GENERAL NOTES

THE SUBCONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIARIZED WITH ALL REQUIREMENTS OF THE CONTRACT PRIOR TO SUBMISSION OF BID. THE SUBCONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO BID OR START OF INSTALLATION.

THE SUBCONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS WHEN THEY BECOME DUE, AND SHALL NOT COVER ANY WORK UNTIL APPROVED BY THE INSPECTION AUTHORITY.

ANY AND ALL FEES ASSOCIATED WITH THE ELECTRICAL WORK, INCLUDING CONSTRUCTION AND INSPECTIONS SHALL BE PAID FOR BY THE SUBCONTRACTOR IN ORDER TO DELIVER AND COMPLETE THE FINISHED BUILDING, READY FOR OCCUPANCY AND 100% USAGE.

THE SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT THE SUBCONTRACTOR HAS FAMILIARIZED HIMSELF/HERSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED, WILL NOT BE RECOGNIZED IF THEY COULD HAVE BEEN FORESEEN HAD PROPER EXAMINATION BEEN MADE.

ANY COSTS DUE TO THE LACK OF COOPERATION AMONG TRADES SHALL BE BORNE BY THE CONTRACTOR.

THE INFORMATION PRESENTED ON THESE DRAWINGS IS DIAGRAMMATIC IN NATURE. IT DOES INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF CIRCUITS, OUTLETS, EQUIPMENT, SYSTEMS ETC. PROVIDE ALL MATERIALS AND LABOR FOR COMPLETELY FINISHED AND OPERATIONAL SYSTEMS. EXACT ROUTING MAY VARY AND MAY REQUIRE ADDITIONAL J-BOXES/PULL-BOXES AND/OR SPECIAL FITTINGS.

REFER TO LATEST ARCHITECTURAL DRAWINGS FOR: EXACT WALL LOCATIONS, DIMENSIONS, AND CONFIGURATIONS, DOOR SWINGS FOR SWITCH LOCATION VERIFICATION, REFLECTED CEILING PLANS FOR VERIFICATION OF LIGHT FIXTURE LOCATIONS.

ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL ELECTRICAL EQUIPMENT LOADS PRIOR TO ROUGH-IN AND SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST.

ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY ALTERATIONS REQUIRED BY THE OWNER, ARCHITECT, OR FIELD CONDITIONS.

ALL EQUIPMENT SHALL BE NEW AND SHALL HAVE APPROPRIATE UNDERWRITERS LABORATORIES, INC. (UL.) LABEL AND SHALL CONFORM TO LATEST INDUSTRY STANDARDS.

ELECTRICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT INCLUDING: LIGHT FIXTURES, ELECTRICAL APPARATUS, WIRING DEVICES, ETC., FOR REVIEW/APPROVAL (5) DAYS PRIOR TO BID. EQUIPMENT IS NOT TO BE ORDERED WITHOUT SUBMITTAL TO ARCHITECT/OWNER/ENGINEER.

ELECTRICAL CONTRACTOR SHALL MAINTAIN ALL WORKING CLEARANCES FOR ALL ELECTRICAL EQUIPMENT PER N.E.C. REQUIREMENTS.

ALL WORK SHALL COMPLY WITH LATEST EDITION OF NATIONAL ELECTRICAL CODE (N.E.C.) AND ALL LOCAL AND STATE BUILDING CODES AND ADOPTED ORDINANCES, AND REQUIREMENTS OF THE UTILITY COMPANY.

ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY WITH DUAL ELEMENT TIME DELAY FUSES AS NOTED ON THE ONE LINE DIAGRAM. ENCLOSURE AND FUSE SIZE AS SHOWN OR AS REQUIRED TO MATCH INSTALLATION LOCATION AND LOAD CONDITIONS.

AT THE COMPLETION OF WORK, THE ELECTRICAL CONTRACTOR SHALL PROVIDE COMPLETE, ACCURATE, TYPED PANEL BOARD DIRECTORIES.

