MANTEENA

Note to Project Managers: please review this document prior to release, pay specific attention to any text in red and customise for your project. Do not delete black or blue text or headings without checking with Safety or senior management – there's a reason for all the sections. Delete this note and any directions or comments prior to release.

Particular importance:

* Section 2
* Section 8.1.1
* update Table of Contents
* any text in blue is new/updated since last release of this document. Take note, then change to black.

If you have any suggestions for improvement of this document, send them to Anthony Hughes

To change picture on cover page:

1. Right click on blue, "send to back"
2. Right click on image, "change image"
3. Right click on image, "send to back"

INTEGRATED MANAGEMENT PLAN

FOR

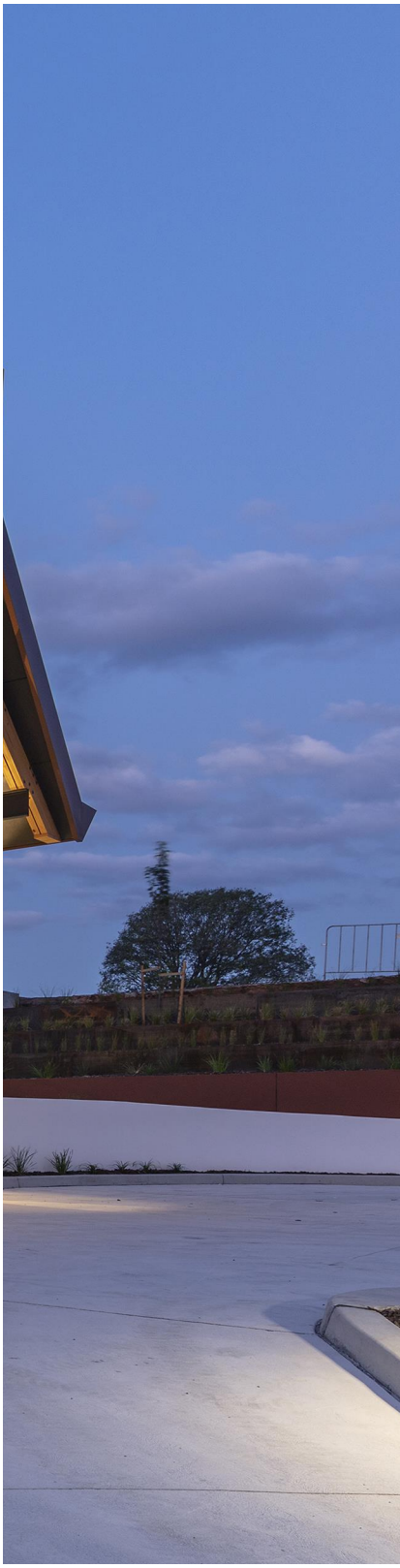
Project Name

ON BEHALF OF

Client Name

[Publish Date]

Commercial-in-confidence



MANTEENA

Contents

MANTEENA

1. PROJECT IMP AMENDMENTS

DATE OF AMENDMENT	SUMMARY OF AMENDMENT	SIGNATURE OF PM APPROVING AMENDMENT
Date: Click or tap to enter a date.	Draft IMP for Project Start-up	
Date: Click or tap to enter a date.		
Date: Click or tap to enter a date.		

2. THE PROJECT

This Integrated Management Plan (the Plan or IMP) is produced in accordance with the requirements of Manteena's Integrated Management System which in turn is compliant with the following Legislation, Regulations, Australian and International Standards:

- Work Health and Safety ACT (2011)
- Work Health and Safety Regulations (2011)
- ISO 9001 - Quality Management Standard
- ISO 31000 - Risk Management
- ISO 45001 - Health & Safety Management Standard
- ISO 14001 - Environmental Management Standard

A review of the implementation and contents of the IMP and associated Project Hazard Risk Assessment and Register shall be carried out at the draft stage of the plan and then four weeks after site establishment. The review shall be conducted by the Health Safety Environment Quality Manager or Safety Manager in accordance with planned auditing arrangements. Should the review result in changes to the IMP, the project specific version status shall be amended and the IMP, as amended, shall be redistributed to all relevant parties.

Prepared by:

Project Director		Date: Click or tap to enter a date.

Approved by:

Health Safety Quality Environment Manager		Date: Click or tap to enter a date.

Client Approval Required: ☐ Yes ☐ No

Submitted for Approval		Date: Click or tap to enter a date.
Approved by:		Date: Click or tap to enter a date.

2.1 Scope of Works

<< DELETE - PM: Insert text to clearly identify the scope of works for the project >>

2.1.1 Site Description

<<PM to describe the site – where applicable. If not please delete this section:>>.

2.1.2 Objectives

Time: Compliance with the contracted program <<PM to insert dates>>. Break up dates by stages.
Cost: Compliance with contracted budget
Quality: Compliance with specifications, specified materials, witness and hold points, build and finish quality as identified in the contract. PM to identify any specific components or aspects as identified within the contract or scope.
Environment: Compliance with the Environmental Management Plan, project specific and the overall Environmental Protection Agreement (with the ACT Government or other jurisdiction as identified).

Safety: Provision and maintenance of a safe workplace that complies with all relevant legislation to the performed activities.

2.1.3 Scope Overview

<< DELETE - PM: Insert text to clearly identify the scope objectives for the project >>

2.1.4 Background to the Project

<< DELETE - PM: Insert text to clearly identify the background to the project where applicable or delete this heading>>

2.2 Integrated Systems Overview

All Manteena site personnel have an important role in effectively implementing the Integrated Management System (IMS) on site; and at management level, to ensure the IMS meets all its stated objectives. As such, this IMP is adapted to specifically meet the needs of the Project and is written to address [Company]'s legislative responsibilities.

- NOTE: the WHS systems in this plan are designed to comply with:
- The Office of the Federal Safety Commissioners accreditation scheme (OFSC).
- The Work Health and Safety Act and Regulations (2011) ACT and NSW
- Model Work Health and Safety Act and Regulations (2011)
- The ACT Government Active Certification Program (where applicable)
- The ACT Government Secure Local Jobs Code 2019 (where applicable)

All Contractors engaged by Manteena shall take all reasonable and practicable steps to ensure their systems, including documentation, safe methods of work, worker consultation, induction, plant and equipment (including risk assessment and certification) training and other safety and compliance systems meet and are maintained to continuously comply with Manteena's requirements and by default those of the schemes identified above.

2.3 IMP Acknowledgement

The following persons acknowledge they have read, understood and are committed to fulfilling their specific roles and responsibilities for the implementation and maintenance of the Plan on the identified project so far as is reasonably practical.

2.4 Project Key Personnel

NAME	POSITION	SIGNATURE	DATE
	Client Representative		Click or tap to enter a date.
	Project Director		Click or tap to enter a date.
	Choose an item.		Click or tap to enter a date.
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	Choose an item.		Click or tap to enter a date.
	Choose an item.		Click or tap to enter a date.

2.5 Emergency Contact Phone Numbers

CONTACT	CONTACT DETAILS
Ambulance Fire Brigade Police	Phone: 000 Mobile: 112
Nearest Hospital Refer to marked up Map showing route from site to hospital.	<<DELETE – Delete one or amend as required>> North Canberra Hospital Address: 40 Mary Potter Circuit, Bruce ACT 2617 Phone: (02) 6201 6111 Canberra Hospital Address: Yamba Drive, Garran ACT 2605 Phone: (02) 6244 2222
Choose an item.	Name: Phone:
Choose an item.	Name: Phone:
Choose an item.	Name: Phone:
Choose an item.	Name: Phone:
Choose an item.	Name: Phone:
[Company] – Head Office	02 6280 7033
Access Canberra (aka WorkSafe ACT)	13 22 81
Environment ACT or EPA After Hours Emergency Contact	02 6207 9777 13 22 81
Poisons Information	13 11 26
Electricity – ACT	13 10 93
Natural Gas – ACT	13 19 09
Water – ACT	13 11 93
State Emergency Services – ACT	13 25 00
ACT Police Attendance	131 444

2.6 Definitions

MANTEENA

The default term used in this manual to identify the contracted entity for the project. Manteena's legal entities include Manteena Commercial Pty Ltd and Manteena Security (Aust) Pty Ltd. On this project the contract is with Manteena Commercial Pty Ltd / Manteena Security (Aust) Pty Ltd. [delete as applicable]

CLIENT

- Click or tap here to enter text.

PROJECT

Works or undertaking for which Manteena is contracted to undertake.

MANTEENA DIRECTOR

That person holding a position as a Director of a defined Manteena entity.

HEALTH SAFETY ENVIRONMENTAL QUALITY MANAGER (HSEQ)

That person appointed by Manteena and holding the position of Health Safety Quality Environment Manager.

PROJECT MANAGER (PM)

That person appointed by Manteena and holding the position of Project Manager for the project.

TECHNICAL MANAGER

That person appointed by Manteena and holding the position of Technical Manager for the project.

SAFETY ADVISOR

That person appointed by Manteena and holding the position of Safety Advisor for the project.

SITE SUPERVISOR (A.K.A FOREMAN)

That person in the employ of either Manteena or a Trade Contractor or Sub-contractor to supervise the works of either a Trade Contractor or a Sub-contractor on the project.

TRADE CONTRACTOR

That Contractor directly engaged to undertake specific works or supply specific goods on the project.

SUB-CONTRACTOR

That Contractor directly engaged by Manteena to undertake specific works or supply specific goods on the project.

SITE HEALTH AND SAFETY REPRESENTATIVE

A person nominated by a work group to represent workers in their work group in relation to health and safety matters at work.

WHS LEGISLATION OR WHS

Refers to Work Health and Safety Act 2011 and Work Health and Safety Legislation 2011 (as amended).

HEAVY VEHICLE NATIONAL LAW (HVNL)

The Heavy Vehicle National Law (HVNL) establishes the National Heavy Vehicle Regulator (the Regulator, NHVR) and a single national system of laws for heavy vehicles (HV) over 4.5 tonnes Gross Vehicle Mass (GVM). All states and territories, except the Northern Territory, have adopted the national law.

CHAIN OF RESPONSIBILITY

Chain of Responsibility (CoR) is a concept that places legal obligations on parties in the transport supply chain. It was established in the early 2000s to ensure accountability, driver fatigue management, speed, overloading and load restraint issues were the legal responsibility of every entity, not just the driver.

OFFICE OF THE FEDERAL SAFETY COMMISSIONER (OFSC)

The functions of the FSC are described in Section 30 of the Building and Construction Industry Improvement Act 2005 and include:

- Promoting Work Health and Safety (WHS) in relation to building work;
- Administering the Australian Government Building and Construction WHS Accreditation Scheme (the Scheme);
- Promoting the benefits of the Scheme; and
- Disseminating information about the Scheme

PERSON CONDUCTING A BUSINESS OR UNDERTAKING (PCBU)

For the purposes of the Work Health and Safety Act 2011, a person conducts a business or undertaking:

a) whether the person conducts the business or undertaking alone or with others; and
b) Whether or not the business or undertaking is conducted for profit or gain.

A business or undertaking conducted by a person includes a business or undertaking conducted by a partnership or an unincorporated association.
If a business or undertaking is conducted by a partnership (other than an incorporated partnership), a reference in the Work Health and Safety Act 2011 to a person conducting the business or undertaking is to be read as a reference to each partner in the partnership.

OFFICER/S

An officer is a broad term that applies to people who can make decisions that significantly affect a business or undertaking.
An officer can be:

- A Director or Secretary of a corporation
- Any person who can make, or participate in making, decisions that affect the whole, or a substantial part, of the business of the corporation
- A person who has the capacity to significantly affect the corporation's financial standing
- A receiver, or receiver and manager, of the property of the corporation
- An Administrator of a corporation
- An Administrator of a deed of company arrangement executed by a corporation
- A Liquidator of a corporation
- A trustee or other person administering a compromise or arrangement made between the corporation and someone else.

WORKER

A person is a worker if the person carries out work in any capacity for a Person Conducting a Business or Undertaking (PCBU), including work as:

- An employee; or
- A Contractor or Sub-contractor; or

- An employee of a Contractor or Sub-contractor; or
- An employee of a labour hire company who is assigned to work in the person's business or undertaking; or
- An outworker; or
- An apprentice or trainee; or
- A student gaining work experience; or
- A volunteer.

The Person Conducting the Business or Undertaking is also a worker if the person is an individual who carries out work in that business or undertaking.

HIGH-RISK CONSTRUCTION WORK

High-risk construction work is defined at length in section High-Risk Construction Work of this document.

SIGN ON SITE

A web-based site management platform / App created to aid in safety on construction sites. For more information refer to: http://signonsite.com.au

COMPETENT PERSON

Unless otherwise specifically defined in legislation, a relevant Code of Practice, Australian Standard or Industry Standard, a competent person is one who has acquired – through training, qualification or experience – the knowledge and skills to carry out the task (*ACT WHS Regulations 2011)*.

MOBILE PLANT

Also referred to as powered mobile plant. Means plant that is provided with some form of self-propulsion that is ordinarily under the direct control of an operator. (Definition from *ACT WHS Regulations 2011)*.

2.7 Project Staging and Objectives

2.7.1 Staging of the Project

<<DELETE - PM to insert stages where applicable>>

2.7.2 Objectives of the Project

<<DELETE - PM to insert Text to clearly describe the objectives of the project>>

2.7.3 Other Key Elements of the Project include

<<DELETE - PM to insert dot points to clearly describe the key elements of the project>>

2.7.4 Work Health and Safety on the Project

<<DELETE - In this section, Project Managers are to identify any safety specific requirements to be applied to the project as defined in the contract, special conditions of contract or specific compliance processes that are in addition to Manteena's established compliance models>>

2.7.5 High Risk Construction Works

<<DELETE - In this section, Project Managers are to identify the High-risk construction activities reasonably expected to be encountered during the course of the project>>

2.7.6 Quality

<<DELETE - PM to insert project specific requirements>>

2.7.7 Environmental

<<DELETE - PM to insert project specific requirements>>

2.8 Program

<< PM to identify within which attachment the program is located <Insert section>>>

2.9 Design, Documentation and Tendering Processes

For all works packages of the Project the design, documentation and tendering process will be completed before any construction works commence. The Design, Documentation and Tendering Phases vary for each works package with commencement and completion dates being reflected in the program.

2.10 Construction Works Stage

The Program addresses the main construction activities for the various elements of the works.
The program's status will be evaluated monthly and will form part of the monthly report tabled by Manteena via a Project Report to the Project Control Group (PCG),
The design and procurement phase is scheduled for:
<<DELETE – PM to enter details below>>

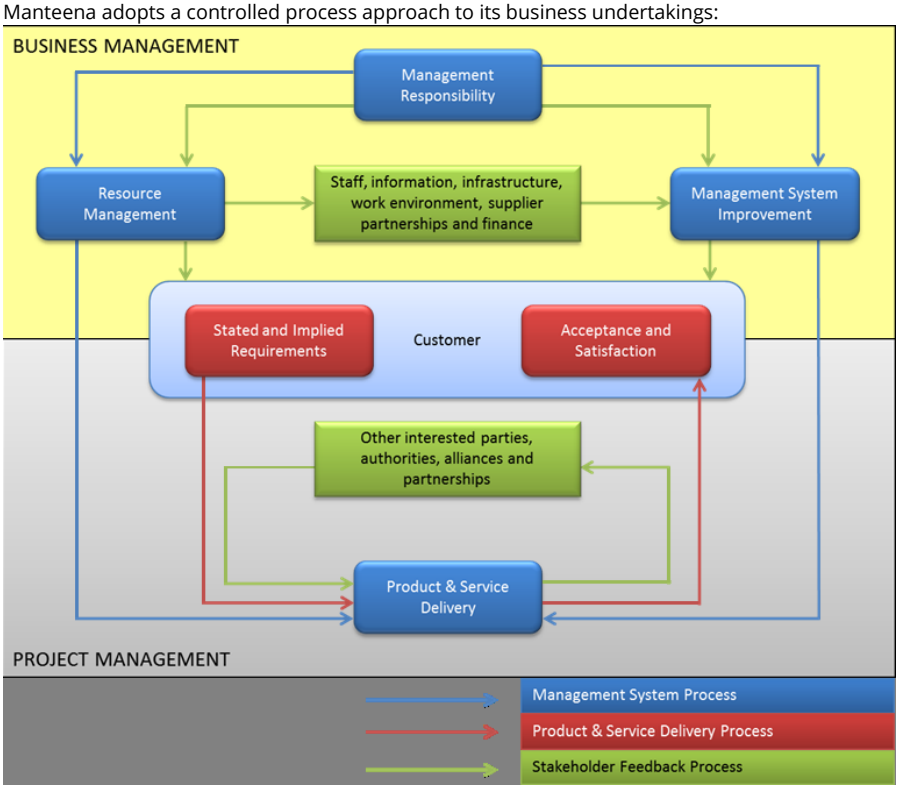
- Enter number of days/weeks/months.
- The Construction Phase is scheduled to commence (from possession of site) on: Click or tap to enter a date..

It should be noted that the program dates will be extended by any delays in documentation associated with budget resolution.

3. INTEGRATED MANAGEMENT SYSTEM

3.1 Corporate Overview

[Company] is a Canberra based company specialising in the management and construction of building projects for public and private sector clients - such as ACT and federal government instrumentalities, educational institutions and corporate clients.
Manteena's focus is upon its clients - where budgetary and programming management has the objective of achieving quality projects, on time and within budget along with protecting the Environment and providing Safety in the workplace.
Manteena adopts a controlled process approach to its business undertakings:



3.2 Integrated Management System Overview

Manteena has implemented an integrated management system which conforms with the quality, Risk, environmental and Work Health and Safety legislation and Standards, ISO 9001, ISO 31000, ISO 14001 and ISO 45001, respectively.

The inputs to this plan are primarily those of the:

- Work, Health and Safety Act 2011
- International standards noted above, and
- Office of Federal Safety Commissioners WHS accreditation scheme.

Corporate Level

- The system is planned at the corporate level through the development of documentation in line with the above Legislation and Standards as outlined below, implemented through training, maintained through the formal internal audit program and improved through scheduled reviews.

Operational Level

- At the project level, planning for quality, environmental and Work Health & Safety (WHS) management is documented in Project Plans which are developed specifically for each contract.

Documents which underpin the Company's management system include:

- Manteena's Web Based Intranet (SharePoint):
- The Intranet is used as a functional tool to house, reference, operate and record all systems functions (save for a small number of bespoke proprietary Document management and transmittal and tendering systems). The sections within the intranet describe the System and states Manteena's policies towards meeting the Client's stated and implied needs, meeting statutory requirements and conformance to Standards.
- Integrated Project Quality, Environmental, Safety and Risk Management Plan (IMP):

The Integrated Management Plan (IMP) is developed for specific projects to achieve the client's needs and statutory requirements.

- Procedures:
- Manteena Procedures describe in detail how, where, when and by whom, activities are to be performed.
- Forms - (Quality References):
- Documents used as functional tools to underpin the stated requirements of procedures, Manteena's Checklists and Forms (prefixed QF and SF respectively) have been developed to largely specify how tasks shall be performed and are referenced in procedures. The completed form or checklist then serves as a record.
- Records:
- Verify the implementation of procedures and provide evidence of compliance.

3.3 Project Delivery Overview

Manteena is involved in a range of project delivery systems, as outlined below:

LUMP SUM CONTRACTING

This is the traditional contractual arrangement where the design is completed prior to Manteena submitting a tender to clients for the construction process.

PROJECT MANAGEMENT

Consultants are engaged by Manteena on behalf of the client to manage the design. On approval of the design, Manteena undertakes management and construction of the project or controls tender and construction by a Contractor (i.e. Manteena acts as Project Director).

CONSTRUCTION MANAGEMENT

Similar to project management; the difference primarily being that design consultants are appointed by the client and either novated by Manteena or answer directly to the client's Senior Project Manager. Manteena manages construction on behalf of the client.

WORKS MANAGEMENT

Manteena contracts to undertake the design and construction of a portfolio of projects for clients who need a quick response on smaller, complicated projects.

DESIGN AND CONSTRUCT

Manteena manages the design and construction of a project from receipt of client's brief to handover of the completed project. There are several variations to this type of delivery system which evolve from adjustments made to meet each client's requirements.

4. WORK HEALTH AND SAFETY PLAN

4.1 Work Health Safety and Rehabilitation Policy

The management team at Manteena is committed to maintaining a safe and healthy environment for all people in the workplace whether managers, supervisors, direct employees, consultants, superintendents or visitors. It is the responsibility of everyone in the organisation to maintain workplace health and safety.
Manteena has established an integrated Quality, Risk, Environmental and Safety Management System based on the ISO 9001, ISO 31000, ISO 14001 and ISO 45001 - standards respectively. The Company is committed to meeting the requirements of these Standards and to comply with the relevant Work Health and Safety Act or legislation, prevailing in the jurisdiction in which projects are undertaken.
Maintaining workplace safety and achieving continual improvement is actioned through providing appropriate training to personnel and through identifying hazards, managing risks, and by setting and attaining WHS objectives and targets as outlined in project safety plans.
Manteena's management team is committed to a process of consultation and communication throughout the organisation and to maintaining the Company's rehabilitation program.

(Note: a signed copy of this policy is maintained by Manteena)

4.2 Manteena - Commitment to Safety

Your health and safety are of great importance to Manteena. It is our aim, so far as is reasonably practical, to eliminate all those conditions and work practices that could lead to personal injury and/or illness. We want to create an environment where safe work practices come naturally. Our safety systems will help us to achieve this aim by pursuing the following objectives:

- Focus on our goal to identify and eliminate all workplace hazards and thereby prevent related accidents and incidents.
- Establish safety as the number one priority in all company activities.
- Implement and nurture a culture of safety in which each of us bears both a personal and collective responsibility for safe work practices in whatever we do.
- Comply at all times with all applicable laws, legislation, regulations, Codes of Practice and standards that reflect the Company's commitment to work health & safety.
- Involve all Workers, Contractors and Sub-contractors in the implementation and continuous improvement of WHS performance.
- Involve all clients and Contractors in sound communication and consultation processes.
- The reporting of all incidents and accidents. Ensure investigations of incidents are aimed at the implementation of controls that shall be sufficient to remove the likelihood of recurrence.
- Record all incidents.

Associated Documentation:

- SP-904 Incident Investigation Procedure
- SP-902 Rehabilitation Procedure

- SP-903 Health Surveillance Procedure
- SP-905 Asbestos Management Procedure
- SF-054 Incident Report
- SP-901 Hazard and Risk Management Procedure

4.3 Project Documents and Records

During Project commencement, The Project Manager shall identify those checklists, forms and records that are applicable to the Project and will form part of the **Project Record**. This plan lists the main attachments for this document. Additional checklists and forms may be developed if deemed necessary by the Project Manager; this **must** be in consultation with the Health Safety Environment and Quality Manager, project team and Safety Advisor and those persons involved in performing the task.
Amendment of controlled Manteena systems documentation is not permissible without the approval of the amendment by the Health Safety Environment and Quality Manager.
Updating, issuing, maintenance and archiving of the Project programs, plans, drawings, project related documents and project records shall be managed under Manteena's **Document Control Procedure**.
Associated Documentation:

- QP-901 Document Control Procedure

5. RISK MANAGEMENT

5.1 Hazard Identification and Risk Management

5.1.1 General

Hazard Identification and the control of risks will be undertaken as a continuous process throughout the duration of the project. The project specific **Project Hazard Risk Assessment and Register (PHRAAR)** for this project is in section 15 as **Attachment 1**. As part of Manteena's commitment to WHS communication and consultation, all Contractors / Sub-contractors are provided with a copy of this plan and relevant attachments including the **PHRAAR** by the Project Manager at the tender stage or at engagement so as to ensure all identified hazards are communicated and may be reflected in the Contractor's safe methods of work documentation.

Manteena's HR Manager shall ensure the relevant project staff have undertaken training either internal or external with regard to the HIRAC process. Records of training shall be maintained in Manteena's corporate system. Contractors shall be required to ensure their staff have received training with regard to HIRAC and shall provide evidence of same upon request from Manteena's Project Manager.
At the beginning of the project (and when significant changes occur to the scope), the **Project Hazard Checklist** is completed to identify key hazards to be addressed in the **PHRAAR** and to identify any gaps in worker training and health surveillance. The project manager and safety advisor should complete this checklist at project award and review it at pre-commencement and when significant changes occur to the project design or scope. When a health hazard is identified, Manteena must engage a competent subject matter specialist (e.g. occupational hygienist) to conduct a project based assessment.

Manteena, Contractors and Sub-contractors will establish safe methods of work by:

- Identifying hazards associated with the performance of the tasks for which they have been engaged.
- Assessment of Risks:
    - Assessing the Likelihood of the Occurrence;
    - Assessing the Consequence to Work Health and Safety if the occurrence took place.
- Control of the risks through the development and documentation of safe work methods and through the implementation of appropriate control measures in accordance with the Hierarchy of Controls.

The Hierarchy of Controls:

- Eliminate
- Substitute
- Isolate
- Engineer
- Administration
- Personal Protective Equipment (PPE)

Review or implementation of:

- Documented safe methods of work
- Hazard Identification (records)
- This project specific IMP
- Site Safety Meetings and other Worker Consultation process
- Site Safety Checklists
- Audits
- Incident reporting and corrective actions

These processes are designed to ensure compliance with WHS Legislation, Regulation and Industry Codes of Practice and the provision of a safe place of work.
Contractors and where applicable Manteena's Construction Workers, shall submit for review, documented safe methods of work (usually in the form of **Work Method Statements**) to Manteena that comply with the WHS Legislation, regulations, Industry Codes of Practice, Australian Standards, OFSC, Manteena requirements and Client requirements (applicable to the project and or the jurisdiction within which the project is being conducted), and to the satisfaction of Manteena's requirements.

> **Note:** Contractors shall not be permitted to commence any works on any Manteena site unless their safe methods of work (including hazard identification and management), insurance and workplace relations / compliance documents have been reviewed by Manteena.

Copies of the **Daily Task Hazards / Risk Assessment** shall be posted on the site notice board or on SignOnSite in the daily briefing section. When required, contractors shall perform a risk assessment of the high-risk activities they plan to undertake, discuss them with their workers (toolbox talk or similar) and have them ready to submit to Manteena on request as evidence that identified hazards and control measures associated with those identified high-risk activities are being discussed within the work teams, are being implemented and that safety consultation is occurring.

A **risk matrix** (example below) may be used to calculate the initial and residual risk levels for identified hazards and the assumed effectiveness of proposed control measures.

Risk Matrix	HOW LIKELY IS IT TO OCCUR?			
	Very Likely Could happen at any time	**Likely** Could happen some time	**Unlikely** Could happen but very rarely	**Very Unlikely** Could happen, but probably never will
How severely could it hurt someone or how ill could it make someone? — **or cause permanent isability or ill health**	1	2	4	7
Long term illness or serious injury	3	5	8	11
Medical attention and several days off work	6	9	12	14
First Aid required	10	13	15	16

The involvement of other relevant stakeholders such as the client, public and others in the implementation of a HIRAC process is managed via the Site Setup checklist on MySite. The project team

will use this checklist to identify site specific requirements including inductions, hazardous material surveys and reports, emergency arrangements, access requirements including personnel access and parking and permits. A project-specific agreed communication/consultation process will be organised via this checklist, which likely will be conducted through the PCG or other client monthly meetings. These initial site requirements are monitored by the project team through the weekly team meeting, weekly site safety walks and project spot audits for the duration of the project. Refer to section *Monitoring (Inspections Reviews Audits and Reporting)* of this document.

Associated Documentation:

- Hazard and Risk Management Procedure
- SF-034 Daily Briefing (SignOnSite)
- SF-051 Daily Site Safety Inspection
- SF-009 Project Spot Audit Checklist
- QF-086 Project Team Meeting Minutes
- QF-087 Weekly / PCG Minutes Template
- Site Setup Checklist (MySite)
- Project Start Up Procedure
- Process Control Procedure
- Project Hazard Risk Assessment and Register
- Project Hazard Checklist
- SF-048 Sub-Contractors Safety plan/WMS Review

5.1.2 Design (Safe Design Analysis)

For all projects, the Senior/Project Manager is to request from the Client and or Consultant and or Design Manager (that person in charge of the various design aspects) a documented Safe Design Analysis (Risk Assessment) that takes into account the life cycle of the project including construction, maintenance and demolition. The Safe Design Analysis is to be undertaken prior to construction work commencing (preferably at Final Sketch Plans (FSP), as per the Design Control Procedure, and the requirements of any jurisdictional safe design legislation. All foreseen design risks identified as a result of the process that were not able to be eliminated are to be included in the Project Hazard Risk Assessment and Register, SF-008 and communicated to the project team and all engaged Contractors for review and implementation of appropriate controls in accordance with the hierarchy of controls in their WMS and associated safety plans.
If design changes are made during the construction phase, further Safe Design Analysis is to be undertaken relevant to the change by the designer and communicated to the Senior/Project Manager. All identified hazards related to construction shall be documented in the Project Hazard Risk Assessment and Register, if not already included.
The Senior/Project Manager is to ensure all relevant parties are informed of the changes through means of consultation (safety consultation meetings or via email) and the Hazard Register is to be amended by the Project Manager or other member of the project team as delegated by the PM. Where seen appropriate by the PM, design change notices are to be issued communicating the design change or variation and where required. Contractors are to provide new or amended WMS and evidence of induction of their workers into the amended/new WMS.

Associated Documentation:

- Design Control Procedure
- SF-006 Safe Design Analysis
- SF-008 Project Hazard Risk assessment and Register
- SF-012 Safe Design Assessment template
- QF-040 Design Change Notification

5.1.3 Procurement / Tendering

All purchases for the project (design and construct or construct only) are to be undertaken with respect to:

- Preparing the Bid
- Conducting the **Safe Design Analysis** (Design Review Meetings)
- Preparing and or amending the **Project Hazard Risk Assessment and Register**
- Project Control Group meetings with all relevant parties
- Taking into account any WHS considerations, and
- Taking into account the worker consultation and representation processes as they apply to the ACT Government Secure Local Jobs Code 2019 (where applicable).

Any project specific WHS risk control measures or general WHS requirements are to be included in the procurement of materials, and in the relevant trade/activity tender and contract documents.
The Project Manager is to inform Contractors during the tendering process of the need to produce project-specific Safe Methods of Work or WMS for the tasks (and associated hazards) they have been engaged and relate them to coalesce with the Project Hazard Risk Assessment and Register.

5.1.4 Reporting

Contractors' WHS performance on the project will be monitored and reported to the Health Safety Quality Environment Manager via the reporting tools available on Manteena's Intranet on an at least monthly basis.
The reporting cycle to be followed is: WHS performance statistics derived from hard copy attendance records or those records downloaded from Sign On Site, along with Contractor attendance hours, shall be entered into the intranet system by 10.00am each Monday and shall reflect data recorded over the preceding week.
For more information about SignOnSite refer to: http://signonsite.com.au/
Associated Documentation:

- Tendering Procedure
- QF-078 Preferred Tenderer Interview Questions
- QF-079 Subcontractor Tender Assessment – Technical Checklist
- SF-012 Safe Design Assessment
- SF-006 Safe Design Analysis
- SF-008 Project Hazard Risk Assessment and Register

5.2 Personnel Site Safety Processes

5.2.1 Site Safety Rules

If you are unsure about your safety or that of others always ask your Supervisor or WHS representative. In consultation with the persons who shall perform the tasks, Manteena, all Contractors and Sub-Contractors shall conduct **Hazard Identification** and **Risk Assessments** for the tasks to be performed on a regular basis.
Members of Manteena's site team shall, in co-operation with the Designated Point of Contact, Contractor Representative conduct:

- Daily Site Safety Inspections
- Pre-start Meeting, and
- Daily Task Hazard (Daily Breifing) / Risk Assessment

prior to the commencement of each working day.
The Daily Site Safety Inspection document is extensive and is to be completed in full as the day progresses. However, the Project Manager must ensure all the High-Risk Construction activities planned or scheduled to occur on that day and the areas in which they are to occur have undergone inspection prior to work commencing for the day, each calendar day the site is open for work and before work commences.

- Manteena's Site Supervisor is responsible for ensuring a Daily Task Hazard Assessment and **Daily Site Safety Inspection (DSSI)** are conducted. The results of which shall be recorded on the Daily Briefing within SignOnSite App for workers to read or presented as part of the next daily pre-start.

Daily Task Hazard Assessment note: given the nature of these works and the fact that the works are repetitive, and the hazards associated with the works may not change greatly from one day to the next, the recorded DTHA (Daily Briefing) may record the hazards associated with the works ranging from Monday through Saturday, yet with a Daily Briefing.

- For more information about SignOnSite refer to: http://signonsite.com.au/
- All Contractors or Sub-contractors shall on a regular basis (at least weekly yet preferably daily) conduct a documented toolbox talk or Job Safety Analysis (JSA) to ensure (so far as is reasonably practicable):
    - All high-risk activities planned for the day have been identified and Work Method Statements (WMS) completed and reviewed for those tasks.
    - Other construction activities are discussed, and any reasonable controls implemented. Note: All persons involved in the toolbox talk or JSA shall sign in recognition of their attendance and involvement in the meeting.

Daily Site Safety Inspection note: MUST be commenced before work commences to ensure high-risk activities are identified, assessed and appropriate controls implemented. The less hazardous process inspections shall then be undertaken during the day, noting that the entire inspection process must be completed each day.

These processes are conducted to identify hazards and apply control measures as appropriate. The Task Hazards posted on SignOnSite each day before work commences for all site personnel and visitors to read.
General Site Safety Rules (Refer to SF-024 Visitor Site Safety Rules) shall be posted at the sign in point of the site or in some other reasonable and prominent point for all workers and visitors to read and understand prior to entering the work site.

Note: If safe work practices are not observed or are ignored, disciplinary actions shall be taken.

Documented Work Method Statements shall be developed for **all high-risk construction work activities** or those tasks that pose a significant risk to the health and safety of workers (as deemed necessary by the result of a **Risk Assessment**). The Safe method of work shall include control measures that through their implementation shall eliminate or reduce any identified hazard / risk to enable personnel to carry out work safely.

Referenced Documents:

- SF-006 Safe Design Analysis
- SF-051 Daily Site Safety Inspection
- SF-048 Sub-Contractors Safety Plan/WMS Review
- SF-008 Project Hazard Risk Assessment and Register
- SF-024 Visitor Site Safety Rules
- Implementation Guidelines for the Code
- ISO 45001
- ISO 31000

5.2.2 Work Method Statements (WMS) and WMS Review

(This includes for activities defined as High-Risk Construction Work and other tasks identified as presenting a risk to worker health and safety)

Manteena's Project Manager is to ensure all Contractors, Sub-contractors and Sub-sub-contractors submit in advance of commencing any work, site-specific WMS / Safe Operating Procedures for themselves and their Sub-contractors including those self-employed, preferably at least one week prior to commencement on site.

Project and task specific **High-Risk Activity Work Method Statements** must be reviewed by a member of the project team prior to a Contractor commencing any works on site and ensuring all personnel have been consulted in the development, inducted into and signed into their WMS.

Copies of contractors' safety documentation (including SWMS) will be stored in contractor folders in the site office.

The review process shall be in accordance with the criteria as set out in Manteena's Contractor Safety Documentation review process. (refer: SF-048 Sub-Contractor Safety Plan / WMS Review)

WMS must be reviewed on a regular basis and kept up to date by the persons responsible for their use wherever there is a change to the risk in construction work.

> ***Note:*** *It must be noted the overall responsibility to ensure the WMS is reviewed, prior to implementation on site, is that of the Project Manager. It also must be noted that the secondary responsibility prior to implementation on site, is that of the Site Supervisor*

The **Project Hazard Risk Assessment and Register** is also to be used during the review process of WMS to ensure all known or foreseeable risks have been addressed and adequately controlled. If Contractors have nominated a better control in their WMS than that provided by Manteena, this should be considered for implementation where appropriate. Contractors shall provide documented evidence to show their workers have had input into the construction and development of the **High-Risk Activity WMS** provided.

WMS implementation on site:

Throughout the construction phase, Contractor's WMS implementation is to be monitored for compliance. This will be done monthly via the Project Spot Audit Checklist. The Site Supervisor and/or

Safety Advisor is to select an onsite Contractor's WMS to conduct a spot audit. The primary person responsible for monitoring this WMS compliance is the Site Supervisor, with support from the Safety Advisor/Manager.

Referenced documents:

- SF-048 Sub-Contractors Safety plan/WMS Review
- SF-009 Project Spot Audit Checklist
- SF-051 Daily Site Safety Inspection
- SF-200 Work Method Statement – Template
- SF-008 Project Hazard Risk Assessment and Register
- Toolbox Talk

5.2.3 Site Supervision

Manteena shall take all reasonable and practical steps to ensure Site Supervision is provided at all times on all Manteena sites.
Site Supervision must be provided by a suitably experienced and competent Manteena site supervisor or equivalent. The experience and competencies will vary depending on the nature of works being undertaken on site.
The minimum requirements for Site Supervision, irrespective of the nature of work being undertaken, are listed in section 6.5 of the IMP, as well as Manteena's site supervisor job description.
Where a site supervisor is not onsite for a short period, Manteena shall implement a temporary Site Supervision handover process, using Manteena's **Designated Point of Contact Form** and process. This process shall occur where Manteena has control over a work site, yet due to resource or other requirements a Manteena site supervisor can not be present on site for a period of time.
The process shall be as follows:

5.2.3.1 Low Risk Works

The Project Manager and site team should determine the site activities and the suitability of the temporary caretaker of the project.

FOR HANDOVER TO ANOTHER MANTEENA STAFF MEMBER WHO IS NOT A SITE SUPERVISOR:

1. Must be an employee or contract employee acting in accordance with Manteena's systems who is not a Cadet, Apprentice or Construction Worker (with the exception of a Leading hand).
2. Must hold a Basic First Aid, General Induction Card (White Card), Asbestos Awareness (ACT only) and Silica Awareness (ACT only) training certificate.
3. Must have completed the WHS for Managers and Supervisors Course (or similar) or 2 years relevant site management and/or WHS risk management experience.
4. Must be conversant with the nature of works being undertaken including the site layout and evacuation plan, trade SWMS, Project Hazard Risk Assessment and Register and Daily Task Hazards Assessment.
5. Ensure emergency contact details are defined and easily located.
6. Ensure emergency evacuation points and processes are understood.
7. Ensure there are no less than two (2) persons on site while the Manteena Site Supervisor is absent.

8. Ensure the responsible person nominated agrees to be the Designated Point of Contact for the site, so far as is reasonably practicable in the absence of Manteena's site supervisor.

FOR HANDOVER TO A CONTRACTOR WHO IS NOT A MANTEENA RESOURCE:

1. Must hold a Basic First Aid, General Induction Card (White Card), Asbestos Awareness (ACT only) and Silica Awareness (ACT only) training certificate.
2. Ensure emergency contact details are defined and easily located.
3. Ensure emergency evacuation points and processes are understood.
4. Ensure there are no less than two (2) persons on site while the Manteena Site Supervisor is absent.
5. Ensure the responsible person nominated agrees to be the Designated Point of Contact for the site, so far as is reasonably practicable in the absence of Manteena's site supervisor.
6. Ensure Manteena's Designated Point of Contact Form is completed. Ensure you consult with all trades on site to whom is the Designated Point of Contact / First aider.
7. Ensure no new workers (i.e. un-inducted) are provided access to the site while the Manteena Supervisor is off site. Only workers that have already received induction to the site by Manteena may enter while the Manteena Supervisor is absent. Should new workers present at site, the designated point of contact person shall not allow entry to the site and shall call Manteena's Site Supervisor for advice.
8. Ensure (where possible) all known deliveries are halted or deferred while the Manteena Representative is off site. If an unscheduled delivery arrives the designated point of contact person shall not allow the delivery onto site and shall call Manteena's Site Supervisor for advice.
9. If the Client, a Regulator / Government Enforcement Officer, Union Official or other external party who is not a subcontractor or supplier involved in the project arrives at site, the Designated Point of Contact is to immediately contact the Supervisor for instruction and advice.

5.2.3.2 High Risk Works

FOR HANDOVER TO ANOTHER MANTEENA STAFF MEMBER WHO IS NOT A SITE SUPERVISOR:

As above points for low risk work as well as:

1. Must have a documented briefing on the nature of works being undertaken including the site layout and evacuation plan, trade SWMS, Project Hazard Risk Assessment and Register and Daily Task Hazard Assessment.
2. Must have direct and regular communication with the normal Site Supervisor for the site via phone and/or MS Teams.
3. Must not induct new workers or commence new works whilst supervising the site.
4. The nominated Manteena representative must be a project manager, site manager, Safety Advisor, or higher in the responsibility chain.
5. Operations Manager or Construction Manager approval that the Manteena representative has the requisite site experience with the high-risk work to assume the site contact responsibility, is capable of handling this task and there are only limited numbers of workers (and Contractors) on the site.

FOR HANDOVER TO A CONTRACTOR WHO IS NOT A MANTEENA RESOURCE:

As per above point for low and high-risk work, plus:

1. Manteena's Site Supervisor / personnel must be on site to supervise the set up and initial commencement of the High-Risk Task each day.
2. Manteena's Site Supervisor must be on site to supervise the pack down and the conclusion of the task each day.
3. Manteena's Site Supervisor must have a clear communication strategy in place at all times they are away from site during and while the High-Risk activity is in process.
4. The Contractor is only responsible for their own work activities. If other trades are present on site an additional handover will need to take place.
5. For all other duties, if agreed, the Contractor will perform the role of a Designated Point of Contact.

Only when the Manteena representative feels comfortable that the Contractor assuming the site contact responsibility is capable of handling this task and there are only limited numbers of workers (and Contractors) on the site, shall they leave the site.

Hand over is ONLY in the context of "Safe work" not Supervision of the Project!
Note: the above sections can be subject to alternate arrangements based on an appropriate Risk Assessment and approval from the Operations Manager and HSEQ Manager.

Referenced documents:

- SF-027-Designated Point of Contact

5.2.4 Managing Covid-19

Manteena's management of Covid-19 is based on government health directives. Sites will receive advice based on government requirements at the time and any addition client mandated requirements. Where required, additional directives to the following can be found in the Covid-19 Management Plan. All contractors MUST provide a documented process on how they manage the spread of Covid-19 within their own company. The document may take any format as long as it demonstrates that all workers agree with the steps and controls identified within and includes their signed acknowledgement. Any contractors not complying with requirements will be stood down until such time as a process has been developed and implemented. Types of documented process could include:

- Risk Assessment
- SWMS
- JSA / SOP

Suggested inclusions:

1. Hygiene – promotion of good hand, sneeze, and cough hygiene.
2. Reasonable separation –eat lunch outside rather than in the lunchroom / spread the distance.
3. Cleaning – regularly clean and disinfect surfaces that many people touch, including disinfecting shared tools. Further information about the recommended requirements for Environmental Cleaning and Disinfection Principles can be found at: https://www.health.gov.au/sites/default/files/documents/2020/03/environmental-cleaning-and-disinfection-principles-for-covid-19.pdf
4. Working – social distance: where possible, separate workers to a minimum of 1.5m, manage occupied areas to roughly 1 person per 4m^2, signage, limit the number of workers to each area/time on site.
5. Use of lifts/hoists is limited to a maximum of 4 people (for a standard sized lift/hoist).

6. Workers who need to work in close proximity and on occasions within 1.5m should consider additional PPE and reducing the duration of work in close proximity. As a team, limit their interaction with other workers on the site (i.e. arrive and leave site together, work and have meal breaks together (apart)).
7. Health – the most important message to get out there is if you feel unwell, DO NOT COME INTO WORK.

Manteena, has implemented a Covid-19 Management Plan, which provides further detail on the steps we are taking to manage Covid-19, including the establishment of a COVID Management Working Group, which evaluates any changes to requirements and plans that need to be put in place to accommodate these changes.
This plan is available to everyone on the site notice board or upon request. Any changes to the processes or requirements on site will be communicated through the usual channels including but not limited to, Daily Briefings on SignOnSite and Toolbox Talks.
Manteena will ensure the following:

- high traffic areas such as toilets, stairwells, lift / hoist wait areas and frequent touch points such as door handles, lift buttons, taps and rubbish bins are identified across the workplace
- increased cleaning and disinfecting to occur regularly on site in high traffic areas and frequently touched services
- additional hand washing / sanitizing facilities be provided in all common areas
- where practical promote the use of staggered start, finish and break times to reduce the number of people on site and using amenities at the same time
- appropriate PPE be provided to First Aid Officers (and anyone else working closely to another person)
- appropriate training be provided to site team on managing Covid-19 exposure safely if it occurs
- site evacuations / emergency response plans are updated to ensure that the plans are reflective of the current government requirements, such as social distancing.

Given the widespread media coverage and information been provided by government and health bodies, we are already expecting that Contractors are already practicing these measures on site. Manteena's duty is to enforces these guidelines, however there is also an expectation that the Supervisors / Managers of the individual companies are also enforcing these guidelines as well.
For additional information please see the following links:

- MBA - https://www.mba.org.au/news-and-media/covid-19-information/
- Australian Government Department of Health - https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/how-to-protect-yourself-and-others-from-coronavirus-covid-19/social-distancing-for-coronavirus-covid-19
- ACT Government Health - https://www.covid19.act.gov.au/protecting-yourself-and-others/protect-yourself

The mental wellbeing of everyone working on sites is paramount. In challenging times, such as these, it can be more stressful than ever. If you see anyone on a site who appears to be struggling in any way, please take action to have them make contact with OzHelp or another EAP, or contact their employer in the case of a subcontractor worker for them to take the necessary action immediately.

5.2.5 Isolated work

Works are planned so that no person will work in isolation at any time. If a person is required to work in isolation an appropriate means of contact and communication must be established and maintained. The methods established shall be sufficient so as to ensure regular contact is made with the person

working in isolation. It may be reasonable to implement communications strategies in consultation with the Site Supervisor to achieve this end.

5.3 High-Risk Construction Work

5.3.1 What Is High-Risk Construction Work?

High-risk construction work is defined as construction works that:

1. involves a risk of a person falling more than 2 metres, for example installing an evaporative cooler on the roof of a double-storey building;
2. is carried out on a telecommunication tower, for example installing equipment on a telecommunications tower;
3. involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure, for example knocking down load-bearing walls as part of a warehouse conversion;
4. involves, or is likely to involve, the disturbance of asbestos, for example removing floor tiles containing asbestos as part of a building refurbishment or cutting or drilling into an asbestos cement sheet wall;
5. involves structural alterations or repairs that require temporary support to prevent collapse, for example using props to support a ceiling where a load-bearing wall will be removed;
6. is carried out in or near a confined space;
7. is carried out in or near a shaft or trench with an excavated depth greater than 1.5 metres or is carried out in or near a tunnel, for example laying or repairing pipes and conduits in a 2 metre trench, testing drainage pipes in a 2 metre trench, building a tunnel in the course of constructing an underground railway or road;
8. involves the use of explosives, for example blasting in preparation for the construction of a building or road, breaking up rock during construction of foundations;
9. is carried out on or "near": pressurised gas distribution mains or piping, chemical, fuel or refrigerant lines, energised electrical installations or services.
   "**Near**" in the above circumstances means close enough that there is a risk of hitting or puncturing the mains, piping, electrical installation or service. High-risk construction work is not limited to electrical safety 'no-go zones'. Electrical installations do not include power leads and electrically powered tools. Some examples of high-risk construction work include working near overhead or underground power lines and construction work that involves drilling into a wall where live electrical wiring may be present;
10. is carried out in an area that may have a contaminated or flammable atmosphere, for example demolishing a petrol station and removing old tanks, decommissioning plant and removing pipework that may contain residue of hazardous chemicals;
11. involves tilt-up or precast concrete, for example building a factory using tilt-up panels or installing a precast drainage pit;
12. is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians, for example building an additional lane on a road or installing drainage that involves digging up part of the road;

13. is carried out in an area at a workplace in which there is any movement of powered mobile plant, for example working in an area of a construction site that is not isolated from the movement of skid steer loaders, telehandlers, backhoes, mobile cranes or trucks;
14. is carried out in an area in which there are artificial extremes of temperature, for example construction work in an operating cool room or freezer or construction work alongside an operating boiler;
15. is carried out in or near water or other liquid that involves a risk of drowning, for example constructing a bridge over a river or restoring a wharf, or
16. involves diving work, for example divers undertaking structural repairs to jetties, piers or marinas.
17. For ACT projects only, involves the cutting of crystalline silica material using a power tool or other mechanical process. [Delete if project is not located within the ACT.]

5.3.2 Working at Heights

(HIGH-RISK ACTIVITY – TASK SPECIFIC WMS REQUIRED)
Whenever working at heights, we should always consider utilising the working at heights' hierarchy of control.

WORKING AT HEIGHTS' HIERARCHY OF CONTROL

The following hierarchy of control should be applied when planning or considering any working at heights. The hierarchy of control encourages working from safest principles (1) to less safe principles (4).

1. Work on the ground or on a solid construction
Working from the ground is always the safest option. Whenever possible, we should always consider not working from heights.

2. Use a fall prevention device
If you have to work from a height, a fall-prevention device is best because it prevents falls e.g. guard rails, scaffold, temporary work platforms including elevating work platforms, void covers or barriers.

3. Use a work positioning system
If it's not possible to use a fall-prevention device, a work-positioning system is your next best option. A work positioning system either prevents a fall hazard being reached, e.g. restraint system, or enables a person to work supported in tension in a way that prevents the person from falling, e.g. industrial rope access. A work positioning system requires correct design and reliance on user behaviour to ensure its effectiveness. Please see section below.

4. Use a fall arrest system
A fall arrest system can only be used when it is not possible to use either a fall prevention device or a work positioning system. A fall arrest system may not prevent a fall, however if installed and used properly, it reduces the impact of the fall. Examples include industrial safety nets, catch platforms or harness-based fall arrest systems used with lifelines or individual anchors. Note: If you use a fall arrest system, you must have emergency and rescue procedures in place and test them to ensure they are effective. Please see section below.

A combination of the above controls may be used if a single control is not sufficient.

On this project, the construction works will require some work to be carried out at height where the potential may exist for a person to fall unless suitable approved controls are put in place. Contractors carrying out these works will therefore be required to submit:

1. their **Work Method Statements**, which implement controls consist with falls from heights utilising the hierarchy of control
2. **Rescue Plan**, and
3. appropriate records of training and/or qualifications for working at height (see section below).

All personnel working at heights must develop a **rescue plan** and provide it to Manteena for review prior to works commencing on site, this includes operation of mobile plant in an elevated position.
Where a rescue plan has been developed for use contractors are required to demonstrate all personnel involved in the work have been trained into the rescue plan by way of signature.
All areas requiring working at height must ensure safe access and egress to and from the work face, e.g.

- minimum 2.5m back from live edge
- behind suitably designed and established scaffolding/edge protection
- within confines of EWP basket
- path to be free of debris and other obstructions/hazards
- access equipment must be designed, installed and verified as fit for purpose, i.e. ladder hooks, existing building attachments
- PPE to be donned at safe location, prior to accessing work area.

All personnel working at height or where the type of work being undertaken impairs visibility (i.e. welding, oxy acetylene cutting) persons must be suitably protected against falls at all times.
Most work at heights requires a permit, refer to the section *Work Permits* within this document. Working from heights within plant (e.g. boom EWP) does not require a work permit, this activity is covered by the *Plant and Equipment Certificate.*

FALL RESTRAINT / ARREST EQUIPMENT

Where individual fall restrained/arrest equipment such as safety harnesses and fall restrained/arrest systems are used, the anchor point must be approved by a suitably qualified competent person to withstand the required forces. Safety harnesses and height safety equipment must be checked via Manteena's *Plant and Equipment Certificate.*
Note:

- All persons using a safety harness and fall restraints/arrest systems must:
  - inspect prior to use
  - only attach to an appropriate anchor point, or an approved structural element / tie-off point
  - remain tethered to an anchor point or structural element at all times whilst working at heights
  - have received training in the use and care of the safety harness and/or equipment. The minimum requirements for training in the use of the equipment is *Work Safely at Heights* (conducted by an RTO).
- All anchor points/systems used as fall prevention equipment must be:
  - designed to the Australian Standards 1891.4 (Concerns such as free-fall distance and pendulum effect must be considered.)

- designed by a competent person with proof of competency in the manufacturer's specification and installation requirements
- installed as per the manufacturer's specifications and in accordance with Australian Standards. The installer must have qualifications or proof of competency in the manufacturer's specification and installation requirements. (Where standard installation cannot be followed, the installation design must be certified by a Structural Engineer.)
- certified by a competent person (with qualifications or proof of competency in the manufacturer's specification and installation requirements) as per the manufacturer's specifications and in accordance with Australian Standards
- inspected at installation by a competent person. Inspection is also to occur every 12 months and immediately after a fall. All inspectors must have the minimum training requirements set by the manufacturer; and
- The anchor points/systems used must be rated to a minimum of 15kN (1500kg) for one person. For two persons, anchor points/systems must be rated to a minimum of 21kN (2100kg).

- All fall restraints/arrest systems and equipment - including harnesses - must:
  - Be fit for purpose
  - Incorporate a connector that provides either sufficient fall restraint protection or incorporate a decelerator/energy absorber to provide appropriate fall restraint/arrest.
  - Be inspected and approved every 6 months (tested and tagged) for use by an appropriately trained and competent person with the minimum competency of *Height Safety Equipment Inspector*
  - Be registered by the owner of the equipment, and
  - Be maintained in accordance with the manufacturer's specifications and Australian Standards.
- A Rescue Plan must be developed and Emergency rescue equipment must be available at all times that a safety harnesses and fall restrained/arrest system are in use.

SCAFFOLDING

No scaffolding, safety barriers, or components of scaffolding are to be removed or altered without the Manteena's Site Supervisor's permission and by a licensed scaffolder.

Definition of Scaffold Risk Assessment.

- **Low Risk Scaffold** are scaffolds under 4 metres, self-supporting, not exceeding the maximum design weight (Light Duty 225kg), (Medium Duty 450kg) and (Heavy Duty 675kg) of the manufacturer, working to the standard design of the manufacturer.
- **High Risk Scaffold** are scaffolds not covered by the above Low Risk Scaffold (i.e. above 4 metres, suspended scaffolds, loading bays outside the standard manufacturer's specifications, scaffolds requiring additional structural elements, ladder beams, hung scaffolds, scaffolds with attached hoists/lifts, mixing of scaffolding from different manufacturers etc).

