

DESIGNER'S RISK ASSESSMENT

CLIENT: **Barratt Redrow Southern Counties**
 PROJECT: **Deerwood Park, Southwater**

JOB NUMBER: **2601**
 DATE: **04/02/2026**

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
1.0	Site and Activity Wide							
1.01	Site wide - site access - site deliveries - site compound - traffic routes - pedestrian routes - housekeeping - work areas - weather - vibration	Contact with moving vehicle/plant	Workforce generally	H	H	H		All vehicles to have audible warnings, consider segregation/screening of plant
1.02		Unauthorised access onto site	General public	H	H	H	Consider early installation of any permanent site fencing	Contractor to provide fencing/hoarding to suit locality and to give consideration to early installation of permanent fencing.
1.03		Clashes of operations/trades	Workforce generally	H	M	H	Design to avoid need for return visits by trades	Works to be programmed to avoid return visits by trades
1.04		Slips and trips	Workforce generally	H	M	H		Provide adequate storage areas
1.05		Falls from height	Workforce generally	H	H	H	Design for early installation of floors, stairs roofs etc.	
1.06		Falling objects	Workforce generally	H	H	H	Design for early installation of floors, stairs roofs etc.	Provide adequate edge protection to scaffolding, slab edges, openings etc.
1.07		Electricity	Workforce generally	M	H	H	Take account of existing overhead, adjacent or underground electricity cables	Avoid work in close proximity to live services where practicable. Inspection and maintenance of site electrical distribution. User inspection of tools, careful siting of leads, preference given to battery tools.
1.08		Fire or other emergency	All	H	H	H		Avoid hot work where practical, provide adequate fire fighting equipment, instigate appropriate emergency procedures

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
1.09		Heat stress/ hypothermia	Workforce generally	M	M	M		Provide suitable PPE, heated rest facilities, drinking water and knowledge of/monitoring for symptoms.
1.10	(Site wide continued)	Vibration white finger	Task operatives	M	M	M		Provide system for monitoring health of operatives, use modern well-maintained equipment, keep hands warm and avoid smoking.
1.11	Working space/working platforms	Falls from height	Workforce generally	M	H	H	Design to allow early installation of permanent floors, allow for work to be carried out at ground level	Programme to allow early installation of permanent floors, provide adequate scaffolding and edge/hole protection
1.12		Entry into confined spaces	Workforce generally	H	H	H	Avoid confined spaces and minimise hazardous operations within confined spaces	
1.13	Materials/substances/ components	Manual handling/muscular-skeletal injuries	Task operatives	M	H	H	Design to all mechanical handling, limit unit weights and sizes, specify adequate tolerances	Provide and utilise mechanical handling equipment where possible, PPE, correct lifting techniques
1.14		Cuts and abrasions	Task operatives	M	M	M	Avoid specifying components/materials with sharp corners/edges	PPE
1.15		Carcinogenic diseases	Workforce generally	M	H	H	Avoid specification of known carcinogenic materials and substances where possible	PPE, provide adequate dust extraction and ventilation, avoid site fabrication where possible
1.16		Respiratory injuries	Workforce generally	M	H	H	Avoid specifying materials likely to cause respiratory problems where possible, design to avoid cutting/chasing	PPE, provide adequate dust extraction and ventilation, avoid site fabrication where possible
1.17		Skin diseases	Task operatives	M	H	H	Avoid specifying materials likely to cause skin diseases where possible	PPE
1.18	Cutting/welding/hot work	Fire/explosion	All	M	H	H	Avoid specifying or designing in the need for site welding/cutting/hot working methods where reasonably practicable	
1.19		Dust	All	M	H	H	Avoid specifying or designing in the need for cutting holes or chases where reasonably practicable	Liase with client/neighbours, use physical screening to protect general public, use wet cutting techniques or dustless equipment, provide PPE.