ANY DEVIATION FROM PLANS WITHOUT PRIOR APPROVAL OF THE ARCHITECT SHALL BE CAUSE FOR REJECTION OF MATERIALS AND/OR METHODS AND ANY COSTS INCURRED TO CORRECT SUCH DEVIATION TO THE SATISFACTION OF THE ARCHITECT SHALL BE BORNE BY THE CONTRACTOR.

EQUIPMENT STARTERS AND RELATED CONTROL AND WIRING SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. OVERLOAD HEATERS SHALL BE INSTALLED IN ACCORDANCE WITH NAMEPLATE DATA ON EQUIPMENT. STARTERS SHALL BE INSTALLED AS DIRECTED BY THE MECHANICAL CONTRACTOR.

FURNISH 1/2" CONDUIT FOR TEMPERATURE SENSORS FROM SENSOR TO APPROPRIATE MECHANICAL EQUIPMENT. PROVIDE 4" SQUARE BOX AT 48" ABOVE FINISHED FLOOR.

REFER TO MECHANICAL DRAWINGS FOR LOCATION OF THERMOSTAT, EXHAUST FANS, AND OTHER SPECIAL EQUIPMENT OR CONTROLS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL CONDUITS, JUNCTION BOXES, WIRING, AND DISCONNECT SWITCHES AND THERMOSTAT JUNCTION BOXES.

ALL WIRING SHALL BE INSTALLED IN APPROVED RACEWAY SYSTEM IN ACCORDANCE WITH N.E.C. AND LOCAL ORDINANCES. THE USE OF TYPE MC CABLE SHALL BE INSTALLED IN ACCORDANCE WITH N.E.C. ARTICLE 334. IF ALLOWED, TYPE NM CABLE SHALL BE INSTALLED IN ACCORDANCE WITH N.E.C. ARTICLE 336.

GROUNDING SYSTEM GROUND SHALL BE IN ACCORDANCE WITH N.E.C. AND TABLE 250-122. THE SYSTEM SHALL BE FURNISHED WITH A CONTINUOUS GROUND FOR RECEPTACLES, LIGHTS, AND EQUIPMENT IN ACCORDANCE WITH N.E.C. TABLE 250-122.

CONTRACTOR SHALL CONTACT UTILITY COMPANY FOR METERING REQUIREMENTS AND SHALL INCLUDE ALL WORK IN BID.

ELECTRICAL CONTRACTOR SHALL PROVIDE ALL TRENCHING, BACK FILL, AND CONDUIT FROM POWER COMPANY TRANSFORMER TO C.T./METER.

CONDUIT RUNS INSIDE THE BUILDING SHALL BE CONCEALED. CONDUIT BELOW FLOOR SLAB SHALL BE INSTALLED BELOW THE SLAB AND INSTALLED PRIOR TO POUR. RUNS TO BE STRAIGHT AS POSSIBLE FROM POINT OF OUTLET TO POINT OF OUTLET.

ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO OUTSIDE EQUIPMENT, SIGNS, LIGHTING, ETC., PROVIDE DISCONNECT AT EACH SIGN LOCATION IN ACCORDANCE WITH N.E.C. PARAGRAPH 600-6.

ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS/HER BID TO PROVIDE TEMPORARY POWER AND LIGHTING PER OSHA STANDARDS AND TEMPORARY POWER TO CONSTRUCTION TRAILER

ALL RECEPTACLES AND SWITCHES SHALL BE COMMERCIAL GRADE AND HAVE A RATING OF 20 AMPS

ALL RECEPTACLE AND SWITCHING COVERS SHALL BE COMMERCIAL GRADE AND SHALL BE STANDARD WHITE.

