ELECTRICAL GENERAL NOTES

- 1. THE EQUIPMENT ROUGH-INS AS SHOWN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, IN SOME INSTANCES, THE OWNER OR SUPPLIER MAY SUBSTITUTE OR THE EQUIPMENT MAY VARY FROM WHAT IS SHOWN. THEREFORE, THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUB-SEQUENT RELOCATION DIRECTLY UPON THE CONTRACTOR.
- 2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE N.E.C. AND STATE AND LOCAL CODES AS THEY APPLY. 3. SWITCHGEAR AND PANELS SHALL BE SQUARE "D", OR EQUAL TO, FURNISHED AND
- INSTALLED BY THE CONTRACTOR. 4. ALL DISCONNECT SWITCHES SHALL BE RATED FOR GENERAL DUTY UNLESS OTHERWISE
- 5. STARTERS AND RELATED WIRING SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR OVERLOAD UNITS SHALL BE INSTALLED AS PER NAME PLATE DATA ON EQUIPMENT. EXCEPT FOR SUCH ITEMS AS ARE NORMALLY SUPPLIED WITH STARTERS INSTALLED (HVAC UNITS, DISH-WASHERS ETC.) AT THEIR POINT OF MANUFACTURE, ALL STARTERS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR WILL MOUNT ALL SUCH STARTERS, AS DIRECTED, FURNISHING SUPPORTING STRUCTURES WHERE
- 6. ANY FEES ASSOCIATED WITH CONSTRUCTION AND INSPECTION SHALL BE BORNE BY THE CONTRACTOR IN ORDER TO DELIVER TO THE OWNER A FINISHED BUILDING, READY FOR
- OCCUPANCY AND 100% OPERATION. 7. TWO COPIES OF OPERATION AND MAINTENANCE MANUALS FOR THE EQUIPMENT HEREIN INSTALLED SHALL BE GIVEN TO THE OWNER PRIOR TO ACCEPTANCE OF THE BUILDING FOR OCCUPANCY.
- 8. ALL PANELBOARDS SHALL BE LABELED WITH RESPECT TO THEIR TITLE. VOLTAGE AND PHASE; I.E. PANEL "A" 120/208/3Ø. LABEL SHALL BE PHENOLIC PLASTIC WITH WHITE LETTERS AND BLACK BACKGROUND. LABELS SHALL BE PERMANENTLY FIXED TO THE **EQUIPMENT**
- 9. PANELBOARDS SHALL CONTAIN A TYPEWRITTEN DIRECTORY WITH A PLASTIC COVER
- CONTRACTOR SHALL SUBMIT 6 COPIES OF SHOP DRAWINGS TO THE ARCHITECTA ENGINEER FOR APPROVAL FOR ALL EQUIPMENT AND DEVICES INSTALLED.THERE WILL BE NO DRAW UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED AND REVIEWED BY ARCHITECT/
- 11. ANY DEVIATION FROM PLANS WITHOUT PRIOR APPROVAL OF THE ARCHITECT SHALL BE CAUSE FOR THE REJECTION OF MATERIALS AND/ OR METHODS, AND ANY COST INCURRED TO CORRECT SUCH DEVIATION TO THE SATISFACTION OF THE A/E SHALL BE
- BORNE BY THE CONTRACTOR. 12. ANY COSTS INCURRED DUE TO LACK OF COOPERATION AMONG THE TRADES SHALL BE BORNE BY THE CONTRACTOR.
- 13. THE SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF 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 FORSEEN HAD PROPER EXAMINATION BEEN MADE.
- 14. TRADE NAMES ARE GIVEN TO CLARIFY TYPE OF PRODUCT AND QUALITY DESIRED. 15. CONTRACTORS SHALL VERIFY SERVICE VOLTAGE WITH UTILITY COMPANY, AND REVISE AND BALANCE PANELS AS REQUIRED.
- 16. ALL REMOTE EQUIPMENT ON ROOF OR GROUNDS SHALL HAVE A DISCONNECT SWITCH AT EACH PIECE OF EQUIPMENT. FURNISH FUSED DISCONNECTS AS REQUIRED BY N.E.C. 17. ALL EXTERIOR RECEPTACLES, JUNCTION BOXES AND EQUIPMENT SHALL BE WEATHERPROOF.
- 18. INSULATE ALL CONDUIT PASSING THROUGH WALK-IN COOLER, FILL AROUND CONDUIT WITH DUCT-IN SEAL WHERE IT PASSES THROUGH COOLER WALL OR CEILING. 19. ALL EXTERIOR CONDUIT FOR WIRING SHOULD BE MINIMIZED BY ROUTING IN CEILING SPACE. NO EXTERIOR CONDUIT WILL BE ACCEPTED. EXCEPT ELECTRICAL SERVICE. 20. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY, PRIOR TO ANY INDIVIDUAL CIRCUIT'S INSTALLATION. TO VERIFY WITH ALL OTHER TRADES CONCERNED THAT THE CIRCUIT WITH DEVICES AS DRAWN IS ADEQUATE IN SIZE AND MAKE-UP FOR THE MECHANICAL AND/OR KITCHEN EQUIPMENT TO BE INSTALLED. IF ANY CONFLICT IN VOLTAGE, PHASE OR LOAD IS ENCOUNTERED WHICH WOULD ALTER THE CIRCUIT SIZE, THIS CONTRACTOR SHALL NOTIFY THE ENGINEER OR OWNER IMMEDIATELY. FAILURE TO DO SO SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT CIRCUIT CHANGE
- 21. ALL ITEMS IN THE NOTES, SCHEDULES AND LEGEND MAY NOT NECESSARILY APPEAR ON THESE DRAWINGS.
- 22. MINIMUM WIRE SIZE SHALL BE #12 AWG AND MINIMUM CONDUIT SIZE SHALL BE 1/2".

