



project management plan

Environmental Management Plan
Environmental Risk Register

Schofields Public School

60 St Albans Road,
Schofields NSW

Version 4

PRINCIPLE CONTRACTOR - ADCO CONSTRUCTIONS
LEVEL 2 7/9 WEST STREET
NORTH SYDNEY
NSW
ABN 46001044391

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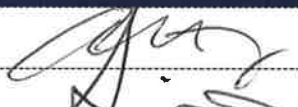
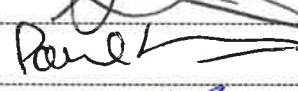

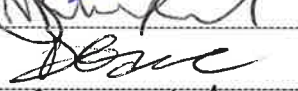
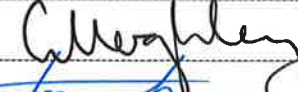

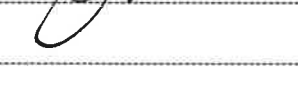


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AUTHORISATION

Rev No.	Issue date	Approved by	Position	Update details
V0	26/10/18	Aleksandar Ilic	Project Manager	Draft Plan
V1	5/3/2019	Aleksandar Ilic	Project Manager	Satisfy SSD Conditions
V2	3/5/2019	Aleksandar Ilic	Project Manager	Satisfy SSD Conditions
V3	28/5/2019	Aleksandar Ilic	Project Manager	Hierarchy Amendment
V4	11/11/2019	Albert Wong	Senior Project Engineer	Added Sediment / Water annexures
V5	13/1/2020	Albert Wong	Project Manager	Change in project team

ADCO PROJECT PERSONNEL CONSULTATION AND SIGN OFF

We, the undersigned, confirm that we have been consulted on the contents of this document, read and understood the contents of this document, and agree to implement the requirements of this Plan on this project site

Name	Position	Signature	Date
Albert Wong	Project Manager		13/1/2020
Scott Wilson	Senior HSE advisor		13/1/2020
Paul Andrews	Site Manager		13/1/2020
Nicholas Napoli	Project engineer		13/01/2020
Michael Brombal	HSE advisor		13/01/2020
Dylan Gower	Site foreman		13/01/2020
Glen Keighley	Senior Contracts Administrator		13/01/2020
Michael Murray	Contracts Administrator		11/2/2020
ERICA WIDJAJA P.E.			11/2/2020

INTRODUCTION

PURPOSE OF THIS PLAN

ADCO Constructions implements an integrated safety and environmental management system on all projects.

Our Corporate SHE (Safety, Health and Environment) Management System, documents the way construction-related activities are managed across ADCO project sites.

This Management Plan provides information on how health and safety will be managed on this project to ensure as far as reasonably practicable that a safe, injury and incident free workplace is maintained.

CORPORATE MANAGEMENT SYSTEM and DOCUMENTATION

System documents which are referenced in this Management Plan can be sourced by accessing the ADCO Constructions Intranet System. This can only be accessed by ADCO personnel.

ADCO PERSONNEL SIGN OFF

ADCO project personnel will be consulted into the Management Plan contents by the relent Project Manager.

A copy of the Management Plan is to be maintained on site for personnel access.

INFORMATION SUPPLY TO SUBCONTRACTORS

The Management Plan will be supplied to PCBU's and subcontractors through the Aconex Portal or another IT formats. Soft copy of the Plan is available on site through the Site Manager.

PLAN REVIEW

The Management Plan will be reviewed on a periodic basis by the site management team, not exceeding 6-monthly, to ensure its suitability and compliance to legislation and the operational requirements of the project.

Document control such as version number, and changes within the document will be recorded and tracked. Superseded soft copies must be marked "superseded" and filed away. Electronic versions must be filed into a superseded file via the "V" drive or "Drop Box"

PLAN ARCHIVING

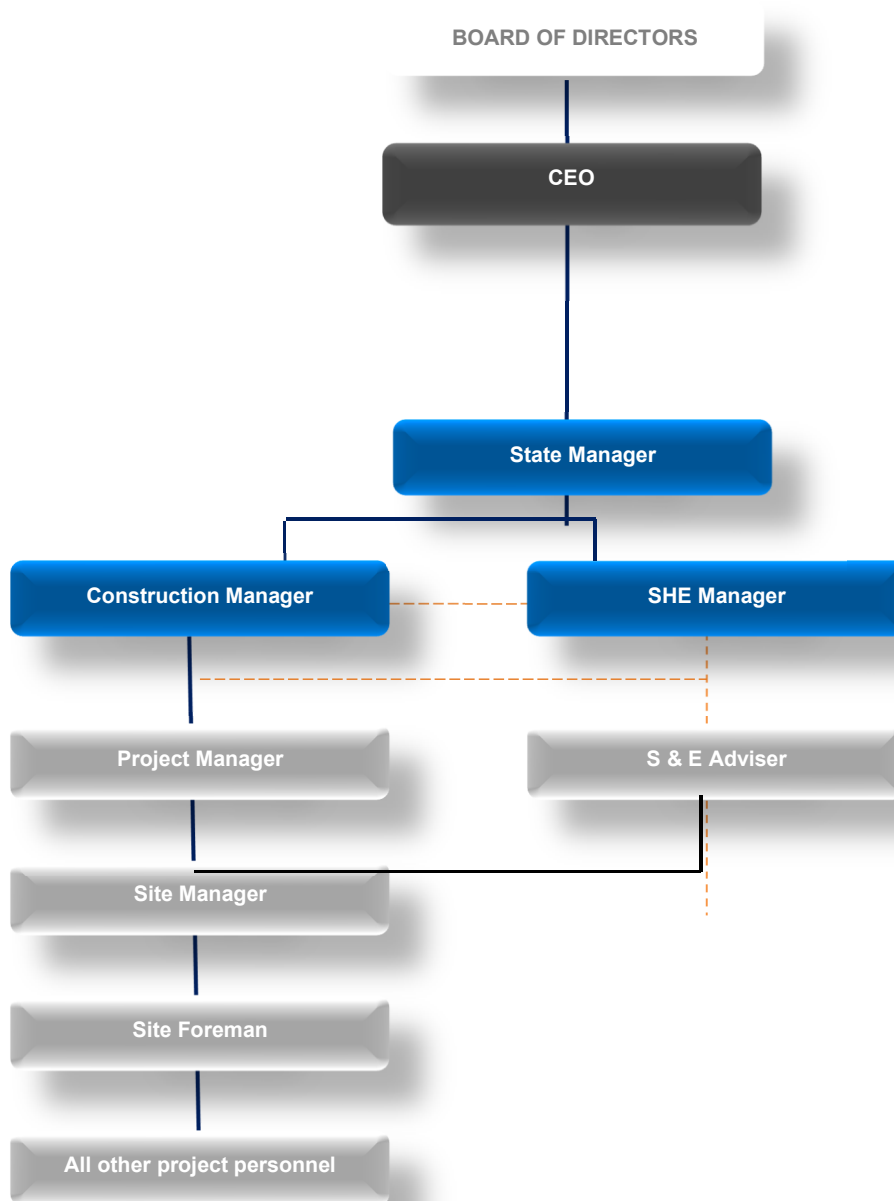
Copies of the Management Plan will be archived for a period of at least 24 months following an update and or completion of the project.

