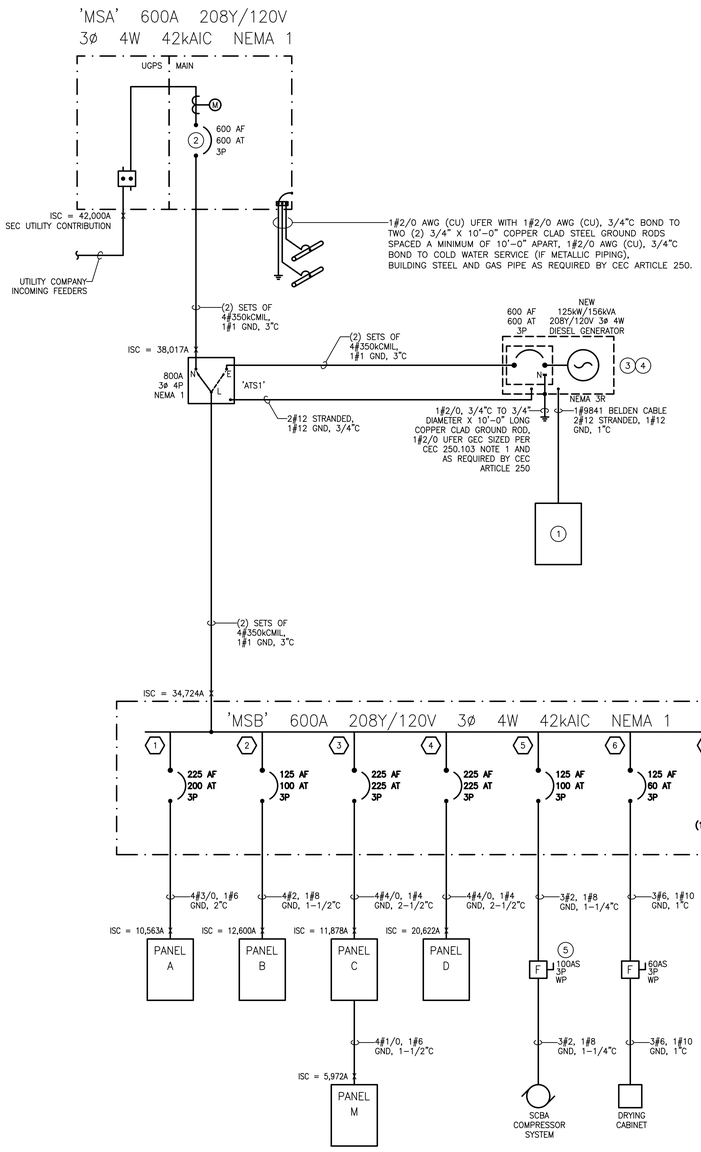

SINGLE LINE DIAGRAM 1
NO SCALE

NOT FOR BID

GENERAL NOTES

A. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND COORDINATE WITH ALL OTHER TRADES. IN CASE OF DISCREPANCIES OR ANY POTENTIAL CONFLICTS, INFORM THE ARCHITECT AND ENGINEER IN WRITING PRIOR TO START OF WORK.

B. ALL WORK SHOWN IS NEW UNLESS NOTED OTHERWISE.

C. ALL CONDUCTORS SHALL BE COPPER UNLESS NOTED OTHERWISE.

KEY NOTES

1. REMOTE GENERATOR ANNUNCIATOR PANEL.
2. PROVIDE REVERSE FEED LISTED CIRCUIT BREAKER FOR PV INSTALLATION.
3. EMERGENCY GENERATOR WITH 72-HR UL-142 LISTED SUB BASE DIESEL TANK. PROVIDE GENERATOR WITH WEATHERPROOF SOUND ATTENUATED ENCLOSURE. WIRING SHALL BE INSTALLED PER N.E.C. ART 700. CONTRACTOR SHALL PROVIDE CERTIFICATE OF APPROVAL FROM SCAQMD FOR ENGINE EXHAUST EMISSIONS, FIRE DEPARTMENT, HAZMAT AND OTHER AGENCY REQUIREMENTS. SECURE PERMIT TO INSTALL AND OPERATE. REFER TO SPECIFICATION SECTION 26 30 01 – DIESEL EMERGENCY GENERATOR SYSTEM.
4. GROUNDING AND NEUTRAL BOND AT THE GENERATOR PER (NEC 250.26).
5. FUSED DISCONNECT SWITCH FOR SCBA UNIT. COORDINATE WITH ARCHITECT AND EQUIPMENT MANUFACTURER FOR EXACT LOCATION AND REQUIREMENTS PRIOR TO START OF WORK.

	SERVICE : MSB		LOCATION: SEE PLANS			MAIN: MLO		BUS: 600A NEMA 1				
	VOLTAGE: 208 / 120		AIC RATING: 42000			FEED: BOTTOM		MTG: SURFACE				
	PHASE: 3		CIRCUIT CODE:									
	WIRE: 4		blank=NON-CONTINUOUS, N=NON-COINCIDENTAL, L=LONG CONTINUOUS, R=RECEPT (NEC ART. 220-44), K=KITCHEN									
NOTE	DESCRIPTION	CODE	BKR	P	#	VA	PHASE	VA	#	P	BKR	CODE	DESCRIPTION	NOTE
	PANEL A		200	3		14120	A	3486		3	100		PANEL B	
	-				1	16680	B	2079	2				-	
	-					16450	C	1561					-	
	PANEL C		225	3		17952	A	21058		3	225		PANEL D	
	-				3	19042	B	23575	4				-	
	-					19241	C	19545					-	
	SCBA COMPRESSOR		100	3		3667	A	6240		3	60		DRYING CABINET	
	-				5	3667	B	6240	6				-	
	-					3667	C	6240					-	
	SPARE		125	3			A	4800		3	50		SCBA DECON	
	-				7		B	4800	8				-	
	-						C	4800					-	
1	PV-BESS SYSTEM	N	110	3		10000	A			3	125		SPACE	
1	-	N			9	10000	B		10				-	
1	-	N				10000	C						-	

CONNECTED VA Ø A	71323	CONNECTED VA ( )	126988	PANEL CONN. AMPS WITH LCL	636.71	PANEL DEMAND KVA WITH LCL	209.38
CONNECTED VA Ø B	76083	CONNECTED VA (L)	41902	CONNECTED VA WITH LCL (L)	52378	PANEL DEMAND AMPS WITH LCL	581.17
CONNECTED VA Ø C	71504	CONNECTED VA (R)	50020	DEMAND VA (R)	30010	PANEL CONNECTED AMPS	607.63
TOTAL VA	218910	CONNECTED VA (K)	0	DEMAND VA (K)	0	DEMAND HIGH Ø AMPS WITH LCL	605.26

1 PROVIDE REVERSE FEED RATED CIRCUIT BREAKER
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SPECIAL NOTES:

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:
Salas O'Brien
3220 Executive Ridge, Suite 210
Vista, CA 92081
760.560.0100
08-22-25 #2024-03417
www.salasobrien.com
JO DRN PP MP

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

DATE:	INFORMATION:
9-11-24	D.D.s
10-26-24	PROGRESS
12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
~~07-25-25~~	~~BID SET~~
08-25-25	BID SET

SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

SHEET TITLE:
SINGLE LINE DIAGRAM AND LOAD SUMMARY

SHEET NO.:
E4.1

08/22/2025 8:55AM T:\2024-03417-00 - SB Fire Station 227\5- BIM-CAD\Electrical\2024-03417_E4.1.dwg

GENERAL NOTES

A. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND COORDINATE WITH ALL OTHER TRADES. IN CASE OF DISCREPANCIES OR ANY POTENTIAL CONFLICTS, INFORM THE ARCHITECT AND ENGINEER IN WRITING PRIOR TO START OF WORK.

B. ALL WORK SHOWN IS NEW UNLESS NOTED OTHERWISE.

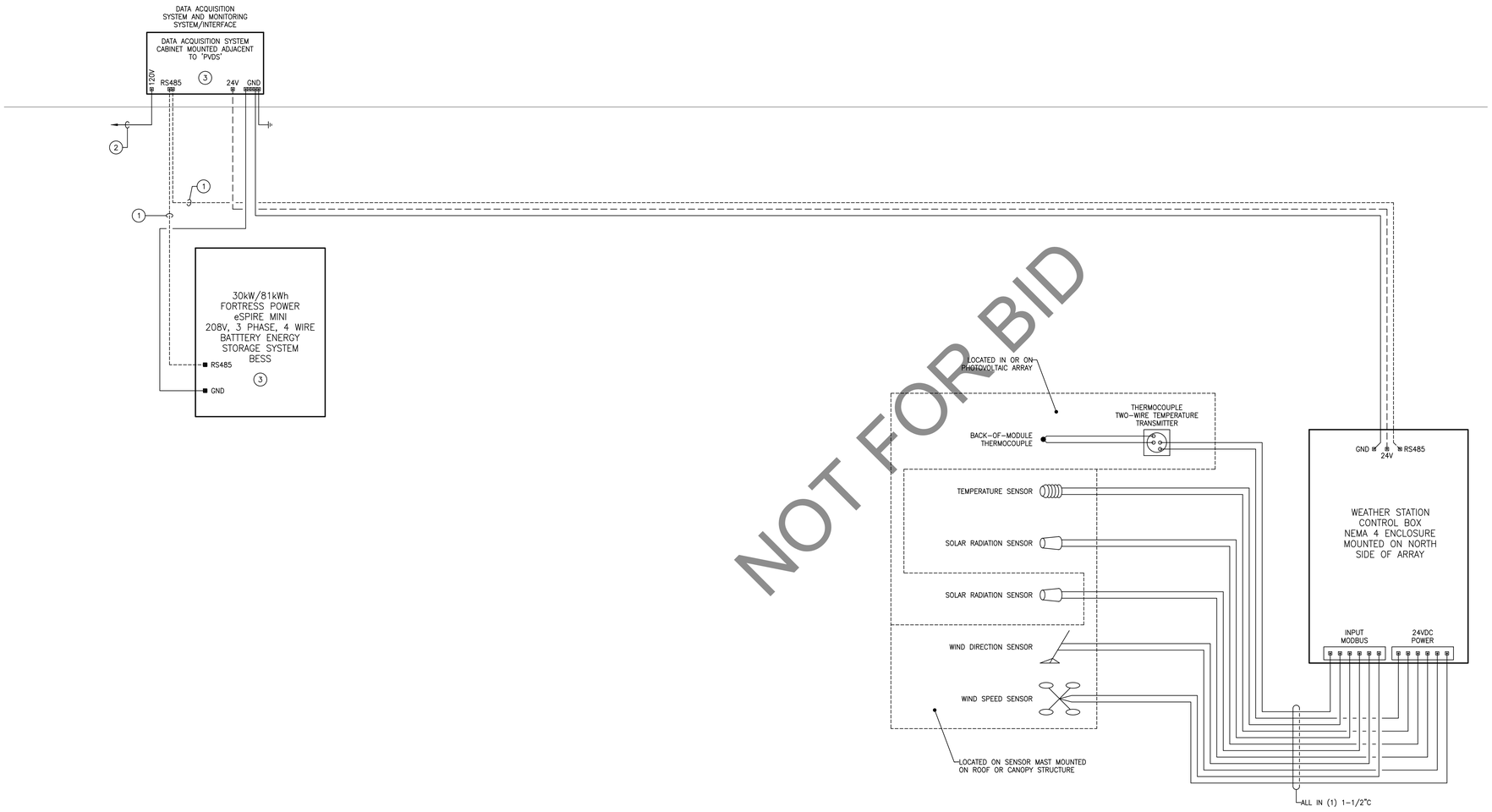
C. CONTRACTOR SHALL PROVIDE A COMPLETE, OPERABLE SOLAR PHOTOVOLTAIC MONITORING SYSTEM COMPLIANT AND COMPATIBLE WITH THE FIRE DEPARTMENT'S REQUIREMENTS.

KEY NOTES

(1) (1) 18 AWG, 2 TWISTEDPAIR RS485 CABLE, 1" CONDUIT.

(2) 120 VOLT CONTROL POWER CIRCUIT.

(3) INSTALLING CONTRACTOR TO PROVIDE SOLAR SYSTEM AND BATTERY ENERGY STORAGE SYSTEM STARTUP.



NOT FOR BID

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:
Salas O'Brien
3220 Executive Ridge, Suite 210
Vista, CA 92081
760.560.0100 08-22-25 #2024-03417
www.salasobrien.com
JO DDZ PP MP

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202

CIP #22-105

APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

DATE:	INFORMATION:
9-11-24	D.D.s
10-26-24	PROGRESS
12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
~~07-25-25~~	~~BID SET~~
08-25-25	BID SET

SHEET INFORMATION:

STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. DIPPEL
No. E18809
Exp. 8/30/27
ELECTRICAL
STATE OF CALIFORNIA

SHEET TITLE:
DAS SYSTEM WIRING DIAGRAM

SHEET NO.:
E4.2

08/22/2025 8:59AM T:\2024-03417-00 - SB Fire Station 227\05 BIM-CAD\Electrical\2024-03417_E4.2.dwg

PANEL: M | LOCATION: EXTERIOR MECH. YARD | MAIN: 150A/3P | BUS: 225A NEMA 3R
VOLTAGE: 208 / 120 | AIC RATING: 10000 | FEED: BOTTOM | MTG: SURFACE
PHASE: 3 | CIRCUIT CODE:
WIRE: 4 | blank=NON-CONTINUOUS, N=NON-COINCIDENTAL, L=LONG CONTINUOUS, R=RECEPT (NEC ART. 220-44), K=KITCHEN

NOTE	DESCRIPTION	CODE	BKR	P	#	VA	PHASE	VA	#	P	BKR	CODE	DESCRIPTION	NOTE
	CU-3		25	2	1	1279	A	919	2	2	20		CU-1	
	-				3	1279	B	919	4				-	
	CU-4		25	2	5	1414	C	1196	6	2	20		CU-2	
	-				7	1414	A	1196	8				-	
	HP-5	L	40	2	9	3276	B		10	1	20	R	REC - PATIO/EXTERIOR	
	-	L			11	3276	C		12	1	20		SPARE	
	SPARE		20	1	13	720	A		14	1	20		SPARE	
	SPARE		20	1	15		B		16	1	20		SPARE	
	SPARE		20	1	17		C		18	1	20		SPARE	
	SPACE				19		A		20				SPACE	
	SPACE				21		B		22				SPACE	
	SPACE				23		C		24				SPACE	

CONNECTED VA Ø A	5528	CONNECTED VA ( )	10336	PANEL CONN. AMPS WITH LCL	51.42	PANEL DEMAND KVA WITH LCL	18.53
CONNECTED VA Ø B	5474	CONNECTED VA (L)	6552	CONNECTED VA WITH LCL (L)	8190	PANEL DEMAND AMPS WITH LCL	51.42
CONNECTED VA Ø C	5886	CONNECTED VA (R)	0	DEMAND VA (R)	0	PANEL CONNECTED AMPS	46.88
TOTAL VA	16888	CONNECTED VA (K)	0	DEMAND VA (K)	0	DEMAND HIGH Ø AMPS WITH LCL	55.83

SPECIAL NOTES:
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PANEL: C | LOCATION: INTERIOR MECH. ROOM | MAIN: 225A/3P | BUS: 225A NEMA 1
VOLTAGE: 208 / 120 | AIC RATING: 18000 | FEED: BOTTOM | MTG: SURFACE
PHASE: 3 | CIRCUIT CODE:
WIRE: 4 | blank=NON-CONTINUOUS, N=NON-COINCIDENTAL, L=LONG CONTINUOUS, R=RECEPT (NEC ART. 220-44), K=KITCHEN

NOTE	DESCRIPTION	CODE	BKR	P	#	VA	PHASE	VA	#	P	BKR	CODE	DESCRIPTION	NOTE
3	DUCT SMOKE DETECTORS	L	20	1	1	500	A	1440	2	1	20	R	REC - OFFICE CTRL	1c
	MICRO-SHADES		20	1	3	500	B	720	4	1	20	R	REC - OFFICE	1c,2
	SPARE		20	1	5		C	720	6	1	20	R	REC - OFFICE	1c
1a	REC -COMM ROOM	R	20	1	7	900	A		8	1	20		SPARE	1d
1a	REC -COMM ROOM	R	20	1	9	900	B		10	1	20		SPARE	1d,2
1a	REC -COMM ROOM	R	20	1	11	900	C		12	1	20		SPARE	1d
	SPARE		20	1	13		A		14	1	20		SPARE	
	SPARE		20	1	15		B		16	1	20		SPARE	
	SPARE		20	1	17		C		18	1	20		SPARE	

POWER LOADS ABOVE - SPLIT-BUS - MECHANICAL LOADS BELOW

	SPARE		40	2	19		A	1464	20	1	20		FAU-1	1a
	SPARE				21		B	1464	22	1	20		FAU-2	1a
	BOOSTER FAN BF-1, BF-2		20	1	23	180	C	1464	24	1	20		FAU-3	1b
	SPARE		40	2	25		A	1464	26	1	20		FAU-4	1b
	SPARE				27		B		28	1	20		SPARE	
	FUTURE EV CHARGER	L	40	2	29	3328	C	107	30	1	20		EF-7	
	-	L			31	3328	A		32	1	20		SPARE	
	FUTURE EV CHARGER	L	40	2	33	3328	B	3328	34	2	40	L	FUTURE EV CHARGER	
	-	L			35	3328	C	3328	36			L	-	
	PANEL M		150	3	37	5528	A	3328	38	2	40	L	FUTURE EV CHARGER	
	-				39	5474	B	3328	40			L	-	
	-				41	5886	C		42				SPACE	

CONNECTED VA Ø A	17962	CONNECTED VA ( )	16979	PANEL CONN. AMPS WITH LCL	179.46	PANEL DEMAND KVA WITH LCL	64.65
CONNECTED VA Ø B	19042	CONNECTED VA (L)	33676	CONNECTED VA WITH LCL (L)	42095	PANEL DEMAND AMPS WITH LCL	179.46
CONNECTED VA Ø C	19241	CONNECTED VA (R)	5580	DEMAND VA (R)	5580	PANEL CONNECTED AMPS	156.09
TOTAL VA	56235	CONNECTED VA (K)	0	DEMAND VA (K)	0	DEMAND HIGH Ø AMPS WITH LCL	187.83

SPECIAL NOTES:
1 PROVIDE LISTED HANDLE-TIE DEVICE
2 CONTROLLED CIRCUIT ROUTED THRU CEILING OCC. SENSOR
3 PROVIDE CIRCUIT BREAKER LOCK-ON DEVICE
4
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PANEL: A | LOCATION: INTERIOR COMM ROOM | MAIN: 200A/3P | BUS: 225A NEMA 1
VOLTAGE: 208 / 120 | AIC RATING: 18000 | FEED: BOTTOM | MTG: SURFACE
PHASE: 3 | CIRCUIT CODE:
WIRE: 4 | blank=NON-CONTINUOUS, N=NON-COINCIDENTAL, L=LONG CONTINUOUS, R=RECEPT (NEC ART. 220-44), K=KITCHEN