When a Scaffold is considered **high risk** a **Scaffold Plan** is required. The Scaffold Plan must be designed by an experienced and competent person (such as an Engineer). A drawing is to be supplied by the scaffold Contractor prior to the start of erection. The scaffold is to be erected as per these drawings and any changes are to be updated on the plan by a SB (Basic Scaffolding), SI (Intermediate Scaffolding), SA (Advanced Scaffolding) licenced scaffolder.

Design consideration must take into account:

- The bearing capacity of the ground and the existing building structure for use/erection
- Load capacity of the scaffold i.e. light, medium and heavy duty
- Elevation on all sides
- Plan view
- Stair and ladder locations
- Platform locations
- Loading Bay location and load capacity limit
- Bracing plan (bracing location) including loading bays
- Ladder beams (span)
- Tie locations and fixing design
- Wind load (including the addition of mesh to face of scaffold)
- Cladding / additional loading
- Handrail / Mid rail or screen
- Material/personnel hoists
- Bracing/buttress bays
- Scaffold hoarding
- Scaffolding guards/sheeting system e.g. brick guards, mesh guards, ply sheeting, shrink wrap etc.
- Scaffold bracing plan e.g. end and face/diagonal bracing
- Cantilevered scaffolding

Other items to consider include:

- Anchor points for safety harnesses
- Traffic/pedestrian management plan
- Overhead services (Close proximity to powerlines)
- Barrier systems e.g. concrete/water barriers to prevent collisions.

All changes to the scaffold must be consulted with the original designer (Engineer) The SB, SI, SA licenced scaffolder must sign off on these drawings or Handover Certificate denoting the scaffold is built in accordance to these drawings, manufacturer's instructions, AS4576 and AS1576 when the scaffold is completed.
The following steps must be completed prior to the use of any scaffold:

- Manteena's Site Supervisor (or competent delegate) are to inspect the scaffold and complete the Scaffold Checklist on MySite.
- Any issues identified in the inspection must be rectified.
- The Site Supervisor (or competent delegate) must sign the scaffold contractor's handover certificate.
- Check the complete scaffold has a scaffold inspection tag at each entry to the scaffold.

The scaffold should not be open for use until the above has been completed.
A scaffold inspection must also be conducted with the scaffold supervisor when it is modified or extended and re-certified by the scaffold supervisor. The scaffold contractor shall inspect the scaffold

at intervals not exceeding 30 days (from the date of erection) and re-certify on the scaffold tag and inspection certificate that the scaffold has ongoing compliance to the manufacturer's requirements and applicable design drawings. Manteena is to undertake daily inspections utilising the Daily Site Safety Inspection.

The construction of a scaffold must comply with the relevant Australian Work Health and Safety requirements. Those responsible for the erection, alteration and dismantling of scaffolds shall ensure that the erected scaffold complies with relevant requirements of AS/NZS 1576.1, AS 1576.2, AS/NZS 1576.3, AS/NZS 1576.6 and AS/NZS 4576. The ways to achieve this are:

- Build the scaffold to the supplier's information about the system.
- Build the scaffold in accordance with AS 1576.3 Supplement 1.
- Build the scaffold to a design that is verified by a competent person as complying with the relevant requirements of AS/NZS 1576.1, AS 1576.2, AS/NZS 1576.3, AS/NZS 1576.6 and AS/NZS 4576, WorkSafe ACT guide to scaffolding January 2006,

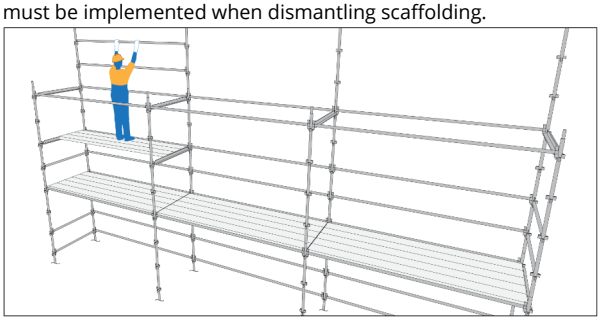
The design specifications of a scaffold can be either a complex set of drawings (for high risk scaffold) or held in the mind of the responsible scaffolder (for low risk scaffold) as per AS/NZS 1576.1.
When erecting scaffold the area shall be barricaded. When being erected at high levels the area below will have signs stating "Workers Above" displayed with an appropriate barricade. All incomplete scaffolds must display warning signs and be barricaded accordingly. No scaffold shall be used until signed-off (certified) as complete and a copy of the sign-off "scaff tag" is displayed on all the scaffold access points.

ONE METRE SEQUENTIAL METHOD FOR SCAFFOLD ERECTION AND DISMANTLING

When erecting and dismantling scaffolding, the one metre sequential method (also known as "the 1m rule") must be documented in the scaffolding contractor's SWMS and implemented as part of the erection and dismantling process.
The one metre sequential method ensures a handrail system is provided for scaffolder/s to safely erect and dismantle scaffolding systems.
Process:

- Scaffolder/s must work from a fully planked platform with handrails (top and mid-rail).
- The next 2 metre lift is constructed.
- Transoms are fitted 1 metre from the fully planked platform and a minimum of 2 scaffold boards placed in the transoms to work off.
- The next set of standards are installed (if required), along with the top and mid-rail for the next lift above. This will provide fall protection for the scaffolder to continue to build the scaffolding system. **Refer to the illustration below**

The same principle must be implemented when dismantling scaffolding.



Referenced documents:

- SF-051 Daily Site Safety Inspection

MOBILE SCAFFOLD

Mobile scaffolds must be erected by a competent person, complete and have the wheels locked when people are working on them. Set up with ladder access and toe boards installed, Mobile scaffolding is not to be ridden while being moved or adjusted at any time.
Any work (additions and or alterations) on scaffolding, including mobile scaffolding, exceeding 4m in height must be carried out by a ticketed scaffolder.
Mobile scaffold erection instructions must be available to site management and users of the scaffold via clear instructions on the components or immediate access to a digital or hard copy.

PLATFORM, A-FRAME AND ACCESS / EXTENSION LADDERS

Falls from ladders account for a high number of site injuries. Other means of gaining height (such as scaffold, mobile scaffold and EWPs) should be considered first. If ladders are the only reasonably practicable way to gain height, platform ladders are preferred and only then should they be used for light work where hand hold and stability can be maintained.
Access/extension ladders are primarily to be used as a means of access / egress. Use of access/extension ladders as a working platform should only be considered as a and are to be the means of last resort.
The use of an A-frame ladder or step ladder as opposed to any other device must be accompanied by a documented risk assessment/Toolbox and provided to Manteena's Site Supervisor.
Portable ladders should comply with AS 1892. Minimum level of controls for hazards associated with ladders are listed in the *Project Hazard Risk Assessment and Register* attached to this document.
In general:

- All ladders must be visually inspected for signs of damage before each use.
- All ladders must be industrial grade and in good condition.
- Avoid bringing ladders in contact with electricity. Only use fibreglass platform ladders for electrical work.
- All work is conducted facing the platform ladder, maintaining a vertical body position with three (3) points of contact and where required to work with both hands by leaning into the ladder.
- Use both hands when climbing up or down a ladder and only one person is to use a ladder at a time.
- Keep ladders and platforms clean.
- Never leave ladders lying on floors as they become trip hazards.
- Never leave a ladder where it may fall.
- Do not use ladders as walkways or scaffolding.
- Do not use ladders upside down.
- Do not leave tools or equipment on top of a platform ladder, they could fall.
- Do not climb higher than the third rung from the top of an A-frame ladder and ensure your 'belt buckle' remains between ladder stiles.
- Set up Access ladders on 4 meters up to 1 metre out ratio.

- Use Access ladder long enough for the task. It should be 1 metre higher than the top stepping off point.
- Secure the Access ladder before use by providing a firm footing and secured top and bottom against movement.
- Ladders should not be used:
    - In access ways, walkways, traffic ways, or within the arc of swinging doors.
    - Where the work involves restricted vision.
    - On scaffolding or elevated platforms to gain extra height.
    - In very windy or wet external conditions.
    - Near an exposed edge or guard rail.
    - Where it is possible for the ladder or user to come into contact with electricity.

5.3.3 Structural Support Systems

Structural support system works include formwork, falsework, shoring, panel bracing, edge protection, propping and other structural support systems. All structural support systems must be:

- designed by a qualified designer (such as a Structural Engineer with verified professional competence)
- detailed on up-to-date drawings/plans supplied by the designer
- changes to the design or installed system are authorised and signed off by a qualified designer, and
- contractors must ensure they develop safe systems to manage the erection and dismantling of structural support systems, ensuring that controls utilise the hierarchy of control e.g. via SWMS.

Structural support systems must be designed by a qualified designer (such as a Structural Engineer with verified professional competence). A design drawing is to be supplied by the qualified designer prior to the erection/installation of structural supports. The design drawing must include the prop/support type, number, location and spacing of props/supports to be installed. In addition, design consideration regarding the bearing capacity of the ground and/or the existing building structure must be included on the design drawing. The structural support system is to be erected/installed as per the design drawing. All changes to the structural support system must be consulted with the original designer and the design drawing must be updated to reflect all changes. Manteena's Site Supervisor and/or Safety Advisor are to inspect the structural support system in conjunction with the structural support system installer. The design plan is to be checked against the structural support system for correct installation. The qualified designer is to provide confirmation of installation as per the design plan by Manteena and provide written approval of the installation. Manteena is to undertake daily inspections of the structural support systems utilising the Daily Site Safety Inspection.

Use the **Formwork Documentation Checklist** to establish specific documentation requirements (e.g. project, construction and proprietary documentation) for formwork and use the **Concrete Pre Pour Checklist** to manage this activity on site. If the project involves slip forms, jump forms or false decks – more complex formwork systems that present unique hazards – consult the *NSW Formwork Code of Practice* for further guidance.

Note: All installation/dismantling of structural support systems must be undertaken by a competent person (required competencies listed below).
Structural support installer competencies:

- Formwork – Certificate III in Formwork/Falsework/Carpentry*

- Falsework – Certificate III in Formwork/Falsework/Carpentry*
- Shoring – Verified product trained personnel*
- Panel bracing – Verified product trained personnel*
- Edge protection – High risk licence basic scaffolding
- Propping – Certificate III in Formwork/Falsework/Carpentry and/or verified product trained personnel*
- Piling – Verification of Competency (VoC) from a Registered Training Organisation (RTO) for plant

* Competency can be held by the supervisor of works rather than the installer. Supervisor must verify all work.

5.3.3.1 Formwork Planning and Documentation

Formwork refers to the surface, support and framing used to define the shape of concrete until it is self-supporting. All formwork should be installed in accordance with *Formwork Code of Practice 2011 (ACT)* and *AS 3610 Formwork for Concrete*.

In choosing a formwork system for a particular job, consider the safety implications for workers erecting, using and dismantling the system. In thinking about safety factors, pay particular attention to three key issues: **stability, strength and how the risk of falls** (both falling people and falling objects) **will be controlled**. Consider if it's possible to eliminate, reduce or substitute the risk of a fall by undertaking all or part of the work on the ground or using prefabricated elements (e.g. roofs or wall frames) or to use pre-cast or tilt up construction methods.

When using a traditional system, use standard formwork frames that have a known tested loading capacity wherever possible and ensure that they are spaced at no more than the recommended distances apart. Wherever practical, it is preferable to use a proprietary formwork.

Both modular and traditional formwork systems should be designed to comply with the loadings and general principles in *AS 3610 Formwork for Concrete*.

Where a modular system is used in combination with a traditional system, formwork drawings should be certified as complying with applicable Australian Standards. Similarly, components from another system should not be used as an integral part of the modular framework system unless the designer of the modular system states that this is permitted.

Early in the project, consideration should be given to the buildability of the formwork structure, eliminate (or identify for additional controls) unnecessary drop downs and cantilevers. Where possible, substitute elements for pre-cast.

Before formwork starts, Manteena will ensure the contractor carrying out work complies with the following:

- undertake an assessment of the risks involved in carrying out the work;
- identify the most appropriate methods to control any risk of injury. These include safeguards such as guardrail systems (including toeboards), perimeter safety screens, barriers and fall arrest systems;
- provide safe access to and from the site and safe movement on site;
- ensure that all workers have received appropriate training and instruction;
- ensure electrical safety, including systems of work for the safe use of equipment;

- ensure that the base on which formwork will be placed is adequate to support the weight of the formwork, concrete and any additional loads such as pumps, workers, mixers, placing concrete and so on;
- ensure unauthorised persons are prevented from entering the work area (including physical barriers and signs clearly displayed to warn people).

COMPONENTS

Refer to AS3610 for the acceptance criteria for assemblies and components and acceptable deviations. Generally, components should be free from splits, cracks, visible deformations, dents and rust. Where it is not possible to identify components or materials as being of the type and grade specified in the formwork documentation they shall not be used in the formwork.
U-heads are to be nailed to bearers. Assemblies should be out of plumb no more than 40mm. Ends of component's bearing surfaces should be no more than 1 degree off square. All nails should be removed from formwork material during dismantling.

MATERIALS AND EQUIPMENT

All materials and equipment used in formwork shall be fit for the intended purpose, meet design specifications and conform to relevant Australian Standards. Used materials shall have structural characteristics at least equal to those of the specified materials. Where there is no relevant Australian Standard, the materials shall be demonstrated as having structural characteristics that will result in the form work satisfying the requirements of AS 3610 and, in particular, being suitable for use as formwork during its design working life.

5.3.3.2 Safety Considerations During Formwork Construction

The following are some key areas to consider in the planning, erection and dismantling of formwork.

ERECTING FORMWORK FRAMES AND DECKS

(This section is directly lifted from the NSW *Formwork Code of Practice.* It has been included because safety is integral to the sequencing of formwork erection and sub-contractor's work should closely reflect the following.)
Formwork frames should be erected progressively to ensure the installers' safety and the stability of the overall structure.
Braces should be attached to the frames as soon as practicable and designated access ways should be indicated by using bunting or other means.
If diagonal bracing or other edge protection is installed progressively on formwork frames, other fall prevention control measures may not be necessary.
Many conventional formwork frames consist of diagonal braces that cross in the middle. These braces are not suitable edge protection for a completed formwork deck, but they may provide reasonable fall protection during frame erection where braces are installed in a progressive manner as soon as the frames are installed.
As the height of formwork frames increases, there is a greater need to provide lateral stability.
Ensure framing, including bracing, is carried out in accordance with on-site design documentation and manufacturer's instructions.
When erecting or dismantling formwork frame towers that require people to work at heights of two metres or more above a level below, a formworker can work within the formwork frame tower if there is fall protection within the frame tower structure.
Controlling the risk of falls while erecting or dismantling frames can be achieved by:

- providing fall protection within the frame structure during erection, by positioning an internal full deck, consisting of scaffolding planks or other suitable decking, no more than two metres below a temporary working deck platform level.
- providing fall protection to all four sides of a frame structure, using the formwork frame along with the diagonal bracing or temporary handrails.

Bearers are the primary horizontal supports for a formwork deck, placed on top of formwork frames or props. They are usually timber. They should be placed in position from a work platform no more than two metres below them.

Bearers should be positioned so they will not fall off the top of the frames. Usually, this is done by placing the bearers in U-heads on top of the frames and minimising cantilevers. U-heads should be used where two bearers abut. Where only single bearers are placed in the U-head, the bearer should be placed centrally unless a competent person requires otherwise. This can be done by rotating the U-head or by using timber wedges. Where the top of the supporting member consists of a flat plate, the bearer should be nailed or effectively secured to the plate. Flat plates should only be used where specified by a competent person.

Where a false deck is provided at two metres or less below a worker, joists may be spread on the bearers with the worker standing on top at bearer level. If the height of the formwork deck being constructed is more than two metres above a continuous deck or surface below it, joists should be spread from a platform located within two metres of that surface, underneath the deck being constructed. This work platform should be a false deck but an intermediate work platform may be used.

A working platform at least 450mm wide e.g. two scaffold planks, should be used when the potential fall distance is less than two metres.

It is not acceptable for a person to work from a single plank or bearer.

The platform below the deck should be positioned at a suitable height for handling joists without introducing manual task risks and not greater than two metres above the continuous deck or surface below.

A formwork deck should be laid in a progressive way to prevent workers from falling. This is particularly important where a false deck has not been provided within two metres below the level of the deck to be laid.

In this situation formply may only be spread on the joists provided:

- a minimum of four joists at 450mm centres - 400mm gaps, totalling 1.8 metres – are located on bearers next to the person and in the other direction joists extend for at least 1.8 metres. Therefore, if a person falls, they will fall onto the joists and should be stopped from falling further. Controls to minimise the sideways movement of joists should be put in place to further avoid potential falls through the joists
- workers should lay the formply in front of them so if they stumble, they are likely to fall on top of the sheets where a leading edge is involved and the distance below the deck being constructed is greater than two (2) metres, the SWMS should detail how work will be completed to control the risk
- the gap between modular tableform and deck panel systems to be covered with infill strips should be limited to nominally 400mm. Should a person fall, they will fall onto the adjacent tableform or deck panel already covered by form sheeting/lining material
- installation and fixing of the infill strips covering the gaps should be carried out in accordance with appropriate SWMS to control falls through such gaps

- workers should lay and fix the infill strips in front of them so if they stumble, they are likely to fall on top of the tableforms or deck panels and the wrecking strips being laid
- where a leading edge is involved and the distance below the tableforms or deck panels where infill strips are being laid is greater than two metres, the SWMS must detail how work will be completed to control the risk of falls e.g. use of catch decks
- Workers should start laying the formply sheets from the perimeter scaffolding or other edge protection provided on the perimeter of the formwork.

ACCESS

Safe access to and egress from all formwork areas shall be provided. Access may take the form of access platforms, stairways or other means. Consideration should be made not just for formworkers but also associated trades working on formwork decks such as post-tensioners and steel fixers. Two means of egress from all areas should be considered.
The formwork sub-contractor must designate clear access ways for workers in and around formwork (by marking a pathway, for example, with green flag bunting and no-go zones with red flag bunting), particularly through formwork frames. Formwork erection or dismantle in progress must be physically barricaded (e.g. with caution tape) from workers who aren't formworkers.
Access platforms and stairways constructed of scaffolding shall comply with relevant Australian Standards. Refer to the separate sections on scaffold and working at heights within this document and those sections of the Project Hazard Risk Assessment and Register.

EDGE PROTECTION

Edge protection is required on the exposed edges of all work areas, include the perimeters of any structure (such as the deck) and any opening (void) in the deck. Protections shall be provided by one of the following means:
(a) Safety screens extending from one working platform to the working platform above.
(b) Edge protection complying with AS 1657.
(c) Scaffolding equipment.
Safety screens shall comply with the performance requirements of AS 1657. Scaffolding equipment shall comply with AS 1576.1 and AS 1576.3 or AS 1576.6.
Scaffolding equipment used as edge protection shall comply with the operational requirements specified in AS 1576.l.
Temporary edge protection (for example, that provided by the formwork sub-contractor to use on formwork decks) must have specifications supplied to demonstrate compliance with AS 1657.
Edge protection or components of edge protection may be omitted at points of access from a ladder, stairs or at edges of platforms adjacent to the floor or face of a building or structure, provided the operational requirements of AS 1576.1 are complied with.

PROTECTION AROUND HOLES, PENETRATIONS AND OPENINGS

Refer to section *Protection around holes, penetrations and openings* within this document.

MANUAL HANDLING AND MOVING MATERIALS DURING FORMWORK

The use of people and plant to move and position formwork elements during delivery, assembly, dismantle and removal presents a large materials handling hazard on site, refer to the **Moving Loads and Materials** and the **Manual Handling** sections of this document.

Referenced documents:

- SF-051 - Daily Site Safety Inspection

- Formwork Documentation Checklist
- QF-009 Concrete Pre Pour Checklist

5.3.4 Demolition (includes for alteration requiring temporary support)

Commented [JB1]: Make reference to the COP. AS is mentioned, but not COP, most info comes from the COP?

(HIGH-RISK ACTIVITY – TASK SPECIFIC WMS REQUIRED)
Demolition can be considered the "reverse of construction" and therefore is a complex and lengthy activity.
The demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure is 'high risk construction work'. A **Safe Work Method Statement (SWMS)** and a **Manteena Demolition Permit (MySite)** must be completed before the high-risk construction work starts. And if the demolition work is **notifiable** under the WHS Regulations, the regulator must be notified at least 5 days before starting work.
Clarifications
A structure is anything that is constructed, whether fixed or moveable, temporary or permanent, and includes buildings, sheds, towers, chimney stacks, silos, storage tanks.
High risk demolition works do not include

- the dismantling of formwork, falsework, scaffolding or other structures designed or used to provide support, access or containment during construction work, or
- the removal of power, light or telecommunication poles.

5.3.4.1 Manteena Demolition Permit and Process

Manteena uses an online Demolition Permit to plan and manage demolition works safely. This is accessed via MySite.

- A Safe Work Method Statement must be developed, reviewed and instructed before any works commence. The SWMS must:
- identify the type of high risk construction work being done
- specify the health and safety hazards and risks arising from that work
- describe how the risks will be controlled
- describe how the control measures will be implemented, monitored and reviewed, and
- be developed in consultation with workers and their representatives who are carrying out the high risk construction work.
- One SWMS can be prepared to cover all high risk construction work being carried out at the workplace by contractors and/or subcontractors, e.g. falls of more than 2 metres, involves structural alterations or repairs that require temporary support to prevent collapse and is carried out on or near energised electrical installations or services.
- Alternatively, the contractors or subcontractors can prepare separate SWMS. If they choose to do this they must consult with each other to ensure all SWMS are consistent and they are not creating unintended additional risks at the workplace.

If "notifiable works" form part of the demolition works, a Demolition Plan must also be developed. See Demolition Plan in this section of the IMP. Notifiable works are currently:

- demolition of a structure, or a part of a structure that is load-bearing or otherwise related to the physical integrity of the structure, that is at least 6 metres in height
- demolition work involving load shifting machinery on a suspended floor, and

- demolition work involving explosives.

LICENSING

A state or territory Demolition License is required to undertake most demolition works. Depending on the type of work being done workers may also need additional licences, e.g. to carry out asbestos removal work, work at heights or use explosives. Manteena registers details of all relevant licences via SignOnSite.

NOTIFIABLE WORKS

A person conducting a business or undertaking (PCBU) who proposes to carry out the following demolition work (i.e. "notifiable works", Regulation 142) must give written notice to the regulator at least 5 days before any of these commence:

- demolition of a structure, or a part of a structure that is load-bearing or otherwise related to the physical integrity of the structure, that is at least 6 metres in height
- demolition work involving load shifting machinery on a suspended floor, and
- demolition work involving explosives.
- The height of a structure is measured from the lowest level of the ground immediately adjacent to the base of the structure to its highest point.
- The type of information which would normally be included in the notification would be:
- the name and contact details of the person conducting the business or undertaking
- if the high risk construction work is in connection with a construction project, the name and contact details of the principal contractor for the project or the principal contractor's representative
- the name and contact details of the person directly supervising the work
- the date of the notice
- the nature of the demolition
- whether explosives will be used in carrying out the work and, if so, the licence details of the person who is to use the explosives
- when the person conducting the business or undertaking reasonably believes the work is to commence and to be completed, and
- where the work is to be carried out.

5.3.4.2 Hazardous materials

Hazardous chemicals or hazardous materials such as asbestos, lead, PCBs and SMF may be present. Manteena will obtain and review any existing hazardous material reports (including asbestos registers and the like). If these do not exist, Manteena will coordinate a destructive survey to identify potential hazardous materials on site. Hazardous materials will be removed by competent parties before demolition starts or, where it not practicable to remove these materials, the risks will be controlled via SWMS.

- Appropriate, clean facilities and amenities must be provided for workers to minimise risks where there are hazardous materials present.

ADDITIONAL REQUIREMENTS FOR ASBESTOS

- Any construction work including demolition work that involves or is likely to involve the disturbance of asbestos is defined by the WHS Regulations as high-risk construction work and a SWMS must be prepared before this work commences. If there is any uncertainty about the

Commented [JB2]: Section on asbestos should remove repeated info that is in the main Asbestos section of the IMP. In this section, refer to that section and the PHRAAR. Check that the PHRAAR asbestos section and demo sections are linked. Check the demo section of the PHRAAR.

presence of asbestos or if any part of the structure or plant is inaccessible and likely to be disturbed, it must be assumed that asbestos is present.

Whenever asbestos or asbestos containing materials (ACM) are determined or presumed to be present, Manteena will inform the occupier and owner of the premises.
There are two types of for asbestos removal licences: Class A and Class B. The class of licence required will depend on the type and quantity of asbestos, ACM or asbestos contaminated dust or debris (ACD) that is being removed at a workplace.
Regardless of varying jurisdictional allowances, no amount of asbestos is to be removed by unlicenced workers on Manteena sites.
If only a part of a building or structure is to be demolished, only the asbestos likely to be disturbed during the demolition of that part of the building or structure is required to be removed, so far as is reasonably practicable, before the demolition work commences.
When planning demolition or refurbishment, consider:

- the age of the building and the likelihood of asbestos or other hazardous materials being present
- the location of asbestos in relation to the proposed demolition or refurbishment
- if there are inaccessible areas likely to contain asbestos
- whether asbestos is likely to be damaged or disturbed as a result of the demolition or refurbishment work—if yes, can it be removed safely before work commences?
- type and condition of asbestos present
- amount of asbestos present
- method of demolition or refurbishment and how will it affect the asbestos, and
- the nature of the ACM (friable or non-friable).

Demolition of part of a building, structure, or plant can be carried out to access in situ asbestos so it can be removed safely. Part of a wall may be demolished to access asbestos located in the wall cavity so it can be removed before further demolition.

ASBESTOS REGISTER

When carrying out demolition or refurbishment at a workplace, Manteena must obtain a copy of the asbestos register from the person with management or control of that workplace before commencing the demolition or refurbishment.
Where an asbestos register is kept, Manteena must ensure that:

- the register is reviewed and, as necessary, revised if asbestos is removed from, or disturbed, sealed or enclosed at the workplace,
- before demolition or refurbishment is carried out at the workplace, the asbestos register for the workplace is reviewed and if the register is inadequate having regard to the proposed demolition or refurbishment, the register must be revised, and
- the Contractor who carries out the demolition or refurbishment is given a copy of the asbestos register before demolition/refurbishment work starts.

If there is no asbestos register, the person carrying out the demolition work must:

- not carry out the work until the structure or plant has been inspected to determine whether asbestos or ACM are fixed to or installed in the structure or plant
- ensure that the determination is undertaken by a licensed asbestos assessor, and
- if asbestos or ACM are determined or assumed to be present:
    - for domestic premises—inform the occupier and owner of the premises, and
    - in any other case—inform the person with management or control of the workplace.

Building and construction workers can expect that, in workplaces where asbestos is fixed or installed, all asbestos has been identified so far as is reasonably practicable. If there is any uncertainty about the

presence of asbestos or if any part of the structure or plant is inaccessible and likely to be disturbed, it must be assumed that asbestos is present.

REMOVAL AND DISPOSING OF ASBESTOS OR ACM

When Manteena commissions the removal of asbestos, Manteena must ensure that the asbestos removal work is carried out by a licensed asbestos removalist who is appropriately licensed to carry out the work.
There are two types of for asbestos removal licences: Class A and Class B. The class of licence required will depend on the type and quantity of asbestos, ACM or asbestos contaminated dust or debris (ACD) that is being removed at a workplace.

TYPE OF LICENCE	WHAT ASBESTOS CAN BE REMOVED?
Class A	Can remove any amount or quantity of asbestos or ACM including: • any amount of friable asbestos or ACM • any amount of ACD, and • any amount of non-friable asbestos or ACM.
Class B	Can remove: • any amount of non-friable asbestos or ACM. • ACD associated with the removal of non-friable asbestos or ACM.

When removing asbestos from a premises, the licensed asbestos removalist must give written notice to WorkSafe ACT at least five days before removal work is commenced.
Where asbestos must be removed immediately, the licensed asbestos removalist must telephone WorkSafe ACT and submit the form within 24 hours of the telephone notification. Immediate removal of asbestos may be commenced if:

- there is a sudden and unexpected event, including a failure of equipment, that may cause persons to be exposed to respirable asbestos fibres
- an unexpected breakdown that requires immediate rectification to enable the service to continue.

Asbestos waste must be transported and disposed of in accordance with the relevant state or territory Environment Protection Authority (EPA) requirements. Asbestos waste can only be disposed of at a site licensed by the EPA and it must never be disposed of in the general waste system.

- Further specific guidance on managing asbestos when demolition and refurbishment work is being carried out can be found in the:
- Asbestos section of this IMP
- Code of Practice: How to manage and control asbestos in the workplace
- Code of Practice: How to safely remove asbestos, and
- the sheet Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

Referenced Policy:

- CPOL-032 Asbestos Policy

Associated Documentation:

- SP-905 Asbestos Management Procedure

ADDITIONAL REQUIREMENTS FOR LEAD

Commented [JB3]: As per comment on asbestos

Lead is found in paint, old water pipes and other plumbing fittings, sheet lead, solders, lead flashing, lead light windows and glass. The age of a structure may be directly related to the amount of lead that can be present.

APPROX DATE OF CONSTRUCTION	SOURCES OF LEAD HAZARDS
1920 - 1978	Paint
1920 - 1978	Plumbing
1923 - 1986	Automobile exhaust (may accumulate as ceiling dust)

If it is suspected that the structure contains lead-based paint, a test for the presence of lead should be conducted.
The precautions which should be taken when demolishing materials containing lead include:

- minimising the generation of lead dust and fumes
- cleaning work areas properly during and after work
- wearing the appropriate PPE, and
- maintaining good personal hygiene.

Further information can be found in AS 4361.1: Guide to lead paint management-Industrial applications. Testing can recognise dried paint film with more than 1 per cent (by weight) to be lead-containing paint.

ADDITIONAL REQUIREMENTS FOR POLYCHLORINATED BIPHENYLS

Commented [JB4]: Should this be it's own section of the IMP and refered to?

Workers can be exposed to Polychlorinated Biphenyls (PCBs) when dismantling electrical capacitors and transformers or when cleaning up spills and leaks. Appropriate control measures should be implemented when handling damaged capacitors to ensure that any spillage does not contact workers and is appropriately cleaned up and disposed of.
Any equipment or parts containing PCBs should be placed in a polyethylene bag and then placed into a marked sealable metal container.
If PCBs cannot be transported immediately for disposal, all containers should be stored in a protected area which prevents any discharge of PCBs to the environment.
PPE including gloves made of materials that are resistant to PCBs (for example polyethylene, nitrile rubber or neoprene), should be provided to workers and worn when there is any likelihood of exposure to PCBs.

ADDITIONAL REQUIREMENTS FOR SYNTHETIC MINERAL FIBRES

Commented [JB5]: Add to SMF section of IMP and refer from here.

Synthetic mineral fibres are used extensively for insulation in building walls and ceilings as well as on items such as air-conditioning duct work. The specific material should be identified and control measures implemented relevant to the manufacturer's instructions.
PPE should be provided to workers and worn when insulation is being removed during the demolition process and dust should be suppressed by damping down.

5.3.4.3 Adjacent or adjoining buildings

Commented [JB6]: Add distance diagrams from AS 2601

- No part of the demolition process should adversely affect the structural integrity of any other building. Consideration may be given to the use of shoring and underpinning and to the effects of changes in soil conditions as a result of the demolition work.
- Lateral support for adjoining structures should be equal to or greater than any provided by the structure to be demolished. Before the existing lateral support is disturbed, provision should be made for the erection of temporary supports, which will need to be checked for effectiveness as the demolition proceeds.
- It is also important that other buildings in and around the demolition site are not adversely affected by vibration or concussion during the demolition process. Special precautions may need to be taken in the vicinity of hospitals and other buildings containing equipment sensitive to shock and vibration.
- No part of the demolition process should cause flooding or water penetration to any adjoining building.
- The effects of demolition on people living/working in adjoining properties or seeking access to and egress from these properties will be considered. Consultation is usually undertaken and recorded.
-

5.3.4.4 Essential services

Essential services include the supply of gas, water, sewerage, telecommunications, electricity, chemicals, fuel and refrigerant in pipes or lines. One of the most important elements of pre-demolition planning is the location and disconnection of all essential services. Manteena documents this via **SF-002 Services Location & Termination Record** or **Contractor termination record** and confirms it via the **Demolition Permit (MySite)**. This process also:

- records the location of all underground tanks, vaults, wells, voids and structures
- certifies that all existing services have been deactivated, including:
    - electricity
    - fire/smoke
    - gas
    - water
    - sewerage
    - telecommunications
    - chemical
    - fuels, and
    - refrigerant in pipes or lines.

As part of our planning, Manteena will review any records available from Before You Dig Australia, the client and others, understanding however that the available information about existing underground essential services may not be accurate.

- If there is any uncertainty about the contents of a work area, or that a service has been disconnected or isolated, it must be scanned before being touched. To confirm a known service has been disconnected, a surface scan may be sufficient. 2D or 3D scanning is better for high-risk or unknown areas. No work can proceed without confirmation that the service is disconnected/isolated.

- All electric, gas, water, sewer, steam and other service lines not required in the demolition process should be shut off, capped, or otherwise controlled, at or outside the building line, before demolition work is started. Any utility agency involved should be notified in advance and its approval or services, if necessary, obtained.

LIVE SERVICES

- Demolition work is 'high risk construction work' when carried out:
- on or near pressurised gas distribution mains or piping
- on or near chemical, fuel or refrigerant lines, or
- on or near energised electrical installations.
- A SWMS must be prepared before this work commences.
- Any service retained for the demolition work should be adequately protected as required by the relevant authority (for example the protection of overhead electric lines). Any utility agency involved should be notified in advance and its approval or services, if necessary, obtained.
- If working within 1 metre of a live service, a Manteena **Live Service Permit** must be obtained.

Underground Essential Services

- Where there are underground essential services that may be disturbed by the work, the demolition contractor must take all reasonable steps to obtain current information on the services prior to commencing work and:
- have regard for the information
- keep the information readily available for inspection under the WHS Act
- make the information available to any principal contractor and subcontractors, and
- retain the information until the excavation is completed or, if there is a notifiable incident relating to the excavation, 2 years after the incident occurs.
- The available information about existing underground essential services may not be accurate.
- Therefore it is important that demolition methods include an initial examination of the area to be demolished.

5.3.4.5 Securing the work area

EXCLUSION ZONES

- To protect workers undertaking demolition activities, exclusion zones should be considered to prevent unauthorised personnel entering work areas.
- A system to prevent falling objects impacting on workers should be implemented to protect the safety of people who are working on or in the vicinity of the demolition work.
- In particular, any area where a falling object might reasonably be expected to land should be designated an exclusion zone. The enclosed and/or protected area should extend horizontally to a safe distance beyond the overhead work area.
- Planning for exclusion zones should take into consideration:
- erecting secure impassable barricades with adequate signage and appropriate lock out procedures to prevent unauthorised pedestrian or vehicular access to the area
- providing information to workers and other persons at the workplace advising them of the status of the exclusion zones, and
- providing supervision so that no unauthorised person enters an exclusion zone.

- Exclusion zones and safe distances may be required during:
- the stripping, removal and/or dropping of debris
- the operation of demolition plant or equipment
- pre-weakening activities for a deliberate collapse, and
- the deliberate collapse or pulling over of buildings or structures.

PUBLIC ACCESS AND PROTECTION

- Adequate public safety should be maintained in public places and areas adjoining the workplace as the work progresses (for example roads, walkways). Consultation with affected parties, especially those working or living in adjoining properties, should occur. Where demolition work is adjacent to a public place and there is a risk of falling debris or hazardous noise, a method of protection should be selected and:
- erected before the commencement of demolition work
- kept in position at all times during the progress of the work, and
- regularly inspected and maintained.
- Control measures to isolate the work from the public may include installing hoarding such as security fencing, containment sheets and mesh, an overhead protective structure, road closures and specified exclusion zones.
- Overhead protective structures should be provided for public walkways in conjunction with perimeter fencing. Overhead protection may be constructed from scaffolding, fabricated steel or timber and should be designed to withstand an appropriate load.
- Unauthorised entry to a demolition workplace can expose persons to a number of hazards that, if not controlled, could result in fatalities or serious injuries. The person conducting a business or undertaking who controls the workplace, who may be a principal contractor or demolition contractor, must ensure, so far as is reasonably practicable, that the workplace is secured so as to prevent unauthorised access. Monitoring of access and egress points for the workplace should be conducted during the work.
- Further information on security fencing, falling materials, overhead protection and hoardings can be found in AS 2601: The demolition of structures and the Code of Practice For Demolition.
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5.3.4.6 Plant and equipment

A range of plant and equipment typically used for demolition work includes:

- powered mobile plant
- personnel and/or materials hoists
- air compressors
- electric generators
- jack hammers
- hydraulic jacks
- oxy-acetylene (gas cutting/welding)
- concrete saws and corers
- scaffolding
- ladders (limited use), and

- many types of handheld plant including: angle grinders, power saws, hammers, demolition saws, hydraulic jacks and pinch/lever bars.

The general principles of working safely with and around plant apply in demolition, i.e. that:

- plant is used and operated by a competent person
- appropriate guards and operator protective devices are fitted
- the safe working load is displayed and any load measurement devices are operating correctly
- plant is maintained in accordance with the manufacturer/supplier's instructions or relevant Australian Standards, and
- manufacturers recommendations for the safe use and storage of oxy-acetylene cutting equipment are referred to.

Further general guidance on plant can be found in the section on Mobile Plant in this IMP and/or the Code of Practice: Managing the risks of plant in the workplace.

POWERED MOBILE PLANT

- The use of powered mobile plant such as cranes, excavators and bulldozers, requires the preparation of a SWMS before work commences.
- A high risk work licence is required to operate some types of powered mobile plant, such as some cranes, elevating work platforms or forklifts.
- Whenever powered mobile plant is to be used for demolition work, traffic management arrangements should be implemented to prevent collision with pedestrians or other mobile plant.

CRANES

- Cranes may be used in demolition work for a number of purposes including:
- lifting and lowering plant and/or materials
- lifting and lowering personnel work boxes, and
- holding suspended loads.
- Cranes require a licensed operator. An operator may also need other competencies for specialist work.
- If cranes are used to suspend loads that are to be cut and then lowered to the ground, it is important for the loads to be accurately calculated. It may be necessary to cut samples in order to determine the weight per unit length or area. Where this occurs, the safe working load of the crane should be reduced by 50 per cent to allow for miscalculations in the test weighing. A similar approach should be followed where weights cannot be determined with reasonable consistency and accuracy.

Further requirements and guidance on working with and around mobile plant can be found in the section of this IMP relating to High-Risk Construction Work: Mobile Plant.

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5.3.4.7 Removal of debris

- Debris should be progressively removed to prevent any build up that could affect the integrity of a suspended floor of the building or structure, affect workplace access and egress, become a fire hazard, or cause a health and safety hazard.
- Demolished materials should not be allowed to fall freely unless they are confined within a chute (or similar enclosure), shaft and/or exclusion zone.

- A debris drop is a debris pile that is enclosed and where the risk of an object striking workers or the public has been eliminated. Debris drop zones should be clearly identified and any area where there is a risk that a worker or other persons at the workplace might be injured by falling or rebounding debris should be fenced or barricaded to prevent access.
- If demolished materials are allowed to fall through internal floor openings in multi-storey buildings, such as lift shafts and/or debris drop zones, the following should apply:
- at the working level, each opening should be protected by an adequate vehicle buffer during the removal of debris by mobile plant, and guarded by suitable barriers at all other times. Vehicle buffers should be high enough to prevent the mobile plant from riding over them and solid enough to stop the fully loaded mobile plant, and
- at all levels below the working level, access to the area through or onto which material is falling should be prevented, either by sealing off the opening with guarding from floor to ceiling, or by erecting signs and barricades to prevent persons coming near the openings.
- Debris chutes should be designed and constructed to prevent the spillage of material and dust and to minimise noise while debris is passing through the chute. Vertical chutes should be fully enclosed with a cover or barrier at the top to prevent a person falling into the chute.
- Debris chutes should be adequately secured to the building or structure and to ensure that debris falls freely and does not become jammed in shafts or chutes. Securing of the chute should take into consideration the weight of the chute plus the accumulated load.
- Overhead demolition should cease during removal of the debris bins. Signs which warn of the risk from falling or ejected material should be placed at the discharge end of every chute.
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5.3.4.8 Falls

- Any demolition work that involves a risk of a person falling more than 2 metres is high risk construction work and a SWMS must be prepared before this work commences.
- In managing the risks of falls, Manteena implements the following control measures where it is reasonably practicable to do so:

1. eliminate the need to work at heights by performing work at ground level
2. carry out the work on solid construction that includes a safe means of access and egress, e.g. scaffolding
3. minimise the risk of fall by providing and maintaining a safe system of work including
    1. using fall prevention devices (for example temporary work platforms and guard railing)
    2. work positioning systems (for example industrial rope access systems), or
    3. fall arrest systems such as catch platforms.

FALL PREVENTION DEVICES

- A fall prevention device is any equipment that is designed to prevent a fall for temporary work at heights, and once in place does not require any further adjustment by workers using the device.
- Fall prevention devices include perimeter guard rails and toe boards, the protection of openings with solid covers and temporary work platforms. A falls hazard could be open sides of floors, roofs, stair wells, lift shafts or the like.

- Further information on the selection and use of fall prevention devices can be found in the Working at Heights section of this IMP and/or the Code of Practice: Managing the risk of falls at workplaces.
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5.3.4.9 Electricity

- Any construction work that is carried out on or near energised electrical installations or services is high risk construction work and a **SWMS** must be prepared before this work commences. If working within 1 metre of a live service, a Manteena **Live Service Permit** must be obtained.
- Electrical power sources, whether overhead or underground, can be a major hazard. In addition to direct electric shock and possible electrocution, contact with overhead electric lines can lead to a variety of hazards including arcing, explosion or fire causing burns, unpredictable cable whiplash and the electrifying of other objects (for example signs, poles, trees or branches).
- Specific control measures must be implemented when work is done in the vicinity of electric lines. The local electricity supply authority should be consulted and appropriate control measures implemented. Before demolition commences, all live electrical wiring and/or components (apart from any temporary electrical installations provided for the work) should be disconnected, isolated, or clearly marked and rendered safe by a competent person (for example electrical engineer) or, where necessary, the local electrical supply authority.
- More detailed guidance on managing risks associated with electricity is available in the Electrical Safety section of this IMP and/or the Code of Practice: Managing electrical risks at the workplace.
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5.3.4.10 Fire prevention

- Where required, adequate fire prevention equipment should be provided and maintained at all times during the demolition of a structure. Access to the fire protection service including any booster fitting, should also be maintained.
- If a sprinkler system is installed in a structure to be demolished, it should be maintained in an operable condition at each storey, so far as is reasonably practicable. Portable fire extinguishers should be kept in working areas at all times and maintained in an operable condition.

FIRE HAZARDS FROM WELDING AND CUTTING

- Welding and cutting operations present a severe fire hazard unless precautions are taken.
- In areas where the floor, walls or ground cover are combustible, the area should be protected by spraying the area with water, spreading damp sand, laying fireproof blankets or other suitable means of protection.
- In cases where a serious fire might quickly develop, a fire spotter should be assigned to the area. Fire extinguishing equipment should be readily available, and all workers trained in its use.
- Where possible, flammable and combustible materials should be removed from the work area and should not be allowed to accumulate to the extent that it can become a fire hazard.
- Further guidance on welding is available in the Code of Practice: Welding processes and in AS 1674.1: Safety in welding and allied processes - Fire precautions.
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5.3.4.11 Information, training, instruction and supervision

- Training specific to the demolition work and to the site should also be provided to workers by a competent person. Manteena must also ensure that workers operating plant at the workplace possess a valid licence to operate that plant, if a licence is required to operate that plant.
- Workers in a supervisory role (for example a leading hand or foreman) should be experienced and trained in the type of demolition being carried out to ensure the work is carried out in accordance with the SWMS.
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5.3.4.12 Demolition methods

- The sequence in which a building or other structure is demolished can be critical for the health and safety of workers and the general public. The demolition sequence will depend on things like the type of construction, location, and demolition method(s) selected. Buildings and structures should generally be demolished in reverse order to their construction, that is, by 'sequential demolition'. In particular:
- sequential demolition should be carried out in reasonably even stages, commencing from the roof or top of the building or structure being demolished
- multi-storey buildings or structures should be demolished storey by storey, and
- masonry and brickwork should be taken down in reasonably even courses.
- There is a range of demolition methods that may be used, either separately or in combination. Control measures should be selected on the basis of the demolition method(s) used. However no matter what method is used, the building or structure to be demolished and all its components should be maintained in a safe and stable condition so as to prevent the unexpected collapse of part or all the structure. Temporary braces, propping, shoring, or guys may need to be added for stability.
- Further information on demolition methods can be found in AS 2601: The demolition of structures.
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5.3.4.13 Manual demolition

- Manual demolition includes any technique where hand tools such as jackhammers, sledge hammers and picks are used.
- Manual demolition has many of the hazards that are present in other major demolition activities including unexpected collapse, falls, falling objects, manual handling and exposure to noise, dust and hazardous chemicals.
- To manage the risk of unplanned collapses, the condition of roofs, walls and floors of the building should be assessed by a competent person before commencing demolition work.
- Where concrete members are being demolished manually, the reinforcement shall not be cut while breaking of the concrete is in progress.
- Where pre- and post-tension demolition work is undertaken competent person advice should be sought as to demolition sequence. More information on the demolition of pre- and post-tensioned concrete appears later in this IMP.
- Areas where debris will fall should be barricaded off and signs erected to prevent persons from entering before demolition starts.

MANUAL DEMOLITION OF ROOFS

- Controlling the risk of falls of persons or objects is an important consideration for roof work. Where it is not reasonably practicable to demolish a roof using mechanical means or to remove the roofing from work platforms below the roof, then careful consideration should be given to the most suitable method of protection for workers engaged in the removal of the roofing. For example, roof trusses should be removed using safe temporary work platforms. It is important to ensure that the removal of trusses does not cause wall instability.
- Prior to commencing roof demolition or dismantling, you should consider:
- fall hazards
- structural stability
- condition and strength of the roofing material and the identification of fragile roofing
- identification of fragile panels or skylights in solid roofs
- crane access
- safe worker access and egress
- fall protection requirements including issues such as perimeter protection, the availability and strength of anchor points for static lines, inertia reels and lanyards and the suitability of roof structure for the use of safety nets means of rescuing persons from safety nets or safety harnesses
- the condition of any roof mesh or safety mesh
- methods of raising and lowering equipment and materials
- assessment of manual handling problems
- electrical safety including the location of nearby power lines, and
- worker competency and training needs.

FRAGILE ROOFS

- Before working on the roof, the roof should be inspected to identify that it is structurally adequate to work on and whether there is any brittle material or if the roof has a fragile aspect to it (for example a skylight or worn section).
- Brittle or fragile roofing material can include roofing made of asbestos cement, cellulose cement, glass panels, fibreglass, acrylic or other similar synthetic moulded or fabricated material used to sheath a roof or contained in a roof.
- If asbestos cement roofing is involved, the work must be undertaken in accordance with the asbestos related requirements of the WHS Regulations. Further information can be found in the Code of Practice: How to safely remove asbestos.
- Where it is necessary for work to be carried out or adjacent to any part of a fragile roof, you should:
- inspect the underside of the roof to determine the extent of the fragile roof material, the existence of any safety mesh and its fixings, and the structural soundness of the roof material
- complete the work from a temporary work platform
- provide temporary walkways as a means of access to and egress from any work area on the roof where permanent walkways are not provided
- secure and fix cleats to walkways on high pitch roofs (for example where the slope of the roof exceeds 1:6)

- provide temporary roof ladders for steep roofs (for example in excess of 35 degrees), and
- provide other fall protection as necessary (for example work positioning or fall arrest system).

ROOF ACCESS

- Manteena ensures that access from the ground to the actual work area is safe and without risk to health. Access arrangements may include personnel hoists, scaffolding, temporary work platforms and ladders.

PURLIN TROLLEYS

- Purlin trolleys are plant designed to travel on top of purlins (horizontal beams running along the length of a roof) and can be used to support material and roof workers. They are sometimes used during the removal of roof coverings.
- Purlin trolleys should be provided with a holding brake and a device to prevent their accidental dislodgment from the supporting purlins. Where it is intended that the roof workers be supported by the trolley, the trolley should be provided with suitable safety harness anchorage points.
- Before a purlin trolley is placed on a roof structure:
- a competent person (e.g. a structural engineer) should have considered whether the roof structure is suitable for the particular purlin trolley and its operational loads, and
- the purlin trolley should be designed and constructed to withstand the loads placed on it and for the purpose of the safe movement of materials and/or persons across the roof surface.

MANUAL DEMOLITION OF WALLS

- Glass should be removed from windows, doors or openings before the commencement of demolition works.
- Walls and gables should be demolished course by course. All work should be performed from safe working platforms. Workers should not work from the top of a wall or partition being demolished. A wall or partition should not be permitted to stand, unless it is effectively supported against collapse including being supported against lateral loads from wind and other forces.
- If the demolition work involves the demolishing course by course of any walls, columns, piers or other vertical structural members, the demolition contractor should check that:
- risks to persons and property from falling collapsing and rebounding material are eliminated or minimised, and
- the remaining portion of the building or structure, if any, can withstand any loads, impacts and vibration caused by felling or other environmental factors such as wind.

MANUAL DEMOLITION OF FLOORS AND MEMBERS

- All floors and other surfaces used to support workers, plant, equipment or materials should be assessed as capable of supporting the load. Suspended floors and their supporting members should not be loaded by workers, plant, falling or accumulated debris/materials to the extent that there is excessive deflection, permanent deformation or danger of collapse.
- If water is used, the increased weight of the watered debris should be taken into account.
- For further information refer to AS 2601: The demolition of structures.
- Openings in floors, through which a person may fall, shall be properly guarded or boarded over and the boarding secured against accidental removal. Any covers or boarding of openings in

floors should be of sufficient strength to withstand any expected loads that may be imposed on the floor, for example elevating work platforms, people and material.
- Drop zones should be isolated and/or guarded to protect workers and the public from falling objects.
- When jack hammering concrete floors, sufficient reinforcing steel should be left in position as protection against collapse or to prevent persons falling through the floor.

MANUAL DEMOLITION OF FRAMEWORKS

- Before any framework is demolished or removed, all reasonably practicable precautions should be taken to prevent the rest of the building collapsing as a result.
- A competent person (for example a structural engineer) should undertake an assessment to determine the necessary supports required when cutting members. Members should not be cut unless they are supported safely and effectively. Measures should be taken to prevent sudden spring, twist, collapse or other movement of the framework when it is cut, released or removed.
- Any framework which is not demolished should be strong enough to remain safely in position, or should be guyed or otherwise supported to ensure that it will be stable in any adverse weather conditions.
- Framework members should be lowered in a controlled manner. Tag lines should be used on loads where necessary to control the load.
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5.3.4.14 Mechanical demolition

- Mechanical demolition involves the use of powered mobile plant, such as excavators, cranes, loaders and bulldozers. There may be a mix of hand and mechanical demolition methods applied.
- All powered mobile plant used for demolition work must be fitted with a suitable combination of operator protective devices.
- Operator protective structures should be designed to the appropriate standard that eliminates or minimises the risk, so far as is reasonably practicable, of operator injury due to:
- roll over and consequent cabin impact damage
- objects falling on or over the cabin
- objects penetrating the cabin, and
- hazardous noise.
- Demolition should be planned to be systematic and sequential. That is, a structure should generally be demolished in the reverse order to which it was constructed.

WORKING ON SUSPENDED FLOORS

- Suspended floors and their supporting members should not be loaded by workers, plant, falling or accumulated debris/materials to the extent that there is excessive deflection, permanent deformation or danger of collapse. If water is used, the increased weight of the watered debris should be taken into account.
- If powered mobile plant will be operated on a suspended floor, the demolition contractor should ensure that a competent person (for example a structural engineer) verifies and documents:
- the type, size, weight and usage of any specified plant

- that the floor is capable of sustaining the static and live loads of the plant (including attachments) and demolished materials, without excessive deformation or collapse, either
- without additional support from below, or
- with specified propping to be applied from below so that the loads carried do not exceed their manufacturer's specified rating.
- Any powered mobile plant used in demolition work should be moved between suspended floor slabs by hoist equipment or an appropriately fabricated ramp.
- If load shifting equipment is to be used on suspended floors as part of the demolition work, a notification must be made to the regulator (see section 3.1 of this Code).
- When using powered mobile plant on suspended floors, the person conducting the business or undertaking should review the demolition SWMS to confirm that:
- where plant has been specified in the SWMS, another piece of plant of the same type and usage may be substituted for it provided that the substituted equipment is neither larger nor heavier than the specified equipment
- effective communication will be maintained between the equipment operator and the demolition supervisor while the equipment is operating
- debris is progressively removed from each floor
- buffers are used to prevent the plant from falling over the edge where plant is used to push/tip materials into a nominated areas, and
- guarding, hoarding and/or exclusion zones are used to protect persons against the risk of being struck by falling debris and materials.
- Load shifting equipment should, so far as is reasonably practicable, be located on a beam.
- Skid steer loaders using a breaker may not be appropriate on suspended floors with their limited reach.
- It is important to consider the load created when large or multiple pieces of plant are used for this purpose so as to ensure that any partially demolished structure can support the loads. For example, the use of an excavator with a hydraulic rock breaker or pulverising attachment to break up walls and floors while other load shifting equipment is used to shift the debris on a suspended floor will result in a higher load. Because of the weight of the plant, the vibration caused by its operation and the build-up of debris, careful design and planning is needed to prevent a premature collapse of the structure.

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MECHANICAL DEMOLITION OF WALLS

- When mobile plant (for example an excavator with hydraulic rock breaker) is used to demolish walls, at least 900 mm of the wall being demolished should be left intact above the floor level to provide a protective barrier at the perimeter of the building and around all lift wells, stair wells, light wells and any other places where persons or objects could fall. The remaining wall can later be safely demolished from the floor below. All remaining sections of walls should be identified and highlighted as buffers for edge protection.
- Guarding, hoarding and/or the exclusion zones should be used to protect workers and/or the public against the risk of being struck by falling debris and materials.
- Walls should not be laterally loaded by accumulated rubble or debris, to the extent that they are in danger of collapse.

