

ELECTRICAL SYMBOLS AND ABBREVIATIONS

THIS IS A COMPREHENSIVE SYMBOL AND ABBREVIATION LIST.  
NOT ALL SYMBOLS ARE APPLICABLE TO THESE DRAWINGS.

WIRING DEVICES

- S SINGLE POLE SWITCH, 3=3 WAY, 4=4 WAY, P=PILOT R=RELAY, K=KEYED, I=ILLUMINATED, D=DIMMER M=MOTION SENSOR SWITCH, T=TOUCH BOLT
- SINGLE RECEPTACLE C=CEILING MOUNTED
- DUPLEX RECEPTACLE C=CEILING MOUNTED
- DUPLEX RECEPTACLE MOUNTED AT 42" TO CENTER
- POWER RECEPTACLE 240V 30=30AMP 60=60AMP R = 50A RANGE OUTLET D = 30A DRYER OUTLET
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER
- DUPLEX RECEPTACLE WITH TOP HALF SWITCHED
- IG ○ ISOLATED GROUND RECEPTACLE
- SP ○ SURGE PROTECTED RECEPTACLE
- UPS ○ UPS SYSTEM RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE (RECEPTACLES MOUNTED SIDE BY SIDE)
- BLANK OUTLET FOR FUTURE DEVICES 4" BOX, SINGLE GANG RING, BLANKPLATE, 1" C. STUBBED INTO ACCESSIBLE CEILING
- BLANK OUTLET MTD @ 42" FOR FUTURE DEVICES 4" BOX, SINGLE GANG RING, BLANKPLATE, 1" C. STUBBED INTO ACCESSIBLE CEILING
- PLUG STRIP
- DUPLEX RECEPTACLE IN FLOOR, FLUSH MTD A,B,C = TYPE PER SPECIFICATION.
- EQUIPMENT CONNECTION
- SPECIAL OUTLET
- 2 GANG FLUSH FLOOR BOX DOUBLE OUTLET, POWER AND LOW TENSION, SEE SPECIFICATIONS.
- 4-BOX

LIGHTING

- POLE MOUNTED LIGHT FIXTURE
- CEILING MOUNTED FLUSH OR SURFACE
- WALL MOUNTED, FLUSH OR SURFACE
- LIGHT FIXTURE
- EMERGENCY LIGHT
- RECESSED EMERGENCY LIGHT
- ARL ○ AREA OF RESCUE ILLUMINATED SIGN
- EXIT LIGHT - ONE FACE
- EXIT LIGHT - ONE FACE WITH EMERGENCY HEADS
- EXIT LIGHT - TWO FACE
- REMOTE EMERGENCY LIGHT
- U ○ DUAL TECHNOLOGY OCCUPANCY SENSOR LIGHTING
- U ○ ULTRASONIC OCCUPANCY SENSOR LIGHTING
- L ○ LONG THROW OCCUPANCY SENSOR LIGHTING
- HB ○ HIGH BAY OCCUPANCY SENSOR LIGHTING
- W ○ WALL MOUNTED MOTION LIGHTING CONTROL
- PC ○ PHOTOCELL
- ◇ LIGHTING CONTACTOR

FIRE ALARM

- X WALL MOUNTED AUDIO/VISUAL NOTIFICATION APPLIANCE, X = CD LEVEL
- X WALL MOUNTED VOICE/VISUAL NOTIFICATION APPLIANCE, X = CD LEVEL
- S WALL MOUNTED VISUAL NOTIFICATION APPLIANCE, X = CD LEVEL
- B WALL MOUNTED BELL
- RA REDUCED db ROOM SOUNDER AUDIO/VISUAL NOTIFICATION APPLIANCE
- F FIRE ALARM INDICATOR FOR SMOKE DETECTORS
- F MANUAL PULL STATION
- X FIRE ALARM STATION WITH LIFT COVER
- X WALL MOUNTED FIRE ALARM SPEAKER
- X CEILING MOUNTED FIRE ALARM SPEAKER
- SX CEILING MOUNTED VISUAL NOTIFICATION APPLIANCE, X = CD LEVEL
- X CEILING MOUNTED AUDIO/VISUAL NOTIFICATION APPLIANCE, X = CD LEVEL
- X CEILING MOUNTED VOICE/VISUAL NOTIFICATION APPLIANCE, X = CD LEVEL
- FACP FIRE ALARM CONTROL PANEL
- FAAP FIRE ALARM ANNUNCIATOR PANEL
- H HEAT DETECTOR
- S SMOKE DETECTOR
- DS DUCT SMOKE DETECTOR
- ES ELEVATOR SMOKE DETECTOR
- MH MAGNETIC DOOR HOLDER
- EH ELECTRIC DOOR HOLDER
- SO SMOKE DOOR OPERATOR/DETECTOR
- CM CARBON MONOXIDE DETECTOR
- FM ADDRESSABLE CONTROL MODULE
- FS SPRINKLER FLOW SWITCH
- TS SPRINKLER TAMPER SWITCH
- ADDRESSABLE MONITOR MODULE