NOTE	DESCRIPTION	CODE	BKR	P	#	VA	PHASE	VA	#	P	BKR	CODE	DESCRIPTION	NOTE
1a,3	REC - SLEEPING QUARTER 1	R	20	1	1	900	A	360	2	1	20	R	HALLWAY 2, MECH RM REC	1g
1a,3	REC - SLEEPING QUARTER 2	R	20	1	3	900	B	1500	4	1	20		WASHER	1g
1b,3	REC - SLEEPING QUARTER 3	R	20	1	5	900	C	1500	6	1	20		DRYER	1g
1b,3	REC - SLEEPING QUARTER 4	R	20	1	7	900	A	500	8	1	20	L	FIRE ALARM FACP	3
1b,3	REC - SLEEPING QUARTER 5	R	20	1	9	900	B	500	10	1	20	R	REC - BATH 3	1a
1c,3	REC - SLEEPING QUARTER 6	R	20	1	11	900	C	500	12	1	20	R	REC - BATH 4	1a
1c,3	REC - SLEEPING QUARTER 7	R	20	1	13	900	A	500	14	1	20	R	REC - BATH 5	1a
1c,3	REC - SLEEPING QUARTER 8	R	20	1	15	900	B	1000	16	1	20	R	MICROWAVE	1n
4	SLEEPING QRTR SMK DETECT	L	20	1	17	500	C	1000	18	1	20	R	MICROWAVE	1n
	SPARE	R	20	1	19		A	1200	20	1	20	R	DISHWASHER	1k
1w	REC - HALLWAY #1	R	20	1	21	540	B	1200	22	1	20	R	DISHWASHER	1k
1w	REC - HALLWAY #2	R	20	1	23	900	C	1130	24	1	20		KITCHEN DISPOSAL	1k
1d	REC - FITNESS EQUIPMENT 1	R	20	1	25	1600	A		26	1	20		SPARE	
1d	REC - FITNESS EQUIPMENT 2	R	20	1	27	1600	B	1500	28	1	20		WASHER	1t
1d	REC - FITNESS EQUIPMENT 3	R	20	1	29	1600	C	1500	30	1	20		DRYER	1t
1e	REC - FITNESS EQUIPMENT 4	R	20	1	31	1600	A	540	32	1	20	R	BATH 1, LAUNDRY REC.	1t
1e	REC - FITNESS EQUIPMENT 5	R	20	1	33	1600	B	100	34	1	20		GAS SHUT OFF SOLENOID	1a
3	REC - SLEEP QUARTER 9	R	20	1	35	900	C	100	36	1	20		GAS SHUT OFF BUTTON	1a
1f	REC - DAY ROOM USB	R	20	1	37	1080	A	500	38	1	20		KITCHEN EXHAUST HOOD	1m
1f	REC - DAY ROOM TV	R	20	1	39	500	B	900	40	1	20	R	KITCHEN REF. REC	1m
1f	REC - DAY ROOM GENERAL	R	20	1	41	1080	C	900	42	1	20	R	KITCHEN REF. REC	1m
1g	REC - COFFEE MAKER DINING	R	20	1	43	1500	A	540	44	1	20	R	REC - KITCHEN COUNTERTOP	1n
1g	REC - ICE MACHINE DINING	R	20	1	45	1000	B	540	46	1	20	R	REC - KITCHEN COUNTERTOP	1n
1g	REC - WTR DINING	R	20	1	47	500	C	540	48	1	20	R	REC - KITCHEN COUNTERTOP	1n
1h	REC - FITNESS ROOM	R	20	1	49	500	A		50	1	20		SPARE	
1h	REC - FITNESS ROOM	R	20	1	51	500	B		52	1	20		SPARE	
1h	REC - FITNESS ROOM	R	20	1	53	500	C	1000	54	1	20		HPA AMPS	
1k	REC - BATH #1	R	20	1	55	500	A	500	56	1	20	R	ALERT SYSTEM PIM UPS	1a
1k	REC - BATH #2	R	20	1	57	500	B	500	58	1	20	R	ALERT SYSTEM PIM UPS	1a
	SPARE		20	1	59		C	500	60	1	20	R	ALERT SYSTEM PIM UPS	1a
	SPARE		20	1	61		A		62	1	20		SPARE	
	SPARE		20	1	63		B		64	1	20		SPARE	
	SPARE		20	1	65		C		66	1	20		SPARE	

CONNECTED VA Ø A	14120	CONNECTED VA ( )	8830	PANEL CONN. AMPS WITH LCL	131.85	PANEL DEMAND KVA WITH LCL	33.79
CONNECTED VA Ø B	16680	CONNECTED VA (L)	1000	CONNECTED VA WITH LCL (L)	1250	PANEL DEMAND AMPS WITH LCL	93.79
CONNECTED VA Ø C	16450	CONNECTED VA (R)	37420	DEMAND VA (R)	23710	PANEL CONNECTED AMPS	131.15
TOTAL VA	47250	CONNECTED VA (K)	0	DEMAND VA (K)	0	DEMAND HIGH Ø AMPS WITH LCL	105.32

SPECIAL NOTES:
1 PROVIDE LISTED HANDLE-TIE DEVICE
2 PROVIDE DEDICATED NEUTRAL
3 PROVIDE CIRCUIT BREAKER LOCK-ON DEVICE RED HANDLE

PANEL: D | LOCATION: MAIN ELECTRIC ROOM | MAIN: 225A/3P | BUS: 225A NEMA 1
VOLTAGE: 208 / 120 | AIC RATING: 30000 | FEED: BOTTOM | MTG: SURFACE
PHASE: 3 | CIRCUIT CODE:
WIRE: 4 | blank=NON-CONTINUOUS, N=NON-COINCIDENTAL, L=LONG CONTINUOUS, R=RECEPT (NEC ART. 220-44), K=KITCHEN

NOTE	DESCRIPTION	CODE	BKR	P	#	VA	PHASE	VA	#	P	BKR	CODE	DESCRIPTION	NOTE
1b	CEILING FAN - F-1		20	1	1	1200	A	2016	2	3	40		CA-1	
1b	CEILING FAN - F-2		20	1	3	1200	B	2016	4				-	
1b	CEILING FAN - F-3		20	1	5	1200	C	2016	6				-	
1c	APPARATUS BAY CORD REELS		30	1	7	360	A	100	8	1	20		FIRE ALARM SPRINKLER BELL	2
1c	APPARATUS BAY CORD REELS		30	1	9	360	B		10		20		SPARE	
1c	APPARATUS BAY CORD REELS		30	1	11	360	C	508	12		20		HOT WTR WH-1 IGNITOR/CP-1	
	APPARATUS BAY ROLLUP DOOR		20	3	13	800	A	800	14	3	20		APPARATUS BYA ROLLUP DOOR	
	-				15	800	B	800	16				-	
	-				17	800	C	800	18				-	
1d	GENERAT. BATTERY CHARGER		20	1	19	1500	A	100	20	1	20	L	IRRIGATION CTRL	1f
1d	GENERAT. JACKET HEATER		20	1	21	1500	B	360	22	1	20	R	POWER STORAGE	1f
	GENERA. RECEPTACLE	R	20	1	23	180	C		24	1	20		SPARE	
	APPARATUS BAY ROLLUP DOOR		20	3	25	800	A		26	1	20		SPARE	
	-				27	800	B	720	28	1	20	R	EXTERIOR GARAGE RECEP	
	-				29	800	C	900	30	1	20	R	REC - EXTERIOR/ELEC RM	1a
	APPARATUS BAY ROLLUP DOOR		20	3	31	800	A	540	32	1	20	R	REC - LOCKER RM	1a
	-				33	800	B	1080	34	1	20	R	REC- APPARATUS	1a
	-				35	800	C		36	1	20		SPARE	
	APPARATUS BAY ROLLUP DOOR		20	3	37	800	A	720	38	1	20	R	REC -WORK BENCH	1b
	-				39	800	B	720	40	1	20	R	REC- WORK BENCH	1b
	-				41	800	C	1800	42	1	20	R	REC - ICE MACHINE	1b
	WASH EXTRACTOR		15	3	43	612	A		44				SPARE	
	-				45	612	B		46				SPARE	
	-				47	612	C		48				SPARE	
	GENERATOR EM PUMP		20	1	49	500	A	800	50	3	20		APPARATUS BAY ROLLUP DOOR	
	GATE CONTROLLER		20	1	51	1920	B	800	52				-	
1e	FUEL CONTROL TERMINAL		20	1	53	200	C	800	54				-	
1e	FUEL DISPENSER		20	1	55	200	A	800	56	3	20		APPARATUS BAY ROLLUP DOOR	
	SPACE				57		B	800	58				-	
	SPACE				59		C	800	60				-	

POWER LOADS ABOVE - SPLIT-BUS - MECHANICAL LOADS BELOW

	MECH. EF-1		50	3	61	2916	A	107	62	1	20		MECH. EF-2	
	-				63	2916	B	107	64	1	20		MECH. SF-1	
	-				65	2916	C	123	66	1	20		MECH. EF-11, EF-3	
	MECH. UH-1		20	1	67	1584	A	123	68	1	20		MECH. EF-4, EF-14	
	MECH. UH-2		20	1	69	1584	B		70	1	20		SPARE	
	MECH. EF-16		20	1	71	250	C		72	1	20		SPARE	
	MECH. PLYMOVENT		40	3	73	2880	A		74	1	20		SPARE	
	-				75	2880	B		76	1	20		SPARE	
	-				77	2880	C		78	1	20		SPARE	
	SPACE				79		A		80				SPACE	
	SPACE				81		B		82				SPACE	
	SPACE				83		C		84				SPACE	

CONNECTED VA Ø A	21058	CONNECTED VA ( )	57058	PANEL CONN. AMPS WITH LCL	178.21	PANEL DEMAND KVA WITH LCL	64.20
CONNECTED VA Ø B	23575	CONNECTED VA (L)	100	CONNECTED VA WITH LCL (L)	125	PANEL DEMAND AMPS WITH LCL	178.21
CONNECTED VA Ø C	19545	CONNECTED VA (R)	7020	DEMAND VA (R)	7020	PANEL CONNECTED AMPS	178.14
TOTAL VA	64178	CONNECTED VA (K)	0	DEMAND VA (K)	0	DEMAND HIGH Ø AMPS WITH LCL	196.31

SPECIAL NOTES:
1 PROVIDE LISTED HANDLE-TIE DEVICE
2 PROVIDE RED HANDLE CIRCUIT BREAKER FOR F/A
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10

PANEL: B | LOCATION: MAIN ELECTRIC ROOM | MAIN: 100A/3P | BUS: 125A NEMA 1
VOLTAGE: 208 / 120 | AIC RATING: 18000 | FEED: BOTTOM | MTG: SURFACE
PHASE: 3 | CIRCUIT CODE:
WIRE: 4 | blank=NON-CONTINUOUS, N=NON-COINCIDENTAL, L=LONG CONTINUOUS, R=RECEPT (NEC ART. 220-44), K=KITCHEN

NOTE	DESCRIPTION	CODE	BKR	P	#	VA	PHASE	VA	#	P	BKR	CODE	DESCRIPTION	NOTE
	UTILITY ROOM, ADA RR, OFFICE	L	20	1	1	284	A	148	2	1	20	L	SLEEP QUARTER 5,6,7,8 LTG	
	HALLWAY LIGHTS & EXIT SIGNS	L	20	1	3	292	B	148	4	1	20	L	SLEEP QUARTER 1,2,3,4 LTG	
	LKR RM,JAN, UTIL RM, WRK SHP	L	20	1	5	407	C	180	6	1	20	L	BATH 1,2,3,4 & STOR 2	
	APPARATUS BAY LIGHTING	L	20	1	7	1300	A	354	8	1	20	L	FITNESS & PATIO LIGHTS	
1	EXTERIOR BUILDING LIGHTS	L	20	1	9	291	B	410	10	1	20	L	DAY RM,PANTRY & KITCHEN	
1	CANNOPY LIGHTING	L	20	1	11	114	C	100	12	1	20	L	BOLLARD & INGROUND LAMP	1
	APPARATUS BAY LIGHTING	L	20	1	13	1300	A		14	1	20		SPARE	
1	SITE POLE LIGHTING	L	20	2	15	260	B	528	16	1	20	L	GARGE BAY EXTERIOR LTG	1
	-	L			17	260	C		18	1	20		SPARE	
	STORAGE LIGHTING	L	20	1	19	100	A		20	1	20		SPARE	
	SPARE		20	1	21		B	150	22	1	20	L	EXTERIOR SIGNAGE LTG	1
	SPARE		20	1	23		C	500	24	1	20	L	LCP	
	SPARE		20	1	25		A		26	1	20		SPARE	
	SPARE		20	1	27		B		28	1	20		SPARE	
	SPARE		20	1	29		C		30	1	20		SPARE	
	SPARE		20	1	31		A		32	1	20		SPARE	
	SPARE		20	1	33		B		34	1	20		SPARE	
	SPARE		20	1	35		C		36	1	20		SPARE	
	SPACE				37		A		38				SPACE	
	SPACE				39		B		40				SPACE	
	SPACE				41		C		42				SPACE	

CONNECTED VA Ø A	3486	CONNECTED VA ( )	0	PANEL CONN. AMPS WITH LCL	24.72	PANEL DEMAND KVA WITH LCL	8.91
CONNECTED VA Ø B	2079	CONNECTED VA (L)	7126	CONNECTED VA WITH LCL (L)	8908	PANEL DEMAND AMPS WITH LCL	24.72
CONNECTED VA Ø C	1561	CONNECTED VA (R)	0	DEMAND VA (R)	0	PANEL CONNECTED AMPS	19.78
TOTAL VA	7126	CONNECTED VA (K)	0	DEMAND VA (K)	0	DEMAND HIGH Ø AMPS WITH LCL	36.29

SPECIAL NOTES:
1 CIRCUIT ROUTED THRU TIMECLOCK, CONTACTOR OR LCP
2
3
4
5
6
7
8
9
10

NOT FOR BID

M	C	A
–	D	B
–	–	–

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:
Salas O'Brien
3220 Executive Ridge, Suite 210
Vista, CA 92081
760.560.0100 #2024-03417
www.salasobrien.com

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO
COUNTY FIRE
DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

DATE:	INFORMATION:
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12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
~~07-25-25~~	~~BID SET~~
08-25-25	BID SET

SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:
REGISTERED PROFESSIONAL ENGINEER EDWARD A. SALAS III Lic. # 18809 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

SHEET TITLE:
PANEL SCHEDULES

SHEET NO.:
E4.3

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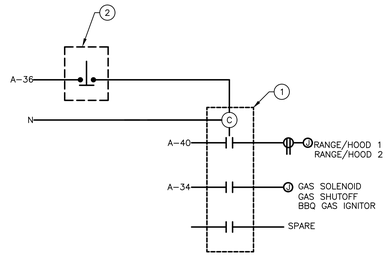
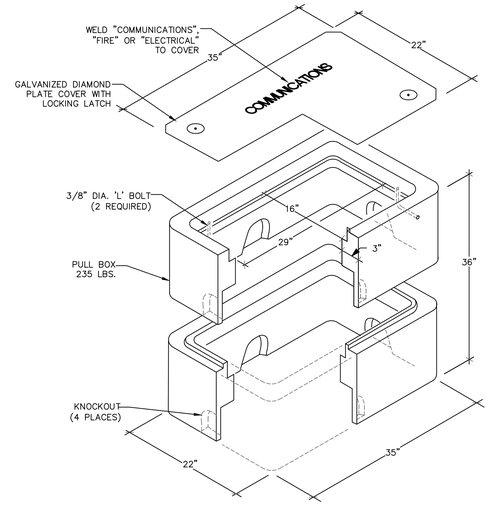


KEY NOTES

1. APPLIANCE CONTROLLER DEVICE. 3-POLE MAGNETIC CONTACTOR IN NEMA 1 ENCLOSURE WITH 120V COIL. MOUNT WALL.
2. MAINTAINED PUSH BUTTON WITH NORMALLY CLOSE CONTACTS. MOUNTED IN ACCESSIBLE AREA LOCATED NEXT TO GAS VALVE. PROVIDED DEDICATED 120V CIRCUIT.

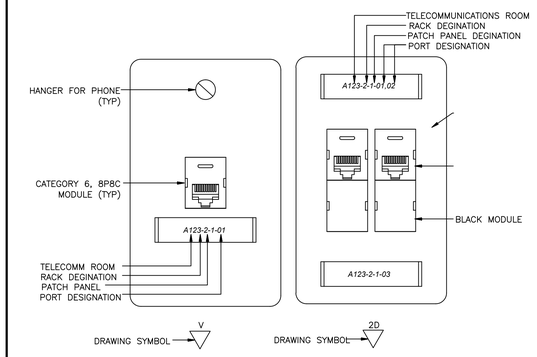
RELAY WIRING DIAGRAM

SCALE: NONE | 10



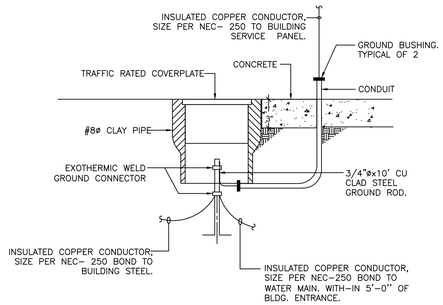
UNDERGROUND HANDHOLE

SCALE: NONE | 7



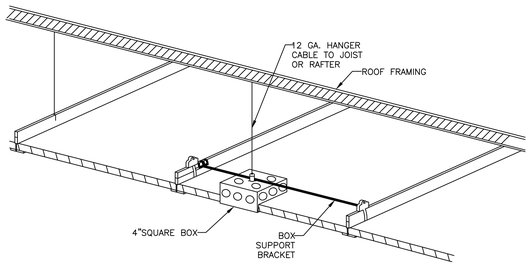
TELECOMM WALL FACEPLATES

SCALE: NONE | 4



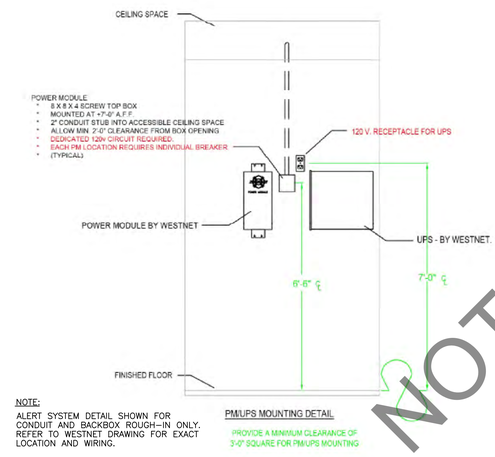
GROUNDING DETAIL

SCALE: NONE | 1



CEILING FAN SUPPORT DETAIL

SCALE: NONE | 11



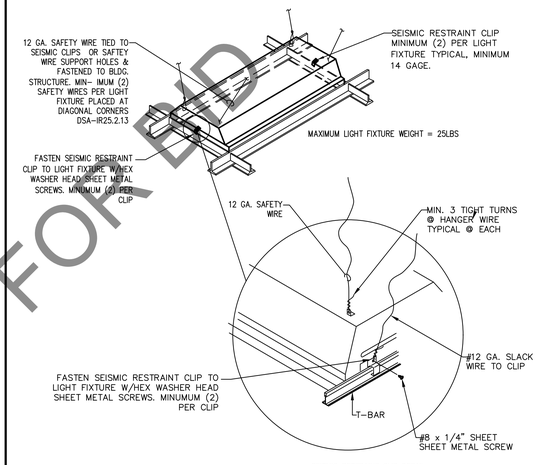
NOTE:
ALERT SYSTEM DETAIL SHOWN FOR CONDUIT AND BACKBOX ROUGH-IN ONLY. REFER TO WESTNET DRAWING FOR EXACT LOCATION AND WIRING.

PM/UPS MOUNTING DETAIL

PROVIDE A MINIMUM CLEARANCE OF 3'-0" SQUARE FOR PM/UPS MOUNTING

PM/UPS MOUNTING DETAIL

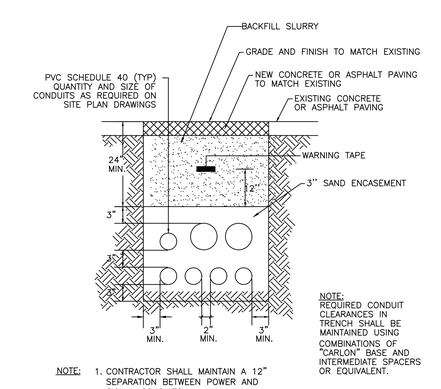
SCALE: NONE | 8



SEISMIC RESTRAINT CLIP DETAIL

T-GRID FIXTURE SEISMIC SUPPORTS

SCALE: NONE | 5

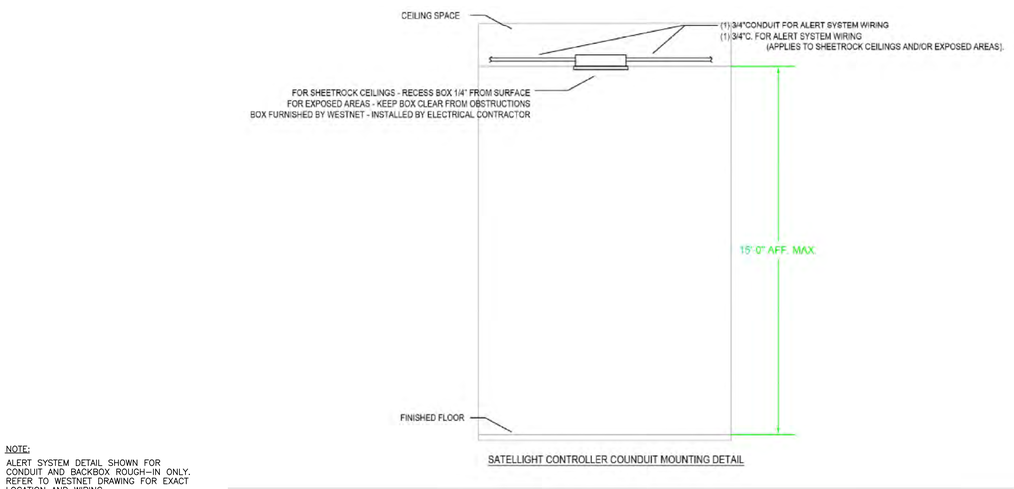


NOTE:
REQUIRED CONDUIT CLEARANCES IN TRENCH SHALL BE MAINTAINED USING COMBINATIONS OF "CARLON" BASE AND INTERMEDIATE SPACERS OR EQUIVALENT.

NOTE: 1. CONTRACTOR SHALL MAINTAIN A 12" SEPARATION BETWEEN POWER AND SIGNAL CONDUITS.