DIRECTLY UPON THE CONTRACTOR.

- ALL WIRING SHALL BE RUN IN CONDUIT. 23. WIRING SHOWN IN THE PANEL SCHEDULE IS THE MINIMUM REQUIRED. RUNS IN EXCESS OF 90'-0" (ONE WAY) SHALL BE SIZED PER THE N.E.C. MAXIMUM 2% VOLTAGE DROP. 24. COORDINATE WITH LOCAL UTILITIES FOR THEIR REQUIREMENTS.
- 25. ANY ELECTRICAL OUTLETS WITHIN 6 FEET OF A SINK SHALL BE GFI PROTECTED. PROVIDE EITHER INDIVIDUAL GFI DEVICES OR GFI CIRCUIT BREAKERS, UNLESS SPECIFICALLY NOTED ON THE DRAWINGS OR SCHEDULES.
- 26. PROVIDE A 120 VOLT RECEPTACLE WITHIN 25 FEET OF ALL HVAC EQUIPMENT ON
- 27. ALL ELECTRICAL TO BE RUN OVERHEAD UNLESS OTHERWISE NOTED. 28. ALL FIXTURES TO BE PROPERLY SECURED TO PREVENT MOVING ONCE IN PLACE.
- 29. ALL CONDUIT (RIGID AND FLEXIBLE) SHALL BE PROPERLY SECURED AND NOT ALLOWED TO LIE ON FLOOR, ETC.
- 30. ALL OUTLETS LOCATED WITHIN 6'-0" OF A WET LOCATION REQUIRE GFCI PROTECTION.

