

				BOREHOLE RECORD	BH N					
sirtus			\	Client: Wm Marriagn Cunarmarketa Dla		Sheet 1 of 2 Contract No: C3821 Dates: 07/04/2010-08/04/2010				
				Method: Cable percussive rig with 150mm diameter tools and casing.		Scale 1:100				
041	ADI E DET	0	iter		Logged B	y: JCC Checked By: MB				
SAI	MPLE DETA	AILS	Groundwater (Casing)	STRATA RECORD	Driller: S	DS T				
Type (Blows)	Depth From - To(m)	N (Cu)	O)	Description	Depth (m)	Level Legend Well (m AOD)				
	0.30			MADE GROUND: Tarmac.	0.10 0.30					
(75)	1.20		1	MADE GROUND: Light grey sandy angular fine to coarse GRAVEL of limestone.	1.20	· · · · · · · · · · · · · · · · · · ·				
) (75) J)	1.20 - 1.65 1.45 - 1.70 2.00 2.20 - 2.65	(30) N=8	- - -2	MADE GROUND: Firm brown slightly sandy gravelly CLAY. Low plasticity (field test). Gravel is subangular to subrounded fine to coarse of siltstone, clinker and brick.	1.20					
) J (35)	3.00 3.20 - 3.55	(1,1,1,2,2	3	Stiff, locally firm, low strength brown fissured slightly sandy slightly gravelly CLAY. Very high plasticity. Gravel is subangular fine to coarse gravel of flint.						
	3.55 - 3.60	(24)	E 4		Ē					
5	4.00 4.20 - 4.50	N=7 (1,0,1,1,2	Ę "		Ė.					
)	5.00	,3)	5		E					
) (38))	5.20 - 5.60 5.60 - 5.65	(74)	Ė	From 5.20m to 8.20m medium strength	Ė					
)	6.00	(74)	6		Ē					
)	6.50 6.70 - 7.15	 	E		E					
'	0.70 - 7.10	N=15 (2,2,3,4,4 ,4)	7		<u> </u>					
	7.50	, -,	E		Ē					
(60)	8.20 - 8.65		8		E E					
)	8.65 - 8.70	(82)	Ė	From 8.20m to 12.70m high strength	Ė					
'	9.00		9		Ē					
;	9.70 - 10.15	N=21	Ē		E					
,	10.20	(4,4,5,5,5 ,6)	- 10 -							
			E - 11		Ę.					
) (80) J	11.20 11.20 - 11.65		E		E					
	40.63		12		Ė					
5	12.20 12.70 - 13.15		Ē		12.70					
)	13.20	N=33 (4,6,7,8,9 ,9)	13	Stiff high and very high strength grey brown slightly sandy slightly gravelly CLAY. Very high, locally high, plasticity.	12.70					
			- - 14	Gravel is fine to coarse subrounded of flint.	Ē.					
(80)	14.20 14.20 - 14.55		E '-		Ė					
'	14.55 - 14.70	(118)	15		Ē.					
)	15.20		E .		E					
)	15.70 - 16.15 16.20	N=33 (6,6,6,8,9 ,10)	16		-					
(100)	17 20		17		Ē					
(100)	17.20 17.20 - 17.58 17.58 - 17.68	(112)	E		E					
)	18.00		18		Ē					
;)	18.70 - 18.95 19.00	N=36 (6,6,7,9,1 0,10)	- 19							
				Continued next sheet	E					
Remark	s and Water O	bservation	lS		F (m AOD)	Fig. No.				
2) Ground	e inspection pit han dwater seepage at	23.60m bgl.	No rise in the g	-	ting:	Fig. No.				
4) Standp	percussive boring on pipe installed as de strengths given in (tailed above.		-	thing:	BH1				
-, - , 1001	guio givon iii (, 165ul		NOI	umy.					

