


ENVIRONMENTAL RISK ASSESSMENT (SSD 8970)

St Joseph's College, Mark Street, Hunters Hill



Submitted to
NSW Planning & Environment

Prepared on behalf of St Joseph's College
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1.0 Introduction

1.1 The site and proposal

The site comprises St Joseph's College, Mark Street, Hunters Hill (**the site**) as shown on **Figure 1**.

The following is proposed on part of the site:

1. **Demolition** of the following existing buildings (which are not heritage significant) near the intersection of Luke Street and Gladesville Road:
 - (a) College Shop
 - (b) Healy Gym and Maintenance Workshop
 - (c) Outdoor Sports Courts
 - (d) Workshop/Storage and Shed.
2. **Construction** of the Physical Education and Sports Precinct Project (**PESPP**) comprising the following facilities:
 - (a) Lower Ground Floor: New car parking, maintenance workshops, storage, offices, amenities etc. A net increase of 55 car parking spaces is proposed (85 new spaces to be provided in the PESPP basement less 30 at grade spaces to be removed)
 - (b) Ground floor: Three indoor sports courts, amenities, kitchen and entry lobbies
 - (c) First Floor: Void over sports courts, bench seating (180 persons), staff facilities, two general learning areas and foyer
 - (d) Driveway entry to the PESPP (no new vehicular cross overs)
 - (e) Landscaping and tree removal/replacement.
3. **Construction** of a new single storey building to accommodate the relocated Healy Gym in the north-western corner of the site near the intersection of Mary Street and Mark Street.
4. **New kiosk substation** and landscaping in the north-eastern corner of the site.
5. **Use** of the completed works as an *educational establishment*.
6. **Staging** which would facilitate completion of the PESPP in up to two stages (noting that the entire project may be completed in one stage).

The proposal does not include the following:

- An increase in the existing student or staff population
- New external use of the proposed facilities (noting that existing external uses would continue in the proposed facilities).

The existing and proposed site plans are shown on **Figures 2** and **3**.

This Environmental Risk Assessment (**ERA**) has been prepared by Robinson Urban Planning Pty Ltd on behalf of St Joseph's College (**SJC**) (the applicant and landowner).



Figure 1 – Location plan (Source: Sixmaps)



Figure 2 – Demolition/existing site plan (Source: TKD Architects, TKD Architects, AR.DA. 1001)



Figure 3 – Proposed site plan: SJC site (Source: TKD Architects, AR.DA. 1101)

1.2 Secretary's Environmental Assessment Requirements

A State Significant Development Application (SSD 8970) has been prepared for the proposal. The General Requirements listed in the Secretary's Environmental Assessment Requirements (SEARs) state that the Environmental Impact Statement (EIS) must include an ERA as shown in the following SEARs extract:

...the EIS must include an environmental risk assessment to identify the potential environmental

impacts associated with the development.

Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include:

- *adequate baseline data;*
- *consideration of potential cumulative impacts due to other development in the vicinity (completed, underway or proposed); and*
- *measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.*

This ERA addresses this requirement.

2.0 2. Risk Management Process

2.1 Overview

The term risk relates to an “effect of uncertainty on objectives” (Standards Australia, 2009, pg. 1). The risk management process, as defined in AS/NZS ISO 31000:2009, is a “systematic application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context, and identifying, analysing, evaluating, treating, monitoring and reviewing risk”.

Figure 4 provides a visual representation of the steps involved in the risk management process and the importance of communication, consultation and constant monitoring throughout all phases of this process.

