

2012

Review of Sturt Baseball Club's Response to Risk Audit Report 2012

Version 1

City of Mitcham

This document contains a review of the Sturt Baseball Club Response to Risk Audit Report 2012 (of playing baseball at Norman Reserve).



Document Authorisation

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Contents

Executive Summary	5
Introduction	6
Methodology.....	6
Results.....	7
Risk of Person Being Struck by Baseball - Summary of Results	8
Risk of Property Damage – Summary of Results.....	8
Recommendation 1: Installation of additional temporary netting to alleviate foul balls	9
Proposed Mitigation Strategies by the Sturt Club	9
Reliance’s Comments.....	9
Recommendations	10
Recommendation 2: Club and Council to seek confirmation from ABF’s insurers regarding disclosure of risk and incidents.....	10
Proposed Mitigation Strategies by the Sturt Club	10
Reliance’s Comments.....	10
Recommendations	10
Recommendation 3: Install additional protective netting in northern part of Western net.....	11
Proposed Mitigation Strategies by the Sturt Club	11
Reliance’s Comments.....	11
Recommendations	11
Recommendation 4: Prohibit parking on grounds behind backstop	11
Proposed Mitigation Strategies by the Sturt Club	11
Reliance’s Comments.....	11
Recommendations	11
Recommendation 5: Install additional netting – protecting pedestrians and vehicular traffic – eastern net to protect northern part of Brownhill Creek Rd.....	12
Proposed Mitigation Strategies by the Sturt Club	12
Reliance’s Comments.....	12
Recommendations	12
Recommendation 6: Cover spectator area in front of clubhouse	12
Proposed Mitigation Strategies by the Sturt Club	12
Reliance’s Comments.....	12
Recommendations	12
Recommendation 7: Improvements to Western and Eastern nets not an option	12

Proposed Mitigation Strategies by the Sturt Club	12
Reliance’s Comments.....	12
Recommendations	12
Recommendation 8: SBC to identify alternative or use temporary batting net for all grades.....	13
Proposed Mitigation Strategies by the Sturt Club	13
Reliance’s Comments.....	13
Recommendations	13
Recommendation 9 & 10: Install risk warning signage.....	13
Proposed Mitigation Strategies by the Sturt Club	13
Reliance’s Comments.....	13
Recommendation.....	13
Recommendation 11: Install additional risk warning signage inside venue.....	13
Proposed Mitigation Strategies by the Sturt Club	13
Reliance’s Comments.....	13
Recommendations	13
Recommendation 12: License conditions	14
Proposed Mitigation Strategies by the Sturt Club	14
Reliance’s Comments.....	14
Recommendations	14
Recommendation 13: SBC to collect ball escape data.....	14
Proposed Mitigation Strategies by the Sturt Club	14
Reliance’s Comments.....	14
Recommendations	14
Recommendation 14: Council to seek professional legal advice.....	14
Proposed Mitigation Strategies by the Sturt Club	14
Reliance’s Comments.....	14
Recommendations	14
Recommendation 15: Appropriate infrastructure improvements not achieved	15
Proposed Mitigation Strategies by the Sturt Club	15
Reliance’s Comments.....	15
Recommendations	15
Appendix A – Venue Zones	16

Executive Summary

Reliance Risk (Reliance”) has considered the proposed netting installations contained in the Sturt Baseball Club’s response to recommendations made in the Risk Audit of the Playing of Baseball at Norman Reserve (v.2) dated 3 May 2012.

Reliance has found that the reduction in residual risk from the proposed works is significant from those previously calculated.

Based upon the assessment method and tolerability criteria in the Risk Audit, the results show that 93% of all foul balls would now be captured by the proposed netting. This equates to the risk level being broadly acceptable.

