



1. CIRCUITS TO REMAIN: EXISTING ROUTING TO REMAIN, AS REQUIRED.
2. REUSE OF EXISTING CIRCUITRY: EXISTING CIRCUITRY SERVING LIGHTING FIXTURES FOR A GIVEN AREA SHALL BE REUSED WHERE CONVENIENT TO SERVE THE NEW LAYOUT. PROVIDE CIRCUIT MODIFICATIONS INDICATED OR AS OTHERWISE REQUIRED TO MAINTAIN THE CONTINUITY OF THE EXISTING CIRCUITS THAT REMAIN.
3. EXISTING CONDUIT: ALL EXISTING CONDUITS AND WIRING THAT WILL NOT BE REUSED SHALL BE REMOVED. ALL EXISTING WIRING IN CONDUITS TO BE ABANDONED SHALL BE DISCONNECTED FROM POWER SOURCE AND REMOVED.
4. EXISTING CIRCUITS: ALL EXISTING CIRCUITS SHALL REMAIN AND RECONNECT TO NEW PANEL WITH THE SAME CIRCUIT NUMBER AS DESIGNATED FROM EXISTING PANEL. INDICATE NEW LOAD TO NEW PANEL AND ITS DIRECTORY.
5. EXISTING PANELBOARDS: EXISTING PANELBOARD IS TO REMAIN ENERGIZED UNTIL ALL CIRCUITS HAVE BEEN REMOVED. THE WORK TO RELOCATE CIRCUITS FROM THE EXISTING PANELBOARD TO NEW PANELBOARD SHALL BE COORDINATED WITH OTHER TRADES AND BE PERFORMED AT TIMES THAT DO NOT DISRUPT ON GOING WORK IN ANY OF THE AFFECTED SPACES.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE TO THE 2020 NATIONAL ELECTRICAL CODE AND OTHER REQUIREMENTS OF JURISDICTIONS HAVING AUTHORITY.
7. ELECTRICAL GROUNDING WILL BE IN ACCORDANCE WITH NEC ARTICLE 250.

(N) - NEW
(E) - EXISTING

PROFESSIONAL ENGINEERING:



NO ALTERATION PERMITTED
EXCEPT AS PROVIDED UNDER
DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER.

0	10/11/2020	ISSUED FOR PERMIT APPLICATION
REV.	DATE	DESCRIPTION

CLIENT:

CREMATION

PROJECT:

CREMATION, LLC

ADDRESS:

ADDRESS: ACE
DENVER, CO 80204

ISSUE DATE:

ISSUE DATE:
10/11/2020

PROJECT NUMBER:

AE# 1217

SCALE:
NONE

DRAWN BY:	DEE
-----------	-----

DESIGNED BY:
DEE

CHECKED BY:
DEE

DRAWING TITLE:

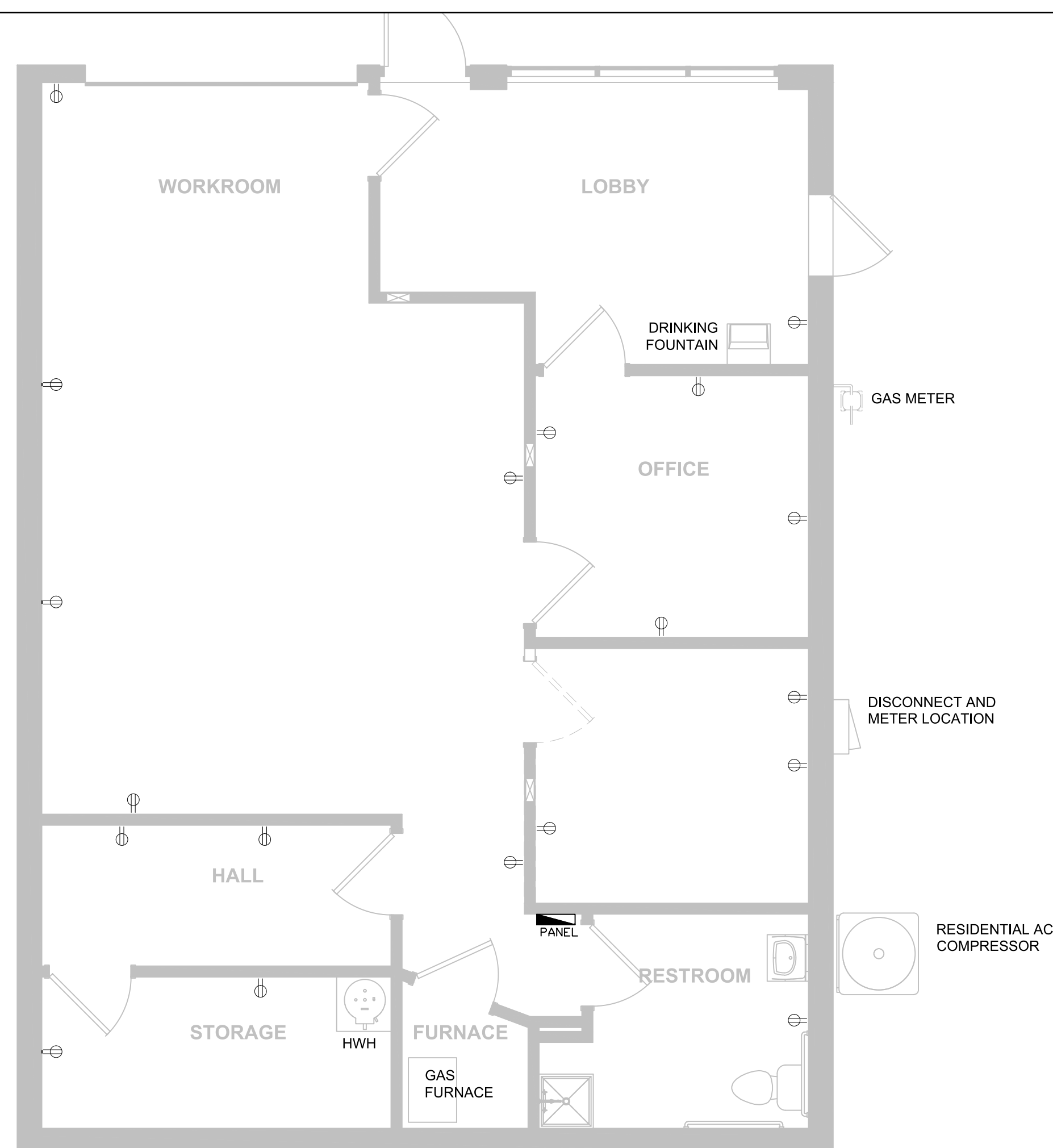
DRAWING TITLE:
LIGHTING LAYOUT

DRAWING NO:

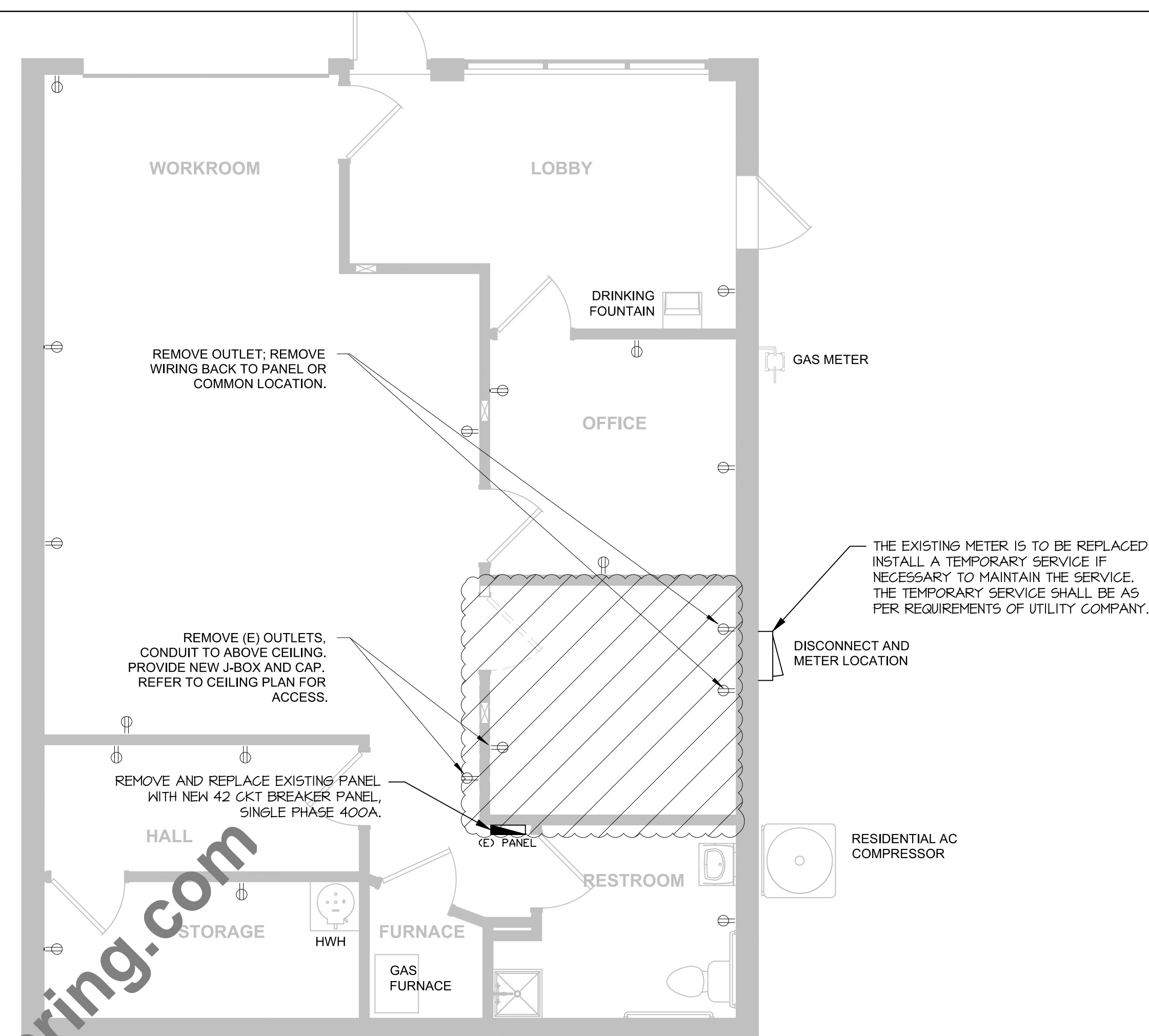
E2

REVISION:

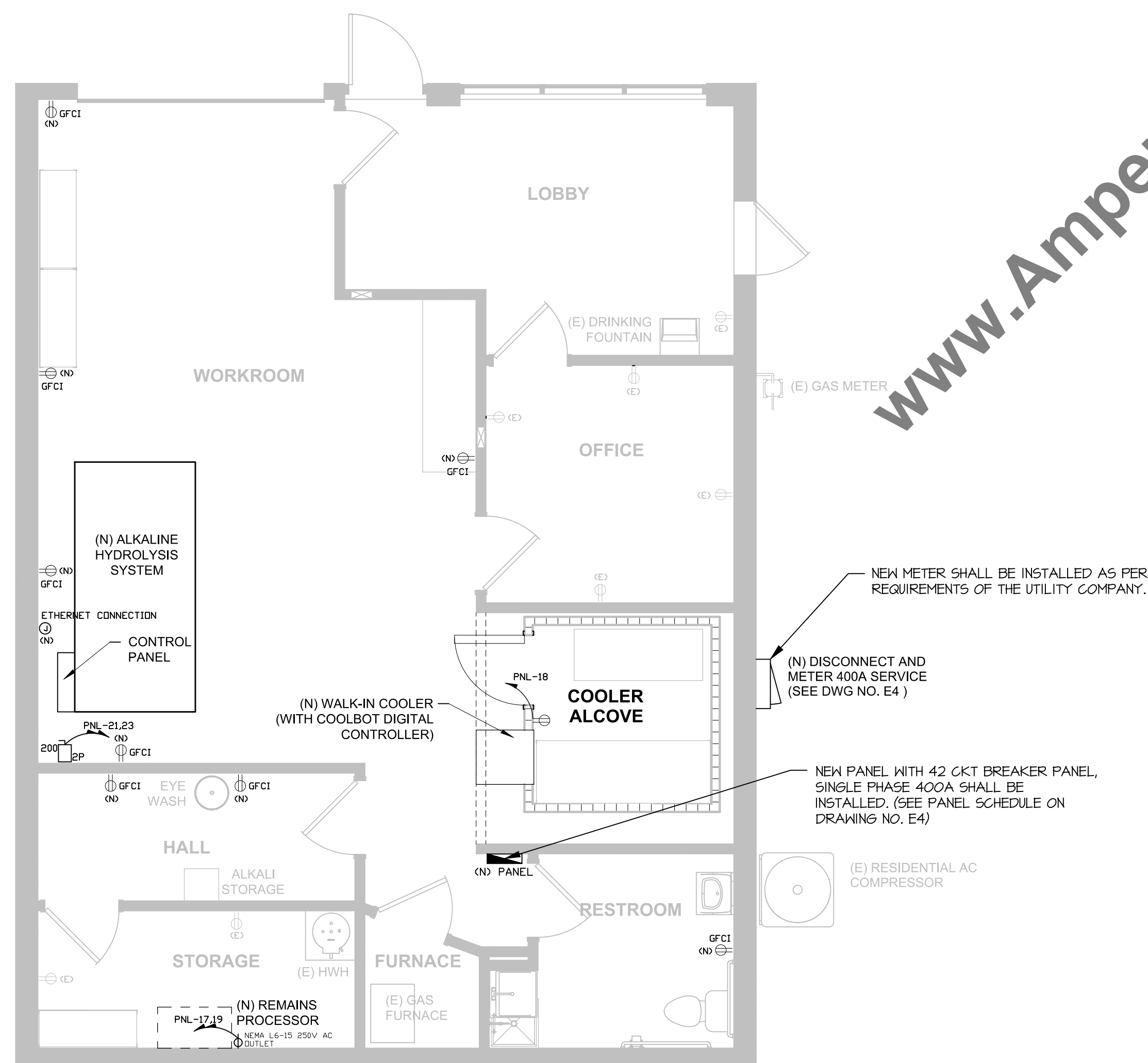
0



(EXISTING) POWER LAYOUT



POWER DEMOLITION PLAN



PROPOSED POWER LAYOUT

GENERAL ELECTRICAL NOTES

1. CIRCUITS TO REMAIN: EXISTING ROUTING TO REMAIN, AS REQUIRED.
2. REUSE OF EXISTING CIRCUITRY: EXISTING CIRCUITRY SERVING RECEPTACLES FOR A GIVEN AREA SHALL BE REUSED WHERE CONVENIENT TO SERVE THE NEW LAYOUT. PROVIDE CIRCUIT MODIFICATIONS INDICATED OR AS OTHERWISE REQUIRED TO MAINTAIN THE CONTINUITY OF THE EXISTING CIRCUITS THAT REMAIN.
3. EXISTING CONDUIT: ALL EXISTING CONDUITS AND WIRING THAT WILL NOT BE REUSED SHALL BE REMOVED. ALL EXISTING WIRING IN CONDUITS TO BE ABANDONED SHALL BE DISCONNECTED FROM POWER SOURCE AND REMOVED.
4. EXISTING CIRCUITS: ALL EXISTING CIRCUITS SHALL REMAIN AND RECONNECT TO NEW PANEL WITH THE SAME CIRCUIT NUMBER AS DESIGNATED FROM EXISTING PANEL. INDICATE NEW LOAD TO NEW PANEL AND ITS DIRECTORY.
5. EXISTING PANELBOARDS: EXISTING PANELBOARD IS TO REMAIN ENERGIZED UNTIL ALL CIRCUITS HAVE BEEN REMOVED. THE WORK TO RELOCATE CIRCUITS FROM THE EXISTING PANELBOARD TO NEW PANELBOARD SHALL BE COORDINATED WITH OTHER TRADES AND BE PERFORMED AT TIMES THAT DO NOT DISRUPT ON GOING WORK IN ANY OF THE AFFECTED SPACES.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE TO THE 2020 NATIONAL ELECTRICAL CODE AND OTHER REQUIREMENTS OF JURISDICTIONS HAVING AUTHORITY.
7. ELECTRICAL GROUNDING WILL BE IN ACCORDANCE WITH NEC ARTICLE 250.

