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Consulting Engineers

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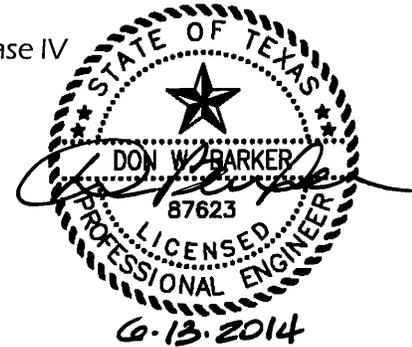
Addendum No.1

Project: Audie Murphy Hospital - Replace HVAC Units - Phase IV

Issuance Date: June 13, 2014

Subject: Addendum No. 1

Issued To: Roland Ibarra
WestEast Design Group
200 E. Grayson, Suite 207
San Antonio, Texas 78215



The following are a list of items that are herby incorporated into the Construction Documents issued for the above referenced project:

Refer to Drawings:

- Item No. 1 Sheet M-103 - BASEMENT PIPE SPACE DEMO PIPING PLAN
1. The Contractor shall demolish items as shown on the attached drawing.
- Item No. 2 Sheet M-104 - BASEMENT PIPE SPACE PIPING PLAN
1. The Contractor shall furnish and install the Air Handling Units, piping and appurtenances as shown on the attached drawing.
- Item No. 3 Sheet M-601 - MECHANICAL CONTROL POINTS
1. The Contractor shall furnish and install the DDC control points and programming as shown on the attached drawing.
- Item No. 4 Sheet M-602 - MECHANICAL SCHEDULES
1. The Contractor shall furnish and install Air Handlers with the capacities /characteristics listed in the Air Handling Unit Schedule shown on the attached drawing.

ADD No. 1

Project:

Audie Murphy Hospital - Replace HVAC Units - Phase IV

Date:

June 13, 2014

Item No. 5

Sheet E-103 - BASEMENT INTERSTITIAL ELECTRICAL PLAN

1. The Contractor shall furnish and install electrical gear, circuits, etc. as shown on the attached drawing.

Item No. 6

Sheet E-104 - BASEMENT PIPE SPACE ELECTRICAL PLAN

1. The Contractor shall furnish and install electrical gear, circuits, etc. as shown on the attached drawing.

Item No. 7

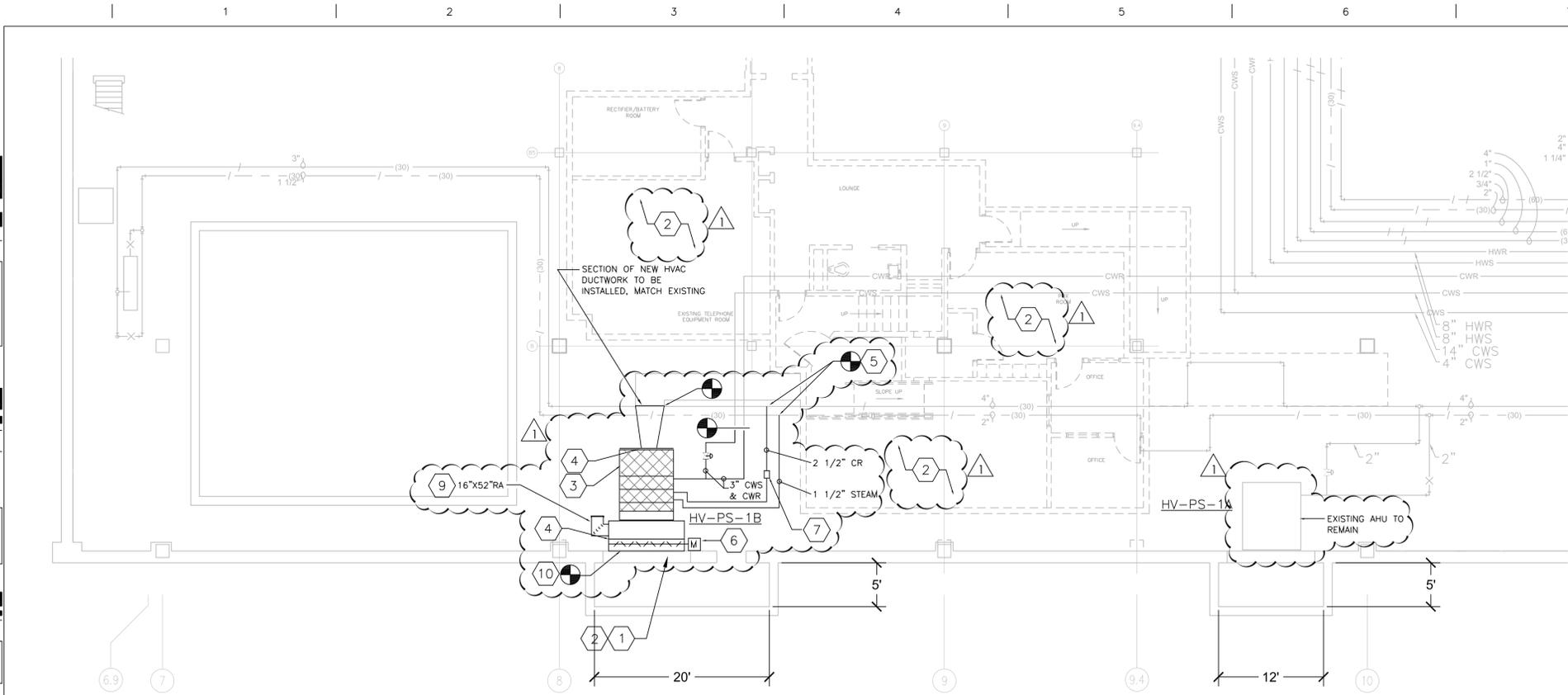
Sheet E-105 - ELECTRICAL ONE-LINE DIAGRAM