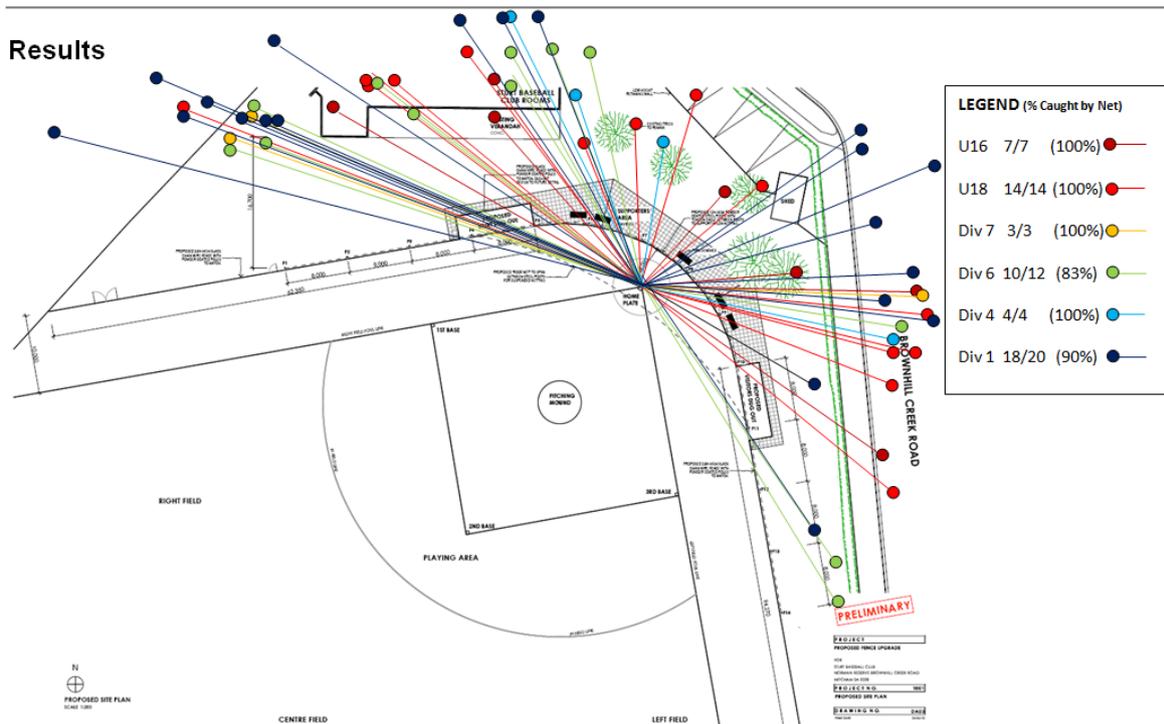


Figure 1 - Ball Landing Data from the Risk Audit plotted against proposed works provided by the Sturt Baseball Club

It should be noted however that there remains a low risk of injury (or death in a worst case scenario) &/or property damage from baseball strike, on roadways and footpaths to the southeast of the baseball diamond on Brownhill Creek Road and to the west and southwest on Old Belair Road.

Introduction

This document contains Reliance's comments and recommendations following a review of the proposed works-related risk mitigation strategies contained in the "Sturt Baseball Club Response to the Risk Audit Report 2012," 'the Response'. The Response was endorsed by the Sturt Senior Committee on 26 June 2012 and submitted to the City of Mitcham for consideration. Reliance's review considers the adequacy of the Club's proposed works in reducing residual risks identified through the Risk Audit to as low as reasonably practicable.

Methodology

The report considers each recommendation as set out in the Sturt Response and comments on those that relate to the installation of proposed temporary infrastructure only.

Each response from Reliance shall provide:

- A summary of the proposed mitigation strategies from the Sturt Club
- Comments from Reliance on adequacy strategy to control risk
- Recommendations if required for further action

On the first page of the results, all ball landing data from the original Risk Audit have been superimposed over the proposed temporary works plans supplied by the Sturt Club in the Response. This shows all recorded ball landing locations per grade (from those observed) and is used by Reliance to determine the locations where netting will capture or not capture foul balls.

Following identification of areas now protected from foul balls, Reliance has also revisited the same formulas used in the original risk assessments in the Risk Audit for:

- Risk of Person being Struck by Baseball; and
- Risk of Property Damage from Struck by Baseball

See section 3.5 in the Risk Audit of the Playing of Baseball at Norman Reserve v.2 for details on the risk assessment methodology.

From the original data recorded, each ball landing location now protected from ball strike was adjusted to reflect a zero ball landing count in the corresponding venue zone. Only those venue zones deemed to remain unprotected following the installation of temporary netting were left with the original data findings.

