Wilson Sports Field
Light Tower Installation
FINAL BUSINESS CASE

Kent Council
Version 1.0
August 2017
## KEY PROPOSAL DETAILS

### PROPOSAL INFORMATION

<table>
<thead>
<tr>
<th>Proposal name</th>
<th>Wilson Sports Fields – Lighting Tower Installation</th>
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<tr>
<td>Lead council</td>
<td>Kent Council</td>
</tr>
<tr>
<td>Lead council ABN</td>
<td>12 345 678 901</td>
</tr>
<tr>
<td>Proposal partners</td>
<td>Not applicable</td>
</tr>
</tbody>
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### LEAD CONTACT

<table>
<thead>
<tr>
<th>Name</th>
<th>Kent Wilson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position</td>
<td>Executive Manager, Infrastructure and Operations</td>
</tr>
<tr>
<td>Phone</td>
<td>02 1234 5678</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:kwilson@kent.nsw.gov.au">kwilson@kent.nsw.gov.au</a></td>
</tr>
<tr>
<td>Fax</td>
<td>02 1234 5679</td>
</tr>
<tr>
<td>Address</td>
<td>401 Lois Lane</td>
</tr>
<tr>
<td></td>
<td>KENT NSW 2562</td>
</tr>
</tbody>
</table>

### PROPOSAL SCOPE

**Project summary for publication**

Please provide 150 words or less

The Wilson Sports Field Light Towers Installation Project proposes the installation of four light towers. These towers will enable matches, training sessions and community events to be held during the evening.

### PROPOSAL LOCATION

<table>
<thead>
<tr>
<th>Proposal address</th>
<th>418 – 520 Wilson Field Road</th>
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<tr>
<td></td>
<td>KENT NSW 2562</td>
</tr>
<tr>
<td>Latitude and longitude</td>
<td>-34.508268, 150.415632</td>
</tr>
<tr>
<td></td>
<td>WGS-84 Web Mercator Projection in five decimal places</td>
</tr>
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</tr>
<tr>
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<td>Kent</td>
</tr>
<tr>
<td>NSW electorate</td>
<td>Dorrigo</td>
</tr>
<tr>
<td>Federal electorate</td>
<td>Thatcher</td>
</tr>
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### SUPPORTING INFORMATION

**Attachments**

Please list out all supporting information provided

- Project GANNT chart
- Project Team CVs
- Risk Register
- Risk Management Plan
### Document Information

**Document Summary Information**

<table>
<thead>
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<td>5 August 2017</td>
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**Document History**

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<td>Final</td>
<td>5 August 2017</td>
<td>Kent Wilson</td>
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**NOTE:**

The contents of this sample business case have been prepared to provide guidance to applicants on the content required in a business case.
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1 EXECUTIVE SUMMARY
2 CASE FOR CHANGE

2.1 BACKGROUND

The Wilson Sports Fields (the ‘Fields’), managed by Kent Council (the ‘Council’), are located 1km south-east of the Wilson township. The Fields are home to:

- A 6,000m² oval with a maximum length of 120m and a maximum width of 60m
- A formal pavilion located on the western side of the oval
- A grass pavilion located on the north-eastern side of the oval
- Four practice wickets
- A playground and BBQ facilities
- A car park for 200 vehicles with overflow parking for a further 500 vehicles.

Established in 1930, the Council has progressively improved the Fields to cement its stature as the leading sporting and recreational facility within the region and to concentrate Council’s investments in its sporting facilities.

Originally, the Fields were used for cricket and AFL. The dimensions of the playing surface of the oval were increased in 1975 to accommodate rugby league and rugby union matches.

Figure 2-1 and Figure 2-2 show the location of the Fields and the current state of the fields respectively.

Figure 2-1: Location of the Fields
Currently, the Fields do not have any oval lighting. The Council proposes the installation of four light towers surrounding the oval (the ‘Project’) to permit the use of the oval during evening for both sporting and non-sporting events.

2.1.1 CURRENT USE

The Fields are used for cricket and soccer during the summer, and rugby league, rugby union and AFL during the winter. Collectively, these teams:

- Play 75 games at the Fields per year, generally held on weekends
- Train 150 times at the Fields per year, generally held on weekday afternoons
- Draw an average crowd of 1,500 people per game.

The Fields is also used for marquee community activities and events about 10 times a year. These events attract about 5,000 people per event.

All events are held during daylight hours.

The Fields is also used for various recreational purposes including picnics, cycling, walking and kite flying. A survey undertaken in 2016 suggests that on non-game days about 500 people use the Fields per day.
2.2 RATIONALE FOR INVESTMENT

2.2.1 INCREASE OVAL CAPACITY

The current demand for sporting events sees the oval being used approximately 85 percent of all weekend days. Games are generally scheduled on weekend days to avoid conflicts with work or education commitments.

