

GENERAL NOTES:

- VOLTAGE DROP TO STUDIO PANELS, FEEDERS AND BRANCH CIRCUITING SHALL NOT EXCEED A TOTAL VOLTAGE DROP OF 3%. SIZE FEEDERS AND BRANCH CIRCUITS AS REQUIRED FOR NEC 210.19(A) (FPN NO. 4), 210.19(A) (FPN NO. 2).
- ALL BREAKERS SERVING NEC 700 AND 701 LOADS SHALL BE FULLY COORDINATED AS REQUIRED BY THE NEC. CONTRACTOR TO PROVIDE A CIRCUIT BREAKER COORDINATION STUDY INDICATING BREAKER TYPES THAT WILL BE USED TO FULLY COORDINATE NEC 700 AND 701 LOADS.

KEY NOTES:

- ELECTRICAL FEEDERS TO BE SIZED FOR ACTUAL WIRING REQUIREMENTS IN COMPLIANCE WITH NEC REQUIREMENTS.
- COPPER WIRING SHALL BE USED FOR ALL FEEDERS.
- PANEL, SEP RATED NEMA 3R FOR SITE LIGHTS & EQUIPMENTS.
- 6410, 3/4" CLOSURE NIPPLE TO EQUIPMENT AND MINIMIZE BENDS.
- PANEL, SEP RATED NEMA 3R FOR POOL EQUIPMENTS.

WIRING NOTES

SIZE: 100V AND 200V BRANCH CIRCUITS FOR LENGTH OF RUN ON THE FOLLOWING BASIS:

1. 0 TO 100 FT. RUN FROM PANEL BOARD TO FIRST OUTLET: NO. 12 AWG MINIMUM.
2. 101 TO 150 FT. RUN: INCREASE ONE WIRE SIZE, I.E. NO. 10 AWG BECOMES NO. 8 AWG TO FIRST OUTLET.
3. 151 TO 250 FT. RUN: WIRING SHALL BE NO. 8 AWG MINIMUM SIZE TO FIRST OUTLET.
4. FOR OTHER BRANCH CIRCUITS, SIZE CONDUCTORS SO THAT VOLTAGE DROP DOES NOT EXCEED 3%.

NOTE: THE WIRE SIZE INDICATED ON THE PANEL SCHEDULE IS THE MINIMUM WIRE SIZE FOR EACH CIRCUIT AND THAT WIRE SHALL BE UP-SIZED FOR VOLTAGE DROP BASED ON THE FEEDER SCHEDULE ON SHEET E-304.

NOTE: CONTRACTOR SHALL FOLLOW TABLE 300.10(A) FOR VERTICAL WIRE RUN.

