GENERAL NOTES

1. CODE COMPLIANCE: ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH CODES, STANDARDS, AND ORDINANCES AS SET FORTH BY THE AUTHORITIES HAVING JURISDICTION AND THEIR LATEST ADOPTED EDITIONS (IN EFFECT AT TIME OF BUILDING PERMIT APPLICATION) OF THE FOLLOWING PUBLICATIONS:

   A. CALIFORNIA CODE OF REGULATIONS TITLE 24; INCLUDES 2016 CALIFORNIA ELECTRICAL CODE, 2016 CALIFORNIA FIRE CODE, 2016 CALIFORNIA BUILDING CODE, ETC. WITH LOCAL AMENDMENTS AS APPLICABLE.

   B. AMERICANS WITH DISABILITIES ACT (ADA).

2. SAFETY: THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL EQUIPMENT IN A SAFE AND RESPONSIBLE MANNER. KEEP DEAD FRONT EQUIPMENT IN PLACE WHILE EQUIPMENT IS ENERGIZED. CONDUCT ALL CONSTRUCTION OPERATIONS IN A SAFE MANNER FOR EMPLOYEES AS WELL AS OTHER WORKPERSONS OR ANYONE VISITING THE JOB SITE. PROVIDE BARRIERS, FLAGS, TAPE, ETC. AS REQUIRED FOR SAFETY. THE CONTRACTOR SHALL HOLD ALL PARTIES HARMLESS OF NEGLIGENT SAFETY PRACTICES, WHICH MAY CAUSE INJURY TO OTHERS ON OR NEAR THE JOB SITE.

3. FIRE RATED ASSEMBLIES SHALL MAINTAIN RATINGS AS SPECIFIED IN THE CALIFORNIA BUILDING CODE CHAPTER 7. CONTRACTOR SHALL PROVIDE AND INSTALL PHYSICAL ENCLOSURE AROUND FIXTURES, PANELS, ETC. AS REQUIRED. ALL ASSEMBLIES TO BE PENETRATED SHALL BE INSTALLED WITH APPLICABLE THROUGH-PENETRATION FIRESTOP SYSTEM AS DETERMINED BY UL CLASSIFICATION. BEFORE CONSTRUCTION, VERIFY AND COMPLY WITH REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION.

4. MOUNTING HEIGHTS SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

   +15" AFF: RECEPTACLES, TELEPHONE, TV & DATA OUTLETS. (MEASURED BOTTOM OF OUTLET BOX)
   +46" AFF: OUTLET ABOVE COUNTER (MEAUSRED TOP OF OUTLET BOX)
   +48" AFF: LIGHT SWITCHES. (MEASURED TOP OF OUTLET BOX)
   +48" AFF: FIRE ALARM MANUAL PULL STATIONS, T-STATS. (MEASURED TOP OF OUTLET BOX)
   THE LOWER OF +80" AFF TO BOTTOM OF LENS, OR 6" BELOW CEILING: FIRE ALARM VISUALS.

   CALIFORNIA BUILDING CODE 1136A ELECTRICAL RECEPTACLE , SWITCH AND CONTROL HEIGHTS:
   [1136A.1] RECEPTACLE HEIGHTS: ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES FROM THE TOP OF THE RECEPTACLE OUTLET BOX NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM. IF THE REACH IS OVER A PHYSICAL BARRIER OR AN OBSTRUCTION (FOR EXAMPLE, A KITCHEN BASE CABINET), RECEPTACLES SHALL BE LOCATED WITHIN THE REACH SPECIFIED IN SECTION 118A.3. PHYSICAL BARRIERS AND OBSTRUCTIONS SHALL NOT EXTEND MORE THAN 25 INCHES FROM THE WALL BENEATH THE RECEPTACLE.

   RECEPTACLE OUTLETS THAT DO NOT SATISFY THESE SPECIFICATIONS ARE ACCEPTABLE PROVIDED THAT COMPARABLE RECEPTACLES OUTLETS, THAT PERFORM THE SAME FUNCTIONS, ARE PROVIDED WITHIN THE SAME AREA AND ARE ACCESSIBLE. EXCEPTIONS:

   1. RECEPTACLE OUTLETS INSTALLED AS PART OF PERMANENTLY INSTALLED BASEBOARD HEATERS ARE EXEMPT
   2. REQUIRED RECEPTACLE OUTLETS SHALL BE PERMITTED IN FLOORS WHEN ADJACENT TO SLIDING PANELS OR WALLS.
   3. BASEBOARD ELECTRICAL OUTLETS USED IN A RELOCATABLE PARTITIONS, WINDOW WALLS OR OTHER ELECTRICAL CONVENIENCE FLOOR OUTLETS ARE NOT SUBJECT TO THE MINIMUM HEIGHT REQUIREMENTS.

5. THIS SECTION SHALL NOT APPLY TO EXISTING BUILDINGS WHEN THE ENFORCING AGENCY DETERMINES THAT COMPLIANCE WITH THESE STANDARDS WOULD CREATE AN UNREASONABLE HARDSHIP.

   [1136A.2] SWITCH AND CONTROL HEIGHTS: CONTROLS OR SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, ALARMS OR COOLING, HEATING AND VENTILATING EQUIPMENT SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX OR NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISHED FLOOR OR WORKING FLAT FORM. IF THE REACH IS OVER A PHYSICAL BARRIER OR AN OBSTRUCTION (FOR EXAMPLE, A KITCHEN BASE CABINET) SWITCHES AND CONTROLS SHALL BE LOCATED WITHIN THE REACH RANGES SPECIFIED IN SECTION 1138A.3. PHYSICAL BARRIERS OR OBSTRUCTIONS SHALL NOT EXTEND MORE THAN 25 INCHES FROM THE WALL BENEATH A CONTROL

   SWITCHES AND CONTROLS THAT DO NOT SATISFY THESE SPECIFICATIONS ARE ACCEPTABLE PROVIDED THAT COMPARABLE CONTROLS OR OUTLETS, THAT PERFORM THE SAME FUNCTIONS, ARE PROVIDED WITHIN THE SAME AREA AND ARE ACCESSIBLE. EXCEPTIONS:

   APPLIANCES (E.G. KITCHEN STOVES, DISHWASHERS, RANGE HOODS, MICROWAVE OVENS, AND SIMILAR APPLIANCES WHICH HAVE CONTROLS LOCATED ON THE APPLIANCES.

   BEFORE ROUGH-IN, VERIFY ALL MOUNTING HEIGHTS AND EXACT LOCATIONS FOR ALL EQUIPMENT ELECTRICAL CONNECTIONS, STUB-UPS, RECEPTACLES, OUTLETS, ETC. WITH ARCHITECT OR OWNER. PLACE DEVICES LOCATED ABOVE COUNTERS, SHELVING, ETC. AND IN BATHROOMS SO AS NOT TO CONFLICT WITH EDGES OF WAINSCOTING, COUNTER SPLASH, SHELVING, ETC. ARCHITECTURAL SHEETS SHALL GOVERN.

6. LABEL PANELS, CABINETS, BACKBOARDS, MAIN DEVICES, SAFETY SWITCHES, CONTACTORS AND OTHER SPECIFICALLY DESIGNATED EQUIPMENT SHOWN ON PLANS. USE ENGRAVED LAMINATED PLASTIC NAMEPLATES ATTACHED BY SCREWS OR RIVETS. FOR FEEDERS, NEATLY AND INDELIBLY LABEL CONDUIT DESTINATIONS ON BOTH VISIBLE ENDS OF CONDUIT RUNS WHERE CONDUITS TERMINATE AT DESIGNATED ENCLOSURES, STRUCTURES OR EQUIPMENT (INCLUDING PULL AND SPLICE BOXES).

POWER PLAN NOTES

A. FUSING: ALL FUSIBLE SAFETY DISCONNECT SWITCHES SHALL BE PROVIDED WITH DUAL-ELEMENT TIME DELAY TYPE FUSES SIZED AND RATED PER EQUIPMENT MANUFACTURERS' RECOMMENDATIONS. VERIFY WITH EQUIPMENT NAMEPLATE BEFORE INSTALLATION.

B. INSTALL SEPARATE NEUTRALS FOR EACH 120V BRANCH CIRCUIT.

C. MOTOR OVERLOAD PROTECTION: WHERE REQUIRED BY NEC ARTICLE 430 PART C AND NOT SHOWN ON PLAN OR PROVIDED INTEGRAL WITH EQUIPMENT, PROVIDE AND INSTALL THERMAL OVERLOAD PROTECTION FOR ALL MOTORS.

D. SPARE CONDUIT FOR RECESSED PANELS: PROVIDE (1) 3/4" SPARE CONDUIT STUB UP TO ACCESSIBLE ABOVE CEILING SPACE AND/OR ACCESSIBLE SPACE BELOW FOR EVERY (3) SPARE BREAKER SPACES AS INDICATED ON PANEL SCHEDULES.

E. DEVICE LOCATIONS SHOWN ARE SCHEMATIC AND APPROXIMATE. EXACT LOCATIONS SHALL BE FIELD VERIFIED DURING ROUGH-IN WITH ARCHITECTURAL ELEVATIONS, CASEWORK SHOP DRAWINGS, FURNITURE, ETC. AND SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT WITH OTHER EQUIPMENT.

F. ELECTRICAL AND COMMUNICATIONS OUTLETS SHOWN IN THE SAME LOCATION, SHALL BE MOUNTED ON OPPOSITE SIDES OF THE SAME STUD. COORDINATE BETWEEN ELECTRICAL AND COMMUNICATIONS PLANS.

LIGHTING PLAN NOTES

A. NIGHT LIGHT "NL" DESIGNATED LUMINAIRES IN INTERIOR LOCATIONS SHALL HAVE ONE BALLAST CONTINUOUSLY ENERGIZED. LUMINAIRES IN EXTERIOR LOCATIONS SHALL BE AUTOMATICALLY CONTROLLED TO BE ON FROM DUSK TO DAWN.

B. LIGHTING FIXTURE LOCATIONS SHOWN ARE SCHEMATIC. REFER TO ARCHITECTURAL PLANS (REFLECTED CEILING, ELEVATIONS, ETC.) FOR EXACT LOCATIONS AND MOUNTING HEIGHTS PRIOR TO ROUGH-IN.

C. REFER TO ARCHITECT'S REFLECTED CEILING PLAN(S) FOR CEILING HEIGHTS, TYPES, FINISHES, ETC. IN EACH AREA. VERIFY FLANGE TYPES, TRIM KITS, STEM LENGTHS, ETC. FOR ALL FIXTURES PRIOR TO SUBMITTALS.

D. CONFIRM LOCATION OF ALL DOORS SWINGS WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN OF SWITCHES.

E. PROVIDE UNSWITCHED HOT LEG OF ROOM LIGHTING BRANCH CIRCUIT TO EACH BATTERY POWERED EMERGENCY LIGHT AND EXIT SIGN FOR CONTINUOUS CHARGING.

COMMUNICATION PLAN NOTES

A. BEFORE CONSTRUCTION, COORDINATE AND VERIFY ALL DATA AND TELEPHONE LOCATIONS WITH OWNER OR ARCHITECT.

B. DEVICE LOCATIONS SHOWN ARE SCHEMATIC AND APPROXIMATE. EXACT LOCATIONS SHALL BE FIELD VERIFIED DURING ROUGH-IN WITH ARCHITECTURAL ELEVATIONS, CASEWORK SHOP DRAWINGS, FURNITURE, ETC. AND SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT WITH OTHER EQUIPMENT.

C. ELECTRICAL AND COMMUNICATIONS OUTLETS SHOWN IN THE SAME LOCATION, SHALL BE MOUNTED ON OPPOSITE SIDES OF THE SAME STUD. COORDINATE BETWEEN ELECTRICAL AND COMMUNICATIONS PLANS.

CONDUIT SYSTEMS NOTES

CONDUIT SYSTEMS USED ON THIS PROJECT SHALL BE AS FOLLOWS

1. PVC SCHEDULE 40 OR 80 - underground/below slab with GRS elbows and risers tape wrapped).
2. ELECTRICAL METALLIC CONDUIT (EMT) - above grade/slab in building construction and where exposed above 8'-0" aff.
3. GALVANIZED RIGID STEEL (GRS) - where exposed below 8'-0" aff. and/or where subject to physical damage.
4. FLEXIBLE STEEL CONDUIT - above ceilings and/or concealed in building construction (seal tight flex rquired in exterior locations).
5. MC CABLE ALLOWED FOR LIGHTING BRANCH CIRCUIT ABOVE T-BAR CEILING SPACE

REFER TO SECTIONS 16110 & 16120 OF SPECIFICATIONS FOR ADDITIONAL INFORMATION. CONDUITS SHALL BE MINIMUM 1/2" UNLESS OTHERWISE NOTED, 3/4" FOR ALL HOME RUN CONDUITS AND WHERE ROUTED BELOW SLAB OR UNDERGROUND. CONDUIT SIZES, WHERE NOT NOTED ON THE DRAWINGS, SHALL BE SIZED FOR MAXIMUM 40% FILL PER CEC 310-6.

ADDITIONAL CONDUIT REQUIREMENTS.

- PROVIDE WHITE DECORA STYLE OUTLETS WITH WHITE COVER PLATES
- REFER TO ELECTRICAL DETAILS FOR METAL PIPE PENETRATION THRU FIRE RATED WALL. PENTRATION OF FIRE-RESISTIVE WALLS AND FLOOR CEILINGS SHALL BE PROTECTED AS REQUIRED IN CBC SECTION 714.
- REFER TO ELECTRICAL DETAIL FOR DEVICE INSTALLATION FOR FIRE RATED WALLS.
- NO CONDUITS OR PIPING IN ANY SPACE SHALL BE EXPOSED AT THE CEILING AND WALL (COORDINATE WITH ALL DISCIPLINES PRIOR TO CONSTRUCTION).

MECHANICAL SYSTEMS

1. MECHANICAL UNIT CONDUITS: TO PREVENT DAMAGE DUE TO VIBRATION, BOTH POWER AND CONTROL WIRING CONDUITS FEEDING EXTERIOR MECHANICAL UNITS SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR WITH LIQUID TIGHT FLEXIBLE TYPE AT FINAL CONNECTION TO UNIT AND BETWEEN ROOF JACK AND DISCONNECT SWITCH WHERE DISCONNECT IS MOUNTED ON UNIT.
2. MECHANICAL CONTROLS ROUGH-IN: PROVIDE AND INSTALL J-BOX, RING AND CONDUIT (SIZE ALL AS REQUIRED) FROM EACH MECHANICAL CONTROLS LOCATION TO CONTROLLED MECHANICAL UNITS.
3. T-STAT J-BOXES: PROVIDE AND INSTALL 4" SQUARE JUNCTION BOX WITH 1-GANG RING AND 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE ABOVE AT EACH THERMOSTAT LOCATION.
4. EXHAUST FANS SHALL BE PROVIDED & INSTALLED BY MECHANICAL CONTRACTOR WITH WIRING CONNECTIONS MADE BY ELECTRICAL CONTRACTOR.
5. MECHANICAL EQUIPMENT CONTROLS: MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOW VOLTAGE WIRE AND CONNECTIONS (BELOW 120 VOLT) TO AND FROM ALL MECHANICAL CONTROL DEVICES. ALL LOW VOLTAGE CONTROL WIRE SHALL BE IN CONDUIT, UNLESS OTHERWISE NOTED.
6. PULLROPES: ANY RACEWAY WITHOUT CABLE OR WIRE SHALL BE INSTALLED WITH MINIMUM 200 POUND TEST PULL LINE AND LARGER IF REQUIRED BY SERVING UTILITY COMPANY. ANY NEW OR EXISTING COMMUNICATION OR SIGNAL RACEWAY ROUTED BETWEEN BUILDINGS, SIGNAL CABINETS, AND/OR SIGNAL CLOSETS WITH FUTURE CAPACITY SHALL BE INSTALLED WITH MINIMUM 200 POUND TEST PULL LINE AS WELL AS THE CALLED FOR CABLE.
7. PROVIDE SEALTITE POWER & CONTROL CONNECTIONS TO ALL AC UNITS.
8. ALL EQUIPMENT SHOWN ABOVE ROOF IS NEMA 3R.
9. VERIFY EXACT EQUIPMENT LOCATIONS AND POINTS OF CONNECTION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
10. FUSE DISCONNECT SWITCHES PER EQUIPMENT NAMEPLATE RATING.

FIRE SPRINKLER AND ALARM SYSTEMS NOTES

(DEFERRED APPROVAL)

FIRE SPRINKLER MONITORING ALARM SYSTEM IS A DEFERRED APPROVAL AND DEVICES SHOWN ON PLANS ARE FOR REFERENCE ONLY. FULL DESIGN-BUILD SHOP DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW, UPON FAVORABLE REVIEW BY THE ARCHITECT AND ENGINEER, SHOP DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE LOCAL FIRE AUTHORITY FOR APPROVAL INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BEGIN UNTIL THE LOCAL FIRE AUTHORITY HAS APPROVED THE SHOP DRAWINGS

1. PROVIDE ALL WORK AND MATERIAL REQUIRED FOR A COMPLETE AND OPERATING FIRE ALARM SYSTEM. WORK SHALL INCLUDE (BUT NOT BE LIMITED TO):

   A. SHOP DRAWINGS
   B. SUBMITTAL FOR APPROVAL
   C. COMPLETE INSTALLATION AND TESTING
   D. SYSTEM TRAINING FOR OWNER'S REPRESENTATIVE
   E. WARRANTY

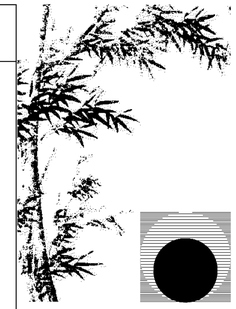
2. SUBMIT A SEPARATE SET OF DETAILED FIRE ALARM PLANS, SPECIFICATIONS AND ENGINEERING CALCULATIONS INCLUDING BUT NOT NECESSARILY LIMITED TO:

   A. CSFM LISTING #'S AND MANUFACTURER MODEL #'S FOR EVERY SYSTEM COMPONENT WHICH IS TO BE INTERCONNECTED AS A PART OF THIS PROJECT.
   B. SINGLE LINE, RISER AND POINT TO POINT WIRING DIAGRAMS INCLUDING BATTERY AND VOLTAGE DROP CALCULATIONS FOR THE ENTIRE SYSTEM.
   C. INDICATION OF CONDUCTOR TYPE(S), POWER-LIMITED OR NON-POWER-LIMITED SYSTEM.
   D. SCALED ELEVATION OF REMOTE GRAPHIC ANNUNCIATOR PANEL AT ENTRY. (IF REQUIRED).
   E. LIST OF PROPOSED ZONES FOR ALL INITIATING DEVICES.
   F. MATRIX OF SYSTEM OPERATION.
   G. INFORMATION AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODE(S) AND GAIN APPROVAL OF AUTHORITY(IES) HAVING JURISDICTION.

