## Risk Assessment - Fencing and Gates – Installation and Maintenance

Reference No: EST-45751-33
Version No: 1
Assessment Approver: Kevin Jarvis

Installation and Maintenance of fencing along railway property. Access is likely to be an issue for materials and equipment. Also uneven ground as fencing can be along top of cuttings or at bottom of embankments.

Department: Drainage
Date Of Assessment: 04 April 2025
Review Due Before: 10 June 2028
Lead Assessor: Sarah Clayton (Infrastructure Manager)
Team: Andrew Laycock (HoD Drainage)

## General use of equipment

| Type | Hazard Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Personal injury<br>Misuse of equipment, use of the wrong equipment or the use of faulty or unsuitable equipment | Volunteers & Staff | 1) CRITICAL - Elimination: Report all defective tools, and either 'red tag' them or mark them “Not to be used.” - Effective<br>2) CRITICAL - Elimination: Keep hands away from moving parts and maintain a firm grip at all times. - Effective<br>3) CRITICAL - Elimination: No one may work with or on – including seeking to repair – any equipment unless those undertaking the work are competent and trained in the work to be done. - Effective<br>4) CRITICAL - Elimination: All work equipment will be subject to user checks – that is, visually inspected for signs of faults, defects or wear and tear, before use and maintained in accordance with manufacturer’s instructions. Any equipment that is faulty or showing signs of faults, defects or wear and tear will be immediately withdrawn from service and either repaired or replaced. - Effective<br>5) CRITICAL - Engineering: Check that all guards and safety devices are in place and functioning properly. - Effective<br>6) CRITICAL - Administrative: All personnel to be advised of the risk of personal injury from the misuse of equipment or from the use of faulty equipment. - Effective<br>7) Administrative: Where necessary for the safe use of power hand tools, those using the equipment to be provided with manufacturer’s instructions for use. - Effective<br>8) CRITICAL - Administrative: Never use a power tool or piece of equipment unless you have been trained and authorised do so and only in accordance with the manufacturer’s instructions - Effective<br>9) CRITICAL - Administrative: Inspect tools prior to use. Only use tools that are in good operating condition. - Effective<br>10) Administrative: First Aid kits to be carried with the work group and ideally a first aider should always be present. - Effective<br>11) CRITICAL - PPE: Wear hearing protection if appropriate and tie back long hair. - Effective<br>12) CRITICAL - PPE: Wear all other PPE designated as appropriate for the equipment. - Effective | 2 x 3 = 6<br>Medium - Risk to be minimised and controlled so far as is reasonably practical. | 1) Elimination: All operatives must work in a way which takes account of the safety of themselves and others. - Effective<br>2) Elimination: Work equipment shall only be used in conditions in which it is intended to be used, for example, shall not be used in wet conditions. - Effective<br>3) Administrative: Lone working is not permitted when working with powered or mechanical machinery or tools. - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |
| Health and Safety | Damage to hearing from Noise<br>Construction activities | Volunteers & Staff | 1) CRITICAL - Administrative: All personnel to be advised: (i) of the risk of permanent injury caused by excessive levels of noise or exposure to noise over a long period of time; (ii) of the symptoms of noise damage and early warning signs; (iii) of ways to reduce harm from noise; (iv) of the increased risk of injury from the misuse of equipment or from the use of faulty equipment. - Effective<br>2) CRITICAL - Administrative: All personnel to be trained in the use of all work equipment used by them. - Effective<br>3) CRITICAL - Administrative: Any equipment that is faulty or showing signs of faults, defects or wear and tear will be immediately withdrawn from service and either serviced, repaired or replaced. - Effective<br>4) CRITICAL - PPE: When using power tools keep the trigger time to a minimum and wear ear defenders. - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | 1) Administrative: Work shall be planned so as to avoid individuals being exposed to noise for long continuous periods – several shorter periods are to be preferred. - Effective | 1 x 2 = 2<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Noise (being unable to hear approaching trains) therefore not being in a position of safety when a train approaches | Volunteers, Staff & Contractors | 1) CRITICAL - Engineering: Lookout to be appointed to warn the team of an approaching train. Advance Lookouts provided too, if necessary. - Effective<br>2) CRITICAL - Administrative: Copies of working timetable to be issued to teams showing public train movements. - Effective<br>3) CRITICAL - Administrative: Daily Ops Notice issued every work day to advise train crews of Lineside teams' work locations - Effective | 2 x 5 = 10<br>Medium - Risk to be minimised and controlled so far as is reasonably practical. | 1) Elimination: Work is to only take place in daylight hours. During fog, falling snow, heavy rain or other environmental condition which causes a reduction in visibility which prevents an approaching train from being seen in time, work must cease, the site made safe and volunteers exit the lineside. - Effective | 1 x 5 = 5<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

