STFC Estates Services Risk Assessment		Risk Assessment Number	ESRA RAL001
Department	RAL - Estates (All)		
Site(s)	RAL		
Building &/ or Area			
Assessors Name	Chris Shipperley and Sarah Jenkinson	Assessment Date	01/06/2021
Distribution of findings to	Estates & SHE	Review Date	01/06/2024
Activity/Task/Title	Site Vehicle Transports (RAL/TCH/CB)	SHE Reference Number	3100

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Under no circumstances are activities or tasks permitted to commence if a red risk residual score exists

Control Measures are intended to reduce the risk of exposure to the potential hazard. Heirarchy of control shall be utilised to reduce the risk to as low as reasonably practicable (ALARP).

What is the Hazard ?	Who Might be Harmed?	How might People be Harmed?	Risk Score			Risk control measures	Further control measures ,if necessary	Residual risk score		
			S	L	H/M/L			S	L	H/M/L
Vehicle Movement Collision with another vehicle (moving or stationary), street furniture (e.g. bollard, arco barrier, etc) and infrastructure (e.g. building, container units etc)	staff, contractors, visitors, users	Whiplash, sprains & strains, bruising, soft tissue injury, lacerations, fractures, broken bones, head/neck/chest/back/knee/ankle and or foot inury, crush injury, internal bleeding, death, pyschological trauma	5	4	HIGH	Eliminate: 1. N/A Substitue: N/A Engineering Controls: 1. Vehicle access on site is minimised via the use of perimeter car parks. 2. Site wide winterisation plan is in place. 3. Use of convex mirrors where required. 4. Landscaping is maintained to reduce long grass and other visibility hazards. Admin Controls: 1. Permit to Drive required to operate all STFC vehicles 2. Site wide speed limit of 20mph 3. R.A.L. Security conduct regular speed checks. 4. Speeding Policy recently introduced 5. Highway Code is adopted on STFC sites. 6. . Notifications are issued when significant works take place or road layout changes. P.P.E: 1. Refer to specific risk assessments for construction or other projects.	Eliminate: 1. NA Substitue: 1. N/A Engineering Controls: 1. Survey of current road signs for their condition and relevance is required. 2. Ensure the review of signage and road markings has had all its actions completed. Admin Controls: 1. Communicate out new speeding policy across R.A.L. site. 2. Arrange for this risk assessment to be communicated across site and easily accessible to all depts. for future reference 3. Liaise with key stakeholders to agree a standard procedure for the safe immobilisation of plant, e.g: FLT, MEWPS, telehandlers etc. 4. Security to escalate incidents of non compliance with this risk assessment and associated policies. P.P.E: 1. N/A	5	2	MEDIUM

Vehicle Movement Collision with a pedestrian or cylists	staff, contractors, visitors, users	Whiplash, sprains & strains, bruising, soft tissue injury, lacerations, fractures, broken bones, head/neck/chest/back/knee/ankle and or foot inury, crush injury, internal bleeding, death, pyschological trauma	5	4	HIGH	Eliminate: 1. E-Scooters are prohibited on STFC sites. Substitue: 1. N/A Engineering Controls: 1. Lighting provided during darker months. 2. Building exits do not generally lead directly into the path of traffic. 3. Accessibility considerations such as aided crossings and parking local to some buildings is provided. 4. Zebra crossings increased across site during 2024, along with pavement widening works for accessiblity. 5. All construction work is barriered off with alternative pedestrain routes put in place. 6. Several buildings are interliked with bridges and tunnels. 7. Regular and free 'Bike Doctor' site visits take place at R.A.L. Admin Controls: 1.. Safety posters and reminders posted on digital screens and on various online platforms across site. 2. Highway Code is adopted on STFC sites. 3. STFC sites have a 20mph speed limit P.P.E: 1. Encourage cyclists to wear hi-vis clothing/jackets	Eliminate: 1. N/A Substitue: 1. N/A Engineering Controls: 1. Consider bankperson training for the Security Team and other relevant individuals 2. Consider identifying areas on site where cycle lanes can be implemented. This could be planned into future building works. Admin Controls: 1. Arrange for this risk assessment to be communicated across site and easily accessible to all depts. for future reference P.P.E: 1. Explore ways to encourage cyclists to wear a cycle helmet.	5	2	MEDIUM