   FIRE ALARM SYSTEM INSTALLATION SHALL NOT BEGIN UNTIL SEPARATE PERMIT HAS BEEN OBTAINED AND ALL OF THE ABOVE HAS BEEN ACCEPTED AND SIGNED BY THE AUTHORITY(IES) HAVING JURISDICTION AND THE ARCHITECT. AFTER CONSTRUCTION, PROVIDE ACCURATE FIELD RECORD DRAWINGS TO OWNER.

3. AS A MINIMUM, UNLESS OTHERWISE NOTED, FIRE ALARM CONTROL PANEL SHALL BE PROVIDED WITH BATTERY BACKUP, 4 ZONES AND 1 SIGNAL CIRCUIT WITH PROVISIONS FOR FUTURE EXPANSION. PROVIDE WITH DIALER (DACT) AND CONNECT TO COMMUNICATIONS SYSTEM WITH (2) DEDICATED VOICE LINES AS REQUIRED TO SEND SEPARATE AND DISTINCT SIGNALS (AS REQUIRED BY THE FIRE DEPARTMENT) TO AN APPROVED CENTRAL STATION. FIRE SPRINKLER RISER WATER FLOW AND / OR VALVE TAMPER SWITCHES SHALL BE PROVIDED AND INSTALLED BY THE SPRINKLER SYSTEM CONTRACTOR, AND WIRED BACK TO THE FACP BY THE FIRE ALARM CONTRACTOR. COORDINATE FOR PROPER VOLTAGE. ALL FIRE ALARM COMPONENTS SHALL BE CALIFORNIA STATE FIRE MARSHAL LISTED.
4. DUCT SMOKE DETECTORS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR. DETECTOR POWER AND SUPERVISORY WIRING AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR. MECHANICAL UNIT CONTROL (SHUTDOWN UPON DETECTOR ALARM) WIRING AND CONNECTIONS SHALL BE MADE BY MECHANICAL CONTRACTOR.
5. APPROVED NOTIFICATION APPLIANCES FOR THE HEARING IMPAIRED SHALL BE INSTALLED IN ACCORDANCE WITH NFPA REQUIREMENTS IN THE FOLLOWING AREA: RESTROOMS, CORRIDORS, OCCUPIED ROOMS WHERE AMBIENT NOISE IMPAIRS HEARING OF THE FIRE ALARM, LOBBIES, MEETING ROOMS, AND OTHER AREA FOR COMMON USE. (ONLY REQUIRED IF PROJECT COMPLY TO ITEM 6 BELOW)

SHEET INDEX



Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Ilanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
csd@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

5300 West Tulare Avenue
Visalia, California

Sheet Description:

Electrical General Notes

Date:	8/8/2020
Project:	19-700
Scale:	NOTED

Sheet No.:

E0.1

Of x Sheets

LEGEND

NOTE: INTERPRET IN CONTEXT

MISCELLANEOUS

- MOTOR
- THERMOSTAT
- CIRCUIT BREAKER
- FUSIBLE SWITCH
- GROUND
- PHASE
- CLOCK
- CLOCK/SPEAKER COMBINATION
- WALL MOUNTED CLOCK
- PUSHBUTTON
- FLUSHMOUNT PANEL
- SURFACEMOUNT PANEL
- FLUSHMOUNT CABINET
- SURFACEMOUNT CABINET
- DAMPER MOTOR
- HUMIDISTAT
- MAGNETIC CONTACTOR
- COMBINATION STARTER
- SAFETY DISCONNECT
- SECURITY CAMERA

LIGHT FIXTURES

- RECESSED LED TROFFER (2'X4')
- RECESSED LED TROFFER (2'X2')
- LED UNDERCABINET LIGHT
- RECESSED CAN LIGHT
- EXIT LIGHT- WALL
- EXIT LIGHT- CEILING (ARROW INDICATES DIRECTION)
- A — LETTER ADJACENT INDICATES FIXTURE TYPE

CONDUIT/WIRE

- NEW
- UNDERGROUND
- NEW POWER HOMERUN (3 HOTS & NEUT SHOWN)
- CONDUIT SEAL
- INDICATES LINE CONTINUES
- CONDUIT STUB (W/MARKER)
- FLEXIBLE CONNECTION

DATA

- DATA OUTLET. PROVIDE 5S BOX WITH 1-1/4"C.O. TO ACCESSIBLE CEILING SPACE FOR LOW VOLTAGE WIRING BY OWNER'S VENDOR.
- TV — TV OUTLET FOR TELEVISION. MOUNT ADJACENT TO POWER OUTLET. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN. PROVIDE 4S BOX WITH 1"C.O. TO ACCESSIBLE CEILING SPACE FOR LOW VOLTAGE WIRING BY OWNER'S VENDOR.
- WIRELESS ACCESS POINT.

WORKSTATION DATA

- 911 — DISPATCH 911 DATA LINES
- C — COUNTY DATA LINES
- D — DB25 CABLES

NOTE: VERIFY POINT OF CONNECTION AT EACH WORKSTATION. ROUTE CABLES BELOW RAISE FLOOR. "X" DENOTES TOTAL CABLE DROP.

POWER

- DUPLEX RECEPTACLE
- AFCI — PROVIDE ARC FAULT BREAKER
- GFCI — (GFCI) GROUND FAULT CURRENT INTERRUPTER DEVICE
- MOUNT ABOVE COUNTER PER ADA. REFER TO ARCH.
- MOUNT AT +48" MEASURED TO TOP OF BOX.
- 208V RECEPTACLE
- WIU — WHILE-IN USE NEMA 3R COVER (TAYMAC #MX4280S OR ENGINEER APROVED EQUAL)
- (1)CONTROLLED DUPLEX RECEPTACLE AND (1) DUPLEX RECEPTACLE
- TV — DUPLEX OUTLET FOR TELEVISION OUTLET. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
- GROUND BAR
- CLG — CEILING MOUNTED OUTLET
- SWITCH RECEPTACLE
- GWS — GANG WITH SWITCH
- DISCONNECT FUSE OR NON FUSED

DOOR ACCESS

- CR — CARD READER. PROVIDE 1/2"C.O. TO ACCESSIBLE CEILING SPACE. VERIFY ROUGH-IN REQUIREMENTS WITH CARD READ MANUFACTURER.
- DOOR CONTACT. VERIFY ROUGH-IN REQUIREMENTS WITH CARD READ MANUFACTURER.

CONVENTION

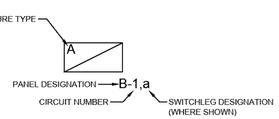
- X — NUMBERED SHEET NOTES: REFERS TO NOTES ON SAME SHEET AS REFERENCE
- Z / X — DETAIL REFERENCE: Z = DETAIL DESIGNATION, X = SHEET NUMBER REFERENCE
- 3103 — FEEDER SCHEDULE DESIGNATION (EXAMPLE: 3103 = 310 AMPERE, 600V, 3 CURRENT CARRYING CONDUCTORS, PREFIXES: 'M' INDICATES MEDIUM VOLTAGE, 'CO14' INDICATES CONDUIT ONLY, QUANTITY (1) AND SIZE (4"))

ABBREVIATIONS

A	AMPERE
AB	AMP BREAKER
ABAND	ABANDONED
ABV	ABOVE
AC	ALTERNATING CURRENT
AC-#	AIR CONDITIONER
ADJ	ADJACENT
AF	AMP FUSE, AMP FRAME
AFF	ABOVE FINISH FLOOR
AFG	BOVE FINISH GRADE
AIC	AMPERES INTERRUPTING CAPACITY
AI	ALUMINUM
AS	AMP SWITCH RATING
ATS	AUTOMATIC TIME SWITCH
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIBLE/AUDIO VISUAL
AWG	AMERICAN WIRE GAGE
BFG	BELOW FINISH GRADE
BIL	BASIC IMPULSE LEVEL
BLDG	BUILDING
C	CONDUIT
-C-	CATV CONDUIT
CABT	CABINET
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER, CODE BLUE
CBC	CA. BUILDING CODE
CEC	CA. ELECTRICAL CODE
	CA. ENERGY COMMISSION
CF	COMPACT FLUORESCENT
CFC	CALIFORNIA FIRE CODE
CLG	CEILING
CL	CENTER LINE
CKT	CIRCUIT
CNTR	CONTRACTOR
C.O.	CONDUIT ONLY (W/PULLROPE)
COND	CONDUIT, CONDUCTOR
CR	CRITICAL BRANCH
CSFM	CALIFORNIA SFM
CT	CURRENT TRANSFORMER
Cu	COPPER
CU-#	CONDENSING UNIT
D	DEPTH
DC	DIRECT CURRENT
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DISC	DISCONNECT
DIST	DISTRIBUTION
DPST	DOUBLE POLE SINGLE THROW
DW	DISHWASHER
EM	EMERGENCY
(E)	EXISTING
EA	EACH
EB	ELECTRONIC BALLAST
EC	ELECTRICAL CONTRACTOR
EC-#	EVAPORATIVE COOLER
EF-#	EXHAUST FAN
EL	EVENING LIGHT
ELEC	ELECTRICAL
EM	EMERG BATTERY BACKUP EMERGENCY BALLAST
EMERG	EMERGENCY
EOL	END OF LINE
EQUIPT	EQUIPMENT
ES	ENERGY SAVING
(EXIN)	(E) IN (N) LOCATION
(EXR)	(E) TO BE (R)
EXT	EXTERIOR
F	FLUORESCENT
(F)	FUTURE
F-#	FURNACE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FAT	FIRE ALARM TERMINAL
FAU	FORCED AIR UNIT
FBO	FURNISHED BY OTHERS
FC-#	FAN COIL
FLA	FULL LOAD AMPS
FLR	FLOOR
FLUOR	FLUORESCENT
FS	FUSIBLE SWITCH
FVNR	FULL VOLTAGE NON-REVERSING
G	GROUNDING CONDUCTOR
GC	GENERAL CONTRACTOR
GD	GARBAGE DISPOSAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL
GWS	GANG WITH SWITCH
H	HEIGHT, HIGH
HACR	HEATING, AC & REFRIG
HID	HIGH INTENSITY DISCHARGE
HO	HIGH OUTPUT
HOA	HAND-OFF-AUTO
hp	HORSEPOWER
HPF	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
IC	INTERCOM
ID	IDENTIFICATION
IF	INSIDE FROST
IG	ISOLATED GROUND
J-BOX	JUNCTION BOX
k	QUANTITY 1000
kVA	KILOVOLTAMPS
kW	KILOWATT
LC	LIGHTING CONTACTOR
LPS	LOW PRESSURE SODIUM
LRA	LOCKED ROTOR AMPS
LS	LIFE SAFETY BRANCH
LT	LIGHT
LTG	LIGHTING
LV	LOW VOLTAGE
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CKT AMPS
MCB	MAIN CIRCUIT BREAKER
MCTB	MAIN CATV TERMINAL BOARD
MCTC	MAIN CATV TERMINAL CABINET
MECH	MECHANICAL
MFR	MANUFACTURER
MFS	MAIN FUSIBLE SWITCH
MH	METAL HALIDE
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OCP
MSB	MAIN SWITCHBOARD
MT	MOUNT
MT HT	MOUNTING HEIGHT
MTS	MANUAL TRANSFER SWITCH
MTTB	MAIN TELEPHONE TERMINAL BOARD
MTTC	MAIN TELEPHONE TERMINAL CABINET
MW	MICROWAVE
N	NEUTRAL (GROUNDED CONDUCTOR)
(N)	NEW
N3R	NEMA 3R
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NAT'L ELEC MANUFACTURER'S ASSOC
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NPF	NORMAL POWER FACTOR
NTS	NOT TO SCALE
OC	ON CENTER
OCP	OVERCURRENT PROTECTION
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OSA	OFFICE of the STATE ARCHITECT
OSHPD	OFFICE of STATEWIDE HEALTH PLANNING & DEVELOPMENT
OVLD	OVERLOAD
P	POLE
PA	PUBLIC ADDRESS
PB	PULLBOX
PC	PULL CHAIN
PC	PHOTOCELL
PC	PLUMBING CONTRACTOR
ph	PHASE
PNL	PANEL
POC	POINT OF CONNECTION
-PP-	POWER PRIMARY
-PS-	POWER SECONDARY
PV	PHOTOVOLTAIC
(R)	RELOCATE(D)
RECEPT	RECEPTACLE
REF	REFRIGERATOR
REQ'D	REQUIRED
RLA	RATED LOAD AMPS
RM	ROOM
RMC	RIGID METAL CONDUIT
RMV	REMOVE
RPLC	REPLACE
RS	RAPID START
SC	SIGNAL CABINET
SCC	SHORT CKT CURRENT
SFM	STATE FIRE MARSHAL
SHT	SHEET
SL	SLIMLINE, SWITCH LEG
SPEC	SPECIFICATION
SPST	SINGLE POLE SINGLE THROW
SQ	SQUARE
STRG	STORAGE
SURF	SURFACE
SVC	SERVICE
SW	SWITCH
T	TRANSFORMER, TERMINAL
-T-	TELEPHONE CONDUIT
(TBR)	TO BE REMOVED
TC	TIME CLOCK
TEL	TELEPHONE
TELCO	TELEPHONE COMPANY
TS	TIME SWITCH
TSO	TIME SWITCH OVERRIDE
TSP	TWISTED SHIELDED PAIR
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TX	TRANSFORMER
TYP	TYPICAL
TYP SIM	TYPICAL SIMILAR
UC	UNDERCABINET, UNDERCOUNTER
UG	UNDERGROUND
UGPS	UNDERGROUND PULL SECTION
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
USA	UG SVC ALERT 800-642-2444
V	VOLT
VA	VOLT AMPERES
VAC	VOLT ALTERNATING CURRENT
VHO	VERY HIGH OUTPUT
VOLT	VOLTAGE
VR	VANDAL-RESISTANT
W	WIDTH, WATT, WIRE
WH-#	WATER HEATER
WP	WEATHERPROOF (NEMA 3R)
XFMR	TRANSFORMER
+48	INDICATES MOUNTING HEIGHT AFF

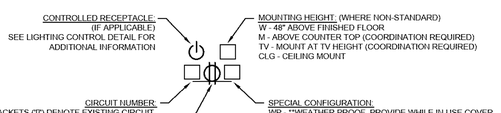
CIRCUITING LEGEND

LIGHTING PLAN



- PROVIDE ALL BRANCH CIRCUIT WIRING FROM FIXTURES TO PANEL(S) AS DESCRIBED BY CIRCUIT NUMBERS SHOWN.
- PROVIDE ALL WIRING BETWEEN FIXTURES AND CONTROL DEVICES AS DESCRIBED IN REFERENCE NOTES AND/OR SHOWN BY SWITCHLEG DESIGNATIONS.
- EXIT AND EMERGENCY LIGHT FIXTURES SHALL BE CONNECTED TO AN UNSWITCHED BRANCH CIRCUIT CONDUCTOR.
- HOME RUN CONDUITS SHALL BE 3/4"C., MAX OF (3) BRANCH CIRCUITS PER CONDUIT.
- PROVIDE ALL BRANCH CIRCUIT WIRING FROM MECH. EQUIPMENT TO PANELS.

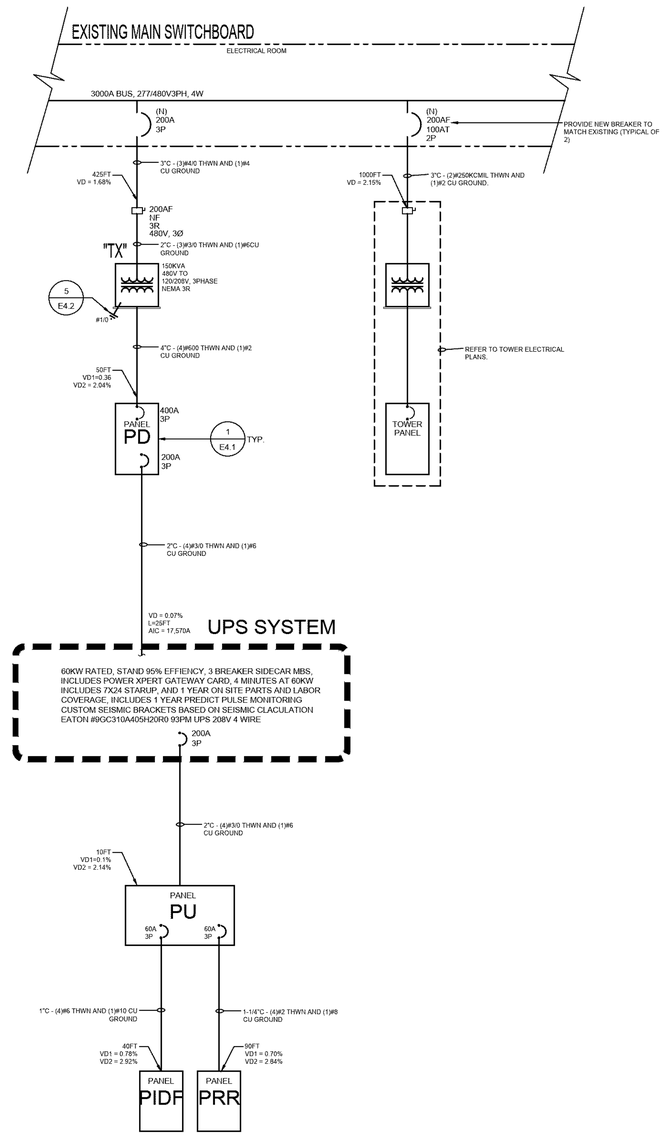
POWER PLAN



- PROVIDE ALL BRANCH CIRCUIT WIRING FROM DEVICES TO PANEL(S) PER DESIGNATIONS/CIRCUIT NUMBERS.
- EACH BRANCH CIRCUIT SHALL HAVE A SEPARATE NEUTRAL AS INDICATED ON PANEL SCHEDULES.
- HOME RUN CONDUITS SHALL BE 3/4"C, MAX OF (3) BRANCH CIRCUITS PER CONDUIT.
- INCREASE HOME RUN CONDUIT SIZE TO 1"C FOR (4) BRANCH CIRCUITS OR MORE.
- (**) DENOTES SPECIAL DEVICE/NAMEPLATE REQUIREMENTS.