DISTRIBUTION OF THIS DRAWING OR REPRODUCTION OF ANY PORTION OF THIS DRAWING, IN WHOLE OR IN PART, WITHOUT WRITTEN CONSENT OF THOMAS PARTNERSHIP IS PROHIBITED. ALL REPORTS, DRAWINGS, SPECIFICATIONS, PLANS, OR OTHER DOCUMENTS PREPARED BY THE ARCHITECT PURSUANT TO THIS AGREEMENT ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT. THE OWNER SHALL BE PERMITTED TO RETAIN COPIES, INCLUDING REPRODUCIBLES, OF THE INSTRUMENTS OF SERVICE FOR INFORMATION AND REFERENCE IN CONNECTION WITH THE OWNER'S USE AND OCCUPANCY OF THE PROJECT. HOWEVER, THE INSTRUMENTS OF SERVICE SHALL NOT BE USED OR CONSTRUED TO BE A GRANT OF LICENSE FOR ANY OTHER PROJECT OR ANY EXTENSION OF THE PROJECT, EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ARCHITECT. ALL TERMS AND CONDITIONS CONTAINED HEREIN ARE ACCEPTED AS A CONDITION OF RECEIPT OF THESE DRAWINGS SHALL NOT BE USED OR COPIED FOR ANY OTHER PROJECT.

LEGEND

- 48" / 6" — DUPLEX RECEPTACLE MOUNT @ 15" A.F.F. UNLESS OTHERWISE NOTED. 48" = MOUNT AT 48" A.F.F. 6" = MOUNT AT 6" ABOVE CONTERTOP. GFI = GROUND FAULT INTERRUPTER. IG = ISOLATED GROUND
- 4-PLEX RECEPTACLE MOUNT @ 15"A.F.F. UNLESS OTHERWISE NOTED
- 208V. RECEPTACLE
- JUNCTION BOX. NOTE: MARK ALL J BOXES WITH BRANCH CIRCUIT PANEL DESIGNATION & CIRCUIT NUMBER(S)
- WALL MOUNTED JUNCTION BOX
- TELEPHONE OUTLET MOUNT @ 15"A.F.F. UNLESS OTHERWISE NOTED - STUB 3/4"C. INTO ACCESSIBLE LOCATION ABOVE CEILING. PROVIDE BLANK COVER PLATE. 2D=DOUBLE
- FLUSH FLOOR MOUNTED TELEPHONE OUTLET - USE BRASS COVER PLATES - STUB 3/4"C. INTO ACCESSIBLE LOCATION ABOVE CEILING
- DATA TERMINAL OUTLET MOUNT @ 15"A.F.F. UNLESS OTHERWISE NOTED - STUB 3/4"C. INTO ACCESSIBLE LOCATION ABOVE CEILING. PROVIDE BLANK COVER PLATE. 2D=DOUBLE
- FLUSH FLOOR MOUNTED DATA TERMINAL - USE BRASS COVER PLATES - STUB 3/4"C. INTO ACCESSIBLE LOCATION ABOVE CEILING
- FUSIBLE DISCONNECT — NON-FUSIBLE DISCONNECT
- PANEL BOARD-NOTE: PROVIDE TYPEWRITTEN DIRECTORIES AT COMPLETION OF WORK
- SWITCH MOUNT @ 48" A.F.F. UNLESS OTHERWISE NOTED. D - DIMMER SWITCH, T - TIMER, L - LIMIT, 3 - THREE-WAY SWITCHING, K - KEYED, M - MANUAL STARTER
- RECESS MOUNTED FIXTURE. S - FIXTURE, S - SWITCHING DESIGNATION
- DR — RECESSED DOWN LIGHT
- SURFACE / CHAIN MOUNTED FIXTURE
- AA — WALL / POLE MOUNTED FIXTURE. AA - FIXTURE TYPE
- WALL MOUNTED EXIT SIGN. ARROW INDICATED
- CEILING MOUNTED EXIT SIGN
- A-1,3,5 (#10) — CIRCUIT HOME-RUN (ARROWS INDICATE NUMBER OF CIRCUITS). A-1,3,5 = PANEL A, CIRCUITS 1, 3, & 5. (#10) = USE 10 GAUGE COPPER WIRE

