# NCC Received 25/07/2017

# APPENDIX 3 Aggregate Testing Reports

LRS/BTN/101 Greenfield associates





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#### **TEST REPORT**

#### **EN 1367 MAGNESIUM SULFATE TEST**

#### Land at Mill Hill and Barton

Report no.	. L16/0609/GFA/005	
Order reference: PO 24	Date of testing: 28/03 to 12/04/2016	
Date of receipt: 11/03/2016	Date of issue: 14/04/2016	
NCA sample reference:	16-7584	
Client sample reference:	BTN16	
Sample description/rock type/aggregate size:	Brown gravel.	/ed
		ia N
Aggregate size fraction tested (mm)	14/10	ece 201
Proportion by mass tested (%):	5.0	C R
Magnesium sulfate range (%):	1.1	NC 25/(
MAGNESIUM SULFATE VALUE (%):	5	

#### NOTES:

- Testing was in accordance with BS EN 1367-2:1998.
- A certificate of sampling is not available.

# **Data Protection**

W. Elson

Manager – Testing Services Nicholls Colton Analytical Greenfield Associates 1 Commercial Road Keyworth Nottinghamshire NG12 5JS



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#### **TEST REPORT**

#### **EN 1097 PARTICLE DENSITY AND WATER ABSORPTION**

#### Land at Mill Hill and Barton

Report no. L16	5/0609/GFA/004
Order reference: PO 24	Date of testing: 16/03/2016 – 21/03/2016
Date of receipt: 11/03/2016	Date of issue: 23/03/2016

NCA sample reference:	16-7584
Client sample reference:	BTN16
Mass of test portion (kg):	3.672
Size of aggregate (mm):	31.5 - 4
Apparent density - (Mg/m³)	2.69 Z Z
Particle density - oven dried (Mg/m³)	2.61
Particle density – saturated surface dried (Mg/m³)	2.64
Water absorption (%)	1.1

#### NOTES:

Testing was in accordance with EN 1097-6: 2013 Clause 8 1. 2.

The above sample was not artificially heated before testing.

Water Absorption was determined in accordance with Clause 8 (4mm to 31.5mm)

A sampling certificate was not supplied.

# **Data Protection**

Will Elson Manager - Testing Services Nicholls Colton Analytical **Greenfield Associates** 1 Commercial Road Keyworth Nottingham NG12 5JS





#### **TEST REPORT**

#### **BS 1377 PLASTICITY INDEX DEFINITIVE**

Land at Mill Hill & Barton

Report no. L16/0609/GFA/003					
Order reference: PO 24	Date of receipt: 11/03/2016	Date of testing: 14/03/2016 to 21/03/2016	Date of issue: 23/03/2016		

-								
NCA Sample reference	Client sample reference	Depth (m)	Sample type	Sample description	Fines passing 425µm (%)	Liquid limit (%)	Plastic limit (%)	Plasticity index [%]
16-7532	BTN16/1 D1	1.0	Disturbed	Brown silty clay	100	53	26	Ř 7/2
16-7536	BTN16/2 D1	1.0	Disturbed	Brown silty clay	100	44	23	) (0)
16-7538	BTN16/3 D1	1.0	Disturbed	Brown silty clay	100	30	18	NFC 25
16-7539	BTN16/4 D1	1.0	Disturbed	Brown silty clay	100	69	30	39
16-7542	BTN16/4 D3	2.5	Disturbed	Brown silty grey clay	100	63	31	32
16-7545	BTN16/6 D1	1.0	Disturbed	Brown silty clay	100	29	15	14
16-7547	BTN16/7 D1	1.0	Disturbed	Brown silty clay	100	49	25	24

- 1. Sample preparation was in accordance with BS 1377: Part 1: 1990.
- 2. Testing was in accordance with BS 1377: Part 2: 1990 Clauses 3, 4.3 (definitive) & 5.
- 3. The material was prepared from its natural state.
- 4. Some information required by BS 1377: Part 1: 1990 Clause 9 is not included in the report. The information will be provided if requested.

## **Data Protection**

Will Elson

Manager – Testing Services

Nicholls Colton Analytical

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#### **TEST REPORT**

#### **BS812 TEN PERCENT FINES VALUE**

#### Land at Mill Hill & Barton

Report no. L16	5/0609/GFA/002
Order reference: PO 24	Date of testing: 16/03/2016 – 21/03/2016
Date of receipt: 11/03/2016	Date of issue: 23/03/2016
NCA sample reference:	16-7584
Client sample reference:	BTN16 .
Sample description:	Brown gravel
Condition of aggregate at test:	Soaked
TEN PERCENT FINES VALUE (Soaked) (kN):	330 Z Z

#### NOTES:

- Testing was in accordance with BS812:Part 111:1990.
- A certificate of sampling is not available.



Will Elson Manager – Testing Services Nicholls Colton Analytical Greenfield Associates 1 Commercial Road Keyworth Nottingham NG12 5JS



#### **Nicholls Colton Analytical**

# NICHOLLS COLTON

#### **Cover Sheet**

#### **Grrenfield Associates**

1 Commercial Road Keyworth Nottigham NG12 5JS

	Analytical Test Report:	L16/0609/GFA/001	
Your Project Reference:	Land at Mill Hill & Barton	Samples Received on:	11/03/2016
Your Order Number:	PO 24	Testing Instruction Received:	11/03/2016
Report Issue Number:	1	Sample Tested :	16/03/2016 - 21/03/2016
Samples Analysed	3 Samples	Report issued:	23/03/2016



#### Will Elson

Manager - Testing Services Nicholls Colton Analytical

#### Notes:

Samples will be retained for 14 days after issue of this report unless otherwise requested.

Samples were provided by the client

#### Grading

Sample preparation was in accordance with BS EN 932-2 : 1999.

Testing was in accordance with BS EN 933-1 : 2012 washing and sieving.  $\label{eq:BS}$ 

Issued by WE 27.01.15, Authorised by MS



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## 0320 L16/0609/GFA/001

#### Land at Mill Hill & Barton

#### **Material Analysis Results**

Waterial Milarysis Results					
NCA Reference		16-7548	16-7550	16-7552	
Client Sample Reference		BTN16/2 B1	BTN16/5 B2	BTN 16/7 B2	
Date of Sampling		Not provided	Not provided	Not provided	
Depth (m)		1.5-3.0	2.1-3.6	3.3-4.8	
Material Description		Brown sandy gravel	Brown sandy gravel	Brown sandy gravel	
BS Test Sieve (mm)	Units				
125	% Passing	100	100	100	
80.0	% Passing	100	100	100	
63.0	% Passing	100	100	100	
50.0	% Passing	100	100	98	
40.0	% Passing	100	91	96	
31.5	% Passing	98	85	89	
25.0	% Passing	92	76	82	
22.4	% Passing	86	71	78	
20.0	% Passing	82	69	74	
16.0	% Passing	73	60	66	
14.0	% Passing	65	54	59	
12.5	% Passing	60	51	55	
10.0	% Passing	52	44	47	
8	% Passing	44	39	39	
6.30	% Passing	38	33	32	
5.00	% Passing	34	28	27	
4	% Passing	30	24	23	
2.8	% Passing	25	19	17	
2	% Passing	22	15	14	
1	% Passing	17	10	11	
0.500	% Passing	9	4	7	
0.250	% Passing	2	1	1	
0.125	% Passing	1	1	1	
0.063	% Passing	1.0	0.9	0.8	