USING PLANT AND ATTACHMENTS

- All plant attachments should be pinned and secured as per manufacturer's requirements.
- The plant fittings used in demolition should be designed and fit for purpose. To avoid damaging the equipment itself and to prevent the risk of plant overturning, equipment should not be overloaded.
- When plant is used to demolish vertical features such as columns or walls, the columns or walls should not be so high as to create a risk of debris falling onto the plant or operator.
- Any member to be severed (with grapples, shears or pulverising attachments) should either be effectively supported or, if allowed to fall, will not endanger persons, plant or damage the remaining structure.
- Exclusion zones should be established where necessary to protect the safety of people who are working on or in the vicinity of the demolition work. No person should be in any area near the mechanical demolition where there is a possibility of being struck by flying debris.
- Areas in which shears are operating should be kept clear of workers, because of the risk of smaller pieces of metal (for example bolts) flying off when sheared.
- For further guidance on the safe use of plant refer to the Code of Practice: Managing the risks of plant in the workplace.
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5.3.4.15 Induced collapse

- Induced collapse involves the systematic/sequential removal of key structural members and the application of a force to result in the controlled collapse of all or part of a building or structure. Expert advice should be sought from a competent person such as an appropriately experienced structural engineer, before this method is used.
- Induced collapse methods should only be used on detached, isolated structures on reasonably level sites. There must be sufficient clear space into which the collapsing material will fall. The space should be large enough to contain the collapsed material and enable equipment and personnel to be removed to a safe distance prior to the collapse.
- For further information on induced collapse methods refer to AS 2601: The demolition of structures.

LOAD REDUCTION

- Structures which are not carrying their design loads may be pre-weakened prior to deliberate collapse. This pre-weakening should be carefully planned so that despite the removal of framework members and/or the partial cutting of load-bearing members, the remaining structure has sufficient strength to withstand wind or impact loads until the actual collapse is initiated.
- Dead load can be reduced systematically by removing surplus material, machinery, roofs, cladding, walls and parts of floors before demolishing the structural frame.
- Sometimes heavy loads are left at height to induce the collapse of the structure after movement is initiated. If this system is adopted, it should be carefully analysed and documented by a competent person (for example a structural engineer) to avoid premature collapse.

WIRE ROPE, SLINGS AND CHAIN PULLING

- If using wire rope, slings and chain pulling to demolish a structure, the pulling medium should be a securely anchored winch or plant designed for towing and heavy enough to apply the required tension without sliding or lifting from the surface on which it is located.
- The wire rope, sling or chain should be long enough to ensure that the horizontal distance from the demolition work to the pulling medium is at least twice the height of the highest part to be pulled. No person should be in any position where they could be struck by the wire rope, sling or chain in the event of a failure. The plant operator should be protected from rope breakage and flying debris. Exclusion zones should be established where necessary to protect the safety of people who are working on or in the vicinity of the demolition work.
- Before pulling of a wall commences, the wall should be cut into appropriate sections having regard to their height, width and construction. If it is not possible to isolate these sections, the chains or wire ropes should be attached to their respective sections prior to the first pull being made. The free ends of the chains or ropes should be left a safe distance from the structure. Vertical reinforcing bars should not be cut until after the wall has been pulled over.
- All wire rope, slings and chains used in mechanical demolition should comply with the relevant Australian Standards.
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5.3.4.16 Using explosives

- Demolition work that involves the use of explosives is 'high risk construction work' and a SWMS must be prepared before this work commences.
- A competent person experienced in the controlled application of explosives for the purpose of carrying out the demolition should be consulted before deciding whether explosives may be used for demolition.
- Explosives must not be used to induce the collapse of any structure unless approved by the regulatory authority.
- All possession, storage, handling and use of explosives must be carried out in compliance with the relevant dangerous substances/goods or explosives legislation applicable in your state or territory.
- The transport of explosives must be in accordance with the Australian Code for the Transport of Explosives by Road and Rail.
- Explosives must only be used by a competent person who is licensed in the use of explosives and has experience in the work to be undertaken. If explosives are used in demolition work, a licensed competent person must develop the blast management plan and be responsible for all aspects of the use of explosives in the demolition.
- If explosives are planned to be used in demolition work, a notification must be made to the regulator (see section 3.1 of this Code).
- For further information on the planning and use of explosives for demolition work, refer to AS 2601: The demolition of structures and AS 2187.2: Explosives - Storage and use.
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5.3.4.17 Demolition of Special Structures

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- Special structures are complex and/or unusual because of the nature of their construction or condition. They include:
- Pre- or post-tensioned construction

- pre-cast concrete panel and framed structures
- stressed skin structures (i.e. buildings that rely on the sheeting, cladding or decking to stiffen and restrain the structural framework), and
- slung structures (i.e. floors or roofs) that are in some way suspended from a framework, supported by a structural core.
- Special structures will require proper planning and care to be demolished safely. An appropriate demolition method and sequence should be selected and documented prior to the work commencing. A demolition plan and an assessment by a competent person of the proposed demolition method may assist with this process. A SWMS must be prepared where structural elements are to be demolished.

PRE- AND POST-TENSIONED CONCRETE

- Pre-tensioned concrete contains tendons (wires, strands or bars) that have been tensioned before the concrete is placed.
- Post-tensioned concrete contains tendons that have been tensioned after the concrete has hardened.
- Tensioned tendons require controlled removal because the high level of potential energy stored in the tendons poses a risk to the health and safety and can cause damage to property. It is also important that structural stability is retained during and after tendon removal, prior to the final demolition of the concrete element.
- The tendons can be subject to corrosion that weakens them and decreases the structural integrity of the building. Damage is not usually evident externally, even if strand breakage is extensive and conditions can vary widely even within an individual structure.
- Before demolishing pre or post-tensioned concrete elements, review all available documentation on the building or structure including:
- building plans, designs and specifications to understand the type of tensioning used, the load carried, anchorage points and number of tendons, and
- any construction photographs to obtain information on anchorage details, the construction sequencing, and any other measures may affect moisture access.
- The condition of the concrete and tendons should be considered before and during demolition, for example by:
- conducting a visual inspection to confirm loads, obvious deviations from the original design and waterproofing details
- assessing conditions throughout the building, as well as utilising selective testing in representative areas to assess any weakening or breakage of tendons
- measuring humidity within tendon sheathing and analysing any sheathing contaminants
- removing, inspecting and testing a small number of tendons to assess their condition, and
- continuing to monitor tendon tension.
- Suitable control measures should be implemented, for example using steel plates or other restraint measures, at locations adjacent to pedestrian areas or where concrete cover is reduced. This will help to minimise the risk of personal injury or property damage arising from the unexpected release of stored energy in tendons.

FIRE-DAMAGED, RUINOUS AND STRUCTURALLY UNSOUND BUILDINGS OR STRUCTURES

- An assessment should be undertaken to identify asbestos, hazardous materials and structural integrity issues relating to fire-damaged, ruinous or structurally unsound buildings or structures. The person conducting a business or undertaking should request a written report by a competent person specifying the hazards associated with the design and the current state of the structure.
- Control measures should be taken, as far as is reasonably practicable, during the assessment and demolition stages.
- In specifying the hazards associated with the design and current state of the structure, the report by the competent person should also specify the control measures that should be applied to the demolition.
- Where possible, fire damaged, ruinous or structurally unsound buildings or structures should be demolished by mechanical means.

LIFT SHAFTS

- The combination of the lift shaft structure and the lift plant (including the lift cage or car, winders, counterweights, electrical supply and controls) can make these complex structures.
- Different methods can be applied to the demolition of lifts and these will depend on the circumstances of the particular site.
- In general, demolition procedures should include the following:
- temporary support of the lift cage and the disconnection of electric power to all areas of the lift machinery
- lowering of any counterweights to an appropriate level for disconnection and the unwinding of cables in a controlled manner prior to the removal of drums
- provision of temporary decking in the lift shaft, and
- progressive demolition of the lift shaft walls onto existing floors and the removal of any debris.

BASEMENTS, CELLARS, VAULTS, DOMES AND ARCHED ROOFS

- During the demolition of a basement, cellar, arch, vault or dome frequent inspections should be made to identify whether there has been any unplanned movement. If unplanned movement is detected, appropriate action should be taken to avoid any uncontrolled collapse.
- If a basement, cellar, vault or void adjoins another property, any adjoining walls should be inspected by a competent person to determine whether they are strong enough to withstand the resultant ground pressure. If they are not, the proposed methods of strengthening them should be subject to an assessment by a competent person (for example a structural engineer).
- If a basement has been built in ground with a high water table, measures should be taken, as far as is reasonably practicable, to prevent any collapse as a result of hydraulic pressure, uncontrolled water inrush or flotation.
- If work is to be undertaken in a basement, it will be necessary to determine if the basement is a confined space. There are specific requirements in the WHS Regulations for working in confined spaces. Further information can be found in the Code of Practice: Confined spaces.

MASONRY AND BRICK ARCHES

- Masonry and brick arches should be demolished in a sequence that allows for the removal of as much of the dead load material as possible without interfering with the stability of the main arch rings. The spandrel infilling should only be removed down to the springing line as the load-carrying capacity of many old arches relies on the filling between the spandrels.

- In multi-span arches, lateral restraints should be provided at the springing level before individual spans are removed.

INDEPENDENT CHIMNEYS AND SPIRES

- A detailed inspection and survey should be completed prior to the demolition of a chimney or spire. In particular, the condition of the structural material, which can range from stone and brick to steel, timber and concrete, needs to be assessed to identify any faults, such as fractured or badly weathered stone or rotten timbers.
- Measurements may need to be taken to determine whether there is any deviation from the perpendicular. The possibility of chimney instability resulting from inclement weather (for example high winds) needs to be considered during all stages of demolition work.
- Due to their height, it is common for chimneys to be demolished by hand or through induced collapse. Temporary supports may be required to ensure that premature collapse does not occur.
- Hand demolition should be carried out progressively from the top of the chimney and from safe working platforms.
- Due to their height, control measures that need to be considered when demolishing chimneys or spires include:
- temporary work platforms
- falling object protection
- exclusion zones, and
- dust control.
- Induced collapse will require sufficient clear space, approximately 1.5 times the total height of the chimney and of sufficient width depending on the type of structure.

PYLONS AND MASTS

- If using hand demolition, a pylon or mast should be dismantled in the reverse order to that in which it was erected. If another method is used, such as demolition by wire rope pulling, planning including the provision of adequate clear space will be required.

PRECAST CONCRETE PANELS

- If a structure is composed of a series of reinforced precast concrete panels, an inspection of the fixings to the rest of the structural elements, jointing between elements, and the lifting points or fittings should be undertaken to establish their nature and condition before any demolition of the structure begins.
- Where possible, the panels should be removed by a crane in the reverse sequence to that used for their erection. Wherever panels act as bracing, for example along a wall, sufficient temporary bracing should be provided to the structure, to maintain its stability during and after removal of the panels.
- The original lifting points or fittings should not be reused to lift and/or support a panel during its removal if they have deteriorated and corroded.
- Before removing any individual panel, it should be fully supported, both vertically and horizontally, above its centre of mass, so as to prevent any sudden rotational movement during its detachment from the supporting structure.
- For further guidance on precast concrete elements, refer to the Code of Practice: Tilt-up and precast concrete elements in building construction [under revision].

FAÇADE RETENTION

- The retention of façades should be planned and documented before demolition work commences. The demolition method(s) used should take into account the limits imposed by the planned façade retention.
- Use guarding, hoarding and/or exclusion zones to protect persons against the risk of being struck by falling debris and materials.
- The façade or footings may need to be repaired and temporary support for the façade may need to be installed before demolition work commences. Temporary support may also need to be installed in stages during the demolition work, depending on the support design and other external factors such as wind.
- Supervision by a competent person (for example structural engineer) during various stages of the demolition work may be necessary in order to monitor any façade movement or cracking. The structure should be inspected after any unusual incidents such as heavy rain or wind, an earth tremor or accidental impact on the façade or its supports.

STORAGE TANKS AND PIPELINES

- Before an above ground or underground storage tank and/or associated pipelines are removed or demolished, any previous use should be determined and appropriate action taken to identify and remove any hazardous chemicals. Delivery lines and vent pipes should be purged. The tank should be emptied and certified by a competent person as being free of gas, flammable vapours or other hazardous chemicals.
- If work is to be undertaken on storage tanks then it is necessary to determine whether they are a confined space for the purpose of the work. There are specific requirements in the WHS Regulations for working in confined spaces and further guidance can be found in the Code of Practice: Confined spaces.
- **General precautions**
- During the demolition of tanks and pipelines, the following precautions should be taken:
- make sure that no flammable or toxic substances or combustible liquid is allowed to enter any drainage system or watercourse
- if excavating underground tanks and/or pipelines, check the soil surrounding the tank/pipe to establish that it is not contaminated, either by leakage from the tank/pipe or by spillage, and
- hot work (for example welding; oxy-acetylene cutting) should not be undertaken where there is a chance that flammable material may be present as a result of leakage/spillage or after cleaning out the tank/pipe.

HAZARDOUS FACILITIES

- Special precautions should be taken during the demolition of major hazard facilities (MHF), chemical works, gas works and similar establishments. These types of facilities should be examined in conjunction with a competent person (for example a chemical engineer), in order to determine the nature of any of the plant, chemical deposits and their influence on the method of demolition or dismantling.
- The removal of flammable materials and their new locations should be ascertained before any demolition work starts.

CONTAINERS THAT HAVE HELD FLAMMABLE OR COMBUSTIBLE MATERIAL

- Welding and cutting work on containers that have held flammable or combustible liquids, solids, gases or dusts can result in fire or explosion if the containers are not entirely free of these materials. It is therefore important to conduct a rigorous cleaning process and that any

instructions for cleaning are followed. Containers which have held any of the following materials are considered unsafe and hot work should not be started before they are properly cleaned:

- petrol, kerosene, solvents, or light oils
- acids and alkalines, which can react with metal to produce explosive or toxic gases
- heavy oils, tars or solids which can release combustible gases when exposed to heat, and
- flammable solids, whose finely divided particles may form an explosive dust cloud.
- Any container which has held flammable or combustible substances should be considered unsafe until confirmed otherwise by a competent person.
- Further guidance on safety precautions that can be taken when welding is available in the Code of Practice: Welding processes.
-

5.3.4.18 Demolition Plan

- A Demolition Plan can be prepared for any project by the demolition contractor, to collate the key information relevant to the work into a single document including some information relevant to work health and safety.
- Manteena requires a Demolition Plan be developed for any 'notifiable works', currently:
- demolition of a structure, or a part of a structure that is load-bearing or otherwise related to the physical integrity of the structure, that is at least 6 metres in height
- demolition work involving load shifting machinery on a suspended floor, or
- demolition work involving explosives.r
- A demolition plan may include:
- the location of the site on which the structure to be demolished stands
- the overall height of the structure above ground level and the least distance from the structure to each site boundary
- the type of building (occupancy class), its structural support system and the principal materials of its construction
- the proposed methods of demolition including the number and types of major items of plant
- the proposed methods for handling and disposing of demolished materials and, in particular, of hazardous materials
- the proposed methods of controlling and maintaining access and egress to workplace
- the proposed sequence of carrying out the demolition works and an estimate of the time (in days) it is likely to take to complete all of each of the stages of the work
- the proposed hoardings, scaffolding and fencing and of any overhead sidewalk protection
- any other plans, illustrations, written documents, or specialist reports as may be necessary to support the proposed methods of work or protective structures
- traffic management arrangements, which includes managing vehicles and mobile plant hazards in relation to operation at the workplace and interaction with the public.
- the location and condition of the following
- underground essential services including

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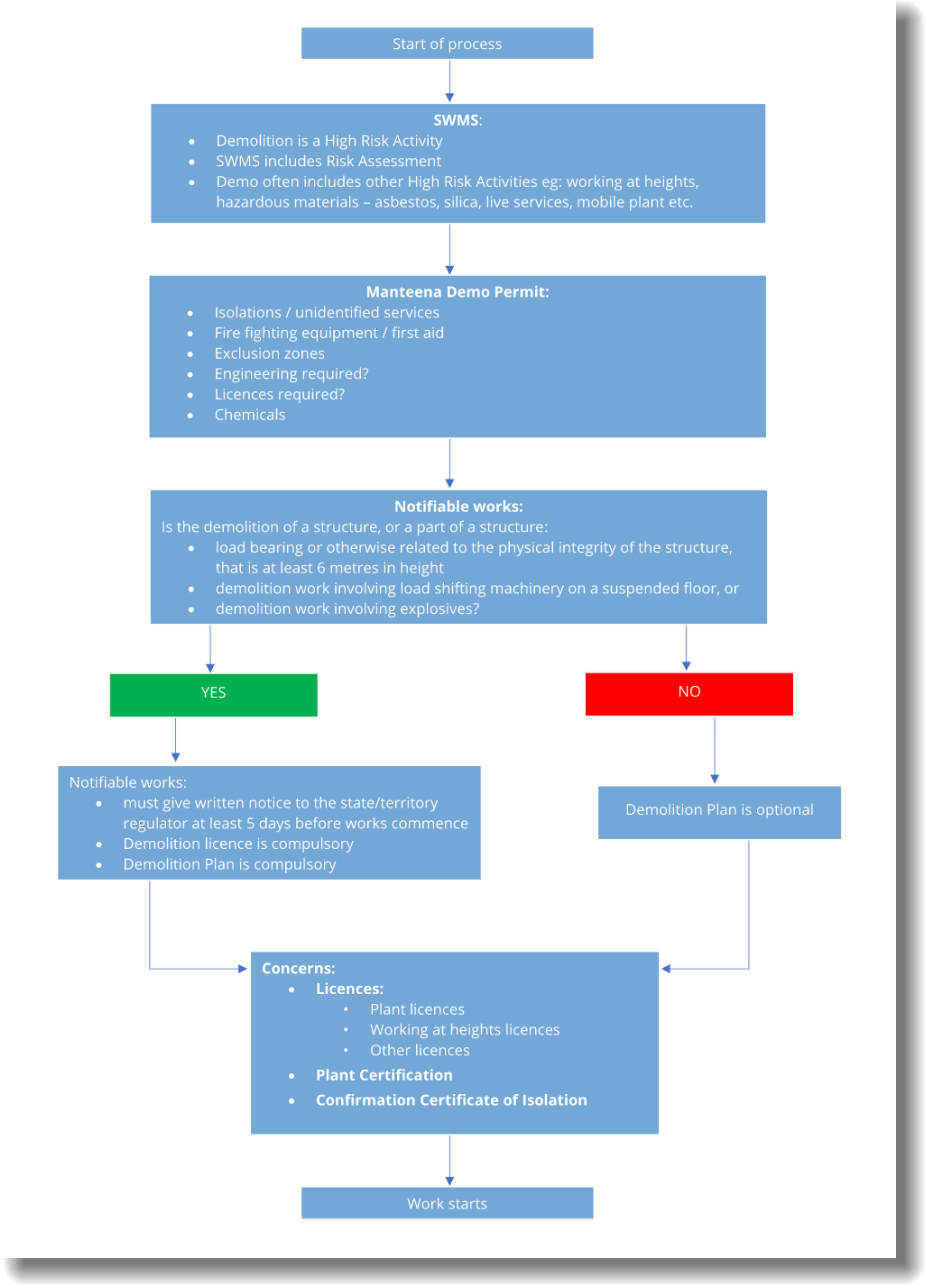
- electricity
  - drainage and sewerage
  - gas
  - water
  - communications cables (for example telephone, radio and television relay lines)
  - hydraulic pressure mains
  - liquid fuel lines
  - lubrication systems
  - process lines (chemical, acid)
- above ground essential services
- hazardous materials, including asbestos
- underground structures such as a basement, cellars, or storage tanks
- any confined spaces where work will be undertaken
- the general condition of structures on adjoining properties, particularly where these are close to or on the boundaries of the demolition workplace
- the effect demolition may have on people working in adjoining properties or seeking access to and egress from those properties, and
- the emergency arrangements, which should include equipment for the rescue of injured persons.

Referenced documents:

- SF-002 Services Location & Termination Record
- Work Health and Safety Demolition Work Code of Practice 2016
- Manteena Demolition Permit (MySite)

5.3.4.19 Demolition flowchart



5.3.5 Asbestos

(HIGH-RISK ACTIVITY – TASK SPECIFIC WMS REQUIRED)

Where asbestos containing product is found or suspected, **DO NOT Disturb it in any way**. Stop work immediately and report it to the Site Supervisor or Safety Advisor. Removal will be conducted by qualified and experienced Asbestos Removalist approved by WorkSafe ACT or the relevant state regulator and in accordance with **Manteena's Asbestos Policy** and **Asbestos Management Procedure**.

Regardless of varying jurisdictional allowances, no amount of asbestos is to be removed by unlicenced workers on Manteena sites.

Note:
If there is asbestos detected or there is a reasonable expectation that there may be asbestos on any Manteena site, Manteena must ensure the following:

1. The Project team **provide information** to ALL Contractors. (Information would be in the form of specific induction processes, information within the project specific IMP, The project specific **Hazard Register**, information of site notice boards and where reasonably practicable pictorial information).
2. **Provide supervision** of workers on site where there is any form of asbestos present on site.
3. Ensure that, on all ACT sites, all persons defined as workers shall be required to have undergone **Asbestos Awareness Training,** specifically, training that includes the unit of competence 11084NAT (formally 10675NAT and 10314NAT). Additionally, all workers in specific occupations are required to have accreditation in 10852NAT - Course in Working Safely with Asbestos Containing Materials from an approved registered training organisation (RTO). Both the list of specific occupations and the list of approved RTOs is available from WorkSafe ACT.

5.3.5.1 Asbestos in the Workplace

Manteena has specific responsibilities in regard to identifying whether asbestos is present and informing others if it is. Manteena must ensure so far as is reasonably practicable, that all asbestos or asbestos containing material (ACM) at the workplace, or assumed present, is identified by an appropriately licensed asbestos assessor. Manteena must clearly identify the location of known asbestos using e.g. signage, barricades, site noticeboard, inductions and other appropriate means.
The Contractor must assume that asbestos or ACM is fixed to or installed in the structure or plant if:

- the appropriately licensed asbestos assessor is, on reasonable grounds, uncertain whether or not asbestos is fixed to or installed in the structure or plant, or
- part of the structure or plant is inaccessible and likely to be disturbed.

Construction work, including demolition work, that involves or is likely to involve the disturbance of asbestos is high risk construction work and Manteena must ensure that a SWMS is prepared before this work commences.
If only a part of a building or structure is to be demolished, only the asbestos likely to be disturbed during the demolition of that part of the building or structure is required to be removed, so far as is reasonably practicable, before the demolition work commences.
When planning demolition or refurbishment, consider:

- the age of the building and the likelihood of asbestos or other hazardous materials being present
- the location of asbestos in relation to the proposed demolition or refurbishment
- if there are inaccessible areas likely to contain asbestos

- whether asbestos is likely to be damaged or disturbed as a result of the demolition or refurbishment work—if yes, can it be removed safely before work commences?
- type and condition of asbestos present
- amount of asbestos present
- method of demolition or refurbishment and how will it affect the asbestos, and
- the nature of the ACM (friable or non-friable).

Demolition of part of a building, structure, or plant can be carried out to access in situ asbestos so it can be removed safely. Part of a wall may be demolished to access asbestos located in the wall cavity so it can be removed before further demolition.

5.3.5.2 Asbestos Register

Manteena must obtain a copy of the asbestos register/hazardous material survey from the person with management or control of that workplace (Client) before commencing the demolition or refurbishment.
Where an asbestos register is kept, Manteena must ensure that:

- the register is reviewed and, as necessary, revised if asbestos is removed from, or disturbed, sealed or enclosed at the workplace
- before demolition or refurbishment is carried out at the workplace, the asbestos register for the workplace is reviewed and if the register is inadequate having regard to the proposed demolition or refurbishment, the register must be revised,
- the Contractor who carries out the demolition or refurbishment is given a copy of the asbestos register before demolition/refurbishment work starts, and
- a copy of the register/survey is shared with affected parties:
    - Staff – via weekly team meeting, daily briefing, email or similar
    - Contractors - via Toolbox talk, Daily Briefing, the site noticeboard or similar
    - Client - for domestic premises, inform the occupier and owner of the premises
    - Client - in any other case, inform the Client Representative
    - Others – a copy will not be shared unless necessary however affected parties will be notified of the confirmed presence of asbestos via warning signage, isolations and any other appropriate means.

If there is no asbestos register/hazardous material survey,

- the person carrying out the demolition work must not carry out the work until the structure or plant has been inspected by an appropriately licensed asbestos assessor to determine whether asbestos or ACM are fixed to or installed in the structure or plant
- If asbestos or ACM are determined or assumed to be present:
    - Manteena will request the asbestos assessor prepare an asbestos survey/identification report
    - Manteena will inform affected parties of the potential presence of asbestos:
        - Staff – via weekly team meeting, daily briefing, email or similar
        - Contractors - via Toolbox talk, Daily Briefing, the site noticeboard or similar
        - Client - for domestic premises, inform the occupier and owner of the premises
        - Client - in any other case, inform the Client Representative
        - Others – via warning signage, isolations and any other appropriate means.

Building and construction workers can expect that, in workplaces where asbestos is fixed or installed, all asbestos has been identified so far as is reasonably practicable. If there is any uncertainty about the presence of asbestos or if any part of the structure or plant is inaccessible and likely to be disturbed, it must be assumed that asbestos is present.

5.3.5.3 Removal and Disposing of Asbestos or ACM

ASBESTOS REMOVAL CONTROL PLAN

An asbestos removal control plan must be prepared by a licensed asbestos removalist before any asbestos removal work. The asbestos removal control plan must include details of:

- how the asbestos removal will be carried out, including the method, tools, equipment and PPE to be used, and
- the asbestos to be removed, including the location, type and condition of the asbestos.

Manteena must review this plan in conjunction with the Work Health and Safety (How to Safely Remove Asbestos Code of Practice) Approval 2022 or the COP for that jurisdiction.
Manteena must:

- ensure that a copy of the reviewed asbestos removal control plan is kept at the workplace until the completion of the asbestos removal work, and
- make a copy readily accessible on-site for the duration of the licensed asbestos removal work to:
  - workers or their health and safety representatives, and
  - the occupants of the premises.

If a notifiable incident occurs in connection with the asbestos removal work to which the asbestos removal control plan relates, the licensed asbestos removalist and Manteena must both keep a copy of the plan for at least two years after the incident occurs.

LICENSING

When Manteena commissions the removal of asbestos, Manteena must ensure that the asbestos removal work is carried out by a licensed asbestos removalist who is appropriately licensed to carry out the work.
There are two types of for asbestos removal licences: Class A and Class B. The class of licence required will depend on the type and quantity of asbestos, ACM or asbestos contaminated dust or debris (ACD) that is being removed at a workplace.

TYPE OF LICENCE	WHAT ASBESTOS CAN BE REMOVED?
Class A	Can remove any amount or quantity of asbestos or ACM including: any amount of friable asbestos or ACM any amount of ACD, and any amount of non-friable asbestos or ACM.
Class B	Can remove: any amount of non-friable asbestos or ACM. ACD associated with the removal of non-friable asbestos or ACM.

Note:
The licensed asbestos removalist must ensure one or more asbestos removal supervisors are named in their licence to oversee asbestos removal work. They must also ensure the named asbestos supervisor(s) hold the appropriate certification to supervise the type of licensed asbestos removal work being carried out. An asbestos removal supervisor must be present at the asbestos removal area whenever asbestos removal work is being carried out – regardless of whether it is Class A or Class B removal work.

NOTIFICATIONS

When removing asbestos from a premises, the licensed asbestos removalist must give written notice to WorkSafe ACT at least five days before removal work is commenced, or in accordance with the Regulator's notification period and process for other state and territory jurisdictions.
Where asbestos must be removed immediately in the ACT, the licensed asbestos removalist must telephone WorkSafe ACT and submit the form within 24 hours of the telephone notification. Immediate removal of asbestos may be commenced if:

- there is a sudden and unexpected event, including a failure of equipment, that may cause persons to be exposed to respirable asbestos fibres, or
- an unexpected breakdown that requires immediate rectification to enable the service to continue.

The procedure for other states or territories should be followed where relevant.
The asbestos removalist is to ensure that Manteena is provided with evidence of notification to the Regulator.

COMMUNICATION

Manteena will notify all workers on site that asbestos removal is being undertaken on site via the Daily Briefing. All other stakeholders that may be impacted by the removal works will be notified by the project manager prior to works commencing.
The asbestos removalist must ensure that signs indicate where the asbestos removal work is being carried out and that barricades are erected to delineate the asbestos area. This will assist in limiting access to the asbestos removal work area.

ACCESS

Manteena will ensure, so far as is reasonably practicable, that access to the removal area is limited to the following people:

- workers who are engaged in the removal work
- other people who are associated with the removal work, and

people who are allowed under the WHS Regulations or another law to be in the asbestos removal area (supervisors, inspectors etc.).
Manteena may refuse to allow access to any of these people if they do not comply with a control measure implemented for the workplace in relation to asbestos, or a direction of the licensed asbestos removalist.
A combination of using signs and barricades may be necessary to limit access to the asbestos removal area, for example installing a fence and signs may be used as a method to inform people where the asbestos removal area is and to limit access. Locking access doors may be appropriate as long it does not create an evacuation hazard.
All people who have access to the removal area must comply with any direction given by the licensed asbestos removalist.

DECONTAMINATION

Decontamination for the work area, workers, PPE and tools used in asbestos removal work is an important process in eliminating or minimising exposure to airborne asbestos fibres, particularly to people outside the asbestos removal work area.
The asbestos removalist in conjunction with the hygienist must assess the risks of each individual asbestos removal job to determine the appropriate decontamination procedure.
Decontamination of the asbestos removal work area

There are two types of decontamination process:

- Wet decontamination, or wet wiping, involves the use of damp rags or wet wipes to wipe down contaminated areas. Rags should only be used once, although they may be refolded to expose a clean surface. The rags should be used flat and should not be wadded. If a bucket of water is used, the rags should not be re-wetted in the bucket as this will contaminate the water. If the water is contaminated, it must be treated as asbestos waste. Care should be taken to avoid any potential electrical hazards when using this procedure.
- Dry decontamination involves carefully rolling or folding up and sealing polythene sheeting and/or vacuuming the asbestos removal area with an asbestos vacuum cleaner. Dry decontamination should only be used where the wet method is not suitable or poses a risk because of hazards such as electricity or slipping.

Contaminated items, tools, equipment and clothing must not be removed from the removal work area unless they have been decontaminated or placed in sealed containers labelled in accordance with the sheet Globally Harmonised System of Classification and Labelling of Chemicals (GHS). If an item is not able to be decontaminated, or is not suitable for decontamination, it should be placed in an appropriately labelled and sealed container and disposed of as asbestos waste. The sealed container must be decontaminated before it is removed from the asbestos removal work area.

If asbestos removal work involves friable asbestos, the decontamination procedures must include decontamination units. 'Glove bag' and 'wrap and cut' methods are exceptions where personal decontamination procedures are likely to be satisfactory and decontamination units will not be necessary. Mini-enclosure removals may require a combination of personal decontamination and decontamination units if used for friable asbestos removal.

Personal decontamination procedures

Personal decontamination involves the removal of all visible asbestos dust/residue from PPE and RPE. You must ensure personal decontamination is undertaken each time a worker leaves the asbestos removal work area and at the completion of the asbestos maintenance or service work. Personal decontamination should be done within the asbestos removal work area to avoid the worker re-contaminating themselves or contaminating adjacent areas. Personal decontamination should be carried out even where a decontamination unit is not necessary, such as during minor or small-scale asbestos removal and maintenance work.

All decontamination processes must be conducted in accordance with the COP How to safely remove asbestos.

DISPOSAL

The route for removal of the asbestos waste bags or containers through the asbestos removal work area must be designed prior to commencement of the asbestos removal work. Only unused heavy duty polyethylene bags (minimum 200 µm thickness) and heavy-duty polyethylene sheeting can be used. Bags labelled for asbestos waste should not be used for any other purpose. In occupied workplaces, all movement of waste containers through a building should take place outside normal working hours.

Waste disposal should take the following into account:

- the containment of waste so as to eliminate the release of airborne asbestos fibres
- details of any asbestos or ACM to be left in situ
- the types of fittings and supports and whether removal and disposal of these items is part of the work specifications
- the location and security of waste storage on site
- the transport of waste within the site and off site
- the location of the waste disposal site

- ensure that the proposed location for the storage and asbestos removal work area and the surrounding area will be unoccupied for the duration of the removal
- approvals needed from the relevant local disposal authority, and
- any local disposal authority requirements that may apply to the amount and dimensions of asbestos waste.

Asbestos waste must be transported and disposed of in accordance with the relevant state or territory Environment Protection Authority (EPA) requirements. Asbestos waste can only be disposed of at a site licensed by the EPA and it must never be disposed of in the general waste system. Manteena may request evidence of appropriate disposal.

All disposal processes must be conducted in accordance with the COP How to safely remove asbestos.

MINOR ROUTINE AND MAINTENANCE WORK

Minor maintenance work includes routine work that is small scale, often short in duration and may be unscheduled. This work may require the partial dismantling of a structure or plant and may include the removal of asbestos or asbestos containing material (ACM) such as

- if you are a plumber, this allows you to disturb small amounts of non-friable asbestos if you come across it during renovations, refurbishments, or service and maintenance work.
- Sealing, painting and coating for the purpose of maintaining the condition of the non-friable asbestos or non-friable ACM.
- Cleaning leaf litter from gutters of asbestos cement roofs.
- Removing and disposing of small, isolated pieces of ACM found at a premises.

However, you must still use safe working methods to ensure the work is not creating a risk to the health and safety of people at the workplace.
The following activities, and any other like activities, ***would not be considered*** *minor routine maintenance work:*

- *Disturbing loose fill asbestos insulation (for example in 'Mr Fluffy' homes).*
- *Cleaning a medium to large premises which has surfaces covered in asbestos contaminated dust (for example where clean-up will take at least 4 hours) - Class A licensed removalist required.*
- *Cleaning any ACM with high pressure air or water devices.*
- *Unless otherwise prescribed in legislation, undertaking any maintenance work on friable asbestos or ACM.*

If, as a person conducting a business or undertaking (PCBU), you do not hold a Class A or Class B asbestos removal licence, you may only carry out work involving asbestos if it is in the course of minor or routine maintenance work, or other minor work.
Manteena will not remove, or direct or allow a worker to remove, friable asbestos materials if you do not have a Class A asbestos licence.
Manteena will ensure workers carrying out work involving asbestos are trained in the VET course Asbestos Awareness. Workers in certain prescribed occupations must also have completed the VET course Working Safely with Asbestos.
If you disturb asbestos in the course of your work you must comply with the duties of the Code of Practice. These duties include:

- ensure signs and barricades are erected to indicate and delineate the asbestos work area
- use the wet method to remove asbestos where reasonably practicable
- ensure the correct tools, equipment (and PPE) are used
- ensure decontamination facilities are available
- contain and label asbestos waste and dispose of it as soon as reasonably practicable at a site licensed to accept asbestos waste, and

- ensure that PPE and clothing used in asbestos removal work and contaminated with asbestos is handled in accordance with the WHS Regulations.

Although it is not mandatory for you to prepare an Asbestos Removal Control Plan if you disturb asbestos in the course of minor or routine maintenance work, or other minor work, it may be beneficial to do so to ensure the work is being carried out safely. Refer to section Asbestos Removal Control Plan for further information.
It is also not mandatory to conduct air monitoring but an independent licensed asbestos assessor can carry it out in these situations. Refer to section Air Monitoring for further information.

5.3.5.4 Air Monitoring

OVERVIEW

Air monitoring involves collecting air samples to assist in assessing the levels of airborne asbestos fibres present in either:

- the asbestos removal area to assess the effectiveness of controls (control monitoring), or
- the worker's breathing zone to assess exposures to asbestos (exposure monitoring).

Air monitoring must be conducted in accordance with the *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres, 2nd Edition [NOHSC: 3003 (2005)]* (the membrane filter method). All asbestos assessment, clearance inspections and air monitoring must be performed by an appropriately licensed asbestos assessor, who is independent of the asbestos removal process. Testing must be undertaken by a NATA certified testing laboratory. A monitoring report that includes a clearance inspection certificate must be provided prior to the area being returned to normal use.

CONTROL MONITORING / AIR MONITORING

Control monitoring requirements will vary depending on the type of asbestos being removed, the location and position of the asbestos, if an enclosure is used and whether the asbestos removal work is within a building or outside.

- Friable asbestos removal—control monitoring is mandatory for all friable asbestos removal. This includes prior to dismantling an enclosure and for the purposes of the clearance inspection.
- Non-friable asbestos removal—control monitoring is not required but may be carried out by an independent licensed asbestos assessor to ensure that controls being used to eliminate or minimise exposure to airborne asbestos are effective.
- Public location—Air monitoring should be considered where the asbestos removal work is being undertaken in or next to a public location.

Air monitoring may be required when:

- it is not clear whether new or existing control measures are effective
- there is evidence (for example, dust deposits are outside the enclosure) the control measures have deteriorated as a result of poor maintenance
- modifications or changes in safe work methods have occurred that may adversely affect worker exposure, or
- there has been an uncontrolled disturbance of asbestos at the workplace.

Control monitoring must be conducted immediately before and during Class A asbestos removal work. Control monitoring must be carried out within the enclosure used for removing friable asbestos before it can be dismantled, as well as outside the enclosure prior to, during and after the removal.
Control monitoring may be carried out (however not mandatory) before and during Class B asbestos removal work to ensure that controls being used to eliminate or minimise exposure to airborne asbestos are effective. Control monitoring results cannot be compared to the exposure standard for

asbestos. Where there are concerns about possible worker exposure, exposure monitoring should be undertaken to ensure compliance with Part 8.2 of the WHS Regulations.

WHO MUST CONDUCT THE MONITORING?

When Manteena commissions asbestos removal work that requires a Class A licence, Manteena must ensure that an independent licensed asbestos assessor undertakes air monitoring of the asbestos removal area at the workplace. The independent licensed asbestos assessor must use the membrane filter method.
Where control monitoring is otherwise required, for instance following an uncontrolled disturbance or release of asbestos at the workplace, only an independent licensed asbestos assessor can carry out the air monitoring.

RESULTS OF THE MONITORING

Manteena and the licensed asbestos removalist will take action depending on the respirable fibre levels reported in control monitoring results. Where the results show that respirable asbestos fibre levels exceed the action levels outlined in the table below, regardless of whether removal has commenced, action must be taken immediately.

ACTION LEVEL	CONTROL	ACTION
Less than 0.01 fibres/mL	No new control measures are necessary	Continue with control measures.
At 0.01 fibres/ml or more than 0.01 fibres/mL but less than or equal to 0.02 fibres/mL	1. Review	Review control measures.
	2. Investigate	Investigate the cause.
	3. Implement	Implement controls to eliminate or minimise exposure and prevent further release.
More than 0.02 fibres/mL	1. Stop removal work	Stop removal work.
	2. Notify regulator	Notify the relevant regulator by phone followed by a written statement that work has ceased and the results of the air monitoring.
	3. Investigate the cause	For example, conduct a thorough visual inspection of the enclosure (if used) and associated equipment in consultation with all workers involved with the removal work.
	4. Implement controls to eliminate or minimise exposure and prevent further release	For example, extend the isolated/barricaded area around the removal area/enclosure as far as reasonably practicable until fibre levels are at or below 0.01 fibres/mL, wet wipe and vacuum the surrounding area, seal any identified leaks (e.g. with expandable foam or adhesive (cloth or duct) tape) and smoke test the enclosure until it is satisfactorily sealed.
	5. Do not recommence removal work until further air monitoring is conducted	Do not recommence until fibre levels are at or below 0.01 fibres/mL.

CLEARANCE CERTIFICATE

Manteena must ensure that once the licensed asbestos removal work has been completed:

- a clearance inspection is carried out, and
- a clearance certificate in writing is issued before the workplace can be re-occupied.

Clearance inspections must be carried out and clearance certificates issued by an independent licensed asbestos assessor, for work that must be carried out by a licensed asbestos removalist.
In some cases, it may not be reasonably practicable for the licensed asbestos assessor to be independent from the person who carried out the asbestos removal work. If this is the case, the PCBU commissioning the asbestos removal work can apply to the regulator for an exemption from this requirement under Part 11.2 of the WHS Regulations.
(The independent licensed assessor must not issue a clearance certificate unless they are satisfied that the asbestos removal area and the area immediately surrounding it are free from visible asbestos contamination. To do this, they must conduct a visual inspection for evidence of dust and debris. If air monitoring is also conducted, the results of that test must show that any identified respirable asbestos fibre levels are below 0.01 fibres/mL).
If a clearance certificate has not been obtained, the asbestos removal area must not be re occupied for normal use or other work activities. A clearance certificate must be issued before the area can be re-occupied for demolition or other work.
Unauthorised people cannot enter the asbestos removal work area prior to a clearance certificate being issued and any protective barricades should remain in place until the completion of all licensed asbestos removal work and the final clearance certificate is issued.

FALSE POSITIVE RESULTS

If doubt exists whether the high reading is caused by a foreign material i.e. synthetic mineral fibre, regular dirt/dust etc, or by asbestos, then Scanning Electron Microscopy (SEM) test could be performed in order to assess if asbestos has been dispersed during asbestos removal work. In the event of a negative SEM test result ("not asbestos"), based upon the advice of a hygienist, it is safe to assume work can recommence, however controls are to be put in place to prevent further false positives.

CONSULTATION

Manteena must ensure the results of air/control monitoring are given to:

- workers at the workplace – via site safety noticeboard, daily briefing or similar
- workers who were in the work area during the relevant period
- health and safety representatives for the workplace – via email or other appropriate means
- other people at the workplace (client, public etc) – via email or other appropriate means.

5.3.5.5 Health Monitoring

Manteena will ensure health monitoring is provided to a worker if they are at risk of exposure to asbestos when carrying out:

- licensed asbestos removal work, or
- asbestos-related work.

Health monitoring includes a medical examination by a registered medical practitioner with experience in health monitoring to provide an initial baseline medical assessment. Health monitoring must include the following, unless another form of health monitoring is recommended by the registered medical practitioner):

- consideration of the worker's demographic, medical and occupational history

- consideration of records of the worker's personal exposure, and
- a physical examination of the worker with emphasis on the respiratory system, including standardised respiratory function tests, unless another form of health monitoring is recommended by a registered medical practitioner.

Manteena will inform workers of any health monitoring requirements before they carry out work that may expose them to asbestos. Manteena must pay all expenses relating to health monitoring.
As Principal Contractor, Manteena has a duty of care to confirm that PCBUs are fulfilling their duty to conduct health monitoring of workers. Manteena may request evidence of health monitoring records within the bounds of the Privacy Act.

LICENSED ASBESTOS REMOVAL WORK

If a worker is carrying out licensed asbestos removal work, health monitoring must be conducted prior to the worker commencing the work and thereafter at regular intervals not exceeding once every two years.

ASBESTOS-RELATED WORK

Health monitoring may also be required for various types of work other than licensed asbestos removal where there is a risk of asbestos exposure. These include regular minor or routine maintenance work and minor work on asbestos containing material which may be undertaken by electricians or building maintenance staff in older buildings.
The question of whether or not health monitoring is required for these workers depends on whether there is an assessed risk of exposure to asbestos when carrying out asbestos-related work. This should be determined on the basis of:

- the potential for exposure
- the frequency of potential exposure
- the duration of the work being undertaken.

Manteena will determine whether regular asbestos-related work is being undertaken by its workers and determine whether it should be providing health monitoring.

- Further specific guidance on managing asbestos when demolition and refurbishment work is being carried out can be found in the:
- Demolition section of this IMP
- Code of Practice: How to manage and control asbestos in the workplace
- Code of Practice: How to safely remove asbestos, and
- the sheet Globally Harmonised System of Classification and Labelling of Chemicals (GHS).
- See also *Health Monitoring, Certificate Classes* and *Demolition* sections of this document.

Referenced Policy:

- CPOL-032 Asbestos Policy

Associated Documentation:

- SP-905 Asbestos Management Procedure

5.3.6 Work in Confined or Restricted Spaces

(HIGH-RISK ACTIVITY – TASK SPECIFIC WMS REQUIRED)

No persons are to enter a confined space unless they hold a competency ticket and have completed a **Risk Assessment** as per AS 2865, section 3 – 3.3, developed a specific **WMS**, and hold an entry permit **SF-035 Confined Space Permit** as per AS 2865 Appendix H signed by the Manteena Site Supervisor. The following requirements must be met:

- A valid entry permit;
- Standby arrangements for continuous communications between the person in the confined space and the responsible person on the outside and emergency procedures that can be initiated from outside of the confined space area;
- The procedure to know when workers have exited the confined space; and
- Emergency procedures for rescue and first aid in the event that this is required.

Referenced documents:

- SF-035 Confined Space Permit
- AS 2865 – 2009 Confined Spaces
- First aid and equipment assessment
- Emergency Response Plan

5.3.7 Excavations, Trenching and Openings

(EXCAVATIONS 1.5M IN DEPTH OR GREATER = HIGH-RISK ACTIVITY – TASK SPECIFIC WMS REQUIRED)

All work carried out is to be in accordance with the relevant Work Health and Safety Act and the Excavation Work Code of Practice, along with Safety control measures in Trenching Operations. Sub-contractors should consult with Manteena prior to excavation – **regardless of the depth of the penetration, any ground disturbance requires a Manteena permit.**
Excavations with a depth of 500mm or less should be identified with bollards and tape or equivalent. Excavations between 500mm and 1.5m depth should be identified with star pickets and para-webbing or equivalent. Excavations of 1.5m depth or more must be barricaded by temporary fencing or equivalent in addition to site perimeter fencing.
A person conducting a business or undertaking who proposes to excavate a trench at least 1.5m deep, must minimise the risk to any person arising from the collapse of the trench by ensuring that all sides of the trench are adequately supported by one or more of the following:

- shoring by shielding or other comparable means (for example, boxing);
- benching;
- battering and
- excavations, trenching and openings must be suitably barricaded or covered to prevent the risk of falling by any person, and must be left securely covered while unattended.

A combination of these control measures may be the most effective depending on the work environment and characteristics of the excavated material. In built up areas or streets the excavation may have to be fully or partly sheeted or supported to prevent collapse due to localised vehicle movement.
Where a worker enters a trench and there is a risk of engulfment, these control measures should be implemented regardless of the depth of the trench.

A report from a geotechnical engineer may be required to provide information on the stability and safety of a trench excavation. The report should include details of the soil conditions, any shoring or trench support requirements, dewatering requirements and any longer-term effects on stability and safety of the excavation. A competent person (e.g. an engineer) should design any support systems or be involved in the selection of other ground collapse control measures, such as trench shields. Shoring, benching and/or battering may not be required if written advice is received from a geotechnical engineer that all sides of the trench are safe from collapse. Any advice should state the period of time to which it applies and may be subject to a condition that specified natural occurrences may create a risk of collapse.
Any geotechnical reports will be made available to Manteena prior to anyone entering the excavation or zone of influence.

Potential for Destabilisation of Earthworks/Temporary Works

The condition of soil surrounding excavations can change quickly due to soil drying out, changes in the water table or water saturation of the soil. This can lead to de-stabilisation and potential failure of temporary earthworks and retaining walls, especially in basement construction. This presents a significant safety risk.
Manteena will ensure the stability of their works including temporary earthworks, retaining walls and basement construction by:

- Monitoring the weather forecast to enable changes/preventative measures to be made to the worksite in anticipation of extreme weather events.
- Ensuring that the works are constructed strictly in accordance with the approved drawings.
- Ensuring that regular inspection/monitoring of the works occurs. The soil condition and the state of shoring, battering and trench walls should be frequently for signs of earth fretting, slipping, slumping or ground swelling. This would include survey monitoring as per the design engineers' instructions.
- Providing suitable barriers/protection at the top surface of cuttings to ensure that fill or other material does not become saturated.
- Ensuring that all stormwater systems (including pipes, drains, pits and swales) are installed and checked on a regular basis.
- At the first sign of any movement/cracks or other issues, cordoning off the area and making safe, then arranging an inspection by a suitably qualified engineer and or geotechnical engineer to assess the situation and provide recommendations.
- Where necessary, repair the excavation or strengthen the shoring system from above before allowing work below ground to continue.

Site Supervisor shall request documented evidence from the Contractor for any active excavations or trench over 1.5m in depth. The evidence required of the Contractor shall be in any documented form such as an excavation checklist, toolbox talk, or diary note. The general condition of the excavation or trench will also need to be inspected by Manteena every calendar day it is active through use of the **Daily Site Safety Inspection** form. This is to ensure the controls identified by the Contractor are in place and are sufficient to ensure safe work so far as is reasonably practical. Access to excavation and trenches by personnel other than the Contractor undertaking the work must be notified and managed through the Site Supervisor. The following practices are to apply:

- No person enters an unsupported section.
- Trenching supports are appropriate to the conditions (i.e. the need or otherwise for trench shields, close sheeting, benching or battering).
- Spoil heaps are properly positioned at least 1000mm from the edges of the zone of influence.

- Safe ladder access is provided into the trench and every 10 metres after depending on the length of excavation.
- All workers to wear safety helmets.
- No person is working alone in an excavation.
- Persons to wear high visibility vests when working on or near machinery.
- The excavation is protected by para-webbing barricades.
- Workers in excavations are not exposed to an accumulation of hazardous fumes including fumes from petrol or diesel vehicles.
- Never enter a trench that is not shored or battered.
- Mechanical plant, vehicles, storage of materials (including excavated material) or any other heavy loads should not be located in the 'zone of influence' of an excavation unless the ground support system installed has been designed by a competent person, for example a geotechnical engineer, to carry such loads.

Personnel are <u>not</u> to remain in close proximity to where an excavator is operating or any vehicle being loaded adjacent to the trench / excavation. The excavation is to be protected at normal ground level by continuous para-webbing barricades within the site boundaries (two metres from the edge) and external to the site boundaries by fully fencing the excavation off from members of the public. Manteena are to undertake inspections of the implemented controls during daily inspections utilising the **Daily Site Safety Inspection**.

When an excavation / penetration permit is to be raised, sub-contractors use an online tool accessed via their mobile phone or similar device with QR scanning capabilities.
Permit process outline:

- Scan the project specific QR code provided by Manteena site staff.
- The sub-contractor conducting the work should fill in all required permit details and submit. The submission should include attachments (e.g. photos of the task location) that support the submission if relevant or required by site staff.
- The sub-contractor will receive an email from the site manager approving or rejecting the excavation. If rejected, the sub-contractor is to amend as requested and resubmit.
- The sub-contractor completes the work and submits for close-out.
- Manteena site staff review the submission and approve the close-out or request a re-submission.
- The sub-contractor will receive email notification that the excavation permit has been closed-out or that re-submission is required.
- The details of all permits (including the progress of all permits, the name of the person submitting the permit, name of the person approving the permit and the dates of submission and approval) is tracked by Manteena's internal management system My Site; data is available via site management.

Referenced documents:

- SF-051 Daily Site Safety Inspection

5.3.8 Tilt-up and Precast Concrete

(HIGH-RISK ACTIVITY – TASK SPECIFIC WMS REQUIRED)

A safe method of unloading and erection of the panels has been assessed and documented, the installation and bracing of such panels is in accordance with documented procedures compliant with AS3850 and specifications for proprietary items used. For proprietary items, technical specifications including make, type and working load limit (WLL) shall be provided by the supplier and a copy shall be held available on the project site. Lifting, bracing and fixing inserts shall be specified on the design drawings, they shall not be changed without prior approval from the panel designer. Drawings shall comply with AS 1100.501.

The shop drawings of the panel shall also include both the design details for the in-service condition and for its erection and temporary bracing phases. A symbol legend shall be shown on the drawings.

In order to facilitate the preparation of suitable shop drawings, the structural drawings shall include the following:

- Date and issue number of the drawing.
- Plans and elevations clearly indicating the structural framing and panel layout.
- Structurally critical dimensions.
- Panel reinforcement required for in-service loadings and conditions.
- Framing connection locations and required type (e.g., cast-in) and the capacity of fixing inserts.
- Levelling pad details.
- Structural design criteria affecting construction.
- The concrete specification, including all special requirements to meet in-service loadings and conditions, and that the concrete shall also meet the strength requirements at the time of lifting nominated on the panel shop drawings.
- Base connection details, for example, grouting sequence of dowel connections.
- The maximum value of the initial lift load, including an allowance for suction when lifting off the casting bed.

Shop drawings shall include the following:

- Date and issue number of the drawing.
- Project location.
- Panel number for each element.
- The mass of each element.
- Location of each element on a layout (marking) plan.
- Element dimensions and centre of gravity.
- Structural reinforcement.
- The location, orientation and depth of all inserts and the configuration and cover of any component reinforcement that is required.
- Where applicable, the type, make, capacity and technical specifications of—
    - Temporary braces;
    - Lifting inserts;
    - Bracing inserts;

    - Fixing inserts; and
    - if required, strong backs, strong back fixing inserts and locations.
- The size, configuration and cover of any additional reinforcement required for the transport and lifting of the element.
- The requirements for brace footings, if required.
- Levelling pad details.
- The concrete specification including:
    - All special requirements to meet in-service loadings and conditions;
    - Concrete strength of the panels required at the time of lifting; and
    - Concrete strength of the footings and bracing support elements required at the time of erection.
- Surface finish of each element.
- Where appropriate, the tolerance limits on the element.
- The orientation of the elements.
- Configuration of secondary braces, including knee braces and lateral restraints including required capacities.
- Rigging details.
- Prior to each installation, a Precast Checklist should be completed by the project team with input from all relevant sub-contractors (e.g. precast manufacturer, precast installer and crane operator).

Referenced documents:

- AS 3850
- Precast Checklist

5.3.9 Traffic Management

(Includes for work on or adjacent to roadways, railway or shipping lane)

(MAY BE CONSIDERED A HIGH-RISK ACTIVITY – MAY REQUIRE A TASK SPECIFIC WMS: CONSULT THE SAFETY MANAGER BEFORE PROCEEDING)

Manteena will implement an approved **External Temporary Traffic Management (TTM) Plan**, signage and notices for vehicles and pedestrians. This includes any work that are directly related to the project but not within the perimeter of site. Manteena requires all site personnel to be aware of the traffic management requirements and adhere to them at all times as they may change from time to time as the circumstances vary. The requirements of the TTM will be included in the **Site Specific Induction** and the TTM will be posted on the notice board for quick reference by workers.

All traffic control measure as documented within the TTM are to be inspected for compliance to stated needs on a regular basis by members of Manteena's project team (refer to the **Daily Site Safety Inspection** criteria and to **Job Statements in section 6**).

Traffic controllers have a responsibility to carry out traffic control in accordance with the requirements of the relevant road authority. The requirements for training and accreditation of traffic controllers should be confirmed with the relevant authority as these may differ between jurisdictions. Minimum expectation is that controllers have received training to the level of:

- A Statement of Attainment or Certificate issued by a Registered Training Organisation (RTO) for the successful completion of the appropriate unit of competency in the Nationally Recognised Training (NRT) package; or
- Evidence of formal VoC assessment against a written criteria by a person who has a Certificate IV in Training and Assessment and demonstrated operational experience in the subject matter.