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
1.20		Fumes/chemical/metal splash	Workforce generally	M	H	H	Avoid specifying or designing in the need for site welding/cutting/hot working methods where reasonably practicable	
1.21	(Cutting/welding/hot work continued)	Noise	All	H	M	H	Avoid specifying or designing in the need for on-site cutting where reasonably practicable	Maximise off-site cutting of materials/components, provide and enforce use of ear defenders, select quiet equipment.
1.22		Radiation	Workforce generally	M	H	H	Avoid specifying or designing in the need for site welding or radiographic weld testing where reasonably practicable	
2.0	Earthworks and Substructures (Designer's Risk Assessments to be prepared by Structural/Civils Engineer and the Landscape Architect where applicable with proposals for addressing any risks identified for all works directly related to the design, construction or alteration of the structure/groundworks and of the landscaping respectively)							
2.01	Earthworks/ Ground works/ external works - earth moving - foundations - piling - basements - retaining walls - trenches - sewers - below ground drainage - below ground services - below ground tanks - below ground	Ground contamination	All	M	M	M	Adequate investigation, specify de-contamination measures, avoid excavation in contaminated areas	Avoid spreading contamination, PPE
2.02		Live services	Task operatives	M	H	H	Adequate investigation, avoid excavation adjacent to live services or hand dig only	Main Contractor to request all Statutory authorities to locate all services prior to commencement of any works
2.03		Instability of excavations	Workforce generally	M	M	M	Adequate investigation, minimise number of operations and time required below ground level in poor ground conditions	Provide adequate shoring/propping
2.04		Instability of adjacent structures	Workforce generally	L	H	M	Adequate investigation of adjacent properties, avoid disturbing existing foundations	
2.05		Flooding/ground water	Workforce generally	M	H	H	Adequate investigation, avoid deep foundations	

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
2.06	chambers - landscaping	Confined spaces	Task operatives	H	H	H	Avoid creating confined spaces and minimise hazardous operations within confined spaces	
2.07		Fire/explosion	Workforce generally	M	H	H	Identify any live/redundant gas/fuel pipes/tanks	Provide method statement for removal/protection
2.08	(Earthworks etc. continued)	Noise/vibration	All	M	M	M	Consider existing/surrounding premises and their occupants, specify noise/vibration restrictions	
3.0	Concrete work (Designer's Risk Assessment to be prepared by Structural/Civils Engineer with proposals for addressing any risks identified for all works directly related to the design, construction or alteration of the structure/groundworks)							
3.1	Pouring concrete	Skin contamination	Task Operatives	M	M	M		Trained operatives, PPE
3.2	Site mixing concrete	Heavy handling, skin contamination	Task Operatives	M	M	M	Design for precast components where appropriate	Limit site mixing, correct lifting techniques, trained operatives, PPE
4.0	Structural Steelwork and Precast Concrete Floors/Other Components (Designer's Risk Assessment to be prepared by Structural Engineer with proposals for addressing any risks identified for all works directly related to the design, construction or alteration of the structure)							
4.1	Work on scaffold	Falls from height	Task Operatives	H	H	H	Maximise prefabrication, design for early installation of floors, stairs, parapets etc.	Scaffold to comply with TG20:13
4.2	Work beneath scaffold	Falling objects	Workforce generally	H	H	H	Maximise prefabrication, design for early installation of floors, stairs, parapets etc.	Warning signs, PPE

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
4.3	Crane operations	Falling/swinging objects	Workforce generally	M	H	H	Design components to include lifting points.	Trained operatives, audible warnings, special arrangements for siting of plant.
4.4	Manhandling PC units	Heavy handling	Task Operatives	M	M	M		Crane lifting, correct lifting techniques
4.5	Welding	Fire/burns/ Sight impairment	Task Operatives	H	H	H	Design for shop prefabrication to minimise site welding where appropriate.	PPE, Trained operatives.
5.0	Masonry (Designer's Risk Assessment to be prepared by Structural Engineer with proposals for addressing any risks identified for all works directly related to the design, construction or alteration of the structure)							
5.1	Erecting structures	Collapse: - temporary instability - const'n loadings	Workforce generally	H	H	H	Avoid temporary instability, specify erection sequence, identify construction loadings	Provide temporary support where necessary and method statements where erection procedure may be hazardous
5.2	Block laying	Heavy handling	Task Operatives	H	M	H	Block specification to limit maximum unit weight	Correct lifting techniques
5.3	Cavity ties	Lacerations	Task Operatives	M	M	M	Specify alternatives to fishtail wall ties	
5.4	Work on scaffold	Falls from height	Task Operatives	H	H	H	Maximise prefabrication, design for early installation of floors, stairs, parapets etc.	Scaffold to comply with TG20:13
5.5	Work beneath scaffold	Falling objects	Workforce generally	H	H	H	Maximise prefabrication, design for early installation of floors, stairs, parapets etc.	Warning signs, PPE, restricted access areas

