

ELECTRICAL SYMBOLS - POWER PLAN

<p>MOTOR, SINGLE-PHASE</p> <p>MOTOR, THREE-PHASE</p> <p>TRANSFORMER, PLAN</p> <p>WYE CONNECTION</p> <p>DUCT, CELL FLOOR HEADER</p> <p>DUCT, TROLLEY</p> <p>DUCT, UNDERFLOOR JUNCTION BOX</p> <p>EARTH GROUND</p> <p>JUNCTION BOX</p> <p>LADDER CABLE TRAY</p> <p>BRANCH CIRCUIT HOMERUN. LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS. ONE SEPARATE GREEN GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN; NOT SHOWN</p> <p>PULL BOX</p> <p>WIREWAY</p> <p>RIGID CONDUIT LINE = RC</p> <p>DIRECT BURIAL CABLE = DB</p> <p>POWER DUCT = P</p> <p>SUBSTATION</p> <p>HI VOLTAGE SWITCH ON CONCRETE PAD</p> <p>LOW VOLTAGE SWITCH ON CONCRETE PAD</p> <p>DUAL POWER AND TELECOMMUNICATIONS MANHOLE</p> <p>BUSWAY</p> <p>FLOOR OUTLET, DATA COMMUNICATION</p> <p>OUTLET, DATA COMMUNICATION</p> <p>PUSH BUTTON</p> <p>DISTRIBUTION PANEL</p> <p>LIGHTING PANEL</p> <p>PANELBOARD CABINET, FLUSH MOUNTED</p> <p>PANELBOARD CABINET, SURFACE MOUNTED</p> <p>RECEPTACLE, CLOCK HANGER</p> <p>RECEPTACLE, DUPLEX</p> <p>RECEPTACLE, DUPLEX ON EMERGENCY POWER</p> <p>RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER</p> <p>RECEPTACLE, QUADRAPLEX</p> <p>RECEPTACLE, SINGLE</p> <p>RECEPTACLE, SINGLE WITH SWITCH</p> <p>RECEPTACLE, SPECIAL PURPOSE</p> <p>A = 120V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 5-20R. B = 208V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 6-20R. C = 120V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 5-30R. D = 208V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 6-30R. E = 208V, 60A, 1 PHASE, 3-POLE, 4W, NEMA 14-60R. F = 208V, 30A, 3 PHASE, 3-POLE 4W, NEMA 15-30R. G = 208V, 50A, 3 PHASE, 3 POLE, 4W, NEMA 15-30R. H = 208V, 60A, 3 PHASE, 3 POLE, 4W, NEMA 15-60R.</p>	<p>DISCONNECT SWITCH, FUSED</p> <p>DISCONNECT SWITCH, UNFUSED</p> <p>STARTER, COMBINATION WITH DISCONNECT SWITCH</p> <p>STARTER OR MOTOR CONTROLLER</p> <p>VARIABLE FREQUENCY DRIVE</p> <p>TIME CLOCK</p> <p>POTHEAD</p> <p>STRESS CONE</p> <p>RECTIFIER, CATHODIC PROTECTION SANITARY</p> <p>VENTILATOR OR FAN COIL UNIT OUTLET</p> <p>CONDUIT TERMINATED 6" [152mm] AFF IN STANDARD BOX FOR EXTENSION TO EQUIPMENT AS DIRECTED.</p> <p>CONDUIT TERMINATED W/COUPLING (FLUSH W/FINISHED FLOOR) FOR EXTENSION TO EQUIPMENT AS DIRECTED.</p> <p>SWITCH</p> <p>D = DIMMING F = FUSED SWITCH L = LOCK M = MANUAL MOTOR STARTING MP = MOTOR SNAP WITH PILOT LIGHT</p> <p>K = KEY OPERATED LM = LOW VOLTAGE MASTER MC = MOMENTARY CONTACT P = WITH PILOT LIGHT</p> <p>OS = OCCUPANCY SENSOR OS/D = DUAL PURPOSE OCCUPANCY SENSOR/DIMMER PB = PUSH BUTTON STATION WP = WEATHER PROOF</p> <p>RC = REMOTE CONTROL X = EXPLOSION PROOF</p> <p>RECEPTACLE, SWITCHED DUPLEX</p> <p>DROP CORD, SINGLE CONVENIENCE OUTLET, 3-WIRE, GROUNDING TYPE, 20A, W/#12 CONDUCTORS IN FLEXIBLE CORD (CENTER LINE OF OUTLET: 6"-6" [1981mm] AFF. MINIMUM).