




Risk Assessment & Method Statement

Project Name	Area 9 Technology Swaps
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Author	Lee Ratcliff

DOCUMENT CONTROL

Author	Name	Lee Ratcliff
	Role	Operations Director
	Signed	
Checked By	Name	Dave Bullock
	Role	Managing Director
	Signed	
Approved By (If applicable)	Name	
	Role	
	Signed	

REVISION STATUS DETAILS

Revision No	Date	Description
01	19/03/2020	First Issue
02	06/03/2023	Amended as per review
03	15/03/2023	Amended as per 2 nd McCann Reveiw

1. DESCRIPTION OF WORKS

1.1. Overview

The work to be carried out will be to remove MS3 2x12/2x16/3x18 signs and replace with V3 Colas MS3 2x12/2x16/3x18 onto access gantries with Area 9 area of responsibility.

All works will be carried out on night shifts within Traffic Management. Traffic Management will be agreed and supplied by Area 9.

Lifting Requirements

The accompanying Lift Plan Document (Doc CLS2302-3-LP) describes the associated lifting operations within these works.

Only fully trained and qualified personnel who are familiar with the current lifting legislation are to operate lifting equipment.

1.2. Quality Requirements

All personnel to be briefed daily, inducted by the Scheme where required and be CSCS Scheme accredited.

A Site Report will be completed at the end of each shift of work by the INFRATEC Site Supervisor and distributed where required. The Site Report will detail what works have been completed and any issues or concerns that have occurred.

1.3. Environmental Requirements

All waste material shall be removed from site and disposed of in line with INFRATEC's Environmental Policy.

2. PLANNED WORKING SEQUENCE

2.1. Pre-Start

- 2.1.1. Site Briefing should be carried out remotely where possible, where this is not possible, only supervisor to attend. NO mass gatherings. NO signing of communal briefing sheet. Briefing location:
- 2.1.2. All required permits to be emailed prior to shift.
- 2.1.3. Attend Site Briefing and obtain any permits required. A briefing will be held by the foreman to communicate any specific risks and procedures for the shift and the locations of any other works that may affect access or egress or any other relevant information that may affect our works. A task specific briefing will be carried out by the INFRATEC Supervisor.
- 2.1.4. Carry out pre use checks of vehicles and equipment. Ensure all equipment has a valid and appropriate certificate.

2.2. Removal – MS3 2x12/2x16/3x18

- 2.2.1. Access the work area by the works access described in the briefing.
- 2.2.2. Position the Crane as illustrated in the attached sketch under control of the Lift Supervisor.
- 2.2.3. Set up Crane according to the manufacturer's instructions.
- 2.2.4. Measure windspeed with an anemometer. **HOLD POINT!!** No lifting in windspeed over 25mph.
- 2.2.5. The slinger signaler will attach the 1m endless slings using the 3 ¼ ton bow shackles as illustrated in the slinging arrangement sketch.
- 2.2.6. The slinger signaler will attach 2m chain slings to lifting beam using 3 ¼ ton bow shackles as illustrated in the slinging arrangement sketch.
- 2.2.7. The Crane operator will manoeuvre the crane into position above the MS3 on Gantry under guidance of the slinger/signaler.
- 2.2.8. The Slinger will attach the endless slings and guide the crane operator to take the strain.
- 2.2.9. The Gantry team will access the EMS bay via gantry fixed ladders, maintaining 3 points of contact at all times.
- 2.2.10. The Gantry team will Loosen all top brackets on MS3, Slinger Signaler will guide operator to take weight until sign is in vertical position – This means crane has weight.
- 2.2.11. **HOLD POINT!** Gantry Team to install Fall restraint Ratchet straps around 1st and last EMS bay uprights, at heights of 450mm and 900mm before sign is removed to prevent a fall from height.
- 2.2.12. **HOLD POINT!** All members of gantry team to Clip on to gantry structure using fall arrest inertia reels and Full body harness/Fall restraint lanyard before sign is removed. Inertia reel to be secured to gantry support beams behind EMS bay or gantry upper support beams depending on gantry type. (shown in LP)
- 2.2.13. **Operatives will remain "Clipped On" at all times when working near open EMS bay.**
- 2.2.14. Gantry team will remove all central brackets leaving only the 2 outer bottom brackets fitted.
- 2.2.15. Sign position is to be monitored as final brackets are removed crane to be adjusted as required.
- 2.2.16. When all brackets have been removed, tag lines can be fitted and under guidance of slinger signaler Crane operator will manoeuvre the MS3 into position on bed of wagon.
- 2.2.17. Transport feet are to be fitted, and sign is to be secured for transport using 5t ratchet straps.
- 2.2.18. The slings can now be removed from the MS3.
- 2.2.19. The operator will remove the accessories and inspect them before stowing away.
- 2.2.20. The operator will pack away the machine and secure any remaining load on the wagon and clear the site of any debris, ready to move to the next site.

