APPENDIX 'A'

GEOTECHNICAL REPORT

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

CELEBRATING 90 Years 1923 - 2013

2013 ALLEY PROGRAM
BLENHEIM AVE & CLONARD AVE ALLEY BETWEEN
RUE DES MEURONS & ST ANNE'S RD
GEOTECHNICAL INVESTIGATION

Prepared for

KGS GROUP INC.
3rd FLOOR - 865 WAVERLEY STREET
WINNIPEG, MANITOBA
R3T 5P4

Prepared by

THE NATIONAL TESTING LABORATORIES LIMITED
199 HENLOW BAY
WINNIPEG, MANITOBA
R3Y 1G4

May 8, 2013

THE NATIONAL TESTING LABORATORIES LIMITED *Established in 1923*	Project No.KGS-1307	Drawn by:SB	Figure: 1	Testhole Location Plan 2013 Alley Program Blenheim & Clonard Ave Alley Btw Rue Des Meurons & St. Anne's Rd
	Date:May 3, 2013	Reviewed by: GL	Scale: NTS	

TABLE 1
2013 ALLEY PROGRAM
BLENHEIM AVENUE & CLONARD AVENUE ALLEY BETWEEN RUE DES MEURONS & ST ANNE'S ROAD
GEOTECHNICAL INVESTIGATION

Testhole ID	Testhole Location	Pavement Surface		Pavement Structure Material		Sample Description	Sample Depth (m)	Moisture Content (%)	Particle Size Analysis				Atterberg Limits		
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
TH1	Blenheim Avenue & Clonard Avenue Alley 3.5 m West from property line 15 & 19 Clonard Avenue 3.0 m North from property 15 Clonard Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH2	Blenheim Avenue & Clonard Avenue Alley 4.0 m West from property line 25 & 23 Clonard Avenue 2.0 m North from property 23 Clonard Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH3	Blenheim Avenue & Clonard Avenue Alley 3.0 m West from property line 33 & 31 Clonard Avenue 3.5 m North from property 31 Clonard Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH4	Blenheim Avenue & Clonard Avenue Alley 7.0 m West from property line 49 & 47 Clonard Avenue 2.0 m North from property 47 Clonard Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH5	Blenheim Avenue & Clonard Avenue Alley 4.0 m West from property line 53 & 55 Clonard Avenue 3.5 m North from property 53 Clonard Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH6	Blenheim Avenue & Clonard Avenue Alley 7.0 m West from property line 67 & 65 Clonard Avenue 2.0 m North from property 65 Clonard Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH7	Blenheim Avenue & Clonard Avenue Alley 3.0 m West from property line 81 & 75 Clonard Avenue 3.5 m North from property 75 Clonard Avenue	-	-	-	-	Clay Fill	0.8	30	12.8	49.6	19.9	17.7	37	12	25
TH8	Blenheim Avenue & Clonard Avenue Alley 2.0 m West from property line 85 & 89 Clonard Avenue 2.0 m North from property 85 Clonard Avenue	-	-	-	-	Clay	0.6	35	0.2	4.1	24.5	71.2	91	31	60
TH9	Blenheim Avenue & Clonard Avenue Alley 3.0 m West from property line 95 & 99 Clonard Avenue 3.5 m North from property 95 Clonard Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH10	Blenheim Avenue & Clonard Avenue Alley 7.0 m East from property line 101 & 99 Clonard Avenue 1.5 m North from property 101 Clonard Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TESTHOLE TH1

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program | **Date Drilled: April 18, 2013**
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd | **Depth of Testhole: 2.0 m**
Client: KGS Group Inc. | **Logged by: Sothea Bun**
Drilling Contractor: Active Drilling and Piling | **Reviewed by: German Leal**
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 3.5 m W from property line 15 & 19 Clonard Ave, 3.0 m N from property 15 Clonard Ave

Depth (m)	Symbol	Description	Sample Type	● Water Content (%)
		Granular Fill - 20 mm max size aggregate	BS	●5
			BS	●7
		Clay Fill - black, firm, moist, medium plasticity - trace fine to coarse gravel - some fine to coarse sand - some silt	BS	●27
0.5			BS	●30
		Clay - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt - brown below 1.7 m	BS	●36
1.0			BS	●38
1.5			BS	●37
			BS	●37
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5				

25 50 75 100

TESTHOLE TH2

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program | **Date Drilled: April 18, 2013**
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd | **Depth of Testhole: 2.0 m**
Client: KGS Group Inc. | **Logged by: Sothea Bun**
Drilling Contractor: Active Drilling and Piling | **Reviewed by: German Leal**
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 4.0 m W from property line 25 & 23 Clonard Ave, 2.0 m N from property 23 Clonard Ave

Depth (m)	Description	Sample Type	Water Content (%)
	Granular Fill - 20 mm max size aggregate - trace organic material - some asphalt debris	BS	7
		BS	28
	Clay Fill - black, firm, moist, medium plasticity - trace organic material - trace fine gravel - some fine to coarse sand - some silt	BS	33
0.5		BS	38
	Clay - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt - brown below 0.9 m	BS	37
1.0		BS	35
1.5		BS	32
		BS	33
2.0	• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5			

Water Content (%): 25 50 75 100

TESTHOLE TH3

THE NATIONAL TESTING LABORATORIES LIMITED

Project Name: 2013 Alley Program
Date Drilled: April 18, 2013
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd
Depth of Testhole: 2.0 m
Client: KGS Group Inc.
Logged by: Sothea Bun
Drilling Contractor: Active Drilling and Piling
Reviewed by: German Leal
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 3.0 m W from property line 33 & 31 Clonard Ave, 3.5 m N from property 31 Clonard Ave

Depth (m)	Symbol	Description	Sample Type	● Water Content (%)
		Granular Fill - 20 mm max size aggregate	BS	●6
		Clay Fill - black, firm, moist, medium plasticity - trace fine to coarse gravel - some fine to coarse sand - some silt	BS	●22
			BS	●33
0.5			BS	●34
		Clay - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt	BS	●33
1.0			BS	●35
		Silt - tan, firm, moist, low plasticity	BS	●23
1.5				
		Clay - brown, firm, moist, high plasticity	BS	●38
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5				

25 50 75 100

TESTHOLE TH4

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program | **Date Drilled: April 18, 2013**
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd | **Depth of Testhole: 2.0 m**
Client: KGS Group Inc. | **Logged by: Sothea Bun**
Drilling Contractor: Active Drilling and Piling | **Reviewed by: German Leal**
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 7.0 m W from property line 49 & 47 Clonard Ave, 2.0 m N from property 47 Clonard Ave

Depth (m)	Description	Sample Type	Water Content (%)
	Granular Fill - 20 mm max size aggregate - trace organic material	BS	6
	Clay Fill - black, firm, moist, medium plasticity - trace fine gravel - some fine to coarse sand - some silt	BS	29
		BS	27
0.5	**Clay** - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt	BS	39
		BS	40
1.0		BS	48
	Silt - tan, firm, moist, medium plasticity - soft below 1.7 m	BS	33
1.5		BS	24
2.0	• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5			

Water Content (%): 25 50 75 100

TESTHOLE TH5

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Date Drilled: April 18, 2013
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd
Depth of Testhole: 2.0 m
Client: KGS Group Inc.
Logged by: Sothea Bun
Drilling Contractor: Active Drilling and Piling
Reviewed by: German Leal
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 4.0 m W from property line 53 & 55 Clonard Ave, 3.5 m N from property 53 Clonard Ave

Depth (m)	Description	Sample Type	Water Content (%)
0.0	**Granular Fill** - 20 mm max size aggregate	BS	8
	Clay Fill - black, firm, moist, medium plasticity - trace organic material - trace fine gravel - some fine to coarse sand	BS	31
		BS	55
0.5		BS	43
	Clay - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt - brown below 1.7 m	BS	33
1.0		BS	39
1.5		BS	36
		BS	36
2.0	• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5			

Water Content (%): 25 50 75 100

TESTHOLE TH6

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program | **Date Drilled: April 18, 2013**
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd | **Depth of Testhole: 2.0 m**
Client: KGS Group Inc. | **Logged by: Sothea Bun**
Drilling Contractor: Active Drilling and Piling | **Reviewed by: German Leal**
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 7.0 m W from property line 67 & 65 Clonard Ave, 2.0 m N from property 65 Clonard Ave