To date, coordination with various sporting bodies and adjacent councils sees cricket and soccer games in summer and football games in winter being scheduled carefully. This coordination results in:

- Cricket and soccer matches playing on alternate weekends in summer
- Rugby league and union matches playing on Saturdays as ‘double headers’ and AFL matches playing on Sundays in winter.

Consultation with sporting bodies indicates that the current arrangements leave no room for:

- Rugby league or union junior/reserve grade matches to be played at the Fields on the same day
- Potential expansion of the competition to include more home/away matches
- Marquee matches to be held at the Fields e.g. finals football or representative football matches
- New sports to be introduced e.g. American football
- Recreational competitions to be held e.g. touch football and Oztag.

The installation of light towers would allow additional matches to be played at the oval on both weekday and weekend nights. Council considers that the installation of light towers would allow:

- The oval to be used for rugby league and rugby union matches on dedicated days
- Rugby league and union ‘curtain raisers’ to be played at the Fields on the same day
- A burgeoning American football competition to be played on weekday nights.

2.2.2 INCREASE PARTICIPATION

The current restriction of the oval to daytime hours is contributing to a stagnation of community participation in sporting events. While attendance and participation have been stable, allowing matches to be held in the evening will allow a higher number of people, who are otherwise constrained by work or other commitments to either sign up to a sporting team and/or attend a sporting match.

In addition to allowing matches to be scheduled to a less busier time of the day, the introduction of lighting will allow new innovations to be introduced by the various sporting bodies to further boost participation and spectatorship including:

- Night time T20 cricket fixtures during the summer
- Thursday and Friday night football matches during the winter
- Introducing a new touch football and Oztag competition.
2.2.3 TRAINING IMPROVEMENTS

In the absence of lighting, local sports clubs are constrained to:

- Timing their training sessions to late afternoons
- Using facilities located elsewhere in the region.

Consultation with clubs indicates that the daytime restrictions on the oval limit the number of training sessions that they can hold to 1-2 sessions per week. Each of these sessions are about one hour long, generally between 5pm and 6pm before the oval is closed.

The installation of light towers will allow teams to:

- Hold more training sessions
- Hold longer training sessions
- Schedule training sessions at a more convenient time
- Increase participation in these training sessions.

2.2.4 ATTRACT NEW EVENTS

The installation of light towers may with time allow Council to attract new non-sports related events or functions. Council has received preliminary interest from various community groups in holding:

- A monthly night time market
- Food and wine events in conjunction with night time football matches
- Summertime movies.

Moreover, existing events including the Kent Fete may be extended in duration into the evenings with the installation of light towers to further increase attendance to these events.

2.3 STRATEGIC ALIGNMENT

This section assesses the alignment of the Project with current NSW Government and Council policies, strategies and initiatives, with the table below outlining how the Projects addresses themes or requirements of each of the policies.

Table 2-1: Project Alignment with NSW Government and Council Policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>Alignment</th>
</tr>
</thead>
</table>
| The **NSW State Infrastructure Strategy Update 2014** identified a priority to “**Deliver targeted upgrades to the State’s cultural, sporting and environmental infrastructure to drive growth in the visitor economy, realise the economic and social benefits of strong cultural and sporting sectors, and support local participation, creativity and liveability**”. | The Project contributes to the delivery of this priority by:
- Increasing participation in local sporting events
- Creating opportunities to hold additional cultural events
- Some cultural events will be held in conjunction with sporting events at the Fields, cultivating stronger community cohesion. |

| The **Regional Sports Infrastructure Fund** seeks to foster the benefits of sport in communities. This fund will invest in new and existing venues to improve the | The Project has a strong alignment to the Regional Sports Infrastructure Fund by: |
2.4 EXPECTED OUTCOMES

The primary outcome of the Project is to allow the community to use the Fields during evenings, thereby increasing the utilisation of the Fields, for:

- Sports matches
- Training sessions
- Non-sport events.

The increased use of the Fields for matches and events would result in increased participation and attendance to events and matches. This should bring about the following benefits:

- Increased health benefits
- Increased hire fees for Council
- Increased welfare (consumer surplus)
- Increased social cohesion.

The installation of the towers will also lead to higher ongoing costs as Council will need to maintain, operate and repair the light towers.

