

Risk Assessment

Likelihood *L

1 = Improbable

2 = Remote

3 = Possible

4 = Probable

5 = Likely

Severity *S

1 = No Injury

2 = Minor Injury

3 = 3-day Injury

4 = Major Injury

5 = Fatality

5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5
	1	2	3	4	5

Risk = Likelihood x Severity

Low	Medium	High
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Hazard	Effect	Persons at Risk	Risk			Control Measures	Residual Risk		
			L	S	L*S		L	S	L*S
Plant and Vehicle movement	Hit by Moving Vehicle	Employee	3	3	9	PEDESTRIAN AND VEHICLE SEGREGATION WHERE POSSIBLE USE OF BANKSMAN WHERE REQUIRED HI VIS CLOTHING TO EN471 FLASHING AMBER BEACONS DISPLAYED ON VEHICLES DRIVER TRAINING EMPLOYEE AWARENESS AND TRAINING	1	3	3
Site or public traffic	Hit by Moving Vehicle	Employee	3	3	9	SIGNING AND GUARDING TO SAFETY AT STREET WORKS AND ROAD WORKS A CODE OF PRACTICE (TRAFFIC SIGNS MANUAL). TRAFFIC MANAGEMENT SYSTEM TO BE USED AND ADHERED TO WHERE NECESSARY. EMPLOYEE AWARENESS AND TRAINING	1	3	3
Pedestrians on Site	Hit by Moving Vehicle	Member of the public	3	3	9	CLEAR PEDESTRIAN ROUTES TO BE IDENTIFIED ON TRAFFIC MANAGEMENT PLAN BARRIERS AS APPROPRIATE	1	3	3

Noise from plant or tasks	Noise induced hearing loss	Employee	3	2	6	NOSIE ASSESSMENT FOR MACHINERY AND EQUIPMENT TO COMPLY WITH NATIONAL STANDARDS. HEARING PROTECTION SHOULD EQUIPMENT BE ABOVE 80DBA	1	1	1
Poor Working Environment (Mud, Dirty, Dust)	Eye Injury, Stomach Bug etc.	Employee	3	4	12	GOOD HOUSEKEEPING ON SITE GOOD PERSONAL HYGIENE USE OF PPE - GLOVES, BOOTS, GOOGLES, HEARING PROTECTION	1	4	4
Working Near Overhead Powerlines	Electrocution/Death	Employee	3	5	15	COMPETENT OPERATORS TRAINED OPERATORS DIAGRAMS AND PLANS OF SERVICES FULL CAT SCAN WHERE MORE THAN 1 OPERATOR WORKING ON THE SAME SYSTEM ALL SHALL LOCK AND TAG ONTO THE FEEDER PILLAR	1	5	5
Vibrating Equipment	Hand Arm Vibration Syndrome	Employee	3	3	9	ASSESSMENT OF VIBRATION LEVELS ANTI VIBRATION HANDLES FITTED TO BREAKER/EQUIPMENT	1	3	3
Bursting Hot and/or Pressurised Oil Hydraulic Pipelines	Burns/Scalds	Employee	3	4	12	WELL MAINTAINED EQUIPMENT VISUAL INSPECTION	1	4	4
Bursting of Compressed Air Hose	Explosion	Employee	3	4	12	PRESSURE REGULATED TO SAFE LEVELS, SECURITY WIRE FITTED BETWEEN BREAKER AND HOSE TO AVOID "SNAKING" OF ACCIDENTALLY DISCONNECTED HOSE UNDER PRESSURE	1	4	4

