

FIRST FLOOR ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



GENERAL PLAN NOTES

- ALL LIGHT FIXTURES TO BE SPECIFIED BY OWNER/DEVELOPER, FURNISHED AND INSTALLED BY CONTRACTOR.
- REFER TO SHEET E-1 FOR ELECTRICAL FLOOR PLAN NOTES AND LEGEND.
- PROVIDE DISCONNECT SWITCH AND 240V POWER FOR MECHANICAL FORCE AIR UNITS.
- ALL ATTIC ACCESSSES SHALL BE PROVIDED WITH A SWITCH, LIGHT AND 120V GFI OUTLET AT OR NEAR THE FORCED AIR UNIT. LOCATE SWITCH NEAR ATTIC ACCESS PANEL.
- SWITCHES SHALL BE MOUNTED AT A MAXIMUM OF 48" ABOVE FINISHED FLOOR. GENERAL RECEPTACLES, TV AND TELE/COMPUTER OUTLETS SHALL BE MOUNTED AT A MINIMUM OF 18" ABOVE FINISHED FLOOR. INSTALL RECEPTACLE IN KITCHEN AND BATHROOMS 6" ABOVE COUNTER HORIZONTALLY UNLESS NOTED OTHERWISE.
- COORDINATE AND VERIFY EXACT MOUNTING HEIGHT AND LOCATIONS OF WALL MOUNTED LIGHT FIXTURES WITH OWNER PRIOR TO INSTALLATION.
- ALL LIGHTING FIXTURE LUMINAIRE INSTALLED INSIDE THE SHOWER ROOM SHALL NOT EXCEED 40 WATTS.
- PROVIDE MINIMUM 4" THICK WALL FOR MOUNTING ELECTRICAL SUBPANELS.
- ALL BRANCH CIRCUITS THAT SUPPLY 125-VOLT, SINGLE PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF ENTIRE BRANCH CIRCUIT. NEC ARTICLE 210.12 (A). SMOKE DETECTORS SHALL BE INCLUDED IN THE ARC-FAULT CIRCUIT INTERRUPTER PROTECTION OF DWELLING UNIT BEDROOM BRANCH CIRCUITS.
- ALL ELECTRICAL PENETRATIONS THROUGH A FIRE RATED BARRIER (I.E. WALLS, CEILING AND/OR FLOORS) SHALL BE PROVIDED WITH A FIRE RATED ESCUTCHEON OR EQUAL. THE FIRE ESCUTCHEON AND ITS INSTALLATION SHALL BE FIRE RATED EQUAL OR BETTER THAN THE BARRIER.

KEYED PLAN NOTES

- WHERE A BOX IS USED AS THE SOLE SUPPORT OF A LIGHT FIXTURE, THE BOX SHALL BE LISTED FOR THE APPLICATION AND FOR THE WEIGHT OF THE FIXTURE SUPPORTED. NEC ART. 314.21(A)(B). CONSULT OWNER FOR FIXTURE TYPE AND FINISH.
- REFER TO SINGLE LINE DIAGRAM FOR DETAILS. MAIN ELECTRICAL SERVICE LOCATION TO COMPLY WITH LOCAL POWER UTILITY REQUIREMENTS.
- PROVIDE 120V POWER FOR ELECTRICAL WATER HEATER. COORDINATE & VERIFY ALL ELECTRICAL REQUIREMENTS WITH MANUFACTURER.
- SEE SITE ELECTRICAL PLAN FOR CIRCUITING.

FIRE RISER ROOM KEYED NOTES

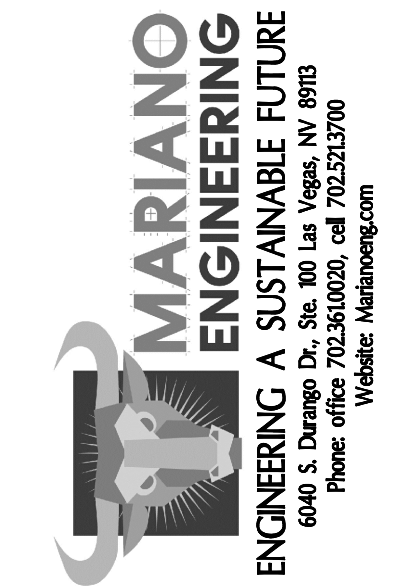
- FIRE ALARM CONTROL WIRING AS REQUIRED TO TELEPHONE BOX. COORDINATE WITH FIRE ALARM CONTRACTOR FOR REQUIREMENTS.
- PROVIDE CONNECTION OF FLOW SWITCH AND TAMPER SWITCHES TO FIRE MONITORING PANEL. VERIFY LOCATIONS, SWITCHES PROVIDED BY FIRE PROTECTION CONTRACTOR.
- PROVIDE UP JUNCTION BOX FOR CONNECTION TO COMBINATION FIRE ALARM HORN/STROBE. VERIFY LOCATION, PROVIDE AS PER LOCAL FIRE DEPARTMENT REQUIREMENTS.
- FIRE MONITORING PANEL WITH BATTERY BACK-UP. PROVIDED BY FIRE PROTECTION CONTRACTOR. VERIFY LOCATION.