MECHANICAL GENERAL NOTES

- THE INTENT OF THIS SPECIFICATION IS TO PROVIDE A STANDARD HVAC INSTALLATION FOR THE FACILITY WHICH IS FREE FROM HAZARD, EFFICIENT SERVICEABLE, CAPABLE OF MAINTAINING SPECIFIED MAXIMUM RELATIVE HUMIDITY AND TEMPERATURE AS SPECIFIED AND EASY TO MAINTAIN.
- THE EQUIPMENT, SYSTEMS, AND CONTROLS SHALL BE DESIGNED AND INSTALLED IN SUCH A MANNER THAT WILL ENCOURAGE THE CONSERVATION OF ENERGY WITHOUT UNNECESSARY HARDSHIP OR INCONVENIENCE TO TENANT
- ALL WORK, MATERIALS AND EQUIPMENT SHALL BE GAURANTEED FOR ONE YEAR FROM THE DATE OF ACCEPTANCE BY TENANT. ANY APPEARING WITHIN THE ONE YEAR GAURANTEESHALL BE REMOVED AND REPLACED AT NO EXPENSE AND TO THE COMPLETE SATISFACTION OF THE TENANT. CODES, RULES AND REGULATIONS:
- THE INSTALLATION SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL AUTHORITIESHARING JURISDICTION AND THE RULES AND REGULATIONS OF THE SERVING UTILITY, AND ALSO THE REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS WHERE THE CONTRACT REQUIREMENTS ARE IN EXCESS OF APPLICABLE CODES, RULES AND REGULATIONS, THE CONTRACT PROVISIONS SHALL GOVERN.
- ARRANGE AND PAY FOR ALL INSPECTION WORK OF THIS SECTION REQUIRED BY LOCAL BUILDING INSPECTOR. OBTAIN AND PAY FOR ALL PERMITS AND LICENSES, AND GIVE ALL NOTICES, PAY ALL FEES, COMPLY WITH ALL EXISTING LAWS, ORDINANCES, RULES AND REGULATIONS, BEARING ON THE CONDUCT OF THE WORK AS SPECIFIED AND DRAWN. INSPECTION AUTHORITY CERTIFICATE OF APPROVAL SHALL BE FURNISHED TO THE
- TENANT BEFORE FINAL ACCEPTANCE WIIL BE GIVEN. IF THE CONTRACTOR OBSERVES THAT THE DRAWINGS OR SPECIFICATIONS ARE AT VARIANCE WITH ANY LAWS, ORDINANCES, RULES AND REGULATIONS, HE SHALL PROMPTLY NOTIFY THE ARCHITECT-ENGINEER IN WRITING.
- IF THE CONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO THE ABOVE, AND WITHOUT NOTICE TO THE ARCHITECT-ENGINEER, HE SHALL BEAR ALL EXPENSE REQUIRED TO MAKE THE WORK TO CONFORM IN AN ACCEPTABLE MANNER.
- ELECTRICAL COMPONENTS USED IN THIS APPLICATION SHALL BE RATED IN ACCORDANCE WITH NEMA STANDARDS.
- SCOPE OF WORK:
- FURNISH A COMPLETE SYSTEM OF HEATING, AIR CONDITIONING AND ALL VENTILATING, THE DESIGN OF WHICH SHALL BE BASED UPON THE USE OF A CEILING SUPPLY AND IN-UNIT RETURN AIR SYSTEM.
- WORK INCLUDED UNDER THIS SECTION, WITHOUT LIMITING THE GENERALITY THEREOF, CONSISTS OF FURNISHING AND INSTALLING ALL MATERIALS, LABOR, EQUIPMENT, AND SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO THE HEATING, VENTILATING AND AIR CONDITIONING SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN IN GENERAL,
- 1. ROOF TOP UNIT, CONDENSING UNITS AND ASSOCIATES REFRIGERANT AND CONDENSATE 2. SHEET METAL WORK, INCLUDING DUCTWORK, DIFFUSERS AND REGISTERS, AND GAS UNIT
- HEATER.
- 3. DUCT FURNACES GAS FIRED (OR AS OTHERWISE SPECIFIED). 4. UNIT HEATERS, GAS FIRED (OR AS OTHERWISE SPECIFIED).
- EXHAUST FANS, INTAKE LOUVERS.
- 6. INSULATION, PIPE AND DUCT.

.FIRE DAMPERS:

PROVIDE HAIL GUARDS.