A summary of these results has been provided.

Results

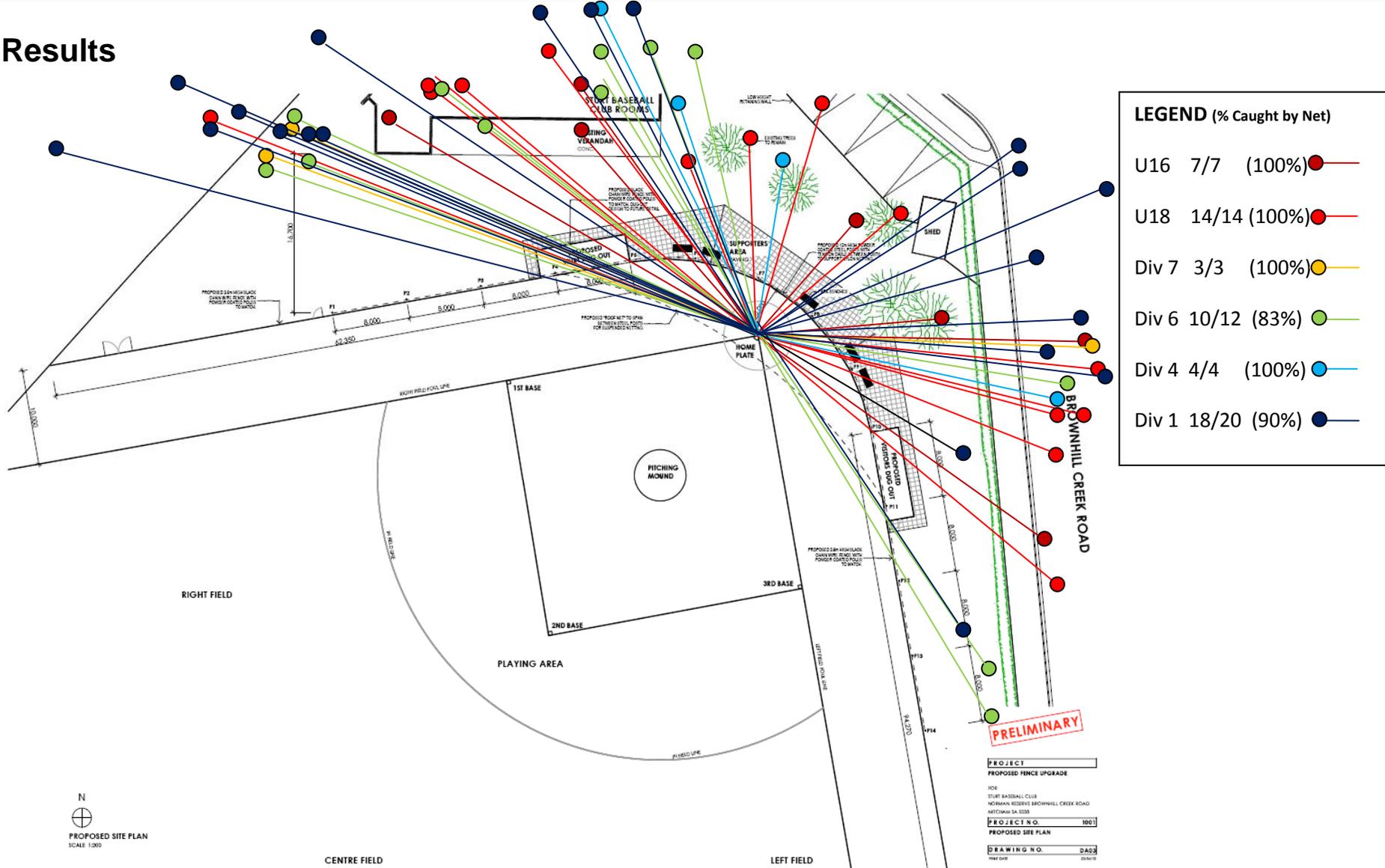
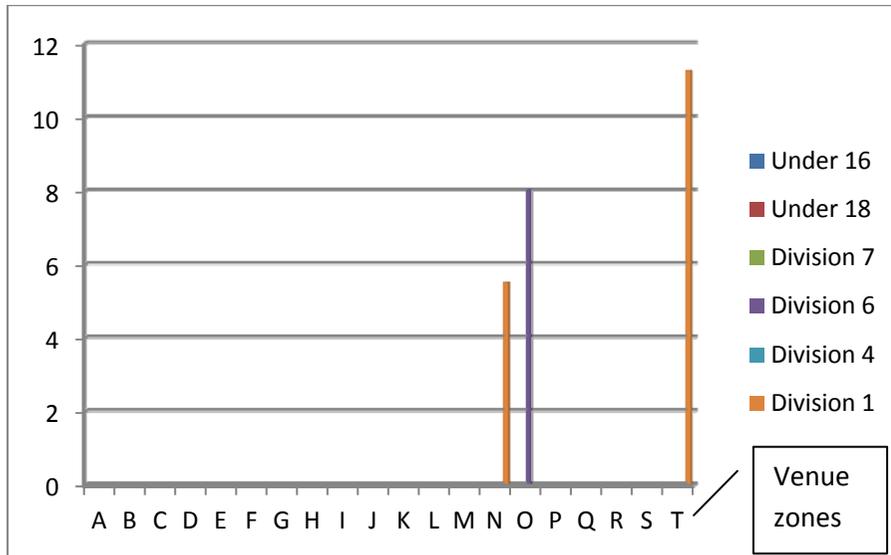


