

**TEMPORARY STRUCTURES FIRE SAFETY
AND OTHER CONSIDERATIONS
ASSESSMENT**

**XI FIP World Polo Championship
17 – 30 October, 2017**

Lot 1 DP 797310

Sydney Polo Club

100 Ridges Lane, Richmond Lowlands 2753

19 April, 2017

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1.0 Outline

This has been prepared on behalf of Sydney Polo Club in respect to the erection and use of Temporary Structures for the XI FIP World Polo Championship event to be held from 17 October, 2017 to 30 October, 2017 at the said property.

Details as described within the Statement of Environmental Effects and Event Management Plan of the project application prepared for submission together with the Development Application, accounts for the use of temporary structures as being integral to the proposed event, and documentation has been prepared for consideration together with that Development Application under the State Environmental Planning Policy – (Miscellaneous Consent Provisions) 2007, as well as Clause 94A and Schedule 1 requirements of the Environmental Planning and Assessment Regulation 2000.

In respect to the requirements of schedule 1 of the Environmental Planning and Assessment Regulation 2000, details within this report and appendices are provided to account for the erection and use of typical temporary structures for consideration by council in conjunction with the Development Application documentation for the 2017 only use of the Sydney Polo Club event site, including those with a stage and various patron viewing arrangements which may be considered at any time as an Entertainment Venue, and to account for fire safety and other considerations under the performance provisions of Part B1 and the Deemed-to-Satisfy NSW provisions of Part H102 to the National Construction Code – Building Code of Australia (BCA) 2012, and to provide information in respect to the requirements of Schedule 3, of the Environmental Planning and Assessment Regulation 2000, with no Alternative Solution proposed as part of this development application submission to meet those requirements.

Under the current provisions of the Environmental Planning and Assessment Regulation 2000, a proponent for a development which incorporates the erection of a temporary structure as an Entertainment Venue is required to appoint a Principal Certifying Authority for the issue of a Final Occupation Certificate prior to the use of those temporary structures, and it is proposed that specific design and internal layout details for all proposed temporary structures including the proposed grandstand structures, are to be submitted with that application demonstrating compliance with the relevant provisions of the National Construction Code (BCA), and as outlined under Schedule 3 of the Environmental Planning and Assessment Regulation 2000, as well as accounting for the requirements of the Development Consent for the proposed activity.

This assessment has been prepared based on the provision that there are no requirements specific to the erection and use of those temporary structures for the cultural event activity, which are not Entertainment Venues, as provided by Clause 98 and Clause 268A(1) of the Environmental Planning and Assessment Regulations 2000.

Additional to temporary structures which may incorporate an Entertainment Venue activity, it is proposed that the event will necessitate temporary grandstand seating structures as well as a number of other temporary structures to provide for under cover rest areas, dining and drinking areas and the usual mobile food and market vendor outlets for the event area, as well as operational staff, site administration, promotional stores and ticketing areas, and will include mobile site offices and amenities for those uses, as well as a number of shipping containers and refrigeration units for storage.

The period of approval proposed for any temporary structure is to account for the erection, use and removal of that temporary structure for the XI FIP World Polo Championship event for which the Development Application is sought.

1.1 Exclusions

This report should not be construed to infer that an assessment for compliance with the following has been undertaken:

- a) structural design documentation;
- b) the requirements of the WorkCover Authority;
- c) those provisions of Building Code of Australia 2016 not relevant to Temporary Structures as an Entertainment Venue; and
- d) Disability Discrimination Act, 1992.

2. NSW Part H102 – Temporary Structures

The following provides an assessment under the provisions of NSW H102 of the BCA, to account for all likely options in respect to the size and configuration of temporary structures which may be intended for the XI FIP World Polo Championship event for which approval is sought, and which may be considered as an Entertainment Venue only.

2.1 H102.1 – Application of Part

The intention of this Part is applied to any temporary structures used as Entertainment Venues, defined as “a building used as a cinema, theatre, concert hall or an indoor sports stadium” as provided under the Environmental Planning and Assessment Act 1979 and Regulation 2000, and although the current definitions are likely to exempt other structures not incorporating performance areas from such criteria, and do not form part of this application, details provided demonstrate a commitment to compliance with the requirements in the event that they may be subject at any time to a change in definition of use.

2.2 H102.2 – Exits – Exclusion

It is prescribed that exits are to be provided for patrons only and no exclusion is sought for the participants with exits required to be provided to the back of house areas of each temporary structure and stage structure, as provided under the provisions of this Clause.

2.3 H102.3 – Locations of Exits

Temporary structures would most likely be provided with open side walls to suit the event organisation, with any temporary structures which are to be partially enclosed, including any stage/performance and viewing areas, to be provided with required exit numbers and aggregate exit widths to the perimeter of the temporary structure for the deemed number of persons to be accommodated, in accordance with details provided by Table 1.

It should be noted that where possible, all exits will be configured to account for the BCA requirements that no point within the temporary structures will be more than 20

metres from a point where travel in two (2) different directions is provided to an exit, with the maximum travel distance to any exit not to exceed 40 metres.