- 7. ENVIRONMENTAL CONTROL PANELS, ALL SYSTEMS SENSORS AND RELATED THERMOSTATS. 8. TESTING AND BALANCING.
- 9. PROVIDE ALL TEMPORARY HOOK REQUIRED TO TEST OUT EQUIPMENT. THE RESTROOMS SHALL BE DESIGNED TO MAINTAIN 70 DEGREES F.D.B. INDOOR WINTER CONDITIONS. THE DESIGN AND INSTALLATION SHALL CONFORM WITH THE LATEST

PUBLICATIONS AND STANDARDS AS RECOMMENDED BY ASHRAE UNLESS OTHERWISE NOTED

- IN THE FOLLOWING PARAGRAPHS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFECT OPERATION OF THE ENTIRE SYSTEM AND MUST MAKE GOOD AT HIS OWN EXPENSE ANY PART OF THE WORK WHICH MAY BE STOPPED UP, OR BECOME INOPERATIVE DUE TO LEAVING THE WORK UNPROTECTED DURING CONSTRUCTION OF THE SYSTEM OR WHICH MAY BREAK OR FAIL IN ANY MANNER BY REASONS OF POOR WORKMANSHIP OR DEFECTIVE MATERIALS FOR A
- ALL WORK, MATERIALS, AND EQUIPMENT SHALL BE GAURANTEED FOR ONE YEAR EXCEPT, COMPRESSORS SHALL BE FOR 5 YEARS FROM TENANTS OPENING DATE. ANY DEFECTIVE ITEMS APPEARING WITHIN THE GAURANTEE PERIOD SHALL BE REMOVED AND REPLACED AT NO EXPENSE AND TO THE COMPLETE SATISFACTION OF TENANT. OPERATIONS AND MAINTENANCE MANUALS WILL BE PROVIDED TO OWNER.

PERIOD ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.

- HEATING, VENTILATING AND AIR CONDITIONING DESIGN CONDITIONS: WALLS AND PARTITIONS WILL INCLUDE R-11 @ 3 1/2" CAVITY. AND R-21 @ 6" CAVITY WHERE INDICATED ON PLANS. CEILING WILL INCLUDE R-30 WHERE DESIGN CONDITIONS. OVERHANG OR SHADING AS PER BUILDING DETAILS. METAL BUILDING ROOF AND WALLS 3 1/2" M.B. WRAP.
- OFFICE AREAS: SUMMER: 75 DEGREES, 50% RH INSIDE (APPROX.) 100 DEGREES DB. 78 DEGREES WB OUTSIDE WINTER: 70 DEGREES DB INSIDE, 10 DEGREES WB OUTSIDE.
- GRILLS AND DIFFUSERS: SUPPLY: EQUAL TO "TITUS" MODEL "TITUS" S300FL SERIES OR EQUAL. 12" X 6" W/DAMPER, SIDE WALL DIFFUSERS AS SIZED ON PLANS. RETURN: EQUAL TO "TITUS" 50FF (UNLESS OTHERWISE SCHEDULED ON PLANS) THERMOSTATS:
- HONEYWELL SINGLE STAGE W/NIGHT SET BACK, T7450 OR EQUAL WITH LOCKABLE COVER (UNLESS OTHERWISE SCHEDULED ON PLANS)
- GALVANIZED SHEET METAL W/2" FIBERGLASS INSULATION FLEXIBLE DUCTWORK MIN. R-8. ALL DUCT SEAMS TO BE SEALED WITH UL181A OR 181B TAPES AND MASTICS. MECHANICAL FASTENERS AND SEALANTS MUST BE USED TO CONNECT DUCTS TO AIR DISTRIBUTION EQUIPMENT. BALANCING DEVICES PER IMC 603.15. FIRST 10' TO BE LINED WITH 1" INSULATION.
- ALL DUCT PENETRATING A FIRE WALL WILL HAVE FIRE/SMOKE DAMPERS. ALL A/C UNITS 2000 cfm OR GREATER MUST HAVE SMOKE DETECTORS.
- LOUVERS/VENTS: ALL LOUVERS AND VENTS ARE TO BE PAINTED TO MATCH METAL FINISHES. FIRST 10' OF DUCT TO BE LINED WITH 1" OF INSULATION. PROVIDE CONDENSATE OVERFLOW SWITCH FOR ALL AIR HANDLERS.