UNDERGROUND TRENCHING DETAIL

SCALE: NONE | 2



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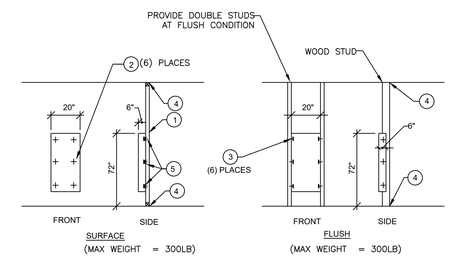
SATELLIGHT CONTROLLER COUNDUIT MOUNTING DETAIL

SATELLIGHT CONTROLLER CONDUIT MOUNTING DETAIL

SCALE: NONE | 6



NOTES:
1. WOOD STUD
2. #10 WOOD SCREW WITH 1.5" EMBED TO 4X MIN. WITH A34 T&B EACH SITE BLOCKING BETWEEN WOOD STUDS
3. #10 WOOD SCREW WITH 1.5" EMBED TOTAL OF 6
4. MOUNTING @ WOOD STUDS, SEE STRUCTURAL DETAILS. (STUD SIZE AND ANCHORAGE AT TOP AND BOTTOM VARIES DEPENDING ON PANEL LOCATION)

SURFACE MOUNT PANEL

SCALE: NONE | 3

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

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08-22-25 #2024-03417
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JO 10024 PP MP

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08-25-25	BID SET

SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: -
DRAWING NAME:

SEAL:

SHEET TITLE:
ELECTRICAL DETAILS

SHEET NO.:
E5.1

NOT FOR BID

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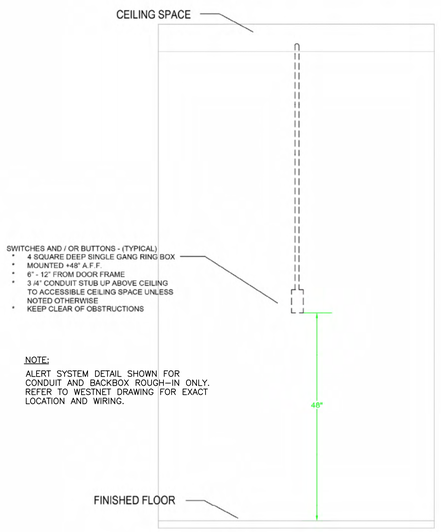
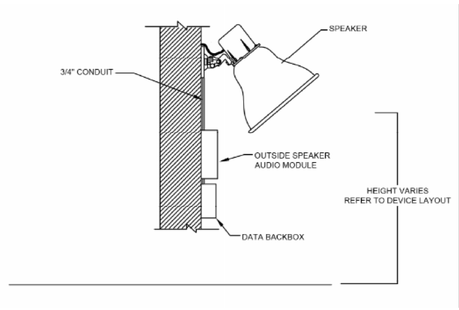


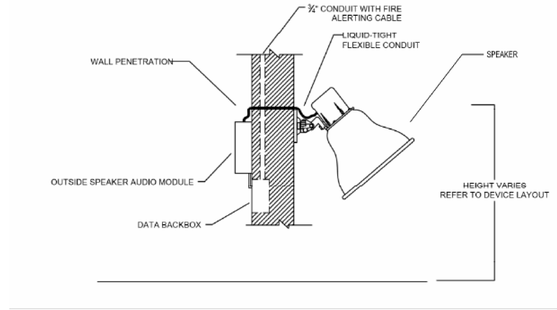
SWITCH/BUTTON MOUNTING DETAIL

SCALE: NONE | 7



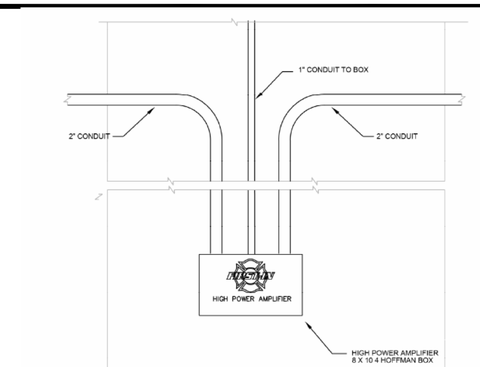
SPEAKER AUDIO MODULE - INTERIOR

SCALE: NONE | 6



SPEAKER AUDIO MODULE - EXTERIOR

SCALE: NONE | 3

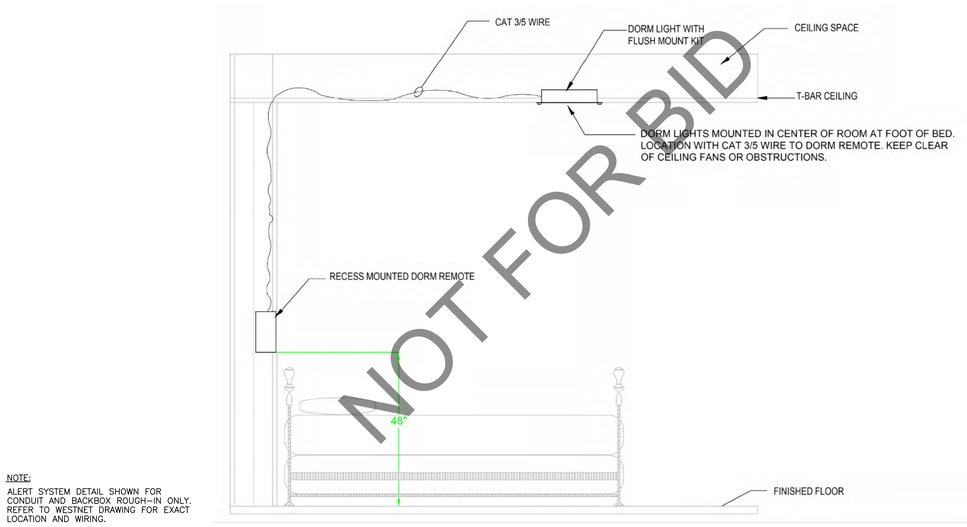


HIGH POWER AMPLIFIER MOUNTING

SCALE: NONE | 1

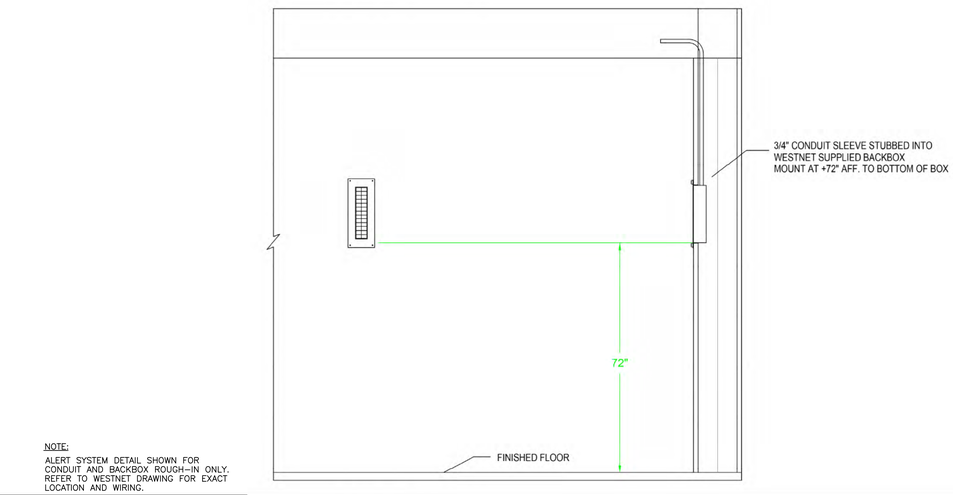
NOT USED

SCALE: NONE | 8



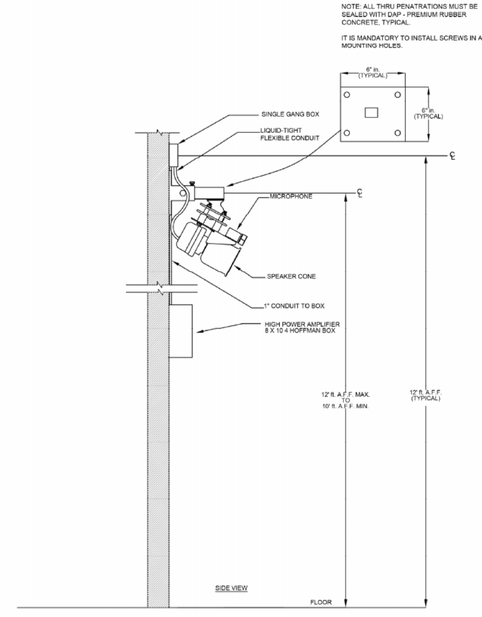
DORM REMOTE/DORM LIGHT MOUNTING DETAIL

SCALE: NONE | 4



FSAS DORM LIGHT STROBE LAYOUT

SCALE: NONE | 5



HIGH POWER AMPLIFIER MOUNTING

SCALE: NONE | 2

NOT FOR BID

STK ARCHITECTURE, INC.
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:
Salas O'Brien
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JO 10024 PP MP

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~~07-25-25~~	~~BID SET~~
08-25-25	BID SET

SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

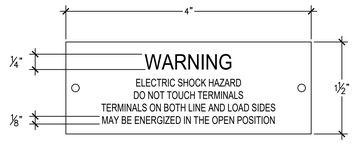
SEAL:
REGISTERED PROFESSIONAL ENGINEER EDRED A. SIY
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

SHEET TITLE:
ELECTRICAL DETAILS

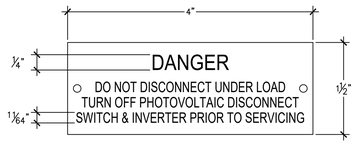
SHEET NO.:
E5.2

T:\2024\03417-00 - SB Fire Station 227\05-BIM-CAD\Revit\R2024\03417_E5.2.dwg
08/22/2025 9:17AM

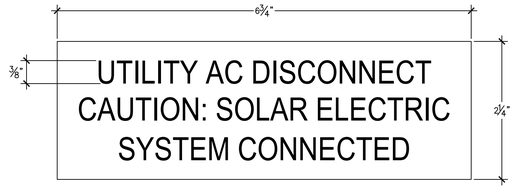
MULTIPLE SERVICE PLAQUE — SCALE: NONE — 16



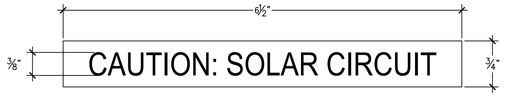
LINE-LOAD SIDE WARNING PLAQUE — SCALE: NONE — 17



DANGER PLAQUE — SCALE: NONE — 18



UTILITY AC DISCONNECT PLAQUE — SCALE: NONE — 19



CONDUIT-JUNCTION BOX PLAQUES — SCALE: NONE — 20

NOT USED — SCALE: NONE — 21

NOT USED — SCALE: NONE — 10

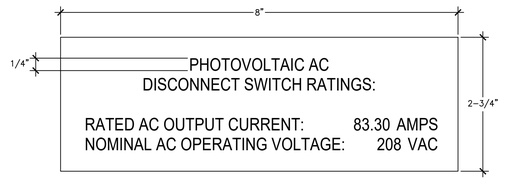
NOT USED — SCALE: NONE — 11

NOT USED — SCALE: NONE — 12

NOT USED — SCALE: NONE — 13

NOT USED — SCALE: NONE — 14

NOT USED — SCALE: NONE — 15



PV AC DISCONNECT PLAQUE (PVDS) — SCALE: NONE — 4

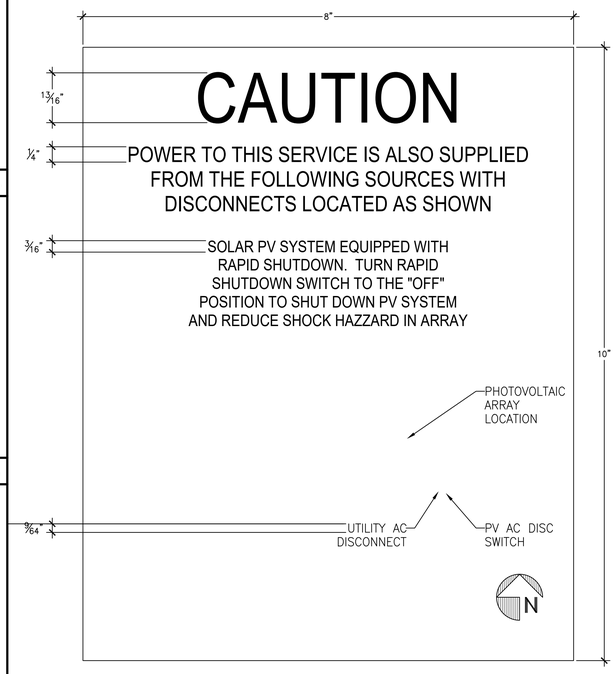
NOT USED — SCALE: NONE — 5

NOT USED — SCALE: NONE — 6

NOT USED — SCALE: NONE — 7

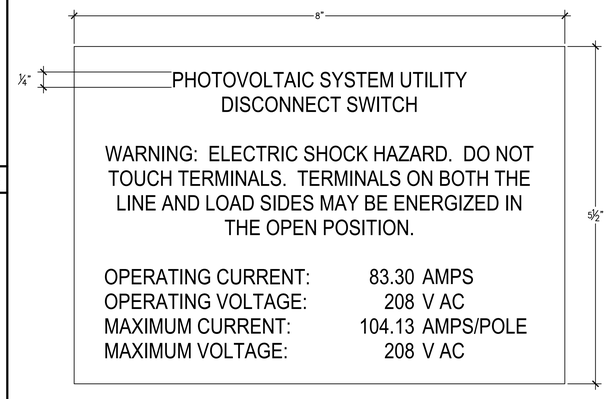
NOT USED — SCALE: NONE — 8

NOT USED — SCALE: NONE — 9



SERVICE LOCATION PLAQUE — SCALE: NONE — 1

NOT USED — SCALE: NONE — 2



PV SYSTEM DISCONNECT SWITCH PLAQUE — SCALE: NONE — 3

NOT FOR BID

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

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~~07-25-25~~	~~BID SET~~
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STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
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DRAWING NAME:

SEAL:

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. SKOWRONEK
No. E18809
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

SHEET TITLE:
PHOTOVOLTAIC
DETAILS

SHEET NO.:
E5.3

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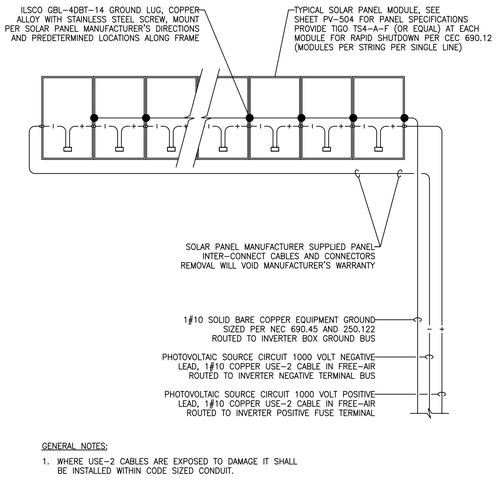
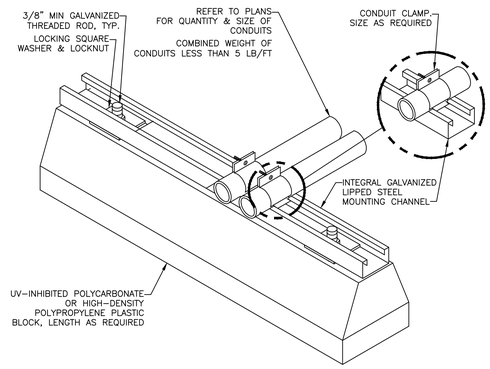


GENERAL NOTES:

1. WHERE USE-2 CABLES ARE EXPOSED TO DAMAGE IT SHALL BE INSTALLED WITHIN CODE SIZED CONDUIT.

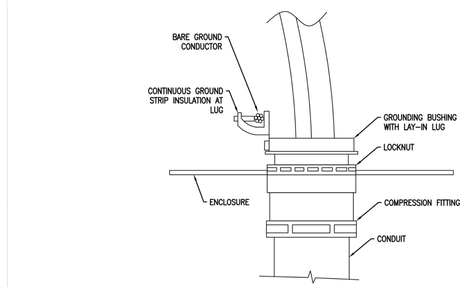
PHOTOVOLTAIC STRING WIRING DIAGRAM

SCALE: NONE | 7



ROOF CONDUIT SUPPORT DETAIL

SCALE: NONE | 4

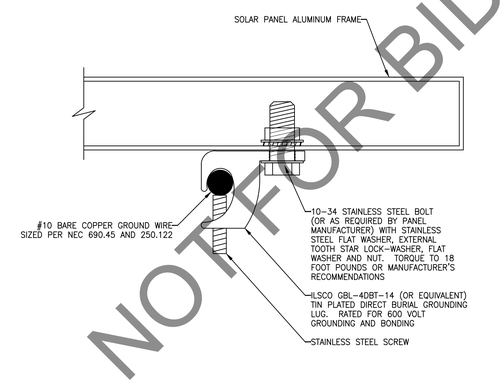


CONDUIT GROUND BONDING DETAIL

SCALE: NONE | 1

NOT USED

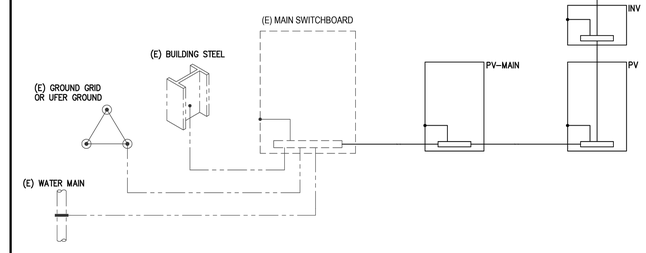
SCALE: NONE | 8



NOT FOR BID

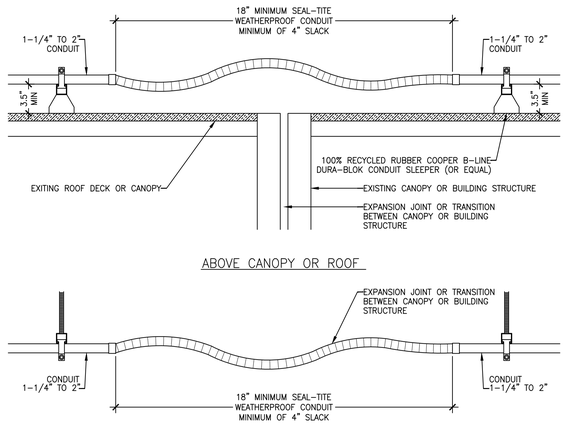
SOLAR PANEL EQUIPMENT GROUND DETAIL

SCALE: NONE | 5



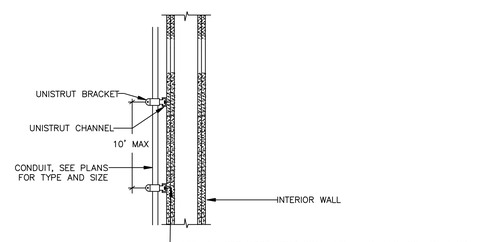
BASIC GROUNDING DIAGRAM

SCALE: NONE | 2



CONDUIT AT EXPANSION JOINT OR TRANSITION

SCALE: NONE | 9

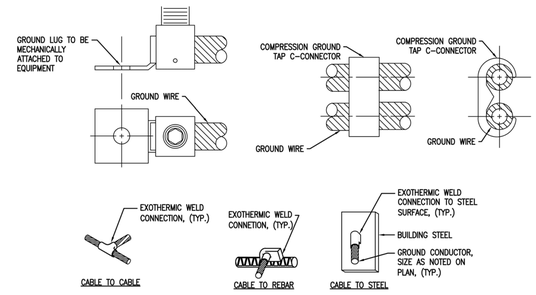


NOTE: 1. FOR WOOD STUD WALL: USE 3/8" LAG BOLT WITH MIN. 4D EMBEDMENT INTO STUDS. (ONE AT EACH END OF UNISTRUT CHANNEL)

2. FOR CONCRETE WALL: USE 3/8" WEDGE ANCHOR WITH MIN. 2 1/2" EMBEDMENT INTO CONCRETE WALL. (ONE AT EACH END OF UNISTRUT CHANNEL).

EXTERIOR WALL CONDUIT SUPPORT

SCALE: NONE | 6



GROUNDING CONNECTION DETAILS

SCALE: NONE | 3

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

Salas O'Brien
3220 Executive Ridge, Suite 210
Vista, CA 92081
760.560.0100 08-22-25 #2024-03417
www.salasobrien.com
JO DO24 PP MP

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

DATE:	INFORMATION:
9-11-24	D.D.s
10-26-24	PROGRESS
12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
~~07-25-25~~	~~BID SET~~
08-25-25	BID SET

SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

SHEET TITLE:
PHOTOVOLTAIC DETAILS

SHEET NO.:
E5.4

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S-5!®

The Right Way!®

S-5-E Clamp

The S-5-E clamp is designed specially for double-folded standing seam roof profiles having the appropriate dimensioning.

Although a bit smaller and less expensive than the S-5-U, for these profiles, the S-5-E is just as strong.

The S-5-E is perfect for use with S-5!® ColorGard® snow retention systems and other heavy-duty applications.

Installation is as simple as placing the clamp on the seam and tightening the patented round-point setscrews to the specified tension. Then, affix ancillary items using the bolt provided. Go to www.S-5.com/tools for information and tools available for properly attaching and tensioning S-5! clamps.

