# LIGHTING SCHEDULE

| FIXT. | DESCRIPTION | LAMPING NO. | LAMPING TYPE | LAMPING INPUT | VOLT | MANUFACTURER | CATALOG NUMBER | MOUNTING | SEE NOTE |
|---|---|---|---|---|---|---|---|---|---|
| F1 | 2x4 RECESSED FLANGE CLEAN ROOM FLUORESCENT | 4 | T5 | 132 | UNV | FAIL-SAFE | CFR-24-428-UNV-KSH25-EB51-GSK | RECESSED IN GWB | |
| F2 | 2' LINEAR LENSED FLUORESCENT | 2 | T5 | 38 | UNV | NULITE | 17-2-14T5-UNV-PS-N | SURFACE OR WALL MOUNT AS REQUIRED | |
| F3 | 2x2 RECESSED SEALED COMPARTMENT FLUORESCENT | 2 | T5 | 34 | 120 | FOCAL POINT | FMA2-22-2-T5-1C-120-S-X-WHA | RECESSED IN ACT AND OR GWB | 1 |
| F4 | LENSED DOWNLIGHT | 1 | 32W CFL | 36 | UNV | PORTFOLIO | C8142-E-6181-LI-3 | RECESSED IN ACT | |
| F5 | 2' WALL MOUNT | 2 | T5 | 34 | UNV | NULITE | DMM-2-14T5-UNV-PS-N-WH | WALL MOUNT 6" ABOVE MIRROR | |
| F6 | 2X4 RECESSED GRID CLEAN ROOM FLUORESCENT | 4 | T5 | 132 | UNV | FAIL-SAFE | CFD-FA-428-KSH25-UNV-EB51-G3 | RECESSED IN ACT | |
| F7 | 2x4 RECESSED SEALED COMPARTMENT FLUORESCENT | 2 | T5 | 66 | 120 | FOCAL POINT | FMA2-24-2-T5-1C-120-S-X-WHA | RECESSED IN ACT | |
| X | EXIT SIGN | | LED | 5 | UNV | ISOLITE | MAX-AC-R-U-WW-UN | WALL OR CEILING AS REQUIRED | 2, 3, 4 |

LIGHTING FIXTURE SCHEDULE GENERAL NOTES:

NOTE 1. CONTRACTOR SHALL CONFRIM CEILING TYPE REQUIREMENTS PRIOR TO THE RELEASE OF THE ORDER.

NOTE 2. CATALOG NUMBERS ARE TO PROVIDE GUIDANCE ONLY AND MAY NOT BE COMPLETE.

NOTE 3. FIXTURES SPECIFIED TO MEET DESIGN INTENT. EQUALS MAY BE SUBSTITUTED SUBJECT TO ENGINEER'S APPROVAL.

NOTE 4. PROVIDE ALL PARTS AND PIECES NECESSARY FOR A COMPLETE AND FUNCTIONAL INSTALLATION.

LIGHTING FIXTURE SCHEDULE KEY NOTES:

NOTE 1. PROVIDE "DR" DRYWALL KIT FOR AREAS WITH GYP CEILING CONDITIONS.

NOTE 2. FIELD SELECTABLE CHEVRONS SHALL BE APPLIED OR INSTALLED/REMOVED AS INDICATED ON PLANS AND AS REQUIRED BY ALL GOVERNING CODES.

NOTE 3. PROVIDE NUMBER OF FACES AS INDICATED ON PLANS AND AS REQUIRED BY ALL GOVERNING CODES.

NOTE 4. ALL EXIT SIGNS MUST MEET ALL CITY, STATE, AND NATIONAL CODES INCLUDING BUT NOT LIMITED TO IBC 1011 AND ANSI-A117.1 SEC 703.

# SPECIAL PURPOSE OUTLET SCHEDULE

| MARK | TO FEED | LOCATION | FLA | VOLT | PH | FEED FROM PANEL | FEED FROM CKT | BREAKER SIZE | BREAKER POLE | WIRE NO. | WIRE SIZE | WIRE GND | WIRE COND | TYPE RECPT | TYPE DIRECT | TYPE OTHER | SEE NOTE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ULTRASONIC CLEANER | B55C | 16.3 | 208 | 3 | 2/EMSPD | 1,3,5 | 30 | 3 | 3 | #10 | #10 | 3/4" | | X | | 1 |
| 2 | ULTRASONIC CLEANER | B55C | 16.3 | 208 | 3 | 2/EMSPD | 7,9,11 | 30 | 3 | 3 | #10 | #10 | 3/4" | | X | | 1 |
| 3 | ULTRASONIC CLEANER | B55C | 16.3 | 208 | 3 | 2/EMSPD | 13,15,17 | 30 | 3 | 3 | #10 | #10 | 3/4" | | X | | 1 |
| 4 | INFRARED TOILET | B55E | | 120 | 1 | 2/SPD | 1 | 20 | 1 | 2 | #12 | #12 | 3/4" | | X | | 2 |
| 5 | INFRARED SINK | B55E | | 120 | 1 | 2/SPD | 1 | 20 | 1 | 2 | #12 | #12 | 3/4" | | X | | 2 |
| 6 | WASHER DISINFECTOR | B55C | 27 | 208 | 3 | 2/EMSPD | 8,10,12 | 35 | 3 | 4 | #8 | #10 | 3/4" | | X | | 1 |
| 7 | GAS STERILIZER | B55J | 12 | 208 | 1 | 2/EMSPD | 14,16 | 15 | 2 | 2 | #12 | #12 | 3/4" | | X | | 3 |
| 8 | GAS STERILIZER | B55J | 12 | 208 | 1 | 2/EMSPD | 18,20 | 15 | 2 | 2 | #12 | #12 | 3/4" | | X | | 3 |
| 9 | GAS STERILIZER | B55J | 12 | 208 | 1 | 2/EMSPD | 34,36 | 15 | 2 | 2 | #12 | #12 | 3/4" | | X | | 3 |
| 10 | NOT USED | | | | | | | | | | | | | | | | |
| 11 | MICROWAVE | B55D | 10 | 120 | 1 | 2/SPD | 2 | 20 | 1 | 2 | #12 | #12 | 3/4" | X | | | |
| 12 | INFRARED SINK | B55C | | 120 | 1 | 2/SPD | 1 | 20 | 1 | 2 | #12 | #12 | 3/4" | | X | | |
| 13 | INFRARED SINK | B55M | - | 120 | 1 | 2/EMSPD | 32 | 20 | 1 | 2 | #12 | #12 | 3/4" | | X | | |
| 14 | STEAM STERILIZER | B55C | - | 208 | 3 | 2/EMSPD | 19,21,23 | 20 | 3 | 4 | #12 | #12 | 3/4" | | X | | 4 |
| 15 | WIRELESS ACCESS POINT | SEE PLANS | | 120 | 1 | 2/SPD | 17 | 20 | 1 | 2 | #12 | #12 | 3/4" | | X | | |

NOTES:
1. PROVIDE NEW DISCONNECT SWITCH
2. COORDINATE TRANSFORMER LOCATION AND REQUIREMENTS WITH PLUMBING CONTRACTOR.
3. EQUIPMENT WIRED TO RUN ON 230V, BUT WILL FUNCTION ON 208 SINGLE PHASE AS LONG AS VOLTAGE DOES NOT DROP BELOW 198V. IF VOLTAGE DROPS BELOW THIS LEVEL, A STEP UP TRANSFORMER IS REQUIRED. PROVIDE A NEMA 6-15R HOSPITAL GRADE RECEPTACLE FOR EQUIPMENT CONNECTION.
4. PROVIDE 120V FOR CONTROL POWER FROM 3 PHASE CIRCUIT. PROVIDE AN 8 AMP CIRCUIT BREAKER IN AN ENCLOSURE FOR THE PUMP POWER AND A 3 AMP CIRCUIT BREAKER IN AN ENCLOSURE FOR THE CONTROL POWER. MOUNT ENCLOSURES ON WALL NEXT TO EQUIPMENT.

# MOTOR WIRING SCHEDULE

| NO. | DRIVING | LOC. | HP | FLA | VOLT | PH. | FEED FROM PANEL | FEED FROM CIRCUIT | BREAKER SIZE | BREAKER POLE | BRANCH WIRING NO. | BRANCH WIRING SIZE | BRANCH WIRING GND | BRANCH WIRING COND | STARTER TYPE | STARTER FURN | STARTER INS | STARTER WIRED | STARTER LOC. | DISCONNECT TYPE | DISCONNECT FURN | DISCONNECT INS | DISCONNECT WIRED | DISCONNECT LOC. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EF-1 | AREA WELL | 3/4 | 3.5 | 208 | 3 | PAD-R | 13,15,17 | 15 | 3 | 3 | #12 | #12 | 3/4" | VFD | MC | EC | EC | NU | | MC | EC | EC | NU | 1 |
| 2 | EF-2 | B568 | 1/4 | 5.8 | 120 | 1 | 2/SPD | 19 | 20 | 1 | 2 | #12 | #12 | 1/2" | - | - | - | - | - | | MFR | MFR | EC | OU | |
| 3 | EF-3 | PENTHOUSE | 2 | 7.5 | 208 | 3 | BPHE-2B | EXISTING | 15 | 3 | 3 | #12 | #12 | 1/2" | VFD | MC | EC | EC | NU | | MC | EC | EC | NU | 1 |
| 4 | AC-1 | BB1-07 | 5 | 16.7 | 208 | 3 | BBP-1 | - | 35 | 3 | 3 | #10 | #10 | 1/2" | MAG | MFR | MFR | EC | OU | | MFR | MFR | EC | OU | |

REMARKS
1. VFD SHALL BE FURNISHED. VFD SHALL HAVE INTEGRAL DISCONNECT SWITCH.

