



GENERAL

Do not scale from this drawing.

All dimensions are in millimetres unless noted otherwise.

All settings out to architects drawings.

Drawing to be read in conjunction with all other SDA drawings and architects drawings.

This drawings have been designed using the survey information provided by others. It shall be the responsibility of the contractor to verify levels, boundaries etc prior to commencing any works on site. SEA Consulting Engineers Ltd shall not accept any responsibility for errors resulting from the survey.

All settings to be in accordance with the architect's drawings. The Contractor is to check all dimensions and levels prior to commencing work and report any discrepancies to the Engineer, including any excavated during construction works.

All dimensions should be checked on site prior to construction. Please notify the Engineer of any discrepancies before commencing or continuing any work.

HEALTH, SAFETY & THE ENVIRONMENT

In accordance with the Health and Safety at Work etc Act 1973 and the Construction (Design and Management) Regulations 2015, designs and details on this drawing have been the subject of a Designer Risk Assessment to identify risks in construction, use, or demolition of the scheme.

It is not considered necessary for Designers to highlight shallow and/or common risks (such as deep excavations, manual handling and working around heavy plant) which contractors should be familiar with.

So far as is reasonably practicable, risks inherent in the design have been eliminated. Where it has been considered that elimination of a risk (or part of a risk) is not reasonably practicable, it has been reduced. Significant unusual residual risks are identified below, beside the measures which have been adopted to eliminate and/or reduce them:

None identified

DRAINAGE NOTES

All pipe lengths and gradients are based on centre of manhole to centre of manhole.

The exact position, level, size and use of existing sewers to be confirmed on site and reported to the Engineer prior to the commencement of works.

All pipes are to be laid with level soffits or as indicated.

All private drainage works to accord with the requirements of Building Regulations 2000, Part H (drainage and waste disposal).

The invert of each horizontal drain at the base of a stack shall be at least 450mm below the centre line of the lowest branch pipe. Set the level to ensure at least 50mm clearance to footings.

All pipes to be bedded and backfilled in accordance with Part H, diagram 10. Shallow pipes shall be protected in accordance with Part H, diagram 11.

Unless otherwise stated, all private drainage to be 100mm diameter. Gradients have been shown where there are pipe capacity issues, however minimum gradients are as below:

Surface water: 150mm diameter pipes shall not be laid flatter than 1 in 100

Foul water: 100mm diameter pipes shall not be laid flatter than 1 in 40 unless there is a WC connected upstream at which it can be laid at 1 in 80

Foul water 150mm diameter pipes shall not be laid flatter than 1 in 150 providing there are minimum of 5 WCs connected

Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, clauses 2.23 to 2.25 and diagram 8.

All private methods and inspection chambers subject to vehicular loading must have class D400 covers and frames must have class B125 covers and frames in accordance with BS EN 124:2015.

All drains near existing or proposed trees shall be constructed in accordance with the requirements of NRMBC's practice note 3 'Building near trees'.

Excavation of drain trenches must not be lower than the foundation of any nearby building. If the trench is within 1m of foundations, the trench needs to be filled with concrete up to the lowest level of the foundation. If the trench is further from foundations, the trench needs to be filled with concrete to a level below the lowest level for the building, equal to the distance from the building less than 150mm.

An opening needs to be formed where a pipe passes through a wall, with a minimum 50mm clearance. A lintel must support the brickwork above and each side of the opening marked with rigid sheet material.

All UPVC pipes with less than 600mm covered concrete protection. Where two pipes cross with less than 300mm separation, surround each with a C20 concrete mix, where centered on the crossing point, extend the concrete surrounds as necessary to within 150mm of the trench nearest footing point.

Adequate surface water drainage systems shall be provided to prevent unregulated discharge of water from a private drive onto the highway. These measures shall be implemented before the development is brought into use.

Perforated pipework to be used for distributor runs within permeable block paved areas.

DRAWING KEY

	Existing Southern water sewers. It's to be confirmed prior to any construction
	Proposed foul water drainage
	Proposed surface water drainage
	Proposed extent of permeable tank providing attenuation for the 1in100 year + 45% event.

