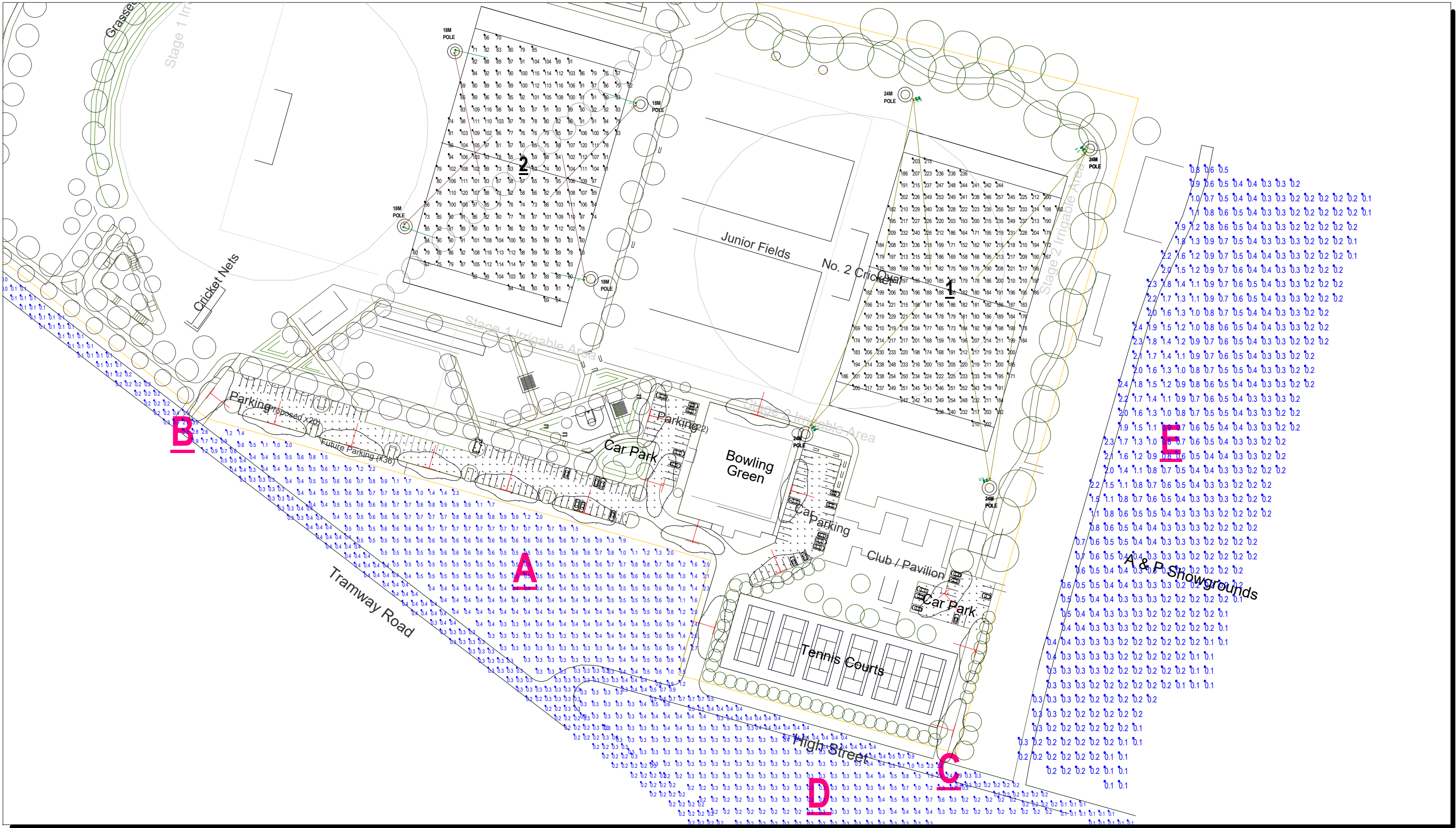


Appendix G

Lighting Assessment



PHILIPS NZ LTD
Level 3,
123 Carlton Gore Rd.,
Newmarket,
Auckland 1023
NEW ZEALAND

