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# **PALMERSTON NORTH CITY COUNCIL**

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## **MINUTES ATTACHMENTS AUDIT AND RISK COMMITTEE**

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**9AM, MONDAY 20 NOVEMBER 2017**  
COUNCIL CHAMBER, FIRST FLOOR, CIVIC ADMINISTRATION BUILDING  
32 THE SQUARE, PALMERSTON NORTH

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## **AUDIT AND RISK COMMITTEE MEETING**

20 November 2017

<b>6</b>	<b>LED Street Lighting Compliance Review</b>	
1.	LED Street Lighting "P" Category	5
2.	LED Street Lighting "V" Category	14





'P' CATEGORY LED STREET LIGHTING AREA 1												
Proposed Solution												
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
1	Ajax Pl	P4	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new and 1 relocated	2
2	Ashton Pl	P4	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new and 1 relocated	2
3	Baton Pl	P4	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new and 1 relocated	2
4	Bruce Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
5	Cedar Gr	P4	2			2	\$5,500		\$3,500	\$ 11,000.00	add 2 new	2
6	Chadwick Pl	P4	3			2	\$5,500	1	\$3,500	\$ 14,500.00	2 new and 1 relocated	2
7	Charwell Pl	P4	2			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
8	Chatsworth Pl	P3	7			4	\$5,500	2	\$3,500	\$ 29,000.00	Redesign 4 new 2 relocate	1
9	Chelmarsh Pl East	P4	2			2	\$5,500		\$3,500	\$ 11,000.00	2 new	2
10	Chelmarsh Pl	P4	2				\$5,500		\$3,500	\$ -		3
11	Chippendale Cres	P3	7			6	\$5,500	1	\$3,500	\$ 36,500.00	Redesign 6 new 1 relocate	1
12	No.10 Clarke Ave	P3	1 (L1632)				\$5,500		\$3,500	\$ -	Nothing reqd cat V	3
13	Cobb Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
14	Dalfield Pl	P3	3			2	\$5,500		\$3,500	\$ 11,000.00	2 new	2
15	Dalwood Gr	P4	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new and 1 relocated	2
16	Drayton Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
17	Ellesmere Cres	P3	3			4	\$5,500	3	\$3,500	\$ 32,500.00	Redesign 4 new 3 relocate	1
18	Gainsborough Gr	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new and 1 relocated	2
19	Halswell Cres	P4	3			3	\$5,500	2	\$3,500	\$ 23,500.00	3 new 2 relocate	2
20	Havelock Ave	P3	11			5	\$5,500	6	\$3,500	\$ 48,500.00	Redesign 5 new 6 relocate	1
21	Jackson Ave	P4	2			1	\$5,500	2	\$3,500	\$ 12,500.00	1 new 2 relocate	2
22	Jones Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
23	Kupe Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
24	Lancaster St	P3	2			1	\$5,500	2	\$3,500	\$ 12,500.00	1 new 2 relocate	2
25	MacEwen Pl	P4								\$ -	Nothing reqd cat V on Highbury	3
26	Marybank Mews	P4	2			2	\$5,500		\$3,500	\$ 11,000.00	2 new	2
27	Monowai Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	3
28	Otaki Pl	P4	1			2	\$5,500	1	\$3,500	\$ 14,500.00	2 new 1 relocate	2
29	Pembroke St	P3	2 (L1634 & L6194)			1	\$5,500	2	\$3,500	\$ 12,500.00	1 new 2 relocate	2
30	Pencarrow St	P3	5			4	\$5,500	2	\$3,500	\$ 29,000.00	4 new 2 relocate	1
31	Sefton Ave	P4	1			1	\$5,500	2	\$3,500	\$ 12,500.00	1 new 2 relocate	2
32	Sheraton Gr	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
33	Tui Pl	P4	2				\$5,500		\$3,500	\$ -	walkway	3
34	Turakina St	P3	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
									TOTAL	\$ 420,000.00		
Proposed Solution												
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 2												
35	Admiral Pl	P4				0				\$ -	No action required will be ok when cat v first light installed	3
36	Bendigo St	P3	3			1	\$5,500	2	\$3,500	\$ 12,500.00	Non compliant respace required 3 becomes 4.	1
37	Bennett St	P2	3	6	\$6,800		\$5,500			\$ 40,800.00	Because this is an extension of V3 it should be redesigned to V4 or P2.	1
38	Cecil Pl	P3	1			2	\$5,500	2	\$3,500	\$ 18,000.00	Lots of trees, do nothing or 2 becomes 4	2
39	Downing St	P3	1			2	\$5,500			\$ 11,000.00	2 new additional because of spacing	2
40	Drury St	P3	3			1	\$5,500	2	\$3,500	\$ 12,500.00	3 becomes 4	2
41	Geraldine Cres	P3	5			1	\$5,500	3	\$3,500	\$ 16,000.00	4 becomes 5	1
42	Henley Ct	P3	1			1	\$5,500			\$ 5,500.00	1 new additional light / column	2
43	Herbert Ave	P3	6			2	\$5,500	4	\$3,500	\$ 25,000.00	6 becomes 8 respace to gain compliance	1
44	Hinau Pl	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2	2
45	Kimberley Gr	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2. 1 new 1 relocate	2
46	Leslie Ave	P3	2			1	\$5,500	2	\$3,500	\$ 12,500.00	2 becomes 3. 1 new 2 relocate	1
47	Meadowbrook Dr	P3	5			2	\$5,500	3	\$3,500	\$ 21,500.00	4 becomes 5. 3 relocates 2 new	1
48	Raglan Ave	P3	6			2	\$5,500	3	\$3,500	\$ 21,500.00	6 becomes 8 respace to gain compliance. 3 relocates, 2 new respace	1
49	Rosedale Cr	P3	5			2	\$5,500	2	\$3,500	\$ 18,000.00	3 becomes 4. 2 relocates 2 new	1
50	Shetland Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional light / column	2
51	Sutherland Cr	P3	9			4	\$5,500	4	\$3,500	\$ 36,000.00	9 becomes 13. 4 new 4 relocate	1
52	Tiki Pl	P4	1			1	\$5,500	2	\$3,500	\$ 12,500.00	2 becomes 3. 1 new 2 relocate	2
53	Waltham Ct	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2. 1 new 1 relocate	2
54	Waterford Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional light / column	2
									TOTAL	\$ 301,300.00		