Vehicle Movement Collision with a vehicle transporting hazardous material or waste on site which can cause environmental pollutionand possible enforcement action	staff, contractors, visitors, users	As above, but also including: burn or blast injuries, skin/eye and or organ damage, respiratory problems and poisoning.	5	4	HIGH	Eliminate: 1. N/A Substitue: 1. N/A Engineering Controls: 1. The majority of hazardous goods are delivered to R56 located on site boundary. 2. Appointment of 'Dangerous Goods Safety Advisors (as required by departments) is in place. 3. Minimisation of hazardous materials being transported on site. 4. Individual depts. create their own RAs for collection/dispatch of hazardous goods with the exception of liquid nitrogen 5. R56 has a dedicated hazardous item fenced compound. 6. Suitable containment should be in place. Admin Controls: 1. Training: In house Waste Disposal Officer training for WDOs and Practical Waste Management & Waste Minimisation for RAL staff involved with hazardsous waste should be undertaken. 2. FLT operators are trained. 3. Emergency procedures - check what is actually happening. P.P.E: 1. Refer to specific COSHH assessments for PPE to be worn in the event of an emergency situation.	Eliminate: 1. Some departments to be encouraged to store COSHH waste locally, eliminating the need for it to be transported across site. Substitue 1. N/A Engineering Controls: 1. Emergency plans need to be reviewed and communicated out to relevant contacts in the various depts. Ensure controls are realisitic. Admin Controls: 1. A review of training under SC31 and SC41 should take place to ensure all training is up to date and in place. 2. Spill kits for hazardous waste - check if dedicated storage is in place at key locations. P.P.E: N/A	5	2	MEDIUM
Vehicle Movement Speeding vehicles	Staff, Contractors, Visitors, Users	Fractures, broken bones, head/neck/chest/back/knee/ankle and or foot inury, crush injury, internal bleeding, death, pyschological trauma	5	5	HIGH	Eliminate: 1. Persistant perpetrators or drivers caught doing excessive speed will be prohibited from driving on site Substitute 1. N/A. Engineering Controls: 1. The Security Team conduct speed tests. 2. Building exits do not generally lead directly into the path of traffic. 3. Additional zebra crossings installed at R.A.L. during 2024. Admin Controls 1. Speeding Policy to be published late 2025. 2. Speed limit is 20mph and there is suitable and sufficient signage across site to relay this. 3. STFC sites follow and implement the Highway Code. 4.Infringement notices are issued for speeding and a ban is enforced after 3 infringments. PPE N/A	Eliminate: 1. Behavioural change required - speeding reoccuring too frequenly on site - infringements should be upheld and actioned as per the speeding policy Substitute 1. N/A Engineering Controls: 1. More frequent hand held (inc. static cam) speed checks to be conduted. 2. Purchase and Install additinoal digital speed awareness signage for Road 8 on southern boundary and Road 5 near R70. Admin Controls 1 More frequent speed monitoring and recording is required. 2. Formal reporting of speeding incidents needs to improve to support the identification of trends. PPE 1. N/A	5	2	MEDIUM