REVISIONS		NO.	DATE	DESCRIPTION	BY
		1	02/25/19	BUD/ FEE/ PT COMMENT	
		2	02/25/19	OWNER REVISIONS	



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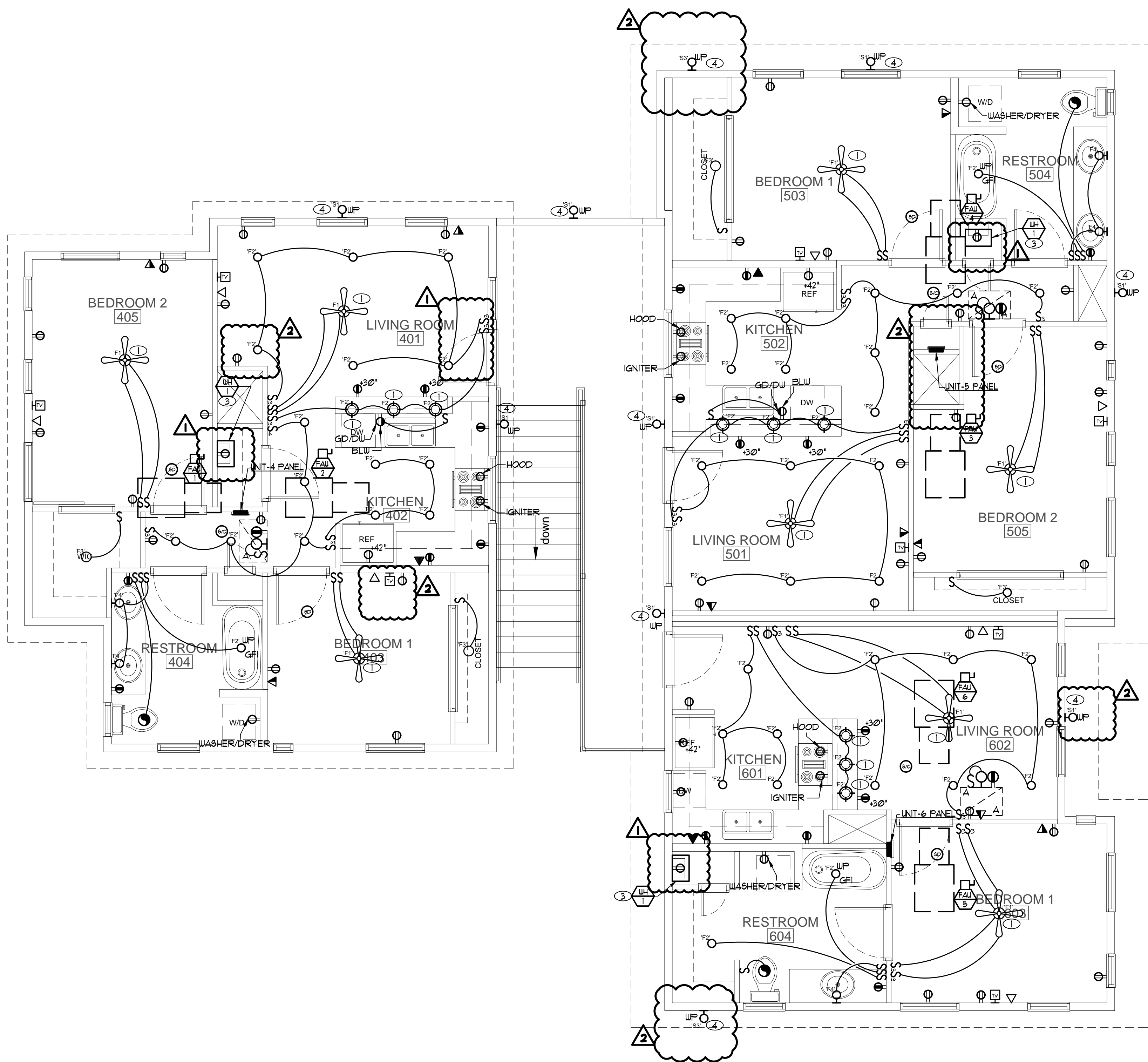
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51 E. TEXAS AVE.
HENDERSON, NEVADA
FIRST FLOOR ELECTRICAL PLAN

JOB NO.:	201724-A
PHASE:	CD
DRAWN:	SO, LE
CHECKED:	SO
DATE:	10/22/2018

E102



SECOND FLOOR ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



GENERAL PLAN NOTES

1. ALL LIGHT FIXTURES TO BE SPECIFIED BY OWNER/DEVELOPER, FURNISHED AND INSTALLED BY CONTRACTOR.
2. REFER TO SHEET E-1 FOR ELECTRICAL FLOOR PLAN NOTES AND LEGEND.
3. PROVIDE DISCONNECT SWITCH AND 240V POWER FOR MECHANICAL FORCE AIR UNITS.
4. ALL ATTIC ACCESSSES SHALL BE PROVIDED WITH A SWITCH, LIGHT AND 120V GFI OUTLET AT OR NEAR THE FORCED AIR UNIT. LOCATE SWITCH NEAR ATTIC ACCESS PANEL.
5. SWITCHES SHALL BE MOUNTED AT A MAXIMUM OF 48" ABOVE FINISHED FLOOR. GENERAL RECEPTACLES, TV AND TELECOMPUTER OUTLETS SHALL BE MOUNTED AT A MINIMUM OF 18" ABOVE FINISHED FLOOR. INSTALL RECEPTACLE IN KITCHEN AND BATHROOMS 6" ABOVE COUNTER HORIZONTALLY UNLESS NOTED OTHERWISE.
6. COORDINATE AND VERIFY EXACT MOUNTING HEIGHT AND LOCATIONS OF WALL MOUNTED LIGHT FIXTURES WITH OWNER PRIOR TO INSTALLATION.
7. ALL LIGHTING FIXTURE LUMINAIRE INSTALLED INSIDE THE SHOWER ROOM SHALL NOT EXCEED 40 WATTS.
8. PROVIDE MINIMUM 4" THICK WALL FOR MOUNTING ELECTRICAL SUBPANELS.
9. ALL BRANCH CIRCUITS THAT SUPPLY 125-VOLT, SINGLE PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF ENTIRE BRANCH CIRCUIT. NEC ARTICLE 210.12 (A). SMOKE DETECTORS SHALL BE INCLUDED IN THE ARC-FAULT CIRCUIT INTERRUPTER PROTECTION OF DWELLING UNIT BEDROOM BRANCH CIRCUITS.
10. ALL ELECTRICAL PENETRATIONS THROUGH A FIRE RATED BARRIER (I.E. WALLS, CEILINGS AND/OR FLOORS) SHALL BE PROVIDED WITH A FIRE RATED ESCUTCHEON OR EQUAL. THE FIRE ESCUTCHEON AND ITS INSTALLATION SHALL BE FIRE RATED EQUAL OR BETTER THAN THE BARRIER.

KEYED PLAN NOTES

- ① WHERE A BOX IS USED AS THE SOLE SUPPORT OF A LIGHT FIXTURE, THE BOX SHALL BE LISTED FOR THE APPLICATION AND FOR THE WEIGHT OF THE FIXTURE SUPPORTED. NEC ART. 314.21(A)(1)(B). CONSULT OWNER FOR FIXTURE TYPE AND FINISH.
- ② REFER TO SINGLE LINE DIAGRAM FOR DETAILS. MAIN ELECTRICAL SERVICE LOCATION TO COMPLY WITH LOCAL POWER UTILITY REQUIREMENTS.
- ③ PROVIDE 120V POWER FOR ELECTRICAL WATER HEATER. COORDINATE & VERIFY ALL ELECTRICAL REQUIREMENTS WITH MANUFACTURER.
- ④ SEE SITE ELECTRICAL PLAN FOR CIRCUITING.