Figure 2 - Ball landing locations recorded in the risk audit overlaid against the proposed temporary netting

Risk of Person Being Struck by Baseball - Summary of Results



Risk Level	Risk Tolerability	Risk Score People
Extreme	Unacceptable	>100
High	Undesirable	>50-100
Medium	Tolerable	>20-50
Low	Broadly Acceptable	0-20

Results

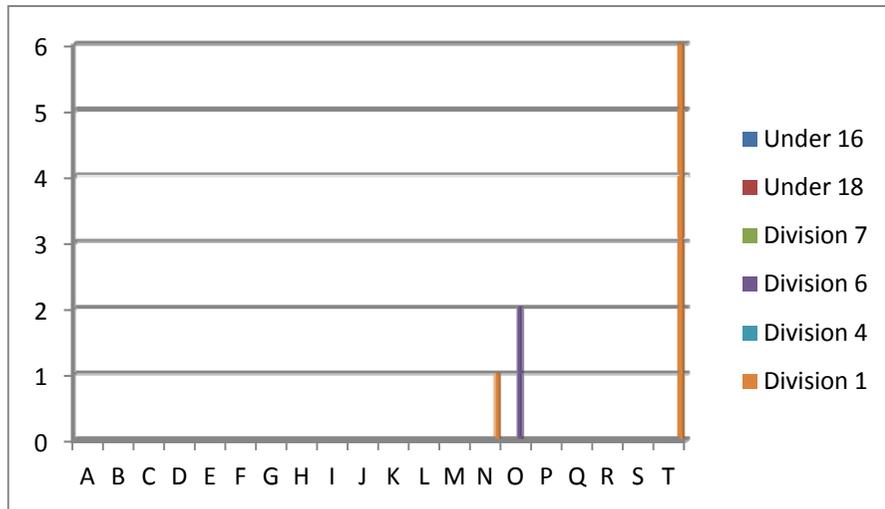
Risk Level: Low

Risk Tolerability: Broadly Acceptable

* Note: In the Risk Audit venue zone N contained a risk score of 11. This review found one ball landing would be captured by the proposed netting in zone N and one would not – therefore a risk score of 5.5 would be generated.

** See Appendix A for venue zones

Risk of Property Damage - Summary of Results



Risk Level	Risk Tolerability	Risk Score Property
Extreme	Unacceptable	>50
High	Undesirable	>20-50
Medium	Tolerable	>12-20
Low	Broadly Acceptable	0-12

Result

Risk Level: Low

Risk Tolerability: Broadly Acceptable

* Note: In the Risk Audit venue zone N contained a risk score of 2. This review found one ball landing would be captured by the proposed netting in zone N and one would not – therefore a risk score of 1 would be generated.

