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CONSULTANT:

PROJECT ADMINISTERED BY:  
COUNTY OF  
SAN BERNARDINO  
REAL ESTATE SERVICES  
DEPARTMENT -  
PROJECT MANAGEMENT  
DIVISION

385 N. ARROWHEAD AVE.  
SAN BERNARDINO, CA 92415

PROJECT NAME:  
YUCAIPA REGIONAL PARK  
RV & GROUP TENT  
CAMPGROUNDS ADA  
UPGRADES

PROJECT # 1010-1069

33900 OAK GLEN ROAD  
YUCAIPA, CA 92399

ISSUE INFORMATION:

DATE: INFORMATION:

SHEET INFORMATION:

STK PROJECT NO.: 374-141-20  
SCALE: AS NOTED  
DATE: SEPTEMBER 2020  
PLOT DATE:  
DRAWING NAME:

SEAL:



SHEET TITLE:

PREFABRICATED  
RESTROOM /  
SHOWER

SHEET NO.:

A2.1

NOTE:  
THIS FACTORY ASSEMBLED BUILDING AS CONSTRUCTED PROVIDES A RIGID BOX TYPE STRUCTURAL SYSTEM. VERTICAL LOADS ARE TRANSFERRED PRIMARILY THROUGH BEARING WALLS TO A PREPARED GRANULAR SUB-BASE WHICH DISPERSES VERTICAL LOADS UNIFORMLY TO THE NATIVE SUBGRADE AND ALSO ACTS AS A FROST BARRIER. DUE TO THE IMPERMEABLE NATURE OF THE BUILDING IT WILL REMAIN SAFE AND STRUCTURALLY SOUND IN THE EVENT OF FROST ACTION BELOW THE BUILDING.

LATERAL LOADS ARE TRANSFERRED TO THE GROUND THROUGH FRICTIONAL RESISTANCE WITHOUT SLIDING OR SHIFTING BETWEEN THE BUILDING FLOOR SLAB AND THE PREPARED SOIL AND GRAVEL SUB-BASE ON WHICH THE BUILDING RESTS. SEISMIC ANALYSES ARE BASED ON LOADS DETERMINED IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE USING PARAMETERS WHICH MEET OR EXCEED THE CODE PRESCRIBED REQUIREMENTS FOR THIS INSTALLATION.

THIS BUILDING, AS DESIGNED, RESTING ON A PROPERLY PREPARED GRANULAR SUB-BASE WILL BE SAFE AND STRUCTURALLY SOUND FOR VERTICAL AND LATERAL LOADS AS DESCRIBED ABOVE. A FULL DEPTH FOUNDATION WALL AT THE BUILDING PERIMETER, TYPICAL FOR OTHER TYPES OF BUILDING CONSTRUCTION, IS NOT REQUIRED FOR THIS BUILDING.

2" TYPICAL  
SUB-BASE THICKNESS VARIES, 6" MINIMUM  
FILL SO THAT FINISHED GRADE HEIGHT (PERIMETER SIDEWALK OR EARTH) IS EQUAL TO FLOOR SLAB HEIGHT  
NATIVE SUBGRADE (1500 PSF BEARING CAPACITY MIN)

PRIOR TO PLACEMENT OF BUILDING A PROPERLY PREPARED SUB-BASE SHALL BE PROVIDED. SUB-BASE SHALL BE A MINIMUM OF 6" THICK AND CONSIST OF 3/4" MINUS CRUSHED ROCK (ROAD BASE MATERIAL) COMPACTED TO 95% OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D 1557. FINISHED SURFACE OF SUB-BASE SHALL BE FLAT AND LEVEL WITH A MAXIMUM DEVIATION OF -3/8" +0" FROM A TRUE HORIZONTAL PLANE. REFER TO BUILDING HANDLING SHEET FOR SUB-BASE REQUIREMENTS DURING BUILDING PLACEMENT. (PREPARED SUB-BASE NOT BY CXT)

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3850 N. Solano Way, #7 Spokane, WA 99207  
**CXT Precast Products**  
800 N. Highway 17, Fresno, CA 93701

CORTEZ SECTIONAL  
BUILDING NUMBER CSE-001

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DATE: 09/21/20  
DRAWN BY: JRM  
CHECKED BY: JRM  
SCALE: AS NOTED  
SHEET NO.: 25  
REV: 01

FOUNDATION DETAIL  
CRS-24

**BELOW FLOOR PIPING - KEY NOTES**

- 4" CLEAN OUT TO GRADE.
- 2" FLOOR DRAIN FIELD INSTALLED TRAP PRIMER SYSTEM IF REQUIRED BY AUTHORITY HAVING JURISDICTION. (4'-0" x 1'-6" BLOCKOUT)
- 2" VENT PIPES EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST PLUG. (4'-0" x 1'-6" BLOCKOUT)
- 3" WASTE PIPE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST PLUG. (4'-0" x 1'-6" BLOCKOUT)
- 1 1/2" TYPE K ANNEALED "SOFT" COPPER WATER SERVICE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE CAP AT END. (4'-0" x 1'-6" BLOCKOUT)
- MIN. BURY PER LOCAL REQUIREMENTS TO PROTECT AGAINST FREEZING AND DAMAGE.
- 2" FLOOR DRAIN FIELD INSTALLED TRAP PRIMER SYSTEM IF REQUIRED BY AUTHORITY HAVING JURISDICTION. (10" DIA BLOCKOUT)
- 3/8" MIN. BURY, PROVIDE TRACER TAPE.
- ELECTRICAL STUB UP, (8" DIA BLOCKOUT)
- 2" VENT PIPES EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST PLUG. (8" DIA BLOCKOUT)

**PIPING LEGEND**

BELOW FLOOR WASTE PIPING SCH 40 ABS TYPE DWV  
BELOW FLOOR VENT PIPING SCH 40 ABS TYPE DWV  
1 1/2" TYPE "K" ANNEALED "SOFT" COPPER WATER SERVICE

**FLOOR DRAIN BLOCKOUTS & BELOW FLOOR PIPING**

ALL PIPING INDICATED ON THIS SHEET IS NOT BY CXT

**FLOOR DRAIN DETAIL NOTES**

- CAST-IN DRAIN HOUSING (10" INSIDE DIM - PROVIDED BY CXT)
- FIELD INSTALLED GROUT, SLOPS TO DRAIN (CXT PROVIDED-INSTALLATION NOT BY CXT)
- 2" INSIDE PIPE - STEEL UP 12" ABOVE GRADE (NOT BY CXT)
- TAPPED P-TRAP ADAPTER (NOT BY CXT)
- P-TRAP ASSEMBLY (NOT BY CXT)
- 1 1/2" O.D. COPPER TRAP PRIMER LINE (NOT BY CXT)
- 2" FLOOR DRAIN VENT RISER - STEEL UP 12" ABOVE GRADE (NOT BY CXT)
- TRAP PRIMER MANIFOLD (PRE-PLUMBED AND INSTALLED BY CXT)
- 1 1/2" SHUT OFF VALVE (PRE-PLUMBED AND INSTALLED BY CXT)

**FLOOR DRAIN DETAIL**

CHASE PLUMBING BLOCKOUT  
TO MAIN DRAIN LINE

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DATE: 09/21/20  
DRAWN BY: JRM  
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SCALE: AS NOTED  
SHEET NO.: 25  
REV: 01

FIELD STUB UP LOCATIONS

CRS-25

NOT FOR

**NOTES:**  
THE DRAWING & NOTES SHOWN ON THIS SHEET IS FOR INFORMATION & REFERENCES ONLY. THIS IS AN OWNER PURCHASED & DELIVERED TO THE SITE, INCLUDING CRANE SERVICES. CONTRACTOR TO COORDINATE WITH OWNER FOR BUILDING DELIVERY & ACCEPTANCE