PLAN INTERFACE

This Management Plan interfaces with other management documents as follows:



PROJECT MANAGEMENT STRUCTURE



Chief Executive Officer

Neil Harding

State Manager

John Basilisco

Construction Manager

Matt Wilkinson

SHE Manager

Phil Provenzano

Project Manager

Albert Wong

Site Manager

Paul Andrews

S&E Adviser

Scott Wilson

Site Foreman

Dylan Gower

First Aid

Scott Wilson / Paul Andrews

Chief Emergency Warden

Paul Andrews

POSITION RESPONSIBILITIES

Chief Executive Officer

Refer to the Corporate Management Plan.

State Manager

Ensure that:

- ▽ Corporate Management Systems are implemented at all levels in the State.
- ▽ Appropriate resources are allocated to project teams to ensure compliance legislative requirements and the requirements of the Corporate Management Systems.
- ▽ Project operations follow applicable state or federal legislation.
- ▽ A review of the safety, environment, quality and health management performance of the State is completed regularly to identify non-conformances, trends and areas of improvement.

Construction Manager

Ensure that:

- ▽ Corporate Management Systems are implemented on projects within the State.
- ▽ SHE requirements have been identified and accounted for during project tender processes.
- ▽ Project operations follow applicable state or federal legislation.
- ▽ Appropriate resources are allocated to project teams to ensure compliance legislative requirements and the requirements of the Corporate Management Systems.
- ▽ Project team personnel have received training to fulfil their duties and responsibilities with the Corporate Management Systems.
- ▽ A review of the safety, environment, quality and health management performance of the State is completed regularly to identify non-conformances, trends and areas of improvement.

Safety, Health & Environment (SHE) Manager

Ensure that:

- ▽ Legislative requirements for SHE management are implemented and maintained on project sites.
- ▽ The requirements of the Corporate SHE Management System are implemented on project sites.
- ▽ Where required, project SHE requirements and risks are identified during project tender and/or trade tender processes and incorporated into project management plans.
- ▽ Reviews of SHE performance are completed on all projects to ensure compliance with legislative and corporate requirements.

Project Manager

Ensure that:

- ▽ SHE requirements are identified and assessed during trade tender evaluations.
- ▽ In conjunction with the SHE Manager, project management plans are developed and implemented on projects.
- ▽ Resources are allocated to implement and maintain the SHE requirements on the project.
- ▽ ADCO project personnel have received training to fulfil their SHE responsibilities.
- ▽ Project personnel are aware of current SHE legislation and their obligations.
- ▽ SHE performance on the project is reviewed and non-compliant activities by employees and subcontractors are addressed.

Site Manager

Ensure that:

- ▽ Legislative requirements for SHE management are implemented and maintained on the project site.
- ▽ The requirements of project SHE Management Plans are implemented and managed on the project.
- ▽ The requirements of the Corporate Management Systems are implemented and managed on the project.
- ▽ Any issues which may arise over SHE requirements (legislative or Corporate) are managed on site.
- ▽ Employees and subcontractors complete their work in compliance with legislative and Corporate Management System requirements.
- ▽ Open lines of communication and consultation are maintained with the S&E Adviser and other parties (i.e. subcontractors, employee representatives) to ensure that the site operates in a safe manner and in compliance with regulatory and corporate requirements.
- ▽ SHE performance on the project is reviewed and non-compliant activities by employees and subcontractors are addressed.

S&E Adviser

Ensure that:

- ▽ Legislative requirements for SHE management are implemented and maintained on project sites.
- ▽ The requirements of the Corporate Management Systems are implemented on project sites.
- ▽ SHE performance on the project is reviewed and non-compliant activities by employees and subcontractors are addressed.

Health and Safety Representative (HSR)

In general:

- ▽ Participate in risk and hazard identification and control.
- ▽ Participate in incident investigations and management.
- ▽ Participate in workplace inspections (e.g. with the Committee, with the project team).
- ▽ Participate in project consultative forums. (e.g. S&E Committee)
- ▽ Consult with and represent workers (i.e. work group) in health and safety issues.

All other project personnel

All personnel are responsible for actively promoting and complying with Safety, Health and Environmental Management requirements as determined / advised / required by ADCO. Activities that all personnel are required to participate in include, but are not limited to:

- ▽ Attend pre-start meetings.
- ▽ Conduct pre-start tasks analysis.
- ▽ Adhere to all permit requirements.
- ▽ Report all hazards, near misses and incidents (including injuries).
- ▽ Immediately stop any "at risk behaviour" identified during daily work activities.
- ▽ Attend safety presentations and toolbox meetings.
- ▽ Assist in achieving project SHE objectives and targets.

OBJECTIVES AND TARGETS

CORPORATE ENVIROBMENTAL OBJECTIVES AND TARGETS

Note Refer to the Corporate Management Plan for additional information.

PROJECT OBJECTIVES AND TARGETS

Environmental	OBJECTIVE	TARGET
	Incident management	<ul style="list-style-type: none"> Zero reportable incidents. All incidents are reported to ADCO site management immediately on occurrence. Incidents investigated within two hours of notification. Corrective actions are implemented according to the ADCO risk management time frame. Incident reports are completed within 24 hours of the occurrence. Incident reports are closed out within 28 days of occurrence. Preventative actions implemented across the project and noted in the Site Report or Weekly Site Inspection.
	Waste management	<p>A form of waste minimisation, recycling and reuse program is established and promoted throughout the project period.</p> <ul style="list-style-type: none"> Where waste minimisation is a requirement of project compliance (e.g. green star), waste strategies are included in the site induction program. Work activities are monitored for compliance through the Weekly Site Inspection.
	Fauna and Flora management	<p>Where fauna and flora minimization is a requirement of project compliance, work activities are completed with consideration and protection of the same.</p> <ul style="list-style-type: none"> Management requirements are included in the site induction program. Work activities are monitored for compliance through the Weekly Site Inspection.
	Air and water quality management	<p>Work activities are completed with nil to minimal impact on air and water quality in and around the site.</p> <ul style="list-style-type: none"> Mitigation strategies (e.g. dust suppression, nominated trade waste wash off areas and refuelling locations) are identified for the project and per work activity (i.e. SWMS). Management requirements are included in the site induction program. Work activities are monitored for compliance through the Weekly Site Inspection.



Cultural Heritage management

Where heritage management is a requirement of project compliance, work activities are completed with due consideration and protection of the same.

- ▽ Management requirements are included in the site induction program.
- ▽ Work activities are monitored for compliance through the Weekly Site Inspection.

LEGAL AND OTHER REQUIREMENTS

LEGISLATION

Compliance

Risks controls on this project will be implemented in accordance with Environmental legislation.

Legislation applied to this project is noted in the Risk Register section of this document.

Access

Access to current Legislation is available to all project personnel.

Subcontract workers should liaise with the Site Manager for access.

SITE RULES

Display

Site Rules are applicable to all workers on this project and are:

- ▽ Attached to the **Site Induction** form - for review and acknowledgment during the site induction.
- ▽ Posted on site noticeboards – for review and confirmation while on site.
- ▽ Re-iterated as required during of the project consultative forums.

Objective

The objectives of the Site Rules are to:

- ▽ Meet legislative requirement for OHS/WHs and environmental management.
- ▽ Define ADCO's minimum operational standards.
- ▽ Prevent harm to people and the environment.