Vehicle Movement Transporting materials or goods on site – dropped / spilled loads due to poor road condition. Motorcyclists or cyclists falling off due to pot holes and/or debris on the road.	Staff, contractors, visitors, users	Sprains & strains, bruising, soft tissue injury, lacerations, fractures, broken bones, head/neck/chest/knee/ankle and or foot inury, crush injury, pyschological trauma	4	4	HIGH	Eliminate: 1. N/A Substitute 1. N/A. Engineering Controls: 1. Regular road inspections around various construction projects and holding contractors to account for poor road conditions 2. Estates' Helpdesk receive and address reported concerns. 3. Recent road surfacing has taken place on key roads (e.g: Road 4 & 6) and side roads between buildings (e.g: R3/R4) 4. Road sweeps to be increased across site to cope with additonal construction works. 5. Loads are secured using suitable and sufficient methods for the load type and vehicle type. 6. New roads are designed and maintained to highways standard 7. Winterisation plan implemented on site, e.g: gritting. Admin Controls 1 Permit to drive and valid UK (or equivalent) driving licence is required to operate STFC vehicles. 2. STFC sites follow and implement the Highway Code. 3. Contractors should have relevant and valid competency training for the vehicle they are contracted to operate (e.g: IPAF, CPC etc) PPE: 1. N/A	Eliminate: 1. N/A Substitue: 1. N/A Engineering Contols: 1. Review gas bottle stillages and strapping. 2. Review plant movement on site - How are loads secured? Admin Controls: 1. Estates H&S to consult SHEG with respect to 'Load Securing Technical Standards' by the British Stds Institue (BSI) to ensure best practice is implemented on site PPE 1. N/A	2	3	LOW
Vehicle Movement Entrance into perimeter car parks with solar panels - restricting plant access to preserve life and prevent damage to infrastructure.	staff, contractors, visitors	Crush injuries, electric shock, falling objects (e.g: cuts, bruises, broken bones, head injuries etc) electrocutian, death	5	4	HIGH	Eliminate 1. Inadvertant/unauthorised access has been eliminated (see engineering controls) Substitute 1. N/A Engineering Controls: 1. Height Restriction Barriers are locked in place to prevent plant access. 2. Vehicle movement to be controlled by Traffic Marshall subject to a risk assessment. Admin Controls 1. Safe System of Work in Place for emergency access and egress 2. Security Team are trained as First Responders 3.Permanent signage shall be in place to warn of risk associated with access and vehicle movements. 4. Access control via Safe System of Work. Access via Security for Emergency Services. PPE: 1. 5 point PPE required for work on public highways/carriageways and carparks.	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. Monitor implemenation of the new Height Restriction Barriers. 2. Report concerns to Security Team and Authorising Engineer. Admin Controls 1. In-house notifications of the change will be published on various platforms. PPE N/A	5	1	LOW

Vehicle Movements Loading and unloading operations causing danger to operatives or other site users	Staff, contractors, suppliers and visitors	Bruising, soft tissue injury, lacerations, fractures, broken bones, head/neck/chest/knee/ankle and or foot inury, crush injury, pyschological trauma	4	4	HIGH	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. Avoid loading/unloading during busy periods. 2. Dedicated logistics depot: R56 co-ordinates site deliveries and distribution. 3. Logistics and Transport Service Manager in post at R56. 3. Loading and unloading locations are postioned to avoid or minimise risks as far as is reasonably practicable. 4. Barriers, cones and signage should be positioned locally around operations. Admin Controls 1. Equipment used for lifting people or accessories (e.g: tailgates) shall be inspected every 6 months. 2. Project work shall plan for temporary loading and unloading. PPE 1. Safety boots shall be worn when loading and unloading.	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. N/A Admin Controls 1.N/A PPE 1. N/A	3	2	LOW	N
Vehicle Movement Plant collision (e.g: FLTs, Dumper Trucks, HGVs etc) leading to road damage, pedestrian safety impacts.	Staff, contractors, visitors,	Lacerations, whiplash, musculoskeletal injuries, crush injuries, broken bones, internal bleeding, organ failure, pyschological trauma, death	5	4	HIGH	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. Height restricting barriers used e.g. South and Avon car park (RAL). 2.Additional gate added by R34 reduce LGVs on wider site (RAL) 3. STFC MEWPs, FLTs etc maintained and operated by trained users with available safety features appropriate to the location(s) of use. 4. Plant operatives shall use safety features, where fitted in accordance with a risk assessment. Admin Controls 1. Contractors cover use of site roads in their RAMS. 2. Notifications to users about intended works 3. Permit to Drive required to operate all STFC vehicles 4. STFC sites follow and implement the Highway Code PPE 1. N/A	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1.Include inspection of contractor plant when carrying out routine site inspections. Admin Controls 1. Review site traffic logistics plan to support futue project work. PPE 1. N/A	5	2	MEDIUM	

Damage to vehicles Caused by poor road condition	Drivers of vehicles	Whiplash, sprains & strains, bruising, soft tissue injury, lacerations, fractures, broken bones, spinal cord injuries internal injuries	4	4	HIGH	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. New roads are designed and maintained to highways standard 2. Majority of STFC RAL employees park off site on dedicated boundary car parks. Admin Controls 1. Estates Helpdesk receive and address reported concerns 2. Roads are formally inspected annally and on ad -hoc basis as the need arises. 3. Site wide speed limit of 20mph 4. STFC sites follow and implement the Highway Code. PPE 1. N/A	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. N/A Admin Controls 1. N/A PPE 1. N/A	3	2	LOW
Untrained or unfamiliar personnel Lapses in attention (e.g. checking directions) can result in sudden breaking or a collision. Unfamiliar road layouts can result in difficult u-turn manoeuvres for large plant and vehicles (e.g: HGVS) in unsuitable spaces.	Visitors, contractors, new drivers, delivery drivers, trespassers, foreign drivers	Sprains & strains, bruising, soft tissue injury, lacerations, whiplash, fractures, broken bones, head/neck/chest /knee/ ankle and or foot inury, crush injury, death pyschological trauma,	5	3	MEDIUM	Eliminate 1. Access to site can be denied if booking in process has not been followed. Substitute 1. N/A Engineering Controls 1. CCTV cameras strategically located across site to deter trespassers. Admin Controls 1. Unannounced / unplanned arrivals will be held at the site gate by Security 2. Responsible Person or point of contact maintains responsibility for providing information in advance. 3. Easy Lobby booking in software in place. 4. Inductions, Safety Booklets and BiteSize training (e.g. SC02) available. 5. Clear site plans available. 6, Vehicles requiring access to site need a site pass.Security make checks on vehicles with no visible pass (RAL). 7. Road signs in accordance with the Highway Code are present throughout site (RAL). 8. Label added to Google Maps indicating Road 7 (near Avon Road carpark) is not suitable for HGVs. PPE 1.N/A	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. N/A Admin Controls 1. N/A PPE 1. N/A	4	2	MEDIUM

Emergency Vehicle Access – rapid response causing an incident. Rapid response team may be unfamiliar with the site layout leading to an increased likelihood of incidents whilst on the way to the IP(s). Startled pedestrians and other road users may unintentionally get in the way of the Emergency Vechicle(s) leading to a collision.	Staff, contractors, visitors, emergency responders.	Delay in IP(s) receiving medical attention can result in conditions worsening, such as too much blood loss, oxygen starvation, brain injuries and death. Site personnel and emergency responders may also suffer collision based injuries, such as whiplash, broken bones, lacerations, internal bleeding, concussion, head injuries, death etc.	5	4	HIGH	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. Planned rendezvous point at Fermi so that emergency service can be guided in 2. Security provide access to and direct emergency vehicles following report of an incident via 778888 3. Regular road inspections take place. 4. New roads are designed and maintained to highways standard Admin Controls 1. Air ambulance – establish standard location for landing e.g. sports pitch (GK).C 2. Project / task planning to avoid blocking emergency access. 3. Onsite parking is limited and controlled with permits/passes. 4. Parking policy outlines procedures for safe parking on site. 5. Ground mainteance contractors ensure road signs and access routes are clear of vegetation. PPE 1. N/A	Eliminate 1. N/A Substitute 1. N/A Engineering Controls 1. N/A Admin Controls 1. Double check current air ambulance/emergecny plan and LZ location. PPE 1. N/A	5	2	MEDIUM
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Additional Guidance or information
If a Safe System or work is needed please add details here Access requests via the 'Electrical Services Request' form if high sided vehicles

RISK ASSESSMENT RISK FACTOR MATRIX	LIKELIHOOD				
	1 Very Unlikely	2 Unlikely	3 Possible	4 Easily foreseeable (odd incident may have occurred)	5 Very Likely
	(freak event-no known history)	(Unlikely sequence of events)	(foreseeable under unusual circumstances)		(Common ccurrence-aware of incidents)
1 Negligible- (no visible injury/no pain)	LOW	LOW	LOW	LOW	LOW
2 Slight (minor cuts, bruises-no long term effects)	LOW	LOW	LOW	MEDIUM	MEDIUM
3 Moderate (Heavy bruising, deep flesh wound. Lost time accident)	LOW	LOW	MEDIUM	MEDIUM	MEDIUM
4 Severe (Lost time and major injuries)	LOW	MEDIUM	MEDIUM	HIGH	HIGH
5 Very severe (Long Term)	LOW	MEDIUM	MEDIUM	HIGH	HIGH