


**Plant information**

<b>Plant item:</b>	Maeda LC383 Crawler Crane	<b>Plant identification details (asset/plant no.):</b>	Serial No 11065 Unit No – CC38301	
<b>Project:</b>				
<b>Competency required to operate the plant:</b>	Slewing mobile Crane (C2) with a capacity of 20Tonnes or less Certificate of Competency.			
<b>List all legislation, codes of practice and Australian Standards applicable to this item of plant:</b>	Plant Code of Practice 2005 Risk Management Code of Practice 2007 Mobile Crane Code of Practice 2006 AS 1418.1 Cranes Hoists and Winches Part 1 – General requirement. AS 1418.5 Cranes Hoists and Winches – Mobile Cranes. AS 2550.1. 2004 Cranes Hoists and Winches Part 1 – Safe Use – General requirements. AS 2550.5. 2002 Cranes Hoists and Winches – Safe use – Mobile Cranes AS 2759 Steel wire rope – Use operation and maintenance AS 4024 Safety of Machinery AS 60204.1 Safety of Machines – Electrical equipment			
<b>List other documentation relevant to this plant reviewed during this assessment? ie SWMS, SOPs, Manufacturer’s Handbook.</b>	SWMS Crawler Crane Operations. - LCPL Maeda LC383 Crawler Crane operations and maintenance manual.			
<b>Assessment conducted by: Names and positions</b>	Pace Cranes Anthony Heeks, Managing Director		<b>Date:</b>	

## Plant Hazard Identification and Risk Assessment

The following risk ranking criteria are used to assess the level of risk for the various aspects involved in a design. Higher risks require increased levels of control.

Consequence		Safety	Probability							
Substantial	Cannot achieve key team or major program milestone, > x days	Class 1 (Fatal Incident)	Risk	Almost Certain	Threat can be expected to occur. 75%-99%	5	10	18	23	25
Major	Major slip in key milestone or critical path impacted; X-X Days Slip	Class 1 (Permanent Injury)		Likely	Threat will quite commonly occur. 50%-75%	4	9	17	20	24
Moderate	Major slip in key milestone; not able to meet needed date, X-X Days Slip	Class 2 (Lost Injury Time)		Possible	Threat may occur occasionally. 25%-50%	3	8	13	19	22
Minor	Additional resources/re-planning required to meet need/key date, X-X Days Slip	Class 3 (Minor injury, medical treatment required)		Unlikely	Threat could infrequently occur. 10%-25%	2	7	12	15	21
Negligible	Minimal or no key impact on dates, X-X Days Slip	Class 3 (Slight injury First Aid)		Rare	Threat may occur in exceptional circumstance. 0%-10%	1	6	11	14	16

	Extreme Threat	Do not proceed
	Very High Threat	Do not proceed
	High Threat	Proceed with strict controls
	Moderate Threat	Proceed with strict controls
	Low Threat	Proceed

	Negligible	Minor	Moderate	Major	Substantial
Negligible	5	10	18	23	25
Minor	4	9	17	20	24
Moderate	3	8	13	19	22
Major	2	7	12	15	21
Substantial	1	6	11	14	16

**Note:** Existing SH&EWMS etc are to be reviewed along with other control measures relating to the plant. If the assessment identifies that a SH&EWMS is not fit for the purpose, note this as a corrective action required in the **Additional Controls** section.

## Plant Hazard Identification and Risk Assessment

**Maintenance and repair assessment** (Complete this section for assessment of **Major Maintenance and repair** activities only – Minor maintenance, inspection and casual access by the operator to included in operational assessment)

<b>Maintenance/repair being assessed:</b>	Yes, records available.		
No. of employees working on (or likely to be working on) plant:	Depending on type of work – minimum 1	<b>Estimate of duration of activity:</b>	
<b>Type of activity:</b>	<b>Scheduled frequency.</b>	<b>By whom</b>	<b>Location of maintenance:</b>
<input checked="" type="checkbox"/> Scheduled. Inspections to be carried out per Maeda Manufacturer's Operational and Maintenance Manual  Crane Safe certificates to be attached	• Daily	Operator	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.
	• 50hrs	Operator	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.
	• 100hrs	Operator	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.
	• 250hrs	Service Technician	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.
	• 500hrs	Service Technician	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.
	• 1000hrs	Service Technician	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.
	• 1500hrs	Service Technician	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.
	• 2000hrs	Service Technician	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.
	• 10 Yearly	Service Technician	<input type="checkbox"/> On site - <input checked="" type="checkbox"/> Off site.
<input checked="" type="checkbox"/> <b>Unscheduled.</b>	When and if it malfunctions	Service Technician	<input checked="" type="checkbox"/> On site - <input type="checkbox"/> Off site.