NOTE: THE INTENT OF THE DRAWINGS IS TO SHOW FIXTURE / DEVICE LOCATIONS AND PANEL DESIGNATIONS. ALL BRANCH CIRCUIT WIRING, MEETING THE CRITERIA NOTED ABOVE, WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. LIGHTING AND POWER PLANS SHOW AN ABOVE CEILING JUNCTION BOX / HOME RUN WITH CIRCUIT NUMBERS BY FIXTURES / DEVICES. PROVIDE ALL BRANCH CIRCUITING AS REQUIRED FOR A COMPLETE INSTALLATION. DOCUMENT ALL BRANCH CIRCUITING ON AS-BUILT DRAWINGS ACCURATELY REFLECTING THE INSTALLATION.

SINGLE LINE DIAGRAM



SINGLE LINE DIAGRAM NOTES

A. ALL CONDUCTORS SHALL BE COPPER WITH TYPE [THHN/THWN] INSULATION UNLESS OTHERWISE NOTED.

B. ALL SWITCHES, CIRCUIT BREAKERS AND OTHER EQUIPMENT, AS SPECIFIED, SHALL HAVE TERMINATION PROVISIONS LISTED AND IDENTIFIED FOR USE WITH 75 DEG. CONDUCTORS, AND ALL FEEDER CONDUCTORS, AND CONDUITS, ARE SIZE BASED ON USE OF 75 DEG. C COPPER WIRES TYPE THWN/THHN.

C. DESIGN SHOWN IS BASED ON SQUARE D PANEL PRODUCT AND EATON UPS. ENGINEER-APPROVED EQUAL ALTERNATE PRODUCT WILL BE ACCEPTABLE.

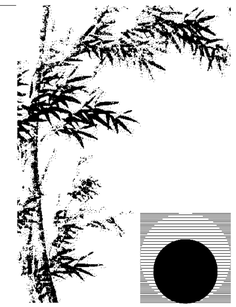
D. ALL EQUIPMENT SHALL HAVE AN APPROVED TESTING LABORATORY LABEL ATTACHED [UL, CSA, ETC.] (CEC 110-2).

E. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SUPPLYING SWITCHGEAR SIZED TO FIT IN THE AVAILABLE SPACE IN THE ELECTRIC ROOM. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONAL INFORMATION NOT SHOWN ON THE ELECTRICAL PLANS. CONTRACTOR SHALL SUBMIT A 1/4" SCALE DRAWING OF ALL ELECTRICAL EQUIPMENT IF SUBSTITUTING PRODUCTS.

F. PER CALIFORNIA TITLE 24 SECTION 130.5, WIRING PROVISIONS HAVE BEEN MADE FOR DISAGGREGATION OF THE ELECTRICAL CIRCUITS, THE OPTIONAL METERING HAS NOT BEEN PROVIDED FOR THIS PROJECT.

G. REFER TO PANEL SCHEDULES FOR INDIVIDUAL BRANCH CIRCUIT VOLTAGE DROP AND/OR SINGLE LINE DIAGRAM FOR FEEDER VOLTAGE DROP CALCULATIONS.

H. BRANCH CIRCUIT/FEEDER DISTANCE IS SHOWN FOR REFERENCE ONLY AS THE BASIS OF VOLTAGE DROP CALCULATIONS. CONDUCTOR DISTANCE AS INDICATED SHALL NOT BE USED FOR BIDDING/CONSTRUCTION PURPOSES. SHOULD THE FEEDER DISTANCE EXCEED THE LENGTH NOTED PER INSTALLATION CONDITIONS, NOTIFY THE ENGINEER OF RECORD. TYPICAL.



Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3629
cad@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

5300 West Tulare Avenue
Visalia, California

Sheet Description:

Legend, Abbreviations, Single Line Diagram

Date:	8/8/2020
Project:	19-700
Scale:	NOTED
Sheet No.:	E0.2

Of x Sheets

BUS RATING: 200 120/208V, 3PH, 4W
MAIN: 200 MAIN BREAKER
SPACES: 54 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

(N) PANEL PU

SURFACE MOUNT, NEMA 1
LOCATION: ELECT/COMM ROOM 05
WITH EQUIPMENT GND BUS

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
1.98%	80		R	1	SHERIFF SUPERVISOR WORKSTATION	20	1	12	900			12	1	20	FIRE SUPERVISOR WORKSTATION	2	R		40	**0.99%**
1.98%	80		R	3	SHERIFF SUPERVISOR WORKSTATION	20	1	12	900	900		12	1	20	FIRE SUPERVISOR WORKSTATION	4	R		40	**0.99%**
0.74%	30		R	5	SHERIFF WORK STATION 1	20	1	12		900		12	1	20	FIRE WORKSTATION 1	6	R		50	**1.24%**
0.74%	30		R	7	SHERIFF WORK STATION 1	20	1	12	900	900		12	1	20	FIRE WORKSTATION 1	8	R		50	**1.24%**
0.99%	40		R	9	SHERIFF WORK STATION 2	20	1	12		900		12	1	20	FIRE WORKSTATION 2	10	R		60	**1.49%**
0.99%	40		R	11	SHERIFF WORK STATION 2	20	1	12	900	900		12	1	20	FIRE WORKSTATION 2	12	R		60	**1.49%**
1.11%	45		R	13	SHERIFF WORK STATION 3	20	1	12	900			12	1	20	FIRE WORKSTATION 3	14	R		65	**1.61%**
1.11%	45		R	15	SHERIFF WORK STATION 3	20	1	12	900	900		12	1	20	FIRE WORKSTATION 3	16	R		65	**1.61%**
1.36%	55		R	17	SHERIFF WORK STATION 4	20	1	12		900		12	1	20	FIRE WORKSTATION 4	18	R		50	**1.24%**
1.36%	55		R	19	SHERIFF WORK STATION 4	20	1	12	900	900		12	1	20	FIRE WORKSTATION 4	20	R		50	**1.24%**
1.36%	55		R	21	SHERIFF WORK STATION 5	20	1	12		900		12	1	20	FIRE WORKSTATION 5	22	R		60	**1.49%**
1.36%	55		R	23	SHERIFF WORK STATION 5	20	1	12		900		12	1	20	FIRE WORKSTATION 5	24	R		60	**1.49%**
0.74%	30		R	25	SHERIFF WORK STATION 6	20	1	12	900	900		12	1	20	FIRE WORKSTATION 6	26	R		65	**1.61%**
0.74%	30		R	27	SHERIFF WORK STATION 6	20	1	12		900		12	1	20	FIRE WORKSTATION 6	28	R		65	**1.61%**
0.99%	40		R	29	SHERIFF WORK STATION 7	20	1	12		900		12	1	20	SHERIFF WORK STATION 8	30	R		45	**1.11%**
0.99%	40		R	31	SHERIFF WORK STATION 7	20	1	12	900	900		12	1	20	SHERIFF WORK STATION 8	32	R		45	**1.11%**
1.36%	55		R	33	SHERIFF WORK STATION 9	20	1	12		900		12	1	20	SHERIFF WORK STATION 10	34	R		55	**1.36%**
1.36%	55		R	35	SHERIFF WORK STATION 9	20	1	12		900		12	1	20	SHERIFF WORK STATION 10	36	R		55	**1.36%**
1.49%	60		R	37	SHERIFF WORK STATION 11	20	1	12	900	900		12	1	20	SHERIFF DISPATCH TV	38	R		30	**0.74%**
1.49%	60		R	39	SHERIFF WORK STATION 11	20	1	12		900		10	1	20	FIRE DISPATCH TV	40	R		80	**2.07%**
				41	SPACE										SPACE	42				
				43	SPACE										SPACE	44				
				45	SPACE										SPACE	46				
				47	SPACE										SPACE	48				
				49	SPACE										SPACE	50				
				51	SPACE										SPACE	52				
				53	SPACE										SPACE	54				
					CON:				12600	13200	10800									
					25%:				0	0	0									
					SUB:				7500	8500	7000									
					TOT:				20100	21700	17800									
					AMPS				168	181	148									

(2)60A 3P SUBFEED BREAKER FOR PANELS "PIDF" & "PRR" ---->

VOLTAGE DROP AT PANEL = 2.14%
BRANCH CIRCUIT VD TO BE <= 2.86%
TO MAINTAIN LESS THAN 5% VD TOTAL

LOAD (VA) LOAD TYPE LEGEND

36600	R	RECEPTACLE
0	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

BUS RATING: 400 120/208V, 3PH, 4W
MAIN: 400 MAIN LUG ONLY
SPACES: 72 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

(N) PANEL PD

SURFACE MOUNT, NEMA 1
LOCATION: ELECT/COMM ROOM 05
WITH EQUIPMENT GND BUS

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
0.14%	5		L	1	LIGHTING INVERTER	20	1	12	1000			10	2	20	FIRE DISPTACH WATER HEATER, WH-1	2	M		25	**0.52%**
									2080											
1.06%	50		L	3	SHERIFF DISPATCH, SUPERVISOR OFFICE	20	1	12		771		10			"	4	M		25	**0.52%**
										2080										
0.66%	55		L	5	FIRE DISPATCH, SUPERVISOR OFFICE	20	1	12			438	10	2	20	SHERIFF DISPATCH WATER HEATER, WH-2	6	M		65	**1.34%**
											2080									
1.14%	75		L	7	HALL, STAFF, QUITET, STORAGE	20	1	12	553			10			"	8	M		65	**1.34%**
									2080											
1.78%	45		R	9	CONVENIENCE OUTLETS - SHERIFF DISPATCH	20	1	12		1440		10	2	20	BREAK ROOM NORTH WATER HEATER, WH-3	10	M		75	**1.55%**
										2080										
3.30%	80		R	11	SHERIFF DISPATCH - PRINTER	20	1	12			1500	10			"	12	M		75	**1.55%**
											2080									
2.60%	75		R	13	CONVENIENCE OUTLETS - HALL, STAFF, STORAGE, QUIT ROOM	20	1	12	1260			10	2	20	BREAK ROOM SOUTH WATER HEATER, WH-4	14	M		95	**1.96%**
									2080											
2.27%	55		N	15	CONVENIENCE OUTLETS - FIRE DISPATCH	20	1	12		1500		10			"	16	M		95	**1.96%**
										2080										
2.48%	60		N	17	FIRE DISPATCH - PRINTER	20	1	12			1500	8	2	35	DS-1 UNIT	18	M	2	50	**1.08%**
											3453									
2.48%	60		N	19	SHERIFF DISPATCH COUNTER	20	1	12	1500			8			"	20	M		50	**1.08%**
									3453											
2.48%	60		N	21	SHERIFF DISPATCH COUNTER	20	1	12		1500		10	2	20	DS-2 UNIT	22	M		100	**1.81%**
										1820										
1.24%	30		N	23	FIRE DISPATCH COUNTER	20	1	12			1500	10			"	24	M		100	**1.81%**
											1820									
1.24%	30		N	25	FIRE DISPTACH COUNTER	20	1	12	1500			12	1	20	SMOKE DUCT DETECTORS	26	M		100	**0.28%**
									100											
0.89%	90	1	R	27	STAFF ROOM COUNTROLLED RECEPTACLE	20	1	12		360		12	1	20	VAV UNITS	28	M	2	55	**0.91%**
										600										
2.23%	75		R	29	SHERIFF DISPATCH SUPERVISOR OFFICE	20	1	12			1080	10	2	20	DS-3 UNIT (RADIO ROOM 2ND FLOOR)	30	M	2	105	**2.19%**
											2100									
1.19%	40		N	31	FIRE DISPATCH, SUPERVISOR OFFICE	20	1	12	1080			10			"	32	M		105	**2.19%**
									2100											
2.33%	90		N	33	STAFF ROOM NORTH COUNTER	20	1	10		1500			1	20	SPARE	34				
0.03%	1		N	35	STAFF ROOM NORTH COUNTER	20	1	10			1500	12	1	20	ELECTRICAL ROOM	36	R		20	**0.20%**
											360									
2.33%	90		N	37	STAFF ROOM SOUTH COUNTER	20	1	10	1500			3/0	3	200	60KW UPS	38			25	**0.27%**
									20100											
2.33%	90		N	39	STAFF ROOM SOUTH COUNTER	20	1	10		1500		3/0			"	40			25	**0.33%**
										21700										
2.97%	90		N	41	STAFF ROOM REFRIGERATORS	20	1	12			1200	3/0			"	42			25	**0.27%**
											17800									
1.86%	75		R	43	SHERIFF SUPERVISOR WORKSTATION	20	1	12	900			12	1	20	FIRE SUPERVISOR WORKSTATION	44	R		40	**0.99%**
									900											
0.99%	40		R	45	SHERIFF WORKSTATION 1	20	1	12		900		12	1	20	FIRE WORKSTATION 1	46	R		45	**1.11%**
										900										
0.99%	40		R	47	SHERIFF WORKSTATION 2	20	1	12			900	12	1	20	FIRE WORKSTATION 2	48	R		45	**1.11%**
											900									
1.24%	50		R	49	SHERIFF WORKSTATION 3	20	1	12	900			12	1	20	FIRE WORKSTATION 3	50	R		60	**1.49%**
									900											
1.24%	50		R	51	SHERIFF WORKSTATION 4	20	1	12		900		12	1	20	FIRE WORKSTATION 4	52	R		60	**1.49%**
										900										
1.61%	65		R	53	SHERIFF WORKSTATION 5	20	1	12			900	12	1	20	FIRE WORKSTATION 5	54	R		60	**1.49%**
											900									
0.62%	25		R	55	SHERIFF WORKSTATION 6	20	1	12	900			12	1	20	FIRE WORKSTATION 6	56	R		70	**1.73%**
									900											
0.62%	25		R	57	SHERIFF WORKSTATION 7	20	1	12		900		12	1	20	SHERIFF WORKSTATION 8	58	R		40	**0.99%**
										900										
0.99%	40		R	59	SHERIFF WORKSTATION 9	20	1	12			900	12	1	20	SHERIFF WORKSTATION 10	60	R		55	**1.36%**
											900									
1.36%	55		R	61	SHERIFF WORKSTATION 11	20	1	12	900						SPACE	62				
				63	SPACE										SPACE	64				
				65	SPACE										SPACE	66				
				67	SPACE										SPACE	68				
				69	SPACE										SPACE	70				
				71	SPACE										SPACE	72				
					CON:				46686	44331	43811									
					25%:				388	193	110									
					SUB:				0	0	0									
					TOT:				47074	44524	43921									
					AMPS				392	371	366									

PANEL NOTES:
1. PROVIDE GFCI BREAKER
2. PROVIDE SHUNT TRIP BREAKER

VOLTAGE DROP AT PANEL = 2.04%
BRANCH CIRCUIT VD TO BE <= 2.96%
TO MAINTAIN LESS THAN 5% VD TOTAL

LOAD (VA) LOAD TYPE LEGEND

23100	R	RECEPTACLE
2762	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
32086	M	MECHANICAL
0	K	KITCHEN APPLIANCE
17280	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

BUS RATING: 200 120/208V, 3PH, 4W
MAIN: MAIN LUG ONLY
SPACES: 18 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

(N) PANEL PIDF

SURFACE MOUNT, NEMA 1
LOCATION: 2ND FLOOR RADIO ROOM
WITH EQUIPMENT GND BUS

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
0.41%	15		N	1	DATA ROOM OUTLET	20	1	12	1000			12	1	20	DATA ROOM OUTLET	2	N		15	**0.41%**
									1000											
0.41%	15		N	3	DATA ROOM OUTLET	20	1	12		1000		12	1	20	DATA ROOM OUTLET	4	N		15	**0.41%**
										1000										
0.14%	5		N	5	DATA ROOM OUTLET	20	1	12			1000	12	1	20	DATA ROOM OUTLET	6	N		20	**0.55%**
											1000									
0.69%	25		N	7	DATA ROOM OUTLET	20	1	12	1000			12	1	20	DATA ROOM OUTLET	8	N		25	
0.69%	25		N	9	DATA ROOM OUTLET	20	1	12		1000		12	1	20	DATA ROOM OUTLET	10			25	**0.69%**
										1000										
				11	SPACE										SPACE	12				
				13	SPACE										SPACE	14				
				15	SPACE										SPACE	16				
				17	SPACE										SPACE	18				
					CON:				3000	4000	2000									
					25%				0	0	0									
					SUB:				0	0	0									
					TOT:				3000	4000	2000									
					AMPS				25	33	17									

VOLTAGE DROP AT PANEL = 2.92%
BRANCH CIRCUIT VD TO BE <= 2.08%
TO MAINTAIN LESS THAN 5% VD TOTAL

LOAD (VA) LOAD TYPE LEGEND

0	R	RECEPTACLE
0	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
8000	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

BUS RATING: 200 120/208V, 3PH, 4W
MAIN: MAIN LUG ONLY
SPACES: 18 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

(N) PANEL PRR

SURFACE MOUNT, NEMA 1
LOCATION: 2ND FLOOR RADIO ROOM
WITH EQUIPMENT GND BUS

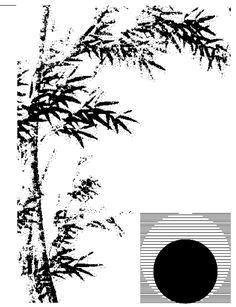
CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
0.55%	20		N	1	RADIO OUTLET	20	1	12	1000			12	1	20	RADIO OUTLET	2	N		20	**0.55%**
									1000											
0.69%	25		N	3	RADIO OUTLET	20	1	12		1000		12	1	20	RADIO OUTLET	4	N		30	**0.83%**
										1000										
1.29%	30		N	5	RADIO OUTLET	30	1	10			2500	10	1	30	RADIO OUTLET	6	N		30	**1.29%**
											2500									
				7	SPACE				2500			10	1	30	RADIO OUTLET	8	N		30	
1.29%	30		N	9	RADIO OUTLET	30	1	10		2500					SPACE	10				
				11	SPACE										SPACE	12				
				13	SPACE										SPACE	14				
				15	SPACE										SPACE	16				
				17	SPACE										SPACE	18				
					CON:				4500	4500	5000									
					25%				0	0	0									
					SUB:				0	0	0									
					TOT:				4500	4500	5000									
					AMPS				38	38	42									

VOLTAGE DROP AT PANEL = 2.84%
BRANCH CIRCUIT VD TO BE <= 2.16%
TO MAINTAIN LESS THAN 5% VD TOTAL

LOAD (VA) LOAD TYPE LEGEND

0	R	RECEPTACLE
0	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
11500	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

PANELBOARDS TO BE MANUFACTURERED TO ACCEPT FUTURE BRANCH CIRCUITING POWER MONITORING (SCHNIEIDER ELECTRIC #BCPM) IN ORDER TO COMPLY TO 2016 CEC SECTION 130.5(B).



Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:
thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

5300 West Tulare Avenue
Visalia, California

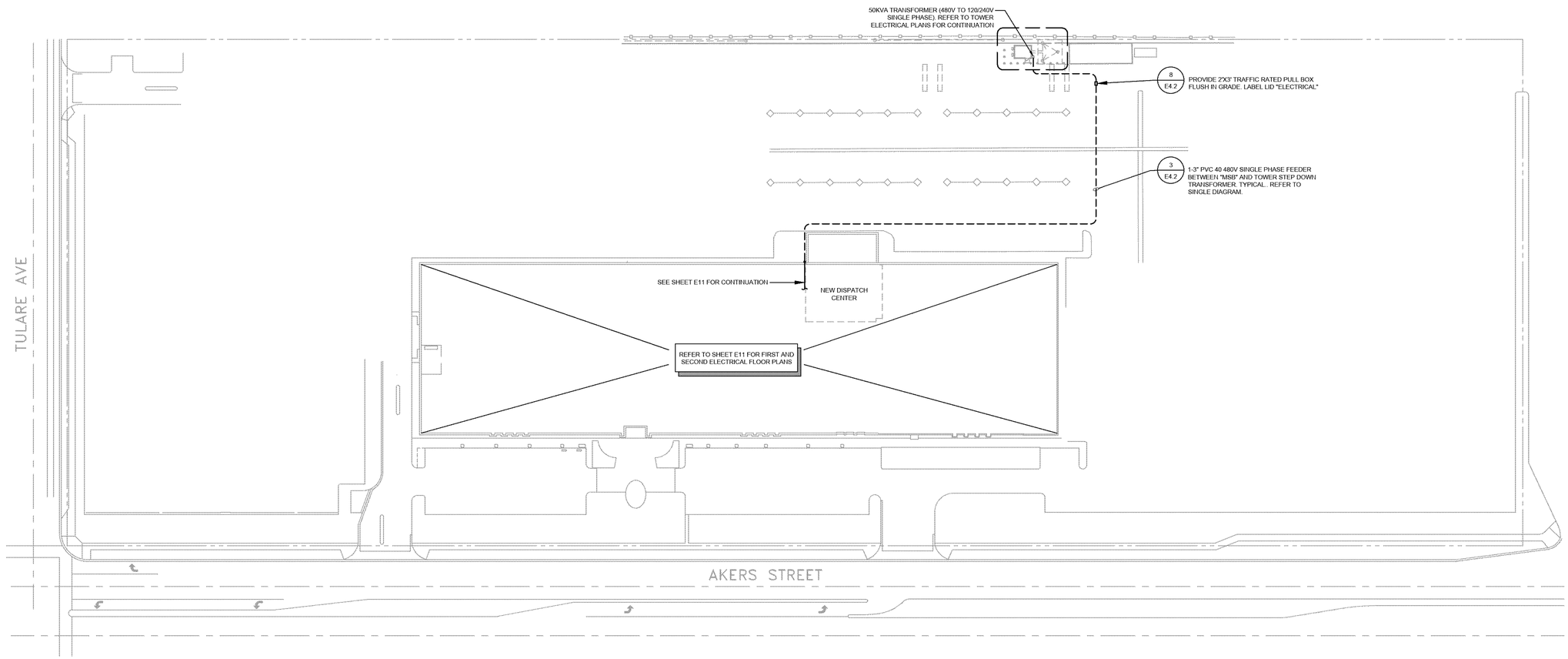
Sheet Description:

Panel Schedule

Date: 8/8/2020
Project: 19-700
Scale: NOTED
Sheet No.:

E0.3

Of x Sheets



ELECTRICAL SITE PLAN

SCALE: 1" = 50'-0"

NORTH

NOTE: REFER TO SHEET SD1 AND SD2 FOR ADDITIONAL REQUIREMENTS

Chas Rhoads

Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. THOMA
ELECTRICAL
STATE OF CALIFORNIA

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

5300 West Tulare Avenue
Visalia, California

Sheet Description:

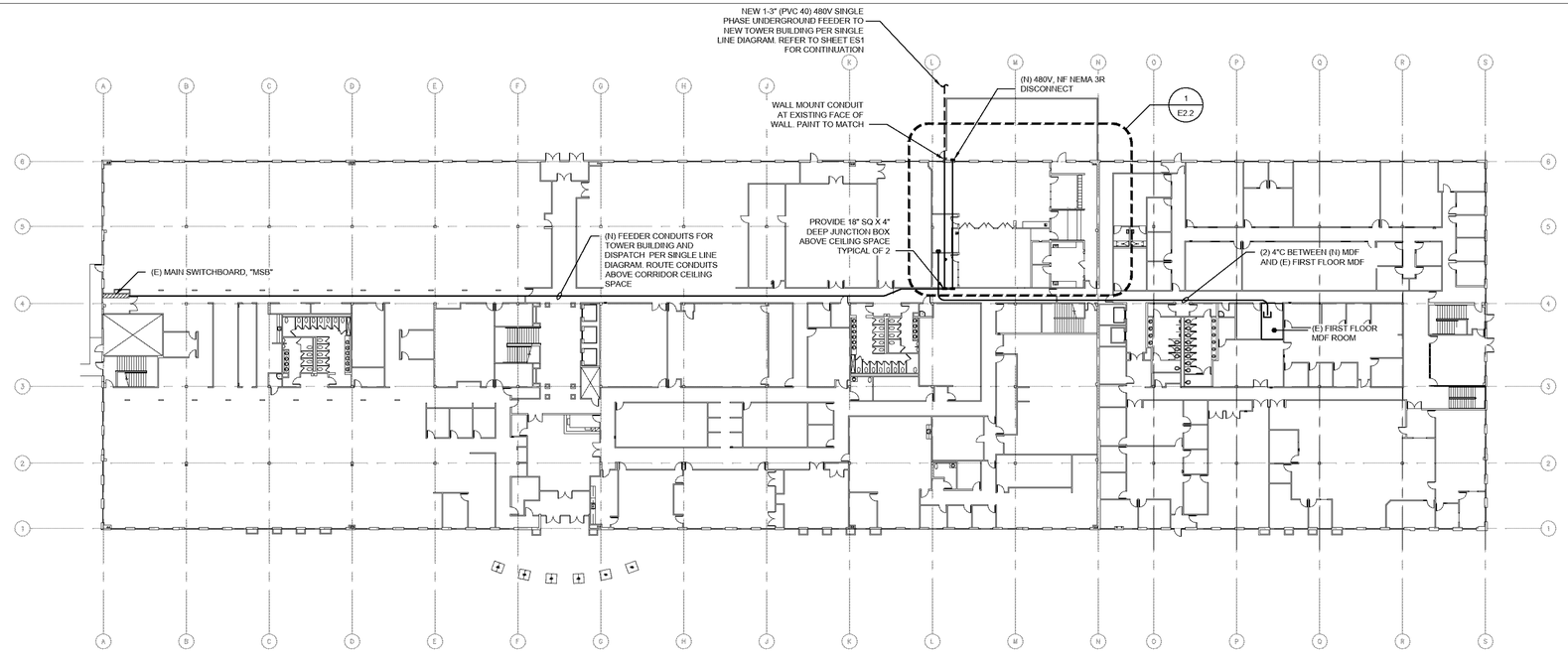
Electrical Site Plan

Date:	8/8/2020
Project:	19-700
Scale:	NOTED

Sheet No.:

ES.1

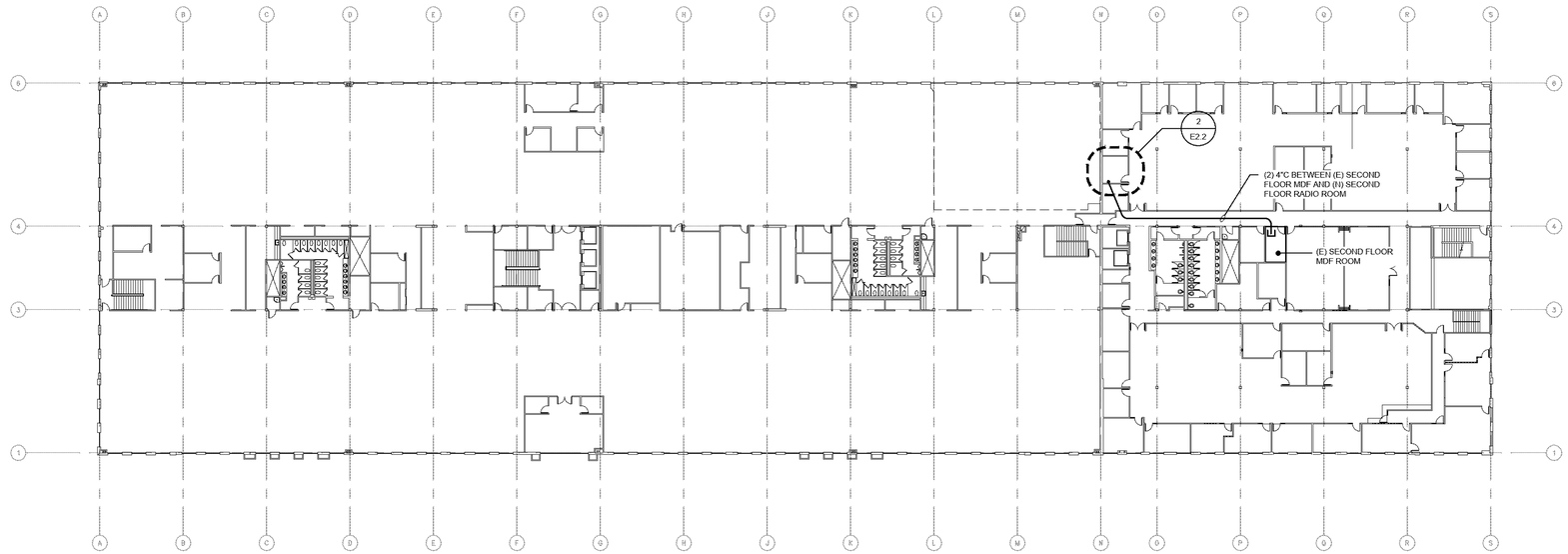
Of x Sheets



OVERALL ELECTRICAL FIRST FLOOR PLAN

NORTH

SCALE: 1" = 30'-0"



OVERALL ELECTRICAL SECOND FLOOR PLAN

NORTH

SCALE: 1" = 30'-0"

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

REGISTERED PROFESSIONAL ENGINEER WILLIAM A. THOMA ELECTRICAL STATE OF CALIFORNIA

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

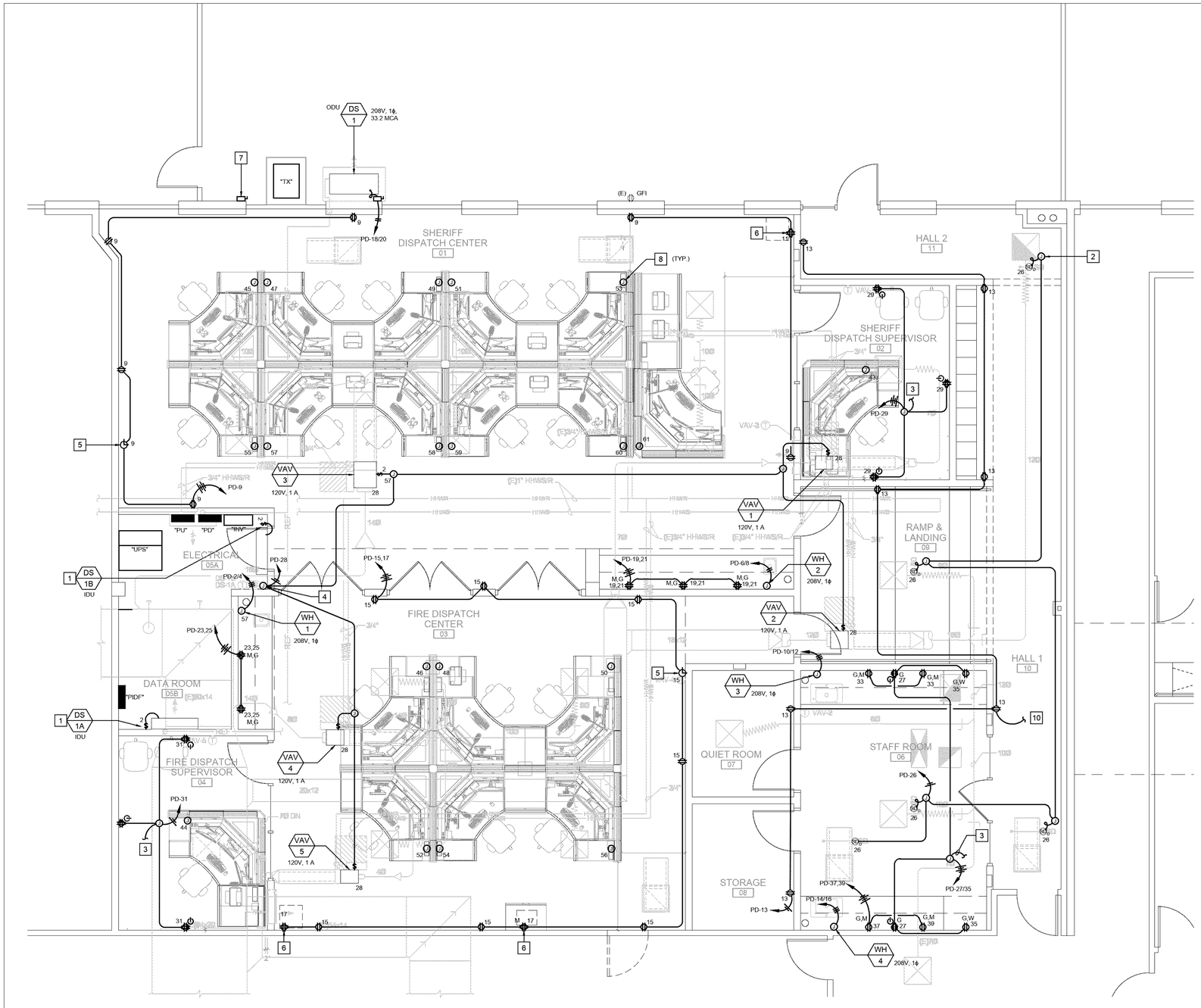
5300 West Tulare Avenue
Visalia, California

Sheet Description:

Overall Electrical Floor Plans

Date:	8/8/2020
Project:	19-700
Scale:	NOTED
Sheet No.:	E1.1

Of x Sheets

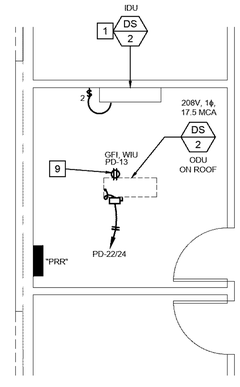


1 ENLARGED POWER, MECHANICAL, PLUMBING CONNECTION PLAN

SCALE: 1/4" - 1'-0"

REFERENCE NOTES

1. OUTDOOR UNIT POWERS INDOOR UNIT. PROVIDE LINE VOLTAGE WIRES BETWEEN INDOOR AND OUTDOOR UNIT.
2. PROVIDE 120V AND FIRE ALARM CONNECTION TO SMOKE DUCT DETECTOR PER MECHANICAL PLANS.
3. TO POWER SUPPLY FOR CONTROLLED RECEPTACLE. REFER TO LIGHTING CONTROL PLANS.
4. PROVIDE 120V CONNECTION TO TEMPERATURE SENSOR PER MECHANICAL PLANS.
5. CLOCK OUTLET. REFER TO ARCHITECT ELEVATION FOR EXACT LOCATION PRIOR TO ROUGH-IN.
6. CONNECTION TO PRINTER.
7. 480V, 3ϕ DISCONNECT WITH LOCKABLE HANDLE PER SINGLE LINE DIAGRAM.
8. VERIFY POINT OF CONNECTION AT WORK STATION. ROUTE CONDUITS UNDER RAISE FLOOR. HOMERUN BRANCH CIRCUIT TO PANEL "PD." THIS CONNECTION IS FOR (2) CONVENIENCE OUTLETS AND (1) CONSOLE POWER STRIP. COORDINATE WITH OWNER'S VENDOR.
9. MOUNT TO OUTLET TO OUTDOOR UNIT.
10. BRANCH CIRCUIT UP TO ROOF MOUNTED OUTLET.



