



INSPIRED  
TECHNOLOGY  
CONCEPTS.  
1433, TONNE ROAD,  
ELK GROVE, IL  
60007  
Tel # 847-770-5725

LECTEXT DESIGNS  
912 HAYDEN DR.  
MCHENRY, IL 60050  
303-526-8158  
LECTEXT@PEAK.COM

ARCHITECT/ENGINEER

LUCACCIONI  
OFFICE REMODEL  
721 DUNDEE AVE., ELGIN, IL

PROJECT NUMBER:

14.009

DRAWN BY:

LP

CHECKED BY:

DATE: REVISION:

DATE: ISSUED AS:

2-26-15 PRELIMINARY DESIGN  
9-16-15 PERMIT SUBMITTAL  
10-28-15 PERMIT REVISION  
10-10-16 PERMIT RE-SUBMITTAL  
10-19-16 ISSUE FOR PRICING

SHEET TITLE:

SPECIFICATION AND  
SINGLE LINE DIAGRAM

SHEET NUMBER:

E-00

© All drawings and written material contained herein may not be duplicated, used or disseminated without the written consent of the architect.

**ELECTRICAL SPECIFICATIONS**

- THE GENERAL CONDITIONS AND SUPPLEMENTAL GENERAL CONDITIONS BY THE ARCHITECT SHALL GOVERN WHERE APPLICABLE.
- THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL VERIFY EXISTING SITE CONDITIONS AT THE JOB SITE BEFORE SUBMITTING BID. FAILURE TO RECOGNIZE WORK REQUIRED SHALL BE AT THE EXPENSE OF THIS CONTRACTOR. NO CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL COMPENSATION AFTER THE LETTING OF BIDS.
- ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST-CLASS WORKMANLIKE MANNER AND SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES. THE COMPLETED SYSTEMS SHALL BE FULL OPERATIONAL; ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT. ALL INTERFERENCES PRESERVE MAXIMUM HEADROOM, AND AVOID OMISSIONS. ALL MATERIALS, WORKMANSHIP, AND EQUIPMENT SHALL BE GUARANTEED FOR ONE (1) YEAR AFTER SYSTEM ACCEPTANCE.
- RECEPTACLES AND SWITCHES SHALL BE THE TYPE AS SHOWN ON THE DRAWINGS AND SHALL BE SPECIFICATION GRADE.
- MINIMUM BRANCH WIRE SIZE SHALL BE #12 AWG COPPER EXCEPT FOR CONTROL AND SIGNAL CIRCUITS. INSULATION (INTERIOR) SHALL BE SOLID TYPE THWN SIZES #12 THROUGH #10. SIZES #8 THROUGH 750 MCM SHALL BE STRANDED TYPE THHN OR THWN AT THE CONTRACTOR'S OPTION.
- MINIMUM OUTLET BOXES SHALL BE 4" SQUARE, UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS BUT SHALL CONTACT THE PROJECT ARCHITECT FOR ALL DIMENSIONAL DATA AND SHALL VERIFY EXACT LOCATION AND MOUNTING HEIGHTS OF ALL OUTLETS WITH ARCHITECT AND/OR OWNER PRIOR TO INSTALLATION.
- GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ALL APPLICABLE CODES.
- ALL MATERIAL USED SHALL BE NEW AND BEAR THE U/L LABEL AND BE OF THE APPROPRIATE NEMA STANDARD.
- THIS CONTRACTOR SHALL ALLOW IN HIS INITIAL BID THE COST OF SERVICES ON ALL EQUIPMENT INSTALLED UNDER HIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE OF THE WORK.
- LAYOUT IS DIAGRAMMATIC AND WORK SHALL BE INSTALLED TO MEET FIELD CONDITIONS AND EQUIPMENT SELECTED. PROVIDE SHOP DRAWINGS AS REQUIRED AND VERIFY ALL EQUIPMENT.
- PANELBOARDS SHALL BE DEAD FRONT WITH BOLT-ON TYPE CIRCUIT BREAKERS W/CU BUS. A TYPED LEGEND, UNDER A CLEAR PLEXAN--GLASS SHALL BE PROVIDED FOR CIRCUIT IDENTIFICATION.
- CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND REQUIRED INSPECTION FEES.
- IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE AND REVIEW THE ELECTRICAL CHARACTERISTICS, AMPACITY, AND OTHER REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLATION.
- IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE THE LOCATIONS OF CONDUIT ROUTING, EQUIPMENT, LIGHTING, ETC. WITH ALL OTHER TRADES IN THE FIELD PRIOR TO INSTALLATION.
- THE ENTIRE INSTALLATION OF ALL COMPONENTS OF THIS PROJECT SHALL COMPLY WITH ALL FEDERAL ADA REQUIREMENTS. VERIFY EXACT LOCATIONS AND HEIGHTS OF ALL FIXTURES AND OUTLETS BEFORE INSTALLATION TO INSURE COMPLIANCE WITH FEDERAL REGULATIONS.
- FOR CLARITY OF ALL PLANS, SOME CONDUIT AND WIRE HAS NOT BEEN SHOWN. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO FURNISH AND INSTALL COMPLETE AND OPERATING SYSTEMS INCLUDING ALL CONDUIT AND WIRING.
- FOR ALL NIGHT LIGHTING, EXIT SIGNS, AND BATTERY POWERED EMERGENCY LIGHTING CIRCUITS, THIS CONTRACTOR SHALL USE #10 AWG FOR THE ENTIRE CIRCUIT LENGTH UNLESS INDICATED OTHERWISE.
- THIS CONTRACTOR SHALL MAINTAIN THE FIRE RATED INTEGRITY OF ALL FLOORS, CEILINGS, AND WALLS. ALL PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS SHALL BE EFFECTIVELY SEALED USING APPROVED MATERIALS AND METHODS. ALL LIGHTING FIXTURES MOUNTED IN FIRE RATED CEILINGS SHALL MAINTAIN THE INTEGRITY OF THE FIRE RATED CEILINGS USING APPROVED MATERIALS AND METHODS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATINGS.

