#### C.J. ASSOCIATES GEOTECHNICAL LTD.

#### SOIL INFILTRATION RATE TEST

See B.R.E. Digest 365, 1991, Soakaway Design.

 Site
 Bodicote

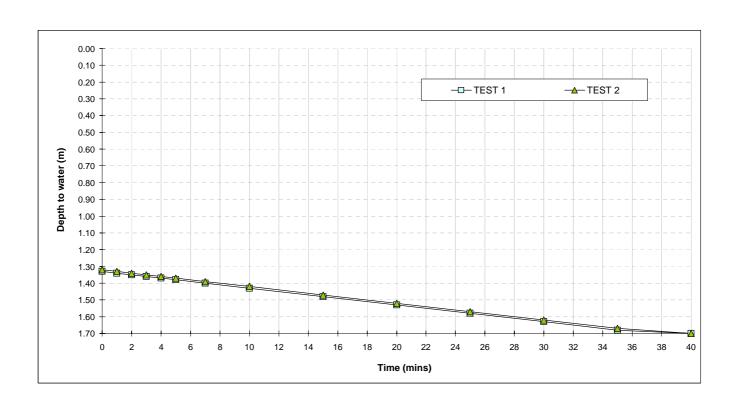
 Job Number
 Y0204

 Date of Test
 23/03/2010

Remarks -			TEST 1		TEST 2		TEST 3
		Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
		0.0	1.33	0.0	1.32		
		1.0	1.34	1.0	1.33		
		2.0	1.35	2.0	1.34		
		3.0	1.36	3.0	1.35		
		4.0	1.37	4.0	1.36		
		5.0	1.38	5.0	1.37		
		7.0	1.40	7.0	1.39		
		10.0	1.43	10.0	1.42		
		15	1.48	15	1.47		
		20	1.53	20	1.52		
		25	1.58	25	1.57		
		30	1.63	30	1.62		
		35	1.68	35	1.67		
		40	1.70	40	1.70		
Effective Storage Depth	m		0.37		0.38		
75% Effective Storage Depth	m		0.28		0.29		
(i.e. depth below GL)	m		1.42		1.42		
25% Effective Storage Depth	m		0.09		0.10		
(i.e. depth below GL)	m		1.61		1.61		
Effective Storage Depth 75%-25%	m		0.19		0.19		
Time to fall to 75% effective depth	mins		9.00		10.00		
Time to fall to 25% effective depth	mins		26.00		29.00		
V (75%-25%)	m3		0.26		0.27		
a (50%)	m2		2.40		2.43		
t (75%-25%)	mins		17.00		19.00		
SOIL INFILTRATION RATE	m/s		1.06E-04		9.62E-05		

DESIGN SOIL INFILTRATION RATE, f

9.62E-05



#### C.J. ASSOCIATES GEOTECHNICAL LTD.

SOIL INFILTRATION RATE TEST

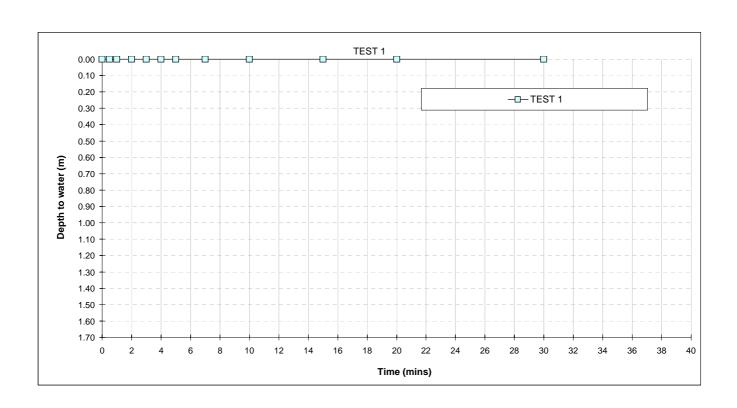
See B.R.E. Digest 365, 1991, Soakaway Design.