(N) - NEW
(E) - EXISTING

PROFESSIONAL ENGINEERING:

SEAL & SIGNATURE:

NO ALTERATION PERMITTED
EXCEPT AS PROVIDED UNDER
DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER.

0	10/11/2020	ISSUED FOR PERMIT APPLICATION
REV	DATE	DESCRIPTION

CLIENT:

CREMATION

PROJECT:

CREMATION, LLC

ADDRESS: ACE
DENVER, CO 80204

ISSUE DATE:

ISSUE DATE:
10/11/2020

PROJECT NUMBER:

AE# 1217

SCALE:

NONE

DESIGNED BY:

DEE

DRAWN BY:

DEE

CHECKED BY:

DEE

DRAWING TITLE:

POWER LAYOUT

DRAWING NO:

E3

REVISION:

0

FROM XCEL ENERGY 240/120V SOURCE
UTILITY POLE

FROM XCEL ENERGY 240/120V SOURCE
UTILITY POLE

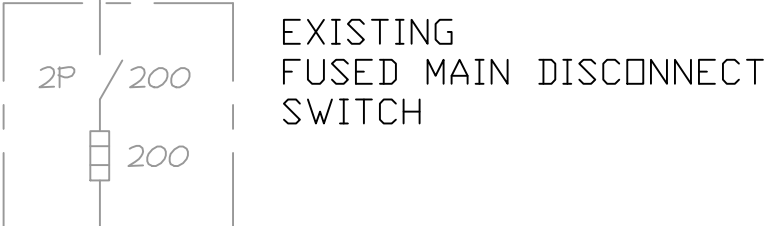
BY UTILITY COMPANY

BY UTILITY COMPANY



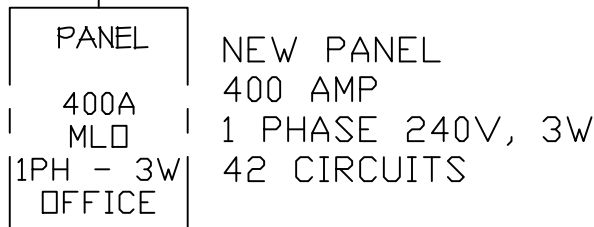
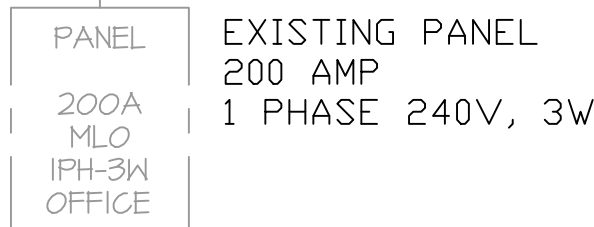
EXISTING CABLE

P-D/S
1 SET
3" C
3 #600 kcmil
1 #1/0 G



EXISTING CABLE

P-PANEL
1 SET
3" C
3 #600 kcmil
1 #1/0 G



EXISTING

NEW

SINGLE LINE DIAGRAM

GENERAL NOTES

- PANEL SCHEDULES SHOWN ABOVE ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY EXISTING LOCATION, AVAILABLE BREAKERS AND SERVICE CAPACITY FOR NEW LOADS. CONTRACTOR TO PERFORM ALL REQUIRED MODIFICATIONS FOR A COMPLETE OPERATING SYSTEM IN CONFORMANCE WITH THE 2020 NATIONAL ELECTRICAL CODE.
- COORDINATE WITH ARCHITECTURAL DRAWINGS, FOR EXACT LOCATION OF EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS INCLUDING EXACT POINT OF ELECTRICAL CONNECTION.
- ELECTRICAL CONTRACTOR TO VERIFY ALL CIRCUITS SAVE DURING DEMO OR REMOVAL OF EXISTING LIGHTING FIXTURES AND WIRING DEVICES AND PREPARE THEM FOR REUSE AS NEEDED.