Depth (m)	Symbol	Description	Sample Type	● Water Content (%) 25 50 75 100
		Granular Fill - 20 mm max size aggregate	BS	●11
			BS	●6
		Clay Fill - black, firm, moist, medium plasticity - trace fine gravel - some fine to coarse sand - some silt	BS	●7
0.5			BS	●12
		Clay - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt	BS	●36
1.0			BS	●39
1.5		**Silt** - tan, soft, moist, low plasticity	BS	●45
			BS	●23
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5				

TESTHOLE TH7

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Date Drilled: April 18, 2013
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd
Depth of Testhole: 2.0 m
Client: KGS Group Inc.
Logged by: Sothea Bun
Drilling Contractor: Active Drilling and Piling
Reviewed by: German Leal
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 3.0 m W from property line 81 & 75 Clonard Ave, 3.5 m N from property 75 Clonard Ave

Depth (m)	Symbol	Description	Sample Type	Particle Size Distribution: Gravel (%)	Sand (%)	Silt (%)	Clay (%)	● Water Content (%) PL LL 25 50 75 100
0		**Granular Fill** - 20 mm max size aggregate	BS					●7
			BS					●5
0.5			BS					●5
		Clay Fill - black, firm, moist, medium plasticity - some fine to coarse gravel - some fine to coarse sand - some silt	BS	12.8	49.6	19.9	17.7	PL ●30 LL
			BS					●29
1.0		**Clay** - brown, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt	BS					●34
1.5			BS					●31
			BS					●29
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.						
2.5								

TESTHOLE TH8

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Date Drilled: April 18, 2013
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd
Depth of Testhole: 2.0 m
Client: KGS Group Inc.
Logged by: Sothea Bun
Drilling Contractor: Active Drilling and Piling
Reviewed by: German Leal
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 2.0 m W from property line 85 & 89 Clonard Ave, 2.0 m N from property 85 Clonard Ave

Depth (m)	Description	Sample Type	Particle Size Distribution: Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content (%)
0.0	**Granular Fill** - 20 mm max size aggregate	BS					9
	Clay Fill - black, firm, moist, medium plasticity - trace fine to coarse gravel - some fine to coarse sand - some silt	BS					19
		BS					36
0.5	**Clay** - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt - brown below 1.4 m	BS	0.2	4.1	24.5	71.2	35
		BS					38
1.0		BS					35
1.5		BS					33
		BS					31
2.0	• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.						
2.5							

PL = 25, LL = 50

TESTHOLE TH9

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program | **Date Drilled: April 18, 2013**
Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd | **Depth of Testhole: 2.0 m**
Client: KGS Group Inc. | **Logged by: Sothea Bun**
Drilling Contractor: Active Drilling and Piling | **Reviewed by: German Leal**
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 3.0 m W from property line 95 & 99 Clonard Ave, 3.5 m N from property 95 Clonard Ave

Depth (m)	Symbol	Description	Sample Type	● Water Content (%)
		Granular Fill - 20 mm max size aggregate	BS	●9
		Clay Fill - black, firm, moist, medium plasticity - trace fine to coarse gravel - some fine to coarse sand - some silt	BS	●16
			BS	●17
0.5			BS	●14
		Clay - brown, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt	BS	●32
1.0			BS	●25
1.5			BS	●25
			BS	●24
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5				

25 50 75 100

TESTHOLE TH10

THE NATIONAL TESTING LABORATORIES LIMITED

Project Name: 2013 Alley Program | **Date Drilled: April 18, 2013**

Project Location: Blenheim & Clonard Ave Alley btw Rue Des Meurons & St Anne's Rd | **Depth of Testhole: 2.0 m**

Client: KGS Group Inc. | **Logged by: Sothea Bun**

Drilling Contractor: Active Drilling and Piling | **Reviewed by: German Leal**

Drilling Method: 125 mm Solid Stem Auger

Testhole Location: 7.0 m E from property line 101 & 99 Clonard Ave, 1.5 m N from property 101 Clonard Ave

Depth (m)	Description	Sample Type	Water Content (%)
	Granular Fill	BS	7
	Clay Fill - black, firm, moist, medium plasticity - trace fine to coarse gravel - some fine to coarse sand - some silt	BS	29
		BS	41
0.5	**Clay** - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt - brown, below 0.8 m	BS	45
		BS	35
1.0		BS	42
	Silt - tan, soft, moist, low plasticity - clayey below 1.8 m	BS	27
1.5		BS	22
		BS	34
2.0	• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5			

Water Content (%): 25, 50, 75, 100

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

PARTICLE SIZE ANALYSIS
ASTM D422

KGS Group Inc.
3rd Floor - 865 Waverley St.
Winnipeg, Manitoba
R3T 5P4

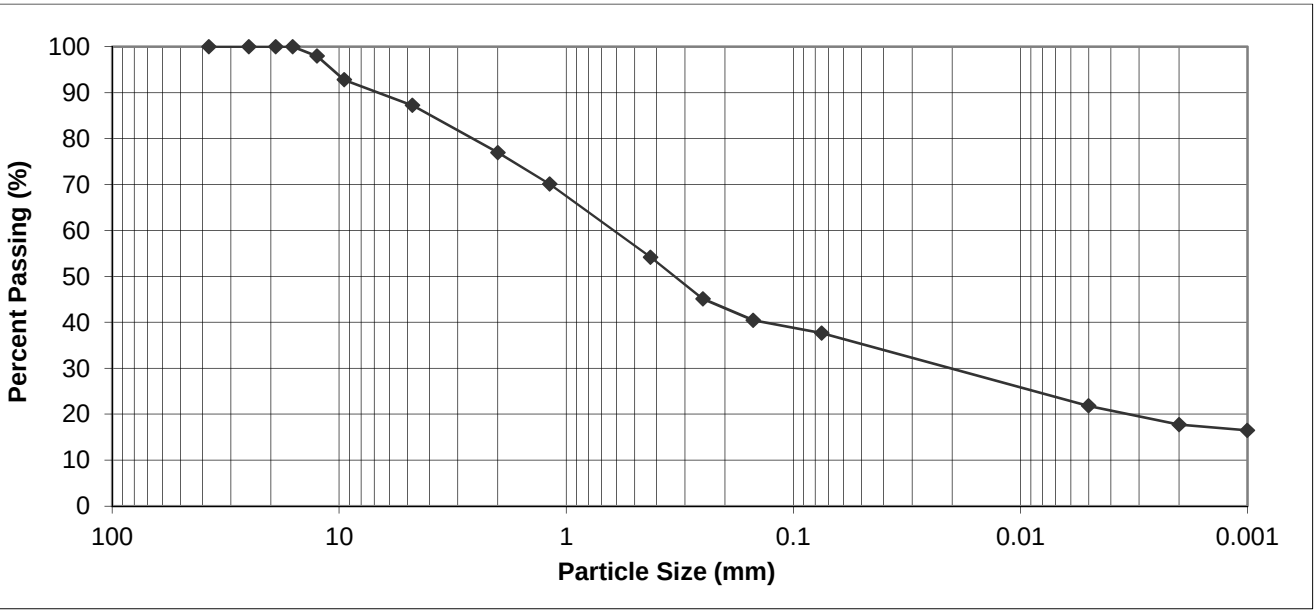
PROJECT: 2013 Alley Program
Blenheim Ave & Clonard Ave Alley
between Rue Des Meurons &
St Anne's Rd

Attention: Michael Turko

PROJECT NO.: KGS-1307

SAMPLED BY: Sothea Bun
SAMPLE ID: TH7 at 0.8 m.

