

CASE STUDY

Cost Comparison on Reactive Soil

Location: Lefroy Street, North Hobart, Tasmania

The Situation

The owner wished to build two new units behind an existing house on a long narrow block in North Hobart. The Site Investigation Report undertaken by consulting engineers, stated that

Site Classifications

This site has been classified as class E.

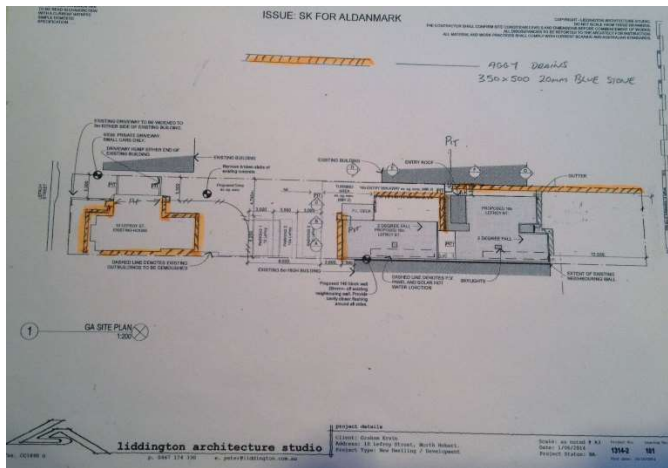
Note: Up-slope drainage is important to prevent elevated moisture levels overlying and within subsoil clays. At the time of inspection bearing capacity within B22 and B23 clays ranged as low as 30-50kPa in places due to localised high moisture levels.

This classification is in accordance with AS 2870-2011.

Peter Liddington ([Liddington Architecture Studio](http://www.liddingtonarchitecture.com.au)) had seen Capiphon demonstrated and thought that had the ability to handle the difficult soil conditions.

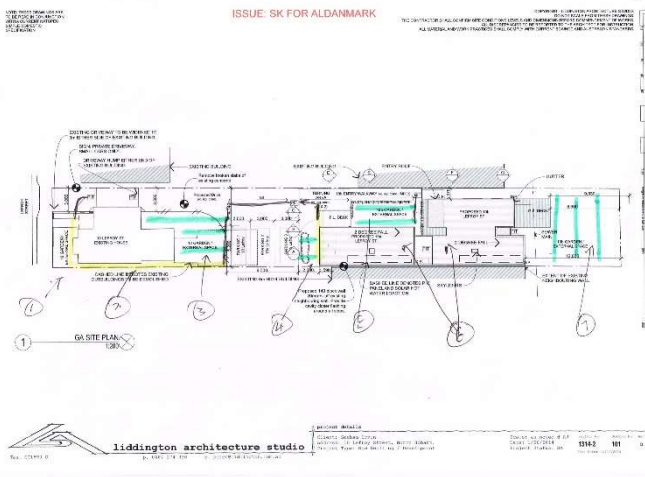
Procedure

A plumber was given the plans and the engineer's report, and asked to draw up a drainage plan with a quote.



	Cost
20mm blue metal aggregate	\$1,156.00
100mm socked aggy pipe	\$467.00
Geo fabric cloth	\$489.00
Excavation costs allowing 2.5 days	\$2,290.00
Labour 3 days @ \$ 88 per hour	\$2,112.00
Total =	\$6514.00

A Capiphon installer was given the same plan and report and also asked for a plan and quote.



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CAPIPHON
Drainage Solutions
ACN 129 286 857

Capiphon Drainage Estimate

Client Name: [REDACTED]
Address: Lefroy Street North Hobart

	Front (west)	side (south)	East of existing building	East of new building	North of new building	Under slab	bottom garden	
Area	1	2	3	4	5	6	7	
Capiphon (m)	3	6	20	18	12		20	Note
Coarse Sand (m3)	0.36	0.54	0.06	0.054	0.078		0.06	Note
Stormwater pipe (m)	12	18	0	6	6		0	Note
Labour (hours)	2	3	2	2	2		3	Note
Garden Loam (m3)	4.2	0	8.1	3	4.8		21.6	Note

Note 1 as per recommendations
 Note 2 300mm*100mm*length in intercept drain - OR 20mm*150mm* length of belt
 Note 3 including pipe to sump pit
 Note 4 to be included in landscaping quote

	Quantity	Price (incl GST)	Cost
Capiphon - 10m rolls	8	110.0	\$880
Coarse sand	1.2	55.0	\$66
S/W pipe	42	3.2	\$133
Delivery	2	20.0	\$40
Excavation	8	275.0	\$671
Labour	14	88.0	\$1,232
Fittings	6	5.0	\$30
Garden Loam	41.7	0.0	\$0
Sub total			\$3,052
Plus Margin		15%	\$458
Total =			\$3,510

	Quantity	Price per unit	Cost
Capiphon - 10m rolls	8	110.0	\$880
Coarse sand	1.2	55.0	\$66
S/W pipe	42	3.2	\$133
Delivery	2	20.0	\$40
Excavation	8	275.0	\$671
Labour	14	88.0	\$1,232
Fittings	6	5.0	\$30
Garden Loam	41.7	0.0	\$0
Sub-total			\$3,052
Plus Margin		15%	\$458
Total =			\$3,510

(PS The job is awaiting Council approval)