MANUFACTURER: GE				BUS RATING: 200 A								
TYPE/MODEL: TYPE 1				MAIN: MAIN LUG ONLY								
MOUNTING: SURFACE				VOLTAGE: 240 /120V								
ENCLOSURE: INDOOR				WIRING: 1 PH 3 W								
LOCATION:				FEEDER SIZE: EXISTING								
TYPE: BOLT-ON				AIC:								
ENTER CABINET: TOP				FED FROM:								
				ELECTRICAL SERVICE/METER PANEL								
CKT NO:	LOAD DESCRIPTION	NO. POLES	CB AMPS	CONDUCTOR TYPE	LOAD KVA	KVA PER PHASE A B	LOAD KVA	CONDUCTOR TYPE	CB AMPS	NO. POLES	LOAD DESCRIPTION	CKT NO:
1	GARAGE OUTLETS, BACK HALL LIGHT & OUTLET	1	20	EXISTING	1.44	1.92	0.48	EXISTING	20	1	BATHROOM LIGHTS	2
3	OFFICE LIGHTS, BATHROOM GFCI	1	20	EXISTING	0.48	1.92	1.44	EXISTING	15	1	OUTLETS	4
5	WEST GARAGE OUTLETS, ADMIN OFFICE	1	20	EXISTING	1.08	1.88	0.80	EXISTING	20	1	FRONT LIGHTS, EXIT SIGNS	6
7	ADMIN OFFICE OUTLETS	1	20	EXISTING	0.72	2.70	1.98	EXISTING	20	1	OUTLETS	8
9	WEST CORRIDOR OUTLETS, MECHANICAL ROOM	1	20	EXISTING	1.08	3.06	1.98	EXISTING	20	1	TIME CLOCK, OUTLETS	10
11	GENERAL OUTLETS	1	20	EXISTING	1.98	3.96	1.98	EXISTING	20	1	OUTLETS	12
13	WATER HEATER	2	30	EXISTING	2.75	4.75	2.00	EXISTING	30	2	AC CONDENSER	14
15	X	X	X	X	2.75	4.75	2.00	X	X	X	X	16
17	BLANK				0.00	0.00	0.00				BLANK	18
19	BLANK				0.00	0.00	0.00				BLANK	20
21	BLANK				0.00	0.00	0.00				BLANK	22
23	BLANK				0.00	0.00	0.00				BLANK	24
25	BLANK				0.00	0.00	0.00				BLANK	26
27	BLANK				0.00	0.00	0.00				BLANK	28
29	BLANK				0.00	0.00	0.00				BLANK	30
					TOTAL CONNECTED LOAD KVA: 25							
					TOTAL CONNECTED AMPS: 104							
					DEMAND LOAD KVA: 28							
					DEMAND LOAD AMPS: 115							