2 ELECTRICAL ENLARGED PLAN AT RADIO ROOM [21]

SCALE: 1/4" - 1'-0"

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

REGISTERED PROFESSIONAL ENGINEER WILLIAM A. THOMA ELECTRICAL STATE OF CALIFORNIA

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

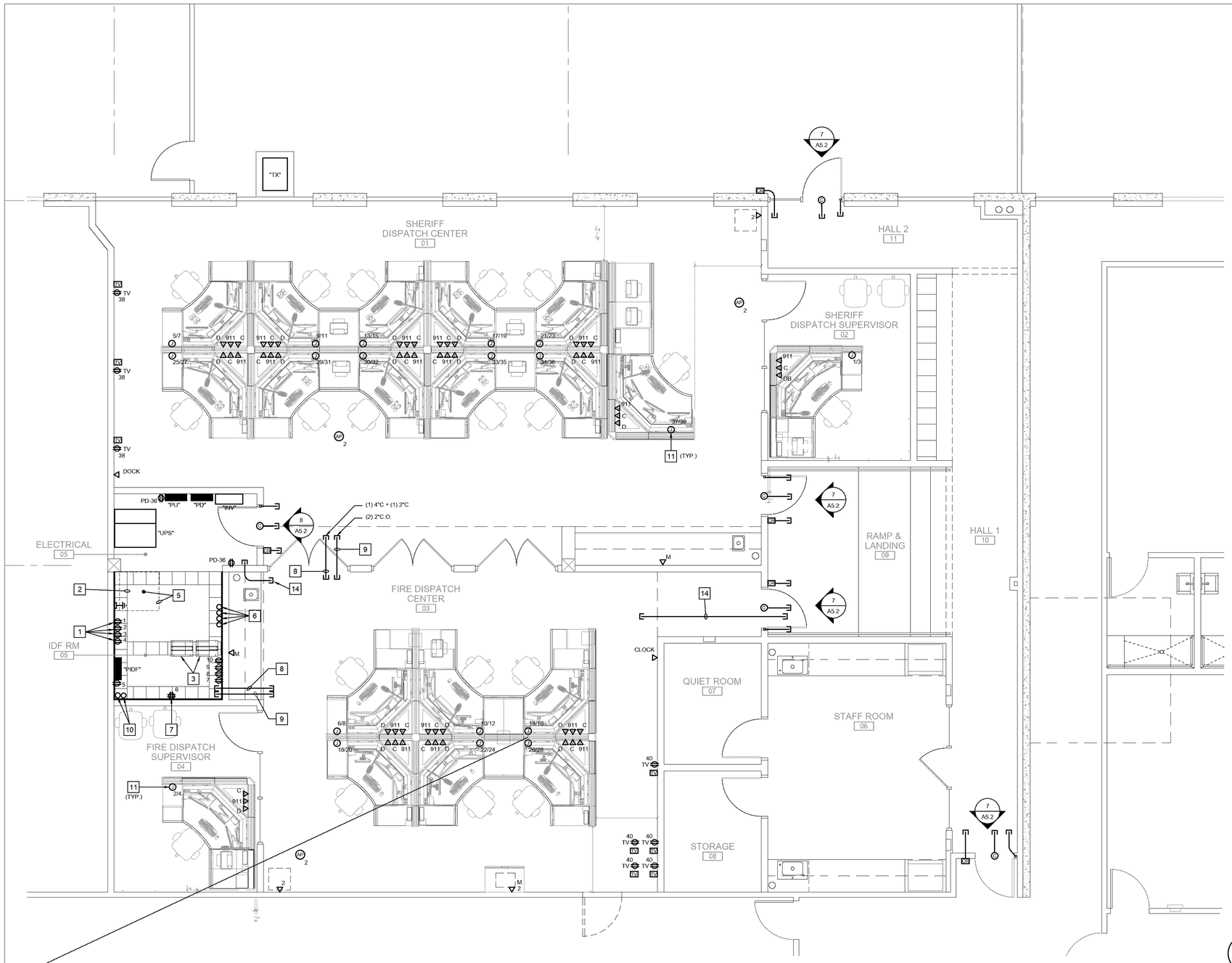
5300 West Tulare Avenue
Visalia, California

Sheet Description:

Enlarged Power, Mechanical, & Plumbing Connection Plan

Date:	8/8/2020
Project:	19-700
Scale:	NOTED
Sheet No.:	E2.1

Of x Sheets

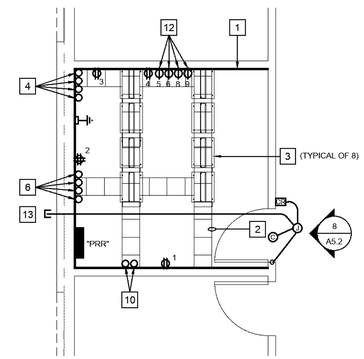


1 ENLARGED UPS POWER AND COMMUNICATION PLAN

SCALE: 1/4" - 1'-0"

REFERENCE NOTES

1. PROVIDE ¾" FIRE RATED BACKBOARD (PAINTED) PLYWOOD 8FT HEIGHT INSTALLED ON THREE WALL AS SHOWN.
2. 12" WIDE OVERHEAD LADDER TRY. INSTALLED/FURNISHED BY OWNER'S VENDOR.
3. STANDARD 7FT UNIVERSAL TWO POST RACK WITH VERTICAL WIRE MANAGEMENT. INSTALLED/FURNISHED BY OWNER'S VENDOR.
4. STUB (4) 4" (EMT) TO ROOF FOR COAXIAL FEED LINE PROVIDE WEATHERHEAD CAP.
5. AT&T VIPR CABINET BY AT&T.
6. (4) 4" (EMT) CONDUIT BETWEEN SECOND FLOOR RADIO ROOM AND IDF.
7. CONNECTION TO DOOR ACCESS CONTROL. REFER TO DETAILS 7 AND 8 ON SHEET
8. EMT CONDUIT SLEEVE(S) STUB TO RAISE FLOOR.
9. EMT CONDUIT SLEEVES UP TO ACCESSIBLE CEILING SPACE.
10. (2) 4" (EMT) TO SECOND FLOOR DATA ROOM.
11. VERIFY POINT OF CONNECTION AT EACH WORK STATION. PROVIDE (2) DEDICATED CIRCUITS EACH FOR CUSTOMER EQUIPMENT (5) POWER STRIPS. ROUTE BRANCH BELOW RAISE FLOOR. HOMERUN BRANCH CIRCUIT TO PANEL UP "PU."
12. PROVIDE NEMA 15-30R OUTLETS.
13. STUB 1" CONDUIT DOWN TO HALL 1 ROOM 10 ACCESSIBLE CEILING SPACE FOR DOOR ACCESS LOW VOLTAGE WIRING TO ROOM 21.
14. STUB 2" CONDUIT SLEEVES ABOVE ACCESSIBLE CEILING SPACE FOR DOOR ACCESS LOW VOLTAGE WIRING.



2 ELECTRICAL ENLARGED PLAN AT RADIO ROOM [21]

SCALE: 1/4" - 1'-0"

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:
REGISTERED PROFESSIONAL ENGINEER WILLIAM A. THOMA ELECTRICAL STATE OF CALIFORNIA
EXPIRES: 06/30/21
THOMA #19-8135

Consultant:
thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:
Contract Document

Revision Summary:

Project:
New Dispatch Center
Tulare County Sheriff & Fire
5300 West Tulare Avenue
Visalia, California

Sheet Description:
Enlarged UPS Power and Communication Plan

Date:	8/8/2020
Project:	19-700
Scale:	NOTED

Sheet No.:
E2.2
Of x Sheets

LIGHTING CONTROLS SEQUENCE OF OPERATIONS

SPACE	LIGHTING CONTROL SEQUENCE
HALLWAYS	• OCCUPANCY: LIGHTS AUTOMATICALLY TURN ONTO 100% WHEN THE USER ENTERS THE ROOM AND 15 MINUTES AFTER SPACE HAS BEEN VACATED, THE LIGHTS WILL AUTOMATICALLY GO TO 50%. • MANUAL DIMMER WILL ALLOW OCCUPANT TO CONTROL EACH ZONE. WALL STATION SHALL HAVE ONE BUTTON PER ZONE AS CALLED OUT ON PLAN. • EMERGENCY LIGHTING SHALL TURN ON WHEN NORMAL POWER SHUTS OFF OR UPON ACTIVATION OF EMERGENCY ALARM
QUIET AND STAFF ROOM	• OCCUPANCY: LIGHTS AUTOMATICALLY TURN ONTO 100% WHEN THE USER ENTERS THE ROOM AND 15 MINUTES AFTER THE ROOM HAS BEEN VACATED, THE LIGHTS WILL AUTOMATICALLY TURN OFF. • MANUAL DIMMER WILL ALLOW OCCUPANT TO CONTROL THE LIGHTS
OFFICES	• ALL OTHER LIGHTS MUST BE TURNED ON MANUALLY BY OCCUPANT • MANUAL DIMMER WILL ALLOW OCCUPANT TO CONTROL • LIGHTS WILL SHUT-OFF WHEN SPACES VACATED VIA OCCUPANCY SENSOR.
STORAGE	• OCCUPANCY: USER MANUALLY TURNS ON LIGHTS UPON ENTRY. 15 MINUTES AFTER THE ROOM HAS BEEN VACATED, THE LIGHTS WILL AUTOMATICALLY TURN OFF. • MANUAL DIMMER WILL ALLOW OCCUPANT TO CONTROL THE LIGHTS
DISPATCH ROOMS	• ALL OTHER LIGHTS MUST BE TURNED ON MANUALLY BY OCCUPANT • NUMBER OF ZONES OF LIGHTING CONTROL AS NOTED ON PLANS • MANUAL DIMMER WILL ALLOW OCCUPANT TO CONTROL EACH ZONE. • LIGHTS IN DAYLIGHT ZONES (WHERE NOTED ON PLANS) WILL AUTOMATICALLY DIM A MINIMUM OF 65% WHEN AVAILABLE DAYLIGHT IS 150% OF DESIGN ILLUMINATION. • LIGHTS WILL SHUT-OFF WHEN SPACES VACATED VIA OCCUPANCY SENSOR.

LUTRON SERVICE DESCRIPTION:

THE COUNTS OF SERVICES BELOW ARE TO BE INCLUDED AS PART OOF THE PROJECTS SCOPE OF WORK AND SPECIFIED INTO THE WRITTEN SPEC DOCUMENTS.

1. ON SITE PRE-WIRE VISIT (LSC-PREWIRE): ONSITE VISIT WITH ELECTRICAL CONTRACTOR TO DISCUSS LOGISTICAL CONSTRUCTION CONSIDERATION INCLUDING WIRING AND MOUNTING OF SYSTEM DEVICES, CONSTRUCTION SCHEDULE, AND LUTRON DOCUMENTATION.
2. TITLE 24 ACCEPTANCE TEST VISIT (LSC-SPV-DOC-T24): ACCEPTANCE TESTING BY A LUTRON CERTIFIED LIGHTING CONTROL ACCEPTANCE TEST TECHNICIAN (CLCATT) TO FULFILL THE REQUIRED TITLE 24 INTERIOR LIGHTING CONTROL TEST.
3. FACTORY ONSITE START UP FOR STANDALONE QS (LSC-OS-SU-QS)
4. FACTORY ONSITE START UP FOR VIVE SYSTEM (LSC-OS-SU-VIVE)

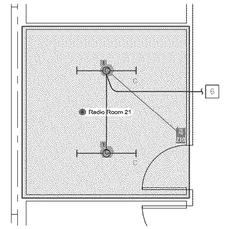
QUANTITY AND LOCATION OF ALL SENSORS ARE SHOWN FOR DESIGN INTENT. LIGHTING CONTROL MANUFACTURER SHALL SUBMIT COMPLETE SHOP DRAWING SHOWING PREFERRED LOCATION AND QUANTITY OF SENSORS REQUIRED FOR OPTIMUM SYSTEM PERFORMANCE.

PROVIDE OCCUPANCY SENSOR, WALL OR CEILING MOUNTED AS SHOWN ON THIS PLAN WITH TYPE AND MODEL THAT CAN ACCOMMODATE THE SPACE REQUIREMENT FOR THE ROOM OR AREA.

(EM) LIGHTS AND EXIT SIGNS SHOWN ARE CONNECTED TO EMERGENCY LIGHTING INVERTER. PROVIDE SEPARATE BRANCH CIRCUIT RACEWAY.

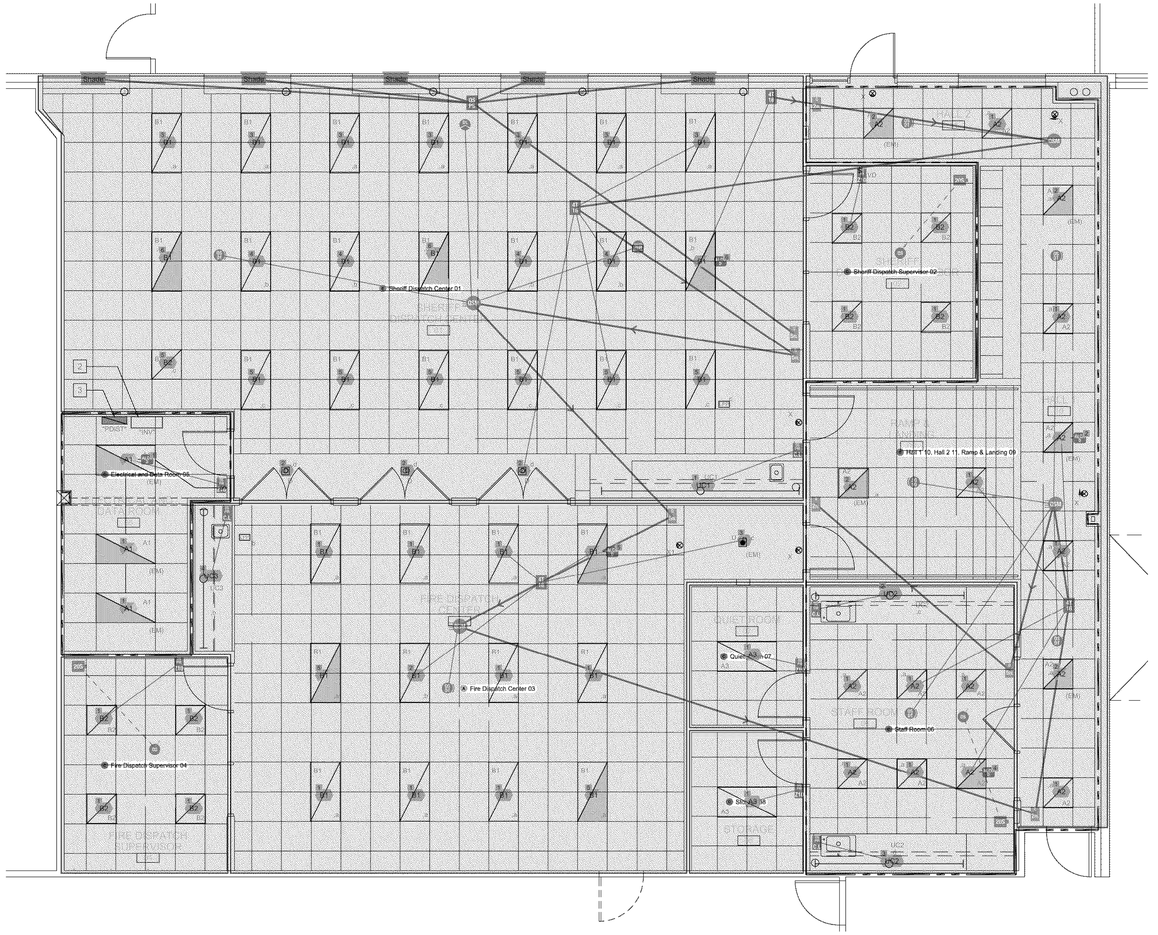
LUTRON LEGEND

- 4T 16 — LUTRON #QSN-4T16-S ENERGI SAVR NODE 0-10V AND SOFTSWITCH (MOUNT ABOVE ACCESSIBLE CEILING SPACE)
- QSM — LUTRON #QSMX-4W-C QS SENSOR MODULE WIRED INPUTS ONLY (CEILING MOUNT)
- MSCL OP153M — LUTRON #MSCL-OP153M-WH MAESTRO PASSIVE INFRARED SENSOR OCCUPANCY SENSOR WITH C.L. WALL DIMMER (600W INCADESCENT/HALOGEN, 150W CFL/LED)
- MS Z101 — LUTRON #MS-Z101-WH MAESTRO PASSIVE INFRARED SENSOR OCCUPANCY SENSOR WITH DIMMER (0-10V). (WALL MOUNT)
- 2B RLI — LUTRON #QSWS2-2BRLI-WH QS 2-BUTTON WITH RAISE/LOWER (WALL MOUNT)
- 5B RLI — LUTRON #QSWS2-BRLI-WH QS 5-BUTTONS WITH RAISE/LOWER (WALL MOUNT)
- DL — LUTRON #EC-DIR-WH CEILING MOUNT DAYLIGHT SENSOR WITH INFRARED RECEIVER
- OS DT — LUTRON #LOX-CDT-500-WH CEILING MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR 500SF
- OS — LUTRON #LRF2-OC42B-P RADIO PWR SAVR WIRELESS CEILING OCCUPANCY SENSOR
- ALCR D — LVS, INC. #LUT-ALCR-D UL924 EMERGENCY BYPASS RELAY FOR 0-10V FIXTURES. MOUNT ABOVE ACCESSIBLE CEILING SPACE.
- 20S — LUTRON #RMJS-20R-DV-B PWPAK RELAY MODULE TO CONTROL 20A RECEPTACLES. (MOUNT ABOVE ACCESSIBLE CEILING SPACE)
- QS PS — LUTRON #QSPS-10PNL SMART PANEL FOR SIVOIA QS WINDOW SHADES. (MOUNT ABOVE T-BAR CEILING)



2 LIGHTING ENLARGED PLAN AT RADIO ROOM [21]

SCALE: 1/4" - 1'-0"



1 ENLARGED LIGHTING CONTROL PLAN

SCALE: 1/4" - 1'-0"

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

REGISTERED PROFESSIONAL ENGINEER · WILLIAM A. THOMA · ELECTRICAL · STATE OF CALIFORNIA

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

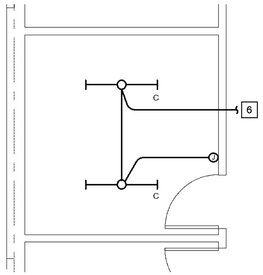
5300 West Tulare Avenue
Visalia, California

Sheet Description:

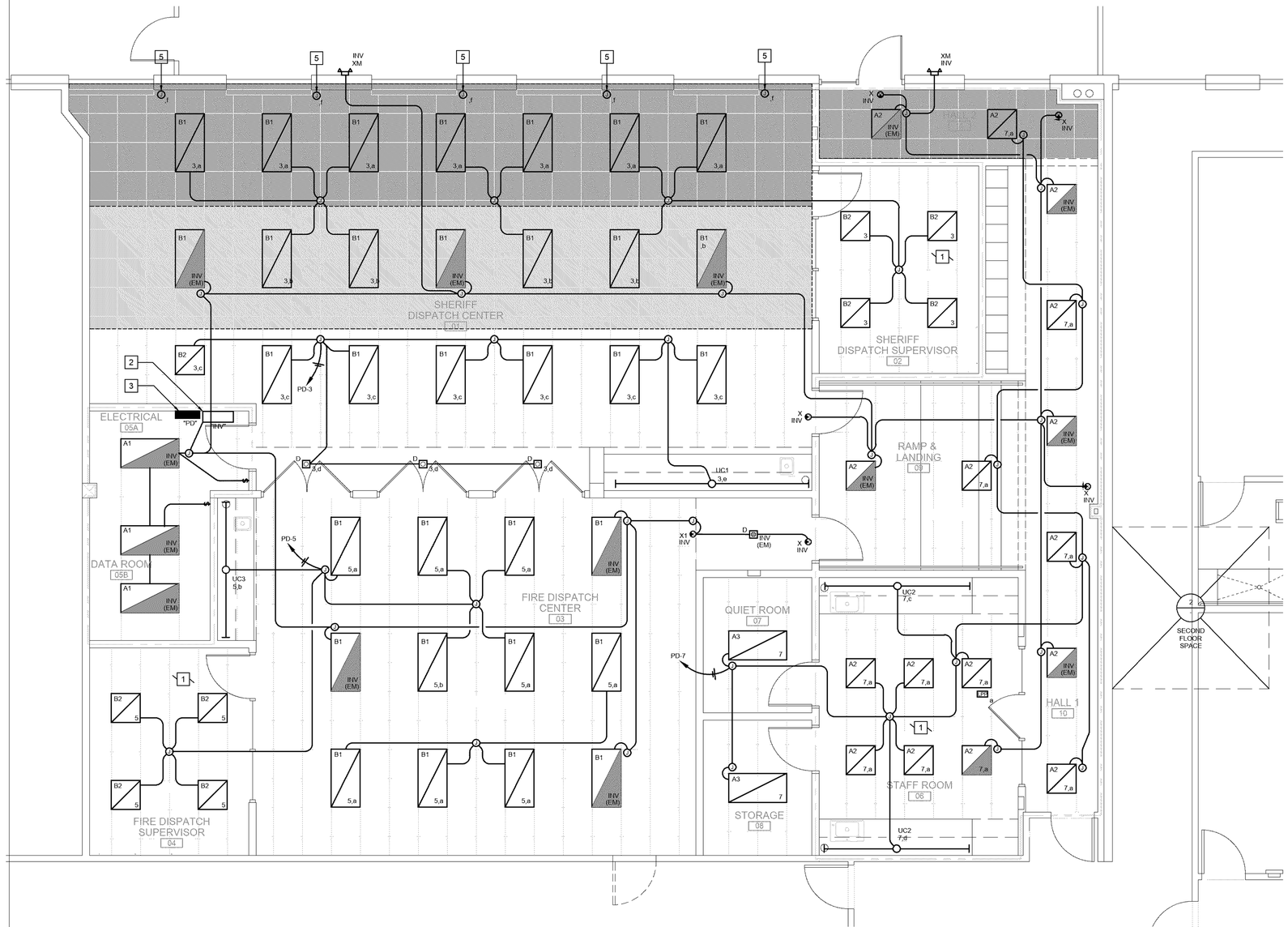
Enlarged Lighting Control Plan

Date:	8/8/2020
Project:	19-700
Scale:	NOTED
Sheet No.:	E2.3

Of x Sheets



LIGHTING
ENLARGED PLAN AT RADIO ROOM [21]
2 SCALE: 1/4" - 1'-0"



LIGHTING
ENLARGED LIGHTING PLAN
1 SCALE: 1/4" - 1'-0"

REFERENCE NOTES

1. REFER TO LIGHTING CONTROL PLANS FOR CONTROLLED RECEPTACLES CONTROLS FOR THIS ROOM.
2. 1000W LIGHTING INVERTER, INV. (LVS #CEPS-A-1000)
3. SUB-PANEL.
4. NOT USED.
5. PROVIDE LOW VOLTAGE CONNECTION TO WINDOW BLINDS PER MANUFACTURER INSTALLATION. REFER TO LIGHTING CONTROL PANELS FOR SWITCH CONTROL AND ADDITIONAL ACCESSORIES.
6. EXTEND EXISTING BRANCH CIRCUIT TO NEW LIGHTS.

DAYLIT ZONE LEGEND

PRIMARY DAYLIT ZONE

SECONDARY DAYLIT ZONE

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	VOLTAGE	MAX. VA.	LAMPING	MOUNTING	DESCRIPTION
A1	CREE INC	C TR B FP24 50L 40K WH	120	50	LED 40K	T-BAR CEILING	2'X4' LED FLAT PANEL 0-10V DIMMING
A2	CREE INC	C TR B FP22 40L 40K WH	120	40	LED 40K	T-BAR CEILING	2'X2' LED FLAT PANEL 0-10V DIMMING TO 10% WHITE FINISH
A3	LA LIGHTING	GHL320 40L 4L FSW PA1DRDM UNV 2 840	120	31.4	LED 40K	T-BAR CEILING	2'X2' LED FLAT PANEL 0-10V DIMMING TO 10%
B1	LA LIGHTING	GIC (2X4) 4 4L PDA DRDM UNV 2 840	120	28.5	LED 40K	T-BAR CEILING	2'X4' LED BASKET TROFFER 0-10V DIMMING TO 10% ALUMINIUM/SILVER FINISH
B2	LA LIGHTING	GIC (2X2) 4 2L PDA DRDM UNV 2 840	120	24.3	LED 40K	T-BAR CEILING	2'X2' LED BASKET TROFFER 0-10V DIMMING TO 10% ALUMINIUM/SILVER FINISH
C	CREE INC	C-STRIP A LIN4 43L 40K WH	120	38	LED 40K	STEP LIGHT	4' LINEAR STRIP LIGHT 0-10V DIMMING TO 10%
D	CREE INC	S DL6 15L 40K W/ S DL6T M SS C	120	15	LED 40K	SURFACE	6" SURFACE EXTERIOR DOWNLIGHT 0-10V DIMMING TO 10%
UC 1	CREATIVE SYSTEMS LIGHTING	(5)ECL-32" WH	120	120	LED 30K	UNDER CABINET	160" LED UNDERCABINET LIGHT
UC 2	CREATIVE SYSTEMS LIGHTING	(3)ECL-32" WH + (1)ECL-24	120	90	LED 30K	UNDER CABINET	120" LED UNDERCABINET LIGHT
UC 3	CREATIVE SYSTEMS LIGHTING	(3)ECL-32" WH + (1)ECL-16	120	84	LED 30K	UNDER CABINET	112" LED UNDERCABINET LIGHT
X	MOBERN LIGHTING	MEBELX W G W AC 1 2C	120	84	LED	CEILING	LED EDGE LIT EXIT SIGN WITH DUAL CIRCUIT OPTION. REFER TO CHEVRON DIRECTION ON PLANS
XM	COLE LIGHTING	L2600W 1 WHT FG 40K SC	120	9	LED	SURFACE	EMERGENCY LIGHTING.

LIGHTING FIXTURE SCHEDULE NOTES

A. EXACT LOCATIONS: BEFORE CONSTRUCTION, VERIFY WITH ARCHITECT EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHT FIXTURES. SEE ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS AS APPLICABLE.

B. FIXTURE BRANCH CIRCUIT THROUGH-WIRING: VERIFY AND COMPLY WITH FIXTURE MANUFACTURER RESTRICTIONS AS DETERMINED BY UL. & NEC.

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:
REGISTERED PROFESSIONAL ENGINEER WILLIAM A. THOMA ELECTRICAL STATE OF CALIFORNIA
EXPIRES: 06/30/21
THOMA #19-8135

Consultant:
thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3629
cad@thomaelec.com

Drawing Status:
Contract Document

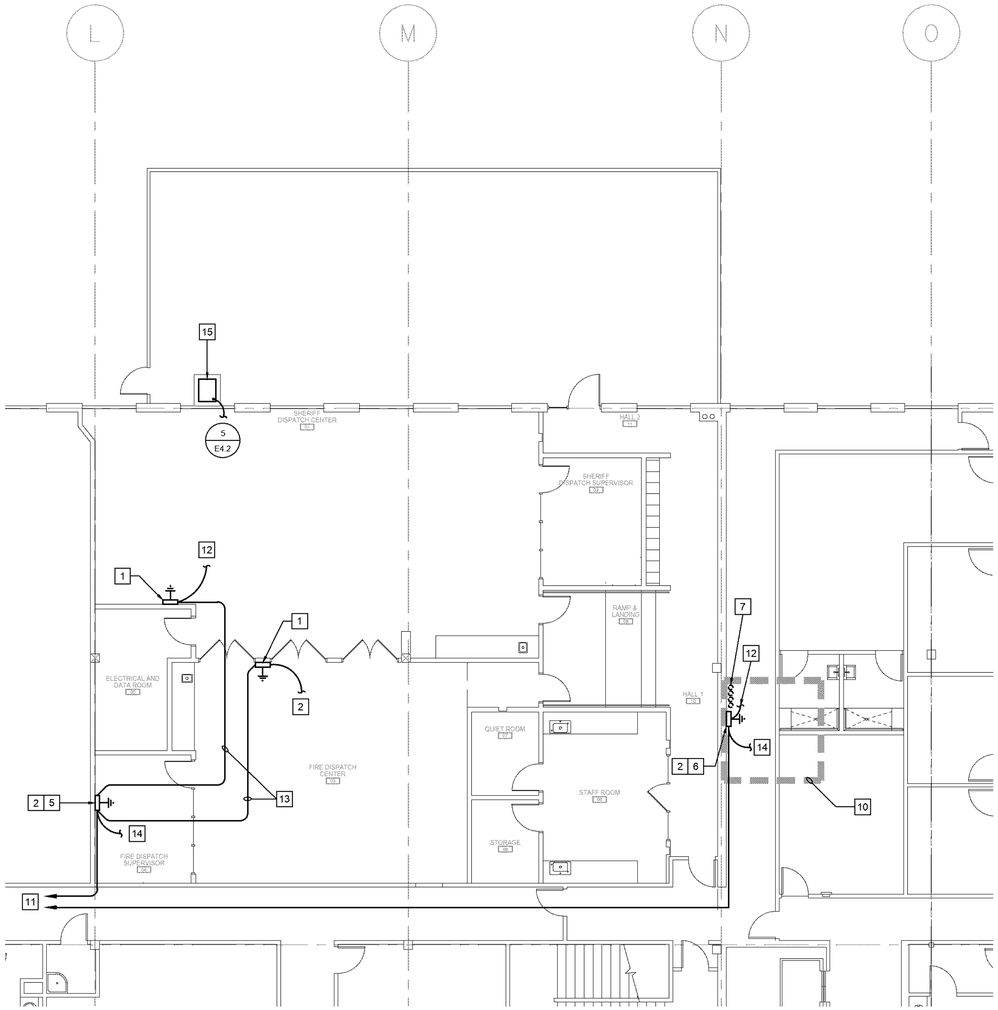
Revision Summary:

Project:
New Dispatch Center
Tulare County Sheriff & Fire
5300 West Tulare Avenue
Visalia, California

Sheet Description:
Enlarged Lighting Plan & Fixture Schedule

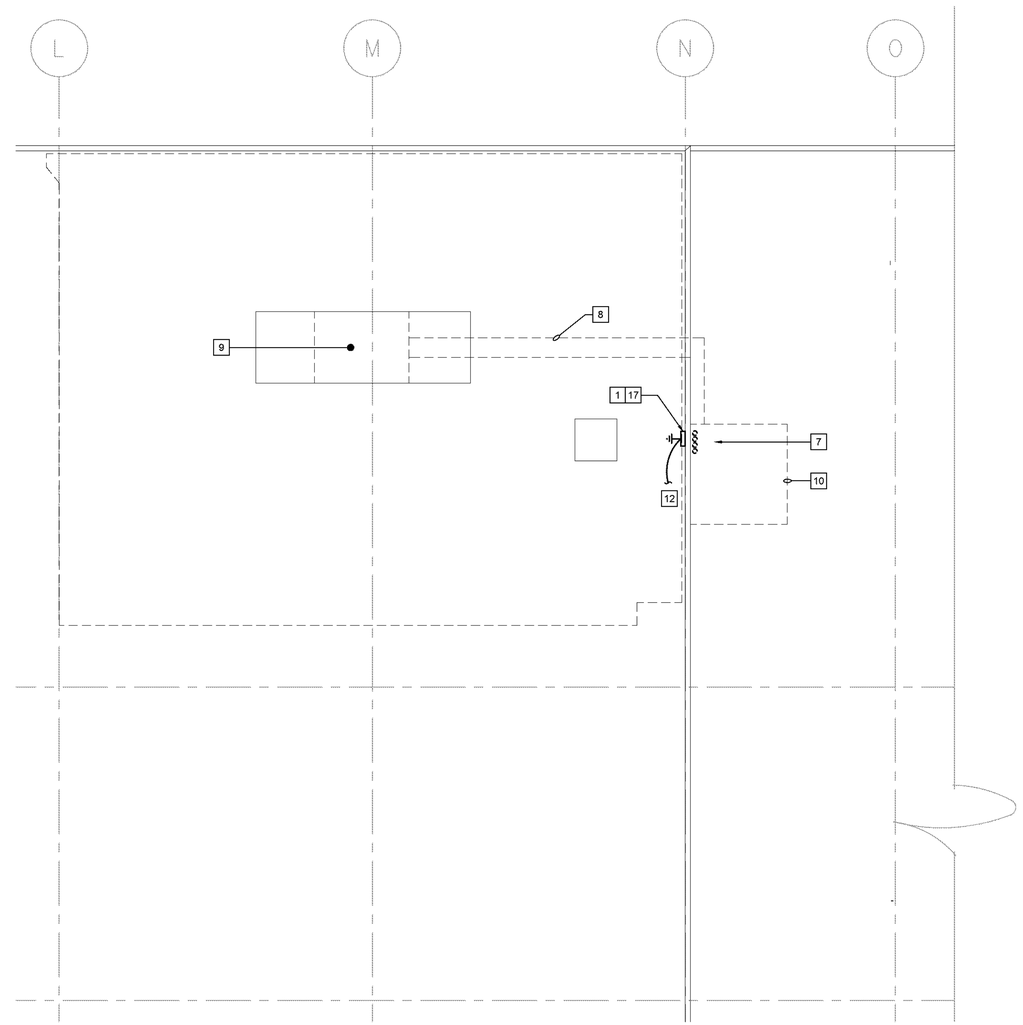
Date:	8/8/2020
Project:	19-700
Scale:	NOTED
Sheet No.:	E2.4

Of x Sheets



2 GROUND/BONDING PLAN

SCALE: 1/8" - 1'-0"



1 PARTIAL ELECTRICAL ROOF PLAN

SCALE: 1/8" - 1'-0"

LIGHTNING PROTECTION

PERFORMANCE SPECIFICATIONS

PART 1 - GENERAL

1.1 SCOPE

A. PROVIDE A COMPLETE LIGHTNING PROTECTION SYSTEM THAT CONFORMS TO UL780 FOR THE BUILDING. CONTRACTOR RESPONSIBLE FOR A COMPLETE/FUNCTIONAL SYSTEM, SHOW DRAWINGS WITH BUILDING OF MATERIALS, DETAILS, ETC

B. THE LIGHTNING PROTECTION SYSTEM SHALL CONSIST OF AIR TERMINALS, ROOF CONDUCTORS, DOWN CONDUCTORS, GROUND CONNECTIONS, AND GROUNDS, ELECTRICALLY INTERCONNECTED TO FORM THE SHORTEST DISTANCE TO GROUND. ALL CONDUCTORS ON THE STRUCTURES SHALL BE EXPOSED EXCEPT WHERE CONDUCTORS ARE IN PROTECTIVE SLEEVES EXPOSED ON THE OUTSIDE WALLS. SECONDARY CONDUCTORS SHALL INTERCONNECT WITH GROUNDED METALLIC PARTS WITHIN THE BUILDING. INTERCONNECTIONS MADE WITHIN SIDE-FLASH DISTANCES SHALL BE AT OR ABOVE THE LEVEL OF THE GROUNDED METALLIC PARTS. ITEMS TO BE INTERCONNECTED INCLUDE METALLIC PARTS SUCH AS METAL DOORS, WINDOWS, AND GUTTERS.

C. ITEMS TO BE GROUNDED OR BONDED AS OCCURRING;

1. STEEL FRAME BUILDINGS.
2. RAMPS.
3. TANKS AND TOWERS.
4. METAL STACKS.
5. NONMETALLIC STACKS.
6. POST TENSIONING SYSTEMS.
7. INTERCONNECTION OF METAL BODIES.
8. FENCES.
9. EXTERIOR OVERHEAD PIPE LINES.
10. SEPARATELY MOUNTED SHIELDING SYSTEMS "MAST TYPE".
11. SEPARATELY MOUNTED SHIELDING SYSTEMS "OVERHEAD GROUND-WIRE TYPE".
12. METAL ROOFS.
13. PARAPET (BACKSIDE) TIED TO STRUCTURAL STEEL REBAR AND SLAB.

1.2 REFERENCES

A. THE PUBLICATIONS REFERENCED BLOW ESTABLISH MINIMUM REQUIREMENTS FOR MATERIALS, SYSTEMS AND EXECUTION THAT MAY BE SPECIFIED IN THIS SECTION.
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
NFPA 780 INSTALLATION OF LIGHTNING PROTECTION SYSTEMS

1.3 SUBMITTALS

A. SHOP DRAWINGS.
B. CERTIFICATES OF COMPLIANCE.

PART 2 - PRODUCTS

2.1 PRODUCTS

A. NO COMBINATION OF MATERIALS SHALL BE USED THAT FORMS AN ELECTROLYTIC COUPLE OF SUCH NATURE THAT CORROSION IS ACCELERATED IN THE PRESENCE OF MOISTURE UNLESS MOISTURE IS PERMANENTLY EXCLUDED FROM THE JUNCTION OF SUCH METALS.
B. COPPER CONDUCTORS 375 POUNDS PER THOUSAND FEET AND MINIMUM SIZE WIRE NOT LESS THAN NO. 15 AWG.
C. COPPER CONDUCTOR RIBBON OR WEB MINIMUM SIZE OF NO. 1/0 AWG.
D. ALUMINUM STRIPS FOR MINIMUM SIZE OF NO. 12 AWG IN THICKNESS AND AT LEAST 1.5" WIDE.
E. GROUND RODS: MINIMUM SIZE OF ¾ INCH IN DIAMETER AND 10 FEET IN LENGTH, COPPER CLAD STEEL.
F. CONNECTORS: CLAMP-TYPE CONNECTORS FOR SPLICING CONDUCTORS.

