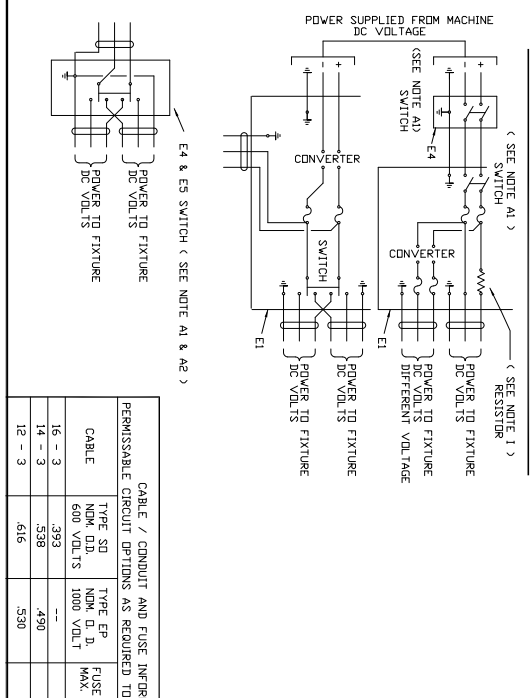
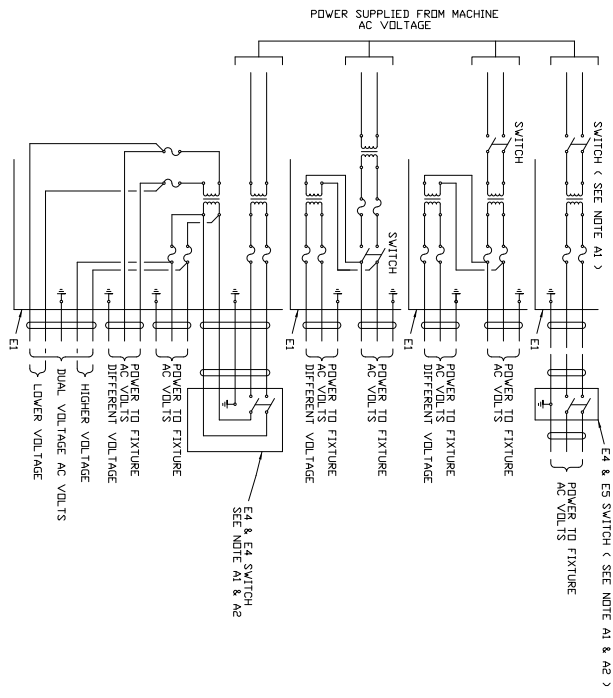
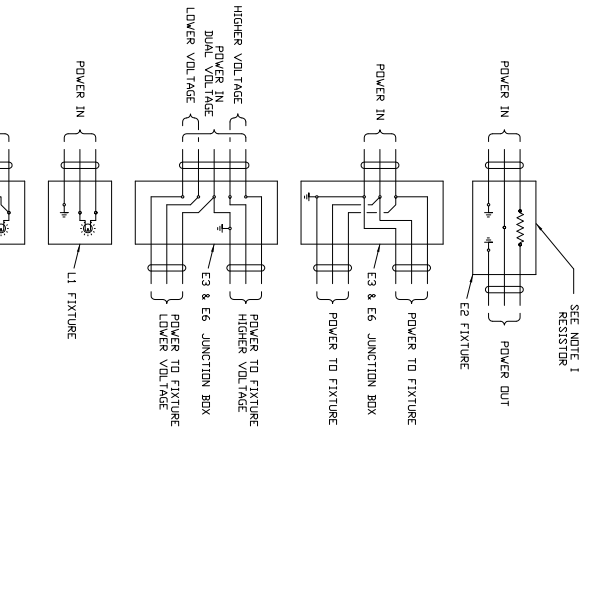


NOTES:
 A. SEPARATE 2-POLE SWITCH SHALL BE PROVIDED TO DE-ENERGIZE POWER CONDUCTORS FOR LUMINAIRES.
 A1. OPTIONAL SWITCH LOCATIONS CAN BE USED ON ANY CIRCUIT.
 A2. SWITCH WIRING APPLIES TO AC OR DC VOLTAGE.
 B. POWER CONDUCTORS SHALL BE PROTECTED BY A FUSE OR EQUIVALENT. SEE TABLE FOR FUSE RATINGS.
 C. SEE PACKING GLAND TABLE FOR CABLE RANGE. CONDUIT HOSE SHALL BE FLAME RESISTANT WITH MIN. WALL OF 3/16" AS PER 300FR PART 18.39. CONDUIT HOSE SIZE: AS REQUIRED TO MATCH CABLE AND PACKING GLAND TUBE SIZE.
 D. FOR MAXIMUM NUMBER OF LIGHT FIXTURES TO BE USED IN ANY ONE RUN OF CABLE.
 E. SEE CABLE RUN TABLE FOR ANY FLAME RESISTANT OR ENCLOSED IN APPROVED CONDUIT HOSE.
 F. EACH FIXTURE REQUIRES GROUNDING THROUGH CABLE.
 G. MAXIMUM NUMBER OF LIGHT FIXTURES PER CABLE RUN CANNOT EXCEED CABLE AMPERAGE.
 H. ITEM E1 POWER SUPPLY OUTPUT MUST BE CONSISTANT WITH ITEM L1 LIGHT FIXTURE.
 I. INPUT TO INSURE PROPER LAMP VOLTAGE IN ACCORDANCE WITH THE CABLE RUN TABLE.
 J. WITH CABLE RUN TABLE.
 K. ALL PACKING GLANDS MUST BE PACKED IN ACCORDANCE WITH 300FR PART 18.
 L. ALL UNUSED GLAND ENTRANCES MUST BE PLUGGED AND TACK WELDED IN PLACE.