2.3. Installation – MS3 2x12/2x16/3x18

- 2.3.1. Access the work area by the works access described in the briefing.
- 2.3.2. Position the Crane as illustrated in the attached sketch under control of the Lift Supervisor.

- 2.3.3. Set up Crane according to the manufacturer's instructions.
- 2.3.4. Measure windspeed with an anemometer. **HOLD POINT!!** No lifting in windspeed over 25mph.
- 2.3.5. The slinger signaler will attach the 1m endless slings using the 3 ¼ ton bow shackles as illustrated in the slinging arrangement sketch.
- 2.3.6. The slinger signaler will attach 2m chain slings to lifting beam using 3 ¼ ton bow shackles as illustrated in the slinging arrangement sketch.
- 2.3.7. The Crane operator will manoeuvre the crane into position above the MS3 under guidance of the slinger/signaler.
- 2.3.8. The Slinger will attach the endless slings and guide the crane operator to take the strain.
- 2.3.9. The Operator will then remove the transport straps, attach a tag line and carry out a test lift.
- 2.3.10. Under guidance of the slinger signaler the Operator will manoeuvre the MS3 into position on the gantry, the tag line must be kept taught at all time during this operation to keep the load under control.
- 2.3.11. **Hold Point!** Gantry Team are to access gantry via fixed ladder, maintaining 3 points of contact at all times. Gantry team are to clip onto gantry structure using inertia reels & fully body harness/Fall restraint lanyard until sign is installed. Inertia reels to be secured to gantry support beams behind EMS bay or gantry upper support beams depending on gantry type (shown in LP).
- 2.3.12. **HOLD POINT!** Gantry Team are not to remove Fall restraint Ratchet straps around 1st and last EMS bay uprights until new sign has been installed to prevent a fall from height.
- 2.3.13. **Operatives will remain "Clipped On" at all times when working near open EMS bay.**
- 2.3.14. The installation team on the gantry will attach the brackets to the MS3.
- 2.3.15. When all brackets have been fitted the weight can be dropped to allow the installation team to torque the bolts.
- 2.3.16. The installation team will then remove the slings and show the operator that both slings and shackles have been removed before the slinger signaler guides the operator clear of the gantry.
- 2.3.17. The operator will remove the accessories and inspect them before stowing away.
- 2.3.18. The operator will pack away the machine and secure any remaining load on the wagon and clear the site of any debris, ready to move to the next site.

3. CONTROL OF ACTIVITY RISK

3.1. Environmental Controls

- 3.1.1. Spill kits are to be available in case of leaks. All leaks are to be reported to the Scheme sponsor.
- 3.1.2. Noise to be kept to a minimum.
- 3.1.3. Any waste produced to be recovered (if applicable).
- 3.1.4. Any environmental issues to be raised to the INFRATEC Site Supervisor.

3.2. Control Measures

- 3.2.1. Awareness of any plant/vehicle movements on site and use of barriers if required.
- 3.2.2. Suitable Traffic Management to be designed, deployed and maintained by others.
- 3.2.3. Full PPE to be used (see section 3.3)
- 3.2.4. Exclusion zones to be used during overhead working/lifting operations and to be detailed in the Lift Plan document.
- 3.2.5. Pre-use checks will be made of tools, equipment and plant to be used.

3.3. Working at Height Rescue Plan – Access Gantry

Emergency Situation	Proposed Action
Minor Injury	<ul style="list-style-type: none"> - Qualified 1st Aider to treat minor injury. - Casualty to exit gantry via ladder under own steam if able. - Seek Medical advice immediately - Report incident through chain of command
Major Injury/ Incapacitated casualty	<ul style="list-style-type: none"> - Qualified 1st Aider to render life saving 1st Aid where able. - Contact 999 immediately – Detailing nature of emergency, location and requirement for rescue from height. - Advice should be sort from medical professionals regarding further treatment and movement of casualty. - Under NO circumstances should any personnel attempt a casualty rescue from height from within the gantry structure. - Report incident through chain of command at earliest opportunity to allow emergency vehicle access.
Fall from Height – Stranded on Fall Arrest Inertia Reel	<ul style="list-style-type: none"> - Lower to casualty to the ground using winch device on inertia reel. - If using inertia reel with auto lower device – casualty will be automatically lowered to ground level (1.4m/second) - Qualified 1st Aider to render treatment where required. - Casualty to be taken to hospital immediately to be checked for secondary injuries.