An **Internal Traffic Management Plan** is to be drafted and implemented to ensure the internal site traffic routes are identified, kept clear of construction equipment, stores, and debris at all times and provide a safe and reasonably controlled means of movement for plant and workers within the site perimeter.

- All movement of plant shall be managed / document on the Internal Traffic Management Plan and within the operating contractor's WMS.
- All deliveries are to be co-coordinated in advance with the Site Manager / Site Supervisor and are to be managed in compliance with the internal and external TTM's.
- All Contractors and Sub-contractors are to conform to Australian Standards, regulatory standards and measures for Traffic Management including, but not limited to;
- Working on or adjacent to roads and vehicle traffic areas.
- Ensure approved traffic management plan shall be in place.
- Ensure Workers are inducted into the traffic management plan during the site induction process.
- Ensure Site Personnel shall wear fluorescent (Hi-Vis) vests / clothing at all times.
- Ensure Vehicles and equipment shall be parked safely off roadways and the like.

Referenced documents:

- SF-060 Temporary Traffic Management Form

5.3.10 Mobile Plant

(HIGH-RISK ACTIVITY – TASK SPECIFIC WMS REQUIRED)

- All plant and equipment on site (owned by Manteena, Contractor or hired) is to be operated, maintained and repaired in accordance with statutory and manufacturer's requirements / specifications.
- Manteena's Site Supervisor shall ensure all Plant and Equipment (including electrical) used on site by Manteena workers is recorded in the relevant Forms; Plant and Equipment Register and Electrical Equipment Register.
- Contractors will supply Manteena with a copy of their Plant and Equipment Registers detailing machinery details along with Plant Risk Assessments and Work Methods Statements. All risks associated with mobile plant must be identified, assessed and controlled in accordance with the Hierarchy of Control. The content of a Plant Risk Assessment should be in line with the content outlined in the Code of Practice for Managing the Risks of Plant in the Workplace.
- A **Plant and Equipment Certificate** is to be completed for all high risk mobile plant (including hired plant) prior to the plants use on site. Contractors are to supply all relevant documentation requested within the certificate. All high risk plant is entered into the Project **Plant and Equipment Register** and is fitted with a Manteena plant tag until the plant leaves site. Plant tags are checked during the **Daily Site Safety Inspection** and during Site Safety Walks.
- The plant tag display the following information:
    - Project;

- Contractor;
- Plant registration/serial number;
- Certification date; and
- Next service due date/hours.

- Where plant and equipment is found to be out of service or in disrepair the relevant Contractor, or Manteena's Site Supervisor, will ensure that the plant and equipment is clearly identified and isolated. When the out of service plant and equipment is unsafe to operate, a 'lockout / tagout' process is to be initiated, i.e. keys removed and if required a physical barrier to prevent operation of the plant /equipment is to be put in place.
- Plant that comes to and from site (e.g. mobile cranes, concrete pumps) are to have their plant tags checked on each arrival and the Project **Plant and Equipment Register** updated.
- Only competent operators are to use plant. Refer to Qualifications, Training, Licencing and Verification of Competency (VoC) section of this document.
- **Operation of the following plant requires a high-risk licence:** Tower crane (CT), Derrick crane (CD), Portal boom crane (CP), Bridge and gantry crane (CB), Vehicle-loading crane (CV), Non-slewing mobile crane (CN), Materials hoist (HM), Personnel and materials hoist (HP), Boom-type elevating work platform (WP), Concrete-placing boom (PB), Reach stacker (RS) Forklift truck (LF), Order-picking forklift truck (LO).
-

5.3.10.1 Minimum Requirements

- No load is to be lifted over a person – exclusion zones are to be set up or a licenced dogger is to ensure a path is clear under the load. This is to be controlled by contractors' WMS.
- The operator is to ensure that they do not exceed the Safe Working Load (SWL) of the Plant. All plant used on site will be required to have the maximum SWL of the plant displayed on the plant (i.e. compliance plate). All operators are to ensure that the specific load charts for the plant are readily available and used to assess the lift.
- Operators are to consult with Manteena on the ground capacity prior to setting up for a lift or travelling with a load, to ensure that no trenches / service trenches / soft ground / unsuitable fill / penetrations will be encroached. A geotechnical engineer (geotech) may be required to provide clearance for operations if ground conditions are unknown. This clearance should be confirmed by the geotech following any rain event since the original clearance.
- Operators are to follow the Code of Practice for excavations 'encroaching the zone of influence' when lifting close to excavations.
- When operating plant on a suspended slab, Manteena is to obtain engineered capacity of the slab / slab loading from a structural engineer. The operator and Manteena are to ensure plant (and its load) does not exceed the baring capacity of the slab. Clear signage / identified markings are to be erected to ensure safe loading sections of the slab are identified.
- Contractors will ensure daily start-up safety checks are conducted for all plant and equipment being used onsite. These checks are to be conducted as per the manufacturer's recommendations. Records of the start-up checks are to be maintained.
-

5.3.10.2 Specific Plant Requirements

- **Designed Crane Lifts**: The project team, led by the site manager/supervisor, are responsible for determining if a lift is classified as a designed lift. A designed lift includes *any extraordinary*

and temporary lifting operation requiring an assessment of the design of the crane, which may require a temporary re-classification or re-rating or a change in the intended use of the crane (as defined in AS 2550.1) and other non-routine, complex crane lifts that require detailed planning and unusual or additional safety precautions.

Examples of designed crane lifts include:

- Irregular loads or loads where the centre of gravity changes or is difficult to determine;
- Use of multiple cranes;
- Lifting within 90% or more of the safe working limit (SWL) of the crane;
- Lifts where the load exceeds the published rated capacity of the crane;
- Lifting on a suspended slab;
- Lifting personnel (work box);
- Lifting submerged loads;
- Lifting with no or partial outriggers (when a crane is fitted with);
- Lifting near unprotected live services (above and below ground, i.e. power lines); and/or
- Any lift that is determined by the involved parties as outside of a normal operation.

Before a designed crane lift is undertaken, the project team should refer to the Manteena Lift Procedure held on SharePoint.

Lifting people using mobile plant: Unless specifically designed to lift people (e.g. EWPs), generally, mobile plant will not lift people and people will never ride a load. People should only be lifted by mobile plant if risk analysis shows that this means of access is safer than all other means of access and approval has been sort from the Site Manager. When a crane is used to lift people, the work box will be designed in accordance with AS 1418.17 and the requirements of AS 2550.1 shall apply. Other hoists used in the suspension of people should comply with AS 1418.

Using other powered mobile plant as a crane: Where an excavator has the capacity to "lift" 1 tonne or more, meaning that it is be used as a crane, that excavator shall be fitted with burst valves.

Access to and egress from an elevated work platform (EWP) when it is in an elevated position: This is not a general practice on Manteena sites. On any occasion, approval must be sort from the Site Manager and a Toolbox Talk submitted that addresses every condition outlined in section 5.9 of *AS 2550.10 Access to and egress from the platform in the elevated position.*

Acceptable load management and lifting practices:

- Never work under a suspended load
- No one should ever ride a load
- No dragging of loads
- Secure or remove all unused sling legs
- Designed lifting devices such as stillages, bins and frames must not be lifted if compliance plates aren't visible
- Double wrap loads that will slip or slide within slings (including loose bundles and smooth surface loads)
- Padding must be used to protect slings from sharp corners on loads
- Never 'piggy back' loads (when multiple loads are slung in a vertical configuration in a single lift)
- All available lifting points on equipment should be used (e.g. all four corner points of a bin)
- Stillages or open top materials cages will not be overloaded
- Only designed lifting devices should be used, for example:
  - Pallet cages should be used for palletised loads
  - Brick cages should be used for lifting bricks
  - Drums should be lifted in purpose built cradles with base support
- Should an undesigned lifting device need to be used, it must be certified by an engineer or a person who holds an intermediate or advanced rigging licence.

5.3.10.3 Lifting Equipment

- Lifting equipment and lifting points must be maintained / inspected in accordance with the relevant Australian Standard. All records of inspection / maintenance must be documented on a register and to be provided to Manteena for review prior to use on site. Common equipment, inspection intervals and the associated standards are listed in the Lifting Gear Schedule on SharePoint. Unless otherwise specified, the inspection is to be conducted by an independent specialist.
- Where lifting equipment or lifting points compliance information is not covered by a specific Australian Standard (for example, built-in lifting points on mobile plant), guidance provided in *AS 4991 Lifting Devices* should be used, including for maintenance and inspections.
- Prior to each use or shift, lifting devices shall be visually inspected to ensure the device is free of any significant damage or wear and markings are legible. If any defects are detected, the lifting device shall immediately be withdrawn from service.

Referenced Documents:

- SF-032 Plant and Equipment Register
- SF-029 Manteena Electrical Equipment Register
- SF-028 Plant and Equipment Certificate
- SF-025 Delivery Checklist
- SF-051 Daily Site Safety Inspection
- Lifting Gear Schedule

5.3.11 Hazardous Dust

Note:
The above requirements (**Hazardous Substances / Dangerous Goods**) also apply to **Hazardous Dust**.

5.3.11.1 Silica Dust

(MAY BE CONSIDERED A HIGH-RISK ACTIVITY – MAY REQUIRE A TASK SPECIFIC WMS: CONSULT THE SAFETY MANAGER BEFORE PROCEEDING)

From 31 January 2023, the cutting of crystalline silica material **using a power tool or mechanical process** will be expressly defined as **'high risk construction work'.** A mechanical process for the purposes includes power tools, tools using an electric motor base, excavation and construction machinery and equipment. It does not include tools that rely exclusively on manual (hand) power for operation.
Airborne crystalline silica means an airborne contaminant containing respirable crystalline silica. It is commonly known as silica dust.
Bricks, mortar, aggregate, sandstone, other stone, minerals, rock, engineered stone, tiles, resins, sand, cement and concrete contain varying levels of silica. To confirm a product contains crystalline silica, check the safety data sheet (SDS) or other information from the supplier.
Silica dust can be created when dry-cutting, chasing, sawing, trimming, drilling, sanding, polishing, crushing, grinding or scabbling silica-containing construction materials. Any of these activities may be referred to as "cutting". Alternatives should be considered in the first instance to prevent the creation of silica dust. Alternatives might include using engineered stone that has been completely fabricated in an automated workshop with no additional cutting or fabrication required on-site, using a material that

contains a lower percentage of crystalline silica such as laminate or wood, or cutting sink, tap and stove top holes during the fabrication stage to eliminate the need for on-site alterations during installation. Manteena will not direct or allow a worker to cut material containing crystalline silica with a power tool or use another mechanical process unless:

- the risk is eliminated so far as is reasonably practicable; or
- if it is not reasonably practicable to eliminate the risk—minimised so far as is reasonably practicable.

USING CONTROL MEASURES

A water delivery control must be considered first.
If this is not reasonably practicable, there are a number of alternative combinations that may be used. This could include:

- another wet dust suppression method using water or another suitable liquid or emulsion such as a spraying, sprinkler or misting technique, water curtain system, foam, gel or other suitable liquid or an on-tool water suppression system

OR

- an on-tool dust vacuum may be used as the primary control measure if it is not reasonably practicable to use a wet dust suppression method.

ADDITIONAL CONTROL MEASURES

Manteena will also implement at least one of the following specified control measures for cutting material containing crystalline silica:

- on-tool dust extraction, if not already being used
- segregation of work areas
- local exhaust ventilation systems
- isolation of the work task, workers or machine operator from the cutting.

Where on-tool dust extraction is selected, a Class H (high risk hazardous material) vacuum extraction must be used unless the cutting material contains less than 25% crystalline silica. In those cases, a Class M (medium risk hazardous material) vacuum extraction may be used.

WHAT IF USING AT LEAST TWO SPECIFIED CONTROL MEASURES IS NOT POSSIBLE?

If it can be demonstrated that it is not reasonably practicable to use at least two specified control measures you need to at least use:

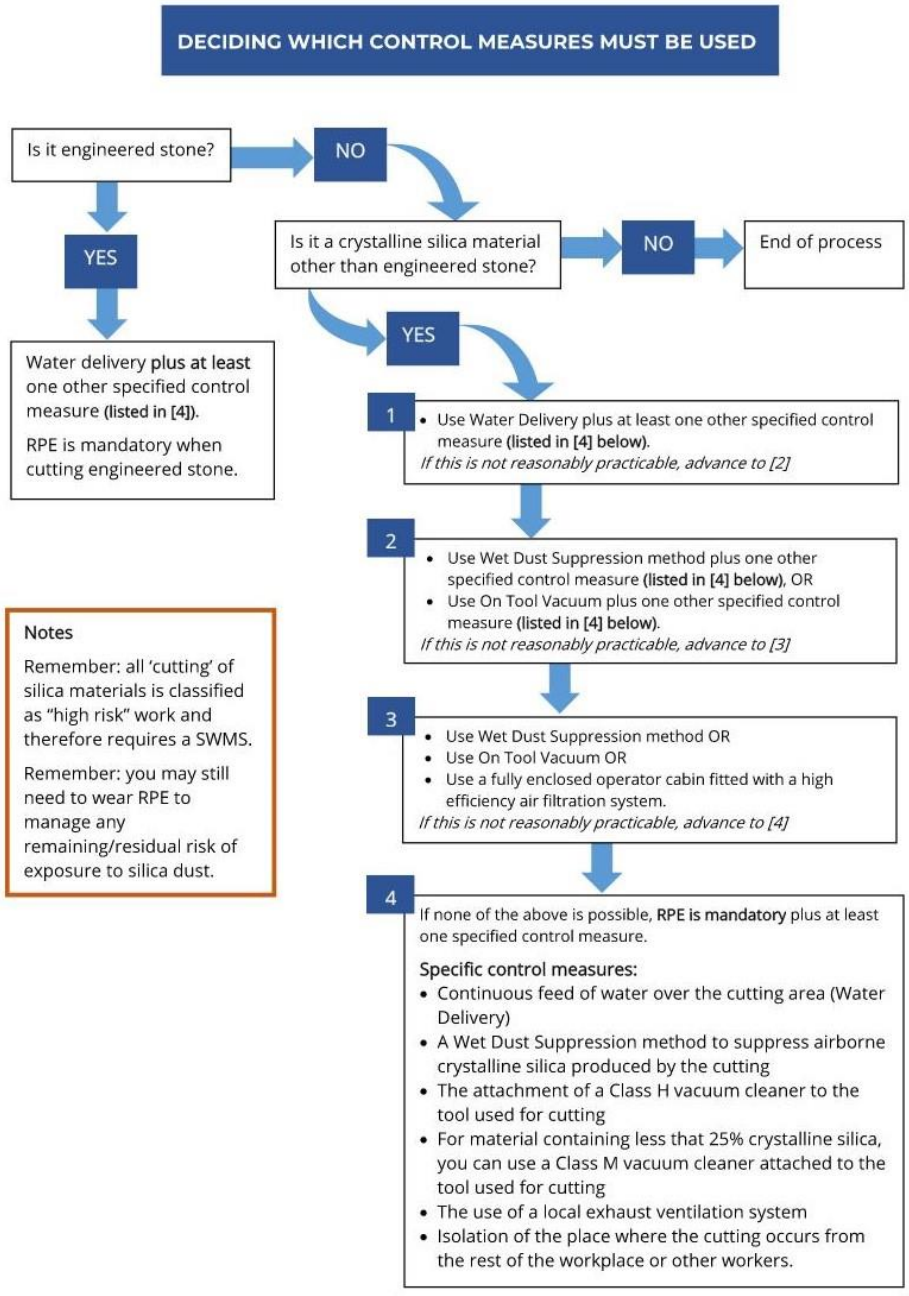
- wet dust suppression method OR on tool dust vacuum OR a suitable enclosed cabin

OR, if this is not possible

- at least one specified control measure AND respiratory protective equipment.

Use the flow chart over the page to work through the steps to determine which method to use.

5.3.11.2 Silica flowchart



- Prior to creating silica dust, a WMS must be developed and appropriate PPE provided and used. Respiratory protective equipment ("masks") must be designed to protect the wearer from inhaling airborne crystalline silica and comply with AS/NZS 1716:2012 (Respiratory protective devices) or requirements equivalent to the standard.

5.3.11.3 Additional hazards when using water suppression

- While water suppressed machinery and tools provide an effective means of reducing exposure to silica dust, their use needs to be controlled to ensure other hazards are not created. Potential hazards arising from the use of water suppression are electrical hazards, water mist hazards and recycled water hazards.

Electrical hazards

- only use tools and machinery that are specifically designed for use with water attachments
- consider the current electrical equipment's IP rating if retrofitting or introducing water suppression into an existing process as a new control, and
- thoroughly check electrical equipment, including electrical cords, to ensure safety when undertaking wet cutting or other processing.
- **Water mist hazards**
- As a consequence of applying water to power tools with rotating blades, contaminated water mist can be generated.
- This water mist can expose workers to silica dust by:
- breathing in contaminated water mist
- particle laden mist drying in the air and being breathed in, and
- particle laden mist depositing on surfaces, including clothing, and later drying, then becoming airborne again when disturbed.
- Vacuuming or washing clothing and footwear can remove dust. Good housekeeping, covering, keeping wet or bagging materials and rubbish will also reduce dust.
- **Recycled water hazards**
- If recycled water is used for water suppression, this may introduce an additional risk for workers. Without an appropriate filtration system, there is a risk that the continual recycling of water will increase the concentration of silica dust in the water over time, and subsequently the level of silica dust in the mist generated from water suppressed activities.

5.3.11.4 Mandatory training

Workers engaged in high-risk crystalline silica work or who are in a declared occupation must complete the 10830NAT – Course in Crystalline Silica Exposure Prevention. In the ACT, declared occupations are listed in the Notifiable instrument NI2022-354 Work Health and Safety (Crystalline Silica Awareness Training Course and Occupations) Declaration 2022, accessed via the ACT Legislation Register.

5.3.11.5 Masks and Fitting

Workers should wear RPE that protects for dusts (or particulates) and has an appropriate safety factor for any residual risks posed after implementing higher order control measures. Where the silica concentration is lower product or material, a properly fitted P1 respirator or mask may be suitable. Where engineered stone or other high silica content products are being worked on, a P2 or half-face respirator should be used.

It is critical that RPE is fit tested for the individual worker wearing it to ensure that there is an effective seal. In most cases, this will mean workers must be clean shaven. There are some full face and hood PAPRs that can be considered for those workers with facial hair.

5.3.11.6 Health Monitoring

Manteena will provide health monitoring to workers where there is a significant risk to the worker's health because of exposure to silica dust. Manteena will inform workers of the requirements for health monitoring and ensure appropriate training and equipment is provided and used.
Where engineered stone products are fabricated, installed or modified health monitoring must be provided to workers. This is because dust from these products contains very high concentrations of silica and respiratory protective equipment is generally required to be used by workers in combination with higher level controls. Because of the high silica content and a reliance on RPE, it is considered that any dust exposure when working with these products poses a significant risk to health.
For other silica products, health monitoring should be considered where RPE is required to be worn for 30 or more shifts per year.
Health monitoring is supervised or carried out by a registered medical practitioner (doctor) who has experience in health monitoring. Generally, the testing will include a questionnaire, lung function tests and a chest X-ray or high-resolution computed tomography (HRCT). The doctor will decide what tests are needed based on the type of work being undertaken, the products being worked on and the worker's exposure history.
Health monitoring records are confidential and required to be kept for at least 30 years. A copy of the report must be provided to the worker as soon as Manteena can after it is obtained from the doctor.
Health monitoring reports that include any advice that the worker has contracted a disease, injury or illness must provide a copy of the report to WorkSafe ACT as soon as practicable.

5.3.11.7 Air monitoring

Air monitoring is a method of measuring airborne hazardous substances. It is not a control measure but can be used to check the effectiveness of the control measures you implement to minimise the risks of exposure to silica dust.
The mandatory limit for silica dust in the ACT is an eight hour time weighted average (TWA) of 0.05 mg/m^3. However, there is still a risk to worker health at this concentration. Therefore, exposure must be reduced as far as possible under this TWA.
The Work Health and Safety Regulation 2011 states that the workplace exposure standard must not be exceeded and air monitoring must be conducted if there is a potential risk to health or a possibility that the exposure limits could be exceeded. Adjustments to the workplace exposure standard for silica should be made for extended work shifts, taking into account the longer daily exposure. Air monitoring results must be readily available to workers and records of results kept for 30 years.
Manteena must review any control measures implemented, if a workplace exposure standard for silica dust has been exceeded.

5.3.12 Working Above or Adjacent to Water

(HIGH-RISK ACTIVITY – TASK SPECIFIC WMS REQUIRED)

Manteena shall ensure WMS have been developed to ensure hazards associated with the task have been identified, assessed and controlled.
Hazards identified for the task shall be identified within Manteena's **Project Hazard Risk Assessment and Register (PHRAAR)**. The PHRAAR will be provided to all engaged Contractors. Any changes to the PHRAAR will be communicated to Contractors and site staff during the regular Site safety meetings. Any

changes to the PHRAAR during the construction process shall be communicated to all affected Contractors. This communication may be via hard copy or email whichever is the most appropriate.
Any training identified for Manteena staff through the development of safe work procedures or the PHRAAR will be managed through Manteena's Human Resources department. Records of any training conducted shall be maintained by Manteena.
Any training identified for Contractor workers through the development of safe work procedures or the PHRAAR will be managed by the responsible Contractor. The Contractor will be required to provide evidence of training provided to Manteena as appropriate.
Emergency procedures for this task shall be developed in consultation with those workers charged with undertaking or supervising the process. The emergency plan shall be communicated at induction and otherwise made available on site throughout the construction phase of the project.
Emergency response drills shall be performed in accordance with the requirements set out in this IMP to test the suitability and adequacy of the processes. Results of drill will be communicated to workers.
Identified hazards will be monitored each calendar day the site is open for use. Records of inspection shall be via use of the **Manteena Daily Site Safety Inspection Form**.
Referenced documents:

- SF-051 Daily Site Safety Inspection
- SF-008 Project Hazard Risk Assessment and Register
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5.3.13 Electrical Safety

(MAY BE CONSIDERED A HIGH-RISK ACTIVITY – MAY REQUIRE A TASK SPECIFIC WMS: CONSULT THE SAFETY MANAGER BEFORE PROCEEDING)

All risks associated for electrical installations and electrical equipment must be identified, assessed and controlled in accordance with the Hierarchy of Control and documented within the Project specific Safe Work Method statements. All project specific risks are located within the Project Hazard Risk Assessment and Register.

5.3.13.1 Electrical Installations

All electrical wiring work must be tested and certified by the licensed electrician who carried out the work. The licensed electrician or electrical contractor undertaking works are responsible for the administration and requirements of that license, including:

- Ensuring the license is correct for the jurisdiction the works are undertaken in
- Complying with obligations under the legislative framework
- Undertaking work in a proper and skillful way
- Rectifying issues that may arise with the quality of the work
- Understanding the requirements for insurances, contracts, and other obligations.

All electrical installations including alterations, additions and repairs must be inspected as far as is practicable and tested as per AS3017 by the licensed electrician or electrical contractor undertaking the works. Once all compliance tests have been completed the licensed electrician or electrical contractor is responsible for submitting a certificate or compliance for the jurisdiction where the works are being undertaken.

5.3.13.2 Temporary Construction Power Boards

Power boards installed for the purpose of power supply on construction and demolition sites shall meet the following criteria:

- Installed in accordance with AS3000
- Constructed in accordance with AS3012
- Installed by a licenced electrician or electrical contractor
- Tested in accordance with AS3017
- Certification of compliance to AS3012
- Certificate or compliance submitted to the local jurisdiction

To ensure all temporary power boards meet the above criteria the Manteena temporary power board checklist is to be completed by a qualified electrician and reviewed by a Manteena representative prior to the temporary power boards being put into service. Any deviation from the criteria within the checklist must be in compliance with the above standards and identified / documented. Once the checklist has been completed, the qualified electrician must sign off verifying certification of compliance to AS3012.

Referenced documents:

- SF-039 Temporary Power Board Checklist
- SF-029 Manteena Electrical Equipment Register
- SF-008 Project Hazard Risk Assessment and Register

5.3.13.3 Portable Power Tools and Equipment

The following general guidelines shall be observed at all times when using power tools and operating machinery:

- **All electrical wiring is to be a considered live and is to be controlled accordingly.**
- No live work shall be undertaken.
- Only use equipment for its designed purpose and ensure that all guards are correctly fitted.
- Ensure you are properly trained before using a new tool or operating equipment for the first time.
- Ensure all portable generators have a fixed or directly connected Residual Current Device (RCD) protection.
- Wear the correct Personal Protective Equipment (PPE).
- Know where the emergency stop button is and how to prevent accidental restart.
- Check electrical connections are safe.
- Tie back loose hair, remove loose jewellery and take off ties.
- Ensure all rotating or moving parts of all tools and equipment are adequately guarded to prevent accidental contact by personnel.
- Always check that plant, tools and equipment are maintained in a clean, safe and operable condition.

Referenced documents:

- SF-029 Manteena Electrical Equipment Register
- SF-028 Plant and Equipment Risk Assessment and Certification

The following practices must be applied:

5.3.13.4 Lock Out and Tag Out

Lock Out and Tag Out (LOTO) procedure must be completed by a licenced electrician when isolating electrical circuits. The LOTO Process must identify and or include the following:

- Consultation/work permit/isolation register (provided to Manteena).
- Isolation of identified circuits requiring isolation.
- Securing the isolation by locking out the circuit breakers (lock dogs & pad locks to be used).
- Tagging isolation with a "Danger" tag including the name and contact number of the person/s isolating and only to be removed by this person/s.
- Testing circuit to confirm that it is isolated.
- Re-testing as necessary for multiple points on a circuit.

5.3.13.5 Electrical isolation and energisation

Contractors performing plant / equipment isolations and re-energisations are required to complete and submit a permit prior to works being undertaken onsite. Permits are completed using an online tool accessed by sub-contractors via their mobile phone or similar device with QR scanning capabilities. The permit must contain acknowledgement that the sub-contractor has submitted safety documentation that covers all controls for the isolation / energisation (e.g. WMS, emergency plan). Only a licensed electrician should complete the isolation / energisation and only they can submit the permit. Manteena site staff approval of the permit acknowledges that all processes are being followed by the electrician.
For **isolations**, follow this process:

- Scan the project specific QR code provided by Manteena site staff to open an Isolation Permit.
- The sub-contractor conducting the work should fill in all required permit details and submit.
- The sub-contractor will receive an email from the site manager approving or rejecting the isolation. If rejected, the sub-contractor is to amend as requested and resubmit.
- The sub-contractor completes the isolation and submits for close-out all required proof that controls have been implemented (for example, photos of the Lock Out, Tag Out, photos or PDFs of sub-contractor supplied isolation checklist and/or location diagram including the date and signature of the responsible worker).
- Manteena site staff review the submission and approve the close-out or request a re-submission.
- The sub-contractor will receive email notification that the isolation permit has been closed-out or that re-submission is required.

For **energisations**, follow this process:

- Scan the project specific QR code provided by Manteena site staff.
- The sub-contractor conducting the work should fill in all required permit details and submit.
- The sub-contractor will receive an email from the site manager approving the re-energisation be conducted.
- The sub-contractor completes the energisation and submits for close-out all required proof that controls have been implemented (for example, records of the Dead Test, photos or PDFs of sub-contractor supplied energisation checklist and/or location diagram including the date and signature of the responsible worker).

- Manteena site staff review the submission and approve the close-out or request a re-submission.
- The sub-contractor will receive email notification that the re-energisation permit has been closed-out or that re-submission is required.
- The details of all permits (including the progress of all permits, the name of the person submitting the permit, name of the person approving the permit and the dates of submission and approval) is tracked by Manteena's internal management system My Site; data is available via site management.

Referenced documents:

- SF-051 Daily Site Safety Inspection
- WI-021 Electrical Lock Out Procedure (Work Instruction)

5.3.13.6 'Testing and Tagging' Electrical Equipment

All electrical items on site are to be tested and tagged as per AS3760 by a licensed electrician or competent person who has completed test and tag training by an RTO. Portable Residual Current Devices (RCD) are subject to an operating time and tripping current test using an RCD tester that is carried out by a licensed electrician or a competent person who has completed RCD test and tag training by RTO. Every portable RCD is tested by the user before each use daily by operation of the pushbutton. It is the responsibility of the owner of each item to ensure that the certification is current, and they are re-tested and re-tagged every three months. Electrical Test and Tag Registers are to be supplied to Manteena before contractors commence works onsite and provided every three months while they are undertaking work onsite.
Following electrical repairs or modification or where damage to the equipment is suspected the electrical items must be retested and tagged post repair.

Referenced documents:

- SF-051 Daily Site Safety Inspection
- SF-029 Manteena Electrical Equipment Register

5.3.13.7 Operation of Electrical equipment

For other electrical processes or tools / devices, the following controls are to be observed:

- Conduct a pre-use inspection of the device; i.e. before plugging in an electrical device run your hands down the length of the lead looking for cuts or wires protruding through the lead and that the lead is not excessively twisted or kinked. Ensure the lead is correctly fitted into the plug with no exposed wires. Note: if the device fails this simple test do not use it.
- All electrical connections shall be made through an RCD protected supply.
- All extension leads used on site are to be heavy duty. Three pin plugs should be fitted to flexible extension cords as defined in AS 3000. All male and female pin and socket fittings used on flexible extension cords should be transparent or a non-removable type moulded on to the cord.
- Extensions leads are not to be run from one floor to another on multilevel sites.
- Flexible extension cords should be run on hangers or stands to provide a safe route through the work area and passageways and to provide sufficient height clearance for personnel and vehicles.
- Where flexible extension cords pass through scaffolding or other metal structures, they shall run on insulated hangers to avoid contact between the cord and the metal.

- Double adaptors, multi power boards and 3 pin plug adaptors (piggyback) must not be used.
- Damaged and out of test date electrical equipment is not to be used and shall be removed from the site.

5.3.13.8 Electrical work on energised electrical equipment—when permitted

Manteena must ensure that electrical work on energised electrical equipment is not carried out unless—
(a) it is necessary in the interests of health and safety that the electrical work is carried out on the equipment while the equipment is energised; or

Example
It may be necessary that life-saving equipment remain energised and operating while electrical work is carried out on the equipment.

(b) it is necessary that the electrical equipment to be worked on is energised in order for the work to be carried out properly; or
(c) it is necessary for the purposes of testing required under WHS Act 2011, section 155 (Duty to determine whether equipment is energised); or
(d) there is no reasonable alternative means of carrying out the work.
The electrical work that may be carried out under subsection (a), (b) and (d) may include testing of the energised electrical equipment.

PRELIMINARY STEPS

Manteena must ensure the following before electrical work on energised electrical equipment commences:
(a) a risk assessment is conducted in relation to the proposed electrical work;
(b) the area where the electrical work is to be carried out is clear of obstructions so as to allow for easy access and exit;
(c) the point at which the electrical equipment can be disconnected or isolated from its electricity supply is—
(i) clearly marked or labelled; and
(ii) clear of obstructions so as to allow for easy access and exit by the worker who is to carry out the electrical work or any other competent person; and
(iii) capable of being operated quickly;
(d) the person authorises the electrical work after consulting with the person with management or control of the workplace.
For the purposes of subsection (a), the risk assessment must be—

i. conducted by a competent person; and
ii. recorded.

Note WHS Act 2011, Section 12 permits risk assessments to be conducted, in certain circumstances, to a class of hazards, tasks, things or circumstances.

Subsection (c) does not apply to electrical work on electrical equipment if—

i. the work is to be carried out on the supply side of the main switch on the main switchboard for the equipment; and
ii. the point at which the equipment can be disconnected from its electricity supply is not reasonably accessible from the work location.

The electrical contractor must ensure that only persons authorised by the person conducting the business or undertaking enter the immediate area in which electrical work on energised electrical equipment is being carried out.

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5.3.13.9 Working Near Energised Electrical Equipment AND/OR Assets

Prior to carrying out work near energised electrical equipment and/or assets i.e. underground or overhead power cables (Refer to Section 7.5.2 Encroachment Works around Live Services for further information on working near underground and overhead services), a risk assessment must be completed between the relevant contactor, Manteena and, if required, the client to ensure the health and safety of all personnel.
When required to carry out work near energised electrical equipment and/or assets, the equipment or cables must be tested by a competent person i.e. a licenced electrician, to determine if energised or not.

TYPICAL CONTROLS MEASURES TO BE IMPLEMENTED INCLUDE THE FOLLOWING:

- Suitable barricading and signage to be installed to prevent unauthorised access.
- Ensure access and egress points are clear and free from obstructions.
- Where necessary e.g. when working withing 1.5 metres of house power, install temporary mechanical protection.
- Ensure all electrical testing equipment is fit for purpose and in a satisfactory condition.
- For construction wiring ensure (as a minimum) medium duty conduits are installed in accordance with AS/NZS 3012 - 2.5.3 Protection against mechanical damage.
  Ensure construction wiring is readily distinguishable from permanent wiring by using cable sheaths of a different colour or by attaching iridescent yellow tape spaced at intervals not exceeding 5m and marked with the words 'CONSTRUCTION WIRING'.
- If live permanent wiring is located where construction activity is occurring it, or its location, shall be marked with the words 'LIVE WIRING' at intervals not exceeding 5m. Live permanent wiring shall be readily distinguishable from construction wiring.
- Ensure appropriate PPE&C is worn and used i.e. insulated gloves and mats.
-

5.3.13.10 Emergency Preparedness

All electrical contractors are to develop a process for managing risks associated with any works that may result in an electrocution / electric shock / arc flash. A specific rescue plan will need to be developed to accompany this process.

5.3.13.11 Electrical Safety Observers

A safety observer is not required if—

a. the work consists only of testing; and
b. a risk assessment shows that there is no serious risk associated with the proposed work.

The safety observer must be competent—

a. to implement control measures in an emergency; and
b. to rescue and resuscitate the worker who is carrying out the work, if necessary; and
c. the safety observer must have been assessed in the previous 12 months as competent to rescue and resuscitate a person.

See also section within this document *Encroachment Works around Live Services.*

Referenced documents:

- SF-028 Plant and Equipment Risk Assessment and Certification
- PL-012 Emergency Response Plan
- Isolation Permit / Energisation Permit (MySite)

Project Hazard Risk Assessment and Register

5.4 Work Permits

Manteena requires the use of a work permits for specific high-risk tasks. Permits for the most common of these activities are facilitated by an online tool accessed by sub-contractors via their mobile phone or similar device with QR scanning capabilities. The tasks currently covered by this tool are:

- Demolition
- Electrical isolations
- Electrical energisations
- Hot works
- Excavations and penetrations
- Safety harness (working at heights)

Online permit process outline:

- Scan the project specific QR code provided by Manteena site staff.
- The sub-contractor conducting the work should fill in all required permit details and submit. The submission should include attachments (e.g. photos of the task location) that support the submission if relevant or required by site staff.
- The sub-contractor will receive an email from the site manager approving or rejecting the permit. If rejected, the sub-contractor is to amend as requested and resubmit.
- The sub-contractor completes the work and submits for close-out.
- Manteena site staff review the submission and approve the close-out or request a re-submission.
- The sub-contractor will receive email notification that the permit has been closed-out or that re-submission is required.
- The details of all permits (including the progress of all permits, the name of the person submitting the permit, name of the person approving the permit and the dates of submission and approval) is tracked by Manteena's internal management system My Site; data is available via site management.

All other tasks requiring a permit are covered by use of the Manteena Work Permit Form. These tasks include but are not limited to:

- Works in confined space
- Dual crane lifts
- Work in or adjacent to water

- Restricted access areas
- Service isolation (other than electrical)
- Tasks specified by a risk assessment or specific client requirements.

Manteena's Project Manager will contact the relevant sub-contractor and acquire all necessary paperwork e.g. training certificates, risk assessment, VoCs, WMS and SDS and calibration certificates for gas monitors (if applicable) before work permit may be issued.
Manteena shall review all **High-risk Activity WMS** to ensure it is fit for purpose before a permit may be issued.
Manteena Work Permits will be issued as required and on a needs basis to sub-contractor's competent person on site.
Referenced documents:

- SF-049 Work Permit
- SF-035 Confined Space Permit
- SF-002 Services Location & Termination Record
-

5.5 Site Inductions

All persons seeking to undertake any works on any Manteena site MUST undergo and complete Manteena's Induction process. This process will then be complemented by a short "**Site Specific Induction**" prior to commencing any work on the site.
Site Induction training will be held as an ongoing process throughout the project.
Site Specific Inductions shall only be conducted once a day. Contractors or persons seeking induction after the nominated time may be turned away and requested to return the next working day.
Site Induction Training will be conducted as per the Induction Agenda and recorded in Sign On Site's Induction software. Induction times shall be nominated by the site teams and communicated to all Contractors.
Failure to undertake the induction will preclude a worker from attending site and undertaking any work on the Manteena site until such time as the induction is successfully completed.
Induction of Non-English Speaking Workers, **refer to section 12.11** below.
Referenced documents:

- Site Induction Power point
- SF-015 Site Specific Induction Record (Backup forms)
- SF-013 Induction Register (Backup forms)
- Website: www.signonsite.com.au
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5.6 Personal Protective Equipment (PPE)

Task specific **Personal Protective Equipment (PPE)** will be supplied to Manteena workers where the task being performed could have an adverse impact on their Health and Safety.
Task specific PPE is to be provided by each Contractor and or Sub-contractor for their Workers.

Safety boots appropriate for the task and site environment (as determined by Manteena) shall be worn by all workers on site at all times. Anyone entering site under visitor rules should wear enclosed, flat shoes as a minimum.
Refer to: AS/NZS 2210:2010 – Safety, Protective and Occupational Footwear. Part 1 Guide to selection, care and use.
NOTE: Steel cap "Volley" type shoes are not to be worn as a general safety footwear. This type of footwear is for use by roofers only and shall only be used for that purpose (not to be worn while walking around the site).
High visibility fluorescent clothing must be worn on site by all site personnel inclusive of visitors at all times. No "singlet" type tops are to be worn as outer clothing or in isolation on the project.
Hard Hats must be worn as designed and advised by the manufacturer, e.g. must be in date, NOT worn backwards, modified or damaged. No other headwear is to be worn under the hard hat that may render it unstable on the wearer's head, e.g. baseball caps, beanies, bucket hats and turbans. Any variation to the default mandatory site PPE (hard hat, high viz and steel caps) is at the discretion of the project manager after conducting a written risk assessment and should be determined at site set-up. The conditions for variation should be sign-posted on the site induction.
Referenced documents:

- SF-051 Daily Site Safety Inspection

5.7 Sharps, Needle Stick Injuries and Medical Waste

It is highly unlikely any sharps will be detected on this site however, in the event that discarded needles, syringes or other blood contaminated products are found on site, a specific **Hazard Assessment** shall be carried out and implemented.
Sharps found in public areas:

- When working in public areas where sharps may occur, appropriate PPE including heavy duty leather gloves are to be worn.
- Where a person is injured by a sharp, the person should advise the responsible Manteena Site Supervisor, report to the casualty department of the nearest Hospital for tests and treatment, and complete an Incident Report form.
- Where sharps are found in a work place, advise the Site Supervisor or Safety Advisor immediately. Do not pick up the sharp. The Site Supervisor or Safety Advisor will arrange for safe removal the sharp using the "Sharps Kit" available at the First Aid facility.

Referenced documents:

- SF-054 Incident Report
- SF-051 Daily Site Safety Inspection
- SF-034 Daily site Hazard / Risk Assessment
-

5.8 Personal Conduct

For safety reasons none of the following will not be tolerated or permitted on any Manteena site:

- Wilful or reckless interference with, or misuse of, objects provided on site in the interest of health and safety
- Smoking or vaping within 10 metres of any buildings and openings, site amenities, enclosed public places, outdoor eating and drinking places or any temporary shed facility

- Taking of, or being under the influence of alcohol or any non-prescription drugs
- Engaging in the threat of violence, violence, bullying or intimidation of any kind
- Pranks or horseplay
- Racial vilification
- Sexual harassment, which means making sexual advances which are not invited nor wanted, public display of sexually explicit materials such as posters or pornographic images, and jokes of a sexual nature
- Inappropriate language
- Any unsafe item or equipment.
- No urinating on site (except in facilities provided for that purpose)
- No animals.
- Loose clothing, hair and jewellery, are not to be worn whilst working onsite.
- No children under the age of 16 years are to be allowed on construction sites.
- No personal music devices where the sound plugs directly into your ears, including the use of airbuds. The use of radios will be determined by the project team. When a radio is deemed to be a hazard the worker will be informed in the site specific induction.

Disciplinary actions (refer to *Discipline and Corrective Action* within this document) will be taken if anyone is found contravening the above requirements.

5.9 Dispute and Grievance Resolution

Any disputes on site regarding Work Health and Safety (WHS) are to be reported to the Site Manager, Site Supervisor or Safety Advisor. All WHS issues will be managed utilising the *Work Health and Safety (WHS) Issue Resolution Procedure*.

- Where a WHS issue is identified, speak with the Site Supervisor or Safety Officer, if possible, to resolve it. Don't just walk past it in the hope that someone else will do it for you.
- If this cannot be accomplished, or you don't feel that talking will resolve the issue, you may fill out a HAZARD REPORT and hand this to the Site Supervisor or Safety Advisor for it to be registered, investigated and actioned. Note: Hazard reports are available in the site shed on all Manteena sites.
- WHS issues may also be raised at the site safety consultation meeting or during toolbox talks.
- A confidential note may also be placed on the desk of the Safety Advisor.

The Work Health and Safety (WHS) Issue Resolution Procedure is available on the site notice board. All contractors will be told about its location via the Site Induction.

> **Note:** Site personnel are to be aware that there will be no personal repercussions from raising any WHS issue. Raising these concerns assists in improving and managing a safe working environment on site for all.

Associated Documentation:

- Work Health and Safety (WHS) Issue Resolution Procedure
- Dispute Resolution Policy

5.10 Training

PROJECT SPECIFIC REQUIREMENT (OVERVIEW):

The Senior / Project Manager and/or Site Manager / Site Supervisor in assessing the project risks and hazards may identify any project specific training or additional skills members of the project team may require. This process will be managed at the project handover stage through use of the **Project Handover** (located in Planner via SharePoint) and during the project as a standing agenda item in the weekly / monthly project consultation meeting.

Where a need is identified the Senior / Project Manager will communicate the training or skill need to the Human Resources Manager for attention and action. This communication may take the form of a telephone call or email. The HR Section will then arrange for internal or external training to be conducted. The HR section is responsible for maintaining training records for all staff, the records of training are provided to the Project Manager upon request.

Associated Documentation:

- Training, Communication and Consultation Procedure

Referenced documents:

- SF-017 Training Attendance Record
- QF-023 Project Handover Checklist
- Planner – Planner via SharePoint
- Project Meeting Agenda

5.11 Qualifications, Training, Licencing and Verification of Competency (VoC)

Anyone attending a Manteena site must have the applicable qualifications to undertake their job activity as required by the Regulator of the jurisdiction in which the site is located.

Apprentices, trainees and others without applicable qualifications must be adequately supervised at all times by fully qualified supervisors. The level of supervision must be appropriate to the apprentice's (or other's) level of experience.

A record of the qualifications of Manteena personnel is retained by the HR department. A copy of all relevant site qualifications is loaded onto SignOnSite as part of the site induction process.

A copy of each contractor's relevant qualifications is loaded onto SignOnSite or held on file as part of the site induction process. These are reviewed by a member of the project team prior to accepting induction.

All Manteena staff and sub-contractors who attend site are required to have a General Construction Induction Card (White Card).

On all ACT sites, all persons defined as workers shall be required to have undergone Asbestos Awareness Training, specifically, training that includes the unit of competence 11084NAT (formally 10675NAT and 10314NAT). Additionally, all workers in specific occupations are required to have accreditation in 10852NAT - Course in Working Safely with Asbestos Containing Materials from an approved registered training organisation (RTO). Both the list of specific occupations and the list of approved RTOs is available from WorkSafe ACT.

All Workers engaged in high-risk crystalline silica work or who are in a declared occupation must complete the 10830NAT – Course in Crystalline Silica Exposure Prevention. In the ACT, declared occupations are listed in the Notifiable instrument NI2022-354 Work Health and Safety (Crystalline

Silica Awareness Training Course and Occupations) Declaration 2022, accessed via the ACT Legislation Register.

Trades with specific training and licencing requirements, such as electricians and plumbers, must provide evidence that work conducted is by a licenced tradesperson or has been overseen or checked by a licenced tradesperson as applicable to the guidelines of that licence. Contractors must hold a licence as required by the jurisdiction of the project site.

Workers conducting high risk construction work or using mobile plant that does not require a specific high risk work licence must be able to demonstrate that they have undertaken formal verification of competency. If competency requirements are outlined within a relevant Code of Practice or Australian Standard, these requirements should be met.

If a qualification is mandated by an Australian Standard or Code of Practice but is not widely available and all reasonably practicable efforts have been made to acquire the qualification, Manteena will accept the next best level of accreditation with reference to the relevant Australian Standard or Code of Practice.

If a qualification does not have an expiry or renewal date, Manteena requires the qualification holder to demonstrate that they have had continual (i.e. within the last 12 months) experience in the relevant job activity and have kept up-to-date with relevant changes in the activity.

Manteena accepts the following as evidence of competency:

- High-Risk Work Licence issued by a State or Territory under the National Certification System as per the legislation; or
- Where a High-Risk Work Licence is not required by legislation a Licence or Certificate of Competency issued under previous State or Territory legislation for which there is no longer a High Risk Work Licence required e.g. load shifting equipment; or
- Statement of Attainment or Certificate issued by a Registered Training Organisation (RTO) for the successful completion of the appropriate unit of competency in the Nationally Recognised Training (NRT) package; or, if this doesn't exist or is not readily available,
- A VoC should be performed by someone who:
    - is competent as an assessor, i.e. who holds the TAEASS402 Assess competence unit of competence (or superseded equivalent or higher, e.g. a Diploma of Vocational Education and Training, and
    - holds the necessary competence for the item of plant, i.e. someone who holds the licence or certificate of competence as an operator relevant to the type of plant; or
    - a team of persons that collectively meet the criteria above.

Refer to each section of this document on job activities (e.g. Working At Heights, Structural Support Systems, Formwork, Scaffolding, Mobile Plant) for more information relating to the requirements for that activity.

Manteena maintains a list of high risk licences and samples, Verifications of Competency, mandatory construction cards i.e. white card etc, training qualification requirements. This is located on SharePoint/SafetyInfo/Competencies / VOCs / HRWL

Referenced documents:

- SF-016 Register of Individuals Certificates of Competencies
- SharePoint – Safety Info /Competencies / VOCs / HRWL
- SignOnSite Register of Inductions

5.12 Discipline and Corrective Action

DISCIPLINARY PROCESS

Where an WHS **Corrective Action** is required to be undertaken during the project, it is to be recorded on:

- A Safety Notice Form;
- A Non-conformance report;
- Alternatively, in the minutes of the Site Safety Consultation Meeting Form, or
- Other suitable documented means.

Other areas requiring corrective action shall be managed as per the **Corrective Action Procedure**. Irrespective, all corrective actions implemented must be sufficient to remove likelihood of recurrence. Where a **Safety Notice** or **Corrective Action Notice** is documented, the person raising the notice must take all reasonable steps to ensure the corrective actions defined within the notice are implemented and the notice is signed as being closed off.

Referenced documents:

- SF-050 Safety Notice (Backup Form)
- SF-026 Worker Safety Consultation Meeting Minutes Template
- QF-069 Non-Conformance Report

STAGE 1

On the first occasion where an individual or company's poor safety performance becomes a matter of concern, Manteena's Site Manager or Safety Advisor shall speak to the person(s) or company representative and record the poor safety performance in the **Site Manager's or Safety Advisor's Diary**. Should the individual(s) be employed by a Contractor, Manteena's Site Manager or Safety Advisor will also notify the individual's employer.

STAGE 2

In the event that unsatisfactory safety performance of the person/s or Contractor persists, Manteena shall interview the person(s) or Contractor, then issue a **Site Safety Notice** summarising the particulars of the issues and the necessary corrective measures including any re-training that are required. The employer of the person/s or Contractor (should they be a lower tier Sub-contractor) shall also be supplied with a copy of the **Site Safety Notice**.

STAGE 3

Failure to affect an improvement after the issue of the **Site Safety Notice** for the same, or similar unsatisfactory performance may lead to the stand down and/or dismissal of staff and/or instruction to leave the site.

*Note: **Site Safety Notices** or Stage 3 actions shall also be implemented where:*

- *a significant or blatant breach of safety is identified.*
- *The person/s or Contractor identified in a safety notice fails to comply with the requirements of a documented and communicated the Site Safety Notice within the prescribed time notified on the Site Safety Notice.*

Referenced documents:

- SF-050 Safety Notice

5.13 Hazardous Substances / Dangerous Goods

Contractors shall complete a **Hazardous Substance Register** and **Risk Assessment** and provide a **Safety Data Sheets (SDS)** for each and every chemical or hazardous material required to be brought onto the site. The hazardous substances register should indicate if the substance is hazardous or dangerous or both and the risk assessment should be provided for any substance identified as hazardous and/or dangerous.

- The Contractor is to conduct a risk assessment for each identified hazardous substance/dangerous good and document the results and appropriate controls within their project specific safe method of work documentation.
    - The Contractor shall also **provide the results of the risk assessment along with a current SDS** (<5 years old) to the Site Supervisor as a component of the work method review process, prior to the use of the hazardous substance / dangerous goods or commencement of the task on the site.
    - Keep Safety Data Sheets (SDS) on site and assessable at all times. A copy shall be kept in the First Aid facility.
    - Workers are to read and follow SDS for handling and use of chemicals and dangerous goods before commencing any task using the chemicals or dangerous goods.
    - Manteena are to be advised what quantities are proposed to be brought on to the site.
    - Minimize the volume of chemicals stored on site.
    - Ensure the safe storage of chemicals. SDS shall be followed for the handling and storage of chemicals or dangerous goods on site.

NOTE:
Detailing the appropriate handling and control measures for and use of the substance as specified in the SDS shall not necessarily be limited to the provision of PPE.
The use of an alternative product should be considered.

- Persons involved in the use of the hazardous substance / dangerous good are to be trained in the relevant WMS and appropriate PPE and other control measures that are to be provided and utilised by the relevant Contractor.
- Contractors are responsible to ensure all hazardous substance / dangerous goods brought to site are stored appropriately in accordance with their hazard class and quantity.
- The storage of hazardous material or substance must comply with the Dangerous Substances Act 2004.
- All hazardous material or substance storage vessels must be correctly labelled and maintained.

Referenced documents:

- SF-031 Hazardous Substance Register
- Dangerous Substances Act 2004.

5.14 Chemicals, Fuels, Refrigerant Lines

Chemicals, fuels and refrigerants need to be identified. Measures for their safe handling and control need to be in accordance with the SDS. WMS also need to list procedures to prevent uncontrolled escape and emergency control.

5.15 Synthetic Mineral Fibres (SMF)

- Synthetic mineral fibres are generally found in insulation batts, ceiling tiles, insulation blankets, loose mineral wool made from glass, rock of other materials.
- If SMF products are to be used, SDS must be obtained and the controls incorporated into WMS i.e. for Rockwool, Glass Wool, Fibreglass, and Ceramic Fibre.
- Prior to removal or installation of SMF, **a WMS must be developed,** and appropriate control measures provided and used. Appropriate safety signage may also need to be implemented as a warning to other persons in the immediate vicinity.

5.16 Welding and Hot Work

Welding, soldering, brazing, cutting, grinding of metals and similar hot work should only be performed by trained and competent operators. Safety documentation is to be developed for all hot work tasks and a hot work permit may be required. Sub-contractors should consult with Manteena prior to hot works being conducted to determine if a permit is required. The need for a permit is risk assessed and considerations should include, but not be limited to:

- Ignition sources in surrounding environment
- Live fire/smoke detection systems
- Client requirements.

The following conditions must be adhered to before, during and after the hot works:

- All Workers involved in the works have been given instruction and training in the safe use of all equipment and firefighting facilities.
- Extinguishers are in service, available and operable at the workface.
- Hot work equipment is in good repair and appropriate for the works to be undertaken. Ventilation is adequate.
- All services have been located and made safe (electrical cables, conduits etc.). Note that some older type insulating materials may ignite if a fire source is applied.
- Area is cordoned off and designated with appropriate warning signs.
- Spark/flash screens are used at all times for welding works.
- If the fire alarm /smoke detectors need to be disconnected, the Site Manager must be informed prior to disconnection.
- On completion of the task, check the area for any smouldering material, and again within 1 hr of leaving the area.

REQUIREMENTS WITHIN 5M OF WORK - ENSURE:

- Flammable liquids, dust, lint and oily deposits are removed.
- Potential explosive atmosphere in the area is to be eliminated. Floors are to be swept clean.
- Combustible floors are to be wetted down, covered with damp sand, fire resistant tarpaulins or metal shields.
- All wall and floor openings are to have a fixed cover to prevent the egress of sparks.

Work on walls or ceilings, ensure that:

- Construction is of a non-combustible material and without combustible coverings or insulation. Where this is not possible, ensure measures are taken to prevent such material from igniting and burning.

- Materials on the other side of walls are non-combustible.
- All services have been located and made safe (electric cables, conduit etc.).

Work on enclosed equipment, ensure that:

- Enclosed equipment is cleaned of all combustibles.
- Containers are purged of flammable liquids/vapours.
- Confined space hazards are addressed (refer to AS 2865: Safe working in a confined space).

Oxygen and acetylene brazing, cutting, ensure that:

- Gas cylinders must be upright when in use, secured in a purpose made trolley to prevent falling, protected from extreme heat and from being struck by moving equipment and falling objects.
- If transported by crane, hoist or derrick, gas cylinders must be handled in a suitable lifting cradle or skip box, NEVER by wire or fibre rope, web or chain slings.
- Care must be taken to ensure that oxygen cylinders and fittings do not come in contact with oil or grease. NB: Oxygen under pressure when combined with oil or grease may cause an explosion.
- Oxygen cylinders must never be stored near highly combustible material, especially oil and grease or near fuel gas cylinders.
- Caps should be replaced on cylinders that are empty and such cylinders must be marked "empty".
- Flash back arresters must be fitted to all hand pieces (both Oxygen and Acetylene hoses) and preferably on both regulators.
- Approved PPE must be used with cutting and brazing equipment.
- Suitable firefighting equipment must be adjacent to the cutting and brazing equipment.