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
5.6	Disc cutting	Inhalation/laceration/ noise	Task Operatives	H	H	H	Design for shop prefabrication and to avoid on-site cutting of components.	Trained operatives, PPE Liase with client/neighbours, use physical screening to protect general public, use wet cutting techniques or dustless equipment, provide PPE
6.0	Internal Partitions							
6.1	Cutting/machining	Lacerations/dust inhalation/noise	Task Operatives	H	H	H	Avoid use of materials with hazardous dust particles.	Maximise workshop operations, Trained operatives, PPE
6.2	Site fixing	Heavy/awkward handling	Task Operatives	M	M	M		Correct lifting techniques, PPE
7.0	Upper Floor and Roofing Works							
7.1	Work on scaffold/roof	Falls from height	Task Operatives	H	H	H	Harness attachment points	Scaffold to comply with TG20:13, edge protection, harness
7.2	Work beneath scaffold/roof	Falling objects	Workforce generally	H	H	H		Warning signs, PPE, restricted access areas
7.3	Crane operations	Falling/swinging objects	Workforce generally and general public	M	H	H		Trained operatives, audible warnings, special arrangements for siting of plant.
7.4	Manhandling components	Awkward handling/ sharp edges	Task Operatives	M	M	M		Trained operatives, PPE

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
		Fall due to manhandling large sheet materials during high wind or gusts	Task Operatives	M	H	H	Limit size of sheets/use of sheet materials	Prevent/minimise or restrict manual handling to areas with suitable protection. Monitor wind speed and cease work if wind speed too high.
7.5	Leadwork	Burns / fumes / fire	Task operative / workforce	M	H	H		Lead welding to be carried out off-site or out of position where possible, insitu welding to utilise lap joints and not to be carried out later than 1 hour before work ceases, fire extinguishers to be located adjacent to any lead welding work, trained operatives, PPE
		Heavy handling	Task Operatives	M	M	M	Limit sheet/roll size	Correct lifting techniques
8.0	Steel Reinforcing Rods and mesh (If applicable) (Designer's Risk Assessment to be prepared by Structural Engineer with proposals for addressing any risks identified for all works directly related to the design, construction or alteration of the structure)							
8.1	Cutting/Burning	Inhalation/ Laceration / Fire / Burns / Sight impairment	Task Operatives	H	H	H	Omit on site cutting (or limit if omission not possible)	Trained operatives, PPE
8.2	Works in progress	Trip hazard and puncture hazard	Task Operatives and Workforce generally	H	H	H		Isolate area of works from general workforce. If not, visually identify and protect exposed rod ends. Trained operatives, PPE

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
9.0	Windows							
9.1	Work on scaffold	Falls from height	Task Operatives	H	H	H	Design components to limit work at high level, maximise off-site prefabrication	Scaffold to comply with TG20:13
9.2	Work beneath scaffold	Falling objects	Workforce generally	H	H	H		Warning signs, PPE, restricted access areas
9.3	Crane operations	Falling/swinging objects	Workforce generally	H	H	H		Trained operatives, audible warnings
9.4	Manhandling window units	Awkward handling/ sharp edges	Task Operatives	M	M	M		Crane lifting, correct lifting techniques, PPE
9.5	Glazing	Lacerations	Task Operatives	M	M	M	Consider pre-glazed units	Trained glaziers PPE, including wrist protectors
9.6	Cleaning/ maintenance	Falls from height	Occupier/maintenance operatives	H	H	H	All windows above first floor level to be cleaned with the use of water fed brushes, poles and kits by professional window cleaners	Correct lifting techniques, PPE
9.7	Gutter Cleaning/ maintenance	Falls from height	Maintenance operatives	H	H	H	Gutter guards to be installed to all gutters to reduce the need for future maintenance. Gutters to be cleaned from the ground with a telescopic Gutter Vacuum Pole Kit by specialist subcontractor.	
10.0	Joinery							
10.1	Cutting/machining	Lacerations/dust inhalation	Task Operatives	H	H	H	Avoid use of materials with hazardous dust particles.	Maximise workshop operations, Trained operatives, PPE, dust control/collection facilities fitted to power tools
10.2	Site fixing	Heavy/awkward handling	Task Operatives	M	M	M		Correct lifting techniques, PPE