# ELECTRICAL NOTES

1. ALL WORK SHALL COMPLY WITH APPLICABLE LOCAL CODES, FEDERAL AND VA REGULATIONS, AND ALL REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, INSPECTION FEES, TAXES, ETC. AS REQUIRED FOR THEIR PORTION OF THE WORK.
3. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO ALL LOCAL AND GOVERNMENTAL AGENCIES AND UTILITY COMPANIES, SHOP DRAWINGS AND/OR INSTALLATION DETAILS WHICH ARE REQUIRED BY THESE AGENCIES FOR THEIR APPROVAL, INCLUDING, BUT NOT LIMITED TO, FIRE ALARM SYSTEM AND EMERGENCY LIGHTING AND EXIT DRAWINGS.
4. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE FULL EXTENT OF WORK, BECOME FAMILIAR WITH THE LOCAL CONDITIONS AND CODES RELATING TO THE WORK BEFORE SUBMITTING A PROPOSAL. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.
5. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER IN WRITING OF ANY EQUIPMENT, MATERIALS, INSTALLATIONS, ETC., THAT ARE DEFICIENT OR IN VIOLATION OF LOCAL CODES AND VA REGULATIONS.
6. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL, LABOR, EQUIPMENT, DEVICES, FIXTURES, SERVICE REQUIREMENTS, ETC., NECESSARY FOR A COMPLETE AND FULLY OPERATIONAL ELECTRICAL SYSTEM/INSTALLATION.
7. THE CONTRACTOR SHALL PERFORM WORK IN ACCORDANCE WITH THESE DRAWINGS. WHERE MORE STRINGENT REQUIREMENTS ARE SET FORTH BY THE ARCHITECTURAL DRAWINGS OR LOCAL CODES AND VA REGULATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. ANY DEVIATIONS FROM THESE DRAWINGS SHALL BE RECORDED AND PROVIDED IN WRITING TO THE ARCHITECT AND ENGINEER.
8. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND THE CONTRACTOR SHALL INSTALL EQUIPMENT TO MEET THE FIELD CONDITIONS WITH COORDINATION FROM APPROVED SHOP DRAWINGS.
9. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE RESPECTIVE TRADES AND VERIFY LOCATIONS AND REQUIREMENTS FROM THE ARCHITECTURAL DRAWINGS, FIELD MEASUREMENTS AND SUPPLIER SHOP DRAWINGS.
10. THE CONTRACTOR SHALL CHECK ALL DRAWINGS AND SPECIFICATIONS OF OTHER TRADES AND INCLUDE IN THEIR BID ANY ADDITIONAL WORK REQUIRED BY THIS TRADE.
11. ALL OUTLETS SHALL BE MOUNTED VERTICALLY UNLESS OTHERWISE NOTED. ELECTRICAL ENGINEERING DRAWINGS SHALL BE USED FOR CIRCUITING INFORMATION ONLY. NUMBERED CIRCUITS SHOWN ON PLANS ARE FOR THE CONVEYANCE OF DESIGN INTENT ONLY. ACTUAL FIELD CONDITIONS WILL AFFECT CIRCUITRY. THE BALANCING OF LOADS ON THE PANELS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. INDICATE THE ACTUAL CIRCUIT NUMBERS INSTALLED ON THE AS-BUILT DRAWINGS AND COORDINATE ALL FINAL DEVICE REQUIREMENTS WITH ARCHITECT PRIOR TO INSTALLATION.
12. THE CONTRACTOR SHALL PROVIDE TEMPORARY POWER FOR ALL TRADES DURING CONSTRUCTION AND REMOVE ALL TEMPORARY POWER AT THE COMPLETION OF CONSTRUCTION.
13. ALL EQUIPMENT, MATERIAL, WIRING DEVICES, ETC., SHALL BE NEW, UL LISTED.
14. ALL CONDUITS SHOULD BE SUPPORTED IN COMPLIANCE WITH CODE REQUIREMENTS AND INSTALLED IN A MANNER AS TO AFFORD MINIMUM INTERFERENCE WITH OTHER TRADES. ALL CONDUITS ABOVE CEILING SHALL BE RIGIDLY SUPPORTED BY SUITABLE HANGERS FROM THE STRUCTURAL SLAB DECK OR FRAMING ABOVE INDEPENDENT OF THE CEILING, CEILING SUPPORT SYSTEM AND OTHER TRADE COMPONENTS. ALL CONDUITS SHALL BE CONCEALED UNLESS OTHERWISE NOTED ON DRAWINGS.
15. FIRE RATED SEALS SHALL BE PROVIDED FOR ALL CONDUIT PENETRATIONS THROUGH FIRE RATED FLOORS, WALLS, AND CEILINGS.
16. ALL BRANCH CIRCUITS SHALL BE GROUPED INTO PHASE BALANCED HOMERUNS WITH A MAXIMUM OF THREE CIRCUITS PER HOMERUN. BRANCH CIRCUIT WIRING WHICH EXCEEDS 75' IN LENGTH FROM PANEL TO CENTER OF LOAD SHALL BE MINIMUM #10 AWG. THE AMPACITY OF MULTIPLE BRANCH CIRCUITS OR CONDUCTORS IN ONE CONDUIT SHALL BE RATED PER CODE AND DE-RATED AS REQUIRED.
17. CONTRACTOR SHALL VERIFY ALL EQUIPMENT CONNECTION CONFIGURATIONS BEFORE PURCHASE OR INSTALLATION OF EXISTING. ALL DEVICES SHOWN ARE FOR REFERENCE ONLY, TO COMMUNICATE DESIGN INTENT, AND ARE TO HAVE FINAL LOCATIONS VERIFIED PRIOR TO INSTALLATION. THIS NOTE SHALL APPLY TO, BUT NOT BE LIMITED TO, RECEPTACLES, SPECIAL PURPOSE OUTLETS, SWITCHES, DATA PORTS, AUDIO/VIDEO DEVICES, AND TELEPHONE JACKS.
18. A.I.C. RATING OF ALL COMPONENTS SHALL BE EQUAL TO, OR GREATER THAN, THAT WHICH IS PROVIDED BY ELECTRIC UTILITY PROVIDED PRIOR TO START OF WORK OR RATING OF UPSTREAM OVERCURRENT PROTECTION DEVICE AFTER VERIFICATION OF CORRECT CALCULATED A.I.C OF SAID DEVICE.
19. ALL CIRCUIT BREAKERS SHALL BE BOLT ON TYPE MATCHING PANELBOARD MANUFACTURER AND WITH AIC RATING TO MATCH AIC RATING OF PANELBOARD.
20. THE CONTRACTOR SHALL PROVIDE ADEQUATE IDENTIFICATION ON ALL ELECTRICAL ITEMS INCLUDING ENGRAVED PLASTIC LAMINATE NAMEPLATES ON ALL PANELBOARDS, DISTRIBUTION PANELS, SWITCHBOARDS, TRANSFORMERS, DISCONNECT SWITCHES AND MOTOR STARTERS. PROVIDE ENGRAVED INSCRIPTIONS ON COVER PLATES OF LOCAL USER DISCONNECT SWITCHES, MANUAL STARTERS, AND PILOT LIGHT SWITCHES. PROVIDE A NEW TYPE WRITTEN, UPDATED PANEL DIRECTORY FOR ALL NEW AND EXISTING PANELS. LABEL ALL BRANCH CIRCUIT WIRING AT EACH BREAKER. REFER TO SPEC SECTION 26 05 53 "IDENTIFICATION FOR ELECTRICAL SYSTEMS" FOR ADDITIONAL REQUIREMENTS.
21. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF LIGHT FIXTURES, CEILING CONSTRUCTION TYPE, MOUNTING DETAILS, ETC., BEFORE ORDERING LIGHTING FIXTURES. FINISHES FOR REFLECTORS AND TRIM TO BE APPROVED BY ARCHITECT. FINAL CONNECTIONS TO RECESSED LIGHTING FIXTURES TO BE MADE WITH FLEXIBLE STEEL CONDUIT, 72" MAX LENGTH.
22. ALL EMERGENCY, EXIT SIGN, AND FIRE ALARM JUNCTION BOXES SHALL BE PAINTED RED WITH PANEL TAG AND CIRCUIT NUMBER INDICATED ON COVERS. PROVIDE SEPARATE NEUTRALS FOR ALL EMERGENCY LIGHT FIXTURES AND EXIT SIGNS.
23. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL ABOVE CEILING REQUIREMENTS (PLENUM, NON-PLENUM, AIR HANDLING, ETC.) AS REQUIRED BY LOCAL AUTHORITY BEFORE THE INSTALLATION AND PURCHASE OF ELECTRICAL EQUIPMENT, MATERIALS AND DEVICES, AND THE ORDERING OF LIGHTING FIXTURES.
24. THE CONTRACTOR SHALL COORDINATE THE REQUIREMENTS OF THE ENTIRE COMMUNICATION SYSTEM PRIOR TO BID AND INSTALLATION.
25. ALL EXISTING CONDITIONS, TO WHICH MODIFICATIONS ARE TO BE MADE TO MEET ACCESSIBILITY REQUIREMENTS, SHALL BE COORDINATED WITH ASSOCIATED TRADES AND BE PROVIDED SUCH WORK AS REQUIRED TO ACCOMMODATE THE MODIFICATIONS TO BE MADE.