Key Project outcomes along with the resultant costs and benefits are illustrated in Figure 2-3. The costs and benefits are discussed in more detail in Chapter 3.
2.5  STAKEHOLDER & COMMUNITY SUPPORT

The Project has secured broad support from the local community and its stakeholders. The Council has solicited stakeholder and community feedback on the Project during its development through:

- Direct one-on-one discussions with potential MOU partners
- Town-hall style meetings with the community
- Informal market sounding with potential suppliers.

The Project’s stakeholders and the community have identified how the Project will:

- Contribute to solidifying the township’s reputation as a sports town
- Contribute to delivering broader benefits to the community beyond sporting events
- Facilitate a creation of a night time economy, considered vital to attract and retain talent from outside the region.

Notwithstanding, consultation has identified concerns from residents regarding potential light spill and excessive. Council is considering the development of new policies to govern the use of the lights to ensure that play is undertaken within specific time slots to minimise the impact on neighbours.

The Project’s key stakeholder groups, along with their potential interest/issues are identified in Table 2-2:
### Table 2-2: Identified Stakeholders and Potential Issues/Interests

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Organisation</th>
<th>Key Issues/Interests</th>
</tr>
</thead>
</table>
| Local Council     | Local Council                 | • Additional costs associated with running extended hours for the sports field and responsibility of day to day running of the facility  
|                   |                               | • Additional revenue relating to higher utilisation of the facility                  |
|                   |                               | • Need to consider creating policies to manage crowds, light spill and noise from night time events |
| Community         | Residents and Neighbours      | • Attending night time games and training as spectators or visitors                   |
|                   |                               | • Night time noise and light impacts on residents nearby the sporting field          |
|                   | Local businesses              | • Potential additional business before and after night time training or games       |
|                   |                               | • Interest in creating new events/festivals to attract business to the region      |
| MOU Partners      | Kent Town RSL                 | • Potential funding partner                                                        |
|                   |                               | • Wish to be seen as a core part of the community                                  |
|                   | Kent Sporting Clubs           | • Wish to increase number of training sessions and matches at the Fields           |
|                   |                               | • Prepared to provide a financial contribution                                    |

Council is committed to continue to consult with stakeholders and the community during the detailed design and delivery phase. To this end, Council will:

- Continue to consult one-on-one with potential MOU partners and the NSW Government
- Contact neighbours to inform them of the Project’s progress
- Invite residents and the community to provide input during the Review of Environmental Factors phase of the Project.
3 ANALYSIS OF THE PROPOSAL

3.1 OBJECTIVES & INDICATORS

Table 3-1 outlines the objectives and the associated indicators of the Project, based on the problems and opportunities identified in Section 2.2.

Table 3-1: Project Objectives

<table>
<thead>
<tr>
<th>Key Problem/Opportunity</th>
<th>Key Project Objective</th>
<th>Key Success Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oval at capacity</td>
<td>Increase the number of games played at the Fields beyond current levels</td>
<td>Number of additional games</td>
</tr>
<tr>
<td>Increase participation</td>
<td>Increase community participation and attendance to sporting events at the Fields beyond current levels</td>
<td>Number of additional spectators</td>
</tr>
<tr>
<td>Training improvements</td>
<td>Allow additional training sessions to be held at the Fields</td>
<td>Number of additional training sessions</td>
</tr>
<tr>
<td>Attract new events</td>
<td>Encourage more events to be held at the Fields</td>
<td>Number of additional non-sports events</td>
</tr>
</tbody>
</table>

3.2 THE BASE CASE

The base case is the “do-nothing” scenario with the continuation of the status quo with no field light towers installed.

Under the Base Case, local teams and clubs will continue to be constrained to playing and training during daylight hours.

3.3 OTHER OPTIONS CONSIDERED

Four strategic options were considered by the Project Team to increase the capacity of the town to increase the number of matches, training sessions and events held. These options are summarised as follows:

3.3.1 OPTION 1 – HIRE TEMPORARY LIGHT TOWERS

Hiring of light towers for special events would avoid any capital cost being incurred by Council. Individuals would have the option of contacting a local provider, facilitated by Council, to hire light towers and position these towers into pre-determined positions.

However, this option has the following drawbacks:

- The high cost of hiring for local clubs
- Require the hirer to acquire generators to operate the lights
- Would not significantly increase the utilisation of the oval as hiring would be limited to special events
- Potential damage to the outfield from hauling temporary light towers into position
- Need to be transported 50km to and from the nearest vendor.
3.3.2 OPTION 2 – INSTALLATION OF PERMANENT METAL HALIDE FIELD LIGHTS (PREFERRED)

This option would involve the installation of four metal halide towers, one in each corner of the oval. The towers would be permanently fixed into position. Underground cables would be laid to connect these towers to the bulk supply point.