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		1	02/25/19	BLOCK/PT COMMENT	
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51 E. TEXAS AVE.
HENDERSON, NEVADA
SECOND FLOOR ELECTRICAL PLAN

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E103

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			02/25/19	PROJECT COMMENT	
		A	02/25/19	OWNER REVISIONS	



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51 E. TEXAS AVE.
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SITE ELECTRICAL PLAN

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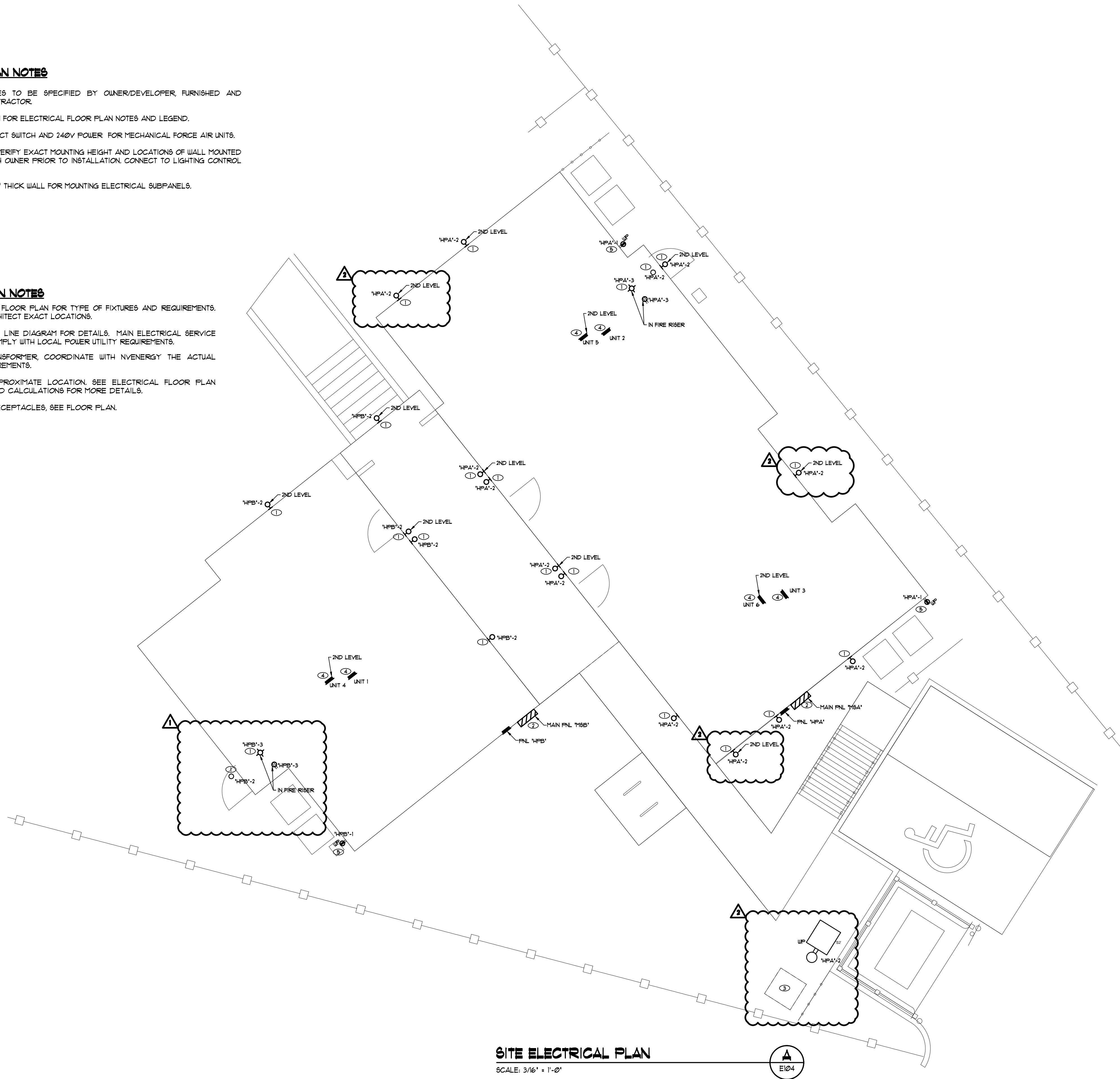
E104

GENERAL PLAN NOTES

1. ALL LIGHT FIXTURES TO BE SPECIFIED BY OWNER/DEVELOPER, FURNISHED AND INSTALLED BY CONTRACTOR.
2. REFER TO SHEET E-1 FOR ELECTRICAL FLOOR PLAN NOTES AND LEGEND.
3. PROVIDE DISCONNECT SWITCH AND 240V POWER FOR MECHANICAL FORCE AIR UNITS.
4. COORDINATE AND VERIFY EXACT MOUNTING HEIGHT AND LOCATIONS OF WALL MOUNTED LIGHT FIXTURES WITH OWNER PRIOR TO INSTALLATION. CONNECT TO LIGHTING CONTROL PANEL.
5. PROVIDE MINIMUM 4" THICK WALL FOR MOUNTING ELECTRICAL SUBPANELS.

KEYED PLAN NOTES

1. SEE ELECTRICAL FLOOR PLAN FOR TYPE OF FIXTURES AND REQUIREMENTS. VERIFY WITH ARCHITECT EXACT LOCATIONS.
2. REFER TO SINGLE LINE DIAGRAM FOR DETAILS. MAIN ELECTRICAL SERVICE LOCATION TO COMPLY WITH LOCAL POWER UTILITY REQUIREMENTS.
3. NVENERGY TRANSFORMER, COORDINATE WITH NVENERGY THE ACTUAL SIZE AND REQUIREMENTS.
4. UNIT PANEL APPROXIMATE LOCATION. SEE ELECTRICAL FLOOR PLAN AND PANEL LOAD CALCULATIONS FOR MORE DETAILS.
5. MAINTENANCE RECEPTABLES, SEE FLOOR PLAN.



SITE ELECTRICAL PLAN

SCALE: 3/16" = 1'-0"



