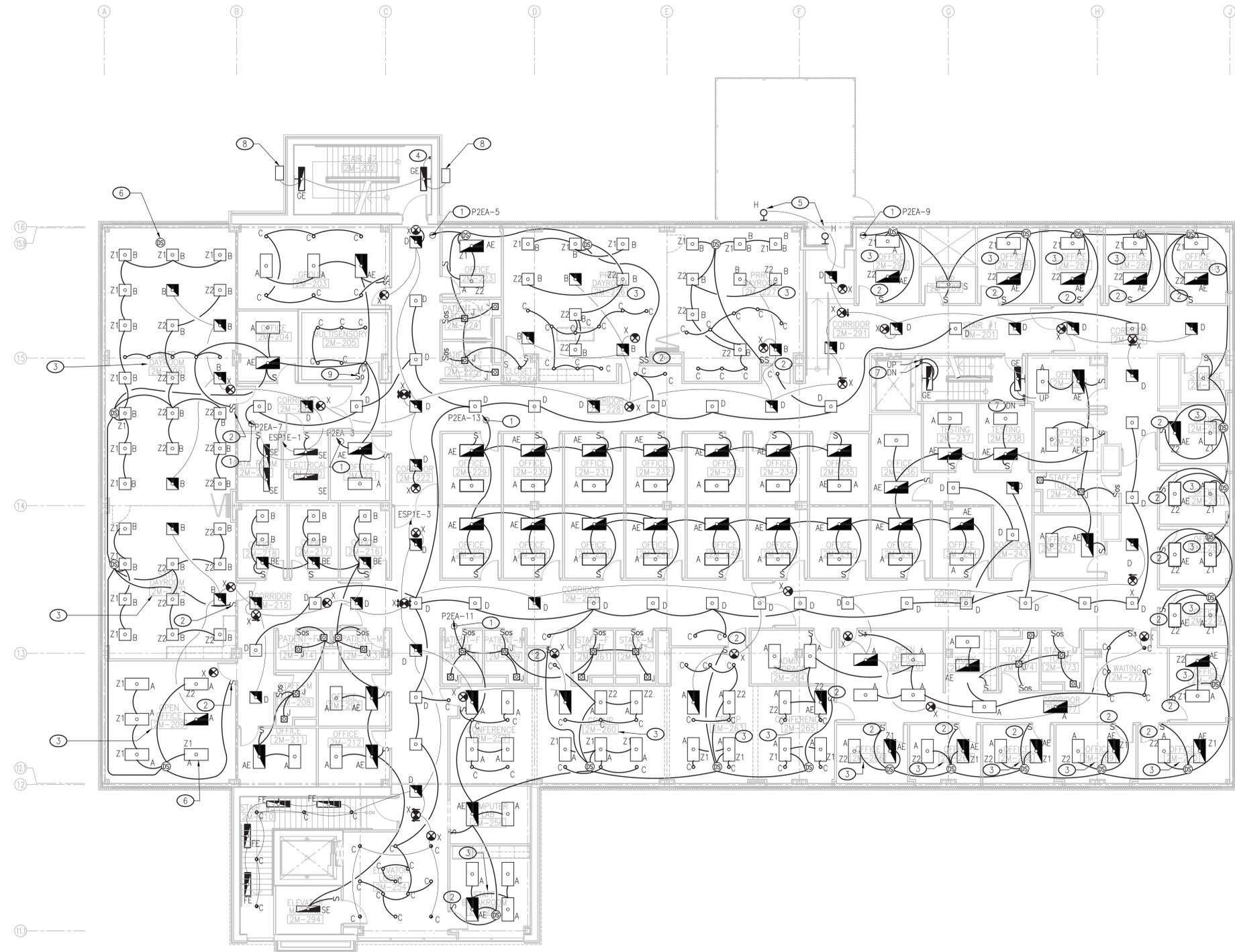
Drawing Number
ES111

Office of
Construction
and Facilities
Management

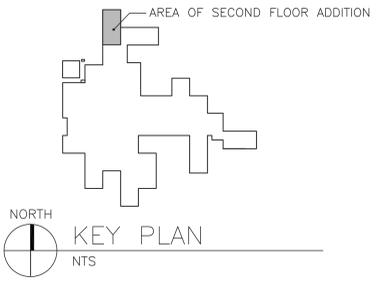
Department of
Veterans Affairs

- NOTES**
- ROUTE CIRCUIT VIA LIGHTING CONTROL PANEL "LCP" IN ELEC CLOSET 2M-220.
 - LOW VOLTAGE PUSHBUTTON SWITCH WITH MANUAL OVERRIDE OF DAYLIGHTING CONTROLS. SEE NOTE #3, THIS SHEET.
 - PROVIDE FULLY PROGRAMMABLE DUAL-ZONE DAYLIGHT HARVESTING SENSOR SYSTEM FOR THIS ROOM/SPACE PER THE FOLLOWING:
 - SENSOR W/ DIGITAL SET-POINT CONTROL FOR DAYLIGHT HARVESTING
 - POWER PACK MOUNTED ABOVE CEILING FOR EACH SENSOR AS INDICATED ON PLANS. PERIMETER SPACE LIGHTING NEAR WINDOWS TO BE CONTROLLED BY DAYLIGHT HARVESTING ZONE "Z1". INTERIOR SPACE LIGHTING TO BE CONTROLLED BY DAYLIGHT HARVESTING ZONE "Z2".
 - PROVIDE SPACE DAYLIGHT HARVESTING LIGHTING CONTROL SYSTEM PER MANUFACTURER'S RECOMMENDATIONS INCLUDING ALL ASSOCIATED SYSTEM COMPONENTS FOR A COMPLETE AND OPERABLE SYSTEM.
