RISK ASSESSMENT CONSTRUCTION SITES

Date: 09 December 2010
Revision No: 05

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 Risk Assessment.

SITE VISIT RISK ASSESSMENT

JBA utilise 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 Assessment			
Severity (S)		**Likelihood 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						
		Likelihood of Occurrence (L)				
		5	4	3	2	1
Severity (S)	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 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.						

The table below identifies the hazard and possible cause/s if appropriate. Frequency and risk factor are also calculated prior to controls being implemented. The risk factor is then re-calculated with the control measures in place.

Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Entry to Construction Sites – General Machinery operation General site hazards Underfoot conditions Slips Trips and Falls Material falling from above	Multiple death Death Serious injury Injury	**5**	**3**	**15**	No staff permitted to enter a construction site without the authority of the Contractor in charge and where possible visits to be prearranged. All staff to have received and have understood a site induction / briefing prior to entering site. All staff to abide by site rules. PPE as specified by Contractor to be worn at all times – but to include as a minimum Hi-Vis Jacket or vest, Safety boots or Wellingtons and Hard Hat. Awareness of machinery and plant operating around site. Site specific hazards to be identified as part of the induction e.g. plant working in area, location of excavations, location of groundworks, stores and restricted areas See also Site Risk Assessment	**5**	**2**	**10**
Trapped in Soft ground Deep mud Clay bund Quicksand Silt Including pedestrians and vehicles	Death Serious injury Injury	**4**	**3**	**12**	Site inspection prior to work commencing to identify potential associated hazard sites. Request details from land owner or client regarding potential hazard locations Avoid entering into any such areas. Specific method statement to be written and approved for the location and its particular hazards including actions to be taken in the event of emergency. Briefing of all staff prior to access to site including staff being briefed by Principal Contractor if applicable. Staff to abide by site rules. No lone working in such areas. Staff to have adequate communication equipment in case of emergency. Precautionary approach to entering any areas including testing depth with suitable pole etc. PPE to be worn.	**4**	**1**	**4**

Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Excavations Works associated with excavations Open excavations Falls from height Buried services Collapse Unsupported excavation Entering excavations Undermining of adjacent structures Flooding / water ingress Contaminated ground Dust and particles	Multiple death Death Serious injury Injury Severe / Chronic Illness Illness	**5**	**3**	**15**	Specific method statement to be written and approved by Principal Contractor and briefed to all staff. JBA Consulting staff not permitted to operate machine or plant of any type and should not ride on / in or supervise works from / in any machine or plant. JBA Consulting staff not permitted to enter into any unsupported excavations and entry to supported excavation only to be considered as a last resort. Open excavations to be clearly identified on site including edge guards / fencing as required. Confined space entry only to be undertaken by competent staff using a safe system of work (see Confined Spaces Risk Assessment) JBA Consulting staff not permitted to undertake excavations of any kind unless permission granted by Divisional Director and Method statement approved and implemented. Such method statement should consider: No open excavation to be left unattended or unsecured No open excavation to be left for prolonged periods of time and ideally should be completed and infilled in one continuous activity. In addition open excavations should be inspected not less than daily. Temporary works and temporary support to be designed by competent engineers and constructed by competent contractors including side support / battering and grading Services search prior to staring on site with locations of services identified on site and drawings CAT scan by competent persons prior to excavation using certified and approved CAT Scan equipment Location and method of storing excavation materials Alternative method to open excavation to be considered as part of engineering solution Permit to dig system to be introduced	**5**	**2**	**10**

Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Working at Height Falling whilst working at height. Inappropriate access / working platform. Inappropriate use of platforms. Alteration of platforms. Temporary scaffolding, towers and powered access platforms Carrying too much. Ladder movement. Ladder failure. Rushing.	Death Serious injury Injury	**4**	**3**	**12**	Specific method statement to be written and approved by Principal Contractor and briefed to all staff. Staff should avoid working at heights and should consider alternative method of working including use of special contractor e.g. roped access. JBA Consulting staff who wish to work at height should gain authority from Divisional Director and only after approved method statement has been produced. Scaffolding to be erected by competent, certified scaffold company using certified equipment Staff awareness **Specific method statements to be written and authorised by line manager if ladder use required – see Site Risk Assessment.**	**4**	**2**	**8**
Working on or near water	Death Serious injury Injury	**4**	**3**	**12**	See – SITE RISK ASSESSMENT	**4**	**2**	**8**
Working in proximity to plant and equipment	Multiple death Death Serious injury Injury	**5**	**3**	**15**	See – SITE RISK ASSESSMENT	**4**	**2**	**8**
Construction Noise	Death Serious injury Injury	**4**	**2**	**8**	See – SITE RISK ASSESSMENT	**4**	**1**	**4**
Asphyxiation due to poor atmosphere Fumes Chemicals Solvents Dust Confined Spaces	Multiple death Death Serious injury Injury	**5**	**3**	**15**	Principal Contractor is to identify any areas of such hazards and brief staff appropriately JBA Consulting staff are not to enter any location where such Hazards may exist (this is irrespective of any specialist PPE being provided) unless they are Confined Spaces trained and an appropriate risk assessment and equipment is in place. In the event of starting to feel unwell and suspect possible contact with any such substances – leave area immediately to fresh air and seek medical help Staff awareness Obey site rules COSHH Assessment and briefing as required	**5**	**1**	**5**

RISK ASSESSMENT CONSTRUCTION SITES

Date: 09 December 2010
Revision No: 05

Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Drowning due to flooding of work site Cofferdam failure Temporary works failure Pump failure Rainfall Leakage Inflow from land drains/culverts	Multiple death Death Serious injury Injury	**5**	**3**	**15**	Principal Contractor is to identify any areas of such hazards and brief staff appropriately Check weather forecast Monitor weather conditions Monitor water levels and flows Temporary works to be designed and installed by competent persons and are to be adequate for expected situations Cofferdam register Anti-vandal cofferdams Standby pumps Standby generator/power supply with adequate fuel supply Emergency plan First aid trained staff on site JBA Consulting staff should avoid entering areas where such risks are possible unless briefed and suitable arrangements are in place. Entry to Confined spaces is to be completed by qualified and competent staff only in accordance with method statement See also Site Risk Assessment	**5**	**1**	**5**
Storage of fuels and chemicals Including location of any storage areas Risk of fire Potential for exposure to chemicals / substances and their by-products Leaks and emergency situations	Multiple death Death Serious injury Injury	**5**	**3**	**15**	Contractor to set up suitable and sufficient storage areas including emergency arrangements as required by the level and type of material or substance being stored. Any arrangements are to e briefed to all staff as part of site induction. Details and records of any stored materials or substances are to be retained in accordance with the legislation and available for inspection if required. Rule governing access to storage areas and use of any materials or substances are to be formulated and enforced by principal contractor A strict no smoking policy applies to these areas.	**5**	**2**	**10**

Hazards and possible causes identified	Potential Risk or consequence associated with the Hazard	S	L	RF	Control Measures	S	L	RF
Working in proximity of cranes and other lifting equipment Objects falling / dropping Injury by lifting equipment or materials being lifted	Death Serious injury Injury	**4**	**2**	**8**	Contractor to prepare and brief suitable method statements for lifting equipment and materials. Banksmen to be used Restricted / 'no-go' areas to be set up and enforced Awareness of banksman and restriction area and obey site rules Do not pass beneath anything slung from or being lifted by equipment Do not move in front of or behind equipment transporting objects unless driver / banksman acknowledges safe to do so. Do not enter within lifting / boom swing area and be aware of plant crush zones PPE to be worn	**4**	**1**	**4**

RISK ASSESSMENT CONSTRUCTION SITES

Date: 09 December 2010
Revision No: 05

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

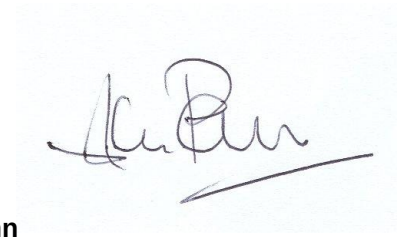
RISK ASSESSMENT CONSTRUCTION SITES

Date: 09 December 2010
Revision No: 05

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

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

Reviewed by:



Ian Benn
HSQE Manager
JBA Group Limited

Approved by:

Richard Buck
Director for Health and Safety
JBA Group Limited