S-5-E Mini Clamp

The S-5-E Mini is a bit shorter than the S-5-E and has one setscrew rather than two. The mini is the choice for attaching all kinds of rooftop accessories: signs, walkways, satellite dishes, antennas, rooftop lighting, lightning protection systems, solar arrays, exhaust stack bracing, conduit, condensate lines, mechanical equipment—just about anything!*

*S-5! mini clamps are not compatible with, and should not be used with S-5! SnoRail®,*SnoFence™ or ColorGard® snow retention systems.

The right way to attach almost anything to metal roofs!

S-5-E and S-5-E Mini

The S-5-E clamp is secured with our patented round-point setscrews without piercing the metal roof panel, thereby preserving the roof manufacturer's warranty!

888-825-3432 | www.S-5.com

NOT FOR BID

Measurements

Global, diffuse, and reflected solar irradiation and albedo	
Atmospheric pressure, air temperature, relative humidity	
Wind speed and direction	
Rain/Precipitation	
Soiling and temperature of solar panels	

Standard communications options

Wireless communication	LTE Cat 4 cellular modem (with LMTS/HSPA+ and GSM/GPRS/EDGE support)
Landline communication	RS-232, RS-485, LAN
Ethernet communication	HTTPS, TCP socket, SFTP
Data collection software	Vaisala Observation Network Manager NMS
Communication protocols	Modbus TCP (SunSpec) ASCII (OMSAWS)
Maintenance	USB host device with Web UI

For other data validation, calculation, report, mast, powering, sensor, communication data collection software options, and measurement unit conversions, contact Vaisala.

VAISALA
www.vaisala.com

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VAISALA

Automatic Weather Station AWS810 *Solar Edition*

Vaisala Automatic Weather Station AWS810 *Solar Edition* combines reliable measurements, data collection, and connectivity to maximize the solar power plant performance. It is a complete communication and data monitoring solution including sensors, electronics, mast, and power supply.

Features

- Complete solution for solar power plant needs
- Provides global, direct, and diffuse solar irradiance data and albedo, as well as all key weather parameters
- Connects to all standard/smart/high-quality irradiance sensors
- Excellent expandability and flexibility
- Modern security architecture
- Advanced data management with Vaisala Data Management Unit DMU801
- Enhanced remote maintenance and configuration management
- Easy integration with the solar power plant's SCADA system

An all-in-one solution for solar power plants

Vaisala Automatic Weather Station AWS810 *Solar Edition* is a weather data collection system that automatically measures, processes, and stores weather data for professional use. It is optimized for solar power plants to collect on-site weather data and help monitoring the solar energy performance.

AWS810 *Solar Edition* provides weather data for global, diffuse, and reflected solar irradiation, as well as all key weather parameters (temperature, pressure, humidity, rain, and wind speed and direction). In addition, data from the soiling sensors help the solar power plant with maintenance planning.

Validated data from reliable sensors

AWS810 *Solar Edition* is compliant with IEC 61724-1. The design quality of Vaisala weather stations has been proven with extensive tests in the development phase and on the field.

To ensure continuous accuracy of measurements and calculations, AWS810 *Solar Edition* includes built-in data quality controls that test sensor data against minimum and maximum limits and changes between successive measurements. The weather station's DMU801 data management unit continuously monitors the status of the sensors to ensure measurement reliability. All the sensors operate independently from each other, meaning that an individual sensor failure does not affect the performance of the other sensors.

Integration with solar power plant's control system

AWS810 *Solar Edition* can be integrated with the solar power plant's SCADA (Supervisory Control and Data Acquisition) system through a Modbus TCP interface. Modbus sensor mapping is compliant with SunSpec Alliance.

Data security prioritized

AWS810 *Solar Edition* provides first-class data security mechanisms to protect your data from security threats and unauthorized access. DMU801 data management unit brings along a number of data security features, such as secure network protocols, secure communication interfaces with industry standard encryption protocols, and dynamic firewall protection. Security development and maintenance, including regular firmware updates, is provided for continuous improvements.

Maintenance made easier

For AWS810 networks, the Vaisala Observation Network Manager NM10 software provides a powerful browser-based interface for 24/7 monitoring, access, and control of all your observation sites. Continuous, reliable observations improve the performance of your weather services, while shorter site visits and correct maintenance actions save time and money.

Even without the optional NM10 software, it is possible to adjust settings and fix problems remotely. The AWS810 Web user interface allows you to view basic station information, sensor status, and readings, to set site-specific parameters, and to perform many other functions.

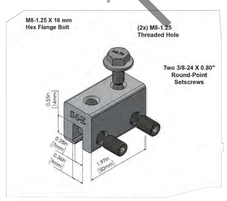
S-5!® The Right Way!®

The strength of the S-5-E clamp is in its simple design. The patented setscrews will slightly dimple the metal seam material but will not puncture it—leaving roof warranties intact.

The S-5-E and S-5-E Mini clamps are each furnished with the hardware shown to the right. Each box also includes a bit tip for tightening setscrews using an electric screw gun. A structural aluminum attachment clamp, the S-5-E is compatible with most common metal roofing materials excluding copper. All included hardware is stainless steel. Please visit **www.S-5.com** for more information including CAD details, metallurgical compatibilities and specifications.

The S-5-E and S-5-E Mini clamps have been tested for load-to-failure results on a variety of double-folded standing seam roofs, from leading manufacturers of panels and panel-forming machines. The independent lab test reports found on our website at www.S-5.com prove that S-5!® holding strength is unmatched in the industry.

S-5-E Clamp

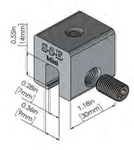


Example Profiles

For horizontal seams under 5°, crimp the seam to 180 degrees at desired clamp location.

This illustration demonstrates crimping technique, NOT actual location of clamp.

S-5-E Mini Clamp



S-5!® Warning! Please use this product responsibly!

Products are protected by multiple U.S. and foreign patents. Visit the website at www.S-5.com for complete information on patents and trademarks. For maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses. Clamp setscrew tension should be verified using a calibrated torque wrench between 160 and 180 inch pounds when used on 22ga steel, and between 130 and 150 inch pounds for all other metals and thinner gauges of steel. Consult the S-5! website at www.S-5.com for published data regarding holding strength.

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S-5! aggressively protects its patents, trademarks, and copyrights. Version 081321.

Distributed by

Technical data

Operating environment

Operating environment	Outdoor use
Use in wet location	Yes
Operating temperature [1]	–40 … +60 °C (–40 … +140 °F)
Storage temperature [1]	–40 … +70 °C (–76 … +158 °F)
Operating humidity	0 … 100 %RH
Pollution degree	2
Maximum operating altitude	3000 m (approx. 9800 ft)

[1] *Excluding backup battery, cellular modem, and ARUSH. See the manufacturer documentation.*
[2] *Excluding cellular modem. See the manufacturer documentation.*

Powering specifications

AC (mains) power	100 … 240 V AC, –15 % … +10 % 50 … 60 Hz 6.8 A maximum (100 V AC)
Mains fuse (nominal)	10 A
External DC	15 … 28 V DC 10 A maximum
Solar panel	70 W, typical 15 … 28 V DC 6 A maximum (each), 9 A combined (both inputs)
Internal backup battery	12 V / 24 … 28 Ah (48 … 56 Ah with 2 batteries)
Overvoltage category	II

ENC652 specifications

IP rating	IP66
UL 50E (NEMA) rating	NEMA 4X
Maximum operating wind speed	75 m/s (168 mph)
Door opening angle	100°
Material	Stainless steel AISI 316, painted white
Size (enclosure only)	600 × 500 × 207 mm (23.62 × 19.68 × 8.15 in)
Weight (excluding backup battery)	< 30 kg (66 lb) [1]

[1] *Depends on the selected options.*

Compliance

EU directives and regulations	EMC, LVD, RoHS
EMC immunity	EN 61326-1, Industrial environment [1] FCC part 15 B, Class B ICES-3 / NMB-3 (Class B)
EMC emissions	CISPR 32 / EN 55032, Class B
Electrical safety	IEC 61010-1
Eye safety	Class 1 laser product IEC 60825-1:2014 + Edition 3.0) and EN 60825-1:2014 + A11:2021 IEC 60825-2:2021 EN 60825-2:2004 + A1:2007 + A2:2010
Compliance marks	CE, FCC, RCM, UKCA

[1] *Modem Carrier Module CM0307 complies with EN 61326-1 basic level. Ethernet connection requires external surge protection to comply with EN 61326-1 industrial environment level.*

Environmental compliance

Test	Applied standard or test procedure	Specification
Operation		
Cold	IEC 60068-2-1	–40 °C (–40 °F)
Dry heat	IEC 60068-2-2	+60 °C (+140 °F)
Damp heat	IEC 60068-2-78	+40 °C (+104 °F), 93 %RH
Vibration (sinusoidal)	IEC 60068-2-6	Frequency range 5 … 200 Hz 1.2 mm/s velocity, 5 … 12 Hz 0.7 g, 12 … 200 Hz
Shock	IEC 60068-2-27	5.0 g, pulse duration 11 ms with 100 pulses in each direction
Vibration (random)	IEC 60068-2-64	5 … 100 Hz
Storage		
Cold [1]	IEC 60068-2-1	–60 °C (–76 °F)
Dry heat [1]	IEC 60068-2-2	+70 °C (+158 °F)
Transport		
Vibration (random)	IEC 60068-2-64	5 … 200 Hz
Shock	IEC 60068-2-27	18 g, pulse duration 6 ms with 100 pulses in each direction
Rough handling	IEC 60068-2-31	Drop height 25 cm (9.84 in)

[1] *Excluding backup battery.*

Electromagnetic compatibility

Test	Applied standard or test procedure	Specification
Emissions radiated	CISPR 32 / EN 55032, Class B	30 MHz … 6 GHz
Emissions conducted to mains (AC)	CISPR 32 / EN 55032, Class B	150 kHz … 30 MHz
Emissions conducted to telecommunication lines	CISPR 32 / EN 55032, Class B	150 kHz … 30 MHz
Emissions radiated, Class B	FCC part 15 B, Class B	30 MHz … 18 GHz
Emissions conducted, Class B	FCC part 15 B, Class B	150 kHz … 30 MHz
Emissions, harmonic current	EN 61000-3-2	0 … 40th harmonic
Immunity to electrostatic discharge	EN 61000-4-2	Contact, HCP ±4 kV Contact, VCP ±4 kV Contact discharge, all conductive parts ±4 kV Air discharge, all nonconductive parts ±2 kV, ±4 kV, ±8 kV
Immunity to RF field (80 MHz … 6 GHz)	EN 61000-4-3	10 V/m (80 MHz … 1 GHz) 3 V/m (1 … 6 GHz)
Immunity to electric fast transient	EN 61000-4-4	±2 kV AC, ±1 kV I/O
Immunity to surge	EN 61000-4-5	Line to line ±1 kV (AC and I/O) Line to ground ±2 kV (AC and I/O)
Immunity to conducted RF	EN 61000-4-6	3 V r.m.s. (150 kHz … 80 MHz)
Immunity to voltage dips and short interrupts	IEC 61000-4-11	0 % 1 cycle 40 % 10 cycles 70 % 25 cycles 0 % 250 cycles

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:
Salas O'Brien
3220 Executive Ridge, Suite 210
Vista, CA 92081
760.560.0100 08-22-25 #2024-03417
www.salasobrien.com
JO 10024 PP MP

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO
COUNTY FIRE
DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

DATE:	INFORMATION:
9-11-24	D.D.s
10-26-24	PROGRESS
12-20-24	95% CDs
03-14-25	Plan Check 1
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08-25-25	BID SET

SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

REGISTERED PROFESSIONAL ENGINEER
EDRO A. QUIROZ
No. E18809
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

SHEET TITLE:
PHOTOVOLTAIC
CUT SHEETS

SHEET NO.:
E5.5

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eSpire Mini

FULLY INTEGRATED, PRE-CONFIGURED ENERGY STORAGE SOLUTION

FORTRESS POWER

ONE SOLUTION FOR ALL

- Large Residential - Light Commercial
- Microgrid, Backup, Off-Grid, Peak Shaving, Time of Use, Self-Supply, Demand Response, and VPP
- AC and DC Coupling Options
- Scalable Energy Storage Capacity
- Indoor and Outdoor Installation

Sample Applications

Residential homes & Multi-family dwelling | Grocery Stores & Convenience Stores | Charging Stations & Service Areas | Schools, Banks, & Hospitals

Product Features

Turnkey Solution for Fast Install
Fully integrated, pre-configured package system reduces on-site installation time: includes inverter(s), battery trays, racks, BMS, Microgrid Controller, HVAC, fire suppression, islanding switch, and outdoor rated enclosure.

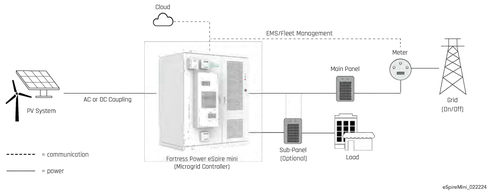
Built-in Microgrid Controls
Ability to integrate with solar, genset, wind, micro-turbines, utility, or other distributed energy resources.

Adaptive Intelligent EMS / Fleet Management
Intelligent software to reduce electricity cost, prepare for resiliency, and maximize return on investment. Remote operation and maintenance for multiple sites.

Safe Technology & Multi-level Protection
Tier 1 Lithium Iron Phosphate (LFP) chemistry for the highest level of safety, thermal stability, and reliability. An integrated, multi-level Battery Management System (BMS) monitors, optimizes, and balances the system.

Easy & Flexible to scale (Easy scalability)
This outdoor rated, modular solution can be expanded depending on the energy and power requirement at either 208Vac or 480Vac with a maximum of 2 units in parallel.

Excellent Local Support
Our US based technical support team can help you from project design to completion.



eSpireMini_022224

Tigo

TS4-A-F

Module-level rapid shutdown

The TS4-A-F (Fire Safety) is the advanced add-on rapid shutdown solution that brings smart module functionality to standard PV modules for higher reliability. Ensure safety by upgrading existing PV systems or by adding safety features to new installations.

The TS4-A-F complies with NEC 2017, 2020, and 2023 690.12 Rapid Shutdown specifications when installed with the Tigo RSS Transmitter or an inverter with a built-in Tigo certified transmitter.

Features

- High input current rating – now rated for 20 A I_{sc}/25 A I_{sc} to better accommodate bifacial and high-current modules
- Simple, fast installation – snaps to a standard PV module frame or mounts to racking
- Power-line communications (PLC) signaling – rapid shutdown signaling over PV conductors
- Automatic shutdown – PV array enters rapid shutdown mode in the event of AC grid loss
- UL Standards-certified – tested and certified with hundreds of top inverter models
- 25-year warranty

Specifications

	20 A	25 A
Electrical		
Maximum current (I_{mp}/I_{sc})	15 A/20 A	20 A/25 A
Input voltage range (V_{mp})	16 – 80 V	
Maximum input voltage	80 V	
Maximum system voltage (V_{max})	1000 V/1500 V*	
Maximum output current (I_{max})	15 A	
Maximum output power (P_{max})	700 W	
Maximum fuse rating	25 A	30 A
Maximum efficiency	99.9%	
Rapid Shutdown		
TS4 conductor AWG	12	
Rapid shutdown time limit	<30 sec.	
PVRSE-controlled conductor limits	≤240 VA, ≤8 A, ≤30 V_{DC}	
UL 1741-compliant PVRSE	Yes	
Communications	PLC	
Connections		
Input (from module) cable lengths	0.12/0.62 m	
Output (to string) cable lengths	1.2/2 m	
Connectors	MC4/EVO2	

*Depending on UL/IEC certification

tigoenergy.com

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CPS

Datasheet

25 kW-208 V, 1000 Vdc String Inverters for North America

The CPS 25 kW-208 V three-phase string inverters are designed for rooftop and carport applications. The units are high performance, advanced, and reliable inverters designed specifically for the North American environment and grid. High efficiency at 97.0% peak and 96.5% CEC, wide operating voltages, broad temperature ranges, and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The CPS 25KTL-208V product ships with the Rapid Shutdown wire box, fully integrated and separable with touch-safe fusing, monitoring, and AC and DC disconnect switches. The integrated PLC transmitter in the Rapid Shutdown wire box enables PVRSS-certified module-level rapid shutdown when used with APS RSD-S-PLC/RSD-D products. The CPS FlexiOM Gateway enables monitoring, controls, and remote product upgrades.

CPS SCA25KTL-DO/US-208

Key Features

- NEC 2017/2020 PVRSS-certified rapid shutdown
- NEC 2017-compliant and UL-listed arc-fault circuit protection
- UL 1741-SB and IEEE 1547-2018 certified
- 15-90° mounting orientation for low-profile roof installs
- Optional FlexiOM Gateway enables remote firmware upgrades
- Integrated AC and DC disconnect switches
- 3 MPPTs with 2 inputs each for maximum flexibility
- Copper- and Aluminum-compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- UL 1741-SA certified to CA Rule 21, including SA8-SA18
- Separable wire-box design for fast service
- Standard 10-year warranty with extensions to 20 years
- Generous 1.8 DC/AC inverter load ratio

SCA25KTL (208V) Rapid Shutdown Wire-box

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Chint Power Systems America
1380 Presidential Drive, Suite 100, Richardson, TX 75081
Tel: 855-584-7168 Mail: AmericaSales@chintpower.com Web: www.chintpowersystems.com

EAGLE MODULES

THE MOST DEPENDABLE SOLAR PRODUCT

EAGLE® 72 G6B

570-590 WATT • N-TYPE BIFACIAL

Positive power tolerance of 0~+3%

- NYSE-listed since 2010, Bloomberg Tier 1 manufacturer
- Top performance in the strictest 3rd party labs
- Automated manufacturing utilizing artificial intelligence
- Vertically integrated, tight controls on quality
- Premium solar factories in USA, Vietnam, and Malaysia

KEY FEATURES

N-Type Technology
N-type cells offer Jinko's in-house TOPCon technology with better performance and improved reliability.

Multi Busbar Half Cell Technology
Better light trapping and current collection to improve module power output and reliability.

Bifacial Power Gain
N-Type architecture increases bifaciality for higher backside bonus and better lifetime yield.

Low Temperature Coefficient
Best in class temperature coefficient for highest lifetime energy yield in all climates.

Industrial Grade Construction
Fire Type 29 with optimized dual-glass construction and thick frame for highest mechanical load resistance.

Shade Tolerant
Twin array design allows continued performance even with shading by trees or debris.

Protected Against All Environments
Certified to withstand humidity, heat, rain, marine environments, wind, hailstorms, and packed snow.

Warranty
12-year product and 30-year linear power warranty.