SECURITY

- M SECURITY SYSTEM MOTION DETECTOR
- K DOOR CONTACT SWITCH
- PX KEY PAD
- ES ELECTRIC STRIKE
- CR CARD READER
- I DOOR INTERCOM
- DB DOOR BELL
- ML MAGNETIC DOOR LOCK

EQUIPMENT

- NEW SURFACE MOUNTED PANEL. SEE PLANS.
- NEW FLUSH MOUNTED PANEL. SEE PLANS.
- EXISTING SURFACE MOUNTED PANEL. SEE PLANS.
- EXISTING FLUSH MOUNTED PANEL. SEE PLANS.
- TYPE
- XXX XXXX EQUIPMENT LOCATION DESIGNATION

MOTOR CONTROL

- HEAVY DUTY DISCONNECT F=FUSIBLE PROOF FURNISHED BY E.C.
- NON-COMBINATION STARTER
- COMBINATION STARTER
- MANUAL STARTER
- MOTOR OUTLET TERMINAL, ON ROOF MOUNTED UNITS PROVIDE WEATHER PROOF DISCONNECTS. X = HORSE POWER OR MOTOR NUMBER IF SCHEDULE IS PROVIDED.

MISCELLANEOUS

- COND. STUB THROUGH WALL BUSHED EACH END
- CABLE TRAY. INSTALL PER DETAIL
- H ELECTRIC HAND/HAIR DRYER
- T WALL MOUNTED THERMOSTAT
- X REFERS TO NOTE NUMBER
- XXX-XX REFERS TO DETAIL NUMBER
- XXX-XXX SHEET NO. WHERE DETAIL IS LOCATED
- DOOR CHIME
- BELL WG= WIRE GUARD
- CIRCUIT HOMERUN TO 20A/1P BREAKER UNLESS SHOWN OTHERWISE ON DRAWINGS.
- INDICATES CONNECTED TO SAME CIRCUIT BUT CONTROLLED SEPARATELY

COMMUNICATION

- X DATA (SHADED) AND VOICE (UNSHADED) OUTLET. SEE DETAILS. X INDICATES NUMBER OF DROPS FOR PHONE AND DATA. PROVIDE 4" SQUARE DEEP BOX, 1-GANG RING, 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING. NO "X" INDICATES SINGLE DROP.
- X TELEPHONE OUTLET ONLY. SEE DETAIL. X INDICATES NUMBER OF PHONE DROPS PER OUTLET. NO X INDICATES 1 DROP. PROVIDE 4" SQUARE DEEP BOX, 1-GANG RING, 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING.
- X WALL TELEPHONE MOUNTED AT 42" AFF. PROVIDE 4" SQUARE DEEP BOX, 1-GANG RING, 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING.
- X DATA OUTLET. SEE DETAIL. X INDICATES NUMBER OF DROPS PER OUTLET. NO X INDICATES 1 DROP. PROVIDE 4" SQUARE DEEP BOX, 1-GANG RING, 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING.
- WAP WIRELESS ACCESS POINT DATA OUTLET MOUNTED IN FACE OF CEILING
- T TELEVISION OUTLET. SEE DETAIL.
- A AUXILIARY/INPUT SOUND JACK
- M MICROPHONE OUTLET
- FLUSH WALL MOUNTED SPEAKER BOX
- SURFACE WALL MOUNTED SPEAKER BOX
- FLUSH CEILING MOUNTED SPEAKER, V = BUILT IN VOLUME CONTROL
- SURFACE CEILING MOUNTED SPEAKER BOX
- COMBINATION CLOCK SPEAKER BAFLE SEE INSTALLATION DETAIL
- ADMINISTRATION STATION SEE SOUND SYSTEM RISER
- WALL MOUNTED PUSH TO CALL BUTTON
- HORN SPEAKER WP=WEATHER PROOF FLUSH MOUNT AT FACE OF CEILING
- GYM SPEAKER CLUSTER SEE GYM RISER DIAGRAM
- VOLUME CONTROL
- ARS AREA OF RESCUE STATION
- ARM AREA OF RESCUE MASTER
- ARA AREA OF RESCUE ASSISTANCE SIGN
- WALL CLOCK WG = WIRE GUARD
- DOUBLE FACED WALL CLOCK WG = WIRE GUARD
- SINGLE PUSH BUTTON
- MULTI PUSH BUTTON STATION
- HDMI OUTLET
- VGA OUTLET
- AUDIO OUTLET
- BLUE STROBE LIGHT