R:\PROJECT\2020\20-208 YUCAIPA REGIONAL PARK RV ADA UPGRADES\20-208 E FINISH - 2020-09-29 - LETT MULLENKAMP

NOT

### GENERAL NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST CALIFORNIA CODE OF REGULATIONS (CCR), NATIONAL ELECTRICAL CODE EDITION AND ALL APPLICABLE LOCAL CODES AND REGULATIONS.
- ALL PANELS, SWITCHES, ETC. SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS IN COMPLIANCE TO UL REQUIREMENTS TO ACCOMMODATE CONDUCTORS SHOWN.
- WHERE WIRE SIZES ARE INDICATED ON PLANS, FOR INDIVIDUAL CIRCUITS, THE WIRE SIZE INDICATED SHALL APPLY TO THE COMPLETE CIRCUIT, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF MECHANICAL, PLUMBING AND OTHER EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO ANY WORK.
- CONTRACTOR SHALL EXTEND WIRING FROM ALL JUNCTION BOXES, SWITCHES, ETC. AND MAKE FINAL CONNECTION AS REQUIRED TO ALL BUILDING EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS.
- LOCATION OF LOCAL WALL SWITCHES ARE SUBJECT TO MODIFICATIONS. AT OR NEAR DOORS, INSTALL SWITCHES ON SIDE OPPOSITE TO DOOR HINGE. VERIFY FINAL HINGE LOCATION IN FIELD PRIOR TO ANY WORK.
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OR OTHER TRADES RELATING TO WORK TO VERIFY SPACE IN WHICH WORK WILL BE INSTALLED. MAINTAIN HEADROOM AND MINIMUM CODE REQUIRED WORKING CLEARANCES AT ALL TIMES.
- CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WALL OUTLET BOXES FOR SWITCHES, BELLSTROBES, FIRE ALARM PULL STATIONS, RECEPTACLES ETC. WITH CABINETS, FURNITURE, EQUIPMENT ETC., TO AVOID CONFLICT.
- FURNISH PULL STRING IN EACH RACEWAY RUN OVER 10' IN LENGTH, IN WHICH PERMANENT WIRING IS NOT INSTALLED.
- NOT MORE THAN THREE LIGHTING OR CONVENIENCE OUTLET CIRCUITS ARE PERMITTED IN ONE CONDUIT, PROVIDE SEPARATE CONDUIT FOR EACH HOMERUN INDICATED ON THE DRAWING, UNLESS INDICATED OTHERWISE.
- PROVIDE PULL BOXES WHEREVER NECESSARY TO FACILITATE PULLING OF CONDUCTORS. COORDINATE LOCATIONS OF BOXES WITH OTHER TRADES TO AVOID CONFLICT. PULL BOXES SHALL BE ACCESSIBLE. THE SIZE OF PULL BOX SHALL COMPLY WITH N.E.C. REQUIREMENTS.
- SEE MECHANICAL AND PLUMBING DRAWINGS AND SPECIFICATION FOR ADDITIONAL CONNECTION REQUIREMENTS TO CONTROL PANELS, CONTROL TRANSFORMERS, POWER FOR CONTROL SYSTEM EP AND PE SWITCHES, TIME CLOCKS, VALVES, STATS, RELAYS, DUCT SMOKE DETECTOR LOCATIONS, ETC. INDICATED ON CONTROL WIRING DIAGRAMS. ELECTRICAL CONTRACTOR SHALL VERIFY FINAL CONTROL WIRING REQUIREMENTS WITH MECHANICAL AND PLUMBING CONTRACTORS PRIOR TO ANY WORK AND PROVIDE ALL NECESSARY DEVICES AND CONNECTIONS AS REQUIRED.
- ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT INCLUDING THOSE THAT ARE EXPOSED TO OUTSIDE ENVIRONMENT (UP TO 15) SHALL BE WEATHERPROOF TYPE, NEMA 3R.
- NO CONDUIT RUNS SHALL BE ALLOWED IN CONCRETE SLABS. ALL CONDUITS WILL BE PLACED ABOVE ACCESSIBLE CEILING SPACES UNLESS SPECIFICALLY INDICATED TO BE UNDERGROUND.
- WHERE MORE THAN ONE LIGHT SWITCH OCCURS AT SAME LOCATION, SWITCHES SHALL BE MOUNTED IN A MULTIPLE GANG BOX UNDER A SINGLE COVER PLATE. PLATES WITH MORE THAN (3) LIGHT SWITCHES SHALL BE LABELED TO INDICATE THE LIGHT FIXTURES CONTROLLED.
- DISCONNECT SWITCHES SHALL BE MOUNTED ON INDIVIDUAL SUPPORTS, OR OTHERWISE DIRECTLY ON EQUIPMENT, PROVIDED NO MODIFICATION TO EQUIPMENT IS NECESSARY.
- ALL ELECTRICAL POWER LIGHTING, TELEPHONE OR SIGNAL WIRING IN FIRE RATED WALL IS TO BE INSTALLED IN A METALLIC CONDUIT SYSTEM.
- ALL ELECTRIC MATERIAL SHALL BE LISTED BY "UL" FOR THE TYPE OF APPLICATION AND "UL" LABEL SHALL APPEAR ON ALL ELECTRICAL EQUIPMENT.
- ALL DISTRIBUTION AND CONTROL EQUIPMENT (SUCH AS CB's, SWITCHES, CONTACTORS, ETC.), TERMINATIONS SHALL BE FULLY RATED PER UL AS FOLLOWS:
  - 125A OR LESS: 60°C OR MORE.
  - MORE THAN 125A: 75°C OR MORE.
- ANY ERRORS, OMISSIONS, OR DESIGN DISCREPANCIES ON PLANS OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER FOR CLARIFICATION OR CORRECTION PRIOR TO CONSTRUCTION AND PREPARATION OF SUBMITTAL PACKAGES.
- CONDUCTORS SHALL HAVE UNDERWRITERS LABORATORIES, INC. (UL) LISTED, 600 VOLT INSULATION OF TYPE SPECIFIED BELOW OR ELSEWHERE IN THE SPECIFICATIONS. CONDUCTORS SHALL BE COPPER.
  - BRANCH CIRCUITS - LIGHTING AND POWER.
    - #10 AWG AND SMALLER, SOLID WIRE TYPE THW OR THHN/THWN, THHN/THWN FOR DRY LOCATION ONLY.
    - #8 AWG TO #2 AWG, STRANDED TYPE THW OR THHN/THWN.
    - #1 AWG AND LARGER, STRANDED TYPE XHHW.
  - FEEDERS: TYPE THW OR THHN/THWN, OR XHHW.
- PROVIDE GREEN INSULATED GROUNDING CONDUCTOR IN EACH RACEWAY INCLUDING CONDUITS, PLUG STRIPS, WIREMOLD. SIZE OF GROUNDING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE ARTICLE 250.
- WIRING METHOD SHALL BE EMT ABOVE GROUND AND MOUNTED IN CONCEALED SPACES AND SCHEDULE-40 PVC FOR UNDERGROUND INSTALLATION, USE RIGID WHEN ENCASED IN CONCRETE OR SUSCEPTIBLE TO DAMAGE.
- USE 10AWG CONDUCTORS FOR 20 AMPERE, 120V BRANCH CIRCUITS LONGER THAN 75 FEET. USE 10AWG CONDUCTORS FOR 20 AMPERE, 277V BRANCH CIRCUITS LONGER THAN 200 FEET.
- ALL SWITCH LOCATIONS ARE REQUIRED TO HAVE A NEUTRAL CONDUCTOR PROVIDED AT THE SWITCH LOCATION PER CEC 904.2(C).
- UNLESS OTHERWISE INDICATED, SHARING OF NEUTRAL/GROUNDED CONDUCTORS AMONG SINGLE PHASE BRANCH CIRCUITS OF DIFFERENT PHASES INSTALLED IN THE SAME RACEWAY IS NOT PERMITTED. PROVIDE DEDICATED NEUTRAL/GROUNDED CONDUCTOR FOR EACH INDIVIDUAL BRANCH CIRCUIT.

### APPLICABLE CODES

- 2019 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
- 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (IBC WITH AMENDMENTS)
- 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (NEC WITH AMENDMENTS)
- 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (UMC WITH AMENDMENTS)
- 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (UPC WITH AMENDMENTS)
- 2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (IFC WITH AMENDMENTS)
- 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
- 2019 TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
- 2019 CALIFORNIA ENERGY CODE (PART 6, TITLE 24 C.C.R.)
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSG), PART 11, TITLE 24 C.C.R.

### ABBREVIATIONS

A	AMPERE	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
AF	AMPERE FRAME RATING (CIRCUIT BREAKER)	NEW (N)	NEW, TO BE FURNISHED AND INSTALLED BY CONTRACTOR
AFG	ABOVE FINISHED FLOOR	NF	NON-FUSED
AFU	AMPERE FUSE RATING (FUSE)	NIC	NOT IN CONTRACT
AIC	AMPERE INTERRUPTING CAPACITY	NL	NIGHT LIGHT
AS	AMPERE SWITCH RATING (FUSE)	NO	NUMBER, NORMALLY OPEN
AT	AMPERE TRIP RATING (CIRCUIT BREAKER)	NTS	NOT TO SCALE
AWG	AMERICAN WIRE GAUGE	OC	ON CENTER
BKBD	BACKBOARD	OD	OUTSIDE DIAMETER
BLDG	BUILDING	P	POLE
BKR	BREAKER	PB	PULL BOX
C	CONDUIT	PF	POWER FACTOR
CB	CIRCUIT BREAKER	PNL	PANEL
CKT	CIRCUIT	POC	POINT OF CONNECTION
CFSD	COMBINATION FIRE SMOKE DAMPER	PP	POWER POLE
CO	CONDUIT ONLY	PWR	POWER
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CT	CURRENT TRANSFORMER	QUAD	QUADRUPLEX
CU	COPPER	QTY	QUANTITY
CL	CENTERLINE	REQD	REQUIRED
DISC	DISCONNECT	REOUT	REQUIREMENT
DSNB	DISTRIBUTION SECTION	RGS	RIGID GALVANIZED STEEL
DN	DOWN	RMC	RIGID METALLIC CONDUIT
DWG	DRAWING	RM	ROOM
EA	EACH	RNC	RIGID NONMETALLIC CONDUIT
EC	ELECTRICAL CONTRACTOR	SHT	SHEET
EM	EMERGENCY	SN	SOLID NEUTRAL
EMT	ELECTRICAL METALLIC TUBING	SPEC	SPECIFICATIONS
EXIST. (E)	EXISTING	SPDT	SINGLE POLE, DOUBLE THROW
EXO	EXTERNAL OPERABLE DISCONNECT	SPST	SINGLE POLE, SINGLE THROW
F	FUSE	SW	SWITCH
FA	FIRE ALARM	SWBD	SWITCHBOARD
FACP	FIRE ALARM CONTROL PANEL	TC	TIME CLOCK
FF	FINISHED FLOOR	TEL	TELEPHONE
FG	FINISHED GRADE	TERM	TERMINAL
FLA	FULL LOAD CURRENT	TP	TEMPORARY POLE
FLUOR	FLUORESCENT	TYP	TYPICAL
GEN	GENERATOR	UGPS	UNDERGROUND PULL SECTION
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	UL	UNDERWRITERS LABORATORY
GFP	GROUND FAULT PROTECTION	UPS	UNINTERRUPTIBLE POWER SUPPLY
GND	GROUND	UNON	UNLESS OTHERWISE NOTED
HOA	HAND-OFF-AUTOMATIC	V	VOLT, VOLTAGE
HP	HORSE POWER	VA	VOLT-AMPERE
HV	HIGH VOLTAGE	VFC	VARIABLE FREQUENCY CONTROLLER
IDF	INTERMEDIATE DISTRIBUTION FRAME	VFD	VARIABLE FREQUENCY DRIVE
IG	ISOLATED/INSULATED	W	WATT
INCAND	INCANDESCENT	WH	WATT-HOUR
ISC	SHORT CIRCUIT CURRENT AVAILABLE IN RMS SYMMETRICAL AMPERES	WP	WEATHERPROOF
J-BOX	JUNCTION BOX	WT	WEATHERTIGHT
KCMIL	THOUSAND CIRCULAR MILS	WW	WIREWAY
KV	KILOVOLT	XP	EXPLOSION PROOF
KVA	KILO VOLT-AMPERE	Z	IMPEDANCE
LDC	LOCAL DISTRIBUTION CABINET		
LDF	LOCAL DISTRIBUTION FRAME	4W	FOUR-WIRE
LCL	LONG CONTINUOUS LOAD	3W	THREE-WIRE
LTG	LIGHTING	SS	JUNCTION BOX (4 1/16" SQUARED X2 1/8" DEEP)
LV	LOW VOLTAGE	Ø	DIAMETER, PHASE
MFR	MANUFACTURER	#	NUMBER
MAX	MAXIMUM	*C	DEGREE CELSIUS
MCC	MOTOR CONTROL CENTER	(E)	EXISTING DEVICE TO REMAIN
MIN	MINIMUM	(R)	REMOVE EXISTING DEVICE AND ASSOCIATED CONDUIT AND WIRE
MH	MANHOLE / METAL HALIDE	(RL)	REMOVE EXISTING DEVICE AND RELOCATE AS SHOWN ON PLAN
LDC	LOCAL DISTRIBUTION CABINET	(NL)	NEW LOCATION OF RELOCATED DEVICE
LDF	LOCAL DISTRIBUTION FRAME		
LCL	LONG CONTINUOUS LOAD		
LTG	LIGHTING		
LV	LOW VOLTAGE		
MFR	MANUFACTURER		
MAX	MAXIMUM		
MCC	MOTOR CONTROL CENTER		
MIN	MINIMUM		
MH	MANHOLE / METAL HALIDE		
MH	METER AND MAIN SECTION		
MULTI	MULTI-METER SECTION		
MV	MEDIUM VOLTAGE		
NC	NORMALLY CLOSED		
NEC	NATIONAL ELECTRICAL CODE		