ELECTRIC WELDING, ENSURE THAT:

- Spark/flash screens are used at all times for welding works to prevent eye injuries to adjacent persons.
- Welding screens must be used to protect the eyes of others working in the area.
- It is the responsibility of the person using any welding gear to check its condition before use and have repairs assessed upon detection by a suitable trained and qualified person where necessary, particularly to damaged electrical leads.
- Persons assisting with electric welding are required to use eye protection and avoid looking directly at an electric arc.
- **"Danger - Welding in Progress" signs shall be displayed** in the area where welding is being carried out.
- Where sparks, slag and other welding debris may affect persons working at a lower level, either fire blankets or a suitable barricade with signs restricting access must be used.
- All care should be taken to prevent sparks and slag contacting any flammable materials or equipment.
- Switch off welding power sources and turn off all valves when the job is completed or when you leave the immediate area.
- Suitable firefighting equipment must be kept as close as possible to the work area.

Should a hot works permit be required, sub-contractors use an online tool accessed via their mobile phone or similar device with QR scanning capabilities.
Permit process outline:

- Scan the project specific QR code provided by Manteena site staff.
- The sub-contractor conducting the work should fill in all required permit details and submit. The submission should include attachments (e.g. photos of the task location) that support the submission if relevant or required by site staff.
- The sub-contractor will receive an email from the site manager approving or rejecting the hot works. If rejected, the sub-contractor is to amend as requested and resubmit.
- The sub-contractor completes the work and submits for close-out.
- Manteena site staff review the submission and approve the close-out or request a re-submission.
- The sub-contractor will receive email notification that the hot works permit has been closed-out or that re-submission is required.

The details of all permits (including the progress of all permits, the name of the person submitting the permit, name of the person approving the permit and the dates of submission and approval) is tracked by Manteena's internal management system My Site; data is available via site management.

5.17 Explosive Powered Tools (EPT)

All operators of EPT are to have received training in the correct use of the EPT, maintenance, adjustment, dangers and safety procedures, as detailed in AS 1873 and in conjunction with the manufacturer's instructions.
A WMS is to be developed taking into consideration the protection of the EPT Operator and the personnel working nearby.
Appropriate PPE must be worn by all personnel involved in the EPT tasks and in the near vicinity.
When a powder actuated tool is being used, a notice or notices stating, **'CAUTION EXPLOSIVE POWERED TOOL IN USE' must be displayed.**

5.18 Moving Loads and Materials

To avoid delays or turn arounds, deliveries and pick-ups must be coordinated with site management in advance. Based on risk assessment, the driver may need to complete the **Site Induction** and/or **Delivery Checklist**. If plant is used for loading and/or unloading (e.g. VLC or forklift), it must be inducted onto site via a **Plant and Equipment Certificate** and entered into the **Plant and Equipment Register** and supporting documentation (including but not limited to operator competency, SWMS and plant risk assessment) made available for review.
Systems of work must ensure the safety of persons in the vicinity of materials or loads being moved.
For example:

- Tag lines should be used to guide and control suspended loads
- A person in control of loads suspended from a crane (including a telehandler) must hold a high risk work licence for dogging or the equivalent certificate of competency
- Areas in the vicinity of materials or loads being moved should be clear of persons when moving long materials such as joists, bearers, planks and frames to prevent striking persons nearby
- Areas beneath suspended loads should be clear of persons

- An isolation zone (or engineered barricade) around the vehicle must be established to ensure stacks of materials that have the potential to fall will not fall on workers or the public
- A spotter should be used if the loader/unloader is unable to see all areas of the zone
- The load should be planned so that no worker is at risk of a fall from height to strap/unstrap or dog/rig a load. Truck beds should have handrails or platform ladders should be used so that workers are not climbing loads that put them at a risk of fall.

5.19 Manual Handling

Safe working procedures must be used for all unloading, loading and manual handling of goods and / or materials. Any special or unusual methods of handling required on the project should be documented in a WMS, SOPs, JSA, etc.
The following practical guidance outlines some ways in which manual handling risks can be controlled.

- design or re-design the task / load to eliminate manual handling.
- provide mechanical aids and/or personal protective equipment. Manual handling risks may be controlled by using powered mechanical equipment. Lifting equipment could include cranes, forklifts, electric pallet trucks and stackers. Mechanical aids should be used only as per manufacturers specifications, not altered or modified. If using powered plant, please refer to the mobile plant section within this document.
- arrange for team lifting in order to reduce the risk. Team lifting (sharing the load between two or more workers) should be used for large items where it is impractical to use mechanical assistance.
- ensure workers receive appropriate training in methods of manual handling involving team lifting procedures, correct use of the mechanical aids and PPE. Where the nature of the work activities or manual handling tasks are constantly changing, the risk assessment and control process should be reviewed on an ongoing basis.
- weights that are manually handled should be minimised. Caution is particularly advised where loads are above 16kg. Workers should always lift within their capacity. Where manual handling involves repetitive bending, twisting, over reaching, work overhead or where persons have pre-existing injuries these loads should be further decreased.
- materials should be delivered as near to the work location as possible to eliminate double handling.
- materials should be stored on racks or other supports at a height of at least 600 mm where possible so that manual lifting can be done without excessive bending.
- the rotation of work duties should be considered in consultation with workers.

For further detail on manual handling, refer to the *National Standard for Manual Tasks* and *National Code of Practice for the Prevention of Musculoskeletal Disorders from performing Manual Tasks at Work.*

Associated Documentation:

- SP-901 Hazard & Risk Management Procedure

Referenced documents:

- SF-200 Work Method Statement - Template

5.20 Unexpected Finds

Unexpected finds on a construction site may include but are not limited to:

- Contaminants – asbestos, lead, heavy metals, waste materials, petroleum hydrocarbons, ash, slag, chemicals, microbiological hazards including blood and mould
- Live or unknown services – electricity, water, sewerage etc.
- Aboriginal cultural or historical heritage items
- Human remains
- Threatened flora, fauna or ecological communities
- Munitions / unexploded ordinance.

The nature and extent of an unexpected find vary considerably, and it is difficult to define a specific remedial strategy to cover each scenario. However, there is a general procedure which details a process for identifying and evaluating feasible options to manage an unexpected find.

5.20.1 General Unexpected Finds Procedure

- Upon discovery of an unexpected find, works will cease in that area. The Site Supervisor is to be notified and the affected area made safe and cordoned off with a buffer zone of at least 10 metres.
- The Project Manager will arrange for an appropriately qualified Consultant to attend site, e.g. Environmental Consultant for contamination (within 24 hours), Heritage Consultant for historical or Aboriginal artefacts (within 10 days).
- The Consultant will inspect the area and assess the find. They will produce a report which includes the nature, type and extent of the find and advises methods of management and/or remediation, as required by regulations, laws, guidelines and industry practice.
- Manteena will obtain all necessary approvals, e.g. from the ACT EPA for disposal or reuse of material at the site, from Heritage ACT for management of cultural or heritage items, or from ACT Policing for human remains.
- The agreed management / remediation strategy will be implemented and a validation report prepared confirming the removal of the unexpected find.
- Details of the incident will be recorded and provided to the client.

5.20.2 Training in unexpected finds

Personnel involved in construction works at the site will be made aware of, and trained, in the recognition of potential unexpected finds appropriate to the area. Training will be undertaken as a part of general site induction and refreshed periodically at toolbox meetings. Training will provide general awareness for recognition of potential hazards and biological and archaeological discoveries, so that works can be suspended temporarily to allow evaluation by an appropriately qualified person. Project workers may be trained in identifying the following:

- Soil that appears to be contaminated based on visual and olfactory indicators
- Asbestos (i.e. either bonded or friable)
- Groundwater or surface water that appears to be contaminated based on visual and olfactory observations (including potential hydrocarbon sheens on the water surface, free phase liquids such as petroleum fuel, discolouration etc.)
- Drums or underground storage tanks
- Fill containing waste (e.g. ash, slag, refuse, demolition materials)

- Services (e.g. pipelines, cabling)
- Black or pink moulds, bacteria, algae
- Human or animal blood, tissues, saliva, mucous, urine and faeces and containers thereof
- Human remains
- Threatened flora, fauna or ecological communities
- Aboriginal cultural or heritage items (e.g isolated stone artefacts, artefact scatters, archaeological deposits or scarred trees)
- Historical items
- Military weapons, ammunition, equipment, and stores.

5.21 Worker Consultation

Manteena acknowledges that workplaces are safer and healthier when workers can provide insight and feedback on WHS topics. The opportunity for workers to contribute and for managers to consult is a valuable process that should occur on all job sites and in all offices.

The health and safety consultation process is detailed in the **Consultation Procedure QP-920** (available from the Project Manager via Manteena's Intranet). Worker consultation processes shall be in accordance with the requirements of the Work Health and Safety Act 2011 and where applicable the ACT Government Secure Local Jobs Code 2019. Where required, a Health and Safety Representative (HSR) will be elected, this process is outlined in the section *Health and Safety Representative (HSR)*. Where required, a Worker Safety Consultation Meeting will be established, this process is outlined in the section *Worker Safety Consultation Meeting.*

Manteena uses a combination of forums for consultation on projects and at a head office level that enable engagement with different work groups:

- Regular safety walks (usually weekly) conducted on every site by the project Safety Advisor. Site workers are encouraged to raise immediate or ongoing concerns with the advisor. This walk is minuted and items actioned as appropriate.
- Regular sub-contractor meetings (usually weekly) conducted on every site by the Project Manager. This forum allows sub-contractor managers the opportunity to consult with the Project Manager, Site Manager and Safety Advisor collectively. This meeting is minuted and items actioned as appropriate.
- A Manteena Safety Committee Meeting is conducted at head office every three months. This meeting addresses WHS issues amongst staff employed directly by Manteena. Committee members are workers from all divisions across Security, Commercial and Residential. The meeting covers both office workers and site workers. It is minuted and items actioned as appropriate.
- Use of the **SignOnSite** online platform and App records inducted worker attendance and includes a **Daily Briefing** function that provides a regular form of communication directly with workers. For example, high risk tasks and hazards and controls associated with those tasks.
- Pre-starts or pre-start meetings are to provide information to subcontractors and receive feedback from workers (typically in the morning or start of shift), Information provided includes identification of the nature of the work to be carried out, what risks that could be associated with completing the work as well as work health and safety, work procedures in place, plant and equipment including locations of use and material handling etc.
- Toolbox Talks – by both Manteena and Sub-Contractors – (weekly).

Associated Documentation:

- QP-920 Training, Communication and Consultation Procedure
- SF-121 Daily Prestart Form
- SF-058 Toolbox Form

Referenced documents:
https://signonsite.com.au/

5.21.1 Senior Management Communication

On a 3 monthly basis, a Senior Manager – be it a CEO, Director, Operations Manager, Project Director, Construction Manager, and/or the HSEQ Manager – attends site to document and review WHS practices with the project team. Senior managers are to complete the Senior Management WHS record of site visit.
Scheduling should ensure that senior managers are rotated amongst sites to achieve a variety of reviews.
Associated Documentation:

- QP-920 Training, Communication and Consultation Procedure

Referenced documents:
https://signonsite.com.au/

5.22 Health and Safety Representative (HSR)

One of the objectives of the Work Health and Safety Act (the WHS Act) is to provide for fair and effective workplace representation, consultation, co-operation and issue resolution in relation to work health and safety. The appointment of a Health and Safety Representative (HSR) provides a job site with a formalised approach to achieving this objective. The following process should be initiated by the Project Manager or Safety Advisor.

*The roles of officer, director, manager and worker are defined within the Manteena IMP and in the legislation.
**The very beginning of a project might not be the best time to hold the election – a more appropriate time may be slightly later in the project when a larger number of workers are attending site. This should be decided in consultation with workers and participating unions.
#For projects outside the ACT, notify the project Safety Advisor to notify the relevant body.

The outline above is a suggested template process that meets the requirements of legislation. There are further details such as the division of a project into smaller work groups and the appointment of a deputy HSR that are not relevant to projects the size of the majority of Manteena's. If a project is particularly large, a worker requests further information or the process of consultation raises the need for further information, refer to relevant documents. These documents include the Act (the one relevant to the state in which the project is located), accompanying regulations, the *Work Health and Safety Consultation, Cooperation and Coordination* Code of Practice, the *Worker Representation and Participation Guide* by Safe Work Australia and guidance notes issued by WorkSafe ACT (or other relevant states' safety bodies).

Associated Documentation:

- QP-920 Training, Communication and Consultation Procedure
- QF-037 Notice of Appointment of a Worker Consultation Representative (WCR)
- Notice Of Requirement To Consult With Each Eligible Union For The Major Construction Project (Work Safe ACT)
- Health and Safety Notification form (Access Canberra)

Referenced documents:

- Work Health and Safety Consultation, Cooperation and Coordination Code of Practice
- Worker Representation and Participation Guide (Safe Work Australia)

5.23 Worker Safety Consultation Meeting

The establishment of a Worker Safety Consultation Meeting on a project is an opportunity to provide for fair and effective workplace representation, consultation, co-operation and issue resolution in relation to work health and safety. The following process should be initiated by the Project Manager or Safety Advisor.

5.23.1 Establishing a Worker Consultation Meeting

*If this is the scenario, the *Worker Safety Consultation Meeting* should closely follow the requirements for *Health and Safety Committees* as outlined in the WHS Act.

Associated Documentation:

- SF-026 Worker Safety Consultation Meeting Minutes template
- SF-058 Toolbox Talk Form
- Work Health and Safety Act 2011 (ACT or relevant state)

5.24 Monitoring (Inspections Reviews Audits and Reporting)

Reviews, inspections, audits and WHS Performance Reports are to be carried out on the relevant project area/activity as follows:

5.24.1 Project Audit Schedule

TYPE	FREQUENCY	RESPONSIBILITY	COMMENTS
Project Integrated Management Plan (IMP) implementation and maintenance audit – Integrated Management Audit (this audit serves as the IMP review)	Initial review and signoff by HSEQ prior to implementation. Implementation audit one (1) month following site establishment. Maintenance audit every six (6) monthly or as required.	Health Safety Quality Environment Manager Safety Manager Project Manager	Audit tools include but not limited to: SF-052 Safety Inspection EF-001 EM Audit Checklist QF-084 Integrated Management Systems (IMS) Audit
Project Spot Audits	One per month	Safety Manager Safety Advisor Project Manager Director or other Senior Manager	Audit tool: SF-009 Project Spot Audit Checklist
Risk Audits	As required	Health Safety Quality Environment Manager	Audit scope determined by the issue at risk. Audit requirement is identified through, inspections, audits, corrective action trends, hazard identification, accidents, incidents, investigations.
Heavy Vehicle National Law (HVNL) compliance	As part of a company wide audit – internally every year, externally every two years	Health Safety Environment Quality Manager	Audit tools include but not limited to: CoR System Audit

Note:
Additional audits will be conducted as deemed necessary by the Health Safety Quality Environment Manager, based upon the perceived risk, historical safety data, and previous audit findings.

Associated Documentation:
QF-084 Integrated Management System Audit
QP-916 Audits Procedure

5.25 Project Responsibilities Matrix

TASK	FREQUENCY	PRIMARY RESPONSIBILITY	SECONDARY RESPONSIBILITY	RECORD
Request/conduct a Safe Design Risk analysis	At the earliest stage of the project and as required	Senior/Project Manager	Project Manager	Design Consultants Meeting Minutes
Conduct project risk assessment – complete the Project Hazard Checklist and Develop the Project Hazard Risk Assessment and Register	Prior to Contractor tenders and as required	Senior/Project Manager & Site Supervisor	Safety Advisor	Project Hazard Checklist and Project Hazard Risk Assessment and Register
Develop this Integrated Project Plan	Prior to Contractor tender	Senior Project Manager	Project Manager	Integrated Management Plan (IMP)
Complete the Pre Commencement Checklist (and the sub-checklist, Site Setup Checklist), in alignment with the Project Start Up Procedure	Prior to starting task on site	Senior/Project Manager & Site Supervisor	Project Manager	Pre Commencement Checklist (MySite) Site Setup Checklist (MySite) Project Start Up Procedure (SharePoint)
Review of Contractor Safety Plans	Prior to the Sub-contractor starting on site	Senior/Project Manager	Site Manager / Supervisor & Safety Advisor	Sub-Contractors Safety Plan/WMS Review
Review Sub-contractor WMS	Prior to Sub-contractor starting task on site	Senior/Project Manager, Site Supervisor	Senior/ Project Manager Safety Advisor	Sub-Contractors Safety Plan/WMS Review
Work with Sub-contractors improving WMS	Prior to Sub-contractor starting task on site	Senior/Project Manager, Site Supervisor	Safety Advisor	Accepted WMS
Develop Manteena WMS	Prior to starting task on site	Site Supervisor Construction worker	Safety Advisor Construction worker	SF-200
Maintain Project Hazardous Substance and Risk Identification Register and Safety Data Sheet Register	Prior to each hazardous substance being used on site	Site Manager / Supervisor Site Supervisor	Safety Advisor	Hazardous Substance Register Material Safety Data Sheet Register
Project Team Meeting	Weekly	Project Manager	Project Administrator	OneNote Team Meeting Template
Manteena Toolbox	Weekly	Site Supervisor	Safety Advisor	Toolbox Talks
Conducting Site Inductions	Daily and as required	Site Supervisor	Safety Advisor	Induction Register Site Induction Site Specific Induction Record Agenda,

TASK	FREQUENCY	PRIMARY RESPONSIBILITY	SECONDARY RESPONSIBILITY	RECORD
High-risk Plant and Equipment Risk assessment and Certification	Prior to plant starting work/task on site	Plant operator or Owner	Plant operator Site Supervisor Safety Advisor	Plant and Equipment Certificate
Review of Contractors Plant and Equipment Registers, Plant certifications and risk assessments	Prior to commencement of any works and then on a needs basis should plant be replaced, or substituted	Senior/Project Manager, Site Supervisor	Safety Advisor	Contractors Plant and Equipment Register and Risk assessments
Crane/Pump setup - Site specific WMS and Toolbox	Prior to crane/pump operating	Site Supervisor with Pump operator	Safety Advisor with Pump operator	WMS Toolbox Talks
High-risk activity site specific WMS & Toolbox	Prior to high risk task commencing	Site Supervisor	Safety Advisor	WMS review checklist
Develop, review and implement Emergency Response plan	Initially at or prior to site establishment Then at least every six months or if there is a significant change to the site layout (i.e. changes to access points or office location.	Project Manager in consultation with the Site Supervisor Safety Advisor	Safety Manager	Manteena Emergency Response Plan
Inspection and test of emergency equipment/ sirens or alarms	Initially at site establishment Then at least every three months	Site Supervisor Safety Advisor	Safety Manager	Daily Site Safety Inspection
Scaffold check against the design drawings or AS 1576.6	Prior to use and as required	Site Supervisor in conjunction with Scaffold Contractor	Safety Advisor in conjunction with Scaffold Contractor	Scaffold Drawings, Contractors Inspection record, Scaff Tag
Fire Extinguisher check as part of the Daily Site Safety Inspection and in accordance with AS2444	Daily for charge and test currency and formally every six months by a nominated fire services contractor (e.g. Chubb)	Daily – Site Supervisor Every six months by a fire services contractor	Safety Advisor Note: no secondary responsibility for six monthly inspections.	Daily site safety inspection (six monthly inspections are provided on Contractor's letterhead)
Daily Task Hazard Assessment (DTHA) & Pre-start	Daily, Must identify the High-risk activities relevant to the site that day	Site Supervisor	Safety Advisor	Daily Site Hazard / Risk Assessment or Sign on Site Daily Briefing Pre-start Form
HIRAC System review	Monthly	HSEQ or a Safety Manager	Safety Managers	Senior Managers report to Directors

TASK	FREQUENCY	PRIMARY RESPONSIBILITY	SECONDARY RESPONSIBILITY	RECORD
Plant and equipment start-up check	Prior to starting work	Plant Operator	Site Supervisor or Safety Advisor to ensure completion	Manufacturer's or contractor's form
Safety Consultation meeting and Safety Walk with Sub-contractors	Weekly	Senior /Project Manager Site Supervisor	Safety Advisor	Site Safety Meeting Records Site (Safety) Meeting Agenda Or Toolbox Talk
First Aid kit assessment & stocks check	Assess at site establishment then quarterly. Check contents weekly	Initial & quarterly assessment - Safety Advisor Safety Manager	Weekly content checks: Site Supervisor Safety Advisor	Assessment = forms from First Aid CoP Content inspection = Daily Safety Inspection form
Daily Site Safety Inspections	Daily	Senior/ Project Manager (twice weekly), Site Supervisor (twice weekly), Safety Advisor (twice weekly)	Site Supervisor	Daily Site Safety Inspection
Environmental Inspections	3 Monthly	Health Safety Quality Environment Manager	Safety Manager Safety Advisor	EF-001 Environmental Audit Checklist
Project Spot Audits	One per month	Safety Manager Safety Advisor Project Manager Director or other Senior Manager	Audit tool: SF-009 Project Spot Audit Checklist	Project Spot Audits
Sub-contractor electrical test/tag register	Prior to commencing any works then 3 Monthly	Senior/ Project Manager Site Supervisor	Safety Advisor	Electrical Test inspection record, Safety Inspection
Monthly Project Report (including WHS Performance Report)	Monthly	Senior/ Project Manager, input by Site Supervisor and Project Administrator		Project Summary Report (on the Intranet)
Manteena IMP Audit	Initially when IMP drafted then 1 month following site establishment then 6 Monthly, or as required	Health Safety Quality Environment Manager	Safety Manager	Project Audit of Site Safety Plan
Project risk audits – additional project spot checks	As required	Health Safety Quality Environment Manager	Project Manager or Branch Manager	Audit checklist Major or minor works

TASK	FREQUENCY	PRIMARY RESPONSIBILITY	SECONDARY RESPONSIBILITY	RECORD
Emergency response drill	6 weeks after site establishment and 6 monthly, as required	Site Supervisor and Safety Manager Safety Advisor	Senior /Project Manager	Emergency Response Record and Site Safety Meeting Records
Incident / dangerous occurrence investigation	As required	Safety Manager and or HSEQ	Safety Advisor Project Manager	Incident Report
Issuing Safety Notices	As required	Senior/ Project Manager, Site Supervisor	Safety Advisor Safety Manager	Safety Notice
Ensure project compliance with CoR / HVNL	As required, at a minimum: during sub-contractor pre-engagement and site operation	Senior/ Project Manager, Site Supervisor	Safety Advisor Safety Manager	CoR Application for Pre-qualification Load Inspection Checklist TSMS Incident Investigation Report

6. JOB STATEMENTS

The following Job Statements at Project level are an expansion of and additional to roles, responsibilities and authorities which are stated within the position descriptions available on Manteena's Intranet.

6.1 Project Director

Defined as an Officer and a Worker under the Work Health and Safety Act 2011.
Manteena's Project Director is involved through all phases of the project, to provide a consistent, senior management presence to ensure that the objectives and needs of the Client and the end users are achieved.
Authorities and Responsibilities include:

- Establish Project Program to achieve time frames.
- Review monthly reports.
- Financial reviews.
- Performance review (coordination, cooperation, quality).
- Tender processes and coordinate implementation.
- Client liaison throughout the project.
- Conduct project safety spot audits.
- Attend the Client's Monthly Project Control Group meetings.
- Leadership over the planning, implementation, review and change management of all related matters corporately and on the project including WHS, IR, EM and QA systems.

- Report any suspected breaches of the Secure Local Jobs Code 2019 to the Operations or Health Safety Quality Environment Manager for investigation and management.
- Ensure project is compliant with HVNL.

6.2 Management System Representative (Health Safety Environment Quality Manager)

Defined as an Officer and a Worker under the Work Health and Safety Act 2011.
Authorities and Responsibilities include:

- Arrange and conduct or coordinate the conduct of internal audits (QA, EM, WHS, HVNL & Risk).
- Establish a site/project audit schedule based on risk and opportunity.
- Investigate and manage any suspected breaches of the Secure Local Jobs Code 2019.
- Investigate and manage any suspected breaches of the HVNL.
- Ensure all staff members are aware of their obligations as established within the Management System documentation.
- Coordinate and oversee all regulatory compliance processes,
- Assist, where necessary, in the checking, acceptance and monitoring of the WHS management systems of Contractors.
- Organise and arrange external reviews and audits.
- In consultation with the Directors, overall responsibility for the development of the Integrated systems and to verify or assist in the preparation of Corporate and Project QA, EM, WHS and Risk Plans or project specific documentation such as Inspection and Test Plans, special process instructions and checklists.
- Investigate and report upon accidents and incidents.
- Coordinate and participate in Periodic Safety Audits (PSA) conducted by the OFSC on site.
- Coordinate the change management processes for all integrated systems.
- Update the Manteena Management System procedures and related documentation.

6.3 Senior / Project Manager

Defined as a Worker under the Work Health and Safety Act 2011.
The Senior / Project Manager assumes overall responsibility for safety on the project and is supported by the:

- Health Safety Quality Environment Manager,
- Contracts Manager,
- Project Administrator,
- Site Manager,
- Site Supervisors,
- Engineering Services Manager,
- Safety Advisor,
- Document Controller.
- In addition, support is provided to the Project Manager from the corporate staff in head office.

Authorities and Responsibilities include:

DOCUMENTATION AND TENDERING

- Populate the Integrated Management Plan (IMP) and ensure it is project specific.
- Ensure the IMP, once completed, is provided to all interested parties.
- Ensure the IMP is implemented and managed throughout the duration of the project lifecycle
- Coordination of the design phase including involvement in Client reviews and approvals.
- Work in close consultation with the Client, Design Team and Cost Planner to review the design and the budget for the project.
- Coordinating the tender package development with the plans and specifications produced by the Consultant Design Manager (e.g. Architect).
- Ensuring the Consultants refer relevant issues through the external authorities where applicable.
- Check letting of tenders against budgets.
- Ensure CoR and HVNL due diligence is performed during tendering and subcontractor pre-engagement. Report any suspected breaches of HVNL to the Operations or Health Safety Quality Environment Manager for investigation and management.

PROGRAMMING

- Establish and up-date all programs and schedules.
- Monitor overall project construction schedule.
- Monitor production of shop drawings, approvals and operational manuals.

ADMINISTRATION

- Liaison with Client and other stake holders.
- Production of reports as required.
- Coordination of Consultants through to completion of as-executed drawings/handover.

COST CONTROL

- Budget and cost control.
- Variation submission for approval.

QUALITY ASSURANCE

- Establish, implement and monitor the Quality Assurance systems for the project.
- Identify, record and report the risks and opportunities present during construction and consultation with the HSEQ look at ways to improve the systems or advance change for the betterment of the systems.
- Manage development and implementation of the project's Integrated Management Plan (IMP).

INDUSTRIAL RELATIONS

- Liaise with employer, worker and statutory bodies as necessary.
- Report any suspected breaches of the Secure Local Jobs Code 2019 to the Operations or Health Safety Quality Environment Manager for investigation and management.

WORK HEALTH & SAFETY

- Develop with the Site Manager site establishment plans, Emergency Response / Evacuation plans, security aspects and Temporary Traffic Management (TTM) Plans and parking needs.
- In consultation with the HSEQ or Safety Manager, establish and implement a Project High-risk Activity Checklist to identify those high-risk activities specific to the project that will require specific controls, documentation, Operator Licences or competencies.
- Establish, implement and maintain the Pre Commencement checklist, the Site Setup checklist, emergency response & site safety programs.
- Ensure the IMP is communicated to all relevant project staff, Contractors and stake holders as appropriate.
- Ensure the IMP is constructed and implemented in compliance with the relevant legislation as identified within this IMP.
- Ensure the maintenance of site safety and the provision of First Aid.
- Site staff co-ordination and control.
- Undertake reviews of the Safety Management Plans and WMS as supplied by Contractors and ensure corrective actions arising from the review process and closed out before the Contractor is permitted to undertake any works on site.
- Assist and otherwise participate in the review and approval of Manteena and Contractor WMS.
- Attend as required the weekly Site Safety Consultation meeting.
- Conduct project spot audits.
- Report and manage unexpected finds, accidents, incidents and near misses and Contractor working hours reporting via Manteena's intranet.
- Issue site notices (Safety Notices) as required. (Note: all safety notices raised must be closed out within an agreed time frame, as documented on the notice).
- Manage the safety corrective action process and review the effectiveness and close out of the actions taken.
- Monitors rehabilitation of Manteena's injured site personnel.

ENVIRONMENTAL

- Establish and maintain the Environmental Management Plan.
- Ensure compliance with all relevant legislation.
- Maintain environmental control and protection measures.
- Prevent environmental pollution.

MANAGEMENT

- WHS, EM, QA, IR and HVNL – prepare all reports and correspondence.

6.4 Site Manager

Defined as a Worker under the Work Health and Safety Act 2011.
Authorities and Responsibilities include:

- Controls all site related issues of the project including, documentation, set-out, supervision of Contractors, direct labour, coordination of procurement, liaison with external parties and safety.

- Implements and promotes Manteena's systems for site related activities.
- Provides mentoring and training to junior staff and advice to senior managers as required.
- Ensures site induction training is delivered and documented prior to any person commencing work on-site.
- Manages Manteena's site staff and construction worker resources under the Site Manager's direct control.
- Works with the Safety Manager and Advisor to ensure all system requirements are implemented.
- Holds a current Provide First Aid Certificate and renders first aid when required.
- Investigates and reports on safety and environmental accidents and incidents as required under Manteena's Integrated Management System. Manages unexpected finds.
- Report any suspected breaches of the HVNL or the Secure Local Jobs Code 2019 to the Operations or Health Safety Quality Environment Manager for investigation and management.
- Assists in and coordinates hazard identification and the preparation of Work Method Statements.
- Ensures site safety checks are conducted and ensures compliance with Work Method Statements.
- Convenes weekly Toolbox Meetings as a forum for consultation for all site personnel.
- Ensures that safe equipment and plant is used and maintained, including implementation of CoR / HVNL site requirements.

6.5 Site Supervisor

Defined as a Worker under the Work Health and Safety Act 2011.
Authorities and Responsibilities include:

- Controls all site related issues of the project including, documentation, set-out, supervision of Contractors, direct labour, coordination of procurement, liaison with external parties and safety.
- Implements and promotes Manteena's systems for site related activities.
- Provides mentoring and training to junior staff and advice to senior managers as required.
- Manages Manteena's site staff and construction worker resources.
- Works with the Safety Manager and Advisor to ensure all system requirements are implemented.
- Coordinate and manage Trades on site for time and quality of performance.
- Liaise with Consultants where design detail clarification is required for on-site works.
- Arrange for site survey and set out, including levels etc.
- Undertake Site Inductions for all Contractors or other persons performing work on site.
- Supervise and record day works by Contractors.
- Arrange for completion of detail trade works not covered by trade contracts let on site.
- Arrange for and check results of the project Inspection and Test Plan (ITP) as required.
- Ordering and establishing delivery schedules for materials.

- Monitor trades and manpower on site for adherence to industrial instruments, industrial and Work Health and Safety requirements.
- Report any suspected breaches of the HVNL or the Secure Local Jobs Code 2019 to the Site Manager or Health Safety Quality Environment Manager for investigation and management.
- Ensures that safe equipment and plant is used and maintained, including implementation of CoR / HVNL site requirements.
- Investigates and reports on safety and environmental accidents and incidents as required under Manteena's Integrated Management System.
- Maintaining site facilities and services.
- Assist and participate in the preparation of Work Method Statements.
- Assist and otherwise participate in the review and approval of Manteena and Contractor WMS.
- Attend and actively participate in weekly Contractor coordination meetings.
- Undertake safety corrective action and management as required.
- Issue site WHS notices (Safety Notices) as required. (Note: all safety notices raised must be provided to the Safety Manager for logging onto the intranet and be closed out within an agreed time frame, as documented on the notice).
- Undertake daily Task Hazard Assessments and ensure the completed document is posted on the site notice board.
- Undertake a daily site safety Inspection, ensuring the implementation and maintenance of hazard control measures.

Note: The Site Supervisor is to ensure Daily Site Safety Inspections are undertaken every calendar day the site is open for use. This may be undertaken by the Site Supervisor or a nominated member of the Manteena site team.

- Provide and record Site Induction Training for all personnel on site (Note: records of inductions must be maintained).
- Chair (or nominate a chairperson) weekly tool box and or other form of site safety consultation meetings for Manteena's site team.
- Attend and participate in weekly site safety meetings.
- Report and manage unexpected finds, accidents, incidents and near misses.
- Carry out (and record) environmental weekly site inspections.
- Holds a current First Aid Certificate and renders first aid when required.

6.6 Safety Manager

Defined as a Worker under the Work Health and Safety Act 2011.
Authorities and Responsibilities include:

- Assist where practical in the preparation or review of Project Integrated Management Plans (IMP) incorporating current company documentation prior to commencement on-sites.
- Auditing all site safety systems and operating procedures (Manteena and Sub-contractors), including HVNL implementation.
- Managing Safety Advisors in consultation with Project Managers as appropriate, to ensure the completion of their duties and tasks.

- Providing reports to the HSEQ Manager on the performance of safety systems and implementation of the systems.
- Review implementation of Manteena IMP's and Work Method Statements including coordination of updates and reviews.
- Review documentation provided by Contractors and assessing implementation performance of SA's in reviewing this documentation.
- Review daily tasks/work method statements and recommend improvements/changes.
- Continuous review of Manteena's site systems for the sites allocated.
- Assisting and as necessary prepare Manteena's WMS, risk analysis reviews and other system documentation.
- Report any suspected breaches of the HVNL or the Secure Local Jobs Code 2019 to the Operations or Health Safety Quality Environment Manager for investigation and management.
- Liaising with the Human Resources Manager (HRM) for all WHS training in Manteena's systems and external training as applicable for all sit staff including Project Managers, Administrators, Site Supervisors and Manteena employed Construction Workers.
- Arrange/facilitate and/or carry out site inductions as coordinated with other site supervisory staff.
- Investigate, report, record WHS incidents and accidents and unexpected finds as applicable or oversee if carried out by Safety Advisors.
- Manage dissemination of relevant information to all site staff.
- Respond to internal and external safety systems enquiries and disseminate relevant information.

6.7 Safety Advisor

Defined as a Worker under the Work Health and Safety Act 2011.
Authorities and Responsibilities include:

- Ensure the site noticeboard is updated to include minutes from the Safety Meeting, daily site safety inspection, daily task hazard assessment, emergency contact details and the name and contact details of the nominated Worker consultation representative.
- Ensure the site noticeboard is updated re the Daily Task Hazard Assessment.
- Ensure identified Hazard Control measures have been implemented, maintained and are in compliance with Project Hazard Risk Assessment and Register.
- Audit site induction records to ensure induction training for all personnel on site is conducted and recorded.
- Assist and otherwise participate in the review and approval of Manteena and Contractor WMS.
- Conduct and record project spot audits. this includes but is not limited to the review of Contractor WMS and plant and equipment registers.
- Implement and otherwise close out corrective actions arising from spot audits.
- Conduct random safety inspections.
- Report any suspected breaches of the HVNL or the Secure Local Jobs Code 2019 to the Operations or Health Safety Quality Environment Manager for investigation and management.
- Ensure HVNL requirements are implemented.

- Report Incidents, Accidents and Near Misses.
- Issue site WHS notices (Safety Notice) as required. (Note: all safety notices raised must be closed out within an agreed time frame, as documented on the notice).
- Undertake safety corrective action monitoring as required.
- Participate in safety consultation with site personnel as required.
- In conjunction with the Project Manager and Site Supervisor follow up and ensure close out of the action issues following Safety Meetings.
- Conduct an assessment of the content of the First Aid kit or facility (whichever is applicable to the project) to ensure it meets the requirements of the First Aid in the Workplace Code of Practice.
- Manage and or communicate to the Project Manager any hazard report forms as and when they are provided.
- Hold a current Provide First Aid Certificate and render first aid when required.

6.8 Contracts Administrator / Project Administrator

Defined as a Worker under the Work Health and Safety Act 2011.
Authorities and Responsibilities include:

- Maintain record system.
- Procure goods and services to maintain schedule.
- Ensure that tender and contract documentation is reflective of this plan.
- Liaise with Contractors and the Client.
- Report any suspected breaches of the HVNL and Secure Local Jobs Code 2019 to the Senior Project Manager for investigation and management.
- Report any suspected breaches of the to the Operations or Health Safety Quality Environment Manager for investigation and management
- Monitor the management of non-conformance reports and associated corrective actions.
- Undertake all role and responsibilities as delegated by the Senior Project Manager – (including WHS and HVNL matters).

6.9 Construction Workers

Defined as a Worker under the Work Health and Safety Act 2011.
WHS Responsibilities include:

- Be responsible for and work in such a manner to ensure their own health and safety and that of others on the site.
- Assisting with hazard identification, risk assessment and the development of Work Method Statements for the tasks they are directed to undertake.
- At all times, comply with WHS Legislation, statutory and industry codes of practice, Manteena's requirements, policies and procedures, WMS, the manufacturers safe operating instructions for plant and equipment, and all reasonable instructions from the Site Supervisors.
- Perform HVNL site requirements such as the Load Inspection Checklist.

- Use and maintain the correct and appropriate personal protective equipment (PPE), tools and equipment for the task, and protection from ultraviolet radiation (i.e. the sun, and welding flash).
- Obey all safety signs and instructions.
- Report all workplace accidents, incidents, injuries, near misses and unexpected finds to the Site Supervisor or the Safety Advisor.
- Report any suspected breaches of the Secure Local Jobs Code 2019 or the HVNL to the Site Manager for investigation and management.
- In emergency situations, follow instructions from the Site Supervisors.
- Never perform any duty or undertake any task which you reasonably believe places your health and safety, or that of fellow workers at risk.

6.10 Contractors

Defined as a Workers under the Work Health and Safety Act 2011.
Contractors' WHS responsibilities on this project include:

BEFORE STARTING ON SITE

- Ensure they have provided evidence of compliance to the Secure Local Jobs Code 2019 and, where applicable the HVNL.
- Ensure all their personnel onsite have undertaken a company induction, including either, input into the development of or provided with the opportunity to add value to – along with training in – the relevant Work Methods Statements (WMS) for the tasks they will perform on site.
- Ensure all their personnel onsite have undertaken a SignOnSite induction and a site-specific safety induction conducted by Manteena.
- Submission to the Safety Advisor for the Senior Project Manager's sign off:
    - their company's site-specific safety plan that supports and complies with the requirements of this Plan.
    - documented WMS that are relevant to the tasks being performed on site.
    - training records and competency certificates of personnel employed onsite relevant to their tasks.
    - plant and equipment register and maintenance records and risk assessments for the plant, equipment and tools to be used on site (including electrical tagging). and
    - hazardous substance / dangerous goods register and SDS for any hazardous substance / dangerous goods that will be used on site.

WHILE WORKING ON SITE

- Have available on site their company site specific safety plan and the documented WMS that are relevant to the tasks being performed on site for their personnel's reference.
- Supervise the behaviour of their personnel on site to ensure compliance with the site safety rules.
- Undertake hazard identification and control measures applicable to the tasks being carried out and provide evidence of hazard identification and risk control measures to Manteena on request.

- Undertake safety checks/supervision of the site, ensuring the establishment and maintenance of your hazard control measures.
- Ensure site personnel (either employed with or engaged by the Contractor) comply with the requirements of ISO 45001, this Integrated Project Plan, Manteena's Management System Procedures, WMS, and Task Hazard Assessment controls at all times, and report any suspected breaches to the Project Manager for investigation and management. Specifically, Contractors must make provision to:
    - Obtain any necessary permits from the Site Manager prior to commencing work (i.e. hot work, excavation, confined space entry).
    - Maintain their plant and equipment in accordance with the manufacturer's instructions.
    - Maintain all personal protective equipment and tools in a safe manner to ensure a safe working environment.
    - Ensure all electrical equipment used on site is electrically tested and tagged as required by legislation.
    - Adequately supervise their workers.
    - Ensure workers are adequately trained and equipped to undertake tasks they have been directed to fulfill.
    - Undertake Toolbox Talk meetings at least weekly for their company.
    - Provide a worker representative to attend Site Safety Worker Consultation Committee meetings whenever sub-contractor is active on site.
    - Provide a suitable representative to attend all sub-contractor site meetings, safety inspections and project spot checks/audits to monitor the WHS implementation on site and follow-up any action issues.
    - Participate in incident/accident/unexpected finds reporting, management and investigation as required.
    - During a site emergency and/or evacuation the Site Supervisor is to report to the Site Supervisor on the status of their personnel.
    - Safety rectification/corrective action identification, management and review of its effectiveness as required.
    - Undertake safety consultation / site walk with the Senior Project Manager, Site Manager, Site Supervisors, and the Safety Advisor as required and co-operate with Manteena on all site WHS requirements.
    - To work in accordance with and comply with WHS Legislation statutory/Industry codes of practice, this Manteena Plan, manufacturers' safe operating instructions for plant and equipment, the reviewed Work Method Statements, and all reasonable instructions from Site Supervisors.

(Note to PMs: these responsibilities are to be included in each Sub-Contractors Contract)

WORK HEALTH AND SAFETY DUTIES (EXTRACT FROM THE WORK HEALTH AND SAFETY ACT 2011)

Duties of "Duty Holders"

Person Conducting a Business or Undertaking (PCBU)

Meaning of Person Conducting a Business or Undertaking (PCBU) (Primary Duty Holder)

- For the purposes of this Act, a person conducts a business or undertaking:
  - whether the person conducts the business or undertaking alone or with others; and
  - whether or not the business or undertaking is conducted for profit or gain.
- A business or undertaking conducted by a person includes a business or undertaking conducted by a partnership or an unincorporated association.
- If a business or undertaking is conducted by a partnership (other than an incorporated partnership), a reference in this Act to a person conducting the business or undertaking is to be read as a reference to each partner in the partnership.
- A person does not conduct a business or undertaking to the extent that the person is engaged solely as a worker in, or as an officer of, that business or undertaking.

Duty of persons conducting businesses or undertakings involving management or control of workplaces

- In this section, person with management or control of a workplace means a person conducting a business or undertaking to the extent that the business or undertaking involves the management or control, in whole or in part, of the workplace but does not include:
  - the occupier of a residence, unless the residence is occupied for the purposes of, or as part of, the conduct of a business or undertaking; or
  - a prescribed person.
- The person with management or control of a workplace must ensure, so far as is reasonably practicable, that the workplace, the means of entering and exiting the workplace and anything arising from the workplace are without risks to the health and safety of any person.

Interpretation of Terms –
What is *reasonably practicable* in ensuring health and safety?

- 'Reasonably practicable' represents what can reasonably be done in the circumstances. To determine what is (or was at a particular time) reasonably practicable in relation to managing risk, a person must take into account and weigh up all relevant matters, including:
  - the likelihood of the relevant hazard or risk occurring
  - the degree of harm that might result
  - what the person knows or ought reasonably to know about the hazard or risk and the ways of eliminating or minimising the risk, and
  - the availability and suitability of ways to eliminate or minimise the risk.
- After taking into account these matters, only then can the person consider the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.

Primary duty of care

- The changing nature of work organisation and relationships means that many who perform work activities do so under the effective direction or influence of someone other than a person employing them under an employment contract. The person carrying out the work:
  - may not be in an employment relationship with any person (e.g. share farming or share fishing or as a Contractor working under a contract for services), or

- may work under the direction and requirements of a person other than their employer (as may be found in some transport arrangements with the requirements of the consignor).

- For these reasons, the Bill provides a broader scope for the primary duty of care, to require those who control or influence the way work is done to protect the health and safety of those carrying out the work.

Duty of officers

- If a person conducting a business or undertaking has a duty or obligation under this Act, an officer of the person conducting the business or undertaking must exercise due diligence to ensure that the person conducting the business or undertaking complies with that duty or obligation.
- In this section, due diligence includes taking reasonable steps:
  a. to acquire and keep up-to-date knowledge of work health and safety matters; and
  b. to gain an understanding of the nature of the operations of the business or undertaking of the person conducting the business or undertaking and generally of the hazards and risks associated with those operations; and
  c. to ensure that the person conducting the business or undertaking has available for use, and uses, appropriate resources and processes to eliminate or minimise risks to health and safety from work carried out as part of the conduct of the business or undertaking; and
  d. to ensure that the person conducting the business or undertaking has appropriate processes for receiving and considering information regarding incidents, hazards and risks and responding in a timely way to that information; and
  e. to ensure that the person conducting the business or undertaking has, and implements, processes for complying with any duty or obligation of the person conducting the business or undertaking under this Act; and
  f. to verify the provision and use of the resources and processes referred to in paragraphs (c) to (e).

Examples

For the purposes of paragraph (e), the duties or obligations under this Act of a person conducting a business or undertaking may include:

- reporting notifiable incidents, consulting with workers, ensuring compliance with notices issued under this Act, ensuring the provision of training and instruction to workers about work health and safety, ensuring that health and safety representatives receive their entitlements to training.
- to verify the provision and use of the resources and processes referred to in paragraphs (c) to (e) above.

Interpretation of Terms –

What is *reasonably practicable* in ensuring health and safety?

- 'Reasonably practicable' represents what can reasonably be done in the circumstances. To determine what is (or was at a particular time) reasonably practicable in relation to managing risk, a person must take into account and weigh up all relevant matters, including:
  - the likelihood of the relevant hazard or risk occurring
  - the degree of harm that might result

- what the person knows or ought reasonably to know about the hazard or risk and the ways of eliminating or minimising the risk, and
- the availability and suitability of ways to eliminate or minimise the risk. After taking into account these matters, only then can the person consider the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.

Meaning of worker

- A person is a worker if the person carries out work in any capacity for a person conducting a business or undertaking, including work as:
  - an employee; or
  - a Contractor or Sub-contractor; or
  - an employee of a Contractor or Sub-contractor; or
  - an employee of a labour hire company who is assigned to work in the person's business or undertaking; or
  - an outworker; or
  - an apprentice or trainee; or
  - a student gaining work experience; or
  - a volunteer; or
  - a person of a prescribed class.
- The person conducting the business or undertaking is also a worker if the person is an individual who carries out work in that business or undertaking.

Duties of workers

While at work, a worker must:

- take reasonable care for his or her own health and safety; and
- take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons; and
- comply, so far as the worker is reasonably able, with any reasonable instruction that is given by the person conducting the business or undertaking to allow the person to comply with this Act; and
- co-operate with any reasonable policy or procedure of the person conducting the business or undertaking relating to health or safety at the workplace that is notified to workers.

7. SITE REQUIREMENTS

7.1 Safe Work Processes

Work is to cease immediately where work cannot be safely undertaken, or its continuance may result in a hazardous condition – this shall be reported to the Site Manager/Supervisor or Safety Advisor immediately.

7.2 Existing and Temporary Services

All existing and temporary services are to be assumed to be 'LIVE.' Contractors are not to terminate or move any existing service without first obtaining clearance from the Site Supervisor, Site Manager or the Engineering Services Manager (where allocated).

7.3 Light and Power

Manteena will provide temporary power and access lighting to work areas. Where required, task lighting is to be provided by relevant Contractors.
Contractors are to assume all cabling to be "LIVE". The relevant WMS must be accepted by the Site Supervisor prior to commencing any work in ceiling spaces or voids.

7.3.1 In and Above Ground Services (Existing and Temporary)

Contractors shall use the **'Before-You-Dig-Australia'** service to make themselves aware of the location of in-ground services and provide search results to Manteena prior to any excavation or demolition and consult with the Site Supervisor, Site Manager or Engineering Services Manager (where allocated) before any exploration, excavation or demolition commences.
In any area of the site marked for exploration, excavation or demolition that is not covered by 'Before You Dig', the contractor shall make every effort to gain knowledge of existing services. The extent of the search should be based on risk assessment and should consider:

- Requests to client or governing body (e.g. local council) for known services drawings
- Visual survey of site for service markers such as pits or service pillars
- Underground service scanning
- Potholing

Manteena shall, upon receipt of results, ensure that the site establishment plan (or separate known services plan) is updated to show all identified services (existing and temporary) and communicate the plan to all workers affected by the change. The updated plan shall be posted in a prominent location on site.

7.4 Encroachment and Works around Services

To avoid incidents involving existing above and or inground services, it is essential to follow the Manteena procedure for the location of, and working near, existing services.

7.4.1 In and above Ground Services

Contractors shall contact **'Before-You-Dig-Australia' / conduct a known service investigation** to make themselves aware of the location of in-ground / above ground services and provide the search results to Manteena before any excavation, demolition or construction and consult with the Site Supervisor, Site Manager before any work commences. Manteena shall upon receipt of **'Before-You-Dig-Australia' / known service investigation** results ensure that the site establishment plan is updated (e.g.: marked up) to show all identified services (existing and temporary) and communicate the plan to all workers affected by the change. The updated plan shall be posted in a prominent location on site such as the site notice board.

7.4.2 Encroachment Works around Live Services

To avoid incidents involving existing above and or inground services, it is essential to follow the Manteena procedure for the location of and working near existing live services.
Safe working distances:

The following outlines the minimum safe working distances as defined by Manteena. **Note:** you must always follow the safe encroachment distances as defined by the asset owner where these are more onerous than the minimum distances identified by Manteena. If you require to work within the identified distance of a live service, you must complete a Work Permit and seek approval from Manteena. This clearance may be in addition to the approval that is to be obtained from the relevant asset owner.

Service	Equipment type	Minimum Safe distances
External		
Electrical: Power / Comms lines	Plant	3 metres
Below Ground		500mm
High-Pressure Gas: Below Ground	Plant	1 metre
Water: Below Ground	Plant	Contact Asset Owner
Internal		
Wet Fire Gas Electrical / Comms / Dry Fire / Data Water Mechanical	Plant	1 metre
	Handheld equipment	1 metre

Before breaking ground, you must always:

- Complete Before You Dig Australia protocols
- Use service locators to locate and mark out inground services
- Pot hole to identify the exact location and depth of the inground services
- Contact the owner of the asset if works are required to enter the encroachment distance listed on the BYDA cover page
- Provide training and permits, as required with guidance from the asset owner
- Communicate with workers i.e. toolbox
- Submit for approval WMS
- Seek permit to start works.

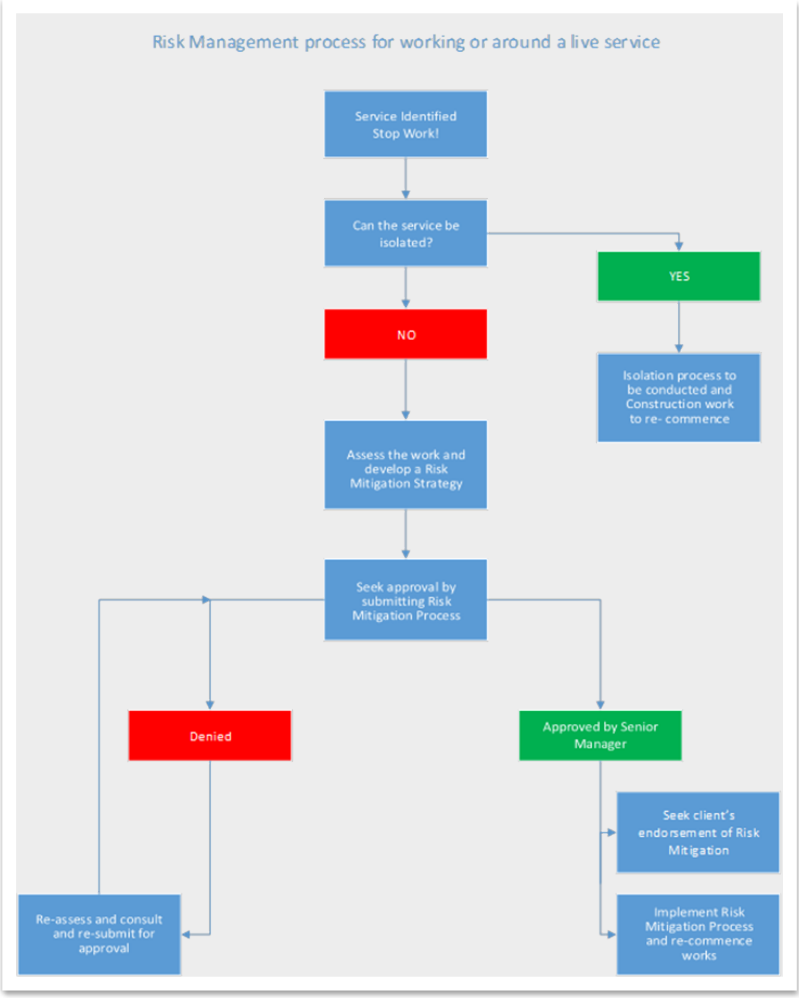
Before working near existing services, you must always:

- Isolate service, if possible
- Check encroachment distance
- Contact Asset owner
- Submit for approval WMS
- Seek permit to start works
- Use Identification tags
- Put in appropriate controls i.e. mechanical protection if applicable
- Use Spotter, if required

- Communicate with workers i.e. Toolbox.

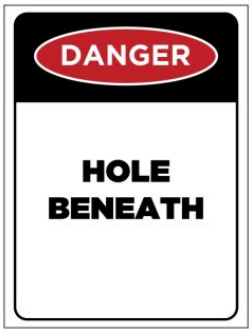
Risk mitigation process:
Once a live service has been identified within your work area, all workers are required to stop work and follow the below 'Risk Management Process for working around a live service'.

For works approval / Permit to work contractors are required to submit to the Project Manager or Site Supervisor the documented process such as WMS/JSA/toolbox talk for review and consultation with the project team. Once submitted the Manteena project team will seek final approval from the Operations Manager or the Construction Manager. Once approval has been granted, where applicable seek client endorsement into the methodology.



7.5 Protection around holes, penetrations and openings

A fall prevention device (for example a secure fence, edge protection, work platform or cover) must be used to provide and maintain a safe system of work where persons are working near and around holes, penetrations and openings through which a person or objects could fall.
Holes, penetrations and openings must be made safe immediately after being formed, for example with covers, barricading or by embedded mesh. This includes any hole, penetration and opening, including core holes for pipes and slots for cable trays (i.e. anything over 50mm in diameter). When mesh is used, an additional cover should be used to prevent things falling through the mesh. If a visual barrier is the only form of protection, it must be 2 meters from the leading edge.
If a cover is used as a control measure it must be made of a material strong enough to prevent people or objects falling through the hole, penetration or opening and should be securely fixed to prevent dislodgement or accidental removal.
Covers over penetrations should be designed to safely withstand a point load of at least 2 kilonewtons—that is, 200 kilograms.
Covers, where reasonably practicable (i.e. enough space on the cover to write) should be marked with signage indicating their purpose as a cover, for example 'DANGER HOLE BENEATH' and be secured with a fixing that can only be removed by a tool (e.g. a hexhead driver) or substantial weight (e.g. deeply embedded, angled star-pickets).



