

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
one eighth inch = one foot

ABBREVIATIONS

ABBREV.	DESCRIPTION
ADO	AUTOMATIC DOOR OPENER
AF	AMPERE FRAME
AT	AMPERE TRIP
BC	BARE COPPER
BIMP	BOILER PLANT INSTRUMENTATION PANEL
	CIRCUIT BREAKER
CB, C/B	DIRECT BURIAL
DB	EMPTY CONDUIT
EG	EQUIPMENT GROUND
FI	FILM ILLUMINATOR
FSS	FUSED SAFETY SWITCH
FSCP	FLAME SAFEGUARD CONTROL PANEL
	GROUND TERMINAL BOX
	GROUND FAULT CIRCUIT INTERRUPTER
GTB	LOCAL TEMPERATURE
GFCI	CONTROL PANEL
LTCP	MAIN DISTRIBUTION PANEL
	MAIN LUGS ONLY
MDP	NON-FUSED SAFETY SWITCH
MLO	PREFABRICATED BEDSIDE PATIENT POWER UNIT
NPSS	POWER OPERATED DAMPER
	POWER TYPE ROOF VENTILATION
PBPU	SAFETY SWITCH
POD	WIRE
PTRV	
SS	
W	

SYMBOLS - REWIRING AND DEMOLITION

DESCRIPTION
EXISTING FAN - REMOVE FAN AND BLANK OUTLET
EXISTING CONDUIT IN PLACE - REMOVE EXISTING WIRES AND INSTALL NEW WIRES AS INDICATED
EXISTING CONDUIT AND WIRE TO REMAIN
EXISTING CONDUIT AND WIRE TO BE ABANDONED OR REMOVED
CONNECTION OF NEW CONDUIT TO EXISTING CONDUIT W/APPROVED TYPE COUPLINGS - INSTALL NEW WIRES
CONDUIT SEAL FOR EXPLOSION PROOF INSTALLATION
PLACED ADJACENT TO DEVICE SYMBOL DENOTES EQUIPMENT SHALL BE REMOVED AND OUTLET BLANKED
PLACE ADJACENT TO DEVICE SYMBOL DENOTES EQUIPMENT SHALL BE REMOVED

SYMBOLS - SINGLE LINE

DESCRIPTION
HIGH-VOLTAGE OIL CIRCUIT BREAKER
HIGH-VOLTAGE DRAWOUT AIR CIRCUIT BREAKER
SWITCH AND FUSE UNIT
MOLDED CASE CIRCUIT BREAKER
LOW-VOLTAGE DRAWOUT AIR CIRCUIT BREAKER
FUSED DRAWOUT POTENTIAL TRANSFORMER
AMMETER
VOLTMETER
WATTMETER
WATT-HOUR METER
INSTANTANEOUS OVERCURRENT OR RATE-OF-RISE RELAY
AC-TIME OVERCURRENT RELAY
AC-DIRECTIONAL OVERCURRENT RELAY
LOCKING OUT RELAY
POTHEAD
STRESS CONE

SYMBOLS - RADIO SYSTEM

DESCRIPTION
RADIO CHANNEL SELECTOR FACILITIES, MTD. 4'-6" [1372mm] A.F.F. UNLESS OTHERWISE NOTED.
SPEAKER PROGRAM SELECTOR SWITCH & VOLUME CONTROL, MTD. 4'-6" [1372mm] A.F.F. UNLESS OTHERWISE NOTED.
SPEAKER OUTLET, MTD. 7'-6" [2286mm] A.F.F. UNLESS OTHERWISE NOTED.
RADIO CONDUIT RUN, MINIMUM 3/4" [19mm] CONDUIT.
CEILING MICROPHONE SPEAKER.

SYMBOLS - TELEVISION SYSTEM

DESCRIPTION
4-11/16" [119mm] MASTER ANTENNA OUTLET BOX W/BLANK COVER AND 3/4" CONDUIT FOR TV INSTALLATION, MTD. 18" [457mm] A.F.F. UNLESS OTHERWISE NOTED. ROUTE THE CONDUIT TO AN ACCESSIBLE LOCATION ABOVE THE CEILING.
OUTLET FOR TV CAMERA (CCTV SYSTEM), MTD 18" [457mm] A.F.F.
OUTLET FOR TV MONITOR (CCTV SYSTEM).
CCTV CONDUIT RUN, MINIMUM 1" [25mm] CONDUIT.