2.4 H102.4 – Exits to be Provided

It is considered that the number of exits required as aggregate exits and the aggregate width of those exits for each temporary structure, based on the maximum deemed number of persons each structure can accommodate, will address the requirements of Table H102.4 – Number of Exits and Widths under the NSW Provisions of the BCA, as provided within Table 1, and as provided in a typical summary to Table 2 for those temporary structures proposed to be provided for the 2017 World Championship Polo event, utilising figures provided in the NSW provisions for an Entertainment Venue under the BCA, as detailed within Table 3.

Table 1

Accommodation Provided	Number of exits required	Aggregate Width of Exits (m)
1 - 25 persons	1-2	1000
26 - 50 persons	2	1500
51 - 75 persons	2	2000
76 - 100 persons	2	2500
101 - 200 persons	2	3000
201 - 400 persons	3	4500
401 - 600 persons	4	6000
601 - 800 persons	5	7500
801 - 1000 persons	5	9000
Over 1000 persons	5 plus 1 additional exit for each additional 450 persons or part thereof	9000 plus 500mm for each additional 50 persons or part thereof

Note:

- (a) Where only one exit is provided that exit must be at least 1000 mm wide.
- (b) Where 2 exits are provided each must be at least 500 mm wide.

Table 2

Maximum Temporary Structure (typical arrangement)	Est. Patron Area	Ratio m²/persons (Maximum Capacity)	Deemed No. of Persons	No. of Exits	Width of Exits (m)
30m x 30m	500m ²	1p/seat	400p	3	4.5
20m x 40m	500m ²	0.5 for 500m ²	1000p	5	9.0
30m x 10m	300m ²	1p/seat for 300m ²	300p	3	4.5
20m x 10m	200m ²	0.5 for 200m ²	400p	3	4.5
15m x 10m	150m ²	0.5 for 150m ²	300p	3	4.5
10m x 10m	100m ²	0.5 for 100m ²	200p	2	3.0
5m x 10m	15m ²	0.5 for 15m ²	30	2	1.5

Table 3

Type of Use	m² per person
Entertainment venue – other than <i>auditorium</i>	1.2
<i>Auditorium</i>	
- standing area	0.5
- removable seating	1.0
- fixed seating	count seats
- bench seating	450 mm/person

2.5 H102.5 – Vertical Clearances for Exits

Access to and through all exits within all temporary structures will be maintained to satisfy the 2 metre minimum unobstructed height all round.

2.6 H102.6 – Curtains Across Exits

No curtains or flaps are proposed to be provided across any exit and in the event that this is required to be provided i.e. to restrict access into a back of house area, such exit will be maintained by security personnel conversant with emergency evacuation procedures to ensure egress is not obstructed or impeded.

2.7 H102.7 – Curtains and Blinds

All curtains and blinds will be selected to satisfy the provisions of AS 1530.2 for decor such as stage curtains used within the event industry, for consideration by the Principal Certifying Authority.

2.8 H102.8 – Fabrics

All external wall and roof fabrics of any proposed temporary structure will require to have been tested under AS 1530.2 to ensure that no fabric used in the construction of that temporary structure has a Flammability Index of no more than 6, or as provided by this part (Appendix A).

2.9 H102.9 – Guardrails

Guardrails will be proposed within any temporary structure where tiered seating or stepped platforms, or viewing platforms are proposed, and in those instances, rigid guardrails will be provided to the sides of those structures from the front of the first (1st) riser to the back row as well as along the full width of the rear of that platform.

2.10 H102.10 – Seating

Seating proposed within any temporary structure, as an entertainment venue will satisfy the NSW provisions of H101.11.1, H101.11.2, H101.11.3(b), H101.11.5(a), (c), H101.11.6(a), H101.11.8(a), (b), (c) and (d).

2.11 H102.11 – Sanitary Accommodation

Determinations of sanitary facilities for male, female and accessible amenities under the Provisions of Table F2.3 of the BCA for the proposed temporary structures as multiple auditorium Entertainment Venues is detailed to Table 4.

Table 4

User Group	Closet Pans		Urinals		Washbasins	
	Design Occupancy (persons)	Number	Design Occupancy (persons)	Number	Design Occupancy (persons)	Number
Male participants	1 – 20 >20	1 Add 1 per 20	1-10 >10	1 Add 1 per 10	1-10 >10	1 Add 1 per 10
Female participants	1-10 >10	1 Add 1 per 10			1-10 >10	1 Add 1 per 10
Male spectators or patrons	1-250 251-500 >500	1 2 Add 1 per 500	1-100 >100	1 Add 1 per 100	1-150 >150	1 Add 1 per 150
Female spectators or patrons	1-10 11-50 >51	1 2 Add 1 per 60			1-80 81-250 251-430 >430	1 2 3 Add 1 per 200

Note: Accessible sanitary facilities to be provided at not less than 50% of the sanitary compartment banks.

2.12 H102.12 – Projection Suites

No projection suite is proposed for any temporary structure under this application, with visuals provided by video projection ancillary to any stage or performances area under the control of the event’s production unit.