# ELECTRICAL LEGEND

| | |
|---|---|
| $ | WALL SWITCH |
| $3 | THREE WAY WALL SWITCH |
| $4 | FOUR WAY WALL SWITCH |
| OS | SWITCH-BOX OCCUPANCY SENSOR |
| OS | CEILING OR WALL OCCUPANCY SENSOR |
| | RECESSED FLUORESCENT LIGHTING FIXTURE |
| | LINEAR HORIZONTAL WALL BRACKET |
| | RECESSED FIXTURE |
| | CEILING OR WALL MOUNTED EXIT |
| | CEILING OR WALL MOUNTED EXIT, DOUBLE FACE, DOUBLE ARROW |
| | PANEL BOARD |
| | DUPLEX RECEPTACLE |
| | DUPLEX RECEPTACLE 6" ABOVE COUNTER OR BACKSPLASH OR AT HEIGHT INDICATED |
| | FOUR PLEX RECEPTACLE |
| GFI | GROUND FAULT INTERRUPTER |
| GFI | DUPLEX RECEPTACLE 6" ABOVE COUNTER OR BACKSPLASH OR AT HEIGHT INDICATED GROUND FAULT INTERRUPTER |
| | SPECIAL PURPOSE OUTLET |
| | DUPLEX CAST FLOOR BOX |
| | PUSH BUTTON |
| | DATA OUTLET |
| | TELEPHONE/DATA OUTLET |
| TV | TELEVISION OUTLET |
| S | CEILING MOUNTED SPEAKER |
| | FIRE ALARM PULL STATION |
| AV | FIRE ALARM HORN STROBE |
| AV | FIRE ALARM STROBE |
| S | FIRE ALARM SMOKE DETECTOR |
| S | FIRE ALARM DUCT DETECTOR |
| DH | FIRE ALARM DOOR HOLDER |
| CM | FIRE ALARM CONTROL MODULE |
| | NURSE DOME LIGHT |
| P | NURSE EMERGENCY PULL STRING |
| N M | NURSE MASTER STATION |

# ABBREVIATIONS

| | |
|---|---|
| A | AMPERES |
| AMP | AMPERES |
| AFF | ABOVE FINISHED FLOOR |
| C | CONDUIT |
| CKT | CIRCUIT |
| CB | CIRCUIT BREAKER |
| CL | MOUNTED ON CEILING |
| D | DEDICATED |
| DD | DOUBLE DUPLEX |
| EC | ELECTRICAL CONTRACTOR |
| EM | EMERGENCY |
| ER | ELEVATOR RECALL |
| ETR | EXISTING TO REMAIN |
| EWC | ELECTRICAL WATER COOLER |
| FAAP | FIRE ALARM ANNUNCIATOR PANEL |
| FACP | FIRE ALARM CONTROL PANEL |
| GC | GENERAL CONTRACTOR |
| GFI | GROUND FAULT INTERRUPTER |
| GND | GROUND |
| HVAC | HEATING AND VENTILATION CONTRACTOR |
| MC | MECHANICAL CONTRACTOR |
| NEC | NATIONAL ELECTRICAL CODE |
| NIC | NOT IN CONTRACT |
| NL | NIGHT LIGHT |
| P | POLE |
| PB | PUSH-BUTTON |
| PC | PLUMBING CONTRACTOR |
| PH | PHASE |
| PW | PRE-WIRED |
| SS | SWITCH STATION |
| SW | SWITCH |
| V | VOLTS |
| VA | VOLT/ AMPERES |
| W | WIRE OR WATT |
| WP | WEATHER PROOF |

DEPARTMENT OF VETERANS AFFAIRS

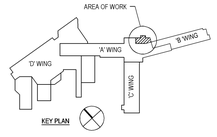
VA MEDICAL CENTER
2500 OVERLOOK TERRACE
MADISON, WISCONSIN 53705

**SPD UPGRADE PROJECT**


IBC ENGINEERING SERVICES, INC.
N8 W22195 JOHNSON DR, STE 180 262.549.1190
WAUKESHA, WI 53188 fx 262.549.1620

eu:a

eppstein uhen : architects
milwaukee 333 East Chicago Street
Milwaukee, Wisconsin 53202
tel 414 271 5350 fax 414 271 7794
madison 222 West Washington Ave, Suite 650
Madison, Wisconsin 53703
tel 608 442 5350 fax 608 442 6680


| # | REVISION | DATE |
|---|---|---|

**ELECTRICAL NOTES, LEGEND & SCHEDULES**

**FULLY SPRINKLERED**

VA PROJECT NO. 607-10-105
IBC PROJECT NO. 2010059

NORTH
BLDG. NO. VA HOSPITAL - 'B' WING
SCALE N.T.S.
DATE JUNE 15, 2011
DRAWN JRK

**BID DOCUMENTS**

**ES001**

# PANEL 2/EMSPD

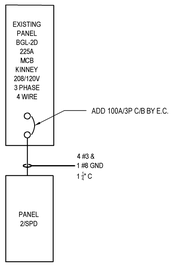
| MOUNT | SPACES | LOCATION | VOLTAGE | PH | WIRE | MAIN BUS RATING | MCB | MLO | WIRE | CONDUIT |
|---|---|---|---|---|---|---|---|---|---|---|
| RECESSED | 42 | B55D | 208/120 | 3 | 4 | 225A | - | - | (4) #3/0 & (1) #6 GND | 2" |

| POLE NO. | BREAKER POLE | BREAKER AMP | OUTLET LGT | OUTLET REC | OUTLET MIS | DESCRIPTION | VA | PHASE LOAD VA A | PHASE LOAD VA B | PHASE LOAD VA C | VA | DESCRIPTION | OUTLET LGT | OUTLET REC | OUTLET MIS | BREAKER POLE | BREAKER AMP | POLE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 30 | | | X | ULTRASONIC CLEANER | 1957 | 3251 | | | 1294 | LIGHTING | X | | | 1 | 20 | 2 |
| 3 | | | | | X | ULTRASONIC CLEANER | 1957 | | 3397 | | 1440 | LIGHTING | X | | | 1 | 20 | 4 |
| 5 | | | | | X | ULTRASONIC CLEANER | 1957 | | | 2002 | 45 | EXIT LIGHTS | X | | | 1 | 20 | 6 |
| 7 | 3 | 30 | | | X | ULTRASONIC CLEANER | 1957 | 5199 | | | 3242 | WASHER DISINFECTOR | | | X | 3 | 35 | 8 |
| 9 | | | | | X | ULTRASONIC CLEANER | 1957 | | 5199 | | 3242 | WASHER DISINFECTOR | | | X | | | 10 |
| 11 | | | | | X | ULTRASONIC CLEANER | 1957 | | | 5199 | 3242 | WASHER DISINFECTOR | | | X | | | 12 |
| 13 | 3 | 30 | | | XX | ULTRASONIC CLEANER | 1957 | 3205 | | | 1248 | GAS STERILIZER | | | X | 2 | 15 | 14 |
| 15 | | | | | X | ULTRASONIC CLEANER | 1957 | | 3205 | | 1248 | GAS STERILIZER | | | X | | | 16 |
| 17 | | | | | X | ULTRASONIC CLEANER | 1957 | | | 3205 | 1248 | GAS STERILIZER | | | X | 2 | 15 | 18 |
| 19 | 3 | 20 | | | X | STEAM STERILIZER | 721 | 1969 | | | 1248 | GAS STERILIZER | | | X | | | 20 |
| 21 | | | | | X | STEAM STERILIZER | 721 | | 721 | | | RECEPTACLES | | X | | 1 | 20 | 22 |
| 23 | | | | | X | STEAM STERILIZER | 721 | | | 721 | | RECEPTACLES | | X | | 1 | 20 | 24 |
| 25 | 1 | 20 | | X | | RECEPTACLES | | | | | | RECEPTACLES | | X | | 1 | 20 | 26 |
| 27 | 1 | 20 | | X | | RECEPTACLES | | | | | | RECEPTACLES | | X | | 1 | 20 | 28 |
| 29 | 1 | 20 | | X | | RECEPTACLES | | | | | | RECEPTACLES | | X | | 1 | 20 | 30 |
| 31 | 1 | 20 | | X | | RECEPTACLES | | 120 | | | 120 | INFRARED SINK | | X | | 1 | 20 | 32 |
| 33 | 1 | 30 | | | X | DRYER RECEPTACLE | 2400 | | 2400 | | | SPARE BREAKER | | | | | | 34 |
| 35 | 1 | 20 | | | | SPARE BREAKER | | | | | | SPARE BREAKER | | | | | | 36 |
| 37 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 38 |
| 39 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 40 |
| 41 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 42 |
| | | | | | | PHASE TOTALS: | | 13744 | 14922 | 11127 | | :PHASE TOTALS | | | | | | |
| | | | | | | TOTAL VA: | 22,176 | | | | 17,617 | :TOTAL VA | | | | | | |

# PANEL PAD-L

| MOUNT | SPACES | LOCATION | VOLTAGE | PH | WIRE | MAIN BUS RATING | MCB | MLO | WIRE | CONDUIT |
|---|---|---|---|---|---|---|---|---|---|---|
| RECESSED | 42 | B27 HALLWAY | 208/120 | 3 | 4 | 400A | - | - | - | - |