ABBREVIATIONS

- AFF ABOVE FINISH FLOOR
- AFG ABOVE FINISH GRADE
- AHU AIR HANDLING UNIT
- C CONDUIT
- CCU COOLING CONDENSER UNIT
- CKT CIRCUIT
- CT CURRENT TRANSFORMER
- CON CONTACTOR
- CP CONTROL PANEL
- CUH CABINET UNIT HEATER
- DIS DISCONNECT
- DM DEMARC
- DS DOOR SWITCH
- EBB ELECTRICAL BASE BOARD
- EC ELECTRICAL CONTRACTOR
- ECB ENCLOSED CIRCUIT BREAKER
- EDH ELECTRIC DUCT HEATER
- EF EXHAUST FAN
- ELEV ELEVATION
- EM EMERGENCY
- EQ EQUIPMENT
- EOL END OF LINE RESISTOR
- ETR EXISTING TO REMAIN
- EUH ELECTRIC UNIT HEATER
- EWG ELECTRIC WATER COOLER
- EVH ELECTRIC WALL HEATER
- FAAP FIRE ALARM ANNUNCIATOR PANEL
- FACP FIRE ALARM CONTROL PANEL
- FBO FURNISHED BY OTHERS
- FC VARIABLE SPEED FAN CONTROL SWITCH
- GUH GAS UNIT HEATER
- GC GENERAL CONTRACTOR
- GFI GROUND FAULT INTERRUPTER
- GND GROUND
- GSP GYM SWITCH PANEL
- HF HEAT FAN
- HVAC HEATING, VENTILATING AND AIR CONDITIONING
- IDF INTERMEDIATE DISTRIBUTION FRAME
- IG ISOLATED GROUND
- INC INCANDESCENT
- JB JUNCTION BOX
- LC LIGHTING CONTROL
- MAU MAKEUP AIR UNIT
- MB MOTORIZED BACKBOARD
- MC MECHANICAL CONTRACTOR
- MDF MAIN DISTRIBUTION FRAME
- MOD MOTOR OPERATED DAMPER
- MTD MOUNTED
- NL NIGHT LIGHT
- NIC NOT IN CONTRACT
- NTS NOT TO SCALE
- OHD OVERHEAD DOOR
- OC ON CENTER
- PC PHOTOCELL
- PDB PUNCH DOWN BLOCK
- PNL PANELBOARD
- PS POWER SUPPLY
- RCP RELAY CONTROL PANEL
- REF REFRIGERATOR
- RTU ROOF TOP UNIT
- SAP SECURITY ANNUNCIATOR PANEL
- SCP SECURITY CONTROL PANEL
- SJB SOUND SYSTEM JUNCTION BOX
- SPD SURGE PROTECTED DEVICE
- SS STAINLESS STEEL
- SV SOLENOID VALVE
- TC TELECOMMUNICATION CLOSET
- TCF TEMPERATURE CONTROL PANEL
- TGB TELECOMMUNICATION GROUND BAR MASTER
- TJB TERMINAL JUNCTION BOX
- TRN TRANSFORMER
- TRS TRANSFER SWITCH
- TTB TELEPHONE TERMINAL BOARD
- UC UNDERCOUNTER
- UH UNIT HEATER
- VFD VARIABLE FREQUENCY DRIVE
- W WELDER
- WE WALL EXHAUST
- WG WIRE GUARD
- WH WATER HEATER
- WP WEATHER PROOF
- XP CLASS 1, DIV. 1 EQUIPMENT