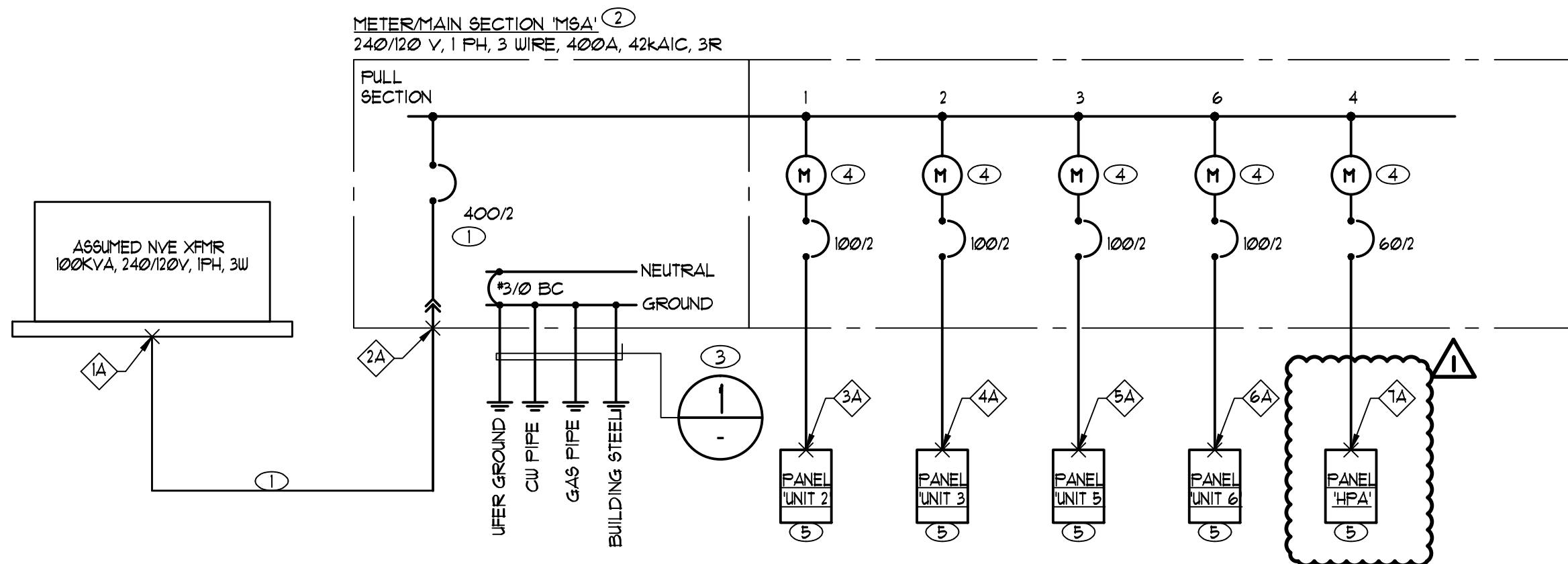
KEYED PLAN NOTES

- 1 X-DENOTES NUMBER OF FEEDER, POINT WHERE AVAILABLE FAULT, & %VOLTAGE DROP; SEE SCHEDULE ON THIS SHEET. PROVIDE APPROPRIATE PANEL/EQUIPMENT SHORT CIRCUIT (KAIC) BRACING AS REQUIRED.
- 2 PROVIDE NEW MAIN/METER SERVICE LATERAL PER NVENERGY REQUIREMENTS, COMPLETE INCLUDING TRENCHING, DIGGING, BACKFILL, AND OR RESTORING ORIGINAL SURFACE AS REQUIRED, AND OR ALL LABOR AND MATERIALS NOT PROVIDED BY NVENERGY FOR A COMPLETE OPERATIONAL SYSTEM.
- 3 PROVIDE NEW MAIN/METER SWITCHGEAR AS REQUIRED, SEE SINGLE LINE DIAGRAM FOR DETAILS.
- 4 PROVIDE NEW BONDING AND GROUNDING AS REQUIRED BY NEC 250, SEE SINGLE LINE FOR DETAILS.
- 5 PROVIDE NEW CIRCUIT BREAKER & METER SETS AS REQUIRED, SIZE AS INDICATED IN SINGLE LINE DIAGRAM.
- 6 PROVIDE PANEL, SEE PANEL LOAD SCHEDULE & CALCULATIONS FOR DETAILS.

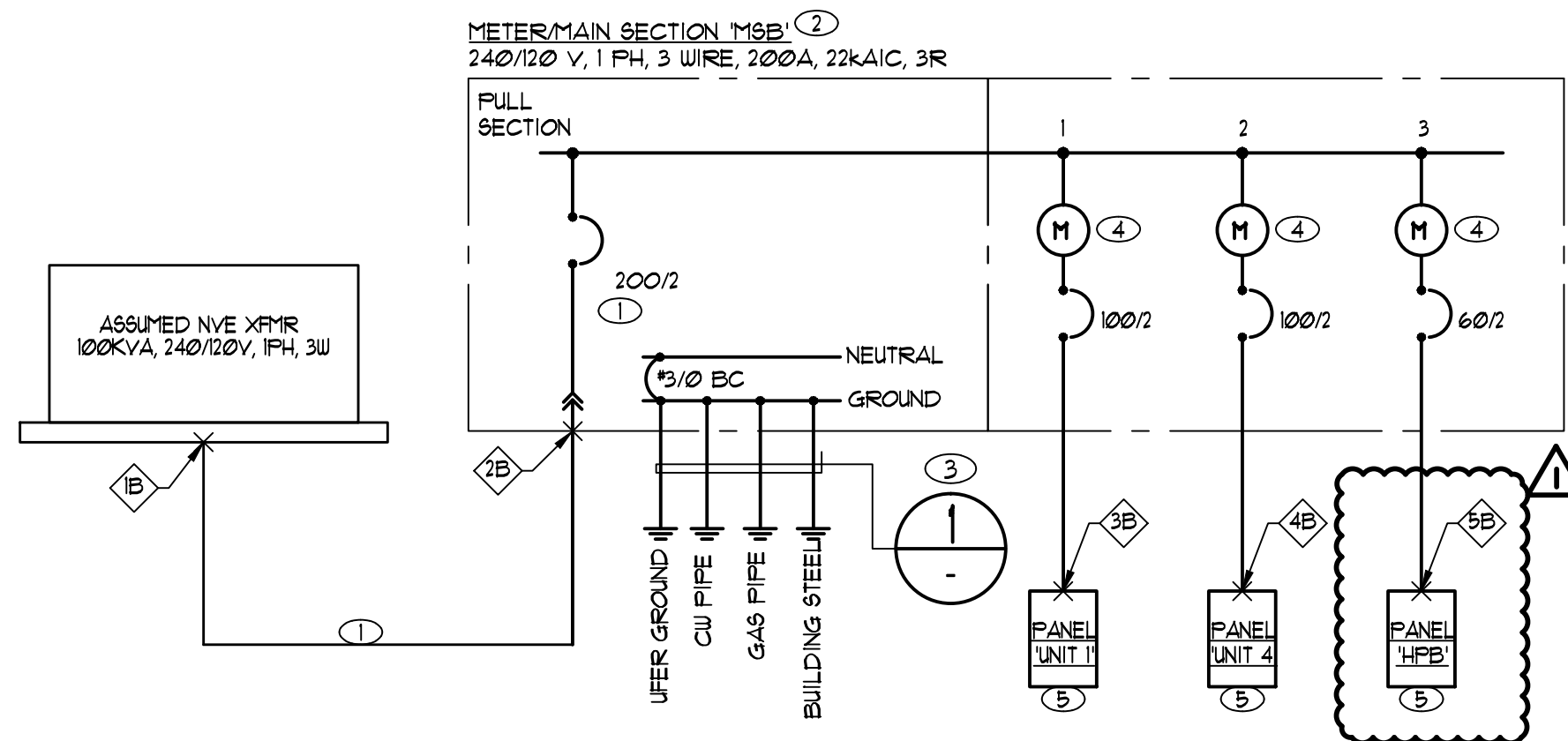
THE DESIGN PROFESSIONAL HAS PERFORMED ALL THE REQUIRED VOLTAGE DROP CALCULATIONS FOR ALL BRANCH CIRCUITS AND FEEDERS PER NEC.

