Risk Assessment

Network Rail

Date: 28 March 2013

Revision No: Document Ref:



DEFINITIONS OF TERMS USED WITHIN THIS DOCUMENT (TAKEN FROM BS OHSAS 18001:2007):

Hazard: Source, situation, or act with the potential for harm in terms of human injury or ill health, or a combination of these.

Hazard Identification: Process of recognising that a Hazard exists and defining its characteristics.

Risk: Combination of likelihood of an occurrence of a hazardous event or exposure and the severity of injury or ill health that can be caused by the event or exposure.

Risk Assessment: Process of evaluating the risk(s) arising from a hazard(s), taking into account the adequacy of any existing controls, and deciding whether or not the risk(s) is acceptable.

Risk Reduction or Mitigation: Set of controls that can be used to eliminate or reduce 'As Low as Reasonably Practical' the risks associated with an activity.

PURPOSE AND SCOPE OF THIS DOCUMENT

To define as far as is reasonable practicable, the generic risks and mitigation measures associated with common site visit activities. This risk assessment should in no way be viewed as exhaustive and may need to be expanded upon depending on the site being visited and the activities being undertaken. As well as clearly identifying a hazard it also vitally important to understand the contributory factors wherever possible. Bearing this in mind, each hazard has been expanded upon to list the most common causes or reasons why the hazard may occur. Once again please note that this list is not exhaustive.

Where additions to this generic assessment have been identified and added, they should also be discussed with the responsible Project Manager, who must in turn inform the Director for Health and Safety or the Health and Safety Advisor. You should be aware and accept that as an Employee you are also responsible for your own health and safety and how your acts or omissions may affect others, therefore you should not undertake any activity which is unsafe or where significant risks cannot be reduced to an acceptable level.

This risk assessment does not consider the identification of potential hazards to the Environment (e.g. pollution risk) and only deals with risk to health and safety. This Risk Assessment should be reviewed in conjunction with the Site Risk Assessment and, if required, the Construction Site or Network Rail Risk Assessment.

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SITE VISIT RISK ASSESSMENT

JBA utilises the 5 X 5 risk assessment table: Severity X Likelihood of occurrence = Risk Factor (S X L = RF)

- · Hazards are identified, listing possible causes if appropriate and assessed for severity
- These are then multiplied by the frequency or likeliness of an incident occurring if no controls were applied
- · This produces the risk factor

The numerical assessment table gives guidelines on how to assess severity and frequency.

This risk assessment is generic and whereas the basic principles will always apply, it is acknowledged risk can change significantly from one site to another. Generic risk assessments will always be reviewed by the appointed Project Manager and then expanded upon if required to nullify or apply the necessary controls to hazards identified during site visits (pre-works) or through information passed to them by a third party.

Numerical Ass	essment		
Severity (S)		Likelil	nood of Occurrence (L)
1	No Injuries / Minor Damage	1	Remote
2	Single Minor Injury	2	Unlikely
3	Single Major Injury / Minor Pollution	3	Occasional
4	Single Fatality / Major Pollution	4	Likely
5	Multiple Fatalities	5	Highly Likely

Risk Factor							
		Likeliho	od of Occur	rence (L)			
		5	4	3	2	1	
(S	5	25	20	15	10	5	
>	4	20	16	12	8	4	
Į.	3	15	12	9	6	3	
)	2	10	8	6	4	2	
Š	1	5	4	3	2	1	

Risk Factors between 16 to 25 = Unacceptable Risk. Risk Factors > 8 will be strictly monitored. Hazards Identified with a Severity Assessed at 3 or above will also be strictly monitored.







Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Struck by a Train Walking adjacent to/along the operational Railway Working on or near the line Lone working Working as part of a group Visitors to the infrastructure Accessing infrastructure from track level	Multiple death Death Serious injury Injury Minor injury Near Miss	5	4	20	Only PTS certified staff to be used as a minimum standard. Need for access at track level to be avoided where possible. Refer to SOP – TRACK ACCESS – PLANNING A SAFE SYSTEM OF WORK (NETWORK RAIL INFRASTRUCTURE) Network Rail PTS and other track competency training, and specification with the Rule Book / PTS Handbook relevant to the activity to be complied with at all times IWA working only in accordance with training and rule book and only with SSOWP Use Approved Safe System of Work (SSOW) for rail work Use approved walking routes. Access site via safe authorised accesses. Pre-site desk study / planning including Hazard Directory and Sectional Appendix Need for access at track level to be avoided where possible. Complete work and access via third party land without the need to access Network Rail Property HV Clothing (Orange Rail Approved) and other PPE to be worn at all times	5	2	10









Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	F	Control Measures	S	L	RF
Electrocution Coming directly into contact with, or objects you are carrying coming directly into contact with: AC Live Overhead Line Equipment (OHL) DC Live traction rail – third or fourth rail Coming with 9ft or objects you are carting coming with 9ft of Live OHL equipment	Multiple death Death Serious injury Injury	5	4	20		Staff awareness Assume the traction rail / OHL are live at all times unless briefed otherwise Staff to be suitably trained PTS (AC/DC or DCCR) Network Rail PTS and other track competency training, and specification with the Rule Book / PTS Handbook relevant to the activity to be complied with at all times Advance planning of access and possible obstructions Use non-conductive levelling staff and other equipment approved for use on the railway Carry objects horizontally with more than 1 person as required Don't let anything come into contact with (or within 9ft of for OHL) live electrification equipment or in contact with DC rail. Works in proximity OHL or DC rail to be completed in isolation under supervision of COSS in isolation. All jetting / CCTV and other invasive work to be completed during an Isolation Caution when climbing cuttings where OHL present consider proximity to OHL Caution when working at height or above track level (e.g. culvert headwalls, bridges etc) where OHL present consider proximity to OHL Do not lower anything from or lean over bridge overbridge parapets above OHL line Cross DC rails in accordance with training and ONLY IF NO OTHER SAFE CROSSING POINT EXISTS IN THE AREA	5	2	10









Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Whilst / walking working on or near the line: from third parties, construction sites, adjacent premises etc Using implements or small hand tools that create noise which makes it difficult to hear oncoming traffic. Use of Mobile Phones (including headsets) and Personal Music devices	Death Serious injury Injury	4	3	12	No equipment to be used by staff if it impairs the ability of being able to detect approaching trains or affects safety of line - see Rule Book Training No tools to be used by JBA staff unless formally agreed by line manager and SSOW in place (see above). JBA Consulting Staff not to use tools supplied by or owned / operated by another Consultancy / Client – act as supervising consultant capacity only. If noise prevents hearing the approach of trains or on track machines then work should stop and SSOW reviewed and safer system introduced Use of mobiles and headset not permitted unless in a position of safety and it does not detract from safety – however use of phones should be kept to avoided where possible Use of person music devises in Prohibited Background noise may mask other hazards or approaching hazards - alternative safe working methods may be needed e.g. additional staff to look and warn of dangers	4	2	8
Struck by a Site Vehicle / plant / on track machines, engineering trains Working in possessions Construction and work sites Supervising contractors / site staff Accessing sites through others works sites	Death Serious injury Injury	4	3	12	Adopt O19 SSOWP method of risk minimisation. Approved High Visibility Clothing to be worn at all times Sign in to and get briefing for work sites with COSS or supervisor as required IWA working only in accordance with training and rule book and only with SSOWP Avoid entering areas where plant and machinery in operation Keep clear of on-track and other plant and do not ride in or on machines or plant Awareness and vigilance Do not undertake any tasks that prevent you looking up and detecting approaching plant or machines	4	2	8

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Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Changes in conditions that affect your safe system work Falling / failing light Darkness Fog Mist Snow Heavy Rain Reduced / reduction of sighting Restricted Clearance Entering Red Zone Working Prohibited areas Loss of Communication with office / signal box	Death Serious injury Injury	4	3	12	If SSOW is no longer safe or useable due to changes in the working environment then Stop Move to a position of safety Set up new safer system of work or Leave activity and site	4	2	8
Previously unrecorded drainage features Open chambers Ditches Drains Culverts Examination of drainage and earthworks Site walk overs Survey work	Serious injury Injury	3	4	12	Staff awareness Precautionary approach Review of all previous records Request information from client relating to Hazards Avoid entering dense vegetation Presence of hydrophilic plants / wets areas often indicate failed or missing drainage features Land topographic features may give clues to drainage presence	3	2	6









Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Buried services and S&T Cables Buried third party utility systems including electric, gas and water Buried Railway cabling including electrical, signalling and telecommunications (S&T) Electrocution Damage to utility or cabling Failure of signalling systems	Death Serious injury Injury	5	2	10	Staff awareness of buried services and safety when working around them Copy of up to date extract from Network Rail Hazard Directory detailing known services in area and a full buried services search are to be obtained prior to undertaking any site works. All recorded services are to be clearly identified on site. No staff to undertake any breaking of the surface without a full CAT scan by a competent person using certified and approved CAT scan equipment is to take place on any railway project. In addition to a SSOW a 'Permit To Dig' procedure is to be introduced before work can commence.	5	1	5
Troughing routes Concrete lids and channels buried or mounted within the ballast areas Walking on troughing route Loose lids and channels Undetected or buried routes Trapped cables Slips, trips, falls	Serious Injury Injury Broken ankles and lower legs	3	3	9	Staff awareness Do not walk on troughing routes. Troughing routes are not to be used as walking routes as they are not designed to withstand foot traffic etc. Normally the troughing routes are located in the cess and visible above the surface, but awareness that they may be remote from the track and buried. As with all walking on railway property precautionary approach is required.	3	2	6
Wind Blown from position of safety Blown from structures Wind borne debris Movement of OHL					Care in wooded areas - inspect trees for possible deadwood and avoid trees. Do not enter wooded areas in times of high winds Do not work on exposed areas, cutting crests, slopes, structures in high wind In very high winds works should not be completed on site Background noise may mask other hazards or approaching hazards - alternative safe working methods may be needed			











Please add site specific hazards and appropriate crisk assessment is stored in the job file.	ontrol measures below. Please ensure that this
Hazard	Control
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Hazard	Control







Every time a site visit is undertaken, details should be updated in the next box

Reviewed by:	
Contact Phone Number	
Vehicle (Type , Colour and Registration)	
Other JBA Employees Attending Site	
Date of Visit:	
Comments:	
Reviewed by:	
Reviewed by: Contact Phone Number	
· ·	
Contact Phone Number Vehicle (Type , Colour and	
Contact Phone Number Vehicle (Type , Colour and Registration)	