The methodology of the removal of penetration covers and working through penetrations must be thoroughly covered within a SWMS. The preferred method is for work to be conducted from below, with a suitable temporary barrier above.
Consider in the sequence of works that some elements of vertical construction may not be sufficiently engineered to be fall protection until they are complete. Ensure fall protection is not removed too early and that it adequately withstands the forces required.

7.6 Protection Against Falling Objects

If the risk of falling objects can't be eliminated, use the Hierarchy of Controls to determine what control measure should be used to manage the risk. Examples include:
Elimination – store materials at ground level if possible. If an object can't fall, it can't hurt anyone.
Substitution – substitute a bucket for a tool bag with a zip to transport tools between floors via a ladder.
Engineering – use toe boards and barrier mesh on scaffolding and edge protection to prevent items being knocked off edges.
Administrative – keep maintenance registers up-to-date for lifting equipment, such as lifting slings and chains. Set up exclusion zones and warning signs wherever there are temporary falling object hazards, for example when removing rubbish from a roof.

Personal protective equipment – use tool lanyards to prevent dropped tools from falling to the ground, especially when working above others. Enforce the use of hard hats whenever working underneath others or when falling object risks have been identified on-site.
The following practices must be applied by all persons on the project:

- When overhead/demolition work is undertaken, directions from the Site Manager, Site Supervisor or Safety Advisor shall be followed by all persons on site.
- Always wear an approved hard hat in hard hat designated areas.
- Do not enter areas that have been isolated, barricaded and/or sign posted.
- Stay away from no access and "no go" areas.
- Keep well away from loads being lifted and slung loads and obey instructions from the Dogger or Crane operator.
- Secure loose material not being used, particularly in windy weather and overnight.
- Do not stack materials close to unmeshed guardrails and perimeter edges at height.

7.7 First Aid and Emergency Equipment

A fully operational First Aid kit will be available for the use of all site persons as part of the site establishment. The nature and content of the First Aid kit shall be implemented in accordance with: Safe Work Australia: First Aid in the Work Place Code of Practice.

- The Safety Advisor or Safety Manager, as an appropriately qualified and/or competent person, will be tasked with conducting a risk assessment (SF-040 First Aid and Emergency Equipment Assessment) to ensure the nature and content of the first aid kit are appropriate to the needs of the project.
- The Project Manager is responsible for ensuring the first aid kit - once established - is maintained,

Records of the assessment shall be maintained on site by the Project Manager. The kit nature and content shall be reviewed every six months after site establishment. Records of review may be maintained within the minutes of the safety consultation meeting.
(Note: this document is available for reference on Manteena's Intranet)
The location of the first aid room will be advised by the Site Supervisor or the Safety Advisor during the initial site induction and will be appropriately signposted. All first aid treatment provided by the designated first aiders will be recorded.
Associated documents:

- SF-040 First Aid and Emergency Equipment Assessment
- Safe Work Australia: First Aid in the Work Place Code of Practice

7.8 Fitness For Work Policy

POLICY STATEMENT

Manteena is committed to the provision and maintenance of a safe, healthy and productive workplace for all staff, Contractors and Sub-contractors. Manteena is also committed to ensuring the safety of all visitors to the workplace.

SCOPE

All employees, Contractors and Sub-contractors on all Manteena sites are to act in accordance with their responsibilities as set out in the policy, related Legislation, Regulation Codes of Practice, Guidelines and project specific Integrated Management Plan (IMP).

STATEMENT

All individuals are expected to report for work in a state, both physically and psychologically, to perform their tasks competently and safely. Manteena provides a framework for workers to ensure they can meet this goal, including, but not limited to policies and procedures relating to:

- Fatigue Management
- Drug and Alcohol Testing and Management
- Employee Assistance Program (EAP)
- Health Monitoring
- Injury Management and Rehabilitation

Workers demonstrate their commitment to Fitness For Work by following all relevant policies, procedures and training and contributing to the improvement of the framework.

Related documents:

- Drug and Alcohol Policy
- Drug and Alcohol Testing Procedure
- Fitness for Work Procedure

7.9 Drug and Alcohol Testing

Drug and alcohol testing may be implemented due to a management decision or to meet client requirements or to comply with Work Health and Safety Act 2011.

All employees, contractors, and sub-contractors on all Manteena sites are required to follow this procedure as part of the Fitness for Work Policy. Site workers are advised of, and agree to follow, this procedure when signing the site induction. The procedure and related documents are made available on site, Manteena employees contractually consent to follow this procedure and it is made available to them via the company intranet.

DRUG AND ALCOHOL TESTING

Eligibility

Testing is mandatory for all managers, supervisors, administrative staff and workers (including contractors and sub-contractors) on a project job site.

Frequency

The minimum frequency for random testing is at least once per month. Where deemed necessary and based on risk, testing may occur on projects with high-risk activities after consultation with employees. Volunteer testing and for-cause testing will occur where necessary and may be a consequence of producing a previous positive test result. Testing may occur where it is reasonably believed that impairment due to the abuse of drugs and/or alcohol may have been a contributing factor to an incident or accident or where, by way of observation or other reasonable method including disclosure, an employee/worker's (including contractor and sub-contractor employees) behaviour or work performance indicates the person is under the influence of drugs and /or alcohol.

Sample Size

As a minimum, testing will be conducted as follows;

- Where there are less than 30 workers on site - at least 10% of the workforce;
- Where there are 30 to 100 workers on site - as minimum of 5 workers per month; and
- Where there are greater than 100 workers on site - a minimum of 10 workers per month.

Sample Selection

The selection of persons to be tested, if the entire workforce is not to be tested in a testing round, will be at the sole discretion of and conducted by the qualified service provider. Those selected are expected to act cooperatively, respectfully and in compliance with the testing procedure.

Tested Substances

In respect of each substance to be tested (listed below), subject to testing detectable levels, there is a zero level tolerance for;

- Alcohol
- Opiates
- THC (Tetrahydrocannabinol or Marijuana)
- Cocaine
- Benzodiazepines
- Amphetamines
- Methamphetamines

Testing Procedure

Drug and alcohol testing will be conducted by an independent qualified service provider. The method of testing will be determined by the service provider and based on the most efficient means available for testing the nominated substances. Methods may include oral, urine, blood and/or breathalyser.

Test Refusal

Failure to submit or refuse a test is deemed an automatic positive result and will be subject to the same conditions as producing a positive result.

POSITIVE DRUG OR ALCOHOL TEST RESULT

Should a person return a positive result, they will be removed from the work site and prevented from performing work until they can prove (via re-testing) they are fit to return to work. A re-test will be performed by Manteena via the appointed service provider or by a medical professional of the employee's choice. Costs for the re-test may be at the expense of the employee.
Further information on steps to follow in the event of a positive test can be found in the Fitness for Work Procedure.

Referenced documents:

Fitness for Work Procedure

7.10 Mandatory Notices (WHS and Workers Compensation)

ACT legislation requires that the following notices be displayed at workplaces:

- Manteena's Work Health and Safety Policy
- Manteena's Drug and Alcohol Policy
- Summary of the ACT Workers Compensation Act
- Details of Manteena's Workers Compensation Insurance Policy
- An outline of how to make an insurance claim, and the name of the Insurer
- A return-to-work program.

Manteena's Safety Manager can supply copies of the above notices relevant to Manteena upon request. Workers of Contractors should refer to their employer for their company details.

7.11 Emergency Procedures (Emergency Response Plan)

The development of an emergency response plan shall be undertaken and documented at the site establishment stage of the project. The process shall be driven by the Project Manager in conjunction with the members of the project team as appropriate. The process shall, so far as is reasonably practicable take into account those situations that may result in an emergency situation.

> *Note: the plan shall be reviewed as new risks are identified (e.g. change of scope, change of methodology, new plant/equipment, new location) and/or as needed, during the construction phase of the project to ensure its ongoing suitability to the needs of the project.*

Once documented all workers on site will be informed about the **Emergency Response and Evacuation Plan** during the Site Induction Training.
In addition to the Plan, evacuation and/or scenario drills will be conducted periodically, 6 weeks after site establishment and 6 monthly after - on higher risk projects the frequency to increase, dependent on the level of risk. Scenario drills might include medical emergency, scissor lift stuck in raised position, plant rollover or fire drill. If a perceived emergency has occurred e.g. an evacuation has been triggered, the record of the event can be used to satisfy the six monthly drill.
The evacuation and/or scenario drills will conducted by the Project Manager and/or Safety Advisor. During evacuation drills all personnel are required to behave as though the situation was a 'real' emergency and should, where practicable, trial a scenario identified within the Response Plan and not just be a trial evacuation of the site. During the evacuation drills, the lines of egress, ability to hear the siren and locality of the assembly point will be checked for suitability to the site layout. All Contractors must complete the **Contractors Attendance Register/SignOnSite** for the purpose of "Roll call".
Emergency contact details (i.e. phone numbers) which have been provided in this **Project Work Health & Safety, Quality, Environmental and Risk Management Plan** shall be displayed on-site along with an emergency evacuation plan. The **Emergency Evacuation Plan** shall be communicated to all personnel on site via induction, safety/supervisor's consultation meetings and implemented by a designated member of the team.
After each drill, the **Emergency Response Record** must be completed to record and evaluate effectiveness and identify any corrective actions. Once identified, the project team are to implement and/or manage any improvements or changes and record the close out of these on the Response Record.
Note: Tampering with safety equipment or false activation of the siren will result in immediate dismissal from the project, **refer to Section 5.3 Disciplinary Process**
Referenced documents:

- Attendance Register on SignOnSite
- PL-012 Emergency Response Plan
- SF-042 Emergency Response Record

7.12 Fire Exits

Fire exits shall be kept clear at all times and no equipment or materials shall be located near exits which may prevent clear egress in an emergency. Fire/exit doors shall not be propped open.

7.13 Fire Extinguishers

- Locations of Fire extinguishers are shown in the Emergency Evacuation Plan and access to the extinguishers must be maintained at all times.
- The Site Supervisor/s are responsible for fire extinguishers on site.
- Fire extinguishers of the appropriate type shall be located with or directly adjacent to all temporary power boards on all Manteena sites.
- Fire extinguishers shall be inspected to ensure they are charged (visual only) and within test date as part of the Daily Site Safety Inspection process.
- Formal inspection and test shall be carried out every six months in accordance with the requirements of AS 2444-2001.

7.14 Housekeeping

- Areas such as stairs and areas giving access and egress to the working areas shall be kept free from debris, material and obstacles.
- All signs, site fencing, barricades and the like shall be maintained in a proper and orderly manner.
- The site and surrounding area shall be kept clean and safe at all times. Cleaning of specific work-areas is the responsibility of those undertaking that work.
- Work areas (including Contractors) must be cleaned on a daily basis or as directed by the Site Supervisor, with rubbish placed in receptacles provided. Rubbish will be removed from the site as required. Work areas are to be free of obstacles, trip hazards, hoses, leads, panels, and metals, protruding nails, sharp objects, materials, scraps and the like.
- All identified hazards that remain either at floor level or at normal head height will be identified by the application of Hazard Tape. Manteena will supply hazard tape if required.

7.15 Parking

- Approved Parking areas are noted on the Site Establishment Plan, a copy of which will be located on the Site Notice Board.
- Contactors are to park in the designated Contractors and Car Parking areas.
- Care needs to be exercised when parking privately owned vehicles on a Construction Site and owners will need to check with their insurance providers for advice.

7.16 Amenities

- Amenities are provided on site for the use of all workers. The facilities are to be used appropriately and respectfully.
- The power/water/WC facilities provided on site are to be appropriately used and all signs must be obeyed.
- Workers are to use toilet facilities provided by Manteena. All amenities must be kept in a hygienic condition by all personnel onsite.
- Food scraps, wastepaper or other rubbish are to be placed in rubbish bins provided by Manteena.
- Secure storage facilities are to be provided by the relevant Contractors. Minimal storage space will be available on site.

7.17 Site Entry

- Access to the site will be restricted to authorised site inducted personnel.
- Access must be sought from Manteena with a minimum of twenty-four hours' notice prior to commencement of work on site.
- Work shall only be carried out during the working hours specified or as directed by Manteena and twenty-four hours' notice is required for work to be undertaken outside of normal hours.

The following restrictions also apply:

- All visitors, and first time Contractors to the site, are to report to the Site Office and sign the visitors register or sign in on SignOnSite and read the site safety rules. Any person conducting any work on site must also undergo and participate in Site Specific Induction.
- Visitors, delivery drivers and site personnel will be refused entry to the site if they do not have the necessary task specific PPE. Visitors/delivery drivers must sign the visitors register and complete the delivery check list where applicable, read the site safety rules and be accompanied by a site inducted person before entering the site. Manteena will provide visitors with Safety Hats and Safety Vests and the Visitors are expected to be wearing appropriate footwear.
- At all times, throughout the project safe and protected means of access and egress, including emergency exits, will be provided for personnel who are on-site.

Referenced documents:

- Attendance Register on SignOnSite
- SF-024 Visitor Site Safety Rules
- SF-025 Delivery Checklist

7.18 Access to Construction Areas

Adequate means of access shall be provided and maintained, clearly defined, and visible, to ensure it is safe for all personnel and without risk to their health.
Access/egress in the case of an Emergency shall be defined in the Emergency Evacuation Plan.

7.19 Noise Restrictions

Noise shall not be generated over and above that prescribed by legislation (Environment ACT). Further noise restrictions may be applied at specific times throughout the project where required by the Client. The Manager and Site Supervisor will apply noise restrictions when deemed necessary, the restrictions will be communicated to all site personnel via Safety Meetings and toolbox meetings and displayed on the site notice board. All personnel shall adhere to the noise restrictions applied.

7.20 Public Protection

The protection of the public shall be via means of exclusion. The construction site or area shall be isolated from general access via means of:

- Temporary or permanent fencing
- Hoarding
- Para webbing
- Bollards and taping, and/or
- Restricted or No Access Signage.

The form of isolation shall be commensurate to the hazard presented by the construction activity. The isolation measure should be identified on the site establishment plan. This plan may be amended from time to time should the construction zone change, or the isolation measure require amendment as deemed necessary by the Site Supervisor.
Consideration of HIRAC issues impacting the public, client and/or others will occur at PCG meetings.

7.21 Site Signage

All Manteena sites shall upon establishment have project identification and safety signage posted. The size and variety of signage posted will depend on the type, size and nature of the project. **Signage templates are available from Marketing**. Irrespective of this the following site signage shall be considered mandatory on all Manteena projects:

EMERGENCY CONTACTS AND SITE LOCATION

Sample:

- 

NOTICE TO VISITORS

Sample:

- 

PROTECTIVE EQUIPMENT

Sample:

The signage noted above shall be placed in prominent locations at all entry points of the site.

7.22 Site Security

Site security requirements shall be identified initially and the project establishment stage. Security measure may take the form of physical or electronic means.
The security measures to be implemented shall be those identified by the Project Manager and may be developed in consultation with the Client or other interested parties.
The responsibility for the implementation and maintenance of the security measures as implemented is that of the project manager.
If any person on site has any concern about security of the site or their own personal security they are to bring the concern to the notice of the Project Manager or Site Supervisor.

7.23 Site Surveillance

In accordance with the Workplace Privacy Act 2011, Manteena reserves the right to use optical surveillance on any of our construction sites. The primary purpose of this surveillance is to capture security breaches (for example, unauthorised entry of site including site offices and storage facilities, vandalism and unauthorised removal of materials and equipment from site). The device used will be cameras. These cameras may cover any area of the construction site, 24 hours a day until the completion of the project and handover to the client.
It is not the intention of these cameras to monitor employees and contractors undertaking regular day to day activities. It is the intention of these cameras to record evidence of criminal activity so that it may be disclosed to the relevant authorities should further action be required. Camera footage will be securely stored and viewing will be restricted to the site supervisor, project manager and Manteena management. In accordance with Section 23 of the Workplace Privacy Act 2011, contractors may request to view footage within this period; the request should be made in writing to Manteena management.
Acceptance of engagement indicates that the contractor and all their employees and sub-contractors agrees to surveillance of the work premises and acknowledge that they have been offered the right to consult on this surveillance.

7.24 Incident/Accident/Dangerous Occurrence Reporting

All incidents, accidents or dangerous occurrences, including near misses (no matter how minor) are to be reported to the Project Manager, Site Supervisor or the Safety Advisor who shall record details in

accordance with **Process Control Procedure** and on Manteena's MySite platform following the methodology below.
The Project Manager is to ensure **ALL incidents are recorded in MySite** using the incident reporting methodology provided within that medium and following the steps as set out for the process. The incident is to be recorded as soon as reasonably practicable after being notified of the incident and no later than 48 hours after the incident occurs. Where a PM is not dedicated to the site or the PM is not present on site this responsibility transfers to the Site Supervisor. The process outlined above is to ensure The Health Safety Quality Environment Manager and Senior Management are informed promptly as the matter may need to be reported to WorkSafe ACT (or other jurisdictional regulator), Comcare and or the Office of the Federal Safety Commissioner (OFSC), the insurance company for workers compensation related injuries, or the client (where they have a specific requirement to be notified within a prescribed time period which may be different to the relevant regulator's reporting timeframe). The responsibility to report an incident to the client is that of the Project Manager or relevant Operations Manager responsible for the project.

1. REPORTING TIMEFRAME:

All incidents **must be reported and recorded in MySite** as soon as is reasonably possible but no later than 48 hours after the incident occurring. The exception to this is in the case of a fatality which must be reported immediately.

2. REPORTING TO REGULATORY AUTHORITIES AND CLIENTS:

All reports to Regulatory Authorities and the OFSC shall be made by the HSEQ. The HSEQ may at his discretion delegate the reporting process to the Safety Advisor/Manager. Where there is a contractual requirement to report all or any incidents to a client, this process may be conducted by the PM but must be in consultation with the HSEQ or Safety Advisor/Manager (consultation may be via email).

- **What is a Notifiable Incident to the regulator?**
  - The death of a person;
  - A serious injury or illness of a person;
  - A dangerous incident; and/or
  - Workplace sexual assault, including a suspected incident.
- **What is a Notifiable Incident to the OFSC?**
  - **Fatality**
  - All fatalities on any projects where the accredited Contractor is the Head Contractor, regardless of value or type, must be reported to the OFSC on 1800 652 500 immediately and an Incident Report form must be submitted through FSC Online within 48 hours.
  - **Lost Time Injury (LTI)**
  - All work-related incidents on a Scheme or Non-Scheme Project where the accredited Contractor is the Head Contractor resulting in a LTI where the project value is $4 million or more must be submitted through FSC Online:
    - Notifiable LTI reports must be submitted within 48 hours;
    - Non-Notifiable LTI reports must be submitted within two weeks.
  - **Medically Treated Injury (MTI)**
  - All work-related incidents on Scheme Projects where the accredited Contractor is the head Contractor resulting in a MTI must be submitted through FSC Online:
    - Notifiable MTI reports must be submitted within 48 hours;

        - Non-Notifiable MTI reports must be submitted within two weeks.
    - **Dangerous Occurrence**
- All work-related incidents on Scheme Projects where the accredited Contractor is the head Contractor resulting in a Dangerous Occurrence must be submitted through FSC Online:
    - Notifiable Dangerous Occurrence reports must be submitted within two weeks. Only notifiable Dangerous Occurrences must be submitted to the OFSC.

3. DUTY TO PRESERVE INCIDENT SITES

The person with management or control of a workplace (i.e. Project Manager or Site Supervisor) at which a notifiable incident has occurred must ensure so far as is reasonably practicable, that the site where the incident occurred is not disturbed until a WorkSafe inspector or Police or Emergency Services personnel arrives at the site or any earlier time that an inspector directs.
This means the site or area where the incident occurred must be isolated or in some other way closed off from access until a WorkSafe Inspector arrives. Failure to adhere to this is an offence under the Work Health and Safety Act and may attract a significant penalty. The site may only be reopened for use once instruction either verbal or written is received from WorkSafe or Police or Emergency Services.

4. RECORDS TO BE MAINTAINED:

Where an incident occurs on site that is deemed either notifiable to a Regulator or reportable to an insurer the following records are required to be gathered, scanned and provided to the HSEQ:

- Signed/executed contracts between Manteena and the Client, Manteena and subcontractor/s involved or associated with the incident.
- All Work Method Statements, Job Safely Analyses, Task Hazard Assessments or the like associated with the "Notifiable" incident.
- All Toolbox talks associated with the incident.
- All attendance registers associated with the incident.
- Daily Site Safety Inspections for the four weeks prior to and including the date of the incident.

For the purposes of this procedure Notifiable/Reportable incident shall be taken to mean:

- A **Lost Time Injury (LTI):** where a worker loses one or more complete shifts as a result of an incident or injury.
- A **Medically Treated Injury (MTI):** where a worker is admitted to hospital as a result of an incident.
- A **Dangerous Occurrence (DO):** where the nature of the incident requires reporting to WorkSafe (ACT), SafeWork (NSW) or other regulatory body.
- A **First Aid Injury (FAI).** Although first aid injuries are not required to be reported to regulatory authorities, they do on occasion result in insurance claims. Therefore the decision whether to maintain documentation resulting from a first aid injury shall be on a case by case basis as advised by the Health Safety Quality Environment Manager upon receipt and review of the incident report.
- A **sexual assault incident** means an incident (including a suspected incident) in relation to a workplace, that exposes a worker or any other person at the workplace to sexual assault.

The decision to report an incident to a regulator lies with the Health Safety Environment Quality Manager or Safety Manager.

What types of incidents are there?

- **First Aid Injury (FAI):** this is an injury that may be minor in nature that can be treated on site by a qualified first aider. An FAI may also be an injury that may be more serious in nature that is treated by a qualified first aider on site to stabilise a casualty prior to that person be treated by a paramedic or other medical professional.
- **Note:** FAIs are reportable on MySite yet are not classified as a Notifiable Incident as defined under Work Health and Safety Legislation.
- **Medically Treated Injury (MTI):** A work-related occurrence that results in treatment by, or under the order of, a qualified medical practitioner (see below), or any injury that could be considered as being one that would normally be treated by a medical practitioner but does not result in the loss of a full day/ shift.
- **Note:** MTIs are reportable on MySite yet are not classified as a Notifiable Incident as defined under Work Health and Safety Legislation unless the casualty is admitted as an In-Patient to a Hospital.
- **Lost Time Injury (LTI):** A work-related occurrence that results in a serious injury or illness resulting in time lost from work of one complete day/shift or more.
- **Note:** LTIs are reportable on MySite yet may not be classified as a Notifiable Incident as defined under Work Health and Safety Legislation unless there is time lost from work of one complete day/shift or more.
- **Dangerous Occurrence or Incident (DO):** Means an incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to:
    - An uncontrolled escape, spillage or leakage of a substance; or
    - An uncontrolled implosion, explosion or fire; or
    - An uncontrolled escape of gas or steam; or
    - An uncontrolled escape of a pressurised substance; or
    - Electric shock; or
    - The fall or release from a height of any plant, substance or thing; or
    - The collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be authorised for use in accordance with the regulation; or
    - The collapse or partial collapse of a structure; or
    - The collapse or failure of an excavation or of any shoring supporting an excavation; or
    - The inrush of water, mud or gas in workings, in an underground excavation or tunnel; or
    - The interruption of the main system of ventilation in an underground excavation or tunnel; or
    - Any other event prescribed by regulation, but does not include an incident of a prescribed kind.
- **Sexual assault incident** means an incident (including a suspected incident) in relation to a workplace, that exposes a worker or any other person at the workplace to sexual assault. For this purpose, sexual assault is:

- A sexual assault that **has been** reported to the Police, or a sexual incident that **could be** referred to police for an investigation, or
- An act, sexual in nature, inflicted on someone, that a reasonable person believes has sexual connotations, or
- An act inflicted on someone for the purpose of sexual arousal or sexual gratification, or
- An act that includes sexual touching or sexual intercourse without consent.

- Sexual assault can be perpetrated by anyone at the workplace. It could be an employer, supervisor, co-worker, client, patient or customer.
- **Note:** Sexual assault incidents are reportable on MySite yet may not be classified as a Notifiable Incident, depending on the jurisdiction of the regulator.

What is a Notifiable Incident?
In the Work Health & Safety Act 2011:
Notifiable incident means—

(a) the death of a person; or (b) a serious injury or illness of a person; or (c) a dangerous incident.

What is a serious injury or illness?
Serious *injury or illness*, of a person means an injury or illness requiring the person to have:

(a) Immediate treatment as an in-patient in a hospital; or
(b) Immediate treatment for—
  i. The amputation of any part of his or her body; or
  ii. A serious head injury; or
  iii. A serious eye injury; or
  iv. A serious burn; or
  v. The separation of his or her skin from an underlying tissue (such as degloving or scalping); or
  vi. A spinal injury; or
  vii. The loss of a bodily function; or
  viii. Serious lacerations; or
(c) Medical treatment within 48 hours of exposure to a substance, and includes any other injury or illness prescribed by regulation but does not include an illness or injury of a prescribed kind.

Associated Documentation:

- QP-919 Process Control Procedure
- SP-904 Incident Investigation Procedure

Referenced documents:

- SF-054 Incident Report (Intranet)
-

7.24.1 Incident Investigation

Incident investigation shall be initiated by the HSEQM, based on that person's determination of the incident.

Determination of an incident requiring investigation:

- All incidents notifiable to the regulator;
- LTI exceeding more than 1 week (6 working days) off work;
- Dangerous Occurrence involving plant or equipment.

Incident investigation shall be undertaken by a suitably trained person holding a Diploma in WHS or a Certificate of Attendance in Incident Investigation by an RTO. The investigation shall utilise Manteena's Incident Investigation procedure and complete Manteena's Incident Investigation Report. The Report must be completed within 14 days of the incident notification. Due to extreme circumstances, an extension of time may be granted by the HSEQM. Once the report is completed, the Safety Advisor/Manager will submit it to the HSEQM for review.

CORRECTIVE ACTIONS

Corporate:

A review of all applicable systems/procedures/process to the incident will take place. Any identified system improvements will be implemented by the HSEQ within 1 month of the incident notification. Once a review has been finalised, the HSEQ is to report the findings to Manteena's Directors via the Senior Management Monthly Report.

Onsite:

Once an incident has been investigated, a corrective action must be applied, where identified, before the activity can re-commence. The intended corrective action must be communicated to the Contractors in the form of a toolbox talk. It is the responsibility of the Project Manager to ensure the corrective action has been applied, however, this may be delegated to the Site Supervisor. A review of all on site procedures/WMS will take place. If required, the Contractor may need to update their documentation to include the identified corrective actions.

Time Frames:

- All incidents that potentially have a serious/fatal consequence - the corrective action must be implemented immediately or works stop until a suitable corrective action can be put in place.
- All administrative controls will be first managed via a toolbox process, followed by an update of the Contractors work method statements. The return of the updated work method statements will be within 1 week after notification.

Monitoring implementation:

- Following the serious incident, the Site Supervisor is responsible for monitoring the implementation of the control. This will be done daily utilising the Daily Site Safety Inspection.
- One month after the serious incident, a specific spot audit will be conducted by the Safety Advisor to ensure the controls are still understood and in place.

Close outs, post incident:

- After the Safety Advisor has completed the spot audit and confirmed compliance to the identified controls, the corrective action can be closed.
- If the contractor has left the project and or the activity is no longer conducted the corrective action can be closed.

- Once a corrective action can be deemed closed, the HSEQ will review all associated documents and close the incident by signing off on the Incident Investigation Report.
  Note: If the agreed close-out can not be achieved the HSEQ will consult with the project team to assign an extended close-out period, This will be noted on the incident investigation form.

LESSONS LEARNT

Site level:
As part of the lessons learnt process, the incident and corrective actions will be discussed at the Site Safety Meetings, ensuring to keep the persons involved confidential.
Company level:
As part of the lessons learnt process, the incident and corrective actions will be discussed at the Safety Meetings, Senior Management Meeting and at the quarterly Project Review Meeting. All significant lessons learnt will be sent out via a company-wide Safety Alert.
Associated Documentation:

- SP-904 Incident Investigation Procedure
- SF-001 Incident Investigation Report
-

7.24.2 Corporate Critical Incident Planning

Manteena shall maintain a **Critical Incident Plan**. The plan shall be known as the **Business Continuity Plan**. Manteena's General Manager shall maintain the plan. Critical incident and business continuity reviews and or drills shall be conducted annually. Third party facilitation may be integral to this process.

7.25 Health Monitoring

Worker health shall be monitored generally to identify any changes, actual or potential, that indicate problems and to take timely corrective action to ensure the health and safety of everyone at the workplace. Where Manteena becomes aware or suspects that a worker's heath may be in danger or may have been compromised, Manteena may direct the person to attend a doctor for assessment.
As determined by and in accordance with WHS Regulations, Manteena will conduct health monitoring relating to:

- Handling, generating or storing hazardous chemicals
- Respirable crystalline silica exposure
- Asbestos removal
- Lead risk work
- Noise.

Other work that does not fall within these categories but presents a potential health hazard (e.g. minor lead remediation or minor work on asbestos containing materials) will be risk assessed and health monitoring implemented if required.
As Principal Contractor, Manteena has a duty of care to confirm that PCBUs are fulfilling their duty to conduct health monitoring of workers. Manteena may request evidence of health monitoring records within the bounds of the Privacy Act.
Associated Documentation:

- SF-008 Project Hazard Risk Assessment and Register
-

7.26 Employee Assistance Program (EAP)

Manteena supports the health and wellbeing of all staff, including mental health and wellbeing.

OzHelp are available to provide confidential support counselling if employees wish to use their services. Employees can contact OzHelp directly on 1300 694 357 or https://ozhelp.org.au/individuals/
The Manteena EAP process is available to all Manteena staff via the Intranet https://manteenaau.sharepoint.com/sites/HealthandWellbeing/SitePages/Employee-Assistance-Program.aspx

8. WHS LEGISLATION

It is every person's responsibility on the site to work in accordance with and comply with WHS Legislation, Statutory/Industry Codes of Practice. The Project IMP which includes Work Health & Safety, Quality, Environmental and Risk Management is written to address the company's legislative responsibilities.

Note: The WHS systems on all Manteena sites are designed to comply with the Model Work Health and Safety Act 2011 and the Office of the Federal Safety Commissioners accreditation scheme (OFSC). As such all Contractors engaged by Manteena shall take all reasonable and practicable steps to ensure their systems, including documentation, work methods, induction, plant and equipment, training and other safety and compliance systems meet and are maintained to continuously comply with Manteena's requirements.

Safe methods of work documentation must be written to comply with the relevant legislation, Australian Standards, and Codes of Practice as defined below, or any other relevant legislation, Australian Standard, or Code of Practice that are required during the course of the project.

The following is a list of the relevant legislation applicable to WHS in the building and construction Industry. The list is to be assessed at the establishment of the IMP and reviewed in accordance with the internal audit requirements as stated in **section 8.1** of the IMP. The list shall be amended and maintained by the HSEQM. Any changes to the list shall be assessed by the HSEQ, the list amended, and the amended list communicated to all relevant areas of the business as deemed appropriate by the HSEQ. The changes to the list shall be communicated to all interested parties on the construction sites by the Project Manager via either the Safety Consultation meeting or the site notice board or other suitable means.

The documents listed below shall, so far as is reasonably practical be made available to interested parties on the construction site via either hard or electronic form (primarily via Manteena's Intranet or via Manteena's subscription to SAI Global, www.legislation.act.gov.au. A List of all applicable standards as identified within this section will be located on the site notice board. All contractors will be made aware of the availability of these standards through the site induction process.

8.1 List of Legislation, Regulations and Codes:

The following is a list of the relevant legislation applicable to WHS in the building and construction Industry (Australian Capital Territory):

- Work Health and Safety Act 2011 (ACT)
- Work Health and Safety Regulations 2011 (ACT)
- Occupational Health and Safety (Manual Handling) Regulation 1997
- Occupational Health and Safety (Certification of Plant Users & Operators) Regulations 2000
- Dangerous Substances Act 2004
- Managing Electrical Risks at the Workplace 2015
- Scaffolding and Lifts Act 1912
- Scaffolding and Lifts Regulations 1950
- Machinery Act 1949
- Machinery Regulations 1950
- Workers Compensation Act 1951

- Building and Construction Industry Improvement Act 2016
- Electrical Safety ACT 1971
- Environment Protection ACT 1997 – Republication 3 August 2010
- ACT Government Secure Local Jobs Code 2019 Certification

The following codes of practice have been approved in the ACT under the Work, Health and Safety Act 2011:

- How to Manage Work Health and Safety Risks
- Work Health and Safety Consultation, Cooperation and Coordination
- Managing the Work Environment and Facilities
- Managing Noise and Preventing Hearing Loss at Work
- Hazardous Manual Tasks
- Confined Spaces
- Managing the Risk of Falls at Workplaces
- Managing the Risk of Falls in Housing Construction
- Preventing and Responding to Bullying
- Formwork
- Construction Work
- Demolition Work
- Excavation Work
- First Aid in the Workplace
- Managing Electrical Risks at the Workplace
- Managing Risks of Plant in the Workplace
- Tower Crane
- Safe Design of Structures
- Welding Processes
- Abrasive Blasting
- Spray Painting and Powder Coating
- How to Safely Remove Asbestos
- How to Manage and Control Asbestos in the Workplace
- Managing Risks of Hazardous Chemicals in the Workplace
- Labelling of Workplace Hazardous Chemicals
- Preparation of Safety Data Sheets for Hazardous Chemicals
- Transport and Delivery of Cash
- Sexual Services Industry

National Codes of Practice

- How to Safely Remove Asbestos

- How to Manage and Control Asbestos in the Workplace
- Abrasive Blasting
- Confined Spaces
- Construction Work
- Work Health and Safety Consultation Co-operation and Co-ordination
- Demolition Work
- Managing Electrical Risks at the Workplace
- Excavation Work
- Managing the Risk of Falls at Workplaces
- Managing the Risk of Falls in Housing Construction
- Managing the Work Environment and Facilities
- First Aid in the Workplace
- Labelling of Workplace Hazardous Chemicals
- Preparation of Safety Data Sheets for Hazardous Chemicals
- Managing Risks of Hazardous Chemicals in the Workplace
- Hazardous Manual Tasks
- Managing Noise and Preventing Hearing Loss at Work
- Managing Risks of Plant in the Workplace
- How to Manage Work Health and Safety Risks
- Safe Design of Structures
- Spray Painting and Powder Coating
- Welding Processes
- Managing psychosocial hazards at work
- Managing risks in stevedoring
- Managing the risks of respirable crystalline silica from engineered stone in the workplace

8.1.1 Standards

The following list is the Australian and International Standards which are applicable to this project.

NOTES:
The documents marked with a ☒ are mandatory for the project.
The Project Manager shall, in the table below identify all relevant standards and codes of practice in addition to those already listed as mandatory for this project. If a standard or code of practice is identified but is not listed below the Project Manager shall add to the lists below and ensure it is available for use.

- The documents listed below shall, so far as is reasonably practical be made available to interested parties on the construction site via either hard or electronic form (primarily via Manteena's Intranet or via Manteena's subscription to SAI global or www.legislation.act.gov.au. Updates to the status of these documents is monitored via SAI Standards Global Watch, ACT Le

gislation Register and MBA/Industry Body bulletin posts/emails. The table below is amended regularly.)

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1885.1 Supp 1-1991	Measurement of occupational health and safety performance - Describing and reporting occupational injuries and disease - Workplace injury and disease recording form (Supplement to AS 1885.1-1990)	Withdrawn	☒
AS 1885.1-1990	Measurement of occupational health and safety performance - Describing and reporting occupational injuries and disease (known as the National Standard for workplace injury and disease recording)	Withdrawn	☒
AS 3745-2010	Planning for emergencies in facilities	2010	☒
AS 4687-2007	Temporary fencing and hoardings	2007	☒
AS/NZS 4804:2001	Occupational health and safety management systems - General guidelines on principles, systems and supporting techniques	2001	☒
AS 4817:2019	Earned value management in project and programme management (ISO 21508:2018, MOD)	2019	☒
AS ISO 31000:2018	Risk management - Guidelines	2018	☒
SA/SNZ HB 436:2013	Risk management guidelines - Companion to AS/NZS ISO 31000:2009	2013	☒
NOHSC:1016	National Standard for Construction Work [NOHSC:1016 (2005)]	2005	☒
National Strategy	National Return to Work Strategy 2020-2030 (Safe Work Australia)	2019	☒
NI2020-551	Work Health and Safety (Managing the Work Environment and Facilities Code of Practice) Approval 2020	2020	☒
Code Of Practice	Model Code of Practice: Managing the work environment and facilities (Safe Work Australia)	2020	☒

DESIGN

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1319-1994 (R2018)	Safety signs for the occupational environment	R2018	☐
CHAIR	CHAIR Safety in Design Tool	2001	☐
Code Of Practice	Code of Practice - Safe Design of Structures	2019	☐
Guidance on Principles of Safe Design for work	Guidance on Principles of Safe Design for work	2006	☐

PLUMBING

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 3500.0:2003	Plumbing and drainage - Glossary of terms	2003	☒
AS/NZS 3500.1:2018	Plumbing and drainage - Water services	2018	☒
AS/NZS 3500.1:2018 /Amdt 1:2019	Plumbing and drainage - Water services	2019	☒
AS/NZS 3500.2:2018	Plumbing and drainage - Sanitary plumbing and drainage	2018	☒
AS/NZS 3500.3:2018	Plumbing and drainage - Stormwater drainage	2018	☒
AS/NZS 3500.4:2018	Plumbing and drainage - Heated water services	2018	☒
AS/NZS 3500.4:2018 Amdt 2:2020	Plumbing and drainage - Heated water services	2020	☒
AS/NZS 3500.4:2018 /Amdt 1:2018	Plumbing and drainage - Heated water services	2018	☒

SCAFFOLDING

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 1576.1:2019	Scaffolding - General requirements	2019	☒
AS/NZS 1576.2:2016	Scaffolding - Couplers and accessories	2016	☒
AS 1576.3:2015	Scaffolding - Prefabricated and tube-and-coupler scaffolding	2015	☒
AS/NZS 1576.4:2013	Scaffolding - Suspended scaffolding	2013	☐
AS/NZS 1576.5:1995	Scaffolding - Prefabricated splitheads and trestles	1995	☒
AS 1576.6:2020	Scaffolding - Metal tube-and-coupler scaffolding - Deemed to conform to AS/NZS 1576.1	2020	☒
AS/NZS 4576:1995	Guidelines for scaffolding	1995	☒

STRUCTURAL STEEL

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 4100 Supp 1-1999	Steel structures - Commentary (Supplement to AS 4100-1998)	1999	☒
AS 4100-1998 (R2016)	Steel structures	R2016	☒
AS 4100-1998 (R2016)/Amdt 1-2012	Steel structures	R2016	☒

WELDING

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1674 Set-2007	Safety in welding and allied processes Set	2007	☒
AS 4839-2001 (R2016)	The safe use of portable and mobile oxy-fuel gas systems for welding, cutting, heating and allied processes	2016	☒

NI2022-683	Work Health and Safety (Welding Processes Code of Practice) Approval 2022	2022	☐
Code Of Practice	Model Code of Practice: Welding processes (Safe Work Australia	2020	☐

FORMWORK

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 3610.1	Formwork for Concrete Specifications	2018	☐
AS 3798-2007	Guidelines on earthworks for commercial and residential developments	2007	☐
AS 4678-2002	Earth-retaining structures	2002	☐
AS 4678-2002/Amdt 1-2003	Earth-retaining structures	2003	☐
AS 4678-2002/Amdt 2-2008	Earth-retaining structures	2008	☐
NI2011-770	Work Health and Safety (Formwork) Code of Practice 2011	2011	☐

CONCRETE AND CONCRETE PUMPING

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1012.1:2014	Methods of testing concrete - Sampling of concrete	2014	☐
AS 1379-2007 (R2017)	Specification and supply of concrete	R2017	☐
AS 2550.15:2019	Cranes, hoists and winches - Safe use - Concrete placing equipment	2019	☐

TILT-UP PRECAST CONCRETE PANELS

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 3600:2018	Concrete structures	2018	☐
AS 3600:2018/Amdt 1:2018	Concrete structures	2018	☐
AS 3850.1:2015	Prefabricated concrete elements - General requirements	2015	☐
AS 3850.1:2015/Amdt 1:2019	Prefabricated concrete elements - General requirements	2019	☐
AS 3850.2:2015	Prefabricated concrete elements - Building construction	2015	☐
AS 3850.2:2015/Amdt 1:2018	Prefabricated concrete elements - Building construction	2018	☐

ELECTRICAL

LINK / REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 1680.0:2009	Interior lighting - Safe movement	2009	☒
AS 1735.2-2001 (obsolescent)	Lifts, escalators and moving walks - Passenger and goods lifts - Electric	2001	☐

AS/NZS 3000:2018 (Amended)	Electrical installations (known as the Australian/New Zealand Wiring Rules)	2018	☒
AS/NZS 3000:2018 /Amdt 1:2020	Electrical installations (known as the Australian/New Zealand Wiring Rules)	2018	☒
AS/NZS 3010:2017	Electrical installations - Generating sets	2017	☐
AS/NZS 3010:2017 /Amdt 1:2020	Electrical installations - Generating sets	2017	☐
AS/NZS 3012:2019	Electrical installations - Construction and demolition sites	2019	☒
AS/NZS 3012:2019 /Amdt 1:2020	Electrical installations - Construction and demolition sites	2020	☒
AS/NZS 3017:2022	Electrical installations - Verification guidelines	2022	☒
AS/NZS 3100:2009	Approval and test specification - General requirements for electrical equipment	2009	☒
AS/NZS 3100:2009 /Amdt 1:2010	Approval and test specification - General requirements for electrical equipment	2010	☒
AS/NZS 3100:2009 /Amdt 2:2012	Approval and test specification - General requirements for electrical equipment	2012	☒
AS/NZS 3100:2009 /Amdt 3:2014	Approval and test specification - General requirements for electrical equipment	2014	☒
AS/NZS 3100:2009 /Amdt 4:2015	Approval and test specification - General requirements for electrical equipment	2015	☒
AS/NZS 3100:2017	Approval and test specification - General requirements for electrical equipment	2017	☒
AS/NZS 3100:2017 /Amdt 1:2017	Approval and test specification - General requirements for electrical equipment	2017	☒
AS/NZS 3100:2017 /Amdt 3:2020	Approval and test specification - General requirements for electrical equipment	2020	☒
AS/NZS 3105:2014	Approval and test specification - Electrical portable outlet devices	2014	☒
AS/NZS 3105:2014 /Amdt 1:2017	Approval and test specification - Electrical portable outlet devices	2017	☒
AS/NZS 3191:2008 (R2019)	Electric flexible cords	R2019	☒
AS/NZS 3199:2007	Approval and test specification - Cord extension sets	2007	☒
AS/NZS 3199:2020	Approval and test specification - Cord extension sets	2020	☒
AS/NZS 3760:2010	In-service safety inspection and testing of electrical equipment	2010	☒
AS/NZS 3760:2010 /Amdt 1:2011	In-service safety inspection and testing of electrical equipment	2011	☒
AS/NZS 3760:2010 /Amdt 2:2012	In-service safety inspection and testing of electrical equipment	2012	☒
NI2020-556	Work Health and Safety (Managing Electrical Risks in the Workplace Code of Practice) Approval 2020	2020	☒
COP	Model Code of Practice: Managing electrical risks in the workplace (Safe Work Australia)	2018	☒

FIRE SPRINKLER SYSTEMS AND FIRE EQUIPMENT

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1670.1:2018	Fire detection, warning, control and intercom systems - System design, installation and commissioning - Fire	2018	☒
AS 1670.2-1997 (available superseded)	Fire detection, warning, control and intercom systems - System design, installation and commissioning - Local fire	1997	☒
AS 1670.3:2018	Fire detection, warning, control and intercom systems - System design, installation and commissioning - Fire alarm monitoring	2018	☒
AS 1670.4:2018	Fire detection, warning, control and intercom systems - System design, installation and commissioning - Emergency warning and intercom systems	2018	☒
AS 1851-2012	Routine service of fire protection systems and equipment	2012	☒
AS 1851-2012/Amdt 1-2016	Routine service of fire protection systems and equipment	2016	☒
AS 2118.1-1999	Automatic fire sprinkler systems - General requirements	1999	☒
AS 2118.1-1999/Amdt 1-2000	Automatic fire sprinkler systems - General requirements	2000	☒
AS 2118.1:2017	Automatic fire sprinkler systems - General systems	2017	☒
AS 2118.1:2017 /Amdt 2:2020	Automatic fire sprinkler systems - General systems	2020	☒
AS 2118.1:2017/Amdt 1:2017	Automatic fire sprinkler systems - General systems	2014	☒
AS 2118.10-1995 (R2013)	Automatic fire sprinkler systems - Approval documentation	R2013	☒
AS 2118.9-1995 (R2013)	Automatic fire sprinkler systems - Piping support and installation	R2013	☒
AS 2419.1:2017	Fire hydrant installations - System design, installation and commissioning	2017	☒
AS 2441-2005 (R2018)	Installation of fire hose reels	R2018	☒
AS 2441-2005 (R2018) /Amdt 1-2009	Installation of fire hose reels	2009	☒
AS 2444-2001	Portable fire extinguishers and fire blankets - Selection and location	2001	☒

EMERGENCY EVACUATION LIGHTING

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 2293	Emergency Evacuation Lighting for Buildings Part 1: System for design, installation & operation (Part 1-3)	2005 Set	☐

CERTIFICATION

LINK / REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 4801:2001 (available superseded)	Occupational health and safety management systems - Specification with guidance for use	2001	☒
AS/NZS ISO 9001:2016	Quality management systems - Requirements	2016	☒
AS/NZS ISO 14001:2016	Environmental management systems - Requirements with guidance for use	2016	☒
NOHSC:1006	Assessment Guidelines for National Occupational Health and Safety Certification Standard for Users and Operators of Industrial Equipment (Archived)	1994	☒
NOHSC:7019	National Guidelines for Occupational Health and Safety Competency Standards for the Operation of Loadshifting Equipment and other Types of Specified Equipment [Nohsc: 7019 (1992)] (Archived)	1992	☒
Link	National Standard for Licensing Persons Performing High Risk Work	2006	☒

PLANT AND EQUIPMENT

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 2211.1:2004 (available superseded)	Safety of laser products - Equipment classification, requirements and user's guide (IEC 60825-1:2001, MOD)	2004	☒
AS 2397:2015	Safe use of lasers in the building and construction industry	2015	☒
NOHSC:1010	National Standard for Plant [NOHSC: 1010 (1994)]	1994	☒
NI2022-356	Work Health and Safety (Managing the Risks of Plant in the Workplace Code of Practice) Approval 2022	2022	☒
COP	Model Code of Practice: Managing risks of plant in the workplace (Safe Work Australia)	2021	☒

CRANES

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1418.1-2002	Cranes, hoists and winches - General requirements	2002	☐
AS 1418.1-2002/Amdt 1-2004	Cranes, hoists and winches - General requirements	2004	☐
AS 1418.2-1997	Cranes (including hoists and winches) - Serial hoists and winches	1997	☐
AS 1418.3-1997 (R2016)	Cranes, hoists and winches - Bridge, gantry, portal (including container cranes) and jib cranes	R2016	☐
AS 1418.3-1997 (R2016)/Amdt 1-1998	Cranes (including hoists and winches) - Bridge, gantry and portal cranes (including container cranes)	R2016	☐
AS 1418.3-1997 (R2016)/Amdt 2-2002	Cranes (including hoists and winches) - Bridge, gantry and portal cranes (including container cranes)	R2016	☐

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1418.4-2004	Cranes, hoists and winches - Tower cranes	2004	☐
AS 1418.5-2013	Cranes, hoists and winches-Mobile cranes (EN 13000:2010, MOD)	2013	☐
AS 1418.6-2004 (R2018)	Cranes, hoists and winches - Guided storing and retrieving appliances	R2018	☐
AS 1418.7-1999	Cranes (including hoists and winches) - Builders hoists and associated equipment	1999	☐
AS 1418.8-2008 (R2018)	Cranes, hoists and winches - Special purpose appliances	R2018	☐
AS/NZS 1418.9:1996	Cranes (including hoists and winches) - Vehicle hoists	1996	☐
AS/NZS 1418.10:2011	Cranes, hoists and winches - Mobile elevating work platforms	2011	☒
AS/NZS 1418.10:2011 /Amdt 1:2017	Cranes, hoists and winches - Mobile elevating work platforms	2017	☒
AS 1418.11:2014	Cranes, hoists and winches - Vehicle-loading cranes (EN 12999:2011, MOD)	2014	☐
AS 1418.11:2014/Amdt 1:2015	Cranes, hoists and winches - Vehicle-loading cranes (EN 12999:2011, MOD)	2015	☐
AS 1418.11:2014/Amdt 2:2015	Cranes, hoists and winches - Vehicle-loading cranes (EN 12999:2011, MOD)	2015	☐
AS 1418.11:2014/Amdt 3:2018	Cranes, hoists and winches - Vehicle-loading cranes (EN 12999:2011, MOD)	2018	☐
AS 2550.1-2011	Cranes, hoists and winches - Safe use - General requirements	2011	☐
AS 2550.10-2006	Cranes, hoists and winches - Safe use - Mobile elevating work platforms	2006	☒
AS 2550.10-2006/Amdt 1-2009	Cranes, hoists and winches - Safe use - Mobile elevating work platforms	2009	☒
AS 2550.11:2016	Cranes, hoists and winches - Safe use - Vehicle-loading cranes	2016	☐
AS 2550.11:2016/Amdt 1:2018	Cranes, hoists and winches - Safe use - Vehicle-loading cranes	2018	☐
NI2022-432	Work Health and Safety (Tower Crane) Code of Practice Approval 2022	2022	☐

WORKING AT HEIGHT

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 1891.1:2007	Industrial fall-arrest systems and devices - Harnesses and ancillary equipment	2007	☒
AS/NZS 1891.1:2007 /Amdt 1:2007	Industrial fall-arrest systems and devices - Harnesses and ancillary equipment	2007	☒
AS/NZS 1891.1:2007 /Amdt 2:2008	Industrial fall-arrest systems and devices - Harnesses and ancillary equipment	2008	☒
AS/NZS 1891.4:2009	Industrial fall-arrest systems and devices - Selection, use and maintenance	2009	☒
AS/NZS 4994.1:2009	Temporary edge protection – Part 1: General requirements	2009	☐
AS/NZS 4994.2:2009	Temporary edge protection – Part 2: Roof edge protection – Installation and dismantling	2009	☐

MANTEENA

ROOFS

LINK / REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
COP	Safe Work on Roofs Part 1: Commercial and Industrial Buildings	2009	☐

DEMOLITION

LINK / REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 2601-2001	The demolition of structures	2001	☐
NI2020-541	Work Health and Safety (Demolition Work Code of Practice) Approval 2020	2020	☐
COP	Model Code of Practice: Demolition work (Safe Work Australia)	2018	☐

CONFINED SPACES

LINK / REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 2865-2009	Confined spaces	2009	☐
NI2022-684	Work Health and Safety (Confined Spaces Code of Practice) Approval 2022	2022	☐
COP	Model Code of Practice: Confined spaces (Safe Work Australia)	2020	☐

TRENCHES AND EXCAVATIONS

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 3798-2007/Amdt 1-2008	Guidelines on earthworks for commercial and residential developments	2008	☐

TEMPORARY TRAFFIC MANAGEMENT

LINK / REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1742.1:2014	Manual of uniform traffic control devices - General introduction and index of signs	2014	☐
AS 1742.3:2019	Manual of uniform traffic control devices - Traffic control for works on roads	2019	☐
AS 1742.10-2009	Manual of uniform traffic control devices - Pedestrian control and protection	2009	☐
AS 1742.13-2009	Manual of uniform traffic control devices - Local area traffic management	2009	☐
AS/NZS 3845.1:2015	Road safety barrier systems and devices - Road safety barrier systems	2015	☐
AS/NZS 3845.2:2017	Road safety barrier systems and devices - Road safety devices	2017	☐
HB81.1	Traffic control at works on roads. Part 1 Short-term urban works, daytime only	2003	☐

EXPLOSIVE POWER TOOLS

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1873 Parts 1 to 4	Explosive-powered hand-held fastening tools, fasteners and explosive charges	2003	☐

CHEMICALS/HAZARDOUS SUBSTANCES

LINK / REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1940:2017	The storage and handling of flammable and combustible liquids	2017	☒
AS 1940:2017/Amdt 1:2019	The storage and handling of flammable and combustible liquids	2019	☒
NI2022-687	Work Health and Safety (Managing Risks of Hazardous Chemicals in the Workplace Code of Practice) Approval 2022	2022	☒
COP	Model Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace (Safe Work Australia)	2020	☒
NI2022-689	Work Health and Safety (Labelling of Workplace Hazardous Chemicals Code of Practice) Approval 2022	2022	☒
COP	Model Code of Practice: Labelling of workplace hazardous chemicals (Safe Work Australia)	2020	☒
NI2022-686	Work Health and Safety (Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice) Approval 2022	2022	☒
COP	Model Code of Practice: Preparation of safety data sheets for hazardous chemicals (Safe Work Australia)	2020	☒

ASBESTOS AND HAZARDOUS DUST

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
NI2022-691	Work Health and Safety (How to Manage and Control Asbestos in the Workplace Code of Practice) Approval 2022	2022	☐
COP	Model Code of Practice: How to manage and control asbestos in the workplace (Safe Work Australia)	2020	☒
NI2022-690	Work Health and Safety (How to Safely Remove Asbestos Code of Practice) Approval 2022	2022	☒
COP	Model Code of Practice: How to safely remove asbestos (Safe Work Australia)	2020	☒
DI2012-237	Dangerous Substances (Code of Practice for the Management and Control of Asbestos in Workplaces) Approval 2012	2012	☒
A2004-7	Dangerous Substances Act 2004	2021	☒
COP	Managing the risks of respirable crystalline silica from engineered stone in the workplace	2022	☒

NOISE

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 1269.0:2005 (R2016)	Occupational noise management - Overview and general requirements	R2016	☒
AS 2436-2010 (R2016)	Guide to noise and vibration control on construction, demolition and maintenance sites	R2016	☒
NOHSC:2009	National Code of Practice for Noise Management and Protection of Hearing at Work - 3rd Edition	2004	☒
NI2022-688	Work Health and Safety (Managing Noise and Preventing Hearing Loss at Work Code of Practice) Approval 2022	2022	☒
COP	Model Code of Practice: Managing noise and preventing hearing loss at work (Safe Work Australia)	2020	☒