3.3.3 OPTION 3 – EXPAND THE FIELDS TO INCLUDE A SECOND OVAL

The number of matches and training sessions could be increased if the Fields was expanded beyond its current boundaries. Given that the Fields is bounded to the north, east and west by roads, a southern expansion is the only feasible option.

However, this option requires compulsory acquisition of 20 properties and their demolition, which is likely to be prohibitively expensive.

Other drawbacks include:

- The costs associated with developing a second oval, including a new playing surface and pavilion
- A two-year lag between property acquisition and commissioning
- Increased ongoing outlays for the maintenance of a second oval
- No ability to hold matches, training sessions or events at night
- Likely community opposition.

3.3.4 OPTION 4 – NEW OVAL DEVELOPMENT

This option is similar to Option 3 although a new site for the ‘second oval’ would be found. Given the level of development in the township, this new oval would need to be located about 10km south of the township. While this option would be of lower cost and bring about lower levels of opposition, this option does not deliver an ability to hold matches, training sessions or events at night.

Moreover, the distance of the new oval from the township would deliver little, if any, spill over activity into the town centre before and after matches and events.

3.3.5 MULTI-CRITERIA ASSESSMENT

The Project Team undertook a multi-criteria assessment (MCA) workshop with key stakeholders at a specially convened workshop in June 2016 to determine a preferred option to progress to concept design. Each criterion was rated low, medium or high based on a qualitative assessment by stakeholders.

The criteria considered to assess each option included:

**Capital Cost to Council**

Ratings for capital costs were assigned based the level of projected capital costs for each option. Lower cost options were rated high while high cost options were rated low.

The Base Case and Option 1 were rated high as no upfront capital cost would be incurred by Council.

Both Option 3 and 4 were considered to have the lowest rating given the need to acquire property, demolish buildings and prepare a new playing surface.

Option 2 was rated as medium, with its expected costs likely to fall between Option 3/4 and Option 1.
Increase in Matches, Training Sessions and Events

A high rating was assigned to Option 2 given that the installation of lights would allow night time matches, training sessions and events to be held.

A moderate rating was assigned to Options 3 and 4. Although the development of a ‘second oval’ theoretically increases daytime capacity, stakeholders identified a strong latent demand for night matches to improve participation and crowds.

The Base Case and Option 1 were assigned a low rating.

Delivery and Construction Risks

Both the Base Case and Option 1 were rated the highest as they involve little or no delivery.

Option 2 was assigned a medium rating as there is a moderate level of risk relating to the installation of light towers, particularly in relation to locating utilities and variable ground conditions in which to run power cables.

However, the constructability risks of Option 2 are well outweighed by the risks associated with Option 3 and 4. Both options introduce new issues and risks that would elongate the delivery period and significantly increase the cost of the Project.

Table 3-2 outlines the scores assigned to each of the options against the each of the criteria and an overall rating.

Table 3-2: MCA Ratings for the Project Options

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Base Case</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
</tr>
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<tbody>
<tr>
<td>Capital Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in Matches, Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sessions and Events</td>
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</tr>
<tr>
<td>Delivery and Construction Risks</td>
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<tr>
<td>Overall Rating</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Key

- Highest performing options
- Middle options
- Lowest performing options

Based on the MCA outcomes, Option 2 was assessed as the preferred option due to its moderate levels of capital investments required and associated risks, while providing the highest potential benefits.
3.4 INFORMATION ABOUT THE PROJECT

3.4.1 SCOPE OF WORKS

Based on the preferred option, the Project’s scope involves the procurement of four post metal halide light towers and their installation at the Fields.

The light towers have the following specifications:

- Each light tower will be 15m high
- Four lamps on each tower
- 2000W lamps with an expected life of 20,000 hours
- Two lighting levels - 100 lux for training and 200 lux for matches and events.

The scope of works also includes:

- Underground cabling to connect the towers to the bulk power supply point
- A switch installed within the existing pavilion.

The following photo provides an example of a similar installation:

![Figure 3-1: Example of A Sports Field in NSW with Four Light Towers Setup](image)

The towers and lamps will be specified to be consistent with the following standards and guidelines to allow for community and regional cricket/football matches to be played at the Fields:

- AS 2560.2.3 standards (for all codes of football)
- Cricket Australia’s Community Cricket Facility Guidelines Section 2 Part 4, Class III.
These light towers would be installed in each corner of the oval and 5m away from the playing surface with a focus on providing a higher intensity of lighting on the centre square for night cricket.

Figure 3-2 illustrates the projected coverage of light.

**Figure 3-2: Illustrative Wilson Sports Fields Light Towers Layout and Coverage**

Detailed designs are provided as Attachment X.