### GENERAL DEMOLITION NOTES

- THE DEMOLITION NOTE REFERENCE PERTAIN TO ALL RELATED SHEETS WHERE EXISTING ELECTRICAL WORK IS INDICATED.
- THE CONTRACTOR SHALL VISIT THE PROJECT SITE AND MAKE THEMSELVES COMPLETELY FAMILIAR WITH THE EXISTING INSTALLED CONDITIONS.
- ALL EQUIPMENT OR WORK REQUIRED TO CARRY OUT THE DEMOLITION SCOPE OF WORK IS CONSIDERED TO BE PART OF THE CONTRACTOR SCOPE OF WORK. NO EXTRAS WILL BE CONSIDERED TO PERFORM THE REQUIRED WORK.
- THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE FACILITY DIRECTOR PRIOR TO THE SCHEDULING OF ANY POWER OUTAGE. SUCH PERMISSION MUST BE OBTAINED IN WRITING AND BE GRANTED AT LEAST 7 DAYS PRIOR TO ANY SCHEDULE SHUT DOWN. THE SHUT DOWN SHALL NOT EXCEED A DURATION OF 4 HOURS.
- THE CONTRACTOR SHALL NOT STORE ON SITE ANY ITEMS THAT WERE DEMOLISHED FOR ANY EXTENDED PERIOD OF TIME, WITHOUT THE WRITTEN PERMISSION OF THE CAMPUS FACILITY DIRECTOR.
- ALL ELECTRICAL ITEMS DESIGNATED AS EXISTING TO REMAIN SHALL AS PART OF THIS SCOPE OF WORK BE CLEANED AND TESTED, TO INSURE PROPER OPERATION. ANY ITEMS THAT FAIL TO PASS THE TEST SHALL BE BROUGHT TO THE ATTENTION OF THE FIELD INSPECTOR AND THE ENGINEER OF RECORD FOR RESOLUTION.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING SWITCHBOARDS, DISTRIBUTION BOARDS, PANEL BOARDS, LIGHTING FIXTURES, CONDUITS, WIRES AND OTHER ELECTRICAL APPARATUS DESIGNATED AS EXISTING TO BE REMOVED. DEMOLITION ITEMS, IF NOT REQUIRED TO BE SALVAGED BY OWNER, BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN AN APPROPRIATE MANNER.
- THE CONTRACTOR SHALL REMOVE ALL CONDUITS SERVING DEVICES WHICH ARE DESIGNATED AS EXISTING TO BE REMOVED. BACK TO THE SOURCE WHEN POSSIBLE. IF THE NATURE OF THE EXISTING INSTALLATION WILL NOT ALLOW REMOVAL THE CONTRACTOR SHALL REMOVE ALL EXPOSED CONDUIT AND ABANDON THE REMAINDER AFTER REMOVING ALL CONDUCTORS.
- DEMOLITION AND/OR REMOVAL OF ELECTRICAL EQUIPMENT IN AREAS TO BE REMODELED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- WHERE OUTLETS ARE REMOVED IN EXISTING WALL, REMOVE DEVICES, OUTLETS AND WIRING BACK TO PANELBOARD OR BACK TO NEAREST OUTLET WITH OTHER EXISTING LOAD TO REMAIN.
- WHERE EXISTING CONDUIT AND CONDUCTORS ARE TO BE REMOVED AND CONDUIT IS INSTALLED IN GROUND OR EMBEDDED IN CONCRETE, REMOVE WIRE AND CUT CONDUIT TO BELOW FLOOR, PLUG CONDUIT, PATCH FLOOR AND ABANDON CONDUIT.
- WHERE ELECTRICAL DEVICES ARE TO BE REMOVED, REMOVE ALL CONDUIT AND CONDUCTORS BACK TO SOURCE, TERMINAL CABINETS AND RACKS, PROVIDE BLANK COVER PLATE FOR ABANDONED JUNCTION BOXES.
- REMOVE ALL CONTROL PANELS, EQUIPMENT RACKS, PULL-BOXES, TERMINAL CABINETS, ETC. FOR SYSTEMS TO BE DEMOLISHED EXCEPT WHERE ANY OF THE EXISTING DEVICES, SYSTEMS, CONSOLES, ETC. ARE TO BE REUSED FOR UPGRADE.
- PROVIDE BLANK COVER PLATE FOR ALL EMPTY OUTLET BOXES WHERE DEVICES AND/OR CONDUCTORS HAVE BEEN REMOVED AS PART OF THIS CONTRACT.
- AFTER REMOVAL OF WIREMOLD AND ASSOCIATED FITTINGS, PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
- EXISTING CONDUIT CAN BE REUSED PROVIDING IT IS CHECKED FOR CONTINUITY OF GROUND, BLOWN FREE OF DEBRIS, AND DOES NOT INTERFERE WITH NEW CONSTRUCTION.
- REMOVALS AND REPAIRS TO EXISTING ELECTRICAL WORK REQUIRED TO AVOID CONFLICTS WITH NEW CONSTRUCTION TO MEET MINIMUM CODE REQUIREMENTS.
- A FIELD SURVEY VERIFICATION IS MANDATORY IN ORDER TO SUBMIT AN ELECTRICAL BID. FAILURE TO DO SO SHALL NOT RELIEVE THIS CONTRACTOR FROM PERFORMING THE WORK OF THIS CONTRACT.

### POWER LEGEND AND SYMBOLS

SYMBOL	DESCRIPTION
	BRANCH PANELBOARD, WALL MOUNTED. SEE PLANS AND SCHEDULE. (SURFACE MOUNTED)
	BRANCH PANELBOARD, WALL MOUNTED. SEE PLANS AND SCHEDULE. (RECESSED MOUNTED)
	MAIN SWITCHBOARD, POWER OR LIGHT, FLOOR STANDING ENCLOSURE. (SEE SINGLE LINE DIAGRAM AND LOAD SUMMARY)
	DISCONNECT SWITCH H.P. RATED 600 VOLTS RATED, "F" INDICATES FUSE TYPE. FUSES PER APPROVED MANUFACTURER'S SHOP DRAWINGS.
	MOUNTING HEIGHT FROM FINISHED FLOOR TO BOTTOM LINE OF OUTLET OR EQUIPMENT. FOR LIGHT FIXTURES, IT IS TO BOTTOM OF FIXTURE.
	CONDUIT CONCEALED IN OR UNDER FLOOR, 3/4" UNON. COORDINATE WITH G.C. OR BURIAL CONDUIT UNDERGROUND IN SCHEDULE - 40 PVC UNLESS NOTED OTHERWISE. VERIFY DEPTH AND TRENCHING WITH G.C.
	DETAIL REFERENCE
	EXISTING (DASH INDICATES) ELECTRICAL EQUIPMENT
	MOLDED CASE CIRCUIT BREAKER
	SWITCH AND FUSE ASSEMBLY
	UTILITY COMPANY PULL SECTION LUGS
	GROUNDING CONNECTION TO MAIN BUILDING GROUND SYSTEM U.O.C.
	GROUNDING CONNECTION AT SWITCHGEAR/DISTRIBUTION BOARD WITH NEUTRAL BONDING.
	IN-LINE UTILITY COMPANY METER
	UTILITY METER WITH CIRCUIT TRANSFORMERS (CTS) METER
	TRANSFORMER WITH SECONDARY GROUND
	CONDUIT WIRING DESCRIPTION PER FEEDER SCHEDULE ON OTHER PLAN
	CONDUIT WIRING DESCRIPTION PER FEEDER SCHEDULE ON OTHER PLAN

### NOTE TO CONTRACTOR

**DO NOT SCALE DRAWINGS**

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.

### SHEET INDEX

SHEET NUMBER	SHEET TITLE
E-0.1	ELECTRICAL LEGENDS AND NOTES
E-0.2	RV SITE SINGLE LINE DIAGRAM
E-0.3	TENT CAMP SINGLE LINE DIAGRAM
E-1.01	OVERALL PROJECT ELECTRICAL SITE PLAN
E-2.01	RV ELECTRICAL DEMOLITION AND REMODEL SITE PLANS
E-3.01	TENT CAMP ELECTRICAL REMODEL PLAN
E-4.01	ELECTRICAL DETAILS



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### DESIGN WEST ENGINEERING

MECHANICAL • ELECTRICAL • ENERGY CONSULTANTS

### PROJECT ADMINISTERED BY:

COUNTY OF SAN BERNARDINO  
 REAL ESTATE SERVICES DEPARTMENT - PROJECT MANAGEMENT DIVISION

385 N. ARROWHEAD AVE.  
 SAN BERNARDINO, CA 92415

### PROJECT NAME:

YUCAIPA REGIONAL PARK  
 RV & GROUP TENT CAMPGROUNDS ADA UPGRADES

PROJECT # 1010-1089

CIP # \_\_\_\_\_

33900 OAK GLEN ROAD  
 YUCAIPA, CA 92399

### ISSUE INFORMATION:

DATE:	INFORMATION:

### SHEET INFORMATION:

STK PROJECT NO.: 374-141-20  
 SCALE: AS NOTED  
 DATE: SEPTEMBER 2020  
 PLOT DATE: \_\_\_\_\_  
 DRAWING NAME: \_\_\_\_\_

### SEAL:



### SHEET TITLE:

ELECTRICAL LEGENDS AND NOTES

### SHEET NO.:

E-0.1



**CONSULTANT:**  
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 YUCAIPA, CA 92399

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 DRAWING NAME: \_\_\_\_\_

SEAL:



**SHEET TITLE:**  
 RV SITE SINGLE  
 LINE DIAGRAM

**SHEET NO.:**

**E-0.2**

**GENERAL NOTES**

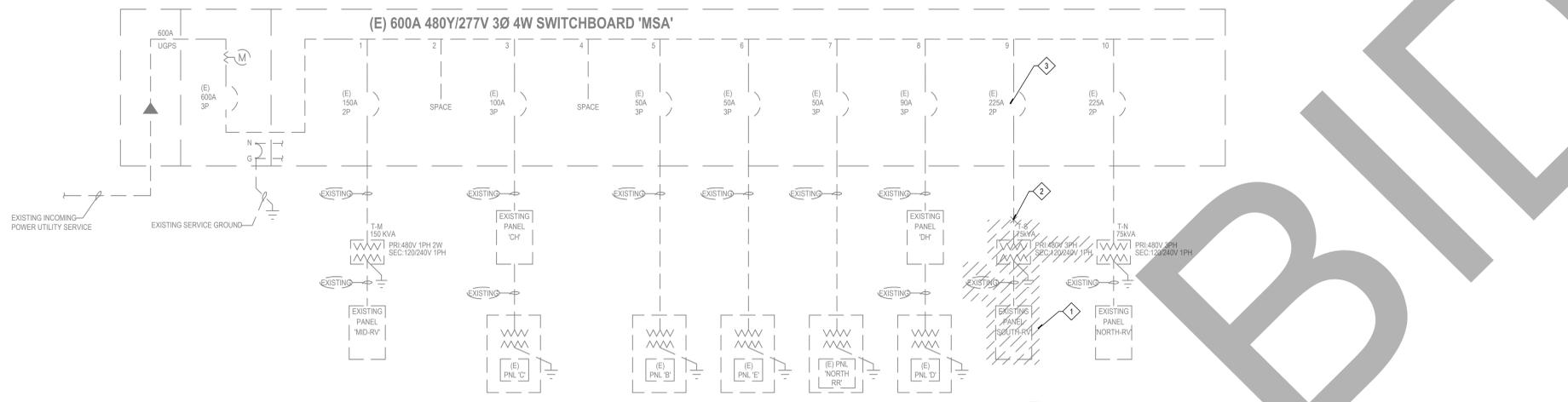
- REFER TO GENERAL NOTES ON ELECTRICAL LEGENDS AND NOTES SHEET FOR WIRING METHODS, MATERIALS, REQUIREMENTS AND DEMOLITION NOTES.
- ALL CIRCUIT BREAKERS, PANELBOARDS AND TRANSFORMERS SHALL BE OF THE SAME MANUFACTURER.
- THE FEEDER LENGTHS SHOWN ON THESE DRAWINGS ARE FOR CALCULATION PURPOSES ONLY AND ARE NOT VALID FOR BIDDING.
- CONTRACTOR SHALL UPDATE ALL MODIFIED PANEL DIRECTORIES OR CREATE A NEW TYPED DIRECTORY, IF ONE DOES NOT EXIST. IDENTIFYING EACH CIRCUIT AND INSTALLED CIRCUIT LOADS, MOUNTED IN GLASS OR PLASTIC INSIDE DOOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING DIRECTORIES TO INDICATE ALL NEW CIRCUITS AND ACTUAL AREA SERVED WHICH IS NOT NECESSARILY THE DESCRIPTION INDICATED ON THE BID DOCUMENTS. USE A COMPUTER OR TYPEWRITER TO CREATE DIRECTORY. HANDWRITTEN DIRECTORIES ARE NOT ACCEPTABLE.
- EQUIPMENT DATA AND CONFIGURATIONS SHOWN ON THE SINGLE LINE DIAGRAM PROVIDE GENERAL EQUIPMENT INFORMATION. CONTRACTOR SHALL REVIEW ELECTRICAL PLANS AND SPECIFICATIONS TO VERIFY ALL EQUIPMENT ASSOCIATED DESIGN INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY COMPONENTS REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION. ANY DISCREPANCIES BETWEEN DESCRIPTIONS, SPECIFICATIONS, AND EXISTING CONDITIONS ARE TO BE PRESENTED TO THE ENGINEER OF RECORD PRIOR TO COMPLETION OF THE BID PROCESS FOR CLARIFICATION. NO EQUIPMENT SHALL BE ORDERED UNTIL DISCREPANCIES ARE RESOLVED THROUGH A FORMAL RFI PROCESS.
- GROUND ALL ELECTRICAL EQUIPMENT, BRANCH CIRCUITS, FEEDERS, PANEL AND DISTRIBUTION BOARDS, ELECTRICAL SERVICES, ETC. PER ADOPTED NEC ARTICLES 250.
- CONTRACTOR IS TO USE EXTREME CAUTION WHEN STARTING THE DEMOLITION WORK, THERE ARE MULTIPLE SERVICES FEEDING THIS WORK AREA. CONTRACTOR SHALL MAKE THEIR DUE DILIGENCE IN SOURCE TRACING ALL EXISTING EQUIPMENT, DISCONNECTS AND CIRCUITS ENTERING AND LEAVING THIS AREA. CONTRACTOR SHALL LABEL ALL CONDUITS WITH THEIR SOURCE LOCATION IF CONDUITS ARE TO REMAIN. ANY CIRCUITS BEING REMOVED SHALL HAVE ITS SOURCE CORRECTLY LABELED AS 'SPARE' AND SAFE-OFF CIRCUIT BREAKER. ANY CIRCUITS THAT REMAIN ARE TO BE REDLINED AND ADDED TO AS-BUILTS.

**DEMOLITION NOTES**

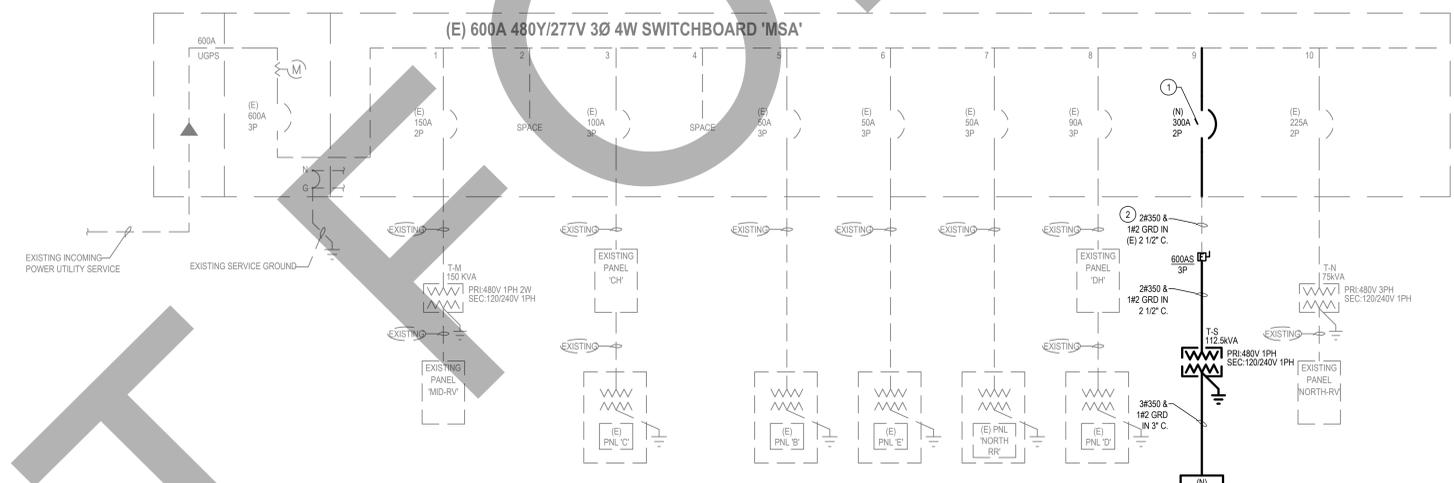
- CONTRACTOR IS TO REMOVE EXISTING TRANSFORMER AND PANELBOARD SAFE OFF EXISTING CIRCUITS AND PREPARE FOR NEW INSTALLATION.
- INTERCEPT EXISTING 2 1/2" CONDUIT BEFORE TRANSFORMER. CONDUITS TO BE DEMOLISHED FROM CONDUIT FEEDING TRANSFORMER. HANDLE EXISTING CONDUIT TO CLEAN OUT DEBRIS BACK TO SOURCE AT MAIN SWITCHGEAR. CONDUIT SIZE WILL NEED TO BE VERIFIED PRIOR TO CONSTRUCTION START.
- EXISTING CIRCUIT BREAKER TO BE DEMOLISHED AND SPACE PREPARED FOR NEW CIRCUIT BREAKER.

**CONSTRUCTION NOTES**

- PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL BOARD. TYPE AND AIC RATING TO MATCH EXISTING.
- CONDUIT TO BE VERIFIED AT CONSTRUCTION START AND IF SIZE IS TOO SMALL, CONDUIT WILL NEED TO BE REPLACED.
- (1) #10 CU BOND TO DRIVEN GROUND ROD (E-4.07)



RV DEMOLITION SINGLE LINE DIAGRAM 1



**LOAD SUMMARY**

EXISTING RV SOUTH PANEL	LOAD VA	LOAD AMPS
1 - EXISTING LOAD (KW)	22000	90
2 - 43% DEMAND*	9494	36
4 - NEW PANEL 'EA1'	13721	57
<b>TOTAL LOAD INCLUDING NEC DEMAND FACTORS:</b>	<b>108655</b>	<b>453</b>
120/240V 1PH 3W		
NEW PANELBOARD RATED: 500		

\*EXISTING DEMAND LOAD BASED ON 43% DEMAND FACTOR PER CEC 551.73 OF (23) RV SPACES AT 50A/2P

**PANEL RV SOUTH**

DESCRIPTION	A	B	TYPE	PHASE	LENGTH	AMP	NOTE
RV SPACES	1020	N 2	100	1	1020	100	1
RV SPACES	8256	N 2	100	5	A - 8	100	1
RV SPACES	8256	N 2	100	7	- B 8	100	1
RV SPACES	1020	N 2	100	8	A - 10	100	2
RV SPACES	1020	N 2	100	11	- B 12	100	2
RV SPACES	1020	N 2	100	13	A - 14	100	2
RV SPACES	1020	N 2	100	15	- B 16	100	2
RV SPACES	1020	N 2	100	17	A - 18	100	2
RV SPACES	1020	N 2	100	19	- B 20	100	2
RV SPACES	1020	N 2	100	21	A - 22	100	2
RV SPACES	1020	N 2	100	23	- B 24	100	2
RV SPACES	1020	N 2	100	25	A - 26	100	2
RV SPACES	1020	N 2	100	27	- B 28	100	2
RV SPACES	1020	N 2	100	29	A - 30	100	2

