



The area defined by the trench soakaway is to be graded to the centre to provide a maximum depth of 120mm from the existing average ground level.

Note: Hatched area indicates extent of flooding during a 1 in 100 year event. The maximum depth of the flood water will be 120mm and the overall volume of water stored above ground will be 9.42m3.

Contractor to be careful during the excavation of the soakaways to ensure the integrity of the tree is not compromised.

New precast concrete kerbs to the front of the car parking bays. Path to be retained between car park and the building, but need to be resurfaced.

The soakaways have been designed in accordance BRE 365 and have been assessed for a 1 in 10 and 1 in 30 year storm plus 30% for climate change.

Consideration has also been given to the 1 in 100 year storm event as specified by Derby City Council.

The excess rainwater will be stored overground in the surface depressions formed by the levels of the finished car park. The area of the flooding during the highest event 1 in 100 year plus 30% is indicated on the adjacent plan.

The excess amount of over ground storage required is 4.15m3. Based upon the low lying area indicated on the plan provides a volume of 9.42m3 which is adequate for the exceedant rain water should the soakaways reach their capacity.

The above value are based upon a flood water level of 48.400m

No overflow outflow is deemed necessary in the final design.

Summary of design data.

Critical design rainfall duration 30 min
Provide storage volume using the trench soakaway = 8.64m3
Required storage volume = 12.72m3

Overground flood zone = 9.42m3

- ← Indicates flow of traffic around the site.
- 48.56 + Indicates existing levels.
- ② Indicates new car parking bays
- 48.475m Indicates new finished car park levels

rev	date	amendment	by
B	20.10.15	Trench soakaway added	SW
A	21.09.15	Soakway detail amended	SW

1. Do not scale this drawing. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant Architects, Engineers and Specialist drawings and specifications.
3. All dimensions are in millimetres unless noted otherwise. All levels are in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the Engineer immediately.

Client
NHS Foundation Trust

Project
**St Andrews House
London Road, Derby**

Drawing Title
**proposed car park extension
drainage layout**

ASPECT
CONSULTING ENGINEERS LTD

Latinkil House
RTC Business Centre
London Road,
Derby
DE24 8UP
t: 01332 258836 f: 01332 258838

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Drawn by S Walker	Chkd by	Scale 1:250
Date 05.03.15	Date	Status PLANNING
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