



Scope:

Provide electrical for new TI

All Electrical work shall be as per NEC 2017.

All work shall be done by qualified electricians.

All branch wiring shall be copper.

Devices shall be 20a commercial grade and color shall be by architect.

1. CONDUIT ABOVE GRADE SHALL BE EMT UNLESS OTHERWISE NOTED 2. CONDUIT BELOW GRADE SHALL BE RIGID PVC UNLESS OTHERWISE NOTED

3. CONNECTIONS SHALL BE MADE USING SET SCREW CONNECTORS 4. MC CABLE IS ACCETABLE FOR FINAL CONNECTIONS TO LIGHT FIXTURES PROVIDE WITH 10' WHIP ON ALL HIGHBAYS 5. BRANCH WIRING SHALL BE #12 THHN COPPER UNLESS OTHERWISE NOTED

6. WIRING SHALL BE AS PER CURRENT NEC 2005 7. WIRING DEVICES SHALL BE OF COMMERCIAL GRADE RATED AT 20 AMP

8. INSTALLATION SHALL ADHERE TO ADA STANDARDS 9. ALUMINUM XHHW-#2 CABLE MAY BE USED FOR FEEDERS LARGER THEN #2 OTHERWISE COPPER

10. REFER TO KCP&L STANDARDS MANUAL FOR 480 SERVICES 11. ALL LIGHTING/EQUIPMENT IN WAREHOUSE SHALL BE MOUNTED TO PROVIDE A MIN OF 36' CLEAR HEIGHT

	SYMBOLS & LEGEND					
H 5 3 1	HOME RUN TO PANEL. CIRCUIT NUMBERS, PHASE, NEUTRAL AND GRCUND CONDUCTORS INDICATED. ALL CONDUCTORS TO BE#12 EXCEPT WHERE NOTED CONDUIT TO BE 1/2" OR AS NOTED ON PLANS AND SPECIFICATIONS.					
	CONDUIT INSTALLED CONCEALED ABOVE CEILING OR IN WALL.					
-\	CONDUIT INSTALLED CONCEALED BELOW FLOOR SLAB OR UNDERGROUND					
\$	SINGLE POLE SWITCH, MOUNTED AT 46" O.C. A.F.F UNLESS OTHERWISE NOTED.					
<b>\$</b> <sup>2</sup>	TWO POLE SWITCH, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED					
<b>\$</b> <sup>3</sup>	THREE-WAY SWITCH, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED					
M9	CEILING MOUNTED MOTION SENSOR UNLESS OTHERWISE NOTED					
<b>\$</b> <sup>D</sup>	DIMMER SWITCH, MOUNTED AT 46" O.C. A.F.F UNLESS OTHERWISE NOTED.					
<b>\$</b> <sup>M</sup>	WALL MOUNTED MOTION SENSCR, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED					
\$	EMERGENCY LIGHTING , MOUNTED AT 7'-6" A F.F. UNLESS OTHERWISE NOTED					
<b>*</b>	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.					
Ø	DUPLEX RECEPTACLE, MOUNTED AT CEILING					
-	GFCI RECEPTACLE MOUNTED AT 18" O.C. A.F.F. UNLESS OTHER WISE NOTED					
=	GFCI FOURPLEX RECEPTACLE, MOUNTED AT 18" O.C. A.F.F. UNLESS OTHER WISE NOTED					
•	FLOOR MOUNTED RECEPTACLE					
4	COMBINATION DATA / VOICE OUTLET, MOUNTED AT 18" O.C. A.F.F. WITH 3/4" CONDUIT TO ABOVE CEILING					
•	PUSH BUTTON, MOUNTED AT 46" O.C. A.F.F., UNLESS OTHERWISE NOTED					
<b>1</b> 0	JUNCTION BOX					
Ó	DISCONNECT SWITCH					
×	STARTER					
Ø	COMBINATION DISCONNECT AND STARTER					
Ó	EXHAUST FAN					
Ó	MOTOR					
	PANELBOARD					
GFCI	GROUND FAULT INTERRUPTING					
D	DEDICATED					
WP	WEATHERPROOF					
IG	ISOLATED GROUND					
AC	ABOVE COUNTER					
WP/GFCI	WEATHERPROOF GROUND FAULT INTERUPPTING					

