

Evolution Civil Maintenance Pty Ltd

51 Heathcote Road, Moorebank NSW 2170

Tel: 1300 880 476 Fax: 1300 880 479 ABN: 81 140 124 858

email: info@evolutioncivil.com.au website: www.evolutioncivil.com.au

Safe Work Method Statement								
Activity:	Concrete Repair W	Concrete Repair Works						
Client:	Fulton Hogan Industri	Fulton Hogan Industries Contract No:						
Project:	SRAPC Maintenance Works			Location Ref:				
Prepared By:	Ben Spletter	Position:	National Civils Manager	Signature:	- Al-	Date:	25/09/2024	
Approved By:	Ian Haigh	Position:	HSEQ Manager	Signature:	J. Hal	Date:	25/09/2024	

High Risk Construction Activities - Monitoring & Review

- Our works are considered to be a **High-Risk Construction Activity.** The following SWMS is used to identify the hazards, assess the associated risks and to develop appropriate control measures. Monitoring and review of control measures to enable the safe and controlled undertaking of works is undertaken by completion of *Daily Pre-Start & Site***Assessment (ECM-FORM-001) which is to be signed off by the nominated ECM Site Foreman and the ECM Site Team Members in acknowledgement.
- Site Audits & Assessments will be conducted during the works to ensure that personnel continue to operate in accordance with this SWMS using *Site Audit & Assessment Form* (ECM-FORM-002). Completed assessments will be reviewed and maintained as a record with all documentation related to this work site activity. The *Site Audit & Assessment Form* includes the means to continually assess other core competencies detailed within Evolution Work Instructions.
- A Site-Specific Risk Assessment must be undertaken using this document to determine and control any further or new risks that arise during the works on site. This SWMS is used to facilitate this Site-Specific Risk Assessment and is complimented by the use of a *Daily Pre-Start & Site Assessment* to document the same Risk Assessment process.
- All persons associated with the works must be given the opportunity to review and comment on the content of this SWMS, Work Instruction and any Safety Data Sheets for products that are used within the works.
- The Responsible Officer for the Works will be the nominated ECM Contract Foreman; this person will represent ECM on site and will be responsible for authorising all site documentation.
- All processes will be monitored and reviewed by our Workplace Health & Safety Committee.
- All ECM Personnel are provided with competency training on the safe use of plant and equipment assigned for the works. This training is provided in accordance with Evolution policy and procedures using approved Evolution Work Instructions and assessment documentation. A record of the completed training assessment is held on the employee personnel file.

Risk Assessment

The risk assessment process is undertaken in accordance with MGT-002 Risk Management which details a Risk Assessment process which adopts the following process:

STEP 1
Establish the Hazards /
Aspects



STEP 2
Identify the Risks /
Impacts



STEP 3
Assess probability and consequences

Issued: 25/09/2024 Review: 25/09/2025



STEP 4 Implement Control Measures



STEP 5 Monitor, Review & Evaluate

		Consequence: Level of severity					
		Insignificant	Insignificant Minor Mo		Major	Catastrophic	
	Almost Certain	3	3	4	4	4	
ıld happen	Likely	2	3	3	4	4	
Likelihood: How likely it could happen	Possible	1	2	3	4	4	
	Unlikely	1	2	2	3	4	
	Rare	1	2	2	3	3	

Consequence: Level of severity				
Descriptor	Description			
Catastrophe	Safety - Fatality or Multiple fatalities. Or significant irreversible effects to one or more persons. Environmental - Very serious, long term environmental impairment of ecosystem functions.			
Major	Safety - Severe irreversible disability (>30%) to one or more persons. Environmental - Very serious, long term environmental impairment of ecosystem functions.			
Moderate	Safety - Moderate irreversible disability or impairment (<30%) to one or more persons. Environmental - Serious medium term environment effects.			
Minor	Safety – Minor injury sustained, requiring medical treatment. Environmental - Moderate, short term effects but not affecting ecosystem functions.			
Insignificant	Safety -No medical treatment required. Environmental - Minor effects on biological or physical environment.			