## Handling of hazardous substances

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Environmental | Environmental impact<br>Spillage | Everyone | 1) Substitution: The use of spill kits can help contain and absorb spilt substances to prevent them from causing excessive damage to the local environment. Always dispose of correctly. - Effective<br>2) CRITICAL - Engineering: When refuelling power tools, use a funnel to prevent spillages of petrol onto the ground. - Effective<br>3) CRITICAL - Administrative: Refer to product Safety Data Sheets and handle in accordance with COSHH requirements. If the product does not have a GWR COSHH assessment it should not be used until this has been completed. - Effective<br>4) CRITICAL - PPE: Wear correct PPE when handling hazardous substances - Effective | 3 x 1 = 3<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 3 x 1 = 3<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |
| Health and Safety | Fire<br>Flammable substances, i.e. fuel | Everyone | 1) CRITICAL - Elimination: Do not refuel machines which are hot; allow them to cool before attempting to refuel - Effective<br>2) CRITICAL - Elimination: Do not start engine if a fuel spillage has occured as there is a risk of ignition. - Effective<br>3) CRITICAL - Elimination: Fuel or flamable substances should be kept out of direct sunlight and away from bonfires and people who are smoking. - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |
| Health and Safety | Personal injury<br>Inadvertent and unintentional skin or eye contact, ingestion, inhalation or injection of substances hazardous to health | Volunteers & Staff | 1) CRITICAL - Elimination: Petrol driven machinery is not to be used in confined spaces due to toxic gases being emitted in exhaust smoke. - Effective<br>2) CRITICAL - Elimination: Petrol driven machinery is not to be used in areas with explosive atmospheres. - Effective<br>3) Engineering: Facilities for the washing and cleansing of the skin should be available (e.g. hand wipes). - Effective<br>4) CRITICAL - Administrative: Handle and use COSHH substances in accordance with the COSHH assessment carried out by the GWR. If a COSHH assessment has not been completed for the substance, it must not be used. - Effective<br>5) CRITICAL - PPE: When handling hazardous substances, the correct PPE should be worn - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | n n n | n/a |

## Using hand tools

**Gloucestershire Warwickshire Steam Railway Plc**
**Risk Assessment for Fencing and Gates – Installation and Maintenance - Drainage**

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Personal injury<br>Injuries from the misuse of equipment, use of the wrong equipment or the use of faulty or unsuitable equipment. Injuries from lack of training. Potentially fatal injuries from the use or misuse of cutting hand tools. | Volunteers & Staff | 1) CRITICAL - Elimination: The tool shall be inspected by the user before use to ensure that it is not damaged. Any damaged or defective tool must not be used. - Effective<br>2) CRITICAL - Elimination: When using a Stanley knife it must have a retractable blade. Fixed blade Stanley knives may not be used. Blades must be retracted when not in use. - Effective<br>3) CRITICAL - Elimination: Cover or remove any blades when tools are being transported, stored or not in use. - Effective<br>4) CRITICAL - Engineering: Ensure you select the pieces of equipment that is suitable and safe for the job required. - Effective<br>5) CRITICAL - Engineering: Only those who are trained and competent to do so may make adjustments to tools such as changing a blade, sharpening and such like. - Effective<br>6) CRITICAL - Engineering: Maintain good housekeeping. Clean up as you go. Do not leave tools lying around. Return them to their correct storage location when not in use. - Effective<br>7) CRITICAL - Engineering: Clean blades periodically throughout the day. Ensure blades are not loose and check for missing and badly damaged teeth, cracks, setting and sharpness. - Effective<br>8) CRITICAL - Administrative: All personnel to be advised of the risk of personal injury from the misuse of equipment or from the use of faulty equipment. - Effective<br>9) CRITICAL - Administrative: You should only use tools that you are confident and competent in using. All tools shall be used in accordance with manufacturer's instructions. - Effective<br>10) CRITICAL - PPE: Wear the appropriate PPE, including eye protection to protect against flying off cuts and gloves to protect hands from bruises, cuts and abrasions. - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | 1) Elimination: When not in use at a specific point during a job then any tool/implement will be positioned so that it cannot interfere with or cause a hazard to any person. - Effective<br>2) Substitution: Where possible, for the safe use of the tool the manufacturer's instructions should be made available for reference. - Effective | 1 x 2 = 2<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |
| Health and Safety | Tools with blades or sharp edges<br>Using sharp tools | Volunteers & Staff | 1) Elimination: Cover or remove the blade when tools are being transported, stored or not in use. - Effective<br>2) Engineering: Clean blades periodically throughout the day. Ensure blades are not loose and check for missing and badly damaged teeth, cracks, setting and sharpness. - Effective<br>3) Engineering: When sharpening, hold the cutting tool firmly and in a safe position. Ensure fingers and other parts of the hand are kept well clear of the edge. - Effective<br>4) Engineering: Check the handles (and extensions) for cracks and splinters. - Effective<br>5) Administrative: Ensure maintenance, setting and sharpening is carried out as specified in the manufacturer's instructions. - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | n n n | n/a |
| Health and Safety | Use of weeding and cleaning tools<br>Incorrect use | Volunteers & Staff | 1) CRITICAL - Engineering: Make sure a firm stance is maintained and ensure there is enough clear, unimpeded space to swing the cutting tools safely. - Effective<br>2) CRITICAL - Engineering: Do not swing the cutting tool directly towards the legs. - Effective<br>3) CRITICAL - Engineering: When using a short-handed hook, keep your free hand well away from the cutting direction. A forked stick may be used to keep the free hand away from the cutting tool. - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Use of Hand Saws for brashing and pruning<br>Incorrect use | Volunteers & Staff | 1) CRITICAL - Engineering: Maintain a firm stance and ensure there is enough clear, unimpeded space to swing the cutting tools safely. - Effective<br>2) CRITICAL - Engineering: Be alert to hazards such as wasps' nests. - Effective<br>3) CRITICAL - Engineering: Take extra care when working on broken ground, near drains etc. - Effective<br>4) CRITICAL - Engineering: Stand clear of falling branches. - Effective<br>5) CRITICAL - Engineering: Keep ditches clear of brash. - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

