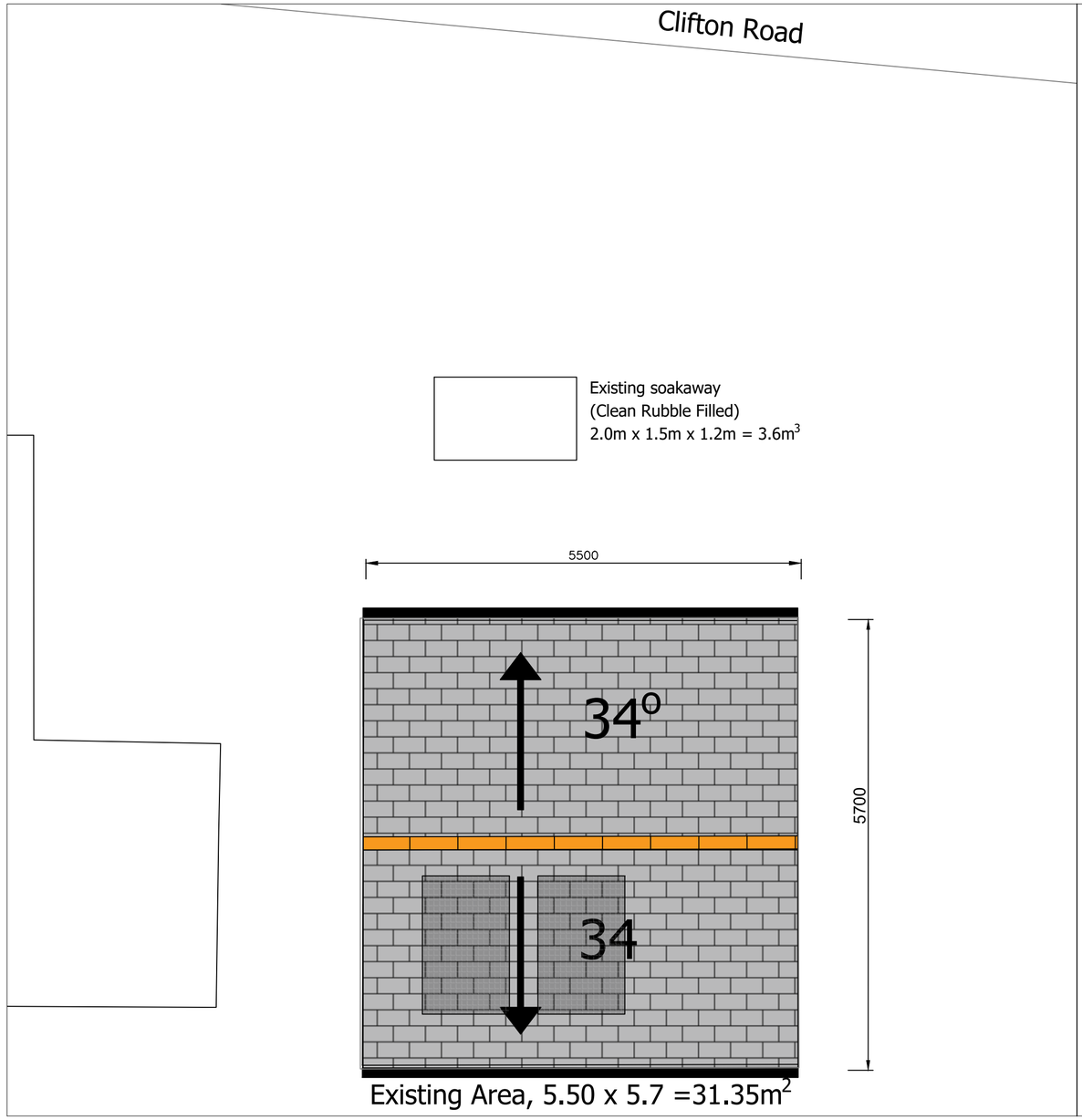

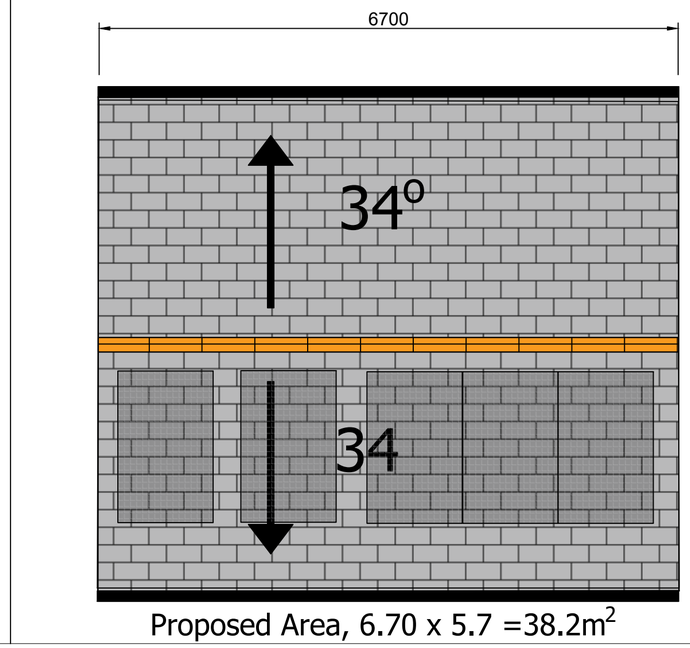

Monthly Rainfall (mm) for Redruth		Total roof area Runoff Existing	Proposed	Difference
Jan	91	2.85	3.48	0.62
Feb	82	2.57	3.13	0.56
Mar	68	2.13	2.60	0.47
Apr	71	2.23	2.71	0.49
May	64	2.01	2.44	0.44
Jun	65	2.04	2.48	0.45
Jul	65	2.04	2.48	0.45
Aug	72	2.26	2.75	0.49
Sep	64	2.01	2.44	0.44
Oct	94	2.95	3.59	0.64
Nov	99	3.10	3.78	0.68
Dec	98	3.07	3.74	0.67
Average		**2.44**	**2.97**	**0.53**

Proposed - Existing =6.85m^2 difference

the site is serviced by Existing RUBBLE FILLED soakaways
there is a dedicated soakaway for the garage
1 @2.0m x 1.5m x 1.2m = 3.6m^3
38.2m^2 x 1.39 for 34 degree pitch
Proposed Roof area requires a soak away of (53m^{2}x50/3000)/0.3 = 2.93m^3

conclusion existing soakaway has capacity for additional runoff

Vol = A × (rainfall rate/3000)

This formula states that the volume of soakaway required is equal to the area to be drained (in m²) multiplied by the product of the storm rainfall rate (assumed to be 50mm/hr in UK) divided by 3000 divided by 0.3 for rubble filled soakaway

DURING THE CONSTRUCTION PROCESS FOR THE ADJACENT BUILDING, PERCOLATIONS TESTS WHERE CARRIED OUT IN LINE WITH BRE 365/CIRIA 156.
THE PERCOLATION TESTS ESTABLISHED AN INFILTRATION RATE OF 0-1.789m/hr

The ground has the ability to disperse large amounts of water per hour
The site location being on a hillside, flooding on the site from rising ground water is unlikely.
Other than the built structures there are no non permeable surfaces around the site, and pooling of standing water has never been observed.
so it can be assumed Risk of flooding on this site is unlikely

Site Location: Garage extension Hillside, Clifton Road, Park Bottom. TR15 3UD	
Drawing Title: Roof rainwater assesment	
Date Drawn: 07/11/2023	Drawn By: Steve Barber
Drawing Scale: 1:50 @A2	Drawing Number: RW2000/SB V1