2.13 H102.13 – Fireplaces and Heating

Fireplaces or other form of heating is not proposed to be provided within any temporary structure that is to be determined as an Entertainment Venue.

It should be noted that any portable heating appliance to any temporary structure not used as an entertainment venue will be selected to satisfy the standards applicable to that installation.

2.14 H102.14 – Electrical Services

It is proposed that generators will be provided to the whole of the event site to service lighting requirements for any stage or performance area within a temporary structure.

Certification in respect to the supply and installation of the electrical services to satisfy the requirements of Local Supply Authority, AS 3002 and where applicable AS/NZS 3000, will be submitted prior to the issue of the Occupation Certificate as required by the Environmental Planning and Assessment Act, 1979.

It should be noted that the Provisions of NSW H101.19.1(a) is satisfied and H101.19.3(b) is not applicable in respect to the event site.

2.15 H102.15 – Artificial Lighting

It is proposed that all lighting will be controlled from restricted production unit area and it is considered that the provisions of H101.20.1(a) and H101.20.1(b) are satisfied.

It is proposed that lighting within any temporary structure will not utilise time delayed lamps such as mercury vapour type, and H101.20.2 is not considered applicable.

H102.15.1 – Emergency Lighting Levels

Generator powered emergency evacuation lighting will be provided to satisfy the provisions of H102.15, and will be sited to provide a minimum of 0.2 lux at floor levels, and details by a licensed electrical contractor addressing this requirement will be submitted for consideration together with an application for an Occupation Certificate.

H102.15.2 – Emergency Lighting Power Supply

It is proposed that emergency lighting will be provided by lights selected and maintained to AS 2293.1 – 2005, to operate as maintained units in conjunction with the generator powered system for any proposed event.

Alternatively, lighting units without battery backup will be provided with a charging system via a backup generator for all lighting circuits, which will be fed into an

automatic transfer switch to provide a continuous power system should the main generator power supply fail.

Details in respect to emergency lighting power supply by a licensed electrical contractor addressing this requirement will be submitted for consideration together with an application for an Occupation Certificate.

2.16 H102.16 – Exit Signs

Exit and directional exit signage is to be installed and maintained to AS 2293.1 – 2005, and provided with battery back up on a generator mains powered system and are located above each exit as an aggregate exit, and to satisfy the NSW Provisions of Part E4.5, with all required exit signage visible from all paths of travel to the required exits and in co-ordination with the emergency evacuation procedures for the event.

Details in respect to Exit signs supply by a licensed electrical contractor addressing this requirement will be submitted for consideration together with an application for an Occupation Certificate.

2.17 H102.17 – Fire Fighting Services

The Tyagarah event and camping site is provided with a reticulated Fire Hydrant Service to AS 2419.1, and following previous with the NSW Rural Fire Service for previous events, it was concluded that accounting for the strategic location of Rural Fire Service Units, the siting of static water tanks as fire-fighting facilities within the event site was not required, and this together with the provision of Portable Fire Extinguishers within the Temporary Structures for the period of the duration of the events operation, would satisfied any concerns of the Board of Fire Commissioners.

Portable Extinguishers will be selected and located to satisfy the provisions of Table E1.6 of the Building Code of Australia, and a certificate of maintenance under AS 1851.1 will be provided to the appointed Principal Certifying Authority, for consideration together with an application for an Occupation Certificate for each event.

3. Building Code of Australia Part B1 – Structural Provisions

All proposed Temporary Structures are designed and certified to be structurally adequate for the capacity and proposed use as an Entertainment Venue (Appendix B).

A Structural Engineering Certificate for all temporary structures as Entertainment Venues from a person with proven experience in Geotechnical Engineering will be submitted to the Principal Certifying Authority together with an application for an Occupation Certificate addressing the ground on which the structure is to be erected, and its ability to sustain the structure while in use.

4. Schedule 3A – Management and Use of Entertainment Venue

4.1 Nitrate Film

No nitrate films will be permitted to be screened within any temporary structure under the proposal.

4.2 Stage Management

It is proposed that during all performances both the stage manager and/or security fire marshals dependent on the nature of the event will be on duty at all times whilst Temporary Structure are used as Entertainment Venues.

4.3 Proscenium Safety Curtains

No proscenium curtains are proposed the performance stages.

4.4 Projection Suites

No projection suites are proposed for use within the Temporary Structure.

4.11 Emergency Evacuation Plans

Emergency Evacuation Plan will be prepared for each event within an Event Management Plan and for consideration together with an application for an Occupation Certificate for each event.

Usage Note

This report has been prepared for the exclusive use of Sydney Polo Club for the purposes of consideration and processing of the Development Application for the XI FIP World Polo Championship event only, and is not to be used for any other purpose or event or by any other person or corporation.

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No reliance should be placed on information contained within this report other than for the purposes of consideration and processing of a Development Application under the State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007, and the requirements of the Environmental Planning and Assessment Act 1979 and its Regulation 2000.