EXISTING PANEL SCHEDULE

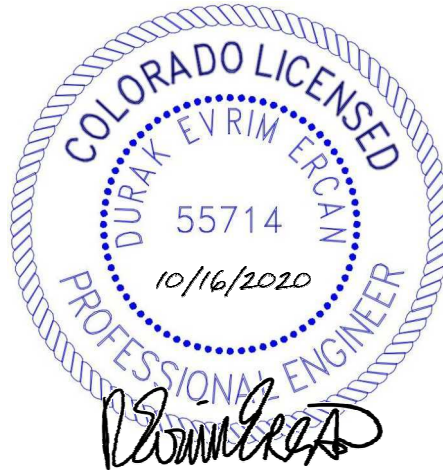
		MANUFACTURER:				BUS RATING: 400 A							
		TYPE/MODEL:				MAIN: MAIN LUGS ONLY							
		MOUNTING: SURFACE				VOLTAGE: 240 /120V							
		ENCLOSURE:				WIRING: 1 PH 3 W							
		LOCATION:				FEEDER SIZE: (NEW) 3" C (3) 600kcmil & (1) #1/0 GND							
		TYPE: BOLT-ON				AIC:							
		ENTER CABINET: TOP				FED FROM:		ELECTRICAL SERVICE/METER PANEL					
CKT NO:	LOAD DESCRIPTION	NO. POLES	CB AMPS	CONDUCTOR TYPE	LOAD KVA	KVA PER PHASE A B	LOAD KVA	CONDUCTOR TYPE	CB AMPS	NO. POLES	LOAD DESCRIPTION	CKT NO:	
1	GARAGE OUTLETS, BACK HALL LIGHT & OUTLET	1	20	EXISTING ¹	1.44	1.92	0.48	EXISTING ¹	20	1	BATHROOM LIGHTS	2	
3	OFFICE LIGHTS, BATHROOM GFCI	1	20	EXISTING ¹	0.48		1.92	1.44	EXISTING ¹	15	1	OUTLETS	4
5	WEST GARAGE OUTLETS, ADMIN OFFICE	1	20	EXISTING ¹	1.08	1.88	0.80	EXISTING ¹	20	1	FRONT LIGHTS, EXIT SIGNS	6	
7	ADMIN OFFICE OUTLETS	1	20	EXISTING ¹	0.72		2.70	1.98	EXISTING ¹	20	1	OUTLETS	8
9	WEST CORRIDOR OUTLETS, MECHANICAL ROOM	1	20	EXISTING ¹	1.08	3.06	1.98	EXISTING ¹	20	1	TIME CLOCK, OUTLETS	10	
11	GENERAL OUTLETS	1	20	EXISTING ¹	1.98		3.96	1.98	EXISTING ¹	20	1	OUTLETS	12
13	WATER HEATER	2	30	EXISTING ¹	2.75	4.75	2.00	EXISTING ¹	30	2	AC CONDENSER	14	
15	X	X	X	X	2.75		4.75	2.00	X	X	X	16	
17	REMAINS PROCESSOR	2	15	(NEW) 1/2" C (2) #12 AWG CU & (1) #12 GND	1.44	2.88	1.44	(NEW) 1/2" C (2) #12 AWG CU & (1) #12 GND	15	1	A/C COOLER	18	
19	X	X	X	X	1.44		1.80	0.36	(NEW) 1/2" C (2) #12 AWG CU & (1) #12 GND	20	1	COOLER LIGHTS	20
21	ALKALINE HYDROLYSIS LT- 500	2	200	(NEW) 2" C (2) #4/0 AWG CU & (1) #6 GND	24.00	24.00	0.00				SPARE	22	
23	X	X	X	X	24.00		24.00	0.00			SPARE	24	
25	SPARE				0.00	0.00	0.00				SPARE	26	
27	SPARE				0.00		0.00	0.00			SPARE	28	
29	SPARE				0.00	0.00	0.00				SPARE	30	
31	SPARE				0.00		0.00	0.00			SPARE	32	
33	SPARE				0.00	0.00	0.00				SPARE	34	
35	SPARE				0.00		0.00	0.00			SPARE	36	
37	SPARE				0.00	0.00	0.00				SPARE	38	
39	SPARE				0.00		0.00	0.00			SPARE	40	
41	BLANK				0.00	0.00	0.00				BLANK	42	
					38.5			39.1					
Note:					TOTAL CONNECTED LOAD KVA: 78								
1. New circuit breakers to be installed with same rating for all existing loads.					TOTAL CONNECTED AMPS: 323								
2. Field verify Panel kAIC shall match or rated higher than the existing panel.					DEMAND LOAD KVA: 93								
					DEMAND LOAD AMPS: 390								

NEW PANEL SCHEDULE

PROFESSIONAL ENGINEERING:

DURAK EVRIM ERCAN P.E.
ENGINEERING | CONSULTING | ESTIMATING
201-920-2899 info@AmperEngineering.com

SEAL & SIGNATURE:



NO ALTERATION PERMITTED
EXCEPT AS PROVIDED UNDER
DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER.

REV	DATE	DESCRIPTION
0	10/11/2020	ISSUED FOR PERMIT APPLICATION

CLIENT:

CREMATION

PROJECT:

CREMATION, LLC

ADDRESS:

ACE
DENVER, CO 80204

ISSUE DATE:

10/11/2020

PROJECT NUMBER:

AE# 1217

SCALE:

NONE

DESIGNED BY:

DEE

DRAWN BY:

DEE

CHECKED BY:

DEE

DRAWING TITLE:

SINGLE LINE DIAGRAM &
PANEL SCHEDULE

DRAWING NO:

E4

REVISION:

0