- ISO9001:2015 Quality Standards
- ISO14001:2015 Environmental Standards
- IEC61215, IEC61730 certified products
- ISO45001: 2018 Occupational Health & Safety Standards
- UL61730 certified products

BUILDING YOUR TRUST IN SOLAR. WWW.JINKOSOLAR.US

JinkoSolar

NOT FOR BID

		Three-Phase 208 VAC			Three-Phase 480 VAC		
AC Data	**PCS Rated AC Power**	**30 kW**	**40 kW**	**50 kW**	**40 kW**	**60 kW**	**90 kW**
	Rated Grid Voltage	Three-Phase 208 VAC			Three-Phase 480 VAC		
	AC Rated Current	83.3 A	111 A	138.8 A	48.1 A	72.2 A	108.3 A
	Grid Voltage Range	± 15%					
	Output THDi	≤ 3%					
	Automatic Transfer Switch timing	20ms					
	Grid Frequency Range	50 Hz / 60 Hz ±2.5%					
	Grid Connected Power Factor	1.0 leading to 1.0 lagging (Adjustable)					
	Wiring Configuration	3 Phase 4 Wire (3P4W Configuration)					
DC Data	**Battery Capacity**	**81/122/184 kWh**	**51 kWh**	**122/184/245 kWh**	**81 kWh**	**122/184/245 kWh**	**184/245/266 kWh**
	String Rack Configuration	1P8S/1P12S /2P9S	1P8S	1P12S/2P9S /2P12S	1P8S	1P12S/2P9S /2P12S	2P9S/2P12S /2P13S
	Rack Nominal Voltage	410/614/460 VDC	410 VDC	614/460/614 VDC	410 VDC	614/460/614 VDC	460/614/665 VDC
	Battery Chemistry	Lithium Iron Phosphate					
	Cell Spec (Nominal voltage/Capacity)	3.2 VDC / 100 Ah					
	Pack Configuration	2P16S					
	Pack Spec (Nominal voltage/Capacity)	51.2 VDC / 200 Ah					
	Pack Nominal Energy	10.24 kWh					
	Voltage Range	310 – 750 VDC					
	BMS Communication Interface	RS485 via Serial, Ethernet via Cat 5 or Cat 6					
	BMS Communication Protocol	Modbus RTU, Modbus TCP					
PV Input (DC Coupled Only)	**PV Input Power**	**45 kW**	**90 kW**	**90 kW**	**90 kW**	**90 kW**	**135 kW**
	PV Input Voltage Range	200 – 830 VDC					
	MPPT per charge controller	3					
	Strings per MPPT	2					
	Current Rating per MPPT	35 A					
General Data	Dimensions without Clearance (W x D x H)	82.7/in x 51.18in x 97.05in (2100mm x 1300mm x 2465mm)					
	Weight of Whole System	Up to 8560 lbs					
	Enclosure Degree of Protection	NEMA 3R / IP54					
	Operating Temperature Range	5 °F to 122 °F (-15 °C to 50 °C)					
	Relative Humidity	0 – 90% Non Condensing					
	Max Altitude	10,000 ft (3,000 m)					
	Noise Level	70 dB					
	Thermal Management System	HVAC (Forced Air)					
	Communication Interface	RS485, Ethernet, HMI					
	Warranty	10 years, 70% Retention with 8,000 cycles @ 25 °C					
	Certificates	UL1973, UL9540(A), UL1741-SB, IEEE-1547, IEEE-519, UL9540, SGIP, CEC, OGPe					

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eSpireMini_022224

Tigo

Specifications

	20 A	25 A
Environmental		
Operating temperature range	-40 – 85 °C (-40 – 185 °F)*	
Storage temperature range	-40 – 85 °C (-40 – 185 °F)	
Maximum elevation	3000 m (9840 ft.)	
Outdoor IP rating	IP68/NEMA 3R	
Mechanical		
Dimensions (H/W/D)	139.7 x 138.4 x 22.9 mm (5.4 x 5.5 x 0.9 in.)	
Weight	490 g (1.1 lb.)	
General		
Standards compliance	UL 1741 PVSRE, UL 1741 PVRSS, CSA 22.2, IEC 62109, NEC 690.12	
Warranty	25 years	

* 20 A UL rating: -30 – 75 °C (-22 – 167 °F)

Ordering Information

Part Number	V_{MAX} Certifications UL/IEC	Cable Lengths	Connectors
20 A I_{SC}			
481-00252-20	1500 V/1000 V	1.2/2 m	MC4
481-00252-32	1500 V/1000 V	0.12/1.2 m	MC4
481-00252-62	1500 V/1000 V	0.62/1.2 m	MC4
481-00261-32	1500 V/1500 V	0.12/1.2 m	EVO2
481-00261-62	1500 V/1500 V	0.62/1.2 m	EVO2
481-01252-32	1500 V/1000 V	0.12/1.2 m	MC4
481-01252-62	1500 V/1000 V	0.62/1.2 m	MC4
481-01261-32	1500 V/1500 V	0.12/1.2 m	EVO2
481-01261-62	1500 V/1500 V	0.62/1.2 m	EVO2
25 A I_{SC}			
486-00252-32	1500 V/1000 V	0.12/1.2 m	MC4
486-00252-62	1500 V/1000 V	0.62/1.2 m	MC4
486-00261-32	1500 V/1500 V	0.12/1.2 m	EVO2
486-00261-62	1500 V/1500 V	0.62/1.2 m	EVO2
488-00252-32	1000 V*	0.12/1.2 m	MC4
488-00252-62	1000 V*	0.62/1.2 m	MC4
488-00261-32	1500 V*	0.12/1.2 m	EVO2
488-00261-62	1500 V*	0.62/1.2 m	EVO2

* IEC certified only

More Resources

Home | Help Center | Downloads

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CPS

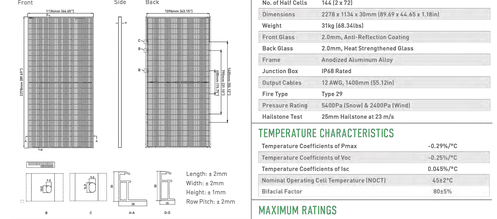
Technical Data

Model name	CPS SCA25KTL-DO/US-208
DC Input	
Max. PV power	45 kW (17 kW per MPPT)
Max. DC input voltage	1000 Vdc
Operating DC input voltage range	200-950 Vdc
Startup DC input voltage / power	330 V / 80 W
Number of MPPTs	3
MPPT voltage range for Pnom @ PF>0.99	480-850 Vdc
Max. PV short circuit current[1]	108 A (36 A per MPPT)
Number of DC inputs	6 inputs, 2 per MPPT
DC disconnection type	Load-rated DC switch
DC surge protection	Type II MOV
AC Output	
Rated AC output power @ PF>0.99	25 kW
Max. AC apparent power	25 kVA
Rated output voltage	208 Vac
Output voltage range[2]	183-228 Vac
Grid connection type	3Φ / PE / N (neutral optional)
Max. AC output current @ 208 Vac	69.5 A
Rated output frequency	60 Hz
Output frequency range[2]	57-63 Hz
Power factor	>0.99 (±0.8 adjustable)
Current TRD @ rated load	< 3%
Max. fault current contribution (1 cycle RMS)	64.1 A (0.92 PU)
Max. OCPD rating	125 A
AC disconnection type	Load-break rated AC switch
AC surge protection	Type II MOV
System and Performance	
Topology	Transformerless
Max. efficiency	97.0%
CEC efficiency	96.5%
Standby / night consumption	< 3 W
Environment	
Enclosure protection degree	NEMA 4X
Cooling method	Variable speed cooling fans
Operating temperature range[3]	-22°F to 140°F (-30°C to 60°C)
Non-operating temperature range[4]	-40°F to 158°F (-40°C to 70°C)
Operating humidity	0-100%
Operating altitude	13123 ft / 4000 m (derating from 9843 ft / 3000 m)
Audible noise	<60 dBA @ 1 m and 77°F (25°C)
Display and Communication	
User interface and display	LCD+LED
Inverter monitoring	SunSpec, Modbus RS485
Site-level monitoring	CPS FlexiOM Gateway (1 per 32 inverters)
Modbus data mapping	CPS
Remote diagnostics / firmware upgrade functions	Standard / (with FlexiOM Gateway)
Mechanical	
Dimensions (H × W × D)	39.4 × 23.6 × 10.2 in (1000 × 600 × 260 mm)
Weight	Inverter: 123.5 lb (56 kg) Wire box: 33 lb (15 kg)
Mounting / installation angle[5]	15 to 90 degrees from horizontal (vertical or angled)
AC termination	M8 stud type terminal block (wire range: #6-3/0 AWG CU/AL; lugs not supplied)
DC termination[6]	Screw clamp, negative busbar* wire range: #14-#6 AWG CU
Fused string inputs (5 per MPPT)	20 A fuses provided (fuse values up to 30 A acceptable)
Safety	
Certifications and standards	UL 1741-SA/SB Ed. 3, UL 1699B, UL 1998, CSA-C22.2 NO.107.1-01, IEEE 1547-2018, FCC Part 15
Selectable grid standards	IEEE 1547a-2014, IEEE 1547-2018[7], CA Rule 21, ISO-NE, HECO
Smart-grid features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt
Warranty	
Standard	10 years
Extended terms	15 and 20 years

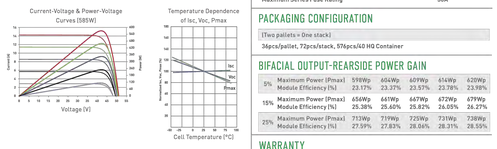
1) The sum of parallel-connected PV module short-circuit currents.
2) The "output voltage range" and "output frequency range" may differ according to the specific grid standard.
3) Active power derating begins at 41°C when PF=1 and MPPTs/min, and at 50°C when PF=1 and MPPTs/900 Vdc.
4) See user manual for further requirements regarding non-operating conditions.
5) Shade Cover accessory required for installation angles of 75 degrees or less.
6) #10 wire-box only includes fuses and fuse holders on the positive polarity, compliant with NEC 2017/2020 Section 690.9(C).
7) Firmware version 4.0 or later required.

EAGLE MODULES

ENGINEERING DRAWINGS



ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE



ELECTRICAL CHARACTERISTICS

Module Type	JKM570N-72HL4-BDV		JKM575N-72HL4-BDV		JKM580N-72HL4-BDV		JKM585N-72HL4-BDV		JKM590N-72HL4-BDV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	570Wp	430Wp	575Wp	433Wp	580Wp	437Wp	585Wp	441Wp	590Wp	445Wp
Maximum Power Voltage (Vmp)	43.58V	40.56V	43.72V	40.72V	43.86V	40.89V	44.02V	41.05V	44.17V	41.21V
Maximum Power Current (Imp)	13.08A	10.59A	13.15A	10.64A	13.22A	10.69A	13.29A	10.74A	13.36A	10.79A
Open-circuit Voltage (Voc)	52.10V	49.49V	52.32V	49.68V	52.50V	49.87V	52.70V	50.06V	52.90V	50.25V
Short-circuit Current (Isc)	13.83A	11.16A	13.89A	11.21A	13.95A	11.26A	14.01A	11.31A	14.07A	11.36A
Module Efficiency STC (%)	22.07%		22.26%		22.45%		22.65%		22.84%	

*STC: ☀ Irradiance 1000W/m² | Cell Temperature 25°C | AM = 1.5
NOCT: ☀ Irradiance 800W/m² | Ambient Temperature 20°C | AM = 1.5 | Wind Speed 1m/s

*Power measurement tolerance: ±3%

MECHANICAL CHARACTERISTICS

No. of Half Cells	144 (2 x 72)
Dimensions	2278 x 1134 x 30mm (89.69 x 44.65 x 1.18in)
Weight	31kg (68.34lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated
Output Cables	12 AWG, 1400mm (55.12in)
Fire Type	Type 29
Pressure Rating	5400Pa (Snow) & 2400Pa (Wind)
Hailstone Test	25mm Hailstone at 23 m/s

TEMPERATURE CHARACTERISTICS

Temperature Coefficients of Pmax	-0.29%/°C
Temperature Coefficients of Voc	-0.25%/°C
Temperature Coefficients of Isc	0.045%/°C
Nominal Operating Cell Temperature (NOCT)	45±2°C
Bifacial Factor	80±5%

MAXIMUM RATINGS

Operating Temperature (°C)	-40°C~+85°C
Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	30A

PACKAGING CONFIGURATION

(Two pallets = One stack)

36pcs/pallet, 72pcs/stack, 576pcs/40 HQ Container

BIFACIAL OUTPUT-REARSIDE POWER GAIN

5%	Maximum Power (Pmax)	598Wp	604Wp	609Wp	614Wp	620Wp
	Module Efficiency (%)	23.17%	23.37%	23.57%	23.78%	23.98%
15%	Maximum Power (Pmax)	656Wp	661Wp	667Wp	672Wp	679Wp
	Module Efficiency (%)	25.38%	25.60%	25.82%	26.05%	26.27%
25%	Maximum Power (Pmax)	713Wp	719Wp	725Wp	731Wp	738Wp
	Module Efficiency (%)	27.59%	27.83%	28.06%	28.31%	28.55%

WARRANTY

12-year product and 30-year linear power warranty

1st year degradation not to exceed 1%, each subsequent year not to exceed 0.4%, minimum power at year 30 is 87.4% or greater.

The company reserves the final right for explanation on any of the information presented hereby. JKM570-590N-72HL4-BDV-F30-F2-US

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JinkoSolar

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:
Salas O'Brien
3220 Executive Ridge, Suite 210
Vista, CA 92081
760.560.0100
08-22-25 #2024-03417
www.salasobrien.com
JO DOZA PP MP

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO
COUNTY FIRE
DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

DATE:	INFORMATION:
9-11-24	D.D.s
10-26-24	PROGRESS
12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
~~07-25-25~~	~~BID SET~~
08-25-25	BID SET

SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

REGISTERED PROFESSIONAL ENGINEER
EDRID A. CA
Lic. # 18809
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

SHEET TITLE:
PHOTOVOLTAIC
CUT SHEETS

SHEET NO.:
E5.6

T:\2024\374170 - SB Fire Station 227\05 BIM\CAD\Sheets\pv2024-03417_E5.6.dwg
08/22/2025 8:50AM

GENERAL CONTRACTOR SCOPE OF WORK INCLUDES INSTALLATION OF CONDUIT, J-BOXES WITH PULL ROPE AND IDENTIFICATION.

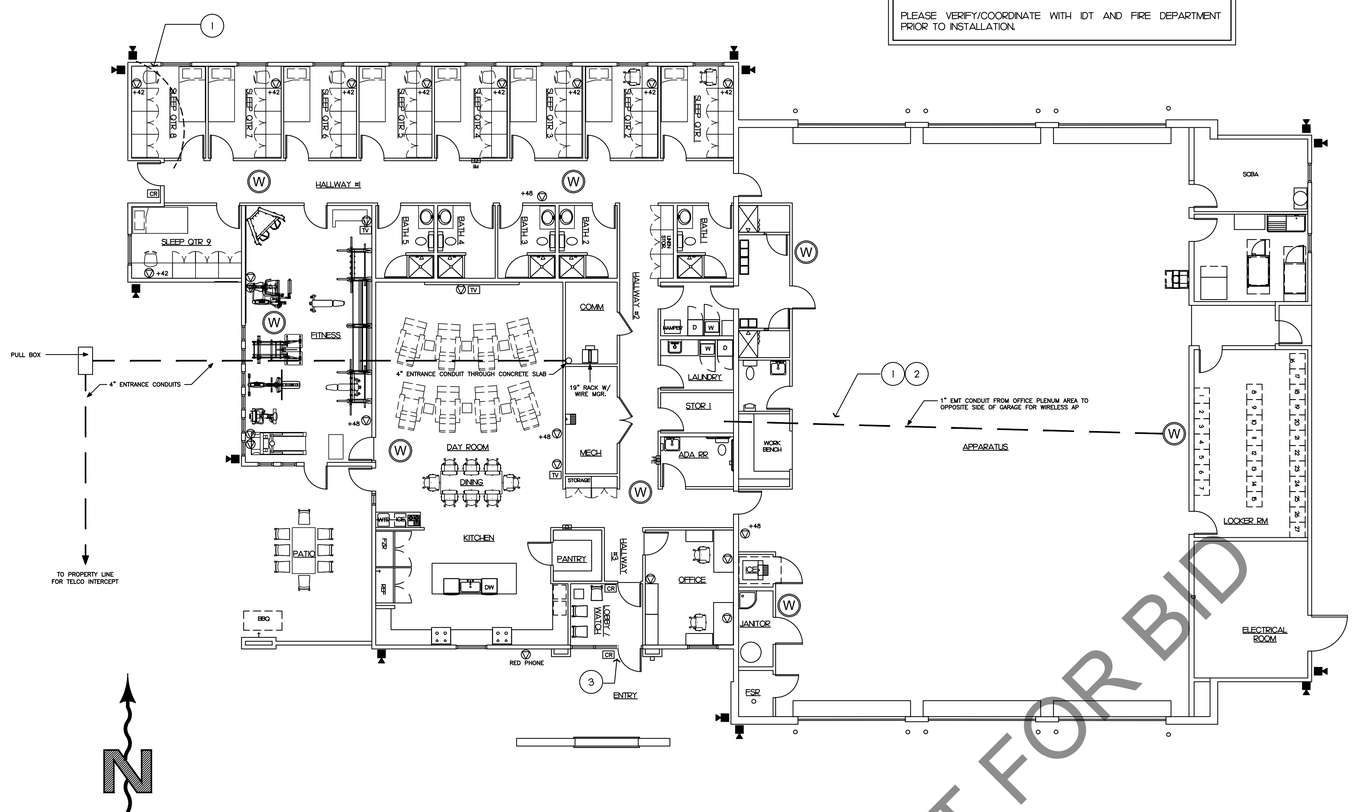
GENERAL CONTRACTOR TO PROVIDE 120V OUTLET WHERE INDICATED ON PLAN BY SYMBOL OR NOTATION.

ALL OTHER EQUIPMENT PROVIDED AND INSTALLED BY COUNTY IDT.

PLEASE VERIFY/COORDINATE WITH IDT AND FIRE DEPARTMENT PRIOR TO INSTALLATION.

LEGEND:

- DATA JACKS
- WIRELESS AP
- TV TELEVISION
- CR CARD READER
- CCTV CAMERA



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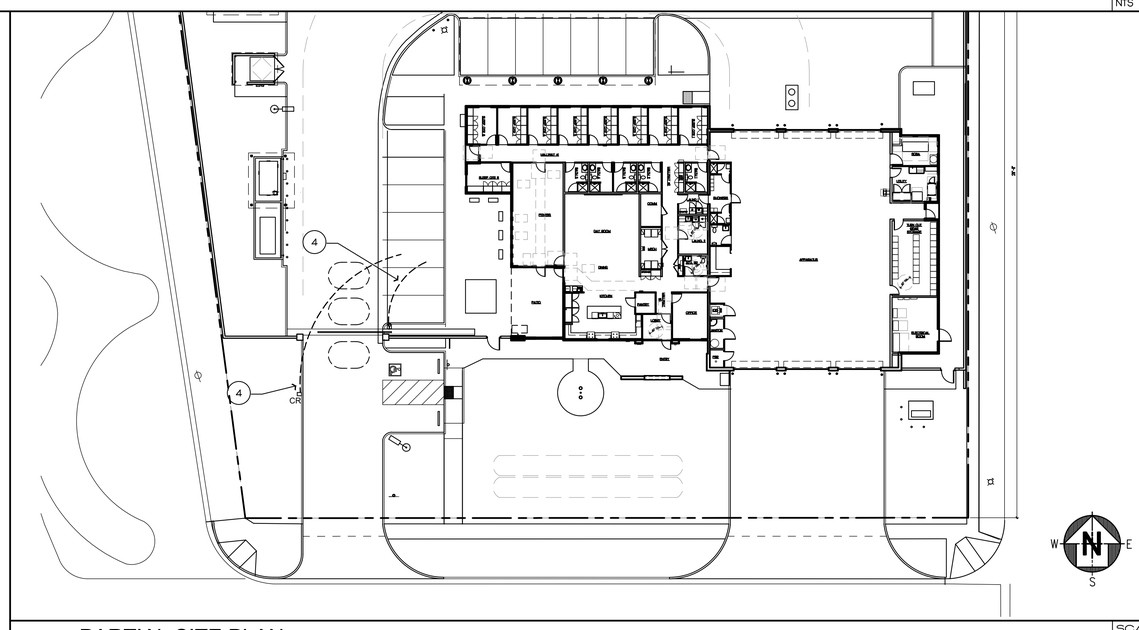
NOT FOR BID

TELECOMMUNICATION SERVICES — COUNTY OF SAN BERNARDINO INFORMATION SERVICES DEPARTMENT

TITLE	COUNTY FIRE STATION #227 (XXX 40TH ST. SAN BERNARDINO)		
SCALE	SCALE BAR	APPROVED BY	REVISED 11-18-2024
DATE	11-18-2024	SHEET 1 OF 1	DRAWING NUMBER STATION 227

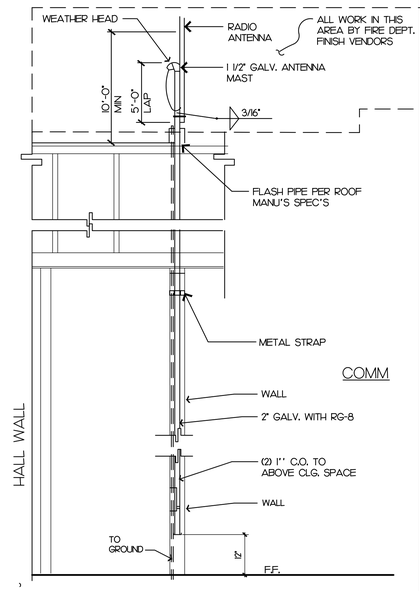
COMMUNICATIONS PLAN

SCALE: NTS 1



PARTIAL SITE PLAN

SCALE: NTS 16



ANTENNA DETAIL

SCALE: N.T.S. 4

KEY NOTE

1. PROVIDE CONDUIT OVERHEAD AT GYP. BOARD CEILING UP TO SUSPENDED CEILING SPACE.
2. THERE WILL NO EXPOSED CONDUIT IN THE APPARATUS BAY.
3. STOREFRONT DOOR CR-PROVIDE 3/4 INCH COND. AND PULL STRING FROM STRIKE PLATE LOCATION TO CEILING SPACE ABOVE.
4. PROVIDE (2) 1 INCH COND. AND PULL STRING. ONE FROM GOOSENECK TO COMM ROOM AND ONE FROM GATE MOTOR TO COMM ROOM.

LEGEND

- DATA OUTLETS
- W WIRELESS ACCESS POINT
- CR PROVIDE 2S BOX, 3/4 INCH CONDUIT AND PULL ROPE CEILING SPACE ABOVE.
- CCTV CAMERA PROVIDE 2S BOX, 3/4 INCH CONDUIT AND PULL ROPE CEILING SPACE ABOVE.