 - INTERFACE MULTIPLE DAYLIGHTING SENSOR DEVICES SERVING THE SPACE PER MANUFACTURER'S RECOMMENDATIONS.
 - BASIS-OF-DESIGN: DAYLIGHTING SENSOR = SENSORSWITCH CM-PC-DZ; LOW VOLTAGE PUSHBUTTON SWITCH = SENSORSWITCH sPDM SERIES W/ 2P OPTION; POWER PACK = SENSORSWITCH P220.
 - DOWN TO FIRST FLOOR LIGHTING.
 - PROVIDE WITH PHOTOCELL CONTROL.
 - INTERFACE DAYLIGHTING SENSOR WITH OTHER DAYLIGHTING SENSOR SERVING SPACE PER MANUFACTURER'S RECOMMENDATIONS.
 - PROVIDE CONNECTION TO 277V, 20A/1P BRANCH CIRCUIT SERVING EXISTING STAIRWELL.
 - SECURITY FLOOD LIGHT TO MATCHING EXISTING FACILITY EXTERIOR SECURITY FLOOD LIGHTS. PROVIDE PHOTOCELL CONTROL. COORDINATE MOUNTING HEIGHT WITH VAMC PERSONNEL AND ARCHITECT PRIOR TO INSTALLATION.
 - PROVIDE LOW VOLTAGE DIGITAL DIMMER SWITCH. ENSURE COMPATIBILITY WITH ASSOCIATED LIGHT FIXTURES.

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 three sixteenths inch = one foot
 one eighth inch = one foot
 one sixteenth inch = one foot



SECOND FLOOR PLAN
 1/8"=1'-0"