PROJECT INFORMATION

PROJECT SUMMARY

Project period Stage 1 Early Works

Works Completed

Project period Stage 2 Main Works

January 2019

to

July 2020

Project Team 24 Hours Contact Details:

Project Manager – Aleksandar Ilic 0421 748 140

Site Manager – Paul Andrews 0439 587 666

Project Description:

The proposed project is separated in two stages; an Early Works stage followed by the main works

The Early Works involves the establishment of a 'Pop Up School' providing temporary learning areas for students. The installation of the demountable buildings is by a separate Contractor with ADCO carrying out some builders works and providing Electrical, Communications, Fire and Hydraulic services connections to the demountable buildings.

Following occupation of the Demountable Village, the Main Works site compound will be established. This stage involves the demolition of existing buildings and associated structures to accommodate a new 2 Storey Building that will house the following:

- ▼ School Administration and staff amenities
- ▼ Hall
- ▼ Canteen
- ▼ Construction of 27 new permanent teaching spaces (including 3 Special Educations Units)
- ▼ Upgrade of core facilities
- ▼ Landscaping and Civil works

The building will be founded on screw piles and comprise of a post tensioned reinforced concrete structure, structural steel roof frame and metal deck roofing, masonry façade and light weight cladding.

PROJECT SPECIFIC INFORMATION

Site access information

STAGE 1 Early Works

Construction
Vehicle site
entry location

Stage 1 Works Complete

Site access information

Stage 2 Main Works

Construction
Vehicle site
entry location

Gate 1 off St Albans Road – Primary Site Access

Construction
Vehicle site
entry location

Gate 2 off Junction Road – Secondary Site Access

School
Pedestrian entry
location

Existing School Gates on Junction Road - (50m south of ADCO Gate 2)

Site Personnel
entry location/s

Gate 2 off Junction Road

Delivery
instructions

1. Entry in accordance with Traffic Management Plan
2. No Deliveries via Gate 2 between 8:30am – 9:30am and 2:30pm – 3:30pm Drop-off and Pick-up Times
3. Prior to entry delivery drive is to contact ADCO Site Manager Paul Andrews 0439 065 709

Work hours – Day Shift

General

From

To

Monday – Friday	Saturday	Sunday	Public Holiday	RDO
7am	8am	No work		7am
6pm	1pm			6pm

Council requirements

Nil

Client requirements

C8. Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:

- a) 9am to 12pm, Monday to Friday;
- b) 2pm to 5pm Monday to Friday; and
- c) 9am to 12pm, Saturday.

ENVIRONMENTAL MANAGEMENT

COMPLIANCE

Risks controls on this project will be implemented in accordance with legislation, Codes of Practice and Standards.

Legislation, Codes of Practice and Standards which will be applied to this project are noted in the Environmental Risk Register (rear of this document)

OBJECTIVES

ADCO will manage construction activities and operations in a manner which, so far as reasonably practicable, minimises any impact upon natural or heritage protected environments.

In general, construction activities will seek to:

- ▽ Minimise land disturbance.
- ▽ Where required (e.g. DA conditions), restore the area to pre-disturbed conditions.
- ▽ Protect flora and fauna ecosystems.
- ▽ Implement controls to prevent the pollution of surface and ground water quality.
- ▽ Implement air quality control measures (e.g. dust suppression, contained work area).
- ▽ Implement waste control / management strategies including (where practicable) recycling, recovering and re-using resources from waste.
- ▽ Implement noise and vibration reduction strategies (where practicable).
- ▽ Ensure compliance with all laws, regulations and rules pertaining to the environment that are applicable to the site.

IDENTIFICATION

The identification and assessment of environmental risks (aspects and impacts) that could eventuate during construction of the project will be completed during the following stages:

- ▽ Design
- ▽ Tender
- ▽ Project planning
- ▽ Project construction

Aspects and impacts will be assessed relative to:

- ▽ The potential to cause the discharge or release of pollutants to water, air, or land.
- ▽ The impact on flora, fauna or heritage.
- ▽ The potential to impact on the surrounding neighbourhood (e.g. noise, vibration).

The identification, assessment and risk mitigation of environmental risks is documented in the Environmental Risk Register (rear of this document)

MONITORING

Actions taken to mitigate environmental risks must be reviewed for ongoing compliance by the Project Manager, Site Manager and S&E Adviser.

Verification of monitoring should be noted on the **Weekly Site Inspection** form.

MANAGEMENT

The Project Manager, Site Manager and S&E Adviser are responsible for ensuring that all site personnel comply with environmental risk mitigation requirements.

NOISE & VIBRATION

ADCO will implement working hours that are compliant with legislation and local government requirements.

To ensure that plant and equipment used throughout construction is the quietest reasonably available ADCO Constructions will:

- ▽ Ensure that Plant is inspected at first entry to site and then at regular intervals. Refer to Procedure: Operating Plant (mobile plant).
- ▽ Where practicable, position Plant / equipment (e.g. start-up, parking, refuelling) away from noise-sensitive areas. There is adequate parking available within the site establishment area.
- ▽ Where practicable, avoid simultaneous operation of noisy Plant /or equipment.
- ▽ Ensure that Plant / equipment is serviced as per the manufacturer's instruction and maintained in good working order.
- ▽ Ensure that Plant / equipment is switched off when not in use.
- ▽ Where practicable, select alternative Plant or equipment to complete the activity.

The ADCO Project team will ensure compliance to noise management controls through:

- ▽ Carrying out works within approved Construction Hours.
- ▽ Regular inspections (documented in the Weekly Site Inspection) and completion of corrective actions where required.
- ▽ Inclusion of noise and vibration awareness and control requirements into the site induction.
- ▽ The use of the daily Pre-Start Meeting to discuss awareness, control compliance and requirements.
- ▽ Ensuring, so far as is practicable, that personnel involved in or working near noise generating activities on the construction site, wear PPE applicable to the activity.
- ▽ Ensuring, that signage advising of the hazard/s are posted in visible locations around the work activity area.

Where construction activities may result in noise / vibration impacts to the community, notification will be provided to the affected parties. If applicable, notification can be in the form of any or all: letterbox drops, door knocking, newspaper adverts etc.

Notification information will include:

- ▽ The date of and/or duration of the works.
- ▽ Time of day that the works will occur.
- ▽ Specific information regarding likely impacts and mitigation strategies
- ▽ Information for registering concerns or complaints through the ADCO 1800 number (1800 232 628).

DUST

ADCO will prevent any nuisance occurring through the discharge of dust, dirt, water, fumes and the like on to persons or property.

Strategies to be implemented to prevent dust generation and potential nuisance includes but is not limited to:

- ▽ Restrict vehicle movements to designated routes.
- ▽ Apply water sprays to earthwork locations as required during periods of dry weather, strong winds or dust generating activities.
- ▽ If excavated materials will be stockpiled, onsite stockpile management practices will be carried out. These include water sprays and locating stockpiles away from public and residential properties as much is reasonably practicable.
- ▽ Minimise dust generating construction activities during periods of high winds or adverse weather.
- ▽ Cease relevant construction activities should they be found to be generating excessive dust until effective control measures are implemented.
- ▽ As required, implement regular sweeping (including road sweeping) and cleaning activities.
- ▽ Monitor and manage the incidence of dust deposition from construction activities and construction vehicles.
- ▽ Daily and Weekly visual monitoring of dust and dust management controls will be carried out by the Site team. Note: Dust sampling will not be required for the project works.
- ▽ Ensure that subcontract personnel adopt work methods to include dust minimisation practices.
- ▽ Implement corrective action in response to diminished air quality.
- ▽ Restrict construction traffic to designated / sign posted traffic routes.
- ▽ No burning off will occur on the site.
- ▽ There will be no need for proprietary stabilisers on excavated areas due to the short duration of exposure to the elements and limited area of excavation. If excavated areas are exposed to the elements for extended periods of time, water suppression will be in place that adequately covers the exposed area.
- ▽ Site amenities areas will have nil dust generating activities that will require additional dust management strategies in place.