Likelihood: How likely it could happen				
Descriptor Description or Frequency				
Almost Certain	Highly likely to occur.			
Likely	Has the potential to occur frequently.			
Possible	It is a possibility that it will occur without adequate controls in place.			
Unlikely	An occurrence is unlikely.			
Rare	An occurrence is highly unlikely to occur.			

In order to simplify the Risk Assessment process the numbers from the Risk Assessment matrix are converted into a clear descriptor so that the assessor and other workers can easily identify the level of risk through the process. To achieve this the following will apply:

Level of Risk		Description of Risk Level
4	VERY HIGH	STOP WORK! Do not continue until suitable controls are in place to reduce the risk.
3	HIGH	It is considered safe to proceed with the appropriate Control Measures in place. Risks must be Monitored and Reviewed as works progress.
2	MEDIUM	The risks are considered to be suitably controlled to allow works to progress safely in accordance with standard operating procedures.
1	LOW	Minimal risk is posed. Works may proceed in accordance with standard operating procedures.

The following **Hierarchy of Controls** outlines the control measures implemented through the process in order of decreasing effectiveness; taken from *NSW Workcover Hierarchy of Controls* Factsheet.

Issued: 25/09/2024 Review: 25/09/2025

Eliminate:

Remove the Hazard by designing out. For example; get rid of the dangerous machine.

Substitute:

Substitute the Hazard with a safer alternative. For example; replace the machine with a safer one.

Isolate:

Isolate the hazard from anyone who could be harmed.

For example; keep the machine in an enclosed area and operate it remotely.

• Engineering:

Use Engineering controls to reduce the risk. For example; attach guards to the machine to protect users.

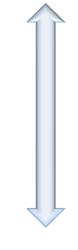
Administrative:

Use Administrative controls to reduce the risk. For example; train the workers how to use the machine safely.

• Personal Protective Equipment (PPE):

Use Personal Protective Equipment. For example; wear gloves and goggles when using the machine.

Most Effective



Least Effective

Type of high-risk construction work	☑ Work that is carried out in an area at a workplace in which there is any movement of powered mobile plant.	☐ Work that is carried out in or near a shaft or trench with an excavated depth greater that 1.5 metres or a tunnel.	☑ Work that is carried out on, adjacent or near a road, railway, shipping lane or others traffic corridor that is in use by traffic other than pedestrians.
(as defined in regulation 291 of the Work Health and Safety Regulation NSW 2017)	☐ Work that is carried out on a telecommunication tower.	☐ Work that involves the use of explosives.	☐ Work that involves tilt-up or precast concrete.
	☐ Work that involves demolition of load-bearing structure or otherwise related to the physical integrity of the structure.	☐ Work that is carried out in or near a confined space.	☐ Work that involves a risk of a person falling more than 2 metres.
	☐ Work that involves, or is likely to involve the disturbance of asbestos.	☐ Work that is carried out on or near chemical, fuel, or refrigerant lines.	☐ Work that involves diving work.
	 Work that involves alterations or repairs that require temporary support to prevent collapse. 	☑ Work that is carried out on or near energised electrical installations or services.	☐ Work that is carried out in or near water or other liquid that involves a risk of drowning.
	☐ Work that is carried out in an area in which there are artificial extremes of temperature.	☐ Work that is carried out in an area that may have a contaminated or flammable atmosphere.	

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
1. Pre-Contract Consultation & Risk Mitigation.	 Working in close proximity to live Traffic. Working near Live Services; Water, Electricity, Fibre Optics, etc. Working in close proximity to the public. Working in close proximity to other Contractors and Site Traffic. Working in close proximity to Mobile Plant. 	VERY HIGH (4)	 Ensure that the correct Products and Systems are selected and used for the works to ensure Hazards and Risks are removed or reduced to a minimum. Ensure that the works are accessed in the safest possible manner using an appropriate level of Traffic Management. Consider all options; i.e. partial or full closure where possible. Dial B4 U Dig information to be obtained from Principal Contractor unless agreed otherwise. If potential service conflict identified (within 1m of proposed Guardrail posts), Principal Contractor to locate services using potholing / vac truck. If Evolution to carry out any ground penetrating activities, work under Principal Contractors Permit to excavate (if required). Ensure that all ECM personnel and subcontractors have attended the appropriate site inductions. Ensure that all ECM personnel, vehicles and subcontractors are compliant with any project specific requirements. Ensure that all ECM personnel and subcontractors are aware of safety criteria including safe distance from Safety Barriers, Mobile Plant, etc. and that the SWMS is revised in advance where appropriate and practicable to do so. 	HIGH (3)	Project Manager