## BRANCH CIRCUIT COPPER CONDUCTOR AND CONDUIT SIZING CHART\*

OVERCURRENT PROTECTION DEVICE RATING (AMPS)	REQUIRED CONDUCTOR SIZE	EQUIPMENT GROUNDING CONDUCTOR SIZE	SINGE PHASE 2 WIRE + GND CONDUIT SIZE	SINGLE PHASE 3 WIRE + GND, CONDUIT SIZE	THREE PHASE 3 WIRE + GND CONDUIT SIZE	THREE PHASE 4 WIRE + GND CONDUIT SIZE
15	12 AWG	12 AWG	3/4"	3/4"	3/4"	3/4"
20	12 AWG	12 AWG	3/4"	3/4"	3/4"	3/4"
25	10 AWG	10 AWG	3/4"	3/4"	3/4"	3/4"
30	10 AWG	10 AWG	3/4"	3/4"	3/4"	3/4"
35	8 AWG	10 AWG	3/4"	3/4"	3/4"	3/4"
40	8 AWG	10 AWG	3/4"	3/4"	3/4"	3/4"
45	8 AWG	10 AWG	3/4"	3/4"	3/4"	1"
50	8 AWG	10 AWG	3/4"	3/4"	3/4"	1"
60	6 AWG	10 AWG	1"	1"	1"	1-1/4"
70	4 AWG	8 AWG	1"	1"	1"	1-1/4"
80	4 AWG	8 AWG	1"	1-1/4"	1-1/4"	1-1/4"
90	3 AWG	8 AWG	1"	1-1/4"	1-1/4"	1-1/4"
100	3 AWG	8 AWG	1-1/4"	1-1/2"	1-1/2"	1-1/2"

UNLESS OTHERWISE NOTED ON THE DRAWINGS UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL BRANCH CIRCUITS AND FEEDERS TO BE PROVIDED WITH A NEUTRAL WALRESIZING BASED ON 3 CURRENT CARRYING CONDUCTORS IN A RACEWAY OR CABLE CONDUCTORS SHALL BE DERATED IN ACCORDANCE WITH THE NEC IF 4 OR MORE CONDUCTORS ARE PLACED IN A RACEWAY OR CABLE ELECTRICAL FIELD PERSONAL RESPONSIBLE FOR VOLTAGE DROP CALCULATIONS.

LIGHT FIXTURE SCHEDULE								
TYPE	MANUFACTURER	CATALOG NO.	LAMPS	MOUNTING	VOLTS	REMARKS		
А	LITHONIA LIGHTING	STAKS-2X4-AL06-SWW7	LED	CEILING	UNV	OR EQUAL		
A1	LITHONIA LIGHTING	STAKS-2X2-AL03-SWW7	LED	CEILING	UNV	OR EQUAL		
В	LIGHTART	22" ACOUSTIC EMPIRE SHADE, OUTSIDE SHADE DUNE, INSDIE SHADE ZINC, WHITE CANOPY CORD AND FRAME 4000K DIMMABLE 800 LUMEN 54 DEGREE FLOOD	LED	CEILING	UNV			
С	LITHONIA LIGHITNG	LDN6-ALO2-SWW1-LO6-AR-LSS-MVO LT	LED	CEILING	UNV	OR EQUAL		
D	HE WILLIAMS	GH-2-L300-840-FA-DIM-UNV	LED	CEILING	277	PROVIDE WITH INTEGRAL MOTION SENSOR		
DR	EXISTING TO RELOCATE							
DE	HE WILLIAMS	GH-2-L300-840-FA-DIM-UNV	LED	CEILING	277	SAME AS TYPE D ONLY WITH EM BALLAST		
DER	EXISTING TO RELOCATE							
EM	COMPASS	CUS2Q	LED	WALL	UNV	OR EQUAL		
X1	Compass	CCR	LED	WALL	UNV	OR EQUAL		
EX	COMPASS	CCR	LED	WALL	UNV	EXISTING		
ERH	COMPASS	CUWZ-PC	LED	WALL	UNV	EXISITNG		