**SUBTOTALS** 2886 2886 23001 25164

**CEC LOAD CALC:** CONNECTED 2886 DEMAND 23001

**LOAD TYPE** VA FACT VA AMPS

(L) LIGHTING 165 1.25 205 1

(R) RECEPTACLE 180 20.44 180 1

(M) MOTOR 0 1.25 0 0

LARGEST MOTOR 0.25 0 0

(C) CONTINUOUS 19488 1.25 13335 96

(N) NON-CONTINUOUS 9484 1.00 9484 36

(K) KITCHEN (NEC 220.54) 0 0.65 0 0

(S) SPECIAL DEMAND 0 1.00 0 0

**TOTALS** 10967 10968

**TOTAL AMPS CONNECTED AT 120/240V 1PH 3W WITH LCL** 453 A

**PANEL E1A (BY OTHERS)**

DESCRIPTION	A	B	TYPE	PHASE	LENGTH	AMP	NOTE
REC - CHASE	100	R 1	20	1	100	20	1
SPARE	1	20	1	2	A - 2	20	1
SPARE	1	20	1	3	- B 4	20	1
SPARE	1	20	1	5	A - 6	20	1
SPARE	1	20	1	7	- B 8	20	1
SPARE	1	20	1	9	A - 10	20	1
SPARE	1	20	1	11	- B 12	20	1

**SUBTOTALS** 100 0 4245 656

**CEC LOAD CALC:** CONNECTED 100 DEMAND 4245

**LOAD TYPE** VA FACT VA AMPS

(L) LIGHTING 165 1.25 206 1

(R) RECEPTACLE 180 20.44 180 1

(M) MOTOR 0 1.25 0 0

LARGEST MOTOR 0.25 0 0

(C) CONTINUOUS 19488 1.25 13335 96

(N) NON-CONTINUOUS 9484 1.00 9484 36

(K) KITCHEN (NEC 220.54) 0 0.65 0 0

(S) SPECIAL DEMAND 0 1.00 0 0

**TOTALS** 11913 11913

**TOTAL AMPS CONNECTED AT 120/240V 1PH 3W WITH LCL** 57 A

**600V FEEDER SCHEDULE 1Ø 3W**

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
20-B	20A-3W	1	2 # 12	1 # 12	1 # 12	3/4"
30-B	30A-3W	1	2 # 10	1 # 10	1 # 10	3/4"
40-B	40A-3W	1	2 # 8	1 # 10	1 # 10	1"
50-B	50A-3W	1	2 # 6	1 # 6	1 # 10	1"
60-B	60A-3W	1	2 # 6	1 # 6	1 # 10	1"
70-B	70A-3W	1	2 # 4	1 # 4	1 # 6	1-1/4"
80-B	80A-3W	1	2 # 4	1 # 4	1 # 6	1-1/4"
90-B	90A-3W	1	2 # 2	1 # 2	1 # 6	1-1/2"
100-B	100A-3W	1	2 # 1	1 # 1	1 # 6	1-1/2"
125-B	125A-3W	1	2 # 1	1 # 1	1 # 6	1-1/2"
150-B	150A-3W	1	2 # 1/0	1 # 1/0	1 # 6	1-1/2"
175-B	175A-3W	1	2 # 2/0	1 # 2/0	1 # 6	2"
200-B	200A-3W	1	2 # 3/0	1 # 3/0	1 # 6	2"

**NOTE:**  
 ALL CONDUCTOR SIZES ARE BASED ON TYPE THHN COPPER CONDUCTOR UNLESS OTHERWISE NOTED. THE AMPACITY OF CONDUCTORS SHALL BE BASED ON THE TERMINALS NOT TO EXCEED 60°C FOR CONDUCTOR SIZE #14 THROUGH #1 AWG OR 75°C FOR CONDUCTOR SIZE OVER #1 AWG AS PER NEC 110.14(C).

RV REMODEL SINGLE LINE DIAGRAM 2

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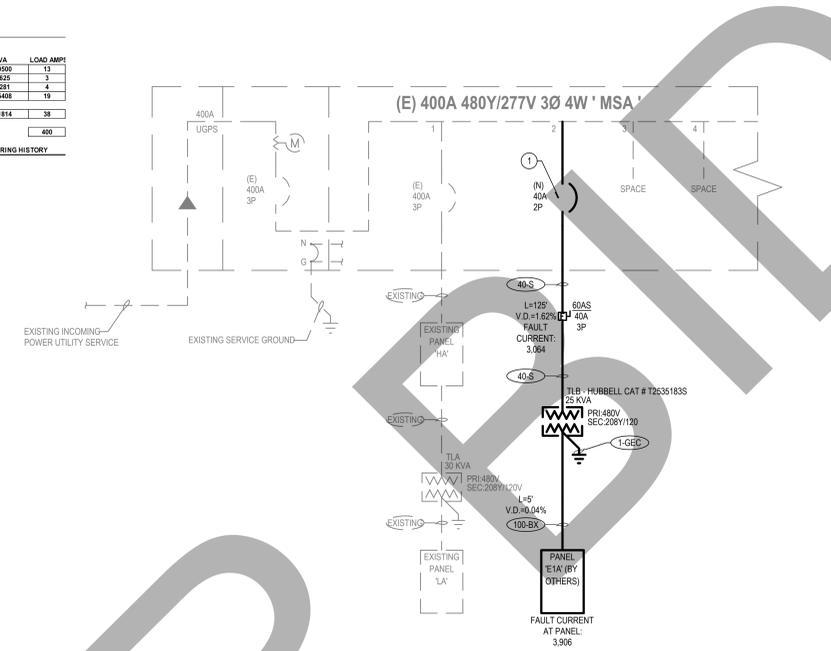
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NOT FOR CONSTRUCTION

**LOAD SUMMARY**

EXISTING MAIN SWITCHBOARD 'MSA'	LOAD VA	LOAD AMP
1 EXISTING LOAD (KW)	10500	13
2 KW TO KVA (8 PF)	2625	3
3 NEW EXIST LOAD PER NEC 220.87	3361	4
4 NEW PANEL 'E1A'	15408	19
<b>TOTAL @ 480Y/277V 3PH 4W (INCLUDING NEC DEMAND FACTORS)</b>	<b>31814</b>	<b>39</b>
EXISTING SWITCHBOARD RATED		400

EXISTING LOAD BASED ON PEAK DEMAND FROM 1 YR. UTILITY METERING HISTORY



**600V FEEDER SCHEDULE 1Ø 3W - XFMR SEC**

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
30-BX	30A-4W	1	2 # 10	1 # 10	1 # 8	3/4"
50-BX	50A-4W	1	2 # 6	1 # 6	1 # 8	1"
75-BX	70A-4W	1	2 # 4	1 # 4	1 # 8	1-1/4"
100-BX	100A-4W	1	2 # 1	1 # 1	1 # 6	1-1/2"
125-BX	125A-4W	1	2 # 1	1 # 1	1 # 6	1-1/2"
200-BX	200A-4W	1	2 # 3/0	1 # 3/0	1 # 4	2"
225-BX	225A-4W	1	2 # 4/0	1 # 4/0	1 # 2	2 1/2"
300-BX	300A-4W	1	2 # 350 KCM	1 # 350 KCM	1 # 2	3"
400-BX	400A-4W	1	2 # 600 KCM	1 # 600 KCM	1 # 1/0	3 1/2"
600-BX	600A-4W	2	2 # 350 KCM	1 # 350 KCM	1 # 2/0	3"
1000-BX	1000A-4W	3	2 # 500 KCM	1 # 500 KCM	1 # 4/0	3 1/2"
1200-BX	1200A-4W	3	2 # 600 KCM	1 # 600 KCM	1 # 250 KCM	4"

NOTE:  
ALL CONDUCTOR SIZES ARE BASED ON TYPE THHN COPPER CONDUCTOR UNLESS OTHERWISE NOTED. THE AMPACITY OF CONDUCTORS SHALL BE BASED ON THE TERMINALS NOT TO EXCEED 60°C FOR CONDUCTOR SIZE #14 THROUGH #1 AWG OR 75°C FOR CONDUCTOR SIZE OVER #1 AWG AS PER NEC 110.14(C). GROUNDING CONDUCTOR SIZED PER TABLE 250.102(C)(1) FOR SEPARATELY DERIVED SYSTEMS.

**600V FEEDER SCHEDULE 1Ø 2W**

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
20-S	20A-2W	1	2 # 12	N/A	1 # 12	3/4"
30-S	30A-2W	1	2 # 10	N/A	1 # 10	3/4"
40-S	40A-2W	1	2 # 8	N/A	1 # 10	1"
50-S	50A-2W	1	2 # 6	N/A	1 # 10	1"
60-S	60A-2W	1	2 # 6	N/A	1 # 10	1"
70-S	70A-2W	1	2 # 4	N/A	1 # 8	1"
80-S	80A-2W	1	2 # 4	N/A	1 # 8	1-1/4"
90-S	90A-2W	1	2 # 2	N/A	1 # 8	1-1/4"
100-S	100A-2W	1	2 # 1	N/A	1 # 8	1-1/4"
125-S	125A-2W	1	2 # 1	N/A	1 # 6	1-1/2"
150-S	150A-2W	1	2 # 1/0	N/A	1 # 6	1-1/2"
175-S	175A-2W	1	2 # 2/0	N/A	1 # 6	2"
200-S	200A-2W	1	2 # 3/0	N/A	1 # 6	2"

NOTE:  
ALL CONDUCTOR SIZES ARE BASED ON TYPE THHN COPPER CONDUCTOR UNLESS OTHERWISE NOTED. THE AMPACITY OF CONDUCTORS SHALL BE BASED ON THE TERMINALS NOT TO EXCEED 60°C FOR CONDUCTOR SIZE #14 THROUGH #1 AWG OR 75°C FOR CONDUCTOR SIZE OVER #1 AWG AS PER NEC 110.14(C).

**G.E.C. SCHEDULE**

LABEL	SERVICE C.P.D.	CONDUCTOR	CONDUIT
1-GEC	60A-100A	#6	3/4"
2-GEC	110A-200A	#4	1"
3-GEC	225A-400A	#1/0	1-1/4"
4-GEC	> 400A	#3/0	1-1/4"

NOTE:  
ALL GROUNDING ELECTRODE CONDUCTOR SIZES ARE BASED ON BARE COPPER CONDUCTOR UNLESS OTHERWISE NOTED AND SIZE PER CEC TABLE 250.66.