SYMBOLS - RECEPTACLES

DESCRIPTION
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).
ELECTRICAL STRIP MOLD (OUTLETS ON 2'-0" [610mm] CENTERS OR AS DESIGNATED ON DRAWINGS), MTD 3'-6" [1067mm] AFF OR AS INDICATED.
FLOOR OUTLET.
QUAD RECEPTACLE 18" [457mm] AFF UNLESS OTHERWISE NOTED.
DUPLEX RECEPTACLE 18" [457mm] AFF UNLESS OTHERWISE NOTED.
DUPLEX ISOLATED GROUND RECEPTACLE 18" [457mm] AFF UNLESS OTHERWISE NOTED.
DUPLEX GROUND FAULT INTERRUPTER RECEPTACLE 18" [457mm] AFF UNLESS OTHERWISE NOTED.
DUPLEX RECEPTACLE ON EMERGENCY CIRCUIT, RED OUTLET & PLATE, 18" [457mm] UNLESS OTHERWISE NOTED.
DUPLEX RECEPTACLE SWITCHED 18" [457mm] AFF UNLESS OTHERWISE NOTED.
3-GANG COMPARTMENT BOX IN FLOOR FOR TELEPHONE, DATA & RECEPTACLE.
FUSED AND NON-FUSED DISCONNECT SWITCH (AMPERAGE AS INDICATED ON PLANS).
120V, 20A, 1 PHASE, 1-POLE, 3W, NEMA 5-20R.
208V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 6-20R.
120V, 30A, 1 PHASE, 1-POLE, 3W, NEMA 5-30R.
208V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 6-30R.
208V, 60A, 1 PHASE, 3-POLE, 4W, NEMA 14-60R.
208V, 30A, 3 PHASE, 3-POLE 4W, NEMA 15-30R.
208V, 50A, 3 PHASE, 3 POLE, 4W, NEMA 15-30R.
208V, 60A, 3 PHASE, 3 POLE, 4W, NEMA 15-60R.
480V, XXA, 3 PHASE, 3 POLE, 4W

NOTE: ALSO SEE VA BARRIER FREE DESIGN GUIDE PG-18-13.

SYMBOLS - GENERAL

NOTE: MOUNTING HEIGHT FOR THE FOLLOWING SWITCHES SHALL BE 40" [1016mm] AFF IN ELECTRICAL CLOSET, MECHANICAL ROOMS, MOUNTING HEIGHT SHALL BE 4'-6" [1372mm] AFF.	DIMMER SWITCH - WITH SILICON CONTROLLED RECTIFIER.
ROCKER TYPE SWITCH.	EXPLOSION PROOF SWITCH.
LOCK TYPE SWITCH.	MANUAL MOTOR STARTING SWITCH.
MOMENTARY CONTACT SWITCH.	MOTOR SNAP SWITCH (THERMAL TYPE) WITH PILOT LIGHT.
PUSH BUTTON STATION.	REMOTE CONTROL SWITCH.
WEATHERPROOF SWITCH.	UNIT HEATER BLOWER MOTOR.
VENTILATOR OR FAN COIL UNIT OUTLET.	CONDUIT TERMINATED 6" [152mm] A.F.F. IN STANDARD BOX FOR EXTENSION TO EQUIPMENT AS DIRECTED.
CONDUIT TERMINATED W/COUPLING (FLUSH W/FINISHED FLOOR) FOR EXTENSION TO EQUIPMENT AS DIRECTED.	BRANCH CIRCUIT EXPOSED.
BRANCH CIRCUIT CONCEALED IN FLOOR.	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL.
HOME RUN TO PANEL - ARROWHEADS INDICATE CIRCUITS. WIRE INDICATED ARE GREEN GROUND, NEUTRAL AND THREE HOT LESS (A DIFFERENT PHASE FOR EACH CIRCUIT) MAXIMUM THREE CIRCUITS PER CONDUIT.	CARD READER.
GROUND NEUTRAL	PHASE CONDUCTORS