Proposed Solution												
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 3												
55	Abraham Cr	P3	4	11		3	\$5,500	5	\$3,500	\$ 34,000.00	6 becomes 8. Redesign required.	1
56	Apollo Pde	P3	14	15	\$6,800					\$ 102,000.00	Redesign required	1
57	Aspiring Ave	P3	5			1	\$5,500	3	\$3,500	\$ 16,000.00	4 becomes 5	1
58	Catlins Cr	P3	3			2	\$5,500	4	\$3,500	\$ 25,000.00	4 becomes 6	1
59	Cohen Pl	P4	1			1	\$5,500			\$ 5,500.00	Cul de sac 1 new	2
60	Denver Pl	P4	1			1	\$5,500			\$ 5,500.00	Cul de sac 1 new	2
61	Dunk Pl	P4	1			1	\$5,500	2	\$3,500	\$ 12,500.00	2 becomes 3	2
62	Flygers Line	P3	3			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2	1
63	Gemini Ave	P3	8	8	\$6,800					\$ 54,400.00	Redesign required	1
64	Holdsworth Ave	P3	7	7	\$6,800					\$ 47,600.00	Redesign required	1
65	Hunter St	P3	1			1	\$5,500			\$ 5,500.00	1 new additional	2
66	Jasper Pl	P3	6			2	\$5,500	3	\$3,500	\$ 21,500.00	3 becomes 5	1
67	Jupiter St	P3	5	5		3	\$5,500	2	\$3,500	\$ 23,500.00	3 new & 2 relocate	1
68	Kaituna St	P3	4			2	\$5,500	3	\$3,500	\$ 21,500.00	4 becomes 6	2
69	Langley Ave	P3	9	9	\$6,800					\$ 61,200.00	Redesign required	1
70	Moa St	P4	1			2	\$5,500			\$ 11,000.00	1 becomes 3	2
71	Moyne Ave	P3	6			1	\$5,500	3	\$3,500	\$ 16,000.00	3 becomes 4	2
72	Palliser Pl	P3	4			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2	2
73	Paradise Pl	P3	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2	2
74	Papawai Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional	2
75	Pinedale Pde	P3	6			3	\$5,500	3	\$3,500	\$ 27,000.00	3 becomes 6	2
76	Pluto Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional	2
77	Pukatea Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional	2
78	Rennie Ave	P3	8			2	\$5,500	4	\$3,500	\$ 25,000.00	4 becomes 6	2
79	Saturn Cr	P3	1			1	\$5,500	2	\$3,500	\$ 12,500.00	2 becomes 3	2
80	Terry Cres	P3	5			3	\$5,500	4	\$3,500	\$ 30,500.00	4 becomes 7	2
81	Venus Way	P3	1			1	\$5,500			\$ 5,500.00	1 new additional	1
TOTAL										\$ 606,700.00		
Proposed Solution												
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 4												
82	Aberdeen Ave	P3	5		\$6,800	2	\$5,500	3	\$3,500	\$ 21,500.00	2 new 3 relocate	1
83	Argyle Ave	P3	3		\$6,800	1	\$5,500	2	\$3,500	\$ 12,500.00	1 new 2 relocate	2
84	Aroha St	P3	1		\$6,800	1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
85	Beresford St	P3	7		\$6,800	3	\$5,500	4	\$3,500	\$ 30,500.00	Redesign reqd 3 new 4 relocate	1
86	Birmingham St	P3			\$6,800		\$5,500		\$3,500	\$ -	Do nothing part of an intersection	3
87	Brett Pl	P4	1		\$6,800	1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
88	Bryant St	P3			\$6,800		\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
89	Chelwood St	P3			\$6,800		\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
90	Clausen St	P3	2		\$6,800	1	\$5,500	2	\$3,500	\$ 12,500.00	1 new 2 relocate	2
91	Forbury Ave	P3	6		\$6,800	2	\$5,500	2	\$3,500	\$ 18,000.00	2 new 2 relocate	1
92	Guy Ave	P3	8	6	\$6,800		\$5,500		\$3,500	\$ 40,800.00	Redesign reqd 2 new 4 relocate	1
93	Havill St	P3	6	9	\$6,800		\$5,500		\$3,500	\$ 61,200.00	Redesign reqd 4 new 5 relocate	1
94	Hobson Pl	P4	1		\$6,800		\$5,500		\$3,500	\$ -	Do nothing cul-de-sac	3
95	Matipo St	P4	1		\$6,800	1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
96	Richmond Ave	P3	5		\$6,800	3	\$5,500	2	\$3,500	\$ 23,500.00	3 new 2 relocate	1
97	Seddon St	P3	1		\$6,800	1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
98	Shamrock St	P3			\$6,800		\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
TOTAL										\$ 253,000.00		
Proposed Solution												
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 5												
99	Albert St	P3								\$ -	Do nothing Cat V on intersection	3
100	Carow St	P4	1			2	\$5,500		\$3,500	\$ 11,000.00	2 new	2
101	Fitchett St	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
102	Marama Cr	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
103	Martin St	P3	4	6	\$6,800				\$3,500	\$ 40,800.00	Redesign reqd 2 new 2 relocate	1
104	Russell St (Featherston to Grey)	P3	3			1	\$5,500	2	\$3,500	\$ 12,500.00	1 new 2 relocate	2
105	Stanley Ave	P3							\$3,500	\$ -	Do nothing Cat V on intersection	2
106	Tawa St	P4							\$3,500	\$ -	Another new is over designed - do nothing	3
TOTAL										\$ 75,300.00		