Excavator in Contact with Underground Services	Electrocution, Explosion, Water Mains Burst	Employee	3	3	9	IDENTIFY AND CONFIRM SERVICES PRIOR TO WORK COMMENCING, PERMIT TO DIG IF REQUIRED	1	3	3
Dust	Respiratory Irritation	Employee	3	3	9	USE WATER OR SIMILAR DUST SUPPRESSANT MEASURE WHERE APPLICABLE USE OF RESPIRATORY PROTECTION	1	3	3
Inexperienced Drivers	Out of Control Plant, Hit by Moving Vehicle	Employee	3	4	12	PEDESTRIAN AND VEHICLE SEGREGATION WHERE POSSIBLE USE OF BANKSMAN WHERE REQUIRED SKILLED OPERATORS TO CITB, SPCS OR EPIC STANDARD INCLUDING WHERE APPROPRIATE NVQ LEVEL 2 SPECIALIST PLANT OPERATIONS EMPLOYEE AWARENESS AND TRAINING	1	3	3
Raised Bodies	Collapse/Entrapment	Employee	3	3	9	USE OF CORRECT PROPS FOR LORRY BODIES, EXCAVATOR ARMS ETD EMPLOYEE AWARENESS AND TRAINING	1	3	3
Removed Guards	Entrapment, Physical Injury	Employee	3	3	9	ENSURE EQUIPMENT IMMOBILISED BEFORE GUARD REMOVAL LOCK OUT, TAG OUT	1	3	3
Refueling	Fire/Explosion	Employee	3	4	12	NO SMOKING FIRE EXTRINGUISHER TO BE DEPLOYED USE OF CORRECT FUELLING APPLIANCE TO AVOID SPLASHES MOBILE PLANT TO BE FUELLED FROM BOWSERS WHERE POSSIBLE	1	4	4
Reversing Vehicles	Hit by Moving Vehicle	Employee	3	4	12	PEDESTRIAN AND VEHICLE SEGREGATION WHERE POSSIBLE USE OF BANKSMAN WHERE REQUIRED HI VIS CLOTHING TO EN471 FLASHING AMBER BEACONS DISPLAYED ON VEHICLES, DRIVER TRAINING, EMPLOYEE AWARENESS AND TRAINING	1	3	3

Excavations	Falls from Height, Collapse of Trench, Personal Injury	Employee	3	3	9	TRENCH SHORING BARRIERS COMPETENCY EMPLOYEES	1	3	3
Temporary Pathways, Kerbs, Open Gullies etc.	Slips, Trips and Falls	Member of the public	3	3	9	CLEAR PEDESTRIAN ROUTES TO BE IDENTIFIED ON TRAFFIC MANAGEMENT PLAN BARRIERS AS APPROPRIATE TO MAINTAIN PEDESTRAIN AND TRAFFIC SEGREGATION PROVISION OF ADEQUATE WALKWAYS WITH ATTENTION FOR DISABLED, ELDERLY AND YOUNG.	1	3	3
Working Adjacent to Live Traffic	Hit by Moving Vehicle	Employee	3	4	12	PEDESTRIAN AND VEHICLE SEGREGATION WHERE POSSIBLE HI VIS CLOTHING TO EN471 TRAFFIC MANAGEMENT TO CHAPTER 8, TRAFFIC LIGHTS, CHICANE , SPEED LIMITS, SIGNAGE, CONES ETC EMPLOYEE AWARENESS AND TRAINING	1	4	4
Use of 360/180 excavators, backswing/hoe or boom entering public carriageway	Contact with Moving Vehicle	Employee	3	4	12	SIGNING AND GUARDING TO SAFETY AT STREET WORKS AND ROAD WORKS A CODE OF PRACTICE (TRAFFIC SIGNS MANUAL) TRAFFIC MANAGEMENT SYSTEM TO BE USED AND ADHERED TO WHERE NECESSARY EMPLOYEE AWARENESS AND TRAINING	1	4	4
Striking Underground Cables	Electrocution/E xplosion	Employee	3	3	9	TRAINED OPERATORS OBTAIN DIAGRAMS/PLANS OF UNDERGROUND SERVICES FULL CAT SCAN PRIOR TO WORK COMMENCING CONTACT ELECTRICITY COMPANY FOR SITE VISIT TO MARK THEIR EQUIPMENT	1	3	3
Penetration of Cable by a Sharp Object	Electrocution/E xplosion	Employee	3	4	12	TRAINED OPERATORS HAND EXCAVATION TRIAL HOLES TO BE DUC TO CONFIRM CAT ENSURE CABLES ARE ISOLATED	1	4	4

Exposed Cables	Electrocution	Employee	3	4	12	TRAINED OPERATORS CABLE ISOLATION BARRIERS PERMIT TO DIG	1	4	4
Exsisting Services - Overhead	Electrocution/E xplosion	Employee	3	4	12	SUITABLE SIZED MACHINE TO BE SELECTED AND/OR HEIGHT RESTRICTOR DEVICE ATTACHED COMPETENT OPERATORS ENSURE THAT THE GS6 HEIGHTS SURVEY HAS BEEN CARRIED OUT AND GOAL POSTS HAVE BEEN ERECTED TO MARK THE RESTRICTED AREA TRAINED OPERATORS	1	3	3
Debris and Equipment in the Working Area	Slips, Trips and Falls	Employee	3	4	12	Ensure all walkways are free from trip hazards. All personnel to wear laced safety footwear No walking on batters, use designated access routes. Keep access routes clear. Good housekeeping to be maintained at all times Park vehicles at suitable location to welfare facility. Provide suitable fencing, signing and guarding to the working area as necessary. Use designated/ proper access to enter and exit plant.	1	4	4
Substances e.g Diesel, Grease, Oil, Concrete, Galvanizing Paint	Dermatitis, Chemical/Concrete Burns, Environmental Incident	Employee	3	4	12	COSHH briefings to be carried out accordingly and control measures within adhered to. Refer to COSHH data sheets before using any substances Spill kit to be available – near the work area. Operatives to be trained to use spill kit. Disposal of empty grease & oil cartridge via correct route, dispose at designated skip. Ensure that there is suitable 'bin' available at work area to place empty cartridges. Wash hands with clean water and soap before eating.	1	4	4