DATE RECEIVED: April 18, 2013
TESTED BY: Larry Presado



PARTICLE SIZE	PERCENT PASSING
37.50 mm	100.0
25.00 mm	100.0
19.00 mm	100.0
16.00 mm	100.0
12.50 mm	97.9
9.50 mm	92.8
4.75 mm	87.2
2.00 mm	76.9

PARTICLE SIZE	PERCENT PASSING
1.18 mm	70.1
0.425 mm	54.2
0.250 mm	45.1
0.150 mm	40.4
0.075 mm	37.6
0.005 mm	21.8
0.002 mm	17.7
0.001 mm	16.5

Gravel, % 75 to 4.75 mm	Sand, %			Silt, % <0.075 to 0.002 mm	Clay, % <0.002 mm	Colloids, % < 0.001 mm
	Coarse <4.75 to 2.0 mm	Medium <2.0 to 0.425 mm	Fine <0.425 to 0.075 mm			
12.8	10.3	22.7	16.6	19.9	17.7	16.5

May 6, 2013

REVIEWED BY: German E. Leal, B.Sc., EIT

199 Henlow Bay, Winnipeg, Manitoba R3Y 1G4 Phone (204) 488-6999 Fax (204) 488-6947 Email info@nationaltestlabs.com

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

PARTICLE SIZE ANALYSIS
ASTM D422

KGS Group Inc.
3rd Floor - 865 Waverley St.
Winnipeg, Manitoba
R3T 5P4

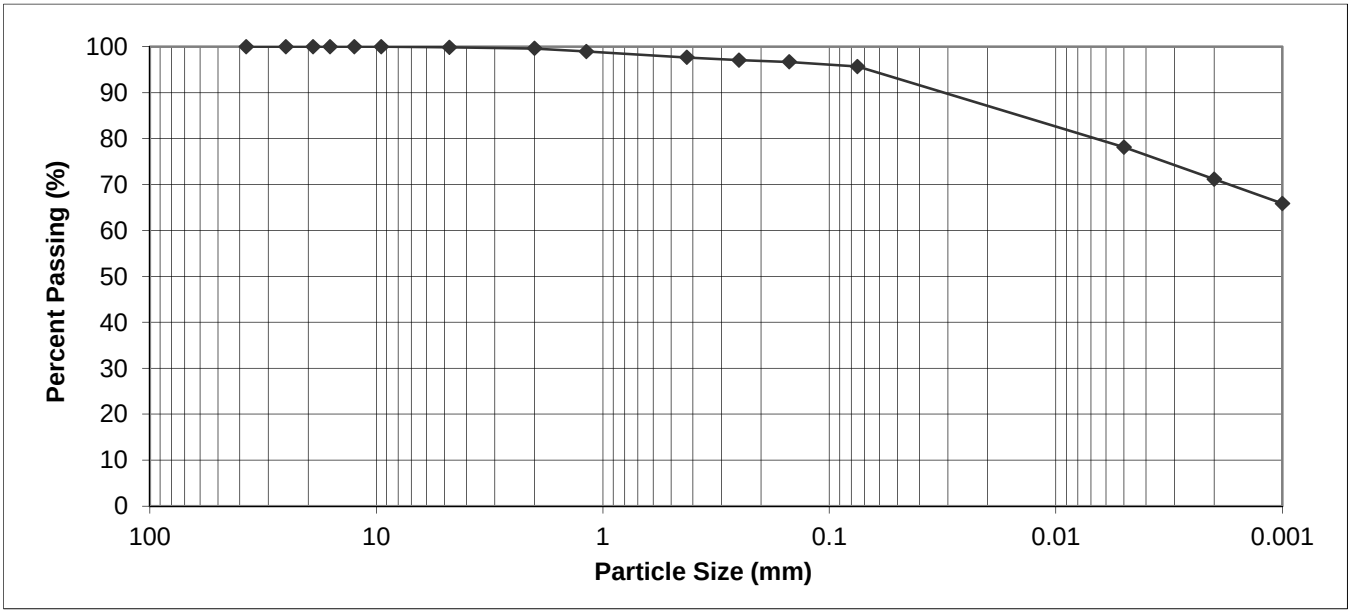
PROJECT: 2013 Alley Program
Blenheim Ave & Clonard Ave Alley
between Rue Des Meurons &
St Anne's Rd

Attention: Michael Turko

PROJECT NO.: KGS-1307

SAMPLED BY: Sothea Bun
SAMPLE ID: TH8 at 0.6 m.

DATE RECEIVED: April 18, 2013
TESTED BY: Larry Presado



PARTICLE SIZE	PERCENT PASSING
37.50 mm	100.0
25.00 mm	100.0
19.00 mm	100.0
16.00 mm	100.0
12.50 mm	100.0
9.50 mm	100.0
4.75 mm	99.8
2.00 mm	99.6

PARTICLE SIZE	PERCENT PASSING
1.18 mm	99.0
0.425 mm	97.7
0.250 mm	97.1
0.150 mm	96.7
0.075 mm	95.7
0.005 mm	78.1
0.002 mm	71.2
0.001 mm	65.9

Gravel, % 75 to 4.75 mm	Sand, %			Silt, % <0.075 to 0.002 mm	Clay, % <0.002 mm	Colloids, % < 0.001 mm
	Coarse <4.75 to 2.0 mm	Medium <2.0 to 0.425 mm	Fine <0.425 to 0.075 mm			
0.2	0.2	1.9	2.0	24.5	71.2	65.9

May 6, 2013

REVIEWED BY: German E. Leal, B.Sc., EIT

199 Henlow Bay, Winnipeg, Manitoba R3Y 1G4 Phone (204) 488-6999 Fax (204) 488-6947 Email info@nationaltestlabs.com

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Established in 1923

CELEBRATING 90 Years 1923 - 2013

2013 ALLEY PROGRAM
FIFTH AVENUE & CARRIERE AVENUE ALLEY BETWEEN RUE DES MEURONS & YOUVILLE STREET
GEOTECHNICAL INVESTIGATION

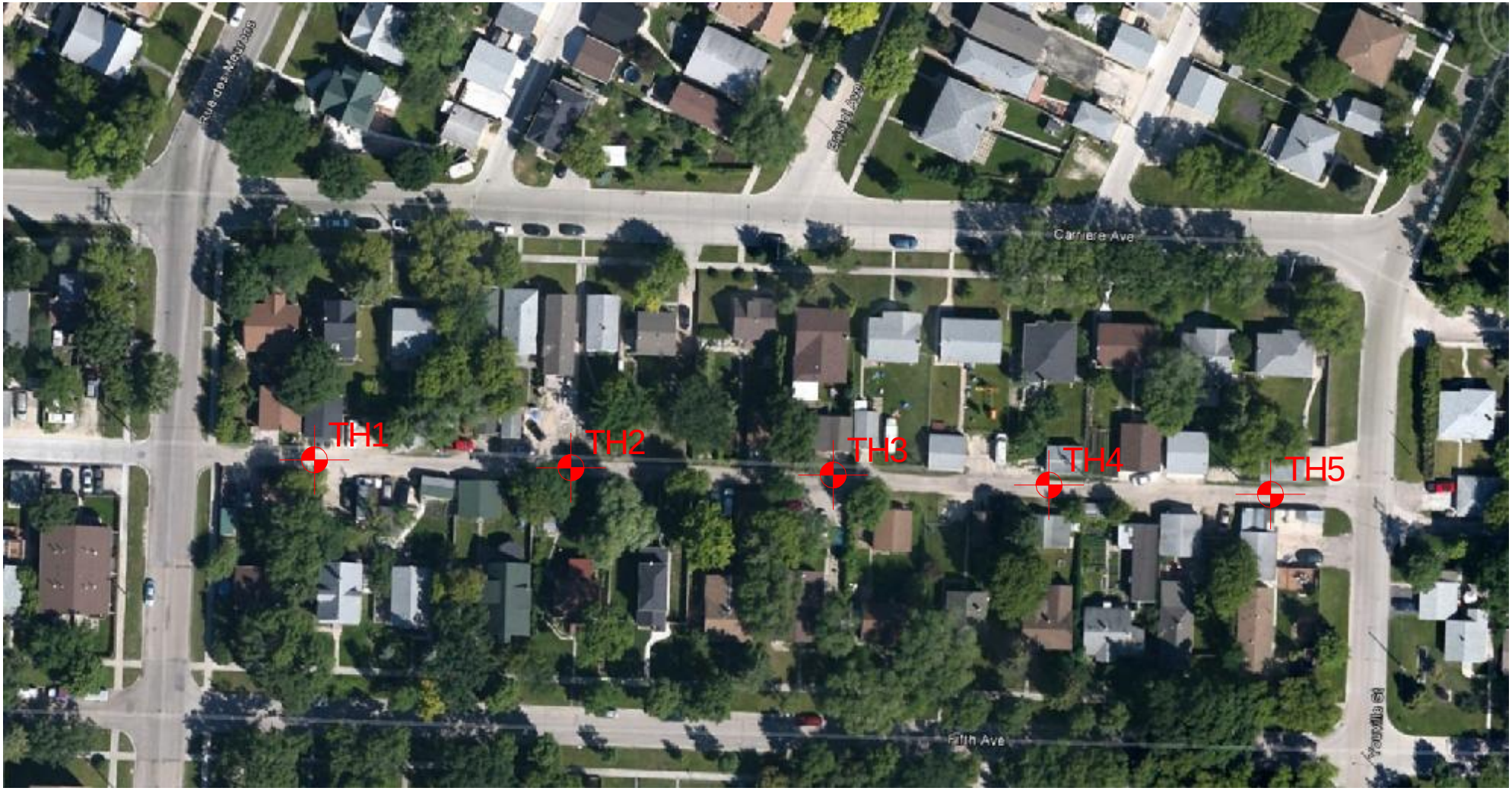
Prepared for

KGS GROUP INC.
3rd FLOOR - 865 WAVERLEY STREET
WINNIPEG, MANITOBA
R3T 5P4

Prepared by

THE NATIONAL TESTING LABORATORIES LIMITED
199 HENLOW BAY
WINNIPEG, MANITOBA
R3Y 1G4

May 8, 2013



THE NATIONAL TESTING LABORATORIES LIMITED *Established in 1923*	Project No.KGS-1307	Drawn by: SB	Figure: 1
	Date:May 8, 2013	Reviewed by:GL	Scale: NTS

