





Risk Assessment & Method Statement

Project Name	Mersey Gateway MS4 Repairs
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DOCUMENT CONTROL

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REVISION STATUS DETAILS

Revision No	Date	Description
01	02/05/2022	First issue

1. DESCRIPTION OF WORKS

1.1. Overview

The work to be carried out will be to carry out fault investigation/ repair works on MS4 signs on the Mersey gateway.

All works will be carried out on night shifts within Traffic Management. TM will be provided by an authorized TM contractor.

1.2. Lifting Requirements

N/A

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. 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.
- 2.1.2. Carry out pre use checks of vehicles and equipment. Ensure all equipment has a valid and appropriate certificate.

2.2. MS4 Sign fault investigation

- 2.2.1. Access the work area by the works access described in the briefing.
- 2.2.2. Access local 600 cabinet.
- 2.2.3. Poll sign from RSC to obtain sign status.
- 2.2.4. From Status Reply ascertain fault status of sign and relevant spares required for repair.
- 2.2.5. Repair sign (detailed in section 2.3).
- 2.2.6. Poll sign to ensure faults have cleared.
- 2.2.7. Close cabinets.

2.3. MS4 Sign Repair

- 2.3.1. Access the work area by the works access described in the briefing.
- 2.3.2. Set up MEWP according to manufacturers instructions, to allow access to the rear of MS4 sign.
- 2.3.3. **Hold Point** – MEWP Operators to wear full body harness with fall restraint lanyard secured to designated anchor points.
- 2.3.4. **Hold Point** – No MEWP operation to be carried out in wind speeds over 25MPH.
- 2.3.5. Set out Exclusion Zone/Drop Zone under working area of MEWP using cones/gates.
- 2.3.6. **Hold Point** - Ensure 1.2 Safety Zone is maintained at all time from line of cones
- 2.3.7. Access sign via relevant rear door to access faulty piece of equipment.
- 2.3.8. Replace/Repair relevant piece equipment as required.
- 2.3.9. Close doors
- 2.3.10. Pack away MEWP according to manufacturers instructions.
- 2.3.11. Pack away equipment and clear site of debris.

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. Personal Protection Equipment (PPE)

- 3.3.1. INFRATEC standard PPE to be used:
 - 3.3.1.1. Safety Hat (EN397)
 - 3.3.1.2. Safety Footwear (EN345 Type-53)
 - 3.3.1.3. High Visibility Clothing – Jacket and Trousers (EN471 Class 3)
 - 3.3.1.4. Protective Gloves (EN388)
 - 3.3.1.5. Safety Glasses (EN1661 F)
 - 3.3.1.6. Head Torch (with Red rear light)
- 3.3.2. Depending on activity and/or identification in risk assessments, the following additional PPE may also be used:
 - 3.3.2.1. Full Body Harness
 - 3.3.2.2. Fall Restraint Lanyard (BS358)
 - 3.3.2.3. Ear Protection
 - 3.3.2.4. Tool lanyards to be used where appropriate.

3.4. Training & Competency

- 3.4.1. All works to be undertaken by suitably able, skilled, trained and competent persons.
- 3.4.2. Toolbox talks/briefings to be given before commencing tasks.
- 3.4.3. Personnel to be issued, read and understand method statement, risk assessments and Lift Plan (if applicable) before works commence.
- 3.4.4. All staff have Emergency First Aid at Work qualification.
- 3.4.5. All staff have undergone a Safety Critical Medical within the prescribed period.
- 3.4.6. All staff are to have a full UK driving license if they are to drive on site.
- 3.4.7. All staff to receive a Site Induction, including a mandatory drug & alcohol test from the Scheme Sponsor
- 3.4.8. 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/Signaller. 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.

Plant & Equipment

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

Item
Site Vehicles
Hand Tools
MEWP

- 4.1.5. All site vehicles will adhere to Chapter 8 of the Traffic Signs Manual with high visibility markings and lighting.
- 4.1.6. The Lorry Loader will have side fall restraints fitted at all times.
- 4.1.7. The Lorry Loader will be inspected daily before use and recorded on a Pre-Use Check proforma.
- 4.1.8. MEWP (mobile elevated working platform) will be operated by a certified IPAF 1b Operator at all times and will be fitted with secondary guarding.
- 4.1.9. The MEWP will be inspected daily before use and recorded on a Pre-Use Check proforma.
- 4.1.10. An emergency situation with MEWP will evoke the following rescue plan

Emergency Situation	Proposed Action
Failure of upper control functions while elevated	Where the normal upper control functions fail, the operator will use the upper auxiliary controls to lower the platform safely
Failure of the operator to be able to operate the MEWP functions while elevated due to one of the following reasons: A. Operator incapacitated B. Auxiliary functions fail to operate from upper control station	Where the operator is incapable of lowering the raised platform using the upper controls, an appointed person familiarised in the use of the 'ground' controls will lower the platform safely using the normal ground controls
Failure of normal ground controls	Where the normal ground controls fail, an appointed person familiarised in the use of the 'ground' controls will use the ground auxiliary controls to safely lower the platform
Failure of ALL normal and auxiliary lowering functions	Where all normal and auxiliary functions have failed, a competent and authorised service engineer should be contacted

5. PERMITS

- 5.1. MEWP Permit

6. SITE DETAILS

- 6.1.1. As per fault list

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: 10 April 2022
 6.5.3. Finish Date: TBC

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. Inform Site Management and INFRATEC contacts as soon as possible.
 6.6.4. The nearest A&E department.

Hospital Details	Map
<p>Warrington Hospital Loveley Lane Warrington WA5 1QG</p> <p>01925 635911</p>	

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

Allocation of personnel will be made prior to work commencing.