THE DESIGN PROFESSIONAL HAS PERFORMED ALL THE REQUIRED SHORT CIRCUIT CALCULATIONS BASED ON ASSUMED 100KVA TRANSFORMER AND 4SETS OF #3/0 COPPER WIRES AT 40FEET AWAY SERVICE LATERAL AND THE AIC RATING INDICATED FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

SINGLE LINE IS DIAGRAMMATICAL ONLY. PRIOR TO BIDDING AND OR ORDERING EQUIPMENT THE CONTRACTOR SHALL VERIFY AVAILABLE TYPE OF SWITCHGEAR/METER OR ELECTRICAL EQUIPMENT THAT WILL FIT IN THE ELECTRICAL ROOM OR WALL PER CODE, UTILITY, AND/OR CITY HAVING JURISDICTION INCLUDING CONDUIT PLACEMENT OR LAYOUT, ADVISE OWNER OR ARCHITECT IF ADDITIONAL ROOM IS NEEDED. OTHERWISE CONTRACTOR SHALL ADD IN HIS/HER BID ALL THE ADDITIONAL LABOR AND MATERIALS TO HAVE INSTALLATION IN COMPLIANCE WITH THE APPROVAL AND SATISFACTION OF OWNER AND OR UTILITY AND/OR CITY HAVING JURISDICTION.



SINGLE LINE DIAGRAM - MAIN SWITCHGEAR "MSA"
NOT TO SCALE



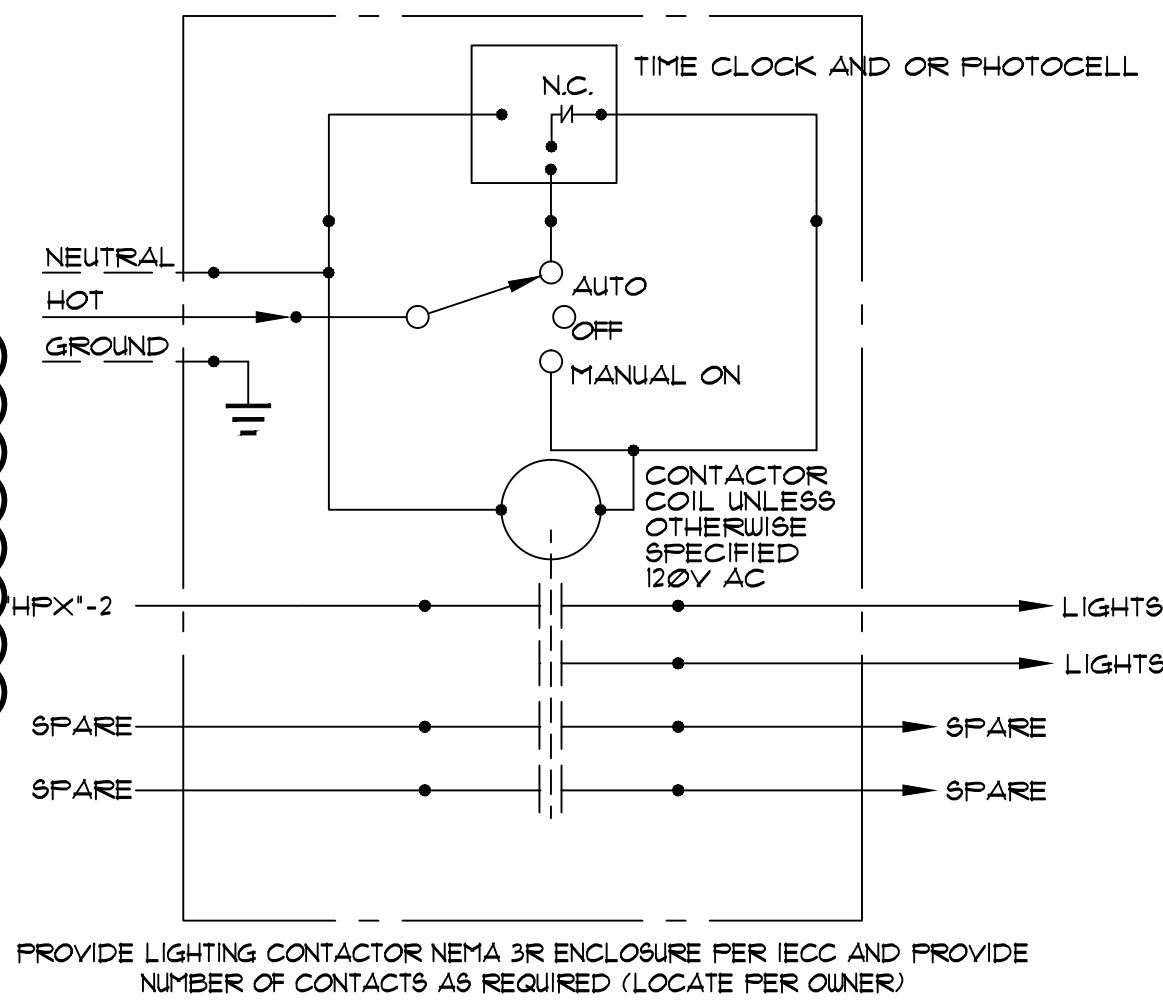
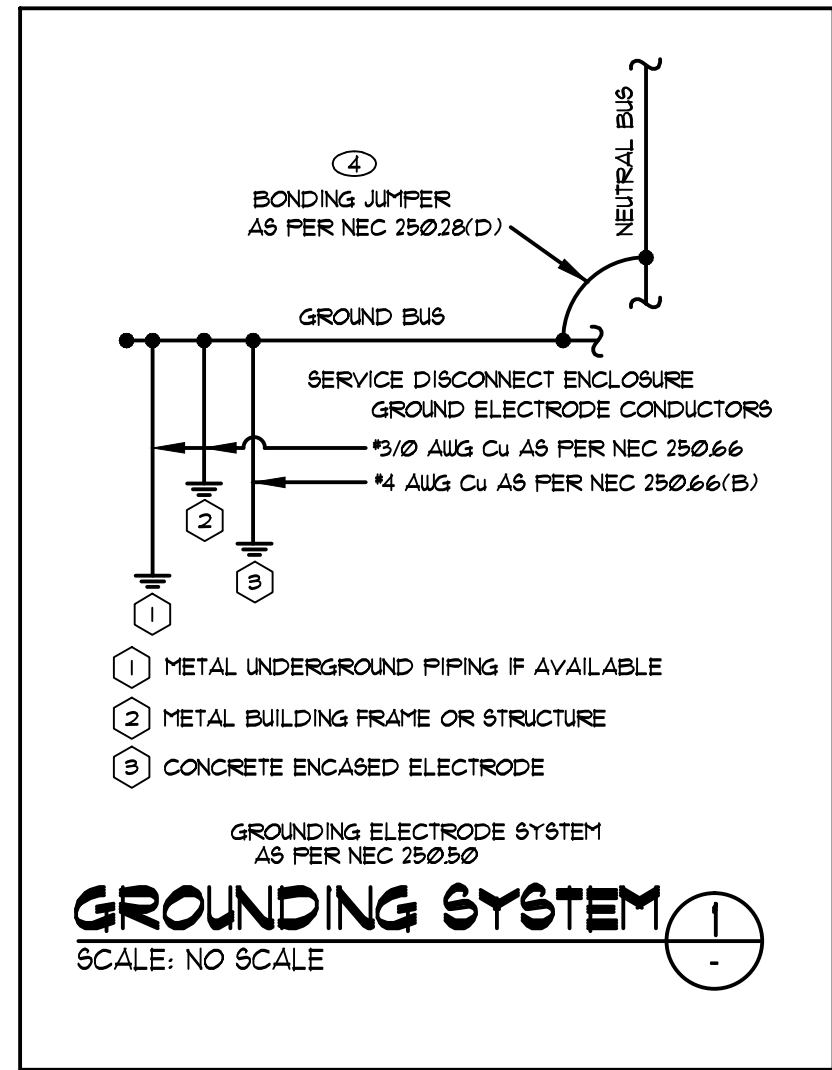
SINGLE LINE DIAGRAM - MAIN SWITCHGEAR "MSB"
NOT TO SCALE

