

Hazard Identification / Designer's Risk Assessment

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Persons at Risk / Affected Groups			
S – Building Staff	C – Contractors (Site)	V - Visitors	P - Public

RISK MATRIX							
Severity	Catastrophic	5	5	10	15	20	25
	Major	4	4	8	12	16	20
	Serious	3	3	6	9	12	15
	Minor	2	2	4	6	8	10
	Negligible	1	1	2	3	4	5
Likelihood (Probability)			1 Very Unlikely	2 Unlikely	3 Possible	4 Likely	5 Very Likely
1 – 4: ■ Low risk – No additional controls required 5 – 18: ■ Medium risk – Risk controls required corrective actions. Preventative measures. (Apply Risk Hierarchy when considering and developing risk controls). 20 – 25: ■ High risk – Stop activity. Apply elimination of reduction strategies. Management involvement in decisions and risk control implementation.							

Definitions of Likelihood (Probability)			Definitions of Consequences (Severity)		
Very Likely	5	Very likely to occur	Catastrophic	5	Fatality, severe environmental damage, severe property/machine damage.
Likely	4	Likely to occur	Major	4	Major injury or illness, significant environmental damage, significant property/machine damage.
Possible	3	Could occur	Serious	3	2-day injury or illness, multiple minor injuries, notable property/machine damage, serious environmental damage.
Unlikely	2	Unlikely to occur	Minor	2	First aid injury or illness, minor property/machine damage, minor environmental damage.
Very Unlikely	1	Very Unlikely to occur	Negligible	1	No first aid required, slight property/machine damage.

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Activity	Site Specific Risks									
Hazard Identification	People at Risk	Design Stage Actions	Without Control Measures			Control Measures	With Control Measures			Residual Risk Acceptable?
			L	S	R		L	S	R	
Existing building drainage	C	Review of all available drainage survey information. However, there are gaps in the available information.	4	2	8	Existing drainage runs to be identified on site and confirmed prior to works being undertaken. Missing information to be provided to the designer by site.	4	2	8	
Existing building drainage to be abandoned	C	Uncharted drainage runs may be exposed, locations and levels may differ to the available survey information.	4	1	4	All existing drainage to be located and proven on-site prior to any drainage works being undertaken and contractor to develop method of maintaining existing building drainage. Abandoned drainage to be removed or filled in with cement.	2	1	4	
Proposed drainage failure i.e. Blockages	S.C.V.P	Proposed drainage designed in accordance with all relevant guidance. Silt traps and sump boxes installed at every outgoing connection. Catchpit chambers installed upstream of attenuation tanks. Drainage management and maintenance plan to be provided to end user.	3	3	9	Regular inspection and maintenance of the drainage system to be undertaken by the relevant person(s) as per the maintenance plan.	2	2	4	
On site flooding i.e. outfall chambers surcharging	S.C.V.P	Proposed drainage designed using the latest hydraulic software and guidance i.e. no surcharging for 1 in 1, no flooding for 1 in 30, flooding for the 1 in 100 + CC is to be kept within the development. Drainage design has kept flooding for the 1 in 100 + CC to a minimum and in areas on site that will be retained and not impact buildings.	4	4	16	Drainage features such as Hydrobrake chambers are equipped with a bypass door i.e. steel rope attached to bypass door to be able to operate manually. Drainage items/networks contain sumps to remove sediment/silt to prevent build up.	3	2	6	
Environmental pollution	S.C.V.P	Pollution control features included within the drainage design i.e. oil separators, vortex separators and channel drains (Hauraton DrainFIX).	5	4	20	Pollution control features treat all surface water runoff in line with SuDS guidance and meet the pollution hazard indices for the land use classification.	2	2	4	