COPPER FEEDER SCHEDULE																
FEEDER DESIGNATION	No. OF SETS	3 PHASE CONDUCTORS	N NEUTRAL CONDUCTOR	G GROUND CONDUCTOR	SD SYSTEM BONDING JUMPER	P PARTIAL NEUTRAL SERVICE CONDUCTOR	NN OVERSIZED NEUTRAL CONDUCTOR	I ISOLATED GROUND CONDUCTOR	CONDUIT SIZE - CONDUIT TYPES EMT, FMC, LPM, MC, IMC, SCH 40, PVC				CONDUIT SIZE - CONDUIT TYPES SCH 80 PVC			
									3 PHASE NEUTRAL & GROUND	3 PHASE & GROUND	3 PHASE OVERSIZED NEUTRAL & GROUND	3 PHASE NEUTRAL & GROUND & ISOLATED GROUND	3 PHASE NEUTRAL & GROUND	3 PHASE OVERSIZED NEUTRAL & GROUND	3 PHASE OVERSIZED NEUTRAL & GROUND & ISOLATED GROUND	3 PHASE NEUTRAL & GROUND
									NG NSG PG PSF (PER SET)	G (PER SET)	NNG NSG2 NNGS2 (PER SET)	NG NSG2 (PER SET)	NG NSG PG PSF (PER SET)	G (PER SET)	NNG NSG2 NNGS2 (PER SET)	NG NSG2 (PER SET)
15	1	3 # 12	1 # 12	1 # 12	1 # 8		1 # 10	1 # 12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
20	1	3 # 12	1 # 12	1 # 12	1 # 8		1 # 8	1 # 12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
30	1	3 # 10	1 # 10	1 # 10	1 # 8		1 # 6	1 # 10	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	3/4"
40SD	1	3 # 8	1 # 8	1 # 10	1 # 8		1 # 2	1 # 10	3/4"	3/4"	1"	1"	1"	3/4"	1"	1"
50	1	3 # 8	1 # 8	1 # 10	1 # 8		1 # 1	1 # 10	1"	3/4"	1 1/4"	1"	1"	1"	1 1/4"	1 1/4"
70SD	1	3 # 4	1 # 4	1 # 8	1 # 8		1 # 20	1 # 8	1 1/4"	1"	1 1/4"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
100	1	3 # 3	1 # 3	1 # 8	1 # 8	1 # 8	1 # 30	1 # 8	1 1/4"	1 1/4"	1 1/2"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	1 1/4"
110	1	3 # 2	1 # 2	1 # 8	1 # 8	1 # 8	1 # 40	1 # 8	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/4"	1 1/2"	1 1/2"
130	1	3 # 1	1 # 1	1 # 8	1 # 8	1 # 8	1 # 300	1 # 8	1 1/2"	1 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"
150	1	3 # 10	1 # 10	1 # 6	1 # 6	1 # 6	2 # 10	1 # 6	2"	1 1/2"	2"	2"	2"	1 1/2"	2"	2"
175	1	3 # 20	1 # 20	1 # 6	1 # 4	1 # 4	2 # 20	1 # 6	2"	1 1/2"	2"	2"	2"	2"	2 1/2"	2"
200	1	3 # 30	1 # 30	1 # 6	1 # 4	1 # 4	2 # 30	1 # 6	2"	2"	2 1/2"	2"	2 1/2"	2"	2 1/2"	2 1/2"
225	1	3 # 40	1 # 40	1 # 4	1 # 2	1 # 2	2 # 40	1 # 4	2 1/2"	2"	2 1/2"	2 1/2"	2 1/2"	2"	3"	2 1/2"
250	1	3 # 250	1 # 300	1 # 4	1 # 2	1 # 2	2 # 250	1 # 4	2 1/2"	2"	3"	2 1/2"	3"	2 1/2"	3"	3"
300	1	3 # 300	1 # 300	1 # 4	1 # 2	1 # 2	2 # 300	1 # 4	3"	2 1/2"	3"	3"	3"	4"	3"	3"
350	1	3 # 500	1 # 500	1 # 3	1 # 10	1 # 10	2 # 500	1 # 2	4"	3"	4"	4"	4"	5"	4"	4"
400	2	3 # 30	1 # 30	1 # 3	1 # 10	1 # 10	2 # 30	1 # 2	2"	2"	2 1/2"	2 1/2"	2 1/2"	2"	2 1/2"	2 1/2"
450	2	3 # 40	1 # 40	1 # 2	1 # 10	1 # 10	2 # 40	1 # 2	2 1/2"	2"	3"	2 1/2"	3"	3"	2 1/2"	2 1/2"
500	2	3 # 250	1 # 300	1 # 2	1 # 10	1 # 10	--	--	2 1/2"	2 1/2"	--	--	3"	2 1/2"	--	--
600	2	3 # 300	1 # 300	1 # 1	1 # 20	1 # 20	--	--	3"	2 1/2"	--	--	3"	3"	--	--
700	2	3 # 500	1 # 500	1 # 10	1 # 20	1 # 20	--	--	4"	2 1/2"	--	--	4"	3"	--	--
800	3	3 # 300	1 # 300	1 # 10	1 # 20	1 # 20	--	--	3"	2 1/2"	--	--	3"	2 1/2"	--	--
1000	3	3 # 400	1 # 400	1 # 20	1 # 30	1 # 30	--	--	3"	3"	--	--	4"	3"	--	--
1200	4	3 # 300	1 # 300	1 # 30	1 # 40	1 # 40	--	--	3"	2 1/2"	--	--	3"	3"	--	--
1600	5	3 # 400	1 # 400	1 # 40	1 # 250	1 # 250	--	--	3"	3"	--	--	4"	3"	--	--
2000	6	3 # 400	1 # 400	1 # 250	1 # 300	1 # 300	--	--	3"	3"	--	--	4"	3"	--	--
2500	7	3 # 500	1 # 500	1 # 300	1 # 500	1 # 500	--	--	4"	3"	--	--	4"	4"	--	--
3000	8	3 # 500	1 # 500	1 # 400	1 # 500	1 # 500	--	--	4"	3"	--	--	4"	4"	--	--
4000	11	3 # 500	1 # 500	1 # 300	2 # 350	1 # 300	--	--	4"	4"	--	--	4"	4"	--	--

EXAMPLES:

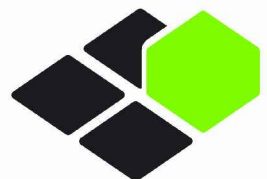
1. 100NG = INDICATES 1 SET OF 4 # 10 + 1 # 6 GROUND CONDUCTOR PER SET.

2. 100P = INDICATES 2 SETS OF 3 # 200KCAL AND 1 # 10 PARTIAL NEUTRAL CONDUCTOR PER SET.

3. 300NG = INDICATES 3 # 300KCAL AND 1 # 4 GROUND CONDUCTOR.

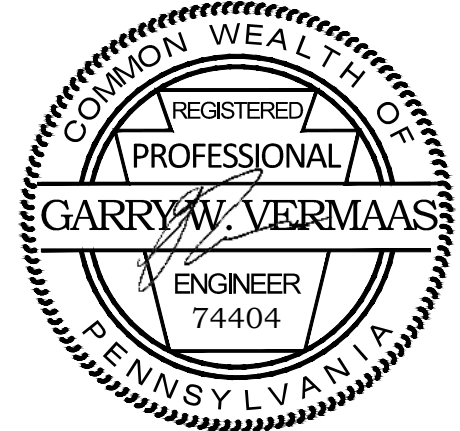
01 ELECTRICAL RISER DIGRAM

SCALE: NTS



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ISSUE:

Issued for Permit
08.05.2016

PROJECT: 16-018

Hampton Inn & Suites
New Stanton, PA 15672

OWNER:

Stanton Hospitality LLC
52 Blueberry Lane,
Grove City, PA 16127

No.	Issue Date	Project Status

DATE 2016.08.05

DRAWN BY SJ

CHECKED BY GWV

SCALE AS NOTED

PROJECT NO. B4-67-1603

SHEET NAME

ELECTRICAL
RISER DIAGRAM

SHEET NO.

E304