WASTE

Waste categories / types on the project will consist of:

1. Solid Waste;
2. Liquid Waste; and
3. Food waste.

Waste management of the project will consist of co-mingled bins to collect waste material. All waste (excluding hazardous waste) will be collected in a single waste bins onsite and will be separated into different waste streams at an offsite recycling facility.

The project will manage waste by

- ▽ Designating waste storage areas.
- ▽ Waste storage areas will be in accessible areas for both vehicles and personnel to allow for easy access for collection and transport.

- ▽ Waste bins will be maintained in good condition to prevent leaks and spills.
- ▽ Defective containers will not be used for waste storage or transport.
- ▽ Hazardous waste will be contained and separated from other waste categories.
- ▽ If applicable – Material contaminated by spills i.e. fuel, oil, lubricants etc. will be stored in sealed containers and disposed of at an approved facility.
- ▽ Generate a Waste Management Report detailing percentage waste recycled and waste to landfill to determine if construction targets have been achieved
- ▽ Actively encouraging Contractors and Suppliers to use non-toxic or recycled products and recycled packaging.
- ▽ Encouraging Contractors and Suppliers to reduce the amount of packaging materials brought on to site.
- ▽ Ensuring that all persons working on our projects are made aware of their responsibility for achieving a green working environment.

Food waste will be managed to prevent birds and vermin accessing the waste.

- ▽ Lidded food waste bins will be in the site amenities areas i.e. offices / lunchrooms.
- ▽ Designated food waste bins will be emptied daily.
- ▽ Food waste bins are to be kept covered
- ▽ Food waste will be contained in bags which will be secured / tied when emptied
- ▽ Work areas are to be kept free of rubbish and other debris always.
- ▽ No food waste to be deposited directly into external construction waste skips.
- ▽ Active rodent control established on the site i.e. baits around site perimeter.

MATERIAL STORAGE

Construction material required to carry out project works will be stored within designated storage areas within the site compound.

Prior to any delivery of materials, mobile plant or tools, subcontractors to consult with ADCO Site Management on the following:

- ▽ Permissible items permitted on site including DG/Hazardous Substances.
- ▽ Storage areas for trades / materials / substances / Plant.
- ▽ Permits or pre-entry inspections including documentation (e.g. Safety Data Sheets, Validation Certificates etc.) required for Plant, tools or substances.
- ▽ Hazardous substances and flammable goods to be stored in an approved lockable storage cage. Subcontractors to provide their own lockable cages.
- ▽ Pre-delivery inspections to ensure that materials are in accordance with SHE requirements.
- ▽ Items found not to be conforming are to be secured and removed from site.

In relation to the storage of substances the following applies:

- ▽ Documentation (SWMS and current SDS) to be supplied to and approved by ADCO prior to the storage and use of such items on site.

- ▽ Register for substances to be maintained on site by user company and supplied to ADCO on request.
- ▽ Substances and containers to be compliant and correctly labelled.
- ▽ Substances only to be stored in approved locations on site. No storage within shipping containers permitted.
- ▽ Bunds to be of sufficient size and capacity to accommodate substances stored in the event of a spill.
- ▽ Persons using the substance to have knowledge of, and training in the use of the substance.
- ▽ "DANGER" signage to be placed in visible positions to warn of dangers (flammable substances).
- ▽ Fire suppression equipment to be located with the substances.
- ▽ Spill management requirements to be implemented.

HAZARDOUS SUBSTANCES/DANGEROUS GOODS ETC

ADCO will have appropriate measures in place to ensure the safe use and storage of hazardous substances / dangerous goods etc. Such measures will be in place to prevent accidental release to the natural environment leading to environmental contamination or harm, including impacts to air and water.

The following management protocols will be implemented and monitored for compliance;

- ▽ Maintaining a limit of 250 litres of each substance on site at any one time. Note: Any requirement to use or store more than this quantity, requires a written request to and approval by ADCO Constructions (SHEQ Manager).
- ▽ Subcontractors providing a site-specific WMS detailing the work activities, risks and control measures. (No work will proceed until ADCO Constructions has approved the WMS).
- ▽ Current SDS for each substance. SDSs are to be Australian and issued within the previous 5 years. SDS information will be in the Site Office/First Aid Room.
- ▽ Ensuring all substances are stored correctly and secured.
- ▽ Hazardous Sub Register for the project must be maintained and regularly updated.
- ▽ Ensuring that the substances and their containers are correctly labelled and contained.
- ▽ Storing the substances in a manner which complies with the SDS and any other applicable legislation or standards.
- ▽ Erection of appropriate warning/emergency panel signage to warn of the location of the substances.
- ▽ Ensuring that the substances are safe from use or access by other parties.
- ▽ Completing regular inspections on vehicles, containers, bunding and equipment to check for any leaks or spills.
- ▽ Providing appropriate fire suppression equipment and Spill Kits.
- ▽ Providing details for ensuring that at the completion of the works, all residual stocks of substances are guaranteed to be removed from the construction area.
- ▽ Ensuring fuels and gases are kept apart and secured when not in use.

REFUELING

The following management protocols will be implemented to ensure correct management for refuelling plant etc;

- ▽ Fuels are to be stored in secured storage and be well ventilated.
- ▽ Regular inspections of fuel containers to be completed to check for any leaks or spills.
- ▽ Ensure that appropriate storage facilities and fire suppression, spill management is available.
- ▽ Ensure that containers are correctly labelled and that minimal quantities are stored on site.
- ▽ Where possible, request MINI TANKERS to undertake refuelling on site.
- ▽ Major servicing of machinery to be completed off site.
- ▽ Refuelling to occur in a designated area and not within 30m of a water body.
- ▽ Hoses to be fitted with a stop valves on fuel cells.

SEDIMENT CONTROL / WATER QUALITY

To control the risk of erosion or sediment erosion and its impact on the natural environment, ADCO will:

- ▽ Install erosion and sediment control devices to mitigate and manage the impact of excess soils on nearby roads, surface water quality, air quality, fauna and flora.
- ▽ Erosion and sedimentation controls will be monitored on a weekly basis or immediately following a rainfall event.
- ▽ Ensure that the handling and placement of excavated material is managed and protected from overspilling into drains and adjacent roads etc.
- ▽ Keep stockpiles relatively low in height and cover as required or seed.
- ▽ Complete daily inspections of stockpiles, excavated areas and control methods for erosion and sediment management.
- ▽ ADCO will ensure that all drains and gutters are protected to prevent sediment entering into the system and waterways
- ▽ Adhere to the sediment and erosion control plans developed by the project Civil Engineer
- ▽ In ground and stormwater run off to be treated in accordance to ADCO's stormwater process
- ▽ Treatment of Acid Sulfate Soils should be in accordance to ADCO's contaminants management plan
- ▽ In the event of wet weather, all external work are to ceased until ground condition have dried to a sufficient level for plant and equipment to track over.

Entering Site

- ▽ Identify vulnerable locations on site and install control devices to halt or alter course of water.
- ▽ Inspections prior to a major weather event.

Exiting Site

- ▽ Identify vulnerable drains, low points and stormwater runoff points.
- ▽ Install control devices (i.e. silt fencing, bunding, diversion devices, sand bags, etc).