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
2. Establishing to Site.	 Possible Road Traffic Accident caused during approach and entry to site by work vehicles. Possible collision with other site users while entering site. 	HIGH (3)	 Site Access & Egress procedure to be discussed at Site Induction and Pre-Start Briefings that follow. Ensure all Work Permits, TCP's and Road Occupancy Licences are in place and approved for the works to be undertaken. All vehicles must display orange flashing beacons and signal clearly 400 metres from site entrance point. Slowly reduce speed to ensure safe entry into site. UHF Radios are to be used so that communication is made on approach to the site work area entrance. 	MEDIUM (2)	All Staff
3. Driving on Site.	Possible collision with other site users while driving through site or manoeuvring site vehicles.	VERY HIGH (4)	 All vehicles must continue to display orange flashing beacons while on site. Site traffic speeds are restricted to 20 km/h; reduced to walking speed around Pedestrians and Operating Plant. All vehicles must be fitted with compliant reversing beepers or quackers. A banksman / spotter must be used during all reversing manoeuvres. Vehicles must have fitted UHF radios. Where Mobile Plant is in use ensure that the appropriate safe distances are maintained and processes adhered to during any site movements. UHF Radios to be used to communicate with Mobile Plant operators. 	HIGH (3)	All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
4. Creating a Safe Area of Work on Site	 Vehicles entering the work site causing incident or injury to workers. Injury caused by flying debris caused by passing traffic. Working around mobile plant. Exposure to noise created by passing traffic, mobile plant, etc. Slips, Trips & Falls. 	HIGH (3)	 Stay within the designated worksite area. Ensure that suitable Speed Zones and Safety Zones are implemented to ensure safe distances are maintained between workers and passing traffic. Ensure that the appropriate distances are maintained between Workers and Mobile Plant. Provide adequate task lighting when appropriate. UHF Radios to be used to communicate with Mobile Plant operators. Ensure that the appropriate PPE is worn; i.e. hearing protection if personnel are exposed to noise from other operations. Fire Extinguishers, Spill Kits, SDS Information and First Aid Kits are to be made readily available at the location of work as a precautionary measure. Implement good housekeeping measures to ensure that Slips, Trips and Falls are prevented. Provide designated areas for the storage or laydown of Plant, Materials and Equipment where they will not present a hazard to site users. Use signage where appropriate. 	MEDIUM (2)	Site Foreman