MCI CODE FOR ALL LED LAMPS	MCI CODE FOR ALL LED LAMPS	LAMP DRIVER	LENS
MANUFACTURE CODE	LAMP TYPE	WATTAGE PER LED	FOCUS
MCELED1231045	LED	12	310
			45



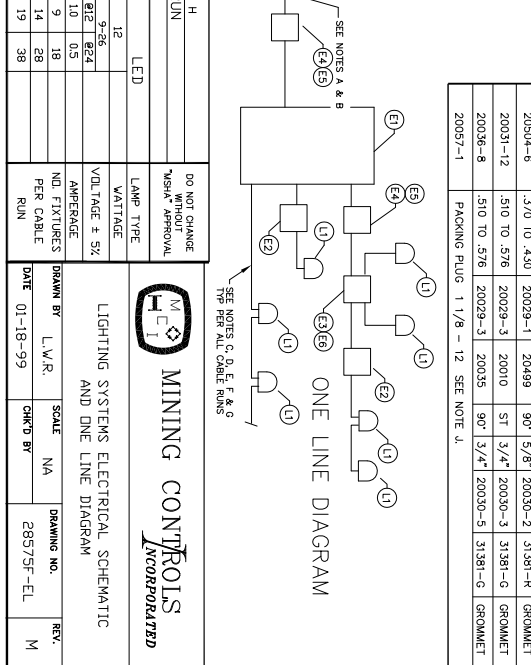
ITEM	DESCRIPTION	MODEL NO.	CERTIFICATION NUMBERS	MAX. CABLE SYSTEM RANGE	QTY.
E1	POWER SUPPLY WITH SWITCH	20653	X/P 2454-1	645	Q.P.T.
E1	POWER SUPPLY NO SWITCH	20799	X/P 2504-0	645	Q.P.T.
E2	RESISTOR ENCL.	20765	X/P 2469-0	645	Q.P.T.
E3	CONNECTION BOX	20630-4 ALUM. 20630-5 BRASS	X/P 2456-0	.710	Q.P.T.
E3	CONNECTION BOX	20630-6 DUCTILE 20630-24 ALUM. 20630-28 BRASS	X/P 2456-2	.710	Q.P.T.
E4	SWITCH BOX	27434GB1-H1 20630-1 ALUM. 20630-2 BRASS	X/P 3844-1 X/P 2456-0	.710 1.500	Q.P.T.
E5	EXISTING SWITCH OR APPROVED XP SWITCH ENCLOSURE	20630-21 ALUM. 20630-22 BRASS 27434GB1-H2	X/P 2456-2 X/P 3844-1	.710 1.500	Q.P.T.
E6	EXISTING JUNCTION BOX OR APPROVED XP JUNCTION BOX				Q.P.T.



CABLE / CONDUIT AND FUSE INFORMATION	MAXIMUM NUMBER OF FIXTURES PER CABLE RUN											
	INCANDESCENT				FLUORESCENT				LED			
TYPE SD NIM. D.D.	150	100	100	75	75	50	15	18	23	25	26	12
TYPE EP NIM. E.I. D.	120	60	12	120	28	12	120	120	120	120	120	812
FUSE RATING AVG. AMPS	125	83	166	8.33	62	8.67	4.16	21	25	28	32	35
CONDUIT SIZE	8	13	6	1	17	3	2	35	30	26	23	21
CAP. (AVG.)	17	19	9	1	26	5	3	33	45	40	35	32
AMP.	26	35	12	2	35	7	4	71	60	53	46	42
	13	17	8	1	35	3	3	45	33	28	25	21
	17	19	9	1	26	5	3	33	45	40	35	32
	26	35	12	2	35	7	4	71	60	53	46	42
	13	17	8	1	35	3	3	45	33	28	25	21
	17	19	9	1	26	5	3	33	45	40	35	32
	26	35	12	2	35	7	4	71	60	53	46	42