Proposed Solution												
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 6												
107	Andrew Ave	P3					\$5,500		\$3,500	\$ -	Considered ok	3
108	Battersea Pl	P4	4			2	\$5,500	1	\$3,500	\$ 14,500.00	2 new 1 relocate	2
109	Clyde Cr	P3					\$5,500		\$3,500	\$ -	Mistake looks ok	3
110	Freyberg St	P3					\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
111	Kauri St	P4					\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
112	Koromiko Ave	P3					\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
113	Landsdown Ct	P4					\$5,500		\$3,500	\$ -	Do nothing not really a street more daytime parking area.	3
114	Milton St	P3	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new, higher priority because near an intersection	1
115	Plymouth St	P4					\$5,500		\$3,500	\$ -	Do nothing not in line of sight	3
116	Rangiora Ave	P3					\$5,500		\$3,500	\$ -	Do nothing mistake on database L11251 between lights	3
117	Weber Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
118	Woodfield Ave	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
									TOTAL	\$ 31,000.00		
Proposed Solution												
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 7												
119	Adrien Way	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
120	Aintree Cr	P4	3			4	\$5,500	1	\$3,500	\$ 25,500.00	4 new 1 relocate	1
121	Alexander St	P3	8			2	\$5,500	3	\$3,500	\$ 21,500.00	2 new 3 relocate	1
122	Anaru Pl	P4	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
123	Anzio Pl	P4					\$5,500		\$3,500	\$ -	ok	3
124	Benbow Pl	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
125	Busby Pl	P4					\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
126	Capri Pl	P4	2			1	\$5,500	2	\$3,500	\$ 12,500.00	1 new 2 relocate	3
127	Carbine Ct	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
128	Cardiff St	P3	1				\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
129	Caulfield Pl	P4	3			2	\$5,500	1	\$3,500	\$ 14,500.00	2 new 1 relocate	2
130	Cavendish Cr	P3	2			2	\$5,500	2	\$3,500	\$ 18,000.00	2 new 2 relocate	2
131	Coronet Pl	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
132	Dampier Ave	P4				1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
133	Drake St	P4				2	\$5,500	2	\$3,500	\$ 18,000.00	2 new 2 relocate	2
134	Dittmer Dr	P3	13			2	\$5,500	4	\$3,500	\$ 25,000.00	2 new 4 relocate	1
135	Frimley St	P3	3			2	\$5,500	2	\$3,500	\$ 18,000.00	2 new 4 relocate	1
136	Grant Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
137	Haast PL	P4	4			4	\$5,500	2	\$3,500	\$ 29,000.00	4 new 2 relocate	2
138	Hartley Pl	P4					\$5,500		\$3,500	\$ -	Do nothing Cat V on intersection	3
139	Heath Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
140	Kentucky Way	P3	8			3	\$5,500	3	\$3,500	\$ 27,000.00	3 new 3 relocate	1
141	Miles Pl	P4					\$5,500		\$3,500	\$ -	ok	3
142	Nottingham Ave	P3	8			3	\$5,500	4	\$3,500	\$ 30,500.00	3 new 4 relocate	1
143	Oban Pl	P4				1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
144	Otira Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
145	Panako Pl	P4	1			2	\$5,500	2	\$3,500	\$ 18,000.00	2 new 2 relocate	1
146	Paul Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
147	Racecourse Rd	P3	6	12	\$6,800		\$5,500		\$3,500	\$ 81,600.00	Redesign change to Cat v status	1
148	Rakino Pl	P4	1				\$5,500	1	\$3,500	\$ 3,500.00	1 relocate	2
149	Raleigh St	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
150	Sharon Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
151	Squires Pl	P4	2				\$5,500	1	\$3,500	\$ 3,500.00	1 relocate	2
152	Truscott Gr	P4					\$5,500		\$3,500	\$ -	ok	3
153	Wainui Ct	P4				4	\$4,700		\$3,500	\$ 18,800.00	4 been missed luminaires only	1
154	Wakefield St	P4	2				\$5,500		\$3,500	\$ -	ok	3
155	Wikiriwhi Cr	P3					\$5,500		\$3,500	\$ -	mistake on spreadsheet	2
156	Wyndham St	P4	4			2	\$5,500	1	\$3,500	\$ 14,500.00	2 new 1 relocate	2
									TOTAL	\$ 468,400.00		