Remarks:-			TEST 1		TEST 2		TEST 3
		Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
Emptied 250 Gallon bowser into pit.							
L		0.0					
Strata was highly permeable and water		0.5					
soaking away quicker than it could be t	niiea.	1.0					
		2.0					
		3.0					
		4.0					
		5.0					
		7.0					
		10.0					
		15					
		20					
		30					
		45					
		60					
		90					
		120					
		180					
Effective Storage Depth	m						
75% Effective Storage Depth	m						
(i.e. depth below GL)	m						
25% Effective Storage Depth	m						
(i.e. depth below GL)	m						
Effective Storage Depth 75%-25%	m						
Time to fall to 75% effective depth	mins						
Time to fall to 25% effective depth	mins						
V (75%-25%)	m3						
a (50%)	m2						
t (75%-25%)	mins						
SOIL INFILTRATION RATE	m/s		Highly Permeable				

DESIGN SOIL INFILTRATION RATE, f

Highly Permeable





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Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP1





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP1



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C10.5	SSOC	:101	ES

Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP2





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP2





Froject	Drawing fille	
Bodicote	Trial Pit Ph	notographs
RPS	Project No. Y0204	TP2A





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP2A



	Project	Drawing Title	
cjassociat€s	Bodicote	Trial Pit Ph	otographs
cjassociales		Project No.	TD1
	RPS	Y0204	TP3





Floject	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP3



cjas	SOCI	otes
	3001	G1 C3

Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP4





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP4



cjas	SOCI	ntes
	300	GICS

Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
RPS	Project No. Y0204	TP5





Project	Drawing Title	
Bodicote	Trial Pit Ph	otographs
	Project No.	
RPS	Y0204	TP5

Site: Bodicote

Job Number: Y0204

Client: RPS

General Remarks

TP No 1

Sheet 1 of 1

Date: 23/03/2010



C J Associates Machine Type: JCB 3CX Vertical Scale 1:25 Reduced Test / Sample Level (m. O.D.) Thickness Legend Description of Strata Sample Test Results Depth Depth Depth Ref. (m) (m) 0.00 В1 0.00-0.30 TOPSOIL: Soft light brown CLAY, with occasional roots. (0.30)B2 0.30-0.70 0.30 Firm light orange-brown SILT/CLAY. 0.50 (0.40)ВЗ 0.70-2.20 0.70 Firm light grey and light orange SILT/CLAY. 1.00 (1.50)1.50 2.00 2.20 В4 2.20-2.50 Firm to stiff orange-brown very gravelly CLAY, with occasional (0.30)subangular cobbles of siltstone and 2.50 2.50 sandstone. Gravel is subangular to subrounded fine to coarse of siltstone and sandstone. **END OF TRIAL PIT** 3.00 3.50 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) Trial Pit Side Stability: All Sides Stable Logged By: Checked By: Groundwater Observations: Direction of Face A (degrees from N): Slight to moderate seepage at 2.2m, water rose to 1.7m after 5.5hrs.

Site: **Bodicote** 

Y0204 Job Number:

RPS

Client: JCB 3CX Machine Type:

TP No 2

Sheet 1 of 1

Date: 23/03/2010

Vertical Scale 1:25



**C J Associates** 

	71			_			tioai Coaic 1.20	
Depth (m)	Sample Ref.	Test / Sample Depth (m)	Test Results	Depth (m)	Thickness (m)	Legeno	Description of Strata	Reduced Level (m. O.D.)
_ 0.00 - - - - -	B1	0.30-2.00		0.40	(0.40)		TOPSOIL: Soft light brown CLAY, with occasional roots.	-
0.50 				0.40		X	Firm to stiff light yellow-grey SILT/CLAY.	-
1.00					(1.20)	X X X X X X X X X X X X X X X X X X X		- - -
1.50				1.60		X X X X X X X X X X X X X X X X X X X	Stiff to very stiff light grey and light orange SILT/CLAY.	
- - -2.00	B2	2.00-2.20			(0.60)	x x x x x x x x	orange SILT/CLAY.	- - -
- - - -2.50				2.20		××	END OF TRIAL PIT	
-								-
-3.00 - - - -								-
-3.50 3.50								- - -
-4.00 								-
-								-
-								-
		Small disturb	ped sample; B = Bulk disturbed sample; J = S	mall distur	bed sample (	glass jar);	T = Small disturbed sample (plastic tub); W = Water sample.	
Co-ordi		- 1114-	All Cides Challs					2.50
	t Side Stal		All Sides Stable		Logged By: IC Checked By:  Direction of Face A (degrees from N): - Excavator D	А В		
	water Obs	ervations:	Dry				Direction of Face A (degrees from N): - Excavator D	С
Jenera	ıı ivemigik	· .						

Site: **Bodicote** 

Job Number: Y0204

Client: **RPS** 

General Remarks

JCB 3CX Machine Type:

TP No

Sheet 1 of 1

Date: 23/03/2010

Vertical Scale 1:25



**C J Associates** Reduced Test / Sample Level (m. O.D.) Depth Thickness Legend Sample Test Results Description of Strata Depth Depth Ref. (m) (m) 0.00 MADE GROUND: Soft light brown slightly gravelly CLAY, with occasional (0.40)roots and occasional glass fragments. Gravel is subangular to subrounded fine to coarse of brick, siltstone and 0.40-1.60 0.40 sandstone. 0.50 Soft to firm light brown gravelly SILT/CLAY. (1.20)1.00 1.50 B2 1.60-2.40 1.60 Firm to stiff light grey and light orange slightly gravelly SILT/CLAY. Gravel is subangular to subrounded fine to coarse of siltstone and sandstone. 2.00 (0.80)2.40 **END OF TRIAL PIT** 2.50 3.00 3.50 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) Trial Pit Side Stability: All Sides Stable Logged By: Checked By: Groundwater Observations: Direction of Face A (degrees from N): Dry

Site: **Bodicote** 

Job Number:

Y0204

RPS Client:

Machine Type: JCB 3CX



Sheet 1 of 1

Date: 23/03/2010

Vertical Scale 1:25



**C J Associates** 

						V C1	ilical Scale 1.25
Depth (m)	Sample Ref.	Test / Sample Depth (m)	Test Results	Depth (m)	Thickness (m)	Legend	Reduc Lev (m. O.
0.00	B1	0.20.0.70		0.30	(0.30)		TOPSOIL: Soft light brown CLAY, with occasional roots.
-0.50	ВТ	0.30-0.70		0.30	(0.40)	× × × × × × × × × × × × × × × × × × ×	X G X
	B2	0.70-2.20		0.70		X X X X X X X X X X X X X X X X X X X	Firm to stiff light grey and light orange SILT/CLAY.
-1.00						x _ x _ x _ x _ x _ x _ x _ x _ x _ x _	
-1.50					(1.50)	X X X X X X X X X X X X X X X X X X X	
-2.00	D2	0 00 0 50		0.00		XX XX	- - - - - - - -
-2.50	B3 :	2.20-2.50		2.20	(0.30)		Firm to stiff orange-brown very gravelly CLAY, with occasional subangular cobbles of siltstone and sandstone. Gravel is subangular to subrounded fine to coarse of siltstone.  END OF TRIAL PIT
-3.00							- - - - -
-3.50							- - - -
-4.00							- - -
Sample	Types: D =	Small disturb	ped sample; B = Bulk disturbed sample; J = Si	mall distur	bed sample (g	glass jar);	T = Small disturbed sample (plastic tub); W = Water sample.
Co-ordi	nates:						Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50
Trial Pit Side Stability : All Sides Stable							Logged By: IC Checked By:
Ground	water Obs	ervations:	Dry				Direction of Face A (degrees from N): - Excavator D A C
Genera	al Remarks	S:					