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
5. Working at Height; includes working on a Bridge Deck or an elevated section of a structure.	 Personnel falling from height. Accident or Injuries sustained by Plant, Equipment, Materials or Debris falling from height. 	HIGH (3)	 When working at height a suitable form of access must be provided to ensure that the area of work can be accessed safely. Where scaffold access is required it shall be erected by trained and competent personnel only. Only suitably trained and competent personnel are able to operate access such as EWP's. Handrails to be installed on exposed edges where a fall from height of over 2 metres exists. Do not store items of plant or materials against perimeter fencing, parapet walls or anywhere where there is a risk of falling. Safety Screening to be used to contain the work site and any dirt and debris generated by the works. Place a physical barrier adjacent to parapet walls where the parapet is less than 900 mm in height from foot level. 	MEDIUM (2)	Site Foreman & All Staff
6. Handling and Storage of Materials, Plant and Equipment.	 Cuts & Abrasions. Slips, Trips and falls. Manual Handling. 	HIGH (3)	 Store plant and materials in a safe designated area. Maintain good site housekeeping. All lifts to be completed within individual lifting capacity. Correct lifting techniques/procedures to be used. Plan route prior to starting lift. Wear supplied PPE as detailed within the PPE Requirements Table. 	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
7. Re-fuelling of Plant & Equipment	 Fuel spill. Fire or explosion. 	VERY HIGH (4)	 As far as is reasonably practicable all site refuelling must be undertaken off of site before the commencement of works. Where necessary site re-fuelling must be undertaken in strict accordance with ECM Site Refuelling procedures. Minimum amounts of fuel to be kept on site. Fuel to be stored on ECM vehicles or within a suitable bunded area. Fire extinguishers must be located at the local area as a precautionary measure. Spill kits must be kept at hand and used as required. 	HIGH (3)	Site Foreman & All Staff
8. Provision of Site Task Lighting	 Impair vision of passing vehicles. Electrocution from site power and leads. 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Place lighting so as not to impair the vision of passing vehicles or other site users or housing abutting the road corridor. Use lead stands to keep leads above floor level. Electrical tagging must be current. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. 	MEDIUM (2)	Site Foreman & All Staff
9. Provision of 240 volt site power	Electric Shock.	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Use lead stands to keep leads above floor level. Electrical tagging must be current. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. Generators must be fitted with RCD's. 	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
10. Saw Cutting & Excavation works	 Cuts & Abrasions. Noise, dust and debris. Manual Handling. Flying debris 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Wear supplied PPE as detailed within the PPE Requirements Table. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. All non-critical workers to maintain a 2 metre safety zone around cutting and grinding works. 2 main methods of suppressing dust – Wet control or Ventilation/on Tool dust extraction(Vacuum) Exclusion zones whilst these activities take place for those personnel not wearing Respiratory Protective Equipment. 3m exclusion zone when using Wet/Extraction method to control or 10m when no control in place All workers to wear respiratory Protective equipment while these activities take place or anything that causes RCS All personnel to hold a fit test card and must carry with them at all times Use appropriate control measures such as Silt Socks or Site Screens to contain dirt debris generated during our works. Follow ECM Manual Handling instructions. Where cutting or grinding produces sparks a Hot Works Permit may be required. Where required ensure that this has been provided prior to commencing work. 	MEDIUM (2)	Site Foreman & All Staff
11. Preparation Works; incorporates Abrasive Cleaning, Cutting & Grinding	 Cuts & Abrasions. Noise, dust and debris. Manual Handling. 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. Wear supplied PPE as detailed within the PPE Requirements Table. 	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Hazards Identified Inherent Risk Rating Co		sidual Rating	Person Responsible
			 2 main methods of suppressing dust – Wet control or Ventilation/on Tool dust extraction(Vacuum) Exclusion zones whilst these activities take place for those personnel not wearing Respiratory Protective Equipment. 3m exclusion zone when using Wet/Extraction method to control or 10m when no control in place All workers to wear respiratory Protective equipment while these activities take place or anything that causes RCS All personnel to hold a fit test card and must carry with them at all times Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. Use appropriate control measures such as Silt Socks or Site Screens to contain dirt debris All non-critical workers to maintain a 10 metre safety zone around grit blasting works; and a 2 metre safety zone around cutting and grinding. During Abrasive Cutting wear double face protection. The use of 9" Grinders for cutting is not permitted. Where Hot Works Permit is required ensure that this has been provided prior to commencing work. Ensure that Fire Extinguishers have been suitably located prior to the commencement of hot works. During Hot Works and where a risk of fire is presented a fire-spotter may be necessary during and after the hot works. This must be determined prior to the start of work. 		
12. Cleaning & Drying of Substrate using	Cuts & Abrasions.Noise, dust and debris.	HIGH (3)	competent personner competency assessed	DIUM (2)	Site Foreman

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
Compressed Air and LPG Gas Torches.	 Fire or explosion. Burns. 		 Wear supplied PPE as detailed within the PPE Requirements Table. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. Follow Manual Handling instructions. Gas bottles must remain secured on ECM vehicles or secured on a site trolley. Where Hot Works Permits are required they must be provided before works commence. Plant & Equipment is only to be used by suitably 		& All Staff
13. Setting Out & Assembly of Temporary Works to facilitate the repair; i.e. formwork placement, or placement of injection ports	 Cuts & Abrasions. Noise, dust and debris. Manual Handling. 	HIGH (3)	competent personnel. Competency assessed using ECM Work Instruction Procedures. System to be set out and assembled by suitably competent personnel. Competency assessed using ECM Work Instructions. Wear supplied PPE as detailed within the PPE Requirements Table. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. All lifts to be completed within individual lifting capacity. Correct lifting techniques/procedures to be used. Use mechanical means or share the load where the load exceeds individual lifting capacity	MEDIUM (2)	Site Foreman & All Staff

