

LIBERTY HIGH SCHOOL Administration and Student Commons Modernization

Addendum 03

DECEMBER 23, 2020

DSA File Number: 7-H4 DSA Application Number: 01-119033 PTN: 61721-55

Owner: Liberty Union High School District 20 Oak Street Brentwood, CA 94513

Architect: Quattrocchi Kwok Architects 636 Fifth Street Santa Rosa, California 95404 P:707.576.0829 F: 707.576.0295

Architect's Project No.: 1783.00

To: Prospective Bidders

The following changes, modifications and additions to Project Manual and Drawings described below are made a part thereof and are subject to all of the requirements thereof as if originally specified. The Bidder must acknowledge receipt of the Addendum in the space provided on the Bid Form; failure to do so may subject the Bidder to disqualification.

Table of Contents - Addendum 03

This Addendum consists of 6 pages and the attachments as listed below dated December 23, 2020.

Deleted Text is shown in strikeout type.

Added Text is shown in *bold italicized type*.

ATTACHMENTS:

Project Manual

None

ADD Drawings (8.5 inch by 11 inch & 11 inch by 17 inch):

None

Drawings: (24 inch by 36 inch)

	/
ADD 03 A-B4.1	CAFETERIA BUILDING ROOF PLAN
ADD 03 M-1.1	MECHANICAL SCHEDULES & LEGENDS
ADD 03 M-B2.1	CAFETERIA MECHANICAL FLOOR PLAN
ADD 03 P-B3.0	CAFETERIA DEMOLITION ENLARGEMENT PLANS
ADD 03 E-0.1	SYMBOLS LIST, GENERAL NOTES AND LIST OF DRAWINGS
ADD 03 E-0.2	LUMINAIRE SCHEDULE
ADD 03 E-0.3	LUMINAIRE SCHEDULE
ADD 03 E-0.4	LIGHTING SEQUENCE OF OPERATION
ADD 03 E-1.0	SITE PLAN - ELECTRICAL
ADD 03 E-A2.1	ADMINISTRATION BUILDING - LIGHTING
ADD 03 E-B2.1	CAFETERIA KITCHEN PLAN - LIGHTING
ADD 03 E-A3.1	ADMINISTRATION BUILDING – POWER & SINGNAL
ADD 03 E-B3.1	CAFETERIA KITCHEN PLAN – POWER AND SIGNAL
ADD 03 E-5.1	SINGLE LINE DIAGRAM – POWER
ADD 03 E-5.2	LIGHTING CONTROL
ADD 03 E-5.3	DETAILS
ADD 03 E-6.1	PANEL AND SCHEDULES
ADD 03 E-7.3	DETAILS

Project Record

Prequalification List

End of Table of Contents

A. CHANGES TO PREVIOUS ADDENDA

Item No. 3. 01

PREQUALIFIED CONTRACTORS

The following document denoted **Addendum 03** supersedes and replaces previously issued document.

B. CHANGES TO THE BIDDING AND CONTRACT REQUIREMENTS

None.

C. CHANGES/ ADDITIONS TO THE SPECIFICATIONS

Item No. 3. 02

Section 07 2216 ROOF INSULATION Revise of article 2.02.A.2 as follows. a. R-Value: Minimum 30 11

Item No. 3. 03

Section 21 0000 FIRE PROTECTION GENERAL

Correct of article 3.3.B as follows.

The required acceptance documents shall be signed by a licensed C 16 Contractor *licensed appropriate for the work in this Section*.

Item No. 3. 04

Section 21 0500 OVERHEAD FIRE PROTECTION

Correct first sentence of article 1.7.A as follows.

The Contractor must be a C 16 Contractor, licensed by the State of California Contractor's Licensing Board licensed appropriate for the work in this Section.

Item No. 3. 05

Section 22 0000 PLUMBING

Correct first sentence of article 1.10.A as follows. All plumbing systems shall be installed by a C-36 Plumbing Contractor *licensed appropriate for the work in this Section*.

Item No. 3. 06

Section 23 0000 HEATING, VENTILATING, AIR CONDITIONING Correct article 3.11.B.3 as follows. The contractor must be in possession of a C-20 California State Contractors License. *construction license appropriate for the work in this Section.*

Item No. 3. 07

Section 23 0500 GENERAL MENCHANICAL Correct article 1.04.A.1 as follows. Liberty High School Administration and Student Commons Liberty Union High School District

All HVAC work, which includes warm air heating systems and water heating pumps, ventilating systems, air conditioning systems, and ductwork, registers, flues, humidity, and thermostatic controls in connection with these systems, shall be performed by a C 20 Warm Air Heating, Ventilating and Air Conditioning Contractor *licensed appropriate for the work in this Section*.

Item No. 3. 08

Section 23 0500 GENERAL MENCHANICAL Correct first sentence of article 1.04.A.2 as follows.

All air and/or water balancing shall be performed by a D-62 air and water balancing contractor *licensed appropriate for the work in this Section*.

Item No. 3. 09

Section 27 0000 TELECOMMUNICATIONS SYSTEM

Correct the last sentence of article 1.05.B as follows.

Documentation must be included with the bid documents submitted within 30 days following contract notice of award.

Item No. 3. 10

Section 08 7100 DOOR HARDWARE Revise to add Hardware Groups 20 and 21

D. CHANGES/ ADDITIONS TO THE DRAWINGS

Item No. 3. 11

The following drawing denoted Addendum 03 is added to the drawings. ADD 03 E-0.4 LIGHTING SEQUENCE OF OPERATION Revise Table of Contents accordingly.

Item No. 3. 12

The following drawings dated December 23, 2020 denoted **Addendum 03** supersede and replace previous drawings with the same titles:

ADD 03 A-B4.1	CAFETERIA BUILDING ROOF PLAN
ADD 03 M-1.1	MECHANICAL SCHEDULES & LEGENDS
ADD 03 M-B2.1	CAFETERIA MECHANICAL FLOOR PLAN
ADD 03 P-B3.0	CAFETERIA DEMOLITION ENLARGEMENT PLANS
ADD 03 E-0.1	SYMBOLS LIST, GENERAL NOTES AND LIST OF DRAWINGS
ADD 03 E-0.2	LUMINAIRE SCHEDULE
ADD 03 E-0.3	LUMINAIRE SCHEDULE
ADD 03 E-1.0	SITE PLAN - ELECTRICAL
ADD 03 E-A2.1	ADMINISTRATION BUILDING – LIGHTING
ADD 03 E-B2.1	CAFETERIA KITCHEN PLAN – LIGHTING
ADD 03 E-A3.1	ADMINISTRATION BUILDING – POWER & SINGNAL
ADD 03 E-B3.1	CAFETERIA KITCHEN PLAN – POWER AND SIGNAL
ADD 03 E-5.1	SINGLE LINE DIAGRAM – POWER
ADD 03 E-5.2	LIGHTING CONTROL
ADD 03 E-5.3	DETAILS
ADD 03 E-6.1	PANEL AND SCHEDULES

ADD 03 E-7.3 DETAILS

E. BIDDERS QUESTIONS

Item No. 3. 13

- Q: In Section 06 4100 paragraph 2.07 the laminate materials are called off to be through color, but none of the laminate selections on sheet A-8.4 are available in through color (Solicor). Please advise if the finish schedule will supersede the specification.
- A: The finish schedule supersedes the specification for the reference paragraph.

Item No. 3. 14

- Q: What is the fiber strand count and type of fiber as well as copper pair count for the new OSP fiber and copper feeder cable that is to be installed outside in the hardscape area?
- A: Refer to Addendum 3 for telecom single line diagram.

Item No. 3. 15

- Q: Where is the campus MDF located and what is the pathway to get there from the new IDF-A in the Admin building? And what is the fiber strand count/type and copper pair count that needs to homerun between the MDF and IDF?
- A: Refer to Addendum 3 for telecom single line diagram.

Item No. 3. 16

- Q: Who is providing the wireless access points? Sentence 'C' in the spec says that I am to provide wifi access points but sentence 'D' say not to include active network components in the installation? If I am to provide them, where is the spec for said wireless access point?
- A: Wireless access points (active equipment) is by the District, per 1.02(D). Only the cabling and jacks are by this contract.

Item No. 3. 17

- Q: With Regards to the Administration Building shades Sheet A-A3.1 Note #18 says "TYP at all glazing, U.N.O." Is all glazing to be shaded, including the Reception and Attendance Lobby?
- A: No window shade at Reception and Attendance area.

Item No. 3. 18

- Q: Drawing A-A6.3 calls for motorized shades in the Principal's secretary & Principals office. Is this correct? Are all other openings to be manual shades noted as #18?
- A: Window shade larger than 6'-0" to be motorized window shades.

Item No. 3. 19

- Q: The Principal's office and Secretary are calling for motorized shades. Is this the case? Only windows is remodeled building ASB, Student Book Store, Event Center are W13 in the student store? Are these and or any other windows in this remodel to be covered?
- A: A-A2.1 Student Store AW100 only shows (2) windows to be replaced, provide new window shades.

Item No. 3. 20

- Q: On page A-1.1 Keynote 19 "Flagpole SLD". Nothing is shown on the L or C sheets and there isn't a specification for it. Is there a new flagpole on this project? Please Clarify
- A: Flagpole information in included in both the drawings and specifications. Please see Detail 5 on Sheet L-1.2 and specification section 12 9300 Site Furnishings.

END OF ADDENDUM





CAFETERIA **BUILDING ROOF** PLAN

SHEET NUMBER ADDENDUM 03 A-B4, 1

DECEMBER 28, 2020

DSA APP NO. 01-119033 1783.00 ARCH PROJECT NO: CH, GRD DRAWN BY: DRAWING SCALE: 1/8" = 1'-0" FILE NO: 7-H4 PTN: 61721-75 CD

ADMINISTRATION & STUDENT COMMONS

850 2ND STREET

BRENTWOOD, CA 94513

LIBERTY UNION HIGH SCHOOL DISTRICT

2 12/18/20 ADD-02

3 12/23/20 ADD-03





				MAX REQUIRED	DESIGN
ROOM #	ROOM NAME	Area	ASHRAE 62.1 OCCUPANCY	OSA	OSA
A100	RECEPTION/ATTEND	644	62-Office Buildings - Reception Areas	97	100
A102	SRO	102	62-Office Buildings - Office Space	16	25
A102	CORRIDOR	79	62-General - Corridor	12	25
A103	DATA	103	62-Office Buildings - Office Space	16	25
A104	NURSE	314	62-Office Buildings - Office Space	48	50
A108	COORIDOOR	409	62-General - Corridor	62	75
A109	REGISTRATION	156	62-Office Buildings - Office Space	24	25
A110	CUM FILES	234	62-Office Buildings - Occupiable Storage	36	50
A112	COORIDOOR	175	62-General - Corridor	27	50
A113	INT TEACHER	165	62-Office Buildings - Office Space	25	25
A114	LARGE CONF	410	62- General - Conference/Meeting	205	225
A115	PRINCIPAL	241	62-Office Buildings - Office Space	37	50
A116	PRIN SEC	183	62-Office Buildings - Office Space	28	50
A117	AP SEC	271	62-Office Buildings - Office Space	41	50
A118	AP OFFICE	191	62-Office Buildings - Office Space	29	50
A118	MAIL	94	62-Office Buildings - Office Space	15	25
A119	MFT	119	62-Office Buildings - Office Space	18	25
A120	MFT	118	62-Office Buildings - Office Space	18	25
A121	STAFF LOUNGE	572	62-Office Buildings - Breakrooms	286	300
A123	PSYCH	110	62-Office Buildings - Office Space	17	25
A126	COUNSELOR	163	62-Office Buildings - Office Space	25	25
A129	PSYCH	111	62-Office Buildings - Office Space	17	25
A133	COUNSELOR	163	62-Office Buildings - Office Space	25	25
A134	AP OFFICE	193	62-Office Buildings - Office Space	29	50
A135	AP SEC	223	62-Office Buildings - Office Space	34	50
A136	STAFF WORK	142	62-Office Buildings - Office Space	22	25
A139	AP SEC	259	62-Office Buildings - Office Space	39	50
A140	SHARED CONF	234	62- General - Conference/Meeting	117	125
A141	COUNSELOR	162	62-Office Buildings - Office Space	25	25
A142	AP SEC	263	62-Office Buildings - Office Space	40	50
A143	AP OFFICE	199	62-Office Buildings - Office Space	30	50
A144	COUNSELOR	162	62-Office Buildings - Office Space	25	25
A145	COUNSELOR	160	62-Office Buildings - Office Space	24	25
A146	AP OFFICE	193	62-Office Buildings - Office Space	29	50

	ROOF TOP UNIT (AC) SCHEDULE																						
		SUPPLY FAN					COOLING CAPACITY		HEATING CAPACITY		ELECTRICAL DATA												
		MODEL	UNIT SIZE				SUPPLY		TOTAL COOLING	SENSIBLE COOLING	GAS INPUT	GAS OUTPUT						CURB	ECONOMIZER	OPERATINO UNIT	G TOTAL		
MARK	MANF	NUMBER	TONS	MIN O.A	MAX O.A	ESP	FAN RPM	AIRFLOW CFM	(MBH)	(MBH)	(MBH)	(MBH)	IEER	V-Ø-Hz	MCA	MOCP	CURB MODEL	WEIGHT	WEIGHT	WEIGHT	WEIGHT	SERVICE	REMARKS
AC-1	CARRIER	48TCDD12	12 (10 TON)	351	1175	1.00 in-wg	1042	4000 CFM	124.1	96.2	120/180	98/148	12.80	208-3-60	55.0	60	CRBK-SRT34FA-14	120	75	1049 lb	1245	DINING B101	1-13
AC-2	CARRIER	48TCDD12	12 (10 TON)	351	1175	1.00 in-wg	1042	4000 CFM	124.1	96.2	120/180	98/148	12.80	208-3-60	55.0	60	CRBK-SRT34FA-14	120	75	1049 lb	1245	DINING B101	1-13
AC 3	CARRIER	48FCLA05	04 (4 TON)			1.00 in-wg	2021	1600 CFM	48.4	34.3	60	49	14.00	208-3-60	25.0	30	CRBK-SRT34FA-14	120	75	561 lb	756	SERVERY B104	1-12
AC 4	CARRIER	48FCLA05	04 (4 TON)			1.00 in-wg	2021	1600 CFM	48.4	34.3	60	49	14.00	208-3-60	25.0	30	CRBK-SRT34FA-14	120	75	561 lb	756	KITCHEN	1-12,14
REMAF																							

1. PROVIDE WITH ECONOMIZER W/ BAROMETRIC RELIEF. 2. PROVIDE WITH FACTORY FABRICATED ROOF CURB, 14" HIGH. 3. MERV-13 2" PLEATED FILTER. 4 VERTICAL DUCT CONFIGURATION 5. PROVIDE WITH 2-SPEED SPEED VFD DISPLAY KIT & 2-SPEED INDOOR FAN MOTOR CONTROLLED BY VFD. 10. SEE B/M-5.1 FOR MOUNTING DETAIL