</p> <p>ELECTRICAL STRIP MOLD (OUTLETS ON 2'-0" [610mm] CENTERS OR AS DESIGNATED ON DRAWINGS), MTD 3'-6" [1067mm] AFF OR AS INDICATED.</p> <p>3-GANG COMPARTMENT BOX IN FLOOR FOR TELEPHONE, DATA & RECEPTACLE.</p> <p>ELECTRICAL STRIP MOLD (OUTLETS ON 2'-0" [610mm] CENTERS OR AS DESIGNATED ON DRAWINGS), MTD 3'-6" [1067mm] AFF OR AS INDICATED.</p> <p>3-GANG COMPARTMENT BOX IN FLOOR FOR TELEPHONE, DATA & RECEPTACLE.</p> <p>RELAY; LETTER INDICATES RELAY TYPE</p> <p>50 = INSTANTANEOUS OVERCURRENT OR RATE-OF-RISE 51 = AC-TIME OVERCURRENT 67 = AC-DIRECTIONAL OVERCURRENT 86 = LOCK OUT</p> <p>PANELBOARD</p> <p>MECHANICAL EQUIPMENT REFERENCE</p>	<p>1PH SINGLE-PHASE</p> <p>1P SINGLE POLE</p> <p>2/C TWO-CONDUCTOR</p> <p>3/C THREE-CONDUCTOR</p> <p>3PH THREE-PHASE</p> <p>4/C FOUR-CONDUCTOR</p> <p>4W FOUR-WIRE</p> <p>A/C UNIT AIR CONDITIONING UNIT</p> <p>A/E ARCHITECT/ENGINEER</p> <p>AAP ALARM ANNUNCIATOR PANEL</p> <p>AC ALTERNATING CURRENT OR ARMORED CABLE</p> <p>ACC ACCESSIBLE</p> <p>ADDL ADDITIONAL</p> <p>ADJ ADJACENT, ADJOINING</p> <p>ADO AUTOMATIC DOOR OPENER</p> <p>AF AMPERE FRAME OR AMP FUSE</p> <p>AFC ABOVE FINISHED COUNTER, AUTOMATIC FREQUENCY CONTROL, OR AVAILABLE FAULT CURRENT</p> <p>AFF ABOVE FINISHED FLOOR</p> <p>AFG ABOVE FINISHED GRADE</p> <p>AH AMPERE HOUR</p> <p>AHJ AUTHORITY HAVING JURISDICTION</p> <p>AIC AMPERE INTERRUPTING CAPACITY</p> <p>ALT ALTERNATE</p> <p>AMB OR A AMBIENT</p> <p>AMP AMPERE</p> <p>ARCH ARCHITECT</p> <p>ASC AMPS SHORT CIRCUIT</p> <p>AT AMPERE TRIP</p> <p>ATS AUTOMATIC TRANSFER SWITCH</p> <p>AUTO AUTOMATIC</p> <p>AV AUDIO VISUAL</p> <p>BAT BATTERY</p> <p>BC BARE COPPER</p> <p>BD BOARD</p> <p>BFF BELOW FINISH FLOOR</p> <p>BIL BASIC INSULATION LEVEL</p> <p>BLDG BUILDING</p> <p>BPIP BOILER PLANT INSTRUMENTATION PANEL</p> <p>BRKR BREAKER</p> <p>BYP BY PASS</p> <p>C CONDUIT</p> <p>CAB CABINET</p> <p>CALC CALCULATE</p> <p>CAP CAPACITY</p> <p>CAT CATALOG</p> <p>CATV COMMUNITY ANTENNA TELEVISION</p> <p>CCR CONTROL CONTACTOR</p> <p>CCTV CLOSED CIRCUIT TELEVISION</p> <p>cd CANDELA</p> <p>CD CONSTRUCTION DOCUMENTS</p> <p>CF CONTRACTOR FURNISHED</p> <p>CF/CI CONTRACTOR FURNISHED/CONTRACTOR INSTALLED</p> <p>CF/OI CONTRACTOR FURNISHED/OWNER INSTALLED</p> <p>CFE CONTRACTOR FURNISHED EQUIPMENT</p> <p>CHW CHILLED WATER</p> <p>CHWP CHILLED WATER PUMP</p> <p>CKT CIRCUIT</p> <p>CKT BRKR CIRCUIT BREAKER</p> <p>CLF CURRENT LIMITING FUSE</p> <p>CLG CEILING</p> <p>CMU CONCRETE MASONRY UNIT</p> <p>COAX COAX CABLE</p> <p>COMM COMMUNICATION</p> <p>COMPMT