1. The Contractor shall furnish and install electrical gear, circuits, etc. as shown on the attached drawing.

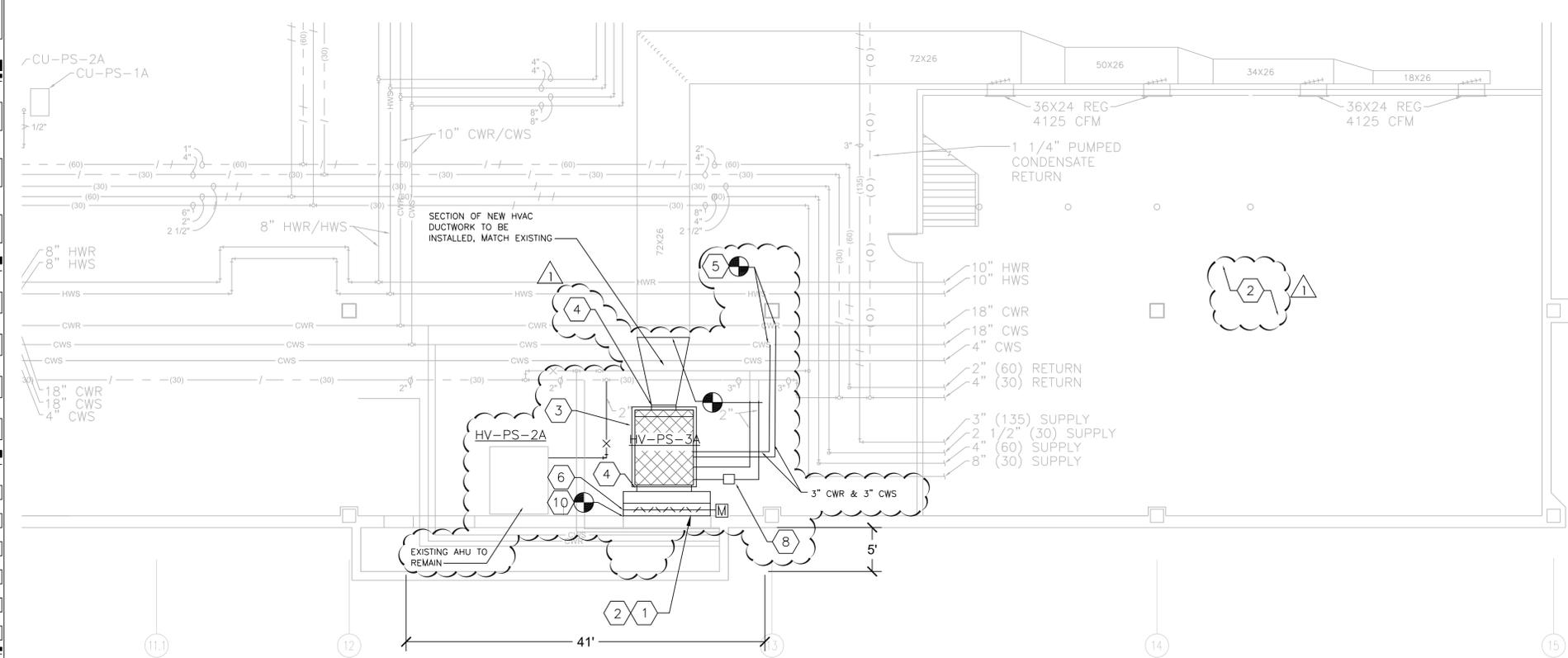


Don Barker, PE, LEED AP
Project Engineer

Barker & Associates, Inc.



1 BASEMENT PIPE SPACE-PIPING PLAN
SCALE: 1/8" = 1'-0"



2 GROUND FLOOR INTERSTITIAL SPACE PLAN
SCALE: 1/16" = 1'-0"

GENERAL NOTES

- COORDINATE ALL WORK WITH THE VA PROJECT MANAGER PRIOR TO START OF WORK.
- FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING A BID, AND PRIOR TO ANY WORK OR EQUIPMENT PROCUREMENT.
- REMOVE ALL TRASH AND VACUUM THE AREA WITHIN 10 FEET OF THE AIR HANDLERS.
- REPLACE ANY DAMAGED INSULATION WITHIN 10 FEET OF THE AIR HANDLERS EVEN IF DAMAGE EXISTS BEFORE THIS WORK STARTS.

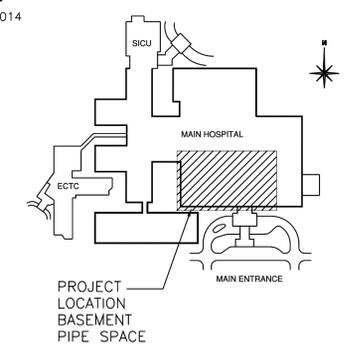
KEY NOTES:

- FURNISH AND INSTALL A NEW AIR HANDLING UNIT. FURNISH AND INSTALL NEW CHILLED WATER PIPING, VALVES AND COIL CONNECTIONS (REF.: 4/M-501). FURNISH AND INSTALL NEW STEAM AND CONDENSATE RETURN PIPING, VALVES AND COIL CONNECTIONS (REF.: 3&5/M-501). FURNISH AND INSTALL A NEW CONDENSATE DRAIN AND TRAP (REF.: 1 2/M-501) ROUTE THE DRAIN TO THE NEAREST FLOOR DRAIN OR FLOOR SINK, TURN DOWN AND TERMINATE 2" ABOVE THE DRAIN. FURNISH AND INSTALL NEW DDC DEVICES, CONTROLS, SENSORS AND CIRCUITS AS INDICATED ON SHEET M-601.
- FURNISH AND INSTALL TEMPORARY COOLING (SPOT COOLERS) A/C UNITS (MINIMUM OF (4) 5TON UNITS FOR THE TOTAL PROJECT).
- FURNISH AND INSTALL A 4" THICK, 3,000 PSI CONCRETE EQUIPMENT PAD WITH #4 REINFORCEMENT BARS ON 10" CENTERS EACH WAY. EXTEND THE PAD 6" BEYOND THE EDGES OF THE EQUIPMENT AND UP TO THE EXTERIOR WALL OF THE BUILDING. CHAMFER OR RADIUS THE TOP EDGE OF THE PAD 1/2" x 1/2".
- FURNISH AND INSTALL NEW CANVAS CONNECTIONS TO THE AHU, DUCTWORK TRANSITIONS AND CONNECTIONS TO THE EXISTING SUPPLY AIR DUCTWORK AND OUTDOOR AIR LOUVER.
- HOT TAP THE EXISTING PIPING MAINS ONE PIPE SIZE LARGER THAN THE CONNECTED PIPING. FURNISH AND INSTALL GATE VALVES. RETAIN THE TAP COUPONS AND DELIVER THE COUPONS TO THE VA PROJECT MANAGER.
- FURNISH AND INSTALL A MOTORIZED DAMPER
- FURNISH AND INSTALL A SPIRAX/SARCO PT2 OR PT3 STEAM TRAP MONITOR AND CONNECT IT TO THE EXISTING MONITORING SYSTEM.
- REINSTALL THE EXISTING STEAM TRAP MONITOR AND RECONNECT IT TO THE EXISTING MONITORING SYSTEM.
- FURNISH AND INSTALL A CAPPED R/A DUCT FOR FUTURE CONNECTION.
- FURNISH AND INSTALL A 20GA, GALVANIZED STEEL OUTDOOR AIR PLENUM ON THE BACK OF THE EXISTING LOUVER.
- REMOVE CONTROL DEVICES, SENSORS, CIRCUITS, ETC AS REQUIRED TO ACCOMMODATE THE INSTALLATION OF THE NEW DDC CONTROL SYSTEM. FURNISH AND INSTALL NEW DDC CONTROLS FOR A FULLY FUNCTIONAL SYSTEM AS SHOWN ON SHEET M-601. SALVAGE THE EXISTING PNEUMATIC CONTROL VALVES AND DELIVER TO A LOCATION AS DIRECTED BY THE VA PROJECT MANAGER. FURNISH AND INSTALL A NEW ELECTRIC CONTROL VALVE.



NOTE: ORIGINAL DESIGN WORK WAS ISSUED BY MICHAEL T. MOONEY P.E., TEXAS LICENSE NUMBER 97995, ON SEPTEMBER 25, 2012

NOTE: MODIFICATIONS TO THIS DOCUMENT ARE BEING ISSUED AS ADDENDUM NO. 1 BY DON W. BARKER P.E., TEXAS LICENSE NO. 87623.



NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE FOR GRAPHICAL REPRESENTATION ONLY. THE DIMENSIONS SHOWN ARE NOT TO BE USED FOR ANY AND ALL CONSTRUCTION, SURVEYING, MATERIAL ESTIMATING, ETC... ALL DIMENSIONS ARE TO BE FIELD VERIFIED.