MAIN PANEL "MSA" 51 E. TEXAS AVENUE, HENDERSON, NV 89015				
General Load	Sq. ft.	VA per Sq. ft.	VA	
General Lighting (SF at 3VA/SF)	2860	3	8580	
20A Small appliance load circuits at 1500VA, 2 each min.	8	1500	12000	
Laundry (Washing Machine) 1500VA 1 min.	4	1500	6000	
	Subtotal (1)		26580	
First 10,000VA of general load at 100%			10000	
Remainder of subtotal (1) at 45%	ST	16580	7461	
If over 120,000VA VA use 25%	ST	0	0	
	Subtotal (2)		17461	
Electrical (Cooking) Appliances (Use NEC Table)	# of Units	VA	DF%	
Range (from table 220-55 rating, Owner's Alternative) Gas	0	0	0	
Double Electric Oven (Owner Option)	0	0	0	
Clothes dryer 100%, table 220-54 (Owner's Alternative) Gas	0	0	0	
	Subtotal (3)		0	
Heating, A/C: Name and List each Equip components VA @ 100%	# of Units	Amps	Watts	VA
CU-1	0	19.1	230	0
CU-2	0	20.6	230	0
CU-3	1	19.1	230	4393
CU-4	1	19.1	230	4393
CU-5	1	19.1	230	4393
CU-6	1	19.1	230	4393
FAU-1	0	7.7	115	0
FAU-2	0	7.7	115	0
FAU-3	1	7.7	115	886
FAU-4	1	7.7	115	886
FAU-5	1	7.7	115	886
FAU-6	1	7.7	115	886
Exhaust Fan 1	2	1.4	120	336
Exhaust Fan 2	0	1.8	120	0
Space Heating (Gas)	0		8000	0
	Subtotal (4)		21450	
Fixed Appliances - use 100%. If four or more, a demand of 75% is allowed	# of Units	VA	VA	
Garbage Disposal	8	800	6400	
Microwave	8	1000	8000	
Water Heater (Gas)	0	4500	0	
Dishwasher	8	800	6400	
	Subtotal (5)		16600	
Miscellaneous Motor Loads	# of Units	VA	VA	
Future Pool Equip	0	10000	0	
Jacuzzi Allowance	0	5000	0	
25% Large Motor including A/C comp.	0.25	0	0	
	Subtotal (6)		0	
ADD 4800VA at New House per Ordinance			54511	
Grand Total of subtotals (2) + (3) + (4) + (5) + (6) + (7) =			4380	
Add House Panel "HP" VA =			245	
Grand Total VA =			58891	
Grand Total VA =			58891 divided by 240V=	
Use Minimum Panel Size =			400 Amperes	

MAIN PANEL "MSB" 51 E. TEXAS AVENUE, HENDERSON, NV 89015				
General Load	Sq. ft.	VA per Sq. ft.	VA	
General Lighting (SF at 3VA/SF)	1634	3	4902	
20A Small appliance load circuits at 1500VA, 2 each min.	4	1500	6000	
Laundry (Washing Machine) 1500VA 1 min.	2	1500	3000	
	Subtotal (1)		13902	
First 10,000VA of general load at 100%			10000	
Remainder of subtotal (1) at 45%	ST	3902	1755.9	
If over 120,000VA VA use 25%	ST	0	0	
	Subtotal (2)		11755.9	
Electrical (Cooking) Appliances (Use NEC Table)	# of Units	VA	DF%	
Range (from table 220-55 rating, Owner's Alternative) Gas	0	0	0	
Double Electric Oven (Owner Option)	0	0	0	
Clothes dryer 100%, table 220-54 (Owner's Alternative) Gas	0	0	0	
	Subtotal (3)		0	
Heating, A/C: Name and List each Equip components VA @ 100%	# of Units	Amps	Watts	VA
CU-1	1	19.1	230	4393
CU-2	1	20.6	230	4736
CU-3	0	19.1	230	0
CU-4	0	19.1	230	0
CU-5	0	19.1	230	0
CU-6	0	19.1	230	0
FAU-1	1	7.7	115	886
FAU-2	1	7.7	115	886
FAU-3	0	7.7	115	0
FAU-4	0	7.7	115	0
FAU-5	0	7.7	115	0
FAU-6	0	7.7	115	0
Exhaust Fan 1	2	1.4	120	336
Exhaust Fan 2	0	1.8	120	0
Space Heating (Gas)	0		8000	0
	Subtotal (4)		11238	
Fixed Appliances - use 100%. If four or more, a demand of 75% is allowed	# of Units	VA	VA	
Garbage Disposal	4	800	3200	
Microwave	4	1000	4000	
Water Heater (Gas)	0	4500	0	
Dishwasher	4	800	3200	
	Subtotal (5)		7800	
Miscellaneous Motor Loads	# of Units	VA	VA	
Future Pool Equip	0	10000	0	
Jacuzzi Allowance	0	5000	0	
25% Large Motor including A/C comp.	0.25	4738	1184.5	
	Subtotal (6)		1188	
ADD 4800VA at New House per Ordinance			31976	
Grand Total of subtotals (2) + (3) + (4) + (5) + (6) + (7) =			3703	
Add House Panel "HP" VA =			149	
Grand Total VA =			35661	
Grand Total VA =			35661 divided by 240V=	
Use Minimum Panel Size =			200 Amperes	