## Working near overhead cables

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Electric shock, Burns, Fire, Explosion<br>Unintentional contact with underground or overhead cables, arcing of electricity from cables, trees falling onto cables. | Volunteers & Staff | 1) CRITICAL - Elimination: Never assume electric cables or lines are dead. Do not touch an electric cable or line at any time - automatic switching may reconnect the power. - Effective<br>2) CRITICAL - Elimination: No lone workers or young workers to work in close proximity to overhead power cables. - Effective<br>3) CRITICAL - Elimination: Long-reach tools, such as polesaws must not be used in the vicinity of overhead electric cables. - Effective<br>4) CRITICAL - Engineering: No trees to be felled if any part of the machine or the tree can come within two tree lengths of power lines without prior consent from the Electricity Network Provider. Only fell trees parallel to or away from the power lines (assume they are always live). Ensure the weather conditions and wind direction will not affect the control of the felling direction. - Effective<br>5) CRITICAL - Administrative: The rules set out in the GWR Rule Book Appendix T must be followed at all times when working near or under electric power lines along railway property. - Effective<br>6) Administrative: Anyone carrying out arboriculture work in close proximity to overhead power lines should refer to advisory leaflet AFAG804: "Electricity at work: Forestry and Arboriculture". - Effective<br>7) CRITICAL - Administrative: Establish safe working areas when working around electricity cables and pylons and determine no-go zones. - Effective<br>8) CRITICAL - Administrative: Ensure that the appropriate control measures are put in place to protect members of the public and other workers. - Effective | 1 x 5 = 5<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 1 x 5 = 5<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

## Working near Flora and Fauna

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Irritation or Poisioning<br>Bites, Stings, Blisters or Rashes from plants on the lineside and animals hiding within the undergrowth | Volunteers & Staff | 1) CRITICAL - Substitution: Identify plants before commencing operations. If Giant Hogweed or Water Hemlock is identitied, report this so specialist contractors can be engaged to remove. - Effective<br>2) CRITICAL - Administrative: Be concious of risk of adders in the undergrowth. If one is spotted, leave it well alone and inform others in the team of its presence. - Effective<br>3) CRITICAL - PPE: Wear PPE covering all skin and safety goggles or face shield as well as mesh visor. - Effective<br>4) CRITICAL - PPE: No shorts, or short sleeved tops to be worn, reducing the risk of skin contact with sap. - Effective<br>5) CRITICAL - PPE: Ensure hands are cleaned thoroughly before eating or drinking. - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