Audie L. Murphy Memorial Veterans Hospital
7400 Merton Minter
San Antonio, Texas 78229

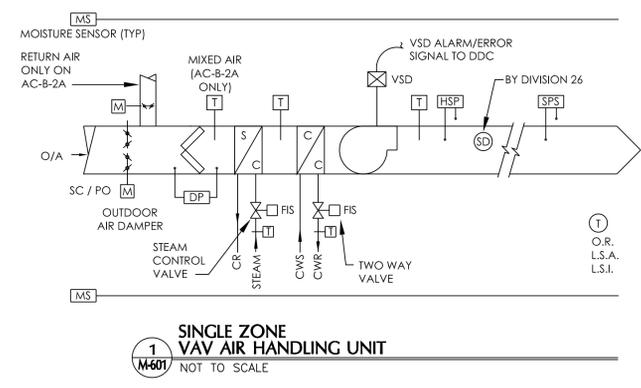
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| | | | | |
|---|---|---------------------------------|-------------------------------------|--------------|
| Approved: Chief, Maintenance and Operations | Approved: Utility Management Supervisor | Drawing Title | Project Title | Date |
| Approved: Chief, Engineer | Approved: Safety Manager | BASEMENT PIPE SPACE PIPING PLAN | REPLACE HVAC UNITS AT ALMD PHASE IV | 09/25/2012 |
| Approved: Environment of Care Manager | Approved: Facilities Service Line Manager | Project No. | Contract No. | Scale |
| | | 671-11-113 | VA257-P-0249 | 1/8" = 1'-0" |
| | | Building No. | Location | Drawing No. |
| | | | SAN ANTONIO, TEXAS | M-104 |

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VARIABLE AIR VOLUME AIR HANDLING UNIT

UNIT SHALL CONSIST OF A MOTOR-OPERATED, MODULATED OUTSIDE AIR DAMPER, MODULATING RETURN AIR DAMPER (AHU AC-B-2A ONLY), FILTER/SECTION, STEAM COIL, CHILLED WATER COOLING COIL, FAN WITH VARIABLE SPEED CONTROL AND SAFETY CONTROLS.

THE UNIT SHALL RUN CONSTANTLY 24 HOURS A DAY AND SEVEN DAYS A WEEK. THE FOLLOWING SEQUENCE SHALL BE PROGRAMMED INTO THE DDC SYSTEM TO ALLOW THE UNIT TO BE OPERATED IN AN OCCUPIED/UNOCCUPIED MODE AT THE DISCRETION OF VA PERSONNEL: WHEN THE UNIT IS STARTED BY THE DDC PROGRAM (OCCUPIED MODE SHALL BE 5 A.M. TO 11 P.M. ADJ.), THE VALVE AND DAMPER MOTORS SHALL BECOME OPERATIONAL. WHEN THE UNIT FAN IS STOPPED BY THE DDC PROGRAM (UNOCCUPIED MODE SHALL BE 11 P.M. TO 5 A.M. ADJ.) THE OUTSIDE AIR DAMPERS AND COOLING COIL CONTROL VALVES SHALL CLOSE.

FOR HV-PS-1B AND HV-PS-3A: THE DDC SYSTEM SHALL MONITOR THE ROOM TEMPERATURE AND MODULATE THE CHILLED WATER VALVE TO MAINTAIN THE ROOM COOLING TEMPERATURE SETPOINT 75°F (ADJUSTABLE). THE DDC SYSTEM SHALL MODULATE THE STEAM CONTROL VALVE TO MAINTAIN THE ROOM HEATING SETPOINT 72°F (ADJ.).

FOR GROUND LEVEL AHUS: THE DDC SYSTEM SHALL MONITOR THE SUPPLY AIR TEMPERATURE AND MODULATE THE CHILLED WATER VALVE AND THE STEAM CONTROL VALVE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE AT 55°F (ADJ.).

THE DDC CONTROLLER SHALL MONITOR A DUCT STATIC PRESSURE SENSOR (OR SENSORS, AS REQUIRED), LOCATED APPROXIMATELY 2/3 TO 3/4 DOWN MAIN TRUNK LINE FROM THE AIR HANDLER AND REPORT THROUGH THE DDC CONTROLLER. IF THE DUCT STATIC PRESSURE RISES ABOVE THE HIGH LIMIT SETPOINT (1.5 IN. W.G., ADJUSTABLE) THE DDC SYSTEM SHALL ALARM.

ROOM TEMPERATURE HIGH-LIMIT AND LOW LIMIT SETPOINTS SHALL BE PROGRAMMED IN THE DDC SYSTEM WHICH SHALL KEEP THE SPACE TEMPERATURE DURING UNOCCUPIED MODE BELOW 85°F AND ABOVE 65°F (ADJ.). UPON SENSING A HIGH LIMIT OR LOW LIMIT CONDITION, THE AHU SYSTEM SHALL GO INTO FULL COOLING OR HEATING. UPON ACHIEVING A ROOM TEMPERATURE WITHIN 2°F (ADJ.) OF THE HIGH/LOW LIMIT, THE UNIT SHALL RETURN TO THE NORMAL/UNOCCUPIED MODE.

SAFETY CONTROLS
A DISCHARGE AIRFLOW TEMPERATURE SENSOR DOWN STREAM OF THE STEAM COIL SHALL BE MONITORED BY THE DDC SYSTEM. IF THE DISCHARGE TEMPERATURE DROPS BELOW 35°F (ADJ.), THE DDC SHALL ALARM, SHUT DOWN THE UNIT AND THE OUTSIDE AIR DAMPER SHALL CLOSE, EXCEPT AHU HV-PS-1B, THAT UNIT SERVES THE TELECOM SYSTEMS. FOR HV-PS-1B: IF THE STEAM COIL DISCHARGE TEMPERATURE FALLS BELOW 35°F (ADJ.) THE DDC SYSTEM SHALL ALARM, THE CHILLED WATER VALVE WILL BE FORCED TO FULL COOLING AND THE UNIT SHALL CONTINUE TO RUN.

FURNISH AND INSTALL TWO MOISTURE SENSORS (KELE MODEL WD-2-T OR APPROVED EQUIVALENT). MOUNT THE 2 MOISTURE SENSORS ON THE FLOOR OF THE MECHANICAL ROOM ON EITHER SIDE OF THE AIR HANDLING UNIT. THE MOISTURE SENSOR SHALL BE CONNECTED TO THE DDC SYSTEM. UPON SENSING MOISTURE THE DDC SYSTEM SHALL ALARM.