SYMBOLS - FIRE ALARM SYSTEM

DESCRIPTION
FIRE ALARM MANUAL PULL STATION.
VALVE SUPERVISORY SWITCH.
ELECTROMAGNETIC TYPE DOOR HOLDER OUTLET.
FIRE ALARM TERMINAL CABINET.
POST INDICATOR VALVE.
FIRE ALARM TRANSMITTER (BASE LOOP) NUMERALS DENOTE CODE.
FIRE ALARM TROUBLE TRANSMITTER (BASE LOOP) NUMERALS DENOTE CODE.
CITY FIRE ALARM MASTER STATION MTD 5'-6" [1676mm] AFF UNLESS NOTED.
FIRE ALARM RECORDER.
FIRE ALARM BATTERIES.
FIRE ALARM RELAY
SMOKE DUCT DETECTOR
SMOKE DETECTOR
HEAT DETECTOR
FIRE ALARM VISUAL DEVICE
FIRE ALARM AUDIO/VISUAL DEVICE
FIRE ALARM PLOW SWITCH
FIRE ALARM TAMPER SWITCH
FIRE ALARM AUDIO DEVICE

SYMBOLS - MISCELLANEOUS ALARM SYSTEMS

DESCRIPTION
SIGNAL TRANSFORMER
BUZZER MTD 1'-6" [457mm] A.F.F. UNLESS OTHERWISE NOTED
HORN MTD 7'-6" [2286mm] A.F.F. UNLESS OTHERWISE NOTED
COMBINATION TELE/DATA OUTLET BOX AND 3/4" CONDUIT, MTD 18" [457mm] A.F.F. UNLESS OTHERWISE NOTED.
TELEPHONE OUTLET (JACK TYPE), MTD 18" [457mm] A.F.F. UNLESS OTHERWISE NOTED.
TELEPHONE OUTLET (WALL TYPE), MTD 54" [1372mm] A.F.F. UNLESS OTHERWISE NOTED.
TELEPHONE TERMINAL CABINET.
TELEPHONE BACKBOARD (WALL MOUNTED)
DOME LIGHT

SYMBOLS - TELEPHONE SYSTEM

DESCRIPTION
COMBINATION TELE/DATA OUTLET BOX AND 3/4" CONDUIT, MTD 18" [457mm] A.F.F. UNLESS OTHERWISE NOTED.
TELEPHONE OUTLET (JACK TYPE), MTD 18" [457mm] A.F.F. UNLESS OTHERWISE NOTED.
TELEPHONE OUTLET (WALL TYPE), MTD 54" [1372mm] A.F.F. UNLESS OTHERWISE NOTED.
TELEPHONE TERMINAL CABINET.
TELEPHONE BACKBOARD (WALL MOUNTED)
DOME LIGHT

SYMBOLS - NURSE CALL SYSTEM

DESCRIPTION
NURSE'S CALL MASTER STATION MTD ON NURSE'S COUNTER TOP UNLESS OTHERWISE NOTED.
NURSE CALL TERMINAL CABINET.
NURSE'S CALL STATION - MTD 6'-0" [1829mm] A.F.F. FOR SHOWER LOCATION, MTD 4'-6" [1372mm] A.F.F. FOR TUB LOCATION, & MTD 3'-0" [914mm] A.F.F. FOR TOILET LOCATION.
NURSE'S CALL AUDIO VISUAL WALL STATION (STAFF) MTD 5'-0" [1524mm] A.F.F. UNLESS OTHERWISE NOTED.
6-COLOR CORRIDOR LIGHT WITH SINGLE GANG BOX MOUNTED FLUSH TO THE CEILING, UON.
NURSE CALL (BED STATION) WITH AN OUTLET BOX AND 3/4" CONDUIT WITH PULLING LINE STUBBED OUT TO ABOVE AN ACCESSIBLE CEILING, UON.
BED READY STATION WITH JUNCTION BOX AND 3/4" CONDUIT WITH PULLING LINE STUBBED OUT TO ABOVE AN ACCESSIBLE CEILING, UON.
CODE BLUE WITH OUTLET BOX AND 3/4" CONDUIT WITH PULLING WIRE STUBBED OUT TO ABOVE AN ACCESSIBLE CEILING, UON.
PULL CORD STATION WITH SINGLE GANG BOX WITH 3/4" CONDUIT WITH PULLING LINE STUBBED OUT TO ABOVE AN ACCESSIBLE CEILING, MOUNTED: -6" AFF AT SHOWER, UON -3" AFF AT TOLIER, UON.
STAFF REGISTRATION STATION WITH THE OUTLET BOX AND 3/4" CONDUIT WITH PULLING LINE STUBBED OUT TO ABOVE AN ACCESSIBLE CEILING, UON.