		SPLIT SYSTEM INDOOR UNIT															F.	XHAUS	FAN SC						
																						٨			
					RATED	HEATING			<u>A</u>						MODEL		FAN	INI FT				A			
				DESIGN	COOLING	CAPACITY							MARK	MFR	NO	AIRFLOW	RPM	SONES	HP	HP	WATTS	V-Ø-Hz	WEIGHT	SERVICE	REMARKS
				OSA (CFM) AIRFL)W CAPACITY	(BIU)	V-Ø-HZ	MCA MC	JCP FILTER			REMARKS	EF-1	PANASONI	C FV-0511VKS2	110 CFM	1356	0.3	-	-	10 W	120-1-60	11.9 lb	RESTROOM	1,2
FC-A100	MITSUBISH	II PLFY-P05NFMU-E	CASSETT	25 280 CF	M 5000 Btu/h	5600 Btu/h	208-1-60	0.24	15 WASHABLE	= 34 lb	SRO A102	3,5	EF-2 EF-3	PANASONI	C FV-0511VKS2 C FV-0511VKS2	110 CFM 110 CFM	1356	0.3	-	-	10 W	120-1-60	11.9 lb 11.9 lb	RESTROOM	1,2
FC-A103	MITSUBISH	II PLFY-P05NFMU-E	CASSETT	25 280 CF	M 5000 Btu/h	5600 Btu/h	208-1-60	0.24	15 WASHABLE	- 34 lb	DATA A103	3,5	EF-4	PANASONI	C FV-0511VKS2	110 CFM	1356	0.3	-	-	10 W	120-1-60	11.9 lb	RESTROOM	1,2
FC-A104 FC-A109		II PLFY-P12NCMU-ER4	CASSETT	50 390 CF 50 350 CF	M 12000 Btu/h M 8000 Btu/h	9000 Btu/h	208-1-60	0.35	15 WASHABLE	= 42 lb = 41 lb	REGISTRATION A109	3,5	EF-5 FF-6	PANASONI	C FV-0511VKS2 C FV-0511VKS2	110 CFM 110 CFM	1356 1356	0.3	-	-	10 W	120-1-60	11.9 lb 11.9 lb		1,2
FC-A110	MITSUBISH	II PLFY-P12NCMU-ER4	CASSETT	50 390 CF	M 12000 Btu/h	13500 Btu/h	208-1-60	0.35	15 WASHABLE	<u> </u>	CUM FILES A110	3,5	KEF 1	GREENHEC	K CUBE-161-10	2520 CFM	1251	15.5	1	0.8	-	208-3-60	132.0 lb	KITCHEN HOOD	3-8
FC-A113		II PLFY-P08NCMU-ER4	CASSETT	50 350 CF	M 8000 Btu/h	9000 Btu/h	208-1-60	0.29	15 WASHABLE	<u>41 lb</u>	INT TEACHER A113	3,5	KEF 2	GREENHEC	K CUBE-141-5	1631 CFM	1270	11.7	1/2	0.43	-	208-3-60	76.0 lb	KITCHEN HOOD	3-8
FC-A114 FC-A115	MITSUBISH	II PLFY-P15NMHU-E2	CASSETT	50 390 CF	M 12000 Btu/h	13500 Btu/h	208-1-60	0.35	15 PAC-KE63TB 15 WASHABLE	<u>-F 98 lb</u> = 42 lb	PRINCIPAL A115	3,4,5	KEF 3	GREENHEC	K CUE 099 VG	525 CFM	991	5.2	1/4	0.05	-	115-1-60	40.0 lb	DISH MACHINE	3-8
FC-A116	MITSUBISH	II PLFY-P08NCMU-ER4	CASSETT	50 350 CF	M 8000 Btu/h	9000 Btu/h	208-1-60	0.29	15 WASHABLE	- 41 lb	PRIN SEC A116	3,5	REMARKS												
FC-A117	MITSUBISH		CASSETT	50 425 CF	M 12000 Btu/h M 5000 Btu/h	5600 Btu/b	208-1-60	0.24	15 WASHABLE	29 lb - 34 lb	MAIL A118 MET A119	2,3,5,6	1.		VITH LIGHT SWITCH	H (BY ELEC.)		5. PR		OLTAGE 1		CONNECT SWI	TCH FACTORY	WIRE FROM MOTO	R TO SWITCH
FC-A120	MITSUBISH	II PLFY-P05NFMU-E	CASSETT	25 200 CF	M 5000 Btu/h	5600 Btu/h	208-1-60	0.24	15 WASHABLE	= 34 lb	MFT A120	3,5	2. 3.	PROVIDE OEN	ACCESSORY OCC	CUPANCY SENS	SOR	JUNC 6. PR	TION BOX WI OVIDE WITH 2	1 HIN THE 2 INCH S	MOTOR CON TANDARD CU	JRB			
FC-A121	MITSUBISH	II PEFY-P24NMHU-E2	DUCTED	300 671 CF	M 24000 Btu/h	27000 Btu/h	208-1-60	2.11	15 FBM2-3	100 lb	STAFF LOUNGE A121	3,4,5	4.	CONNECT TO	FAN SWITCH ON H	HOOD FOR ON/C	OFF CONTROI	L. 7. PR 8 PR	OVIDE WITH O	REASE T	RAP WITH A	BSORBENT MA	ATERIAL.		
FC-A123 FC-A126		II PLFY-P05NFMU-E	CASSETT	25 208 CF 25 350 CF	M 5000 Btu/h M 8000 Btu/h	9000 Btu/h	208-1-60	0.24	15 WASHABLE	<u> </u>	COUNSELOR A126	3,5						0.110							
FC-A127	MITSUBISH	II PLFY-P08NCMU-ER4	CASSETT	25 350 CF	M 8000 Btu/h	9000 Btu/h	208-1-60	0.29	15 WASHABLE	= 41 lb	AP OFFICE A118	3,5													
FC-A128	MITSUBISH	II PEFY-P12NMAU-E3	DUCTED	50 371 CF	M 12000 Btu/h	13500 Btu/h	208-1-60	1.2	15 FBH2-2	49 lb	AP SEC A117	3,4,5													
FC-A129 FC-A133	MITSUBISE	II PLFY-P05NFM0-E	CASSETT	25 208 CF 25 350 CF	M 8000 Btu/h	9000 Btu/h	208-1-60	0.24	15 WASHABLE	= 34 lb = 41 lb	COUNSELOR A133	3,5						AIR	TFRM	ΛIN	AL SC	CHED			R:TITUS
FC-A134	MITSUBISH	II PLFY-P08NCMU-ER4	CASSETT	50 350 CF	M 8000 Btu/h	9000 Btu/h	208-1-60	0.29	15 WASHABLF	<u>-</u> 41 lb	AP OFFICE A134	3,5						/ \III \							IED)
FC-A135				50 494 CF	M 15000 Btu/h	17000 Btu/h	208-1-60	1.63	15 PAC-KE63TB	-F 98 lb	AP SEC A135	3,4,5							\perp						
FC-A139	MITSUBISH	II PEFY-P12NMAU-E3	DUCTED	50 371 CF	M 12000 Btu/h	13500 Btu/h	208-1-60	1.2	15 FBH2-2	49 lb	AP SEC A139	3,4,5					С	D ()— R	ADIAL DI	FFUSER	TMR - PO	SITION-1, EXPO	SED (NO CEILING)	
FC-A140	MITSUBISH	II PLFY-P12NCMU-ER4	CASSETT	125 390 CF	M 12000 Btu/h	13500 Btu/h	208-1-60	0.35	15 WASHABLE	<u>- 42 lb</u>	SHARED CONF A140	3,5							T			UTLLE UU	Nonconion		
FC-A141 FC-A142		II PLFY-P08NCMU-ER4		25 350 CF 50 371 CF	M 8000 Btu/h M 12000 Btu/h	9000 Btu/h 13500 Btu/h	208-1-60	0.29	15 WASHABLE 15 FBH2-2	41 lb	COUNSELOR A141	3,5													
FC-A143	MITSUBISH	II PLFY-P12NCMU-ER4	CASSETT	50 390 CF	M 12000 Btu/h	13500 Btu/h	208-1-60	0.35	15 WASHABLE	= 42 lb	AP OFFICE A143	3,5					CD	D-1	c	EILING D	IFFUSER	TDC - COI	MPLETE WITH E	-QUALIZING GRID, -S. STEEL CONSTR	UCTION
FC-A144	MITSUBISH	II PLFY-P08NCMU-ER4	CASSETT	25 350 CF	M 8000 Btu/h	9000 Btu/h	208-1-60	0.29	15 WASHABLE	<u>41 lb</u>	COUNSELOR A144	3,5													oonon
FC-A145 FC-A146	MITSUBISH	II PLFY-P08NCMU-ER4	CASSETT	50 350 CF	M 8000 Btu/h M 8000 Btu/h	9000 Btu/h	208-1-60	0.29	15 WASHABLE	= 41 lb	AP OFFICE A146	3,5												FUSERS	
FC B1	MITSUBISH	II PKA-A18HA	WALL	50 425 CF	M 18000 Btu/h	19000 Btu/h	208-1-60	1	15 WASHABLE	29 lb	DRY STORAGE B110	1-2,6-7					CE	0-2 _		IFFUSER	LING	4 WAY AD PERFORA	JUSTABLE MOE TED FACE,	ULAR CORES W/	
REMARKS	6.																					STEEL CO	NSTRUCTION		
	1. SEE I 2. HIGH	E/M-6.1 FOR CONTROL D	IAGRAM		6. 1 ET AT 90E 7				ATE PUMP, DISCHA	RGE TO APPO	VED RECEPTOR									XPOSED	SUPPLY	300RL - S	TEEL CONSTRU	JCTION. DOUBLE D	EFLECTION
	3. PRO	IDE WITH PELICAN CON	TROLS WIREL	ESS THERMOSTAT.	_1A1301. 7.1				JIDOOR UNIT.								WS	SR		IFFUSER	001121	HORIZONT	TAL BLADES, EC	JUALIZING GRID	
	4. PRO\ 5. SEE \$	/IDE FILTER BOX FOR AL SHEE M-6.3 FOR VRF WI	L DUCTED FAI RING, PIPING A	N COILS. .ND CONCONTROL DIAG	RAM.														L						
																						355R - LO	UVERS ON 1/2"	CENTERS,	
						MAKE-			ULE								VVF			ALL RE I	URN GRILLE	WITH LON	NSTRUCTION, I G DIMENSION	-OUVERS PARALLE	±L
										ELECTRICA								V							
			SUPPL	Y	GAS HT	G GAS HT	G EVAP	COOLING	MOTOR								C	R	_√_ C	EILING RI	ETURN	SAME AS (CD EXCEPT NO	EQUALIZING GRID	
MARK	MF	R MODEL NO	FAN RF	PM AIRFLOW E	SP INPUT	OUTPU	<u>í EFFI</u>	CIENCY	HP OP	'ER. HP V-9	Ø-HZ MCA MOC	CP WEIGHT	SERVICE	REMARKS	S										
MUA 1 MUA 2	GREEN	HECK IGX-P112-H12-MF	-G 2280 -E 1657	2520 CFM 0.50 1631 CFM 0.50	in-wg 200 Btu/ in-wg 150 Btu/	160 Btu/h h 120 Btu/h			1	0.82 208	3-3-60 15.5 20 8-3-60 10 15	1481.00 lb 1452.00 lb	KITCHEN HOOD	1-8						VUALOT					
MUA 3	GREEN	HECK SQ-95-VG	1714	525 CFM 0.50	in-wg				1/6	0.13 11/	5-1-60	91.00 lb	DISH MACHINE HOOD	9,10			E	G 🛛 🗌		EILING R	GRILLE ETURN	50F5 - 1/2'	' x 1/2" x 1/2" EG	GCRATE, ALUMINU	JM GRID
REMARKS	S.																								
	1. PRO\ 2. PRO\	IDE INTEGRAL UNIT MO UDE WITH 2" CLEANABLE	UNTED DICON E ALUMINUM M	NECT. IESH. DIRTY (FILTER SW	4. ⁷ ITCH) DP: 5.	WO STAGE GAS	HEAT MOD	ULATING. IST FAN.	7. PRC 8. PRC	VIDE WITH 1" N VIDE WITH CO	AKE UP WATER ASSEME MBINATION CURB -161	BLY										T700 OT			
	3. PRO	IDE WITH KITCHEN HOC	D CONTROLLI	ER.	6.1	-ACTORY VFD AI	JD INVERTE	R DUTY RATED	MOTOR. 9. PRC	VIDE WITH 2" N	AERV 13 FILTERS.						D	L 🚽	⊢ ∣ □	OOR LOL	JVER	AND AUXII	EEL CONSTRUC LIARY FRAME	TION WITH FLANGE	ED
									10. IN I	ERLOCK WITH	KEF 3														
																						355R - LO	UVERS ON 1/2"	CENTERS,	
																	T	G	т	RANSFEF	R GRILLE	STEEL CO	NSTRUCTION, I	_OUVERS PARALLE	EL
					HEAI																	WITH LON	G DIMENSION		
			U	NIT CAPACITIES (E	TU)		ELECTR	ICAL DATA											P	LENUM S	LOT	SERIES FT	B-20: 2 CRA, 1"	TWO SLOTS , 48" L	ENGTH,
MARK	M	R. MODEL	NO. H	EATING COOL	ING EEF	. V-Ø-I	ΗZ	MCA	MOCP WE	IGHT 5	3ERVICE REM	ARKS					LS	SD C	>∥ ─► s	UPPLY DI	IFFUSER	STEEL; WI	NEERED PLEN	JM. 10" INLET. JET	TROW
HP A1		JBISHI TURYP3123	3N40A	350000 3120	$\frac{0.000}{0.00000000000000000000000000000$.2 208-230-3-	<u>60 (X2)</u> 61	/57, 52/48 10	<u>0/90, 80/70 73</u>	9/646	1, 6, 1 STORAGE B110 1	7, 8, 9 5, 7								\sim	$\sim\sim\sim\sim$	PATTERN.	BORDER TYPE		\sim
וט ווי				100	0 10.0	200-1-		IU				, , , , , , , , , , , , , , , , , , , 				۸_	S			-	. •	S300FS - /	ALUMINUM DIRI	ECT MOUNT SPIRA	L DUCT GRILLE
REMARKS	S.															<u></u>	SD SD	og 1/		XPOSED	SPIRAL		EFLECTION 3/4	" SPACING W/ FRO	NT BLADES
	1. COOI	RDINATE WITH FAN COIL	UNIT.			1 960 SALT SPRA		ION									<u></u> ا}					PARALLEL	TO SHORT DI	л, W/ ASD	
	2. DALL 3. COM	PRESSOR START ASSIS	CAPACITOR	AND RELAY.	8. PROVIDE WIT	HENERGY RECC	VERY										Ψ		int			m	min	min	m
	4. FREE 5. LOW·	ZE-STAT. AMBIENT PRESSURE SV	VITCH AND WI	NTER START CONTROL	9. PROVIDE WITH	1 TWINING KIT																			
												1						INUTES:	I. ADAFIEK N	ICCUEU F	UNIKANOH	IN FRUM SU	UARE NEUK IU		

							MAKE-UP	AIR UNIT SCHED	ULE							
									ELECTRICAL DATA							
			SUPPLY			GAS HTG	GAS HTG	EVAP COOLING	MOTOR							
MARK	MFR	MODEL NO	FAN RPM	AIRFLOW	ESP	INPUT	OUTPUT	EFFICIENCY	HP	OPER. HP	V-Ø-HZ	MCA	MOCP	WEIGHT	SERVICE	REMARKS
MUA 1	GREENHECK	IGX-P112-H12-MF-G	2280	2520 CFM	0.50 in-wg	200 Btu/h	160 Btu/h		1	0.82	208-3-60	15.5	20	1481.00 lb	KITCHEN HOOD	1-8
MUA 2	GREENHECK	IGX-P112-H12-MF-E	1657	1631 CFM	0.50 in-wg	150 Btu/h	120 Btu/h		1/2	0.34	208-3-60	10	15	1452.00 lb	KITCHEN HOOD	1-8
MUA 3	GREENHECK	SQ-95-VG	1714	525 CFM	0.50 in-wg				1/6	0.13	115-1-60			91.00 lb	DISH MACHINE HOOD	9,10
REMARKS.																
	1. PROVIDE IN 2. PROVIDE W 3. PROVIDE W	ITEGRAL UNIT MOUN /ITH 2" CLEANABLE AL /ITH KITCHEN HOOD (TED DICONNEC LUMINUM MESH CONTROLLER.	CT. H, DIRTY (FILTE	R SWITCH) [4. TWO DP: 5. INTE 6. FACT	STAGE GAS HE RLOCK W/ HOO ORY VFD AND	EAT MODULATING. D EXHAUST FAN. INVERTER DUTY RATEI	7 8 0 MOTOR. 9 1	. PROVIDE WITH . PROVIDE WITH . PROVIDE WITH 0. INTERLOCK W	H 1" MAKE UP H COMBINATI H 2" MERV 13	WATER A ON CURB FILTERS.	SSEMBLY -161			

			UNIT CAPAC	ITIES (BTU)		ELEC	TRICAL DA	TA				
MARK	MFR.	MODEL NO.	HEATING	COOLING	EER	V-Ø-HZ	MCA	MOCP	WEIGHT	SERVICE	REMARKS	
HP A1	MITSUBISHI	TURYP3123BN40A	350000	312000	10.1/10.2	208-230-3-60 (X2)	61/57, 52/48	100/90, 80/70	739/646		1, 6, 7, 8, 9	
HP B1	MITSUBISHI	PUY-A12NHA4	19000	18000	15.3	208-1-60	13	15	99	DRY STORAGE B110	1-5, 7	
REMARKS.	P B1 MITSUBISHI PUY-A12NHA4 19000 18000 15.3 208-1-60 13 15 99 DRY STORAGE B110 1-5, 7 MARKS.											

	BRANCH CONTROLLER SCHEDULE									
		MODEL	ELEC	DATA						
MARK	MFR	NUMBER	V-Ø-HZ	MCA	MOCP	WEIGHT				
BC-1	MITSUBISHI	CMB-P1016NU-HA1	208-1-60	1.65		172 lb				
BC-2	MITSUBISHI	CMB-P1016NU-HB1	208-1-60	1.46		136 lb				
BC-3	MITSUBISHI	CMB-P1016NU-HB1	208-1-60	1.46		136 lb				
BC-4	BC-4 MITSUBISHI CMB-P1016NU-HB1 208-1-60 1.46 136 lb									

			roo				MA REQUI	X IRED		
					2.1 OCCUPAN		000		03A	
B101 B102			677 62-Public A	ssembly Spaces -	LODDIES		233	9	2350	
B103			12 02-General	- Comuoi	Labbias		701	1	75	
B104			89 62-0ffice B	uildings - Office Si	nace		14	1	25	
B106	OFFICE		81 62-Office B	uildings - Office Sp uildings - Office Sp			14		25	
B107	OFFICE		81 62-Office B	uildings - Office Si			13		25	
B108		REP 1	197 62-Educati	undings - Onice of	Classroom		13	<u> </u>	200	
							100		200	
		GR	AVITY RELIEF	SCHEDULE					3425	
		•11								
		MODE	_							
MARK	MFR	MODE NO	- AIRFLOW	SP	WEIGHT	REMAR	٨S			
MARK GRSI B1 REMARKS	MFR GREENHEC S: 1, PROVIE 2, PROVIE	MODE NO GRSI 12 E WITH BIRD S E WITH MIN 10	AIRFLOW 525 CFM CREEN " CURB AND BAC	O.07 in-wg	WEIGHT 10 lb R.	REMARI 1, 2	KS			
MARK GRSI B1 REMARKS	MFR GREENHEC S: 1, PROVIE 2, PROVIE	MODE NO K GRSI 12 E WITH BIRD S E WITH MIN 10	- AIRFLOW 525 CFM CREEN " CURB AND BAC	CORAFT DAMPE	WEIGHT 10 lb R.	REMARI 1, 2	<s< th=""><th></th><th></th><th></th></s<>			
MARK GRSI B1 REMARKS	MFR GREENHEC S: 1, PROVIE 2, PROVIE	MODE NO K GRSI 12 E WITH BIRD S E WITH MIN 10	AIRFLOW 525 CFM CREEN "CURB AND BAC EN	C SP 0.07 in-wg CRAFT DAMPE	WEIGHT 10 lb R.	REMARI 1, 2		ТΔ		
MARK GRSI B1 REMARKS	MFR GREENHEC S: 1, PROVIE 2, PROVIE	MODE NO E WITH BIRD S E WITH MIN 10	- AIRFLOW 525 CFM CREEN "CURB AND BAC EN	Contraction of the second seco		REMARI 1, 2		TA		DEM
MARK GRSI B1 REMARKS	MFR GREENHEC S: 1, PROVIE 2, PROVIE	MODE NO E WITH BIRD S E WITH MIN 10 MODEL NO	AIRFLOW 525 CFM CREEN "CURB AND BAC EN SUPPLY CFM	C SP 0.07 in-wg CRAFT DAMPE ERGY RECO EXHAUST CFM	WEIGHT 10 lb R. VERY VENTII	REMARI 1, 2 -ATOR ELECT V-Ø-HZ	KS RICAL DA MCA	TA MOCP	WEIGHT	REM
MARK GRSI B1 REMARKS MARK ERV 1	MFR GREENHEC S: 1, PROVIE 2, PROVIE	MODE NO E WITH BIRD S E WITH MIN 10 MODEL NO	AIRFLOW 525 CFM CREEN "CURB AND BAC EN SUPPLY CFM 0-1 1100	CRAFT DAMPE	WEIGHT 10 lb R. VERY VENTII ESP ("WC") 1 1	REMARI 1, 2 -ATOR ELECT V-Ø-HZ 208-3-60	KS RICAL DA MCA I 37.5	TA MOCP 45	WEIGHT 3126	REM

9. PROVIDE WITH EXHAUST FAN VFD CONTROL - CONSTANT VOLUME 10. PROVIDE WITH PHASE AND BROWN OUT PROTECTION 11. PROVIDE WITH UNIT DISCONNECT - MOUNTED BY FACTORY

12. WEB-BASED USER INTERFACE 13. ELECTRIC HEATER 208V-1-60, 34.14 AMPS

6. PROVIDE WITH MERV-13 2" PLEATED FILTER. 7. PROVIDE FACTORY BASE ELECTROMECHANICAL CONTROLS.

1875

12. PROVIDE WITH PELICAN CONTROLS WIRELESS THERMOSTAT. 8. PROVIDE FACTORY FUSED DISCONNECT WITH THRU THE BASE CONDUIT ENTRY 13. AUTOMATIC SHUTOFF NOT REQUIRED PER 2019 CMC608 EXEPTION 2. 9. MEDIUM STATIC BELT DRIVE. 14. PROVIDE WITH CO SENSOR.

11. PROVIDE WITH CO2 ROOM SENSOR FOR DEMAND CONTROL VENTILATION.



BLDG 'MECHANICAL' SHEET LIST

	DLDG WECHANICAL SHEET LIST
	MECHANICAL SCHEDULES & LEGENDS
	ADMINISTRATION DEMOLITION MECHANICAL PLAN
	CAFETERIA MECHANICAL DEMOLITION FLOOR PLAN
)	CAFETERIA MECHANICAL DEMO ROOF PLAN
	ADMINISTRATION MECHANICAL FLOOR PLAN
	ADMINISTRATION MECHANICAL ENLARGEMENT FLOOR PLAN
	ADMINISTRATION MECHANICAL ENLARGEMENT FLOOR PLAN
	ADMINISTRATION MECHANICAL ROOF PLAN
	CAFETERIA MECHANICAL FLOOR PLAN
	CAFETERIA MECHANICAL KITCHEN ENLARGEMENT
	CAFETERIA MECHANICAL ROOF PLAN
	MECHANICAL DETAILS
	MECHANICAL DETAILS
	MECHANICAL DETAILS
	CONTROL DIAGRAMS
	CONTROL DIAGRAMS
	PIPING DIAGRAMS

	MECHAN	ICAL LEGEND
SYMBOL	ABBREVIATION	DESCRIPTION
$\begin{pmatrix} x \\ x \end{pmatrix}$		EQUIPMENT TYPE EQUIPMENT NUMBER
X X-X		DETAIL / DRAWING NUMBER SHEET NUMBER
	SA OR OA	SECTION THRU SUPPLY AIR OR OUTSIDE AIR DUCT
	RA OR EA	SECTION THRU RETURN AIR OR EXHAUST AIR DUCT
		ROUND DUCT DOWN
	DN OR UP	SLOPE DUCT DOWN OR UP IN DIRECTION OF FLOW
	AL	ACOUSTICAL LINING
- 	FC	FLEXIBLE DUCT CONNECTION
	VD	VOLUME DAMPER
	FD	FIRE DAMPER
	TV	TURNING VANES
		FLEXIBLE DUCT
		45° ROUND DUCT TAKE-OFF
		45° RECTANGULAR DUCT TAKE-OFF
<u>ب</u>		90° TURN - ROUND DUCT
		90° RADIUS TURN - ROUND OR RECTANGULAR DUCT
		SQUARE TO ROUND DUCT TRANSITION
		DUCT TRANSITION
		RECTANGULAR DUCT 90° SPLIT
$(\overline{\mathbf{I}})$		THERMOSTAT @ 48" AFF
	AP	ACCESS PANEL
	POC	POINT OF CONNECTION
	POD	POINT OF DEMOLITION
	BHP	BRAKE HORSEPOWER
	HP	HORSEPOWER
	SAD	SEE ARCHITECTURAL DRAWINGS

2. SIZE (NECK/FACE) TYPE CFM (NO. OF THROW)

MEP Componet Anchorage Note

Applicable Code: 2019 CBC

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSAapproved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2019 CBC Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26, and 30:

02/05/2020

SEE STRUCTURAL DRAWINGS

SEE CIVIL DRAWINGS

1. All permanent equipment and components.

SSD

SCD

- 2. Temporary, movable or mobile equipment that is permanently attached (e.g. hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
- Temporary, movable or mobile which is heavier than 400 pounds or has a center of mass located 4 feet or more above the adjacent floor or roof level that directly support the component is required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both trasverse and longitudinal directions:

- A. Components weighing less than 400 pounds and having a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
- B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge of structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

Piping, Ductwork, and Electrical Distribution System Bracing Note

Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2019 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26. The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., OSHPD OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the haging and bracing of the distribution systems. The Structural Engineer of

Record shall verify the adequacy of the structure to support the hanger and brace loads. Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

MP MD PP E Option 1: Detailed on the approved drawings with project specific notes and details MP X MD X PP E Option 2: Shall comply with the applicable OSHPD Pre-Approval (OPM #) #<u>OPM-0043-13</u>

APPLICABLE GOVERNING CODES:

2019 CALIFORNIA BUILDING CODE 2019 CALIFORNIA ELECTRICAL CODE

- 2019 CALIFORNIA MECHANICAL CODE
- 2019 CALIFORNIA PLUMBING CODE 2019 CALIFORNIA ENERGY CODE
- 2019 CALIFORNIA FIRE CODE

2019 CALIFORNIA GREEN BUILDING STANDARDS



(B1) (BM) BL (BK) (BJ) (BI) (BH) BG BF BE (BD.) $\sum 3$ BC BB (BA) (B1)







TO SHEET P-1.1

BB

POD & CAP

3 KITCHEN GAS ENTRANCE 1/2" = 1'-0"

-DEMO GAS PIPE

RECONNECTION

-SHUT OFF GAS

- LOCATION.
- DEMOLISHED AND REMOVED FROM THE SITE.
- MATCH EXISTING CONDITIONS.