| POINT DESCRIPTION: (TYPICAL FOR THE FOLLOWING POINTS) | INPUT / OUTPUT SUMMARY | | | | | | | | | | | |
|---|------------------------|--------|---------|--------|---------|--------|----------|--|--|--|--|--|
| | HARDWARE | | | | | | SOFTWARE | | | | | |
| | OUTPUT | | INPUT | | ALARMS | | PROGRAMS | | | | | |
| | DIGITAL | ANALOG | DIGITAL | ANALOG | DIGITAL | ANALOG | | | | | | |
| START/STOP | | | | | | | | | | | | |
| ENABLE/DISABLE | | | | | | | | | | | | |
| MODULATE VALVE | | | | | | | | | | | | |
| DDC-DAMPERS | | | | | | | | | | | | |
| MODULATE AIR VOLUME | | | | | | | | | | | | |
| STATUS CONTACT | | | | | | | | | | | | |
| CURR. SENSING RELAY (ADJ. THRESH.) | | | | | | | | | | | | |
| PHASE FAILURE | | | | | | | | | | | | |
| LOCAL BUTTON | | | | | | | | | | | | |
| TEMPERATURE | | | | | | | | | | | | |
| RELATIVE HUMIDITY | | | | | | | | | | | | |
| VSD STATUS (TH) | | | | | | | | | | | | |
| ABOVE LOW (CHW) | | | | | | | | | | | | |
| LOCAL SPACE ADJUST | | | | | | | | | | | | |
| POSITION FEEDBACK | | | | | | | | | | | | |
| CONTACT CLOSURE | | | | | | | | | | | | |
| VSD ALARM/ERROR | | | | | | | | | | | | |
| KILL SWITCH | | | | | | | | | | | | |
| HIGH LIMIT | | | | | | | | | | | | |
| LOW LIMIT | | | | | | | | | | | | |
| RUN TIME | | | | | | | | | | | | |
| TIME OF DAY START/STOP | | | | | | | | | | | | |
| OPTIMUM START/STOP | | | | | | | | | | | | |
| TEMPERATURE LIMITING | | | | | | | | | | | | |
| DUTY CYCLING | | | | | | | | | | | | |
| ECONOMIZER OPTIMIZATION | | | | | | | | | | | | |
| OCCUPIED/UNOCCUPIED | | | | | | | | | | | | |
| MORN WARM UP/COOLDOWN | | | | | | | | | | | | |
| RESET | | | | | | | | | | | | |
| BOILER RESET | | | | | | | | | | | | |
| NIGHT OVERRIDE | | | | | | | | | | | | |
| CONDENSER WATER RESET | | | | | | | | | | | | |
| CHILLER DEMAND LIMIT | | | | | | | | | | | | |
| DDC LOOP CONTROL | | | | | | | | | | | | |
| SUPPLY/RETURN FAN TRACK | | | | | | | | | | | | |
| EVENT PROGRAMMING | | | | | | | | | | | | |
| SOFTWARE INTERLOCK | | | | | | | | | | | | |
| DYNAMIC GRAPHIC CREATION | | | | | | | | | | | | |

NOTE: THE CONTRACTOR SHALL INTERFACE THE AHU'S SERVING THE GROUND FLOOR WITH THE EXISTING SMOKE EVACUATION SYSTEM

NOTE: THE CONTRACTOR SHALL UPDATE THE EXISTING HOSPITAL EMCS SYSTEM FRONT END SOFTWARE TO INCLUDE VSD POINTS, GRAPHICS, SETPOINTS, ALARMS AND THE SEQUENCE OF OPERATION AS INDICATED ON THIS SHEET.

| CONTROLS SYMBOLS AND ABBREVIATIONS | | | | | | | |
|------------------------------------|--------------------------------------|--------|--|--------|---------------------------------|--------|-----------------------|
| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
| | AIR FLOW MEASURING STATION | | TEMPERATURE SENSOR (AIR OR LIQUID) | | LOW WATER SENSOR | | HUMIDIFIER |
| | MOTOR-OPERATED, OPPOSED-BLADE DAMPER | | TEMPERATURE SENSOR (ROOM) OR THERMOSTAT | O/A | OUTSIDE AIR | | CARBON DIOXIDE SENSOR |
| | PREHEAT COIL | | HUMIDITY SENSOR / HUMIDISTAT | R/A | RETURN AIR | SO | SPRING OPEN |
| | COOLING COIL | | CURRENT SENSING RELAY | | CONTROL WELL (PIPE) | FIS | FAIL IN STATE |
| | HEATING COIL | | DISCHARGE DUCT HIGH STATIC PRESSURE SWITCH | | STARTER (FAN OR PUMP) | PC | POWER CLOSED |
| | MOTOR-OPERATED THREE-WAY VALVE | | SMOKE DETECTOR | | FAN OR PUMP | SC | SPRING CLOSED |
| | MOTOR-OPERATED TWO-WAY VALVE | | HVAC KILL SWITCH | | AIR FLOW MEASURING STATION | PO | POWER OPEN |
| | FREEZESTAT | | VARIABLE SPEED DRIVE | | MOTOR-OPERATED BUTTERFLY DAMPER | | |
| | DIFFERENTIAL PRESSURE SENSOR | | VARIABLE SPEED DRIVE | | VOLUME DAMPER | | |
| | | | DIFFERENTIAL PRESSURE SWITCH | | FLOW SENSOR | | |



NOTE: ORIGINAL DESIGN WORK WAS ISSUED BY MICHAEL T. MOONEY P.E., TEXAS LICENSE NUMBER 97995, ON SEPTEMBER 25, 2012

NOTE: MODIFICATIONS TO THIS DOCUMENT ARE BEING ISSUED AS ADDENDUM NO. 1 BY DON W. BARKER P.E., TEXAS LICENSE NO. 87623.

100% SUBMITTAL

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

| | | | | | | |
|---|--|--|--|--|--|--|
| Audie L. Murphy Memorial Veterans Hospital 7400 Merton Minter San Antonio, Texas 78229 | CONSULTANT: Barker & Associates, Inc. Consulting Engineers Firm Registration No. F-0213 824 Broadway St., Suite 201 San Antonio, Texas 78215 Phone: (210) 826-9191 Fax: (210) 223-9194 Email: barker@barker-assoc.com | ARCHITECT: WEST EAST DESIGN GROUP 200 E. GRAYSON ST., SUITE 202, SAN ANTONIO, TEXAS 78215 USA 210.531.0755 Fax: 210.293.1018 | SAUNDERS ARCHITECTS - ENGINEERS 1H 10 West, Suite 1500 San Antonio, Texas 78230 Tele: 877-275-7126 | Approved: Chief, Maintenance and Operations Approved: Chief, Engineer Approved: Utility Management Supervisor Approved: Safety Manager Approved: Environment of Care Manager Approved: Facilities Services Line Manager | Drawing Title MECHANICAL CONTROL POINTS Project No. 671-11-113 Contract No. VA257-P-0249 Building No. - AISCAD File Name 871-11-112 M-601.DWG Location SAN ANTONIO, TEXAS | Project Title REPLACE HVAC UNITS AT ALMD PHASE IV Scale: AS SHOWN Date: 09/25/2012 Drawing No. M-601 |
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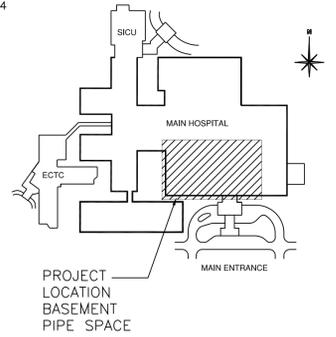
AIR HANDLING UNIT SCHEDULE