The Council will oversee the development and delivery of the Project, with an external supplier to be responsible for:

- Manufacturer of light towers
- Procurement of lamps, cabling and other hardware
- Field installation
- Testing and commissioning
- Training and handover.

### 3.4.2 PROJECT EXCLUSIONS

The Project excludes any provision for the installation of outdoor power points near or on the light towers.

### 3.4.3 RELATED PROJECTS

No other related Projects that have been identified.
3.5 PROJECTED COSTS

3.5.1 PROJECTED CAPITAL COSTS

The following table outlines the cost estimates for the field lights hardware and installation, as well as ancillary costs required to power upgrades and field works.

The base costs estimates have been developed based on design advice from light tower design consultants commissioned by the Council, estimated from the quantity of components and materials required, unit pricing, labour cost estimates for design, project management and installation and grounds work. A detailed cost plan is available as Attachment X to this document.

A contingency of 20 percent has been applied to all future capital and recurrent costs projected by the Council to provide a buffer for unforeseen changes in unit prices or scope, based on Council’s prior experiences with projects of similar scope. This contingency allowance is over and above any allowances that may have been inherently built into the cost estimates shown Table 3-3 and Table 3-4.

Table 3-3: Projected capital costs inclusive of contingency

<table>
<thead>
<tr>
<th>Stage</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
<th>Future Years</th>
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<td>$0</td>
<td>$0</td>
<td>$365,284</td>
</tr>
</tbody>
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3.5.2 PROJECTED ONGOING COSTS

Table 3-4 outlines the cost estimates for the ongoing operation and maintenance costs with the new filed lights, including:

- Asset maintenance and renewal (cleaning and replacement of lamps every 2-3 years) at $5,000 per renewal
- Additional power costs ($2,000 per annum) and regular maintenance costs ($2,000 per annum)
- Night time security costs ($6,000 per annum).

The costs above are mostly offset by additional field hiring revenue.
### Table 3-4: Projected ongoing costs

<table>
<thead>
<tr>
<th>Year</th>
<th>Project Capital Costs</th>
<th>Recurrent Operations Costs</th>
<th>Asset Renewable Costs</th>
<th>Incremental Revenue</th>
<th>Total by Year</th>
<th>Cumulative Expenditure</th>
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</thead>
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<td>$0</td>
<td>$0</td>
<td>$307,500</td>
<td>$307,500</td>
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<td>$57,784</td>
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<td>$0</td>
<td>$0</td>
<td>$57,784</td>
<td>$365,284</td>
</tr>
<tr>
<td>2019-20</td>
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<td>$0</td>
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<td>-$5,000</td>
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<tr>
<td>2020-21</td>
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<td>-$5,000</td>
<td>$345,284</td>
</tr>
<tr>
<td>2024-25</td>
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<td>$10,000</td>
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</tr>
<tr>
<td>2025-26</td>
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<td>$15,000</td>
<td>-$5,000</td>
<td>$340,284</td>
</tr>
<tr>
<td>2026-27</td>
<td>$0</td>
<td>$10,000</td>
<td>$0</td>
<td>$15,000</td>
<td>-$5,000</td>
<td>$335,284</td>
</tr>
</tbody>
</table>

### 3.6 COST-BENEFIT ANALYSIS

The key costs as identified in Section 3.5 are:

- Capital costs and contingency associated with the provision and installation of the field lights
- Ongoing operation and maintenance costs

Based on the Council’s experience of other installations of field light towers in the Council area, the following benefits have been identified that are expected to be realised from the Project:

- Expected increase in sports participation by 100 additional night time training sessions and games per annum
- Expected increase in activity by 25 additional night time matches (on average 2.5 hours per match) and 75 additional night time training sessions (on average 2 hours per session) per annum
- New events to be hosted such as night time fairs and drive in movie nights (3 night time events are estimated to take place per annum)
- Reduction in travel for local residents having to travel to sports fields in other areas for participation at night games or night time training. Survey results have indicated residents need to travel an additional 15km to participate a night time match which lasts 2 hours.
- Health benefits associated with increased physical activity and participation
- Encourages sense of an inclusive community
- Potential to prevent crimes for youths and better educational outcomes
- Potential improvement for local businesses’ turnover before/after games or training
Players, visitors and spectators from the night time games/training may also seek to attend to local businesses such as restaurants after the games, potentially provide an uplift in turnover for local businesses.

Higher utilisation of the sports field will lead to higher revenue for the Council from the hiring out of the facilities at night or after sunset, with additional costs being incurred such as additional power and security required. However, these costs will be offset by venue hire revenues.