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
10.3	Cleaning/ maintenance	Falls from height	Occupier/maintenance operatives	L	H	L	Avoid use of materials at high level that will require regular maintenance	
11.0	Mechanical & Electrical Installations (Designer's Risk Assessment to be prepared by Services Engineer/Designer/Sub Contractor with proposals for addressing any risks identified for all works directly related to the design, construction or alteration of the services installation)							
11.1	Work on/adjacent to existing/new services	Electrocution/ explosion	General Public, Task operatives, Occupier/maintenance operatives and workforce generally	H	H	H		Trained operatives, PPE, electrical installation to comply with BS 7671 'Requirements for Electrical Installations' (The IEE Wiring Regulations).
11.2	Work at high level	Falls	Task Operatives, Occupier/maintenance operatives	H	H	H		Scaffold to comply with TG20:13
11.3	Cutting/machining	Lacerations/ inhalation	Task Operatives	H	M	H		Maximise workshop operations, Trained operatives, PPE
11.4	Site fixing	Awkward handling/ laceration	Task Operatives	M	M	M		Trained operatives, PPE
11.5	Pipe joining	Burns/fumes/fire	Task operatives / workforce	H	H	H		Trained operatives, PPE
12.0	Internal Finishes							
12.1	Preparation	Dust inhalation	Workforce generally	H	M	H		Restrict access to operatives, provide adequate ventilation, PPE

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
12.2	Painting	Vapour inhalation	Workforce generally	H	M	H	Paint selection	Restrict access to operatives, provide adequate ventilation, PPE
12.3	Work at high level	Falls	Task Operatives, Occupier/maintenance operatives	H	H	H		Scaffold to comply with TG20:13
12.4	Work beneath scaffold	Falling objects	Workforce generally	H	H	H		Warning signs, PPE, restricted access areas
13.0	External Finishes							
13.1	Preparation	Dust inhalation	Task operatives	H	M	H		PPE
13.2	Painting	Vapour inhalation	Task operatives	H	M	H	Paint selection	PPE
13.3	Work at high level	Falls	Task Operatives, Occupier/maintenance operatives	H	H	H	Design out where possible	Scaffold to comply with TG20:13, PPE
13.4	Work beneath scaffold	Falling objects	Workforce generally	H	H	H		Warning signs, PPE, restricted access areas

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
14.0	Drainage (Designer's Risk Assessment to be prepared by Civils Engineer)							
14.1	Working within excavations	Collapse	Sub-contractor	M	H	H	Minimise excavation depths	Shoring
14.2	Working in vicinity of excavations	Falls	Workforce generally	M	H	H	Minimise excavation depths	Protect top of excavations
14.3	Pouring concrete	Skin contamination	Task Operatives	M	M	M		Trained operatives, PPE
14.4	Site mixing concrete	Heavy handling, skin contamination	Task Operatives	M	M	M	Design for precast components where appropriate	Limit site mixing, correct lifting techniques, trained operatives, PPE
14.5	Work on / adjacent to existing drainage	Contamination	Task operatives / workforce	M	H	M		Trained operatives, PPE
15.0	Landscape Works							
15.1	Concrete work	Heavy handling/ skin contamination	Task Operatives	M	M	M		Trained operatives, correct lifting techniques, PPE
15.2	Disc cutting of concrete components	Inhalation/ laceration	Task Operatives	H	H	H		Trained operatives, PPE
15.3	Fencing	Lacerations/dust inhalation	Task Operatives	H	H	H	Avoid use of materials with hazardous dust.	Maximise workshop operations, Trained operatives, PPE

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
15.4	Planting	If planting forms part of the works, Designer's Risk Assessment to be prepared by Landscape Consultant or Landscaping Contractor						
16.0	Future Maintenance, Cleaning, Repair, Alteration, Refurbishment and Demolition							
16.1	Future cleaning/ maintenance/ repair/ alteration/ refurbishment / dismantling/ demolition	Falls from height	Occupier/maintenance operatives	M	H	H	Position controls, valves and equipment requiring regular maintenance at low level (or lowerable) and specify low maintenance equipment/ fittings where reasonably practicable Maintenance subcontractors to provide temporary fall restraint system, edge protection, provisions for the attachment of safety equipment, etc where necessary. Provide adequate information regarding built in safety facilities, etc in Health and Safety File/ maintenance manual	
16.2		Falls through fragile materials	Occupier/maintenance operatives	L	H	H	Avoid specifying fragile materials where possible. Design in adequate safe systems of access, edge protection, provisions for the attachment of safety equipment, etc where necessary. Provide adequate information regarding fragile materials and in built facilities in Health and Safety File/ maintenance manual.	