| CODE | SUGGESTED MFR. & MODEL NUMBER | SYSTEM TYPE | SUPPLY FAN | | | | | | | | | | | STEAM COILS | | | | CHILLED WATER COILS | | | | | | | | | | | FILTERS | | | | NOTES | | | | | | |
|----------|--------------------------------|-----------------------|------------|-----------------|--------|--------|----------|---------|--------|------|----|-------|-----------------|---------------|---------------|---------------|-------|---------------------|----------|--------|--------|-----------|------------|---------|--------|--------|---------------|---------------|---------------|------|--------|-------|-------|----------|-----|------|------------------|---------------------------------|--|
| | | | FAN TYPE | SERVICE | ACFM | OA CFM | FAN O.V. | FAN DIA | T.S.P. | RPM | HP | VOLT. | STEAM TRAP #/HR | PSIG | E.A.T. db.wb. | L.A.T. db.wb. | S MBH | TYPE | SERVICE | T. MBH | S. MBH | FACE AREA | GPM | W.PD FT | E.W.T. | L.W.T. | E.A.T. db.wb. | L.A.T. db.wb. | A.P.D. INCHES | ROWS | F.P.I. | % EFF | | VEL. FPM | QTY | SIZE | | | |
| HV-PS-1B | TRANE PERFORMANCE UNIT SIZE 14 | VAV, 100% OUTSIDE AIR | FC | SPACE TEMPERING | 6500 | 6500 | 4437 fpm | 12 | 3.6 | 1710 | 10 | 480/3 | 1 | 485 | 30 | 27 | 90 | 450.5 | 2 ROW NS | COOL | 540 | 314.6 | 13.6 SQ FT | 108 | 12 | 45 | 55 | 99 | 78 | 55 | 54 | 0.5 | 6 | 13 | 30 | 360 | 2 4 4 | 16X25 16X20 16X20 3X16 | PROVIDE VFD, FLEX CONNECT TO DUCT, SMOKE DETECTOR, MOTOR OPERATED INLET DAMPER, DISCHARGE PLENUM |
| HV-PS-3A | TRANE PERFORMANCE UNIT SIZE 25 | VAV, 100% OUTSIDE AIR | AF | SPACE TEMPERING | 13,750 | 13,750 | 3138 fpm | 20 | 3.7 | 2089 | 20 | 480/3 | 1 | 866 EACH COIL | 30 | 25 | 80.0 | 820 | 1 ROW NS | COOL | 570 | 562 | 25 SQ FT | 114 | 12 | 45 | 55 | 95 | 67 | 55 | 53 | 0.5 | 4 | 13 | 30 | 275 | 6 3 2 1 | 20X20 12X24 16X20 4X12 | PROVIDE VFD, FLEX CONNECT TO DUCT, SMOKE DETECTOR, MOTOR OPERATED INLET DAMPER, DISCHARGE PLENUM |

NOTE:
ORIGINAL DESIGN WORK WAS ISSUED BY
MICHAEL T. MOONEY P.E., TEXAS LICENSE
NUMBER 97995, ON SEPTEMBER 25, 2012



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BEING ISSUED AS ADDENDUM NO. 1 BY
DON W. BARKER P.E., TEXAS LICENSE NO.
87623.

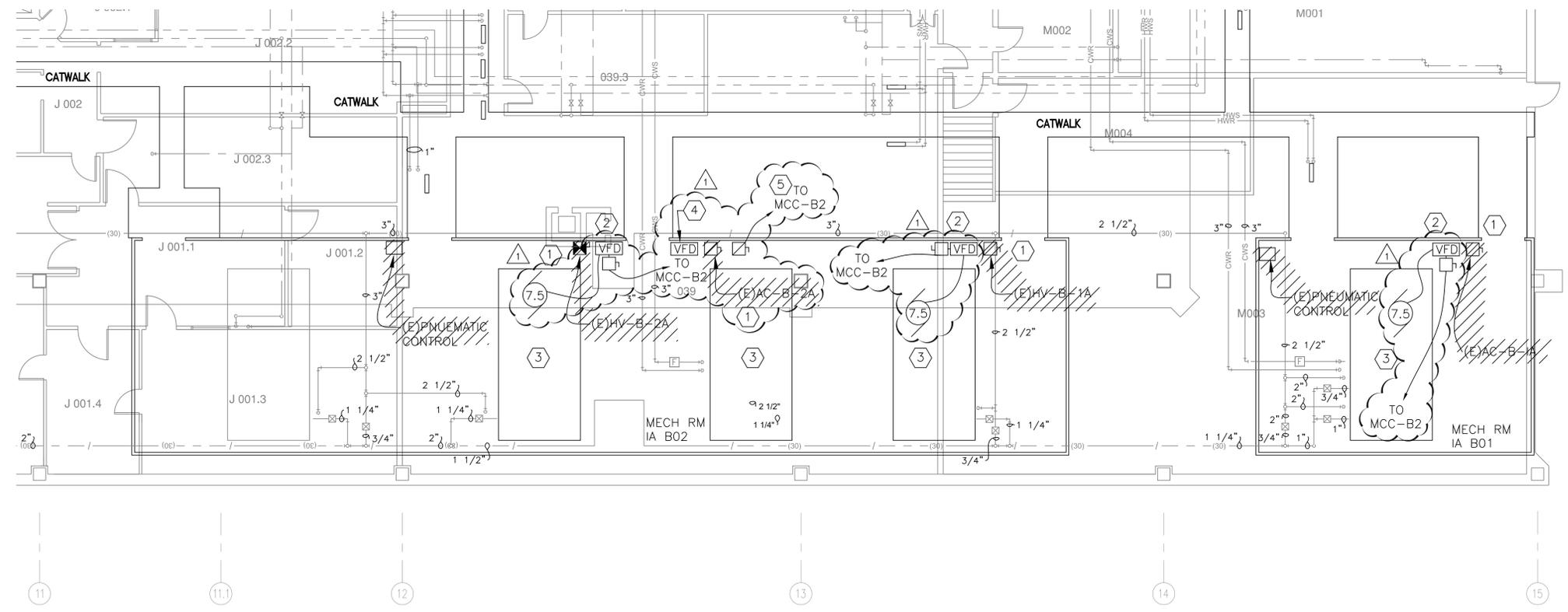


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|---|---|---|---|---|---|--|---|
| <p>Audie L. Murphy Memorial Veterans Hospital 7400 Merton Minter San Antonio, Texas 78229</p> | <p>CONSULTANT:</p> <p><i>Barker & Associates, Inc.</i> Consulting Engineers Farm Registration No. F-9213 824 Broadway St., Suite 201 San Antonio, Texas 78215 Phone: (210) 826-9191 Fax: (210) 223-9194 Email: barker@barkerandassociates.com</p> | <p>ARCHITECT:</p> <p>WEST EAST DESIGN GROUP 200 E. GRAYSON ST., SUITE 202, SAN ANTONIO, TEXAS 78215 USA 210.531.0755 FAX 210.293.1018</p> | <p>SAUNDERS ARCHITECTS - ENGINEERS 1H 10 West, Suite 1500 San Antonio, Texas 78230 Tele: 877-275-7126</p> | <p>Approved: Chief, Maintenance and Operations</p> <p>Approved: Chief, Engineer</p> | <p>Approved: Utility Management Supervisor</p> <p>Approved: Safety Manager</p> <p>Approved: Environment of Care Manager</p> <p>Approved: Facilities Services Line Manager</p> | <p>Drawing Title MECHANICAL SCHEDULES</p> <p>Project Title REPLACE HVAC UNITS AT ALMD PHASE IV</p> <p>Project No. 671-11-113</p> <p>Contract No. VA257-P-0249</p> <p>Building No. -</p> <p>Location SAN ANTONIO, TEXAS</p> | <p>Date 09/25/2012</p> <p>Scale AS SHOWN</p> <p>Drawing No. M-602</p> |
|---|---|---|---|---|---|--|---|

Scale indicators on the left margin:
 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

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
one quarter inch = one foot
three eighths inch = one foot
one eighth inch = one foot



GENERAL NOTES

- 1. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE VA PROJECT MANAGER PRIOR TO START OF WORK.
2. DRAWINGS BASED ON SITE SURVEYING, HOWEVER, NOT ALL DEVICES MAY BE SHOWN.
3. EXISTING EQUIPMENT SUCH AS DISCONNECTS, PNEUMATIC CONTROLS, ETC, SHOWN ON PLANS TO BE REMOVED COMPLETELY. 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.
4. REMOVE ALL ACCESSIBLE ABANDONED WIRING OF ALL TYPES, OR CAP AND LABEL IN JUNCTION BOX FOR RE-USE IN COMPLIANCE W/ THE NATIONAL ELECTRICAL CODE.
5. MAINTAIN AND RESTORE, IF INTERRUPTED ALL CONDUITS AND CONDUCTORS PASSING THROUGH RENOVATED AREAS AND SERVICING UNDISTURBED AREAS.