| POLE NO. | BREAKER POLE | BREAKER AMP | OUTLET LGT | OUTLET REC | OUTLET MIS | DESCRIPTION | VA | PHASE LOAD VA A | PHASE LOAD VA B | PHASE LOAD VA C | VA | DESCRIPTION | OUTLET LGT | OUTLET REC | OUTLET MIS | BREAKER POLE | BREAKER AMP | POLE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 20 | | | X | SCOPE CLEANER B55I | 1800 | 1800 | | | | **SPD PLUGMOLD A-47** | | X | | | | 2 |
| 3 | 1 | 20 | | X | | RECPT B55C | 1080 | | 1080 | | | **SPD PLUGMOLD A-47** | | X | | | | 4 |
| 5 | 1 | 20 | | X | | RECPT B55H, B55I, B55J | 1080 | | | 1080 | | **SPD PLUGMOLD A-47** | | X | | | | 6 |
| 7 | **3** | **15** | | | X | **GRD FL CENTER** | | | | | | **GRD FL 3 POLE** | | | X | | | 8 |
| 9 | | | | | X | **GRD FL CENTER** | | | | | | **GRD FL 3 POLE** | | | X | | | 10 |
| 11 | | | | | X | **GRD FL CENTER** | | | | | | **GRD FL 3 POLE** | | | X | | | 12 |
| 13 | **1** | **20** | | X | | **OUTLET MECH RM** | | | | | | **LTS B-50-B53A** | X | | | | | 14 |
| 15 | | | | | | | | | | | | | | | | | | 16 |
| 17 | | | | | | | | | | | | **LTS B-50-B53A** | X | | | **1** | **20** | 18 |
| 19 | | | | | | | | | | | | STERILIZER DOOR B50 | | | X | 1 | 20 | 20 |
| 21 | | | | | | | | | | | | STERILIZER DOOR B50 | | | X | 1 | 20 | 22 |
| 23 | **1** | **20** | | | X | **GRD FL CENTER** | | | | | | STERILIZER DOOR B50 | | | X | 1 | 30 | 24 |
| 25 | **1** | **20** | X | | | **B-WING ENTRANCE LTS** | | 840 | | | 840 | | | | X | 1 | 20 | 26 |
| 27 | **1** | **20** | X | | X | **LTS & HEATER MECH RM** | | | 900 | | 900 | | | | X | 1 | 20 | 28 |
| 29 | **1** | **30** | | X | | **PLUG BELOW PANEL** | 720 | | | 1620 | 900 | | | | X | 1 | 20 | 30 |
| 31 | **1** | **20** | | | X | **GRD FL CENTER** | | | | | | | | | | | | 32 |
| 33 | **2** | **30** | | | X | **GRD FL CENTER** | | | | | | | | | | | | 34 |
| 35 | | | | | X | **GRD FL CENTER** | | | | | | | | | | | | 36 |
| 37 | 3 | 50 | | | X | STERILIZER DOOR B50 | | | | | | **STERILIZER DOOR B50** | | | X | **3** | **20** | 38 |
| 39 | | | | | X | STERILIZER DOOR B50 | | | | | | **STERILIZER DOOR B50** | | | X | | | 40 |
| 41 | | | | | X | STERILIZER DOOR B50 | | | | | | **STERILIZER DOOR B50** | | | X | | | 42 |
| | | | | | | PHASE TOTALS: | | 2640 | 1980 | 2700 | | :PHASE TOTALS | | | | | | |
| | | | | | | TOTAL VA: | 4,680 | | | | 2,640 | :TOTAL VA | | | | | | |

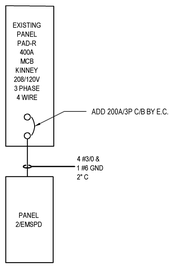



1 RISER DIAGRAM
NTS

# PANEL PAD-R

| MOUNT | SPACES | LOCATION | VOLTAGE | PH | WIRE | MAIN BUS RATING | MCB | MLO | WIRE | CONDUIT |
|---|---|---|---|---|---|---|---|---|---|---|
| RECESSED | 42 | B27 HALLWAY | 208/120 | 3 | 4 | 400A | - | - | - | - |

| POLE NO. | BREAKER POLE | BREAKER AMP | OUTLET LGT | OUTLET REC | OUTLET MIS | DESCRIPTION | VA | PHASE LOAD VA A | PHASE LOAD VA B | PHASE LOAD VA C | VA | DESCRIPTION | OUTLET LGT | OUTLET REC | OUTLET MIS | BREAKER POLE | BREAKER AMP | POLE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **2** | **20** | | | X | **GAS AERATOR** | | | | | | | | | | | | 2 |
| 3 | | | | | X | **COMPUTER B-96A** | | | | | | | | | | | | 4 |
| 5 | 1 | 20 | | X | | RECPT B55C SHELF | 540 | | | 540 | | **GRD FL CENTER** | | X | | **1** | **15** | 6 |
| 7 | **3** | **15** | | | X | **MECH RM EX FAN** | | | | | | **GRD FL CENTER** | | X | | **1** | **20** | 8 |
| 9 | | | | | X | **MECH RM EX FAN** | | | 1800 | | 1800 | SCOPE CLEANER B55I | | | X | 1 | 20 | 10 |
| 11 | | | | | X | **MECH RM EX FAN** | | | | | | **B-1 CARD ACCESS** | | | X | **1** | **20** | 12 |
| 13 | 3 | 15 | | | X | SFD EF-1 MOTOR 01 | | | | | | | | | | | | 14 |
| 15 | | | | | X | | | | | | | | | | | | | 16 |
| 17 | | | | | X | | | | | | | **GAS AERATOR** | | | X | **1** | **20** | 18 |
| 19 | **1** | **20** | | | X | **GRD FL CENTER** | | | | | | **COMPUTER B-56B** | | | X | **1** | **40** | 20 |
| 21 | | | | | | | | | 1800 | | 1800 | SCOPE CLEANER B55I | | | X | 1 | 20 | 22 |
| 23 | | | | | | | | | | | | **AUDIO PAGE SYSTEM** | | | X | **1** | **50** | 24 |
| 25 | | | | | | | | | | | | | | | | | | 26 |
| 27 | **1** | **20** | | | | **SP** | | | | | | | | | | | | 28 |
| 29 | **1** | **20** | | | X | **AERATOR** | | | | | | | | | | | | 30 |
| 31 | 1 | 20 | | X | | WIREMOLD B55C | 1620 | 1620 | | | | | | | | | | 32 |
| 33 | **1** | **20** | | | X | **GRD FL CENTER** | | | | | | | | | | | | 34 |
| 35 | **1** | **20** | | | X | **JC-80 B-106** | | | | | | | | | | | | 36 |
| 37 | 3 | 200 | | | | PANEL 2/EMSPD | | | | | | **MECH RM AIR HANDLER** | | | X | **3** | **60** | 38 |
| 39 | | | | | | | | | | | | **MECH RM AIR HANDLER** | | | X | | | 40 |
| 41 | | | | | | | | | | | | **MECH RM AIR HANDLER** | | | X | | | 42 |
| | | | | | | PHASE TOTALS: | | 1620 | 3600 | 540 | | :PHASE TOTALS | | | | | | |
| | | | | | | TOTAL VA: | 2,160 | | | | 3,600 | :TOTAL VA | | | | | | |




2 RISER DIAGRAM
NTS

# PANEL 2/SPD

| MOUNT | SPACES | LOCATION | VOLTAGE | PH | WIRE | MAIN BUS RATING | MCB | MLO | WIRE | CONDUIT |
|---|---|---|---|---|---|---|---|---|---|---|
| RECESSED | 42 | B55D | 208/120 | 3 | 4 | 100 | - | - | (4) #3, (1) #8 GND | 1- 1/4" |

| POLE NO. | BREAKER POLE | BREAKER AMP | OUTLET LGT | OUTLET REC | OUTLET MIS | DESCRIPTION | VA | PHASE LOAD VA A | PHASE LOAD VA B | PHASE LOAD VA C | VA | DESCRIPTION | OUTLET LGT | OUTLET REC | OUTLET MIS | BREAKER POLE | BREAKER AMP | POLE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 20 | | | X | INFRARED SENSORS | 200 | 1200 | | | 1000 | MICROWAVE | | | X | 1 | 20 | 2 |
| 3 | 1 | 20 | | X | | WIREMOLD B55C | 900 | | 1800 | | 900 | RECPT B55N, B55K | | X | | 1 | 20 | 4 |
| 5 | 1 | 20 | | X | | WIREMOLD B55C | 900 | | | 1980 | 1080 | RECPTB55Z | | X | | 1 | 20 | 6 |
| 7 | 1 | 20 | | X | | RECPT B55C, B55E | 900 | 1980 | | | 1080 | RECPT B55N | | X | | 1 | 20 | 8 |
| 9 | 1 | 20 | | X | | RECPT B55AA, B55D, B55G | 1080 | | 2160 | | 1080 | RECPT B55N | | X | | 1 | 20 | 10 |
| 11 | 1 | 20 | | X | | REFRIGERATOR | 500 | | | 1400 | 900 | RECPT B55N, B55M, B55K | | X | | 1 | 20 | 12 |
| 13 | 1 | 20 | | X | | RECPT B55I | 540 | 1440 | | | 900 | WIREMOLD B55L | | X | | 1 | 20 | 14 |
| 15 | 1 | 20 | | X | | RECPT MAINTENANCE | 540 | | 1260 | | 720 | WIREMOLD B55L | | X | | 1 | 20 | 16 |
| 17 | 1 | 20 | | | X | WIRELESS ACCESS POINT | 540 | | | 900 | 360 | RECPT B53, B53A | | X | | 1 | 20 | 18 |
| 19 | 1 | 20 | | | X | EF-2 | 696 | 696 | | | | SPARE CIRCUIT BREAKER | | | | 1 | 20 | 20 |
| 21 | 1 | 20 | | | | SPARE CIRCUIT BREAKER | | | | | | SPARE CIRCUIT BREAKER | | | | 1 | 20 | 22 |
| 23 | 1 | 20 | | | | SPARE CIRCUIT BREAKER | | | | | | SPARE SPACE | | | | | | 24 |
| 25 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 26 |
| 27 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 28 |
| 29 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 30 |
| 31 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 32 |
| 33 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 34 |
| 35 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 36 |
| 37 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 38 |
| 39 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 40 |
| 41 | | | | | | SPARE SPACE | | | | | | SPARE SPACE | | | | | | 42 |
| | | | | | | PHASE TOTALS: | | 5316 | 5220 | 4280 | | :PHASE TOTALS | | | | | | |
| | | | | | | TOTAL VA: | 6,796 | | | | 8,020 | :TOTAL VA | | | | | | |

