

Client	Strata Homes
Site	Westgate, Cleckheaton – Site Access and Off-Site Highways
Designer	M. K. Wheatley Kinsella
Date	10.10.2023
Date of Current Drawings	10.10.2023

DESIGNER HAZARD IDENTIFICATION AND RISK ASSESSMENT								
Item Ref.	Highlighted Hazard	P	S	R	Response/Control Measure	P	S	R
0.1	The risk of a crane toppling whilst lifting heavy loads	2	3	6	Minimise need for crane lifts by trying to design out hazard. Try and ensure cranes not operated alongside excavations or unstable/steep ground.	1	3	3
0.2	The risk of construction workers being struck by moving vehicles due to having to work close to or within live traffic or traffic movements to/from the site	4	4	16	Try to design out hazard. Safe working zones to be maintained providing clearance from live carriageway using traffic management in accordance with Chapter 8 of the Traffic Signs Manual. Temporary speed limits to be in place during construction phase. Ensure safe methods of site access and egress for vehicles and pedestrians. Ensure vehicle/pedestrian segregation. Full PPE to be used at-all-times.	1	4	4
0.3	Risk to members of the public and operatives from air pollution (associated with dust and visual intrusion)	3	3	9	Designer to minimise the need for saw cutting and other operations resulting in airborne pollution. Operatives to use water to damp down dust clouds, for the duration of any cutting works.	1	2	2
0.4	Risk of electrocution or explosion due to plant being accidentally damaged. Risk of electrocution as a result of passing too close to live electricity overhead cables. Risk of explosion or injury to construction operatives and members of the public by damaging Statutory Undertakers' plant	3	5	15	Identify utility plant present in area and try to design to avoid such plant. Inform Contractor which utilities are present. Ensure the position of apparatus is to be established prior to commencement of works on site. Mark on drawing position of plant. Liaise with utility company regarding measures to be adopted and need for any temporary diversions. Minimise breakout/excavation within design. Where statutory undertakers' apparatus affects proposed road alignment, follow procedures laid down in NRSWA (Diversionary Works) Code of Practice. Hand dig recommended when excavating close to known underground apparatus.	2	5	10
0.5	Risk to operatives from removing asbestos cement or old lead (old manholes, pipes, lamp columns, paint etc)	2	4	8	To be identified on site. Potential risk to Contractor of asbestos being uncovered is to be identified in H & S Plan. Should asbestos containing material be suspected, RCBC to be	1	4	4



					notified so tests can be arranged to confirm presence of asbestos. All materials suspected to contain asbestos are to remain in situ until testing/safe removal can be arranged.			
0.6	Risk to operatives associated with construction in areas of hazardous materials	3	3	9	Try to minimise the risk by avoiding use of hazardous materials where possible. Allow for suitable welfare facilities to be installed from the outset of the project. Strict adherence to all COSHH literature should be ensured. Additional precautions relating to protecting members of the public with respect to the following materials will need to be addressed: a) dust generated by construction b) noise generated by construction Appropriate protective clothing/equipment to be worn. Washing facilities to be provided. Abide by manufacturers' instructions.	1	3	3
0.7	Risk to operative exposure to vibration and noise from use of vibrating roller, road breaker or other tools	4	4	16	Use well maintained plant suitable for the purpose. Use job rotation methods to reduce exposure to vibration and noise. Use tools with reduced noise/vibration level. Plant & vehicles to be turned off when not in use. Provide correct PPE, especially ear defenders for noise control. Method statements to control hand-arm vibration must follow HSE guidance document HSE 246/30.	2	3	6
0.8	Risk of back injury as a result of lifting heavy loads and/or crushing from dropping heavy loads	4	4	16	Allow enough room for the use of mechanical lifting equipment for weights over 20kg when setting out temporary traffic management.	2	4	8
0.9	Risks to operatives and members of the public due to falling objects during lifting operations or whilst working at height	2	3	6	Ensure all lifting operations are covered by an adequate method statement and personnel are aware of all lifting operations. Ensure adequate drop zone is cordoned off during works at height. Hard hats to be worn by all operatives.	1	3	3
0.10	The risk to members of the public from the hazards of a construction site near to a residential area	4	4	16	Provide alternative routes for pedestrians/cyclists. Residents to be informed prior to commencement of works. Pedestrian barriers should be used to provide adequate safety zones.	1	2	2
0.11	Risk of oil spillage entering existing watercourses	3	3	9	Existing highway drains to be cleaned using appropriate method which removes effluent/detritus. Operatives to carry and be trained in the use of spill kits. Cover existing	2	3	6