Kirwee Recreation Reserve

Selwyn, New Zealand

Kirwee Recreation Reserve

Lighting Prediction Plan 1

- Zoomed-in View

SCALE: (on plan)

MAIN PRODUCTS / CODES

Luminaire Schedule					LLF	Qty	Lum. Watts	Total Watts
Symbol	Label	Description						
■	A-NB	OptiVision LED_BVP525_OUT_T15_100K_LED2020_757_A-NB		0.760	20	1471	29420	
■	L1	BRP711 LED42/WW 36W PSD DWP3 P7 ANZ (L1)		0.760	16	36	576	
■	S4	OptiVision LED_BVP525_OUT_T15_100K_LED2020_757_S4		0.760	8	1471	11768	
■	S8	OptiVision LED_BVP525_OUT_T15_100K_LED2020_757_S8		0.760	4	1471	5884	



BRP711



OptiVision LED

DESIGN REFERENCES :			Date: 30/08/2019	
Item	Description	Details	Comm. / Summ.	
A	Salesforce no. -	000000		
B	Designed by -	RV		
C	Checked by -	AS		
D	Design version -	SET: 01	REVISION: 03	
E	DSGN HRS USED	Hrs: Rate: \$ / hr	Total:	

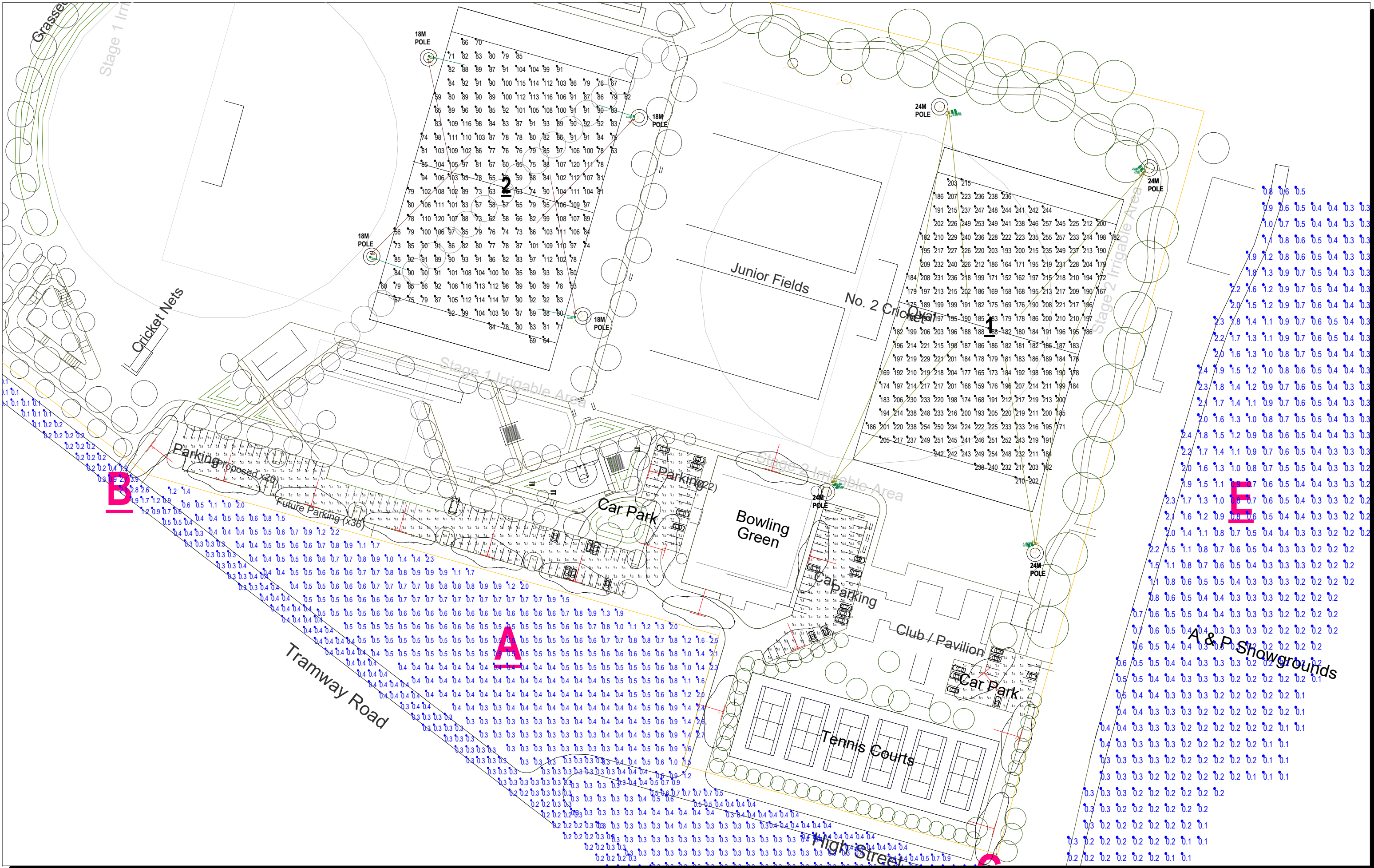
Calculation Summary						
Label	Avg	Units	Min/Avg	Min	Max	Max/Avg
Carparks	5.25	Lux	0.27	1.4	34.9	6.65
No 1	207.46	Lux	0.73	152	257	N.A.
No 2	88.87	Lux	0.60	53	120	N.A.
Spill - A area	N.A.	Lux	N.A.	0.3	2.7	N.A.
Spill - B&C Tramway-High Sts	N.A.	Lux	N.A.	0.0	3.9	N.A.
Spill - D area	N.A.	Lux	N.A.	0.2	1.3	N.A.
Spill - E area	N.A.	Lux	N.A.	0.1	2.4	N.A.

