

Size, load and capacity

Each crate has an overall area of approximately 0.125 cubic metres, enabling 8 crates to be used together to make a 1 cubic metre soakaway.

The Rainsmart soakaway crate has an impressive void ratio of 95%. This is the amount of free space within the crate structure that can be used for rainwater storage. Each crate has a capacity of 119.47 Litres.

The vertical crush load capacity of 24.2 tonnes per square metre ensures that the Rainsmart Ellipse crates are safe to be used beneath gardens and pedestrian areas. The lateral crush load of 18 tonnes per square metre is the best of any type of soakaway crate.

Joining crates together

Clips are not required to hold the crates together, we recommend the use of cable ties to hold the crates in situ until the side fill is introduced. No clips on any crate system are structural, it is the side fill which holds the installation in place. Cable Ties are included with our 1m³ Soakaway Sets but if you are ordering individual crates and need to join them together you should order the ties separately.

All outward facing crate surfaces should be always wrapped in a non-woven geotextile membrane, which allows the free passage of water but prevents any soil or sand particles from entering the soakaway, maintaining its long term efficiency.

Connecting Pipes to Soakaways

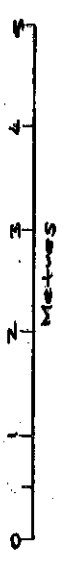
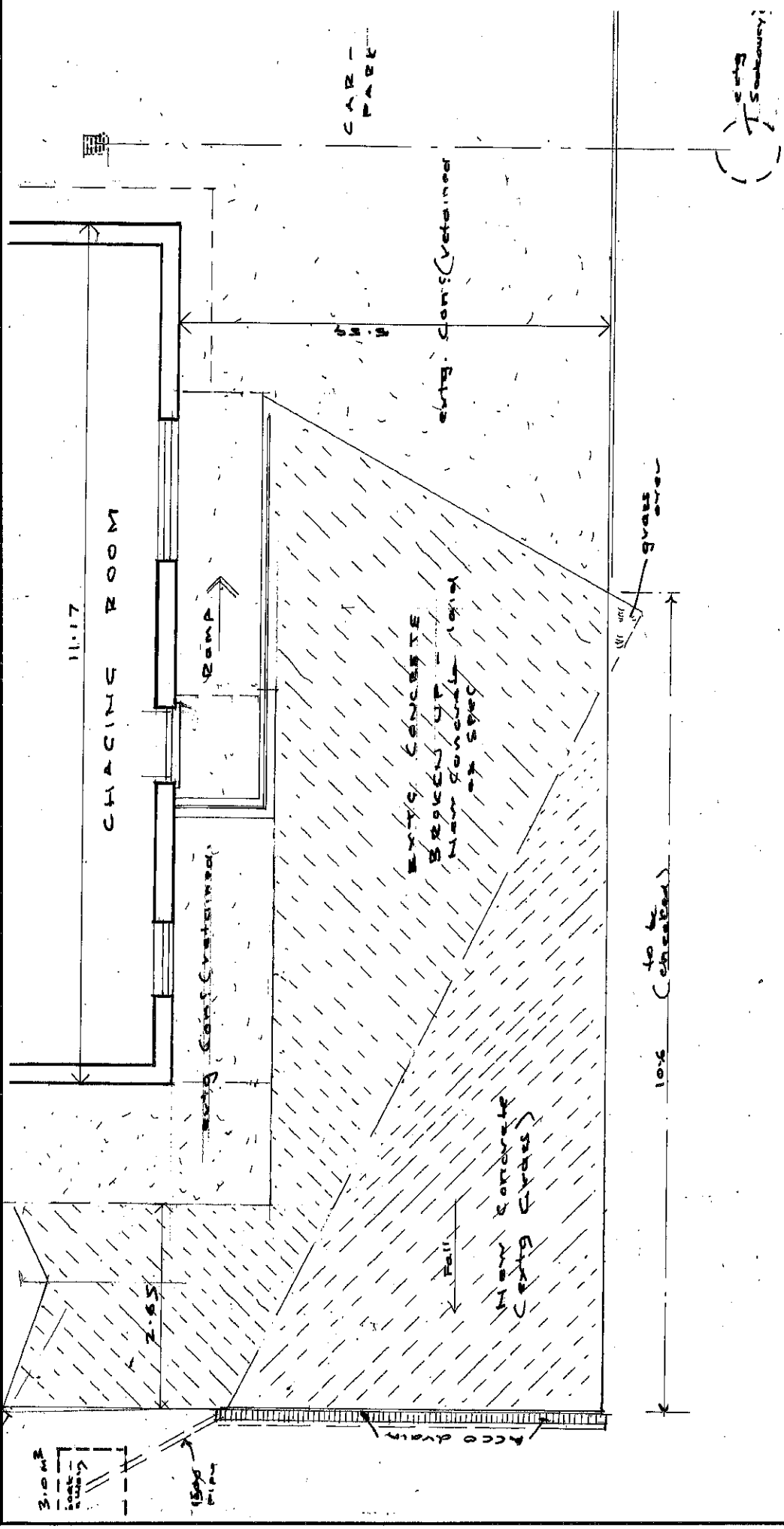
The 110mm (or 160mm) drainage pipe is fed into the soakaway via the pipe entry plate on the end crate. 110mm pipes simply rest on the bottom of the opening - we suggest that the pipe is inserted approximately 150mm inside the crate. A Geotextile membrane should first be installed over the whole structure and then a small cross should be cut in the membrane in the centre of the entry point with a sharp knife. Carefully peel back the membrane, insert the pipe and tape or clamp the membrane tightly around the outside of the pipe to stop the ingress of any soil particles.

For a closer look at Soakaway Crates in general, including installation tips, [please take a look at our video.](#)

Consider a pre-filter

To maintain your soakaway and extend its working life you should ideally incorporate into the system a pre-filter such as our Sentinel Silt Trap. Empty the filter on a regular basis, you will be surprised at how much silt it retains.

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ground plan PROJECT: Extension to, and replacement of, concrete aprons at: The Changing rooms The Memorial Playing fields Steyning CLIENTS: Steyning parish Council	PHILIP J CLAY ARCHITECTURAL DESIGN TELEPHONE 01903 815889
Scale & plan size A30 at A3	DWG. NO. 2282 - 4
P. J. Clay July, 2011	Scale & plan size A30 at A3

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