STK
ALL WORKS SERVICES
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

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12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
~~07-25-25~~	~~BID SET~~
08-22-25	BID SET

SHEET INFORMATION:

STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

LICENSED ARCHITECT ANTONIO FINAZ No. C31478 REN. 07-31-27 STATE OF CALIFORNIA

SHEET TITLE:

DATA PLAN ITD

SHEET NO.:

DATA 1.1

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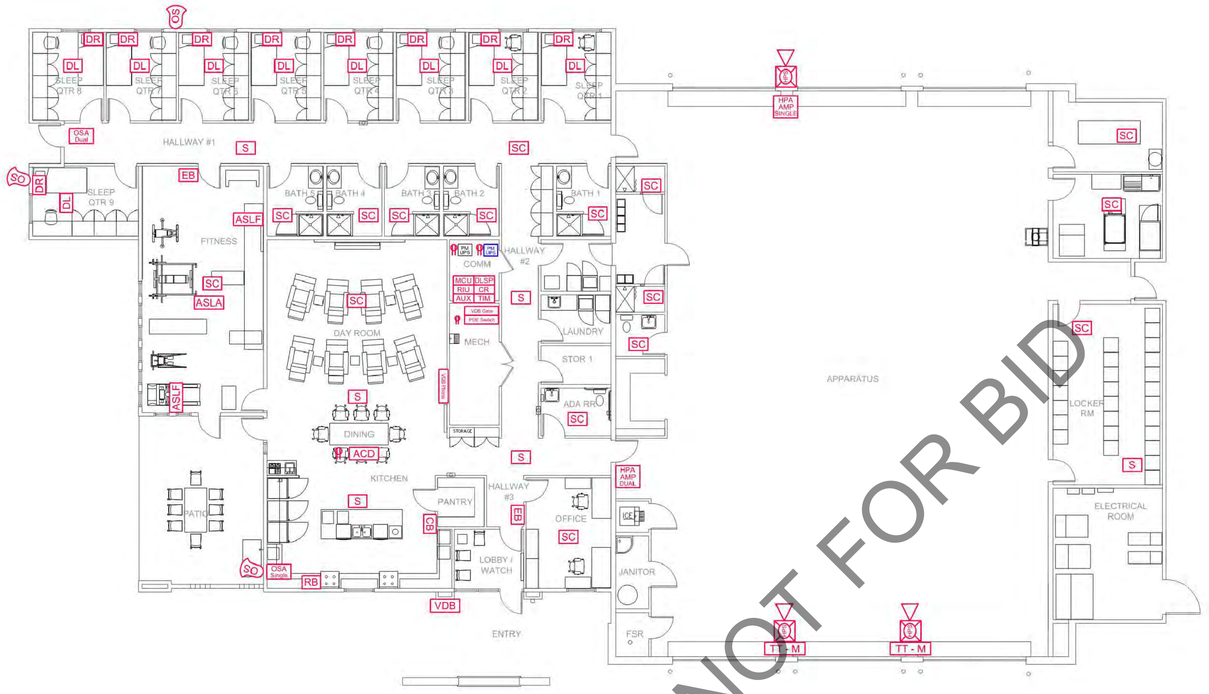

NOT FOR BID

ALERT SYSTEM - 1ST FLOOR DEVICE PLAN

SCALE: N.T.S.

FIRST-IN FIRE STATION ALERTING

SYMBOL LEGEND

MCU	MASTER CONTROL UNIT
DLSP	DATA LINE SURGE PROTECTOR
TIM	TELEPHONE INTERFACE MODULE
CR	CONTROL REMOTE
RIU	RADIO ISOLATION UNIT
AUX	AUXILLIARY MODULE
PM UPS	POWER MODULE WITH UPS-BLACK (DEDICATED 120V CIRCUIT REQUIRED, INDIVIDUAL BREAKER RECOMMENDED)
PM UPS	POWER MODULE WITH UPS-BLUE (DEDICATED 120V CIRCUIT REQUIRED, INDIVIDUAL BREAKER RECOMMENDED)
S	SATELLIGHT
SC	SATELLIGHT CONTROLLER
TT - M	TURNOUT TIMER MEDIUM
HPA	HIGH-POWERED AMPLIFIED SPEAKER IN CONJUNCTION WITH HPA AMP
HPA AMP SINGLE	HIGH-POWERED AMPLIFIER MODULE SINGLE
HPA AMP DUAL	HIGH-POWERED AMPLIFIER MODULE DUAL
OSA Single	OUTSIDE SPEAKER AUDIO MODULE SINGLE
OSA Dual	OUTSIDE SPEAKER AUDIO MODULE DUAL
OS	OUTSIDE SPEAKER - IN CONJUNCTION WITH OSA
DB	DOORBELL BUTTON
EB	EMERGENCY BUTTON
DR	DORM REMOTE
DL	DORM LIGHT
ASLA	ALERTING STROBE LIGHT ADAPTER
ASLF	ALERTING STROBE LIGHT FIXTURE - IN CONJUNCTION WITH ASLA
ACD	APPLIANCE CONTROL DEVICE (DEDICATED 120V CIRCUIT REQUIRED)
RB	APPLIANCE RESET BUTTON
CB	CHOW BUTTON
VDB	VIDEO DOORBELL
VDB Phone	VIDEO DOORBELL PHONE
VDB Gate	VIDEO DOORBELL GATEWAY
POE Switch	POE SWITCH (120V POWER REQUIRED)

GENERAL NOTES

1. DEVICES ARE TYPICAL AND FOR REFERENCE ONLY.
2. ALL BACK BOXES & CONDUITS ARE TO BE FLUSH MOUNTED UNLESS OTHERWISE SPECIFIED FOR NEW CONSTRUCTION.
3. DEVICES LOCATED IN ACOUSTICAL CEILINGS DO NOT REQUIRE BACKBOXES
4. DEVICES LOCATED IN ACOUSTICAL CEILINGS REQUIRE ACOUSTICAL WESTNET MOUNTING KIT (SSATKIT-A)
5. DEVICES ONLY LOCATED IN SHEETROCK OR EXPOSED CEILINGS REQUIRE HOFFMAN BRAND 8X10X4 BACKBOX
6. DEVICES ONLY LOCATED IN SHEETROCK OR EXPOSED CEILINGS REQUIRE APPROPRIATE WESTNET MOUNTING KIT (SURFACE MOUNT OR FLUSH MOUNT) FOR NEW CONSTRUCTION.
7. LOCATIONS OF DEVICES DETERMINED AT INSTALLATION BY INSTALLER FOR NEW CONSTRUCTION.
8. SEE ARCHITECTURAL SPECIFICATION FOR ALL ROUGH-IN AND INSTALLATION DETAILS FOR NEW CONSTRUCTION.
9. INSTALLER TO VERIFY WALL AND CEILING TYPE TO DETERMINE NEED FOR FLUSH OR SURFACE MOUNT INSTALLATION OF EQUIPMENT SPECIFIED FOR NEW CONSTRUCTION.
10. ALL WIRING AND DEVICES TO BE INSTALLED BY WESTNET.
11. ALL PENETRATION TO EXTERIOR DEVICES MUST BE WEATHERPROOF AND FIRE CAULKED FOR CONSTRUCTION BY OTHERS.
12. DEVICES LOCATED IN BATHROOM/SHOWER AREAS MUST BE VISIBLE FROM SHOWERS. INSTALLER TO FIELD VERIFY DEVICE LOCATION. (TYPICAL)
13. ALL DEVICES MUST BE KEPT CLEAR OF OBSTRUCTIONS & CEILING FAN BLADES.
14. IN ACOUSTICAL CEILING (T-BAR), WIRE CABLING IS FREE WIRE (NOT IN CONDUIT).
15. IN GYPSUM BOARD CEILING (SHEET ROCK / HARD LID), WIRE CABLING IN IN 3/4" CONDUIT UNLESS CONDUIT SIZE OTHERWISE NOTED.
16. IN EXPOSED AREAS ONLY 8X10X4 HOFFMAN BACK BOX MOUNTED AT +10'-0" A.F.F. MAX. WITH OPEN FACE DOWN IN CENTER OF ROOM WITH 3/4" CONDUIT TO ACCESSIBLE CEILING SPACE, KEEP CLEAR OF OBSTRUCTIONS.
17. A 5 OHM EARTH GROUND MUST BE CONNECTED TO THE RADIO ISOLATION UNIT IN THE COMMUNICATION RACK.
18. THE RADIO RECEIVING THE DISPATCH INFORMATION SHALL BE LOCATED WITHIN 6'-0" FT. OF THE RADIO ISOLATION UNIT.
19. INSTALLER TO PROVIDE ONE ADDITIONAL UNCONNECTED BLUE CAT5 CABLE WITH RJ45 CONNECTORS ON BOTH ENDS BETWEEN THE MCU LOCATION AND EACH ALERTING END POINT FOR NETWORK CONNECTIVITY.

WESTNET/FIRST IN SYSTEM LAYOUT REVIEW

PROJECT: SAN BERNARDINO FIRE STATION # 227

DEPARTMENT: SAN BERNARDINO, CA

DATE SUBMITTED:

- ☐ Approved subject to notations and corrections as indicated.
- ____ Re-submit corrected Layout for our approval.
- ____ Re-submittal of Layout not required.
- ☐ Rejected/Re-submit Layout

Remarks: _____

DATE RETURNED:

REVIEWED BY: _____

DEPT TITLE:

This serves to Certify that this Layout submittal(s) have been reviewed for accuracy and compliance with the general conformance of the design and layout(only) with the Departmnet Contact and/or Contract Documents.

ONLY AFTER APPROVAL OF LAYOUT WILL SUBMITTAL INFORMATION AND QUOTES BE AVAILABLE.

Westnet, LLC.
15542 Chemical Lane
Huntington Beach, CA 92649

Phone: (714) 548-3500
Fax: (714) 901-5610
www.FirstInAlerting.com

GENERAL CONTRACTOR SHALL INSTALL ALL DEVICES SHOWN FOR BACKBOX AND CONDUIT LOACATION ONLY. ALL EQUIPMENT AND CABLING TO BE PROVIDED AND INSTALLED BY WESTNET UNDER CONTRACT WITH THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL INCLUDE BID FROM WESTNET FOR ALL WORK SHOWN ON THIS SHEET. COORDINATE WITH WESTNET FOR EXACT LOCATION PRIOR TO START OF WORK .

GENERAL CONTRACTOR TO PROVIDE 120V OUTLET WITH INDICATED ON PLAN BY SYMBOL OR NOTATION.

PLEASE VERIFY/COORDINATE WITH WESTET AND FIRE DEPARTMENT PRIOR TO INSTALLATION

WESTNET
15542 CHEMICAL LANE
HUNTINGTON BEACH, CA 92649
TEL: (714) 548-3500 FAX: (714) 901-5610
www.FirstInAlerting.com

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REV	REVISION	DATE	BY

PROJECT NAME: SAN BERNARDINO COUNTY FIRE STATION # 227

180 W. 38TH STREET
SAN BERNARDINO, CA 92405

NOTE:
IF THIS SCALE IS NOT 1"
THIS SHEET IS NOT TO SCALE.

DATE: 11/15/2024
DRAWN BY: EV
SCALE: N.T.S.
TITLE: 1ST FLOOR DEVICE PLAN
SHEET
AS1.2

STK
42065 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202

CIP #22-105

APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

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08-22-25	BID SET

SHEET INFORMATION:

STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

LICENSED ARCHITECT
ANTONIO FINATO
No. C31476
REN. 07-31-27
STATE OF CALIFORNIA

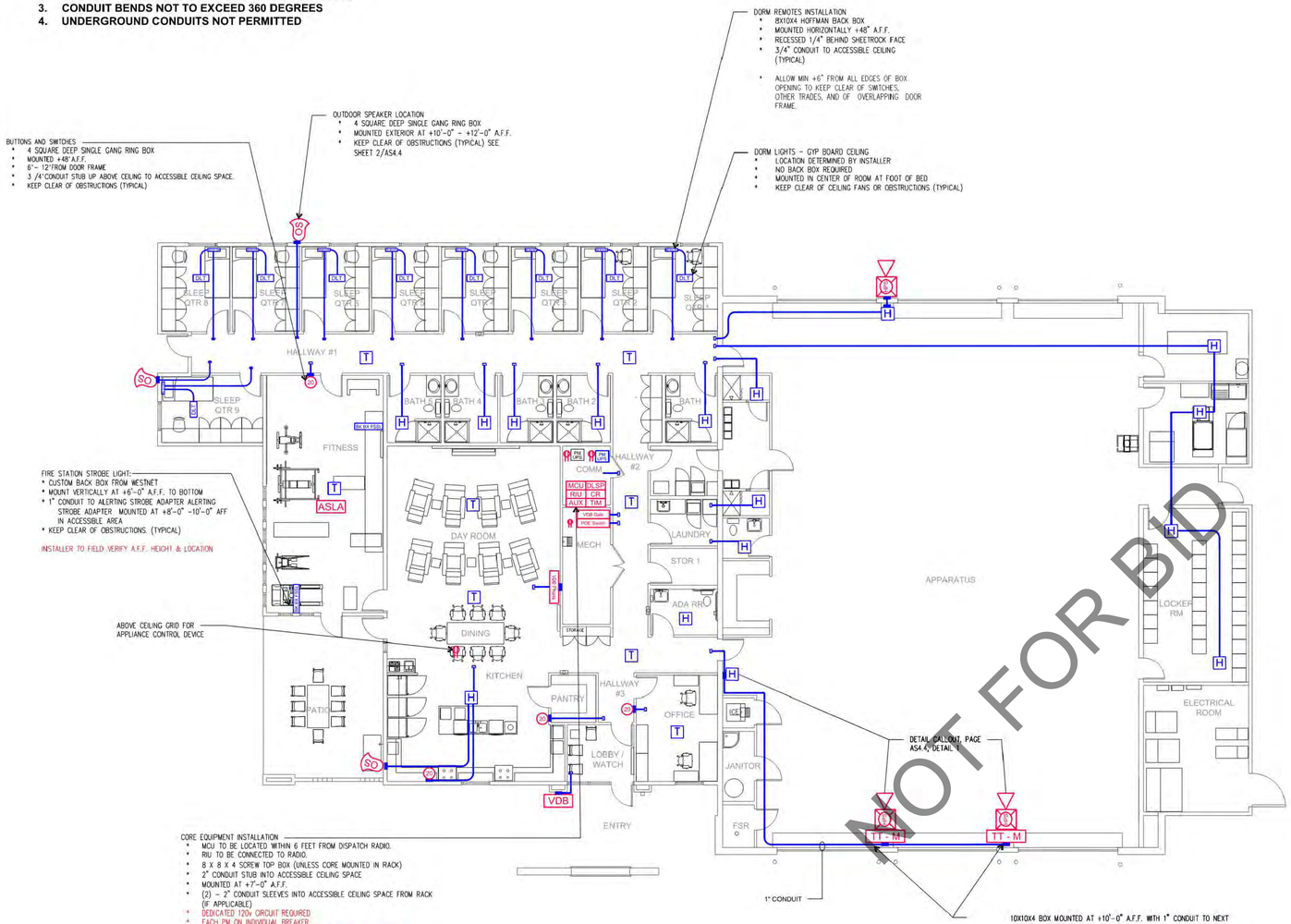
SHEET TITLE:
FIRE ALERT SYSTEM
AS1.2

SHEET NO.:
DATA 2.1

J:\374-SANBNDO\24-193-24 Fire Station No 227\Architecture\DATA2 1-FS227 FIRE ALERT SYSTEM.dwg
07/24/2025 4:57PM

NOTE:

1. **CONDUIT ROUTING IS FOR REFERENCE ONLY**
2. **CONDUIT INSTALLER PLACE PULL BOXES AS NEEDED**
3. **CONDUIT BENDS NOT TO EXCEED 360 DEGREES**
4. **UNDERGROUND CONDUITS NOT PERMITTED**



NOT FOR BID

ALERT SYSTEM - 1ST FLOOR CONDUIT PLAN

SCALE: N.T.S.

FIRST-IN FIRE STATION ALERTING

SYMBOL LEGEND

MCU	MASTER CONTROL UNIT
DLSP	DATA LINE SURGE PROTECTOR
TIM	TELEPHONE INTERFACE MODULE.
CR	CONTROL REMOTE
RIU	RADIO ISOLATION UNIT
AUX	AUXILLIARY MODULE
PM UPS	POWER MODULE WITH UPS-BLACK (DEDICATED 120V CIRCUIT REQUIRED. INDIVIDUAL BREAKER RECOMMENDED)
PM UPS	POWER MODULE WITH UPS-BLUE (DEDICATED 120V CIRCUIT REQUIRED. INDIVIDUAL BREAKER RECOMMENDED)
HPS	HIGH-POWERED AMPLIFIED SPEAKER IN CONJUNCTION WITH
OS	OUTSIDE SPEAKER - IN CONJUNCTION WITH
BK BX FSSL	CUSTOM BACKBOX PROVIDED BY WESTNET
BK BX DR	DORM REMOTE BACKBOX PROVIDED WESTNET
DLT	DORM LITE ACOUSTIC CEILING MOUNT KIT
H	8x10x4 HOFFMAN BACKBOX
T	ACOUSTIC CEILING KIT
▬	LOCATION OF DEVICE WALL MOUNTED

GENERAL NOTES

1. DEVICES ARE TYPICAL AND FOR REFERENCE ONLY.
2. ALL BACK BOXES & CONDUITS ARE TO BE FLUSH MOUNTED UNLESS OTHERWISE SPECIFIED FOR NEW CONSTRUCTION.
3. DEVICES LOCATED IN ACOUSTICAL CEILINGS DO NOT REQUIRE BACKBOXES
4. DEVICES LOCATED IN ACOUSTICAL CEILINGS REQUIRE ACOUSTICAL WESTNET MOUNTING KIT (SSATKIT-A)
5. DEVICES ONLY LOCATED IN SHEETROCK OR EXPOSED CEILINGS REQUIRE HOFFMAN BRAND 8X10X4 BACKBOX.
6. DEVICES ONLY LOCATED IN SHEETROCK OR EXPOSED CEILINGS REQUIRE APPROPRIATE WESTNET MOUNTING KIT (SURFACE MOUNT OR FLUSH MOUNT) FOR NEW CONSTRUCTION.
7. LOCATIONS OF DEVICES DETERMINED AT INSTALLATION BY INSTALLER FOR NEW CONSTRUCTION.
8. SEE ARCHITECTURAL SPECIFICATION FOR ALL ROUGH-IN AND INSTALLATION DETAILS FOR NEW CONSTRUCTION.
9. INSTALLER TO VERIFY WALL AND CEILING TYPE TO DETERMINE NEED FOR FLUSH OR SURFACE MOUNT INSTALLATION OF EQUIPMENT SPECIFIED FOR NEW CONSTRUCTION.
10. ALL WIRING AND DEVICES TO BE INSTALLED BY WESTNET.
11. ALL PENETRATION TO EXTERIOR DEVICES MUST BE WEATHERPROOF AND FIRE CAULKED FOR CONSTRUCTION BY OTHERS.
12. DEVICES LOCATED IN BATHROOM/SHOWER AREAS MUST BE VISIBLE FROM SHOWERS. INSTALLER TO FIELD VERIFY DEVICE LOCATION. (TYPICAL)
13. ALL DEVICES MUST BE KEPT CLEAR OF OBSTRUCTIONS & CEILING FAN BLADES.
14. IN ACOUSTICAL CEILING (T-BAR), WIRE CABLING IS FREE WIRE (NOT IN CONDUIT).
15. IN GYPSUM BOARD CEILING (SHEET ROCK / HARD LID), WIRE CABLING IN IN 3/4" CONDUIT UNLESS CONDUIT SIZE OTHERWISE NOTED.
16. IN EXPOSED AREAS ONLY 8X10X4 HOFFMAN BACK BOX MOUNTED AT +10'-0" A.F.F. MAX. WITH OPEN FACE DOWN IN CENTER OF ROOM WITH 3/4" CONDUIT TO ACCESSIBLE CEILING SPACE, KEEP CLEAR OF OBSTRUCTIONS.
17. A 5 OHM EARTH GROUND MUST BE CONNECTED TO THE RADIO ISOLATION UNIT IN THE COMMUNICATION RACK.
18. THE RADIO RECEIVING THE DISPATCH INFORMATION SHALL BE LOCATED WITHIN 6'-0" FT. OF THE RADIO ISOLATION UNIT.
19. INSTALLER TO PROVIDE ONE ADDITIONAL UNCONNECTED BLUE CAT5 CABLE WITH RJ45 CONNECTORS ON BOTH ENDS BETWEEN THE MCU LOCATION AND EACH ALERTING END POINT FOR NETWORK CONNECTIVITY.
20. BUTTONS AND SWITCHES
    * 4 SQUARE DEEP SINGLE GANG RING BOX
    * MOUNTED +48" A.F.F.
    * 6" - 12" FROM DOOR FRAME
    * 3 /4" CONDUIT STUB UP ABOVE CEILING TO ACCESSIBLE CEILING SPACE.
    * KEEP CLEAR OF OBSTRUCTIONS (TYPICAL)

WESTNET/FIRST IN SYSTEM LAYOUT REVIEW

PROJECT: SAN BERNARDINO FIRE STATION # 227

DEPARTMENT: SAN BERNARDINO, CA

DATE SUBMITTED:

- ☐ Approved subject to notations and corrections as indicated.
- ____ Re-submit corrected Layout for our approval.
- ____ Re-submittal of Layout not required.
- ☐ Rejected/Re-submit Layout

Remarks: _____

DATE RETURNED:

REVIEWED BY:

DEPT TITLE:

This serves to Certify that this Layout submittal(s) have been reviewed for accuracy and compliance with the general conformance of the design and layout(only) with the Department Contact and/or Contract Documents.