**GENERAL NOTES**

- REFER TO GENERAL NOTES ON ELECTRICAL LEGENDS AND NOTES SHEET FOR WIRING METHODS, MATERIALS, AND REQUIREMENTS.
- ALL CIRCUIT BREAKERS, PANELBOARDS AND TRANSFORMERS SHALL BE OF THE SAME MANUFACTURER.
- THE FEEDER LENGTHS SHOWN ON THESE DRAWINGS ARE FOR CALCULATION PURPOSES ONLY AND ARE NOT VALID FOR BIDDING.
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- GROUND ALL ELECTRICAL EQUIPMENT, BRANCH CIRCUITS, FEEDERS, PANEL AND DISTRIBUTION BOARDS, ELECTRICAL SERVICES, ETC. PER ADOPTED NEC ARTICLES 250.

**CONSTRUCTION NOTES**

- PROVIDE NEW CIRCUIT BREAKER IN EXISTING DISTRIBUTION BOARD, TYPE AND AIC RATING TO MATCH EXISTING.



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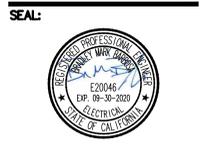
PROJECT # 1010-1089  
CIP # \_\_\_\_\_

33900 OAK GLEN ROAD  
YUCAIPA, CA 92399

**ISSUE INFORMATION:**

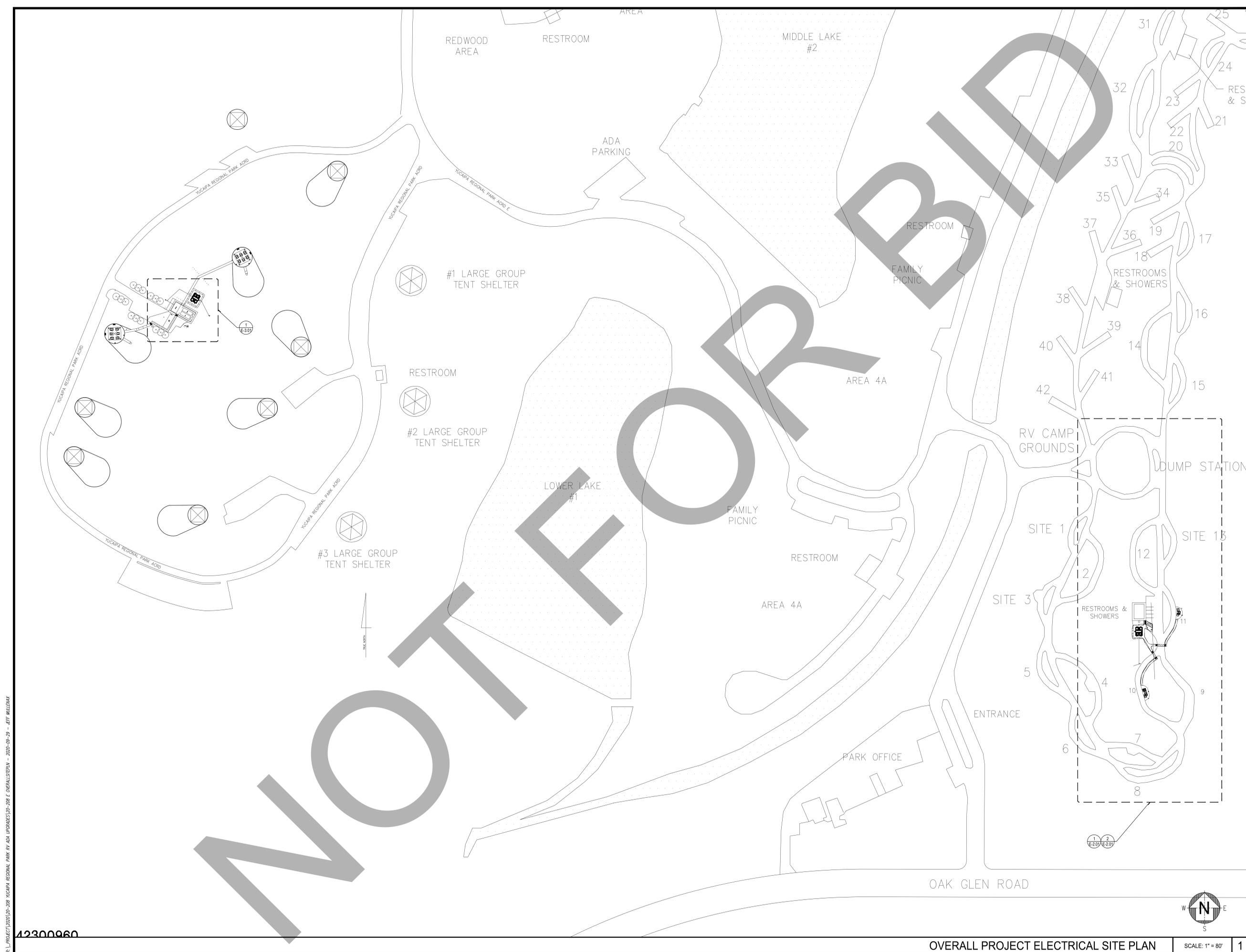
DATE:	INFORMATION:

**SHEET INFORMATION:**  
STK PROJECT NO.: 374-141-20  
SCALE: AS NOTED  
DATE: SEPTEMBER 2020  
PLOT DATE: -  
DRAWING NAME: -



**SHEET TITLE:**  
TENT CAMP  
SINGLE LINE  
DIAGRAM

**SHEET NO.:**  
**E-0.3**



P:\PROJECT\2020\20-208 YUCAIPA REGIONAL PARK RV ADA UPGRADES\20-208 E OVERALL SITE PLAN - 2020-09-29 - ETT MULLENX

42300960

OVERALL PROJECT ELECTRICAL SITE PLAN SCALE: 1" = 80' 1



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 385 N. ARROWHEAD AVE.  
 SAN BERNARDINO, CA 92415

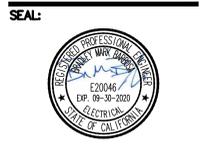
**PROJECT NAME:**  
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 RV & GROUP TENT  
 CAMPGROUNDS ADA  
 UPGRADES

PROJECT # 1010-1089  
 CIP # \_\_\_\_\_  
 33900 OAK GLEN ROAD  
 YUCAIPA, CA 92399

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DATE:	INFORMATION:

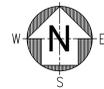
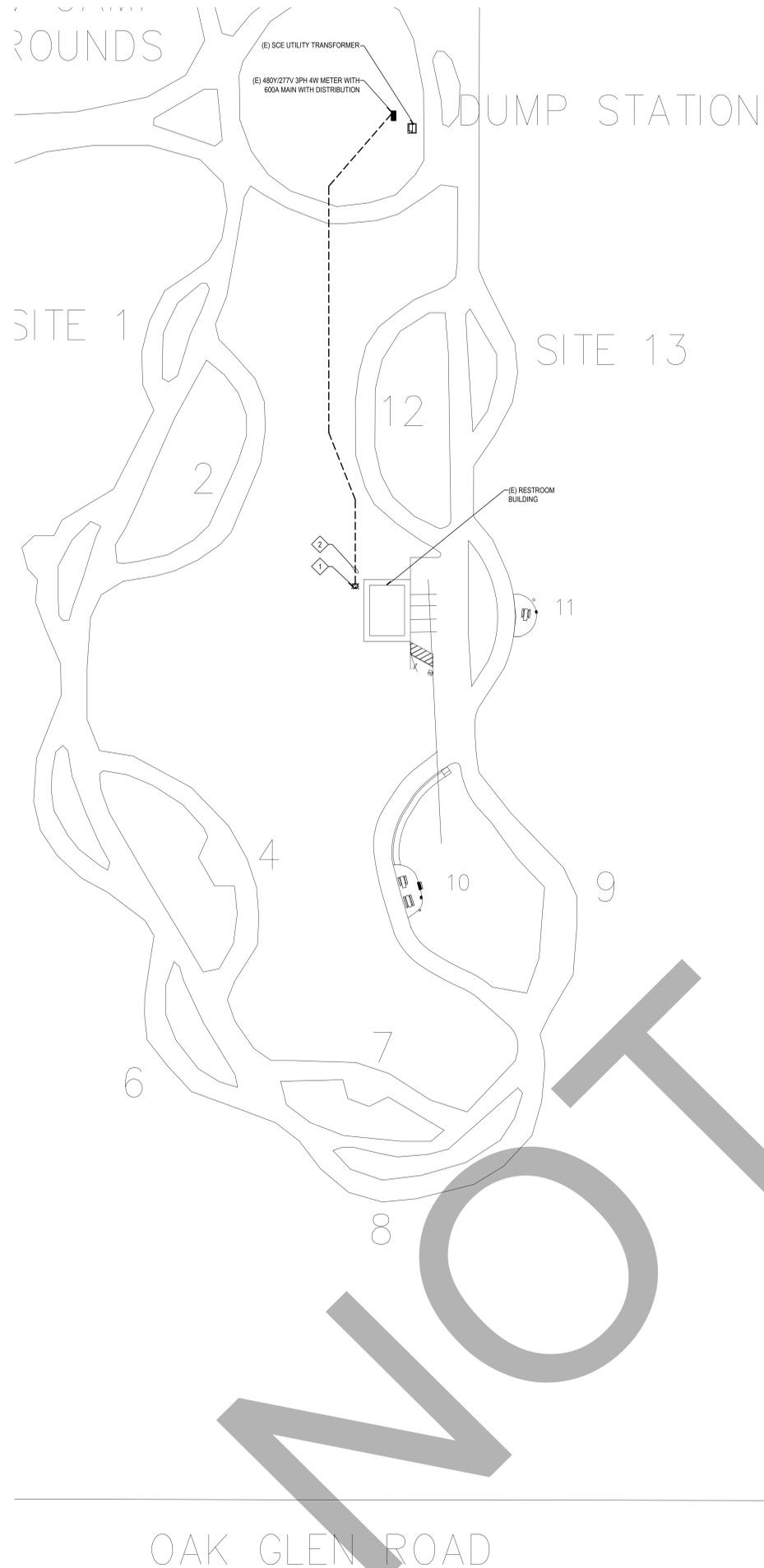
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 DRAWING NAME:



**SHEET TITLE:**  
 OVERALL  
 PROJECT  
 ELECTRICAL SITE  
 PLAN

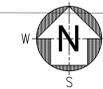
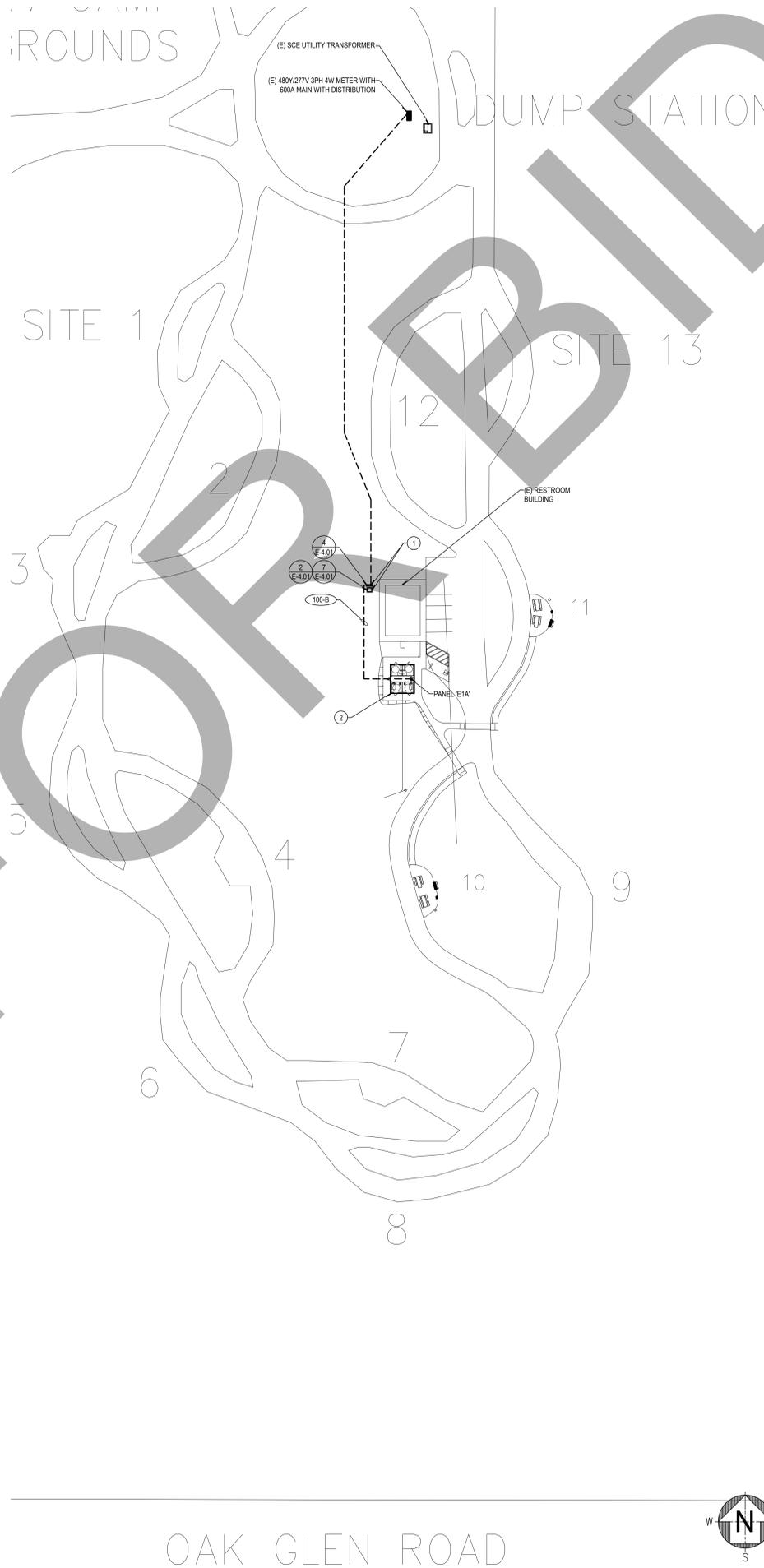
**SHEET NO.:**  
 E-1.01

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RV DEMOLITION ELECTRICAL SITE PLAN

SCALE: 1" = 40' 1



RV REMODEL ELECTRICAL SITE PLAN

SCALE: 1" = 40' 1

**GENERAL NOTES**

1. REFER TO ELECTRICAL LEGENDS AND NOTES SHEET FOR ADDITIONAL DEMOLITION NOTES.
2. CONTRACTOR IS TO USE EXTREME CAUTION WHEN STARTING THE DEMOLITION WORK. THERE ARE MULTIPLE SERVICES FEEDING THIS WORK AREA. CONTRACTOR SHALL MAKE THEIR DUE DILIGENCE IN SOURCE TRACING ALL EXISTING EQUIPMENT, DISCONNECTS AND CIRCUITS ENTERING AND LEAVING THIS AREA. CONTRACTOR SHALL LABEL ALL CONDUITS WITH THEIR SOURCE LOCATION IF CONDUITS ARE TO REMAIN. ANY CIRCUITS BEING REMOVED SHALL HAVE ITS SOURCE CORRECTLY LABELED AS 'SPARE' AND SAFE-OFF CIRCUIT BREAKER. ANY CIRCUITS THAT REMAIN ARE TO BE RE-ROUTED AND ADDED TO AS-BUILTS. THE CONTRACTOR SHALL INSPECT AND VERIFY ALL FIELD CONDITIONS PRIOR TO INSTALLATION OF UTILITY SERVICES.
3. COORDINATE TRENCH ROUTING AND EQUIPMENT LOCATIONS WITH EXISTING CONDITIONS AND NEW WORK.
4. ALL SITE BRANCH CIRCUIT WIRING SHALL BE #10 AWG. OR LARGER.
5. CONTRACTOR SHALL UTILIZE 'GPR' GROUND PENETRATING RADAR TO SURVEY AND TRACE ALL EXISTING UNDERGROUND UTILITY LINES IN AREAS WHERE NEW TRENCHING IS PLANNED. CONTRACTOR TO SUBMIT 'GPR' REPORT TO PROJECT MANAGER FOR REVIEWING PRIOR TO TRENCHING.
6. ALL SITE UNDERGROUND CONDUIT TO BE 1" MIN. UNLESS OTHERWISE NOTED.
7. SUPPORT CONDUIT(S) EVERY 10'-0" AND WITHIN 3'-0" OF ANY JUNCTION BOX OR TERMINATION.

**DEMOLITION NOTES**

1. CONTRACTOR IS TO REMOVE EXISTING TRANSFORMER AND PANEL BOARD SAFE OFF EXISTING CIRCUITS AND PREPARE FOR NEW INSTALLATION.
2. INTERCEPT EXISTING 2 1/2" CONDUIT BEFORE TRANSFORMER. CONDUCTORS TO BE DEMOLISHED FROM CONDUIT FEEDING TRANSFORMER. MANDREL EXISTING CONDUIT TO CLEAN OUT DEBRIS BACK TO SOURCE AT MAIN SWITCHGEAR. CONDUIT SIZE WILL NEED TO BE VERIFIED PRIOR TO CONSTRUCTION START AND MAY HAVE TO BE REPLACED IF SMALLER THAN 2 1/2".

**CONSTRUCTION NOTES**

1. NEW 112 KVA TRANSFORMER ON HOUSEKEEPING PAD WITH ADJACENT UNISTRUT RACK FOR PANEL RV-SOUTH AND SERVICE DISCONNECT.
2. NEW RESTROOM BUILDING WITH PREFAB PANELBOARD 'E1A' SEE SINGLE LINE DIAGRAM AND PANEL SCHEDULES ON SHEET. 2  
E-02



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 CAMPGROUNDS ADA  
 UPGRADES

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33900 OAK GLEN ROAD  
 YUCAIPA, CA 92399

**ISSUE INFORMATION:**

DATE:	INFORMATION:

**SHEET INFORMATION:**

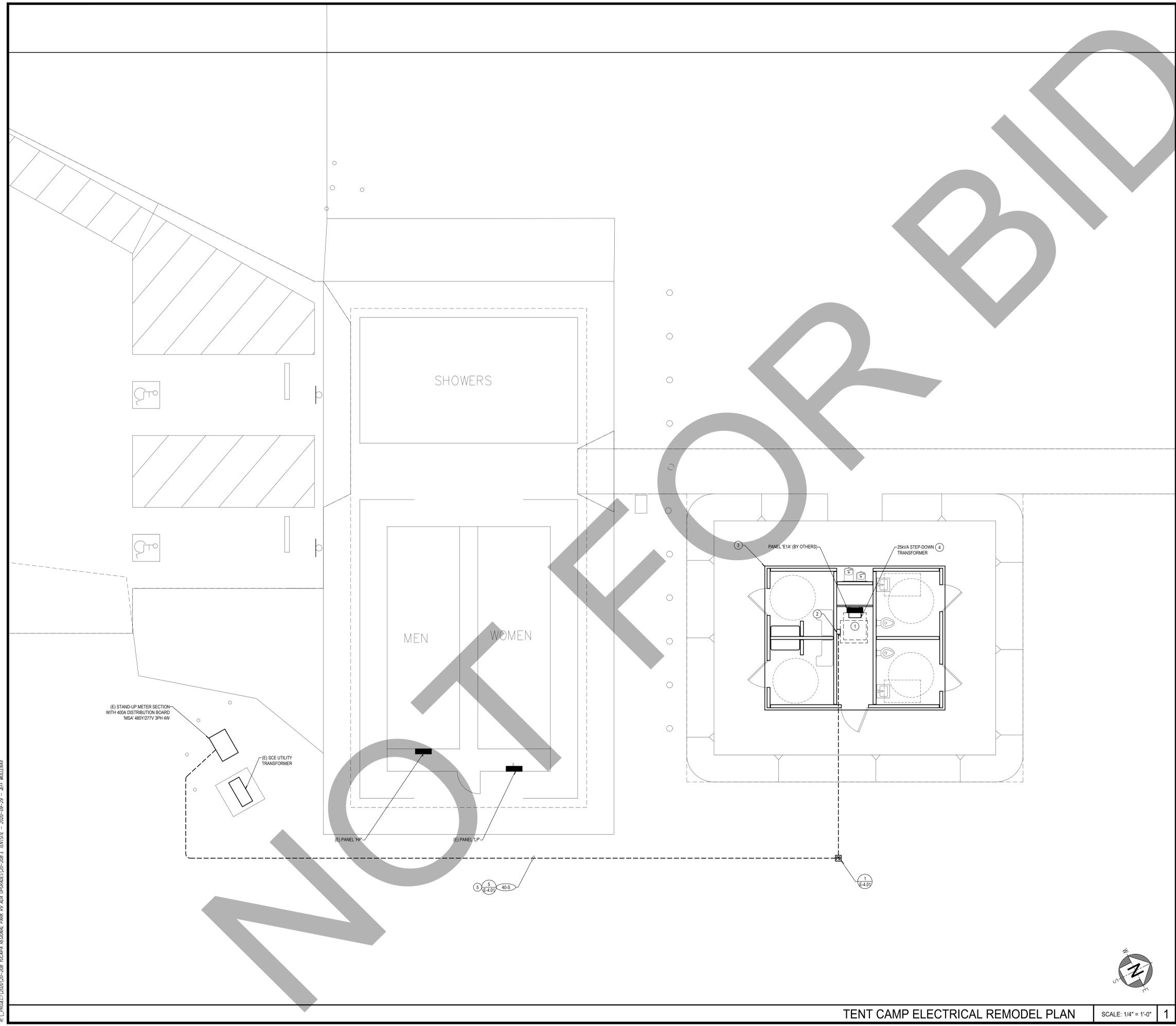
STK PROJECT NO.: 374-141-20  
 SCALE: AS NOTED  
 DATE: SEPTEMBER 2020  
 PLOT DATE: \_\_\_\_\_  
 DRAWING NAME: \_\_\_\_\_