- ▽ Daily inspections and maintenance of control

FOREIGN OBJECTS DAMAGE (FOD)

Materials will be stored in such a way to ensure they are secured from dislodgment in extreme weather conditions.

Site Compound

- ▽ Within the site compound all material and equipment must be secured or securely stored.
- ▽ Material storage area to be fully contained.
- ▽ Appropriate storage containers based on the nature of the product being stored will be provided and located in a designated area.
- ▽ Containers must be closed except for when personnel are accessing or working within the container.
- ▽ Items within containers must be secured.
- ▽ Waste must be placed into supplied receptacles fitted with lids.
- ▽ Waste lids are to be closed.
- ▽ Material or equipment stored external to site sheds or containers must not have any fittings, fixtures or wrapping which could come loose and cause a hazard.
- ▽ Lightweight materials must be secured to prevent uplift and dislodgment i.e. materials on roofs and balconies etc.

Work Areas

- ▽ Material or equipment transported to the work area must be secured to ensure that no fittings, fixtures or wrapping could come loose and cause a hazard during transportation
- ▽ Work areas are to be maintained with a high standard of housekeeping and must be free of loose material, packaging, debris etc. at the close of each shift.

FLORA AND FAUNA

Flora and fauna protection will be managed as prescribed in development approvals etc;

- ▽ Protective controls will be erected around trees and shrubs with denoted signage e.g. tree protection zone
- ▽ No materials to be stored over root systems as prescribed in approvals.
- ▽ Compliance to specific flora or fauna requirements set out in the approvals is mandated and the responsibility of ADCO management.
- ▽ Any wildlife is to be protected. National Parks or Local Council to be contacted upon finding any wildlife on the project.

COMPLAINTS MANAGEMENT

Complaints can be raised for issues such as, but not limited to:

- ▽ Noise
- ▽ Vibration
- ▽ Dust
- ▽ Pollution

- ▽ Harassment
- ▽ Perceived safety or environmental management issues.
- ▽ Breaches of legislation, DA/BA conditions

A person wishing to register a complaint with ADCO can do so by calling the 1800 ADCO AU phone number and requesting to speak to the Site Manager or Project Manager.

Information relating to complaints is documented on the ADCO Constructions Complaints Form. Complaints are registered on the Register - Project Complaints.

Complaints must:

- ▽ Immediately - Be reviewed and Investigated by the Project Manager, Site Manager and/or S&E Adviser.
- ▽ 48 Hours - Be actioned by the Project Manager, Site Manager and/or S&E Adviser. Actions to be noted on the form. This includes a response (email or verbal) to the person generating the complaint.

In general, the below recommended actions should be followed:

- ▽ Respond to the complainant in an objective, polite and courteous manner.
- ▽ Engage with the complainant to correctly understand the complaint.
- ▽ Seek clarification and confirm the issues, relevant information, and outcomes sought (i.e. summarise the main points).
- ▽ Clarify the application of any relevant legislation, policies or procedures.
- ▽ Resolve the complaint and acknowledge the complainant.
- ▽ If the complaint cannot be resolved within a reasonable time frame, advise the complainant about the complaints process and indicative response.
- ▽ Take reasonable action to prevent similar complaints in the future.

FIRE PROTECTION

Fire is a very real threat in construction activities. The management of potential fire and the spread is dependent of controls implemented by the site team:

- ▽ Hot Works will require an assessment and permit to proceed issued by ADCO.
- ▽ Unless otherwise exempt, Hot Works will not be permitted on Total Fire Ban Days.
- ▽ Fire Zone areas (as prescribed in development approvals) will be established and enforced.
- ▽ Fire suppression equipment will be available for minor flares. NSW Fire will be immediately contacted for assistance pending assessment by ADCO management.

MONITORING AND REVIEW

INSPECTIONS

ADCO will complete daily and weekly workplace inspections to review and confirm compliance to approved work practices and environmental controls.

- ▽ Regular daily visual inspections will be completed by the Site Manager, S&E Adviser and / or HSR.
- ▽ Formal inspections will be completed by the Project Manager, Site Manager, S&E Adviser using the **Weekly Site Inspection** form.
- ▽ The completed **Weekly Site Inspection** must be attached to a **Site Report** following each week.

The inspection is required to reflect the project's level of compliance to:

- ▽ Control measures required per active work permits.
- ▽ Approved subcontractor SWMS for high risk work activities.
- ▽ General site conditions.

AUDITS

Project audits, completed by the SHE Manager are a formal a review of project compliance against select criteria of the Corporate SHE Management System.

- ▽ Applicable projects are required to be audited once during the life of the project.
- ▽ The level of compliance to the requirements of the Corporate SHE System is determined by the audit score achieved.
- ▽ Any corrective action identified in the audit must, depending on the level of risk be addressed by the site team within a maximum of seven working days of receipt of the audit report.
- ▽ Corrective actions and supporting evidence must be attached to the Audit Report in the ADCO Data Portal.

TRAINING AND INSTRUCTION

SITE INDUCTION

Training and instruction are key requirements to ensuring that workers can perform their duties and tasks without risk to their health and safety or the health and safety of any other persons. The ADCO induction process is a prescribed method of ensuring that workers are provided with information on:

- ▽ The type of project being completed
- ▽ The project teams
- ▽ Site access / egress
- ▽ Emergency management requirements
- ▽ Consultation arrangements
- ▽ Incident and hazard management
- ▽ Compliance management
- ▽ Permit to work management
- ▽ Environmental management requirements
- ▽ Industrial relations
- ▽ [Management of contractor's work activities](#)

All persons who are attending the site for completing construction activities must attend and complete the site induction before commencing work.

Subcontractors (supervisors) are responsible to ensure that all new workers are site inducted on the very first day on site.

Induction booking are recommended with the Site Manager and or / S&E Adviser.

Visitors

Visitors will not be site inducted and will be required to:

- ▽ Report to the Site Office on entry and at exit from the site.
- ▽ Sign in to and out of the [Register - Visitors](#).
- ▽ Be accompanied by and remain within two metres of a site inducted person.
- ▽ Wear PPE mandated on the project.
- ▽ Where footwear and clothing appropriate to a construction site.

Records

Induction information, including supporting documentation, will be maintained on site in a lockable storage facility, by the Site Manager and/or S&E Adviser.

Site induction information will be archived for a period of at least three years after completion of the project.

TRAINING

Evidence of training and instruction must be provided / be available for all persons who work on our project sites.

COMMUNICATION AND CONSULTATION

ADCO PRE-START MEETINGS

A daily pre-start meeting to identify and discuss safety issues / hazards / controls relative to daily work activities is required to be held by the Site Manager.

Subcontract personnel are required to attend the meeting prior to commencing their daily work.

Issues to be discussed at the meeting, include but are not limited to:

- ▽ The tasks being completed by each trade during the shift.
- ▽ Risk and hazard management requirements including the requirement for any Permits.
- ▽ Incidents, accidents and near misses from any previous shifts.
- ▽ Health and safety issues raised by the workforce.

Details of the meetings will be recorded on the **Pre-Start Meeting** form and attached to the **Site Report**.

Late comers should liaise with the Site Manager to ensure they understand the day's events and pending issues.