METAL FRAMING - NON RATED





17. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF EXISTING ELECTRICAL EQUIPMENT AND TURN OVER REMOVED EQUIPMENT THAT THE OWNER REQUESTS, IN AS-FOUND CONDITION. EQUIPMENT THAT IS TO BE TURNED OVER SHALL BE BOXED AND TAGGED TO IDENTIFY THE SPECIFIC EQUIPMENT. EQUIPMENT TO BE TEMPORARILY REMOVED DUE TO THE CONSTRUCTION SHALL BE CLEANED AND RE-INSTALLED IN ITS ORIGINAL CONDITION OR AS REQUIRED.

18. WHERE EXISTING WALLS HAVE BEEN REMOVED, AND THERE ARE EXISTING CONDUIT FEEDS WHICH HAVE BEEN CUT OFF AND CAPPED FLUSH WITH THE FLOOR, IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND DIMENSION ALL SUCH CONDUITS ON THE "AS-BUILT" DRAWINGS.

19. IF ANY EQUIPMENT THAT IS SCHEDULED TO REMAIN IN OPERATION IS DAMAGED BY THE CONTRACTOR, IT SHALL BE REPLACED TO ITS ORIGINAL CONDITION SATISFACTORY TO THE OWNER AT CONTRACTOR'S EXPENSE.

	SYMBOLS LIST			SYMBOLS LIST
П	FIRE ALARM SYSTEM MAGNETIC DOOR HOLD-OPEN			MAIN SWITCHBOARD, DISTRIBUTION PANEL OR MOTOR CONTROL CENTER
Â	WALL-MOUNTED BEAM SMOKE DETECTOR - TRANSMITTING UNIT; MOUNT			FLUSH MOUNTED PANELBOARD, 6'-6" TO TOP
Ť ~	10 DELOW CEILING LEVEL, U.U.N. WALL-MOUNTED BEAM SMOKE DETECTOR - RECEIVING UNIT: MOUNT IN			SURFACE MOUNTED PANELBOARD, 6'-6" TO TOP
B	EXACT HORIZONTAL & VERTICAL ALIGNMENT WITH CORRESPONDING TRANSMITTING UNIT			FUSED EQUIPMENT DISCONNECT SWITCH WITH FUSE SIZE AS RECOMMENDED BY EQUIPMENT MANUFACTURER
B	CEILING-MOUNTED BEAM SMOKE DETECTOR - TRANSMITTING UNIT		\boxtimes	MOTOR DISCONNECT SWITCH; HORSEPOWER RATED, NON FUSE
B	CEILING-MOUNTED BEAM SMOKE DETECTOR - RECEIVING UNIT; MOUNT IN EXACT HORIZONTAL & VERTICAL ALIGNMENT WITH CORRESPONDING			COMBINATION MAGNETIC MOTOR STARTER & MOTOR CIRCUIT PROTECTOR
	TRANSMITTING UNIT			MAGNETIC MOTOR STARTER
****	FIRE ALARM STSTEM END-OF-LINE RESISTOR		VFD	CONNECTED COMPLETE BY ELECTRICAL
FSD	MONITORING TO FIRE ALARM SYSTEM (INCLUDING SMOKE DETECTOR PROVISIONS). CONTROL OF DAMPER TO BE BY MECHANICAL, U.O.N. PROVIDE		N N	MANUAL MOTOR STARTER WITH OVERLOAD PROTECTION
FACP	TOGGLE TYPE DISCONNECT SWITCH FIRE ALARM CONTROL PANEL		l N N N N N N N N N N N N N N N N N N N	MOTOR WITH FLEXIBLE CONDUIT CONNECTION AND DISCONNECT
FAAP	FIRE ALARM ANNUNCIATOR PANEL			CONCRETE PULLBOX, SIZE AS REQUIRED OR SHOWN - CHRISTY OR EQUAL WITH
•	WEATHERPROOF ENCLOSURE			
	- CONDUIT AND WIRE CONCEALED IN CEILING OR WALL		 በ	FLUSH CEILING MOUNTED JUNCTION BOX, U.O.N.
	CONDUIT AND WIRE CONCEALED IN OR UNDER SLAB OR UNDERGROUND		Ю	FLUSH WALL MOUNTED JUNCTION BOX, UP 18" U.O.N.
	CROSSMARKS INDICATE OUANTITY OF #12 CONDUCTORS PLUS PARITY SIZED		J	JUNCTION BOX FLUSH FLOOR MOUNTED
	 GROUND CONDUCTOR (INCLUDED BUT NOT INDICATED), NO HASHMARKS INDICATES (2) #12 CONDUCTORS PLUS PARITY SIZED GROUND CONDUCTOR, 		Ħ	20A 3PG 125V DUPLEX RECEPTACLE, UP 18" U.O.N.
	GROUND WIRE		GFI	20A 3PG 125V DUPLEX RECEPTACLE, WEATHERPROOF, UP 18" U.O.N.
(#10)	WIRE SIZE 10 AWG FOR ALL CONDUCTORS, INCLUDING GROUND WIRE,			TYPE, UP 18" U.O.N.
				20A 3PG 125V DUPLEX RECEPTACLE, ISOLATED GROUND TYPE, UP 18" U.O.N.
\sim	HOMERUN TO PANELBOARD OR TERMINAL BOARD, AS NOTED ON PLANS		₽ ₽	20A 3PG 125V DUPLEX RECEPTACLE, TAMPER RESISTANT, UP 18" U.O.N.
	COMPLETE CONNECTION OF EQUIPMENT		_₽ ₽	20A 3PG 125V DOUBLE DUPLEX RECEPTACLE, UP 18" U.O.N.
	- CONDUIT STUBBED OUT, CAPPED AND MARKED		₽	20A 3PG 125V DOUBLE DUPLEX RECEPTACLE, MOUNTED ABOVE COUNTER, U.O.N.
	- CONDUIT TURNED UP		Ю	20A 3PG 125V SINGLE RECEPTACLE, UP 18" U.O.N.
	CONDUIT TURNED DOWN		H	20A 3PG 125V SINGLE TWISTLOCK RECEPTACLE, NEMA L5-20R, UP 18" U.O.N.
— T —	TELEPHONE SYSTEM CONDUIT AND PULLWIRE; 3/4" U.O.N.		H	SPECIAL RECEPTACLE AS INDICATED ON PLANS
C	 COMPUTER/DATA STSTEM CONDULT AND PULLWIRE; 3/4" U.O.N. TELEPHONE/DATA SYSTEM CONDULT AND PULLWIRE; 3/4" U.O.N. 		Þ	CONTROLLED AND IDENTIFIED (SPLIT-WIRED) DUPLEX RECEPTACLE, WITH ONE HALF OF RECEPTACLE WIRED THROUGH LOCAL PLUG-LOAD CONTROLLER, UP 18" U.O.N.
—— G ——	#4/0 COPPER GROUNDING ELECTRODE CONDUCTOR, U.O.N.		Þ	CONTROLLED DUPLEX RECEPTACLE WIRED THROUGH LOCAL PLUG-LOAD CONTROLLER, UP 18" U.O.N.
AC-1	MECHANICAL EQUIPMENT DESIGNATION - SEE MECHANICAL PLANS		•	FLUSH IN FLOOR OUTLET BOX WITH QUANTITY OF 20A 3PG 125V DUPLEX RECEPTACLES AS INDICATED ON PLANS
$\left\langle \begin{array}{c} 3 \\ F. 6 \end{array} \right\rangle$	DETAIL DESIGNATION - <u>SEE</u> DETAIL 3, SHEET E-6		\	FLUSH CEILING MTD. DUPLEX OUTLET, 20A 3PG
	NUMBERED SHEET NOTE		НŪ	LINE VOLTAGE THERMOSTAT, PROVIDED & INSTALLED BY ELECTRICAL,
d m		.		SURFACE MOUNTED WIREMOLD RACEWAY WITH RECEPTACLES AS INDICATED ON
F. [™]	UTILITY METER			PLANS
E CT'S	CURRENT TRANSFORMERS			TERMINAL MOUNTING BACKBOARD, 3/4" PLYWOOD, DIMENSIONS AS NOTED ON PLANS, PAINT TO MATCH ADJACENT WALL SURFACE, MAINTAINING UL FIRE LABEL VISIBLE
۱ م) <u>30</u> ۸	CIRCUIT BREAKER. NUMBER INDICATES 30A 3-POLE		(2)	COMBINED TELEPHONE/DATA OUTLET, UP 18" U.O.N.
o ² 3P	FEEDER SIZE - <u>SEE</u> POWER SINGLE LINE DIAGRAMS & FEEDER SCHEDULE			- NUMBER INDICATES QUANTITY OF DATA OUTLET JACKS
			Ħ	COMBINED VOICE/DATA OUTLET, MOUNTED ABOVE COUNTER U.O.N.
	ABBREVIATIONS		Ø	INTERCOM HANDSET, UP 48" U.O.N.
			₩ N	WALL MOUNTED 120V SIGNAL SYSTEM CLOCK, UP 96" U.O.N.
A.F.F.	ABOVE FINISHED FLOOR		HTV)	WALL MOUNTED VIDEO OUTLET, UP 18" U.O.N.
A.F.G. BMS	ABOVE FINISHED GRADE		⊦© ⊦©	FLUSH WALL MOUNTED OUTDOOR WEATHERPROOF PUBLIC ADDRESS SPEAKER
C	CONDUIT		S	FLUSH CEILING MOUNTED INDOOR PUBLIC ADDRESS SPEAKER
CATV	CABLE TV		<u>0</u> 0	FLUSH WALL MOUNTED INDOOR PUBLIC ADDRESS SPEAKER & SIGNAL SYSTEM
C.L.	CIRCUIT LIGHTING	($\overset{+}{\square}$	CCTV CAMERA
C.O.			20	SECURITY SYSTEM DOOR CONTACT. 1/2"C. FOR WIRING AND
E.C.	ELECTRICAL CONTRACTOR			SECURITY SYSTEM MICROPHONE SENSOR, WALL OR CEILING MOUNT PER
E	EMERGENCY LIGHT FIXTURE ON EMERGENCY GENERATOR OR INVERTER,	(SYMBOL. 1/2" CONDUIT FOR WIRING AND DEVICE BY DISTRICT SECURITY VENDOR.
EM	EMERGENCY LIGHT FIXTURE WITH BATTERY PACK, SWITCHABLE		F	FIRE ALARM SYSTEM MANUAL PULL STATION, UP 48" U.O.N.
EMS	ENERGY MANAGEMENT SYSTEM		110 F⊲	FIRE ALARM SYSTEM HORN/STROBE, UP 80" U.O.N. NUMBER ADJACENT INDICATES CANDELA VALUE FOR STROBE
(E)	EXISTING		110 F⊲	WEATHERPROOF FIRE ALARM SYSTEM HORN/STROBE, UP 80" U.O.N. NUMBER
EQPT	EQUIPMENT		∎ √⊑_110	FIRE ALARM SYSTEM HORN/STROBE, CEILING MOUNTED. NUMBER ADJACENT
(ER)	EXISTING EQUIPMENT TO BE RELOCATED			INDICATES CANDELA VALUE FOR STROBE
EXT	EXTERIOR		Sp	CANDELA VALUE FOR STROBE
FMC	FLEXIBLE METALLIC CONDUIT		dSp	FIRE ALARM SYSTEM STROBE, CEILING MOUNTED. NUMBER ADJACENT INDICATES CANDELA VALUE FOR STROBE
FTL	FEED THROUGH LUGS		H₫	WEATHERPROOF FIRE ALARM SYSTEM HORN, UP 90" U.O.N.
GFI	GROUND FAULT CIRCUIT INTERRUPTING TYPE RECEPTACLE		110 V	FIRE ALARM SYSTEM SPEAKER/STROBE, UP 80" U.O.N. NUMBER ADJACENT INDICATES CANDELA VALUE FOR STROBE
IDF I	INTERMEDIATE DISTRIBUTION FRAME		▼ ¹¹⁰ Þ⊻d	FIRE ALARM SYSTEM SPEAKER/STROBE, CEILING MOUNTED. NUMBER ADJACENT
LV	LOW VOLTAGE		<u>⊼</u> [5]⊄	FIRE ALARM SYSTEM SPEAKER, UP 90" U.O.N.
МСВ	MAIN CIRCUIT BREAKER		 S₫	WEATHERPROOF FIRE ALARM SYSTEM SPEAKER, UP 90" U.O.N.
MDF	MAIN DISTRIBUTION FRAME		⋗ ろ⊴⊲	FIRE ALARM SYSTEM SPEAKER, CEILING MOUNTED
MFR	MANUFACTURER		HD	WALL MOUNTED ELECTROMAGNETIC DOOR HOLD-OPEN DEVICE, FURNISHED BY DIV. 8, INSTALLED & CONNECTED COMPLETE TO FIRE ALARM SYSTEM BY DIV. 28
MLO MTD	MAIN LUGS ONLY		FS	FIRE ALARM SYSTEM SPRINKLER FLOW SWITCH. PROVIDE MONITOR MODULE
(N)	NEW		TS	FIRE ALARM SYSTEM SPRINKLER VALVE SUPERVISORY SWITCH. PROVIDE MONITOR MODULE
N.E.C.	NATIONAL ELECTRICAL CODE		PIV	POST INDICATING VALVE
NEU	NEUTRAL		⊦®	SPRINKLER FLOW ALARM (PROVIDE BY SPRINKLER CONTRACTOR). CONNECT COMPLETE VIA WATER FLOW SWITCH AUX. CONTACTS
N.I.E.C.	NOT IN ELECTRICAL CONTRACT		\$	FIRE ALARM SYSTEM SMOKE DETECTOR
U.A.H. O.F.C.T	OVERALL HEIGHT		Æ	FIRE ALARM SYSTEM HEAT DETECTOR
P	INDICATES FIXTURES ON PHOTOCELL CONTROL		D	FIRE ALARM SYSTEM HVAC DUCT MOUNTED SMOKE DETECTOR. COORDINATE WITH MECHANICAL FOR SUPPLY, INSTALL AND COMPLETE CONNECTION
PA	PUBLIC ADDRESS			(INCLUDING CONTROL OF HVAC EQUIPMENT) - <u>SEE</u> SPECIFICATIONS
PNL	PANEL		\"'' (C)	FIRE ALARM SYSTEM CONTROL MODULE
S.A.D.	SEE ARCHITECTURAL DRAWINGS		R	FIRE ALARM SYSTEM RELAY MODULE
TC	INDICATES FIXTURES ON TIMECLOCK CONTROL		\bigcirc	FIRE ALARM SYSTEM CEILING MOUNTED CARBON MONOXIDE DETECTOR WITH SOUNDER BASE
TELE	TELEPHONE			
TVSS	TRANSIENT VOLTAGE SUPPRESSION			
U.O.N.	UNLESS OTHERWISE NOTED		CALIFOR	NIA GREEN BUILDING STANDARDS COMPLIANCE
VAV	VAV BOX, <u>SEE</u> MECHANICAL DIVISION DRAWINGS FOR LOCATIONS. PROVIDE TOGGLE TYPE DISCONNECT SWITCH	ALL WIT	EXTERIOR LU	IMINAIRES SPECIFIED IN THESE CONTRACT DOCUMENTS COMPLY REMENTS OF THE CALIFORNIA ENERGY CODE AND THE CALIFORNIA
WP	WEATHER PROOF, NEMA 3R	GRE RED	EN BUILDING	G STANDARDS CODE, SECTION A5.106.8 LIGHT POLLUTION FERIOR LUMINAIRES COMPLY WITH BACKLIGHT, UPLIGHT, AND
WPIU	WEATHER PROOF WHILE IN USE	GLA	RE (BUG) RA	TINGS AS DEFINED IN IESNA TM-15-11 AND BUG RATINGS DO NOT