				BOREHOLE RECORD	BH N	o. BH1 Sheet 2 of 2
		,		Site: Chalk Farm Road, Camden	Contract	
	\sir'	îUS		Client: Wm Morrison Supermarkets Plc	Dates: 07/0-	4/2010-08/04/2010
		_/		Method: Cable percussive rig with 150mm diameter tools and casing.		Scale 1:100
SAN	MPLE DETA	\II S	ater 1)	070.174.050000	Logged By	
	Depth	N N	Groundwater (Casing)	STRATA RECORD Description	Driller: SE	Level Legend Well
Type (Blows)	From - To(m)	(Cu)	ō Ö	·	(m)	(m AOD)
D (100) D D	20.20 - 20.60 20.60 - 20.65 21.00	(70)	21	Stiff high and very high strength grey brown slightly sandy slightly gravelly CLAY. Very high, locally high, plasticity. Gravel is fine to coarse subrounded of flint.		
S	21.70 - 22.15	N=35			- - - -	
D	22.00	(5,5,7,9,9	22 		<u>-</u>	
D U (100)	23.00 23.20 - 23.60		E-23		<u>E.</u>	
D D	23.60 - 23.65 24.00	(92)	24		- - - -	
s	24.75 - 25.15					
D	25.20	N=38 (6,8,8,9,1 0,11)	25		<u>-</u> - - -	
					<u>-</u>	
D (100) U D	26.20 26.20 - 26.50 26.50 - 26.55				<u>-</u> - - -	
D	27.20		27		<u>-</u> - - -	
S	27.70 - 28.15	N=46 (7,8,10,10	-28		-	
D	28.20	,12,14)				
D UF	29.20		- 29 - -		<u>-</u> - - - - -	
B D	30.20		30		<u>-</u>	
U (110)	30.70 - 30.95					
D	30.95 - 31.00	(>150)	E-31 E			
D	32.20	50/195mm	32		-	
S	32.20 - 32.65	(8,11,14,1 9,17)				
D	33.20		E-33 E			
U (120) D	33.70 - 33.95 33.95 - 34.00		-34 -34		<u>-</u> -	
D	35.00		- - - - -35		35.00	
ט	33.UU		- - - - - - -	End of Borehole at 35.00 m	35.00 	
			E - 36 -		<u>-</u> - - -	
			-37		<u>-</u>	
			E		<u>-</u> 	
			38			
			39		<u>-</u>	
Remark	s and Water O	bservation	is		GL (m AOD)	
2) Ground	e inspection pit hand dwater seepage at 2	23.60m bgl. I	No rise in the gr	oundwater level recorded after 20 minutes.	Easting:	Fig. No.
4) Standp	percussive boring op pipe installed as det strengths given in (tailed above.		tests undertaken in U100's.	Northing:	BH1
					-	

	_			BOREHOLE RECORD	BH N					
			\	Site: Chalk Farm Road, Camden	Contract	Sheet 1 of 2 t No: C3821				
	\Sir	iUS		Client: Wm Morrison Supermarkets Plc	Dates:	14/2010-13/04/2010				
				Method: Cable percussive boring rig with 200mm and 150mm diameter casing and tools.		Scale 1:100				
SAN	MPLE DETA	711 S	ater	070.474.050.000	Logged By					
			Groundwater (Casing)	STRATA RECORD	Driller: S					
Type Blows)	Depth From - To(m)	N (Cu)	S. S.	Description	Depth (m)	Level Legend Well (m AOD)				
	0.40		Ē	MADE GROUND: Tarmac.	0.20 0.40					
	1.00 1.20 - 1.65	N=35	<u>1</u>	MADE GROUND: Light grey sandy angular to subangular fine to coarse GRAVEL of limestone.	<u> </u>					
)	2.00	(2,5,8,10, 10,7)	-2	MADE GROUND: Medium dense and dense brown clayey fine to coarse SAND and subangular to subrounded fine to coarse	-					
3	2.20 - 2.65	N=27 (3,3,4,8,9 ,6)	E 2	GRAVEL of sandstone, brick, flint, limestone, concrete and clinker.						