COMPARTMENT</p> <p>CONC CONCRETE</p> <p>CONT CONTINUE</p> <p>CONTR CONTRACTOR</p> <p>COORD COORDINATE</p> <p>CPT CONTROL POWER TRANSFORMER</p> <p>CRI COLOR RENDERING INDEX</p> <p>CT CURRENT TRANSFORMER</p> <p>CTV CABLE TELEVISION</p> <p>CU COPPER</p> <p>CU FT CUBIC FEET</p> <p>CUR CURRENT</p> <p>DB DECIBEL OR DIRECT BURIAL</p> <p>DC DIRECT CURRENT</p> <p>DCP DIMMER CONTROL PANEL</p> <p>DEG C DEGREES CELSIUS</p> <p>DEG F DEGREES FAHRENHEIT</p> <p>DEMO DEMOLITION</p> <p>DIAG DIAGRAM</p> <p>DISC DISCONNECT</p> <p>DISTR DISTRIBUTION</p> <p>DISTR PNL DISTRIBUTION PANEL</p> <p>DMR SW DIMMER SWITCH</p> <p>DN DOWN</p> <p>DPDT DOUBLE POLE, DOUBLE THROW</p> <p>DPST DOUBLE POLE, SINGLE THROW</p> <p>DRSW DOOR SWITCH</p> <p>DS DISCONNECT SWITCH</p> <p>DWG DRAWING</p> <p>EC EMPTY CONDUIT</p> <p>EG EQUIPMENT GROUND</p> <p>EL ELEVATION</p> <p>ELEC ELECTRIC OR ELECTRICAL</p> <p>ELEV ELEVATOR</p> <p>EMCP EMERGENCY MONITORING CONTROL PANEL</p> <p>EMER EMERGENCY</p> <p>EMI ELECTROMAGNETIC INTERFERENCE</p> <p>EMT ELECTRICAL METALLIC TUBING</p> <p>ENCL ENCLOSURE</p> <p>EPO EMERGENCY POWER OFF</p> <p>EPRF EXPLOSION PROOF</p> <p>ESMT EASEMENT</p> <p>EWC ELECTRIC WATER COOLER</p> <p>EWL ELECTRIC WATER HEATER</p> <p>EXIST EXISTING</p> <p>FA FIRE ALARM</p> <p>FAAP FIRE ALARM ANNUNCIATOR PANEL</p> <p>FABL FIRE ALARM BELL</p> <p>FABX FIRE ALARM BOX</p> <p>FACP FIRE ALARM CONTROL PANEL</p> <p>FC FOOTCANDLE</p> <p>FI FILM ILLUMINATOR</p> <p>FIXT FIXTURE</p> <p>FLA FULL LOAD AMPS</p> <p>FLEX FLEXIBLE METALLIC CONDUIT</p> <p>FLT FLOODLIGHT</p> <p>FLUOR FLUORESCENT</p> <p>FLUOR FIX FLUORESCENT FIXTURE</p> <p>FOUIT TELEPHONE FLOOR OUTLET</p> <p>FP FIRE PROTECTION</p> <p>FT FEET OR FOOT</p> <p>FU SW FUSED SWITCH</p> <p>FVNR FULL VOLTAGE NON-REVERSING</p> <p>FVR FULL VOLTAGE REVERSING</p> <p>G OR GND GROUND OR GENERATOR</p> <p>GEN GENERATOR</p> <p>GFCI GROUND FAULT CIRCUIT INTERRUPTER</p> <p>GTB GROUND TERMINAL BOX</p> <p>HID HIGH INTENSITY DISCHARGE</p> <p>HOA HAND-OFF-AUTOMATIC</p> <p>HP HORSEPOWER</p> <p>HT HEIGHT</p> <p>HZ HERTZ</p> <p>IESNA ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA</p> <p>IMC INTERMEDIATE METAL CONDUIT</p> <p>INCAND INCANDESCENT</p> <p>IR INFRARED</p> <p>IWH INSTANTANEOUS WATER HEATER</p> <p>J-BOX JUNCTION BOX</p> <p>KV KILOVOLT</p> <p>KVA KILOVOLT AMPERE</p> <p>KVAH KILOVOLT AMPERE PER HOUR</p> <p>KVAR KILOVOLT AMPERE REACTIVE</p> <p>KW KILOWATT</p> <p>KWH KILOWATT HOUR</p> <p>KWHM KILOWATT HOUR METER</p> <p>LED LIGHT EMITTING DIODE</p> <p>LF LINEAR FEET (FOOT)</p> <p>LM LUMEN</p> <p>LP LIGHT POLE</p> <p>LPS LOW PRESSURE SODIUM</p> <p>LRA LOCKED ROTOR AMPS</p> <p>LTCP LOCAL TEMPERATURE CONTROL