## ELECTRICAL GENERAL NOTES

- 1. WORK INCLUDED. FURNISH ALL LABOR, MATERIAL, SERVICES AND SKILLED SUPERVISION NECESSARY FOR THE CONSTRUCTION, ERECTION, INSTALLATION CONNECTIONS, TESTING AND ADJUSTMENTS OF ALL CIRCUITS AND ELECTRICAL EQUIPMENT SPECIFIED HEREIN, OR NOTED ON THE DRAWINGS, AND ITS DELIVERY TO THE OWNER COMPLETE IN ALL RESPECTS READY FOR
- 2. CONTRACT DRAWINGS THE CONTRACT DRAWINGS ARE SHOWN IN PART DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK. INDICATING THE GENERAL ARRANGEMENT OF EQUIPMENT, CONDUIT AND OUTLETS. VERIFY SPACES FOR THE INSTALLATION OF THE MATERIALS BASED ON ACTUAL DIMENSIONS OF EQUIPMENT FURNISHED. IF A QUESTION EXISTS AS TO THE EXACT INTENDED LOCATION OF OUTLETS OR EQUIPMENT, OBTAIN INSTRUCTIONS FROM THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH
- 3. MINIMUM SIZE OF CONDUIT SHALL BE 1/2" UNLESS NOTED OTHERWISE.
- 4. ALL WIRING FOR LIGHTING, RECEPTACLE AND POWER CIRCUITS WHERE NOT SHOWN ON DRAWINGS SHALL BE WITH #12 CONDUCTORS, NUMBER AS REQUIRED IN CONDUIT SIZED PER N.E.C. PROVIDE EQUIPMENT GROUNDING CONDUCTOR FOR ALL BRANCH CIRCUITS AND FEEDERS. HOMERUNS TO PANEL SHALL BE IN INDIVIDUAL CONDUITS, UNLESS NOTED OTHERWISE, WITH
- CIRCUITS AS SHOWN. 5. THE USE OF TYPE 'MC' AND TYPE 'AC' CABLE IS PERMITTED IN ALL AREAS PER NEC AND LOCAL CODE REQUIREMENTS.
- 6. THE USE OF ALUMINUM CONDUCTORS WITH AMPACITY EQUIVALENT TO COPPER IS PERMITTED IN ALL AREAS PER NEC REQUIREMENTS.
- 7. ALL JUNCTION BOXES, PULL BOXES, AND PANELBOARDS SHALL BE RIGIDLY ATTACHED TO STRUCTURE.
- 8. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.
- 9. ALL CONDUIT, BOXES, ETC. SHALL BE CONCEALED OR MOUNTED FLUSH WITH CEILING OR WALL CONSTRUCTION, CONDUITS SHALL BE MOUNTED AS HIGH AS POSSIBLE. NO SURFACE MOUNTED CONDUIT, BOXES, ETC. WILL BE PERMITTED WITHOUT PERMISSION OF THE ENGINEER PRIOR TO INSTALLATION. ALL CONDUIT PENETRATIONS SHALL BE FIRE-CAULKED AS REQUIRED.



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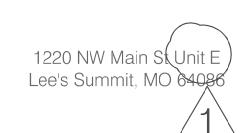
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PLUMBING



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1 06/24/24 City Comments 2 06/24/24 Owner Changes 3 06/24/24 Riser update

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