**GENERAL LIGHTING NOTES**

- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF AL CEILING MOUNTED DEVICES. COORDINATE INSTALLATION WITH ALL OTHER TRADES.
- SUPPORT ALL RECESSED AND PENDANT MOUNTED FIXTURES FROM STRUCTURE IN ACCORDANCE WITH APPLICABLE BUILDING CODE REQUIREMENTS. SUSPENDED CEILING MOUNTING SYSTEMS SHALL NOT BE USED TO SUPPORT FIXTURES OR RACEWAYS.
- THE MAXIMUM FLEXIBLE CONDUCTOR LENGTH SHALL BE 6 FT.

**GENERAL AUXILIARY SYSTEMS NOTES**

- DATA AND TELEPHONE CABLE ARE INCLUDED IN THIS CONTRACT. STUB EMPTY 1" CONDUIT ABOVE NEAREST ACCESSIBLE CEILING. BUSH CONDUIT END. SEE SPECIFICATIONS FOR CABLING INFORMATION.
- ROUTE ALL LOW VOLTAGE CABLING IN ACCESSIBLE CEILING SPACE IN J-HOOKS. WHERE NO ACCESSIBLE CEILING EXISTS, ROUTE IN CONDUIT AS SHOWN ON POWER PLANS.

**GENERAL FIRE ALARM SYSTEMS NOTES**

- A FULLY ALARMED FIRE SYSTEM IS TO BE INSTALLED, UNLESS NOTED OTHERWISE.
- FIRE ALARM HORN/STROBES WITH A 'C' DESIGNATION SHALL BE CEILING MOUNTED DEVICES. COORDINATE CEILING MOUNTED STROBES WITH ALL OTHER CEILING MOUNTED DEVICES.
- PROVIDE CONNECTIONS TO SPRINKLE FLOW SWITCH, TAMPER SWITCH, AND POST INDICATING VALVE. COORDINATE LOCATION WITH MECHANICAL.
- CONTRACTOR SHALL SUBMIT FIRE ALARM DRAWINGS TO AUTHORITY HAVING JURISDICTION FOR APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO COORDINATE FIRE ALARM INSTALLATION/CONNECTION AND VOLTAGE WITH ALL OTHER TRADES FOR ANY TIMES WHICH REQUIRE A FIRE ALARM CONNECTION INCLUDING, BUT NOT LIMITED TO: SMOKE DAMPERS, FIRE DAMPERS, FIRE SHUTTERS, MAGNETIC HOLD OPENS, MAGNETIC DOOR LOCKS.
- COORDINATE WITH CIVIL DRAWINGS WHETHER A POST INDICATOR SWITCH IS PRESENT. ALLOW 100 FT OF CONDUCTOR AND CONDUIT AND FIRE ALARM ADDRESSABLE MODULE FOR CONNECTION TO SWITCH.
- COORDINATE LOCATION AND QUANTITY OF SUPERVISORY VALVE/SPRINKLER TAMPER SWITCHES AND WATER FLOW VALVES. THESE ITEMS ARE NOT SHOWN ON THE ELECTRICAL PLANS. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE LOCATION WITH SPRINKLER INSTALLER AND PROVIDE NUMBER OF CONNECTIONS NECESSARY FOR A COMPLETE AND CODE COMPLIANT INSTALLATION.