ONLY AFTER APPROVAL OF LAYOUT WILL SUBMITTAL INFORMATION AND QUOTES BE AVAILABLE.

Westnet, LLC.
15542 Chemical Lane
Huntington Beach, CA 92649

Phone: (714) 548-3500
Fax: (714) 901-5610
www.FirstInAlerting.com

GENERAL CONTRACTOR SHALL INSTALL ALL DEVICES SHOWN FOR BACKBOX AND CONDUIT LOACATION ONLY. ALL EQUIPMENT AND CABLING TO BE PROVIDED AND INSTALLED BY WESTNET UNDER CONTRACT WITH THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL INCLUDE BID FROM WESTNET FOR ALL WORK SHOWN ON THIS SHEET. COORDINATE WITH WESTNET FOR EXACT LOCATION PRIOR TO START OF WORK .

GENERAL CONTRACTOR TO PROVIDE 120V OUTLET WITH INDICATED ON PLAN BY SYMBOL OR NOTATION.

PLEASE VERIFY/COORDINATE WITH WESTET AND FIRE DEPARTMENT PRIOR TO INSTALLATION

WESTNET®
15542 CHEMICAL LANE
HUNTINGTON BEACH, CA 92649
TEL: (714) 548-3500 FAX (714) 901-5610
www.FirstInAlerting.com

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REV	REVISION	DATE	BY

FIRST-IN ALERT SYSTEM

PROJECT NAME: SAN BERNARDINO COUNTY FIRE STATION # 227
180 W. 38TH STREET
SAN BERNARDINO, CA 92405

NOTE:
IF THIS SCALE IS NOT 1"
THIS SHEET IS NOT TO SCALE.

DATE: 11/15/2024
DRAWN BY: EV
SCALE: N.T.S.
TITLE: 1ST FLOOR CONDUIT PLAN
SHEET
AS3.2

STK
42065 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202

CIP #22-105

APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:	
DATE:	INFORMATION:
9-11-24	D.D.s
10-26-24	PROGRESS
12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
07-25-25	BID SET
08-22-25	BID SET

SHEET INFORMATION:

STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: -
DRAWING NAME:

SEAL:

LICENSED ARCHITECT ANTONIO FIRMO No. C31476 REN. 07-31-27 STATE OF CALIFORNIA

SHEET TITLE:
FIRE ALERT SYSTEM
AS3.2

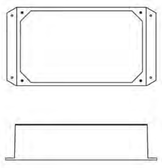
SHEET NO.:
DATA 2.2

07/24/2025 4:58PM J:\374-BA\PROJ\374-193-24 Fire Station No 227\Architectural\DATA\2.1-FS227 FIRE ALERT SYSTEM.dwg

01 MASTER CONTROL UNIT - MCU
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS.

MCU MASTER CONTROL UNIT

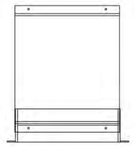
- THE MASTER CONTROL UNIT IS THE COMMAND CENTER OF THE SMART STATION NETWORK.
- THE MASTER CONTROL UNIT SHALL ACCEPT ALARM INPUTS FROM UP TO (4) RADIOS, DEDICATED PHONE LINES, POTS TELEPHONE LINES, SERIAL DATA LINES, AS WELL AS TCP/IP ETHERNET NETWORKS.
- THE MASTER CONTROL UNIT SUPPORTS THE FULL ZIR COMMAND SET.
- THE MASTER CONTROL UNIT SHALL MEET THE NFPA REQUIREMENT 1221 FOR SUPERVISED COMMUNICATIONS FOR ALERTING WITH THE DISPATCH CENTER.
- ALARM AUDIO LEVELS SHALL BE CONTROLLABLE OVER A (30) DECIBAL RANGE IN (1) DECIBAL INCREMENTS.
- RADIO AUDIO LEVELS SHALL BE CONTROLLABLE OVER A (30) DECIBAL RANGE IN (1) DECIBAL INCREMENTS.
- THE ENTIRE FIRE STATION ALERTING LEVEL SHALL BE AUTOMATICALLY REDUCED AT NIGHT AND RETURNED TO NORMAL LEVELS IN THE MORNING AUTOMATICALLY.
- OUTSIDE SPEAKERS SHALL BE AUTOMATICALLY TURNED OFF AT NIGHT AND TURNED BACK ON IN THE MORNING AUTOMATICALLY.
- PRIMARY PROGRAMMING SHALL BE ACCOMPLISHED FROM THE FRONT PANEL. WHILE SECONDARY PROGRAMMING IS ACCOMPLISHED WITH THE SMART STATION SERVICE VIA COMPUTER.
- FRONT PANEL PROGRAMMING SHALL BE LIMITED TO PLACING THE STATION ON RADIO WATCH OR REMOVING THE STATION FROM RADIO WATCH.
- THE MASTER CONTROL UNIT SHALL BE POWERED FROM AN "ON-LINE" UPS FOR UNINTERRUPTIBLE ALERTING SERVICE.



02 CONTROL REMOTE - CR
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS.

CR CONTROL REMOTE

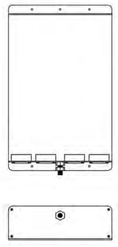
- WHEN THE ALARM SYSTEM TRIGGERS, THE CONTROL REMOTE CAN OPEN BAY DOORS, TURN ON BAY LIGHTS, OPEN GATES, AND/OR SENSE INPUTS FROM CO DETECTORS IN APPARATUS BAYS.
- PROVIDES (8), DOUBLE POLE, DOUBLE THROW (DPDT) RELAYS UNDER SOFTWARE CONTROL OF THE MASTER CONTROL UNIT.
- PROVIDE (4) REMOTE SENSING INPUTS TO COLLECT DATA RELEVANT TO THE CONTROL FUNCTIONS.
- ENABLES THE MASTER CONTROL UNIT TO OPERATE FIRE STATION ALERTING EQUIPMENT THAT IS NOT SMART STATION COMPATIBLE.
- ALL RELAYS SHALL BE ZONE, TIME DELAY AND TIME OF DAY CONTROLLABLE IN ANY COMBINATION NECESSARY.
- SHALL PROVIDE CONTROL AND SENSE CAPABILITY THROUGHOUT THE NETWORK AT ANY LOCATION.
- RELAYS SHALL BE RATED AT (5) AMPS AT (24) VOLTS DC OR AC.
- MECHANICAL LIFE OF THE RELAY CONTACTS SHALL BE A MINIMUM OF (5) MILLION OPERATIONS.
- RELAYS SHALL BE USED TO CONTROL THE OVEN/RANGES IN THR KITCHEN. OPERATION OF EACH APPARATUS BAY DOOR INDEPENDANTLY, AND CONNECTION OF CARBON MONOXIDE SENSORS TO THE SYSTEM. COORDINATE ALL ELECTRICAL CONTACTS AND RELAYS REQUIRED FOR LINE VOLTAGE CIRCUITS TO INTERFACE WITH CONTROL REMOTE DEVICES.
- WESTNET ALERT SYSTEM PROVIDES ONLY DRY CONTACTS RATED AT 24 VOLTS MAX., NO VOLTAGE IS SUPPLIED.



03 STATION PAGING MODULE - PAG
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS.

TIM TELEPHONE INTERFACE MODULE

- SHALL BE UTILIZED FOR PAGING PERSONNEL WITHIN THE FIRE STATION.
- SHALL INTEGRATE THE FIRE STATION TELEPHONE SYSTEM INTO ALL AUDIO UNITS, SUCH AS COMBINATION SPEAKER/LED LIGHT DEVICES. PROGRAMMABLE SPEAKER/RED GLOW LIGHT DEVICES AND HIGH POWER AMPLIFIERS.
- REQUIRES CONDUIT SLEEVE TO STATION TELE/COMM ROOM



04 RADIO ISOLATION UNIT - RIU
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS.

RIU RADIO ISOLATION UNIT

- SURGE PROTECTION DEVICE CONNECTED TO RADIO ANTENNAS EXTEND GROUND WIRE FROM UNIT TO LIGHTING PROTECTION SYSTEM.

ALERTING SYSTEM OVERVIEW PLEASE READ

Most contractors are unfamiliar with what the Alerting System is and the capabilities of the system. The overall function of the alerting system is to reduce the response time of the received calls from 15 to 45 seconds using visual and audio alerts for dispatched units. This system is installed as a large communication loop utilizing CAT 5 cabling with very limited connections to the existing building.

There are several common questions that are generally asked during the rough in stages for our system:

Does the back box specified need to be a Hoffman Brand - Part #43050 - Cat #A-SE8X10X4 for Dorm Remotes (DR) and Satellite Controllers (SC)? YES, the mounting flanges for these devices specifically made for this type of box. This eliminates re-tapping of the box and quicker installation time.

Can power receptacles be relocated? YES, at a maximum of six (6) feet from plan indication.

Can conduit differ from plans? NO, the routing of the conduit is very specific and is the link from device to device creating the over all communication loop.

There is a spacing conflict with the Dorm Remote (DR), Thermostat, Light Switch, and Telephone location next next to the door jamb. Can this be relocated? YES, this can be moved away from the door jamb, generally between the light switch and thermostat is most common, for the occupants to monitor their dispatched calls. Refer to notes on AS.01. The mounting flange will require 18" space between light switch and next device for the horizontally mounted Hoffman back box.

Can devices be relocated? YES, but at a maximum of six (6) feet. Please keep in mind of equal spacing of devices for an even audio and visual coverage; this is important when announcing dispatched calls. Also, the cabling is pre-manufactured and is designated for that device. Relocation of devices at more than six (6) feet from indicated location will need approval by Westnet.

How is the Hoffman Brand - Part #43050 - Cat #A-SE8X10X4 boxes to be mounted? For Dorm Remotes (DR), the back box is to mount horizontally, 10" wide and 8" tall, recessed 1/8" into the sheetrock wall, at 48" to centerline, above finished floor. The mounting flange covers the back box opening and pulls flush against the sheetrock.

For Satellite Controllers (SC), that is to be mounted into sheetrock ceilings, the back box will run, the 10" side, with the length of the room, in the center, free from obstructions, avoiding other trades, recessed 1/8" into sheetrock, and mounted at a maximum of 15' above finished floor. Back boxes installed in open areas will be mounted at a maximum of 15' above finished surface, free from obstructions, avoiding other trades, recessed 1/8" into sheetrock, and mounted at a maximum of 15' above finished floor. Back boxes installed in open areas will be mounted at a maximum of 15' above finished surface. free from obstructions, with length of room, and visible from all points in the rooms. Westnet does not assume the responsibility for poor installation of back boxes. Refer to notes on AS.01.

What is the function of the Control Remote (CR)? This device can perform multiple functions, opening apparatus bay doors, gates, console lighting, etc.
Any equipment that is/was to be connected that are to be controlled by the CR will need a control voltage of 24 Volts that is NOT supplied by Westnet. The terminal rating is a maximum of 24V on the CR.

What is the MCU? This is the brains of the system. Received calls go thru this device and are announced throughout the system. This is most commonly the only connection that is made to the existing communications. The unit is to be located within max (6) feet of the dispatch radio in watch room or communication center of station.

These are just a few of the issues that you may have questions about.
There is to be no alteration of the system without the approval of Westnet.

If there are more questions or concerns about the rough in for installation, please call 1-800-807-1700

DATA LINE SURGE SUPPRESSOR - DLSP

- SHALL BE UTILIZED FOR SURGE PROTECTION OF THE LAN FEED FROM SWITCH
- SHALL BE GROUNDED TO 5 OHM GROUND PLATE
- SHALL BE LOCATED WITHIN 6 FEET OF MCU

NOT FOR BID

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WESTNET®
15542 CHEMICAL LANE
HUNTINGTON BEACH, CA 92649
TEL: (714) 548-3500 FAX (714) 901-5610
www.FirstInAlerting.com

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REV	REVISION	DATE	BY

FIRST-IN ALERT SYSTEM

PROJECT NAME:
SAN BERNARDINO COUNTY
FIRE STATION # 227
180 W. 38TH STREET
SAN BERNARDINO, CA 92405

NOTE: IF THIS SCALE IS NOT 1" THIS SHEET IS NOT TO SCALE

DATE: 11/15/2024
DRAWN BY: EV
SCALE: N.T.S.
TITLE: DEVICE DETAILS
SHEET
AS4.1

STK
42065 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO
COUNTY FIRE
DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

DATE:	INFORMATION:
9-11-24	D.D.s
10-26-24	PROGRESS
12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
07-25-25	BID SET
08-22-25	BID SET

SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

LICENSED ARCHITECT
ANTONIO FINAZZO
No. C31476
REN. 07-31-27
STATE OF CALIFORNIA

SHEET TITLE:
FIRE ALERT
SYSTEM
AS4.1

SHEET NO.:
DATA
2.3

J:\374-SAN\PROJ\374-193-24 Fire Station No 227\Architecture\DATA\2.1 FS227 FIRE ALERT SYSTEM.dwg
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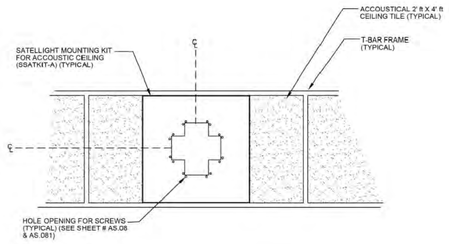
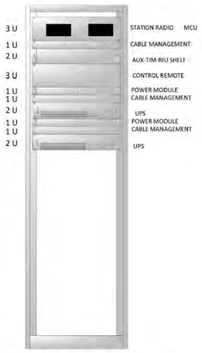


ID 929 **SSATKIT-A**

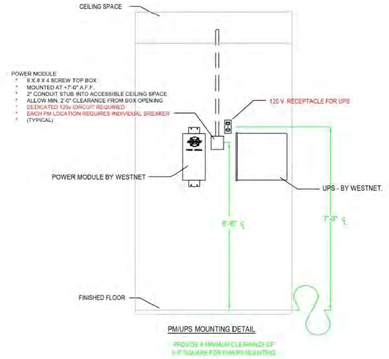
Satellight Mounting Kit - Acoustic Ceiling (A-Kit)

Note:
Kit used for mounting on drop-tile ceilings. Compatible products include:
1. Satellight Controllers 2. Satellights 3. Dorm lights

03 TYPICAL T-BAR PANEL INSTALLATION
N.T.S



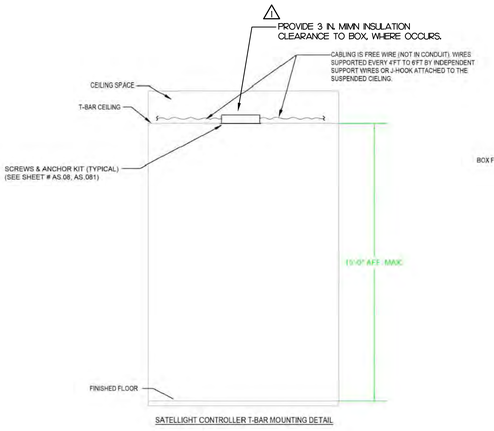
TYPICAL LAYOUT
01 SMART STATION RACK DIAGRAM
N.T.S.
RACK PROVIDED BY OTHERS



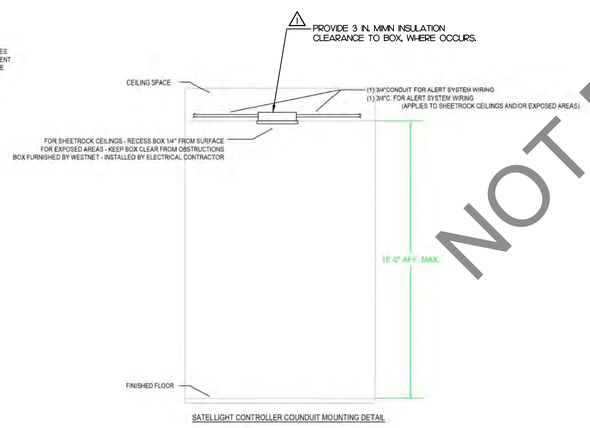
PM/UPS MOUNTING DETAIL
PROVIDE A MINIMUM CLEARANCE OF 6-0" SQUARE FOR PM/UPS MOUNTING

PM UPS POWER MODULE AND UPS

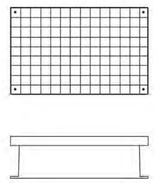
- POWER MODULES SHALL SUPPLY THE SMART STATION CAT 5 PRIMARY ALARM NETWORK WITH 24 VOLTS DC OUTPUT
- THE POWER MODULE SHALL BE CENTERED TO THE FIRE STATION RADIO, THE PRINTER, MASTER CONTROL UNIT, AND THE DATA TERMINAL CONTROL UNIT IF THE FIRE STATION IS ETHERNET DISPATCHED.
- SHALL SUPPLY SYNTHESIZED 110-VAC POWER THAT IS PROTECTED FROM THE POWER GRID BY AN ON-LINE CONVERTER.
- SHALL SENSE POWER LOSS AND NOTIFY THE MASTER CONTROL UNIT OF ANY OUTAGE.
- LED STATUS INDICATORS SHALL SHOW FIRE PERSONEL THE MODULE POWER STATUS.
- STANDARD AGC POWER FUSES SHALL BE CHANGEABLE BY FIRE STATION PERSONNEL.
- EACH POWER SUPPLY SHALL BE ACCOMPANIED BY AN UNINTERRUPTIBLE POWER SUPPLY WITH CAPACITY TO RUN THE SYSTEM AT FULL OPERATION FOR (60) MINUTES.



SATELLIGHT CONTROLLER T-BAR MOUNTING DETAIL



SATELLIGHT CONTROLLER COUNDUIT MOUNTING DETAIL



03 SATELLIGHT CONTROLLER - SC
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS.

SATELLIGHT SPEAKER - S
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS.

SC SATELLIGHT CONTROLLER

KSC KNIGHT LITE SATELLIGHT CONTROLLER

- SHALL OPERATE ON A CAT 5 SMART STATION PRIMARY ALARM NETWORK, WHICH IS DRIVEN FROM THE MCU.
- OPERATE INDEPENDANTLY OR DRIVE UP TO (3) OR (4) DEVICES DEPENDING UPON THE LOCATION IN THE FIRE STATION.
- AUDIO OUTPUT SHALL BE CONTROLLED BY SOFTWARE FROM THE MASTER CONTROL UNIT.
- AUDIO OUTPUT SHALL BE ADJUSTABLE ACROSS A (90) DECIBAL RANGE.
- SHALL BE CAPABLE OF INTELLEGENT SENSING AND CONTROL OF FIRE STATION SYSTEMS AND EQUIPMENT. CONTROLLER SHALL UTILIZE BI-DIRECTIONAL DATA THROUGHOUT THE SMART STATION NETWORK AND EXTEND CAPABILITY TO THE FIRE DEPARTMENT DIPATCH CENTER.
- SHALL BE MOUNTED IN THE CEILING TO PROVIDE ALARM COVERAGE THROUGHOUT THE STATION.
- ACOUSTICAL CEILING MOUNTING SECURES THE DEVICE TO THE T-BAR RAILS AND THE SUPERSTRUCTURE OF THE BUILDING.
- DRYWALL AND PLASTER CEILING MOUNTING HARDWARE SHALL UTILIZE METAL HARDWARE THAT IS COLOR-MATCHED TO THE LAMP ASSEMBLY.

S SATELLIGHT, SPEAKER/LED LIGHT

KS KNIGHT LITE SATELLIGHT, SPEAKER/LED LIGHT

- SHALL OPERATE ON A CAT 5 ALARM SUBNETWORK, WHICH IS DRIVEN FROM A DEVICE CONTROLLER.
- AUDIO OUTPUT FROM THE DEVICES SHALL BE SET BY THE SOFTWARE FROM THE CONTROLLER.
- AUDIO OUTPUT SHALL BE ADJUSTABLE ACROSS A (90) DECIBLE RANGE.
- THE LIGHTING OUTPUT SHALL INCREASE AUTOMATICALLY DURING THE FIRST FEW SECONDS OF THE ALARM SEQUENCE.
- SHALL BE MOUNTED IN CEILING TO PROVIDE ALARM COVERAGE THROUGHOUT THE STATION.
- ACOUSTICAL CEILING MOUNTING SECURES THE DEVICE TO THE T-BAR RAILS AND THE SUPERSTRUCTURE OF THE BUILDING.
- DRYWALL AND PLASTER CEILING MOUNTING HARDWARE INSTALLS DEVICES INTO THESE CEILINGS.

NOT FOR BID

GENERAL CONTRACTOR SHALL INSTALL ALL DEVICES SHOWN FOR BACKBOX AND CONDUIT LOACATION ONLY. ALL EQUIPMENT AND CABLING TO BE PROVIDED AND INSTALLED BY WESTNET UNDER CONTRACT WITH THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL INCLUDE BID FROM WESTNET FOR ALL WORK SHOWN ON THIS SHEET. COORDINATE WITH WESTNET FOR EXACT LOCATION PRIOR TO START OF WORK .