KEY NOTES:

- 1 DISCONNECT THE BRANCH CIRCUIT FROM THE AHU AND REMOVE THE CIRCUIT BACK TO MCC-B2. REMOVE THE DISCONNECTING MEANS, STARTER, ETC.
2 FURNISH AND INSTALL A NEW BRANCH CIRCUIT TO THE NEW AIR HANDLING UNIT. MOUNT A NEW DISCONNECT AND VARIABLE FREQUENCY DRIVE AT AN ACCESSIBLE LOCATION THAT IS IN ACCORDANCE WITH NEC DEDICATED SPACE AND WORKING CLEARANCE REQUIREMENTS.
3 CONNECT EXISTING SMOKE DETECTORS TO NEW VFD'S FOR SHUTOFF UPON DETECTION OF SMOKE. CONFIRM THAT DETECTORS ARE ALSO CONNECTED AND MONITORED BY THE EXISTING BUILDING-WIDE FIRE ALARM SYSTEM. PROVIDE CONNECTION TO EXISTING BUILDING-WIDE FIRE ALARM SYSTEM IF CURRENTLY NOT CONNECTED. PROVIDE ALL WIRE/CONDUIT AND ACCESSORIES AS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
4 THE EXISTING VFD AND EQUIPMENT CONNECTION SHALL REMAIN.
5 REMOVE/MODIFY THE BRANCH CIRCUIT SERVING AC-B-2A (REFER TO THE ONE-LINE DIAGRAM ON SHEET E-105).

LEGEND



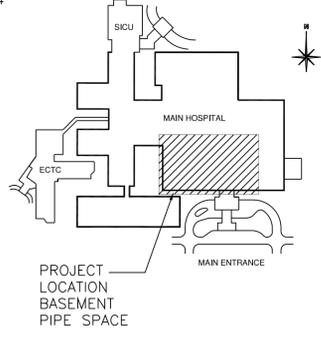
1 BASEMENT INTERSTITIAL ELECTRICAL PLAN
SCALE: 1/8"=1'-0"
NORTH

NOTE: ORIGINAL DESIGN WORK WAS ISSUED BY ALAN WAYNE ELY P.E., COLORADO LICENSE NUMBER 31969, ON SEPTEMBER 25, 2012



NOTE: MODIFICATIONS TO THIS DOCUMENT ARE BEING ISSUED AS ADDENDUM NO. 1 BY DON W. BARKER P.E., TEXAS LICENSE NO. 87623.

JUNE 13, 2014



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Project information block including Consultant (Barker & Associates, Inc.), Architect (West East Design Group), and Saunders Architects - Engineers. Includes approval signatures and dates.

GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE VA PROJECT MANAGER PRIOR TO START OF WORK.
2. DRAWINGS BASED ON SITE SURVEYING, HOWEVER, NOT ALL DEVICES MAY BE SHOWN.
3. EXISTING EQUIPMENT SUCH AS DISCONNECTS, PNEUMATIC CONTROLS, ETC. SHOWN ON PLANS TO BE REMOVED COMPLETELY. 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.
4. REMOVE ALL ACCESSIBLE ABANDONED WIRING OF ALL TYPES, OR CAP AND LABEL IN JUNCTION BOX FOR RE-USE IN COMPLIANCE W/ THE NATIONAL ELECTRICAL CODE.
5. MAINTAIN AND RESTORE, IF INTERRUPTED ALL CONDUITS AND CONDUITORS PASSING THROUGH RENOVATED AREAS AND SERVICING UNDISTURBED AREAS.

KEY NOTES:

1. DISCONNECT THE BRANCH CIRCUIT FROM THE AHU AND REMOVE THE CIRCUIT BACK TO MCC-B1. REMOVE THE DISCONNECTING MEANS, STARTER, ETC.
2. FURNISH AND INSTALL A NEW BRANCH CIRCUIT TO THE NEW AIR HANDLING UNIT. MOUNT A NEW DISCONNECT AND VARIABLE FREQUENCY DRIVE AT AN ACCESSIBLE LOCATION THAT IS IN ACCORDANCE WITH NEC DEDICATED SPACE AND WORKING CLEARANCE REQUIREMENTS.
3. PROVIDE SUPPLY DUCT-MOUNTED SMOKE DETECTOR PER VAMC STANDARDS. DETECTOR SHALL SHUT OFF AIR HANDLING UNIT UPON DETECTION OF SMOKE, AND ALARM TO EXISTING BUILDING-WIDE FIRE ALARM SYSTEM. PROVIDE ALL WIRE/CONDUIT & ACCESSORIES AS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
4. DISCONNECT AND PULL BACK THE TELCOMM EPO CIRCUIT FROM THE STARTER. EXTEND AND CONNECT THE CIRCUIT TO THE NEW VFD CONTACTS. THE VFD SHALL SHUT DOWN ON EPO ACTIVATION.
5. REMOVE THE PHASE FAULT UNIT.

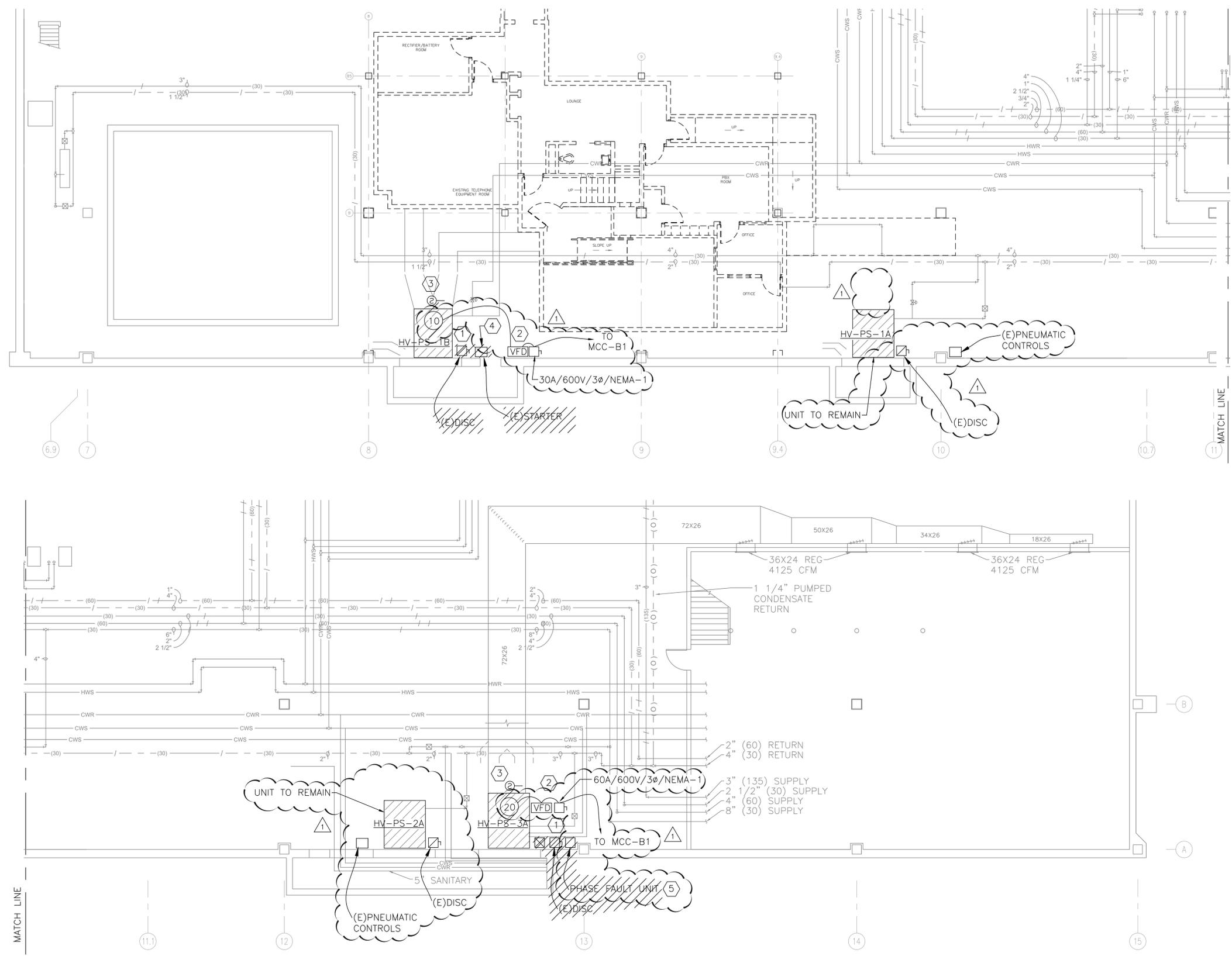
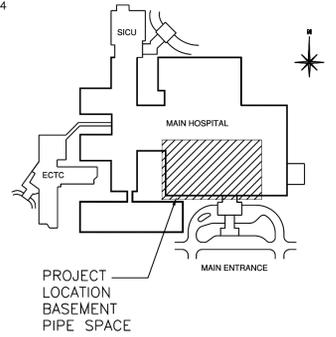
LEGEND