MANUAL HANDLING

LINK / REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
NOHSC:2005	National Code of Practice for Manual Handling [Nohsc:2005(1990)] (Archived)	1990	☒
COP	Model Code of Practice: Hazardous manual tasks (Safe Work Australia)	2020	☒

FIRST AID AND EMERGENCIES

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 3745-2010 /Amdt 1-2014	Planning for emergencies in facilities	2014	☒
AS 3745-2010 /Amdt 2-2018	Planning for emergencies in facilities	2018	☒

PERSONAL PROTECTIVE EQUIPMENT

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 1067:2003 /Amdt 1:2009 (available superseded)	Sunglasses and fashion spectacles	2009	☒
AS/NZS 1270:2002 (R2014)	Acoustics - Hearing protectors	R2014	☒
AS/NZS 1336:2014	Eye and face protection - Guidelines	2014	☒
AS 1337.0:2020	Personal protective equipment - Eye and face protection - Vocabulary	2020	☒
AS/NZS 1715:2009	Selection, use and maintenance of respiratory protective equipment	2009	☒
AS/NZS 1716:2012	Respiratory protective devices	2012	☒
AS/NZS 1800:1998	Occupational protective helmets - Selection, care and use	1998	☒

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS/NZS 1801:1997	Occupational protective helmets	1997	☒
AS/NZS 1801:1997 /Amdt 1:1999	Occupational protective helmets	1999	☒
AS/NZS 2161.1:2016	Occupational protective gloves - Selection, use and maintenance	2016	☒
AS/NZS 2210.1:2010	Safety, protective and occupational footwear - Guide to selection, care and use	2010	☒
AS/NZS 2604:2012	Sunscreen products - Evaluation and classification	2012	☒
AS 4602.1:2011	High visibility safety garments - Garments for high risk applications	2011	☒
AS/NZS 4602.1:2011 /Amdt 1:2016	High visibility safety garments - Garments for high risk applications	2016	☒
AS/NZS 4602.1:2011 /Amdt 2:2020	High visibility safety garments - Garments for high risk applications	2020	☒
NOHSC:3012	Guidance Note for the Protection of Workers from the Ultraviolet Radiation in Sunlight	2008	☒

AMENITIES

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
NI2020-551	Work Health and Safety (Managing the Work Environment and Facilities Code of Practice) Approval 2020	2018	☐

ACCESS AND MOBILITY

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1012.1:2014	Methods of testing concrete - Sampling of concrete	2014	☐
AS 1428.1-2009	Design for access and mobility - General requirements for access - New building work	2009	☐
AS 1428.1-2009/Amdt 1-2010	Design for access and mobility - General requirements for access - New building work	2010	☐
AS 1428.1-2009/Amdt 2-2017	Design for access and mobility - General requirements for access - New building work	2017	☐
AS 1428.2-1992 (R2015)	Design for access and mobility - Enhanced and additional requirements - Buildings and facilities	R2015	☐
AS 1428.3-1992 (obsolescent)	Design for access and mobility - Requirements for children and adolescents with physical disabilities	1992	☐
AS 1428.4.2:2018	Design for access and mobility - Means to assist the orientation of people with vision impairment - Wayfinding signs	2018	☐
AS 1657:2018	Fixed platforms, walkways, stairways and ladders - Design, construction and installation	2018	☐
AS 1735.1:2016	Lifts, escalators and moving walks - General requirements	2016	☐
AS 1735.3-2002 (obsolescent)	Lifts, escalators and moving walks - Passenger and goods lifts - Electrohydraulic	2002	☐
AS 1735.5.1:2019	Lifts, escalators and moving walks - Safety of escalators and moving walks - Construction and installation (EN 115-1:2017, MOD)	2019	☐

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1735.5.2:2019	Lifts, escalators and moving walks - Safety of escalators and moving walks - Rules for the improvement of safety of existing escalators and moving walks (EN 115-2:2017, MOD)	2019	☐
AS 1735.5.3:2019	Lifts, escalators and moving walks - Safety of escalators and moving walks - Correlation between AS 1735.5:2015 and AS 1735.5.1:2019 (CEN/TR 115-3:2017, MOD)	2019	☐
AS 1735.5.4:2019	Lifts, escalators and moving walks - Safety of escalators and moving walks - Interpretations related to AS 1735.5 series of standards (CEN/TS 115-4:2015, MOD)	2019	☐
AS 1735.12:2020	Lifts, escalators and moving walks - Facilities for persons with disabilities (EN 81-70:2018, MOD)	2020	☐
AS 1735.14-1998 Rul 1:2014	Lifts, escalators and moving walks - Low rise platforms for passengers (Ruling to AS 1735.14-1998)	2014	☐
AS 1735.15-2002	Lifts, escalators and moving walks - Low rise passenger lifts - Non-automatically controlled	2002	☐
AS/NZS 1735.18:2002	Lifts, escalators and moving walks - Passenger lifts for private residence - Automatically controlled	2002	☐
AS/NZS 1428.4.1:2009	Design for access and mobility - Means to assist the orientation of people with vision impairment - Tactile ground surface indicators	2009	☐
AS/NZS 1428.4.1:2009 /Amdt 1:2010	Design for access and mobility - Means to assist the orientation of people with vision impairment - Tactile ground surface indicators	2010	☐
AS/NZS 1428.4.1:2009 /Amdt 2:2014	Design for access and mobility - Means to assist the orientation of people with vision impairment - Tactile ground surface indicators	2014	☐

MATERIALS/OTHER

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1288-2006 (R2016)	Glass in buildings - Selection and installation	R2016	☐
AS 1345-1995 (R2018)	Identification of the contents of pipes, conduits and ducts	R2018	☒
AS/NZS 1428.4:2002 (available superseded)	Design for access and mobility - Tactile indicators	2002	☐
AS 1530.4:2014	Methods for fire tests on building materials, components and structures - Fire-resistance tests for elements of construction	2014	☒
AS 1562.1:2018	Design and installation of sheet roof and wall cladding - Metal	2018	☐
AS 1684.1-1999 /Amdt 1-2002 (available superseded)	Residential timber-framed construction - Design criteria	2002	☐
AS 1684.2-2010	Residential timber-framed construction - Non-cyclonic areas	2010	☐

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
AS 1684.2-2010 /Amdt 1-2012	Residential timber-framed construction-Non-cyclonic areas	2012	☐
AS 1684.2-2010 /Amdt 2-2013	Residential timber-framed construction - Non-cyclonic areas	2013	☐
AS/NZS 2208:1996	Safety glazing materials in buildings	1996	☐
AS/NZS 2208:1996 /Amdt 1:1999	Safety glazing materials in buildings	1999	☐
AS/NZS 2311:2017	Guide to the painting of buildings	2017	☒
AS/NZS 2311:2017 /Amdt 1:2019	Guide to the painting of buildings	2019	☒
AS/NZS 2588:2018	Gypsum plasterboard	2018	☒
AS/NZS 2589:2017 /Amdt 1:2018	Gypsum linings - Application and finishing	2018	☒
AS 2870-2011	Residential slabs and footings	2011	☐
AS/NZS 2589:2017	Gypsum linings - Application and finishing	2017	☒
AS/NZS 3500 Set (Parts 0-4):2018	Plumbing and drainage Set	2018	☒
AS 3660.1:2014	Termite management - New building work	2014	☐
AS 3660.1:2014/Amdt 1:2017	Termite management - New building work	2017	☐
AS 3700:2018	Masonry structures	2018	☐
AS 3700:2018 Sup 1:2020	Masonry structures - Commentary (Supplement 1 to AS 3700:2018)	2020	☐
AS 3740-2010	Waterproofing of domestic wet areas	2010	☐
AS 3740-2010/Amdt 1-2012	Waterproofing of domestic wet areas	2012	☐
AS 4072.1-2005 (R2016)	Components for the protection of openings in fire-resistant separating elements - Service penetrations and control joints	R2016	☒
AS 4072.1-2005 (R2016)/Amdt 1-2006	Components for the protection of openings in fire-resistant separating elements - Service penetrations and control joints	R2016	☒
AS/NZS 4200.1:2017	Pliable building membranes and underlays - Materials	2017	☐
AS 4200.2:2017	Pliable building membranes and underlays - Installation	2017	☐
AS 4200.2:2017/Amdt 1:2018	Pliable building membranes and underlays - Installation	2018	☐
AS/NZS 4361.2:2017	Guide to hazardous paint management - Lead paint in residential, public and commercial buildings	2017	☐
AS 4422:2022	Playground surfacing - Specifications, requirements and test method	2022	☐
AS 4586-2013	Slip resistance classification of new pedestrian surface materials	2013	☒
AS 4586-2013/Amdt 1-2017	Slip resistance classification of new pedestrian surface materials	2017	☒
AS/NZS 4680:2006 (R2017)	Hot-dip galvanized (zinc) coatings on fabricated ferrous articles	R2017	☐
AS 1289.5.1.1:2017	Methods of testing soils for engineering purposes - Definitions and general requirements	2017	☐

REFERENCE	TITLE	YEAR	RELEVANT TO PROJECT
NOHSC:2015	National Code of Practice for the Control and Safe Use of Inorganic Lead at Work [NOHSC: 2015 (1994)]	1994	☐

8.2 Certificate Classes

The following Building and Construction Industry classes of work require certification in the ACT:

- Under the model Work Health and Safety (WHS) Regulations certain types of work and facilities require licensing. These include:
- Asbestos removal and clearance;
- High-risk work; and
- Demolition work (refer to section 5.2.4.2).
- The Commonwealth, state and territory work health and safety regulators issue licences in their jurisdiction. If you would like to apply, renew, have lost your licence or have questions relating to your licence please contact your work health and safety regulator.

ASBESTOS REMOVAL AND CLEARANCE

- The WHS Regulations set out the training and competency requirements for asbestos assessors, asbestos removal workers and supervisors.
- Under the WHS Regulations two Asbestos licences have been established— Class A and Class B.
- Businesses with a Class "A" Asbestos licence are permitted to remove all types of asbestos, including both friable and non-friable asbestos.
- Businesses with a Class "B" Asbestos licence can only remove non-friable asbestos.

FRIABLE ASBESTOS

Friable asbestos is material containing asbestos that when dry, is in powder form or may be crushed or pulverised into powder form by hand pressure. This material poses a higher risk of exposing people to airborne asbestos fibres.

NON-FRIABLE ASBESTOS

Non-friable asbestos is all forms of asbestos other than friable asbestos and includes asbestos cement sheeting and other materials where asbestos fibres are bonded into a matrix. If non-friable asbestos is damaged or degraded it may become friable and will then pose a higher risk of fibre release.
The WHS Regulations also set out a new licence category for asbestos assessors. The role of the licensed asbestos assessor is to carry out air monitoring and clearance inspections following removal of friable asbestos.
Persons undertaking asbestos removal are required to be appropriately trained and to hold a licence. The Commonwealth, state and territory work health and safety regulators administer licences for asbestos removal in their jurisdiction. Applications, renewals or questions relating to asbestos licences should be directed to the work health and safety regulator.
For more information on requirements for asbestos removal and clearance go to:

- Chapter 8 of the WHS Regulations
- Code of Practice: How to Safely Remove Asbestos, and

- Code of Practice: How to Manage and Control Asbestos in the Workplace.

HIGH-RISK WORK

The Commonwealth, state and territory work health and safety regulators issue licences in their jurisdiction. If you would like to apply, renew, have lost your licence or have questions relating to your licence please contact your work health and safety regulator.
The Work Health and Safety (WHS) Regulations list the work that requires a high-risk work licence. High-risk work includes:

- scaffolding,
- dogging and rigging work.

It also involves:

- using cranes,
- forklifts,
- reach stackers,
- boilers and
- boom-type elevating work platforms.

In most instances if you carry out high-risk work you will need a licence to undertake that type of work. View the table of high-risk work categories (below) for more information on whether or not you need a high-risk licence to carry out your work.
Work health and safety regulators accredit assessors to assess the competency of candidates that wish to apply for a high-risk work licence.
Accredited assessors must use the National Assessment Instruments endorsed by Safe Work Australia and available from your work health and safety regulator to assess a candidate's competency. National Assessment Instruments have recently been developed for the two boiler classes (Standard and Advanced), the Reach Stacker class and the Concrete Placing Boom class. For more information on high-risk work, go to:

- WHS Regulations
- Code of Practice: Construction Work
- Code of Practice: Managing Risks of Plant in the Workplace
- Code of Practice: Excavation Work, and
- Code of Practice: Demolition Work.
- Other Codes of Practice and model Codes of Practice are available.

HIGH-RISK WORK LICENCE	DESCRIPTION OF CLASS OF HIGH-RISK WORK
Basic scaffolding	Scaffolding work involving any of the following: • modular or pre-fabricated scaffolds • cantilevered materials hoists with a maximum working load of 500 kilograms • ropes • gin wheels • safety nets and static lines, and • bracket scaffolds (tank and formwork).
Intermediate scaffolding	Scaffolding work involving any of the following: • cantilevered crane loading platforms • cantilevered scaffolds • spur scaffolds • barrow ramps and sloping platforms • scaffolding associated with perimeter safety screens and shutters • mast climbing work platforms, and

HIGH-RISK WORK LICENCE	DESCRIPTION OF CLASS OF HIGH-RISK WORK
	• tube and coupler scaffolds (including tube and coupler covered ways and gantries).
Advanced scaffolding	Scaffolding work involving any of the following: • cantilevered hoists • hung scaffolds, including scaffolds hung from tubes, wire ropes or chains, and • suspended scaffolds.
Dogging	Dogging work involves exercising judgement (making decisions) when selecting appropriate slinging methods and by considering: • load size and shape • determining load weight (its mass) and centre of gravity • inspecting lifting gear like chains, slings, ropes, cables and hooks used to attach loads to plant to ensure it is not defective Dogging work also includes directing a plant operator in the movement of a load when the load is out of the plant operator's view by communicating with the plant operator using hand signals, whistles or two-way radios. Note: Plant in this context means a crane or hoist or other plant used as a crane or hoist.
Basic rigging	Rigging work involving any of the following: • structural steel erection • hoists • pre-cast concrete members of a structure • safety nets and static lines • mast climbing work platforms • perimeter safety screens and shutters, and • cantilevered crane loading platforms
Intermediate rigging	Rigging work involving any of the following: • hoists with jibs and self-climbing hoists • cranes, conveyors, dredges and excavators • tilt slabs • demolition of structures or plant, and • dual lifts
Advanced rigging	Rigging work involving any of the following: • gin poles and shear legs • flying foxes and cable ways • guyed derricks and structures, and • suspended scaffolds and fabricated hung scaffolds
Tower crane	Use of a tower crane
Self-erecting tower crane	Use of a self-erecting tower crane

HIGH-RISK WORK LICENCE	DESCRIPTION OF CLASS OF HIGH-RISK WORK
Derrick crane	Use of a derrick crane
Portal boom crane	Use of a portal boom crane
Bridge and gantry crane	Use of a bridge crane or gantry crane that is: • controlled from a permanent cabin or control station on the crane, or • remotely controlled and having more than 3 powered operations, including the application of load estimation and slinging techniques to move a load
Vehicle loading crane	Use of a vehicle loading crane with a capacity of 10 metre tonnes or more, including the application of load estimation and slinging techniques to move a load
Non slewing mobile crane	Use of a non-slewing mobile crane with a capacity exceeding 3 tonnes
Slewing mobile crane—with a capacity up to 20 tonnes	Use of a slewing mobile crane with a capacity of 20 tonnes or less
Slewing mobile crane—with a capacity up to 60 tonnes	Use of a slewing mobile crane with a capacity of 60 tonnes or less
Slewing mobile crane—with a capacity up to 100 tonnes	Use of a slewing mobile crane with a capacity of 100 tonnes or less
Slewing mobile crane—with a capacity over 100 tonnes	Use of a slewing mobile crane with a capacity exceeding 100 tonnes
Materials hoist	Use of a materials hoist
Personnel and materials hoist	Use of a personnel and materials hoist
Boom type elevating work platform	Use of a boom-type elevating work platform where the length of the boom is 11 metres or more
Concrete placing boom	Use of a concrete placing boom
Reach stacker	Operation of a reach stacker of greater than 3 tonnes capacity that incorporates an attachment for lifting, moving and travelling with a shipping container, but does not include a container crane
Forklift truck	Use of a forklift truck other than an order picking forklift truck
Order picking forklift truck	Use of an order picking forklift truck
Standard boiler operation	Operation of a boiler with a single fuel source that does not have a pre-heater, superheater or economiser attached
Advanced boiler operation	Operation of a boiler, including a standard boiler, which may have one or more of the following: • multiple fuel sources • pre-heater • superheater • economiser
Turbine operation	Operation of a turbine that has an output of 500 kilowatts or more and: • is multi wheeled • is capable of a speed greater than 3600 revolutions per minute • has attached condensers, or • has a multi staged heat exchange extraction process.

HIGH-RISK WORK LICENCE	DESCRIPTION OF CLASS OF HIGH-RISK WORK
Reciprocating steam engine	Operation of a reciprocating steam engine where the diameter of any piston exceeds 250 millimetres

8.2.1 Load Shifting Equipment Operation

CODE	CLASS
LL	Front End Loader
LB	Front End Loader/Backhoe
LS	Front End Loader (Skid Steer Type)
LE	Excavator
LD	Dragline

8.2.2 Crane and Hoist Operation

CODE	CLASS
CT	Tower Crane
CD	Derrick Crane
CP	Portal Boom Crane
CB	Bridge and Gantry Crane
CV	Vehicle Loading Crane (greater than 10 metre tonnes)
CN	Non-slewing Crane (greater than 3 tonnes)
C2	Slewing Mobile Crane (up to 20 tonnes)
C6	Slewing Mobile Crane (up to 60 tonnes)
C1	Slewing Mobile Crane (up to 100 tonnes)
C0	Slewing Mobile Crane (open/over 60 tonnes)
WP	Boom-Type Elevating Work Platform (boom length 11 meters or more)
HM	Materials Hoist (Cantilever Platform)
HP	Hoists (Personnel and Material)
PB	Concrete Placing Boom

8.2.3 Scaffolding, Dogging and Rigging

CODE	CLASS
SB	Basic Scaffolding
SI	Intermediate Scaffolding
SA	Advanced Scaffolding
DG	Dogging
RB	Basic Rigging
RI	Intermediate Rigging
RA	Advanced Rigging

8.2.4 Pressure Equipment Operation

CODE	CLASS
BB	Basic Boiler Operation
BI	Intermediate Boiler Operation
BA	Advanced Boiler Operation
TO	Turbine Operation
ES	Reciprocating Steam Engine Operation

9. QUALITY MANAGEMENT PLAN

9.1 Quality Policy

[Company] is committed to providing quality projects safely, which achieve both the satisfaction of our clients' needs and expectations as well as providing the Client with increased value for money. The Company appreciates the need to meet specified standards, which are now recognised both nationally and globally, and which are becoming the norm in the industry.

Manteena has built a reputation on its commitment to clients and in the management and leadership of designers and Contractors on all our projects. Manteena is committed to achieving client's specified quality requirements in a deliberate, planned and constructive manner, considering the needs of the community, environment and safety.

Manteena has established an integrated Quality, Risk, Environmental and Work Health and Safety Management System based on the ISO 9001-2016, ISO 31000-2009, ISO 14001-2016 and ISO 45001 standards respectively, to cover our various business entities (Manteena Commercial Pty Ltd, Manteena Security (Aust) Pty Ltd and Manteena Residential Pty Ltd), the corporate functions of those entities and all of our projects consisting of Project/Construction Management, Works Management and Tender contracts. This documented and externally certified system provides parameters and direction for every employee, all consultants and sub-contractors to achieve the requirements of the relevant Standards.

Manteena's management team is committed to achieving quality goals within the organisation and on all of our projects through the implementation of the systems, standards and continuous improvement principles established in these documents.

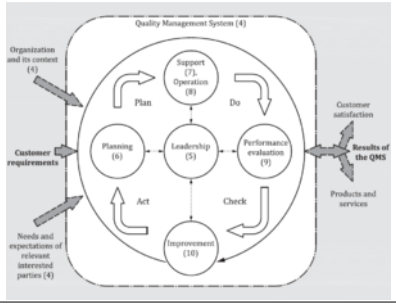
(Note: a signed copy of this policy is maintained by Manteena)

9.1.1 The Quality System

Manteena's Directors and Senior Management Team have established, implemented, maintained and seek to continually improve the quality management system, including the business processes needed and their interactions, in accordance with the requirements of the AS NZS ISO 9001:2016 international standard.

Manteena's Directors and Senior Management Team has determined the processes needed for the quality management system and their application throughout the organisation, and by doing this have:

- determined the inputs required and the outputs anticipated from these processes
- built the systems to support our corporate and project functions in line with the "Deming" cycle of Quality Management (Plan-Do-Check-Act or PDCA).



THE PDCA CYCLE CAN BE BRIEFLY DESCRIBED AS FOLLOWS:

- **Plan**: establish the objectives of the system and its processes, and the resources needed to deliver results in accordance with customers' requirements and the organisation's policies, and identify and address risks and opportunities
- **Do**: implement what was planned
- **Check**: monitor and (where applicable) measure processes and the resulting products and services against policies, objectives, requirements and planned activities, and report the results.
- **Act**: take actions to improve performance, as necessary.

- determined the sequence and interaction of these processes to meet the needs of the Organisation, Client, Project and the Directors;
- determined and applied the criteria and methods (including risk and opportunity assessment, monitoring, measurements and related indicators) needed to ensure the effective operation, control and continuous improvement of the identified systems and processes;
- determined the resources needed for the various processes to ensure their availability, efficiency and safe operation;
- assigned the corporate and project based responsibilities and authorities for the processes (refer to section 6);
- address the risks and opportunities presented by the processes and undertaking with which we engage;

- evaluated the processes and implemented any changes needed to ensure that these processes achieve their intended results, so far as is reasonably practicable; and
- through the Management Review processes sought to improve the processes and the quality management system.

9.1.2 Leadership

Manteena's Directors and Senior Management Team demonstrate leadership and commitment with respect to the quality management system by:

- taking accountability for the effectiveness of the quality management system
- planning for the effective and efficient implementation and management of the systems, processes and functions
- ensuring that the established quality policy and objectives are established for the system and are compatible with the context and strategic direction of Manteena's various entities
- ensuring the integration of the quality management system requirements into the organisation's other established business and project management processes
- promoting through established communication and consultation processes, the use of the process approach and risk-based thinking
- ensuring that the resources needed for the quality management and system are available
- via established means, communicating the importance of effective quality management and of conforming to the quality management system requirements
- taking all reasonable steps to ensure the quality management system achieves its intended results via:
    - Planned processes
    - Controlled actions
    - Structured reviews, and
    - The implementation of corrective actions or system / process changes
- through established processes, engage, direct and support all staff to contribute to the effectiveness of the quality management system
- promoting improvement in all aspects of the corporate and project functions
- supporting all management roles to demonstrate their leadership as it applies to their areas of responsibility.

9.1.3 Roles, Responsibilities and Authorities

Manteena's Directors and Senior Management Team shall ensure that the responsibilities and authorities for relevant roles are within the organisation are assigned, communicated and understood within the organisation.

Note: to avoid repartition, the roles, responsibilities and authorities identified in this section (9) of the IMP are reflective of the integrated nature of Manteena's systems in that they include for: quality, risk, environmental and work health and safety management. As such the commitment to planning, management, review and subsequent action and change are true for all four disciplines.

Manteena's Directors and Senior Management Team shall assign the responsibility and authority for:

- ensuring that the management system conforms to the requirements of AS NZS ISO 9001:2016; AS NZS ISO 14001, ISO 31000, ISO 45001.

- ensuring the processes provided by Manteena's various entities and business units are delivering their intended outputs;
- reporting on the performance of the quality management system and on opportunities for improvement, in particular to top management;
- ensuring the promotion of customer focus throughout the organisation;
- ensuring the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented.

9.1.4 Planning

Manteena's Actions to address risks and opportunities
When planning for the quality management system, Manteena's Senior Management shall consider:

- the interested parties that are relevant to the quality management system;
- the requirements of those interested parties and their relevance to the quality management system.

The issues, once identified shall be assessed to determine the risks and opportunities that need to be addressed to:

- Give assurance that the quality management system can achieve its intended result(s);
- enhance desirable effects;
- Prevent, or reduce, undesirable effects;
- Achieve improvement.

Manteena's Directors and Senior Management Team shall

PLAN:

- actions to address identified risks and opportunities; and
- Assess the opportunities as identified to establish the potential of the opportunity as it relates to future projects, developments and the corporate structure, both positive and negative aspects will need to be assessed on merit.

HOW TO (DO):

- integrate and implement the actions into the quality management system processes; and or

REVIEW (CHECK)

- evaluate the effectiveness of these actions, opportunities, and changes to the established systems, then

ACT

- Take actions to address changes, risks and opportunities and ensure the actions are sufficient and proportionate to the potential impact on the conformity of products and service provided by the various business unit or entity.
  Note 1: options to address risks can include avoiding risk, taking risk in order to pursue an opportunity, eliminating the risk source, changing the likelihood or consequences, sharing the risk, or retaining risk by informed decision.
  Note 2: opportunities may lead to the adoption of new practices, new products, entering new markets, addressing new customers, building partnerships, using new technology and other desirable and viable possibilities to address the organisation's or its customers' needs.

QUALITY OBJECTIVES AND PLANNING TO ACHIEVE THEM

Manteena has established quality objectives at relevant functional levels and processes needed for the efficient conduct of the quality management system.
The quality objectives are (so far as is reasonably practicable):

- planned
- consistent with the quality policy
- measurable
- accountable to planned needs and applicable requirements
- relevant to the conformity of products and services we provide to enhance customer satisfaction
- monitored and communicated
- updated as appropriate.

Note: Manteena maintains documented information on the quality objectives.
When planning how to achieve its quality objectives, Manteena's Directors and Senior Management team shall determine:

- what planning is required to achieve the desired quality outcome (Plan – what will be done)
- what resources will be required to ensure the time, cost, quality and safety aspects of business, project and systems are appropriately and efficiently managed
- who will be assigned responsible for the planning, management, conduct, review, corrective actions or change management and implementation aspects of the systems and support processes
- when it will be completed, by the assignment of time frames, reporting and review cycles
- how the results will be reviewed, evaluated, assessed for adequacy or identified for change within the parameters of the established systems and procedures.

PLANNING OF CHANGES

When the Senior Management Team determines the need for changes to the quality management system, or any part of the Integrated Management System, the changes shall be carried out in a planned manner.
When implementing changes, the Senior Management Team shall consider:

- the purpose of the changes and their potential consequences
- the integrity of the quality management system
- the availability of resources to develop and implement the change
- the allocation or reallocation of responsibilities and authorities
- the review period for the change.

9.1.5 Defect Free Strategy

POLICY STATEMENT

[Company] is committed to providing quality projects safely and defect free, which achieves both the satisfaction of our clients' needs and expectations as well as providing the Client with increased value for money.

STRATEGY

- Manteena defines a 'Defect' as a non-conformance to requirements or function or stated need. In some cases, defects may lay hidden from view and may not become apparent until the plant, process or function to which they are a component is initiated or commissioned, causing a failure.
- Manteena defines failure as 'the inability of a system or component to perform its required role or function.
- Manteena's Defect Free Strategy is therefore the pro-active process of identification of a potential or actual non-conformance and its removal at the earliest possible stage in the project phase.
- Manteena has in place through the application of this Integrated Management plan, means to identify defects during the design, procurement and construction phases of the projects.
- A successful defect free strategy is all about quality management and quality control systems. Quality control in construction can be done at various stages of the design, procurement and construction phases.
- Manteena initiates this process by facilitating a series of audits and reviews of the intended designs at the Final sketch plan stage. The audits are designed to check the quality control and assurance systems utilised and implemented by the various disciplines to ensure build ability, Legislative (including safety in design), code and standards compliance and to ensure the requirements of the Client can be met.
- Further reviews and audits are conducted at all other stages of the project all the way through to final completion. These may take the form of structured or random audits or as a component of documented Inspection and Test Plans (ITPs). Non-conformances detected during the reviews and audits are assigned corrective action status and designated responsibility is nominated to the organisation or individual to provide object evidence to either remove the defect or non-conformance or other strategies within the hierarchy of controls.

9.1.6 Design Control

Manteena, in the main, does not directly undertake design work, but manages the design process of Consultants so that stated requirements in the project brief are met. Design control shall be either through Manteena's procedures, or through the Consultant's own procedures where these are acceptable, yet always in accordance with the relevant WHS legislation in place in the jurisdiction in which the construction is to take place.

Design control shall generally be through Manteena's participation in scheduled project coordination meetings and monitoring follow-up of agreed actions.

For large 'design and construct' projects the Project Director may decide to engage Manteena's Design Manager as specified in the Tender submission. Where this is the case the Manteena Design Manager will be responsible for the undertaking of the **Design Control Procedure**.

Associated Documentation:

- QP-912 Design Control Procedure

Referenced documents:

- QF-040 Design Change Notification
- SF-006 Safe Design Analysis
- SF-012 Safe Design Assessment

9.2 Purchasing

9.2.1 General

Goods or services procured by Manteena shall be in line with documented procedures and meet quality, environment and safety requirements.
Goods or services may be procured by direct purchasing or through a tendering process.

9.2.2 Direct Purchasing

Manteena's purchasing documentation shall clearly define the product or service, including quality, environmental and safety requirements.
Where relevant, assurance of conformance of the purchased product shall be sought from suppliers (e.g. calibration certificates, records of traceability).
Purchasing documents shall be reviewed and approved for adequacy of specified requirements prior to release.
Suppliers shall be selected on their ability to meet specified requirements and the sensitivity of goods or services being ordered.

9.2.3 Tender Process

Letting tenders and engagement of external organisations (e.g. Consultants; Sub-contractors) shall be in line with the documented procedures.
Terms-of-Engagement shall indicate whether the Consultant/Sub-contractor is to work under their own Management (QA, EM, and WHS) System, or that of Manteena's.
Associated Documentation:

- QP-919 Process Control Procedure

9.2.4 Appointment of Sub-contractors and Consultants (e.g. Architects)

Further to the above paragraph Sub-contractors and Consultants shall be considered for engagement by Manteena based upon several criteria:

- **Perceived ability/ resources/ expertise to handle the scope of the project**
- Referenced documents:
    - QF-078 Preferred Tenderer Interview Questions
    - QF-079 Subcontractor Tender Assessment – Technical Checklist
- **Ability to complete the work within the timeframe (other current commitments)**
- Refer:
    - Manteena Intranet - Project Summary Supplier Performance Record

- Nominated Personnel
- Referenced documents:
    - QF-074 Consultant Pre-appointment Checklist
- **Price**
- Referenced documents:
    - QF-044 Request for fixed Price Quotation
- **Comparison**
- Referenced documents:
    - QF-050 Sub-contractor Comparison

9.2.5 Assessment of Sub-contractors

Manteena shall routinely assess and record the performance of sub-contractors (and consultants), re Quality, Environmental and WHS.

Refer:

- Manteena Intranet - Project Summary Report
- QF-048 Assessment of Tender Submissions

9.2.6 Verification of Purchased Product

Manteena shall verify that the purchased product conforms to the specified requirements.
Where specified in purchasing documentation, Manteena or the Client may arrange for verification of conformance at the supplier's premises or an audit of the suppliers / sub-contractor's quality, environmental and WHS system.
When Manteena or their representative elects to carry out verification at the sub-contractor's plant, such verification shall not be used by the sub-contractor as evidence of effective control of quality, nor will it preclude subsequent rejection.

Referenced Document:

- QP-919 Process Control

9.2.7 Operational Planning and Process Control

Manteena's Directors and Senior Management team, in consultation with the Project Management Teams shall plan, implement and control the processes needed to meet the requirements for the provision of services, and to deliver the projects by:

- determining the requirements of the services and projects
- establishing criteria for:
    - the processes
    - the acceptance of products and services.
- determining the resources needed to achieve conformity to the product and service requirements
- implementing control of the processes in accordance with the criteria
- determining, maintaining and retaining documented information to the extent necessary
    - to have confidence that the processes have been carried out as planned;

- to demonstrate the conformity of products and services to their requirements.

The output of this planning shall be suitable for the organisation's operations and established needs.
The organisation shall control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.
Manteena shall ensure that outsourced processes are controlled.

9.2.7.1 Customer communication

Communication with customers shall include:

- providing information relating to products and services
- handling enquiries, contracts, work orders, including changes
- obtaining customer feedback relating to services, including customer complaints
- handling or controlling customer or contractor supplied products
- establishing specific requirements for contingency actions, when relevant.

Stages of the works are identified and documented within a **Project Plans** and, as necessary, in **Inspection and Test Plans (ITPs)** in line with requirements of the contract specification.
Associated Documentation:

- QP-919 Process Control Procedure

9.2.8 Determining the requirements for products and services

When determining the requirements for the products and services to be offered to customers, Manteena shall ensure that:

- the requirements for the products and services are defined, including:
  - any applicable statutory and regulatory requirements
  - those considered necessary by the organisation
- the organisation can meet the claims for the products and services it offers.

9.2.9 Review of the requirements for products and services

Manteena shall ensure that it has the ability to meet the requirements for products and services to be offered to customers. Manteena shall conduct a review before committing to supply products and services to a customer, to include:

- requirements specified by the customer, including the requirements for delivery and post-delivery activities
- requirements not stated by the customer, but necessary for the specified or intended use, when known
- requirements specified by Manteena
- statutory and regulatory requirements applicable to the products and services
- contract or work order requirements differing from those previously expressed.

Manteena shall ensure that contract or work order requirements differing from those previously defined are resolved.
The customer's requirements shall be confirmed by the Project Manager or Project Director before acceptance, when the customer does not provide a documented statement of their full requirements.

- Manteena shall retain documented information, as applicable:

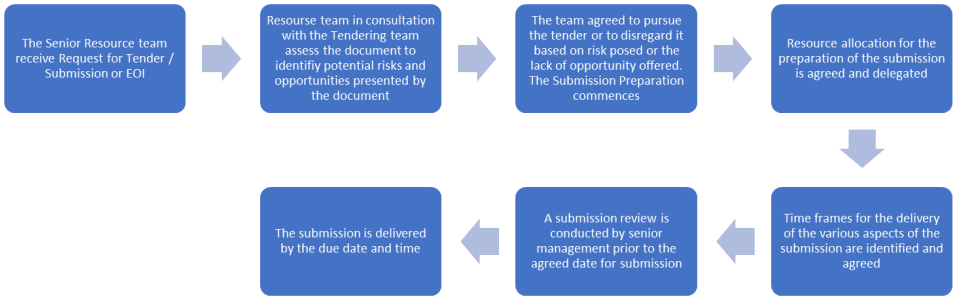
- on the results of the review
- on any new requirements for the products and services
- changes to requirements for products and services
- The Customer shall ensure that relevant documented information is amended, and that relevant persons are made aware of the changed requirements, when the requirements for products and services are changed.

9.3 Project Process Mapping

The below is derived from the Mapcomm process for project Management that has been amended to suit the project Management methodologies adopted and used by the various Manteena Entities. Note: the following aims to identify the QA processes and not the WHS processes as they are managed elsewhere in this plan.

9.3.1 Tendering for a Project

This procedure refers when Manteena is submitting a tender; where Manteena is calling tenders, refer to Sub-contractor Engagement Section in the Process Control Procedure



Purpose: To “map” tender sequence and to reference Checklists and Forms that are sufficiently detailed to serve as Work Instructions for operational documents.

9.3.1.1 Scope

This procedure applies to:

- Expressions of Interest (EOIs)
- Quotations
- Tenders
- Tender (Management) Submissions

Note - Checklists and Forms referenced below are for use, as and where appropriate to manage the Tendering process (i.e. their use is not mandatory in every instance)

9.3.1.2 Responsibilities

Managing Director, Design Manager, Estimator and as delegated to other staff

9.3.1.3 Actions

Closing date and time – actions shall be planned accordingly

Operational map – (and index to following sections)
The following "maps" the sequence of operations and serves as index to the following sections:

- Advertisement or invitation to tender
- Lump sum tender/estimate
- Tender documents
- Sub-contractors
- Tender preparation
- Tender (management) submission
- Post tender

9.3.1.4 Advertisement or Invitation to Tender ("we approach' them', or 'they' approach us")

Estimator shall confirm with General Manager to proceed with tender

- Lump Sum Tender/Estimate

Tender documents

- Collect tender documents.
- Review tender documents and resolve any ambiguities
- Conduct a Risk and Opportunity assessment and seek management approval before proceeding to the development of a submission
- Register tender in tendering database on the intranet

9.3.1.5 Sub-contractors

Place advertisement calling for subcontractors' / suppliers' quotations (if applicable).
Prepare tender documents for collection by subcontractors and take applicable action.
Sub-contractor requirements to include:

- Quality Assurance (QA)
- Environmental Management (EM)
- Occupational Health and Safety (OHS).

Refer:

- QF-045 Telephone Quotation
- QF-044 Request for Fixed Price Quotation
- QF-046 Supplier Expression of Interest
- QF-048 Responses to Advertisement
- QF-049 Subcontractor Analysis
- QF-050 Subcontractor Comparison
- QF-051 Contract Recommendation (Principally for Project Manager's Use)
- Manteena Intranet Project Summary Report. - Supplier Performance Record

9.3.1.6 Tender Preparation

Action Subcontractor quotations.

- QF-038 Estimate Take-off sheet
- QF-039 Adjustment sheet
- QF-053 Tender Summary Sheet
- QF-054 Tender Options Sheet
- MS Project; Replaces Hard Copy Form - Program (Tender Assessment)
- Estimating Software - Calculate Bill of Quantities, price-extend calculations as appropriate. (Calculations self-check in GES spread-sheet program).
- Separate Bill of Quantities into trades; complete estimate forms
- QF-053 Tender Summary Sheet
- QF-050 Sub-Contractor Comparison
- QF-049 Sub-Contractor Analysis
- QF-039 Adjustment Sheet
- Essential Calculations self-check in GES spread-sheet program

Complete estimate - prepare tender - submit before closing time.

9.3.1.7 Management Submission

Independent review, prior to submitting to Client

- QF-001 Management Submission Checklist

9.3.1.8 Post Tender

Prior to contractor selection, a review of sub-contractors' performance on current and past projects, by reviewing:

- Time - working to schedule / program
- Financial - working to original costing with minimal variations
- Quality - delivering projects to a high standard with minimal defects
- Work Health Safety - assessing contractors against non-conformances and applying the HIRAC methodology
- Environmental - comply with all Environmental Protection Guidelines

This is to be reported through to the Operation Managers and Construction Managers on an as required basis and discussed at the fortnightly Resources Meetings.
The Project Manager will conduct a post tender interview with all compliant tenderers, the selection of a successful tenderer will depend on the outcome of the post tender interview and the answers supplied.
During the post tender interview, an assessment of the contractors HIRAC process will be conducted and a weighting applied. The outcome of the assessment and weight score will assist with contractor selection.
If unsuccessful, return documents and re-claim tender deposit (if applicable) and archive the estimate documents for six months.
Reference documents:
Successful, Project Start-up Procedure (refer to 9.3.2 below)

- QF-078 Preferred Tenderer Interview Questions

- QF-079 Subcontractor Tender Assessment – Technical Checklist

Managing Preferred Contractors

9.3.2 Starting Up a Project

OVERVIEW

Under the Manteena Workflow, these are the first steps of every new project and are designed to ensure the project is set up for success at the outset. Steps include:

- Handover and Project Start Up meetings – these are the processes by which the tender team handover the project to the Project Management team. This is a consultation and planning process where the team players, at all levels are identified, the time frame for the creation of key project and systems documentation, along with regulatory submissions and approvals are identified, delegated and set in play.
- The execution of a head contract following a successful tender,
- The application and set up of a project number and project files within the intranet and on the nominated document management platform (as appropriate).
- Initiate the Design control processes (refer to the Design Control Procedure)

The key outcomes from the planning process are to appoint the project team, conduct a suitable handover from the tendering team and capture lessons from previous projects before planning the project initiation.

INPUTS

- Project mandate from Senior Management
- Head contract or Work Order
- Integrated Management Plan
- Design Control procedure
- Safe design guidelines
- Project Start Up Procedure QP-909 and associated support forms
- Pre-Commencement Checklist
- Site Setup Checklist (MySite)
- Project Numbering Procedure
- Project database.

OUTPUTS

- Project created on Project Database and project number generated
- Creation of Project IMP and Project Hazard Risk Assessment and Register
- Safe design workshop and risk assessment records
- Project Program
- Project Start Up procedure, meeting and record
- Creation of an initial ITP register.

APPROVALS

- Direction to Proceed from Project Sponsor and Senior Management.

-

9.3.3 Initiating a Project

OVERVIEW

- This process addresses:
- what will be done (Project Scope)
- why it must be done, and what the benefits will be (Project background and Client requirements)
- how it will be done (Initiating the project Program)
- how risks and opportunities will be identified, reported, actioned and reviewed.

This planning forms the basis for the project which is used to guide the project as it progresses through the stages.

INPUTS

- Integrated Management Plan

OUTPUTS

- Create:
- Program
- Project documentation/safety folders
- Document and drawing register
- PCG/Project Control Group minutes. Unless otherwise agreed, the expectation is that the PCG will meet initially at project commencement and monthly thereafter.

PROCEDURES

- Audits procedure
- Management review procedure
- Inspection and Test Plan procedure
- Corrective Action procedure
- Project Start Up procedure.

9.3.4 Directing A Project

OVERVIEW

The directing process is a function of both the Project Director and Senior Management. It serves to provide overall accountability for the project's success while delegating management to the Project Manager and their team. They also ensure the project remains in line with the initial project objectives. The primary tasks of the Senior Management Team are to:

- Provide supervision, direction and support
- Advise on specific issues.

INPUTS

- Integrated Management Plan
- Project Brief
- Site establishment plan

- Monthly project reports
- PCG and PSG meetings

OUTPUTS

- Create:
- ITP register
- Communication Consultation and training

PROCEDURES

- Audit procedure
- Management review procedure
- Inspection and Test Plan procedure
- Electronic document and data procedure
- Security of information procedure

9.3.5 Controlling Stages

OVERVIEW

Stage control responsibility falls to the Project Manager and the project team, who are delegated the authority from Senior Management to:

- Execute work package and coordinate across multiple work packages
- Tender, manage and monitor all Works Packages (i.e. design or trade packages)
- Manage trade and resource procurement
- Manage effective and efficient communication with the client
- Ensure all regulatory approvals are in place and managed
- Manage trade performance
- Monitor and report progress
- Maintain project progression in accordance with the documented program
- Manage identified risks and opportunities
- Ensure witness and hold points as identified within ITPs and checklist are effectively managed and recorded
- Conduct and provide a safe place of work
- Monitor progress of work package
- Monitor and raise risks and opportunities (in relation to Quality, Safety, Time, Cost and Environment).
- Where issues fall outside the PM's delegation, they are raised to the Project Executive for resolution.

PROCESS

- Process Control Procedure
- Design Control Procedure

COST:

- Claims and Invoices Handling Procedure
- Progress Claims and Variation Register Procedure

QUALITY:

- Inspection and Test Plan Procedure
- Security of Documentation Procedure
- Drawing Control Procedure
- Electronic Documents and Data Procedure
- Procurement Process Guidance
- Monthly project report

INPUTS

- Risk Register
- QF-200 Inspection & Test Plan

OUTPUTS

- Create:
- Work Packages
- Monthly project report
- Update:
- PL-001 Integrated Management Plan
- Risk Register
- QF-200 Inspection & Test Plan
- Vista Viewpoint
- PCG meetings and minutes, or equivalent

9.3.6 Closing a Project

OVERVIEW

The Closing a Project Process enables a controlled completion of the project and ensures the product is delivered and the client's objectives have been met, ongoing maintenance and support is effectively managed, and the projects performance is evaluated. The lessons gathered in this phase are then inputs for the Starting up Project Process for the next project. The keys tasks to achieve in the Closing a Project Stage are:

- Delivery of the final product to the client
- De-camp of site and facilities
- Delivery of operations and maintenance manuals
- Coordinate Defects and Defects liability period
- Conduct final inspection, review and evaluation
- Prepare for the final completion.

INPUTS

- Risk Register
- Configuration Register
- Program
- Issue Register

OUTPUTS

- Create:
- Follow on Action Recommendations
- End Project Report (incl Lessons Learnt)
- Update:
- Issue Register
- ITP register and records

Close:

- Risk Register
- Conduct Lessons learnt workshop
- Load lessons learnt records to library
- Quality Register
- Daily Log
- Initiate archiving procedures

9.3.7 Process Validation (Special Processes)

Manteena shall validate those processes where the resulting output cannot be verified by subsequent inspection and testing and where defects may only become apparent after the product is in use. Such processes are sometimes designated “special processes”.
Validation of such special processes includes:

- the accuracy and variability of measuring equipment
- the skill of operators
- the special environment condition
- the certification records for personnel and equipment.

9.4 Reporting

Project status shall be reported as stated in the reference procedures.
Safety and/or environmental incidents or accidents shall be reported as stated above.
Associated Documentation:

- QP-919 Process Control Procedure

Referenced Document:

- QP-909 Project Start-up
- QP-915 Project Completion

9.5 Product Identification and Traceability

Product shall be identified, and traceability maintained as specified in the contract. All parts of the construction or installation works shall be clearly identified from applicable drawings, specifications or other documents.

Associated Documentation:

- QP-919 Process Control Procedure

9.6 Inspection and Test Status

Records shall identify the inspection and test status during construction (manufacture) or installation to ensure that only specified and conforming materials are utilised.
Records shall identify the inspection authority responsible for the release of conforming product and usually accompany ITPs.

RESPONSIBILITIES

- The Project Manager is responsible for:
  - Approving Inspection and Test Plans (ITPs) after reviewing them against drawings and specifications
  - Registering ITPs on the ITP register.
- The Client is responsible for:
  - Nomination of witness and hold points (where appropriate)
  - Acceptance of the ITP (if required by the contract).
- The Contractor is responsible for:
  - Implementing the ITP
  - Preparing the ITP (as required within the contract).

Associated Documentation:

- QP-914 Inspection and Test Procedure
- QP-919 Process Control Procedure

9.7 Customer Property

Product supplied by customers shall be managed as stated for purchased product – including WHS provisions.
Customer property (including intellectual property) when received, shall be managed as stated in procedures for Preservation of Product (handling, storage, packaging preservation and delivery) through the relevant procedures for verification, storage and maintenance of the supplied product.
Product which is unsuitable for use (or unsafe) shall be recorded and reported to the customer, and shall not be used.
Design validation may be required in accordance with the relevant procedure to confirm the suitability of the purchaser supplied design and that it meets the specified needs.

9.8 Product Preservation

(Handling, Storage, Packaging, Preservation and Delivery)

9.8.1 General

Equipment shall be operated and maintained in accordance with manufacturer's requirements. Manual handling methods shall be such as to prevent personal injury. Substances shall be handled, stored, used and disposed-of in line with relevant Safety Data Sheets (SDS) – as provided by the Supplier or Contractor.

9.8.2 Handling

Manteena shall adopt methods and means of handling goods that prevent personal injury or damage or deterioration of the product.

9.8.3 Storage

Product shall be stored safely to prevent injury, environmental pollution, or damage or deterioration of the product.

9.8.4 Packaging and Preservation

Manteena shall ensure that packing, preservation and marking processes meet the specified requirements to ensure the packaged product meets specified requirements.

9.8.5 Delivery

Methods of delivery shall be such as to protect the quality of the product until received by the Client.
Referenced Document:

- QP-919 Process Control

9.9 Control Of Monitoring And Measuring Devices

(Inspection, Measuring and Test Equipment – Calibration)

Inspection, measuring and test equipment that confirms conformance to specified (quality) requirements, or is utilised in environmental and/or safety monitoring, shall be controlled, calibrated and maintained.
The required statutory electrical testing will be conducted for the relevant Manteena equipment.
Electrical Testing and Tagging will be monitored for all project Contractors and Sub-contractors equipment.
Associated Documentation:

- QP-919 Process Control Procedure

9.10 Measurement, Analysis And Improvement

9.10.1 Inspection and Testing (Records)

Please refer to the Manteena ITP Procedure (intranet based document).

9.10.2 Receiving Inspection and Testing

Incoming products are not used or processed (except in exceptional circumstances as noted below) until it is inspected or verified as conforming with the quality plan or documented procedure. Manteena, in establishing the amount of testing and inspections necessary, will consider the cost impact and the effect substandard work may have on that project. Consideration will also be given to

the amount of control exercised at the source of the item and any documented evidence of quality conformance provided.
Incoming product may be released for urgent purposes in accordance with Manteena's procedures provided that the product is positively identified and recorded to allow immediate recall and replacement in the event of an identified non-conformance.

9.10.3 In-Process Inspection and Testing

In general, Manteena will develop and implement, Project Plans (and an ITP) which incorporate statutory and contractual requirements.

9.10.4 Quality

- Inspect, test and identify products as required by the Project Management Plan
- Identify any non-conforming product, or situation.

9.10.5 Environmental

Throughout the project, regular inspection shall be undertaken to ensure that the environment is protected (e.g. flora and fauna) and that pollution is prevented. Refer to Manteena's Environmental Management Plan in section 11.0 of this document.

9.10.6 Work Health and Safety (WHS)

Throughout the project regular inspections shall be undertaken to ensure that safe work-places are maintained and that there is compliance with legislative requirements. Refer to Manteena's Work Health and Safety Plan in section 4.0 of this document. Where a WHS incident is recorded that warrants investigation, the HSEQM shall initiate the investigation procedure. The investigation process shall be utilised to prompt a review of internal procedures and or systems that may have been deemed contributory to the incident. The results of the review shall be documented, and corrective actions implemented in conjunction and consultation with all persons affected by the systems change or amendment.

Associated Documentation:

- QP-919 Process Control Procedure

Referenced Document:

- SF-059 Project Safety Management Flow Chart
- SF-052 Weekly Inspection

FINAL INSPECTION AND TESTING

Before the handover of completed projects, Manteena will carry out final inspection and testing to ensure that all verification measures required under the Project Management Plan have been fully, correctly and satisfactorily completed.

Referenced Document:

- QP-915 Project Completion

9.10.7 Customer Focus and Satisfaction

Manteena senior management and staff are committed to:

- Meeting and, where possible, exceeding customer and regulatory expectations
- Ensuring the risks and opportunities that can affect conformity of products and services and the ability to enhance customer satisfaction are determined and addressed
- Customer requirements are identified from such sources as tender documents and project briefs. Customer satisfaction shall be assessed through
- Ensuring Feed-back, complaints and comments received during meetings are recorded and effectively managed
- Ensuring formal communication and consultation processes are implemented and managed
- Ensuring the lessons learnt process is conducted and documented after project hand over to evaluate the risks and opportunities coming out of all completed projects
- Assessment of customer satisfaction is a routine agenda item for management reviews.

9.10.8 Audits and Assessments

Internal - Manteena carries out internal auditing of the management system and second party audits of its Sub-contractors, as required. Audits cover the areas of quality, environmental and WHS and are designed to ensure that:

- The system documentation adequately defines the organisation and the project needs,
- The documented procedures are effectively implemented,
- The hazard control measures are appropriate and effective, and
- Personnel training is adequate.

The types of audits conducted are set out in section 5.3 of this plan.
External – Manteena participates in external audits and assessments conducted by numerous parties (both second and third party). These parties may include third party certification bodies, The Office of the Federal Safety Commissioner (OFSC), The Fair Work Building and Construction Commission (FWBC), The ACT Government, WorkSafe and various clients or their nominated representatives.
Where these audits or assessments occur, a written report shall be requested from the auditing or assessing body for review and where appropriate the application of corrective actions.
The assessment of the actions to be taken and or implemented shall be that of the HSEQ or Senior Manager responsible for the project or entity being audited or assessed.
Note: Where formal recognition of the audit report or assessment is required by the assessing agency, this responsibility shall rest with the HSEQ or Senior Manager responsible for the project or entity.
Associated Documentation:

- QP-916 Audits Procedure

9.10.9 Analysis of Data

Data shall be analysed as a source of improvement and reported to Senior Management at the Quarterly Project Review Meeting and at the Management Review. This data includes:

- Feedback from clients
- Site reports

- Effectiveness of the Hazard identification and Risk Assessment systems on a site or exception basis.
- Management review meetings
- Accidents, Incidents and Lost Time Injury reports.

Refer:

- Manteena Intranet
- Project Summary Report

9.10.10 Improvement

Manteena shall continually seek improvement and maintain records (e.g. audit reports) for:

- Performance of the Management System particularly with respect to customer satisfaction
- Environmental performance
- Safety in the workplace with 'due care'.
-

9.11 Control Of Non-Conformities

9.11.1 Product

Procedures are maintained which prevent the use of or incorporation of non-conforming products into the work under the contract. Dealing with non-conformities applies to both goods and services – refer Product Identification and Traceability above, which defines Manteena's "product". These procedures provide for identification, documentation, evaluation, segregation (where practicable), disposition of non-conforming product and for notification to the appropriate personnel to ensure that action is taken to identify and correct the cause of the non-conformance and to prevent repeat occurrence.
Associated Documentation:

- QP-918 Non-Conformities Procedure

9.11.2 Environmental and Work Health and Safety

Minor breaches of environmental or Work Health and Safety requirements shall be corrected through verbal instructions.
More serious environmental or Work Health and Safety non-conformities shall be actioned through raising a Non-conformance Report or Site Notice.
Significant environmental or Work Health and Safety incidents/accidents shall be investigated and reported to Senior Management, HSEQ, Safety Manager, and relevant Authority, where this is a statutory requirement.

9.11.3 Actions to Address Risks and Opportunities

The risk-based thinking approach to the development and management of Manteena's systems are intended to provide processes and actions that act as corrective tools and as such reduce the likelihood of non-conformances.
The systems and processes undertaken by Manteena present with them identifiable risks and opportunities. Whether positive or negative, they still exist, and it is the intent of these systems to provide requirements, guidance and tools to:

- Identify the risk or opportunity

- Assess the nature of the risk or opportunity as it relates to Manteena's products or services provided (corporately or on a project)
- Identify actions to change or develop a new process or strategy
- Implement and trace the application and effectiveness of the change, and
- Identify the potential for non-conformities and to take appropriate action before they occur in the areas of Quality, Environmental and Work Health and Safety.