Testhole Location Plan
2013 Alley Program
Fifth Ave & Carriere Ave Alley btw
Rue Des Meurons & Youville St

TABLE 1
2013 ALLEY PROGRAM
FIFTH AVENUE & CARRIERE AVENUE ALLEY BETWEEN RUE DES MEURONS & YOUVILLE STREET
GEOTECHNICAL INVESTIGATION

Testhole ID	Testhole Location	Pavement Surface		Pavement Structure Material		Sample Description	Sample Depth (m)	Moisture Content (%)	Particle Size Analysis				Atterberg Limits		
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
TH1	Fifth Avenue and Carriere Avenue Alley 1.0 m East from property line 65 & 67 Fifth Avenue 2.0 m North from property 67 Fifth Avenue	-	-	-	-	Clay	0.6	36	0.2	3.2	29.4	67.2	83	32	51
TH2	Fifth Avenue and Carriere Avenue Alley 5.0 m East from property line 75 & 79 Fifth Avenue 2.0 m North from property 79 Fifth Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH3	Fifth Avenue and Carriere Avenue Alley 12.5 m East from property line 87 & 91 Fifth Avenue 3.3 m North from property line 91 Fifth Avenue	-	-	-	-	Clay Fill	0.3	28	4.7	31.6	27.9	35.8	59	25	34
TH4	Fifth Avenue and Carriere Avenue Alley 11.0 m East from property line 101 & 103 Fifth Avenue 3.0 m North from property 103 Fifth Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH5	Fifth Avenue and Carriere Avenue Alley 5.0 m East from property line 109 & 113 Fifth Avenue 2.5 m North from property 113 Fifth Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TESTHOLE TH1

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Fifth Ave & Carriere Ave Alley btw Rue Des Meurons & Youville St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 1.0 m E from property line 65 & 67 Fifth Ave, 2.0 m N from property 67 Fifth Ave

Date Drilled: April 18, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Symbol	Description	Particle Size Distribution Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content (%) PL LL 25 50 75 100
		Granular Fill - 20 mm max size aggregate - trace organic material					12
		Clay Fill - black, firm, moist, medium plasticity - some fine to coarse sand - trace fine gravel					34
0.5		**Clay** - black, firm, moist, high plasticity - trace fine gravel - trace fine to coarse sand - some silt - brown below 0.9 m	0.2	3.2	29.4	67.2	36
							34
1.0							36
1.5							33
							32
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.					
2.5							

TESTHOLE TH2

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Fifth Ave & Carriere Ave Alley btw Rue Des Meurons & Youville St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 5.0 m E from property line 75 & 79 Fifth Ave, 2.0 m N from property 79 Fifth Ave

Date Drilled: April 18, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Symbol	Description	● Water Content (%)
		Granular Fill - 20 mm max size aggregate - some organic material - some asphalt debris	●10
		Clay Fill - black, firm, moist, medium plasticity - some organic material - some fine to coarse sand - trace fine gravel	●39 ●33
0.5			●32
		Clay - brown, firm, moist, high plasticity - some silt	●39
1.0			●33
1.5			●36
		Silt - tan, soft, moist, low plasticity	●22
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.	
2.5			

TESTHOLE TH3

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Fifth Ave & Carriere Ave Alley btw Rue Des Meurons & Youville St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 12.5 m E from property line 87 & 91 Fifth Ave, 3.3 m N from property line 91 Fifth Ave

Date Drilled: April 18, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Symbol	Description	Particle Size Distribution Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content (%) PL LL 25 50 75 100
0		**Granular Fill** - 20 mm max size aggregate - trace organic material - some asphalt debris					●10 ●22
		Clay Fill - black, firm, moist, medium plasticity - some fine to coarse sand - trace fine to coarse gravel - some silt	4.7	31.6	27.9	35.8	●28
0.5							●36
		Clay - brown, firm, moist, high plasticity - some silt below 1.7 m					●31
1.0							●31
1.5							●30
							●33
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.					
2.5							

TESTHOLE TH4

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Fifth Ave & Carriere Ave Alley btw Rue Des Meurons & Youville St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 11.0 m E from property line 101 & 103 Fifth Ave, 3.0 m N from property 103 Fifth Ave

Date Drilled: April 18, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Symbol	Description	● Water Content (%)
		Granular Fill - 20 mm max size aggregrate - some organic material - some asphalt debris	●9 ●10
		Clay Fill - black, firm, moist, medium plasticity - some fine to medium sand	●29
0.5		**Clay** - black, firm, moist, high plasticity - some silt - brown below 1.5 m	●56 ●26
1.0			●57
1.5			●62
			●34
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.	
2.5			

25 50 75 100

TESTHOLE TH5

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Fifth Ave & Carriere Ave Alley btw Rue Des Meurons & Youville St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 5.0 m E from property line 109 & 113 Fifth Ave, 2.5 m N from property 113 Fifth Ave

Date Drilled: April 18, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Symbol	Description	● Water Content (%)
		Granular Fill - 20 mm max size aggregate	25 50 75 100 ●9
		Clay Fill - black, firm, moist, medium plasticity - trace organic material - some fine to coarse sand	●38 ●36
0.5		**Clay** - black, firm, moist, high plasticity - some silt - brown below 1.2 m	●28
			●38
1.0			
			●38
1.5			●39
			●26
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.	
2.5			

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

PARTICLE SIZE ANALYSIS
ASTM D422

KGS Group Inc.
3rd Floor - 865 Waverley St.
Winnipeg, Manitoba
R3T 5P4

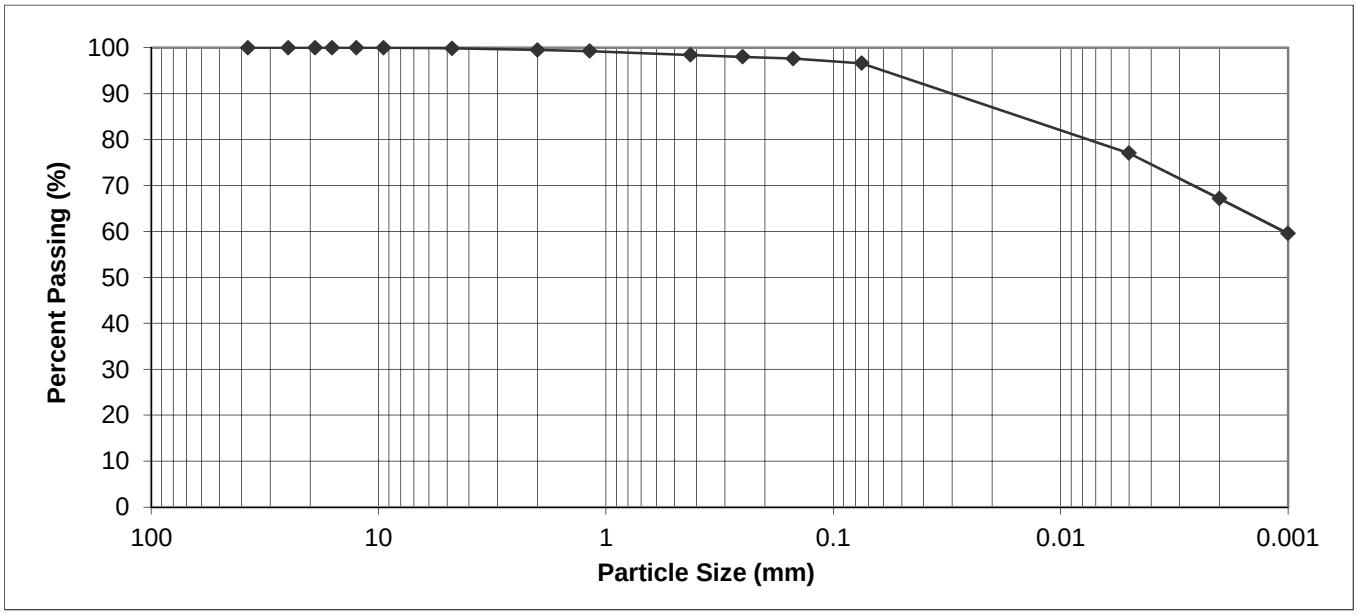
PROJECT: 2013 Alley Program
Fifth Ave & Carriere Ave Alley btw
Rue Des Meurons & Youville St

Attention: Michael Turko

PROJECT NO.: KGS-1307

SAMPLED BY: Sothea Bun
SAMPLE ID: TH1 at 0.6 m.