Site: **Bodicote** 

Y0204 Job Number:

**RPS** Client: Date: 23/03/2010

TP No 4

Sheet 1 of 1



Sample   S	лепі. Iachir	ne Tyr		CB 3CX					e: 23/03/2010 tical Scale 1:25
1,200   1,20		ار ت		25 00X		1	Ī	ven	
Somple Spece   D - Small disturbed sample;   B - Blak disturbed sample;   J - Small disturbed sample;   Substitute that   J - Small disturbed sample;   Substitute that   J - Small disturbed sample;   J - Small dist	(m)	Sample Ref.	Depth		Test Results	Depth (m)	Thickness (m)	Legend	Description of Strata  Redu Lev (m. O
0.50 B2 D.50-1.7C	0.00						(0.30)		TOPSOIL: Soft light brown CLAY, with occasional roots.
Signific Types: D = Small disturbed sample: B = Built disturbed sample: J = Small disturbed sample (place) in: T = Small disturbed sa						0.30	(0.20)		Firm brown slightly gravelly CLAY. Gravel is subangular to subrounded
subangular COBBLES of siltstone and subangular COBBLES of siltston	0.50	B2	0.50-1.70			0.50			fine to coarse of siltstone and
1.70   END OF TRIAL PIT								0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	subangular COBBLES of siltstone and
2.00   1.70   END OF TRIAL PIT	1.00						(1.20)		
2.00   1.70   END OF TRIAL PIT								0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
2.00	1.50					1.70		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0
2.50 3.00 4.00 Sample Types: D = Small disturbed sample: B = Bulk disturbed sample; J = Small disturbed sample (plassi par): T = Small disturbed sample (plassic tub): W = Water sample.  Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50 Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									END OF TRIAL PIT
3.50  Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (plass) and the sample (plass) and	2.00								-
3.50  Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (plass) and the sample (plass) and									-
3.50  August 1 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample.  Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50  Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:	2.50								
3.50  August 1 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample.  Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50  Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:	2.00								
August Pit Side Stability:  All Sides Stable	3.00								
August Pit Side Stability:  All Sides Stable	3.50								
Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample.  Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50  Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									
Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample.  Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50  Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:	4.00								
Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50  Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									-
Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50  Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									
Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50  Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									-
Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) 2.50  Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:									
Trial Pit Side Stability: All Sides Stable Logged By: IC Checked By:			Small disturb	ped sample; E	B = Bulk disturbed sample;	J = Small distu	rbed sample (		
A .			-1114	All 0: :	4-1-1-				
Direction of Face A (degrees from N) Exavation C.					TADIE				A
General Remarks:				ыу					C C

Site: Bodicote

Job Number: Y

General Remarks

Y0204

Client: RPS

TP No 5

Sheet 1 of 1

Date: 23/03/2010



**C J Associates** JCB 3CX Machine Type: Vertical Scale 1:25 Reduced Test / Sample Level (m. O.D.) Depth (m) Depth Thickness Legend Description of Strata Sample Test Results Depth Ref. (m) (m) 0.00 TOPSOIL: Soft light brown CLAY, with occasional roots. (0.30)B1 0.30-1.00 0.30 Light brown clayey gravelly angular to subangular COBBLES of siltstone and 0.50 sandstone. (0.70)1.00 1.00-1.20 1.00 Firm to stiff light blue-grey CLAY (0.20)1.20 END OF TRIAL PIT 1.50 2.00 2.50 3.00 3.50 4.00 Sample Types: D = Small disturbed sample; B = Bulk disturbed sample; J = Small disturbed sample (glass jar); T = Small disturbed sample (plastic tub); W = Water sample Co-ordinates: Trial Pit Width (m) 0.70 Trial Pit Length (m) Trial Pit Side Stability: All Sides Stable Logged By: Checked By: Groundwater Observations: Direction of Face A (degrees from N): Dry

TP terminated as clay strata encountered in A, C and D-sides, but still cobbles in B-side of pit at 1.2m.