FEEDER, AVAILABLE FAULT, & %VD SCHEDULE	
DATE PERFORMED: 01/03/18	
CONTRACTOR SHALL MARK IN THE FIELD THE MAXIMUM AVAILABLE CURRENT ON THE SERVICE EQUIPMENT PER NEC 110.24 (A) OR AS REQUIRED BY CITY HAVING JURISDICTION	
1A	AVAIL FAULT = 55766 %VDrop = 0% PANEL NAME = "MSA" FEEDER SIZE = 2SETS OF 2" C WITH 3#3/0 & 1#6 GND (Copper) ABOVE FEEDER SIZE IS USED FOR CALCULATION ONLY, PROVIDE PER UTILITY REQUIREMENTS AS REQUIRED. AVAIL FAULT (AIC) = 24260 %VDrop = 0.00%
2A	PANEL NAME = "UNIT-2" FEEDER SIZE = 1" C WITH 3#4 & 1#8 GND (Copper) wire types to be per NEC table 310.15(B)(7) AVAIL FAULT (AIC) = 6484 %VDrop = 1.81%
3A	PANEL NAME = "UNIT-3" FEEDER SIZE = 1-1/2" C WITH 3#4 & 1#8 GND (Copper) wire types to be per NEC table 310.15(B)(7) AVAIL FAULT (AIC) = 11799 %VDrop = 0.65%
4A	PANEL NAME = "UNIT-4" FEEDER SIZE = 1" C WITH 3#4 & 1#8 GND (Copper) wire types to be per NEC table 310.15(B)(7) AVAIL FAULT (AIC) = 5687 %VDrop = 2.12%
5A	PANEL NAME = "UNIT-5" FEEDER SIZE = 1" C WITH 3#4 & 1#8 GND (Copper) wire types to be per NEC table 310.15(B)(7) AVAIL FAULT (AIC) = 5687 %VDrop = 0.97%
6A	PANEL NAME = "UNIT-6" FEEDER SIZE = 1" C WITH 3#4 & 1#8 GND (Copper) wire types to be per NEC table 310.15(B)(7) AVAIL FAULT (AIC) = 5990 %VDrop = 0.97%
7A	PANEL NAME = "UNIT-7" FEEDER SIZE = 3/4" C WITH 3#6 & 1#10 GND (Copper) AVAIL FAULT (AIC) = 17126 %VDrop = 0.08%

FEEDER, AVAILABLE FAULT, & %VD SCHEDULE	
DATE PERFORMED: 01/03/18	
CONTRACTOR SHALL MARK IN THE FIELD THE MAXIMUM AVAILABLE CURRENT ON THE SERVICE EQUIPMENT PER NEC 110.24 (A) OR AS REQUIRED BY CITY HAVING JURISDICTION	
1B	AVAIL FAULT = 55766 %VDrop = 0% PANEL NAME = "MSB" FEEDER SIZE = 2" C WITH 3#3/0 & 1#8 GND (Copper) ABOVE FEEDER SIZE IS USED FOR CALCULATION ONLY, PROVIDE PER UTILITY REQUIREMENTS AS REQUIRED. AVAIL FAULT (AIC) = 18512 %VDrop = 0.00%
2B	PANEL NAME = "UNIT-1" FEEDER SIZE = 1" C WITH 3#4 & 1#8 GND (Copper) wire types to be per NEC table 310.15(B)(7) AVAIL FAULT (AIC) = 5697 %VDrop = 1.89%
3B	PANEL NAME = "UNIT-2" FEEDER SIZE = 1" C WITH 3#4 & 1#8 GND (Copper) wire types to be per NEC table 310.15(B)(7) AVAIL FAULT (AIC) = 5073 %VDrop = 2.24%
4B	PANEL NAME = "UNIT-3" FEEDER SIZE = 3/4" C WITH 3#6 & 1#10 GND (Copper) AVAIL FAULT (AIC) = 14048 %VDrop = 0.06%
5B	



LIGHTING CONTROL DETAIL FOR "LCPA" & "LCPB"
NOT TO SCALE



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51 E. TEXAS AVE.
HENDERSON, NEVADA

SINGLE LINE DIAGRAM, LOAD CALCULATION, PANEL SCHEDULE, FEEDER, AVAILABLE FAULT & %VD SCHEDULE

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CHECKED:	SO
DATE:	10/22/2018

E105

LIGHT FIXTURE SCHEDULE							
TYPE	DESCRIPTION	MANUFACTURER/ CATALOG NUMBER	VOLTAGE	NO. LAMPS	WATTS FXT.	LAMP TYPE	REMARKS
"F1"	CEILING FAN WITH INTEGRAL LED LIGHT	LUMENCIA LL52SKY355N-ES-LED SERIES	120	INCL		LED	OR APPROVED BY OWNER/ ARCHITECT INSTALL WITHOUT 6 INCH DOWN ROD FAN HEIGHT APPROX 12 INCHES VERIFY CEILING CLEARANCE
"F2"	4 INCH LED DOWNLIGHT BAFFLE / RECESSED	ELCO E414C-08-30-W HOUSING: E4LC-08-ICA-D	UNV	INCL	8.76	LED	OR APPROVED BY OWNER/ ARCHITECT PROVIDE COMPLETE KIT INCLUDING SPECIAL MOUNTING BRACKET, ETC. AS REQUIRED
"F2E"	4 INCH LED DOWNLIGHT BAFFLE / RECESSED	ELCO E414C-08-30-W HOUSING: E4LC-08-ICA-D-EM1	UNV	INCL	8.76	LED	OR APPROVED BY OWNER/ ARCHITECT EM BATTERY BACK UP 700 LUMENS FOR 90 MINUTES
"F3"	CLOSET LIGHT	FEIT 71801	120V	INCL	17.5	LED	OR APPROVED BY OWNER/ ARCHITECT
"F4"	BATHROOM VANITY FIXTURE	BROWNLEE 5172-25-BN-H16LED-30K	120V	INCL	16	LED	OR APPROVED BY OWNER/ ARCHITECT
"F5"	LED VAPOR TIGHT WALL MOUNT	CREE C-VTT-A-SMWL-9-40K-GR	120V	INCL	14	LED	OR APPROVED BY OWNER/ ARCHITECT
"S1"	WALL PACK WITH EM BACK-UP AND PHOTOCELL	MOBERN MILGOWPK-LED-36-MV-50-PC120 EM	120V	INCL	35	LED	OR APPROVED BY OWNER/ ARCHITECT PHOTOCELL MUST BE SPECIFIED FOR LINE VOLTAGE
"S2"	AREA LIGHT PARKING SPACES 16 FOOT POLE	NLS VUE VUE1-T3-S2L-1-50K-UNV-DPS6- BRZ-PC-... POLE	UNV	INCL	106	LED	OR APPROVED BY OWNER/ ARCHITECT
S3	WALL SOURCE WITH EM BACK-UP AND PHOTOCELL	BROWNLEE 7601-PL-C24LED-VB2-BBIC EM	120V	INCL	17	LED	OR APPROVED BY OWNER/ ARCHITECT PHOTOCELL MUST BE SPECIFIED FOR LINE VOLTAGE