Note: To standardise the monetisation of benefits and to ease the administrative burden on applicants, DPC will prepare the cost-benefit analysis for all applicants based on inputs provided by the applicants.

3.7 FINANCIAL APPRAISAL

The key costs as identified in Section 3.5 are:

- Capital costs and contingency associated with the provision and installation of the field lights
- Ongoing operation and maintenance costs

The additional revenue benefits are:

- Additional council revenue maybe realised from extended hours and additional events. Based on the rate of $100 per night time match hour and $50 per night time training hour, an estimate of $15,000 of additional revenue has been estimated

The cashflows of the projects have been summarised in Table 3-4.

3.8 PROPOSED FUNDING ARRANGEMENTS

The request for funding for the Project focuses on the capital costs requirements for procuring and installation of the field light towers.

Council has dedicated $25,000 in funding over two years for the Project, with the local RSL club having agreed to contribute $5,000 in the first year by fundraising through various local events. The full upfront funding request from the State Government is $305,284 as indicated below.

Ongoing costs are expected to be realised by the Council and additional venue hire revenues generated as outlined in Table 3-5.
### Table 3-5: Proposed capital funding contributions

<table>
<thead>
<tr>
<th>Stage</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
<th>2021-22</th>
<th>Remaining Years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal capital costs</td>
<td>$307,500</td>
<td>$57,784</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>$365,284</td>
</tr>
<tr>
<td>Proposed recurrent and renewal costs</td>
<td>$0</td>
<td>0</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$15,000</td>
<td>$55,000</td>
<td>$90,000</td>
</tr>
</tbody>
</table>

**Funding sources**

<table>
<thead>
<tr>
<th>Funding sources</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
<th>2021-22</th>
<th>Remaining Years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional revenues</td>
<td>$0</td>
<td>$0</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>0</td>
<td>$120,000</td>
</tr>
<tr>
<td>Cost savings</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Council contributions</td>
<td>$12,500</td>
<td>$12,500</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>$25,000</td>
</tr>
<tr>
<td>Industry contributions</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Community contributions</td>
<td>$5,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>$5,000</td>
</tr>
<tr>
<td>Other government contributions</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other funding sources (please detail)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>$17,500</td>
<td>$12,500</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>0</td>
<td>$150,000</td>
</tr>
<tr>
<td><strong>Request for funding</strong></td>
<td>$290,000</td>
<td>$45,284</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>$305,284</td>
</tr>
</tbody>
</table>
4 IMPLEMENTATION CASE

4.1 PROGRAM & MILESTONES

Subject to securing of funding from Council sources, community groups and the NSW Government, the Project’s delivery phase is expected to commence in January 2018. The delivery phase is expected to be nine months long with all works due to be completed by October 2018.

Table 4-1 outlines the expected dates of the key milestones. A detailed GANNT chart is provided as an attachment to this business case as Attachment X.

Table 4-1: Key Milestones

<table>
<thead>
<tr>
<th>Event</th>
<th>Start</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept design</td>
<td>June 2016</td>
<td>December 2016</td>
</tr>
<tr>
<td>Final business case</td>
<td>March 2017</td>
<td>June 2017</td>
</tr>
<tr>
<td>Final business case review and approval</td>
<td>August 2017</td>
<td>October 2017</td>
</tr>
<tr>
<td>Detailed design</td>
<td>October 2017</td>
<td>January 2018</td>
</tr>
<tr>
<td>Review of environmental factors</td>
<td>October 2017</td>
<td>January 2018</td>
</tr>
<tr>
<td>Finalisation of MOUs and funding from community groups</td>
<td>September 2017</td>
<td>December 2017</td>
</tr>
<tr>
<td>Approval of funding from Council</td>
<td>November 2017</td>
<td>December 2017</td>
</tr>
<tr>
<td>Approval of funding from NSW Government</td>
<td>November 2017</td>
<td>December 2017</td>
</tr>
<tr>
<td>Development application</td>
<td>January 2018</td>
<td>March 2018</td>
</tr>
<tr>
<td>Request for tender</td>
<td>January 2018</td>
<td>February 2018</td>
</tr>
<tr>
<td>Evaluation of tenders</td>
<td>March 2018</td>
<td>March 2018</td>
</tr>
<tr>
<td>Agreement of terms with preferred supplier</td>
<td>April 2018</td>
<td>April 2018</td>
</tr>
<tr>
<td>Power supply upgrades and preliminary field works</td>
<td>May 2018</td>
<td>June 2018</td>
</tr>
<tr>
<td>Installation of field light towers</td>
<td>July 2018</td>
<td>August 2018</td>
</tr>
<tr>
<td>Testing</td>
<td>August 2018</td>
<td>August 2018</td>
</tr>
<tr>
<td>Update to online booking system</td>
<td>August 2018</td>
<td>September 2018</td>
</tr>
<tr>
<td>Commissioning and finalisation</td>
<td></td>
<td>October 2018</td>
</tr>
</tbody>
</table>
4.2 GOVERNANCE

The Project is currently being overseen by the Council’s Infrastructure and Operations Unit. This Unit will also be responsible for the delivery phase of the Project. The proposed governance structure is illustrated in Figure 4.1.