NOTE:
ORIGINAL DESIGN WORK WAS ISSUED BY ALAN WAYNE ELY P.E., COLORADO LICENSE NUMBER 31969, ON SEPTEMBER 25, 2012



NOTE:
MODIFICATIONS TO THIS DOCUMENT ARE BEING ISSUED AS ADDENDUM NO. 1 BY DON W. BARKER P.E., TEXAS LICENSE NO. 87623.



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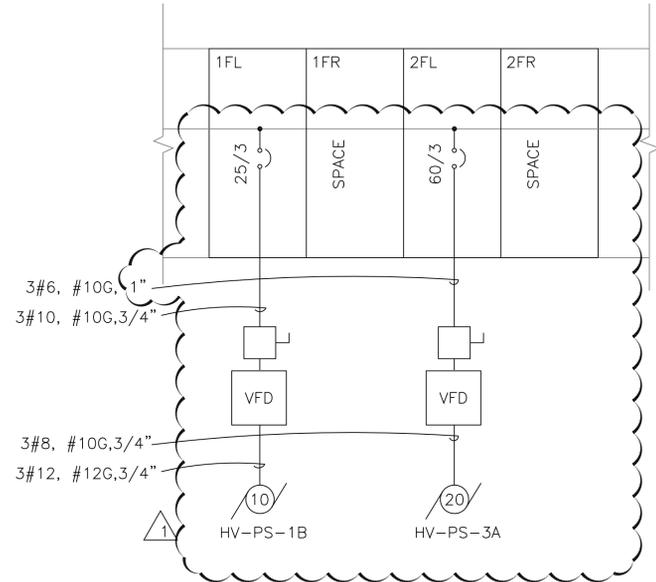
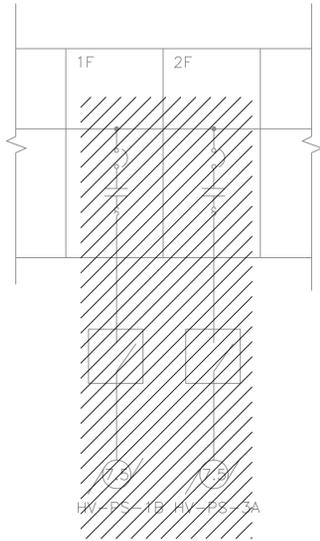
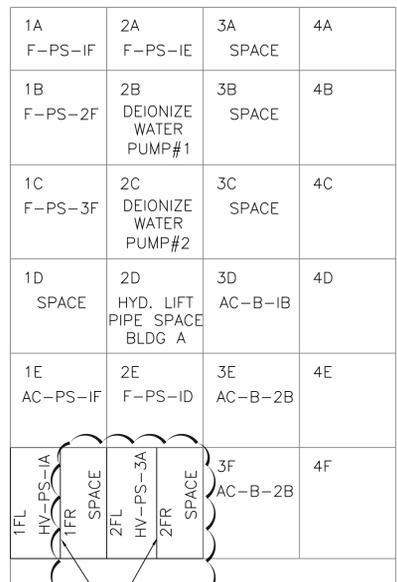
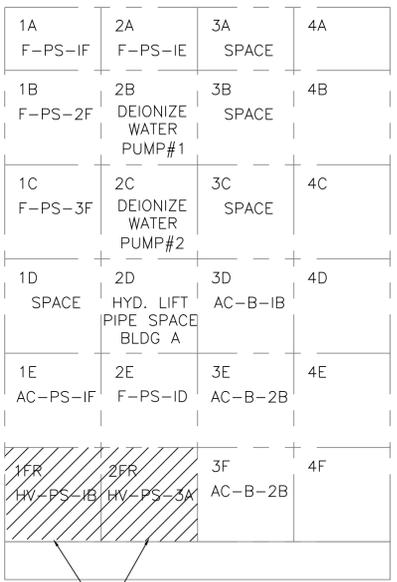
1 BASEMENT PIPE SPACE-ELECTRICAL PLAN
SCALE: 1/8"=1'-0"

100% SUBMITTAL

| | | | | | | | | |
|---|---|--|--|--|--|---|--|----------------------------|
| <p>Audie L. Murphy Memorial Veterans Hospital 7400 Merton Minter San Antonio, Texas 78229</p> | <p>CONSULTANT:</p> <p>Barker & Associates, Inc. Consulting Engineers Firm Registration No. F-1212 824 Broadway St., Suite 201 San Antonio, Texas 78215 Phone: (210) 826-9191 Fax: (210) 223-9194 Email: barker@barker.com</p> | <p>ARCHITECT:</p> <p>WEST EAST DESIGN GROUP 200 E. GRAYSON ST., SUITE 202, SAN ANTONIO, TEXAS 78215 USA 210.531.0755 Fax: 210.293.1018</p> | <p>SAUNDERS ARCHITECTS - ENGINEERS 1H 10 West, Suite 1500 San Antonio, Texas 78230 Tele: 877-275-7126</p> | <p>Approved: Chief, Maintenance and Operations</p> | <p>Approved: Utility Management Supervisor</p> | <p>Drawing Title BASEMENT PIPE SPACE ELECTRICAL</p> | <p>Project Title REPLACE HVAC UNITS AT ALMD PHASE IV</p> | <p>Date 09/25/2012</p> |
| | | | | <p>Approved: Chief, Engineer</p> | <p>Approved: Safety Manager</p> | <p>Project No. 671-11-113</p> | <p>Contract No. VA257-P-0249</p> | <p>Designed By DS</p> |

Vertical scale markers on the left side of the sheet, including 'three quarters inch = one foot', 'one half inch = one foot', 'one quarter inch = one foot', and 'one eighth inch = one foot'.