## Plant Hazard Identification and Risk Assessment

<p><b>Competency requirements for maintenance:</b> <i>(eg electrical, welding, etc)</i></p>	<p>All inspections maintenance and repairs shall be carried out by a competent person.</p> <ul style="list-style-type: none"> <li>(a) A competent person inspecting welding on a crane should have suitable knowledge and experience in the inspection and testing of welds, including knowledge of non-destructive testing methods, and AS/NZS 1554: Structural steel welding.</li> <li>(b) A competent person inspecting hydraulic systems and circuitry on the crane should have suitable knowledge and experience in the inspection and testing of hydraulic systems.</li> <li>(c) A competent person inspecting electrical systems, including the ability to read circuit diagrams and understand relevant technical standards. This person <b>must be a qualified and licensed electrician</b> where the voltage of the electrical system is greater than 50 volts alternating current or 115 volts direct current.</li> </ul>		
<p><b>References</b> <i>(Australian Standards, maintenance manuals etc):</i></p>	<p>Mobile Crane Code of Practice 2006, Plant Code of Practice 2005, Risk Management Code of Practice, AS 1418.1 Cranes Hoists and Winches Part 1 – General requirements, AS 1418.2.1997 Serial Hoists and Winches, AS 2550.1. 2004 Cranes Hoists and Winches Part 1 – Safe Use – General requirements, AS 2759 Steel wire rope – Use operation and maintenance, AS 4024 Safety of Machinery. AS 60204.1 Safety of Machines – Electrical equipment, AS 2550.5. 2002 Cranes Hoists and Winches – Safe use – Mobile Cranes</p>		
<p><b>Identified energy sources:</b></p>	<p>Diesel</p>	<p><b>State method of isolation:</b></p>	<p>Isolation Tag Procedure</p>
<p><b>Other permit to work required?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><b>If Yes, which permits:</b></p>	<p>N/A</p>

## Plant Hazard Identification and Risk Assessment

### Hazard identification and risk assessment during operations and/or maintenance activities

<b>Section 1</b> Put an <b>X</b> if the hazard does apply to the plant. Leave blank if the hazard does not apply to the plant.	<b>Section 4</b> Then indicate the <b>Consequence, Likelihood</b> and <b>Risk Rating</b> .
<b>Section 2</b> Write where on the plant the hazard exists.	<b>Section 5</b> Write the existing Controls and relevant Comments relating to additional controls required
<b>Section 3</b> Indicate when the exposure is likely to occur? During Operations ( <b>O</b> ), Maintenance ( <b>M</b> ) or Both ( <b>B</b> ).	<b>Section 6</b> Indicate the residual risk taking into account controls being implemented after considering applicable legislation, Codes, Standards, etc.

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Entanglement</b> <input checked="" type="checkbox"/> Arms, hands, fingers, or upper body <input type="checkbox"/> Legs, feet, or lower body <input checked="" type="checkbox"/> Hair, clothing, or jewellery <input type="checkbox"/> Cleaning brushes, rags etc <input checked="" type="checkbox"/> Isolation of energy sources <input type="checkbox"/> Other (please specify)	Engine	B	Major	Unlikely	High Threat 15	Ensure hands, fingers, loose clothing, jewellery and other limbs are not exposed to crush/pinch points when conducting maintenance works or pre-start checks.	Major	Rare	High Thre at 14
						Ensure lockout at main oscillation before maintenance works commence	Major	Rare	High Thre at 14
<b>Inadequate Access</b> <input checked="" type="checkbox"/> Falling <input type="checkbox"/> Hitting crane objects with part of body <input type="checkbox"/> Tools falling causing injury	Cab access and egress	B	Negligible	Possible	Low Threat 3	Ensure Boots are cleaned of all loose materials and maintain 3 points of contact during access and egress	Negligible	Unlikely	Low Thre at 2