				Proposed Solution								
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 8												
157	Chester Cr	P4	1								Incorrect indication on spreadsheet no action required.	3
158	Graham Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional	2
159	Hammond Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional	2
160	Just Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional	2
161	Linton St (Ferguson to College)	P3	1							\$ -	ok no action required first light is cat V	3
162	Manawaroa St	P3	3			1	\$5,500			\$ 5,500.00	1 new additional plus cat V	2
163	Mansford Pl	P3	1							\$ -	Incorrect indication on spreadsheet no action required.	3
164	Nathan Pl	P3	1			2	\$5,500			\$ 11,000.00	2 new additional lights	2
165	Ruha St	P3	1			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2	2
166	Savage cr	P3	2							\$ -	Considered ok because of contribution from double light in Hodgens Pl	3
167	Townshend Pl	P4	1			1	\$5,500			\$ 5,500.00	1 new additional	2
									TOTAL	\$ 47,500.00		
				Proposed Solution								
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 9												
168	Collingwood St	P3								\$ -	Reconsider after cat V, first light is installed	3
169	Dahlia St	P3								\$ -	Reconsider after cat V, first light is installed	3
170	Elmira Ave	P3								\$ -	Reconsider after cat V, first light is installed	3
171	Hardie St	P3								\$ -	Reconsider after cat V, first light is installed. Light L3771 doesn't appear to be installed?	3
172	Moana St	P3	1			1	\$5,500	2	\$3,500	\$ 12,500.00	2 becomes 3	2
173	Ranfurly St	P3	1			1	\$5,500	2	\$3,500	\$ 12,500.00	2 becomes 3. Trees and speed bump maybe an issue.	2
174	Rolleston St	P3	1			1	\$5,500	2	\$3,500	\$ 12,500.00	3 becomes 4. Trees and wide street.	2
175	Seaton Ct	P4	1			1	\$5,500	1	\$3,500	\$ 9,000.00	add 1 new at head of cul-de-sac and relocate 1.	2
176	Tasman Pl	P4	1			1	\$5,500			\$ 5,500.00	add 1 new to bowl of cul-de-sac.	2
									TOTAL	\$ 52,000.00		
				Proposed Solution								
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 10												
177	Croxley Pl	P4	2			1	\$5,500			\$ 5,500.00	Add 1 new mid span	2
178	Heatley Ave	P3	2			2	\$5,500			\$ 11,000.00	1 becomes 2 replace low height conc. Column	2
179	Hind Pl	P3	2			1	\$5,500	2	\$3,500	\$ 12,500.00	2 becomes 3	2
180	Limbrick St	P3	2			2	\$5,500			\$ 11,000.00	Add 2 new to outside of bend	1
181	Manson St	P3	2							\$ -	No action required non-compliance is due to unusual wide bowl in road reserve	3
182	Mokau Pl	P4	4			2	\$5,500	2	\$3,500	\$ 18,000.00	2 becomes 4	2
183	Newcastle St	P3	2			1	\$5,500			\$ 5,500.00	add 1 new mid span	2
184	Patea Pl	P4	2			1	\$5,500			\$ 5,500.00	add 1 new mid span	2
185	Ruamahanga Cr	P3	4			3	\$5,500	2	\$3,500	\$ 23,500.00	long spans, dense trees and 10% used	1
186	Waterloo Cr	P3	2			2	\$5,500			\$ 11,000.00	add 2 new mid span	2
									TOTAL	\$ 103,500.00		
				Proposed Solution								
Street No.	Street Name	"P" Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 11												
187	Clifton Tce	P3	7			2	\$5,500	3	\$3,500	\$ 21,500.00	2 new 3 relocate	2
188	Fernwood Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
189	Guernsey Pl	P4	1				\$5,500		\$3,500	\$ -	ok because light in Clifton Tce	3
190	Heathcote Pl	P4	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
191	Hillgrove Pl	P4	1			1	\$5,500		\$3,500	\$ 5,500.00	1 new	2
192	Mountain View Rd	P4					\$5,500		\$3,500	\$ -	ok distance from intersection not accurate	3
193	Silicon Way	P4					\$5,500		\$3,500	\$ -	ok mistake on spreadsheet	3
194	Springdale Gr	P3	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 new 1 relocate	2
195	Titirangi Dr	P4					\$5,500		\$3,500	\$ -	ok do nothing considered rural	3
196	Williams Tce	P4	1				\$5,500		\$3,500	\$ -	ok because light in Summerhill Dr	3
									TOTAL	\$ 50,500.00		