NOTE:
- NOT ALL SYMBOLS MAY APPLY TO ALL SHEETS
- ALL WIRE SHALL BE COPPER (MIN. #12 AWG) UNLESS OTHERWISE NOTED.
- FEEDERS SHALL CONFORM TO N.E.C. 215-2.
- BRANCH CIRCUIT WIRING AND VOLTAGE DROP REQUIREMENTS SHALL CONFORM TO N.E.C. 210-19(a).
- OUTLET MOUNTING HEIGHTS FOR RECEPTACLES, SWITCHES, SYSTEM INITIATING DEVICES, AND INDICATING DEVICES SHALL COMPLY WITH REQUIREMENTS OF THE (ADA) AMERICANS WITH DISABILITIES ACT.
- COORDINATE MOUNTING HEIGHT OF ALL EXTERIOR LIGHTING FIXTURES WITH ARCHITECTURAL ELEVATION DRAWINGS.
- ALL SUPPORTS FOR EQUIPMENT AND DEVICES SHALL CONFORM SEISMIC ZONE REQUIREMENTS AND LOCAL AUTHORITY HAVING JURISDICTION. LIGHT FIXTURES SHALL BE SUPPORTED IN ACCORDANCE WITH U.B.C. VOL. III, SEC. 25.213 and N.E.C. ARTICLE 300, AND SPECIFICALLY PARAGRAPH 300-11(a).
- ALL DIMENSIONS ARE FROM FINISHED FLOOR OR FACE OF STUD TO CENTER OF DEVICE UNLESS OTHERWISE NOTED.

SHORT CIRCUIT CALCULATIONS

POINT TO POINT METHOD FOR SHORT CIRCUIT CALCULATIONS (ILLUSTRATED IN BUSSMAN MANUFACTURING PUBLICATION FORM SP540.

SERVICE: 120/208 V. 3-PHASE 4W

AVAILABLE SHORT CIRCUIT CURRENT FROM UTILITY = 58,900 A.

FIND FACTOR F = 1.73 x (length in feet) x (short circuit current) / (constant from Table C1 x (line-to-line voltage))

F = 1.73 x 50 x 58,900 / (22,185 x 208) = 0.37 (Based on PSCO Lateral)

FIND FACTOR M = 1 / (1 + F) M = 0.787

SHORT CIRCUIT CURRENT AT CT = M x AVAILABLE S.C. CURRENT = 46,355 A

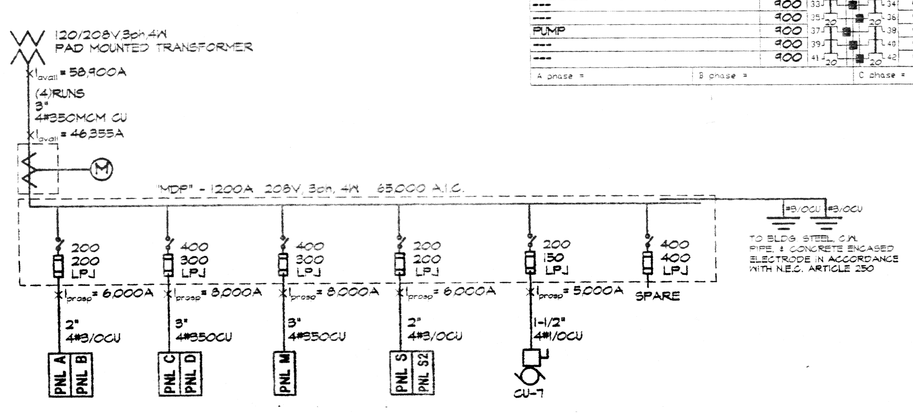
PANEL "C1" & "M1": FUSE 300 A LPJ = 8000 A PROSPECTIVE AVAILABLE

PANEL "A" & "S": FUSE 200 A LPJ = 6000 A PROSPECTIVE AVAILABLE

CU-1: FUSE 50 A LPJ = 5000 A PROSPECTIVE AVAILABLE

LOAD CALCULATIONS:

LIGHTING	85.8 @ 125% =	107.4 KVA
RECEPTACLE	10.0 @ 100% =	10.0 KVA
BALANCE	26.3 @ 50% =	13.2 KVA
MECHANICAL	56.4 @ 100% =	56.4 KVA
25% OF LARGEST	=	5.6 KVA
SPECIAL	74.9 @ 100% =	74.9 KVA
TOTAL		= 306.9 KVA (853 A)



ONE LINE DIAGRAM
NO SCALE

* PER N.E.C. ARTICLE 220-18
FIRST 10.0KVA @ 100% = 10.0
BAL. 8.9KVA @ 50% = 4.1
TOTAL = 14.1

SCHEDULE - PANEL A

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG. AS APPROVED; TYPE PANELBOARD; LUG LOC. TOP; AMPS 200A M.L.O FEED THRU; VOLTAGE 120/208V, 3ph, 4W; MOUNTING SURFACE; BRACING 10,000 A.I.C.