3.4. Personal Protection Equipment (PPE)

- 3.4.1. INFRATEC standard PPE to be used:
 - 3.4.1.1. Safety Hat with chin strap (EN12492)
 - 3.4.1.2. Safety Footwear (EN20345 Type-S3)
 - 3.4.1.3. High Visibility Clothing – Jacket and Trousers (EN471 Class 3)
 - 3.4.1.4. Protective Gloves (EN388)
 - 3.4.1.5. Safety Glasses (EN1661 F)
- 3.4.2. Depending on activity and/or identification in risk assessments, the following additional PPE may also be used:
 - 3.4.2.1. Full Body Harness (EN361)
 - 3.4.2.2. Fall Restraint Lanyard (BS358)
 - 3.4.2.3. Fall Arrest Lanyard (EN354)
 - 3.4.2.4. Ear Protection
 - 3.4.2.5. Inertia Reel (EN360)

3.5. Training & Competency

- 3.5.1. All works to be undertaken by suitably able, skilled, trained and competent persons.

- 3.5.2. Toolbox talks/briefings to be given before commencing tasks.
- 3.5.3. Personnel to be issued, read and understand method statement, risk assessments and Lift Plan (if applicable) before works commence.
- 3.5.4. All staff have Emergency First Aid at Work qualification.
- 3.5.5. All staff have undergone a Safety Critical Medical within the prescribed period.
- 3.5.6. All staff are to have a full UK driving license if they are to drive on site.
- 3.5.7. All staff to receive a Site Induction, including a mandatory drug & alcohol test from the Scheme Sponsor
- 3.5.8. Training records and competencies are held by INFRATEC and are available upon request.

4. PLANNING & REQUIREMENTS

4.1. Personnel

- 4.1.1. INFRATEC's site team will be made up by a minimum of the following personnel.
 - 4.1.1.1. Supervisor. An INFRATEC member of staff who has overall responsibility for all activities on site.
 - 4.1.1.2. Engineer. A multi-skilled engineer able to carry out installation or removal and maintenance of equipment, as well as commissioning and testing.
 - 4.1.1.3. Lift Supervisor. The person responsible for supervising the lifting operation and safely operating the safe system of work.
 - 4.1.1.4. Crane Operator. The person responsible for crane operations and the lifting and moving of the load(s).
 - 4.1.1.5. Slinger/Signaler. The person that is responsible for attaching and detaching the load to and from the lifting equipment and directing the safe movement of the equipment and load.
- 4.1.2. The team may be augmented with additional Operatives required to carry out the tasks.
- 4.1.3. All team members will be First Aid trained.

4.2. Plant & Equipment

- 4.2.1. The following are the expected items of plant and equipment required to carry out the tasks.

Item
Lorry Loader (HIAB)
Site Vehicles
Hand Tools

- 4.2.2. All site vehicles will adhere to Chapter 8 of the Traffic Signs Manual with high visibility markings and lighting.
- 4.2.3. The Lorry Loader will have side fall restraints fitted at all times.
- 4.2.4. The Lorry Loader will be inspected daily before use and recorded on a Pre-Use Check proforma.

5. PERMITS

- 5.1. Permit to Lift *(To be issued before work begins – McCann)*
- 5.2. Isolation Permit *(To be issued before work begins – McCann)*

6. SITE DETAILS

6.1. As per Gantry Schedule

6.2. Access / Egress

- 6.2.1. Access to the work site will be agreed with the TSCO entry/exit points as detailed in the Site Traffic Management Plan.
- 6.2.2. This will be briefed to the team during the pre-start briefing.

6.3. Site Layout

- 6.3.1. As detailed in Site drawings provided by the Scheme Sponsor.

6.4. Welfare Facilities

- 6.4.1. As directed at site induction and at pre-start briefings.

6.5. Program Hours and Duration

- 6.5.1. Expected site working hours: 2200hrs to 0400hrs
- 6.5.2. Start Date: March 2023
- 6.5.3. Finish Date: May 2023

6.6. Emergency Detail

- 6.6.1. First Aid. All staff have completed an Emergency First Aid at Work course.
- 6.6.2. In an emergency call 999 and instruct the appropriate emergency services.
- 6.6.3. The nearest A&E department detailed in site induction.
- 6.6.4. Inform Site Management and INFRATEC contacts as soon as possible.
- 6.6.5. Nearest A&E: As per site specific briefing.

6.7. INFRATEC Key Personnel Contact Details

Name	Role	Contact Number
Dave Bullock	Commissioning Engineer/ Appointed Person/ Lift supervisor	07798704818
Lee Ratcliff	Commissioning Engineer/ Appointed Person/ Lift supervisor	07970813422
*Mike Arkle	Commissioning Engineer/Lift supervisor	07877406940
*Dan McCann	Commissioning Engineer/Lift supervisor	07772759623
Dale Richards	Lorry Loader Operator	07568398293
Simon Coupland	Slinger/Signaler	07539074106

*Overall supervisor(s) for planned works Highlighted in Red. (Allocation of personnel will be made prior to work commencing).

6.8. Customer / Scheme Personnel Contact Details

Name	Role	Company	Contact Number

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7. RISK ASSESSMENT & METHOD BRIEFING RECORD

The following members have read or have been briefed on this risk assessment, method statement and, if applicable, the accompanying Lift Plan.

Name	Signature	Date