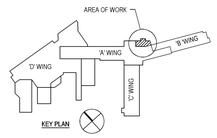

DEPARTMENT OF VETERANS AFFAIRS

VA MEDICAL CENTER
2500 OVERLOOK TERRACE
MADISON, WISCONSIN 53705


**SPD UPGRADE PROJECT**


IBC ENGINEERING SERVICES, INC.
N8 W22195 JOHNSON DR, STE 180 262.549.1190
WAUKESHA, WI 53188 fx 262.549.1620

eu:a
eppstein uhen : architects
milwaukee 333 East Chicago Street
Milwaukee, Wisconsin 53202
tel 414 271 5350 fax 414 271 7794
madison 222 West Washington Ave, Suite 650
Madison, Wisconsin 53703
tel 608 442 5350 fax 608 442 6680


| # | REVISION | DATE |
|---|---|---|

# ELECTRICAL SCHEDULES & RISER DIAGRAM

**FULLY SPRINKLERED**

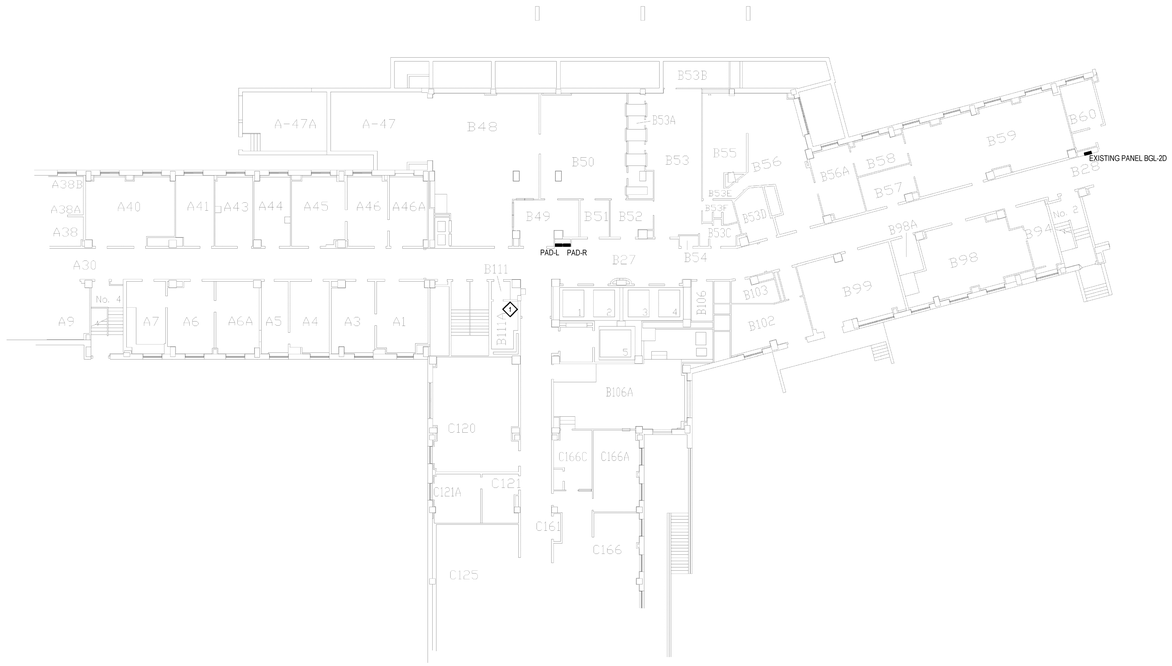
VA PROJECT NO. 607-10-105
IBC PROJECT NO. 2010059

NORTH

BLDG. NO. VA HOSPITAL - 'B' WING
SCALE N.T.S.
DATE JUNE 15, 2011
DRAWN JRK

**BID DOCUMENTS**

# ES002




1 SPD FLOOR PLAN
1/16"=1'-0"

## GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR RELOCATING EXISTING SPD EQUIPMENT AND PROVIDING ALL NECESSARY CONNECTIONS TO MAKE EQUIPMENT FUNCTIONAL. CONTRACTOR SHALL READ ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND BE FAMILIARIZED WITH ALL EQUIPMENT PRIOR TO DEMOLITION AND INSTALLATION.
2. CONTRACTOR SHALL GIVE ALTERNATE BID PRICING FOR THE VARIOUS PHASES FOR THIS PROJECT. REFER TO ARCHITECTURAL DRAWING G101 FOR PHASING.

## KEY NOTES

1. EXISTING IT ROOM. EXTEND NEW TELECOM/DATA RACEWAYS AND CABLES TO THIS ROOM.

1 SPD BASEMENT FLOOR PLAN
1/8"=1'-0"

## KEY NOTES

1. PROVIDE A 35A/3P CIRCUIT BREAKER IN EXISTING PANEL BBP-1 AND EXTEND FEEDER TO AC-1 CONTROL PANEL.
2. PROVIDE DUPLEX RECEPTACLE ON COLUMN FOR AIC DRYER. CONNECT RECEPTACLE TO EXISTING 120 VOLT EMERGENCY EQUIPMENT CIRCUIT IN AREA.

DEPARTMENT OF VETERANS AFFAIRS

VA MEDICAL CENTER
2500 OVERLOOK TERRACE
MADISON, WISCONSIN 53705

**SPD UPGRADE PROJECT**

IBC ENGINEERING SERVICES INC.
N8 W22195 JOHNSON DR, STE 180 262.549.1190
WAUKESHA, WI 53188 fx 262.549.1620

eu:a
eppstein uhen : architects
milwaukee 333 East Chicago Street
Milwaukee, Wisconsin 53202
tel 414 271 5350 fax 414 271 7794
madison 222 West Washington Ave, Suite 650
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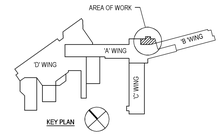



| # | REVISION | DATE |
|---|---|---|
| | | |
| | | |

# ELECTRICAL SYSTEM PLAN

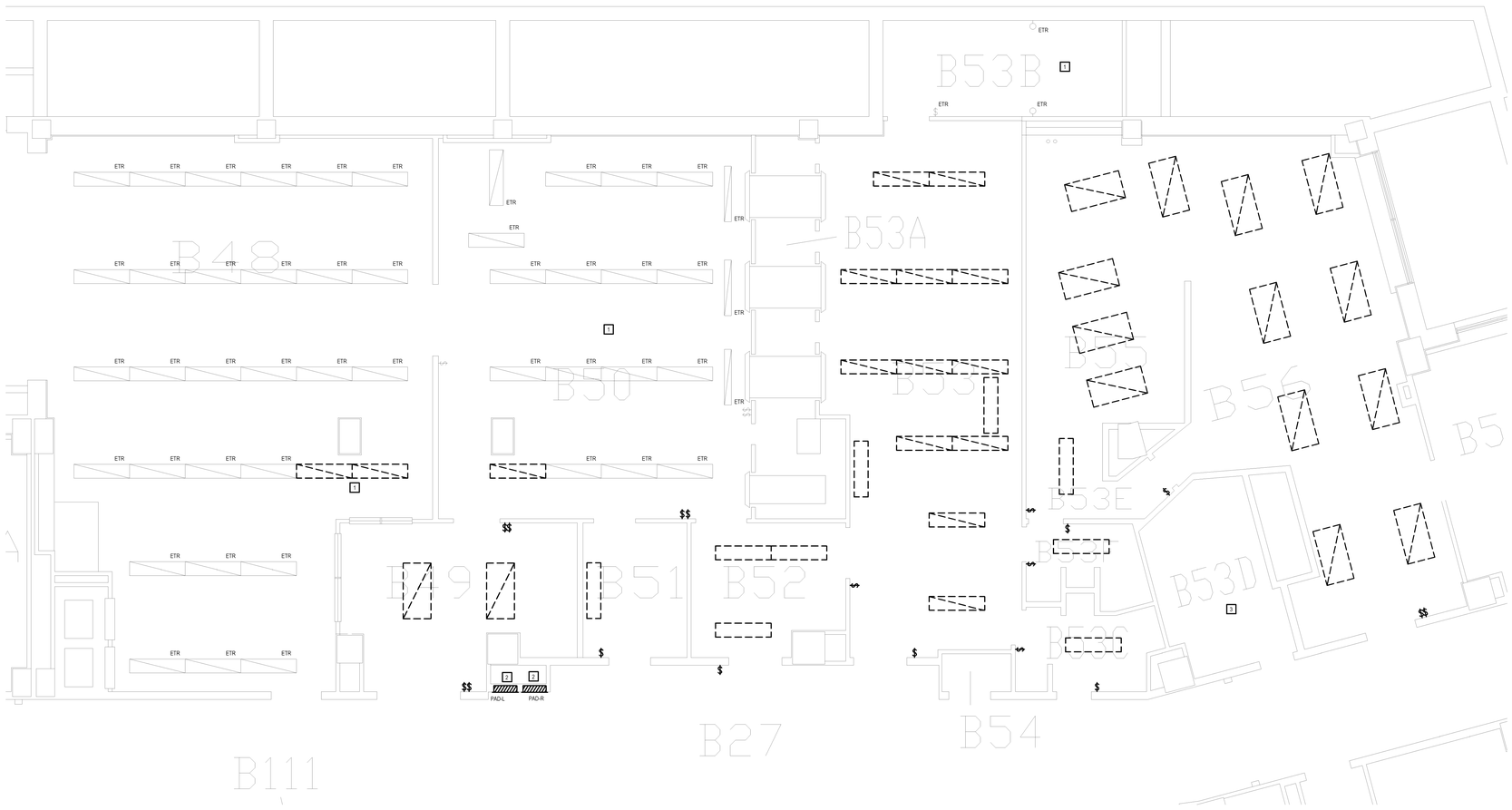
**FULLY SPRINKLERED**

| | |
|---|---|
| VA PROJECT NO. | 607-10-105 |
| IBC PROJECT NO. | 2010059 |
| BLDG. NO. | VA HOSPITAL - 'B' WING |
| SCALE | 1/16"=1'-0" |
| DATE | JUNE 15, 2011 |
| DRAWN | JRK |

NORTH

**BID DOCUMENTS**

# ES003




1 SPD LIGHTING DEMOLITION PLAN
1/4"=1'-0"

## SHEET NOTES

1. DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AND ASSOCIATED CONDUIT AND WIRING SHOWN (LIGHT FIXTURES, SWITCHES, ETC.) SHOWN WITHIN CONSTRUCTION LIMIT. REMOVE CONDUIT AND WIRE BACK TO EXISTING PANEL.

## GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR RELOCATING EXISTING SPD EQUIPMENT AND PROVIDING ALL NECESSARY CONNECTIONS TO MAKE EQUIPMENT FUNCTIONAL. CONTRACTOR SHALL READ ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND BE FAMILIARIZED WITH ALL EQUIPMENT PRIOR TO DEMOLITION AND INSTALLATION.
2. CONTRACTOR SHALL GIVE ALTERNATE BID PRICING FOR THE VARIOUS PHASES FOR THIS PROJECT. REFER TO ARCHITECTURAL DRAWING G101 FOR P

## DEMOLITION NOTES

1. REWORK EXISTING WIRING IN THIS AREA TO MAINTAIN EXISTING LIGHTING CIRCUIT AND CONNECT EXISTING LIGHTING NOTED AS "EXISTING TO REMAIN" TO NEW LIGHT SWITCH AS INDICATED ON EL100 LIGHTING PLAN.
2. ELECTRICAL PANELS EXISTING TO REMAIN.
3. ALL LIGHTS, SWITCHES, CONDUITS AND WIRES IN ROOM SHALL BE REMOVED.

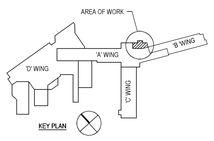
DEPARTMENT OF VETERANS AFFAIRS

VA MEDICAL CENTER
2500 OVERLOOK TERRACE
MADISON, WISCONSIN 53705

**SPD UPGRADE PROJECT**

IBC ENGINEERING SERVICES INC.
N8 W22195 JOHNSON DR, STE 180, WAUKESHA, WI 53186
262.549.1190
fx 262.549.1620

eu:a
eppstein uhen : architects
milwaukee 333 East Chicago Street Milwaukee, Wisconsin 53202 tel 414 271 5350 fax 414 271 7794
madison 222 West Washington Ave, Suite 650 Madison, Wisconsin 53703 tel 608 442 5350 fax 608 442 6680




| # | REVISION | DATE |
|---|---|---|

# ELECTRICAL DEMOLITION PLAN LIGHTING

**FULLY SPRINKLERED**

VA PROJECT NO. 607-10-105
IBC PROJECT NO. 2010059

NORTH

BLDG. NO. VA HOSPITAL - 'B' WING
SCALE 1/4"=1'-0"
DATE JUNE 15, 2011
DRAWN JRK

**BID DOCUMENTS**

# ED100

SPD ELECTRICAL POWER AND SYSTEMS DEMOLITION PLAN
1 1/4"=1'-0"

## SHEET NOTES

1. DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AND ASSOCIATED CONDUIT AND WIRING SHOWN (RECEPTACLES, FIRE SYSTEMS, DATA, ABANDONED CONDUIT, HANGERS, ETC.) WITHIN CONSTRUCTION LIMIT. REMOVE CONDUIT AND WIRE BACK TO EXISTING PANEL.

## GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR RELOCATING EXISTING SPD EQUIPMENT AND PROVIDING ALL NECESSARY CONNECTIONS TO MAKE EQUIPMENT FUNCTIONAL. CONTRACTOR SHALL READ ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND BE FAMILIARIZED WITH ALL EQUIPMENT PRIOR TO DEMOLITION AND INSTALLATION.
2. CONTRACTOR SHALL GIVE ALTERNATE BID PRICING FOR THE VARIOUS PHASES FOR THIS PROJECT. REFER TO ARCHITECTURAL DRAWING G101 FOR PHASING.

## DEMOLITION NOTES

1. ELECTRICAL PANELS EXISTING TO REMAIN.
2. DISCONNECT AND REMOVE ALL DEVICES IN ROOM.

DEPARTMENT OF VETERANS AFFAIRS

VA MEDICAL CENTER
2500 OVERLOOK TERRACE
MADISON, WISCONSIN 53705

**SPD UPGRADE PROJECT**

IBC ENGINEERING SERVICES INC.
N8 W22195 JOHNSON DR, STE 180 WAUKESHA, WI 53188
262.549.1190 fx 262.549.1620

eu:a
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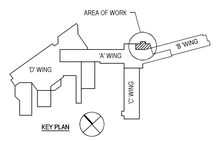



| # | REVISION | DATE |
|---|---|---|

# ELECTRICAL DEMOLITION PLAN POWER & SYSTEMS

## FULLY SPRINKLERED

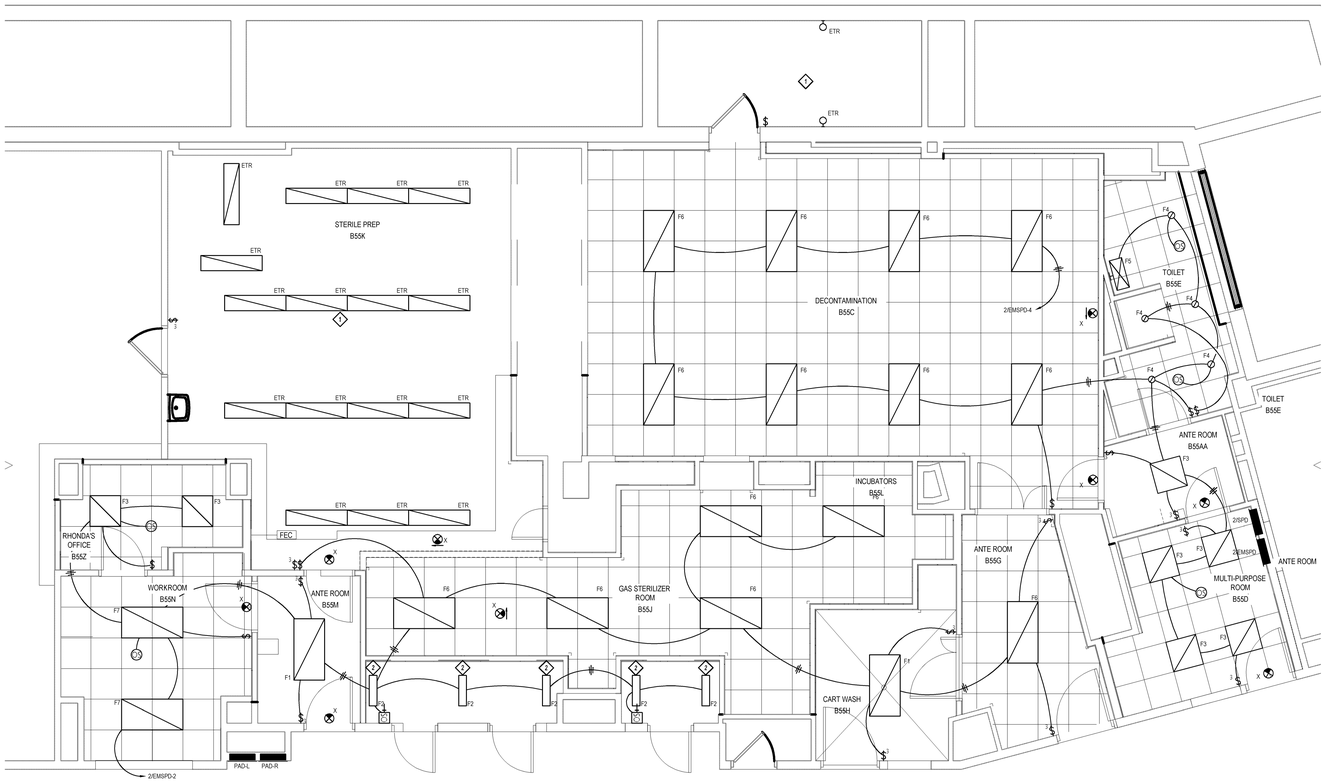
VA PROJECT NO. 607-10-105
IBC PROJECT NO. 2010059

NORTH

BLDG. NO. VA HOSPITAL - 'B' WING
SCALE 1/4"=1'-0"
DATE JUNE 15, 2011
DRAWN JRK

**BID DOCUMENTS**

# ED101




## 1 SPD ELECTRICAL LIGHTING PLAN
1/4"=1'-0"

## SHEET NOTES

1. ALL EXIT SIGNS SHALL BE CIRCUITED TO 2/EMSPD-6.

## GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR RELOCATING EXISTING SPD EQUIPMENT AND PROVIDING ALL NECESSARY CONNECTIONS TO MAKE EQUIPMENT FUNCTIONAL. CONTRACTOR SHALL READ ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND BE FAMILIARIZED WITH ALL EQUIPMENT PRIOR TO DEMOLITION AND INSTALLATION.
2. CONTRACTOR SHALL GIVE ALTERNATE BID PRICING FOR THE VARIOUS PHASES FOR THIS PROJECT. REFER TO ARCHITECTURAL DRAWING G101 FOR PHASING.

## KEY NOTES

1. LUMINAIRES IN THIS AREA ARE EXISTING AND TO REMAIN. MAINTAIN EXISTING CIRCUIT AND CONNECT EXISTING LUMINAIRES TO NEW TOGGLE SWITCH OR SWITCHES AS SHOWN.
2. COORDINATE LUMINARE LOCATION AND MOUNTING TO AVOID MECHANICAL EQUIPMENT, DUCTS, AND PIPING.