LOAD BREAKDOWN INCLUDES PANEL "B"

	KVA @ 125% =	45.1 KVA
RECEPT	KVA @ 100% =	14.1 KVA
MECH	KVA @ 100% =	KVA
25% LARGEST MOTOR		KVA
SPECIAL	KVA @ 100% =	KVA
SPARE		KVA
TOTAL		KVA

RECEPT - CONSULTATION	360	1	2	1860	LIGHTING - UPPER SHOWROOM
RECEPT - UCH	360	3	4	1860	LIGHTING - UPPER SHOWROOM
RECEPT - SHOWROOM WINDOW	540	5	6	1860	LIGHTING - UPPER SHOWROOM
RECEPT - RECEPTION	180	7	8	1860	LIGHTING - UPPER SHOWROOM
RECEPT - SHOWROOM WINDOW	360	9	10	1860	LIGHTING - UPPER SHOWROOM
RECEPT - SM	360	11	12	1860	LIGHTING - UPPER SHOWROOM
RECEPT - BUSINESS CENTER	540	13	14	1860	LIGHTING - UPPER SHOWROOM
RECEPT - INFO CENTER	180	15	16	1860	LIGHTING - UPPER SHOWROOM
J-BOX - INFO CENTER LIGHTING	500	17	18	1860	LIGHTING - UPPER SHOWROOM
RECEPT - INFO CENTER	540	19	20	1860	LIGHTING - UPPER SHOWROOM
RECEPT - COPY/FAX	500	21	22	1945	LIGHTING - UPPER DISPLAY
RECEPT - COPY/FAX	180	23	24	1945	LIGHTING - UPPER DISPLAY
RECEPT - KID'S PLAY	540	25	26	1945	LIGHTING - UPPER DISPLAY
RECEPT - SMC	500	27	28	500	LIGHTING - INFO CENTER
RECEPT - CUSTOMER CENTER	540	29	30	1400	LIGHTING - CONSULT AREA
RECEPT - VENDING	500	31	32	350	LIGHTING - ENTRY
SPARE		33	34	1050	LIGHTING - DELIVERY CANOPY
RECEPT - SERVICE ADVISORS	360	35	36		SPARE
RECEPT - SERVICE ADVISORS	360	37	38		SPACE
RECEPT - VENDING	500	39	40		SPACE
SPARE		41	42		SPACE

A phase = 21,125 VA; B phase = 20,045 VA; C phase = 19,955 VA; Total = 61,175 VA

SCHEDULE - PANEL B

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG.; TYPE; LUG LOC.; AMPS; VOLTAGE; MOUNTING; BRACING

	KVA @ 125% =	KVA
RECEPT	KVA @ 100% =	KVA
MECH	KVA @ 100% =	KVA
25% LARGEST MOTOR		KVA
SPECIAL	KVA @ 100% =	KVA
SPARE		KVA
TOTAL	SEE PANEL "A"	KVA

RECEPT - F&I	720	1	2	1100	LIGHTING - F&I OFFICES
RECEPT - GEN MGR	720	3	4	1400	LIGHTING - MAITNS
RECEPT - F&I	540	5	6	1050	LIGHTING - SALES WORKROOM
RECEPT - BREAKROOM	720	7	8	1500	LIGHTING - GM & BREAKROOM
RECEPT - SALES	540	9	10	1350	LIGHTING - RESTROOMS
RECEPT - SALES	360	11	12	1400	LIGHTING - ADMIN.
RECEPT - SALES	540	13	14	1150	LIGHTING - PARTS RETAIL
RECEPT - SALES	540	15	16	400	LIGHTING - CUSTOMER CENTER
RECEPT - RESTROOMS	360	17	18	1350	LIGHTING - SERVICE ADVISORS
RECEPT - VENDING	500	19	20	1110	LIGHTING - PARTS
RECEPT - REFRIG.	500	21	22	440	LIGHTING - PARTS
RECEPT - DISPOSAL	630	23	24	440	LIGHTING - STORAGE
RECEPT - BREAKROOM	500	25	26	1220	LIGHTING - STORAGE
RECEPT - ADMIN.	360	27	28	1250	LIGHTING - TECH BREAK
RECEPT - ADMIN.	360	29	30	1400	LIGHTING - SERVICE RECEPTION
RECEPT - ADMIN.	360	31	32		SPACE
RECEPT - COPY/FAX	500	33	34		SPACE
RECEPT - CASHIER	360	35	36		SPACE
SPARE		37	38		SPACE
SPARE		39	40		SPACE
SPARE		41	42		SPACE