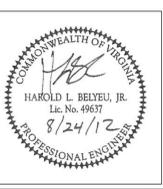
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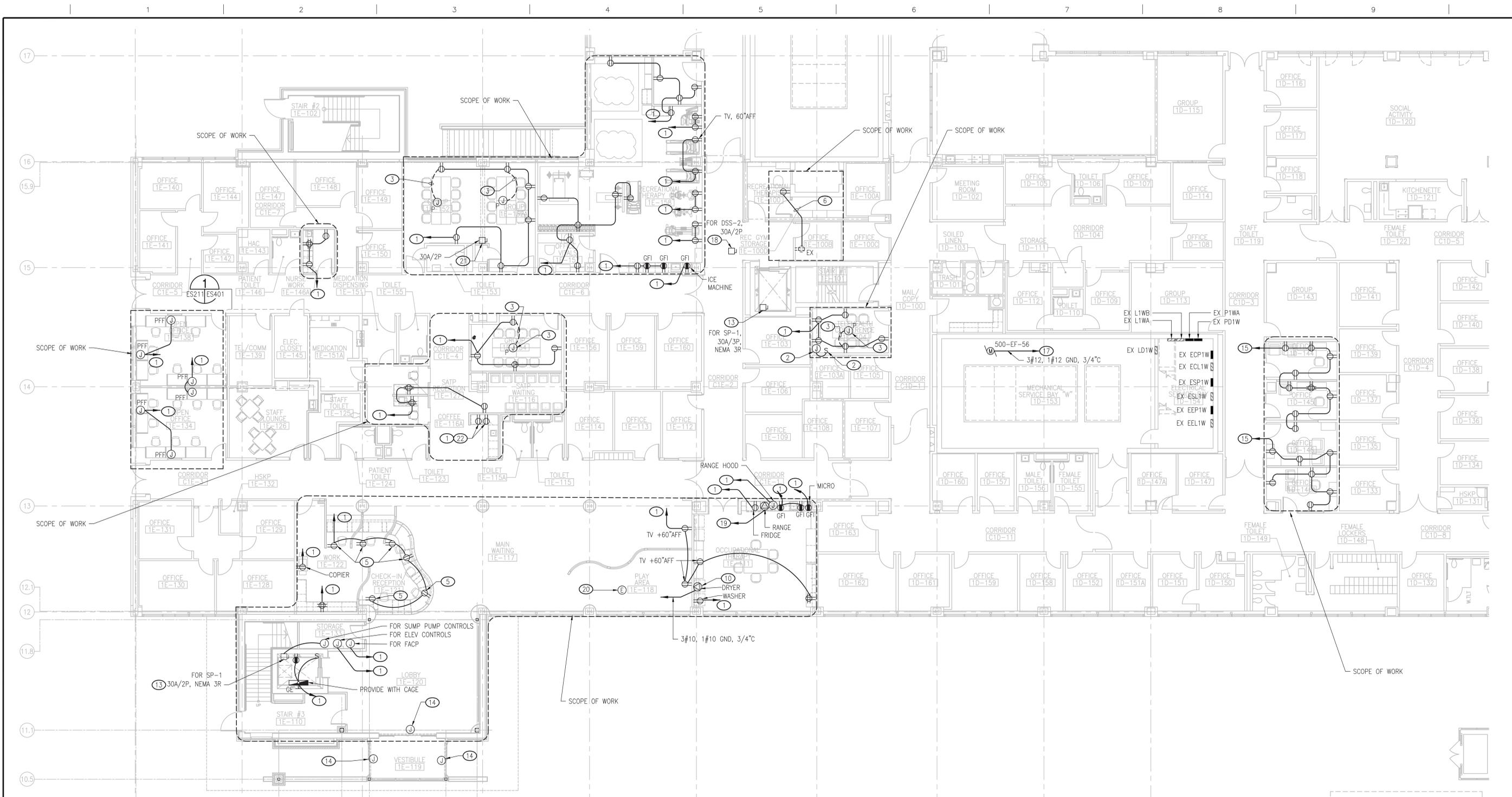
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Drawing Title SECOND FLOOR PLAN - LIGHTING	Project Number 310
Approved Project Director	Building Number 500
Date 08.24.12	Checked WCM/JR
FOR CONSTRUCTION	Drawn DAR

Project Title Mental Health Recovery Enhancement Center	Location Richmond, VA
Building Name HH McGuire VA Medical Center	Drawing Number ES121

Office of Construction and Facilities Management

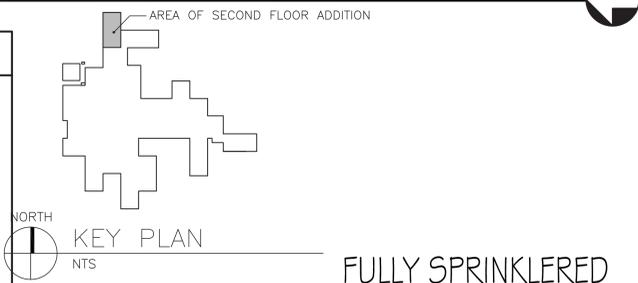
Department of Veterans Affairs



FIRST FLOOR PLAN - POWER (11, 12, 16)
1/8"=1'-0"

