



Date

16 October 2019

Revision

A

Wisdom Landscapes

Our Ref AWT55800

Your Ref 180504

Soil Permeability as per AS1547-2012

Lot 39, No.33 Careel Head Road, Avalon Beach

$$K_{sat} = 0.24\text{cm/min or } 0.04\text{litres/sec/m}^2$$

Please find attached the results of the Soil Permeability test, log sections and site sketch, undertaken at the above address.

Providing the system is designed by a suitably qualified person for the recommended design Ksat, above, and the system is located a minimum setback distance of 1.5m from any adjacent property boundary and infrastructure, we do not see any reason why this proposal should not proceed to construction.

Although no water table was encountered during our testing, a perched water table or water seepage can occur during or after wet periods, generally where a porous layer overlies less porous strata.

If you have any queries please do not hesitate to contact the writer.

Yours faithfully

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BORELOGS

TEST SITE 1

Depth (mm)	Description Soil Type-Colour-Consistency	FILL	DCP	PP kPa
100	SAND TOPSOIL			
200				
300	SAND			
400	(gy/or)			
500	moist and dense			
600				
700				
800	SANDY CLAY			
900	(or/gy)			
1000	moist and very stiff			
1100				
1200				
1300				
1400				
1500				
1600				
1700				
1800				
1900				
2000				
END P/A				

NOMENCLATURE: UTP=Unable to Penetrate DCP=9kg Dynamic Cone Penetrometer PP = Pocket Penetrometer A=Auger XW-ROCK=Extremely Weathered Rock Refer Tables 7.3.2 & 7.3.3 AS1726-1993 gy=grey or=orange pnk=pink yell=yellow rd=red wh=white brn=brown bk=black bl=blue gr=green Refer AS1726-1993 Clause A2.4 for classifying soils.

SITE SKETCH (Not to Scale)





Reference No: AWT55800

Address: Lot 39, No.33 Careel Head Road

Suburb: Avalon Beach

Soil Permeability Test Sheet

(Refer AS1547-2000)

Test Data:

Date of test:	15/10/19
Test Site location:	See site sketch
Depth(cm) of auger hole(D):	50
Depth(cm) of water in hole(H):	30
Average radius(cm) of hole(r):	5
Depth(cm) to any impermeable layer(s):	See Log Section.
Pretest Hole Saturation duration(mins):	30

Apparatus Specifications:

Diameter of reservoir(cm):	3.65
Diameter of Air Inlet(cm):	1.2
Effective Surface Area(cm²)	37.3

Field Measurements.

	Start(min)	Level(cm)	Drop(cm)	cm/min	cm³/min	Litres/sec
Test 1	0.00	39.8				
	5.00	26.1	13.7	2.74	102.3	0.0017
Test 2	0.00	43				
	5.00	29	14	2.80	104.5	0.0017
Test 3	0.00	42.8				
	5.00	28.6	14.2	2.84	106.0	0.0018
Test 4	0.00	43.2				
	5.00	27.8	15.4	3.08	115.0	0.0019
Test 5	0.00	42.9				
	5.00	28.5	14.4	2.88	107.5	0.0018

Result:

Test 1	K_{sat}=	0.24	cm/min	or	0.04	litres/sec/m2
Test 2	K_{sat}=	0.24	cm/min	or	0.04	litres/sec/m2
Test 3	K_{sat}=	0.24	cm/min	or	0.04	litres/sec/m2
Test 4	K_{sat}=	0.27	cm/min	or	0.04	litres/sec/m2
Test 5	K_{sat}=	0.25	cm/min	or	0.04	litres/sec/m2



Site Photographs