3	3.00 3.20 - 3.65	N=16	3		-					
		(2,2,5,4,4	Ē		<u>-</u> -					
3	4.00 4.20 - 4.65	62/225mm (10,12,30,		From 4.20m: Low cobble and boulder content of concrete.	-					
,	5.00	22,10)								
	5.20 - 5.65	60/150mm (25,20,50,	Ē		-					
		10)	6	From 5.50 to 5.75m: Obstruction encountered.	<u> </u>					
			<u> </u>		-					
(45)	6.75 7.00 - 7.45		7	Stiff high strength brown fissured locally thinly laminated	6.75					
	7.45 - 7.50	(98)	E	slightly sandy slightly gravelly CLAY. Very high plasticity. Gravel is subangular to subrounded fine to coarse gravel of	E					
	8.00		8	flint.	Ē					
	8.50 - 8.95	N=23	Ē		Ē					
	9.00	(4,4,5,5,6 ,7)	9							
			=		Ē					
(75)	10.00 10.00 - 10.45		10		<u> </u>					
	10.45 - 10.50	(88)			Ē					
)	11.00		11		<u>E</u>					
	11.50 - 11.95	N=29	Ē		Ē					
)	12.00	(4,5,5,7,8 ,9)	12		<u>-</u>					
			Ē		Ē					
(80)	13.00 13.00 - 13.45		- 13 -		-					
	13.45 - 13.50	(44)	Ē	At 13.45m hand vane failed on fissures	-					
	14.00		14	Citt high strength and a citizens at a city	14.30					
	14.50 - 14.95	N=35 (4,6,7,8,1	E 45	Stiff high strength and very high strength grey brown fissured slightly sandy slightly gravelly CLAY. Very high plasticity.	-					
	15.00	0,10)	- 15 - -	Gravel is subangular to subrounded fine to medium of flint.	-					
(100)	16.00		- - - 16		E E					
(100)	16.00 16.00 - 16.40 16.40 - 16.45	(98)	- 10		E					
	17.00	(30)	17	At 16.40m hand vane sheared on fissures.	E					
	17.00 17.50 - 17.95	N 0=	È ''		-					
	18.00	N=37 (6,7,8,8,1 0,11)	- - 18							
		0,11)	E		-					
(100)	19.00		19		-					
(100)	19.00 - 19.30 19.30 - 19.35		Ė		-					
		<u> </u>	Ē	Continued next sheet	-					
	s and Water C inspection pit han			GL	(m AOD)	Fig. No.				
2)Ground 3) Chisell	water encountered ing hard strata fror	at 4.40m bgl n 5.50m to 5.	, rising to 4.35r 75m bgl, 1 hou	m bgl after 15 minutes.	sting:					
 Casing Cable 	reduced from 200 percussive boring of	m to 150mm a complete at 3	at 6.75m. 5.00m.		rthing:	BH2				
C) Ctooled	ipe installed, as de	etailed above.	ts of hand vane	e tests undertaken in U100's.	•					

				BOREHOLE RECORD	BH N	o. BH2 Sheet 2 of 2
				Site: Chalk Farm Road, Camden	Contract	
	\sir'	iUS		Client: Wm Morrison Supermarkets Plc	Dates: 09/04	4/2010-13/04/2010
		_/		Method: Cable percussive boring rig with 200mm and 150mm diameter casing and tools.	S	Scale 1:100
2/1	MPLE DETA	VII S	ater ()	277.7.	Logged By	
			Groundwater (Casing)	STRATA RECORD	Driller: SD	
Type (Blows)	Depth From - To(m)	N (Cu)	9 9.	Description	Depth (m)	Level Legend Well (m AOD)
D % D	20.00 20.50 - 20.95 21.00	N=41 (6,8,10,10 ,10,11)	-21	Stiff high strength and very high strength grey brown fissured slightly sandy slightly gravelly CLAY. Very high plasticity. Gravel is subangular to subrounded fine to medium of flint.	na ana ana ana	
D (100) U D	22.00 22.00 - 22.20 22.20 - 22.25		E-22 E-22			
D	23.00		23		-	
S D	23.50 - 23.95 24.00	N=50 (7,8,10,12 ,12,16)	- 24			
D (100) U D	25.00 25.00 - 25.30 25.30 - 25.35	(>150)	- 25			
D	26.00		26			
S D	26.50 - 26.95 27.00	N=68 (8,9,10,15 ,18,25)			recent percent	
D (100) U D	28.00 28.00 - 28.10 28.20 - 28.25		- 28 - 28		randrann randrann	
D	29.00		29		-	
S	29.50 - 29.90	50/235mm (7,9,11,14	E E			
D	30.00	,16,9)	E-30 E		<u>-</u> E E	
D (100) U D	31.00 31.00 - 31.25 31.25 - 31.30		- 31 - 21		<u> </u>	
D	32.00		-32		<u>-</u>	
S D	32.50 - 32.95 33.00	50/275mm (8,9,10,15 ,19,6)	33		i i i di	
D (100) U D	34.00 34.00 - 34.25 34.35 - 34.40		34		a character	
D	35.00		-35 -	End of Borehole at 35.00 m	35.00	
			36			
			37		andani.	