PLUMBING GENERAL NOTES

- 1. PROVIDE ALL PLUMBING ITEMS INDICATED ON THE DRAWINGS, DESCRIBED HEREIN OR OTHERWISE REQUIRED FOR A COMPLETE AND PROPER INSTALLATION, INCLUDING: A. PLUMBING FIXTURES, FITTINGS AND EQUIPMENT.
- B. HOT AND COLD WATER SYSTEMS.
- C. DRAIN WASTE AND VENT PIPING SYSTEMS.
- D. INDIRECT WASTE PIPING, INCLUDING ALL VALVES, TRAPS, PIPING AND ACCESSORIES FOR ALL KITCHEN EQUIPMENT. SIZE PER EQUIPMENT REQUIREMENTS.

(ROOF DRAINAGE IS SHOWN ON ARCHITECTURAL DRAWINGS.)

2. COMPLY WITH ALL APPLICABLE CODES, STANDARDS AND ORDINANCES, INCLUDING REQUIREMENTS OF THE INTERNATIONAL PLUMBING CODE (IPC), CURRENT EDITION.

3. THESE DRAWINGS AND SPECIFICATIONS REFLECT A STANDARD DESIGN WHICH MUST

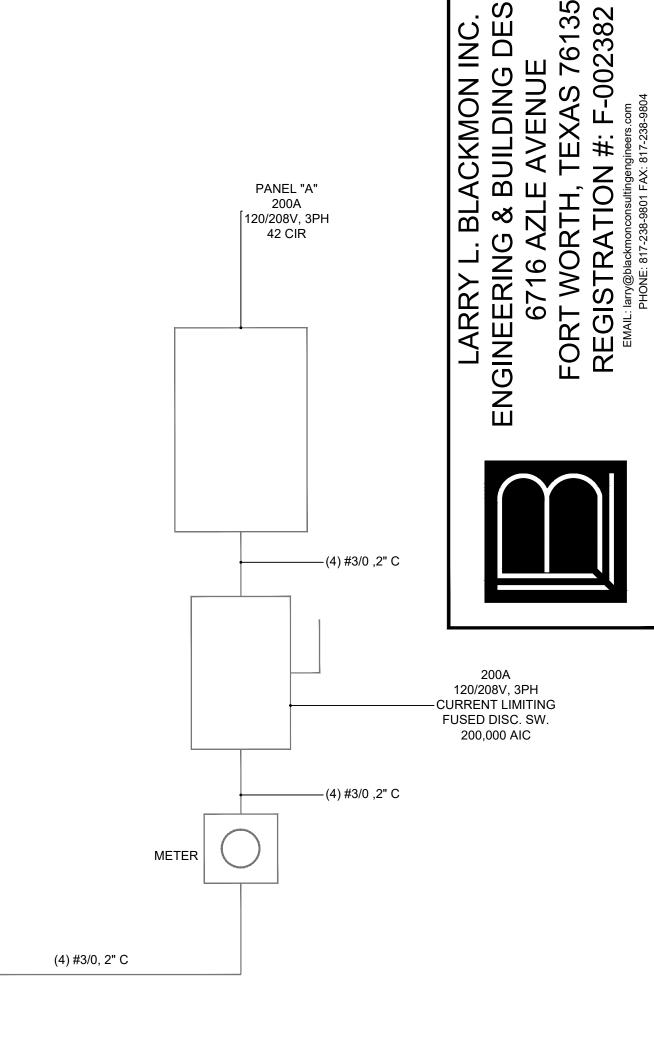
- BE VERIFIED OR MODIFIED FOR EACH APPLICATION. AS A MINIMUM, VERIFY ALL EQUIPMENT LOADS AND REQUIREMENTS, PIPE AND SERVICE SIZES, SITE CONDITIONS, LOCAL ORDINANCES AND CODES ETC. 4. THE SUBMISSION OF A BID OR PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT
- THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND/OR LABOR DUE TO DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED UNLESS THESE DIFFICULTIES COULD NOT HAVE BEEN FORESEEN, EVEN THOUGH PROPER EXAMINATION HAD BEEN MADE.
- 5. COORDINATE WITH ALL TRADES AND VERIFY ALL EQUIPMENT ROUGH-IN ITEMS AND LOCATIONS WITH THE EQUIPMENT SUPPLIER OR CONTRACTOR. ALL RE-WORK AND CORRECTIONS REQUIRED DUE TO LACK OF COORDINATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY, AND DONE AT NO COST TO THE OWNER.
- 6. SUBMIT SIX COPIES OF SHOP DRAWINGS AND MATERIAL DATA SUBMITTALS TO THE ENGINEER FOR APPROVAL BEFORE INSTALLATION. NO SUBSTITUTIONS SHALL BE ALLOWED WITH PRIOR APPROVAL BY THE ENGINEER.