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
14. Install Concrete Repair materials using Construction Products; Grouts, Mortars, Resins, Sealants, etc.	 Cuts & Abrasions. Noise, dust and debris. Manual Handling. Ingestion, inhalation or skin contact with construction products. 	HIGH (3)	 Plant & Equipment is only to be used by suitably competent personnel. Competency assessed using ECM Work Instruction Procedures. System to be installed by suitably competent personnel. Installation works include the Mixing, Placement and Curing of ancillary Construction Products. Competency is assessed in accordance with using ECM Work Instructions. Exclusion zones whilst these activities take place for those personnel not wearing respiratory protective equipment. 3m exclusion zone when using Wet / Extraction method to control or 10m when no control in place. All workers to wear respiratory protective equipment while these activities take place or anything that causes RCS. All personnel to hold a fit test card and must carry with them at all times. Wear supplied PPE as detailed within the PPE Requirements Table. Inspect Plant and Equipment before start of work each day and record on ECM Pre-Start records. All lifts to be completed within individual lifting capacity. Correct lifting techniques/procedures to be used. 	MEDIUM (2)	Site Foreman & All Staff
15. Demobilisation from site on completion of work.	 Risk of incident where works have not been completed or have fully cured. Risk of incident where an obstruction is left within the carriageway. Possible Road Traffic Accident caused during exiting of the worksite. 	HIGH (3)	 As a part of our Final Inspection ensure that all works have been undertaken in accordance with procedure and that all works have suitably cured prior to opening the road space to traffic. Site is to be visually checked prior to demobilising from site to ensure that area is clear of all plant, equipment and materials. Site Access procedure must be adhered to. 	MEDIUM (2)	Site Foreman

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible
			 All vehicles must display orange flashing beacons and signal clearly before, during and after exiting for a short period until they have reached the speed of other traffic. UHF Radios are to be used so that communication is continued during exiting the work site. Where required notification must be provided to the appropriate body to advise that works are complete and that we have left site. 		

Site Specific Risk Assessment

The following risk assessment schedule is provided to allow site personnel to assess and control and additional hazards that may present themselves over and above those considered to be inherent risks documented in the preceding pages. An assessment will be made using the risk assessment chart also included within this document.

Activity	Hazards Identified	Inherent Risk Rating	Control Measures	Residual Risk Rating	Person Responsible

Safety Data Sheets

The following materials will be used during these works. In accordance with HSEQ-002 Handling, Storage & Use of Dangerous Goods all materials are evaluated prior to be approved for use using LOG-FORM-043 Product Assessment Form. This process considers all hazards presented by the material and provides consideration to the possibility of the elimination of any hazards through using alternatives. Where substitution is not an option all other hazards are investigated to ensure that all hazards and risks are effectively controlled. All materials that are Approved are included within our Approved Product list and the SDS information is introduced. SDS information is available both electronically through our Business improvement System, and also on site in hard copy within the ECM work vehicles.

Material	Description

Plant & Equipment Maintenance

The following items of **Plant and Equipment** are used during concrete repair works detailed within this SWMS. The competence of personnel is assessed in accordance with Work Instructions which form part of our certified Business Improvement System. All plant and equipment items are maintained in accordance with the same BIS procedures, with the daily checks and maintenance inspections that are required as a part of our daily pre-start inspections being undertaken as detailed below.