NOTES

1. PROVIDE 20A/1P BRANCH CIRCUIT TO EXISTING PANEL L1WA, L1WB, L1WC, OR L1WD OR NEW PANEL L1WE.
2. FOR PROJECTION SCREEN, COORDINATE FINAL POWER CONNECTION REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
3. ROUTE CONDUIT UNDER ABOVE-GRADE SLAB.
4. NOT USED.
5. DEVICE MOUNTED IN MILLWORK. COORDINATE INSTALLATION W/ MILLWORK VENDOR PRIOR TO ROUGH-IN.
6. CONNECT TO EXISTING BRANCH CIRCUIT SERVING EXISTING DEVICE.
7. FOR PROJECTOR, MOUNT RECEPTACLE FLUSH IN CEILING. COORDINATE FINAL LOCATION WITH PROJECT LOCATION PRIOR TO ROUGH-IN.
8. COORDINATE FINAL LOCATION W/ ARCHITECT PRIOR TO ROUGH-IN.
9. NOT USED.
10. PROVIDE NEW 30A/2P BRANCH CIRCUIT TO EXISTING PANEL L1WA, L1WB, L1WD OR LD1W AVAILABLE SPACE. PROVIDE NEMA14-30R RECEPTACLE. COORDINATE FINAL CONNECTION REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.
11. PROVIDE 120V, 20A/1P DEDICATED CIRCUIT FOR FIRE/SMOKE DAMPER (F/SD) EQUIPMENT CONNECTION IN FIRST FLOOR INTERSTITIAL SPACE. COORDINATE EXACT LOCATION.
12. PROVIDE 120V, 20A/1P CIRCUIT FOR VAV UNIT STEP DOWN TRANSFORMER CONNECTION IN FIRST FLOOR INTERSTITIAL SPACE. COORDINATE WITH PRIOR TO INSTALLATION.
13. PROVIDE NEW 30A/1P BRANCH CIRCUIT TO EXISTING PANEL L1WA, L1WB, L1WD, OR LD1W AVAILABLE SPACE FROM SP-1 CONTROL PANEL. COORDINATE LOCATION OF SP-1 CONTROL PANEL PRIOR TO INSTALLATION.
14. FOR AUTO DOOR, PROVIDE 120V, 20A/1P DEDICATED BRANCH CIRCUIT TO EXISTING 208V/120V LIFE SAFETY BRANCH PANEL SERVING WING "E".
15. PROVIDE 20A/1P BRANCH CIRCUIT TO EXISTING PANEL L1WA OR L1WB.
16. PROVIDE 120V, 20A/1P BRANCH CIRCUIT FOR DDC CONTROLS IN INTERSTITIAL SPACE. COORDINATE LOCATION PRIOR TO INSTALLATION.
17. PROVIDE 480V, 20A/3P BRANCH CIRCUIT TO AVAILABLE SPACE IN EXISTING PANEL P1WA OR PD1W.
18. SPLIT SYSTEM LOCATED IN BASEMENT. COORDINATE EXACT LOCATION PRIOR TO INSTALLATION. CONNECT TO RESPECTIVE OUTDOOR CONDENSING UNIT PER MANUFACTURER'S RECOMMENDATIONS, SEE ES213.
19. PROVIDE 50A/2P BRANCH CIRCUIT TO L1WA, L1WB, L1WD, OR LD1W AVAILABLE SPACE.
20. FOR SKY FACTORY DISPLAY IN CEILING. PROVIDE 2#12, 1#12 GND, IN 1-1/2" 20A/1P DEDICATED BRANCH CIRCUIT TO EXISTING PANELS L1WA, L1WB, L1WC, L1WD OR PANEL L1WE. COORDINATE FINAL CONNECTION REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
21. FOR 208V, 3-PHASE .5HP MOTORIZED OPERABLE PARTITION.
22. DEDICATED GFI RECEPTACLES FOR COFFEE MACHINE MOUNTED ABOVE COUNTER.



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Drawing Title
FIRST FLOOR PLAN - POWER

Approved Project Director

Project Title
Mental Health Recovery Enhancement Center
HH McGuire VA Medical Center

Location
Richmond, VA

Date
082412
FOR CONSTRUCTION

Checked
WCMJR

Drawn
DAR

Project Number
310

Building Number
500

Drawing Number
ES211

Office of Construction and Facilities Management

Department of Veterans Affairs