**Plant Hazard Identification and Risk Assessment**

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Crushing/ Draw in/ Nip points</b> <input type="checkbox"/> Material falling or being ejected from working area <input checked="" type="checkbox"/> Uncontrolled or unexpected movement <input checked="" type="checkbox"/> Nip points <input type="checkbox"/> Inability to slow, stop, or immobilise plant <input type="checkbox"/> Isolation of energy sources <input type="checkbox"/> In-running rollers/gear sets  <input checked="" type="checkbox"/> Plant tipping or rolling over <input type="checkbox"/> Parts of plant closing or collapsing  <input checked="" type="checkbox"/> Trapping between plant and materials or fixed structures  <input checked="" type="checkbox"/> Failure resulting in loss of	Complete Crane	B	Major	Possible	Very High Threat 19	Only certified Operator (C2 or Higher) to operate machine in accordance with operators manual. Operator and Service Technician to read manual before operating or working on crane	Major	Rare	High Threat 14
	Complete Machine	B	Major	Possible	Very High Threat 19	Unsure machine safety labels are correctly positioned as per operators manual Keep fingers, hands and other body parts away from nip points Barricade and sign work area – no unauthorised personnel entry	Major	Rare	High Threat 14
	Track Mounted	O	Major	Possible	Very High Threat 19	Ensure machine stability by operating in accordance with the operator's manual.  Ensure ground conditions suitable for machine operations. – firm ground conditions. DO NOT set machine near soft ground, roadside or drilled holes etc	Major	Rare	High Threat 14
	Complete Crane	B	Substantial	Unlikely	Very High Threat 21	Barricade off and sign work area – No unauthorised personnel entry  Before moving machine operator to physically check around crane to ensure a clear zone to manoeuvre	Substantial	Rare	High Threat 16

## Plant Hazard Identification and Risk Assessment

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
contents or load <input checked="" type="checkbox"/> Falling objects <input checked="" type="checkbox"/> Load falling/moving due to power loss or plant failure  <input type="checkbox"/> Other (please specify)	Jib and Hook	O	Major	Unlikely	Very High Threat 21	Machine maintained in accordance with operators manual.  Only certified dogman to sling and direct loads  All lifting equipment to be inspected and maintained in accordance with AS  All materials to be inspected and secure prior to lifting	Major	Rare	High Threat 14
<b>Cutting/ Stabbing/ Puncturing</b> <input type="checkbox"/> Contact with sharp parts <input type="checkbox"/> Contact with flying parts or work pieces <input checked="" type="checkbox"/> Parts or work pieces breaking (disintegrating) <input type="checkbox"/> Work pieces ejected <input checked="" type="checkbox"/> Movement of plant or components <input checked="" type="checkbox"/> Isolation of energy sources <input checked="" type="checkbox"/> Body or body parts caught between moving components <input type="checkbox"/> Other (please specify) _____	Lift Chains	B	Major	Unlikely	High Threat 15	All lifting equipment to be inspected prior to use by competent person and have current test tag in place and be on site register	Major	Rare	High Threat 14
	Hook and load	O	Moderate	Unlikely	High Threat 12	Only nominated dogman to direct crane operator.	Moderate	Rare	Moderate Threat 11
	Complete crane	B	Moderate	Possible	High Threat 13	Access to crane area restricted to operator and authorised maintenance personnel.	Moderate	Rare	Moderate Threat 11
	Engine	M	Major	Unlikely	High Threat 15	Ensure lockout of main isolation switch before works commence.	Major	Rare	High Threat 14

## Plant Hazard Identification and Risk Assessment

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
	Complete crane	B	Major	Unlikely	High Threat 15	All nip points are to be highlighted by stickers or signage  Personnel not to place hands, fingers or other body parts in nip zones	Major	Rare	High Thre at 14
<b>Shearing</b> <input checked="" type="checkbox"/> Body or body parts caught between moving components	Between chains/slings and load	O	Major	Unlikely	High Threat 15	Ensure positive communication between operator and dogman via line of sight and/or radio communication.  Ensure lockout of main oscillation switch before works commence.	Major	Rare	High Thre at 14
<input checked="" type="checkbox"/> Isolation of energy sources  <input type="checkbox"/> Body or body parts shear when passing structure.	Engine	M	Major	Unlikely	High Threat 15	Ensure lockout of main isolation switch before works commence.	Major	Rare	High Thre at 14
<b>Friction</b> <input checked="" type="checkbox"/> Contact with moving parts or surfaces <input checked="" type="checkbox"/> Contact with moving material <input type="checkbox"/> Isolation of energy sources <input type="checkbox"/> Other (please specify)	Contact with lift chains	O	Moderate	Possible	High Threat 13	Dogman only to control crane load and also ensure no personnel encroaches the operating area.	Moderate	Unlikely	High Thre at 12



SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Striking / Impact</b> <input checked="" type="checkbox"/> Uncontrolled or unexpected movement of plant ( <i>warning sirens req'd?</i> ) <input checked="" type="checkbox"/> Uncontrolled or unexpected movement of components or material ( <i>warning sirens req'd?</i> ) <input type="checkbox"/> Moving objects due to parts or work pieces breaking (disintegrating) <input type="checkbox"/> Work materials protruding into travel path of Crane <input type="checkbox"/> Normal movement of plant <input type="checkbox"/> Isolation of energy sources <input type="checkbox"/> Other (please specify)	Hook with suspended load.	O	Major	Likely	Very High Threat 20	Audible alarm to indicate all crane movements.	Major	Rare	High Thre at 14
						Ensure a clear path of travel before any crane movements are undertaken.			High Thre at 14

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<p><b>Pressure</b></p> <p><input type="checkbox"/> Contact with fluids or gas under pressure as part of normal operation</p> <p><input checked="" type="checkbox"/> Contact with fluids or gas under pressure due to failure</p> <p><input type="checkbox"/> Contact with fluids or gas under pressure due to misuse</p> <p><input type="checkbox"/> Striking due to severed high pressure hoses/couplings</p> <p><input type="checkbox"/> Stored energy in machine systems/accumulators counterweights</p> <p><input type="checkbox"/> Isolation and bleeding of pressure energy sources</p> <p><input type="checkbox"/> Other (please specify)</p>	Hydraulic hoses	B	Moderate	Possible	High Threat 13	Qualified service personnel to maintain as per Maeda service manual	Moderate	Rare	Moderate 11

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Slips/ Trips/ Falls</b> <input checked="" type="checkbox"/> Uneven or slippery work or access surfaces entering or exiting the plant <input type="checkbox"/> Housekeeping hazards produced by the plant <input type="checkbox"/> Material ejected or falling from the plant <input type="checkbox"/> Inadequate work platforms (size, location, fall protection) <input type="checkbox"/> Access (ladders, stairs, walkways) to and from the plant <input type="checkbox"/> Lack of guardrails or fall protection <input type="checkbox"/> Collapse of the supporting structure <input type="checkbox"/> Other (please specify)	Crane work area	B	Moderate	Unlikely	Moderate 12	Ensure access to crane is free of any debris, grease, oil etc before entering.	Moderate	Rare	Moderate 11

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Loss of Stability</b> <input checked="" type="checkbox"/> Uneven or slippery work or access surfaces on the plant <input type="checkbox"/> Housekeeping hazards produced by the plant <input type="checkbox"/> Material ejected or falling from the plant <input type="checkbox"/> Inadequate work platforms (size, location, fall protection) <input type="checkbox"/> Access ladders from the plant <input type="checkbox"/> Lack of guardrails or fall protection <input type="checkbox"/> Collapse of the supporting structure <input type="checkbox"/> Other (please specify)	Access to Crane	B	Major	Possible	Very High Threat 19	Ensure access is clean of oil and debris  Maintain 3 points of contact when climbing onto crane	Major	Unlikely	High Threat at
<b>Uncontrolled movement</b> <input checked="" type="checkbox"/> Potential for unknown workers to operate plant whilst being serviced causing safety concerns <input type="checkbox"/> Plant fails to respond to controls when needed <input checked="" type="checkbox"/> Plant operated when "Out of Service" <input type="checkbox"/> Other (please specify)	Main isolation switch	B	Substantial	Possible	Very high Threat 22	Isolate controls to machine before doing any works.  Place "Out of Service" tag at main isolation switch	Substantial	Rare	High Threat at 16