			- 38 			
			= -39 =			
			E		- - - -	
	s and Water O			G	iL (m AOD)	Fig. No.
2)Ground 3) Chisel	ling hard strata fron	at 4.40m bgl n 5.50m to 5.3	, rising to 4.35m 75m bgl, 1 hour	bgl after 15 minutes.	asting:	-
4) Casing 5) Cable 6) Standa	reduced from 200r percussive boring c pipe installed, as de	m to 150mm a complete at 35 ctailed above.	at 6.75m. 5.00m.	-	lorthing:	BH2
	(

				BOREHOLE RECORD	BH N	BH No. BH3 Sheet 1 of 2			
		`		Site: Chalk Farm Road, Camden	Contract		C3821		
\sir [†] us				Client: Wm Morrison Supermarkets Plc	Dates:	A/2010 1	5/04/2010		
				Method: Cable percussive boring rig with 150mm diameter casing and tools.		Scale	1:100		
			ter		Logged By	r: JCC	Checked By: MB		
SAI	MPLE DETA		Groundwater (Casing)	STRATA RECORD	Driller: S	Driller: SDS			
Type Blows)	Depth From - To(m)	N (Cu)	Gro O)	Description	Depth (m)	Level (m AOD)	Legend We		
	0.30			MADE GROUND: Tarmac.	0.30 0.40				
	1.00 1.20 - 1.65	N=18	<u>-</u> 1	MADE GROUND: Light grey sandy angular to subangular fine to coarse GRAVEL of limestone.	/ <u>E</u>				
•	1.40	(1,2,4,5,5 ,4)		MADE GROUND: Medium dense brown clayey sandy GRAVEL. Mediu cobble content. Gravel is subangular to subrounded fine to	n				
	2.00 2.20 - 2.65	N=8 (1,2,2,2,2	-2	coarse of brick, clinker, sandstone and flint. Cobbles are angular to subrounded of brick, sandstone and concrete.	2.10				
(20)	3.00	,2)	-3	MADE GROUND: Soft low and medium strength brown slightly sandy					
(20)	3.20 - 3.65			slightly gravelly CLAY. High Plasticity (field test). Medium subangular brick and concrete cobble content. Gravel is					
•	4.00 4.20 - 4.65	N=8	-4	subangular to subrounded fine to coarse of brick, clinker, sandstone and flint.	E				
		(1,1,2,2,2 ,2)		from 3.00m very wet with strong sewage odour.	Ē				
F	5.00 5.20 - 5.65		- '5 '						
)	6.00		-6						
	6.20 - 6.65 6.20	N=50 (5,8,10,10			Ē				
	6.20 - 6.65 7.00	,20,10)	7	At 6.50m: Chiseling at 6.50m concrete/obstruction.	E				
	7.70 - 8.15	N 20		From 6.50m: Obstruction. Assumed former concrete basement floor.	E				
(50)	8.00 8.20 - 8.45	N=28 (10,10,8,7 ,7,6)	8	Stiff high and very high strength soft brown fissured slightly	8.10				
	8.65 - 8.70	(88)		sandy slightly gravelly CLAY. Very high plasticity. Gravel	Ė				
	9.00		- 9	is subangular to subrounded fine to coarse of flint.	E				
	9.70 - 10.15	N=33 (4,6,8,8,8	10		Ē				
)	10.20	,9)			Ė				
			- 11		E				
	11.20 11.20 - 11.65 11.65 - 11.70	(86)			Ē				
	12.00	(60)	12	At 12.00m orange brown and rare angular fine to coarse	E				
	12.70 - 13.15	N=37		gravel of quartz.	Ē				
	13.20	(4,5,9,9,9 ,10)	13						
				Stiff very high strength orange brown fissured slightly sandy	13.60				
(88)	14.20 14.20 - 14.65		Ē '¬	slightly gravelly CLAY. Very high, locally high, plasticity. Gravel is subangular to subrounded fine to coarse flint.					