DEPARTMENT OF VETERANS AFFAIRS

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N8 W22195 JOHNSON DR, STE 180 262.549.1190
WAUKESHA, WI 53188 fx 262.549.1620

eu:a

eppstein uhen : architects
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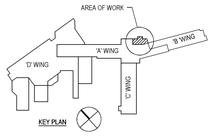


| # | REVISION | DATE |
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# ELECTRICAL LIGHTING PLAN

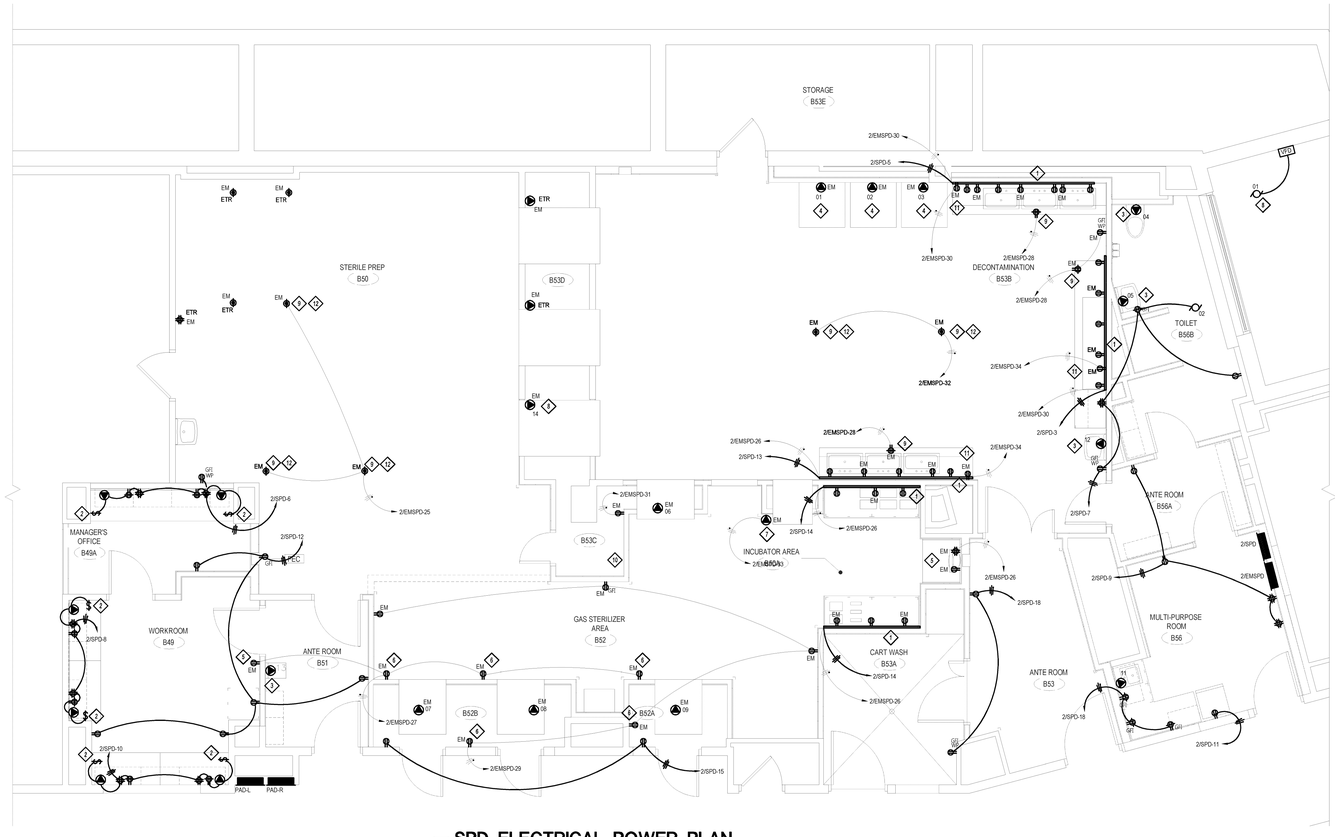
**FULLY SPRINKLERED**

| | |
|---|---|
| VA PROJECT NO. | 607-10-105 |
| IBC PROJECT NO. | 2010059 |
| BLDG. NO. | VA HOSPITAL - 'B' WING |
| SCALE | 1/4"=1'-0" |
| DATE | JUNE 15, 2011 |
| DRAWN | SLO |

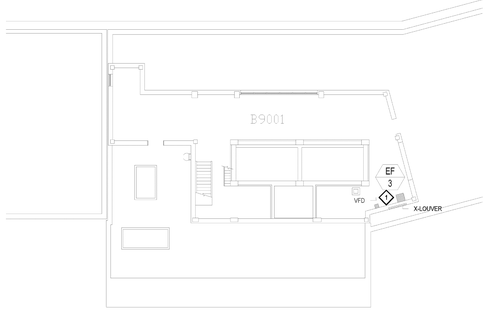
NORTH

**BID DOCUMENTS**

# EL100




## 1 SPD ELECTRICAL POWER PLAN
1/4"=1'-0"




## 2 9TH FLOOR PENTHOUSE PLAN
1/16"=1'-0"

## SHEET NOTES

1. ALL EMERGENCY RECEPTACLES AND FACEPLATES TO BE RED.

## GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR RELOCATING EXISTING SPD EQUIPMENT AND PROVIDING ALL NECESSARY CONNECTIONS TO MAKE EQUIPMENT FUNCTIONAL. CONTRACTOR SHALL READ ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND BE FAMILIARIZED WITH ALL EQUIPMENT PRIOR TO DEMOLITION AND INSTALLATION.
2. CONTRACTOR SHALL GIVE ALTERNATE BID PRICING FOR THE VARIOUS PHASES FOR THIS PROJECT. REFER TO ARCHITECTURAL DRAWING G101 FOR PHASING.

## KEY NOTES

1. 2- CHANNEL STAINLESS STEEL SURFACE RACEWAY TO BE MOUNTED 6" ABOVE STAINLESS STEEL SHELF. ALTERNATING RECEPTACLES SHALL BE ON EMERGENCY POWER, WHILE THE OTHERS ARE ON NORMAL POWER.
2. PROVIDE SWITCH ON WALL AND CONNECT TO UNDER CABINET LIGHTING IN MODULAR FURNITURE.
3. COORDINATE TRANSFORMER LOCATION WITH P.C.
4. PROVIDE AND INSTALL DISCONNECT.
5. MOUNT RECEPTACLE 6" FROM CEILING FOR WIRELESS ANTENNA SYSTEM.
6. MOUNT RECEPTACLE AT 48" FOR CHEMDAC SYSTEM.
7. PROVIDE A NEMA L5-30R RECEPTACLE FOR DRYER.
8. EXHAUST FAN EF-1 AND VFD LOCATED IN EXTERIOR AREA WELL.
9. MOUNT RECEPTACLE AT CEILING FOR MONITOR. COORDINATE LOCATION WITH OWNER.
10. RECEPTACLE FOR PUMP WD-1 IN THIS LOCATION. COORDINATE WITH EQUIPMENT INSTALLATION REGARDING LOCATION.
11. MOUNT DUPLEX RECEPTACLE 6" ABOVE SHELF.
12. PROVIDE CEILING MOUNTED ELECTRICAL DROP. ROUGH-IN TO CONSIST OF A GALVANIZED 4" SQUARE X 2" DEEP ELECTRICAL BOX WITH A 3/4" RAISED SINGLE DEVICE COVER. ATTACH 6 FEET OF 12/3 500W BLACK ELECTRICAL CABLE WITH FACTORY INSTALLED STAINLESS STEEL WIRE MESH STRAIN RELIEF A HOSPITAL GRADE CONNECTOR. VERIFY WITH VA REGARDING TWISTLOCK OF STRAIGHT BLADE RECEPTACLE (EQUAL TO BEACON MEDES CAT. #6-23560 1 OR 2-00).

## KEY NOTES

1. REMOVE EXISTING STARTER AND DISCONNECT SWITCH FOR EXISTING EXHAUST FAN (.5HP, 208V, 3PH). EXTEND EXISTING CONDUCTORS (3) #12 & (1) #12 GROUND TO VFD FOR NEW EXHAUST FAN EF-3 (2HP, 208V, 3PH) IN SAME LOCATION. STARTER IS CONNECTED TO PANEL BPHE-2B.

DEPARTMENT OF VETERANS AFFAIRS

VA MEDICAL CENTER
2500 OVERLOOK TERRACE
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N8 W22195 JOHNSON DR, STE 180 262.549.1190
WAUKESHA, WI 53188 fx 262.549.1620

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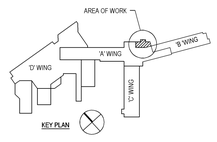



| # | REVISION | DATE |
|---|---|---|

# ELECTRICAL POWER PLAN

**FULLY SPRINKLERED**

| | |
|---|---|
| VA PROJECT NO. | 607-10-105 |
| IBC PROJECT NO. | 2010059 |
| BLDG. NO. | VA HOSPITAL - 'B' WING |
| SCALE | 1/4"=1'-0" |
| DATE | JUNE 15, 2011 |
| DRAWN | JRK |

NORTH

**BID DOCUMENTS**

# EP100

## 1 SPD ELECTRICAL SYSTEM PLAN
1/4"=1'-0"

## SHEET NOTES

1. CONNECT PA SPEAKERS TO EXISTING CIRCUIT THAT SERVES THE AREA. PROVIDE ANY ADDITIONAL EQUIPMENT (I.E. AMPLIFIERS, ETC) NEEDED TO MAKE SPEAKERS FULLY FUNCTIONAL.
2. CONNECT FIRE ALARM DEVICES TO EXISTING FIRE ALARM PANEL SERVING THE AREA. PROVIDE ANY ADDITIONAL EQUIPMENT (I.E. NAC PANEL, ETC) NEEDED TO MAKE FIRE ALARM FULLY FUNCTIONAL. VERIFY EXACT LOCATION PRIOR TO BID.
3. CONNECT ALL STROBES TO NEAREST EXISTING NAC PANEL. PROVIDE NEW NAC PANEL IF EXISTING NAC PANEL DOES NOT HAVE CAPACITY FOR NEW STROBES. VERIFY LOCATION PRIOR TO BIDDING.
4. VERIFY EXACT LOCATION OF ALL SPECIAL SYSTEMS (DIRECT PHONE, SPEAKERS, DOORBELLS, CHIMES, ETC.) INSTALLED IN AREA WITH VA.
5. ALL DATA AND TELEPHONE OUTLETS SHALL BE MOUNTED AT 18" UNLESS OTHERWISE NOTED.

## GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR RELOCATING EXISTING SPD EQUIPMENT AND PROVIDING ALL NECESSARY CONNECTIONS TO MAKE EQUIPMENT FUNCTIONAL. CONTRACTOR SHALL READ ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS AND BE FAMILIARIZED WITH ALL EQUIPMENT PRIOR TO DEMOLITION AND INSTALLATION.
2. CONTRACTOR SHALL GIVE ALTERNATE BID PRICING FOR THE VARIOUS PHASES FOR THIS PROJECT. REFER TO ARCHITECTURAL DRAWING G101 FOR PHASING.

## KEY NOTES

1. DOORBELL SHALL SIGNAL DISTINGUISHABLE TONE TO BELLS IN THE SPD.
2. CONNECT BELL TO EACH DOORBELL BUTTON. BELL SHALL HAVE DISTINGUISHABLE TONES FOR EACH DOORBELL CONNECTED TO BELL.
3. PROVIDE DATA OUTLET IN WALL 6" FROM CEILING FOR WIRELESS ANTENNA CONNECTION. EXTEND ¾"C AND DATA WIRING TO I.T. ROOM.
4. PROVIDE J-BOX IN CEILING FOR MONITOR AND EXTEND ¾"C AND DATA WIRING TO I.T. ROOM. COORDINATE LOCATION WITH VA AND POWER.
5. LOCATE DATA OUTLET ABOVE COUNTER TOP AND EXTEND ¾"C AND WIRING TO I.T. ROOM

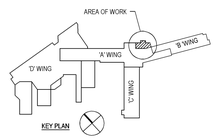
DEPARTMENT OF VETERANS AFFAIRS

VA MEDICAL CENTER
2500 OVERLOOK TERRACE
MADISON, WISCONSIN 53705

**SPD UPGRADE PROJECT**

IBC ENGINEERING SERVICES INC.
N8 W22195 JOHNSON DR, STE 180, WAUKESHA, WI 53186
p 262.549.1190
fx 262.549.1620

eu:a
eppstein uhen : architects
milwaukee 333 East Chicago Street Milwaukee, Wisconsin 53202 tel 414 271 5350 fax 414 271 7794
madison 222 West Washington Ave, Suite 650 Madison, Wisconsin 53703 tel 608 442 5350 fax 608 442 6680




| # | REVISION | DATE |
|---|---|---|

# ELECTRICAL SYSTEM PLAN

**FULLY SPRINKLERED**

| | |
|---|---|
| VA PROJECT NO. | 607-10-105 |
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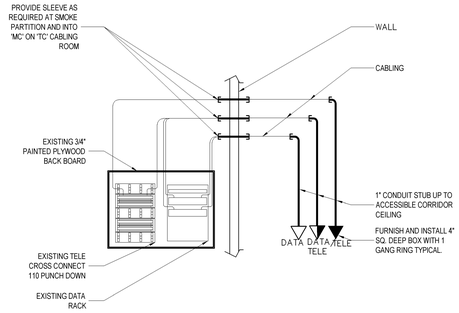
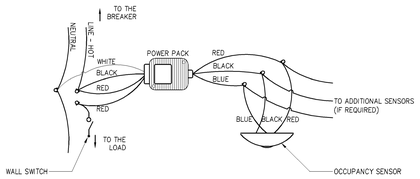
**BID DOCUMENTS**

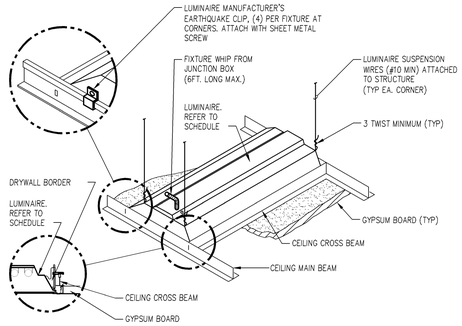
# EI100



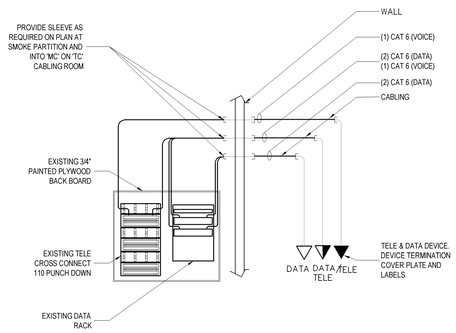

## 9 STATION RACEWAY DETAIL
N.T.S.



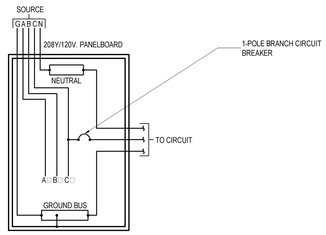

## 5 TYPICAL OCCUPANCY SENSOR WIRING DETAIL
N.T.S.




## 1 TYPICAL LUMINAIRE MOUNTING FOR A GYPBOARD CEILING
N.T.S.

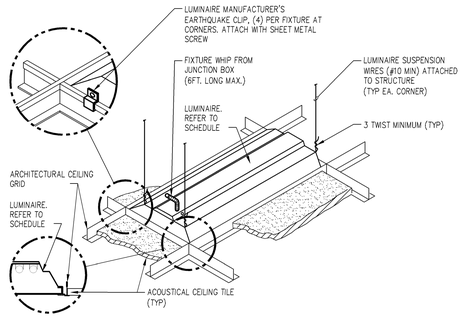



## 10 STATION TELE/DATA CABLE DETAIL
N.T.S.

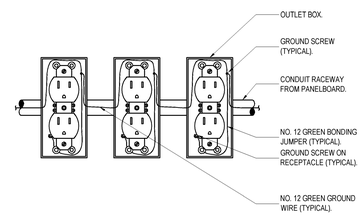



NOTE:
-GREEN GROUNDING CONDUCTORS REQUIRED FOR ALL 120V. CIRCUITS.
-WIRE SHALL BE CONTINOUSLY COLOR CODED.

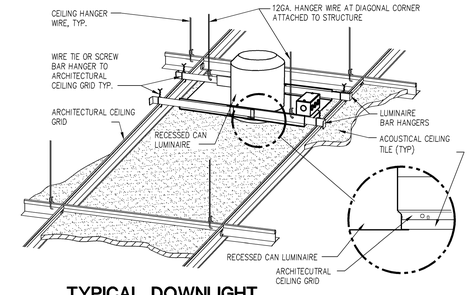
## 6 TYPICAL EQUIPMENT GROUNDING DETAIL
N.T.S.



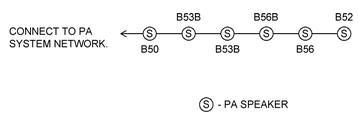

## 2 TYPICAL LUMINAIRE MOUNTING FOR A LAY-IN CEILING
N.T.S.



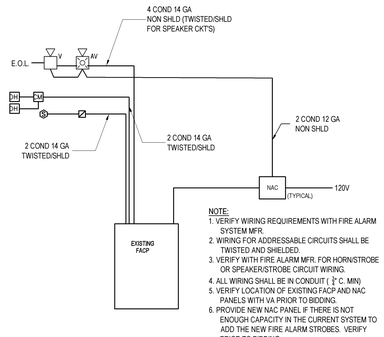

## 7 TYPICAL RECEPTACLE GROUNDING DETAIL
N.T.S.




## 3 TYPICAL DOWNLIGHT MOUNTING FOR A LAY-IN CEILING
N.T.S.

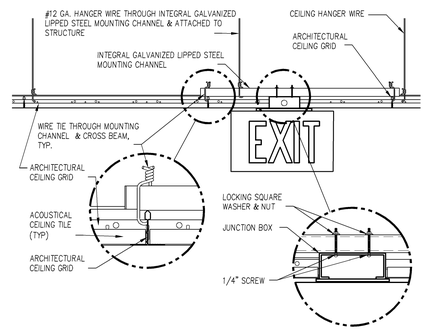



## 11 CABLE CONNECTION FOR PA SPEAKERS
N.T.S.




NOTE:
1. VERIFY WIRING REQUIREMENTS WITH FIRE ALARM SYSTEM MFR.
2. WIRING FOR ADDRESSABLE CIRCUITS SHALL BE TWISTED AND SHIELDED.
3. VERIFY WITH FIRE ALARM MFR. FOR HORN/STROBE OR SPEAKER/STROBE CIRCUIT WIRING.
4. ALL WIRING SHALL BE IN CONDUIT ( $\frac{3}{4}$" C. MIN)
5. VERIFY LOCATION OF EXISTING FACP AND NAC PANELS WITH VA PRIOR TO BIDDING.
6. PROVIDE NEW NAC PANEL IF THERE IS NOT ENOUGH CAPACITY IN THE CURRENT SYSTEM TO ADD THE NEW FIRE ALARM STROBES. VERIFY PRIOR TO BIDDING.

## 8 FIRE ALARM RISER DIAGRAM
N.T.S.




## 4 TYPICAL EXIT SIGN MOUNTING FOR A LAY-IN CEILING
N.T.S.

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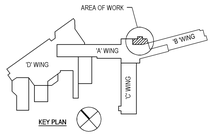
N8 W22195 JOHNSON DR, STE 180, WAUKESHA, WI 53188
p 262.549.1190
fx 262.549.1620

eu:a
eppstein uhen : architects
milwaukee 333 East Chicago Street Milwaukee, Wisconsin 53202 tel 414 271 5350 fax 414 271 7794
madison 222 West Washington Ave, Suite 650 Madison, Wisconsin 53703 tel 608 442 5350 fax 608 442 6680




| # | REVISION | DATE |
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# ELECTRICAL DETAILS

**FULLY SPRINKLERED**

VA PROJECT NO. 607-10-105
IBC PROJECT NO. 2010059

NORTH

BLDG. NO. VA HOSPITAL - 'B' WING
SCALE NTS
DATE JUNE 15, 2011
DRAWN JRK

**BID DOCUMENTS**

# EP300