**SHEET TITLE:**  
 RV ELECTRICAL  
 DEMOLITION  
 AND REMODEL  
 SITE PLANS

**SHEET NO.:**

**E-2.01**



**GENERAL NOTES**

1. NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN A SPACE EXTENDING FROM FLOOR TO A HEIGHT OF 6' ABOVE THE EQUIPMENT. CEC 110.26(E).
2. SEE PREFAB DRAWINGS FOR LIGHTING CALCULATIONS, TITLE 24 AND ALL OTHER POWER REQUIREMENTS INCLUDING PANEL SCHEDULE.
3. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE NEMA 3R.

**CONSTRUCTION NOTES**

1. PROVIDE MINIMUM 3'-0" LEVEL CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT, PER CEC 110.25.
2. 60A, 2P, 600V DISCONNECT SWITCH FOR STEP-DOWN TRANSFORMER. COORDINATE EXACT LOCATION WITH PREFAB BUILDING DRAWINGS.
3. PRE-FABRICATED BUILDING (BY OTHERS).
4. 25kVA STEP-DOWN TRANSFORMER TO BE INSTALLED ABOVE PANELBOARD DUE TO CLEARANCE RESTRAINTS.
5. PROVIDE (2) 1 1/2" SPARE CONDUITS & TERMINATE AT UNDERGROUND PULLBOX WITH NYLON PULL STRING.



**PROJECT ADMINISTERED BY:**  
 COUNTY OF  
 SAN BERNARDINO  
 REAL ESTATE SERVICES  
 DEPARTMENT -  
 PROJECT MANAGEMENT  
 DIVISION

385 N. ARROWHEAD AVE.  
 SAN BERNARDINO, CA 92415

**PROJECT NAME:**  
 YUCAIPA REGIONAL PARK:  
 RV & GROUP TENT  
 CAMPGROUNDS ADA  
 UPGRADES

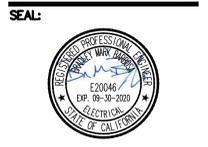
PROJECT # 1010-1089  
 CIP # \_\_\_\_\_

33900 OAK GLEN ROAD  
 YUCAIPA, CA 92399

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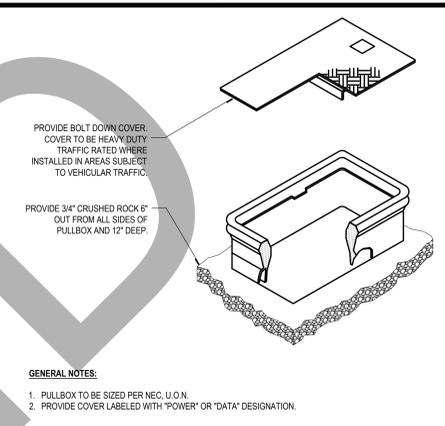
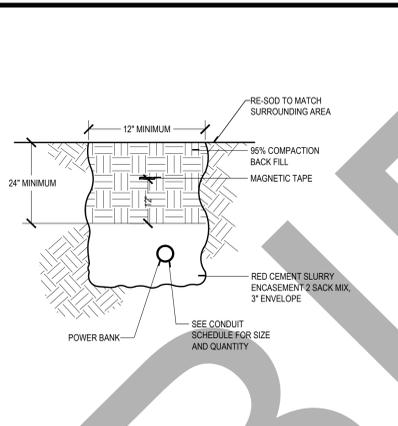
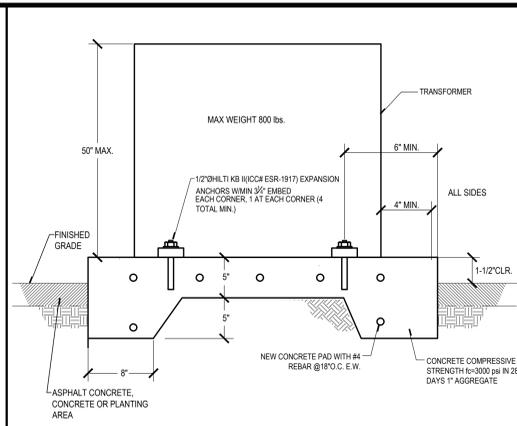
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**SHEET TITLE:**  
 TENT CAMP  
 ELECTRICAL  
 REMODEL PLAN

**SHEET NO.:**  
 E-3.01

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- 11

TRANSFORMER MOUNTING PAD DETAIL 7

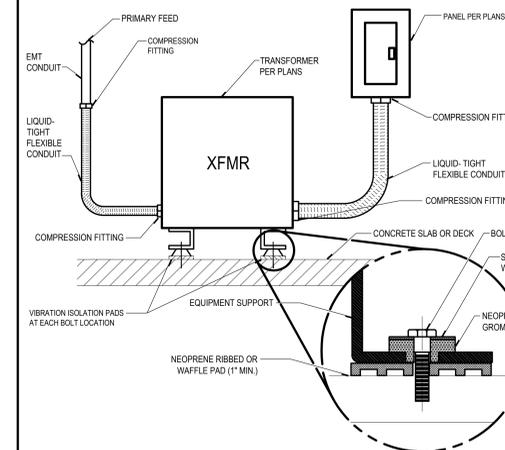
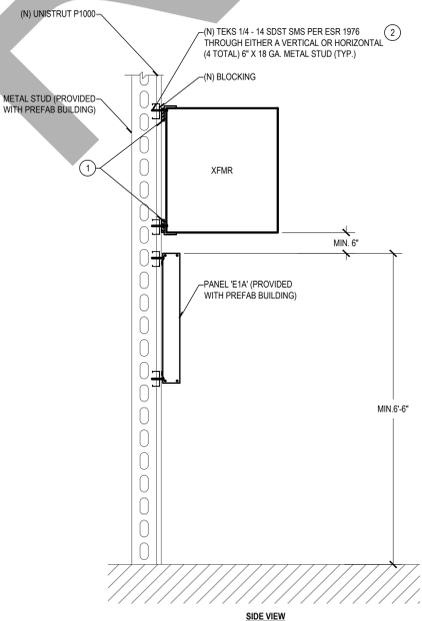
TRENCH DETAIL 5

PULLBOX DETAIL 1

- 16

- 12

**GENERAL NOTES:**  
 1. ELECTRICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF TRANSFORMER FRAME PRIOR TO CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SEISMIC RESTRAINT SYSTEM PER SMOCA PUBLICATION AND GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL EQUIPMENT AND CALIFORNIA ADMINISTRATIVE CODE, TITLE 24, DIVISION 22.  
**CONSTRUCTION NOTES:**  
 1. PROVIDE ISOLATION PADS MINIMUM 1" THICK. TRANSFORMER SHALL BE SECURED TO METAL STRUCTURE.  
 2. VERIFY WEIGHT CAPACITY OF TEK SCREWS AND ADJUST SIZE FOR WEIGHT OF TRANSFORMER AND PANELEARD.  
 (N) UNISTRUT P1000  
 (N) TEKS 1/4" - 14 SDST SMS PER ESR 1978 THROUGH EITHER A VERTICAL OR HORIZONTAL (4 TOTAL) 5" X 18 GA. METAL STUD (TYP.)  
 (N) BLOCKING  
 METAL STUD (PROVIDED WITH PREFAB BUILDING)  
 (1)  
 (2)



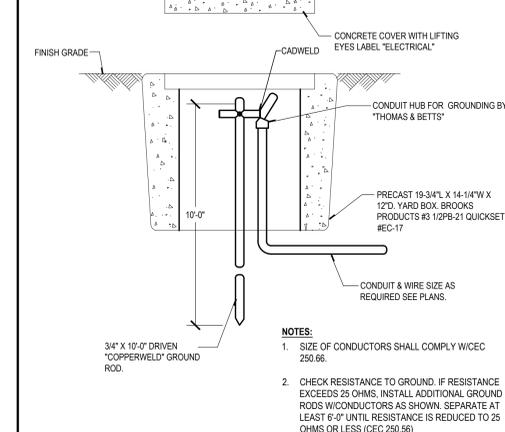
TYPICAL XFRMR VIBRATION ISOLATION 2

- 17

- 13

PANEL WITH TRANSFORMER ABOVE 6

GROUND ROD DETAIL 3

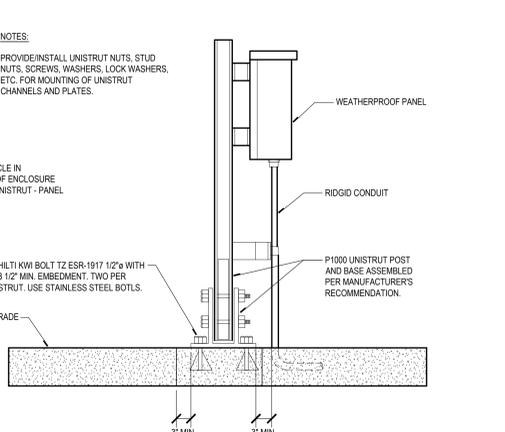


GROUND ROD DETAIL 3

- 18

- 14

UNISTRUT PANEL MOUNTING DETAIL 4



UNISTRUT PANEL MOUNTING DETAIL 4



4125 EVANS DR., TEMECULA, CALIFORNIA 92590-3760  
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**DESIGN WEST ENGINEERING**  
 MECHANICAL • ELECTRICAL • ENERGY CONSULTANTS

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SEAL:



**SHEET TITLE:**  
 ELECTRICAL DETAILS

**SHEET NO.:**

E-4.01

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