



Customer Name: _____ Date: _____
 Address: _____
 Day Phone: _____ Page _____ of _____

Figure 5

12 Volt Transformer Load Calculation Sheet

Is the run longer than 100 feet
 yes - use #10/2
 Are there more than 100 watts lamp
 load on the run?
 yes - use #10/2

Wiring Information			Amp Load Formula					Voltage Drop Formula						Total Watts					
Run	Wiring Method	Wire Size	# of Lamps	(X) Lamp Size	(=) Watt Load	÷ 12	(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=) Total	(X) 2	(=) Total	(X) Resistance per foot	(=) Voltage Drop	+ 12	** Tap Needed	* Amp Load	(X) ** Tap Needed	(=) Total Watts
1	T	12	2	36	172	÷ 12	14.33	14.33	40	573.2	(X) 2	1146.4	0.00162	1.857	+ 12	14	14.33	14	200.62
1	T	12	2	50											+ 12				

Wiring Information			Amp Load Formula					Voltage Drop Formula						Total Watts				Description			
Run	Wiring Method	Wire Size	# of Lamps	(X) Lamp Size	(=) Watt Load	÷ 12	(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=) Total	(X) 2	(=) Total	(X) Resistance per foot	(=) Voltage Drop	+ 12	** Tap Needed	* Amp Load		(X) ** Tap Needed	(=) Total Watts	Cumm Watts
1	H	12	2	5	10	÷ 12	0.83	0.83	25	20.83	(X) 2	41.7	0.00162	0.07	+ 12	12.07	0.83	12	10.1	10.1	wash on grass / rock / spruce + aw on Japanese maple
2	H	12	2	4	8	÷ 12	0.67	0.67	50	33.33	(X) 2	66.7	0.00162	0.11	+ 12	12.11	0.67	12	8.1	18.1	2 mw on upper eaves
3	H	12	5	4	20	÷ 12	1.67	1.67	25	41.67	(X) 2	83.3	0.00162	0.14	+ 12	12.14	1.67	12	20.2	38.4	5 area lights on lhs walkway
4	H	12	5	5	25	÷ 12	2.08	2.08	60	125.00	(X) 2	250.0	0.00162	0.41	+ 12	12.41	2.08	12	25.8	64.2	2 iw on 2 maples + shrub on rhs plus 2 area lights for transition
	H					÷ 12					(X) 2				+ 12	12.00		12		64.2	
	H					÷ 12					(X) 2				+ 12	12.00		12		64.2	
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