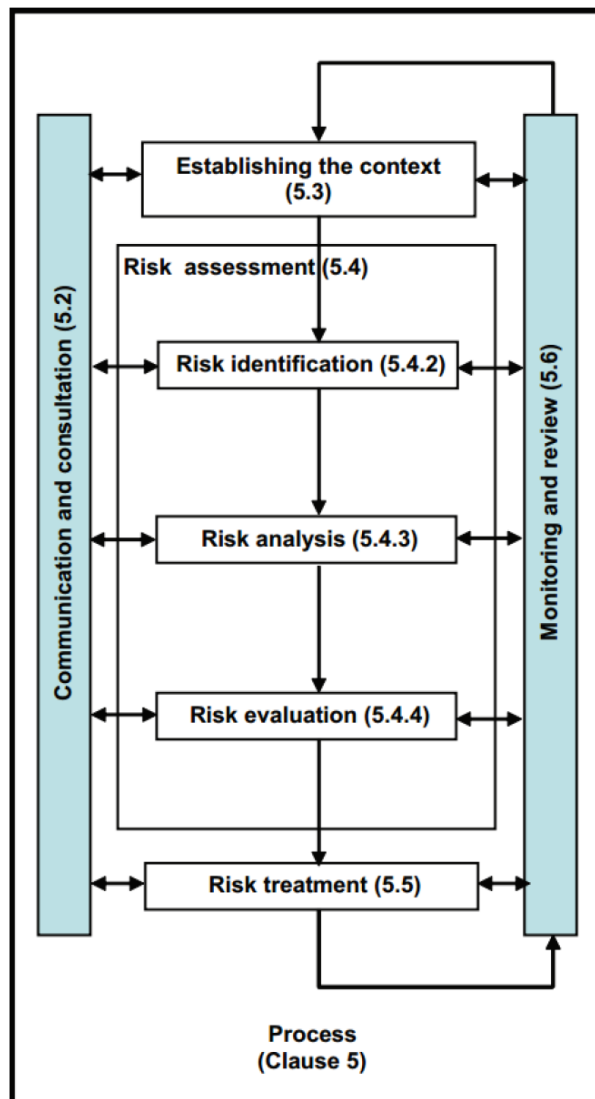


Figure 4 – Risk Management Process (Standards Australia)

2.2 Communication and Consultation

As **Figure 4** illustrates, communication and consultation with relevant stakeholders should be an ongoing event throughout the risk management process at a variety of different levels depending on the audience and at what stage of the project lifecycle the project is in.

Effective external and internal communication and consultation should take place to ensure that those accountable for implementing the risk management process and stakeholders understand the basis on which decisions are made, and the reasons why particular actions are required. (Standards Australia, 2009, pg. 14).

The SEARs outlines the following requirements for community consultation:

During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, and affected landowners. You must consult with:

- *Hunters Hill Council; and*
- *Government Architect NSW.*

The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.

Under the guidance of Elton Consulting, SJC completed a thorough community engagement process prior to lodging SSD 8970. Elton Consulting has prepared a Community Engagement Outcomes Report which documents the SJC's pre-lodgement consultation (EIS, **Appendix N**).

2.3 Establish the Context of the Risk Management Process

The objectives, strategies, scope and parameters of the activities of the organisation, or those parts of the organisation where the risk management process is being applied, should be established. (Standards Australia, 2009, pg. 16).

SJC has identified a need for improved sports facilities on the site noting the following issues:

- The campus lacks sufficient all-weather practical teaching and sporting facilities.
- As a replacement for the existing outdoor basketball courts which are in poor condition. The existing courts have no acoustic screening and are exposed to the weather.
- To meet the increased demand for indoor sports court usage, required by the College to teach the sports and PDHPE curriculum.
- To reduce noise and parking impacts on the nearby community.

SJC has identified the following objectives for the proposal:

- The highest priority for SJC is to ensure that educational outcomes are improved and enhanced for existing and future students
- Create a building which complements the urban context of the existing SJC campus
- Provide high quality outcomes and finishes
- Respond to teaching and learning requirements
- Foster a positive relationship with the College's neighbours and the wider local community
- Achieve value for money.

2.4 Defining the Risk Criteria

This ERA aims to identify and assess the environmental risks associated with the proposal during both construction and operation. The following key areas of potential impact form the basis of this assessment:

- Visual impacts
- Amenity for adjoining residential properties (in particular noise, vibration and overshadowing)
- Traffic and parking
- Heritage
- Air and water quality impacts from construction.

A qualitative risk assessment has been prepared in accordance with AS/NZS ISO 31000:2009 *Risk management - Principles and guidelines*. The level of risk is assessed based on the likelihood of an event occurring and the consequence of that event. A treatment to mitigate the likelihood or consequence is proposed and the residual risk assessed. A description of the levels of 'likelihood' and 'consequence' is provided below.

Table 1 – Risk assessment likelihood and consequence description

Likelihood	Description	Consequence	Description
1. Rare	May occur only in exceptional circumstances	1. Insignificant	Short term negligible impact.
2. Unlikely	Could occur at some time	2. Minor	Short term reversible impact.
3. Possible	Should occur at some time	3. Moderate	Medium term reversible impact.
4. Likely	Will probably occur in most circumstances.	4. Major	Medium term potentially irreversible impact.
5. Certain	Expected to occur in most circumstances.	5. Critical	Long term irreversible impact.