SYMBOLS LIST

	– INDICATES LUMINAIRE TYPE, <u>SEE</u> LUMINAIRE SCHEDULE
	RECESSED 2'x2', 2'x4' OR 1'x4' LUMINAIRE, FULLY LENSED
	RECESSED 2'x2', 2'x4' LUMINAIRE WITH DECORATIVE ARTICULATED OPTICAL
	SHIELD INDICATES EMERGENCY LUMINAIRE. <u>SEE</u> ABBREVIATIONS FOR TYPE OF
	-INDICATES AIRCRAFT CABLE SUPPORT POINT (VERIFY WITH MANUFACTURER)
	-INDICATES COMBINATION AIRCRAFT CABLE/ELECTRICAL FEED POINT (VERIFY WITH MANUFACTURER)
	SURFACE CEILING, WALL OR COVE MOUNTED LUMINAIRE
 	SURFACE OR SUSPENDED STRIP LUMINAIRE
	SURFACE CEILING MOUNTED LUMINAIRE
	-PENDANT MOUNTED LUMINAIRE WITH CABLE SUSPENSION AND (1) POWER FEED LOCATION
Φ	-(2) SUSPENDED CABLE LOCATIONS DECORATIVE CEILING MOUNTED LUMINAIRE
	SURFACE MOUNTED LIGHTING TRACK WITH TRACK LUMINAIRES
↑ O	RECESSED ADJUSTABLE ACCENT LUMINAIRE. ARROW INDICATES AIMING DIRECTION
	RECESSED DOWNLIGHT LUMINAIRE
	RECESSED WALLWASH LUMINAIRE RECESSED OR SURFACE MOUNTED LINEAR WALLWASHER, OPEN AREA INDICATES
	DIRECTION OF ILLUMINATION
ю	WALL MOUNTED LUMINAIRE
ю	LOCATION OF WALL MOUNTED LUMINAIRE, <u>SEE</u> BUILDING PLANS FOR EXACT LOCATION AND LUMINAIRE TYPE
þ	STEPLIGHT RECESSED FLUSH IN WALL
-□ •□↑	POLE ARM-MOUNTED AREA LUMINAIRE; ARROW INDICATES DIRECTION OF LIGHT DISTRIBUTION WHEN NOT PARALLEL TO ARM ORIENTATION
-○ •-○↑	POLE ARM-MOUNTED PEDESTRIAN-SCALE WALKWAY OR AREA LUMINAIRE; ARROW INDICATES DIRECTION OF LIGHT DISTRIBUTION
 ● → 	POST-TOP PEDESTRIAN-SCALE AREA LUMINAIRE; ARROW INDICATES DIRECTION OF LIGHT DISTRIBUTION
	BOLLARD LUMINAIRE; ARROW INDICATES DIRECTION OF LIGHT DISTRIBUTION
\oplus	FLUSH IN-GROUND LANDSCAPE OR BUILDING UPLIGHT, NON-ADJUSTABLE AIMING
⊕→	FLUSH IN-GROUND LANDSCAPE OR BUILDING UPLIGHT WITH ADJUSTABLE AIMING FEATURE; ARROW INDICATES AIMING DIRECTION
Ð	FLUSH IN-GROUND WALLWASH UPLIGHT; OPEN AREA INDICATES DIRECTION OF ILLUMINATION
ŀ	STEM MOUNTED SIGN LIGHT
⊦⊗∤	WALL MOUNTED EXIT SIGN, ARROWS AS NOTED ON PLANS. SHADED AREA INDICATES NUMBER OF FACES
⊗ţ	CEILING MOUNTED EXIT SIGN, ARROWS AS NOTED ON PLANS. SHADED AREA INDICATES NUMBER OF FACES
ΗX	LOW LEVEL WALL MOUNTED EXIT SIGN
R	WALL MOUNTED EMERGENCY BATTERY EGRESS LUMINAIRE WITH NUMBER OF ADJUSTABLE LAMP HEADS INDICATED
\$a	LINE VOLTAGE SINGLE POLE TOGGLE SWITCH, LETTER ADJACENT INDICATES RESPECTIVE ZONE CONTROLLED, UP 48" U.O.N.
\$2	LINE VOLTAGE TWO POLE TOGGLE SWITCH, UP 48" U.O.N.
\$3 \$k	LINE VOLTAGE THREE-WAY TOGGLE SWITCH, UP 48" U.O.N.
\$m	LINE VOLTAGE MOTOR RATED TOGGLE SWITCH INSTALLED AT EQPT SHOWN
\$p	LINE VOLTAGE TOGGLE SWITCH WITH PILOT LIGHT, LIGHT IS ON WHEN CIRCUIT IS CLOSED, UP 48" U.O.N.
Sab	LOW VOLTAGE MOMENTARY CONTACT SWITCH - <u>SEE</u> LOW VOLTAGE RELAY SCHEDULE, LOWER CASE LETTER ADJACENT INDICATES RESPECTIVE ZONE
	CONTROLLED, UP 48" U.O.N. LOW VOLTAGE KEYED MOMENTARY CONTACT SWITCH - <u>SEE</u> LOW VOLTAGE
_k Sab	RELAY SCHEDULE, LOWER CASE LETTER ADJACENT INDICATES RESPECTIVE ZONE CONTROLLED, UP 48" U.O.N.
aOSb	WALL MOUNTED SWITCH TYPE INFRARED OCCUPANCY SENSOR; UP 48" U.O.N.; SINGLE OR DUAL AS NOTED BY LETTERS ADJACENT. SET TO FIXED 20 MINUTE TIME DELAY AND MAX SENSITIVITY
عالي	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR; UP 48" U.O.N.; SINGLE OR DUAL AS NOTED BY LETTERS ADJACENT OF THE STORE AND MULTER
alnon	TIME DELAY AND MAX SENSITIVITY
OSD	WALL MOUNTED DIGITAL DUAL TECHNOLOGY DIMMING OCCUPANCY SENSOR SWITCH; UP 48" U.O.N.
Sa	WALL MOUNTED DIGITAL SWITCH, UP 48" U.O.N.; LOWER CASE LETTER ADJACENT INDICATES RESPECTIVE ZONE CONTROLLED
2Da,b	WALL MOUNTED SINGLE OR MULTI-ZONE DIGITAL DIMMER SWITCH, UP 48" U.O.N.; LOWER CASE LETTERS ADJACENT INDICATE RESPECTIVE ZONES TO BE SIMULTANEOUSLY MANUALLY CONTROLLED: NUMERAL DESCRIPTION
	ZONES ASSIGNED TO THE DEVICE
⊖	CEILING MOUNTED DUAL TECHNOLOGY DIGITAL OCCUPANCY SENSOR
7	CEILING MOUNTED LINE VOLTAGE DUAL TECHNOLOGY OCCUPANCY SENSOR
Z3,Z4 ወን	SINGLE OR MULTI-ZONE SWITCHING OR DIMMING OPEN LOOP DIGITAL DAYLIGHTING SENSOR; NOTATIONS ADJACENT IDENTIFY DAYLIGHT ZONES
IJマ Z1 @	ASSIGNED TO THE DEVICE. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN SINGLE ZONE SWITCHING OR DIMMING CLOSED LOOP DIGITAL DAYLIGHTING
E	SENSOR; NOTATIONS ADJACENT IDENTIFY DAYLIGHT ZONES ASSIGNED TO THE DEVICE. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN
Z1 ⊬®	DAYLIGHT CONTROL PHOTOCELL - BRACKET MOUNTED; NOTATIONS ADJACENT IDENTIFY DAYLIGHT ZONES ASSIGNED TO THE DEVICE. VERIFY EXACT
Z2	INDICATES DAYLIGHT ZONE CONTROLLED VIA PHOTOCELL
	-ROOM CONTROLLER
RC 2	- ADJACENT NUMERAL REFERS TO THE NUMBER OF ZONES TO BE CONTROLLED. VENDOR OR CONTRACTOR TO PROVIDE QUANTITY OF ROOM CONTROLLERS REQUIRED FOR THE NUMBER OF CONTROLLED ZONES.
PC	PLUG LOAD ROOM CONTROLLER
NB	NETWORK BRIDGE
MBR	MASTER WIRELESS BORDER ROUTER & NB - SWITCH IN NETWORK CABINET; <u>SEE</u> DETAILS FOR TYPE
BR 1	SECONDARY WIRELESS BORDER ROUTER
IR EC	ISOLATED RELAY INTERFACE EMERGENCY LIGHTING CONTROL MODULE

GENERAL NOTES

1.	PRIOR TO BID THE CONTRACTOR SHALL VISIT THE SITE TO ADEQUATELY DETERMINE ALL PRE-EXISTING CONDITIONS. BY THE ACT OF SUBMITTING A BID, THE CONTRACTOR WILL BE DE TO HAVE COMPLIED WITH THE FOREGOING, TO HAVE ACCEPTED SUCH CONDITIONS, AND TO HA MADE ALLOWANCES THEREFORE IN PREPARING THE BID.
2.	PROVIDE PARITY SIZED GREEN GROUND WIRE IN ALL POWER CONDUITS, BRANCH CIRCUITS (LIGHTING & POWER) AND HOMERUNS. PROVIDE ADDITIONAL ISOLATED GROUND, GREEN WIT YELLOW STRIPE, TO ALL ISOLATED GROUND RECEPTACLES.
3.	PROVIDE PULLROPE IN ALL EMPTY CONDUITS THROUGHOUT THE PROJECT.
4.	REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION & CONNECTION REQUIREMENTS OF ALL LUMINAIRE(S) AND ALL OUTLET, SWITCH, AND ELECTRICAL RELATED DE MOUNTING HEIGHTS AND LOCATIONS. COORDINATE LOCATIONS OF ALL LUMINAIRE(S) AND JUNCTION BOXES WITH MECHANICAL DIVISION PRIOR TO ROUGH-IN. COORDINATE LOCATIONS ELECTRICAL DEVICES WITH FURNITURE PLANS PRIOR TO ROUGH-IN.
5.	REFER TO MECHANICAL PLANS FOR EXACT LOCATION(S) OF ALL MECHANICAL EQUIPMENT, AND CONFIRM EXACT CONNECTION REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH MECHANIDIVISION, PRIOR TO ROUGH-IN. VERIFY EXACT REQUIREMENTS FOR VOLTAGE, PHASE, HORSE-POWER, OR KVA RATINGS, OF ALL MECHANICAL DIVISION EQUIPMENT REQUIRING ELECTRICAL CONNECTION.
6.	VERIFY EXACT CONNECTION REQUIREMENTS, OUTLET TYPE(S), MOUNTING HEIGHT(S) AND LOCATION(S) OF ALL OWNER-SUPPLIED EQUIPMENT, AND ALL EQUIPMENT PROVIDED UNDER OT SECTIONS OF THE SPECIFICATIONS, PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL DRAWINF FOR EQUIPMENT LOCATIONS.
7.	COORDINATE TRENCHING WITH OWNER AND OTHER TRADES BEFORE BEGINNING WORK.
8.	ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED WALLS AND FLOORS SHALL BE SEALED AN EQUIPPED WITH U.L. LISTED FIRE PENETRATION ASSEMBLIES TO MAINTAIN FIRE SEPARATION RATING.
9. 10.	THE CONTRACTOR SHALL VERIFY ALL CEILING TYPES BEFORE ORDERING OF LUMINAIRE(S). ALL
	VERIFY THAT ALL FEATURES CALLED FOR IN LUMINAIRE DESCRIPTIONS ON THE LUMINAIRE SCHEDULE ARE INCLUDED WITH CATALOG NUMBERS LISTED ON THE LUMINAIRE SCHEDULE WH LUMINAIRE ORDERS ARE PLACED, AND ARE INCLUDED AS PART OF THE LIGHTING SUBMITTALS THIS PROJECT. IF A DISCREPANCY EXISTS, CONTACT THE ARCHITECT AND ELECTRICAL ENGINE FOR CLARIFICATION <u>PRIOR TO BID</u> .
11.	CIRCUITRY AND CONDUIT ROUTING SHOWN ON THE PLANS IS DIAGRAMMATIC ONLY. THIS CONTRACTOR IS RESPONSIBLE FOR BECOMING COMPLETELY FAMILIAR WITH THE ARCHITECTUR AND STRUCTURAL CONDITIONS AND LIMITATIONS IN THE BUILDING AND TO PROVIDE ALL LABO TOOLS AND MATERIALS REQUIRED TO PRODUCE A COMPLETELY CONCEALED INSTALLATION WHEREVER INDICATED ON THE PLANS.
12.	MAINTAIN "AS-BUILT" RECORDS AT ALL TIMES, SHOWING EXACT LOCATION OF ALL UNDERGROU AND/OR CONCEALED CONDUITS AND SERVICES INSTALLED UNDER THIS CONTRACT, INCLUDING CIRCUIT IDENTIFICATION WHERE APPLICABLE. PROVIDE OWNER WITH "AS-BUILT" DOCUMENTS INDICATED IN THE SPECIFICATIONS, AND/OR CALLED FOR IN THE SPECIFICATIONS.
13.	DRAWINGS INDICATE THE LOCATION(S) OF DEVICES, LUMINAIRE(S) AND EQUIPMENT, AND THE CIRCUIT NUMBER AND PANEL DESIGNATED TO SUPPLY THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETELY CONNECTING ALL ELECTRICAL DEVICES TO CIRCUITS INDICATE THE DRAWINGS.
14.	UNLESS OTHERWISE NOTED, ALL WORK SHOWN ON DRAWINGS IS NEW AND TO BE PROVIDED A INSTALLED COMPLETE UNDER THIS CONTRACT.
15.	ALL EQUIPMENT GROUNDING SHALL CONFORM TO ARTICLE 250 OF THE NATIONAL ELECTRICAL
16.	ALL EXTERIOR CONDUIT ABOVE GRADE, INCLUDING ALL ROOF MOUNTED CONDUIT, SHALL BE GALVANIZED RIGID STEEL. COAT ALL EXPOSED THREADS WITH GALVANIZING PAINT. PAINT AI SURFACE MOUNTED RACEWAYS AND PULLBOXES TO MATCH SURROUNDING CONDITIONS, AS DIRECTED BY THE ARCHITECT.
17.	ALL ELECTRICAL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITION OF N.E.C., AS WELL AS STATE, AND LOCAL CODES AND REOUIREMENTS.
18.	ALL CONDUIT SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
19.	THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE AVAILABLE SHORT CIRCUIT CURRENT THE MAIN SWITCHBOARD INCOMING TERMINALS WITH THE UTILITY COMPANY, AND TO VERIFY ALL POWER AND SIGNAL SERVICE PROVISIONS, INCLUDING CONCRETE EQUIPMENT PADS, CONDUITS, PULLBOXES AND CLEARANCES, MEET THE UTILITY COMPANY'S REQUIREMENTS, PRICE INSTALLATION.
20.	EQUIPMENT OVERLOADS AND FUSES SHALL BE PROVIDED AND INSTALLED AS PER NAME PLATE THE FOUIPMENT ACTUALLY PROVIDED.
21.	THE CONTRACTOR SHALL PAY FOR ALL REQUIRED PERMITS AND INSPECTION FEES.
22.	THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE ARCHITECTURAL DRAW PRIOR TO ROUGH-IN.
23.	ALL EXIT SIGNS SHALL COMPLY WITH THE RELEVANT PORTIONS OF SECTIONS 1008 AND 1013 (THE CBC.
24.	ALL MECHANICAL DIVISION EQUIPMENT LOW VOLTAGE CONTROL WIRING AND RACEWAY SHALL PROVIDED AND INSTALLED AS SPECIFIED IN MECHANICAL DIVISION U.O.N.
25.	COORDINATE INSTALLATION OF ALL RECESSED LUMINAIRE(S) WITH MECHANICAL DIVISION PR TO INSTALLATION OF HVAC DUCTS AND SPRINKLER HEADS. ENSURE AFTER INSTALLATION OF LUMINAIRE(S) THAT THERE IS NO CONTACT BETWEEN DUCTS AND LUMINAIRE(S) TO AVOID VIBRATION IN LUMINAIRE(S).
26.	USE FLEXIBLE CONDUIT FOR ALL MOTOR, TRANSFORMER, RECESSED LUMINAIRE CONNECTIONS CONNECTIONS BETWEEN TWO SEPARATE STRUCTURES AND FOR ALL FINAL CONNECTIONS TO "CRITICAL EQUIPMENT" AS DEFINED IN SPECIFICATIONS. MINIMUM 1/2" DIAMETER, LIQUID TIC TYPE USED OUTDOORS AND IN ALL WET LOCATIONS; PROVIDE WITH CODE-SIZE (MINIMUM #12
27.	PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR ALL BRANCH CIRCUITS FEEDING OUTLETS A NOTED ON THE DRAWINGS.
28.	FOR FLUSH MOUNTED PANELBOARDS THE CONTRACTOR SHALL STUB A MINIMUM OF FOUR (4) 3
29.	ALL CONDUIT CONNECTORS TO OUTLET OR JUNCTION BOXES SHALL HAVE INSULATED THROATS
30.	THROATS ARE NOT ACCEPTABLE. ALL CIRCUITS IN ALL JUNCTION BOXES AND DEVICES SHALL BE CLEARLY IDENTIFIED BY MEANS "EZ" NUMBERING TAGS OR EQUIVALENT, TO IDENTIFY THE CIRCUIT NUMBER OR RELAY SUPPLYI
31.	THE CONDUCTOR. ALL JUNCTION BOXES SHALL BE LABELED PER SPECIFICATIONS. ALL SURFACE MOUNTED POWER AND SIGNAL BOXES IN FINISHED AREAS SHALL BE "WIREMOLD TYPE, WITH MATCHING RACEWAYS. SURFACE MOUNTED STEEL JUNCTION BOXES AND/OR EMT NOT ACCEPTABLE.
32.	ALL LOCATIONS OF BARE METAL SURFACE MOUNTED CONDUIT, BOXES, PANEL COVERS, AND RELATED FITTINGS OR ACCESSORIES INSTALLED IN FINISHED AREAS (BOTH INTERIOR AND EXTERIOR) SHALL BE FINISH PAINTED TO MATCH THE SURFACE TO WHICH THEY ARE MOUNTED (AFTER INSTALLATION). PAINTING SHALL INCLUDE DIFFERENT COLORS AS REQUIRED TO MATCH EXISTING STRIPING OR OTHER BUILDING FEATURES TO WHICH THE EQUIPMENT IS ATTACHED A VISIBLE. VERIFY EXACT JUNCTION BOX LOCATION(S) AND ROUTING OF EXPOSED RACEWAYS W THE ARCHITECT PRIOR TO ROUGH-IN.
33.	PROVIDE A BLANK COVER PLATE (COLOR TO MATCH ADJACENT DEVICES OR AS SPECIFICALLY C FOR IN SPECIFICATIONS) FOR ALL JUNCTION BOXES (NEW AND EXISTING) ON THE PROJECT WE NO DEVICE IS INSTALLED.
34.	FOR OUTDOOR 15 AND 20-AMPERE, 125 AND 250-VOLT RECEPTACLES: RECEPTACLES LOCATED "WET" LOCATIONS SHALL HAVE "IN-USE" TYPE WEATHERPROOF COVER PLATES PROVIDED AND INSTALLED; RECEPTACLES LOCATED IN "DAMP" LOCATIONS SHALL HAVE "IN-USE" TYPE WEATHERPROOF COVER PLATES IN LOCATIONS DEEMED TO BE "IN-USE" WITH CORD AND PLUG ATTACHED.
35.	TWO OR THREE DIFFERENT PHASES SUPPLIED BY A 3-PHASE PANEL MAY SHARE A SINGLE NEUT ONLY IF CIRCUIT POSITIONS ARE ADJACENT IN THE PANEL. PROVIDE COMMON HANDLE-TIE ON BREAKERS FOR MULTI-WIRE BRANCH CIRCUITS, WITH COMMON NEUTRAL, PER NEC REQUIREME
	LIST OF DRAWINGS
E-0. E-0. E-0.	1 SYMBOLS LIST, GENERAL NOTES & LIST OF DRAWINGS 2 LUMINAIRE SCHEDULE 3 LUMINAIRE SCHEDULE 4 LIGHTING - SEQUENCE OF OPERATIONS 4 LIGHTING - SEQUENCE OF OPERATIONS
с-0. — E-1.	GENERAL NOTES SITE PLAN - ELECTRICAL FOR FAILONS FE-U.1 FIRE ALARM EQUIPMENT LIST AND GENERAL NOTES FE-1.0 SITE PLAN - FIRE ALARM

- E-1.1 SITE PLAN LIGHTING FE-A3.1 ADMINISTRATION BLDG - FIRE ALARM E-A2.1 ADMINISTRATION BLDG - LIGHTING FE-B3.1 CAFETERIA KITCHEN PLAN - FIRE E-B2.1 CAFETERIA KITCHEN PLAN - LIGHTING AI ARM E-A3.1 ADMINISTRATION BLDG - POWER & SIGNAL FE-5.1 RISER DIAGRAM - FIRE ALARM E-A3.2 ADMINISTRATION BLDG - MECHANICAL FE-6.1 CALCULATIONS - FIRE ALARM EQUIPMENT ELECTRICAL
- E-B3.1 CAFETERIA KITCHEN FLOOR PLAN POWER & SIGNAL
- E-B4.1 ENLARGED KITCHEN PLAN POWER & SIGNAL
- E-5.1 SINGLE LINE DIAGRAM POWER E-5.2 LIGHTING CONTROL DIAGRAMS E-5.3 DETAILS
- E-6.1 PANEL SCHEDULES
- E-7.1 DETAILS E-7.2 DETAILS E-7.3 DETAILS