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Plant rolling over/ through limits</b> <input type="checkbox"/> Tip over hazard. <input type="checkbox"/> Correct qualifications of operator.	NA								
<b>Ejection of Parts</b> <input type="checkbox"/> Contact with sharp parts <input checked="" type="checkbox"/> Contact with flying parts or work pieces <input checked="" type="checkbox"/> Parts or work pieces breaking (disintegrating) <input type="checkbox"/> Work pieces ejected <input type="checkbox"/> Movement of plant or components <input type="checkbox"/> Isolation of energy sources <input type="checkbox"/> Body or body parts caught between moving components <input type="checkbox"/> Other (please specify)	Lift chains	O	Major	Possible	Very High threat 19	Dogman or Rigger to ensure chains are in good condition and within current test period.	Major	Rare	High Thre at 14
<b>Electrical Hazards</b>									

**Plant Hazard Identification and Risk Assessment**

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Electricity (Shock or burns) Contact</b> <input type="checkbox"/> Contact via damaged or poorly maintained electrical leads and cables <input type="checkbox"/> Overloading of electrical circuits <input type="checkbox"/> Isolation of electrical energy sources <input type="checkbox"/> Contact with or proximity to live electrical conductors <input type="checkbox"/> Contact via damaged electrical control devices <input type="checkbox"/> Contact via water entry <input type="checkbox"/> Other (please specify)									
<b>Fire Hazards</b>									
<b>Explosion / Fire</b> <input type="checkbox"/> Ignition of flammable atmosphere initiated by the plant <input type="checkbox"/> Ignition of flammable atmosphere initiated by material <input type="checkbox"/> Ignition of flammable material by the plant <input type="checkbox"/> Ignition of flammable material by the process <input checked="" type="checkbox"/> Other (please specify) Explosion of battery	Battery	B	Major	Possible	Very High Threat 19	Battery produces flammable gas – no smoking or ignition sources to be placed near battery.  When changing battery ensure tools do not contact positive battery post as sparks may ignite flammable gases.  When disconnecting battery always disconnect negative cable first.	Major	Rare	High Threat at 14

## Plant Hazard Identification and Risk Assessment

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Ergonomics Hazards</b>									
<b>Working environment and ergonomics</b> <input checked="" type="checkbox"/> Inadequate lighting levels <input type="checkbox"/> Glare from artificial light <input type="checkbox"/> Glare from natural light <input type="checkbox"/> Placement and identification of controls <input type="checkbox"/> Seating design or seating location <input type="checkbox"/> Human error or behaviour aspects (Human factors) <input type="checkbox"/> Manual handling tasks associated with the plant <input type="checkbox"/> Cramped or restricted work spaces (particularly for maintenance) <input checked="" type="checkbox"/> Noise levels <input type="checkbox"/> Vibration	Complete Crane	B	Major	Possible	Very high Threat 19	Ensure adequate lighting provided.	Major	Unlikely	High Thre at 15
						Hearing protection to be worn	Major	Unlikely	High Thre at 15
<b>Atmospheric contamination</b> <input checked="" type="checkbox"/> Exhaust fumes <input type="checkbox"/> Lack of oxygen <input type="checkbox"/> Dust, fibres, vapours <input type="checkbox"/> Thermally generated fumes <input checked="" type="checkbox"/> Restricted spaces associated with the plant <input type="checkbox"/> Other (please specify)	Engine	B	Major	Likely	Very High Threat 20	Air monitoring to be conducted and results recorded.  Industrial exhaust extraction fans to be installed.	Major	Unlikely	High Thre at 15