Figure 4-1: Proposed Governance Structure

The Project Sponsor will be Penelope Maul, Council’s General Manager. The Project Manager will be Kent Wilson, the head of Council’s Infrastructure and Operations Unit. The Project Manager will be responsible for the day-to-day running of the Project. Responsibilities include:

- Managing the preferred supplier’s activities
- Managing the Project Team
- Reporting to the Steering Group, the General Manager and Councillors
- General Project administration.

Both Kent and Penelope have prior experience in overseeing the installation of light towers, having overseen five previous installations.

CVs for both Kent and Penelope are provided as Attachment X.

The Project team will report to the Steering Group, the General Manager and Councillors monthly. Decisions will be escalated in line with Council’s delegations of authority. Generally, key actions will be approved by Councillors following the endorsement of the General Manager.

A Steering Group will also be in place for the Project. The Steering Group will consist of MOU partners, who will contribute to Project funding, as well as heads from other Council units. The Steering group will meet bi-monthly.
The Council’s nominated supplier will be responsible for managing the development field light tower designs, delivering of field light tower components and field installation. Payments to the nominated supplier will be based on the successful completion of agreed key milestones.

4.3 **KEY RISKS**

Key Project risks have been identified by the Project team in a workshop environment. Key risks for the Project were first identified at a stakeholder roundtable meeting in August 2016. Subsequently, the Project’s Risk Register was reviewed monthly by the Project team. The May 2017 version of the Project’s Risk Register and Risk Management Plan were endorsed by the Councillors in June 2017.

A Risk Management Plan and Risk Register have been developed by Council, which are provided as [Attachment X](#) and [Attachment X](#) respectively.

The Project is considered to have a moderate risk profile. Table 4-2 outlines the key Project risks identified by Council:

**Table 4-2: Key Project Risks**

<table>
<thead>
<tr>
<th>Risk</th>
<th>Proposed mitigation</th>
<th>Risk rating after mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funding from partners, including the NSW Government is not secured in part or whole</strong></td>
<td>• Secure MOUs from funding partners&lt;br&gt;• Identify alternative funding sources&lt;br&gt;• Consult/inform funding partners on monthly basis&lt;br&gt;• Seek additional funding from Council&lt;br&gt;• Delay project</td>
<td>Severe&lt;br&gt;Likely&lt;br&gt;High</td>
</tr>
<tr>
<td><strong>Excessive light spill and/or noise requires changes in scope</strong></td>
<td>• Complete REF&lt;br&gt;• Continue to consult nearby residents&lt;br&gt;• Adjust light tower height&lt;br&gt;• Consider noise walls&lt;br&gt;• Consider policy measures e.g. mandatory shutdown time</td>
<td>Moderate&lt;br&gt;Unlikely&lt;br&gt;Moderate</td>
</tr>
<tr>
<td><strong>Unfavourable ground conditions increase cable run required</strong></td>
<td>• Undertake early works to investigate potential impact&lt;br&gt;• Incorporate risk into Project contingency</td>
<td>Major&lt;br&gt;Unlikely&lt;br&gt;Moderate</td>
</tr>
<tr>
<td><strong>Excessive workloads on General Manager and Project Manager</strong></td>
<td>• Train existing staff to assist</td>
<td>Moderate&lt;br&gt;Likely&lt;br&gt;Moderate</td>
</tr>
</tbody>
</table>
4.4 LEGISLATIVE, REGULATORY ISSUES & APPROVALS

The following legislation and standards have been identified by the Project Team as being applicable to the Project:

4.4.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Advice from Council’s planning department indicated that a Review of Environmental Factors (REF) would be required as a minimum to proceed. The REF is an environmental assessment under Part 5 of the Act, to determine whether the Project has taken into account to the fullest extent possible all matters affecting or likely to affect the environment.

The REF for the Project will need to be undertaken from October 2017.

4.4.2 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

Division 12, Part 65 3(d) notes that the development may be carried out by or on behalf of Council without consent on a public reserve under the control of or vested in the Council in relation to lighting, if light spill and artificial sky glow is minimised in accordance with AS/NZS 1158: 2007 Lighting for Roads and Public Spaces.