LUMINAIRE SCHEDULE					LUMINAIRE SCHEDULE												
ТҮРЕ	MOUNTING	DESCRIPTION	MANUFACTURER	CATALOG #	SOURCE	POWER SUPPLY	VOLTS		TY	PE MOUNTING	DESCRIPTION	MANUFACTURER	CATALOG #	SOURCE	POWER SUPPLY	VOLTS	
AG4	SURFACE RECESSED	SAME AS TYPE AG1 EXCEPT 16' LENGTH	FINELITE	HP-2-R-WW-D-16-H-835 -K-96LG-277-SC-FC-10 %-(CEILING)-FE	5 LED 3500K 80 CRI 292 LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER	120	61	A	A1 AIRCRAFT CABLE SUSPENDED	S.S. AIRCRAFT CABLE SUSPENDED LINEAR L.E.D. LUMINAIRE WITH EXTRUDED ALUMINUM HOUSING; NOM. 4" H x 4" W x 8' L; DOWNLIGHT-ONLY; VERY HIGH OUTPUT; INTEGRAL ELECTRONIC	FINELITE	HP4-P-D-8-V-835-BG-96 LG-120-SC-FC-10%-FAx x-C4-FE-(FINISH)	LED 3500K 80 CRI 926 LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER	120	75
AG5	SURFACE RECESSED	SAME AS TYPE AG1 EXCEPT 17' LENGTH	FINELITE	HP-2-R-WW-D-17-H-835 -K-96LG-277-SC-FC-10 %-(CEILING)-FE	5 LED 3500K 80 CRI 292 LM/LF	0-10V, 100%-10% INTEGRAL ELECTRONIC LED DIMMING DRIVER	120	65		A2 AIRCRAFT CABLE SUSPENDED	DIMMING DRIVERS, DROPPED FROSTED ACRYLIC 'BOTTOM GLOW' DIFFUSERS. SIMILAR TO AA1, EXCEPT NOM 10' L; ONE 4' LONG EMERENCY INVERTER-POWERED SECTION IN LUMINAIRES INDICATED ON THE DLANS	FINELITE	HP4-P-D-10-V-835-BG-9 6LG-120-SC-FC-10%-FA	LED 3500K 80 CRI	0-10V, 100%-10%	120	93
AJ1	RECESSED CEILING	EDGE-LIT DECORATIVE L.E.D. 2' x 2' RECESSED DOWNLIGHT WITH TWIN ANGLED ACRYLIC DIFFUSING PANELS & DECORATIVE CENTER TRIM BAND.	H COLUMBIA LIGHTING	VSY22-35-HLHE-G-ED- U	LED 3500K 80+ CRI 3755 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER	UNV	26		A3 AIRCRAFT CABLE SUSPENDED	SIMILAR TO AA1, EXCEPT NOM 10' L; WITH WIRING FOR (2) CONTROL ZONES TO ACCOMMODATE DAYLIGHT ZONES; ONE	FINELITE	GEN(WHERE SHOWN) HP4-P-D-10-V-835-BG-9 6LG-120-MC(4' +	LED 3500K 80 CRI	INTEGRAL ELECTRONIC LED	120	93
AJ2	RECESSED CEILING	SAME AS TYPE AJ1 EXCEPT LOWER OUTPUT	COLUMBIA LIGHTING	VSYWW-35-LWHE-G-E D-U	LED 3500K 80+ CRI 1425 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER	UNV	19		A4 AIRCRAFT CABLE SUSPENDED	SIMILAR TO AA1, EXCEPT NOM 12' L; ONE 4' LONG EMERENCY INVERTER-POWERED SECTION IN LUMINAIRES INDICATED ON	FINELITE	6)-FC-10%-FAXX-C4-FE- (FINISH) HP4-P-D-12-V-835-BG-9 6LG-120-SC-FC-10%-FA	LED 3500K 80 CRI	0-10V, 100%-10%	120	11
AK1	PENDANT	4' L x 7.5"W x 3"H LINEAR L.E.D. DIRECT/INDIRECT CABLE SUSPENDED UNIT WITH DIE FORMED STEEL HOUSING, FROSTED ACRYLIC BOTTOM LENS, 2-LED LIGHT ENGINES, INTEGRAL	FINELITE	S16 LED 1D DCO-4-3E-B-B	LED 3500K 80 CRI 856LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER	120	28		A5 AIRCRAFT CABLE SUSPENDED	SIMILAR TO AA1, EXCEPT NOM 12' L; WITH WIRING FOR (2) CONTROL ZONES TO ACCOMMODATE DAYLIGHT ZONES; ONE	FINELITE	xx-C4-FE-(FINISH)-EM/ GEN(WHERE SHOWN) HP4-P-D-12-V-835-BG-9 6LG-120-MC(6' + 6U = 0.04 EE	920 LM/LF LED 3500K 80 CRI	INTEGRAL ELECTRONIC LED	120	11
AK2	PENDANT MOUNTED	SAME AT TYPE AK1 EXCECPT 8ft LENGTH	FINELITE	S16 LED 1D DCO-4-3E-B-B	LED 3500K 80 CRI 856LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER	120	57		A6 AIRCRAFT CABLE SUSPENDED	SIMILAR TO AA1, EXCEPT NOM 16' L; ONE 4' LONG EMERENCY INVERTER-POWERED SECTION IN LUMINAIRES INDICATED ON	FINELITE	(FINISH) HP4-P-D-16-V-835-BG-9 6LG-120-SC-FC-10%-FA	LED 3500K 80 CRI	INTEGRAL ELECTRONIC LED	120	14
AL1	RECESSED CEILING	2'W x 2'L x 2-3/8"H RECESSED LED FLAT PANEL 'FOOD SERVICE' RATED SEALED TROFFER, WITH FROSTED SHATTERPROOF/PROTECTIVE, 0.125" THICK POLYCARBONATE BOTTOM LENS, FORMED STEEL HOUSING, PAINTED AFTER	FAILSAFE	FSP-22-2135-CP125-FP EQ	P LED 3500K 80+ CRI 2100 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	UNV	21		A7 AIRCRAFT CABLE SUSPENDED	SIMILAR TO AA1, EXCEPT NOM 20' L; ONE 4' LONG EMERENCY INVERTER-POWERED SECTION IN LUMINAIRES INDICATED ON THE PLANS	FINELITE	HP4-P-D-20-V-835-BG-9 6LG-120-SC-FC-10%-FA	LED 3500K 80 CRI 926 I M/I F	INTEGRAL ELECTRONIC LED DIMMING DRIVER	120	18
		FABRICATION HOUSING, INTEGRAL ELECTRONIC DIMMING DRIVER, BASKETS BETWEEN FRAME AND LENS, AND BETWEEN FRAME AND CEILING GRID MEMBERS, UL WET LOCATION AND NATIONAL SANITATION FOUNDATION (NSF) CERTIFIED, OPTIONA EARTHQUAKE CLIPS.	L							A8 AIRCRAFT CABLE SUSPENDED	SIMILAR TO AA1, EXCEPT NOM 20' L; WITH WIRING FOR (2) CONTROL ZONES TO ACCOMMODATE DAYLIGHT ZONES; ONE CONTROL ZONE SHALL BE 16' L, THE REMAINING ZONE SHALL BE 4' L; ONE 4' LONG EMERENCY INVERTER-POWERED SECTION IN	FINELITE	GEN(WHERE SHOWN) HP4-P-D-20-V-835-BG-9 6LG-120-MC(16' + 4')-FC-10%-FAxx-C4-FE- (FINISH)-EM/GEN(WHE	LED 3500K 80 CRI - 926 LM/LF	0-10V, 100%-10% INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	18
AL2	RECESSED	SAME AS AL1 EXCEPT HIGHER OUTPUT	FAILSAFE	FSP-22-25HE35-CP125 FPEQ ESP-24-4735-CP125-FP	- LED 3500K 80+ CRI 4200 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%		38		B1 AIRCRAFT CABLE SUSPENDED	LUMINAIRES INDICATED ON THE PLANS; SUSPNESION CABLES IN EXACT LOCATIONS SHOWN ON THE PLANS. SUSPENDED LINEAR L.E.D. DIRECT/INDIRECT RUN, 6'-3"L x 4"H x 4"W, WITH OPEN, WIDESPREAD DISTRIBUTION 'UP', FLAT	FINELITE	RE SHOWN) HP-4-P-ID-6'3"-H-S-835- WSO-F-96LG-SC-FAxx- C1 EE (EINISH) EM/CE	LED 3500K 80 CRI 1222 LM/ET	INTEGRAL ELECTRONIC LED	120	67
	CEILING	OPAL WHITE ACRYLIC DIFFUSING LENS, FORMED STEEL HOUSING, PAINTED AFTER FABRICATION HOUSING, INTEGRAL ELECTRONIC DIMMING DRIVER, OPTIONAL EARTHQUAKE CLIPS AT EACH CORNER.		EQ	80+ CRI 4700 LM	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%					DIMMING DRIVER(S), WITH EMERGENCY INVERTER POWER CORI DROP IN LUMINAIRES OR SECTIONS OF LUMINAIRES SHOWN ON PLANS.		N(WHERE SHOWN ON PLANS)	1222 LM/F1	0-10V, 100%-10%	120	75
AM2	RECESSED CEILING	SAME AS AM1 EXCEPT HIGHER WATTAGE & OUTPUT	FAILSAFE	FSP-24-6435-CP125-FP EQ	P LED 3500K 80+ CRI 6400 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	UNV	60		B2 AIRCRAFT CABLE	OUPUT.		SO-F-96LG-SC-FAxx-C1 -FE-(FINISH)	80 CRI 1222 LM/FT	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	12
AN1 AN2	SURFACE WALL	6'L L.E.D. OVER MIRROR LUMINAIRE WITH EXTRUDED ALUMINUM LINEAR HOUSING, DIECAST ALUMINUM ENDCAPS, 'WRAP-AROUND' CONTINUOUS ACRYLIC DIFFUSER. SAME AS AN1, EXCEPT 8'L, WATTAGE AND OUTPUT.	LITECONTROL	67L-W-D-6-(FINISH)-35I -D055-NDM-UNV 67L-W-D-8-(FINISH)-35I	K LED 3500K 80 CRI 3300 LM K LED 3500K	INTEGRAL ELECTRONIC LED NON-DIMMING INTEGRAL	UNV	24		BI AIRCRAFT CABLE	OUPUT.		35-WSO-F-96LG-SC-FA xx-C1-FE-(FINISH)	80 CRI 1222 LM/FT	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	12
AP1	RECESSED CEILING	ROUND 2'x'2' RECESSED L.E.D. TROFFER UNIT, WITH OPTIONAL RAL COLOR PAINTED SQUARE SURROUND TRIM, CONVEX OPAL	PRUDENTIAL	-D055-NDM-UNV P9020-LED35-LO-(SHIE LDING)-(FINISH)-SC-UN	80 CRI 4400 LM LED 3500K N 80 CRI	ELECTRONIC LED NON-DIMMING INTEGRAL ELECTRONIC LED	UNV	35			OUPUT.		-C1-FE-(FINISH)	80 CRI 1222 LM/FT	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	120
AQ1	RECESSED DOWNLIGHT	 WHITE ACRYLIC DROPPED DISH DIFFUSER, RAL COLOR, PAINTEI TRIM FINISH, AS SELECTED BY THE ARCHITECT 4" DIAMETER L.E.D. DOWNLIGHT WITH DECORATIVE, FROSTED DROPPED ACRYLIC RING ELEMENT 		V-X1-DM10 4RN C4L10-835-W-Z10-U	2100 LM LED 3500K 80+ CRI	DIMMING DRIVER 0-10V, 100%-10% INTEGRAL ELECTRONIC LED	UNV	11			OUPUT.		35-WSO-F-96LG-SC-FA xx-C1-FE-(FINISH)	80 CRI 1222 LM/FT	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	21
AQ2	RECESSED	SAME AT TYPE AQ1 EXCEPT HIGHER OUTPUT	LIGHTOLIER	C4R-DL-(FINISH)-(FLAN GE) D4A02-C4RDL-4RN 4RN	N 1000 LM	DIMMING DRIVER 0-10V, 100%-1% INTEGRAL	UNV	21		SUSPENDED	OUPUT.		-WSO-BG-96LG-SC-FAx x-C1-FE-(FINISH)-EM/G EN(WHERE SHOWN ON PLANS)	80 CRI 1222 LM/FT	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	2.11
	DOWNLIGHT			C4L20-835-W-Z10-U C4R-DL-(FINISH)-(FLAN GE) D4A02-C4RDL-4RN	80+ CRI 2000 LM	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-1%		11		B8 AIRCRAFT CABLE SUSPENDED	SAME AS AB1, EXCEPT 6'-0"L RUN, WATTAGE AND WITH BOOSTE 'UP', STANDARD 'DOWN' OUPUTS.	D FINELITE	HP-4-P-ID-6'-B-S-835-W SO-F-96LG-SC-FAxx-C1 -FE-(FINISH)	LED 3500K 80 CRI 939 LM/FT	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	49
	DOWNLIGHT	GYP BOARD MOUNT		C4L10-835-W-Z10-U C4R-DL-(FINISH)-(FLAN GE)	80+ CRI 1000 LM	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-1%		11		B9 AIRCRAFT CABLE SUSPENDED	SAME AS AB1, EXCEPT 8'-0"L RUN, WATTAGE AND WITH BOOSTE 'UP', STANDARD 'DOWN' OUPUT.	D FINELITE	HP-4-P-ID-8'-B-S-835-W SO-F-96LG-SC-FAxx-C1 -FE-(FINISH)	LED 3500K 80 CRI 939 LM/FT	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	65
AS1	SURFACE	2'L L.E.D. STRIP LUMINAIRE WITH FORMED STEEL HOUSING, NON	1. HE WILLIAMS	C4L10-835-W-Z10-U C4R-DL-(FINISH)-(FLAN GE) 75R-2-L20-8-35-WG	80+ CRI 1000 LM	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-1%	UNV	15		310 311 AIRCRAFT CABLE SUSPENDED	NOT USED SAME AS AB1, EXCEPT 12'-0"L RUN, WATTAGE AND WITH BOOSTED 'UP', STANDARD 'DOWN' OUPUT.	FINELITE	HP-4-P-ID-12'-B-S-835- WSO-F-96LG-SC-FAxx- C1-FE-(FINISH)	LED 3500K 80 CRI 939 LM/FT	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	97
AS2	SURFACE	GAGE WIRE GUARD. SAME AS TYPE AS1 EXCEPT 4' LENGTH, WATTAGE & OUTPUT.	HE WILLIAMS	75R-4-L50-8-35	LED 3500K	DIMMING DRIVER 0-10V, 100%-10%	UNV	31	AB	312 AIRCRAFT CABLE SUSPENDED	SAME AS AB1, EXCEPT 14'-0"L RUN, WATTAGE AND WITH BOOSTED 'UP', STANDARD 'DOWN' OUPUT.	FINELITE	HP-4-P-ID-14'-B-S-835- WSO-F-96LG-SC-FAxx- C1-FE-(FINISH)	LED 3500K 80 CRI 939 LM/FT	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	11:
AS3	SURFACE	SAME AS TYPE AS1 EXCEPT 8' LENGTH	HE WILLIAMS	75R-8-L100-8-35	LED 3500K	DIMMING DRIVER 0-10V, 100%-10%	UNV	63		C1 AIRCRAFT CABLE SUSPENDED	SUSPENDED LINEAR L.E.D. DIRECT/INDIRECT RUN, 8'L x 4"H x 2"W WITH OPEN, WIDESPREAD DISTRIBUTION 'UP', FLAT FROSTED ACRYLIC DIFFUSER 'DOWN', INTEGRAL ELECTRONIC DIMMING DRIVER(S).	/, FINELITE	HP-2-P-ID-8-B-S-835-W SO-F-96LG-SC-FA50-C1 -FE-SW-	LED 3500K 80 CRI 1120 LM/FT	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	65
AS4	SURFACE	SAME AS TYPE AS1 EXCEPT 4' LENGTH AND LOWER OUTPUT	HE WILLIAMS	75R-4-L30-8-35	LED 3500K	DIMMING DRIVER 0-10V, 100%-10%	UNV	20		C2 AIRCRAFT CABLE SUSPENDED	SAME AS AC1, EXCEPT 10'-0"L RUN, WATTAGE AND OUTPUT.	FINELITE	HP-2-P-ID-10-B-S-835-W SO-F-96LG-SC-FA50-C1 -FE-SW-	/ LED 3500K 80 CRI 1120 LM/FT	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	81
AT1	RECESSED	4" DIAMETER RECESSED L.E.D. DOWNLIGHT WITH DROPPED	FOCAL POINT	FLS2DD-RF-700L-NFL- 20-1 11-BH-I S2-RD-35K	3000 LM 1 LED 3500K	DIMMING DRIVER 0-10V, 100%-10% INTEGRAL	120	8		D1 RECESSED	RECESSED LINEAR L.E.D. DOWNLIGHT, 4"W x 4"H x 4' LENGTH, WITH DROPPED OPAL WHITE ACRYLIC DIFFUSER, EXTRUDED ALUMINUM HOUSING.	FINELITE	HP-4-R-D-4-B-835-DL-96 LG-120-SC-FC-10%-C1- FE-SW	6 LED 3500K 80 CRI 423LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	18
				DNC-NFL-CD-(FINISH)	700 LM	DIMMING DRIVER				D2 RECESSED	SAME AS AD1, EXCEPT 6' L, WATTAGE & OUTPUT.	FINELITE	HP-4-R-D-6-B-835-DL-96 LG-120-SC-FC-10%-C1- FE-SW	6 LED 3500K 80 CRI 423LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	28
AU3	TRACK SPOT LIGHT	TRACK MOUNTED L.E.D. ADJUSTABLE ACCENT LUMINAIRE WITH FORMED ALUMINUM HOUSING, NOMINAL 7-1/4" WIDE X 8" TALL; LSI CT1 FITTING FOR CONTROLTRACK; WITH 25 DEGREE BREAM SPREAD: FINISH AS SELECTED BY THE ARCHITECT	LIGHTING SERVICES	LP2-ZE8 22-90 35 25 CT1-10 120 (FINISH) ACCESSORIES: LP2 CROSS BAFFLE	LED 3500K 90 CRI 2180 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER, 0-10V, 100%-10%	120	30		D3 RECESSED	SAME AS AD1, EXCEPT 8' L, WATTAGE & OUTPUT.	FINELITE	HP-4-R-D-8-B-835-DL-96 LG-120-SC-FC-10%-C1- FE-SW	6 LED 3500K 80 CRI 423LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	37
AU4	SURFACE TRACK	ONE CIRCUIT CONTROLTRACK EXTRUDED ALUMINUM, MUSEUM-GRADE LIGHT TRACK NOMINAL 1-7/16" DEEP X 1-13/16"	LIGHTING SERVICES	BACKER RING E, (SPREAD GELS) TRACK:	NA	NA	120	180		D4 RECESSED	SAME AS AD1, EXCEPT 12' L, WATTAGE & OUTPUT.	FINELITE	HP-4-R-D-12-B-835-DL-9 6LG-120-SC-FC-10%-C1 -FE-SW	9 LED 3500K 80 CRI 423LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	55
		WIDE X 8 FT LENGTH WITH 1.5A CURRENT LIMITER. PROVIDE WITH ALL PARTS AND ACCESSORIES TO COMPRISE A FULLY FUNCTIONING TRACK SYSTEM; FINISH AS SELECTED BY THE ARCHITECT.		(FINISH) (CUT TO LENGTH) JOINTER: TRK-XC-MJ1-120 END FEED:						D5 RECESSED	SAME AS AD1, EXCEPT 16' L, WATTAGE & OUTPUT	FINELITE	HP-4-R-D-16-B-835-DL-9 6LG-120-SC-FC-10%-C1 -FE-SW	9 LED 3500K 80 CRI 423LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	74
				TRK-SC-EFC1-120 (FINISH) END CAP: TRK-S-AC-EC-(FINISH) CURRENT LIMITER:						D6 RECESSED	SAME AS AD1, EXCEPT 20' L, WATTAGE & OUTPUT - 12' MAXIMUM SECTION LENGTH PLUS 8' SECTION	FINELITE	HP-4-R-D-20-B-835-DL-9 6LG-120-SC-FC-10%-C1 -FE-SW	 LED 3500K 80 CRI 423LM/LFM 	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	92
				IUL-2-1.5-(FINISH)				Ļ		D7 RECESSED	SAME AS AD1, EXCEPT 28' L, WATTAGE & OUTPUT - (2) 12' MAXIMUM SECTION LENGTH PLUS 2' SECTION:TWO 4' LONG EMERENCY INVERTER-POWERED SECTIONS IN LOCATIONS INDICATED ON THE PLANS.		HP-4-R-D-28-B-835-DL-9 6LG-120-SC-FC-10%-C1 -FE-SW-2 EM/GEN(SEE PLANS)	 LED 3500K 80 CRI 423LM/LF 	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%		
										G1 SURFACE RECESSED	「RECESSED LINEAR 上E.D. WALL WASH LUMINAIRE, 2 七文4" HIGH 2 2 1/4" WIDE, WITH DROPPED 'KICK' REFLECTOR, INTEGRAL ELECTRONIC DIMMING DRIVER EXTRUDED ALUMINUM RECESSE HOUSING.		← Ħ₱-2-Ŕ-₩₩-Ď-2-Ĥ-835- K-96LG-277-SC-FC-10% -(CEILING)-FE	LED 3500K 80 CRI 292 LM/LF	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	8
									A	G2 SURFACE RECESSED	SAME AS TYPE AG1 EXCEPT 8' LENGTH	FINELITE	HP-2-R-WW-D-8-H-835- K-96LG-277-SC-FC-10% -(CEILING)-FE	LED 3500K 80 CRI 292 LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	31
									AC	G3 SURFACE RECESSED	SAME AS TYPE AG1 EXCEPT 10' LENGTH	FINELITE	HP-2-R-WW-D-10-H-835 -K-96LG-277-SC-FC-10 %-(CEILING)-FE	LED 3500K 80 CRI 292 LM/LF	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	38