PANEL</p> <p>LT LIGHT</p> <p>LTG LIGHTING</p> <p>LTG PNL LIGHTING PANEL</p> <p>LTNG LIGHTNING</p> <p>LV LOW VOLTAGE</p> <p>MATV MASTER ANTENNA TELEVISION SYSTEM</p> <p>MAX MAXIMUM</p> <p>MC METAL-CLAD</p> <p>MCA MINIMUM CIRCUIT AMPS</p> <p>MCB MAIN CIRCUIT BREAKER</p> <p>MCC MOTOR CONTROL CENTER</p> <p>MDP MAIN DISTRIBUTION PANEL</p> <p>MECH MECHANICAL</p> <p>MG MOTOR GENERATOR</p> <p>MH MANHOLE</p> <p>MIN MINIMUM</p> <p>MOCPP MAXIMUM OVERCURRENT PROTECTION</p> <p>MLO MAIN LUGS ONLY</p> <p>MT MOUNT</p> <p>MTD MOUNTED</p> <p>MTG MOUNTING</p> <p>MTS MANUAL TRANSFER SWITCH</p> <p>MV MEDIUM VOLTAGE</p> <p>MVA MEGAVOLT-AMPERE</p> <p>MW MEGAWATT MICROWAVE</p> <p>NA NOT APPLICABLE</p> <p>NEC NATIONAL ELECTRICAL CODE</p> <p>NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION</p> <p>NEUT OR N NEUTRAL</p> <p>NFPA NATIONAL FIRE PROTECTION ASSOCIATION</p> <p>NIC NOT IN CONTRACT</p> <p>NL NIGHT LIGHT</p> <p>NO NORMALLY OPEN</p> <p>NS NO SCALE</p> <p>NTS NOT TO SCALE</p> <p>OC ON CENTER</p> <p>OD OUTSIDE DIAMETER</p> <p>OL OVERLOAD</p> <p>P POLE</p> <p>PA PUBLIC ADDRESS</p> <p>PB PANELBOARD, PULL BOX, OR PUSHBUTTON</p> <p>PBPU PREFABRICATED BESIDE PATIENT UNIT</p> <p>PCB POLYCHLORINATED BIPHENYL</p> <p>PEC PHOTOELECTRIC CELL</p> <p>PED PEDESTAL</p> <p>PEND PENDANT</p> <p>PF POWER FACTOR</p> <p>PH PHASE</p> <p>PNL PANEL</p> <p>POD POWER OPERATED DAMPER</p> <p>PT POTENTIAL TRANSFORMER</p> <p>PTRV POWER TYPE ROOF VENTILATION</p> <p>PVC POLYVINYL CHLORIDE (PLASTIC)</p> <p>PWR POWER</p> <p>RCP REFLECTED CEILING PLAN</p> <p>REC RECESSED</p> <p>RECPRT RECEPTACLE</p> <p>RGS RIGID GALVANIZED STEEL</p> <p>RM ROOM</p> <p>RMS ROOT MEAN SQUARE</p> <p>REQD REQUIRED</p> <p>CC SHORT CIRCUIT CAPACITY</p> <p>SEAS SERVICE ENTRANCE SECTION</p> <p>SD SMOKE DETECTOR</p> <p>SF SQUARE FOOT (FEET)</p> <p>SHT SHEET</p> <p>SI INTERNATIONAL SYSTEM OF UNITS</p> <p>SPEC SPECIFICATION</p> <p>SPST SINGLE POLE, SINGLE THROW</p> <p>SURF SURFACE</p> <p>SW SWITCH</p> <p>SWBD SWITCHBOARD</p> <p>SWGR SWITCHGEAR</p> <p>TC TIME CLOCK</p> <p>TEL TELEPHONE</p> <p>TP TWISTED PAIR</p> <p>TPS TWISTED PAIR SHIELDED</p> <p>TB TELEPHONE TERMINAL BOARD</p> <p>TV TELEVISION</p> <p>TYP TYPICAL</p> <p>UFD UNDERFLOOR DUCT</p> <p>UGND UNDERGROUND</p> <p>UL UNDERWRITERS LABORATORY</p> <p>UNON UNLESS OTHERWISE NOTED</p> <p>UPS UNINTERRUPTIBLE POWER SUPPLY</p> <p>UTIL UTILITY</p> <p>V VOLT</p> <p>VA VOLT AMPERE</p> <p>VAR VOLT AMPERE REACTIVE</p> <p>VFD VARIABLE FREQUENCY DRIVE</p> <p>VOLT VOLTAGE</p> <p>W WATT</p> <p>WH WATER HEATER</p> <p>WP WEATHERPROOF</p> <p>XFER TRANSFER</p> <p>XFMR TRANSFORMER</p>
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LINE WEIGHT LEGEND