1PH,4W 240/120V		PANEL-LP1 (EXISTING)						22KAIC		BOTTOM FEED SURFACE MOUNT	
125 BUS		LOCATION: UTILITY ROOM								LOCATION: UTILITY ROOM	
SL.NO.	DESCRIPTION	LOAD	BRK	BRK	A	C	DESCRIPTION	SL.NO.			
1	OFFICE LOBBY LTG	768	20/1	20/1	391	C	CONF. LTG	2			
3	MEN'S & WOMEN LTG & POW	1500	20/1	20/1			OFFICE LTG	4			
5	OFFICE RECEP.	1440	20/1	20/1	900		STORAGE RECEP.	6			
7	CONF. FLOOR RECEP.	1200	20/1	20/1	1500		MICROWAVE	8			
9	CONF. RECEP.	360	20/1	20/1			LC REFRIGERATOR	10			
11	ELECTRIC DRINKING FOUNTAIN	360	20/1	20/1	1500	1,260	PRIVATE OFFICE REC.	12			
13	MECH LTG (EXISTING)	500	20/1	20/1	1,500		COPIER/PRINTER	14			
15	PANEL LP-1A	2520	30/2	20/1			SPARE	16			
17				20/1			SPARE	18			
19	EF-3	300	20/1	20/1			SPARE	20			
21	SPARE		20/1	20/1			SPARE	22			
23	SPARE		20/1	20/1			SPARE	24			
25	SPARE		20/1	20/1			SPARE	26			
27	SPARE		20/1	20/1			SPARE	28			
29	SPARE		20/1	20/1			SPARE	30			
31	SPARE		20/1	20/1			SPARE	32			
33	SPARE		20/1	20/1			SPARE	34			
35	SPARE		20/1	20/1			SPARE	36			
37	SPARE		20/1	20/1			SPARE	38			
39	SPARE		20/1	20/1			SPARE	40			
41	SPARE		20/1	20/1			SPARE	42			
TOTAL-VA		5,588	6,370		4,291	3,212					
PHASE-A											
PHASE-B											
PHASE-C											
TOTAL CONNECTED VA											
TOTAL AMPS											

\*\* CIRCUIT BREAKERS SERVING TO EMERGENCY AND EXIT SIGN TO HAVE HANDLE LOCKED

1PH,4W 240/120V		PANEL-LP2 (NEW)						22KAIC		BOTTOM FEED SURFACE MOUNT	
125 BUS		LOCATION: UTILITY ROOM								LOCATION: UTILITY ROOM	
SL.NO.	DESCRIPTION	LOAD	BRK	BRK	A	C	DESCRIPTION	SL.NO.			
1	OFFICE AND LOBBY LTG	771	20/1	20/1	836		OFFICE LTG	2			
3	PRIVATE OFFICE REC.	384	20/1	20/1	1500		MEN'S & WOMEN LTG & POW	4			
5	CONF. ROOM LTG	361	20/1	20/1	1350		EXTERIOR LIGHT FIXTURES	6			
7	SPARE	0	20/1	20/1	1260		OFFICE RECEPTACLE	8			
9	OFFICE RECEPTACLE	1440	20/1	20/1	1200		FLOOR OUTLET	10			
11	RECEPTION DESK RECEP.	720	20/1	20/1	900		PRIVATE OFFICE REC.	12			
13	CONFERENCE ROOM RECEP.	720	20/1	20/1	360		EXTERIOR RECEPTACLE	14			
15	ELECTRIC DRINKING FOUNTAIN	850	20/1	20/1	1500		COPIER/PRINTER	16			
17	RTU SERVICE-GF-WP OUTLET	500	20/1	20/1	100		TIME CLOCK	18			
19	TTB	360	20/1	20/1	200		FIRE ALARM PANEL	20			
21			20/1	20/1				22			
23			20/1	20/1				24			
25			20/1	20/1				26			
27			20/1	20/1				28			
29			20/1	20/1				30			
31			20/1	20/1				32			
33			20/1	20/1				34			
35			20/1	20/1				36			
37			20/1	-				38			
39			20/1	20/3				40			
41	SPARE		20/1	-				42			
TOTAL-VA		3,792	2,314		3,846	5,360					
PHASE-A											
PHASE-B											
PHASE-C											
TOTAL CONNECTED VA											
TOTAL AMPS											