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
16.3		Live services	Occupier/maintenance operatives	M	H	H	Provide adequate isolation facilities for all plant and equipment, zoning isolation for service runs and labelling. Provide appropriate switchgear where live working will be essential. Provide adequate information regarding isolation facilities, zoning, labelling and switchgear in Health and Safety File/ maintenance manual.	
16.4	(Future maintenance etc. continued)	Manual handling/ Musculo-skeletal injuries	Occupier/maintenance operatives	L	M	L	Design components for ease of handling and replacement where reasonably practicable. Provide adequate access facilities, working space and lifting facilities around all plant and equipment where necessary. Provide adequate information regarding access and lifting facilities in Health and Safety File/ maintenance manual	
16.5		Hazardous materials/ substances	Occupier/maintenance operatives	L	H	M	Avoid specifying hazardous materials and substances where reasonably practicable. Provide adequate information regarding any unavoidable hazardous materials or substances for inclusion in Health and Safety File	
16.6		Uncontrolled collapse	All	L	H	M	Provide adequate information regarding design parameters, design loadings, means of ensuring structural stability, construction details, specific alteration/ demolition hazards (ie pre-stressing, etc) in Health and Safety File.	

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
16.7		Fire	All	L	H	M	Design to ensure maintenance of fire protection systems and integrity of fire separation. Note in health and safety file/ maintenance manual that the fire brigade should be informed and special precautions taken if fire protection systems are temporarily disconnected.	
17.0	Demolition of and works to existing structures (Designer's Risk Assessments to be prepared by Structural Engineer where applicable with proposals for addressing any risks identified for all works directly related to the design, construction or alteration of the existing structure)							
17.01	Demolition/ dismantling/stripping out/alteration/ renovation - dangerous structures - steel frames - asbestos - mineral fibres	Live services	Workforce generally	M	H	H	Adequate survey, provide adequate information identifying nature and location of known live services	Main Contractor to request all Statutory authorities to locate all services prior to commencement of any works
17.02		Uncontrolled collapse	Workforce generally	M	H	H	Adequate survey, define principles of structural stability and any special hazards inherent in existing/adjoining construction	
17.03		Falls from height	Task operatives	H	H	H	Avoid unnecessary demolition and the specification of hazardous or complex demolition procedures	

Ref. No.	Activity/ Element	Potential Hazards	Population at Risk	Risk rating			Action at Design Stage	Possible Control Options (Contractors)
				L	S	R		
17.04		Hazardous materials/substances	Workforce generally	M	H	H	Adequate investigation/testing	Provide method statement for removal/protection
17.05		Work with asbestos - respiratory injury/ carcinogenic	Workforce generally	M	H	H	Adequate investigation/testing	Provide method statement for removal by specialists and protection of all parties
17.06		Dust	Workforce generally	M	H	H	Adequate investigation/testing, specify any specialist requirements	
17.07		Noise/vibration	Workforce generally	M	M	M	Consider existing/surrounding premises and their occupants, specify noise/vibration restrictions	Provide and enforce use of ear defenders, select quiet equipment.
17.08		Fire/explosion	Workforce generally	M	H	H	Identify any live/redundant gas/fuel pipes/tanks	Provide method statement for removal/protection

RISK RATING CALCULATION:

Likelihood (L): Low, medium, high
Severity (S): Low, medium, high

Risk category (R) = LxS: High (H), if R = HxH or HxM
Medium (M), if R = MxM or HxL
Low (L), if R = MxL or LxL

POPULATION TERMINOLOGY:

All:	The general public, anybody involved with the Works and occupants/users of the completed building(s)
Workforce generally:	All employees of and Subcontractors to the Contractor and all other persons visiting the site in conjunction with the Works.
Task Operatives:	Person or persons involved with the task or operation identified, including any persons assisting or labouring on that task.
Occupier/maintenance operatives:	Person or persons involved in the ongoing maintenance of the building(s) after completion, this will include some operations by the owner/tenant.