	EXISTING WORK
	NEW WORK
	EXISTING TO BE DEMOLISHED
	EXISTING TO BE DEMOLISHED

<p>Audie L. Murphy Memorial Veterans Hospital 7400 Merton Minter San Antonio, Texas 78229</p>	<p>UNITED STATES DEPARTMENT OF VETERANS AFFAIRS</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 Approved: Chief, Engineering Approved: Environment of Care Manager Approved: Facilities Service Line Manager</p>	<p>Approved: Utility Management Supervisor Approved: Safety Manager</p>	<p>Drawing Title: ELECTRICAL SYMBOLS & ABBREVIATIONS Project No.: 671-11-712 Contract No.: VA257-P-0249 Building No.: 671-11-712 E-101 DWG</p>	<p>Project Title: NUCLEAR MEDICINE RELOCATION Designed By: DS Checked By: MZ Drawn By: DS Location: SAN ANTONIO, TEXAS</p>	<p>Date: 01/04/2013 Scale: AS SHOWN Drawing No.: E-101</p>
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ELECTRICAL SYMBOLS LEGEND

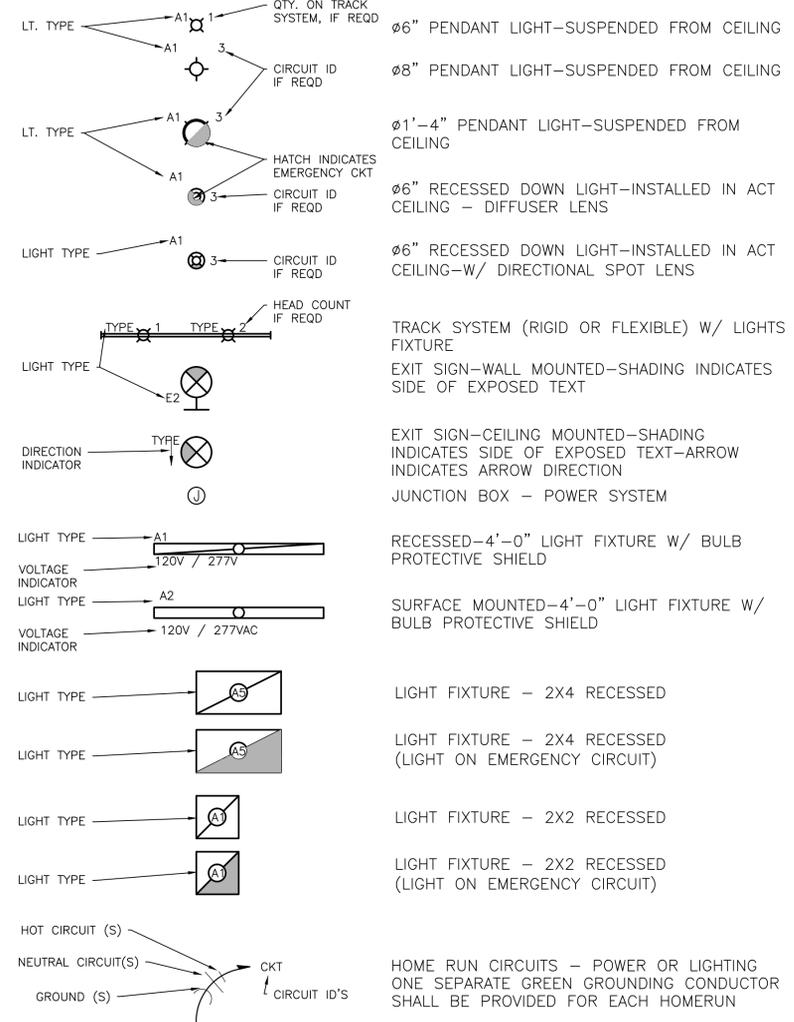
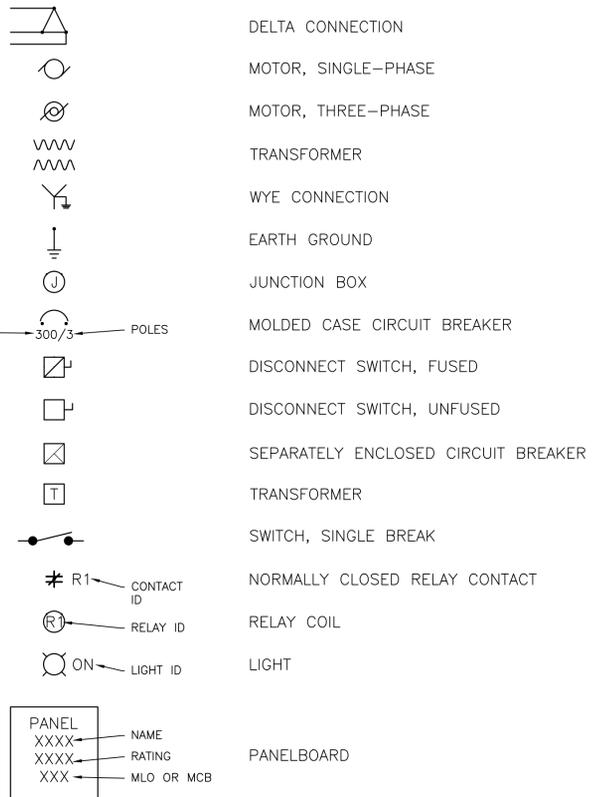
DIAGRAMMATIC SYMBOLS LEGEND

LIGHTING SYMBOLS LEGEND

GENERAL ELECTRICAL NOTES

ELECTRICAL DEMOLITION NOTES

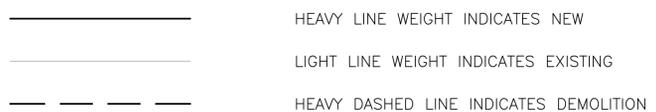
three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 one eighth inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