\*\* CIRCUIT BREAKERS SERVING TO EMERGENCY AND EXIT SIGN TO HAVE HANDLE LOCKED

3PH,4W 240/120V		PANEL-MDP (EXISTING)						22KAIC		BOTTOM FEED SURFACE MOUNT	
400 BUS,400A MLO		LOCATION: UTILITY ROOM								LOCATION: UTILITY ROOM	
SL.NO.	DESCRIPTION	LOAD	BRK	BRK	A	B	C	DESCRIPTION	SL.NO.		
1	DOWN HEAT-DOWN	2,880			30/2	30/2	2,880	DOWN HEAT-UP	2		
3		2,880					2,880		4		
5	Furnace-1	1,500	20/1	60/2				FAN FOR HEAT-UP (EXISTIG)	6		
7	Furnace-2	1,500	20/1			5,760			8		
9	Furnace-3	1,500	20/1	20/1		1,500		Furnace-4	10		
11	EXISTING				1,920	20/2	100/2	9,600	PANEL LP-2 (NEW)	12	
13	EXISTING	1,920					9,600		14		
15	SPARE				20/2	20/2		1,875	1,875	16	
17	SPARE								18		
19	PANEL LP-1 (EXISTING)	9,600			100/2	20/2		1,875	1,875	20	
21										22	
23	CU-1				3744	45/2	45/2		3744	CU-2	24
25		3744					3744				26
27	CU-3				3744	45/2	45/2		3744	CU-4	28
29											30
TOTAL-VA		19,644	17,724	10,908			23,859	11,874	24,723		
PHASE-A											
PHASE-B											
PHASE-C											
TOTAL CONNECTED VA											
TOTAL AMPS											