Figure 3 – Risk Assessment results following installation of temporary netting

Recommendation 1: Installation of additional temporary netting to alleviate foul balls

Proposed Mitigation Strategies by the Sturt Club

This proposal involves the installation of temporary netting and the removal of existing backstop netting, eastern netting, fences along both foul lines, and two dugouts. These would be replaced with a new backstop system constructed from chain wire fencing and nylon netting to the height of 12m. It will extend at least 2/3 the length of the right field line and around to the infield line on the left field side.

The backstop shall be moved closer to the home plate; (from 8m in the current position to 5m).

A 3.6m high, black chain wire fence, with powder coated poles would be installed to match the right field home run fence around to the end of the existing low level fence on the left field foul line.

An access gate for vehicles and pedestrians would be installed to suit requirements.

12m high powder coated steel posts would be installed behind the chain wire fence to support a temporary nylon net. This net will be supported by a stainless steel tension wire stretched between posts. This would allow the net to be pulled tight and affixed to the top of the chain wire fence.

A horizontal roof fence would be hung above the area from the backstop to approx. 2m in front of the home plate. The roof net would be curved to reach around each side of the home plate towards the bases.

Existing underground dugouts shall be filled and replaced with new, ground level, chain wire enclosures.

Reliance's Comments

Based on data collected through the Risk Audit, Reliance recommended that infrastructure improvements should be installed to maximum heights as estimated in s5.1 of the Report for the following netting:

- Western net
- Eastern net
- Backstop net and;
- Club net

The maximum heights recommended were proposed in order for the nets to effectively catch all foul balls based on the ball heights observed by Reliance during matches. While increases in net heights in the proposed improvements are not to the maximum height recommended, the additional temporary tension netting appears to provide a fully enclosed space from above and behind the home plate.

Figure 2 on the previous page shows the observed ball landing locations superimposed on top of the proposed temporary fencing infrastructure. It shows that 93% of balls observed during the Risk Audit would be captured by the proposed netting. All balls falling outside of the netted zone on the eastern side from those recorded in the Risk Audit generally land in lowly frequented spectator areas.

That is not to say balls could pass over the hedged fencing and onto pedestrians or vehicles on Brownhill Creek Road. On the other side of the venue, one single western foul ball is deemed to have

still breached the western fence as balls travelling that distance generally have a lower trajectory and are not considered to be protected by the tension net, (even with a 2m overhang from home plate).

The only area still potentially affected by foul balls and home runs on the western side is along footpaths and roadways to the west and south west of home plate. The former scenario (foul balls) was observed only once during the Risk Audit, while no home runs in this area were observed. This is not to say that balls breaching the western fence cannot occur, but rather they are generally rare and were not observed during the Risk Audit.

Overall, the proposed additional temporary fencing provides a significant reduction in errant foul balls leaving the ground and substantial reduction in residual risk in all areas behind the home plate.

Recommendations

Nil

Recommendation 2: Club and Council to seek confirmation from ABF's insurers regarding disclosure of risk and incidents

Proposed Mitigation Strategies by the Sturt Club

Discussions between SABL/ABF/SBC and insurer on this matter are ongoing. Resolution expected shortly.

Reliance's Comments

This is deemed as outside of scope for Reliance's review.

Recommendations

Nil

Recommendation 3: Install additional protective netting in northern part of Western net

Proposed Mitigation Strategies by the Sturt Club

Additional netting is not required given the new backstop system proposed. Additional netting also has the potential to look unsightly from the Old Belair Rd and picnic area perspectives.

Reuse the existing 1200mm high ARC fencing along the playing field to enclose the car park adjacent High St/Old Belair Rd. This would prevent any stray balls rolling onto the roadway and deter children from running on the road to retrieve balls. (The fence is also to have an access gate).

Reliance's Comments

As noted previously, the new temporary netting will capture the vast majority of right field foul balls that previously impacted the north western part of Brownhill Creek Rd adjacent to the ground.

It will however not totally eliminate the risk for foul balls and home runs that pass over the top of the western net.

Recommendations

As recommended in the Risk Audit, signage installed on footpaths along Old Belair Rd and Brownhill Creek Road should help to communicate to pedestrians the risks associated with walking in the area.