The procedures are structured to address the following:

- Record the corrective action required and follow-up to ensure effectiveness
- Provide Workers with appropriate training and continually upgrade equipment, procedures and operational methods
- Provide a record of complaints from clients, suppliers and Contractors to determine any trends and consider the causes and action necessary to eliminate them
- Implementing and recording changes to procedures resulting from corrective action recommendations
- Consideration of Audit and Corrective Action Reports at Management Reviews.

Associated Documentation:

- QP-917 Corrective Action procedure

9.12 Privacy

Manteena is committed to protecting the privacy of our employees, clients, contractors and sub-contractors. We comply with the *Privacy Act 1988* (Cth) and the Australian Privacy Principles (APPs). The full Manteena Privacy Policy is available on our website (https://www.manteena.com.au/privacy-policy/). It applies to personal information Manteena collects via:

- our websites, social media, telephone, email, fax, in person, or in writing; and
- by third parties in some instances (such as apps and websites used for site inductions)

When provided with personal information it will only be used for the purpose for which it was provided. We will not use it for any other purpose without the consent of the person providing the information.

MANTEENA

10. CHECKLISTS AND FORMS

The documents marked with a ☒ are mandatory for the project.

10.1 Quality Reference Forms

DOCUMENT NUMBER	TITLE	APPLIES TO PROJECT WHERE INDICATED BY ☒
QF-074	Consultant Pre-Appointment Checklist	☒
QF-078	Preferred Tenderer Interview Checklist	☒
QF-079	Subcontractor Tender Assessment – Technical Checklist	☒
QF-001	Management Submission Checklist	☒
QF-004	Commercial Certificate of Occupancy Checklist	☒
QF-006	Commissioning & Handover	☒
QF-007	End of Defect Liability Period Checklist	☒
SF-051	Daily Site Safety Inspection	☒
QF-069	Non-Conformance Report	☒
SF-006	Safe Design Analysis	☒
SF-008	Project Hazard Risk Assessment and Register	☒
SF-034	Daily Site Hazard / Risk Assessment	☒
SF-026	Worker Safety Consultation Meeting Minutes Template	☒
SF-028	Plant and Equipment Certificate	☒
SF-048	Sub-Contractors Safety Plan/WMS review	☒

10.2 Safety Reference Forms

DOCUMENT NUMBER	TITLE	APPLIES TO PROJECT WHERE INDICATED BY ☒
SF-013	Induction Register	☒
SF-014	Site Induction Agenda	☒
SF-015	Site Specific Induction Record	☒
SF-058	Toolbox Talks	☒
SF-030	Restricted Area Access Register	☒
SF-031	Hazardous Substance Register	☒
SF-034	Daily Site Hazard / Risk Assessment	☒
SF-035	Confined Space Permit	☒
SF-060	Temporary Traffic Management Form	☒
SF-050	Safety Notice	☒

SF-009	Project Spot Audit Checklist	☒
SF-054	Incident Report	☒
SF-200	Work Method Statement - Template	☒

10.3 Environmental Forms / Documentation

DOCUMENT NUMBER	TITLE	APPLIES TO PROJECT WHERE INDICATED BY ☒
http://www.tccs.act.gov.au/city-living/trees/tree_activity_application_forms	Tree Damaging Activity, Application to Undertake a Tree Damaging Activity	☒
CPL-02	Environment Protection Agreement – MCPL	☒
CPL-03	Environment Protection Agreement – MSAPL	☒
CPL-04	Environment Protection Agreement – MRPL	☒
EF-003	Typical Site Waste Materials Inventory	☒
EF-001	Environmental Audit Checklist	☒
EF-002	Tree Protection Checklist	☒
EF-004	Site Waste & Recyclable Materials Inventory	☒
EF-005	Project waste Reduction Plan	☒
EF-006	Waste and Recyclable Materials Minimisation Plan	☒

11. ENVIRONMENTAL MANAGEMENT PLAN

11.1 Environmental Practice Policy

[Company] is an environmentally responsible organisation and is committed to protecting the environment in all its business undertakings to provide satisfaction to clients, to visibly support government environmental initiatives and to comply with all statutory requirements.
The Company is committed to preventing pollution and to achieving continual improvement through the setting and attaining of environmental objectives and targets as outlined in project quality plans.
Manteena has established an Integrated Quality, Risk, Environmental and Work Health and Safety Management System based on the ISO 9001-2016, ISO 31000-2009, ISO 14001-2016 and ISO 45001 standards respectively and accordingly, is committed to meeting the requirements of these standards.
The management team at Manteena is committed to achieving environmental goals within the organisation and on all our projects.

(Note: a signed copy of this policy is maintained by Manteena)

11.2 Environmental Management System

To achieve the organisation's intended outcomes, including enhancing our environmental performance, Manteena has established, implemented, maintained and continually improves an environmental management system, including the processes needed and their interactions. This is undertaken in accordance with the requirements of the International Standard AS NZS ISO 14001:2016 and ACT Environment Protection Act 1997.

11.3 Environmental Management Plan

11.3.1 Determination of Scope

Manteena's Senior Management Team shall determine the boundaries and applicability of the environmental management system to establish its scope and applicability to the works generally undertaken by the various entities.
When determining this scope, the organisation shall consider:

- the external and internal issues that may present as a result of the products or services provided by Manteena to achieve its it ended goals
- the compliance obligations placed upon Manteena to undertake its processes and services and achieve its intended goals
- The entity charged with the undertaking of a project, the functions of the entity and physical boundaries
- Manteena's activities, products and services
- Manteena's authority and ability to exercise control and influence over the processes, service and product provided.

Once the scope is defined, all activities, products and services under the control and or influence of Manteena within that scope need to be included in the environmental management system.
The scope shall be maintained as documented within this IMP, the Contract for works and services and any project specific Environmental Management Plans (EMP). The IMP and EMP shall be available to interested parties.

11.3.2 Leadership and Responsibilities

In addition to those qualities and requirements with respect to risk based (Plan-Do-Check-Act) approach to environmental management (refer to section 9.1.2 above), Manteena's Senior Management Team shall demonstrate leadership and commitment with respect to the environmental management system by:

- taking accountability for the effectiveness of the environmental management system
- implementing and managing those planning aspects of the projects where environmental aspects and impacts as they relate to risks and opportunities present or are identified during the various site establishment and construction processes
- ensuring that the environmental policy and environmental objectives are established and are compatible with the strategic direction and the context of Manteena's various entities
- ensuring the integration of the environmental management system requirements into the organisation's business processes via the Integrated Management Plan
- ensuring that the resources needed for the environmental management system are available
- communicating the importance of effective environmental management and of conforming to the environmental management system and legislative requirements
- ensuring that the environmental management system achieves its intended outcomes
- consulting, directing and supporting all staff to contribute to the effectiveness of the environmental management system
- promoting continual improvement
- supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

When planning for the environmental management system, Manteena shall consider:

- the risks and opportunities, related to its environmental aspects, compliance obligations and other issues and requirements
- the needs and expectation of all interested parties in the project. Be they client., contractor or regulator.
- giving assurance that the environmental management system can achieve its intended outcomes
- preventing or reducing undesired effects, including the potential for external environmental conditions to affect the organisation
- the audit requirements of the system to verify the planned processes are achieving their intended outcomes and if not what change needs to be assessed and implemented to gain compliance
- achieving continual improvement

- Within the scope of the environmental management system, Manteena shall determine potential emergency situations, including those that can have an environmental impact.

11.3.3 Environmental Aspects and Impacts

Within the defined scope of the environmental management system, Manteena shall determine the environmental aspects and potential impacts of its activities, products and services that it can control and or influence, and their associated environmental impacts and impacts, considering a life cycle perspective.
When determining environmental aspects and impacts, Manteena shall take into account:

- planned or new developments, and new or modified activities, products and services
- abnormal conditions and reasonably foreseeable emergency situations
- control measures that can reasonably and practically be put in place and managed throughout the project and after handover to the Client or end user.

Manteena shall determine those aspects and impacts that have or can have a significant environmental impact.
Manteena shall document and communicate all identified significant environmental aspects and impacts via the creation of an Environmental risk register as part of Manteena's overall Project Risk Register and made specific to the project.
Note:

An Environmental Aspect is an element of an organisation's activities or products or services that interacts or can interact with the environment.
An Environmental Impact is change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.

11.3.4 Compliance Obligations

Manteena's EMS has been developed in accordance with the requirements of the Environmental Protections Act prevalent in the jurisdiction in which the works are undertaken. To that end Manteena has entered into an Environmental Protection Agreement with the ACT Government which is specific to any works undertaken by Manteena within the ACT. Works conducted outside the ACT are conducted in accordance with the regulatory instrument in place in that state or territory.

THE INSTRUMENT: Environmental Protection Agreement under the Environment Protection Act 1997

THE PURPOSE OF THE ENVIRONMENTAL PROTECTION AGREEMENT

The Environment Protection Act 1997 (the Act) provides for the protection of the environment from pollution and includes a provision under Section 38 for the Environment Protection Authority (EPA) to enter into an Environmental Protection Agreement (Agreement).
This Agreement is an agreement between Manteena Group (Agreement Holder) and the EPA concerning:

- major land development or construction activities, being-
    - land development, or the construction of a commercial building, on a site of 0.3 hectares or more and including the construction of associated public infrastructure;

or

- the construction of public Infrastructure on a site of 0.3 hectares or more.

The aim of this agreement is to ensure that the land development sites achieve a consistently high level of environmental management.

11.3.5 Environmental Objectives and Planning

Planning to achieve environmental objectives are consistent with those identified in section 9.1.4 above.

11.4 Operational Planning and Control Processes

11.4.1 Prevention of Pollution

Manteena, our Contractors and all interested parties are to ensure that project specific Environmental measures are planned, communicated, documented and implemented specific to the scope of works. These shall comply with the requirements prescribed under the ACT Environment Protection Act 1997 and the international Standard AS NZS ISO 14001:2016.
Additional to the identification and control of the various aspects and impacts the project may present all personnel, contractors and interested parties are responsible for ensuring that:

- Every effort must be made to prevent pollution of the air or waterways
- Noise pollution is minimised where possible
- Environmental incidents or potential incidents must be reported to the Site Manager
- Waste is to be minimized and where possible, recycled
- Trees and their immediate root zone must not be damaged.

11.4.2 Air Pollution

General principles

- Dust generated during construction or maintenance activities shall be controlled.
- Community consultation shall be undertaken where appropriate where work is likely to cause dust impact on the public and nearby residents.
- No burning of vegetation or other materials shall be permitted on site.
- Exhaust emissions from plant and equipment shall be minimized.
- Any vehicle transporting waste or other materials that may produce odors or dust shall be covered during transportation.

All Contractors are to conform to Regulatory air pollution standards and measures e.g.

Dust generated from power tools

- Ducted dust extraction system must be used in all workshop works.
- Where fitted, dust bags must be used on all power saws and sanders on site.
- Workers must wear filter masks appropriate to the work.
- Dust generation from unsealed or un-grassed areas must be dampened as appropriate to reduce the spread of dust.

Fumes from paint, chemicals, cleaning agents or equipment

- Spraying of paint and other materials with the potential to become air borne particulates shall not be undertaken during windy conditions.
- Use spray painting booths wherever possible.
- Keep work areas well ventilated.
- Workers wear respirators and other PPE as required by SDS.
- Ensure proper ventilation where equipment emits exhausts fumes.
- Isolate area where fumes may affect others.
- Prevent fumes from entering air-intakes of near-by buildings.

11.4.3 Noise Pollution and Vibration

All sub-contractors are to conform to noise emission regulations relating to Work Health and Safety and Environmental Protection Guidelines. Noise generated by equipment:

- Ensure that equipment conforms to noise emission guidelines.
- Do not operate noisy equipment outside working hours, or times specified in tender documentation, especially in residential or occupied areas.
- Residents and businesses shall be notified when work is likely to cause harsh vibration or offensive noise to impact on the public. (Based on risk assessment)
- Works shall be undertaken during normal working hours. Any work that is undertaken on Sundays, Public Holidays or outside normal working hours shall require prior approval
- Turn off noise generating equipment when not in use.
- Appropriate hearing protection must be worn by all those likely to be affected by excessive noise (i.e. not only the operator performing the work).
- All reasonable practical steps shall be undertaken to reduce maintenance activity noise and vibration from the site.

11.4.4 Water

Manteena and all contractors are to prevent water pollution and minimise water usage.

- Where appropriate, sediment control measures shall be constructed to prevent suspended soil particles entering waterways. Before any water from site is discharged, the clarity of the water shall be measured using a turbidity tube. All site personnel with duties to manage any discharges shall be trained in the use of the turbidity tube, and all releases shall be below 60mg/L(50NTU) (suspended solids).
- Storage areas for fuels, oils and chemicals shall be surrounded by an impervious bund that is capable of containing 120% of the largest container stored in the Bund. The location of storage areas shall not be within 20 meters of any areas of concentrated water flow, flood and poorly drained areas, on slopes above 10 degrees or near any areas of native vegetation.
- Refueling plant and equipment shall be undertaken within bonded areas and more than 50m away from waterways.
- Cleaning of spray bars or equivalent equipment shall be undertaken in appropriate areas and in a manner which prevents or minimizes pollution to waters.
- Spill containment equipment kits shall be available on site.
- Works in waterways shall be postponed during or immediately following heavy rainfall or when waterways are running high.

- Where possible, consideration should be given to installing water tanks and grey watering systems.

Use of water for cleaning

- Minimize the excessive use of water for cleaning by using trigger controlled hoses, and where possible use brooms, vacuums and blowers as an alternative.
- Consideration must be given to any prevailing water restrictions. Other dust suppression methods, such as mulching, should be used where possible.
- Where cleaning vehicles, use commercial cleaning stations that recycle water and have approved traps to prevent pollution entering storm water systems.

11.4.5 Soil Erosion

[Company] and Contractors shall prevent soil erosion and silting of waterways.

Water run off

- Use sandbags, hay bales and other baffles to control water run off to reduce erosion.
- Use of mulch materials may be used to protect disturbed or exposed areas, where suitable.
- Erosion and sediment control measures shall be maintained regularly and after rainfall events.
- Erosion and sediment control measures shall not be removed until disturbed areas have been stabilised.
- Disturbed areas shall be stabilised progressively with vegetation during construction, where necessary and stabilisation shall be undertaken after works are complete.

11.4.6 Toxic Chemicals and Dangerous Goods

All Contractors are to conform to legislative requirements described in the Dangerous Substances Act 2004 and applicable Codes of Practice. Consider as a minimum the following:

Chemical/Dangerous Goods, storage and handling (For more information see section 5.2.15 of this plan).

Chemical Spills

- Store chemicals in bunds to contain any spills.
- All stockpiles on site shall be located in previously cleared and disturbed areas within the site boundaries. No stockpile shall impact an environmentally sensitive area, vegetated areas, on floodplains or within 40m of a water course or where it shall affect a cultural and/ or heritage site. No stockpile site shall be established without prior consultation with the Site Manager.
- Keep emergency phone numbers on site in case of a large spill.
- Follow procedure as stipulated on the SDS if a spill occurs – if safe, stop the source, contain the spill and control its flow, clean up the spill.
- Notify Environment ACT if the spill threatens or harms the environment.

Misuse of chemicals

- Chemicals shall only be used for their intended purpose, and according with the SDS and to the developed WMS.

11.4.7 Fire (Prevention)

All Contractors are to conform to Regulatory fire safety standards and measures

- Prevent fires that could be caused by sparks from equipment.

- Work site to be kept tidy and clear of flammable materials.
- When welding, use welding bays in workshop wherever practical.
- Hot Works Permit to be obtained (when specified), before starting work.
- Fire extinguishers to be available at the workface for "hot work" (e.g. welding, cutting, grinding).
- Burning of rubbish or lighting of fires is not permitted on the site.

11.4.8 Waste Management

Waste minimisation practices will be adopted.

Disposal of demolition waste and building materials from site

- Excess building materials to be returned to workshop store.
- Identify recyclable materials and return to workshop store to recycle.
- All construction sites to have waste disposal skips available.
- All environmental instructions and requirements issued by the Senior Project Manager, Site Manager and the Site Supervisor shall be complied with.

11.4.9 Vegetation and fauna

Traffic paths and parking areas for plant and equipment shall be identified prior to commencement of works and provided to site personnel to minimize unnecessary vegetation disturbance.

11.4.9.1 Weed management

- All noxious weeds shall be managed in accordance with the Weeds management Act, including prevention the spread of noxious weeds through movement of contaminated plant and equipment into un-infested areas.
- Weed infestation areas shall be identified then avoided during construction activities.
- Weed infested areas that are programmed for disturbance shall be treated appropriately prior to construction to avoid germination of weed seeds.
- All personnel managing and using pesticides shall receive appropriate training prior to commencing work. Only pesticides registered for use over water shall be used within 10m of watercourses.
- Machinery shall arrive at and depart from the site in a clean condition, free of seed or mud.
- Plant and machinery shall be cleaned on a hardstand area where weed seeds can be separated from runoff and treated appropriately.
- Fill that is contaminated with weed seeds shall be quarantined with visible barriers and a notice, then treated appropriately. Alternatively, it shall be buried under 300mm depth of clean, weed seed free fill.

11.4.10 Awareness and Communication

Manteena shall through the provision of this IMP at engagement or at least prior to the commencement of any works, ensure that persons doing work under the organisation's control are aware of:

- the environmental policy.
- the significant environmental aspects and related actual or potential environmental impacts associated with their work.
- their required contribution to the effectiveness of the environmental management system, including the benefits of enhanced environmental performance.

- the potential implications of not conforming with the environmental management system requirements as set, including not fulfilling the organisation's compliance obligations.

COMMUNICATION

Manteena has established, implemented and maintained the processes of efficient internal and external communications relevant to the environmental management system, which include:

- what will be communicated
- the frequency
- with whom to communicate
- the means by which communication will be conducted.

Manteena have considered, when establishing our communication processes:

- Our compliance obligations
- The environmental information communicated is consistent with information generated within our system, which we have reason to expect is reliable
- Our ability to respond to relevant communications re our environmental management system.

Manteena maintains records of all forms of communication or complaints with regard to our systems and environmental performance.

INTERNAL COMMUNICATION

Please refer to section 5.22 as this forum is the forum within which all system aspects are raised, discussed and actions for change identified.

EXTERNAL COMMUNICATION

Each month Manteena provides project specific EMS performance information to all interested external parties and a component of our established system requirements, contract conditions and compliance obligations.

12. INDUSTRIAL RELATIONS PLAN (IR)

12.1 Industrial Relations Policy

The executive management of [Company] is committed to maintaining excellent industrial relations with the staff and employees (Workers) of the Company through organised and accessible processes of consultation and communication throughout the organisation and to maintaining the Company's reputation for integrity and fairness.
Effective Industrial Relations management is essential to the wellbeing of staff in achieving a work-life balance that enables them to perform their duties to the high standards expected of the Company and to ultimately contribute to the business success of the Company and its survival as an employer of choice.
Manteena's approach to industrial relations is to be pro-active and the Company continues to implement effective consultative processes with the Workers and communicates directly with them. Manteena is committed to a co-operative approach to all industrial matters and encourages full involvement of all Workers in the continual improvement of site relations, safety and working conditions. A "prevention rather than cure" approach is encouraged to address potential areas of concern at an early stage.
A properly documented Industrial Relations record is maintained in conjunction with the Project Management Plan for each project to ensure the transparency of Industrial Relations management practice.
Company operational procedures, along with checklists, are in place through the Project Management System to ensure that the various facets of the project are managed in accordance with the requirements of:

- The relevant Work Health & Safety Act and Regulations;
- Manteena's Company policies and Integrated Management Plans;
- any legislative obligations of the Company; and
- relevant codes of practice, guidelines and industry codes of conduct.

[Company] is committed to maintaining excellence in Industrial Relations.
(Note: a signed copy of this policy is maintained by Manteena)

12.2 Elements Of Manteena's Contractor Relationships

Sub-contractors engaged by Manteena on this project will manage their own Industrial Relations processes in line with Manteena standards. Project Managers have responsibility for Industrial Relations management and compliance on the project.
This will involve compliance with the Secure Local Jobs Code 2019 (where applicable) and reporting of any suspected breaches to the Operations or Health Safety Quality Environment Manager for investigation and management.
Note: Any workplace agreement entered into by any entity working on this project from 24 April 2014 MUST be registered with Fair work Australia (FWA) as being in compliance with the: Building and Construction Industry (Fair and Lawful Building Sites) Code, 17 April 2014. For more information go to: http://www.fwbc.gov.au/building-code

12.3 Elements Of Manteena's Industrial Relations Management Plan (IR Plan)

Manteena's Industrial Relations Management Strategy comprises our Industrial Relations Management Policy and the accompanying Industrial Relations Management Plan.

12.4 Legal And Other Requirements

Legislative requirements that apply to industrial relations and to the program are detailed below. The Manteena Management team will manage the program in accordance with these requirements. The Manteena intranet provides a summary of key legislation and how it relates to the company's activities. The review of this plan and any subsequent amendments to it will be based on the project budget, resource allocation, program related IR issues or agreements and contract requirements.

12.4.1 Legislation, Regulation and Codes of Practice / Regulating Authority

Workplace Relations Act 1996 and associated Regulations in their many amended forms, including the Fair Work Australia legislation and DEWR regulations.

- Manteena will not discriminate against, coerce, unduly influence or unduly pressure subcontractors to make above-entitlements payments or to contribute to a particular fund or scheme, or support a particular product, service or arrangement.

12.4.1.1 Monitoring Workplace Arrangements

Manteena will conduct regular payroll audits in respect of our workforce to ensure underpayments and similar do not occur.

- We will investigate complaints of underpayment or non-payment of entitlements in respect of our workforce, take steps to rectify non-compliance.

12.4.1.2 Engagement of non-citizens and non-residents

We will not employ a person to undertake building work who is not an Australian citizen or permanent resident unless:

- the position is first advertised in Australia; and
- the advertising was targeted in such a way that a significant proportion of suitably qualified Australian citizens and Australian permanent residents would be likely to be informed about the position; and
- any skills or experience requirements set out in the advertising are appropriate to the position; and
- we can demonstrate that no Australian citizen or Australian permanent resident is suitable for the job.

We will use the following advertisement mediums:

- Seek, Recruitment Agencies, LinkedIn

Employment of non-Australian citizens or non-Australian permanent residents will require written approval by Director.
We will subscribe to the Visa Entitlement Verification Online (VEVO) system to identify prospective employees who are non-Australian citizens or non-permanent residents for which labour market testing must be applied.

12.4.1.3 Freedom Of Association

We will ensure freedom of association by:

- Having a documented freedom of association policy that applies to all persons on site. This policy will be communicated to our employees. In addition, we will display this policy within site offices and meal rooms.
- Reviewing the policy's effectiveness and making amendments where necessary.
- Conducting and recording regular site inspections to ensure freedom of association by ensuring that:
    - 'no ticket, no start' signs or similar, are not displayed and such arrangements are not implemented;
    - signs that seek to vilify or harass employees who participate, or do not participate, in industrial activities are not displayed; and
    - building association logos, mottos or indicia are not applied to clothing, property or equipment supplied by, or which provision is made for by, the employer or any other conduct which implies that membership of a building association is anything other than an individual choice for each employee.
- Ensuring site induction processes are not undertaken or administered by officials, delegates, or other representatives of a building association. Induction processes will be undertaken or administered by site management.
- Ensuring secondary inductions are not undertaken or administered by officials, delegates, or other representatives of building associations.
- Handling and storing personal information in accordance with the *Privacy Act 1988* and the *Fair Work Act 2009*.
- Not providing the names of staff, job applicants, contractors or subcontractors to third parties other than as required by law.

12.4.1.4 Entry To Premises

- We will comply with all laws of the Commonwealth and each relevant State and Territory that apply and give a permit holder a right to enter premises.
- All officers of building associations who attend the Project will be required to produce their relevant permits.
- We will so far as is reasonably practicable ensure that officers of building associations only enter the site for a purpose for which a right of entry could be exercised under Part 3-4 of the Fair Work Act 2009 or a relevant work health and safety law and only where the applicable legislative requirements in those laws have been strictly complied with.
- We will maintain copies of entry notices issued in relation to the Project and require subcontractors to provide a copy of any entry notices they received to site management.
- We will maintain a record of any attendance of an officer of a building association to the Project.
- All visitors and officers of building associations who attend the Project will be required to comply with the site safety requirements that apply, including completing and signing the visitor register.
- We will ensure, as far as is reasonably practicable, that the site is secure from trespassers.
- We will monitor the site for unauthorised entry and take appropriate action in response to unauthorised access. For example, by, as far as is reasonably practicable, requiring unauthorised entrants to leave immediately.

12.4.1.5 Grievance Management

- We will comply with the relevant dispute procedure (whether or not pursuant to an enterprise agreement).
- We will ensure that employees are provided freedom of choice in deciding whether to be represented in grievance or dispute procedures, and if so, by whom.
- We will log employee and workforce grievances reported to us and use this information to proactively address employee and workforce grievances.

12.4.1.6 Industrial Impacts

- We will, to the extent reasonably practicable, take steps to prevent or bring an end to industrial action that is not protected action taken by our employees on the project (depending on the circumstances this may involve taking legal action in the Fair Work Commission or a court where remedies are available).
- We will ensure subcontractors, as far as is reasonably practicable, take steps to prevent or bring an end to industrial action that is not protected action taken by their employees on the project (depending on the circumstances this may involve taking legal action in the Fair Work Commission or a court where remedies are available).
- We will ensure that we comply with laws relating to payments to employees during periods of industrial action (strike pay) and we will take reasonable steps to verify that subcontractors comply with laws relating to payments to employees during periods of industrial action.
- When unlawful or potentially unlawful industrial action is threatened, we will take reasonable steps to advise participants of the potential consequences and lawful alternatives.
- We will keep records of any actual or threatened industrial action.

12.4.1.7 Security Of Payment

We will train all relevant staff who process payments to subcontractors on the requirements of the security of payment laws.

- We will ensure subcontracts provide for payment terms in accordance with the relevant security of payment law.
- We will comply with all applicable laws and other requirements relating to the security of payments that are due to persons.
- We will ensure that payments which are due and payable are made in a timely manner and are not unreasonably withheld.
- We will have a documented dispute settlement process that details how disputes about payments to subcontractors will be resolved.
- We will ensure that our documented dispute settlement process detailing how disputes about payments to subcontractors will be resolved includes a referral process to an independent adjudicator for determination if the dispute cannot be resolved between the parties.
- We will, as far as practicable, ensure that disputes about payments are resolved in a reasonable, timely and cooperative way.
- We will not unduly influence, unduly pressure or coerce subcontractors in relation to the exercise of their rights under security of payments laws.

12.4.2 ACT Government

Manteena adheres to the ACT Government Secure Local Jobs Code 2019 (SLJ) (applicable only to works contracted by the ACT Government from 15 January 2019) https://legislation.act.gov.au/di/2020-278/

Secure Local Jobs Code

(a) If the Secure Local Jobs Code applies to this project the Trade Contractor must:
  (i) comply with the provisions of the Secure Local Jobs Code; and
  (ii) hold a valid secure local jobs code certificate in accordance with the requirements of the Secure Local Jobs Code during the term of this Agreement.

(b) During the term of this Project the Trade Contractor must provide Manteena with such information as is requested by Manteena to permit Manteena to comply with its obligations as a Code Certified Entity pursuant to the Secure Local Jobs Code.

(c) The Trade Contractor must comply with:
  (i) applicable industrial laws applicable to the Secure Local Jobs Code;
  (ii) all applicable orders, directions and decisions of any court, tribunal, board, commission or other entity (including but not limited to the Fair Work Commission) with jurisdiction to consider the interpretation, breach or any other matter concerning the prescribed legislation referred to in the Secure Local Jobs Code; and
  (iii) any Industrial Instrument that applies to the Trade Contractor.

(d) The Trade Contractor must notify Manteena in writing of any Adverse Ruling made against it, or its subcontractors, or it becoming aware of a failure to comply with Secure Local Jobs Code obligations, within 3 Business Days of such a ruling being made or such awareness arising.

(e) The Trade Contractor must comply with the obligations of the Secure Local Jobs Code and ensure that any subcontractors engaged by them also maintain compliance with the Secure Local Jobs Code.

12.5 Relationship Management

Manteena will seek to maintain open consultation and communication with all parties involved in the project as we believe that speedy resolution of disputes, grievances, misunderstandings and other unforeseen occurrences is essential to maintaining the relationships necessary for success.

12.6 Dispute Resolution Intention

It is Manteena's policy that an individual project's Industrial Relations are the responsibility of the individual Project Manager. Should industrial disputes eventuate, the Construction Manager is required to mediate in order to resolve the dispute. At this stage, if the Construction Manager is unable to resolve the dispute, they will call upon outside assistance in the form of the services of the Master Builders' Association, in consultation with both the Construction Manager and the Project Manager. The management of these Industrial Relations issues will be handled through early identification at project meetings, both Client and Sub-contracted Builders or Sub-contractors and escalated to the Program office where necessary. When disputes arise, we will use the Manteena Dispute Resolution Procedure (available on Manteena's Intranet).

12.7 Industrial Relations Risk Management

Project management practices using the Manteena Management System incorporate ongoing risk assessment and management elements. Major aspects of this are the Risk Management workshop early in the project start-up and regular monthly reporting to the Board of aspects likely to impact on

project progress including IR. Industrial relations risks and the way these are managed are detailed elsewhere in this document.

12.7.1 Document control and compliance

With respect to compliance to the Secure Local Jobs Code 2019,

> *To demonstrate compliance with **Part 3** of the Code, contractors require a current ACT Government Secure Local Jobs Code Certificate.*

The Project shall ensure the following documentation, inspections and compliance reviews of that documentation are conducted prior to any Contractor commencing any works on site:

- A current ACT Government Secure Local Jobs Code Certificate (on applicable ACT Government Projects) (refer: www.procurement.act.gov.au/securelocaljobs)
- A Code Compliance Checklist
- A signed Undertaking of Compliance
- A certificate of currency for:
  - Workers Compensation; and
  - Public Liability & Professional Indemnity (where applicable)
- Evidence of:
  - Long Service Leave Contributions
  - Superannuation, Redundancy and other employee entitlements
- Workers right to work in Australia:
  - A Right to Work Declaration from the Contractor in regard to their workers/employees right to work in Australia.

To achieve this outcome Manteena has initiated an intranet-based Contractor Documentation Compliance process which serves as a repository for all Contractor IR compliance documents as listed above. To ensure the compliance of **ALL** Contractors on **ALL** Manteena site, the Project Manager shall provide, without exception:

- the Company name,
- Company address, and
- Telephone and email contact details of ALL Contractors being engaged on ALL Manteena sites to: compliance@manteena.com.au

This process is also to be followed when the Project Manager anticipates adding any new Contractors once the project has commenced and must be conducted well in advance of the Contractor being required to start work on any Manteena site.

12.8 Resource Responsibilities

The following list provides detail of the personnel involved and their responsibilities in relation to Industrial Relations management.

12.8.1 Company Directors

The Company Directors will be responsible for:

- Defining the industrial relations policy
- Allocating human, physical and financial resources adequate to meet the corporate and project strategy.

12.8.2 Project Director

The Project Director on this project is the management representative for the Industrial Relations and will be responsible for:

- The management of Manteena staff industrial relations matters, compliance with industrial and employment obligations
- Identifying resources and procedures for implementing required industrial relations management procedures
- Reviewing the suitability and effectiveness of the industrial relations strategy to ensure continual improvement
- Acquiring and disseminating industrial relations management information.

12.8.3 Health Safety Quality Environment Manager

The Health Safety Quality Environment Manager is the Senior Management representative for Industrial Relations and will be responsible for:

- Monitoring workplace and management practices
- Monitoring compliance with Collective Agreements, Federal and ACT / NSW legislation and Codes of Practice
- Managing compliance with, and keeping abreast of changes to, awards and other legal obligations relating to employment
- Planning industrial relations training for project Workers of Manteena
- Tracking the benefits as well as the costs of industrial relations management activities at both the corporate and project level
- Mediate project specific industrial disputes.

12.8.4 Project Manager

The Project Manager will be primarily responsible for documenting and implementing the Project IR plan and project delivery in accordance with the drawings, specifications and general conditions of contract through the application of the company's Management Systems.
The Project Manager will plan, organise and control all elements of the work in collaboration with the program team and specialist Contractors. In particular:

Planning and programming:

- Establishing an action/game plan for the project having regard for industrial relations risks and exposure (set the strategy to cover all moderate and major risks)
- Identifying IR issues and sources of IR risk and assess the likelihood and consequences of each
- Documenting the action/game plan as part of the project IR plan
- Communicating the IR plan to all project staff
- Resource planning the project
- Establishing the project programme and ensure acceptance of the performance requirements of the programme during contract letting
- Convening meetings with the Clients Representative/Consultants on a regular basis and review project strategies, performance against programme, cost, quality and time issues. Ensure all notices and submissions required under the contract are dealt with on a fortnightly basis

- The development of comprehensive operational planning for all key activities having regard for industrial and WHS requirements and implement in accordance with the company's Management System
- Implement through the Site Manager and Contracts Administrator, industrial management procedures and ensure compliance with the company's Union Collective Agreement at all times
- Having regard for the skill requirements of the project, implementing training in accordance with the project management plan and corporate training program
- Ensuring the company's policies and routines are implemented at handover including all the mandatory handover file requirements
- Assessing and monitoring Sub-contractors' ability to comply with industrial relations laws and their employment obligations.

12.8.5 Contracts Administrator

The Contracts Administrator will be directly responsible to the Project Manager for the formation, commercial control and administration procedures of the project cost system. In particular:

- The purchasing and procurement system
- The contract administration system
- The monthly project report system
- The company's handover documentation
- Extensions of time processing (and the due date for completion is adjusted and approved)
- Variation submissions and contract adjustments are issued promptly and an adjusted contract value is approved on an ongoing basis
- Lodging progress claims by the due date and ensuring payment is received on time
- Subcontract progress claims and invoices for goods and services are processed promptly and payments made in accordance with the contract conditions
- Ensuring Sub-contractors and suppliers comply with all conditions of contract and in particular verify compliance with Collective Agreement / Award conditions specifically Workers Compensation, LSL Registration, Redundancy and Superannuation payments are made prior to processing each Sub-contractor's progress claim.

12.8.6 Site Manager / Site Supervisor

The Site Manager is responsible to the Project Manager for the effective planning, organisation and control of the workface. In particular:

- The day-to-day planning and organisation of manpower, equipment and material deliveries in accordance with the project program
- The induction of all personnel employed on the site. Induction is to include the industrial relations risks identified for the project and the action plan and proposed measures to manage these risks
- Implementation of temporary facilities plan
- Implementation of pedestrian management and traffic management procedures
- Implementation of the Project Management Plan (includes quality, safety, environmental, Client and industrial relations issues)

- In association with the Project Manager attend and participate in meetings with the Architect and subcontract co-ordination meetings
- Establish a Site Safety Committee (as required) in accordance with the company's procedures
- Implement industrial management procedures and ensure compliance with the company's Enterprise Agreement and industrial awards.

12.8.7 Subcontracted Builders and Sub-contractors

Subcontracted Builders and Sub-contractors are responsible for:

- Providing the documentation and records to ensure the documentation provided is compliant and current at all times
- Verifying their compliance with all employment and legal requirements including payment of remuneration to Workers, annual leave, Long Service Payment scheme registration, Workers Compensation insurance (including self-insurance arrangements), superannuation fund membership and contributions, over-award payments
- Complying with all aspects of the GST, including the registration for an ABN number.

12.9 Recruitment

The capability to continue to develop an individual's competencies is a critical requirement of our people. We want to reflect this in our recruitment practices as well as maintaining diversity in our workforce. We have developed a workforce that comes from two main educational streams, that of the trade background and that of the university educational background.
Over many years now we have maintained this approach of keeping the diversity of background education and actively encouraging the development of our people to give us the capacity for continued organisational development.

12.10 Workers

We want a stable and reliable workgroup and so entered into an Enterprise Agreement in collaboration with our Workers in 2016.

12.11 Non-English Speaking Workers

12.11.1 Policy Statement

- This Policy:
- Recognises that employees have various and diverse needs.
- States Manteena's commitment to ensuring that WHS information, training and systems will address Workers diverse needs.
- States that employees have access to information and training regardless of their disability, language, race, culture, religion, age, gender or literacy and are not discriminated against on those grounds.
- Commits to communicate information to all staff in an appropriate format and appropriate languages.
- Includes procedures on how the organisation will communicate effectively with all staff in appropriate and relevant ways. For example, ensuring that information placed on notice boards is in the appropriate languages for all employees to understand, and that alternative visual, verbal and written communication means are used where necessary.

12.11.2 Communication

When communicating with non-English speaking employees:

- Ensure clear, accurate and relevant information is supplied.
- Provide instructions in a straightforward and logical sequence. For example, 'First put on the goggles and earmuffs, then enter the plant room'.
- Avoid jargon (unless clearly explained as part of the industry/company culture) and unfamiliar or overly technical terms.
- Read through documents and explain to any employees with literacy needs.
- Use multiple methods of communication such as verbal, visual and audio - don't just rely on written forms.
- Display pictorial/multilingual safety signs – where appropriate.
- Request the employees demonstrate their understanding of the work task or safety control
- Where practical, develop mentoring arrangements for new employees with experienced colleagues.
- Use accredited interpreters when communicating with employees from a non-English speaking background.
- Where possible, utilise the skills of bilingual employees in communicating information.

12.11.3 Consultation

As part of the consultation process, ensure that:

- Employees are encouraged to join in discussions on WHS.
- All employees, including those from NSW, know about the roles of both the WHS Committee and HSRs.
- Employees know how and who to contact about WHS issues.
- Employees from one language group who have limited English literacy are encouraged to discuss information and contribute ideas about WHS in their preferred language.
- The organisation provides the WHS Committee with adequate time and resources to consult with employees.
- HSRs are trained and provided with the appropriate support to represent diverse workgroups.
- WHS Committees have representation from a cross-section of employees.
- Adequate time is allocated to ensure that the safety needs of all employees can be met.

12.11.4 Training

Training is important for all employees to ensure they are able to carry out their work safely. Therefore, ensure that:

- Training plans address the needs of employees from culturally and linguistically diverse backgrounds.
- Training is evaluated, including the suitability and effectiveness of the training methods.
- The trainers understand how cultural factors, language and English literacy issues can impact on the delivery of information.

The intent of this section is to ensure that workers who are non-English speakers have the same opportunities and are provided the same level of WHS information as all other workers and have the

same opportunities to discuss work activities. Manteena welcomes a diverse and multicultural work environment on all projects, in saying this we feel it is the responsibility of the employer to ensure the above requirements are met on Manteena's work sites. This includes but is not limited to:

- Translated WMS and safety plans both in English and the specific language of their workers.
- Signage in both English and specific language of their workers.
- An interpreter in close proximity to the non-English speaking workers.
- An interpreter provided by the Contractor at time of induction to functionally assist in the induction process.

NB: If the Contractor is unable to provide the above, Manteena will seek to engage and provide this service at the cost of the Contractor. If this is not possible Manteena will, given the potentially hazardous nature of the construction environment be unable to allow non-English speaking workers on to site.

12.12 Contingency Planning

Manteena will seek to maintain open consultation and communication with all parties involved in the conduct of the business in order to avoid/minimise the impact of disputes, grievances, inclement weather, industrial action and other unforeseen risks before they occur. The management of these issues will be handled through early identification at project meetings – both Client and Sub-contractors. When disputes arise refer to **Manteena Dispute Resolution Procedure**.

12.13 Development Of Our Competencies

The continued success and development of our business relies on our ability to recruit, retain and develop our people. Competency development will enable our people to adapt to new technological advances and business practices. We also want to develop our people to be able to work collaboratively and safely with our Clients, Subcontract Builders, Sub-contractors, Suppliers and fellow Workers as strong working relationships are the foundation of the success of our business.
We want to continue to expand and enhance our people's performance and development, and this is a fundamental process of the business.

12.14 Apprenticeship Scheme

We are Project Managers and have relied on specialist Sub-contractors to perform the majority of the work for many years. Yet, Manteena is in position to provide effective in-house training for staff and apprentices where reasonably practical.
Advances in technology require continued development of more specialised skills and so there is little doubt the practice of subletting most of the work will remain unchanged.
The traditional tradesperson that possesses a broad range of trade skills is being replaced by a greater number of people with more focused and specialised skills.
Our policy is to ensure sub-contractors on major projects engage one apprentice for every ten tradespeople employed within the company, or as a compromise, insist upon one apprentice for every five tradespeople working on a specific project.

12.15 Responsibility For Project Delivery

Responsibility for project delivery rests with the Project Manager and to facilitate a professional outcome we provide management support from key staff resources such as our:

- Managing Director
- Project Director

- Health Safety Quality Environment Manager
- Business Systems Manager
- Human Resources Manager.

12.16 Project Start-Up Meetings

These will be attended by the Branch Manager, Health Safety Quality Environment Manager, Project Manager and often the other key support staff members along with the Project Team.
During this meeting, the group review issues and risks to the project with respect to time, quality, safety, environment, Industrial Relations issues etc. Management of these risks is also documented in the Project Management Plan.
Ongoing audits of the Project Management Plan will ensure its implementation and continuing suitability.

12.17 Monthly Program Review Meetings

These will be held with the Managing Director/General Manager, Operations Manager, Construction Manager, and the leaders of the project team. These reviews examine and monitor the progress of:

- Client relationships
- Staff relationships and performance
- The Project Management Plan and its implementation
- Training requirements and outcomes
- Industrial Relations
- Project status in respect of cost, quality and time performance.

12.18 Subcontracted Builders and Sub-Contractors

The following are what we classify as “Key Trades” (Key trades are those trades where a failure or industrial action will bring about a delay to the project.):

- Major earthmoving and excavation
- Structural trades, concrete, reinforcement & formwork, stressing etc
- Structural & precast erection, scaffolding and rigging
- Service trades: mechanical, electrical, hydraulic, fire services and lifts
- Façade and major window installation work, brickwork
- Major interior trades.

Prior to awarding subcontracts, sub-contractors will be checked for compliance with the following:

- Superannuation funds
- Workers Compensation
- LSL registration
- Redundancy.

Where non-compliance is evident, the Project Manager will ensure compliance prior to allowing them to commence work on a project.
All Sub-contractors must have an ABN.
Sub-contractors are responsible for:

- Verifying their compliance with all employment and legal requirements including payment of remuneration to Workers, annual leave, Long Service Payment scheme registration, Workers Compensation insurance (including self-insurance arrangements), superannuation fund membership and contributions, over-award payments (e.g. redundancy fund contributions).
- Complying with all aspects of the GST, including the registration for an ABN number
- For major projects and Key Trades, having their own IR plan which is compatible with the Manteena project IR plan
- Evidence from DEWR of compliance of industrial agreements.
- Non-Compliance with the above requirements - worker entitlements and insurances in particular - are considered the largest potential industrial relations risk to a project. To mitigate these risks, Manteena will monitor throughout the project (monthly) compliance with these requirements. Sub-contractors providing verification of such requirements is a prerequisite to receiving progress payments. Contract Administrators shall track the status via detailed spread sheets and take appropriate action if required. Records shall be systematically filed and be available for the duration of the project. Records shall be archived on Completion.

12.19 Subcontracts

Prior to entering a subcontract, the Sub-contract Builder will:

- Evaluate the Sub-contractor's business structure
- Establish an understanding of their policies in relation to Industrial Relations management
- Provide details of Manteena's Industrial Relations management for the particular project
- Assess the Sub-contractor's ability to comply with the Project Industrial Relations Plan.

12.20 Supplementary Labour

We will accept Sub-contractors outsourcing supplementary labour providing the people are appropriately qualified and certified for the type of duties expected of them. It is worth noting that the Client has placed a high emphasis on location participation.

12.21 Records, Measurement, Evaluation and Review

The Manteena Management system complies with the requirements of ISO 9001, ISO 45001, ISO 14001, ISO 31000 and The Work Health and Safety Act 2011 and Regulations 2011.
Records are identified, collected, filed and maintained in accordance with Manteena quality procedures for records.

- Records associated with Industrial Relations are:
- Award and registered agreements
- Audit and management review reports
- Records of Industrial Relations issues or grievances
- Training on IR matters
- Sub-contractor verification records for compliance with employment and legal obligations. These are required monthly and a prerequisite to making progress payments
- Manteena verification records for compliance with employment and legal obligations

All projects are audited on a regular basis, generally every 6 months. The scope of the audit covers all issues from contract administration, project management, compliance with the specification on issues

of Quality, WHS, the Environment and Industrial Relations and corrective action from the previous audit.
Audits are proactive and there is a lot of emphasis placed on improving the processes for all stakeholders. Copies of all audit reports are provided to all project staff and the Directors. Results of audits are discussed at the Monthly Senior Managers Meeting and on exception at the Project Reviews with the Board and the effectiveness of all systems including the HIRAC and IR management systems are reviewed against documented objectives. Manteena aims to achieve a nil downtime and therefore nil cost for IR related issues.
Site meetings are used to monitor the performance of the project on communication between all parties, time management, costs, quality, safety, claims and issue resolution, environment, contractual relationships, Industrial Relations management, consultation and Sub-contractor performance.
In addition, the Senior Management Team consisting of the Directors, Finance Manager, Health Safety Quality Environment Manager, Branch Managers and others as required meet monthly to review progress at an executive level. This Team monitors the effectiveness of the Manteena Management System and it reviews the systems and procedures.

Associated Documentation:

- HRP-002 Grievance Handling Procedure

13. HUMAN RESOURCES (HR) AND TRAINING

Manteena has achieved its great results through the success of its staff to perform professionally as a team and reflect the positive values of the company to the people they deal with on a day-to-day basis. To ensure our continued success, we need our people to:

- manage strategies linked to our business goals
- implement management practices that are the responsibility of everyone in the Company
- reflect the values we hold to be important including a commitment to completing tasks, with honesty and integrity in all our dealings with people.

13.1 Planning

- Detailed within Project and Business Plans.

13.2 Recruitment and Retention

- Recruitment practices are streamlined and tailored to making sure we employ the right people for the right job at the right time.
- We anticipate recruitment needs by monitoring staff turnover, satisfaction, and future skills needs.
- We offer the right people competitive salary and employment conditions.
- We recognise and reward the effort and contributions our Workers make toward our success.

13.3 Training and Development

Training and development activities are linked to corporate business needs and goals.
Appropriate training and development opportunities are identified and provided for all staff, are flexible in approach to meet the learners needs and are evaluated.
Supporting and developing our staff for a long career with the Company through implementing a Performance Development Program which is a 2-way dialogue between Worker and supervisor which focuses on:

- linking each person's work to their position description and to Company outcomes
- encouraging staff to participate in planning their work, setting long term goals, determining the resources needed
- evaluating progress towards achieving work goals encouraging staff to consider their learning needs for their current job and future career goals as part of performance development. We see the improvement of skills increasing the value of staff to themselves firstly, the company and to the industry as a whole.

Reference:

- Manteena Corporate Training Plan
- QP-920 Training, Communication and Consultation Procedure

13.4 Safety At Work

Manteena is committed to ensuring staff, Contractors, clients and visitors are safe at all times and we achieve that through our WHS systems, maintaining compliance to all safety standards and fostering a positive safety culture. Refer to Manteena's Work Health and Safety Plan in section 4.0 of this document.

13.5 Return to Work Plan / Notice

Manteena is committed to caring for our staff following injury and complying with our responsibilities under Section 109 of the Workers Compensation Act 1951 (as amended), the Work Health and Safety Act 2011 and the National Return to Work Strategy 2020-2030.
Specifically, we are committed to:

- Commencing the occupational rehabilitation process as soon as possible after injury.
- Providing early access to rehabilitation services to those in need.
- Returning an injured worker to work as soon as possible following injury, subject to medical opinion.
- Providing suitable duties/employment to injured workers where reasonably practicable and otherwise assisting them with their return to work in a safe and proper manner by participating in the development and implementation of an individual Personal Injury Plan.
- Ensuring that participation in a Personal Injury Plan does not prejudice an injured worker's rights.
- Maintaining confidentiality of rehabilitation records.
- Consulting with workers and unions to ensure that the employer's Return to Work Program operates effectively.
- A return-to-work plan / notice shall be completed and posted on all Manteena site notice boards for the information of persons on those sites

14. TRANSPORT SAFETY MANAGEMENT PLAN OVERVIEW

14.1 Purpose

The Transport Safety Management Plan provides guidance on the minimum requirements for management of transport safety including Chain of Responsibility (CoR) provision by Manteena and its Supply Chain Partners engaged in the delivery of Manteena's transport activities. The intent of this Management Plan is to ensure Manteena, its Supply Chain Partners, Contractors, and their Sub-Contractors meet their responsibilities under the Heavy Vehicle National Law (HVNL).
The Transport Safety Management Plan does not in any way replace, reduce or limit Manteena or its Supply Chain Partners responsibilities or liability under the HVNL, Heavy Vehicle National Regulations, State Road Rules and Australian Vehicle Standards. Manteena is responsible for ensuring it, its Supply Chain Partners and their Sub-Contractors comply with all aspects of the HVNL, including the CoR provisions.
Manteena may, in its contracts, require its Supply Chain Partners and their Subcontractors to implement additional measures and controls for managing risks arising from the use of heavy vehicles to those set out in this Plan.

14.2 Scope

The Transport Safety Management Plan applies to all transport activities involving heavy vehicles over 4.5 tonnes Gross Vehicle Mass (GVM) as well as speed and fatigue regulated heavy vehicles as defined in the HVNL, engaged in the delivery of Manteena's transport activities including but not limited to the transport of:

- Equipment, plant, and people
- Packaged goods and materials
- Any unloaded heavy vehicle while travelling or on a return journey.
- either travelling to, or from any premises, site or work area operated by Manteena and or its Supply Chain Partners.

This Plan covers CoR compliance within all areas of heavy vehicle compliance:

- HV Fatigue Management
- HV Speed Management
- HV Mass and Dimension Management
- HV Load Restraint Management
- Safety and Roadworthiness Management
- HV Contractor Management
- HV Training and Competency
- Transport Safety Risk Management
- Transport Safety Monitoring Measurement and Evaluation.

14.2.1 Statement Of Commitment

Manteena is committed to achieving the receival and delivery of goods and products from and to its supply chain in accordance with progressive industry CoR and WHS practices, as well as compliance with relevant WHS and HVNL legislation, Standards and Codes of Practice.
As part of this, Manteena is committed to ensuring so far as it can control or influence, it will eliminate or minimise where reasonably practicable all safety and CoR related risks associated with its transport activities including those conducted by its Supply Chain Partners, Contractors and their Subcontractors.
Manteena is committed to providing the time, resources and expertise required to eliminate or minimise hazards and prevent incidents and injury / illness occurring in the environments we undertake our transport activities.
Through implementation of this Plan Manteena aims to ensure compliance with the HVNL and to seek continuous improvement in all our transport activities.

14.3 Transport Safety Policy

Manteena has established a framework for developing and implementing an essential **Transport Safety Policy** which act as a compass by providing the direction and framework for establishing key corporate level performance measures and related improvement objectives and targets.
The Executive Officer has overall responsibility for defining, documenting, implementing the **Transport Safety Policy** in consultation with the management teams and other personnel, or their representatives.
Management ensures that our established **Transport Safety Policy** is communicated and made available to all employees, other persons engaged in our business transport activities and, where applicable, our supply chain partners.
Workers are inducted into the **Transport Safety Policy** prior to works commencing on site and have access to them throughout the duration of the project.
The **Transport Safety Policy** shall be applicable across the whole organisation.

14.3.1 Policy

Manteena is committed to achieving Heavy Vehicle National Law (HVNL) and Chain of Responsibility (CoR) compliance, and this policy outlines how Manteena will do all that is reasonably practicable, to ensure safety in all our transport activities.
Our **Transport Safety Policy** and management system is implemented and maintained to ensure we meet the objectives of HVNL to:

- Promote public safety;
- Manage the impact of heavy vehicles on the environment, road infrastructure and public amenities;
- Promote industry productivity and efficiency in the road transport of goods and passengers by heavy vehicles;
- Encourage and promote productive, efficient, innovative, and safe business practices.
- Drivers of heavy vehicles not to exceed a speed limit applying to the driver;
- Ensure that roadworthiness compliance is included as a contractual requirement;
- Ensure all vehicles are checked prior to every shift to ensure basic mechanical issues are identified and rectified prior to commencement;

- Investigate any matters that are identified through pre-start or maintenance inspections and rectify any matters that may present a risk to safety;
- Workers are provided with regular reminders about the importance of working together to ensure vehicles do not present a risk to themselves, the public, road infrastructure and the environment a due to poor maintenance or unsafe vehicles.
- Another person, including another party in the Chain of Responsibility, not to contravene HVNL by eliminating, or minimising where reasonably practicable, driver fatigue risks, load management risks, arising from our transport activities.

Manteena is committed to eliminating or minimising where reasonably practicable, all transport-related risks throughout our organisation and associated transport activities and tasks by implementing a Transport Safety Management program that addresses the key risk areas of mass, dimension, load restraint, fatigue, speed and heavy vehicle safety and roadworthiness.
Manteena is committed to providing the time, resources and expertise required to conduct all necessary activities to prevent hazards arising and incidents and injury/illness occurring in the environments we undertake our transport activities.
Through implementation of this policy, Manteena aims to ensure the safety of our transport activities, ongoing compliance with the HVNL and seek continuous improvement where opportunities arise.

This policy and supporting procedures apply to all Manteena's employees, other persons engaged in our business transport activities and, where applicable, our supply chain partners. This includes Registered Operator, Prime Contractor, Transport Operator, Consignor/Consignee, Loading Manager, Loader and Unloader, Scheduler, Packer, and responsible persons.
Manteena will seek continual improvement and compliance with relevant legislation by ensuring all elements of our risk management program are monitored, reviewed, and evaluated on a regular basis in consultation with the employees and contractors, supply chain partners and other relevant duty holders.

(**Note**: a signed copy of this policy is maintained by Manteena)

15. ATTACHMENTS

15.1 Project Hazard Risk Assessment and Register
15.2 Emergency Response and Evacuation Plan
15.3 Site Establishment Plan
15.4 Construction Program
15.5 Inspection and Test Plan (ITP)
15.6 Project Handover
15.7 Project Hazard Checklist
15.8 Pre Commencement Checklist
15.9 Temporary Traffic Management Plan
15.10 Site Contacts List
15.11 Nearest Hospital (Map and Directions)
15.12 Transport Safety Management Plan

MANTEENA

COMMERCIAL / SECURITY / RESIDENTIAL CONSTRUCTION

INTEGRATED MANAGEMENT PLAN

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Manteena Commercial Pty Ltd holds:
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