				Proposed Solution								Priority rating	
Street No.	Street Name	'P' Category	Present No. of Lights	Green Field	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments		
AREA 12													
197	Acacia St	P3	8	12	\$6,800					\$ 81,600.00	Redesign required, new columns respace	1	
198	Alpine Gr	P4	1			1	\$5,500			\$ 5,500.00	add 1 new	2	
199	Anakiwa St	P3	2			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2 long span	2	
200	Branigan Pde	P3	2					1	\$3,500	\$ 3,500.00	Stagger installation respace 1 span maybe enough	2	
201	Cargill Gr	P4	3			2	\$5,500	2	\$3,500	\$ 18,000.00	2 becomes 4	2	
202	Colonial Pl	P4	1			2	\$5,500	1	\$3,500	\$ 14,500.00	1 becomes 3	2	
203	Forbes Pl	P4	1			2	\$5,500			\$ 11,000.00	add 2 new	2	
204	Hillcrest Dr	P3	9	20	\$6,800					\$ 136,000.00	Redesign required, new columns respace	1	
205	Hilton Gr	P4	3			1	\$5,500	1	\$3,500	\$ 9,000.00	1 becomes 2	2	
206	Karamea Cr	P3	3	8	\$6,800					\$ 54,400.00	Redesign required, new columns respace	1	
207	Lyndale Pl	P4	3			2	\$5,500	1	\$3,500	\$ 14,500.00	2 becomes 4	2	
208	Mahia Pl	P4	1			1	\$5,500			\$ 5,500.00	add 1 new	2	
209	Motuoapa Pl	P4	1			1	\$5,500			\$ 5,500.00	add 1 new	2	
210	Parnell Hgts	P3	2			2	\$500.00			\$ 1,000.00	up wattage of luminaire	3	
211	Peter Hall Dr	P3	4			1	\$5,500	2	\$3,500	\$ 12,500.00	2 becomes 3 replace column	2	
212	Rhodes Dr	P3	11	7	\$6,800					\$ 47,600.00	Redesign required, new columns respace	1	
213	Rodeo Dr	P3	4					1	\$3,500	\$ 3,500.00	Relocate 1 then when columns are replaced this will help compliance	3	
214	Rosalie Tce	P3	4			2	\$5,500	1	\$3,500	\$ 14,500.00	Relocate 1 then when columns are replaced this will help compliance	3	
215	Suzanne Gr	P4	1			1	\$5,500			\$ 5,500.00	add 1 new	2	
216	Wairau Pl	P4	1			1	\$5,500			\$ 5,500.00	add 1 new	2	
									TOTAL	\$ 458,100.00			
KEY				513	141	247		192	P CATEGORY AREA TOTAL			\$ 2,867,300.00	
Indicates a change in street category classification									PRIORITY RATING 1 TOTAL			\$ 1,271,000.00	
Indicates a street where residents have complained - 7 in total									PRIORITY RATING 1b TOTAL			\$ 382,300.00	\$ 1,653,300.00
Indicates consideration be given to a redesign - 28 streets in total									PRIORITY RATING 2 TOTAL			\$ 1,177,000.00	
									PRIORITY RATING 3 TOTAL			\$ 37,000.00	
												48	
												122	
												46	
												216	