SYMBOLS - MISCELLANEOUS COMMUNICATIONS SYSTEMS

DESCRIPTION
REMOTE DICTATING OUTLET MTD 1'-6" [457mm] A.F.F. UNLESS OTHERWISE NOTED.
3-POLE TWIST-LOCK RECEPTACLE FOR MICROPHONE, MTD. 4'-6" [1372mm] A.F.F.
INTERCOM STATION (REFER TO SPECS. FOR FUNCTIONAL OPERATION OF INSTRUMENT & TYPE REQUIRED)
INTERCOM CONDUIT RUN. MINIMUM 3/4" [19mm] CONDUIT
INTERCOM STAFF STATION.

NOTE: ALSO SEE VA BARRIER FREE DESIGN GUIDE PG-18-13.

SYMBOLS - CODE ONE SYSTEM

DESCRIPTION
CODE ONE CONTROL AND ALARM STATION, MTD 5'-0" [1524mm] A.F.F. UNLESS OTHERWISE NOTED.
CODE ONE TERMINAL CABINET.
CODE ONE ANNUNCIATOR PANEL.
CODE ONE BEDSIDE STATION.
CODE ONE DUTY STATION, MTD 5'-0" [1524mm] A.F.F. UNLESS OTHERWISE NOTED.

SYMBOLS - SITE WORK

DESCRIPTION
DIRECT BURIAL CABLE - SIZE AS INDICATED.
TELECOMMUNICATIONS DUCT
POWER DUCT
EXTERIOR FLOOD LIGHT
DUAL POWER & TELECOMMUNICATIONS MANHOLE
PADMOUNT TRANSFORMER - NUMERAL INDICATES KVA SIZE
SWITCHGEAR - SUBSCRIPT DENOTES SUBSTATION
HIGH-VOLTAGE SWITCH ON CONCRETE PAD
LOW-VOLTAGE SWITCH ON CONCRETE PAD
SWITCHBOARD
COMBINATION FIRE/SMOKE DAMPER

RECORD DRAWINGS
DATE: NOVEMBER 18, 2012
THESE AS-BUILT DOCUMENTS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY THE CONTRACTOR LOEBIG GENERAL CONTRACTORS, LTD. THE ARCHITECT/ ENGINEER HAS NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS RESULT OF INCORRECT INFORMATION PROVIDED BY THE CONTRACTOR.

SYMBOLS - MISC. MECHANICAL

ASI RFI No. 91 03/05/12 09/19/11	CONSULTANTS: TEXAS REGISTERED ENGINEERING FIRM #10487 700 N. ST. MARY'S SUITE 1222 SAN ANTONIO, TX 78205 WWW.RDMENGINEERING.NET PHONE: 210.299.4522 FAX: 210.299.4525	Approved: Assistant Director Approved: Chief of Staff Approved: Chief, Engineering	Approved: Service Chief Approved: Service Chief Approved: Service Chief	Approved: Chief, Biomed Approved: Chief, EMS Approved: Chief, Infection Control	Approved: Chief, IT Approved: Chief, M & O Approved: Chief, Police	Approved: Chief, Safety Approved: Chief Approved: Chief	ARCHITECT: WEST EAST DESIGN GROUP 1617 E. COMMERCE ST., SUITE 7102, SAN ANTONIO, TEXAS 78205 USA 210.530.0755 FAX 210.530.9427 These documents can not be copied or reproduced without written consent from WestEast Design Group	Drawing Title ELECTRICAL SYMBOLS AND ABBREVIATIONS Approved: Project Director	Project Title POLYTRAUMA TRANSITIONAL HOUSING Location Audie L. Murphy Veterans Hospital San Antonio, Texas Date 28 JULY 2010 Checked Drawn	Project Number 671-237 Building Number 1 Drawing Number ES1.1 Dwg. 1 of 11	Office of Facilities Management Department of Veterans Affairs
---	--	--	---	---	--	---	--	--	--	---	--