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Other Notes:

- Layout is NOT for construction unless approved by concerned parties.
- Layout and results are as per brief and drawings received.
- Layout is void if non-Philips fittings are used and when there are deviations from design in actual installation.



PHILIPS NZ LTD
Level 3,
123 Carlton Gore Rd.,
Newmarket,
Auckland 1023
NEW ZEALAND

Kirwee Recreation Reserve

Selwyn, New Zealand

Kirwee Recreation Reserve

Lighting Prediction Plan 2

- Overall View

SCALE: (on plan)

MAIN PRODUCTS / CODES



BRP711



Optvision LED

DESIGN REFERENCES :			Date: 30/08/2019
Item	Description	Details	Comm. / Summ.
A	Salesforce no. -	000000	
B	Designed by -	RV	
C	Checked by -	AS	
D	Design version -	SET: 01	REVISION: 03
E	DSGN HRS USED	Hrs: Rate: \$ / hr	Total:

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Appendix H

CPTED Assessment

Crime Prevention through Environmental Design (CPTED) Analysis of the Proposed Kirwee Reserve Master Plan – Dated 26 June 2019

The following is a CPTED review of Selwyn District Council (SDC) proposed Kirwee Reserve Master Plan, dated 26 June 2019.

This review has been undertaken internally by Derek Hayes, who is a Landscape Architect employed with the Selwyn District Council.

Proposal:

Based on the Master Plan, the proposal is to extend the Kirwee Reserve to allow for:

- The establishment of a second dedicated cricket oval;
- Reorientation of the number two senior rugby field and the creation of a second junior rugby field;
- The provision of an open space area available for off-leash dog exercise;
- Perimeter walking tracks and an improved footpath network;
- The creation of a 'community activities hub', inclusive of children's play facilities, BBQ's and picnicking facilities, public toilets;
- Increased car parking and lighting;
- Space for other recreational facilities including a bmx pump track.

As part of the overall reserve redevelopment the proposal also includes landscaping, largely consisting of native shrub borders, specimen tree planting and grassed earth mounding.