LIGHT FIXTURES - ITEM L1 APPROVED LAMP / MODEL CERTIFICATION	MATERIAL	WATTAGE	TYPE	BULB TYPE	VOLTAGE	APPROVED LAMPS		CERTIFICATION NO.	MAX. CABLE SYSTEM QTY.
						DUAL PACKING GLANDS	RANGE		
21322-A ALUM.	150	INC	A-23	125 / 130	X/P 2594-0 -1				1 TO 20
21322-B BRASS					X/P 2594-0 -2				
21322-D DUCTILE					X/P 2594-0 -2				
24000-A ALUM.	100	OH FROST	DC		X/P 3118-0				
24000-B BRASS	100	OH CLEAR			X/P 3118-0				
27434-A ALUM.	15	FL	EL		X/P 3843-0				
27434-B BRASS	15	FL	EL		X/P 3843-0				
27434-LP	20	FL	EL / SIS		X/P 3843-0-1-2-3				
27434-LP	20	FL	EL / SIS		X/P 3843-2-3				
27434-LP	23	FL	EL / SIS		X/P 3843-2-3				
27434-LP	23	FL	EL / SIS		X/P 3843-2-3				
27434-LP	25	FL	SIS		X/P 3843-0-1-2-3				
27434-LP	25	FL	SIS		X/P 3843-2-3				
27434-LP	28	FL	FL-1 2BW/4P		X/P 3843-2				
27434-LP	28	FL	FL-1 2BW/4P		X/P 3843-2				
20043-A ALUM.	150	INC	PAR-36		X/P 2372-0				
20043-B BRASS	150	INC	PAR-36		X/P 2372-0				
20043-D DUCTILE	100	INC	PAR-36		X/P 2372-0				
20061-A ALUM.	150	INC	PAR-46		X/P 2372-1				
20061-B BRASS	100	INC	PAR-46		X/P 2372-1				
30000-A ALUM.	50	OH	WR-16		X/P 3493-0 -1				
30000-B BRASS	50	OH	WR-16		X/P 3493-0 -1				
30000-A ALUM.	50 / 75	OH	WR-16		X/P 3493-2				
30000-B BRASS		OH	WR-16		X/P 3493-2				
MCS09P	50	OH	WR-16		X/P 3938-0				
	20/25/50/65/75	OH	WR-16		X/P 3938-1				
(3) 4 WATT	LED	LED	WR-16		X/P 3938-0 -1				
200-D	150	INC	PAR-36		X/P 2859-0				

PACKING GLAND INFORMATION	PACKING PART NO.	CABLE RANGE	PACKING NUT	PACKING TUBE P/N	RUSHING TYPE O.O.	INNER DIAMETER	PACKING P/N	SIZE
20950-1	20950-1	20498	ST 5/8"	20030	92204	1/4"		
20950-1	20950-1	20499	ST 5/8"	20030-1	92204	1/4"		
20950-1	20950-1	20950-1	ST 3/4"	20030-1	92204	1/4"		
20950-2	20950-2	20950-2	ST 5/8"	20030-2	92204	1/4"		
20950-2	20950-2	20950-2	ST 5/8"	20030-2	92204	1/4"		
20950-3	20950-3	20950-3	ST 5/8"	20030-3	92204	1/4"		
20950-3	20950-3	20950-3	ST 5/8"	20030-3	92204	1/4"		
20950-3	20950-3	20950-3	ST 5/8"	20030-3	92204	1/4"		
20950-4	20950-4	20950-4	ST 5/8"	20030-4	92204	1/4"		
20950-4	20950-4	20950-4	ST 5/8"	20030-4	92204	1/4"		
20950-4	20950-4	20950-4	ST 5/8"	20030-4	92204	1/4"		
20950-5	20950-5	20950-5	ST 5/8"	20030-5	92204	1/4"		
20950-5	20950-5	20950-5	ST 5/8"	20030-5	92204	1/4"		
20950-5	20950-5	20950-5	ST 5/8"	20030-5	92204	1/4"		
20950-6	20950-6	20950-6	ST 5/8"	20030-6	92204	1/4"		
20950-6	20950-6	20950-6	ST 5/8"	20030-6	92204	1/4"		
20950-6	20950-6	20950-6	ST 5/8"	20030-6	92204	1/4"		
20950-7	20950-7	20950-7	ST 5/8"	20030-7	92204	1/4"		
20950-7	20950-7	20950-7	ST 5/8"	20030-7	92204	1/4"		
20950-7	20950-7	20950-7	ST 5/8"	20030-7	92204	1/4"		
20950-8	20950-8	20950-8	ST 5/8"	20030-8	92204	1/4"		
20950-8	20950-8	20950-8	ST 5/8"	20030-8	92204	1/4"		
20950-8	20950-8	20950-8	ST 5/8"	20030-8	92204	1/4"		
20950-9	20950-9	20950-9	ST 5/8"	20030-9	92204	1/4"		
20950-9	20950-9	20950-9	ST 5/8"	20030-9	92204	1/4"		
20950-9	20950-9	20950-9	ST 5/8"	20030-9	92204	1/4"		
20950-10	20950-10	20950-10	ST 5/8"	20030-10	92204	1/4"		
20950-10	20950-10	20950-10	ST 5/8"	20030-10	92204	1/4"		
20950-10	20950-10	20950-10	ST 5/8"	20030-10	92204	1/4"		



MINING CONTROLS
INCORPORATED

LIGHTING SYSTEMS ELECTRICAL SCHEMATIC
AND ONE LINE DIAGRAM

DESIGNED BY: L.W.R. SCALE: NA
DRAWING NO.: 28575-EL REV: M
DATE: 01-18-99