GENERAL CONTRACTOR TO PROVIDE 120V OUTLET WITH INDICATED ON PLAN BY SYMBOL OR NOTATION.

PLEASE VERIFY/COORDINATE WITH WESTET AND FIRE DEPARTMENT PRIOR TO INSTALLATION

WESTNET
15542 CHEMICAL LANE
HUNTINGTON BEACH, CA 92649
TEL: (714) 548-3500 FAX (714) 901-5610
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REV	REVISION	DATE	BY

FIRST IN

ALERT SYSTEM

PROJECT NAME:
SAN BERNARDINO COUNTY
FIRE STATION # 227
180 W. 38TH STREET
SAN BERNARDINO, CA 92405

NOTE:
IF THIS SCALE IS NOT 1", THIS SHEET IS NOT TO SCALE.

DATE: 11/15/2024
DRAWN BY: EV.
SCALE: N.T.S.
TITLE: DEVICE DETAILS.
SHEET
AS4.2

STK
42095 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO
COUNTY FIRE
DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

DATE:	INFORMATION:
9-11-24	D.D.s
10-26-24	PROGRESS
12-20-24	95% CDs
03-14-25	Plan Check 1
05-09-25	Plan Check 2
07-25-25	BID SET
08-22-25	BID SET

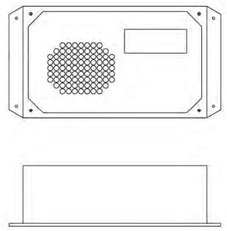
SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

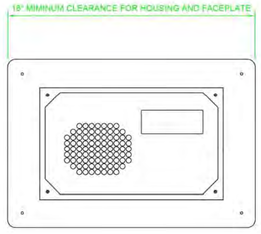
SEAL:

SHEET TITLE:
FIRE ALERT
SYSTEM
AS4.2

SHEET NO.:
DATA
2.4

J:\374-SAN\WD\374-193-24 Fire Station No 227\Architecture\SHEETS\2.1 FS227 FIRE ALERT SYSTEM.dwg
07/24/2025 4:58PM





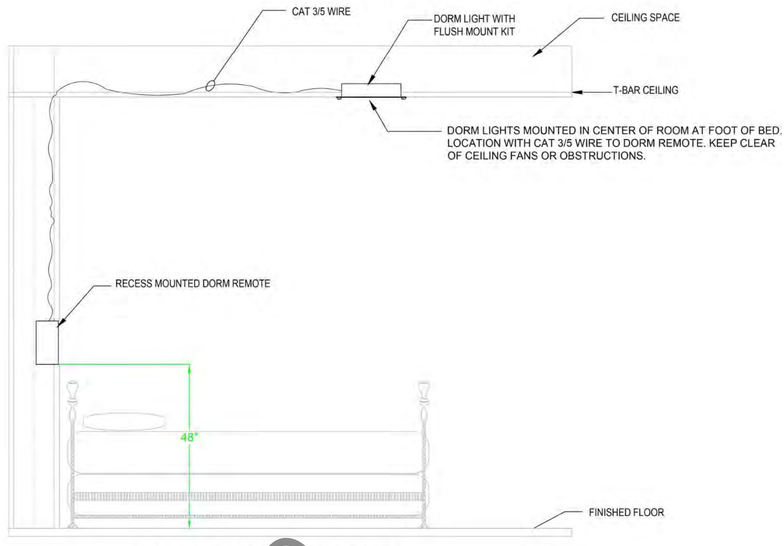
DORM REMOTE WITH ATTACHED FACEPLATE

RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS.

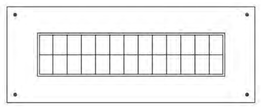
01 DORM REMOTE - DR
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS.

DR DORM REMOTE WITH LIGHT

- SPEAKER/LIGHT DEVICES SHALL BE FIREFIGHTER PROGRAMMED TO ACTIVATE ON ALL ALARMS STARTING AT SHIFT CHANGE.
- THE DEVICE AUDIO SHALL BE ADJUSTED OVER A (60) DECIBLE RANGE IN (1) DECIBLE INCREMENTS TO AID IN THE REDUCTION OF AUDIBLE SHOCK THAT OCCURS WHEN THE FIREFIGHTER AWAKENS TO AN ALARM.
- THE LIGHTING SHALL INCREASE DURING THE FIRST FEW SECONDS OF THE ALARM SEQUENCE TO REDUCE OPTICAL SHOCK UPON AWAKENING.
- THE LIGHT OUTPUT SHALL BE ADJUSTABLE BY EACH FIREFIGHTER.
- INSTALLED WITH VISIBLE FRONT DISPLAY PANEL AND SPEAKER TOWARD THE SLEEPING AREA.
- MUST BE MOUNTED 2'-0" FROM HEAD OF BED IF LOCATED BY DOOR JAMB AND/OR SWITCHES
- THE TWO-LINE DISPLAY SHALL BE USED FOR DISPLAYING TEXT MESSAGING.
- THE DEVICE SHALL OPERATE UP TO (4) COMBINATION SPEAKER/LED LIGHT DEVICES FOR ZONE CONTROLLED SLEEP AREAS.
- THE DEVICE SHALL BE DESIGNED TO BE WALL OR ROOM DIVIDER MOUNTED AT (2) FEET ABOVE THE HEAD OF THE BED TO PROVIDE ILLUMINATION FOR THE BED AND THE FLOOR.
- THE DEVICE CAN BE SURFACE MOUNTED.
- ALL CONNECTIONS SHALL BE MODULAR PLUGS ENABLING RELOCATION OF DORM REMOTE WITH MINIMUM EFFORT.

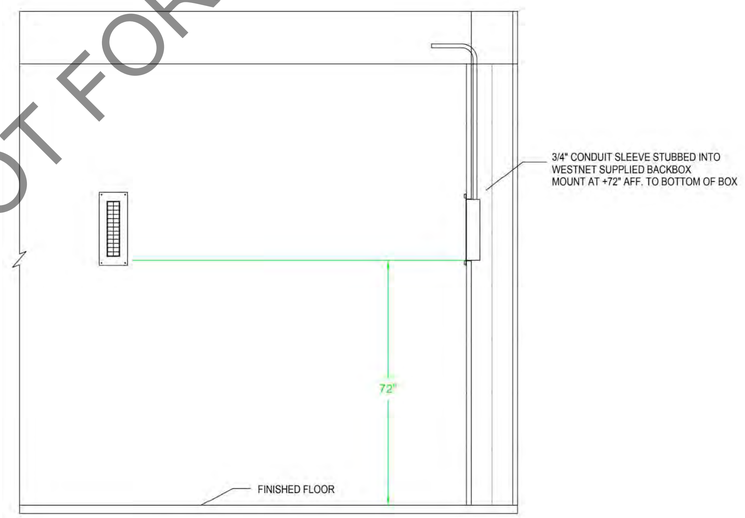


DORM REMOTE / DORM LIGHT MOUNTING DETAIL



DORM LIGHT - DL

02 FSAS WALL LITE
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS



FSAS DORM LIGHT STROBE LAYOUT

NOT FOR BID

GENERAL CONTRACTOR SHALL INSTALL ALL DEVICES SHOWN FOR BACKBOX AND CONDUIT LOACATION ONLY. ALL EQUIPMENT AND CABLING TO BE PROVIDED AND INSTALLED BY WESTNET UNDER CONTRACT WITH THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL INCLUDE BID FROM WESTNET FOR ALL WORK SHOWN ON THIS SHEET. COORDINATE WITH WESTNET FOR EXACT LOCATION PRIOR TO START OF WORK .

GENERAL CONTRACTOR TO PROVIDE 120V OUTLET WITH INDICATED ON PLAN BY SYMBOL OR NOTATION.

PLEASE VERIFY/COORDINATE WITH WESTET AND FIRE DEPARTMENT PRIOR TO INSTALLATION

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HUNTINGTON BEACH, CA 92649
TEL: (714) 548-3500 FAX (714) 901-5610
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REV	DATE	BY
REVISION		

ALERT SYSTEM

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE STATION # 227
180 W. 38TH STREET
SAN BERNARDINO, CA 92405

NOTE:
IF THIS SCALE IS NOT 11", THIS SHEET IS NOT TO SCALE.

DATE: 11/15/2024
DRAWN BY: EV
SCALE: N.T.S.
TITLE: DEVICE DETAILS
SHEET
AS4.3

STK
42065 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

ISSUE INFORMATION:

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12-20-24	95% CDs
03-14-25	Plan Check 1
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SHEET INFORMATION:
STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

SEAL:

LICENSED ARCHITECT
ANTONIO FINAZ
No. C31478
REN. 07-31-27
STATE OF CALIFORNIA

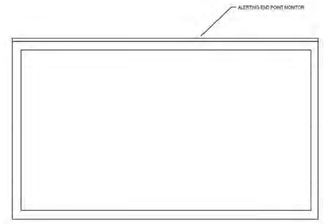
SHEET TITLE:
FIRE ALERT SYSTEM
AS4.3

SHEET NO.:
DATA
2.5

07/24/2025 5:00PM J:\374-SAN\PROJ\374-193-24 Fire Station No 227\Architectural\DATA\2.4 F5227 FIRE ALERT SYSTEM.dwg

AEP ALERTING END POINT MONITOR - (SIZE VARIES)

- SHALL BE TEXT AND GRAPHICS IMAGING SIGNS THAT ARE CONTROLLED FROM THE MASTER CONTROL UNIT IN A SMART STATION SYSTEM.
- SHALL BE USED TO DISPLAY THE COMPANIES ASSIGNED TO THE CALL AND ADDITIONAL INFORMATION SUCH AS THE ADDRESS OF THE CALL, HYDRANT OUTAGES NEAR THE CALL OR HAZMAT INFORMATION ASSOCIATED WITH THE ADDRESS OF THE CALL.
- CHARACTER PANELS SHALL UTILIZE (3) COLOR EMITTERS ENABLING A TOTAL OF (9) SHADES OF MESSAGES.
- SHALL BE DRIVEN BY THE SMART STATION CAT 6 NETWORK.
- SHALL DISPLAY SILENT, CONFIDENTIAL MESSAGES RECEIVED FROM THE MCU RESPONDING TO A MESSAGE ZONE COMMAND.
- SHALL PROVIDE ALERTING INFORMATION THAT IS TOTALLY IMMUNE FROM HIGH NOISE LEVELS OF APPARATUS ROOMS AND AIRCRAFT FACILITIES.
- REQUIRES LOW VISCOSITY FACE.
- TWO SYSTEMS MANUFACTURED BY WESTNET LLC.

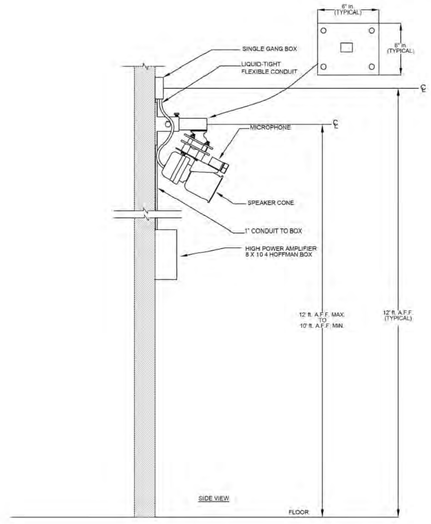


ALERTING END POINT - TOUCH SCREEN

01 ALERTING END POINT MONITOR
N.T.S.
REF. WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS

NOTE: ALL THRU PENATRATIONS MUST BE SEALED WITH DAP - PREMIUM RUBBER CONCRETE, TYPICAL.

IT IS MANDATORY TO INSTALL SCREWS IN ALL MOUNTING HOLES.

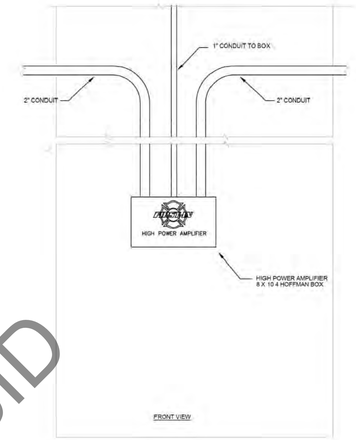


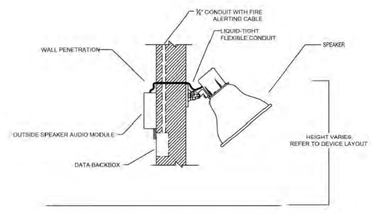
01 HIGH POWER AMPLIFIER AND INTERIOR SPEAKER
N.T.S.

HPS
HPA AMP

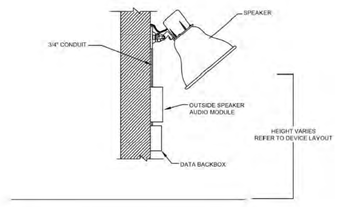
HIGH POWER PAGING AMPLIFIER & SPEAKER

- HIGH POWER AMPLIFIERS SHALL PROVIDE DYNAMIC CONTROL OF THE FIRE ALARM SOUND LEVEL IN HIGH NOISE AREA OF THE FIRE STATION.
- AMPLIFIERS SHALL BE USED THROUGHOUT THE APPARATUS BAYS, AND ALONG THE PERIMETER OF EACH STATION.
- INCREASED VOLUME SHALL PROVIDE AUDIBLE DISPATCH IN HIGH NOISE LEVEL AREAS.
- AN AMBIENT NOISE DETECTOR SHALL SENSE SOUND LEVELS AND CONTROL THE OUTPUT POWER FROM (5) TO (12) DECIBALS.
- MAXIMUM OUTPUT POWER SHALL BE SET BY SERVICE SOFTWARE.
- A BUILT IN VOLUME LED INDICATOR SHALL DISPLAY THE OUTPUT LEVEL CONTROL ACTIVITY.
- BUILT IN LED STATUS INDICATORS SHALL INDICATE THE OPERATING MODE OF THE HIGHT POWER AMPLIFIER.
- MULTIPLE HIGH POWER AMPLIFIERS SHALL BE OPERATED ON THE SMART STATION NETWORK.
- SPEAKER SHORN OUTDOORS SHALL BE WEATHERPROOF AND DESIGNED FOR OUTDOOR USE.
- SPEAKER MOUNTS SHALL BE ADJUSTABLE TO ANY ANGLE AS NEEDED BY THE INSTALLATION.





02 OUTSIDE SPEAKER AUDIO MODULE - EXTERIOR
N.T.S.



03 OUTSIDE APEAKER AUDIO MODULE - INTERIOR
N.T.S

NOT FOR BID

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WESTNET®
15542 CHEMICAL LANE
HUNTINGTON BEACH, CA 92649
TEL: (714) 894-9539 FAX: (714) 894-6610
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REV	REVISION	DATE	BY

ALERT SYSTEM

PROJECT NAME: SAN BERNARDINO COUNTY FIRE STATION # 227
180 W. 38TH STREET
SAN BERNARDINO, CA 92405

NOTE: IF THIS SCALE IS NOT 1". THIS SHEET IS NOT TO SCALE.

DATE: 11/15/2024
DRAWN BY: EV
SCALE: N.T.S.
TITLE: DEVICE DETAILS
SHEET
AS4.4

STK
42065 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY:
SAN BERNARDINO COUNTY
PROJECT & FACILITIES
MANAGEMENT DEPARTMENT

385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

PROJECT NAME:
SAN BERNARDINO COUNTY FIRE DEPARTMENT:
FIRE STATION 227

PROJECT # 10.10.1202
CIP #22-105
APN Part of 0154-281-01

180 W. 38TH STREET
SAN BERNARDINO,
CA 92405

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08-22-25	BID SET

SHEET INFORMATION:

STK PROJECT NO.: 374-193-24
SCALE: AS NOTED
DATE: DECEMBER 2024
PLOT DATE: –
DRAWING NAME:

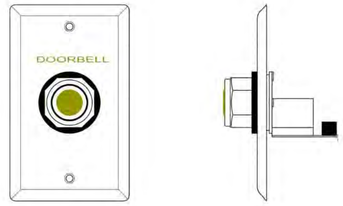
SEAL:

LICENSED ARCHITECT ANTONIO FINATO No. C31478 REN. 07-31-27 STATE OF CALIFORNIA

SHEET TITLE:
FIRE ALERT SYSTEM
AS4.4

SHEET NO.:
DATA
2.6

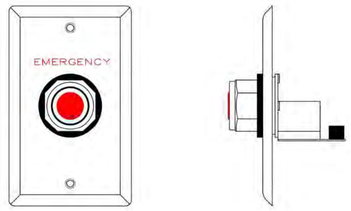
07/24/2025 5:00PM J:\374-SAN\PWD\374-193-24 Fire Station No 227\Architecture\DATA\2.4 F S227 FIRE ALERT SYSTEM.dwg



DB DOORBELL - DB
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS

DB DOORBELL

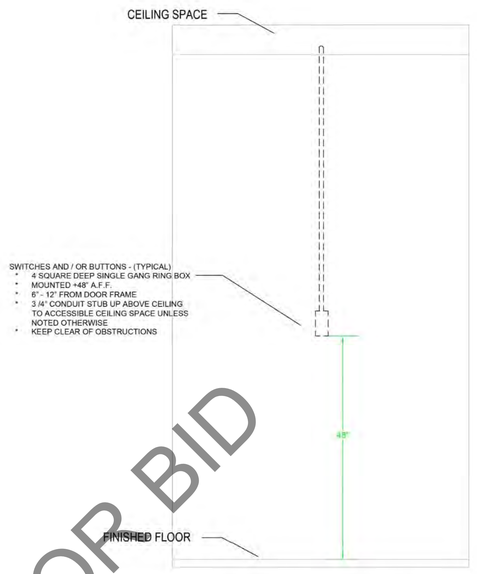
- SHALL NOTIFY PERSONNEL OF VISITOR ON FIRE STATION GROUNDS.
- NOTIFICATION OF VISITOR SHALL BE RELAYED TO DISPATCH CENTER.
- SHALL NOTIFY FIRE PERSONNEL AT WHICH DOOR THE VISITOR IS WAITING.
- SHALL PROVIDE BOTH AUDIBLE AND VISUAL NOTIFICATION OF DOORBELL ACTIVATION.
- PROVIDE CUSTOMIZED MESSAGES AND ALERT TONES.



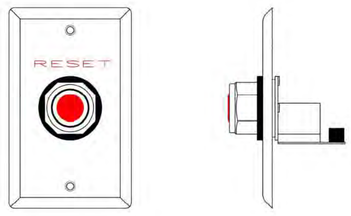
EMERGENCY BUTTON - EB
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS

EB EMERGENCY BUTTON

- SHALL NOTIFY PERSONNEL OF EMERGENCY ON FIRE STATION GROUNDS.
- SHALL ENABLE THE FIRE FIGHTER TO ANSWER THE DOOR AND ATTEND TO THE PROBLEM IMMEDIATLY.
- SHALL NOTIFY DISPATCH CENTER OF INCIDENT OCCUBANCE AT THE FIRE STATION.
- SHALL PROVIDE BOTH AUDIBLE AND VISUAL NOTIFICATION OF AN EMERGENCY.
- PROVIDE CUSTOMIZED MESSAGES AND ALERT TONES.



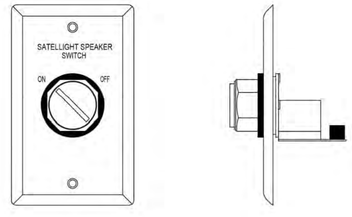
SWITCH/BUTTON MOUNTING DETAIL (TYP.)



RESET BUTTON - RB
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS

RB RESET BUTTON

-RESETS APPLIANCE CONTROLLER DEVICE
- SHALL BE WITHIN CLOSE DISTANCE TO APPLIANCE CONTROLLER DEVICE



SPEAKER SWITCH - SW
N.T.S.
RE: WESTNET SPECIFICATIONS FOR OVERALL DEVICE DIMENSIONS

SW SPEAKER SWITCH

- SHALL BE UTILIZED TO CONTROL THE ACTIVE/INACTIVE OPERATION OF THE SATELLIGHT CONTROLLER IN ROOM (COMBINATION SPEAKER/LED LIGHT DEVICE).

NOT FOR BID

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15542 CHEMICAL LANE
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REV	REVISION	DATE	BY

ALERT SYSTEM

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180 W. 38TH STREET
SAN BERNARDINO, CA 92405

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TITLE: DEVICE DETAILS
SHEET
AS4.5

STK
42065 ZEVO DR., TEMECULA, CALIFORNIA 92590-3780
Phone: 951.296.9110 Fax: 951.296.6079 Email: stk@stkinc.com

CONSULTANT:

PROJECT ADMINISTERED BY:
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385 N. ARROWHEAD AVE.
SAN BERNARDINO, CA 92415

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SCALE: AS NOTED
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PLOT DATE: -
DRAWING NAME:

SEAL:

LICENSED ARCHITECT
ANTONIO FINATO
No. C31476
REN. 07-31-27
STATE OF CALIFORNIA

SHEET TITLE:
FIRE ALERT SYSTEM
AS4.5

SHEET NO.:
DATA
2.7

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07/24/2025 5:01PM