	LUMINAIRE SCHEDULE											
ТҮРЕ	MOUNTING	DESCRIPTION	MANUFACTURER	CATALOG #	SOURCE DETAILS	POWER SUPPLY	VOLTS	INPUT WATTS				
BJ1	RECESSED	4" ROUND RECESSED EXTERIOR L.E.D. DOWNLIGHT, U.L. WET LOCATION LISTED, ENCLOSED & GASKETED, WITH NOM. 3" D ENAMELED ALUMINUM HOUSING, REGRESSED LENS PROVIDING MEDIUM FLOOD DISTRIBUTION, GASKET BETWEEN TRIM & CEILING	KIRLIN	LRR-04006-1500L-120-2 3-45	LED 3500K 80+ CRI 1500 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-1%	120	21				
BK1	PEDESTRIAN POST TOP	DECORATIVE POST-TOP L.E.D. WALKWAY LUMINAIRE, WITH 20" DIA. x 2.5"H DIE-CAST ALUMINUM 'DISC HOUSING' WITH MATCHING DIECAST ALUM., 17"H TWIN SUPPORT ARMS, DIFFUSING 'COMFORT' LENS OBSCURES LED ARRAY, I.E.S. SYMMETRIC MEDIUM TYPE V LIGHT DISTRIBUTION; ROUND STRAIGHT, 4" DIA. x 12'H ALUMINUM POLE, FULL BASE COVER, MATCHING FACTORY-STANDARD FINISH FOR LUMINAIRE AND POLE AS SELECTED BY ARCHITECT.	GARDCO	PPT-140L-650-BW/G2-T 3-5-UNV-(FINISH) POLE SRS-14-4.0-T4-(FINISH)	LED 3500K 70CRI 2910 LM	NON-DIMMING	UNV	30				
BK2	PEDESTRIAN POST TOP	SAME AS TYPE BK1, EXCEPT IES TYPE II ASYMMETRIC DISTRIBUTION PATTERN	GARDCO	PPT-140L-650-WW/G2-T 3-2-UNV-(FINISH) POLE SRS-14-4.0-T4-(FINISH)	LED 3500K 70CRI 2910 LM	NON-DIMMING	UNV	30				
BK3	PEDESTRIAN POST TOP	SAME AS TYPE BK1 EXCEPT TYPE III ASYMMETRIC DISTRIBUTION PATTERN	GARDCO	PPT-140L-650-WW/G2-T 3-3-UNV-(FINISH) POLE SRS-14-4.0-T4-(FINISH)	LED 3500K 70CRI 2910 LM	NON-DIMMING	UNV	30				
BK4	PEDESTRIAN POST TOP	SAME AS TYPE BK1 EXCEPT TYPE III ASYMMETRIC DISTRIBUTION PATTERN	GARDCO	PPT-140L-650-WW/G2-T 3-4-UNV-(FINISH) POLE SRS-14-4.0-T4-(FINISH)	LED 3500K 70CRI 2910 LM	NON-DIMMING	UNV	30				
EX1	SURFACE WALL OR CEILING	DIECAST ALUMINUM SINGLE FACE LED EXIT SIGN WITH GREEN STENCIL LETTERS, ARROWS AS SHOWN ON THE PLANS, VANDAL RESISTANT LENS; VERIFY FINISH WITH THE ARCHITECT	ISOLITE	TL2-AC-G-1-(FINISH)-M TEB-VR	NA	NON-DIMMING	UNV	2				
EX2	SURFACE WALL OR CEILING	SAME AS EX1 EXCEPT DOUBLE FACE.	ISOLITE	TL2-AC-G-2-(FINISH)-M TEB-VR	NA	NON-DIMMING	UNV	2				
EX3	SURFACE WALL	NON-ELECTRIC SINGLE FACE EXIT SIGN WITH 20-YR. RATED TRITIUM LIGHT SOURCE, POLYCARBONATE LENS, VANDAL RESISTANT EXTRUDED ALUMINUM FRAME, ARROWS AS INDICATED, BACK-MOUNTED ON WALL, FINISH AS SELECTED BY THE ARCHITECT.	ISOLITE	2040-95-1-G-(FINISH)-M B	NA	NA	NA	0				
EX4	SURFACE CEILING	SAME AS EX5 EXCEPT DOUBLE FACE, TOP MOUNTED TO CEILING.	ISOLITE	2040-95-2-G-(FINISH)-M T	NA	NA	NA	0				
EX5	SURFACE CEILING	SAME AS EX3, EXCEPT TOP MOUNTED TO CEILING.	ISOLITE	2040-95-2-G-(FINISH)-M T				0				

		LUMINA	IRE SCHE	DULE				
	MOUNTING	DESCRIPTION	MANUFACTURER	CATALOG #	SOURCE	POWER SUPPLY	VOLTS	INPU WATA
AU5	SURFACE TRACK	ONE CIRCUIT CONTROLTRACK EXTRUDED ALUMINUM, MUSEUM-GRADE LIGHT TRACK, NOMINAL 1-7/16" DEEP X 1-13/16" WIDE X 7 FT LENGTH WITH 1.5A CURRENT LIMITER. PROVIDE WITH ALL PARTS AND ACCESSORIES TO COMPRISE A FULLY FUNCTIONING TRACK SYSTEM; FINISH AS SELECTED BY THE ARCHITECT.	LIGHTING SERVICES	TRACK: TRK-SC-(LENGTH)-120- (FINISH) (CUT TO LENGTH) JOINTER: TRK-XC-MJ1-120 END FEED: TRK-SC-EFC1-120 (FINISH) END CAP: TRK-S-AC-EC-(FINISH) CURRENT LIMITER:	NA	NA	120	180
AV1	PENDANT	24" DIA.DECORATIVE L.E.D. DIRECT/INDIRECT CABLE-SUSPENDED 'RING' PENDANT UNIT WITH EXTRUDED ALUMINUM HOUSING, OPTIONAL 50% REDUCED OUTPUT (OPTION PR1), REMOTE ELECTRONIC DIMMING DRIVER MOUNTED IN NEMA 1 ENCLOSURE ABOVE TBAR CEILING, POWER OVER SUSPENSION CABLE, PREMIUM RAL PAINTED FINISH AS SELECTED BY THE ARCHITECT. VERIFY REMOTE DRIVER LOCATION & REQUIRED WIRING HARNESS LENGTH, PRIOR TO RELEASE OF ORDER.	BETA CALCO	TCL-2-1.5-(FINISH) 953105-D35-N35-S1-D1- PR1-RAL METALLIC	LED 3500K 80 CRI 2250LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-1%	UNV	21
AW1	SURFACE WALL MOUNT	ROUNDED DECORATIVE L.E.D. WALL SCONCE WITH HEAVY GAGE FORMED STEEL HOUSING, 8-7/8" WIDE X 16" HIGH X 4" DEEP; PREMIUM METALLIC RAL POWDER COAT PAINT FINISH AS SELECTED BY THE ARCHITECT	VISA LIGHTING	CB3660-L35K-H-MVOLT -(FINISH)	LED 3500K 80 CRI 1000LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-1%	UNV	14
AZ1	SURFACE UNDERCABINET	3'L x 5"W x 1"H L.E.D. UNDERCABINET UNIT WITH ACRYLIC PRISMATIC LENS, SOLID FRONT, FORMED STEEL HOUSING; COORDINATE PROVISION OF CONCEALING FACIA AT BASE OF UPPER CABINETS & SHELVES WHERE UNITS ARE TO BE INSTLALLED, PRIOR TO RELEASE OF CASEWORK ORDERS.	HE WILLIAMS 1SF	1SF-3-L18-835-AF12125 -DIM	LED 3500K 80 CRI 1800 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	UNV	21
AZ2	SURFACE UNDERCABINET	SAME AS AZ1 EXCEPT 4'L, WATTAGE, OUTPUT.	HE WILLIAMS 1SF	1SF-4-L24-835-AF12125 -DIM	LED 3500K 80 CRI 2400LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	UNV	29
BA1	SURFACE ROOF EAVE	2"W x 2.5"H x 6'L EXTERIOR LINEAR L.E.D. DOWNLIGHT WALL-GRAZING LUMINAIRE, WITH EXTRUDED ALUMINIUM ENCLOSED & GASKETED HOUSING, UL WET LOCATION LABEL, 10deg. x 60deg OPTICS, INTEGRAL ELECTRONIC DIMMING DRIVER, ADJUSTABLE HINGED MOUNTING BRACKETS, FACTORY STANDARD FINISH, SLANTED GLARE BAFFLE.	BOCA FLASHER	HPNLS-HO-5W- 3000K-10X60-120-(FINIS H)-E-H-S-SSB-6FT-	LED 3000K 90+ CRI	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	2 30
BA2	SURFACE AT ROOF EAVE, W/ADJUSTABLE BRACKETS	SAME AS BA1 EXCEPT 12L, 'WALL WASH' OPTICS.	BOCA FLASHER	HPNLS-HO-5W- 3000K-30X60-120-D-E-S -(LENS)-SSB-12FT	LED 3000K 90+ CRI	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	60
BA3	SURFACE AT ROOF EAVE, W/ADJUSTABLE BRACKETS	SAME AS BA1 EXCEPT 13L, INCREASED WATTAGE, OUTPUT.	BOCA FLASHER	HPNLS-HO-16W-3000K- 10X60-120-(FINISH)-E-H -S-SSB-13FT-	LED 3000K 90+ CRI	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	200
BA4	SURFACE AT ROOF EAVE, W/ADJUSTABLE BRACKETS	SIMILAR TO BA1, EXCEPT 16'L, LED GRAZE OPTICS, WITH BLADE BAFFLE - FOR METAL PANEL - SERVERY	BOCA FLASHER	HPNLS-HO-16W-3000K- 30X60-120-(FINISH)-E-S -(LENS)-SSB-16FT	LED 3000K 90+ CRI	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	243
BB1	SURFACE WALL	DECORATIVE EXTERIOR L.E.D. WALL SCONCE, UL WET LOCATION LISTED, WITH CUTOFF IES TYPE III 'DIFFUSE' DOWNLIGHT DISTRIBUTION PATTERN, NOM. 13"W x 10"H x 4"D 'TRIANGLE/WEDGE' FABRICATED ALUMINUM HOUSING, FACTORY PREMIIUM FINISH AS SELECTED BY THE ARCHITECT, OPTIONAL DIECAST MOUNTING ADAPTER FOR SURFACE CONDUIT CONNECTION WHERE INDICATED ON THE PLANS OR REQUIRED.	ARCHITECTURAL AREA LIGHTING	CY1-25-3K8-1-3D-UNV-(PREMIUM FINISH)-MOUNTING ADAPTER	LED 3000K 80 CRI 2500 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	UNV	25
BB2	SURFACE WALL	SAME AS BB1, EXCEPT WITH 'PRECISION' IES TYPE III DISTRIBUTION OPTICS.	ARCHITECTURAL AREA LIGHTING	CY1-25-3K8-1-3D-UNV-(PREMIUM FINISH)-MOUNTING ADAPTER	LED 3000K 80 CRI 2500 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	UNV	25
BB3	SURFACE WALL	SIMILAR TO BB1, EXCEPT LARGER HOUSING, HIGHER WATTAGE & OUTPUT.	ARCHITECTURAL AREA LIGHTING	CY2-25-3K8-1-2D-UNV-(PREMIUM FINISH)-MOUNTING ADAPTER WHERE SPEC'D	LED 3000K 80 CRI 2500 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	UNV	25
BB4	SURFACE WALL	SIMILAR TO BB1, EXCEPT LARGER HOUSING, HIGHER WATTAGE & OUTPUT, IES TYPE 4 DISTRIBUTION PATTERN	ARCHITECTURAL AREA LIGHTING	CY2-25-3K8-1-2D-UNV-(PREMIUM FINISH)-MOUNTING ADAPTER WHERE SPEC'D	LED 3000K 80 CRI 2500 LM	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	UNV	25
BD1	SURFACE CANOPY	3" DIAMETER, UL WET LOCATION LISTED, ADJUSTABLE L.E.D. EXTERIOR ROOF CANOPY-MOUNTED DOWNLIGHT, WITH INTEGRAL ELECTRONIC DIMMING DRIVER IN CYLINDRICAL MACHINED ALUMINUM HOUSING, FACTORY PREIMIUM FINISH AS SELECTED BY THE ARCHITECT, 45deg ANGLED GLARE SNOOT, OPTIONAL ROTATING KNUCKLE, MATCHING DIECAST ALUMINUM GASKETED J-BOX CANOPY COVERPLATE.	BK LIGHTING	DELED-X65-WFL-(FINIS H)-12-(CAP)-PC-360HD-	3000K	INTEGRAL ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%		27
BF1	POLE MOUNT AREA	POLE MOUNTED L.E.D. CUTOFF PARKING LOT/AREA LUMINAIRE WITH SINGLE ARM-MOUNTED, 5"H x 27.5"L x 14.9"W DIECAST ALUMINUM LUMINAIRE HEAD WITH ROTATABLE OPTICAL SYSTEM PROVIDING IES TYPE III DISTRIBUTION AIMED AS INDICATED ON THE PLANS, WITH UNIFORM LUMINAIRE HEAD ALIGNMENT, AS SHOWN ON THE PLANS, INTERNAL HOUSE SIDE SHIELD; MOUNTED ON 23' HIGH ROUND STRAIGHT STEEL POLE WITH BOLTED BASEPLATE, FULL BASEPLATE COVER, MATCHING FACTORY STANDARD FINISH FOR LUMINAIRE AND POLE, AS SEI ECTED BY THE ARCHITECT	GARDCO	GARDCO ECF-S-32L-700-WW-G2- AR-3-UNV-(FINISH)-HIS- 32 POLE: SRS-23-4-D1-(FINISH)	LED 3000K 70 CRI 7795 LUMENS	NON-DIMMING	UNV	73
BF2	POLE MOUNT AREA	SAME AS TYPE BF1 EXCEPT WITH OPTICS ROTATED 90deg/HEAD ALIGNED WITH OTHER UNITS.	GARDCO	GARDCO ECF-S-32L-700-WW-G2- AR-3- 270-UNV-(FINISH)-HIS-3 2-V POLE: SRS-23-4-D1-(FINISH)	LED 3000K 70 CRI 7795 LUMENS	NON-DIMMING	UNV	73
BF3	POLE MOUNT AREA	SAME AS TYPE BF1 EXCEPT WITH 2 HEADS AT 180deg TO ONE ANOTHER; ONE HEAD TYPE III ON THE NORTH SIDE OF POLE, AND TYPE IV ON THE SOUTH SIDE HEAD.	GARDCO	GARDCO (1) ECF-S-32L-700-WW-G2- AR-3-UNV-IMRI3-(FINIS H) (1) ECF-S-32L-700-WW-G2- AR-4-UNV-IMRI3-(FINIS H) POLE: SRS-20-4-D2-(FINISH)	LED 3000K 70 CRI 15590 LUMENS	NON-DIMMING	UNV	146
BF4	POLE MOUNT AREA	SAME AS TYPE BF1 EXCEPT WITH 2 HEADS AT 90deg TO ONE ANOTHER	GARDCO	GARDCO (2) ECF-S-32L-700-WW-G2- AR-3-UNV-IMRI3-(FINIS H) POLE: SRS-20-4-D2@90-(FINIS H)	LED 3000K 70 CRI 15590 LUMENS	NON-DIMMING	UNV	146
BG1	SURFACE MOUNTED	SURFACE CEILING MOUNTED L.E.D. DOWNLIGHT WITH 'BEVELLED BLOCK'DIECAST ALUMINUM HOUSING, NOM. 5" SQUARE X 7" H, INTEGRAL SURFACE CONDUIT ADAPTER BACKBOX WITH CUTOUTS, STANDARD FACTORY FINISH AS SELECTED BY THE ARCHITECT, REGRESSED FROSTED BOROSILICATE GLASS DIFFUSER, 90° BEAM SPREAD	USAI	BLSD5-24C3-35KS-90-B F-(FINISH)-CC-UNVD2, W/KEY ACCESSORIES AS REQUIRED AT EACH UNIT.	LED 3500K 80+ CRI	NON-DIMMING	UNV	24
BG2	SURFACE MOUNTED	SAME AS BG1 EXCEPT REDUCED WATTAGE & OUTPUT.	USAI	BLSD5-12C3-35KS-90-B F(FINISH)-CC-UNVD2, W/KEY ACCESSORIES AS REQUIRED AT EACH UNIT.	LED 3500K 80+ CRI	NON-DIMMING	UNV	12
вH1	RECESSED	SQUARE RECEISED EXTERIOR L.E.D. DOWNLIGHT, U.L. WET LOCATION LISTED, ENCLOSED & GASKETED, WITH NOM. 3" D ENAMELED ALUMINUM HOUSING, REGRESSED LENS PROVIDING MEDIUM FLOOD DISTRIBUTION, GASKET BETWEEN TRIM & CEILINGRECESSED DOWNLIGHT MEDIUM FLOOD OPTICS		ско-04003-2500L-120-2 3-45-	80+ CRI 2500 LM	ELECTRONIC LED DIMMING DRIVER 0-10V, 100%-10%	120	36