- 7. SANITARY AND STORM DRAIN, WASTE AND VENTS SHALL BE STANDARD WEIGHT CAST IRON NO-HUB PER CISPI STANDARDS 301 AND 310, WITH STAINLESS STEEL ONE-PIECE NEOPRENE GASKETS. UNDER SLAB PIPING SHALL BE CAST IRON BELL AND SPIGOT PIPING WITH NEOPRENE GASKETS, OR A.B.I. "BEST" COUPLING. WHERE PERMITTED BY LOCAL AUTHORITY, APPROVED PVC OR ABS PLASTIC PIPE AND FITTINGS, PER ASTM D2661-89 OR D2665-89, MAY BE USED.
- 8. HOT AND COLD WATER AND INDIRECT WASTE PIPING: HARD-DRAWN COPPER TUBE, TYPE "L", PER ASTM B88-88A, MADE UP WITH WROUGHT OR FORGED COPPER SWEAT FITTINGS. UNDER SLABS: TYPE "K" SOFT TEMPER COPPER TUBE WITHOUT JOINTS. SOLDER: LEAD-FREE, CANFIELD "100% WATERSAFE". THE USE OF PEX IS ACCEPTABLE IF ALLOWED BY CITY OF FORT WORTH.
- 9. VALVES: USE PIPE SIZE VALVES, AS SHOWN BELOW:
- A. GATE: MILWAUKEE 148 OR 149 B. CHECK: MILWAUKEE 509T OR 1509T
- C. PRESSURE AND TEMPERATURE RELIEF VALVES: WATTS TYPE 100XL. 10. FIXTURE TAILPIECES AND TRAPS FOR LAVATORIES AND SINKS SHALL BE BRASS TUBING, SEMI-CAST, OR CAST IRON; ALL BRASS TUBING SHALL BE 17 GAGE, CHROME PLATED.
- 11. ALL PIPE HANGERS, CLAMPS AND CHANNELS SHALL BE ADEQUATELY SIZED TO CARRY PIPE LOADS AND PREVENT SAGGING.
- 12. INSULATE ALL HOT WATER PIPING WITH OWENS CORNING TYPE ASJ/SSL-II HEAVY DENSITY FIBER GLASS WITH ALL SERVICE JACKET; 1/2" FOR RUNOUTS UP TO 12'; 1" FOR OTHER PIPING 2" OR LESS IN DIAMETER. INSULATION SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY NOT TO
- EXCEED 50 WHEN TESTED IN ACCORDANCE WITH I.B.C. 13. ALL OTHER MATERIALS, NOT SPECIFICALLY DESCRIBED BUT REQUIRED FOR A COMPLETE AND PROPER INSTALLATION OF THE WORK OF THIS SECTION, SHALL BE NEW, FIRST QUALITY OF THEIR RESPECTIVE KINDS, AND AS SELECTED BY

THE CONTRACTOR SUBJECT TO ACCEPTANCE BY THE ENGINEER.