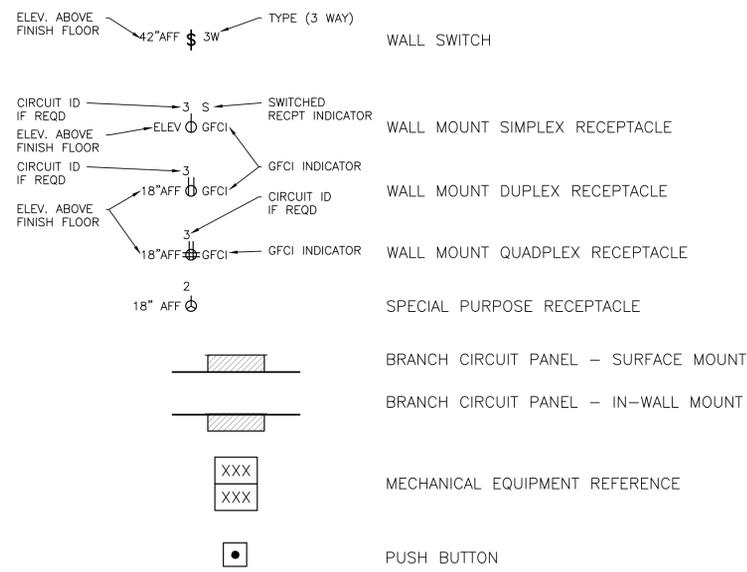
- ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.). NOTE: THE LATEST VERSION IS 2011.
- ADDITIONAL JUNCTION BOXES SHALL BE FURNISHED AND INSTALLED AS REQUIRED.
- ALL CONDUITS SHALL CONTAIN A GREEN, BONDING JUMPER GROUND WIRE. BOND ALL PANELS, CABINETS, ENCLOSURES, CONDUITS, JUNCTION BOXES, ETC. AS REQUIRED BY THE N.E.C.
- PROVIDE CONDUIT SLEEVES FILLED WITH AN APPROVED FIRE RESISTANT MATERIAL, WHERE FIRE RATED WALLS OR CEILINGS ARE PENETRATED. APPROVED WATERTIGHT CONDUIT SLEEVES SHALL BE PROVIDED WHERE WALLS RE PENETRATED EITHER ENTERING OR LEAVING A BUILDING.
- WHERE CONDUITS ARE NOT IDENTIFIED, THEY SHALL BE 3/4" EMT OR METAL CLAD RACEWAYS, WITH 2-#12 (HOT / NEUTRAL), 1-#12 (GROUND). RECEPTACLES, LIGHT FIXTURES, AND POWER DEVICES BRANCH CIRCUIT WIRING MAY NOT BE SHOWN, BUT SHALL BE PROVIDED AS REQUIRED. MINIMUM WIRING SHALL BE 3/4" EMT OR METAL CLAD RACEWAYS, WITH 2-#12 (HOT / NEUTRAL), 1-#12 (GROUND). NO MORE THAN THREE PHASES MAY BE COMBINED IN A SINGLE HOMERUN RACEWAY AND SHALL BE PROVIDED WITH COMMON NEUTRAL.
- FOR LOW VOLTAGE SYSTEMS WIRING REQUIREMENT, REFER TO THE WIRING DIAGRAM DRAWINGS.
- FOR EXACT LOCATION OF MECHANICAL EQUIPMENT, REFER TO THE MECHANICAL DRAWINGS.
- ALL CONDUIT AND CABLES SHALL BE RUN ABOVE SUSPENDED CEILINGS AND IN WALLS WHERE POSSIBLE. IN THE EXPOSED AREAS OF THE DINING ROOM AND KITCHEN, WHERE ELECTRICAL DEVICES AND RACEWAYS ARE VISIBLE, ALL DEVICES SHALL HAVE A CLEAN CONDITION WHERE THEY COULD BE FINISHED WITH PAINT, IF THE PROJECT OUTLINED SUCH FINISHES.
- ALL CUTTING AND PATCHING OF GYPSUM BOARD, ALL FIRE-STOPPING, AND ANY OTHER WORK RELATED TO THE ARCHITECTURAL ELEMENTS AND THEIR COMPLETED CONSTRUCTION, THEIR COMPONENTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXISTING DISTRIBUTION PANEL MEETS ALL REQUIREMENTS TO ALLOW THE CONNECTION OF THE NEW PROPOSED PANEL.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING DISTRIBUTION PANEL AND THE POSSIBLE ROUTING PATH OF THE CONDUIT.
- PER THE VAMC DESIGN GUIDELINES, ALL RECEPTACLES FEEDING CUSTOMER EQUIPMENT SHALL BE INSTALLED USING DEDICATED CIRCUITS AND OF THE GFCI TYPE.
- PER THE VAMC DESIGN GUIDELINES, ALL GENERAL PURPOSE RECEPTACLES SHALL NOT INCLUDE MORE THAN SIX (6) RECEPTACLES PER CIRCUIT NOT TO EXCEED, PER VA DESIGN GUIDELINES.
- WIRE SIZING AND COLOR IDENTIFYING SHALL BE IN ACCORDANCE WITH THE N.E.C. 2011.
- ALL JUNCTION BOXES SHALL HAVE LABELED ON THE COVER IN LEGIBLE WRITING IDENTIFYING THE CIRCUITS THAT TRACE THROUGH EACH BOX. THE TEXT SHOULD BE AROUND 3/8" TALL FOR OPTIMAL VISIBILITY. ALL TEXT SHALL BE IN BLACK INDELIBLE MARKER.
- ALL CONDUITS SHALL HAVE LABELED AT EACH END CONNECTION TO JUNCTION BOXES OR ELECTRICAL PANELS THE CIRCUITS THAT TRACE THROUGH. THE TEXT SHALL BE IN LEGIBLE WRITING AROUND 3/8" TALL FOR OPTIMAL VISIBILITY. ALL TEXT SHALL BE IN BLACK INDELIBLE MARKER.