The Project scope and design has been prepared to align with AS/NZS 1158:2007.

4.4.3 SPORTS LIGHTING SPECIFIC APPLICATIONS - LIGHTING FOR FOOTBALL (ALL CODES) AS 2560.2.3-2007 (R2017) AND IESANZ LIGHTING GUIDE FOR OUTDOOR CRICKET LG - 4.01

This AS 250.23-2007 contains recommendations and requirements (the requirements refer to methods of assessment and measurement and levels of performance) specific to the lighting of outdoor football grounds for all codes commonly played in Australia. This standard deals with training and competition levels of play and considers spectator viewing requirements associated with these levels of play. The Standard does not address the amenity and emergency lighting which may be required in public areas associated with stadiums. This standard makes recommendations, but does not set requirements, for obtrusive light released into the environment from sports lighting installations.

The IESANZ guide LG 4.01 for the professional lighting of cricket venues as is recommended by Cricket Australia to provide sufficient and uniform illumination of the field and the ball through its flight; convey the scene and player team colours; produce a suitable visual background against which the players and the ball are contrasted to enable quick and clear identification; control and restrict glare; control obtrusive lighting impacts to neighbours and limit waste upward light. The Project is designed to meet Class III of these guidelines for low level competitions.
4.5 PROPOSED MANAGEMENT ACTIVITIES

4.5.1 BENEFIT MANAGEMENT

It is proposed that a post-evaluation will be undertaken by Council one year after implementation to measure the success of the Project. As outlined in Section 3.1, four success indicators have been identified:

- **Metric 1:** Total number of matches held annually (divided into day and night time matches, data to be recorded and retrieve from the Council's booking system)
- **Metric 2:** Total number of spectators and visitors annually (undertake a number of surveys and extrapolated)
- **Metric 3:** Number of training sessions held annually (divided into day and night time sessions, data to be recorded and retrieve from the Council's booking system)
- **Metric 4:** Number and type of non-sports events (recorded and retrieved from the Council’s booking system)

Council’s online booking system will be used to provide most of the information required to inform the post-evaluation report. This system has the capacity to generate information on:

- Number of bookings by month and by time slot
- Booking type by month
- Fee generated by month.

To measure patronage, Council will contact the relevant sporting clubs to obtain patronage estimates. Council will also undertake surveys to measure attendance levels at non-sporting events.

4.5.2 RISK MANAGEMENT

The Risk Management Plan developed by the Project Team will guide risk reporting, monitoring and mitigation activities during the delivery phase of the Project.

Day-to-day risk monitoring will be overseen by the Project Team, led by the Project Manager. Generally, key risks and risk activities will be reported through the governance structure monthly i.e. to the General Manager, Steering Group and Councillors.

This report is integrated as part of the integrated project management tool that Council uses on all Council projects.

Should critical risks be identified by the Project Team, these risks will be escalated immediately through the governance structure.
4.5.3 ASSET MANAGEMENT & OPERATIONS

The Project will involve the development, installation and maintenance of field assets including the lamps, poles and other ancillary works. The ownership and responsibility for the operations and maintenance of all assets developed as part of the Project lie with Council. The Council will be required to engage contractors for future maintenance and replacement activities.

Typical activities that may need to be undertaken across the asset lifecycle are outlined in Table 4-3:

**Table 4-3: Asset Management Cycle**

<table>
<thead>
<tr>
<th>Asset Management Lifecycle</th>
<th>Description of Activities</th>
<th>Timeframes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>Develop and refine specifications of the field light towers</td>
<td>0-1 years</td>
</tr>
<tr>
<td>Procure</td>
<td>Procure filed light tower manufacturer and provider</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Operate and maintain</td>
<td>Fault management</td>
<td>1+ years</td>
</tr>
<tr>
<td></td>
<td>Lamp replacement</td>
<td></td>
</tr>
<tr>
<td>Improve and Dispose</td>
<td>Undertake periodic reviews</td>
<td>Continual. Disposal will be</td>
</tr>
<tr>
<td></td>
<td>Dispose of life-expired assets</td>
<td>dependent on performance</td>
</tr>
</tbody>
</table>

4.6 PROPOSED REPORTING

The Council will use its integrated project management software tool to track:

- Expenditure to date
- Value generated
- Projected expenditure remaining
- Contingency utilised
- Contingency remaining
- Program adherence
- Key project risk and issues.

The Project Team will use this tool to generate monthly reports to inform the General Manager, the Steering Group and Councillors of the Project’s status.

A post-evaluation report will be produced one year after the completion of the Project, to be prepared by the Project Manager.