STREET LIGHTING "V" CATEGORY

AREA 1												
Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
1	Tremaine Ave	V3	14			19	\$6,000			\$ 114,000.00	Redesign required could reduce wattage, add 6 lights mid span between L1595-L1582. Redesign required L6167-L6158 respace and or add 7.	1
2	Amberley Ave	V4	5			5	\$6,000			\$ 30,000.00	Add 1 new mid span L18929-L8928, L8926-L8925, L8918-L8917, add 2 new mid span L8915-L2169	2
3	Pioneer Hway	V2	2			2	\$6,000			\$ 12,000.00	Intersection design with increased height may confirm compliance L5929-L5939. 1 new added between L5939-L5938, L5933 out of sequence between L5934-L10106, L2188 out of sequence between L2189-L11009, L10776 out of sequence between L2177-L2176, add 1 new mid span L2160-L2159.	2
4	Botanical Rd	V3	3			1	\$6,000	2	\$3,500	\$ 13,000.00	10% concession used over 3 spans non-compliance acceptable, span between L6234-L6235 10% concession exceeds but less than 2m, relocate L6238 & L6240 add new mid span	2
5	Highbury Ave	V4	3			1	\$6,000	2	\$3,500	\$ 13,000.00	Relocate L6172-L6203 add 1 new, L8699-L8698 span river increased height will help.	2
									TOTAL	\$ 182,000.00		
Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 2												
6	Gillespies Ln	V4								\$ -	1 light wattage amended, other light considered ok because no lights between for some distance	3
7	Bennett St	V3	9	12	\$7,300					\$ 87,600.00	Redesign required	1
8	Rangitikei St	V2	11	11	\$7,300					\$ 80,300.00	Redesign required	1
									TOTAL	\$ 167,900.00		





Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 3												
9	JF Kennedy Dr	V3									considered ok because with +/- 2m permitted max plus there is contribution from side street.	3
10	Fairs Rd	V4	1			1				\$ 1,000.00	add new light onto o/h bewteen L8570 & L8567	3
11	Wiltshire Pl	P2	1			2	\$6,000			\$ 12,000.00	Change sub category of road to P2. Add 2 new lights	2
12	Milson Ln	V2	9	10	\$7,300	1	\$6,000	3	\$3,500	\$ 89,500.00	L1382 can't do anything because of large setback illuminance calculation may prove acceptable. Nothing can be done (L1333) because of overbridge. Relocate L8389 plus add new between L1332. Redesign / respace existing / new 11.2m columns to max 55m - reuse existing lights. Relocate L7282 - 19m towards L7283. Relocate L7285 - 15m towards L7286. Replace column L7288 with 11.2m	1
13	Airport Dr Nth	V3	1			1	\$6,000			\$ 6,000.00	Add new additional light mid span between doubles	2
14	McGregor St	V4	1			1	\$6,000			\$ 6,000.00	Increasing height of column to 11.2m when due will meet compliance	3
15	Railway Rd	V3								\$ -	L12015 is stagger with L12018 spreadsheet doesn't show this hence do nothing.	3
									TOTAL	\$ 114,500.00		



Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & or new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 4												
16	Featherston St	V2	21	28	\$7,300					\$ 204,400.00	Redesign required check information from data base heights appear in correct.	1
17	Chelwood St	V4	3			3	\$6,000	1	\$3,500	\$ 21,500.00	Relocate L5705, add 3 additional	2
18	Lombard St	V4	3			2	\$6,000			\$ 12,000.00	Intersection appears ok. Add 2 extra and increase mounting height.	2
19	Walding St	V3	1					1	\$3,500	\$ 3,500.00	Appears distance on data is incorrect due to the sequence numbering	3
20	Wood St	V3	8			13	\$6,000			\$ 78,000.00	Changing the height alone is not sufficient, wattage change to 132W is also required for 13 fittings.	1
21	Waldegrave St	V4	3								Considered ok because there are 3 spans using the 10%	3
22	Main St West	V2	26	26	\$7,300					\$ 189,800.00	Redesign to find something that complies and or change column height.	1
23	Cook St	V4	2			2	\$6,000			\$ 12,000.00	Because of very wide road specific design required with 2 new additional lights	1
24	Pitt St	V3	8	10	\$7,300					\$ 73,000.00	Design required increased height required. 1 additional light	1
25	Taonui St	V4	12	12	\$7,300					\$ 87,600.00	Design required increased height required and a change in wattage / optic	1
26	Rangitikei St	V2	20	22	\$7,300					\$ 160,600.00	Design required increased height required and a change in wattage / optic. Contribution from intersection lighting means L5767will be ok. Column L5992 relocated to gain compliance. Column L5989 is considered ok.	1
27	Tremaine Ave	V2	15	34	\$7,300					\$ 248,200.00	Design required increased height required and a change in wattage / optic	1
									TOTAL	\$ 1,090,600.00		
Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 5												





Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 6												
28	Featherson St	V2	4			2	\$6,000	4	\$3,500	\$ 26,000.00	L5160 within 2m of 10% concession. L5157 4th span in a row using 10% concession. Alternative for these two additional concessions is replace 2 with 3 i.e 2 relocates 1 new. L5140 3rd span of 10% concession. Considered an additional concession or replace 2 with 3 i.e 2 relocates 1 new. L5009 is located between L5010 - L5012.	3
29	Vogel St	V3	4					4	\$3,500	\$ 14,000.00	Either relocate column L5021 OR L5022. Relocate L5070 towards L5071. Relocate L5058 towards L5059. Relocate L5056 towards L5057	2
30	Upper Main St	V3	1					1	\$3,500	\$ 3,500.00	L11451 3rd span using 10% concession increase mounting height on L11451	3
31	Napier Rd	V2	1							\$ -	Last span leaving speed restriction.	3
32	Main St East	V2	2							\$ -	Last span distance indicated is incorrect. There appears to be a light missing between L4670 & L7176.	3
33	Tremaine Ave	V2	18	25	\$7,300	3	\$6,000	4	\$3,500	\$ 214,500.00	Excessive spacing L5180-L4981 redesign required (allow 10 becomes 15). L4979, L11401 relocated 2 new. L4973 & L4972 relocated add new between. Excessive stagger spacing between L1815-L8266 - REDESIGN in this area required (allow 8 becomes 10). L1820 not shown on spreadsheet but is between L8266 - L8254	1
TOTAL										\$ 258,000.00		
Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 7												
34	College St	V3	6							\$ -	Height amended checked wattage and optic for less non-compliance	3
35	Long Melford Rd	V3	1							\$ -	Can't move far because of driveways, L1984 within 2m of 10% concession.	3
36	Pitama Rd	V3	2					1	\$3,500	\$ 3,500.00	Move L9768 or L2049	3
37	Rugby St	V3	1							\$ -	Modified wattage and optic	3
38	Ferguson St	V3	1							\$ -	Within 2m of 10% concession	3
39	Botanical Rd	V3	8			1	\$6,000	2	\$3,500	\$ 13,000.00	Consider longer outreach for columns that are set back (check RAMM data). Checked wattage optic and tilt, add additional light between L11489-L10168	2
TOTAL										\$ 16,500.00		





Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 8												
40	Park Rd	V3	5			5	\$6,000			\$ 30,000.00	Increased wattage to reduce using 10% concession, because of large setback additional columns need to be on other side of the road, L1297 exceeds 10% concession but is within 2m of doing so.	2
41	Fitzherbert Ave	V1	14			3	\$6,000	1	\$3,500	\$ 21,500.00	Relocate L10338 & add 2 new, L10342 & L4060 are associated with an intersection, L4056 1 additional opposite, because stagger has changed over the years it is really a double opposite L4051, L4050, L4075 relocate 18m towards L11648, single sided installation does not work L4046, L4077, L4080, L4033, L4035, L8473, L4041 within 2m of 10% concession, L2948, L9782, L4009 associated with intersection, relocate L4083, L8477 to even spacing,	2
42	College St	V3	6			2	\$6,000	3	\$3,500	\$ 22,500.00	Between L4327-L4323 add extra light to reduce spacing to around 43m. Add extra light between L4323 and L4322. Relocate L4319 & add 1 new, L10610, L4138 are within 2m of 10% concession.	2
43	Ferguson St	V3	15			15	\$6,000			\$ 90,000.00	Changed wattage L7026,L7027, L8492, lights L4610-L6011 will become compliant if or when existing columns replaced with 11.7m columns	3
44	Linton St	V3	1							\$ -	Span is within 2m of 10% concession	3
45	Church St	V4(10)& V3(40)	16			14	\$6,000	2	\$3,500	\$ 91,000.00	L6974, L4164, L10124 part of intersection lighting, L9012 within 2m of 10% concession. L9979 missing from data base, side of road indication for some lights incorrect on data base, because of wide area (parking) columns need to be 12.2m high to achieve 34m spacing anything longer requires relocate and additional lights, single sided doesn't work, specific design or illuminance calculation required.	1
46	West St	V2	8			8	\$6,000			\$ 48,000.00	If all columns are replaced with 11.2m can reuse proposed lights for compliance.	3
47	Pitt St	V3	6			6	\$6,000			\$ 36,000.00	Reuse proposed lights on new 11.2m columns compliance achieved, L9366 & L9364 can be consider stagger installation because additional supplementary light has been added.	2
48	Cook St East	V3	25			25	\$6,000			\$ 150,000.00	If new columns at 11.2m can reuse existing lights for compliance.	2
									TOTAL	\$ 489,000.00		





Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 9												
Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating
AREA 10												
49	Franklin Ave	V4	5							\$ -	Only the intersection is cat V hence specific illuminance calculation required.	1
50	Ascot St	V3	2							\$ -	Only the intersection is cat V hence specific illuminance calculation required.	1
51	Winston Ave	V4	2							\$ -	Only the intersection is cat V hence specific illuminance calculation required.	1
52	Churchill Ave	V4	3							\$ -	similar to Franklin, Ascot & Winstone. A lot of lights been changed under cat P therefor whole street is not cat V4. Gut feel is proposed lights should provide required illuminance	1
53	Ruahine St	V3	2							\$ -	L10041 & L10040 associated with roundabout with Church St. L3054 missing from data base 52m from L3028 & 24m from L3029?	3
54	Albert St	V2(28) & V3(46)	11			6	\$6,000	6	\$3,500	\$ 57,000.00	L3233, L3234, L3238 single sided doesn't work on wide road respace and or add, higher columns will also help. L3257, L3259, L3260 - move 2 add 1 new because of spacing. L3267, L3269, L3268, L3270 relocate 4 add 1. Add 1 new between L3323 & L3324. L3006 within 2m of 10% concession.	2
55	Fitzroy St	V3	3					3	\$3,500	\$ 10,500.00	L3475 within 2m of 10% concession. Relocate L3490 10m closer to L3489. Relocate L3494 10m closer to L3493. Relocate L3512 6m closer to L3513.	2
56	Church St East	V3	3							\$ -	L4700, L4692 associated with Church/Ruahine roundabout. L4696 associated with Fitzroy intersection.	3
57	Ferguson St	V3	4			1	\$6,000	1	\$3,500	\$ 9,500.00	NC spacing because of driveways, stub columns expensive to change. L7218 similar but could move L7219 15m solve the issue? Replace column L3495 with higher column to reduce non-compliance.	2
TOTAL										\$ 77,000.00		





Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating	
AREA 11													
Street No.	Street Name	"P" Category	Present No. of Non-complying lights	Greenfields	Cost of Greenfields Upgrade	No. of new columns & new lights	Cost new column & light	No. of relocated columns reuse light	Cost of relocation	Estimate Cost \$	Comments	Priority rating	
AREA 12												2	
58	Kelvin Grove Rd	V2	10			5	\$6,000	4	\$3,500	\$ 44,000.00	Not sure where L8171 is located? Add new column between L8047-L8153, relocate L8046 add 1 new, L8044 - L8040 3 relocated 3 new, L11431-L9436 3rd span using 10% concession.		
59	Schnell Dr	V4								\$ -	Lights out of sequence on spreadsheet		3
60	Fernlea Ave	V4	1			1	\$6,000	1	\$3,500	\$ 9,500.00	L2928 relocated 1 new add		2
61	Roberts Ln	V2								\$ -	lights on o/h mid span not included		3
62	McLeavey Dr	V2	3			1	\$6,000	2	\$3,500	\$ 13,000.00	1 new between L8139-L9447, L9460 relocated, L9974 relocated.		2
63	Kaimanawa St	V3	1					1	\$3,500	\$ 3,500.00	L8840 relocated.		2
64	Mihaere Dr	V3	2			1	\$6,000			\$ 6,000.00	1 new between L11449-L8411		2
			379	190		153		49	TOTAL	\$ 76,000.00		18	Priority 1
												23	Priority 2
												23	Priority 3
"V" CATEGORY TOTAL										\$ 2,471,500.00			
PRIORITY RATING 1 TOTAL										\$ 1,730,500.00		64	Total
PRIORITY RATING 2 TOTAL										\$ 559,500.00			
PRIORITY RATING 3 TOTAL										\$ 181,500.00			
										\$ 2,471,500.00			
<div><div></div><div>Indicates a change in street category classification</div></div>													
<div><div></div><div>Indicates consideration could be given to a redesign 18 roads in total but one road may continue over more than one zone</div></div>													