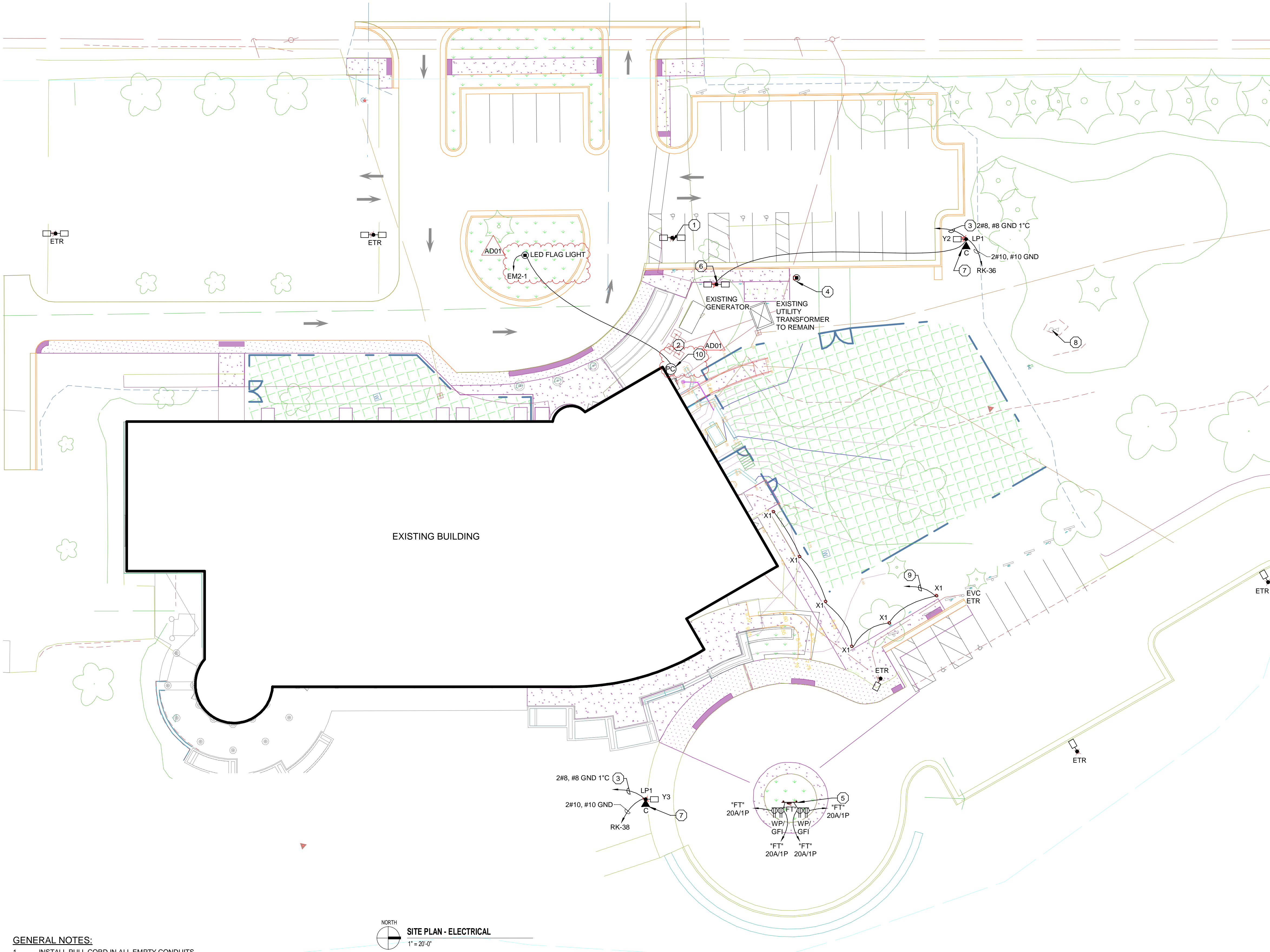
GENERAL NOTES:

- INSTALL PULL CORD IN ALL EMPTY CONDUITS.
- PROVIDE CONCRETE BASE FOR POLES PER DETAIL.
- UNLESS SHOWN OTHERWISE, ALL CONDUITS BURIED 2'-6" BELOW FINISHED GRADE.
- E.C. IS RESPONSIBLE FOR ALL WORK REQUIRED TO BRING SITE EXCAVATION AND TOPPING BACK TO ORIGINAL CONDITION IF TRENCHING IS DONE ON COMPACTED SURFACES.
- ALL CONDUITS STUBBED OUT OF BUILDING SHALL BE DONE PER DETAIL.
- E.C. TO INDICATE EXACT ROUTING OF ALL UNDERGROUND CONDUITS ON RECORD DRAWINGS.
- (---) INDICATES APPROXIMATE UNDERGROUND ROUTING OF CONDUITS. PROVIDE RECORD DRAWINGS INDICATING EXACT ROUTING WITH DIMENSION LINES.
- PROVIDE BOLLARDS FOR X1 PER DETAIL.

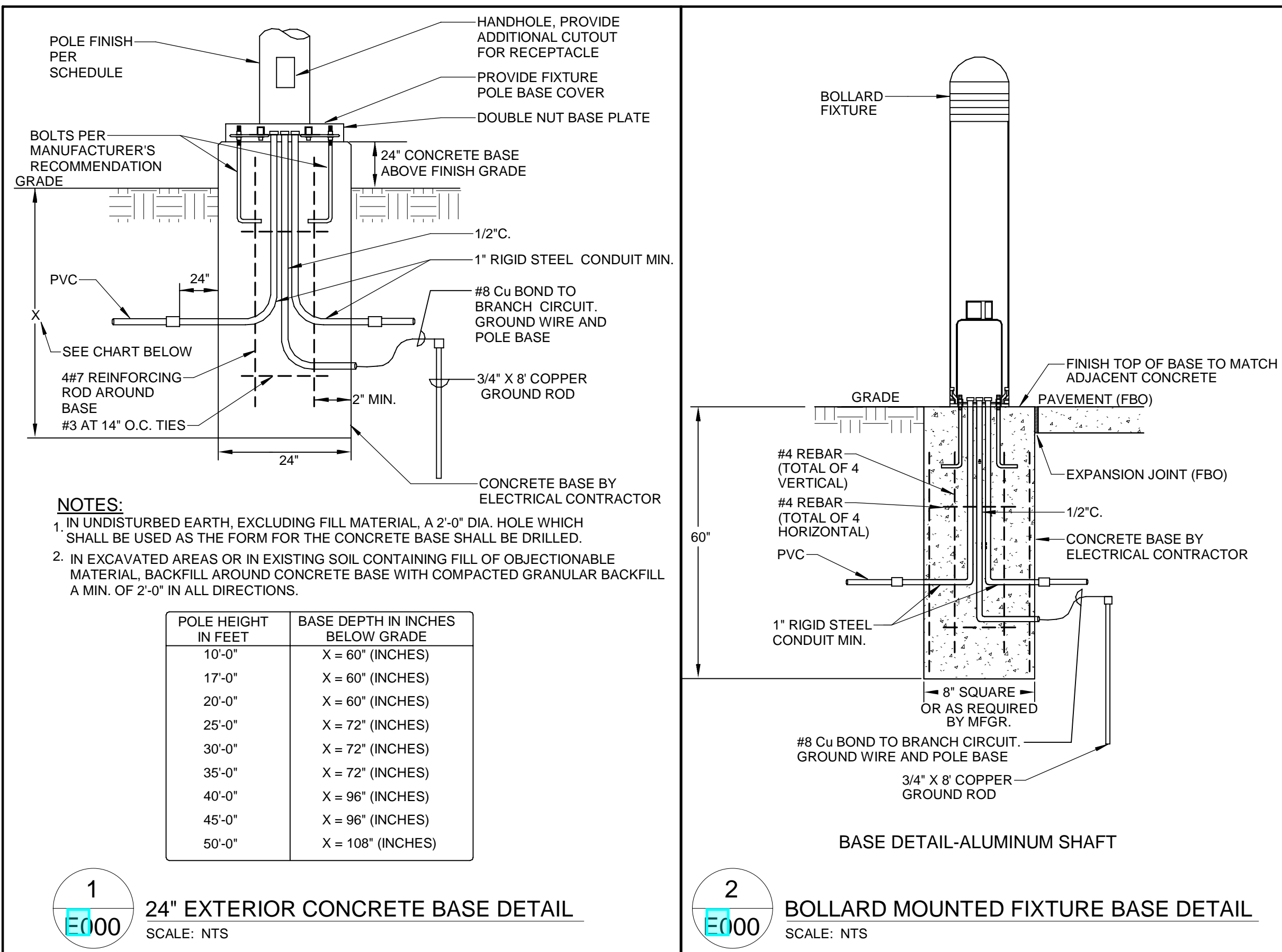
PLAN NOTES:

- DISCONNECT AND RELOCATE EXISTING FIXTURE, POLE, AND CIRCUIT. REMOVE EXISTING CONCRETE BASE.
- REMOVE EXISTING UNUSED UTILITY TRANSFORMER.
- CONNECT TO EXISTING EXTERIOR LG-1 277V LIGHT POLE CIRCUIT. RECONNECT TO MATCH EXISTING CIRCUIT CONTROLLED BY EXISTING RELAY.
- FUTURE ELECTRICAL VEHICLE CHARGER LOCATION. PROVIDE 1-1/2" CONDUIT STUB BACK TO PANEL "MDP". CAP CONDUIT FLUSH WITH FINISHED GRADE. PROVIDE PULL STRING.
- PROVIDE FREESTANDING EQUIPMENT MOUNTING RACK PER DETAIL.
- EXISTING RELOCATED POLE AND FIXTURE. PROVIDE NEW CONCRETE BASE. EXTEND EXISTING CIRCUIT TO NEW POLE LOCATION. RECONNECT TO MATCH EXISTING.
- FURNISH AND INSTALL 1" CONDUIT FOR (4) CAT6 UNDERGROUND RATED CABLES FOR SECURITY CAMERAS. COORDINATE INSTALLATION WITH SECURITY CAMERA VENDOR. PROVIDE 120V CIRCUIT CAPPED INSIDE POLE FOR FUTURE USE.
- DISCONNECT AND REMOVE EXISTING FLAG POLE LIGHT AND WIRE.
- CONNECT TO EXISTING 277V STEP LIGHTING CIRCUIT LG-2. CIRCUIT CONTROLLED BY EXISTING RELAY.
- PROVIDE INTERMATIC EK4236S PHOTOCELL MOUNTED TO WEATHERPROOF BOX. MOUNT APPROXIMATELY 10'-0" AFF. AIM PHOTOCELL NORTH.

OCCUPANCY SENSOR SCHEDULE		
SYMBOL	DESCRIPTION	SENSOR/SWITCH
L	DUAL TECHNOLOGY OCCUPANCY SENSOR-CORRIDOR	CM-PDT-11
HB	PASSIVE INFRARED HIGH BAY OCCUPANCY SENSOR	CM-6
P	PASSIVE INFRARED OCCUPANCY SENSOR	CM-10
○	DUAL TECHNOLOGY OCCUPANCY SENSOR	WV-PDT-16-R-KIT
○	DUAL TECHNOLOGY OCCUPANCY SENSOR	CM-PDT-10-R
SM	PASSIVE INFRARED WALL SWITCH OCCUPANCY SENSOR	WSX-XX



SITE PLAN - ELECTRICAL  
1" = 20'-0"



ELECTRICAL SHEET LIST	
Sheet Number	Sheet Name
E000	SITE PLAN - ELECTRICAL
E100	GROUND FLOOR DEMOLITION - ELECTRICAL
E101	FIRST FLOOR DEMOLITION - ELECTRICAL
E102	SECOND FLOOR DEMOLITION - ELECTRICAL
E200	GROUND FLOOR - LIGHTING
E200P	GROUND FLOOR - POWER
E201	FIRST FLOOR - LIGHTING
E201P	FIRST FLOOR - POWER
E202	SECOND FLOOR - LIGHTING
E202P	SECOND FLOOR - POWER
E203	ENLARGED KITCHEN PLAN
E300	FIRE ALARM PLANS
E400	KEYLESS ENTRY & CCTV PLANS
E400	ONE LINE & SCHEDULES
E500	DETAILS
E501	FIXTURE & MOTOR SCHEDULES