A phase =; B phase =; C phase =; Total =

SCHEDULE - PANEL S

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG. AS APPROVED; TYPE PANELBOARD; LUG LOC. TOP; AMPS 200A M.L.O FEED THRU; VOLTAGE 120/208V, 3ph, 4W; MOUNTING SURFACE; BRACING 10,000 A.I.C.

LOAD BREAKDOWN INCLUDES PANEL "S2"

	KVA @ 125% =	57.4 KVA
RECEPT	KVA @ 100% =	0.9 KVA
MECH	KVA @ 100% =	KVA
25% LARGEST MOTOR		KVA
SPECIAL	KVA @ 100% =	20.9 KVA
SPARE		KVA
TOTAL		72.0 KVA

SIGN	200	1	2	1860	LIGHTING - SITE
SIGN	200	3	4	1860	---
SIGN	200	5	6	1860	---
SIGN	200	7	8	1945	LIGHTING - SITE
RECEPT - SITE	360	9	10	1650	---
RECEPT - SITE	540	11	12	1160	---
SIGN	200	13	14	1860	LIGHTING - SITE
SIGN	200	15	16	1860	---
SIGN	200	17	18	1860	---
SIGN	200	19	20	1945	LIGHTING - SITE
SIGN	200	21	22	1945	---
SIGN	200	23	24	1945	---
SPARE		25	26	930	LIGHTING - SITE (NL)
SIGN	200	27	28	930	---
SIGN	200	29	30	465	LIGHTING - SITE (NL)
SPARE		31	32	465	---
SPARE		33	34		SPACE
SPACE		35	36		SPACE
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42	600	LIGHTING - EXTERIOR

A phase = 19,810 VA; B phase = 19,440 VA; C phase = 19,815 VA; Total = 59,065 VA

SCHEDULE - PANEL S2

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG. AS APPROVED; TYPE PANELBOARD; LUG LOC. TOP; AMPS 200A M.L.O; VOLTAGE 120/208V, 3ph, 4W; MOUNTING SURFACE; BRACING 10,000 A.I.C.

	KVA @ 125% =	KVA
RECEPT	KVA @ 100% =	KVA
MECH	KVA @ 100% =	KVA
25% LARGEST MOTOR		KVA
SPECIAL	KVA @ 100% =	KVA
SPARE		KVA
TOTAL	SEE PANEL "S"	KVA

SPACE		1	2		SPARE
SPACE		3	4		SPARE
SPACE		5	6		SPARE
SPACE		7	8		SPACE
SPACE		9	10		SPACE
SPACE		11	12		SPACE
SPACE		13	14	500	120V CONTROLS
SPACE		15	16	500	120V CONTROLS
SPACE		17	18	500	120V CONTROLS
SPACE		19	20	1000	LIGHTS, VENT, HEATER
SPACE		21	22	930	CHEMICAL PUMP
SPACE		23	24	1130	COMPRESSOR
SPACE		25	26	2005	WELL PUMP
SPACE		27	28	2005	---
SPACE		29	30	2005	---
PUMP	900	31	32	900	BLOWER
---	900	33	34	900	---
---	900	35	36	900	---
PUMP	900	37	38	900	BLOWER
---	900	39	40	900	---
---	900	41	42	900	---

A phase =; B phase =; C phase =; Total =

SCHEDULE - PANEL C

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG. AS APPROVED; TYPE PANELBOARD; LUG LOC. TOP; AMPS 400A M.L.O FEED THRU; VOLTAGE 120/208V, 3ph, 4W; MOUNTING SURFACE; BRACING 10,000 A.I.C.

