BOREHOLE LOG - MH01-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 13/01/2025



Great People | Practical Solutions

Borehole Location: Refer to Site Plan Logged by: SS Checked by: MJC Scale: 1:50 Sheet 1 of 2

Projection: EDENMT2000 Position: 388556.2mE; 829928.6mN Datum: AUCKHT1946 Survey Source: Handheld GPS Elevation: 57.00m Structure & Other Observations Material Description Defect Drilling Method/ Support Consistency/ Relative Density Estimated Samples & Insitu Tests Material Description
Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)
Rock: Colour, fabric; rock name; additional comments. (origin/geological unit) Weathering Spacing Moisture Condition Recovery $\widehat{\mathbf{E}}$ (mm) Discontinuities: Depth: Defect RQD Well Graphic Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Groundy Depth 귐 Depth Type & Results 57.0 OL: Organic SILT: Dark brown. PQ3 s Low plasticity. With minor rootlets. 100 56.7 (Topsoil) 0B/ CH: Silty CLAY: Brownish grey mottled orange. High plasticity. PQ3 With trace limonite staining and 001 rootlets. Blocky structure. (Northland Allochthon) OB/ PQ3 9 0B/ SPT: N* = 6 (0, 0 / 1, 1, 2, 2) 55.4 VSt ML: Completely weathered, dark 28 SPT grey, blocky MUDSTONE: Extremely weak. Recovered as Clayey SILT with trace fine sand. Low plasticity. With minor fine to PQ3 54.8 medium grained limestone clasts. Tightly interlocking fabric. 0B/ 100 (Hukerenui Mudstone) Highly weathered, dark grey and HQ3 whitish grey, blocky, SILTSTONE: Very weak. Recovered as fine to È SPT: N* = 50+ (13, 15 / 20, 30, 0, 0 3.0 3 coarse, subangular to subrounded GRAVEL. With trace limonite 100 SPT for 45mm) staining. Highly fractured with clayey silt infill. With trace fine 3.5-3.6m:4,JN,45°,PL,R,CL,Csand. (Mangakahia Complex) O,(Z),CS, НОЗ 9 19 È 4.2-4.5m:4.JN.60°.PL.R.CL.C 4.5 SPT: No = 43 at 4.50m, Limestone clasts in (13, 19 / 15, 11, 9, 8) silty clay matrix. Clasts are fine SPT grained to gravel sized, subrounded to rounded at 5.05m, Clay matrix becoming dark greenish grey Н 24 È 6.0 SPT: Nc = 34 (3, 7 / 8, 8, 9, 9) SPT 0 HQ3 9 C È SPT: N* = 50+ (4, 10 / 11, 12, 12, 15) from 7.50m to 10.50m, Becoming matrix dominant. SPT 39 НОЗ 00 43 È 9.0 SPT: N* = 43 (8, 9 / 9, 10, 11, 13) 9 SPT TT / HQ3 100 29

Termination Reason: Target Depth Reached. Shear Vane No: DCP No:

Remarks:

BOREHOLE LOG - MH01-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 13/01/2025



Great People | Practical Solutions

Borehole Location: Refer to Site Plan Logged by: SS Checked by: MJC Scale: 1:50 Sheet 2 of 2

Position: 388556.2mE: 829928.6mN Projection: EDENMT2000

Position: 388556.2mE; 829928.6mN Datum: AUCKHT1946 Survey Source: Handheld GPS Elevation: 57.00m Structure & Other Observations Material Description Defect Drilling Method/ Support Consistency/ Relative Density Estimated Samples & Insitu Tests Material Description

Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)

Rock: Colour; fabric; rock name; additional comments. (origin/geological unit) Weathering Spacing Moisture Condition Recovery $\widehat{\mathbf{E}}$ (mm) Discontinuities: Depth: Defect Graphic L Rad Well Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Groundy Depth 귐 Depth Type & Results \$ \$ \$ \$ \$ \$ \$ at 10.25m, Clasts becoming subangular to rounded SPT: N* = 50+ (7, 18 / 21, 22, 7, 0 for 25mm) 10.5 SPT 4 8 82 11.5-11.6m:1,JN,60°,PL,R,CL,-CO,(CA),W, SPT: N* = 50+ (9, 17 / 25, 25, 0, 0 for 45mm for 0mm 12 100 SPT for 0mm) 12.8-12.9m:1,JN,55°,UN,R,CL 19 29 ,CO,(CA),W, 13 SPT: Nc = 39 (7, 12 / 9, 10, 10, 10) 13.5 SPT 14 43.0 Highly weathered, dark grey, massive, SILTSTONE: Very weak 14.3m:1,JN,10°,IR,R,CL,IF, PQ3 With trace fine sand and limestone (Z),W, 86 22 0B/ (Mangakahia Complex) SPT: Nc = 50+ (9, 21 / 23, 27, 0, 0 for 75mm) 15.0 15 33 SPT 100 100 41.1 ML: Highly weathered, dark grey, 16.0m:1,JN,15°,IR,R,CL,CO. È massive SILTSTONE : Extremely weak. Recovered as SILT with trace fine sand. Low plasticity. With trace fine sand sized limestone 16.5 SPT: Nc = 36 (4, 7 / 7, 8, 9, 12) clasts. (Mangakahia Complex) SPT 0 17 17.2m:1,JN,60°,PL,R,CL,CO, (Z),W, 8 100 100 18.0m:1,JN,60°,PL,R,CL,CO,-18.0 18 (8, 6 / 8, 8, 8, 8)0 HQ3 100 100 19 È 19.5 SPT: Nc = 34 (3, 5 / 6, 8, 9, 11)SPT 20 Borehole terminated at 19.95 m