Vertical scale markers on the right side of the sheet, including 'three quarters inch = one foot', 'one half inch = one foot', 'one quarter inch = one foot', and 'one eighth inch = one foot'.



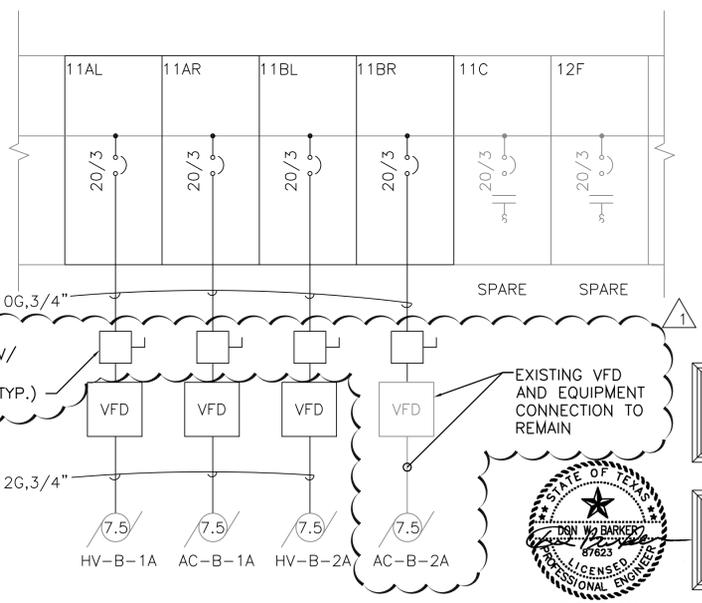
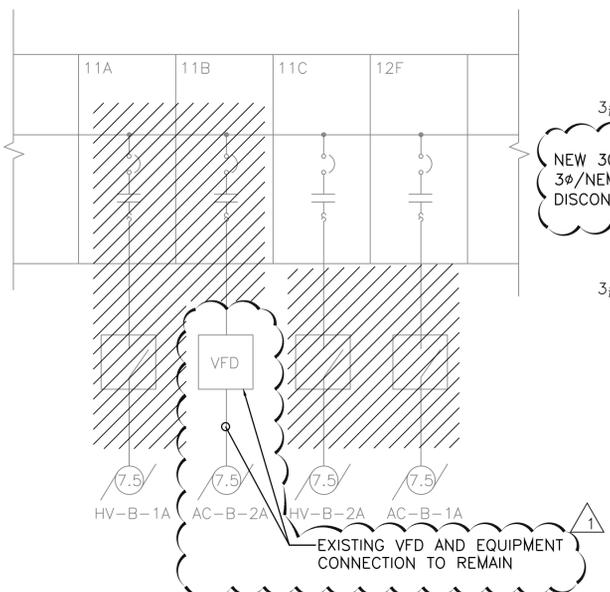
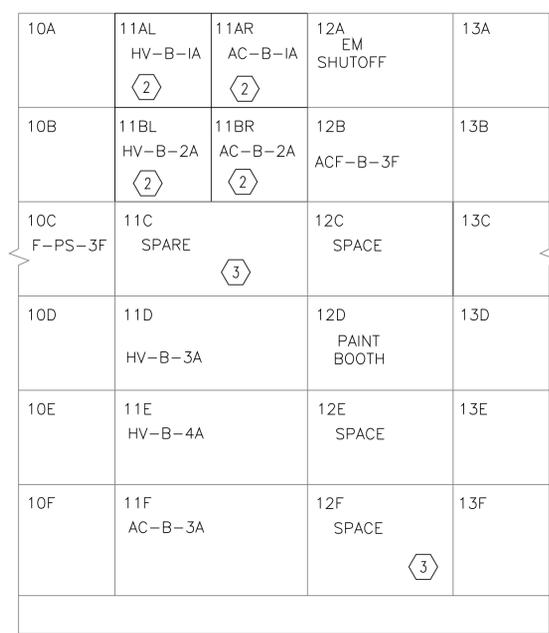
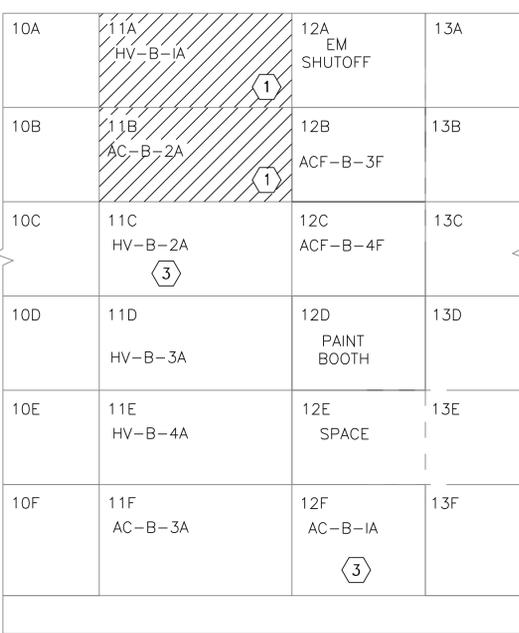
- GENERAL NOTES**
- ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO PROJECT START-UP.
 - PROVIDE NEW LABELS FOR MODIFIED COMPARTMENTS AS INDICATED. PROVIDE PER VAMC STANDARDS.
 - EXISTING MOTOR CONTROL CENTERS NOT SHOWN ON FLOOR PLANS. EXISTING MOTOR CONTROL CENTER LOCATED ON BASEMENT LEVEL, MAIN ELECTRICAL ROOM.
 - FIELD DETERMINE BEST BRANCH CIRCUIT ROUTING FROM MOTOR CONTROL CENTERS TO AIR HANDLING UNITS.

- KEY NOTES:**
- REMOVE EXISTING CIRCUIT BREAKER AND MOTOR STARTERS. MODIFY THE COMPARTMENTS FOR NEW CIRCUIT BREAKERS. EXISTING CIRCUIT BREAKERS AND MOTOR STARTERS SHALL BE HANDED OVER TO THE VA PROJECT MANAGER.
 - MODIFY THE MCC FOR SPLIT COMPARTMENTS TO ACCOMMODATE NEW CIRCUIT BREAKERS IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
 - DISCONNECT AND REMOVE CIRCUITS. RE-LABEL COMPARTMENT AS "SPARE"

1 MOTOR CONTROL CENTER
MCC-B1 FRONT ELEVATION DEMOLITION
SCALE: NTS

2 MOTOR CONTROL CENTER
MCC-B1 FRONT ELEVATION
SCALE: NTS

3 MOTOR CONTROL CENTER
MCC-B1 ONE-LINE DEMOLITION
SCALE: NTS

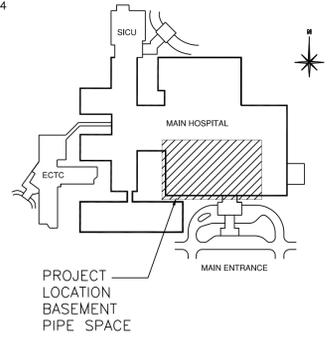


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8 MOTOR CONTROL CENTER
MCC-B2 ONE-LINE
SCALE: NTS



5 MOTOR CONTROL CENTER
MCC-B2 FRONT ELEVATION DEMOLITION
SCALE: NTS

6 MOTOR CONTROL CENTER
MCC-B2 FRONT ELEVATION
SCALE: NTS

7 MOTOR CONTROL CENTER
MCC-B2 ONE-LINE DEMOLITION
SCALE: NTS

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

A
B
C
D
E
F