- EXISTING ELECTRICAL EQUIPMENT INDICATED ON PLANS HAS BEEN DERIVED FROM THE BEST AVAILABLE EXISTING DRAWINGS AND PHOTOS AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION AS REQUIRED. ANY EQUIPMENT THAT IS NOT IDENTIFIED AND CONFLICTS WITH CONSTRUCTION SHALL NOT BE DISCONNECTED AND SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER OR PROJECT MANAGER OR DISPOSITION.
- EXISTING ELECTRICAL EQUIPMENT AND DEVICES TO BE REMOVED, AS INDICATED, SHALL BE REMOVED COMPLETELY, INCLUDING RACEWAYS, RACEWAY SUPPORTS, AND WIRING. THE REMOVAL SHOULD START FROM THE DEVICE BACK TO THE ORIGIN OR SOURCE.
- WHERE WIRING / CABLING IS TO BE REMOVED, RELOCATED, OR RECONNECTED, THE CONTRACTOR SHALL PROTECT WIRING / CABLING FROM DAMAGE. CONTRACTOR SHALL TAKE PRECAUTIONS AND ASSUME CIRCUIT MAY BE ACTIVE. THE TESTING OF EACH UNKNOWN CIRCUIT, TO VERIFY THE CIRCUIT IS SECURE (NOT ELECTRIFIED), SHALL TAKE PLACE PRIOR TO REMOVAL. THE USE OF A VOLTAGE METER, APPROVED BY U.L. AND THE N.E.C., SHALL BE USED FOR TESTING. ANY UNKNOWN WIRE REMAINING SHALL BE VERIFIED SECURE, TAGGED AND IDENTIFIED, WHICH WILL INDICATE THE SOURCE OF THE WIRE OR ITS ORIGIN POINT.
- EXISTING ELECTRICAL EQUIPMENT TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AS REQUIRED DURING THE CONSTRUCTION PERIOD, AND LEFT IN GOOD WORKING ORDER AT COMPLETION OF PROJECT.
- OWNER SYSTEMS AND SYSTEMS REQUIRED, BY CODE, TO STAY OPERATIONAL, SHALL BE TEMPORARILY CONNECTED TO REMAIN ACTIVE, THROUGHOUT THE CONSTRUCTION PERIOD, OR UNTIL THE NEW SYSTEMS ARE INSTALLED, TESTED, ACCEPTED, AND ACTIVE.
- DURING THE ENTIRE PROJECT, IF A CONDITION ARISES THAT THE DIRECTION IS UNCLEAR, WHETHER AN EXISTING ELECTRICAL DEVICE OR SYSTEM IS TO BE REMOVED OR REMAIN, THE CONDITION SHOULD BE PRESENTED TO THE ENGINEER OF RECORD FOR REVIEW SO A FINAL DECISION COULD BE MADE.
- ANY DISRUPTION OF ANY ELECTRICAL SERVICE, NECESSITATED BY THE ELECTRICAL RENOVATION, SHALL BE COORDINATED WITH THE OWNER, IN ORDER FOR PROPER NOTICES TO BE GIVEN, PRIOR TO THE SYSTEM DISCONNECTION.
- EXISTING ELECTRICAL EQUIPMENT REMOVED SHALL BE BROKEN DOWN INTO MANAGEABLE LENGTHS, FOR STORAGE, HANDLING, RECYCLING, AND OR PROPER DISPOSAL.
- EXISTING ELECTRICAL EQUIPMENT THAT HAS BEEN STRIPPED OF ANY NOMINAL VALUE SHALL BE TURNED OVER TO THE OWNER FOR THEIR FINAL DISPOSITION.
- ELECTRICAL RENOVATION WORK SHALL BE ACCOMPLISHED IN CONFORMANCE WITH THE REQUIREMENTS OF THE N.E.C.2011.