NOTES:
1. WHEN REQUIRED, UNIVERSAL OR ADVANCED BALLAST ONLY ELECTRONIC, PARALLEL >0.90 POWER FACTOR, REDUCED HARMONICS 3%
2. UL LISTED AND APPROVED FOR WET OR DAMP LOCATION, DEPENDING ON CONDITIONS
3. COORDINATE BLDG PENETRATION WITH EXTERIOR BLDG SURFACE MATERIALS. PROVIDE MANUFACTURERS LISTED PENETRATION SEALS. ALL PENETRATIONS SHALL BE MADE WATER PROOF. COORDINATE WITH OTHER TRADES REQUIREMENTS, WHERE APPLICABLE
4. WHEN FIXTURE IS DENOTED WITH AN "E" EXAMPLE - F1E. PROVIDE 30 MINUTE EMERGENCY OPERATION WITH ACCESSIBLE TEST SWITCH. 1100 LUMEN BATTERY PACK MANUFACTURED BY BODINE WITH 5 YEAR WARRANTY. TEST SWITCH SHALL BE FIXTURE MOUNTED. EXTERIOR FIXTURE TEST SWITCHES SH-WEATHERPROOF. ALL LIGHTING FIXTURE WITH BATTERY PACKS REQUIRE A SEPARATE NON-SWITCH, HOT CONDUCTOR FOR OPERATION. DISCONNECT POWER TO BATTERY PACKS WILL CAUSE THEM TO DISCHARGE. (OR PER OWNER'S APPROVED)
5. PROVIDE WITH FIXTURE MOUNTED PHOTOCELL.
6. ALL SWITCHING AND MOUNTING SHOWN IN DRAWINGS ARE GENERIC IN NATURE. BEFORE ORDERING FIXTURES YOU SHALL VERIFY WITH ARCHITECT/ARCHITECTURAL'S SWITCHING AND MOUNTING REQUIREMENTS AND PROVIDE THE APPROPRIATE BALLASTS, FIXTURES OR MOUNTINGS MATERIALS AS NEEDED.
7. YOU SHALL ADHERE TO THE NOTES IN THE "PRIOR TO COMMENCING WORK" AS STATED IN COVER SHEET OR ELSEWHERE ON DRAWINGS.

		LINE-LINE VOLTS	PHASE VOLTS	SYSTEM PHASE	PANEL NAME "HPA"				FEED: TOP			
		240	120	1	LOCATION: SEE PLAN				ENCL: NEMA-3R			
NO OF WIRE SYSTEM		3							AVAIL SHRT CKT		17.13 KAIC	
MAIN BREAKER OR FUSE SIZE		60					SHRT CKT BRACE		22 KAIC			
MAIN LUG BUSS SIZE		60					%VDROP = 0.08%					
POLE #	DESCRIPTION	PHASE A	PHASE B	POLE	C.B.	C.B.	POLE	PHASE A	PHASE B	DESCRIPTION		POLE #
1	MAINTENACE RECEPTACLES	720		1	20	20	1	720		BLDG LIGHTS		2
3	FIRE RISER RECEPTACLE & LIGHT		360	1	20	20	1			SPARE		4
5	OU-UNIT & IU-UNIT	1200		2	15							6
7	-		1200									8
9												10
11												12
SUB-TOTAL =		1920	1560									
TOTAL CONNECTED VA/PHASE =		2640	1560									
TOTAL CONNECTED VA =		4200										
TOTAL DEMAND		Load	DF	DEMAND								
LIGHTING IN VA		720	25%	180								
RECEPTACLES > 10K IN VA			50%	0								
LARGEST MOTOR IN VA			25%	0								
THIS PANEL LOAD IN VA		4200	100%	4200								
TOTAL PANEL IN VA				4380								
TOTAL AMPERES =				18								
NOTES: PROVIDE 3/4"C WITH 3#6 & #10 GND (Copper) PROVIDE APPROPRIATE WIRE SIZES PER NEC												

NOTES:
PROVIDE 3/4"C WITH 3#6 & 1#10 GND (Copper)
PROVIDE APPROPRIATE WIRE SIZES PER NEC

		LINE-LINE VOLTS	PHASE VOLTS	SYSTEM PHASE	PANEL NAME "HPB"			FEED: TOP ENCL: NEMA-3R			
		240	120	1	LOCATION: SEE PLAN			AVAIL SHRT CKT		14.05 KAIC	
NO OF WIRE SYSTEM		3						SHRT CKT BRACE		18 KAIC	
MAIN BREAKER OR FUSE SIZE		60									
MAIN LUG BUSS SIZE		60				%VDROP = 0.06%					
POLE #	DESCRIPTION	PHASE A	PHASE B	POLE	C.B.	C.B.	POLE	PHASE A	PHASE B	DESCRIPTION	POLE #
1	MAINTENACE RECEPTACLES	360		1	20	20	1	466		BLDG LIGHTS + POLE LIGHT	2
3	FIRE RISER RECEPTACLE & LIGHT		360	1	20	20	1			SPARE	4
5	OU-UNIT & IU-UNIT	1200		2	15						6
7	-		1200								8
9											10
11											12
SUB-TOTAL =		1560	1560								
TOTAL CONNECTED VA/PHASE =		2026	1660								
TOTAL CONNECTED VA =		3586									
TOTAL DEMAND		Load	DF	DEMAND							
LIGHTING IN VA		466	25%	116.5							
RECEPTACLES > 10K IN VA			50%	0							
LARGEST MOTOR IN VA			25%	0							
THIS PANEL LOAD IN VA		3586	100%	3586							
TOTAL PANEL IN VA				3702.5							
TOTAL AMPERES =			15								
NOTES: PROVIDE 3/4" C WITH 3#6 & 1#10 GND (Copper) PROVIDE APPROPRIATE WIRE SIZES PER NEC											

NOTES:
PROVIDE 3/4"C WITH 3#6 & 1#10 GND (Copper)
PROVIDE APPROPRIATE WIRE SIZES PER NEC

REVISIONS		NO.	DATE	DESCRIPTION	BY
		02-25-19		BLDG OPT COMMENT	



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LIGHT FIXTURE SCHEDULE; PANEL

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