LOAD BREAKDOWN INCLUDES PANEL "D"

	KVA @ 125% =	6.0 KVA
RECEPT	KVA @ 100% =	17.5 KVA
MECH	KVA @ 100% =	2.5 KVA
25% LARGEST MOTOR		KVA
SPECIAL	KVA @ 100% =	58.6 KVA
SPARE		KVA
TOTAL		144.0 KVA

RECEPT - SERVICE BAYS	360	1	2	1945	LIGHTING - SERVICE BAYS
RECEPT - SERVICE BAYS	360	3	4	1860	LIGHTING - SERVICE BAYS
RECEPT - SERVICE BAYS	720	5	6	1860	LIGHTING - SERVICE BAYS
RECEPT - SERVICE BAYS	360	7	8	440	LIGHTING - SERVICE BAYS
RECEPT - SERVICE BAYS	720	9	10	440	LIGHTING - SERVICE BAYS
RECEPT - SERVICE BAYS	720	11	12	180	RECEPT - PHONE BOARD
RECEPT - PARTS MGR	900	13	14	2500	RECEPT - BUNN COFFEE BREWER
RECEPT - TECH PARTS	900	15	16		SPARE
RECEPT - PARTS	720	17	18		SPACE
RECEPT - TECH RESTROOMS	360	19	20		SPACE
RECEPT - VENDING	500	21	22		SPACE
RECEPT - REFRIG.	500	23	24		SPACE
RECEPT - DISPOSAL	630	25	26		SPACE
RECEPT - TECH BREAKROOM	500	27	28		SPACE
RECEPT - TECH BREAKROOM	720	29	30		SPACE
RECEPT - EXTERIOR	1080	31	32		SPACE
OPENER - PARTS RECEIVING	660	33	34		SPACE
OPENER - SERVICE BAYS	1660	35	36		SPACE
SPARE		37	38		SPACE
SPARE		39	40		SPACE
SPARE		41	42		SPACE

A phase = 26,730 VA; B phase = 27,830 VA; C phase = 24,565 VA; Total = 78,925 VA

SCHEDULE - PANEL D

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG.; TYPE; LUG LOC.; AMPS; VOLTAGE; MOUNTING; BRACING

	KVA @ 125% =	KVA
RECEPT	KVA @ 100% =	KVA
MECH	KVA @ 100% =	KVA
25% LARGEST MOTOR		KVA
SPECIAL	KVA @ 100% =	KVA
SPARE		KVA
TOTAL	SEE PANEL "C"	KVA

VH-1	2500	1	2		SPARE
---	3600	3	4	1150	EF-5
VH-2	1650	5	6	1150	EF-6
SPACE		7	8		SPARE
SPACE		9	10		SPARE
SPACE		11	12		SPARE
SPACE		13	14		SPACE
SPACE		15	16		SPACE
SPACE		17	18		SPACE
SPACE		19	20		SPACE
SPACE		21	22		SPACE
SPACE		23	24		SPACE
SPACE		25	26		SPACE
SPACE		27	28	1075	AIR DRYER
SPACE		29	30	1075	---
SPACE		31	32	1150	AIR COMPRESSOR
SPACE		33	34	1150	---
SPACE		35	36	1150	---
BUSS	2150	37	38	4125	BUSS
---	2150	39	40	4125	---
---	2150	41	42	2150	---

A phase =; B phase =; C phase =; Total =

SCHEDULE - PANEL M

NOTE: ALL BREAKERS 20A UNLESS NOTED OTHERWISE

MFG. AS APPROVED; TYPE PANELBOARD; LUG LOC. TOP; AMPS 400A M.L.O; VOLTAGE 120/208V, 3ph, 4W; MOUNTING SURFACE; BRACING 10,000 A.I.C.