- 14. LAY OUT THE PLUMBING SYSTEM IN CAREFUL COORDINATION WITH THE DRAWINGS, DETERMINING PROPER ELEVATIONS FOR ALL COMPONENTS OF THE SYSTEM AND USING ONLY THE MINIMUM NUMBER OF BENDS TO PRODUCE A SATISFACTORILY FUNCTIONING SYSTEM. FOLLOW THE GENERAL LAYOUT SHOWN ON THE DRAWINGS IN ALL CASES EXCEPT WHERE OTHER WORK MAY INTERFERE. UNLESS SHOWN OTHERWISE, LAY OUT ALL PIPES TO FALL WITHIN PARTITION, WALL, FLOOR, OR ROOF CAVITIES, AND TO NOT REQUIRE FURRING OTHER THAN AS SHOWN ON THE
- 15. DO NOT CUT INTO OR REDUCE THE SIZE OF ANY LOAD-CARRYING MEMBER WITHOUT THE PRIOR APPROVAL OF THE ARCHITECT. INSTALL ALL PIPES TO CLEAR ALL BEAMS AND OBSTRUCTIONS.
- 16. UNLESS SHOWN OTHERWISE, PROVIDE UNIFORM PITCH OF AT LEAST 1/4 INCH PER FOOT FOR ALL HORIZONTAL DRAINAGE PIPING WITHIN THE BUILDING. 17. EXTEND ALL PLUMBING VENTS ABOVE ROOF
- 18. PROVIDE PRESSURE REDUCING VALVE IF WATER SERVICE PRESSURE EXCEEDS 80 PSI. PROVIDE PRESSURE BOOSTING SYSTEM IF PRESSURE IS BELOW 35 PSI.
- 19. PROVIDE SHUT-OFF GATE VALVES AND UNIONS AT ALL WATER CONNECTIONS TO EQUIPMENT AND APPLIANCES. PROVIDE STOPS AND CHROME PLATED BRASS SUPPLIES AT ALL FIXTURES.
- 20. ISOLATE ALL DISSIMILAR METALS WITH "EPCO" DIELECTRIC UNIONS, EXCEPT FOR BRASS OR BRONZE VALVES WITH STEEL PIPE.
- 21. PROTECT THE POTABLE WATER SUPPLY AGAINST BACKFLOW AND SIPHONAGE FROM EQUIPMENT, FIXTURES, ETC., USING APPROVED BACKFLOW AND ANTI-SIPHON DEVICES. 22. THOROUGHLY CLEAN ALL PIPING AND EQUIPMENT. REMOVING ALL DIRT. RUST. OIL AND PLASTER.
- 23. TEST SANITARY, PROCESS, AND STORM DRAINAGE PIPING BY PLUGGING ALL OPENINGS AND FILLING WITH WATER TO A HEIGHT EQUAL TO A 10 FOOT HEAD. ALLOW TO STAND ONE HOUR OR LONGER AS REQUIRED. REPAIR LEAKING JOINTS AND THEN RE-TEST.
- 24. NO WORK SHALL BE COVERED UNTIL IT HAS BEEN INSPECTED AND ACCEPTED BY THE LOCAL AUTHORITY AND THE ENGINEER.
- 25. TEST WATER LINES AT 100 PSIG. RETAIN FOR 24 HOURS; REPAIR ALL LEAKS AND
- 26. THE ENTIRE SYSTEM SHALL BE WARRANTED FOR A PERIOD OF ONE (1) YEAR BEGINNING WITH OWNER'S ACCEPTANCE OF THE WORK. ALL LABOR AND MATERIALS NECESSARY TO REPAIR OR REPLACE THE SYSTEM, OR PORTIONS THEREOF, DURING THAT TIME SHALL BE WARRANTED FOR A PERIOD OF ONE (1) YEAR FROM THE REPAIR OR REPLACEMENT.
- 27. PLUMBING CONTRACTOR TO PROVIDE AND HOOK UP ALL CONDENSATION LINES. 28. PLUMBING CONTRACTOR TO PROVIDE AND HOOK UP ALL GAS LINES. 29. ALL FLOOR DRAINS AND HUB DRAINS TO HAVE TRAP PRIMERS