DATE RECEIVED: April 18, 2013
TESTED BY: Larry Presado



PARTICLE SIZE	PERCENT PASSING
37.50 mm	100.0
25.00 mm	100.0
19.00 mm	100.0
16.00 mm	100.0
12.50 mm	100.0
9.50 mm	100.0
4.75 mm	99.8
2.00 mm	99.5

PARTICLE SIZE	PERCENT PASSING
1.18 mm	99.3
0.425 mm	98.4
0.250 mm	98.0
0.150 mm	97.6
0.075 mm	96.6
0.005 mm	77.0
0.002 mm	67.2
0.001 mm	59.5

Gravel, % 75 to 4.75 mm	Sand, %			Silt, % <0.075 to 0.002 mm	Clay, % <0.002 mm	Colloids, % < 0.001 mm
	Coarse <4.75 to 2.0 mm	Medium <2.0 to 0.425 mm	Fine <0.425 to 0.075 mm			
0.2	0.3	1.1	1.8	29.4	67.2	59.5

May 6, 2013

REVIEWED BY: German E. Leal, B.Sc., EIT

199 Henlow Bay, Winnipeg, Manitoba R3Y 1G4 Phone (204) 488-6999 Fax (204) 488-6947 Email info@nationaltestlabs.com

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

PARTICLE SIZE ANALYSIS
ASTM D422

KGS Group Inc.
3rd Floor - 865 Waverley St.
Winnipeg, Manitoba
R3T 5P4

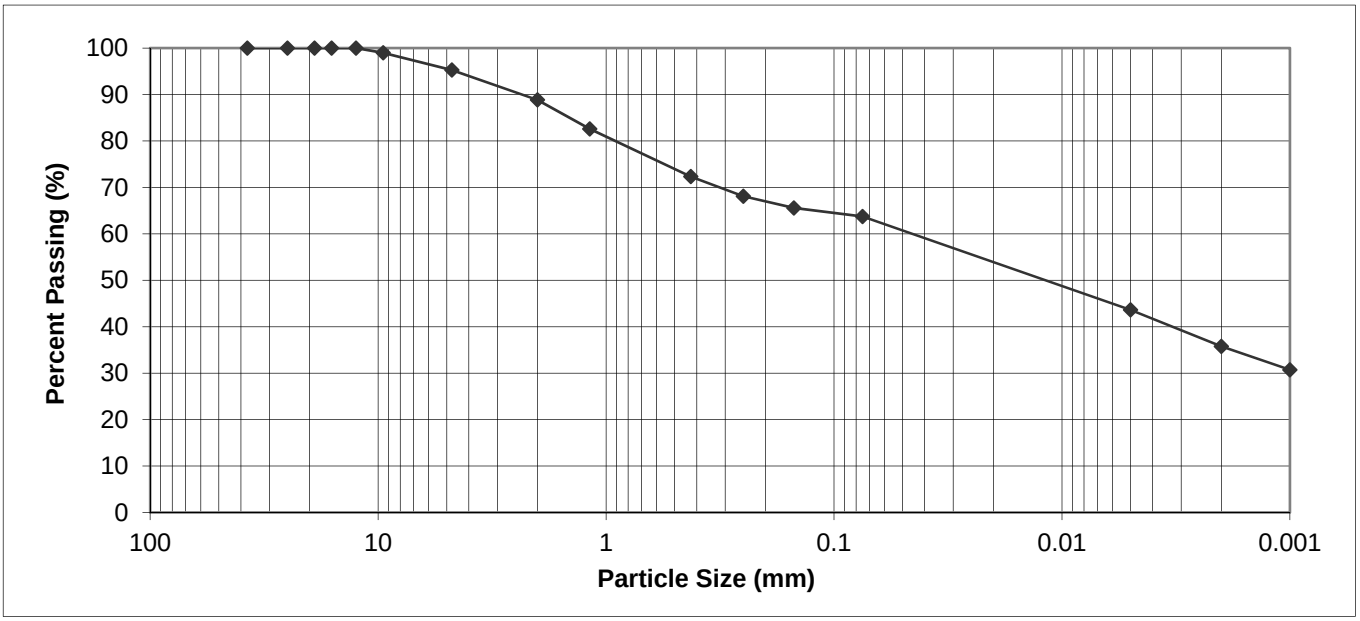
PROJECT: 2013 Alley Program
Fifth Ave & Carriere Ave Alley btw
Rue Des Meurons & Youville St

Attention: Michael Turko

PROJECT NO.: KGS-1307

SAMPLED BY: Sothea Bun
SAMPLE ID: TH3 at 0.3 m.

DATE RECEIVED: April 18, 2013
TESTED BY: Larry Presado



PARTICLE SIZE	PERCENT PASSING
37.50 mm	100.0
25.00 mm	100.0
19.00 mm	100.0
16.00 mm	100.0
12.50 mm	100.0
9.50 mm	99.0
4.75 mm	95.3
2.00 mm	88.9

PARTICLE SIZE	PERCENT PASSING
1.18 mm	82.6
0.425 mm	72.3
0.250 mm	68.1
0.150 mm	65.6
0.075 mm	63.7
0.005 mm	43.6
0.002 mm	35.8
0.001 mm	30.7

Gravel, % 75 to 4.75 mm	Sand, %			Silt, % <0.075 to 0.002 mm	Clay, % <0.002 mm	Colloids, % < 0.001 mm
	Coarse <4.75 to 2.0 mm	Medium <2.0 to 0.425 mm	Fine <0.425 to 0.075 mm			
4.7	6.4	16.6	8.6	27.9	35.8	30.7

May 6, 2013

REVIEWED BY: German E. Leal, B.Sc., EIT

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

CELEBRATING 90 Years 1923 2013

2013 ALLEY PROGRAM
GALLAGHER AVENUE & LOGAN AVENUE ALLEY BETWEEN DEE STREET & KEEWATIN STREET
GEOTECHNICAL INVESTIGATION

Prepared for

KGS GROUP INC.
3rd FLOOR - 865 WAVERLEY STREET
WINNIPEG, MANITOBA
R3T 5P4

Prepared by

THE NATIONAL TESTING LABORATORIES LIMITED
199 HENLOW BAY
WINNIPEG, MANITOBA
R3Y 1G4

May 9, 2013

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project No.KGS-1307	Drawn by: SB	Figure: 1	Testhole Location Plan 2013 Alley Program Gallagher Ave & Logan Ave between Dee St & Keewatin St
Date:May 9, 2013	Reviewed by:GL	Scale: NTS	

TABLE 1
2013 ALLEY PROGRAM
GALLAGHER AVENUE AND LOGAN AVENUE ALLEY BETWEEN DEE STREET AND KEEWATIN STREET
GEOTECHNICAL INVESTIGATION

Testhole ID	Testhole Location	Pavement Surface		Pavement Structure Material		Sample Description	Sample Depth (m)	Moisture Content (%)	Particle Size Analysis				Atterberg Limits		
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
TH1	Gallagher Avenue and Logan Avenue Alley 3.0 m East from property line 60 & 56 Gallagher Avenue 1.0 m North from property 56 Gallagher Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH2	Gallagher Avenue and Logan Avenue Alley 4.5 m West from property line 42 & 44 Gallagher Avenue 1.0 m South from property 44 Gallagher Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TH3	Gallagher Avenue and Logan Avenue Alley 1.0 m West from property line 30 & 34 Gallagher Avenue 1.0 m South from property 34 Gallagher Avenue	-	-	-	-	Clay Fill	0.9	33	1.2	22.8	36.5	39.5	63	24	39
TH4	Gallagher Avenue and Logan Avenue Alley 2.0 m North from property line 1835 & 1833 Logan Avenue	-	-	-	-	Silty Clay	0.9	36	0.2	5.3	33.7	60.8	63	19	44
TH5	Gallagher Avenue and Logan Avenue Alley 1.0 m West from property line 1817 & 1815 Logan Avenue 2.0 m North from property 1817 Logan Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TESTHOLE TH1