SUBCONTRACTOR MEETINGS

Subcontractors / PCBU's are required to undertake the following consultation;

- ▽ Weekly toolbox Meeting with entire workgroup
- ▽ Daily Pre-Start Meeting for activities under a ATW Permit
- ▽ Toolbox Talk post any Incident (covering the incident, outcomes and actions)

Copies of all such consultation meetings must be forwarded to the ADCO Site Manager and / or S&E Adviser.

S&E COMMITTEE MEETINGS

At the initiation of ADCO or at the request of workers, a Safety Committee may be established on the project.

- ▽ All subcontract companies are required to ensure that a representative attends the meeting. This may be the (HSR) Health and Safety Representative.
- ▽ Details of the meetings will be recorded on the **S&E Meeting** form and attached to the **Site Report** and issued to all Committee Members.

Copies of the meeting minutes will be placed on the noticeboard for general site review.

OTHER MEETINGS

Other site meetings which may be used for the discussion of safety, health and environmental management issues include, but are not limited to:

- ▽ Subcontractor Meetings
- ▽ PCG Meetings
- ▽ General Site Meetings

Details of the meetings will be recorded on an applicable form and as required attached to the **Site Report** or distributed to other parties.

TOOLBOX TALKS

At the initiation of ADCO or at the request of workers, topic-based Toolbox Meetings may be held on the project. The objectives of toolbox meetings are to:

- ▽ Review the safety status in the work areas.
- ▽ Discuss health and safety items which have not been resolved on a day-to-day basis.
- ▽ Discuss health and safety aspects of work planned for the next week.
- ▽ Discuss any proposed changes to work procedures.
- ▽ Discuss any topical or promotional health and safety items.

Details of the discussion topic will be recorded on the **Toolbox** form and attached to the **Site Report**.

Copies of the completed form will be placed on the site noticeboard for general site review.

NOTICE BOARDS

Notice boards located external to site offices and within amenity areas will be used by ADCO to communicate safety and operational information to site workers. Such information includes but is not limited to:

- ▽ Surveillance and air monitoring results
- ▽ Regulatory notices
- ▽ Notification of significant incidents / events
- ▽ Changes in procedures and management processes
- ▽ Reinforcing requirements for the management of risks / hazards
- ▽ Weather information
- ▽ Traffic movement requirements
- ▽ Emergency management requirements
- ▽ Health management (e.g. sun smart)
- ▽ Confirmation of meeting times and venues

NOTIFICATION

Details of consultative forums will be advised to site workers via;

- ▽ Site Induction
- ▽ Pre-Start Meetings
- ▽ Site Notice Boards

SUBCONTRACTOR MANAGEMENT

INFORMATION

ADCO's SHE standards are required to be adopted and maintained throughout the life of the project. Subcontract companies will be advised of the requirements through:

- ▽ Discussions during the tender stage.
- ▽ Discussion and agreement at the project award stage.
- ▽ Provision of the **Contractor S&E Requirements** book. (Also annexed to the Subcontract Agreement)

SWMS

Prior to the commencement of any work activity on a project, a subcontract company must provide safe work method statements (SWMS) to ADCO for review and approval. The review and approval process will be:

- ▽ Generally managed by the S&E Adviser in conjunction with the Site Manager.
- ▽ Documented using a **SWMS Review** form.

MONITORING

The monitoring of subcontractor site activity compliance to approved SWMS will be:

- ▽ Managed by the Site Manager and S&E Adviser through regular visual inspections.
- ▽ Documented (as selected) on the **Weekly Site Inspection** form.

NON-COMPLIANCE

Where a non-compliance is observed, the Site Manager or S&E Adviser will do any/all of the following:

- ▽ Stop the work activity.
- ▽ Cancel / suspended any active Authority to Work Permit.
- ▽ Issue an Improvement Notice / non-compliance via ACONEX.
- ▽ Issue a verbal instruction.

Non-compliances will be recorded on ACONEX.

ARCHIVING

Subcontractor supplied documentation will be archived for a period no less than 24 months after project completion.

RISK MANAGEMENT

IDENTIFICATION

Design

Where ADCO has responsibility for the design of the building / components of the building, the Design Manager will co-ordinate the compilation of a **Safety in Design (SID) Register**.

The Register will be completed with input from, but not limited to: Consultants and nominated ADCO personnel.

Changes to design during the design phase, which have the potential to impact on the safety of persons or the environment will be risk assessed including the determination of control measures.

Tender

Where ADCO does not have responsibility for the design, a review of the buildability of the design may be completed by the Project Manager / Design Manager.

Project preparation

Prior to commencement of the project, the Project Manager is required to develop the Project Management Plan, Risk Registers and any other supporting Plans.

An assessment of project operating conditions will be made by completing the **Project Review (Part A) – Commencement** form in consultation with the SHEQ Manager.

Project construction

During project construction, risks / hazards will be assessed and managed through, but not limited to:

- ▽ Site daily pre-start meetings.
- ▽ Pre-start meetings with individual trade contractors.
- ▽ Authority to Work Permits (ATWP) for high risk work activities.

CONSIDERATIONS

The identification of risks or hazards in the workplace will consider:

- ▽ Situations / events that have the potential to give rise to injury, illness or environmental issues.
- ▽ The nature of potential injury, illness or environmental concern relevant to the activity, product or service.
- ▽ Past incidents, audit reports, etc.

The identification process will consider but not be limited to:

- ▽ The way work is arranged, managed, completed.
- ▽ The fabrication, installation and commissioning and handling and disposal (of materials, plant and equipment).
- ▽ The purchasing of goods and services.
- ▽ The inspection, maintenance, testing, repair and replacement of plant and equipment.

REPORTING

ADCO encourages all site personnel to report safety and environmental risks and hazards.

Risk and hazards will be identified by the ADCO project team in, but not limited to the following:

- ▼ Completing regular visual site inspections.
- ▼ Completing the Weekly Site Inspection.
- ▼ Issuing permits to work.
- ▼ Conducting daily pre-start meetings.

Risks or hazards, which cannot be actioned by the identifying person, must be reported to the Site Manager or S&E Adviser. The methods for reporting risks and hazards, include:

- ▼ Verbal notification.
- ▼ Advice at any of the consultative forums (e.g. pre-start meeting, committee meeting, subcontractor meeting).
- ▼ Completion of the **Issues Notification** form.

ACTION

Where a Site Manager or S&E Adviser is notified of a risk or hazard the following must occur:

- ▼ The risk or hazard must be reviewed.
- ▼ The risk or hazard should be assessed, and appropriate controls developed according to the principles of the hierarchy of controls.

MONITORING

Worker compliance to approved risk controls will be monitored through:

- ▼ Daily visual inspections by the project team.
- ▼ Reviews of subcontractor SWMS.
- ▼ Completion of a **Weekly Site Inspection** by the project team.

NON-CONFORMANCES

Where a worker does not comply with a risk or behaviour control requirement, disciplinary action through the ADCO non-conformance system will be initiated.

Dependent on the severity of the non-compliance, workers are subject to a tiered warning system and may receive up to 3 warnings for engaging in the same non-complaint activity.

Written warnings in the form of an **Improvement Notice** are issued to a company, when an individual of that company has engaged in a non-compliant activity.

ADCO reserves the right to deny a person access to site - irrespective of the number of warnings required / issued - if the non-compliance could / has resulted in a dangerous occurrence. This determination will be made in consultation with Construction Manager, Project Manager, Site Manager and SHE Manager.

MONITORING

Daily and on-going inspections of work areas, Plant, work practices against the approved Permit conditions must be completed by the Site Manager / Forman and/or S&E Adviser.