Working at Height	Fall from Height	Employee	3	4	12	Qualified MEWP operator Safety harness and lanyard to have valid test certificate and inspected prior to use Ensure suitable access and egress. Only lift of tarmaced level ground. If not on tarmac foreman and AGC supervisor to confirm that ground is suitable and stabiliser legs are deployed correctly Ensure that temporary barriers are in place to prevent unauthorised personnel into working area.	1	4	4
Lifting Operations - Failure of Accessories/Boom	Dropped Load, Death, Damage to Property	Employee	3	5	15	Lifting plan All lifting equipment will be certified and tested 'colour coded' within the last 6 months and will be checked by the slinger prior to use. Remove all personnel from lifting area. Ensure safe zone is established by means of physical barrier. Operatives do not stand or place body parts under suspended loads. Ensure SWL is not exceeded by adhering to lift plan. All accessories to comply with Lifting operations and Lifting Equipment regulations. (LOLER).	1	5	5
Lifting with HIAB Crane & Telehandler	Falling Object/Load, Personnel Crushed	Employee	3	5	15	CPCS qualified banksman to be used to sling loads. Lift plan to be provided for the lift prepared by a CPCS qualified Appointed person. Lifting equipment to have a valid test certification, and inspected prior to use. Plant operator to be competent and CSCS lifting with excavator qualified. Only lift of flat/ level ground. Ensure that ground is firm. No Under slinging load to forks.	1	5	5

Environmental Impact	Emission to Air, Water or Groundwater, Damage to Flora and Fauna, Use of Fossil Fuels, Nuisance to Neighbours	Member of the public	3	1	3	Operative to be trained and supervised. Careful excavation in good weather conditions Frequent Vehicle and plant maintenance Careful operations near trees and hedgerows. Frequent vehicle and plant maintenance. Noise mitigation methods employed as required. Noise monitoring Refuel as much as is practical in the yard. All fuel bowsters to carry adequate spill kit and granules, and funnels. Refuelling only to be carried out by designated person. Refuelling not to take place within 30m of a watercourse/drain Observe Traffic Management Plan, Dust management, observe agreed working hours	1	1	1
Abrasive Wheels	Havs, Noise, Dust Inhalation	Employee	3	3	9	Use P3 dust mask when cutting. Use dust suppression techniques such as attached water bottle of vac system. Wear EN166 (impact resistance' safety goggles. Use hearing protection EN352. Operative to hold current CSCS card. Only qualified personnel to change abrasive wheel. HAVS exposure Carry out HAVS assessment on Stihl saw and brief the operatives on exposure times. The maximum daily trigger time on the Stihl Saw TS410 is 3hrs 28 minutes.	1	3	3

Working Near Live Traffic	Collision of Plant and/or Operatives	Employee	3	4	12	All plant only to be operated by trained and competent personnel (CPSC card required) Full PPE to be worn including high visibility full sleeve and trousers. All plant to hold all necessary test certificates (check on arrival to site). All plant to be fitted with and use warning lights on top of their vehicle. All plant to be fitted with and use audible reversing alarm. Seat belts to be worn at all times. Pre use inspection completed by operative. Do not use plant if broken or faulty. Ensure all walkways are free from trip hazards. Use designated access routes. Keep access routes clear. Good housekeeping to be maintained at all times Provide suitable fencing, signing and guarding to the working area as necessary. Use designated/ proper access to enter and exit working area Works must be not be carried out in safety zones	1	4	4
Working in Hot Weather/Sun	Sunburn, Heatstroke, Exhaustion	Employee	3	2	6	Regularly apply sunblock Drink water regularly Monitor urine colour Ensure skin exposed to sun's rays is minimised	1	2	2
Working with Live Electrical Systems	Electrocution/Explosion/Fire	Employee	3	4	12	Only qualified electricians with ECS cards to work on live electrical systems Permit to work on live electrical systems must be in place before work begin All supplies to be locked off unless the system has been tested and commissioned	1	4	4