

RISK ASSESSMENT

Company:	Hill Partnership	Assessed By:	Kathy Fawcett
Site:	St Ann's	Analysis Date:	11 December 2023
Task:	General Construction Materials	Revision Date:	11 May 2024

HAZARDS WHICH CREATE POTENTIAL FOR HARM (highlighted are all that apply)

1 Access/Egress	11 Work on / adjacent to water	21 Heat	31 Live Services
2 Underground / Obstructions / Services	12 Adverse Weather	22 Radiation	32 Moving Machinery Parts
3 Overhead / Obstructions / Services	13 Hazardous Substances / Materials	23 Sharp Objects / Needles	33 Manual Handling
4 Excavations	14 Disease / Weils Disease/ Dermatitis	24 Restricted Access	34 Electrical Equipment / Tools
5 Collapse of ground / earth / materials	15 Fire / Explosion	25 Pressure Systems	35 Competency
6 Collapse of Structures	16 Noise	26 Reversing / Overturning Vehicles	36 Abrasive Wheels
7 Contaminated Ground	17 Hand Arm Vibration	27 Falls from Height	37 Surface Obstructions / Falls on level
8 Soft Ground	18 Whole Body Vibration	28 Falls of Materials	38 Vehicle Movements
9 Confined Spaces	19 Fumes / Gas	29 Lifting Operations	39 Temporary Works
10 Demolition	20 Dust	30 Flying Particles	40 Railway / DLR / Trams

Risk Factors

Severity (S)	Frequency (F)
1 Minor Injury	1 Improbable
2 Major Single Injury	2 Possible
3 Major Multiple Injuries	3 Occasional
4 Single Death	4 Frequent
5 Multiple Deaths	5 Regular

Risk Rating (R)
$R = S \times F$
Unacceptability Limits
More than 5 is unacceptable re-assess task and preventative actions.
S = 0 is deemed to be the limit of practicability of control measures.

HIGH		MEDIUM			LOW	
15-25		6-14			1-5	
S↓	5	4	3	2	1	⇔F
5	25	20	15	10	5	
4	20	16	12	8	4	
3	15	12	9	6	3	
2	10	8	6	4	2	
1	5	4	3	2	1	

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Task	Person at risk	Risk identified	S	F	RR	Preventative action	S	F	RR
Mobile Crane Operation Lifting Operation	Lifting Team / Site Personnel	Crane Overturning, failure of ground beneath crane	6	5	30	Set up currently, on good ground, based designed and verified by technical services. Main contractor to approve crane standing area and all outrigger loadings for each configuration.	6	1	6
Correct Capacity of Crane	Lifting Team	Crane Overturning	6	3	30	Check that the crane on site is the crane ordered. All loads to be lifted within the safe working load at specified radius. Operator to confirm ASLI is in good working order. Any defects to be reported on daily check sheet.	5	1	5
Failure of lifting equipment	Lifting Team / Site workers	Damage to equipment and injury/death to personnel	6	6	36	All lifting equipment is to be certificated and inspected regularly as per LOLER Regulations	2	2	4
Falling Materials	Lifting Team / Site workers	Damage to equipment and injury/death to personnel	6	6	36	All lifts are to be carried out by competent trained/qualified and authorised Slinger/Signallers only. All plant to be lifted by the designated lifting points as specified by the manufacturer. All lifts to be carried out as per the project specific schedule of common lifts.	2	2	4
Free falling loads	Lifting Team / Site workers	Damage to buildings/equipment and injury/death to personnel	6	3	18	Daily inspections and checks are to be made by the crane operator to ensure that the crane is safe and operable	2	2	4
Heavy loads	Lifting Team / Site workers	Failure of lifting equipment and machinery	6	4	20	Visual assessments are to be made by competent personnel to ensure the correct lifting equipment is used for the lift and that the crane is able to lift the weight of the load at the required radius. SLI (safe load indicators) indicators to be fitted in craneage.	2	2	4

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High Winds whilst operating mobile crane	Lifting Team / Site workers	Instability and loss of control of lifting operation	6	6	36	Wind speeds within the site area are to be monitored and all lifting operations are to be in strict conditions of the Beafort wind speed allowances as laid down for the restrictions of safe use of cranes in high wind and wind conditions.	2	2	4
Unscheduled / Non competent lifts	Lifting Team / Site workers	Damage to buildings/equipment and injury/death to personnel	6	5	30	No unauthorised persons are to carry out any lifting operations, all operatives are to show proof of their competency relating to specific training by an approved body i.e. CPCS/CITB. Authorised / competent / certified Slinger/Signallers identified by orange helmets. All unauthorised personnel wear different coloured helmets	2	2	4
Close proximity to building/public amenities.	Lifting Team / Site workers	Entanglement leading to loss of integrity of load.	4	6	24	All slinger signallers and operators to be briefed on safe slewing zones by Appointed Person / Crane Co-ordinator and crane operators to have colour codes over-slew zones marked up on a drawing which will be kept in all cabs.	2	2	4
Protection of the Public / Public Interface	General Public	Working next to public road / public walkway. Walking into lift area	3	2	9	The areas in which the lifting operation shall be completely barriered off to prevent public gaining access. Exclusion signs shall be displayed. The lifting operations shall be halted immediately if any member of the public gains access.	3	1	3
High winds/gales	Lifting Team / Site workers	Loads striking slinger signaller. Hitting of structure with load. Collapse of crane.	6	6	36	Five day weather forecast before day of lift. Manufacturer's maximum wind speeds for products.. Manufacturers maximum wind speeds for products. Anemometer fitted to crane and wind speed will be constantly monitored between supervisor and tower crane operator.	2	2	4