Plant & Equipment	Maintenance Checks	Frequency
Air Compressor	Check Oil & Fuel levels. Check for signs of damage or wear.	Daily before use
Compressor Hoses	Check for damage and wear.	Daily before use
Generators and Electrical leads	Check Oil & Fuel levels. Check for signs of damage or wear. Tagging must be current.	Daily before use
MIG and ARC Welders	Check for signs of damage or wear. Tagging must be current.	Daily before use
Hydraulic Lifting Arms	Check for signs of damage, wear or fluid leaks. Check hydraulic oil levels.	Daily before use
Road & Demo Saws	Check Oil & Fuel levels. Check cutting wheel is secured correctly. Check general condition for damage or wear.	Daily before use
Pneumatic Tools	Check for signs of damage or wear. Lubricate with hydraulic oil.	Daily before use
Electric Grinders	Check for signs of damage or wear. Tagging must be current. Check cutting wheel is secured correctly.	Daily before use
Electric Drills and Diamond Corers	Check for signs of damage or wear. Tagging must be current.	Daily before use
Abrasive Grit Blasters	Check hoses and connections for damage and wear.	Daily before use
Bitumen Heaters	Check Heat Transfer Oil, Engine Oil & Fuel levels. Check for Gas or Fluid leaks and general wear and tear.	Daily before use
Resin Heaters	Check Heat Transfer Oil levels. Check for Gas or Fluid leaks and general wear and tear.	Daily before use
Petrol Mixers	Check Oil & Fuel levels. Check for signs of wear and tear.	Daily before use
Electrical Mixers	Check for signs of damage or wear. Tagging must be current.	Daily before use
Oxy or Plasma Cutting Equipment	Check for signs of damage or wear. Check Hoses and Connections for Gas Leaks. Tagging must be current.	Daily before use
LPG Gas Torches	Check for signs of damage or wear. Check Hoses and Connections for Gas Leaks.	Daily before use
Hot Compressed Air (HCA) Lances	Check for signs of damage or wear. Check Hoses and Connections for Gas Leaks.	Daily before use

Personal Protective Equipment (PPE)

Long Sleeved Shirts & Pants, Lace-up Safety Boots, Safety Glasses, and Protective Gloves are mandatory items of PPE and are termed General PPE. The use of Hard Hats will be assessed by the nominated ECM Foreman / Supervisor with their use implemented where a risk of injury is present, or where use is a mandatory requirement of our client. In addition to our General PPE requirements the following list identifies the minimum level of PPE to be worn by ECM workers or subcontractors while undertaking specific tasks. In addition to these minimum requirements PPE use must be implemented to suit any additional hazard that may be presented during the works to offer the necessary level of protection to the worker; i.e. Dust Masks should be worn when dust is created, or similar.

Task	Minimum PPE Requirements
Air Compressor	General PPE.
Compressor Hoses	General PPE.
Generators and Electrical leads	General PPE.
MIG and ARC Welders	General PPE, Heat Resistant Gauntlets & Welding Mask.
Hydraulic Lifting Arms	General PPE.
Road & Demo Saws	General PPE, Hearing Protection, Impact Resistant Face Shield.
Pneumatic Tools	General PPE & Hearing Protection.
Electric Grinders	General PPE.
Electric Drills and Diamond Corers	General PPE.
Abrasive Grit Blasters	General PPE, Hearing Protection, Protective Gauntlets, Full Respirator System and Helmet.
Bitumen Heaters	General PPE, Impact Resistant Face Shield and Heat Resistant Gauntlets.
Resin Heaters	General PPE, Heat Resistant Gauntlets and Half Face Respirator (Organic Vapour & P2 Filters).
Petrol Mixers	General PPE.
Electrical Mixers	General PPE.
Oxy or Plasma Cutting Equipment	General PPE, Heat Resistant Gauntlets & Apron, Tinted Safety Goggles or Welding Mask.
LPG Gas Torch	General PPE.
Hot Compressed Air (HCA) Lance	General PPE, Heat Resistant Gauntlets and Hearing Protection.

Training and Qualifications

The following Training and Qualifications listed are those upon which Competencies are assessed in accordance with our certified Business Improvement System. The list outlines the general requirements only and the level of experience and competence of personnel will be assessed and developed in an ongoing manner:

- 1. Construction Industry Safety Induction
- 2. ECM Induction Training
- 3. Site specific induction of the client (as directed)
- 4. Drivers Licence (if required)
- 5. Plant and Equipment competencies (ERMG Work Instructions)
- 6. Hazard Identification & Risk Assessment Training

- 7. Forklift Licence (if required)
- 8. Hazardous Substance training including SDS and segregation training
- 9. Environmental Training including spill management
- 10. Product Training; proprietary system training
- 11. Manual Handling Training
- 12. First Aid Training