Table 2 – Risk matrix

		Consequence				
		1 Insignificant	2. Minor	3. Moderate	4. Major	5. Critical
Likelihood	1. Rare	2 Low	3 Low	4 Moderate	5 Moderate	6 High
	2. Unlikely	3 Low	4 Moderate	5 Moderate	6 High	7 High
	3. Possible	4 Moderate	5 Moderate	6 High	7 High	8 Extreme
	4. Likely	5 Moderate	6 High	7 High	8 Extreme	9 Extreme
	5. Certain	6 High	7 High	8 Extreme	9 Extreme	10 Extreme

2.5 Risk Analysis

The results of the ERA are presented in **Table 3**. This provides a risk rating prior to any mitigation and the residual risk after mitigation. It shows that the proposed mitigation measures significantly reduce the potential impacts associated with the proposal.

Table 3 – Environmental risk assessment

Item	Phase of impact C Construction O Operational	Potential impact	Unmitigated risk			Proposed Mitigation Measures	Residual Risk		
			L	C	R		L	C	R
Visual impacts	O	Visual impact of PESPP when viewed from Luke Street, Gladesville Road and Rocher Avenue	4	3	7	<ul style="list-style-type: none"> Replacement of the informal and mixed planting to Luke Street with a defined landscape (mature height 8-10m) Retention of street trees in Gladesville Road High quality materials and façade articulation. 	2	2	4
		Visual impact of Healy Gym when viewed from Mary Street	4	3	7	<ul style="list-style-type: none"> Height limited to one storey (4.5m) Setback of 5.8m from boundary Retention of street trees to Mary Street. 	2	2	4
Noise, vibration	C	Noise and vibration from demolition and construction activities	4	3	7	Implementation of Construction Noise and Vibration Measures set out in the Noise Report by Wilkinson Murray.	4	2	6
	O	Noise from operation of the PESPP	4	4	8	Implementation of Construction Noise and Vibration Measures set out in the Noise Report by Wilkinson Murray including material and plant selections and closing of elevation and roof louvres during major events.	2	2	4
Overshadowing	O	Overshadowing (from the PESPP) of dwellings facing Luke Street and Gladesville Road	2	1	3	Height of the PESPP is 8.6-14.6m, which is characteristic of other buildings on the SJC site.	2	1	3
Traffic and parking	C	Increased traffic and on-street parking demand from construction traffic	5	3	8	<ul style="list-style-type: none"> All construction vehicle entries/exits will be from Gladesville Road Prior to construction, a construction traffic management plan will be prepared by the chosen builder. This will address truck routes, access around the site for the public including 	4	3	7

Item	Phase of impact	Potential impact	Unmitigated risk			Proposed Mitigation Measures	Residual Risk		
						pedestrians and cyclists. A preliminary construction traffic management plan is included in the Traffic Report.			
	O	Increased traffic and on-street parking demand from operation of the PESPP.	1	1	2	No change to the number of SJC students, boarders, staff or intensity of uses on the site.	1	1	2
Heritage	C	Impact on heritage items (including the SJC sandstone wall)	3	3	6	<ul style="list-style-type: none"> Other than the SJC stone wall, which will be protected, the PESPP does not adjoin heritage items on the site or adjoining properties (residential development along the southern side of Gladesville Road and eastern side of Luke Street does not have heritage significance and was generally constructed relatively recently) Impacts of the new Healy Gym on the Main Building are mitigated to by the distance between it and the Main Building. An open space curtilage is proposed to allow the Main Building to be clearly read and understood. Impacts on the Hunter's Hill Conservation Area No. 1 will be minimised by screening from the SJC stone wall and street trees. The proposed substation is located in an unobtrusive part of the site. Its impacts on the College will be mitigated by its location and existing/proposed vegetation. The substation will be screened from the nearby Conservation Area by the SJC stone wall along Luke Street. Materials and colours sensitive to the heritage context (including sandstone cladding) have been selected. The Statement of Heritage Impact concludes that the heritage impacts will be minor and acceptable. Recommendations in relation to protection of the stonewall will be adopted. 	2	2	4
Air and water quality	C	Air and water quality impacts during the	3	3	6	Demolition and construction will be carried out in accordance with the	2	2	4

Item	Phase of impact	Potential impact	Unmitigated risk			Proposed Mitigation Measures	Residual Risk		
		demolition and construction phase.				following reports appended to the EIS: <ul style="list-style-type: none"> • Stormwater Management Plan and Report Northrop which includes sediment and erosion control mitigation measures • Preliminary Construction Management Plan, by TBH which details environmental management measures, including dust control and stormwater management. 			