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Bad Communication.	Lifting Team / Site workers	Collision, entrapment fall of materials damage to structure.	6	3	18	Slinger signaller must speak language of the country. Crane co-ordinator to issue radios to competent personnel. Dedicated channels on radio system for communication between slinger/ crane operatives. Weekly lifting operations meeting daily also any close proximity cranes must have zoned drawings.	2	2	4
Operator Illness.	Lifting Team / Site workers	Injury death to personnel or members of the public. Damage to structure.	6	4	24	Yearly medicals for tower crane operators under the age of 55, annually if over. Annually for mobile crane operators. Hours to be carefully monitored. Regular breaks – relief drivers.	2	2	4
Crane Collapse	Lifting Team / Site workers	Injury or death to operator, members of the public and personnel. Damage to property.	6	6	36	Rated capacity indicator to be checked daily. Any lifting must be free standing. Crane to be checked by independent Thorough Examiner expert 6 monthly..	2	2	4
Stress	Lifting Team / Site workers	Collision of loads through lack of concentration. Ill-health. Danger to the public and personnel.	6	4	24	Regular breaks relief operators on every project. Hours to be carefully monitored. At least 11 hrs rest every working day and one days rest per week.	2	2	4
Lifting Plant and Machinery around site.	Lifting Team / Site workers	Risk of plant falling from height danger of damage to buildings/equipment and injury/death to personnel	5	4	20	All plant and machinery to be inspected and serviced regularly as per PUWER and LOLER Regulations. Plant to be lifted only by the designated lifting points as specified by the manufacturer. All loads to be slung by competent / qualified and authorised personnel only.	3	1	4

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Lifting over the Public or Operatives	Lifting Team / Site workers / Members of the public	Fall of materials crushing Injury or death. Damage to property or vehicles	5	3	15	Where lifting over the public protection must be in place. Limiters to be fitted to cranes to stop them slewing into areas if high risk. Safe walkways for operatives planned into projects.	3	1	3
Manual Handling	Lifting Team / Site workers	Injury to Lifting Team Member	5	3	15	Lifting team must be trained in good manual handling techniques. Use of good planning combined with mechanical handling where possible	3	1	3
Load falling over railway	Lifting Team / Site workers	Injury to Lifting Team Member, Damage to Network Rail Asset Injury to Passengers	6	6	36	Tag lines are to be used to control load. Crane to be zoned out no lifting zones. No over sailing of railway property. Capacity of tower crane will be de-rated by 25%	2	2	4
Oversailing of railway property	Lifting Team / Site workers	Damage to Network Rail Asset Injury to Passengers	5	4	20	Once mobile tower crane has been rigged, zoning system will be set up to prevent slewing over railway property & no lift zones as identified by site will be zoned out.	2	2	4
Out of Service procedure	Lifting Team / Site workers	Damage to Network Rail Asset Injury to Passengers	6	6	36	The mobile tower crane will be folded each evening to avoid oversail during out of hours.	2	2	4
Load falling	Lifting Team / Site workers	Injury to Lifting Team Member, Damage to Network Rail Asset	6	4	24	All loads to be well secured with appropriate strops/chains/ Use certificated strops/qualified slinger to attach. Lift 6" off ground to check balance. Ensure strops cannot slip.	2	2	4
Falling Items	Lifting Team / Site workers	Injury to Lifting Team Member, Damage to Network Rail Asset	5	4	20	Use certificated strops/ certified slinger to attach. Lift 6" off ground to check balance. Mark lifting points for disassembly. Ensure strops cannot slip.	3	1	4
Injury to others/public interest	Lifting Team / Site workers	Injury to Lifting Team Member, Damage to Network Rail Asset Injury to general public	6	3	18	Area below to be secured. No work to be carried out above other operators, to liaise with operators of possible interfaces.	2	2	4
Public Interest	Lifting Team / Site workers	Injury to Lifting Team Member, Damage to Network Rail Asset	6	4	24	Keep public at bay with Heras fencing, hoarding or barriers. Respond politely if questioned.	2	2	4