Monitoring includes, but is not limited to:

- ▼ Reviews of work activities.
- ▼ Ensuring that competent personnel are completing the work activity.
- ▼ Confirmation that risk control measures listed on the permit are in place.



Observations must be recorded in the [Weekly Site Inspection](#).

NON-CONFORMANCE Where an inspection of the permit work area identifies that risk, controls are not in place, the Site Manager must suspend or cancel the Permit.

ENVIRONMENTAL RISK REGISTER

REFERENCE LEGISLATION

ENVIRONMENTAL

Acts and Regulations

Environment Protection and Biodiversity Conservation Act 1999
 Environmental Protection and Biodiversity Conservation Regulations 2000
 Protection of the Environmental Operations (POEO) Act 1997
 Protection of the Environmental Operations (Clean Air) Regulation 2002
 Protection of the Environmental Operations (Waste) Regulation 2005
 Protection of the Environmental Operations (General) Regulation 2009
 Contaminated Land Management Act 1997
 Waste Avoidance and Resource Recovery Act 2001
 Contaminated Land Management Regulation 2008

Legend

Federal legislation

State legislation

NSW	
Federal legislation	
Federal legislation	
State legislation	
State legislation	
State legislation	
State legislation	
State legislation	
State legislation	
State legislation	

CULTURAL HERITAGE

Acts

The Native Title Act 1993
 Aboriginal and Torres Strait Islander Heritage Protection Act 1984
 National Parks and Wildlife Amendment (Aboriginal Ownership) Act 1996
 Heritage Act 1977
 Aboriginal Land Rights Act 1983

Legend

Federal legislation

State legislation

NSW	
Federal legislation	
Federal legislation	
State legislation	
State legislation	
State legislation	

RISK ASSESSMENT FRAMEWORK

SIGNIFICANT RISK

In accordance with the Standard, impacts resulting in a residual risk rating of (E) Extreme or (H) High will be defined as "Significant".

Communicating impacts falling into these categories will be undertaken through the following but not limited to; induction process, contractor meeting and client meetings.

HIERARCHY OF CONTROL

General

ELIMINATE

Can the risk or hazard be eliminated or removed?

SUBSTITUTE

Can the activity or product be substituted by something else (a substance or a process) that has less potential to cause injury or damage?

ENGINEER or ISOLATE

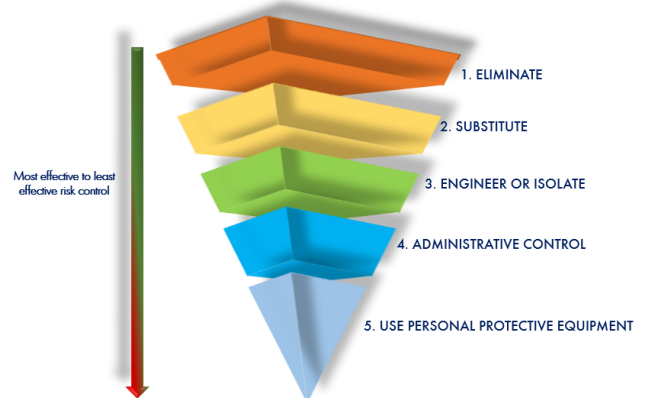
Can a structural change to the work environment or work process be made to interrupt the path between the worker and the risk?

ADMIN CONTROL

Will an administrative change (i.e. by upgrading training, changing rosters) reduce the risk?

PPE (PERSONAL PROTECTIVE EQUIPMENT)

Can personal protective equipment (gloves, goggles, etc.) or clothing be worn to safe-guard against the hazard?



Risk Matrix

			CONSEQUENCE (C) - The outcome or impact of an event			
			1	2	3	4
(P) PROBABILITY - A measure of the chance of the occurrence	SAFETY		Permanent disability or death.	Serious bodily injury.	Hospitalisation resulting in LTI.	External medical treatment. No LTI.
		ENVIRONMENT	Toxic release off site with detrimental environmental impact	Offsite release contained with outside treatment/assistance. Minimal detrimental environmental impact.	On site release contained with outside treatment/assistance. No detrimental environmental impact.	On site release contained. No environmental impact
	Expected to occur in most circumstances.	ALMOST CERTAIN	E	E	H	M
	Probably occur at some time.	LIKELY	E	H	M	M
	May occur at some time.	POSSIBLE	H	H	M	L
	Not likely to occur in normal circumstances.	UNLIKELY	H	M	M	L

ACTION TIME FRAME			
EXTREME (E)	HIGH (H)	MEDIUM (M)	LOW (L)
IMMEDIATE action required	Action IN THE SAME SHIFT.	Action in < 48 HOURS.	Action AS AGREED.
Involvement and approval of Construction Manager / SHE Manager National SHEQ Manager required.	Construction Manager / SHE Manager to be advised of actions to be taken, prior to continuation.	Site Manager and S&E Adviser to review and agree on actions to be taken, prior to continuation.	SWMS review by contractor supervisor. Observation by ADCO.

PROJECT ASPECTS AND IMPACTS

ASPECT	Establishment, Use of Project Offices			
Project Description	Project operations Use of consumables - paper, electricity etc.			
SHE System references	Procedure: Risk Management	Procedure: Environmental Management		

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
M	▽ Increase in environmental impact and associated cost with disposal / recycling	▽ Where possible; use electronic devices for communications. ▽ Where possible; use recycled paper. ▽ Lights only to be turned on as required. ▽ Use long life globes (low voltage where possible) ▽ Switch off all lights on departure from office ▽ Where external lighting has been installed ensure the Design and Construct Subcontractor has issued a certificate stating compliance with AS4282-1997 ▽ Doors to be closed when cooling / heating is used. ▽ General waste to be disposed of in appropriate designated waste facilities. ▽ Use environmentally friendly cleaning products for amenities cleaning.	L

ASPECT	Vegetation Clearing and Revegetation			
Project Description	Clearing of vegetation (trees / shrubs) in accordance with planning / building approvals			
SHE System references	Procedure: Risk Management	Procedure: Environmental Management		

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
H	▽ Decrease in air and water quality. ▽ Build-up of sediment in water systems from land run off.	Clearing ▽ Clearing methods to follow approved (DA or other) procedures. ▽ Trees to be retained will be identified to ensure they are not inadvertently damaged. ▽ Stockpile excavated material into areas which have no impact on the eco system.	M

		<ul style="list-style-type: none"> ▽ Stockpiles to be covered or vegetated (where practicable) to improve soil stability. ▽ Appropriate control measures to be installed to ensure containment of disturbed areas and stockpiles. ▽ Dust mitigation to be implemented as required. 	
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ASPECT	Erosion and Sediment Management		
Project Description	Construction works potentially impacting on the surrounding environment through the erosion of ground.		
SHE System references	Procedure: Risk Management	Procedure: Environmental Management	General Requirements: Erosion and Sediment Management

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
H	<ul style="list-style-type: none"> ▽ Dust emissions degrade air quality. ▽ Sediment impacting on the external environment / public areas. ▽ Extreme weather event 	<p>General</p> <ul style="list-style-type: none"> ▽ Sediment Erosion controls to be implemented in accordance with approved SEP. ▽ Complete inspections of stockpiles, excavated areas and control methods for erosion and sediment management. ▽ Wheel wash / rumble grid etc. to be implemented to minimize tracking of soil into public areas. ▽ Erosion and sedimentation controls to be monitored. ▽ Erosion and sedimentation controls to be immediately inspected following a severe weather event. ▽ For all extreme weather event, additional Erosion and sediment controls should be installed and prior to forecast event. 	M

ASPECT	Fauna and Flora Management		
Project Description	Impact on nearby flora and fauna		
SHE System references	Procedure: Risk Management	Procedure: Environmental Management	General Requirements: Fauna and Flora Management

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
M	<ul style="list-style-type: none"> ▽ Loss, damage or harm to local and/or protected flora and fauna. 	<ul style="list-style-type: none"> ▽ Manage in accordance with DA requirements. ▽ Implement approved protection controls around flora to be preserved or fauna to be protected. ▽ Daily inspections of control measures to be conducted. 	L

ASPECT	Cultural Heritage		
Project Description	Archaeological artefacts Unexpected finds.		
SHE System references	Procedure: Environmental Management	General Requirements: Cultural Heritage Management	Cultural Heritage: Unexpected Finds Procedure

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
M	▽ Construction activities damage or destroy archaeological artefacts or heritage listed items.	▽ Prior to the commencement of the project, determine heritage / cultural significance of the project site. ▽ Where required, ADCO to engage a competent person to develop an applicable management plan. ▽ Report all finds to Site Management immediately.	L

ASPECT	Management of Air Quality		
Project Description	Dust generation Plant emissions		
SHE System references	Procedure: Risk Management	Procedure: Environmental Management	General Requirements: Air and Water quality management

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
H	▽ Discomfort to site personnel and neighbouring properties or persons.	▽ Monitor and manage the incidence of dust from construction activities / vehicles. ▽ Minimise dust generating construction activities during periods of high winds or adverse weather. ▽ Ensure that contract personnel adopt work methods to include dust minimisation practices. ▽ Apply water sprays as required during periods of dry weather, strong winds or dust generating activities. ▽ As required, implement regular sweeping. ▽ Mobile plant on site to be in good working order.	L

ASPECT	Management of Noise and Vibration		
Project Description	Noise and Vibration attributed to building and construction activities		
SHE System references	Procedure: Risk Management	Procedure: Environmental Management	General Requirements: Noise and Vibration management

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
H	<ul style="list-style-type: none"> ▽ Noise ▽ Discomfort to site personnel and adjoining neighbours and properties 	<ul style="list-style-type: none"> ▽ Noisy works to be pre- planned and assessed for DB rating and controls to be implemented. ▽ Review equipment on an ongoing basis to ensure condition and suitability for use. ▽ Plant, equipment and machinery to be fitted with noise reducing attachments where possible. (i.e. mufflers). ▽ Plant, equipment and machinery to be maintained in accordance with manufacturers specifications. ▽ Works to be completed during approved work hours. ▽ As applicable: install noise and vibration monitors to measure and record discomfort levels. ▽ Investigate noise complaints. 	M

ASPECT	Waste Management		
Project Description	Waste generated from building and construction activities		
SHE System references	Procedure: Risk Management	Procedure: Environmental Management	General Requirements: Waste Management

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
M	<ul style="list-style-type: none"> ▽ Environmental pollution into waterways, roads etc ▽ Contamination of ground soil, sewerage systems and storm water systems. ▽ Health hazards to site personnel and other non-construction personnel. ▽ Increased housekeeping and waste removal requirements and costs. ▽ Dewatering of excess water offsite after an extreme weather event 	<p>General</p> <ul style="list-style-type: none"> ▽ Provide waste bins to accommodate construction waste (i.e. concrete, paint, plaster). ▽ Where practicable, install waste bins for separate waste streams. / ▽ Ensure that regulated or contaminated waste is disposed of licensed disposal locations by licensed contractors. ▽ All materials, packaging etc is to be made secure at all times and to be disposed of using allocated sealed waste bins. ▽ No debris to be dropped/left outside of the waste skips. ▽ Waste bins to be located in a suitable location with minimal impact from environmental conditions i.e. wind. ▽ Include waste minimisation requirements in Subcontract Agreements, trade requirements and during trade tendering. ▽ Daily inspections of control measures to be conducted and immediately rectified as required. ▽ Environmental management requirements will be included in the Site Induction. 	L

		<ul style="list-style-type: none"> ▽ Provide sediment pond to capture all sediment from run off ▽ Dewatering excessive water offsite in accordance to the Blue Book procedures. Notify or apply for all require permits from local authorities. ▽ 	
M	<ul style="list-style-type: none"> ▽ Discomfort to site personnel and neighbouring properties or persons ▽ Health hazards to site personnel and other non-construction personnel. 	Odour management <ul style="list-style-type: none"> ▽ Waste bins to be kept covered preventing odour and secured at all times. ▽ Work areas are to be kept free of rubbish and other debris at all times. ▽ No food waste to be deposited in external construction waste skips. (i.e. to prevent bird access) 	L

ASPECT	Management of Substances			
Project Description	Use of Hazardous Substances and Dangerous Goods			
SHE System references	Procedure: Risk Management	Procedure: Substances Management	General Requirements: Spills Management	Procedure: Environmental Management

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
H	<ul style="list-style-type: none"> ▽ Contamination of ground, air or water from spillage or leakage. 	<ul style="list-style-type: none"> ▽ Appropriate storage facilities used. ▽ Spill management provided. ▽ Containers correctly labelled. ▽ Plant refuelling completed in approved locations. ▽ Manage spills in a manner which inhibits further contamination. ▽ Ensure substances use/storage has been included in worker SWMS. ▽ Ensure that site personnel comply with the conditions of use of such substances. ▽ Daily inspections of control measures to be conducted and immediately rectified as required. ▽ Environmental management requirements will be included in the Site Induction. 	M

ASPECT	Haulage		
Project Description	Access and Egress of vehicles throughout project delivery.		
SHE System references	Procedure: Risk Management	Procedure: Environmental Management	General Requirements: Air and Water quality management

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
M	<ul style="list-style-type: none"> ▽ Debris on roadways ▽ Exhaust emissions ▽ Noise generation 	<p>General</p> <ul style="list-style-type: none"> ▽ Install control measures (i.e. water spraying, rumble grids, road sweepers) which limit the opportunity for dust, noise or spillage to occur. ▽ Loads to be covered prior to leaving the site. 	L
H	<ul style="list-style-type: none"> ▽ Impact on other road users ▽ On site congestion, hazards or incidents due to uncontrolled haulage routes 	<p>Traffic Management / Movement</p> <ul style="list-style-type: none"> ▽ Comply with any approved Traffic Management Plan for external site traffic management. ▽ If required under planning, inform local community about the timing and scale of construction traffic impacts. ▽ Where practicable, co-ordinate deliveries and site activities with out of peak traffic hours. ▽ Monitor traffic flows 	M

ASPECT	Foreign Object Damage (FOD)			
Project Description	Not applicable			
SHE System references				

IR	Impacts (consequences)	Risk Mitigation (controls)	RR
	▽	▽	

ASPECT	Management of Water Quality			
Project Description	Not applicable (no in ground water or existing lakes have been identified on this project)			
SHE System references				

IR	Impacts (consequences)	Risk Mitigation (controls)	RR

Annexure

- Annexure – Unexpected finding – Contamination
- Annexure – Environmental Impact Statement_Schofields PS
- Annexure – Heritage Management and Findings
- Annexure – General Requirements - Fauna and Flora Protection
- Annexure – In Ground & Stormwater Management process
- Annexure – Contaminants Management
- Annexure – Erosion & Sediment Management Policy