Site Context:

The surrounding area consists of residential properties bordering the reserve along the southern boundary, the A&P Showgrounds along the east, the Kirwee Cemetery to the north, and rural farmland to the west/north west. Current visibility into the reserve is predominantly via the surrounding rurally focussed A&P grounds, cemetery and farm land. There is limited street frontage and a few neighbouring residential properties along the southern boundary.

From discussions with Reserve Committee members, there has been a couple of isolated incidents of vandalism or anti-social behaviour reported within the Reserve over the last couple of years. There was one major incident where windows were broken in the public toilets and graffiti which required a complete repainting of the inside of the toilets. Additionally, there were a number of trees that had graffiti painted on them. On occasion there has been reported evidence of vehicle misuse (loss of traction) within the western car park area.

Design Considerations:

Through the master planning design process the following considerations have been made to assist with preventing potential crime and anti-social behaviour occurring within Kirwee Reserve.

- The design seeks to, as much as possible, increase the provision of car parking within close proximity to building entranceways and key facilities. An additional 13 car parks have been provided within the existing car park adjacent to the main reserve pavilion. Additional new car parking is also proposed adjacent to the 'community activity hub' and children's play

areas, as well as to service new cricket facilities and dog exercise area towards the western end of the reserve.

- The design places an emphasis on the facilitation of pedestrian movement and provision of safe linkages, particularly between reserve entry points, car parking, and key facilities and building entranceways. A well-structured footpath network is proposed that connects facilities both in an east/west and north/south direction. Footpaths are long and linear and have been offset from structures, fences, dense plantings or potential blind spots to ensure the provision of adequate sight lines. All proposed landscaping near footpaths is generally specified as specimen trees that are to be limbed in height to maintain a clear line of sight.
- It is proposed to illuminate the main car park areas and those pedestrian linkages connecting car parking and main building entranceways only, to ensure these are able to be used safely at night. The lighting of footpaths is only proposed for essential designated routes only where there is no alternative safe route provided.
- The provision of clear signage will be advocated for as part of the development, to clearly identify main and secondary entranceways into the reserve. Internal signage within the Reserve will also be specified to assist with wayfinding around the bowling club facility in either direction – to available parking and facilities on either side (either the pavilion or proposed community activity hub).
- Consideration has been given to the locations and context of vulnerable facilities (such as children's play areas, public toilets etc.). The public toilets and playground areas have been located so that they are easily visible from within the reserve and within close proximity to higher use areas, such as sports fields, footpaths and car parking. The proposed toilets front onto public space. In terms of the relationship between the reserve and adjoining land uses, there is a concern that the reserve will not be as visible from neighbouring housing following the installation of the required acoustic fencing along the southern reserve boundary. There will however be additional visibility into the Reserve created through the development of the Tramway Rd frontage, which will help with passive surveillance.
- The design has given thought to the expected use patterns (time of day, peak periods, activity mix etc.). The idea behind the 'community activity hub' is to increase usage and promote a centralised area within the reserve where a variety of activities are provided for. It is believed that by grouping facilities together, a range of users will be attracted to this area of the reserve, who might also feel encouraged to stay for a longer period (e.g. by providing BBQ and picnicking facilities). This will in turn help to ensure there is activity occurring throughout the day.
- Besides enhancing amenity values, the design and placement of landscape elements (such as the avenue tree planting), will help to define the different activity spaces and car parking areas, as well as to support the legibility of the footpath network (while maintaining a clear line of sight).
- The design includes the placement of physical protection measures in the form of bollards to restrict vehicle access onto playing fields and playground areas, and speed humps to limit vehicle speeds within the car parks. The provision of gates to lock areas of the car park after hours could be considered as a measure should issues arise that need to be managed.
- There has been extensive community involvement in the design process, including consultation with adjoining landowners of design decisions. The process has helped to

provide better understanding of the local context and has allowed potential issues to be identified early and addressed through the design.

- It is expected that there will remain a high standard of reserve upkeep, to maintain an appearance of a well utilised and cared for environment. Maintenance regimes will be implemented by Council and will be adjusted to keep pace with utilisation (e.g. the servicing of rubbish bins and toilets).