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Gallagher Ave & Logan Ave between Dee St & Keewatin St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 3.0 m E from property line 60 & 56 Gallagher Ave, 1.0 m N from property 56 Gallagher Ave

Date Drilled: April 16, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Description	Sample Type	Water Content (%)
	Granular Fill - 20 mm max size aggregate	BS	7
	Clay Fill - black, firm, moist, high plasticity - some fine to coarse sand - trace fine gravel - some silt	BS	21
0.5		BS	30
	Silty Clay - black, stiff, moist, high plasticity - trace fine to coarse sand - trace fine gravel	BS	37
1.0		BS	30
	Silt - tan, soft, moist, low plasticity	BS	23
1.5		BS	22
		BS	22
2.0	• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5			

Water Content (%): 25 50 75 100

TESTHOLE TH2

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Gallagher Ave & Logan Ave between Dee St & Keewatin St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 4.5 m W from property line 42 & 44 Gallagher Ave, 1.0 m S from property 44 Gallagher Ave

Date Drilled: April 16, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Description	Sample Type	Water Content (%)
	Granular Fill - 20 mm max size aggregate	BS	10
0.5	**Clay Fill** - black, firm, moist, high plasticity - some fine to coarse sand - trace fine gravel - some silt	BS BS	27 28
1.0	**Silty Clay** - black, stiff, moist, high plasticity - trace fine to coarse sand - trace fine gravel	BS BS	35 37
1.5	**Silt** - tan, soft, moist, low plasticity	BS BS	17 18
2.0	• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5			

Water Content (%): 25 50 75 100

TESTHOLE TH3

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Gallagher Ave & Logan Ave between Dee St & Keewatin St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 1.0 m W from property line 30 & 34 Gallagher Ave, 1.0 m S from property 34 Gallagher Ave

Date Drilled: April 16, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Description	Sample Type	Particle Size Distribution: Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content (%)
	Granular Fill - 20 mm max size aggregate	BS					8
	Clay Fill - black, firm, moist, high plasticity - trace organic material - some fine to coarse sand - trace fine to coarse gravel - some silt	BS					39
0.5		BS					38
		BS	1.2	22.8	36.5	39.5	33
1.0	**Silty Clay** - brown, firm, moist, high plasticity - trace fine to coarse sand - trace fine gravel	BS					29
1.5		BS					27
	Silt - tan, soft, moist, low plasticity	BS					23
2.0	• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.						
2.5							

Water Content (%): PL — LL; 25 50 75 100

TESTHOLE TH4

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Gallagher Ave & Logan Ave between Dee St & Keewatin St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 2.0 m N from property line 1835 & 1833 Logan Ave

Date Drilled: April 16, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Symbol	Description	Sample Type	Particle Size Distribution Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content (%) PL LL 25 50 75 100
		Granular Fill - 20 mm max size aggregate	BS					12
		Clay Fill - black, firm, moist, high plasticity - some fine to coarse sand - trace fine gravel - some silt	BS					33
0.5			BS					28
		Silty Clay - black, firm, moist, high plasticity - trace fine to coarse sand - trace fine gravel	BS	0.2	5.3	33.7	60.8	36
1.0		**Silt** - tan, soft, moist, low plasticity	BS					34
1.5			BS					28
			BS					23
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.						
2.5								

TESTHOLE TH5

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Gallagher Ave & Logan Ave between Dee St & Keewatin St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 1.0 m W from property line 1817 & 1815 Logan Ave, 2.0 m N from property 1817 Logan Ave

Date Drilled: April 16, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: German Leal

Depth (m)	Symbol	Description	Sample Type	Water Content (%)
		Granular Fill - 20 mm max size aggregate	BS	11
		Clay Fill - black, firm, moist, high plasticity - some fine to coarse sand - trace fine gravel - some silt	BS	54
0.5			BS	50
		Silty Clay - black, firm, moist, high plasticity - trace fine to coarse sand - trace fine gravel	BS	30
1.0			BS	29
		Silt - tan, soft, moist, low plasticity	BS	22
1.5			BS	28
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.		
2.5				

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

PARTICLE SIZE ANALYSIS
ASTM D422

KGS Group Inc.
3rd Floor - 865 Waverley St.
Winnipeg, Manitoba
R3T 5P4

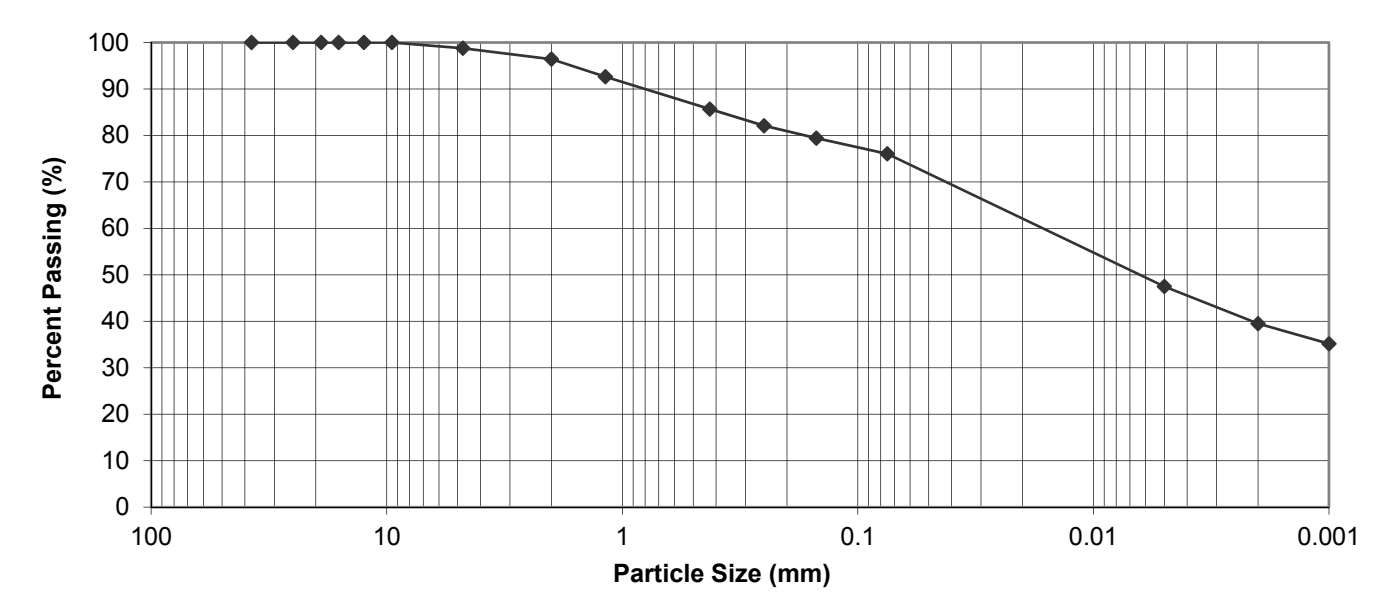
PROJECT: 2013 Alley Program
Gallagher & Logan Ave Alley
between Dee St & Keewatin St

Attention: Michael Turko

PROJECT NO.: KGS-1307

SAMPLED BY: Sothea Bun
SAMPLE ID: TH3 at 0.9 m.