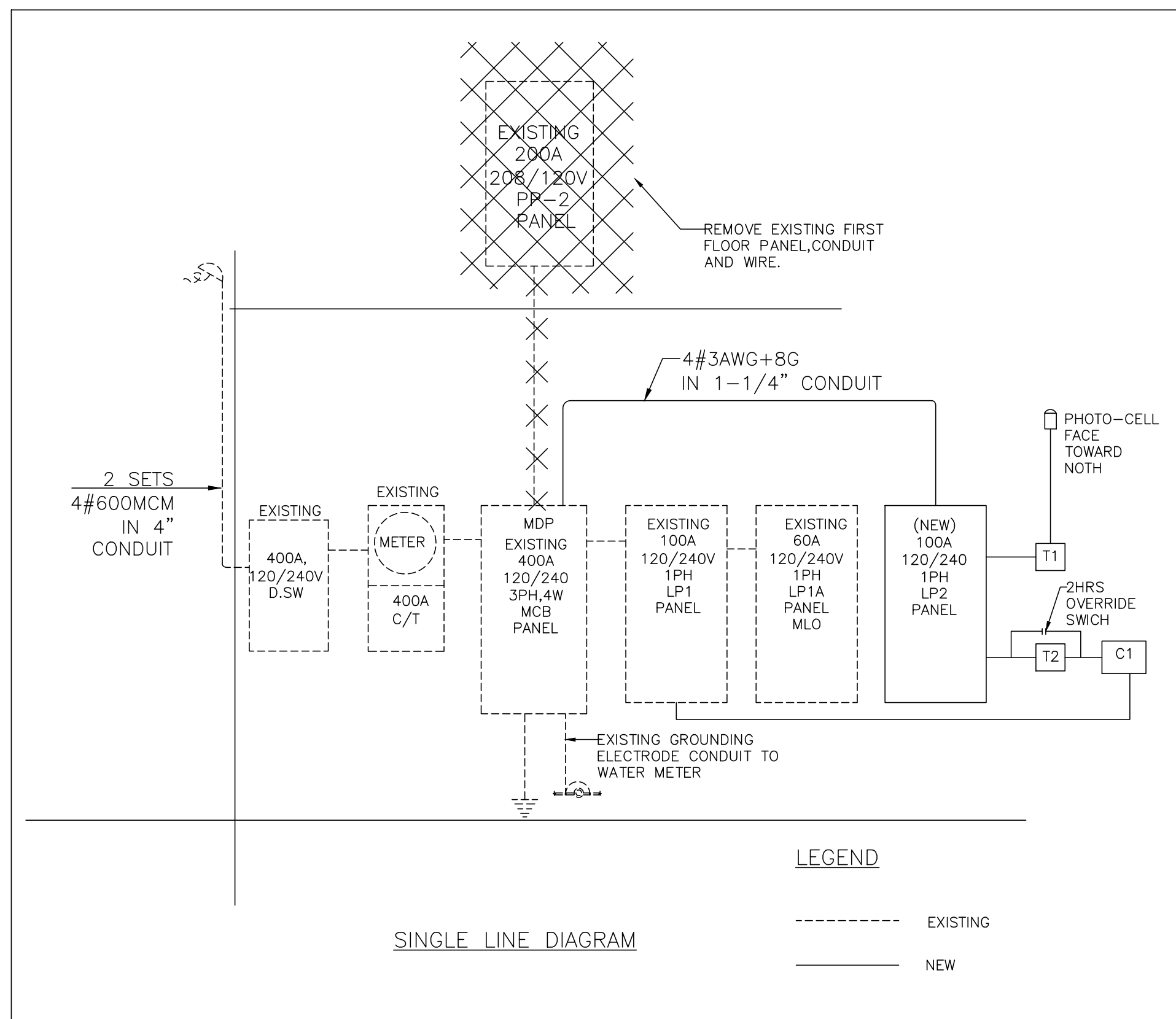
NOTE: EXISTING 400A,3PH,240/120V PANEL IS SUFFICIENT AND TO BE RE-USED

THE FOLLOWING BUILDING CODE IS ADAPTED BY CITY OF ELGIN, IL.

- INTERNATIONAL BUILDING CODE (2012)
- INTERNATIONAL RESIDENTIAL CODE (2012)
- INTERNATIONAL FIRE CODE (2012)
- INTERNATIONAL MECHANICAL CODE (2012)
- NATIONAL ELECTRIC CODE (2011)
- ACCESSIBILITY--1997 STATE OF ILLINOIS ACCESSIBILITY CODE (2012)
- INTERNATIONAL ENERGY CONSERVATION CODE (2012)
- ILLINOIS STATE PLUMBING CODE (2004)
- LIFE SAFETY CODE (2012 - NFPA 101)

- SCOPE OF WORK
- REMOVE EXISTING SUB PANEL FROM FIRST FLOOR AND PROVIDE A NEW 100A PANEL IN BASEMENT.
  - DISCONNECT AND REMOVE EXISTING LIGHTING AND POWER AND CONNECT TO NEW PANEL.
  - FURNISH AND INSTALL NEW LIGHTING AND RECEPTACLES AS PER NEW LAYOUT.
  - DISCONNECT AND REMOVE EXISTING FEEDER FROM ROOF TOP UNIT-1 AND EXTEND TO NEW RELOCATED RTU.

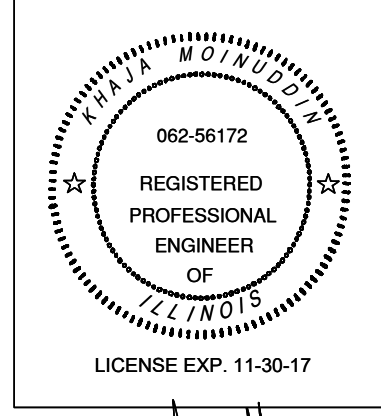
- FIRE ALARM SYSTEM NOTE:
- FIRE ALARM CONTRACTOR SHALL SUBMIT A SEPARATE DETAIL DRAWING WITH CALCULATION AND DEVICES CUT SHEETS TO THE FIRE DEPARTMENT AND OBTAIN A PERMIT PRIOR TO FIRE ALARM SYSTEM INSTALLATION.



**LEGEND**

SINGLE LINE DIAGRAM

----- EXISTING  
————— NEW



C. Noisell