As explained in the Risk Audit, risk signage warning drivers along Old Belair Road of this risk is considered by Reliance to be problematic due to the additional risk of distracting drivers travelling at 60km/h with signage that warns of potential incoming baseballs.

Recommendation 4: Prohibit parking on grounds behind backstop

Proposed Mitigation Strategies by the Sturt Club

Erect an ARC fence with vehicular access gates adjacent to the driveway to prevent vehicles from driving onto the grassed area behind the backstop.

Reliance's Comments

This is considered a positive initiative.

Recommendations

Supported by Reliance.

Recommendation 5: Install additional netting – protecting pedestrians and vehicular traffic – eastern net to protect northern part of Brownhill Creek Rd

Proposed Mitigation Strategies by the Sturt Club

Additional netting is not required given the new backstop system proposed.

Reliance's Comments

As noted, areas to the south east of home plate will still remain exposed to a low risk of property damage and injury however the areas more significantly affected by these risks will be protected.

Recommendations

The installation of risk warning signage along pathways on Brownhill Creek Rd (as recommended in the Risk Audit) should help mitigate this risk further.

Recommendation 6: Cover spectator area in front of clubhouse

Proposed Mitigation Strategies by the Sturt Club

Develop a spectator viewing area behind the backstop fence for the extent of the 'roof net'.

SBC is considering a family friendly area, possibly with shade sails installed.

Reliance's Comments

If the roof net provides 100% protection from foul balls behind home plate then the further physical protection of this (and other proposed spectator areas) is unnecessary.

Recommendations

Nil

Recommendation 7: Improvements to Western and Eastern nets not an option

Proposed Mitigation Strategies by the Sturt Club

(See response to recommendation 1)

Reliance's Comments

Covered earlier.

Recommendations

Nil

Recommendation 8: SBC to identify alternative or use temporary batting net for all grades

Proposed Mitigation Strategies by the Sturt Club

Ensure a policy that batting practice during training sessions will utilise the mobile batting cage.

Batting practice during games warm up will be undertaken in the batting tunnel.

Reliance's Comments

In the Risk Audit, Reliance recommended the procurement of a new structure or utilise the existing temporary batting net to mitigate the risk of foul balls from the Sturt Club's pre-game warm ups completed in right field before games. The Club's responses adequately address this recommendation.

Recommendations

Nil

Recommendation 9 & 10: Install risk warning signage

Proposed Mitigation Strategies by the Sturt Club

The areas referred to in these recommendations fall outside of Norman Reserve and it is considered to be Council's responsibility to erect appropriate signage.

Reliance's Comments

Not related to proposed works raised by Sturt Club so considered outside scope for comment by Reliance.

Recommendation

Nil

Recommendation 11: Install additional risk warning signage inside venue

Proposed Mitigation Strategies by the Sturt Club

Additional risk warning signage to be installed at all street entrances to the playing venue and affixed to the backstop and home run fence.

Reliance's Comments

Not related to proposed works raised by Sturt Club so considered outside scope for comment by Reliance.

Recommendations

Nil

Recommendation 12: License conditions**Proposed Mitigation Strategies by the Sturt Club**

N/A

Reliance's Comments

Not related to proposed works raised by Sturt Club so considered outside scope for comment by Reliance.

Recommendations

Nil

Recommendation 13: SBC to collect ball escape data

Response of The Sturt Baseball Club

Reliance's Comments

Reliance's Recommendations

Proposed Mitigation Strategies by the Sturt Club

Introduce a policy that ball escape data be collected at all games at Norman Reserve.

Introduce a simple form to enable a spectator to record data on escaped balls.

Reliance's Comments

Not related to proposed works raised by Sturt Club so considered outside scope for comment by Reliance.

Recommendations

Nil

Recommendation 14: Council to seek professional legal advice**Proposed Mitigation Strategies by the Sturt Club**

N/A

Reliance's Comments

Not related to proposed works raised by Sturt Club so considered outside scope for comment by Reliance.

Recommendations

Nil

Recommendation 15: Appropriate infrastructure improvements not achieved**Proposed Mitigation Strategies by the Sturt Club**

A mutually beneficial solution can be achieved.

Reliance's Comments

Appropriate infrastructure improvements have been addressed.

Recommendations

Nil

Appendix A – Venue Zones