☐ REFERENCE NOTES

1. WALL MOUNTED BUS BAR KIT INCLUDES 10"X1/4" COPPER GROUND BAR WITH TAPPED HOLES, INSULATORS, AND STAND-OFF BRACKETS.
2. WALL MOUNTED BUS BAR KIT INCLUDES 20"X1/4" COPPER GROUND BAR WITH TAPPED HOLES, INSULATORS, AND STAND-OFF BRACKETS.
3. PROVIDE #2 INSULATED GREEN JACKET BONDING CONNECTION TO RAISED FLOOR SUPPORT PEDESTAL. CONNECT TO PEDESTAL WITH UL LISTED GROUND CLAMP. GROUND ALL RAISE FLOOR PEDESTAL TOGETHER PER MANUFACTURER REQUIREMENTS.
4. REFER TO TIA/EIA J-STD-607-A FOR ADDITIONAL GROUNDING/BONDING REQUIREMENTS.
5. GROUND BAR AT IT ROOM.
6. GROUND BAR AT 2ND FLOOR RADIO ROOM.
7. LOCATION OF FOUR 4" CONDUIT WITH CABLE ACCESS WEATHERHEAD.
8. CABLE TRANSMISSION BRIDGE BY OTHERS.
9. PROSPECTIVE LOCATION OF 20 FT TOWER.
10. OUTLINE OF 2ND FLOOR RADIO ROOM.
11. 3/4"C (1) 3/O THWN CU GROUND TO MSB GROUND BAR.
12. 3/4"C (1) 3/O THWN GROUND BETWEEN ROOF GROUND BAR AND RADIO ROOM GROUND BAR.
13. 3/4"C (2) 3/O THWN GROUND BETWEEN IT GROUND BAR AND RAISED FLOOR GROUND BAR.
14. PROVIDE #6 CU INSULATED GREEN JACKET GROUND CABLE. GROUND ALL METAL EQUIPMENT IN ROOM (I.E. DATA RACK, LADDER TRY, CONDUITS, METAL EQUIPMENTS, ETC.) PROVIDE APPROVED COMPRESSION CONNECTOR, TYPICAL.
15. STEP DOWN TRANSFORMER PER SINGE LINE DIAGRAM.
16. PER CEC 250.50 GROUNDING ELECTRODES PRESENT AT STRUCTURE.
17. VERIFY EXACT LOCATION OF GROUND BAR AT ROOF WITH OWNER'S VENDOR.

Chas Rhoads

Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. THOMA
ELECTRICAL
STATE OF CALIFORNIA

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
csd@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

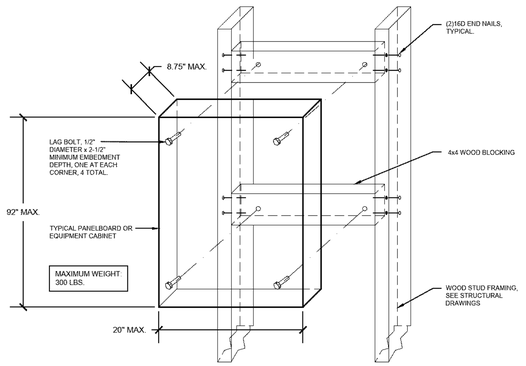
New Dispatch Center
Tulare County Sheriff & Fire

5300 West Tulare Avenue
Visalia, California

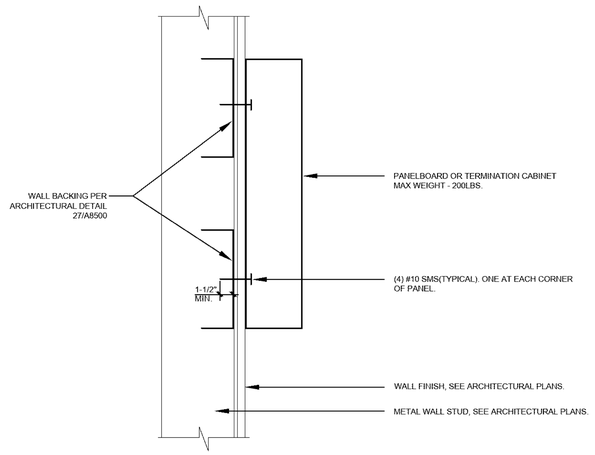
Sheet Description:

Partial Electrical Roof & Grounding/Bonding Plans

Date:	8/8/2020
Project:	19-700
Scale:	NOTED
Sheet No.:	E3.1
Of x Sheets	



7 TYPICAL SURFACE MTD. PANEL
SCALE: NTS



4 TYPICAL SURFACE MTD. PANEL/CABINET
SCALE: NTS

WARNING
ARC FLASH HAZARD

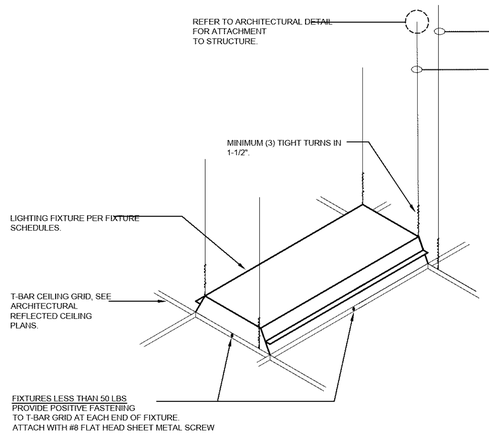
LINE SIDE of MAIN	FLASH PROTECTION BOUNDARY:	40 inches
	HAZARD RISK CATEGORY:	CLASS 2
	INCIDENT ENERGY RANGE:	4 - 8 cal/cm²
LINE SIDE of MAIN	FLASH PROTECTION BOUNDARY:	20 inches
	HAZARD RISK CATEGORY:	CLASS 0
	INCIDENT ENERGY RANGE:	0 - 2 cal/cm²

PSE TQS#: #####.# Date Issued: April 2004 Study Rev. :0

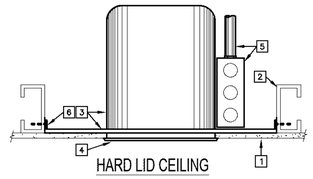
LOCATION: BUS NAME PROTECTIVE DEVICE: UPSTREAM DEVICE

NOTE:
IN ACCORDANCE WITH CEC 110.16. PROVIDE ARC FLASH PROTECTION WARNING LABELS ON EACH SWITCHBOARD, PANELBOARD, AND TRANSFORMER. LABELS SHALL BE PER ANSI Z535.4 GUIDELINES PER THE ABOVE EXAMPLE.

1 TYPICAL ARC FLASH SIGNAGE
SCALE:

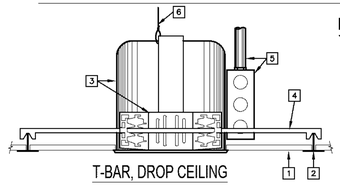


8 TYPICAL LAY-IN T-BAR FIXTURE FOR TROFFERS
SCALE: NTS



☐ REFERENCE NOTES

1. CEILING FINISH MATERIAL, SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR TYPE AND DEPTH.
2. PROVIDE STEEL FRAMING ABOVE AS REQUIRED TO MATCH CEILING FRAMING, SEE FRAMING PLANS FOR REQUIRED FRAMING.
3. RECESSED HOUSING WITH EXPANDABLE MOUNTING BARS.
4. FIXTURE TRIM
5. OUTLET BOX / BRANCH CIRCUIT
6. ATTACH EXPANDABLE MOUNTING BARS WITH #10 X 1" SMS, PROVIDE A MINIMUM OF (4) PER MOUNTING BAR.

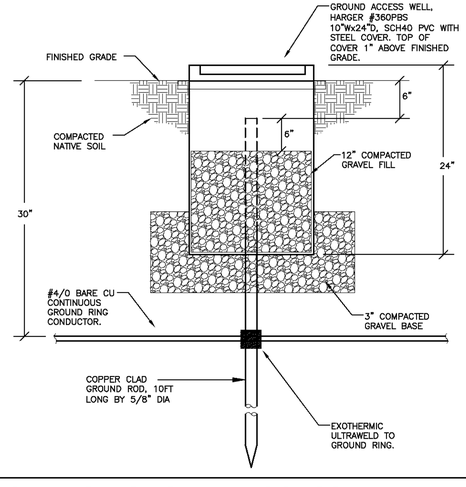


☐ REFERENCE NOTES

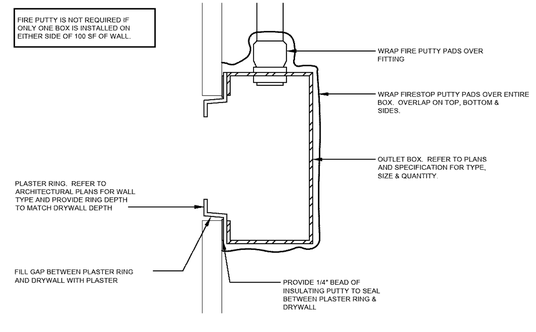
1. CEILING MATERIAL
2. T-BAR CEILING RUNNER.
3. RECESSED LIGHT HOUSING WITH QUICK MOUNTING BRACKET ON BOTH SIDES.
4. T-BAR FIXTURE HANGING BAR.
5. OUTLET BOX / BRANCH CIRCUIT
6. #12 LIGHT FIXTURE SUPPORT WIRE (MIN. 2 PER FIXTURE). CONNECT TO FIXTURE WITH MINIMUM OF 4 TIGHT TURNS AND TO STRUCTURE ABOVE PER ARCHITECTURAL ATTACHEMENT DETAILS, REFER TO 5/A-921.

5 RECESSED DOWNLIGHT MOUNTING
SCALE: NTS

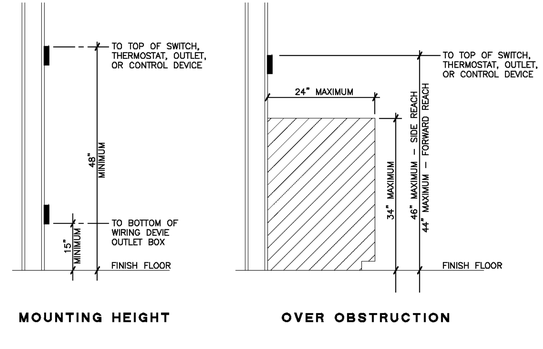
2 NOT USED



9 TYPICAL ROD/GROUND ACCESS WELL
SCALE: NTS



6 TYPICAL DEVICE INSTALLATION - RATED WALLS
SCALE: NTS



3 TYPICAL DEVICE ADA MOUNTING HEIGHTS
SCALE: NTS

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

5300 West Tulare Avenue
Visalia, California

Sheet Description:

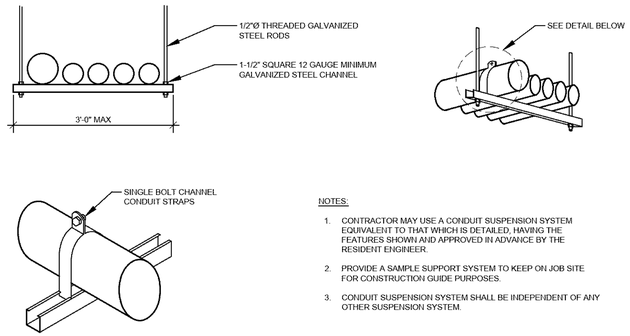
Electrical Details

Date:	8/8/2020
Project:	19-700
Scale:	NOTED

Sheet No.:

E4.1

Of x Sheets

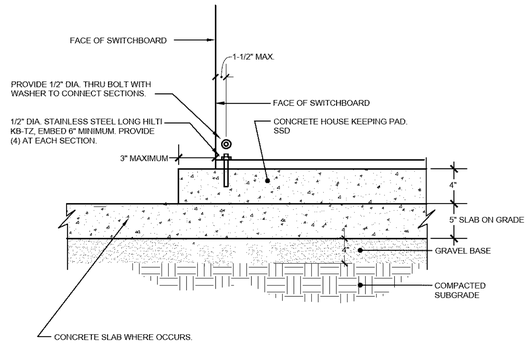


NOTES:

1. CONTRACTOR MAY USE A CONDUIT SUSPENSION SYSTEM EQUIVALENT TO THAT WHICH IS DETAILED, HAVING THE FEATURES SHOWN AND APPROVED IN ADVANCE BY THE RESIDENT ENGINEER.
2. PROVIDE A SAMPLE SUPPORT SYSTEM TO KEEP ON JOB SITE FOR CONSTRUCTION GUIDE PURPOSES.
3. CONDUIT SUSPENSION SYSTEM SHALL BE INDEPENDENT OF ANY OTHER SUSPENSION SYSTEM.

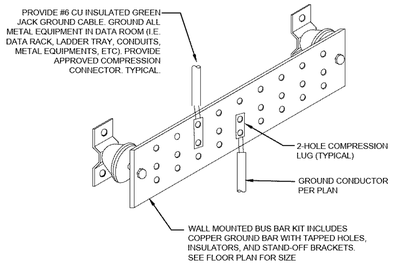
7 TYPICAL CONDUIT SUPPORT SYSTEM DETAIL

SCALE:



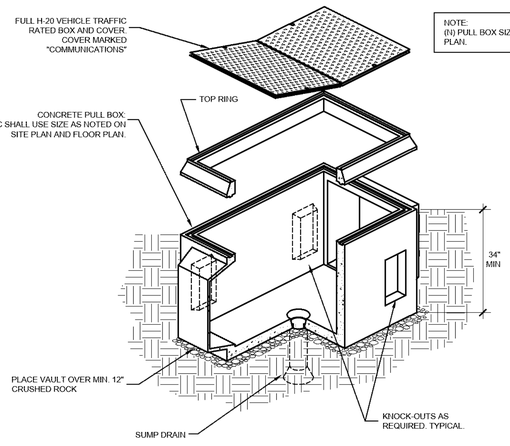
4 UPS MOUNTING DETAIL

SCALE: NTS



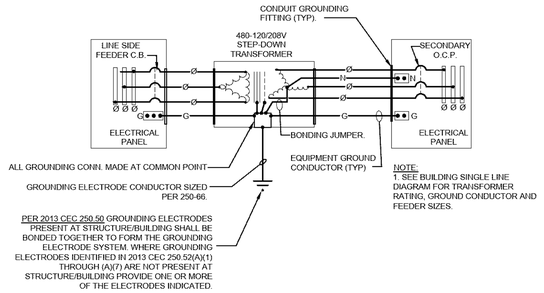
1 TYIPCAL GROUND BAR DETAIL

SCALE: NTS



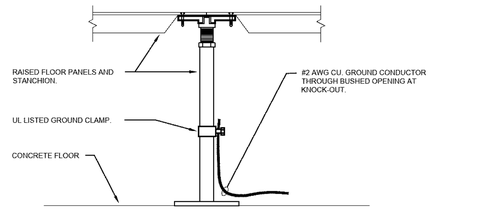
8 TRAFFIC RATED PULL BOX DETAIL

SCALE:



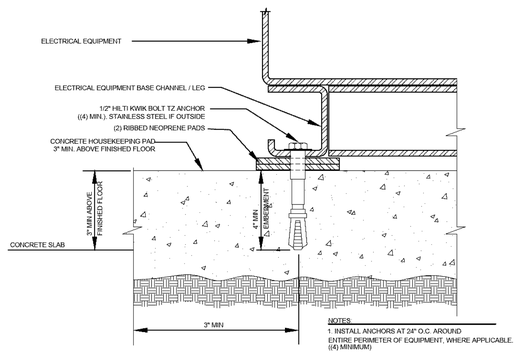
5 TRANSFORMER GROUNDING DETAIL

SCALE: NTS



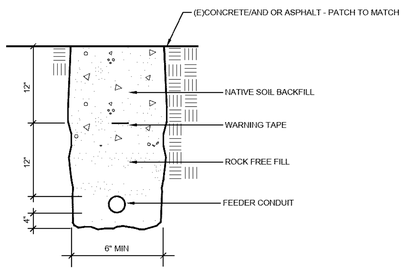
2 GROUND/BOND CONNECTION AT RAISED FLOOR

SCALE: NTS



6 TRANSFORMER MOUNTING DETAIL

SCALE: NTS



3 FEEDER TRENCH DETAIL

SCALE:

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:

REGISTERED PROFESSIONAL ENGINEER WILLIAM A. THOMA No. 18754 ELECTRICAL STATE OF CALIFORNIA

EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:

Contract Document

Revision Summary:

Project:

New Dispatch Center
Tulare County Sheriff & Fire

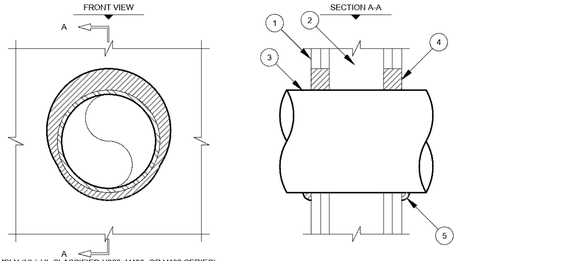
5300 West Tulare Avenue
Visalia, California

Sheet Description:

Electrical Details

Date:	8/8/2020
Project:	19-700
Scale:	NOTED
Sheet No.:	E4.2

Of x Sheets

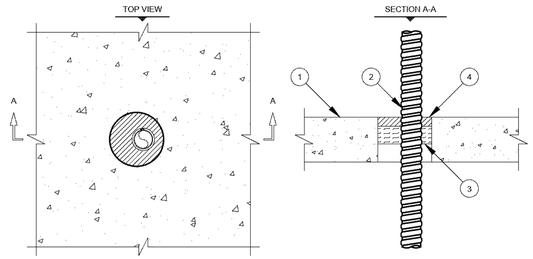


1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400, OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. (NOT SHOWN). WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 2-1/2" WIDE.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 30" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 30" NOMINAL DIAMETER CAST IRON OR DUCTILE IRON PIPE.
   C. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE OR TUBING.
   D. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
   E. MAXIMUM 4" NOMINAL DIAMETER EMT.
4. HILTI CP 606 FLEXIBLE FIRESTOP SEALANT:
   A. MINIMUM 5/8" DEPTH OF SEALANT FOR A 1-HR. FIRE-RATING.
   B. MINIMUM 1-1/4" DEPTH OF SEALANT FOR A 2-HR. FIRE-RATING.
5. MINIMUM 1/2" BEAD HILTI CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES:
1. MAXIMUM DIAMETER OF OPENING = 32".
2. ANNULAR SPACE IN 1-HR. WALLS = MINIMUM 0", MAXIMUM 1".
3. ANNULAR SPACE IN 2-HR. WALLS = MINIMUM 0", MAXIMUM 2".
4. PENETRANT MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45° FROM PERPENDICULAR.

F-RATING = 1-HR. OR 2-HR.
T-RATING = 0-HR.
L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ.FT.
L-RATING AT 400°F = LESS THAN 1 CFM/SQ.FT.

7 METAL PIPE THROUGH 1HR OR 2HR GYPSUM WALL ASSEMBLY
SCALE: NTS

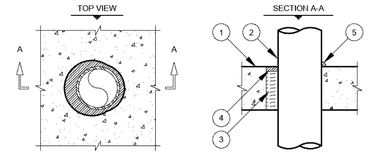


1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING):
   A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 2-1/2" THICK).
   B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 1" NOMINAL DIAMETER FLEXIBLE STEEL CONDUIT.
   B. MAXIMUM 1" NOMINAL DIAMETER FLEXIBLE STEEL GAS PIPING (WITH OR WITHOUT PLASTIC COVERING) MANUFACTURED BY OMEGA FLEX INC., TITEFLEX CORP., OR WARD MFG. INC.
3. MINIMUM 1" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.