## Working near water

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Bio-hazards<br>Infections from vermin - Weils disease, Legionella, Tetanus, Hepatitis, etc. | Volunteers & Staff | 1) CRITICAL - Engineering: Beware of unidentified cannisters, bottles, cans and so on dumped on the lineside, the contents may not be as labelled. - Effective<br>2) CRITICAL - Administrative: All personnel to be advised of the significant risks from bio-hazards through direct ingestion, entry by skin or eye contact and inhalation when in contact with contaminated soil or sewage. - Effective<br>3) Administrative: Ensure your tetanus and hepatitis inoculations are up to date. - Effective<br>4) CRITICAL - PPE: At all times keep all cuts and abrasions covered with waterproof dressings. Wear suitable gloves. Do not eat, drink or smoke whilst working. Wash hands thoroughly at the beginning and end of each shift and before using the toilet. Remove contaminated clothing before eating and drinking. - Effective<br>5) CRITICAL - PPE: Where the water is known to be or is suspected to be foul, do not touch your face unless you have washed your hands. Wear a P3 face mask and goggles over disposable coveralls if possible. Wear disposable nitrile gloves and waterproof boots. - Effective<br>6) CRITICAL - PPE: If the work is likely to expose you to significant volumes of soil dust, moulds or spores, wear a face mask. Use wetting techniques if possible to minimise exposure. - Effective<br>7) CRITICAL - PPE: If working with water systems where a water mist or spray is likely to be created (including disposing of dirty water or foul water), wear a suitable face mask (P3). - Effective | 2 x 3 = 6<br>Medium - Risk to be minimised and controlled so far as is reasonably practical. | None | 2 x 3 = 6<br>Medium - Risk to be minimised and controlled so far as is reasonably practical. | n/a |
| Health and Safety | Drowning<br>Entering water intentionally or otherwise and being unable to escape | Volunteers & Staff | 1) CRITICAL - Substitution: Retain stumps in riparian zones and aquatic habitats, where practicable, to reduce the potential for bank errosion. - Effective<br>2) CRITICAL - Substitution: Ensure that all water systems are identified before work commences to ensure that there is no risk of water inundation. - Effective<br>3) CRITICAL - Engineering: Clear up waste materials as work proceeds and dispose of correctly. Keep floor areas clean to prevent trip or fall hazards near water. - Effective<br>4) CRITICAL - Administrative: All personnel to be advised of the significant risks while working in and around water particularly the risks of falling into or being inundated by water or materials as a result of a ground collapse and of vehicles falling in. - Effective<br>5) CRITICAL - Administrative: Plan the works to avoid, where practicable, any activities in aquatic habitats and riparian zones. - Effective | 2 x 4 = 8<br>Medium - Risk to be minimised and controlled so far as is reasonably practical. | 1) Elimination: Any person unable to swim is not permitted within 10m of any body of water. - Effective<br>2) Substitution: Minimise riparian vegetation removal where practicable, and restrict access to the waterways to the minimum amount of bank length required for the activity. - Effective<br>3) PPE: Consider the provision of a water life saving device such as a floating ring. - Effective | 1 x 4 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Environmental | Environmental impact<br>Contamination to land or water | Volunteers & Staff | 1) CRITICAL - Substitution: Carry out any refuelling of plant and equipment, chemical storage and decanting at least 50 m away from aquatic habitats. - Effective<br>2) CRITICAL - Engineering: Clean up spills immediately and dispose of waste correctly. - Effective | 2 x 1 = 2<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 2 x 1 = 2<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

## Access to worksite

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Access/Egress - Slips / Trips & Falls<br>Work sites can often be at top of cuttings or bottom of embankments | Volunteers & Staff | 1) CRITICAL - Engineering: Work area to be kept clean, tidy and free from trip hazards. - Effective<br>2) CRITICAL - Administrative: All volunteers shall be appropriately instructed and trained in the safe working techniques to be employed - Effective<br>3) CRITICAL - PPE: Correct footwear to be worn - Effective | 3 x 1 = 3<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 3 x 1 = 3<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

## Excavation

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T Overall | Additional Control Measures | L S T Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Unknown buried services | Volunteers & Staff | 1) CRITICAL - Administrative: All employees to assume that the work area contains services of a dangerous nature and no one shall break ground without first having ascertained what services are on site, their path and location and whether they are live. - Effective | 1 x 4 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 1 x 4 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |
| Health and Safety | Manual digging<br>Injury | Volunteers & Staff | 1) CRITICAL - Elimination: Use specifically designed equipment such as borers where reasonably practicable - Effective | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 2 x 2 = 4<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

## Manual handling

| Type | Hazard<br>Cause | Persons Affected | Control Measures | L S T<br>Overall | Additional Control Measures | L S T<br>Overall | Owner/Action |
|---|---|---|---|---|---|---|---|
| Health and Safety | Back injury, muscle strains and Sprains<br>Pushing, pulling, twisting or reaching too far with bad posture, and/or repetitive use of the same muscles over and over again. | Volunteers & Staff | 1) CRITICAL - Elimination: Use correct body posture when lifting, pushing or pulling and be aware not to repeatedly do the same task - Effective<br>2) CRITICAL - Administrative: All staff to have completed GWSR on line manual handling training. - Effective | 3 x 1 = 3<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | None | 3 x 1 = 3<br>Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level. | n/a |

## COSHH Assessments

There are no COSHH assessments associated with this risk assessment.

Ends