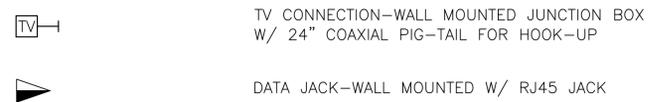
LINE WEIGHT LEGEND

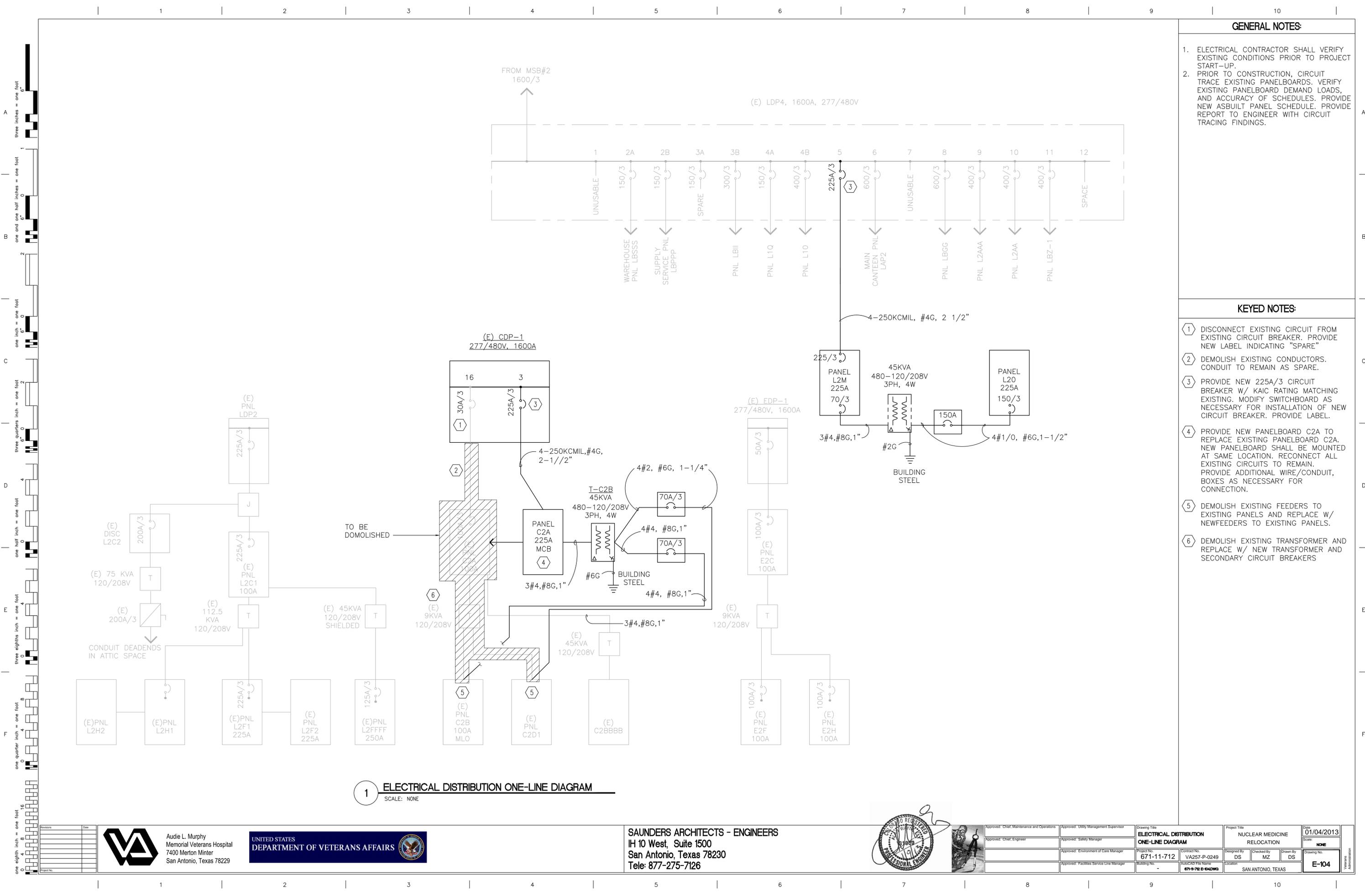


POWER SYMBOLS LEGEND



DATA / VOICE SYMBOLS LEGEND





GENERAL NOTES:

1. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO PROJECT START-UP.
2. PRIOR TO CONSTRUCTION, CIRCUIT TRACE EXISTING PANELBOARDS. VERIFY EXISTING PANELBOARD DEMAND LOADS, AND ACCURACY OF SCHEDULES. PROVIDE NEW ASBUILT PANEL SCHEDULE. PROVIDE REPORT TO ENGINEER WITH CIRCUIT TRACING FINDINGS.

KEYED NOTES:

- 1 DISCONNECT EXISTING CIRCUIT FROM EXISTING CIRCUIT BREAKER. PROVIDE NEW LABEL INDICATING "SPARE"
- 2 DEMOLISH EXISTING CONDUCTORS. CONDUIT TO REMAIN AS SPARE.
- 3 PROVIDE NEW 225A/3 CIRCUIT BREAKER W/ KAIC RATING MATCHING EXISTING. MODIFY SWITCHBOARD AS NECESSARY FOR INSTALLATION OF NEW CIRCUIT BREAKER. PROVIDE LABEL.
- 4 PROVIDE NEW PANELBOARD C2A TO REPLACE EXISTING PANELBOARD C2A. NEW PANELBOARD SHALL BE MOUNTED AT SAME LOCATION. RECONNECT ALL EXISTING CIRCUITS TO REMAIN. PROVIDE ADDITIONAL WIRE/CONDUIT, BOXES AS NECESSARY FOR CONNECTION.
- 5 DEMOLISH EXISTING FEEDERS TO EXISTING PANELS AND REPLACE W/ NEWFEEDERS TO EXISTING PANELS.
- 6 DEMOLISH EXISTING TRANSFORMER AND REPLACE W/ NEW TRANSFORMER AND SECONDARY CIRCUIT BREAKERS

1 ELECTRICAL DISTRIBUTION ONE-LINE DIAGRAM
SCALE: NONE

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Approved: Chief, Maintenance and Operations	Approved: Utility Management Supervisor	Design Title	Project Title	Date
Approved: Chief, Engineer	Approved: Safety Manager	ELECTRICAL DISTRIBUTION ONE-LINE DIAGRAM	NUCLEAR MEDICINE RELOCATION	01/04/2013
Approved: Environment of Care Manager	Approved: Facilities Service Line Manager	Contract No. 671-11-712	Designed By DS	Checked By MZ
		Project No. VA257-P-0249	Drawn By DS	Scale: NONE
		Building No. 671-9-72E-1400G	Location: SAN ANTONIO, TEXAS	Drawing No. E-104