	14.65 - 14.70	(88)	15		-				
	15.20 15.70 - 16.15		Ē						
•	16.20	N=45 (6,7,9,10, 12,14)	16		-				
		,,	-						
(100)	17.20		- 17						
	17.20 - 17.60 17.60 - 17.65		40		-				
	18.20		18						
	18.70 - 19.15	N=49 (5,8,12,10	_ 19						
	19.20	,12,15)	Ė						
Domo-l	e and Mater C	heor of:	<u> </u>	Continued next sheet	-				
1) Service	s and Water C	d excavated	to 1.20m.	-	n AOD)	Fig. N	0.		
bgl. 3) Chisel	ing hard strata fror	n 6.50m to 8.	00m bal. 1 hou		Easting:		ВН3		
4) Cable	percussive boring or pipe installed, as de	complete at 3	5.00m.	North	ning:				

		$\overline{}$		BOREHOLE RECORD		BH N		BH3			
				Site: Chalk Farm Road, Camden		Contract		C3821			
	\sir'i	ÎUS)	Client: Wm Morrison Supermarkets Plc		Dates:	4/2010-1	5/04/201	0		
			,	Method: Cable percussive boring rig with 150mm diameter casing and tools.			cale	1:1			
SAI	MPLE DETA	AILS	Groundwater (Casing)			Logged By:					
Type (Blows)	Depth From - To(m)	N (Cu)	Grour (Ca	Description		Depth (m)	Level (m AOD)	Legend	Well		
D (100) U D	20.20 20.20 - 20.50 20.50 - 20.55 21.00	(90)	-21	Stiff very high strength orange brown fissured slightly sandy slightly gravelly CLAY. Very high, locally high, plasticity. Gravel is subangular to subrounded fine to coarse flint.							
S D	21.70 - 22.15 22.20	N=40 (6,8,8,10, 10,12)	22								
D (100) U D	23.20 23.20 - 23.50 23.50 - 23.55 24.00	(120)	-23 23 								
S D	24.70 - 25.15 25.20	N=46 (5,8,10,10 ,12,14)	- - - - - - - - - - - - - - - - - - -								
D (100) U D	26.20 26.20 - 26.45 26.45 - 26.50 27.20	(120)	-26 								
S	27.70 - 28.15	N=50 (6,9,9,10, 16,15)	- 28 - 28								
D (100) U D	29.20 29.20 - 29.50 29.50 - 29.55 30.00	(87)									
S D (120) U D	30.70 - 31.15 31.20 31.20 - 31.40 31.40 - 31.45	N=50 (7,9,11,13 ,18,8) (120)	31								
D S D	32.20 32.70 - 33.15 33.20	N=70 (8,11,14,1 9,17,20)	-32 								
D (120) U D	34.20 34.20 - 34.50 34.50 - 34.55	(120)	- 34 54								
D	35.00		- 35 35 	End of Borehole at 35.00 m		35.00		<u> </u>	*.; % **!		
			-37								
			38								
			= 39 = 39 = = = = = = = = = = = = = = = = = = =								
1) Service		d excavated t	o 1.20m.	1	GL (m A	AOD)	Fig. N	0.			
2) Groun bgl. 3) Chisel 4) Cable 5) Standa	1) Service inspection pit hand excavated to 1.20m. 2) Groundwater encountered at 5.00m bgl, rising to 4.85m bgl after 20 minutes. Groundwater seepage at 22.50m										

Appendix C CDA and LFRZ Map