NOTES :
1. MAXIMUM DIAMETER OF OPENING = 3".
2. ANNULAR SPACE = MINIMUM 1/2", MAXIMUM 1-1/4"

F-RATING = 2-HR.
T-RATING = 0-HR.

4 FLEXIBLE STEEL CONDUIT THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL
SCALE: NTS

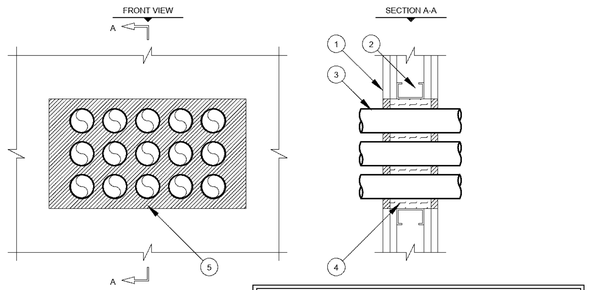


1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING):
   A. ANY LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 4-1/2" THICK).
   B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 10" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 10" NOMINAL DIAMETER CAST IRON PIPE.
   C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
   D. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
   E. MAXIMUM 4" NOMINAL DIAMETER EMT.
3. MINIMUM 3" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED FOR NOMINAL 4" DIAMETER (AND SMALLER), AND MINIMUM 4" THICKNESS MINERAL WOOL (MIMIMUM 4 PCF DENSITY) TIGHTLY PACKED FOR PIPES GREATER THAN NOMINAL 4" DIAMETER.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT, CP 601S ELASTOMERIC FIRESTOP SEALANT, CP 604 SELF-LEVELING FIRESTOP SEALANT, OR CP 606 FLEXIBLE FIRESTOP SEALANT.
5. MINIMUM 1/2" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT, CP 601S ELASTOMERIC FIRESTOP SEALANT, OR CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED AT POINT OF CONTACT. (NOT REQUIRED WHEN CP 604 SELF-LEVELING FIRESTOP SEALANT IS USED, ITEM NO. 4).

NOTES :
1. MAXIMUM DIAMETER OF OPENING = 12".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-1/4".
3. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT, CP 601S ELASTOMERIC FIRESTOP SEALANT, OR CP 606 FLEXIBLE FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.
4. W-RATING APPLIES ONLY WHEN CP 601S ELASTOMERIC FIRESTOP SEALANT OR CP 604 SELF-LEVELING FIRESTOP SEALANT IS USED.

F-RATING = 2-HR.
T-RATING = 0-HR.
L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L-RATING AT 400° F = 4 CFM/SQ. FT.
W-RATING = CLASS I (SEE NOTE NO. 4 BELOW)

1 METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL
SCALE: NTS

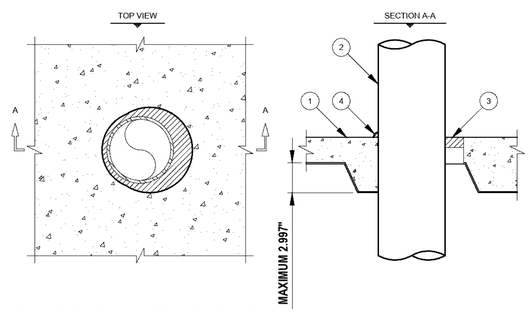


1. GYPSUM WALL ASSEMBLY (UL/ULC CLASSIFIED U300 OR U400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 2-1/2" WIDE. OPENING TO BE "FRAMED-OUT".
3. ONE OR MORE MAXIMUM 2" NOMINAL DIAMETER EMT OR STEEL CONDUIT.
4. MINIMUM 2-1/2" OR 2-3/4" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED FOR 1-HR. OR 2-HR. FIRE-RATING, RESPECTIVELY.
5. MINIMUM 5/8" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.

NOTES:
1. MAXIMUM SIZE OF OPENING = 18" x 10". MAXIMUM WIDTH BETWEEN WOOD STUD WALLS IS LIMITED TO 14-1/2".
2. ANNULAR SPACE BETWEEN PIPES AND PERIPHERY OF OPENING = MINIMUM 1/2", MAXIMUM 2-3/8".
3. ANNULAR SPACE BETWEEN PIPES = MINIMUM 1/2", MAXIMUM 5/8".
4. EMT OR STEEL CONDUIT MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45° FROM PERPENDICULAR.

F-RATING = 1-HR. OR 2-HR.
T-RATING = 1/2-HR.

8 MULTIPE METAL PIPE THROUGH 1HR OR 2HR GYPSUM WALL ASSEMBLY
SCALE: NTS

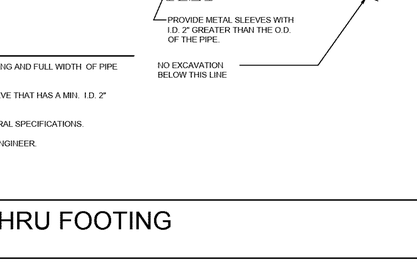


1. NORMAL WEIGHT CONCRETE (MINIMUM 2-1/2" THICK) OVER METAL DECK ASSEMBLY (2-HR. FIRE-RATING).
2. PENETRATING ITEM TO ONE OF THE FOLLOWING:
   A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE.
   C. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
   D. MAXIMUM 4" NOMINAL DIAMETER EMT.
3. MINIMUM 1" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
4. MINIMUM 1/2" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES:
1. MAXIMUM DIAMETER OF OPENING = 14-5/8".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-7/8".

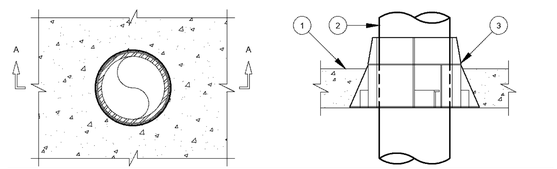
F-RATING = 2-HR.
T-RATING = 0-HR.

5 METAL PIPE THROUGH CONCRETE FLOOR OVER METAL DECK ASSEMBLY
SCALE: NTS



GENERAL NOTES
1. CONCRETE FILL TO BE THE SAME WIDTH AS FOOTING AND FULL WIDTH OF PIPE TRENCH. (BACKFILL PER SPECIFICATIONS).
2. CENTER PIPE IN PVC OR GALVANIZED METAL SLEEVE THAT HAS A MIN. I.D. 2" GREATER THAN THE PIPES O.D.
3. WATERPROOF OPENING AROUND PIPE PER GENERAL SPECIFICATIONS.
4. COORDINATE INSTALLATION WITH STRUCTURAL ENGINEER.

2 CONDUIT NEAR/THRU FOOTING
SCALE: NTS

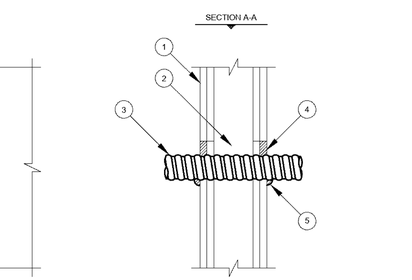


NOMINAL PIPE DIAMETER	PENETRANT TYPE	PRODUCT DESCRIPTION
1-1/2" TO 2-1/2"	STEEL, CAST IRON, CONDUIT, EMT	CP 680 75/2.5" N or CP 682 75/2.5"
2" TO 2-1/2"	COPPER	CP 680 75/2.5" N or CP 682 75/2.5"
4"	ALL	CP 680 110/4" N or CP 682 110/4"
6"	ALL	CP 680 160/6" H

1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING):
   A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK).
   B. STEEL FLOOR UNIT/FLOOR ASSEMBLY - NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 6" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 6" NOMINAL DIAMETER CAST IRON PIPE.
   C. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE.
   D. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
   E. MAXIMUM 4" NOMINAL DIAMETER EMT.
3. HILTI CP 680N OR CP 682 CAST-IN FIRESTOP DEVICE CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW).

NOTES:
1. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A CAST-IN METAL DECK ADAPTER IS REQUIRED.
2. WHEN PIPE DIAMETER IS SMALLER THAN INDICATED ABOVE, A MINIMUM 1" THICKNESS HILTI CP 618 FIRESTOP PUTTY STICK SHALL BE APPLIED WITHIN THE ANNULUS BETWEEN THE PIPE AND PERIPHERY OF HILTI CP 680N OR CP 682 CAST-IN FIRESTOP DEVICE, FLUSH WITH TOP SURFACE OF DEVICE.
3. AS AN ALTERNATE TO HILTI CP 618, MINIMUM 4" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) MAY BE TIGHTLY PACKED INTO HILTI CP 680N OR CP 682, FLUSH WITH TOP SURFACE OF DEVICE.

6 METAL PIPE THROUGH CONCRETE FLOOR OR CONCRETE OVER METAL DECKING
SCALE: NTS



1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300 OR U400 SERIES WALL) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. (NOT SHOWN). WOOD STUDS TO CONSIST OF NOMINAL 2"x4" LUMBER. STEEL STUDS TO BE MINIMUM 2-1/2" WIDE.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 2" NOMINAL DIAMETER FLEXIBLE STEEL CONDUIT.
   B. MAXIMUM 1" NOMINAL DIAMETER FLEXIBLE STEEL GAS PIPING (WITH OR WITHOUT PLASTIC COVERING) MANUFACTURED BY OMEGA FLEX INC., TITEFLEX CORP., OR WARD MANUFACTURING INC.
4. MINIMUM 5/8" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
5. MINIMUM 1/2" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT AT POINT OF CONTACT.

NOTES:
1. MAXIMUM DIAMETER OF OPENING = 3-1/2".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".

F-RATING = 1-HR. OR 2-HR.
T-RATING = 0-HR.

3 FLEXIBLE CONDUIT THROUGH 1HR OR 2HR GYPSUM WALL ASSEMBLY
SCALE: NTS

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Hanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasrhoads@sbcglobal.net

Professional Seal:
REGISTERED PROFESSIONAL ENGINEER WILLIAM A. THOMA ELECTRICAL STATE OF CALIFORNIA
10/1851
EXPIRES: 06/30/21
THOMA #19-8135

Consultant:

thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:
Contract Document

Revision Summary:

Project:
New Dispatch Center
Tulare County Sheriff & Fire
5300 West Tulare Avenue
Visalia, California

Sheet Description:
Electrical Details

Date:	8/8/2020
Project:	19-700
Scale:	NOTED
Sheet No.:	E4.3

Of x Sheets

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 7/18) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-LTI-E

Project Name:	New Dispatch Center Tulare County Sheriff & Fire	Report Page:	Page 4 of 6
Project Address:	5300 West Tulare Avenue	Date Prepared:	12/13/2019

L. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
This Section Does Not Apply

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED SPECIAL FUNCTION AREAS
This Section Does Not Apply

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
This Section Does Not Apply

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
This Section Does Not Apply

P. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS
This Section Does Not Apply

Q. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
This Section Does Not Apply

R. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (PAF)
This Section Does Not Apply

S. RATED POWER REDUCTION COMPLIANCE BY SPACE
This Section Does Not Apply

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at http://www.energy.ca.gov/2015publications/CEC-400-2015-033/appendices/forms/NRCI.

YES	NO	Form/Title	Field Inspector Pass	Fail
◉	○	NRCI-LTI-01-E - Must be submitted for all buildings	☐	☐
◉	○	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐	☐

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

YES	NO	Form/Title	Field Inspector Pass	Fail
◉	○	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐	☐
◉	○	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐	☐
○	◉	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐	☐
○	◉	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	☐	☐

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

Documentation Author Name:	William Thoma	Documentation Author Signature:	
Company:	Thoma Electric, Inc	Signature Date:	12/13/2019
Address:	3562 Empleo, Suite C	CEA/ HERS Certification Identification (if applicable):	E10757
City/State/Zip:	San Luis Obispo, CA 93401	Phone:	805-543-3850

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	William Thoma	Responsible Designer Signature:	
Company :	Thoma Electric, Inc.	Date Signed:	12/13/2019
Address:	3562 Empleo, Suite C	License:	E10757
City/State/Zip:	San Luis Obispo, CA 93401	Phone:	805-543-3850

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 7/18) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-LTI-E

This document is used to demonstrate compliance with requirements in §110.9, §130.0, §130.1, §140.6, and §141.0(b)2 for indoor lighting scopes using the prescriptive path.

Project Name:	New Dispatch Center Tulare County Sheriff & Fire	Report Page:	Page 1 of 6
Project Address:	5300 West Tulare Avenue	Date Prepared:	12/13/2019

A. GENERAL INFORMATION

01	Project Location (city)	Visalia	04	Total Conditioned Floor Area (ft²)	3,934
02	Climate Zone	13	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1

☐ Office ☐ Retail ☐ Warehouse ☐ Hotel/Motel ☐ School ☐ Support Areas
☐ Parking Garage ☐ High-Rise Residential ☐ Relocatable ☑ Other (write in):

B. PROJECT SCOPE

Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)2 for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".

Scope of Work		Conditioned Spaces		Unconditioned Spaces	
01		02	03	04	05
My Project Consists of (check all that apply):		Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☐ New Lighting System					
☑ Altered Lighting System	Entire Luminaire Alteration	Area Category	3,934	Area Category	0
Total Area of Work (ft²):		**3,934**		**0**	

C. COMPLIANCE RESULTS

Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1.	Allowed Lighting Power per §140.6(b) (Watts) 01 Complete Building §140.6(c)1 (-)	02 Area Category §140.6(c)2 (+)	03 Area Category Footnotes §140.6(c)2G (+)	04 Tailored §140.6(c)3 (+)		05 Total Allowed (Watts)		Actual Lighting Power per §140.6(a) (Watts) 06 Total Designed (Watts)	Adjustments 07 Portable Lighting §140.6(a) (-)	08 PAF Control Credits §140.6(a)2 (-)		09 Total Actual (Watts) *Includes Adjustments	Compliance Results 10 05 Must be ≥ 09 §140.6
	(See Table I)	(See Table I)	(See Table K)	(See Table L)				(See Table F)	(See Table J)	(See Table R)			
Conditioned:		3,540.6			=	**3,540.6**	≥	2,458.5			=	**2,458.5**	**COMPLIES**
Unconditioned:					=		≥				=		
Controls Compliance [See Table H for Details]													**COMPLIES**
Rated Power Reduction Compliance [See Table S for Details]													**Not Applicable**

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

No exceptional conditions apply to this project.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

E. INDOOR LIGHTING FIXTURE SCHEDULE

Table Instructions: Include all permanent designed lighting and all portable lighting in offices.

01 Name or Item Tag	02 Complete Luminaire Description	03 Specialized Luminaire Types: Track	Portable	04 Watts per luminaire[1]	05 How Wattage is determined	06 Total number luminaires	07 Exempt per §140.6(a)3	08 Design Watts	09 Field Inspector Pass	Fail
A1	A1	☐	☐	50	Mfr. Spec[1]	3	☐	150	☐	☐
A2	A2	☐	☐	40	Mfr. Spec[1]	16	☐	640	☐	☐
A3	A3	☐	☐	31.4	Mfr. Spec[1]	2	☐	62.8	☐	☐
B1	B1	☐	☐	28.5	Mfr. Spec[1]	32	☐	912	☐	☐
B2	B2	☐	☐	24.3	Mfr. Spec[1]	9	☐	218.7	☐	☐
C	C	☐	☐	38	Mfr. Spec[1]	2	☐	76	☐	☐
D	D	☐	☐	15	Mfr. Spec[1]	1	☐	15	☐	☐
UC1	UC1	☐	☐	120	Mfr. Spec[1]	1	☐	120	☐	☐
UC2	UC2	☐	☐	90	Mfr. Spec[1]	2	☐	180	☐	☐
UC3	UC3	☐	☐	84	Mfr. Spec[1]	1	☐	84	☐	☐
					Total Designed Watts CONDITIONED SPACES:			**2,458.5**		

[1]NOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. TRACK LIGHTING
This Section Does Not Apply

H. INDOOR LIGHTING CONTROLS (Not Including PAFs)

Table Instructions:
*Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.*

Building Level Controls 01 Mandatory Demand Response §130.1(e)	02 Shut-off Controls §130.1(c)	03 Field Inspector Pass	Fail
Not Required < 10,000 SF	See Area Level Controls	☐	☐

Area Level Controls

04 Area Description	05 Complete Building or Area Category Primary Function Area	06 Area Controls §130.1(a)	07 Multi-Level Controls §130.1(b)	08 Shut-Off Controls §130.1(c)	09 Primary/Skylit Daylighting §130.1(d)	10 Secondary Daylighting §140.6(d)	11 Interlocked Systems §140.6(a)1	12 Field Inspector Pass	Fail
see lighting & lighting control plans	Police/Fire Station	Manual ON/OFF	Dimmer	Occ Sensor	Included	Included	☐	☐	☐

*[1]NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.*
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting; EXCEPTION 1 to §130.1(d)2

13 Plan Sheet Showing Daylit Zones:

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.

Conditioned Spaces

01 Area Description	02 Complete Building or Area Category Primary Function Area	03 Allowed Density (W/ft²)	04 Area (ft²)	05 Allowed Wattage (Watts)	06 Additional Allowances / Adjustments: Footnotes	PAF	Portable Ltg
Police/Fire Station	Low Bay Comm/ Industrial	0.9	3,934	3,540.6	☐	☐	☐
		TOTAL:	**3,934**	**3,540.6**	See Tables J, K, R for detail		

J. POWER ADJUSTMENT: PORTABLE LIGHTING IN OFFICES
This Section Does Not Apply

K. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD FOOTNOTES
This Section Does Not Apply

Chas Rhoads
Architecture
Interiors
Landscape

128 Katherine Street - Ilanford - California - 93230
Phone: 559 - 584 - 3371

Postal Box 221 - Morro Bay - California - 93443
Phone: 805 - 234 - 6220

Email: chasthoads@sbcglobal.net

Professional Seal:
REGISTERED PROFESSIONAL ENGINEER WILLIAM A. THOMA ELECTRICAL STATE OF CALIFORNIA
EXPIRES: 06/30/21
THOMA #19-8135

Consultant:
thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St
San Luis Obispo, CA 93406
Phone: (805) 543-3850
Fax: (805) 543-3829
cad@thomaelec.com

Drawing Status:
Contract Document

Revision Summary:

Project:
New Dispatch Center
Tulare County Sheriff & Fire
5300 West Tulare Avenue
Visalia, California

Sheet Description:
Lighting Energy Compliance Forms

Date:	8/8/2020
Project:	19-700
Scale:	NOTED

Sheet No.:
E5.1
Of x Sheets