PANEL - A MLO															
200 AMPS 120/2	120/208 VOLTS 3 PHASE					4 WIRE 10,000 AMP SHORT CIRCUIT RATING									
DESCRIPTION	POLES BKR V.A. LOA		V.A. LOAD			JIT	V.A. LOAD		BKR	POLES	S DI	ESCRIPT	ION		
LIGHTS	1	20	1208	1	Α	2	1440		20	1	OUTL	OUTLET			
LIGHTS	1	20	976	3	В	4	1260		20	1		OUTLET			
LIGHTS	1	20	520	5	O	6	900		20	1		OUTLET			
LIGHTS	1	20	900	7	Α	8	900		20	1		OUTLET			
LIGHTS	1	20	900	9	В	10	1260		20	1	OUTL	OUTLET			
LIGHTS	1	20	900	11	O	12	1080		20	1	OUTL	OUTLET			
EXTERIOR LIGHTS	1	20	810	13	Α	14			20	1	OUTL	OUTLET			
EF-1	1	20	301	15	В	16			20	1	WATI	WATER COOLER			
EF-2	1	20	1000	17	O	18	720 2		20	1	OVE	OVERHEAD DOOR 1			
OVERHEAD DOOR 2	1	20	1000	19	Α	20	720 20		20	1	OVE	OVERHEAD DOOR 3			
OVERHEAD DOOR 4	1	20	1000	21	В	22	720		20	1	OVE	OVERHEAD DOOR 5			
HEATER 1	1	20	486	23	С	24	486		20	1	HEAT	HEATER 2			
BIG ASS FAN	1	20	1200	25	Α	26	2760 3		35	3	RTU-	RTU-1			
RTU-2	3	50	3840	27	В	28	2760		35		RTU-	RTU-1			
RTU-2		50	3840	29	С	30	2760		35		RTU-	RTU-1			
RTU-2		50	3840	31	Α	32	3360		40	3	RTU-	RTU-3			
HEATER 3	1	20	1500	33	В	34	3360		40		RTU-	RTU-3			
WATER HEATER	2	30	3000	35	С	36	3360		40		RTU-	RTU-3			
WATER HEATER		30	3000	37	Α	38	1080		20	1	OUTL	OUTLET			
				39	В	40									
				41	C	42									
MOUNTING				(CON	INE	CTED	ED LOAD D		EMAND ACTOR	DE	MAND LOAD			
					Α		В	С	; F		Α	В	C		
LOCATION LIGHTS					2918		1876	142	20	1.25	3647	2345	1775		
OUTLETS				6340			6761	5032		1.00	6340	6761	5032		
HVAC					9960		9960	9960		1.00	9960	9960	9960		
					PANEL TOTAL							19,066	16,767		
		TOTAL LOAD 55,780 / 360 = 154.9 A													
NOTES: ALL OUTDOO	R LIGHT	ING (CIRCUITS T	ОВ	ΕO	ΝE	YE/TIM	1ER							

ELECTRICAL CONTRACTOR TO VERIFY BREAKER SIZE & HOOK UP REQUIRMENTS WITH HVAC CONTRACTOR AND EQUIPMENT SUPPLY.



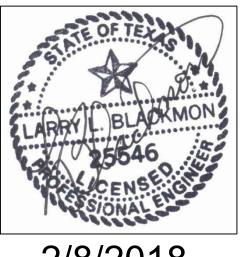


TO SERVICE

NOTE TO CONTRACTORS

THE INTENT OF THE DRAWINGS HEREIN IS TO REPRESENT A COMPLETE WORKING SYSTEM PER ALL CODES. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL COMPONENTS NECESSARY TO PROVIDE A COMPLETE WORKING SYSTEM PER ALL CODES. WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS





2/8/2018



NOTES PLAN

REVISIONS

DRAWN BY: DLP PROJ. MGR.: LLB DATE: PROJ. NO:

SHEET NO.