	KVA @ 125% =	KVA
RECEPT	KVA @ 100% =	KVA
MECH	KVA @ 100% =	44.1 KVA
25% LARGEST MOTOR		KVA
SPECIAL	KVA @ 100% =	KVA
SPARE		KVA
TOTAL		44.1 KVA

HP-1	685	1	2	3200	CU-1
---	685	3	4	3200	---
---	685	5	6	3200	---
HP-2	375	7	8	3200	CU-2
---	375	9	10	3200	---
---	375	11	12	3200	---
HP-3	480	13	14	5100	CU-3
---	480	15	16	5100	---
---	480	17	18	5100	---
HP-4	480	19	20	5100	CU-4
---	480	21	22	5100	---
---	480	23	24	5100	---
HP-5	265	25	26	1525	CU-5
---	265	27	28	1525	---
---	265	29	30	1525	---
HP-6	375	31	32	3200	CU-6
---	375	33	34	3200	---
---	375	35	36	3200	---
MAU-1	2005	37	38	400	CAR EXHAUST
---	2005	39	40	400	---
---	2005	41	42	400	---

A phase = 31,350 VA; B phase = 31,350 VA; C phase = 31,350 VA; Total = 94,050 VA

SCHEDULE - FIXTURE

KEY	MANUFACTURER - CATNO	MOUNTING	FINISH	LAMPS	COMMENTS
A	HOLOPHANE SL2A-400M-P-U HIGH BAY	SURFACE		-400W MH	PROVIDE QUARTZ RESTRIKE FOR SHADED FIXTURES
B	ABOLITE HOU-400-MH-20-RFR-8-9 2X2 400W MH	RECESSED		1-400W MH	PROVIDE QUARTZ RESTRIKE FOR SHADED FIXTURES
C	6 LIGHT FLUORESCENT DOWN LIGHT	RECESSED		1-CFS26DT/E/830	
D	INDY 215-56-2288-49A-SSB	RECESSED		3-FT40DL/835/RS	PROVIDE BATTERY BACKUP FOR SHADED FIXTURES
E	2X2 FLUORESCENT TROFFER INDY 52-59-3140A-T8SSB	RECESSED		3-FO32/835	
E2	2X4 FLUORESCENT TROFFER LSI MIDWEST	RR-232-SSD	SURFACE	2-F32T8	
F	4' FLUORESCENT WRAPAROUND INDY	T304-3-KA-T8SSB	SURFACE	4-FO32/835	
G4	8' WRAPAROUND INDY	81-240-T8SSB	SURFACE	2-FO32/835	
G6	4' FLUORESCENT STRIP INDY	81-240-8-T8SSB	SURFACE	4-FO32/835	
H	8' FLUORESCENT STRIP INDY	SOOT/450W TRACK	WHITE	3OPAR/CAP/SP	
J2	OPEN BACK TRACK FIXTURE INDY	SH220/T8SSB	SURFACE	2-FO17/835	
K	2' OCTRON STRIP INDY	QTSR	SURFACE	7SPAR30/CAP/FL	
L	WALL-DOWN ADJ. ACCENT LIGHT DECO LIGHTING	HD-1327S-BK	SUSPENDED		
M	DMF LIGHTING DOWNLIGHT	DHMV8-50	RECESSED	1-150WMH	
N	DMF LIGHTING 4" LOW VOLTAGE DOWNLIGHT	DH447-75	RECESSED	1-60W	
P	LSI MIDWEST 4' FLUORESCENT STRIP	9 L 32 SSD	SURFACE	1-F32T8	
AA	LSI TWIN POLE LIGHT		POLE	2-400W MH	
BB	LSI SINGLE POLE LIGHT		POLE	1-400W MH	
CC	LSI WALL PACK	SBWM 250 MH F 120	WALL	1-250W MH	
XI	LIGHTGUARD COMBO EXIT SIGN/ EM LIGHT	X6C		FURNISHED W/FIXTURE	WITH BATTERY BACKUP
X3	LIGHTGUARD EMERGENCY LIGHT	FLI		FURNISHED W/FIXTURE	WITH BATTERY BACKUP
X5	LIGHTGUARD LOW MOUNT EXIT SIGN	X5B		FURNISHED W/FIXTURE	

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