			LIGHTING CO	NTROL S	EQUENCE OF OPERA	ATIONS				
SPACE TYPE	OCC SENSOR SETPOINT	PHOTOCELL SETPOINT	NORMAL BUSINESS HOUR	S	AFTER HOURS	RECEPTACIES			DURATION	AUTOMATIC DEMAND RESPONSE
ADMINISTRATION BUILDING								RECEITACLES	Delotition	
CORRIDORS	AUTO ON/ OFF IN 20 MIN	NA	OCCUPANCY SENSOR BRINGS LIGHT TO 100%, LIGHT GOES TO 50% WHEN NO ONE IS DETECTED	NOT REQUIRED TO BE CONTROLLED	OCCUPANCY SENSOR BRINGS LIGHT TO 100%, LIGHT GOES TO 0% WHEN NO ONE IS DETECTED	NA	ON/DIM/OFF VIA MANUAL CONTROL	NA	NA	NOT REQUIRED
STAFF LOUNGE	AUTO ON/ OFF IN 20 MIN	50FC AT WORKPLANE	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS AND PHOTOSENSOR	CONTROLLED BY OCCUPANCY SENSOR	SAME AS DURING NORMAL BUSINESS HOURS	CONTROLLED BY OCCUPANCY SENSOR				NOT REQUIRED
STAFF WORKROOM	AUTO ON/ OFF IN 20 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	CONTROLLED BY OCCUPANCY SENSOR	SAME AS DURING NORMAL BUSINESS HOURS	CONTROLLED BY OCCUPANCY SENSOR				NOT REQUIRED
RECEPTION	AUTO ON/ OFF IN 20 MIN	50FC AT WORKPLANE	OCCUPANCY SENSOR BRINGS LIGHT TO 100%, LIGHT GOES TO 50% WHEN NO ONE IS DETECTED	NOT REQUIRED TO BE CONTROLLED	OCCUPANCY SENSOR BRINGS LIGHT TO 100%, LIGHT GOES TO 0% WHEN NO ONE IS DETECTED	NA	ON/DIM/OFF VIA MANUAL CONTROL	NA	NA	NOT REQUIRED
AP SEC	AUTO ON/ OFF IN 20 MIN	75FC AT WORKPLANE	OCCUPANCY SENSOR BRINGS LIGHT TO 100%, LIGHT GOES TO 50% WHEN NO ONE IS DETECTED	NOT REQUIRED TO BE CONTROLLED	OCCUPANCY SENSOR BRINGS LIGHT TO 100%, LIGHT GOES TO 0% WHEN NO ONE IS DETECTED	NA	ON/DIM/OFF VIA MANUAL CONTROL	NA	NA	NOT REQUIRED
CONFERENCE	MANUAL ON/OFF IN 20 MINUTES	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	OCCUPANCY SENSOR	SAME AS DURING NORMAL BUSINESS HOURS	OCCUPANCY SENSOR				NOT REQUIRED
TOILET	MANUAL ON/OFF IN 20 MINUTES	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
STORAGE	MANUAL ON/OFF IN 20 MINUTES	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
LOCKER	MANUAL ON/OFF IN 20 MINUTES	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
CUSTODIAN	MANUAL ON/OFF IN 20 MINUTES	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
MAIL ROOM	AUTO ON/ OFF IN 20 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
REGISTRATION	AUTO ON/ OFF IN 20 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
CUM FILES	AUTO ON/ OFF IN 20 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
ELECTRICAL EQUIPMENT ROOMS	MANUAL ON/OFF	NA	ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
NURSE	MANUAL ON/OFF IN 20 MINUTES	75FC AT WORKPLANE	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS AND PHOTOSENSOR	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
OFFICE	MANUAL ON/OFF IN 20 MINUTES	75FC AT WORKPLANE	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS AND PHOTOSENSOR	CONTROLLED BY OCCUPANCY SENSOR	SAME AS DURING NORMAL BUSINESS HOURS	CONTROLLED BY OCCUPANCY SENSOR				NOT REQUIRED
CAFETERIA BUILDING B										
DINING	AUTO ON/ OFF IN 20 MIN	60FC AT WORKPLANE	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS AND PHOTOSENSOR	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
KITCHEN/PREP	AUTO ON/ OFF IN 20 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
SERVERY	AUTO ON/ OFF IN 20 MIN	75FC AT WORKPLANE	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS AND PHOTOSENSOR	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
OFFICE	MANUAL ON/OFF IN 20 MINUTES	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	CONTROLLED BY OCCUPANCY SENSOR	SAME AS DURING NORMAL BUSINESS HOURS	CONTROLLED BY OCCUPANCY SENSOR				NOT REQUIRED
DRY STORAGE	MANUAL ON/OFF IN 20 MINUTES	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
ELECTRICAL EQUIPMENT ROOMS	MANUAL ON/OFF	NA	ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
CLASSROOM	MANUAL ON/ OFF IN 20 MIN	75FC AT WORKPLANE	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS AND PHOTOSENSOR	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
CUSTODIAN, STORAGE	MANUAL ON/ OFF IN 15 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
ELECTRICAL EQUIPMENT ROOMS	MANUAL ON/OFF	NA	ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
CORRIDOR, HALLWAY, VESTIBULE	AUTO ON/ OFF IN 20 MIN	NA	OCCUPANCY SENSOR BRINGS LIGHT TO 100%, LIGHT GOES TO 50% WHEN NO ONE	NOT REQUIRED TO BE CONTROLLED	OCCUPANCY SENSOR BRINGS LIGHT TO 100%, LIGHT GOES TO 0% WHEN NO ONE	NA	ON/DIM/OFF VIA MANUAL CONTROL	NA	NA	NOT REQUIRED
MECHANICAL, PLUMBING,	MANUAL ON/	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF	NOT REQUIRED TO	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
CONFERENCE ROOM	MANUAL ON/ OFF IN 20 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS	CONTROLLED BY OCCUPANCY SENSOR	SAME AS DURING NORMAL BUSINESS HOURS	CONTROLLED BY OCCUPANCY SENSOR				NOT REQUIRED
RECEPTION AREA	MANUAL ON/ OFF IN 20 MIN	75FC AT WORKPLANE	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS AND PHOTOSENSOR	CONTROLLED BY OCCUPANCY SENSOR	SAME AS DURING NORMAL BUSINESS HOURS	CONTROLLED BY OCCUPANCY SENSOR				NOT REQUIRED
OFFICE	MANUAL ON/ OFF IN 20 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, DIM VIA MANUAL CONTROLS	CONTROLLED BY OCCUPANCY SENSOR	SAME AS DURING NORMAL BUSINESS HOURS	CONTROLLED BY OCCUPANCY SENSOR				NOT REQUIRED
RESTROOMS	CEILING SENSOR AUTO ON/ OFF IN 20 MIN, WALL SENSOR MANUAL ON/OFF IN 20 MIN	NA	ON/OFF PER OCCUPANCY SENSOR, ON/OFF VIA MANUAL CONTROLS	NOT REQUIRED TO BE CONTROLLED	SAME AS DURING NORMAL BUSINESS HOURS	NA				NOT REQUIRED
EXTERIOR LIGHTING										
EXTERIOR LIGHTS ZONE SB3 TRASH ENCLOSURE	NA	NA	MANUAL ON/OFF USING LOCAL TIMECLOCK OVERRIDE SWITCH	NOT REQUIRED TO BE CONTROLLED	CONTROLLED BY ASTRONOMICAL TIME CLOCK, PROGRAMMED TO BE OFF AT ALL TIMES.	NA	ON/OFF VIA LOCAL MANUAL CONTROL		2 HR	NOT REQUIRED
EXTERIOR LIGHTS ZONE SB5 LOGO AND METAL PANELS	NA	NA		NOT REQUIRED TO BE CONTROLLED	CONTROLLED BY ASTRONOMICAL TIME CLOCK, ON DUSK TO LATE EVENING. OBTAIN SCHEDULE FROM OWNER.	NA	ON/OFF VIA LOCAL MANUAL CONTROL		2 HR	NOT REQUIRED
EXTERIOR LIGHTS ZONES SB1, SB6, SB8, SA1, SA3, SA5	NA	NA		NOT REQUIRED TO BE CONTROLLED	CONTROLLED BY ASTRONOMICAL TIME CLOCK, ON DUSK TO LATE EVENING. OBTAIN SCHEDULE FROM OWNER.	NA	ON/OFF VIA LOCAL MANUAL CONTROL		2 HR	NOT REQUIRED
EXTERIOR LIGHTS ZONES SB2, SB7, SB9, SA2, SA4, SA6	NA	NA		NOT REQUIRED TO BE CONTROLLED	CONTROLLED BY ASTRONOMICAL TIME CLOCK, ON DUSK TO DAWN	NA	ON/OFF VIA LOCAL MANUAL CONTROL		2 HR	NOT REQUIRED
NOTES:	1. THE INTENT OF THIS SCHEDU 2. THIS SCHEDULE IS NOT INTE	NDED TO DEFIN	IFY THE PROGRAMMING AND FUNCTION OF CO	NTROLS THAT MAY B	E LOCATED IN EACH SPACE TYPE.					
	3. FOR ACTUAL CONTROL DEVIC 4. ALL SETPOINTS AND TIME SC 5. ALL LIGHTING CONTROL DEVI	ES TO BE INST HEDULES TO B	ALLED IN EACH SPACE, REFER TO PLANS. E VERIFIED WITH OWNER PRIOR TO PROGRAM LIBRATED AND COMPLIANCE PERFORMANCE TO	IMING. ESTED PER SPECIFIC	ΑΠΟΝ SECTION 26 0800 ΡΑΒΑGΒΑΡΗ 3-2					







NUMBERED	SHEET	NOTES

- (E) EQUIPMENT, VAULT, OR UNDERGROUND LINES TO REMAIN. FIELD SURVEY EXACT LOCATION, IDENTIFY, AND PROTECT IN PLACE DURING CONSTRUCTION.
 (E) POWER FEEDER INTO BUILDING TO (E) PANEL 'H', DISCONNECT AND REMOVE PANEL 'H' TO
- TO (E) PANEL 'H'. DISCONNECT AND REMOVE. PANEL 'H' TO REMAIN AND BE RECONNECTED WITH A NEW FEEDER FROM (E) DISTRIBUTION PANEL 'DP3'. SEE NOTE 18.
- AND REMOVE (E) PANEL 'H' FEEDER RUNNING THROUGH BOX, BACK TO SOURCE AND LOAD.
- (4) (E) UNDERGROUND PANEL 'H' FEEDER TO BE REMOVED BETWEEN (E) DISTRIBUTION PANEL 'DP3' AND (E) PANEL 'H'.
- (5) (E) IN-GROUND POWER VAULT TO BE REMOVED. DISCONNECT AND REMOVE (E) POWER FEEDERS FOR (E) DISTRIBUTION PANEL 'DP3' AND (E) PANEL 'H', RUNNING THROUGH BOX.
- 6 (E) 208V FEEDER FROM TRANSFORMER TO PANEL 'DP3' TO REMAIN. FIELD SURVEY EXACT LOCATION, IDENTIFY, AND PROTECT IN PLACE DURING CONSTRUCTION.
- (7) PROVIDE AND INSTALL (N) TRANSFORMER FEEDER FROM PRIMARY SIDE OF (E) TRANSFORMER TO SPLICE POINT AT SOUTH SIDE OF WORK AREA (NOTE 10).
- 8 PROVIDE AND INSTALL (N) FLUSH IN-GROUND POWER VAULT (3'x5') WITH STEEL LID LABELED "POWER". COORDINATE EXACT LOCATION WITH NEW HARDSCAPE DESIGN AND ORIENT PARALLEL AND PERPENDICULAR TO NEW HARDSCAPE LINES AND FEATURES.
- 9 PROVIDE AND INSTALL NEW 4" UNDERGROUND SCHEDULE 40 PVC TRANSFORMER PRIMARY SIDE FEEDER -(3)#500 KCMIL + (1)#2G - THROUGH (N) HARDSCAPE AREA, FROM PRIMARY SIDE OF (E) TRANSFORMER TO SPLICE POINT AT SOUTH SIDE OF WORK AREA (NOTE 10). RECONNECT TRANSFORMER COMPLETE.
- (10) INTERCEPT (E) TRANSFORMER FEEDER FOR PANEL 'DP3 AT THIS PULLBOX AND SPLICE (E) 500 KCMIL CONDUCTORS FOR EXTENSION OF NEW AS SHOWN (SEE NOTE 9). UTILIZE LONG BARREL HIGH COMPRESSION BUT SPLICES AND 3M COLD SHRINK INSULATION FOR SPLICING OF EACH PHASE CONDUCTOR AND GROUND, FOR A COMPLETELY WATER-TIGHT SPLICE.
- (11) (E) UNDERGROUND ELECTRICAL FEEDERS TO REMAIN. FIELD SURVEY EXACT LOCATION, IDENTIFY, AND PROTECT IN PLACE DURING CONSTRUCTION.
- 12 INTERCEPT (E) TELECOM FEEDERS AT THIS PULLBOX AND SPLICE FOR EXTENSION OF NEW AS SHOWN, WITH COMPLETELY WATER-TIGHT FIBER AND COPPER SPLICE CASES IN (E) VAULT.
- (13) PROVIDE AND INSTALL (N) COPPER AND FIBER TELECOM FEEDERS TO REPLACE (E) LINES THROUGH (N) HARDSCAPE AREA, FROM TELECOM BOXES AT NORTH AND SOUTH SIDES OF WORK AREA.
- (15) (E) TELECOM FEEDERS TO BUILDING A TO REMAIN. FIELD SURVEY EXACT LOCATION, IDENTIFY, AND PROTECT IN PLACE DURING CONSTRUCTION.
 (10) (7) 5 (1)
- (16) (E) POWER WIRING TO REMAIN. FIELD SURVEY EXACT LOCATION, IDENTIFY, AND PROTECT IN PLACE DURING CONSTRUCTION.
- 17 PROVIDE AND INSTALL NEW UNDERGROUND FEEDER TO (N) TRANSFORMER, FED FROM (E) 480V SERVICE PANEL TO THE SOUTH.
- PROVIDE AND INSTALL NEW 3" UNDERGROUND SCHEDULE 40 PVC PANEL 'H' FEEDER - (4)#350 KCMIL + (1)#4G - THROUGH (N) HARDSCAPE AREA, FROM (E) DISTRIBUTION PANEL 'DP3' TO (E) PANEL 'H'. RECONNECT PANEL COMPLETE.
- (E) UNDERGROUND TELECOM FEEDERS TO BE REMOVED BETWEEN (E) PULL BOXES SHOWN. FIELD IDENTIFY EACH
- CONDUCTOR / CABLE, TAG, AND SPLICE (N) PER NOTE 13
- 20) LOW PROFILE CUSTOM TUBE STEEL POWER PEDESTAL. SEE

GENERAL SITE NOTES

ALL CONDUIT ROUTING SHOWN ON THIS PLAN IS DIAGRAMMATIC. CONTRACTOR TO FIELD VERIFY ALL (E) UNDERGROUND CONDITIONS IN THE AREA OF WORK, PRIOR TO DIGGING. MAINTAIN A MINIMUM LATERAL CLEARANCE FROM ALL NEW AND EXISTING TREES. REFER TO PLANTING PLAN L4.1 AND TREE PRESERVATION STANDARDS ON L4.1. INSTALL ALL (N) WORK TO BEST ACCOMMODATE (E) AND (N) OBSTRUCTIONS, INCLUDING BIO-RETENTION AREAS.



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CAFETERIA KITCHEN PLAN - POWER & SIGNAL SCALE: 1/8" 1'-0"

NUM	1BERED SHEET NOTES
1	PROVIDE TEMPORARY POWER SOURCE FOR COMPACTOR AN CARDBOARD BAILER DURING DEMOLITION AND CONSTRUC PROCESS.
2	MECHANICAL EQUIPMENT LOCATED ON ROOF. WEATHERPROOF OUTLET LOCATED ON ROOF. CONNECT TO
4	CHILLED WATER FILLING STATION.
5	FOR ALL ELECTRICAL / LIGHTING / LOW VOLTAGE ITEMS MOUNTED IN, ON, OR FROM THE HIGH CEILING AREA, PRO' MC CABLE (POWER) AND METALLIC FLEX CONDUIT (LOW VOLTAGE) UP SOUTH PERIMETER WALL FURRING AND INTO THROUGH CEILING CAVITY SPACE. REFER TO ARCHITECTUR SECTIONS FOR PROFILE OF LIMITED WALL AND CEILING TRANSITION SPACE. FOR RACEWAYS IN CEILING, MAINTAIL MINIMUM OF 1.5" CLEAR FROM THE BOTTOM OF ANY ROOF:
6	ELECTRIC ROLL UP DOOR (208, 1PH, 30A). PROVIDE AND INSTALL PUSH BUTTON CONTROLS WITH 'UP', 'DOWN' AND FUNCTIONS. WIRING/CONDUIT: (2) #8 + (1) #10G. IN 3/4
7	FOR ALL CLOCKS PROVIDE 120V CIRCUIT. AV2: PROVIDE 4-GANG HUBBELL AV BACKBOX #NSAV124M DOUBLE DUPLEX 120V OUTLET, DATA JACK, AND AV INPUT THRU CABLING ((2) HDMI, (1) 3.5mm AUDIO), INSET INTO COORDINATE LOCATION WITH ARCHITECT. CONTINUE 1-1/ CONDUIT FROM AV INPUTS TO PROJECTOR LOCATION.
(9) (10)	PROVIDE CIRCUIT C2-44/46 FOR FC-B1. ADDITIONALLY CO-LOCATE 120V OUTLET FOR CONDENSATE PUMP. PROVIDE RED CATEGORY 6A CABLE AND WP DATA JACK FO DISTRICT PROVIDED IP SECURITY CAMERA TO BE SURFACE
	GLAZING BELOW. COORDINATE EXACT ROUGH-IN LOCATIC WITH SECURITY CAMERA INSTALLER PRIOR TO ROUGH-IN. PROVIDE YELLOW CATEGORY 6A CABLE AND WP DATA JACK
	COORDINATE EXACT ROUGH-IN LOCATION WITH DISTRICT TO ROUGH-IN.
	OUTLET, DATA JACK, AND AV PASS THRU CABLING WHIPS, CONNECTION TO CEILING MOUNT PROJECTOR ASSEMBLY. PROJECTOR AND MOUNT BY OTHERS. PROJECTOR WEIGHT LESS THAN 20LB.
	AV3: PROVIDE FLUSH 2-GANG AV BACKBOX FOR MEDIA SWITCHING INPUTS WITH 3/4" C. TO PROJECTOR ASSEMBL
	'IDF-C', WALL MOUNTED, SWING-OUT STYLE; 3'H x 30"D (1 RACK FRAME).
	2/E-5.3.

E-B3.1







COPPER FEEDER SCHEDULE							
FEEDER	CONDUIT	CONDUCTORS					
10004	(1) 3"	(4)350 MCM & (1)#2/0 G.					
4003	(1) 3"	(3)500 MCM & (1)#2 G.					
4004	(1) 3.5"	(4)500 MCM & (1)#2 G.					
2254	(1) 3"	(4)#4/0 & (1)#4 G.					
1004	(1) 1.5"	(4)#2 & (1)#8 G.					
703	(1) 1"	(3)#4 & (1)#8 G.					
FEEDER TAG KEY							

NOTE: NOT ALL FEEDERS ON THIS SCHEDULE ARE NECESSARILY

GROUNDING ELECTRODE SCHEDULE

G1	(1)#4/0 CU TO GROUND RODS
G2	(1)#4/0 CU UFER GROUND (MIN. 30 LF IN PAD)

INVERTER UNIT SPECIFICATIONS

- ALL EMERGENCY SOURCE CIRCUITS SHALL BE INSTALLED IN SEPARATE RACEWAYS (FROM NORMAL POWER), PER 2014 NEC 700.10(B), OR APPLICABLE CODE AT THE TIME OF PERMITTING.
- REFER ALSO TO SPECIFICATIONS SECTION 265101. UNITS SHALL BE MYERS POWER PRODUCTS
- ILLUMINATOR SERIES EM OR APPROVED EQUAL: INVA: 1-EM-1-S-BA2004-M-Z-2YW
- INVB: 1-EM-1-S-BA2003-M-Z-2YW INVW: 1-EM-1-S-BA2003-M-Z-2YW 3. UNITS SHALL BE 120V 1PH 2W INPUT, 120V OUTPUT WITH 20AMP OUTPUT CIRCUIT BREAKER, RATED AS FOLLOWS: INVA: 1.0KVA
- INVB: 1.0KVA INVW: 1.0KVA
- 4. INPUT SHALL BE EQUIPPED WITH ANSI 62.41 SURGE PROTECTION AND 1HZ NOMINAL SYNCHRONIZING SLEW RATE.
- 5. OUTPUT VOLTAGE STATIC REGULATION SHALL BE +/- 5% FOR 100% RESISTIVE LOAD.
- 6. OUTPUT DISTORTION SHALL BE 5% THD MAXIMUM.
- 7. OVERLOAD RATING: 150% MOMENTARY; 120% FOR 5 MINUTES.
- 8. TRANSFER TIME: NO BREAK
- 9. BATTERY SHALL BE SEALED LEAD CALCIUM, 10 YEAR LIFE, 90 MINUTE RUN TIME, WITH AUTO-DISCONNECT FOR LOW BATTERY VOLTAGE.
- 10. PROVIDE RS232 PORT FOR EXTERNAL COMMUNICATIONS.
- 11. INVERTER SHALL BE PWM TYPE.
- 12. PROVIDE MAINTENANCE BYPASS.
- 13. PROVIDE IN NEMA 1 ENCLOSURE, FRONT ACCESS ONLY.
- 14. PROVIDE FACTORY STARTUP AND TEST OF UNIT TO THE SATISFACTION OF BUILDING INSPECTION AUTHORITIES AND WITH MAXIMUM 4 HOURS OF PERSONNEL TRAINING FOLLOWING STARTUP.
- 15. AUTO SELF TESTING.
- 16. PROVIDE OUTPUT CIRCUIT BREAKERS RATED 20AMPS EACH WITH DEDICATED CIRCUITS FOR EACH OF THE EMERGENCY LIGHTING LOADS: INVA: 4 OUTPUT BREAKERS
 - INVB: 3 OUTPUT BREAKERS INVW: 3 OUTPUT BREAKERS
- 17. SEISMIC QUALIFIED.
- 18. SUBMIT FOR REVIEW AND APPROVAL.

