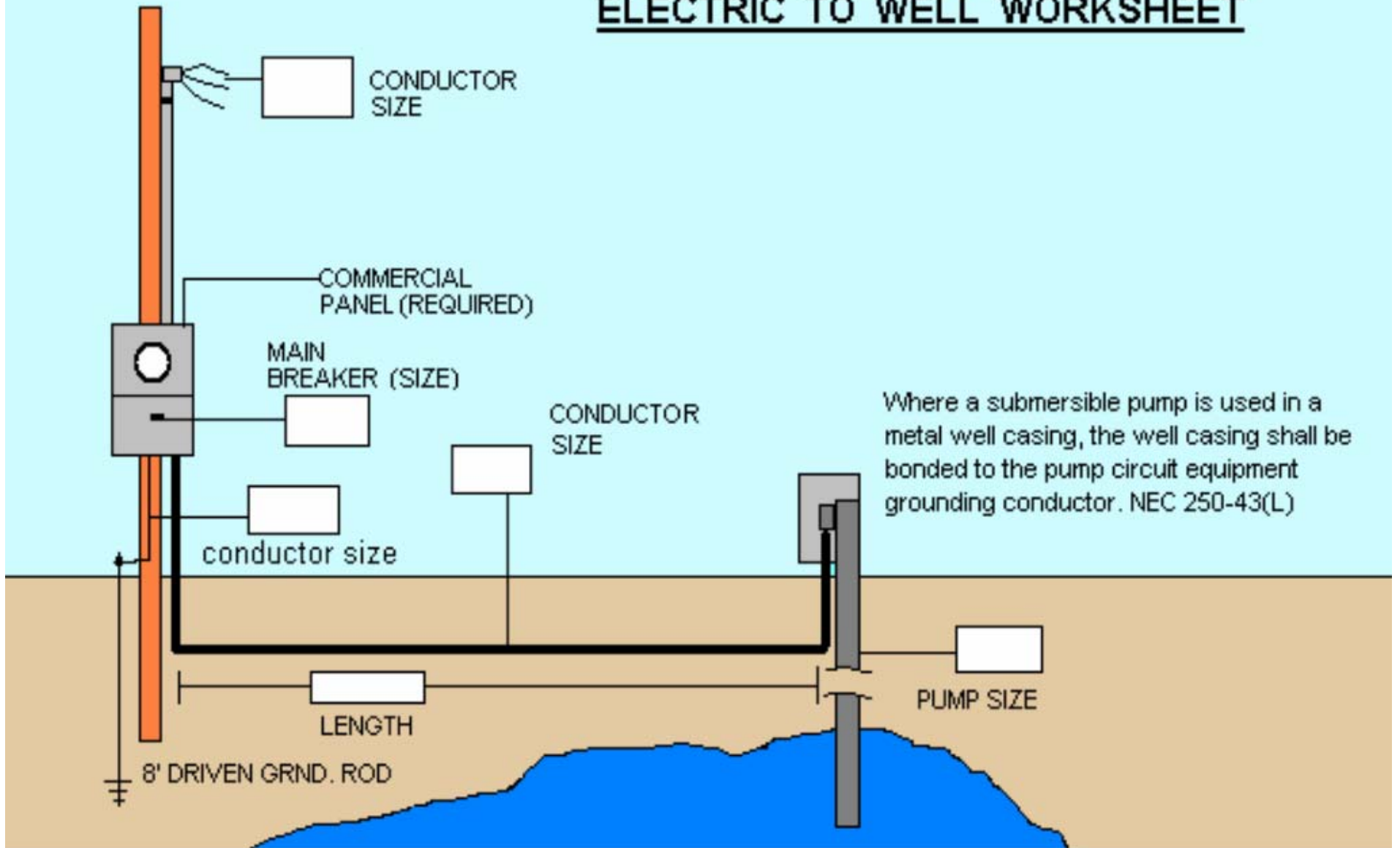


ELECTRIC TO WELL WORKSHEET



SINGLE MOTOR CIRCUIT

HP	120 VOLTS	240 VOLTS	480 VOLTS
¼	5.8	2.9	-
1/3	7.2	3.6	-
½	9.8	4.9	1
½	13.8	6.9	1.2
1	16	8	1.6
1 ¼	20	10	2.3
2	24	12	3
3	34	17	4.2
5	56	28	6.6
7 ¼	80	40	9
10	100	50	12
15	-	-	18
20	-	-	23
25	-	-	29
30	-	-	35
40	-	-	45
50	-	-	56

The above table is for single-phase 115-120 volt and three phases for 480 volts.

Step 1: Select the circuit amperage from the above table based on the motor HP and the voltage to be used +25% (430-22).

Step 2: Select conductor size from Table 310-16

Step 3: Select the minimum over current protection based on the amperage from the above table + 15%. (T-430-32, 430-110). For the maximum over current protection see Table 430-152.

Note: That a standard circuit breaker is reverse time and can be 250% of the amperage from the above table.

MAXIMUM LENGTH CONDUCTORS W/ VOLTAGE DROP 120 VOLTS

Wire size	14	12	10	8	6
Amps					
5	191	303	482	768	1220
10	95	152	241	400	610
15	63	110	170	270	406
20	-	76	121	191	305
30	-	-	80	127	203
40	-	-	-	96	152
240 VOLTS					
5	366	582	925	1472	2254
10	183	291	462	736	1127
15	122	194	308	490	751
20	-	145	231	368	563
30	-	-	154	245	375
40	-	-	-	184	281
50	-	-	-	-	225