Codes of Practice and Legislation

The following Codes of Practice and Legislation are offered in a general sense with the full list of references being available within our Legal Compliance Procedure (MGT-006) that forms part of our certified Business Improvement System:

- ISO 45001:2018 OH&S Management System
- ISO 9001:2015 Quality Management System
- ISO 14001:2015 Environmental Management System
- Work Health & Safety Act 2011 (NSW)
- Work Health & Safety Regulation 2017 (NSW)
- Environmental Protection Act 1994 (NSW)
- Work Health & Safety Act 2011 (QLD)
- Work Health & Safety Regulation 2011 (QLD)
- Environmental Protection Act 1994 (QLD)
- Environmental Protection Regulations 2019 (QLD)
- Electrical Safety Regulations 2013 (QLD)
- Work Health & Safety Act 2011 (ACT)
- Work Health & Safety Regulation 2011 (ACT)

- Environmental Protection Act 1997 (ACT)
- Occupational Health & Safety Act 2004 (VIC)
- Occupational Health & Safety Regulations 2017 (VIC)
- Environmental Protection Act 2017 (VIC)
- Traffic Management for Construction or Maintenance Work Code of Practice 2008 (QLD)
- Hazardous Manual Tasks Code of Practice 2021(QLD/NSW)
- How to Manage Work Health and Safety Risks Code of Practice 2021(QLD)
- Managing the Risks of Plant in the Workplace 2021 (QLD)
 - Chain of Responsibility Legislation 2018

- Traffic and Road Use Management Manual (TRUM) 2021 QLD
- MUTCD (Part 3) (QLD)
- Managing Risks of Plant in the Workplace Code of Practice 2019 (NSW) /Vic)
- Safe Design of Structures Code of Practice 2021 (QLD)
- Work Near Overhead Power Lines Code of Practice 2006 (NSW)
- Cutting and Drilling Concrete and Other Masonry Products Code of Practice 1997 (NSW)
- Workplace Amenities and Work Environment Compliance Code 2008 (Vic)
- Road Management Act 2004 (VIC)
- Code of Practice Worksite Safety Traffic Management
- Managing respirable crystalline silica dust exposure in construction and manufacturing of construction elements Code of Practice OLD 2022

Reference Documents

The following document references are taken from our certified Business Improvement System that are considered relevant to these works. Additional Policies and Procedures are also available upon request and where considered appropriate on a Commercial in Confidence basis.

MGT-002 Risk Management

MGT-008 Corrective Actions & Improvements

MGT-009 Preventive Actions

MGT-FORM-032 Hazard Identification Notice

HSEQ-001 Environmental Management

HSEQ-002 Handling, Storage & Use of Dangerous Goods

HSEQ-007 Incident & Accident Reporting & Management

HSEQ-014 Manual Handling

HSEQ-FORM-002 Incident & Accident Report Form

LOG-001 Plant & Equipment

LOG-010 Contractor Management

LOG-FORM-043 Product Assessment Form

LOG-WI-001 to LOG-WI-047 Work Instructions

TRN-WI-001 to TRN-WI-053 Short Training Programs

ECM-FORM-001 Daily Pre-Start & Site Assessment

ECM-FORM-002 Site Audit & Assessment

ECM-FORM-003 Site Record Form

ECM-FORM-005 Toolbox Talk Form

ECM-FORM-009 Foreman's Instruction Sheet

ECM-FORM-010 to ECM-FORM-022 Material Requisition

ECM-001 to ECM-008 Work Method Statements

ECM-SWMS-002 Concrete Repair Works (v7)

I have been consulted and have assisted in the development and have been given the opportunity to comment on the content of this SWMS. I have read and understand how I am to carry out the activities listed in this SWMS. I have been supplied with the Personal Protective Equipment (PPE) identified in this SWMS and have been given training in the safe use of the equipment that I am required to use. I have read and understand the requirements set out in the Safety Data Sheets for the Hazardous Substances identified in this SWMS.

Name (print)	Name (sign	ed)	Date		Name (prin	t)	Name (sign	ed)	Date
ECM representative responsible for supervising on-site work, inspecting and approving work areas, work methods, protective measures, plant and equipment:									
Name:		Position:			Signature:			Date:	