PANEL C1 PANEL A2	PANEL A
VOLTS:120 / 208MAIN BRKR:MAIN LUG ONLY(SECTION 1 - RIGHT HAND SIDE)MAIN BRKR:MLOPHASE:3 PHFEEDER:SEE SINGLE LINEFEEDER:3 PHFEEDER:SEE SINGLE LINEWIRE:4 WCONDUIT:SEE SINGLE LINEWIRE:4 WCONDUIT:SEE SINGLE LINEBUSSING:100AMOUNTED:SUPFACEBUSSING:225AMOUNTED:SUPFACE	VOLTS: 120 / 208 MAIN BRKR: MAIN LUG ONLY PHASE: 3 PH FEEDER: SEE SINGLE LINE WIRE: 4 W CONDUIT: SEE SINGLE LINE BUISSINC: 100.0 MOUNTED: SUIDEACE
BOSSING: HOA SURFACE MOUNTED: SURFACE MOUNTED: SURFACE	BOSSING: 100A SURFACE POLES: 42P AIC RATING: 22 KAIC LOAD DESCRIPTION TYPE A B C BRKR. A B C TYPE A B C BRKR. A B C TYPE Load DESCRIPTION LIGHTING ROOMS 100 - 104 L 0.54 20/1 1 2 20/1 0.98 L LIGHTING ROOMS 105 - 114
LIGHTING ROOM 104 SERVERY L 3 1.29 20/1 3 4 20/1 3 0.55 L LIGHTING ROOMS 105 - 107, 110 - 116 LIGHTING ROOM 104 SERVERY L 3 1.29 20/1 3 4 20/1 3 0.55 L LIGHTING ROOMS 105 - 107, 110 - 116 LIGHTING ROOMS 108 109 L 0.98 20/1 5 6 20/1 5 6 20/1 3 4 20/1 8 8 6 20/1 3 4 20/1 8 8 9 0.90 20/1 3 4 20/1 8 8 9 9 20/1 3 4 20/1 8 8 9 9 10	LIGHTING ROOMS 115 - 125 L 1.14 20/1 3 4 20/1 0.93 L LIGHTING ROOMS 126 - 134 LIGHTING ROOMS 135 - 143 L 0.95 20/1 5 6 20/1 1.18 L LIGHTING ROOMS 144 - 147, EXTER PARKING LOT LIGHTING L 1.42 20/1 7 8 20/1 5 6 20/1 5
SPARE 20/1 9 10 20/1 9 10 20/1 9 10 20/1 9 10 SPARE SPARE 20/1 11 12 20/1 11 12 20/1 11 12 20/1 SPARE REC - STAFF WORK A136 R 1.00 20/1 11 12 20/1 SPARE SPARE 20/1 13 14 SPARE SPARE SPARE 20/1 13 14 SPARE	LIGHTING CONTROLS L 0.10 20/1 9 10 20/1 SPARE S
SPACE IS	SPARE 20/1 13 16 SPACE SPARE 20/1 17 18 SPACE SPACE 19 20 SPACE SPACE 21 22 SPACE
SPACE M <th>SPACE 23 24 SPACE SPACE 25 26 SPACE SPACE 27 28 SPACE</th>	SPACE 23 24 SPACE SPACE 25 26 SPACE SPACE 27 28 SPACE
SPACE 29 30 90 SPACE REC-COUNSELORA144 R 0.90 20/1 29 30 SPACE SPACE SPACE 31 32 32 SPACE SPACE REC-APOFFICE A143 R 0.90 20/1 31 32 SPACE SPACE SPACE 33 34 SPACE SPACE R 0.90 20/1 33 34 SPACE SPACE SPACE SPACE SPACE SPACE R 0.90 20/1 33 34 SPACE SPACE	SPACE 29 30 SPACE SPACE 31 32 SPACE SPACE 33 34 SPACE
SPACE R 0.54 20/1 35 36 SPACE SPACE SPACE 37 38 36 SPACE M 0.50 20/1 35 36 SPACE SPACE SPACE 37 38 36 SPACE M 0.50 20/1 37 38 SPACE SPACE SPACE 39 40 40 SPACE	SPACE SPACE 35 36 SPACE SPACE 37 38 SPACE SPACE 39 40 SPACE SPACE 41 42 SPACE
2.31 1.29 0.98 1.29 0.55 1.51 THIS SECTION PHASE A: 6.21 KVA DEMAND LOAD SUMMARY CONN. DEMAND KVA DEMAND KVA DEMAND KVA	1.96 1.24 0.95 0.98 0.93 1.18 DEMAND LOAD SUMMARY CONN. DEMAND DEMAND KVA
KVA FACTOR KVA FACTOR THIS SECTION PHASE C: 4.24 KVA TYPE "M": NON-CONTINUOUS / MISC. LOADS 0.00 100% 0.00 100% 0.00 100% 1.35 100% 1.35 100% 1.35 THIS SECTION PHASE C: 4.24 KVA TYPE "M": NON-CONTINUOUS / MISC. LOADS 0.00 100% 0.00 100% 1.35 100% 1.35 THIS SECTION: 51.75 MAX AMPS / PHA TYPE "L": LIGHTING / CONTINUOUS LOADS 7.93 125% 9.91 PHASE B: 1.84 KVA TYPE "L": LIGHTING / CONTINUOUS LOADS 0.00 10.00 PANEL TOTAL PHASE A: 10.89 KVA	KVA FACTOR SE TYPE "M": NON-CONTINUOUS / MISC. LOADS 0.00 100% 0.00 PHASE A: 2.94 KVA TYPE "L": LIGHTING / CONTINUOUS LOADS 7.24 125% 9.05 PHASE B: 2.17 KVA TYPE "P": RECEPTACLES (EIRST 10K)(A) 0.00 100% 0.00 PHASE C: 2.13 KVA
TYPE "R": RECEPTACLES (OVER 10KVA) 0.00 50% 0.00 TYPE "R": RECEPTACLES (OVER 10KVA) 0.00 50% 0.00 TYPE "R": RECEPTACLES (OVER 10KVA) 0.00 100% 0.00 TYPE "R": RECEPTACLES (OVER 10KVA) 0.00 100% 0.00 TYPE "R": RECEPTACLES (OVER 10KVA) 4.24 50% 2.12 PANEL TOTAL PHASE B: 11.70 KVA TYPE "R": HVAC / MECHANICAL LOADS 0.00 100% 0.00 100% 0.00 10.47 KVA TOTALS: 7.93 9.91 9.91 TOTALS: 15.9 13.47 13.47 TOTAL: 97.46 MAX AMPS / PHA	TYPE "R": RECEPTACLES (OVER 10KVA) 0.00 50% 0.00 TYPE "R": RECEPTACLES (OVER 10KVA) 0.00 50% 0.00 TYPE "H": HVAC / MECHANICAL LOADS 0.00 100% 0.00 TOTALS: 7.24 9.05 9.05
VOLTS: 120 / 208 MAIN SRKR: 225A MCB PHASE: 3 PH FEEDER: SEE SINGLE LINE PHASE: 3 PH FEEDER: SEE SINGLE LINE WIRE: 4 W CONDUIT: SEE SINGLE LINE WIRE: 4 W	VOLTS: 120 / 208 V (SECTION 1 - RIGHT HAND SIDE) MAIN BRKR: MLO PHASE: 3 PH FEEDER: SEE SINGLE LINE
WIRE: 4 W 4 W 4 W 4 W 4 W 4 W 6 C MDEN: 6 C MOUNTED: 6 C MDEN: 6 C MOUNTED: 6 C MCEN: 6 C MCEN: <td>WIRE: 4 W CONDUIT: SEE SINGLE LINE BUSSING: 225A MOUNTED: SURFACE POLES: 42P AIC RATING: 22K LOAD DESCRIPTION TYPE A B C BKP A B C TYPE</td>	WIRE: 4 W CONDUIT: SEE SINGLE LINE BUSSING: 225A MOUNTED: SURFACE POLES: 42P AIC RATING: 22K LOAD DESCRIPTION TYPE A B C BKP A B C TYPE
REC-OFFICE B105 R 0.90 20/1 1 2 20/1 0.60 L FIRE ALARM 'FACP-B' SPARE SPARE 20/1 43 44 A </th <th>REC - RECEPTION R 0.90 20/1 1 2 20/1 0.72 R REC - AP SEC REC - NURSE R 0.90 0.90 20/1 3 4 20/1 0.72 R REC - AP SEC</th>	REC - RECEPTION R 0.90 20/1 1 2 20/1 0.72 R REC - AP SEC REC - NURSE R 0.90 0.90 20/1 3 4 20/1 0.72 R REC - AP SEC
REC - DINING R 1.08 - 20/1 7 8 - H REC - DINING R 1.08 0.10 9 10 6.03 10 9 10 <th>REC - NURSE / FILES R 1.08 20/1 7 8 20/1 0.18 R REC - CUSTODIAN / RESTRM REC - CORRIDORS R 1.08 20/1 9 10 20/1 SPARE SPARE REC - EXTERIOR R 1.08 20/1 11 12 20/1 0.85 M LARGE CONF AV PRESENTATION</th>	REC - NURSE / FILES R 1.08 20/1 7 8 20/1 0.18 R REC - CUSTODIAN / RESTRM REC - CORRIDORS R 1.08 20/1 9 10 20/1 SPARE SPARE REC - EXTERIOR R 1.08 20/1 11 12 20/1 0.85 M LARGE CONF AV PRESENTATION
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	REC - SRO A102 R 0.90 20/1 13 14 20/1 0.85 M STAFF LOUNGE AV PRESENTATIO REC - DATA A103 R 0.90 20/1 15 16 20/1 0.90 R REC - MATH A120 R REC - RESTROOMS NURSE R 0.36 20/1 17 18 20/1 0.90 R REC - PSYCH 123 REC - REGISTRATION R 0.90 20/1 19 20 20/1 0.36 D 0.90 R REC - PSYCH 123
REC-SERVERY REGISTERS R 0.72 201 21 22 50/2 4.80 H Ac-3, AC-4 REC-SERVERY REGISTERS R 0.72 201 23 24 H Ac-3, AC-4 SPACE	REC - NECOS TRATION R 0.30 20/1 13 20 20/1 0.30 R REC - NALE RM REC - INT TEACHER R 0.90 20/1 21 22 20/1 0.50 R REC - STAFF LOUNGE REC - PRIN SEC R 0.90 20/1 23 24 20/1 0.50 R REC - STAFF LOUNGE REC - PRINCIPAL R 1.08 20/1 25 26 20/1 SPARE
REC - RESTROOM - EF-4 R 0.40 20/1 27 28 30/3 2.00 H MAU-1, MAU-2 SPACE	REC - CONFERENCE RM R 0.72 20/1 27 28 20/1 20 SPARE REC - IDF 'A' L 1.00 20/1 29 30 20/1 50/1 SPARE REC - MFT A119 R 0.90 20/1 31 32 20/1 50/1 SPARE
M 1.20 33 34 20/3 40 H KEF-1, KEF-2 M I <th< th=""><th>REC - MAIL RM R 0.72 20/1 33 34 20/1 SPARE REC - STAFF LOUNGE R 0.36 20/1 35 36 20/1 SPARE REC - STAFF LOUNGE R 0.36 20/1 37 38 SPARE REC - STAFF LOUNGE R 0.36 20/1 37 38 SPA C E</th></th<>	REC - MAIL RM R 0.72 20/1 33 34 20/1 SPARE REC - STAFF LOUNGE R 0.36 20/1 35 36 20/1 SPARE REC - STAFF LOUNGE R 0.36 20/1 37 38 SPARE REC - STAFF LOUNGE R 0.36 20/1 37 38 SPA C E
ROLL UP DOOR 30/2 41 42 15/2 0.22 H PC-B1 CAFETERIA PROJECTOR M 0.50 20/1 43 44 15/2 0.22 H PC-B1 SPACE Image: SPAC	REC-PSYCH 129 R 0.90 20/1 40 C SPACE 6.12 5.40 5.50 2.11 2.30 2.65 THIS SECTION PHASE A: 8.23 KVA
CAFETERIA AV PRESENTATION R 0.36 20/1 47 48 SPACE SPACE CONN. DEMAND LOAD SUMMARY CONN. DEMAND KVA THIS SECTION PHASE B: 6.56 KVA SPACE Z 49 50 SPACE SPACE SPACE THIS SECTION PHASE B: 6.23 KVA SPACE E 51 52 SPACE SPACE 0.00 100% 0.00 THIS SECTION PHASE B: 6.23 KVA	SE DEMAND LOAD SUMMARY CONN. KVA DEMAND FACTOR DEMAND KVA THIS SECTION PHASE B: THIS SECTION PHASE B: THIS SECTION PHASE C: THIS SECTION: 7.70 KVA SE TYPE "M": NON-CONTINUOUS / MISC. LOADS 1.70 100% 1.70 THIS SECTION PHASE B: THIS SECTION: 7.70 KVA
SPACE 6.82 6.40 6.50 Image: Construction of the state of the sta	TYPE "L": LIGHTING / CONTINUOUS LOADS 1.00 125% 1.25 TYPE "R": RECEPTACLES (FIRST 10KVA) 10.00 100% 10.00 PANEL TOTAL PHASE A: 24.45 KVA TYPE "R": RECEPTACLES (OVER 10KVA) 11.38 50% 5.69 PANEL TOTAL PHASE B: 22.87 KVA TYPE "H": HVAC (MECHANICAL LOADS 0.00 100% 0.00 PANEL TOTAL PHASE C: 23.59 KVA
DEMAND LOAD SUMMARY KVA FACTOR DEMAND KVA TYPE "M": NON-CONTINUOUS / MISC. LOADS 8.20 100% 8.20 TYPE "L": LIGHTING / CONTINUOUS LOADS 0.60 125% 0.75 TYPE "L": LIGHTING / CONTINUOUS LOADS 0.60 125% 0.75	TOTALS: 24.08 18.64 TOTAL: 203.76 MAX AMPS / PH
TYPE "R": RECEPTACLES (FIRST 10KVA) 10.00	VOLTS: 120 / 208 V (SECTION 2 - LEFT HAND SIDE) MAIN BRKR: SUB FED, FEED THRU LUGS
PHASE: 3 PH WIRE: 4 W BUSSING: 100A POLES: 42P	PHASE: 3 PH FEEDER: WIRE: 4 W CONDUIT: BUSSING: 225A MOUNTED: SURFACE POLES: 42P AIC RATING: 22K
LOAD DESCRIPTION TYPE A B C BRKR. CKT. BRKR. A B C TYPE LOAD DESCRIPTION REC - EXTERIOR RECEPTACLES R 0.72 - 20/1 1 2 20/1 0.98 - L LIGHTS REC - STUDENT STORE R 0.54 0.54 20/1 3 4 20/1 1 2 0.93 L LIGHTS	LOAD DESCRIPTION TYPE A B C BRKR. CKT. BRKR. A B C TYPE LOAD DESCRIPTION SPARE SPARE Image: Control of the state of the
REC - STUDENT STORE R 0.36 20/1 5 6 20/1 1.18 L LIGHTS REC - OFFICE R 0.72 20/1 7 8 20/1 5 6 20/1 5 6 20/1 1.18 L LIGHTS REC - OFFICE R 0.72 20/1 7 8 20/1 5 6 20/1 5 5 6 20/1 5 6 20/1 10 10 20/1 5 6 20/1 10 20/1 5 6 20/1 10 20/1 5 6 20/1 10 20/1 5 6 20/1 10 20/1 5 6 20/1 10 20/1 10 20/1 10 20/1 10 20/1 10 20/1 10 20/1 10 20/1 10 20/1 10 20/1 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 </th <th>SPARE SPARE 20/1 47 48 5.86 M SPARE 20/1 49 50 4.99 M SPARE 20/1 51 52 65/3 4.99 M</th>	SPARE SPARE 20/1 47 48 5.86 M SPARE 20/1 49 50 4.99 M SPARE 20/1 51 52 65/3 4.99 M
REC-30FPET ROOM & TOILET 100 R 0.94 20/1 11 12 20/1 SPARE REC-ASB R 0.90 20/1 13 14 20/1 SPARE REC-ASB R 0.90 20/1 15 16 20/1 SPARE REC-OFFICE R 0.72 20/1 17 18 20/1 SPARE	SPARE 20/1 53 54 4.99 M SPACE SPACE 55 56 15/2 0.57 M SPACE 57 58 15/2 0.57 M SPACE 59 60 0.57 0.84 M
REC - CAREER / EVENT CENTER R 0.72 20/1 19 20 20/1 SPARE REC - CAREER / EVENT CENTER R 0.54 20/1 21 22 20/1 0.85 M CAREER AV PROJECTOR AND RE REC - CAREER / EVENT CENTER R 0.54 20/1 23 24 20/1 0.85 M ASB AV PROJECTOR AND REC	3 SPACE 61 62 15/2 0.84 M FAN COILS FC A100-A116 SPACE 63 64 15/2 0.15 M SPACE 65 66 15/2 0.15 M
REC - CAREER / EVENT CENTER R 0.54 20/1 25 26 SPACE CLOCK CIRCUIT L 0.20 20/1 27 28 SPACE SPARE 20/1 29 30 SPACE SPACE SPACE	SPACE 67 68 3.60 M SPACE 69 70 45/3 3.60 M SPACE 71 72 3.60 M
SPARE 20/1 31 32 SPACE SPARE 20/1 33 34 SPACE SPARE 20/1 35 36 SPACE M 5.00 37 38 SPACE	SPACE 73 74 20/1 0.36 R ROOF RECEPTACLES SPACE 75 76 SPACE SPACE SPACE SPACE 77 78 SPACE SPACE
M 0.00 0.1 0.0 0.1 0.0 0.0 PANEL 'B' M 5.00 90/3 39 40 SPACE M 5.00 41 42 SPACE 8.60 7.54 7.16 0.98 1.78 2.03	SPACE 81 82 SPACE SPACE 0.00 0.00 0.00 16.22 15.17 15.44
DEMAND LOAD SUMMARY CONN. DEMAND KVA DEMAND KVA	DEMAND LOAD SUMMARY CONN. DEMAND DEMAND KVA THIS SECTION PHASE A: 16.22 KVA DEMAND LOAD SUMMARY CONN. DEMAND FACTOR DEMAND KVA THIS SECTION PHASE B: 15.17 KVA
Image: Problem in the image: image	TYPE "M": NON-CONTINUOUS / MISC. LOADS 46.47 THIS SECTION: 135.18 MAX AMPS / PI TYPE "L": LIGHTING / CONTINUOUS LOADS 0.00 125% 0.00 125% 0.00 TYPE "R": RECEPTACLES (FIRST 10KVA) 0.36 100% 0.36 0.00 125% 0.00 TYPE "R": RECEPTACLES (FIRST 10KVA) 0.36 100% 0.36 0.00 0.00
TYPE "H": HVAC / MECHANICAL LOADS 0.00 100% 0.00 TOTALS: 28.09 28.91	HASE TYPE "H": HVAC / MECHANICAL LOADS 0.00 100% 0.00 TOTALS: 46.83 46.83 46.83 46.83 46.83

LIBERTY HS ADMIN & STUDENT COMMONS - 21901

ADDENDUM 03

LIBERTY UNION HIGH SCHOOL DISTRICT PREQUALIFIED CONTRACTORS AS OF DECEMBER 23, 2020 VALID THROUGH DECEMBER 31, 2021

*This list is subject to change based on 11/20/20 applications that are still under review

Contractor

Type of License

3D Datacom	B, C7, C10
Airteks	C20
ALB	А, В
Alessandro Electric	C7, C10
Alten	А, В
American Air Conditioning, Plumbing, Heating	B, C4, C20, C36, C38, C43
American Plumbing	B, C4, C36
AMS Heating	C4, C20, C36, C43
Anaya Construction	В
Arntz	А, В
Asbestos Management Group (AMG)	A, B, C2, C21, C22
B&H Electric	C10
Bay Cities Fire Protection	B, C16
Bay City Mechanical	C4, C20, C36, C43
Beals Martin	А, В
Bel Aire Mechanical	B, C4, C10, C20, C36, C38
Bell Products	A, B, C4, C20, C36, C43
Best Contracting	A, B, C17, C39, C43
Bobo Construction	A, B, C8, C20, C36, C43
Bockmon & Woody Electric Co., Inc.	C10
Bothman	A, B, C8, C27
Bowen Engineering & Environmental	A, B, C10, C21, C22, C29, C33
Cal Pacific Systems	A, B, C4, C10, C20, C36
Charles Pankow Builders	В
Collins Electrical	A, B, C10, C31
Con J Franke	C10
Consolidated Engineering	A
CWS Construction Group	А, В
D.A. Bender	C36
DDK Mechanical	B, C20, C36, C43
DecoTech Systems	B, C7, C10
Del Monte	C10
Demolition Services and Grading	A, B, C12, C21
Diede	A, B, C8, C15, C27, C39, C61
Digital Networks Group	C7, C10
Dinelli	C36
Div 15 Tech, Inc.	В, С20
Diversified Power Corp	C10
DL Falk	В
Dowdle	A, B, C4, C20, C36
Du-Mor Fire Systems	C16
EF Brett	А, В
F&H	А, В
Fertado Heating	C20, C43

Contractor

Type of License

GCCI	В
GP Mechanical	C20, C43
Granite Rock Company	А, В
Hometown Construction	В, С20, С36
Kerex Engineering	A
KS Plumbing	C36
Lloyd F. McKinney	C7, C10
Marquee Fire Protection	C16, C41A
Matrix	B, C4, C10, C20, C36, C38, C43
McGuire & Hester	A, B, C21, C27, C31
McMillian Data Communications	C10
Meehlies	В
MK Pipelines, Inc.	А, В,
Pacific Coast General Engineering	A
Pacific Metro Electric	B, C10
Pacific Power & Systems	C7, C10
Paschke Electric	C10
PCD	C7, C10
Peterson Mechanical	B,C20,C16,C36,C38,C42,C43,C4,C34
Point One Electrical Systems	B, C7, C10
Presidential Fire Protection	C16
Prime Mechanical	B, C4, C20, C36, C38
Quality Sound	C7, C10
Red Top Electric	B, C7, C10
Rodan	A, B, C21
Saboo	A, B, C10, C20
Sausal Corp	В
Sebastian Corp.	A, B, C7, C10
Smith and Sons Electric	C10
Southern Bleacher	A
Sturdiesteel	A
SW Allen	A, B, C39, ASB
Teichert Construction	A, B, C10, C22, C27
Trahan Mechanical	C20, C43
Vanden Bos Electric	B, C7, C10
WA Thomas	А, В
Walker Telecomm	В ,С7, С10
W.C. Maloney	A, C21
Zapein Electric	C10, C38
Zovich & Sons	A, B, C8