DATE RECEIVED: April 16, 2013
TESTED BY: Larry Presado



PARTICLE SIZE	PERCENT PASSING
37.50 mm	100.0
25.00 mm	100.0
19.00 mm	100.0
16.00 mm	100.0
12.50 mm	100.0
9.50 mm	100.0
4.75 mm	98.8
2.00 mm	96.4

PARTICLE SIZE	PERCENT PASSING
1.18 mm	92.6
0.425 mm	85.7
0.250 mm	82.1
0.150 mm	79.4
0.075 mm	76.0
0.005 mm	47.5
0.002 mm	39.5
0.001 mm	35.2

Gravel, % 75 to 4.75 mm	Sand, %			Silt, % <0.075 to 0.002 mm	Clay, % <0.002 mm	Colloids, % < 0.001 mm
	Coarse <4.75 to 2.0 mm	Medium <2.0 to 0.425 mm	Fine <0.425 to 0.075 mm			
1.2	2.4	10.7	9.7	36.5	39.5	35.2

May 6, 2013

REVIEWED BY: German E. Leal, B.Sc., EIT

199 Henlow Bay, Winnipeg, Manitoba R3Y 1G4 Phone (204) 488-6999 Fax (204) 488-6947 Email info@nationaltestlabs.com

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

PARTICLE SIZE ANALYSIS
ASTM D422

KGS Group Inc.
3rd Floor - 865 Waverley St.
Winnipeg, Manitoba
R3T 5P4

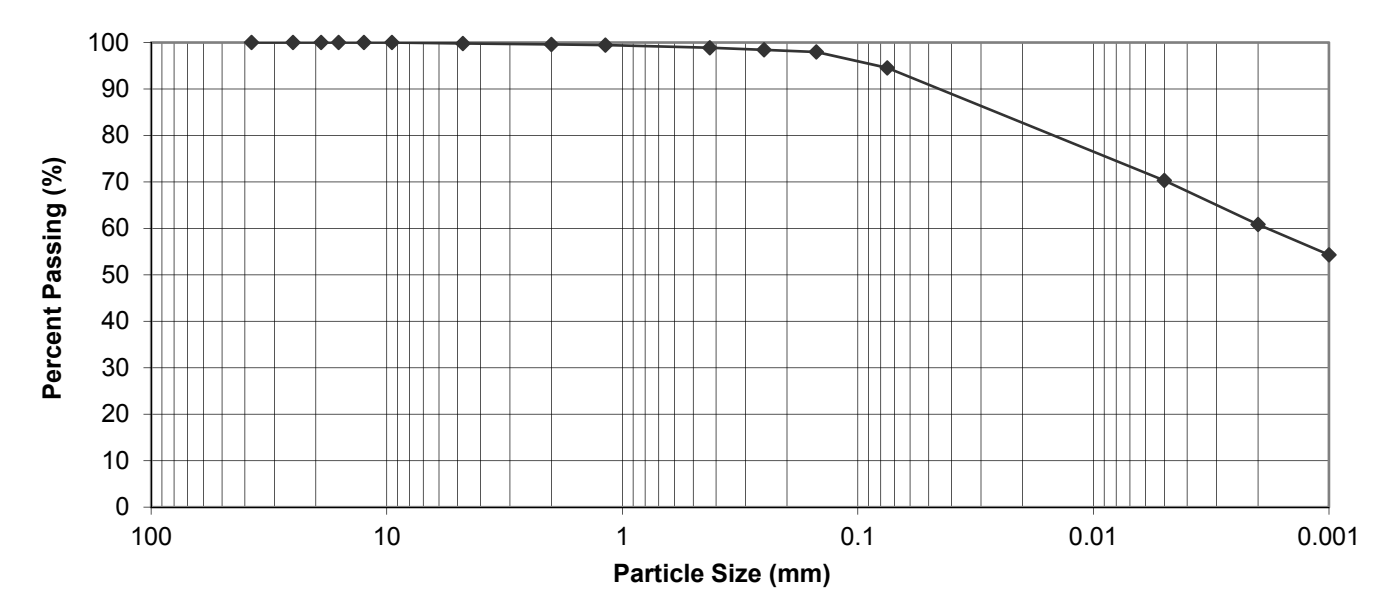
PROJECT: 2013 Alley Program
Gallagher & Logan Ave Alley
between Dee St & Keewatin St

Attention: Michael Turko

PROJECT NO.: KGS-1307

SAMPLED BY: Sothea Bun
SAMPLE ID: TH4 at 0.9 m.

DATE RECEIVED: April 16, 2013
TESTED BY: Sothea Bun



PARTICLE SIZE	PERCENT PASSING
37.50 mm	100.0
25.00 mm	100.0
19.00 mm	100.0
16.00 mm	100.0
12.50 mm	100.0
9.50 mm	100.0
4.75 mm	99.8
2.00 mm	99.6

PARTICLE SIZE	PERCENT PASSING
1.18 mm	99.4
0.425 mm	98.9
0.250 mm	98.4
0.150 mm	98.0
0.075 mm	94.5
0.005 mm	70.3
0.002 mm	60.8
0.001 mm	54.3

Gravel, % 75 to 4.75 mm	Sand, %			Silt, % <0.075 to 0.002 mm	Clay, % <0.002 mm	Colloids, % < 0.001 mm
	Coarse <4.75 to 2.0 mm	Medium <2.0 to 0.425 mm	Fine <0.425 to 0.075 mm			
0.2	0.2	0.7	4.4	33.7	60.8	54.3

May 6, 2013

REVIEWED BY: German E. Leal, B.Sc., EIT

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

CELEBRATING 90 Years 1923 - 2013

2013 ALLEY PROGRAM
DOLLARD BOULEVARD & BERTRAND STREET ALLEY
BETWEEN RUE RICHOT & RUE ST JEAN BAPTISTE
GEOTECHNICAL INVESTIGATION

Prepared for

KGS GROUP INC.
3rd FLOOR - 865 WAVERLEY STREET
WINNIPEG, MANITOBA
R3T 5P4

Prepared by

THE NATIONAL TESTING LABORATORIES LIMITED
199 HENLOW BAY
WINNIPEG, MANITOBA
R3Y 1G4

May 24, 2013

THE NATIONAL TESTING LABORATORIES LIMITED *Established in 1923*	Project No.KGS-1307	Drawn by:SB	Figure: 1	Testhole Location Plan 2013 Alley Program Dollard Blvd & Bertrand St Alley between Rue Richot & St Jean Baptiste St
	Date:May 15, 2013	Reviewed by:GL	Scale: NTS	

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

TABLE 1
2013 ALLEY PROGRAM
DOLLARD BOULEVARD & BERTRAND STREET ALLEY BETWEEN RUE RICHOT & ST JEAN BAPTISTE ST
GEOTECHNICAL INVESTIGATION

Testhole ID	Testhole Location	Pavement Surface		Pavement Structure Material		Sample Description	Sample Depth (m)	Moisture Content (%)	Particle Size Analysis				Atterberg Limits		
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
TH1	Dollard Boulevard & Bertrand Street Alley 1.0 m East from property line 286 & 288 Dollard Boulevard 1.0 m South from property 288 Dollard Boulevard	Granular Fill	300	-	-	Clayey Sand Fill	0.6	15	39.7	41.1	12.1	7.1	31	21	10
TH2	Dollard Boulevard & Bertrand Street Alley 3.0 m West from property line 294 & 298 Dollard Boulevard 1.5 m South from property 294 Dollard Boulevard	Granular Fill	225	-	-	Silty Clay	0.9	52	0.7	9.7	39.9	49.7	76	35	41

TESTHOLE TH1

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Dollard Blvd & Bertrand St Alley btw Rue Richot & St Jean Baptiste St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 1.0 m East from property line 286 & 288 Dollard Blvd, 1.0 m South from property 288 Dollard Blvd

Date Drilled: May 15, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: Don Flatt

Depth (m)	Symbol	Description	Sample Type	Particle Size Distribution Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content (%) PL LL (25 50 75 100)
0		**Granular Fill** - 20 mm max size aggregate	BS					3
			BS					4
		Clayey Sand Fill - with gravel - black, firm, moist, medium plasticity						
0.5			BS	39.7	41.1	12.1	7.1	15
		Silty Clay - black, firm, moist, high plasticity - trace fine to coarse sand - trace fine gravel - grey below 1.5 m	BS					78
1.0			BS					80
1.5			BS					62
			BS					68
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.						
2.5								

TESTHOLE TH2

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

Project Name: 2013 Alley Program
Project Location: Dollard Blvd & Bertrand St Alley btw Rue Richot & St Jean Baptiste St
Client: KGS Group Inc.
Drilling Contractor: Active Drilling and Piling
Drilling Method: 125 mm Solid Stem Auger
Testhole Location: 3.0 m West from property line 294 & 298 Dollard Blvd, 1.5 m South from property 294 Dollard Blvd

Date Drilled: May 15, 2013
Depth of Testhole: 2.0 m
Logged by: Sothea Bun
Reviewed by: Don Flatt

Depth (m)	Symbol	Description	Sample Type	Particle Size Distribution Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Water Content (%) PL LL 25 50 75 100
		Granular Fill - 20 mm max size aggregate	BS					3
		Clayey Sand Fill - with gravel - black, firm, moist, medium plasticity	BS					10
0.5		**Silty Clay** - black, firm, moist, high plasticity - trace fine to coarse sand - trace fine gravel - grey below 1.5 m	BS					56
			BS	0.7	9.7	39.9	49.7	52
1.0			BS					46
1.5			BS					55
			BS					47
2.0		• No groundwater seepage or soil sloughing was observed during or upon completion of drilling. • Testhole terminated at a depth of 2.0 m.						
2.5								

THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

PARTICLE SIZE ANALYSIS
ASTM D422

KGS Group Inc.
3rd Floor - 865 Waverley St.
Winnipeg, Manitoba
R3T 5P4

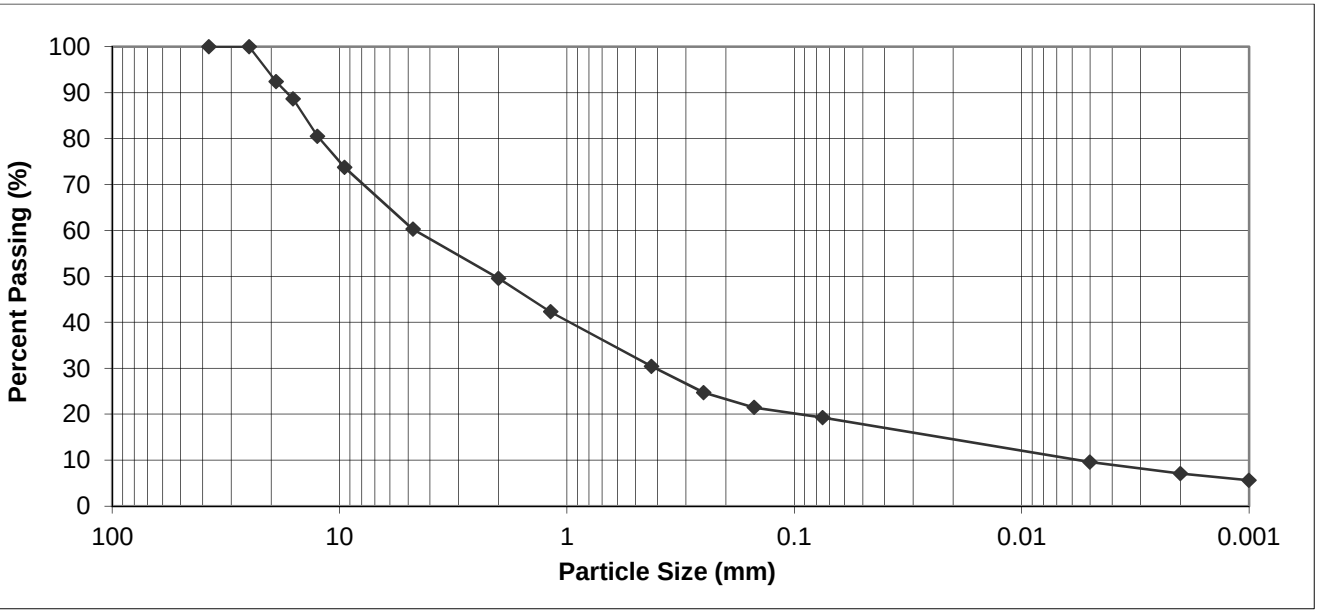
PROJECT: 2013 Alley Program
Dollard Blvd & Bertrand St Alley
between Rue Ritchot &
St Jean Baptiste St

Attention: Michael Turko

PROJECT NO.: KGS-1307

SAMPLED BY: Sothea Bun
SAMPLE ID: TH1 at 0.6 m

DATE RECEIVED: May 15, 2013
TESTED BY: Nestor Abarca



PARTICLE SIZE	PERCENT PASSING
37.50 mm	100.0
25.00 mm	100.0
19.00 mm	92.4
16.00 mm	88.6
12.50 mm	80.5
9.50 mm	73.7
4.75 mm	60.3
2.00 mm	49.5

PARTICLE SIZE	PERCENT PASSING
1.18 mm	42.3
0.425 mm	30.4
0.250 mm	24.7
0.150 mm	21.4
0.075 mm	19.2
0.005 mm	9.6
0.002 mm	7.1
0.001 mm	5.6

Gravel, % 75 to 4.75 mm	Sand, %			Silt, % <0.075 to 0.002 mm	Clay, % <0.002 mm	Colloids, % < 0.001 mm
	Coarse <4.75 to 2.0 mm	Medium <2.0 to 0.425 mm	Fine <0.425 to 0.075 mm			
39.7	10.8	19.1	11.2	12.1	7.1	5.6

May 23, 2013

REVIEWED BY: Trevor Schellenberg, B.Sc., EIT

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THE NATIONAL TESTING LABORATORIES LIMITED
Established in 1923

PARTICLE SIZE ANALYSIS
ASTM D422

KGS Group Inc.
3rd Floor - 865 Waverley St.
Winnipeg, Manitoba
R3T 5P4

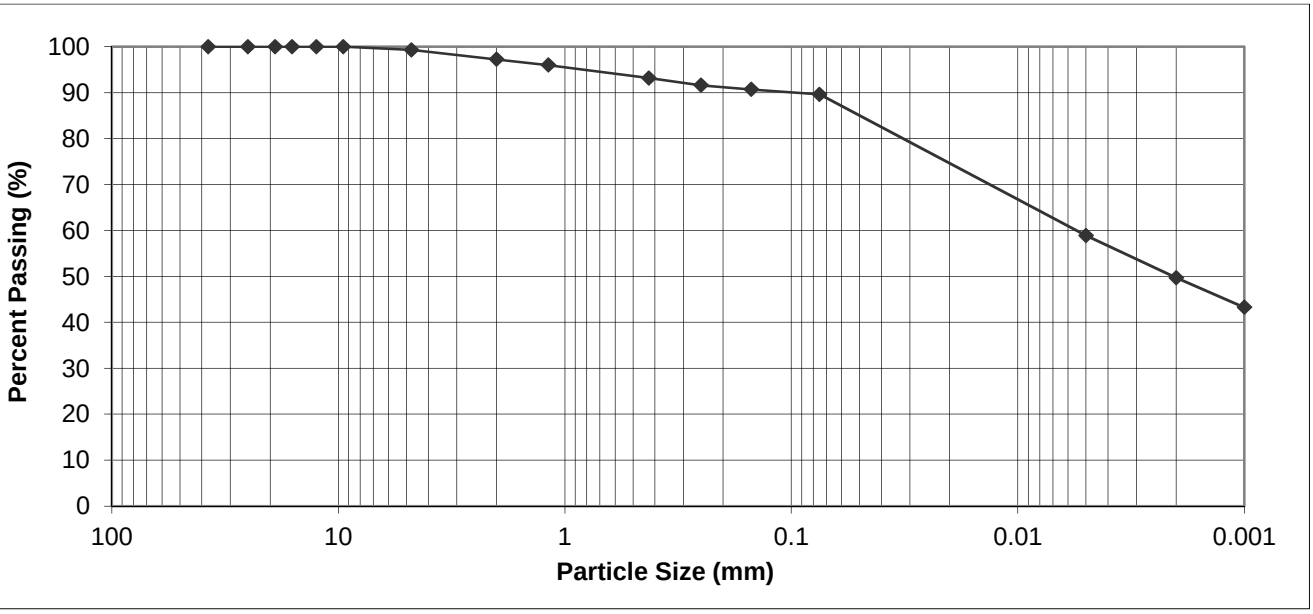
PROJECT: 2013 Alley Program
Dollard Blvd & Bertrand St Alley
between Rue Ritchot &
St Jean Baptiste St

Attention: Michael Turko

PROJECT NO.: KGS-1307

SAMPLED BY: Sothea Bun
SAMPLE ID: TH2 at 0.9 m

DATE RECEIVED: May 15, 2013
TESTED BY: Nestor Abarca



PARTICLE SIZE	PERCENT PASSING
37.50 mm	100.0
25.00 mm	100.0
19.00 mm	100.0
16.00 mm	100.0
12.50 mm	100.0
9.50 mm	100.0
4.75 mm	99.3
2.00 mm	97.2

PARTICLE SIZE	PERCENT PASSING
1.18 mm	96.0
0.425 mm	93.2
0.250 mm	91.6
0.150 mm	90.7
0.075 mm	89.6
0.005 mm	58.9
0.002 mm	49.7
0.001 mm	43.2

Gravel, % 75 to 4.75 mm	Sand, %			Silt, % <0.075 to 0.002 mm	Clay, % <0.002 mm	Colloids, % < 0.001 mm
	Coarse <4.75 to 2.0 mm	Medium <2.0 to 0.425 mm	Fine <0.425 to 0.075 mm			
0.7	2.1	4.0	3.6	39.9	49.7	43.2

May 23, 2013

REVIEWED BY: Trevor Schellenberg, B.Sc., EIT