## Plant Hazard Identification and Risk Assessment

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>Temperature extremes</b> <input type="checkbox"/> Open flame, steam or heated air <input type="checkbox"/> Exposure to high or low temperature extremes (thermal comfort) <input type="checkbox"/> Contact with hot or cold plant components <input type="checkbox"/> Contact with hot or cold material <input type="checkbox"/> Other (please specify)	N/A								
<b>Condition and suitability of plant</b> <input type="checkbox"/> Age and condition <input checked="" type="checkbox"/> Service and maintenance history <input type="checkbox"/> Frequency of use (high or low use or inappropriate duty cycle) <input type="checkbox"/> Not fit for purpose <input type="checkbox"/> Unsuitable accessories/fittings <input type="checkbox"/> Inability to apply isolation/lock out devices <input type="checkbox"/> Accessories in unsafe condition <input type="checkbox"/> Use in arduous environment <input checked="" type="checkbox"/> Modification from original design <input type="checkbox"/> Other (please specify) n	All crane	B	Major	Possible	Very High Threat 19	Crane not serviced and maintained as per scheduled frequency. Ensure maintenance timeframes are adhered to as per manufacturer's requirements.	Major	Unlikely	High Thre at 15
					Possible modifications to original design could cause further hazards or reduce structural integrity. Any modifications must be approved by crane manufacturer.	Major	Unlikely	High Thre at 15	



**Plant Hazard Identification and Risk Assessment**

SECTION 1 Hazard category and examples	SECTION 2 Where on this plant does this hazard exist?	SECTION 3 Exposure during O M or B?	Section 4			SECTION 5 Controls and comments	SECTION 6 Residual Risk		
			Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
<b>System of work relating to the plant</b> <input type="checkbox"/> Emergency procedures relating to the plant <input type="checkbox"/> Communication systems associated with plant operation <input checked="" type="checkbox"/> Communication methods with plant operation <input type="checkbox"/> Use of Permit to Work system <input checked="" type="checkbox"/> Start up and shut down procedures <input type="checkbox"/> Secure against unauthorised use/access <input type="checkbox"/> Storage or restoration to service requirements <input type="checkbox"/> Other (please specify)	Crane start up <ul style="list-style-type: none"> <li>• Limit Switches</li> <li>• Wire Ropes</li> <li>• Control Switches</li> <li>• Chains</li> </ul> Crane shut down <ul style="list-style-type: none"> <li>• Control unit</li> <li>• Energy supply</li> </ul>	<b>B</b>	Major	Possible	Very High Threat 19	Ensure start up procedures are in accordance with manufacturers instructions.  Ensure crane has movement alarm and visual light when in operation	Major	Unlikely	High Threat at 15

Misc Hazards									
<p><b>Missing or incorrectly positioned safety related systems</b></p> <p><input type="checkbox"/> Guards missing</p> <p><input checked="" type="checkbox"/> Lack of signage</p> <p><input checked="" type="checkbox"/> Lack of communication systems</p> <p><input type="checkbox"/> Failure of emergency systems</p> <p><input type="checkbox"/> Other (please specify)</p>	Crane area of works	B	Moderate	Possible	High Threat 13	Ensure area of works is clearly defined with signage or delineation as required. Ensure communications between operator and dogman are established	Moderate	Rare	Moderate Threat 11
<p><b>Failure to ensure competent personnel operate plant</b></p> <p><input checked="" type="checkbox"/> Lack of training</p> <p><input type="checkbox"/> lack of maintenance</p> <p><input type="checkbox"/> No signage on floors indicating location</p> <p><input checked="" type="checkbox"/> No communication systems functioning</p> <p><input type="checkbox"/> Out of Service requirements</p> <p><input type="checkbox"/> Shutdown</p> <p><input type="checkbox"/> Overloading</p> <p><input type="checkbox"/> Other (please specify)</p>	Crane Operation	O	Major	Possible	Very High Threat 19	Ensure ticketed competent operators only operate crane. Ensure operators manual is communicated before works commence. Ensure only certified dogman slings and controls loads.	Major	Unlikely	High Threat 15
Environmental Concerns									
<p><b>Environmental issues causes failure</b></p> <p><input type="checkbox"/> Inclement weather causes issues</p> <p><input type="checkbox"/> Wind fowls cables and snags or breaks cable</p> <p><input type="checkbox"/> Water impairs operation</p>	N/A								

Wind speed exceeds recommended limit

Other (please specify) \_\_\_\_\_

<input checked="" type="checkbox"/> Wind speed exceeds recommended limit	<input type="checkbox"/> Other (please specify) _____	Contact details:	
<input checked="" type="checkbox"/> Wind speed exceeds recommended limit	<input type="checkbox"/> Other (please specify) _____	Contact details:	

I have reviewed the Maeda LC383 Crawler Crane Risk Assessment and have had the opportunity to comment and make changes as I thought necessary.

Name:	Position description:	Signature:	Date:	Company:

