

PANEL <u>  H  </u> MOUNTING <u>  FLUSH  </u> BUS <u>  200  </u> MAIN <u>  MLO  </u> TYPE <u>  BOLT-IN  </u>		LOCATION <u>  COURT  </u>		VOLT <u>  277/480V  </u> <u>  3  </u> <u>  Ø  </u> <u>  4  </u> WIRE			
CKT. NO.	DESCRIPTION	BKR.	CKT. V.A.	CKT. V.A.	BKR.	DESCRIPTION	CKT. NO.
1	LIGHTING	20	1600	1900	20	LIGHTING	2
3	LIGHTING	20	1600	1600	20	LIGHTING	4
5	LIGHTING	20	2000	800	20	LIGHTING	6
7	ROOF TOP UNIT	60/3	38K	38K	60/3	ROOF TOP UNIT	8
9							10
11							12
13	ROOF TOP UNIT	30/3	20K	11,000	40/3	PANEL 'L'	14
15							16
17							18
19	SPARE	20			20	SPARE	20
21	SPARE	20			20	SPARE	22
23	SPARE	20			20	SPARE	24
		116,500		TOTAL VOLT AMPS		140 AMPS	

PANEL <u>  L  </u> MOUNTING <u>  FLUSH  </u> BUS <u>  100A  </u> MAIN <u>  100A-BP  </u> TYPE <u>  BOLT-IN  </u>		LOCATION <u>  COURT  </u>		VOLT <u>  120/208V  </u> <u>  3  </u> <u>  Ø  </u> <u>  4  </u> WIRE			
CKT. NO.	DESCRIPTION	BKR.	CKT. V.A.	CKT. V.A.	BKR.	DESCRIPTION	CKT. NO.
1	BRK REC	20	800	1200	20	RECEPT	2
3	BRK REC	20	800	1200	20	RECEPT	4
5	REFRIDGE	20	1000	1000	20	EDF	6
7	VENDING MACH	20	1200	1000	20	EXH FANS	8
9	WASHER	20	1200	800	20	TREADMILL	10
11	RECEPT	20	1200	1000	20	RECEPTACLES	12
13	TREADMILL	20	800	1000	20	MONITORS	14
15	TREADMILL	20	800	5000	30/2	DRYER	16
17	TREADMILL	20	800				18
19	SPARE	20				SPACE	20
21	SPARE	20				SPACE	22
23	SPACE					SPACE	24
25	SPACE					SPACE	26
27	SPACE					SPACE	28
29	SPACE					SPACE	30
		15800		TOTAL VOLT AMPS		44 AMPS	

## LIGHT FIXTURE SCHEDULE

A HIGH BAY LED FIXTURE, RAB #RAIL 185W, PENDANT MOUNTING , 277 VOLT PROVIDE WITH WIRE GUARD

B ORACLE 24FPL1LED 5000L MV 35K FLAT PANEL LED , 277 VOLT 2'X4'

COMBO EXIT/EMERGENCT LIGHT WITH HIGH CAPACITY BATTERY TO OPERATE EXTERIOR EMERGENCY FIXTURES

C EXTERIOR EMERGENCY LIGHT TO OPERATE OFF OF EMERGENCY LIGHT

EMERGENCY LIGHT

EXIT LIGHT

## SYMBOLS & LEGEND

\$	SINGLE POLE SWITCH, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED.
\$ <sup>2</sup>	TWO POLE SWITCH, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED
\$ <sup>3</sup>	THREE-WAY SWITCH, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED
\$ <sup>4</sup>	FOUR-WAY SWITCH, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED
⚡	EMERGENCY LIGHTING , MOUNTED AT 7'-6" A.F.F. UNLESS OTHERWISE NOTED
⚡	GFCI RECEPTACLE, MOUNTED AT 18" O.C. A.F.F. UNLESS OTHER WISE NOTED
⚡	DUPLEX RECEPTACLE, MOUNTED AT 18" O.C. A.F.F. UNLESS OTHER WISE NOTED
⚡	QUADRAPLEX RECEPTACLES, MOUNTED AT 18" O.C. A.F.F. UNLESS OTHERWISE NOTED.
⚡	VOICE OUTLET, MOUNTED AT 18" O.C. A.F.F. WITH 3/4" CONDUIT TO ABOVE CEILING
⚡	JUNCTION BOX
M	MOTION SENSOR WALL SWITCH
⚡	FLOOR MOUNTED RECEPTACLE
⚡	COMBINATION DISCONNECT AND STARTER
⚡	WALL MOUNTED OCCUPANCY SWITCH
⚡	EXHAUST FAN
⚡	PANELBOARD
WP	WEATHERPROOF
ALL SYMBOLS NOT NECESSARILY REFERENCED ON PLAN	

## GENERAL ELECTRICAL NOTES

- ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE.
- TELEPHONE/DATA CABLES TO BE 4-PAIR CAT. 5. CABLE TO BE FURNISHED AND INSTALLED BY OTHERS. ALL CABLING TO BE PLENUM RATED.
- ELECTRICAL CONTRACTOR TO INCLUDE GROUND WIRE IN ALL RACEWAYS. SIZE RACEWAYS AS NECESSARY TO COMPLY WITH N.E.C.
- REFER TO REFLECTED CEILING PLAN AND DETAILS FOR THE EXACT LOCATION OF ALL LIGHTING FIXTURES AND ANY OTHER EQUIPMENT INSTALLED IN THE CEILING SYSTEM. VERIFY EXACT MOUNTING HEIGHTS AND FINISHES WITH CONSTRUCTION COMPANY PRIOR TO ROUGH-IN.
- DUAL LIGHT SWITCH TO BE PROVIDED IN RESTROOMS, ONE FOR FAN VENT, AND ONE FOR LIGHTING.
- EMPTY MUD RING W/ CONDUIT AND PULL STRING NEXT TO LIGHT SWITCH FOR SPEAKER CONTROLS
- PLYWOOD TELEPHONE BACKERBOARD (4'X4') TO HAVE ROUTED 2" EMPTY CONDUIT BACK TO THE EXISTING TELEPHONE SERVICE ENTRANCE AND 110V OUTLET, FIELD COORDINATE.
- THE WORD "PROVIDE" HEREIN SHALL MEAN FURNISH AND INSTALL.

## D. ELECTRICAL SPECIFICATIONS

- THE ENTIRE ELECTRICAL SYSTEM SHALL COMPLY WITH THE FOLLOWING:
  - 2017 NATIONAL ELECTRICAL CODE AND ANY OTHER APPLICABLE LOCAL CODES.
  - ALL FEEDER AND BRANCH CIRCUIT WIRING SHALL BE COPPER ONLY.
  - THE REQUIREMENTS FOR ALL ROOF AND WALL OPENINGS DESRIBED IN SECTIONS HEREIN.
- MATERIALS, PRODUCTS AND EQUIPMENT INCLUDING COMPONENTS THEREOF, SHALL BE NEW AND SUITABLE FOR THE PURPOSE AND SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND OF THE LOCAL AUTHORITIES HAVING JURISDICTION. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING COMPONENTS THEREOF, SHALL BE SIZED IN CONFORMITY WITH THE REQUIREMENTS OF OTHER RECOGNIZED STANDARDS, SUCH AS, ASTM, IEEE, IPCEA, NFPA AND NEMA WHERE THE REQUIREMENTS OF SUCH STANDARDS ARE MORE STRINGENT THAN THOSE CITED ABOVE.
- ELECTRICAL SERVICE PROVIDED IS 800 AMP, 277/480V, THREE PHASE.
- ALL CONDUCTORS SHALL BE SOFT DRAWN ANNEALED COPPER. MINIMUM SIZE SHALL BE #12 FOR POWER WIRING AND #14 FOR CONTROL WIRING. WIRE SHALL BE 600 VOLT INSULATED, NEC TYPE THHN/THWN. ALL WIRE SHALL BE RUN IN RIGID CONDUIT OR EMT. NO PLASTIC CONDUIT WILL BE PERMITTED, EXCEPT WHERE PERMITTED BY THE NATIONAL ELECTRIC CODES LATEST EDITION. SERVICE ENTRANCE FEEDERS FROM POWER CO TRANSFORMER TO MDP MAY BE ALUM IN PVC CONDUIT.
- LIGHTING AND APPLIANCE PANELBOARDS WITHIN THE SPACE, THEY SHALL BE OF THE THREE PHASE, FOUR WIRE DISTRIBUTED PHASING TYPE, ALL BREAKERS SHALL BE BOLT-ON TYPE. CIRCUITING SHALL BE ARRANGED TO PRESENT, AS NEARLY AS POSSIBLE, AND EVENLY BALANCED LOAD ON ALL PHASES. PANELBOARDS SHALL BE CIRCUIT BREAKER TYPE. ALL CIRCUIT BREAKERS SHALL HAVE INTERRUPTING CAPACITY AT LEAST 10 % GREATER THAN THE AVAILABLE FAULT CURRENT AT THE BREAKER LOCATION.
- ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIRING. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE EXPOSED CONDUIT SHALL BE IN STRAIGHT LINES PARALLEL WITH, OR AT LEAST 3 INCHES FROM WATER LINES WHENEVER THEY RUN ALONGSIDE OR ACROSS SUCH LINES. HANGERS SHALL BE FASTENED TO STEEL CONCRETE OR MASONRY, BUT NOT TO PIPING. HANGERS AND SUPPORT SYSTEMS ARE AN INTEGRAL PART OF THE VISUAL ENVIROMENT. ALL HANGERS AND SUPPORTS EXPOSED TO PUBLIC VIEW MUST BE SHOWN IN DETAIL ON PLANS SUBMITTED TO LANDLORD FOR APPROVAL OF APPEARANCE. ALL HANGERS MUST BE UNIFORMLY SPACED AND NEATLY INSTALLED WITH NO EXCESS MATERIAL BEYOND WHAT IS REQUIRED FOR THE SUPPORT FUNCTION. SELECT ACCESSORIES AND HARDWARE WITH A SMOOTH, NEAT FINISHED APPEARANCE. PAINT ALL EXPOSED CONDUIT HANGERS TO MATCH THE ADJACENT FINISHES.
- GROUNDING SHALL CONSIST OF COPPER CONDUCTORS IN CONDUIT WITH BOLTED, OR BRAZED CONNECTION TO COLD WATER LINE FOR THE NEUTRAL. GROUNDING AND BONDING SHALL COMPLY WITH NEC ARTICLE 250. ALL METALLIC RACEWAYS SHALL BE GROUNDED.
- PROVIDE WIRING DEVICES EQUAL TO THE FOLLOWING: TOGGLE SWITCHES  
LEVITON CAT #1221, RECEPTACLES- LEVITON CAT # 5262, GFCI RECEPTACLES, LEVITON #6699, PROVIDE AN EMPTY CONDUIT SYSTEM FOR THE TELEPHONE SYSTEMS.
- EQUIPMENT TO BE APPROVED BY THE LOCAL TELEPHONE COMPANY. COORDINATE ALL CONDUIT REQUIREMENTS AND TERMINATION WITH THE LOCAL SOUTHWESTERN BELL TELEPHONE COMPANY OR OTHER TELEPHONE SYSTEM PROVIDER.
- DUPLEX RECEPTACLES AND TELE-COMMUNICATION OUTLETS SHALL BE MOUNTED AT 15" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED. TOGGLE SWITCHES SHALL MOUNT AT 48" ABOVE FINISH FLOOR. WALL MOUNTED TELEPHONE OUTLETS SHALL BE MOUNTED AT 48" ABOVE FINISH FLOOR.

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