6.8. Customer / Scheme Personnel Contact Details

Name	Role	Company	Contact Number

INFRATEC	RISK ASSESSMENT
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No.	Likelihood of Occurrence (L)	Description
1	Not Likely	A freak combination of factors would be required for an incident to result. Normal state.
2	Possible	A rare combination of adverse factors would be required for an incident to result.
3	Quite Possible	Only happens if additional factors are present, but is unlikely to occur otherwise
4	Likely	Less than 100% certainty that an incident will occur, but an additional factor may be required to cause the event.
5	Very Likely	Almost 100% certainty that an incident will occur under the circumstances.

No.	Severity of Hazard (S)	Description
1	Negligible	Results in negligible injury with no absence from work or negligible loss of function with any damage to equipment or the environment.
2	Slight	Minor injury requiring first aid treatment, damage to equipment requiring minor repair, minor loss of operations or impact to the environment
3	Moderate	Injury leading to a Lost Time Accident, localised damage to equipment requiring extensive repair, significant loss of operations or moderate pollution incurring some restitution costs.
4	High	Involving a single death or severe injury, damage to equipment resulting in operational shutdown, severe pollution incurring significant restitution costs.
5	Significant	Multiple deaths, major plant or equipment damage, major pollution incurring very high restitution costs

Risk Matrix		Hazard Severity				
		5	4	3	2	1
Likelihood of Occurrence	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

Risk Potential = Likelihood of Occurrence x Hazard Severity	Category	Value	Guidance
	High	15-25	Unacceptable, more control essential. Work must not be approved.
	Medium	6-12	Tolerable, more control is practicable. Approval from relevant supervisory level required
	Low	1-5	Manageable, nut reasonably practicable controls to be considered

Hazard	Risk	Severity	Likelihood	Initial Risk	Control Measures	Severity	Likelihood	Residual Risk
Slips, Trips & Falls	Personal Injury	3	3	9	<ul style="list-style-type: none"> - Keep work site tidy, good housekeeping. - Stow tools and equipment not in use. - Check ground and footing. - PPE - all personnel to wear high visibility clothing to EN471 - class 3. 	3	1	3
Manual Handling	Personal Injury	3	3	9	<ul style="list-style-type: none"> - Awareness training is to be provided for all personnel involed with manual handling. - Correct techniques to be used at all times. - Consider the load, identify the weight/individual capabilities, task and the environment 	3	1	3
Access and Egress	Personal Injury Damage to Plant Damage to Equipment	3	3	9	<ul style="list-style-type: none"> - Only the safe "Works Access" and "Works Exits" are to be used as provided by the competent Traffic Management contractor. - Where possible, the work party will exit the work area at the end of the Traffic Management (usually on an Off Slip or a dedicated "Works Exit" lane) Where Traffic is lighter. 	3	1	3
Contact with Live Traffic	Personal Injury Damage to Plant Damage to Equipment	5	3	15	<ul style="list-style-type: none"> - Adequate Traffic Management (TM) in place before work commences. - PPE – all personnel to wear high visibility clothing to EN471 - class 3. - Pre-work briefings for all members of site team before work commences. - No work to be conducted within 600mm of the rear of the installed traffic management (Safety Zone). 	5	1	5
Night working - Poor Visibility	Personal Injury Damage to Plant Damage to Equipment	4	3	12	<ul style="list-style-type: none"> - All night shift personnel to be equipped with head torches (white LED lamp to the front of helmet and red LED lamp to the rear) to allow illumination of line of sight/immediate work area. - PPE - all personnel to wear high visibility clothing to EN471 - class 3. - Where appropriate, mobile task lighting is to be provided. 	4	1	4
Night working - Fatigue	Personal Injury Damage to Plant Damage to Equipment	4	2	8	<ul style="list-style-type: none"> - Night shift personnel working on site are to be provided with accommodation that allows adequate rest between night shifts. - Consecutive nightshifts will be limited to 5 shifts out of 7. - At a minimum, rest breaks of 20 minutes should be taken every 4 hours - Where welfare facilities are not available, refreshments will be provided free of charge. 	4	1	4

Night working - Lone Working	Personal Injury Damage to Plant Damage to Equipment	5	3	15	- There is to be no lone working under any circumstances by night shift workers. - Extra personnel will be provided as required.	5	1	5
Plant & Equipment	Personal Injury Damage to Plant Damage to Equipment Damage to Property	4	3	12	- Only competent Operators with current certification/licence to be used. - Only approved Lift Plans to be used. - Statutory check/maintenance of equipment as required. - Pre-use and/or daily checks to be carried out on all plant and relevant equipment.	4	1	4
Noise	Personal Injury	4	3	12	- Wear correct hearing protection where signs are posted or where applicable	4	1	4
Working from Mobile Elevated Working Platform (MEWP)	Personal Injury Damage to Plant Damage to Property	5	3	15	- MEWP to be fitted with secondary guarding. - Full-body harness with fall-restraint lanyard BS358 to be worn by all personnel in MEWP. - Only trained personnel (IPAF 1B) to operate the MEWP. - Pre-use checks to be carried out before use. - Use of MEWP as per the relevant Lift Plan.	5	1	5
Transmission of COVID-19	Personal Injury	5	3	15	- All personnel to follow INFRATEC-UK COVID-19 Operating Procedures. - Min of 1m social distancing. - Face covering provided to staff for use when required. - Sanitisation gel placed in all vehicles and all staff encouraged to use them - Always use gloves – Dispose after use. - Sanitise hands before and after work activities. - Regular cleaning of company vehicles by the driver.	5	2	10
Live Services strike	Personal Injury	5	3	15	- Isolation permits to be in place before work begins - Isolation certificates to issued to site teams - Equipment to be checked for dead before work begins - Each site to be checked for overhead power lines before any lifting activities take place.	5	1	5
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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.