					highway drainage where there is a risk of oil spillage.			
0.12	The risk of contracting Leptospirosis/Weils disease whilst working near or over water	2	5	10	Ensure all staff are aware of the hazards involved and provide hand washing facilities. Provide registered leptospirosis cards for all site operatives. Provide guidance information for all operatives relating to the risk of working in proximity to a watercourse, river, pond or sewer. Ensure adequate supply of sterile wipes and waterproof plasters for minor cuts/grazes. All operatives to have up to date Tetanus inoculation.	1	5	5
0.13	Hazard to construction operatives when entering confined spaces (i.e. gas)	2	3	6	Attempt to design out the need for entering confined spaces. All operatives to be trained to work with a confined space and to have a safe system of work in place. Access into excavations and sewers must be controlled and only undertaken in accordance with the Confined Spaces Regulations 1997 with monitoring for Oxygen and hazardous gas (Methane & Carbon Dioxide), prior to personnel entering such excavations.	1	3	3
0.14	Risk of contamination/stagnation when working near water main	2	4	8	Inform Contractor of presence. Ensure the position is established prior to commencement of works. Mark the position on drawing. Liaise with NWL regarding measures to be adopted and need for any temporary diversions. Minimise breakout/excavation within design. Where water main affects proposed road alignment, follow procedures laid down in NRSWA (Diversionary Works) Code of Practice. Hand dig recommended when excavating close to known underground apparatus. Flush/disinfect if required and agreeable with NWL.	1	4	4
0.15	Risk of spread of Covid-19	4	5	20	All site attendees to be reminded on a regular basis of measures to help reduce the spread of coronavirus with clear provisions/guidance in place for hand washing, cleaning, social distancing, PPE & RPE plus promotion of mental health & wellbeing awareness.	2	5	10
1.1	Risk of collision when vehicle breaks down but has insufficient room to pull far enough off the live carriageway	2	3	6	Provide full carriageway cross-section to standard. Ensure width enough for vehicles to pass a broken-down vehicle.	1	3	3
1.2	Risk of collision with pedestrians/cyclists at crossings	3	3	9	Avoid dead areas of carriageway that may accumulate debris and cause a slippery surface for NMUs. Separate	2	3	6

					NMU movements from vehicle movements where possible. Provide adequate warning signs in advance of crossings and temporary signs as required.			
5.1	Risk of flooding due to effect on existing watercourses/drainage system by highway proposal	2	3	6	Minimise effect on existing system. Use of trapped gullies where appropriate.	1	3	3
5.2	Risk of trench collapse during temporary de-watering works within running sand and ground water	1	5	5	Ensure protective system installed keeping heavy equipment and excavated materials away from trench edges. Refer to underground information before digging.	1	5	5
6.1	Risk of wall/earth collapse during construction of retaining walls/batters.	1	4	4	Not to be undertaken in adverse weather conditions. Contractor to ensure adequately installed temporary support and a safe rate of construction as required.	1	3	3

EXPLANATORY NOTE ON RISK CLASSIFICATION

Risk is the likelihood of potential harm from a hazard being realised. The extent of risk will depend on:

- The likelihood/probability of that harm occurring
- The potential severity of that harm i.e. of any resultant injury or adverse health effect
- The population which might be affected by the hazard i.e. the number of people who might be exposed

This risk assessment shall be reviewed if there is any reason to suspect that it may no longer be valid or there has been a significant change in the matters to which it relates.

Risk classification and required action:

Probability (P) *		Severity (S) **					
		0	1	2	3	4	5
		No harm	Minor harm	Moderate harm	Serious harm	Major harm	Catastrophic harm
0	Almost impossible	-	-	-	-	-	-
1	Extremely unlikely	-	1	2	3	4	5
2	Unlikely	-	2	4	6	8	10
3	Likely	-	3	6	9	12	15
4	Extremely likely	-	4	8	12	16	20
5	Almost certain	-	5	10	15	20	25

Risk rating (R)

1 = Very Low – No action required.

2-6 = Low – Ensure control measures are maintained and reviewed as necessary to ensure so far as is reasonably practicable the appropriate control of residual risk.

8-16 = Medium – Control measures to reduce risk rating to a level which is as low as is reasonably practicable.

20-25 = High – Activity not permitted – hazard to be avoided or risk to be considerably reduced.

*** Probability that harm will occur:**

0	Almost impossible	Probability close to zero
1	Extremely unlikely	Highly improbable, never known to occur
2	Unlikely	Improbable, remote chance
3	Likely	Possible, has happened occasionally
4	Extremely likely	Probable, commonly occurs
5	Almost certain	Inevitable, definite, continually occurs

**** Potential severity of harm:**

0	No harm	e.g. No injury, damage, sickness or other loss
1	Minor harm	e.g. Minor injury with short term effect, minor damage or loss
2	Moderate harm	e.g. Lost time injury or illness, moderate damage or loss
3	Serious harm	e.g. Over 3day injury or illness, substantial damage or loss
4	Major harm	e.g. Major injury, major damage or loss
5	Catastrophic harm	e.g. Fatality (including the public) or disabling illness, catastrophic damage or loss