Termination Reason: Target Depth Reached. Shear Vane No: DCP No:

Remarks:

PHOTOGRAPH SHEET - MH01-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:13/01/2025





MH01-25: 0.00m - 2.70m



MH01-25: 2.70m - 7.10m

PHOTOGRAPH SHEET - MH01-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:13/01/2025





MH01-25: 7.10m - 10.20m



MH01-25: 10.20m - 14.10m

PHOTOGRAPH SHEET - MH01-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:13/01/2025





MH01-25: 14.10m - 17.85m



MH01-25: 17.85m - 19.50m

BOREHOLE LOG - MH02-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 14/01/2025



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Borehole Location: Refer to Site Plan Logged by: JH Checked by: MJC Scale: 1:50 Sheet 1 of 2

Projection: EDENTM2000 Position: 388502.9mE; 829718.5mN Datum: AUCKHT1946 Survey Source: Handheld GPS Elevation: 60.75m Structure & Other Observations Material Description Defect Drilling Method/ Support Consistency/ Relative Density Estimated Samples & Insitu Tests Material Description

Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)

Rock: Colour; fabric; rock name; additional comments. (origin/geological unit) Weathering Spacing Moisture Condition Recovery $\widehat{\mathbf{E}}$ (mm) Discontinuities: Depth: Defect RQD Well Graphic Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Groundy Depth 귐 Depth Type & Results 8 8 8 8 8 8 60.8 OL: Organic SILT: Dark brown. S PQ3 Low plasticity. With minor rootlets. 60.6 100 (Topsoil) CH: Silty CLAY: Orange brown and grey mottled orange. High plasticity. With trace limonite St 0B/ staining. (Hukerenui Mudstone) PQ3 9 59.7 ML: Clayey SILT with trace fine sand: Brownish grey mottled 0B/ orange. Low plasticity. With trace limonite staining and rootlets. SPT: N* = 9 (1, 2 / 2, 2, 3, 2) St (Hukerenui Mudstone) at 1.13m, Becoming light 93 SPT brownish grey with trace orange mottles. at 2.00m, With minor fine to medium grained siltstone nodules. Subangular to angular. 58.5 PQ3 at 2.15m. With trace 100 manganese.
CH: Silty CLAY: Dark brownish red OB) mottled greenish grey and yellowish brown. High plasticity. SPT: N* = 13 (1, 2 / 2, 3, 4, 4) 3.0 With trace manganese and limonite staining. (Hukerenui Mudstone) 100 SPT St Completely to highly weathered, dark reddish brown and greenish grey, massive SILTSTONE : Extremely weak. Recovered as Clayey SILT with minor fine sand. PQ3 9 Low plasticity. With trace fine gravel sized white MUDSTONE 0B/ M to clasts, Subangular. (Hukerenui Mudstone) 4.5 SPT: N* = 12 (1, 2 / 2, 3, 3, 4) 90 SPT HQ3 8 È SPT: N* = 30 6.0 (3, 5 / 6, 8, 8, 8) at 6.10m, Becoming dark 100 SPT greenish grey with trace reddish brown streaks. VSt at 6.50m, Becoming blocky in structure. Tightly interlocking HQ3 9/ 8 È HQ3 (5, 6 / 6, 7, 7, 7) 39 È HQ3 9/ 22 52.2 Highly weathered, greenish grey, interbedded SILTSTONE: 8.8-8.9m:1.SZ.CS. Extremely weak. Interbedded with MUDSTÓNE 9.0 SPT: N* = 27 9 (Mangakahia Complex) (2, 3 / 4, 5, 7, 11)100 SPT Highly weathered, grey and trace brown, massive MUDSTONE: 9.7-9.8m:SZ.CS. 9/ 9/ Extremely weak. Trace fine gravel È sized silt clasts, subangular. 50.8 10 (Hukerenui Mudstone)

Termination Reason: Target Depth Reached.
Shear Vane No: DCP No:
Remarks: Groundwater not encountered.

BOREHOLE LOG - MH02-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 14/01/2025



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Borehole Location: Refer to Site Plan Logged by: JH Checked by: MJC Scale: 1:50 Sheet 2 of 2

Projection: EDENTM2000 Position: 388502.9mE; 829718.5mN Datum: AUCKHT1946 Survey Source: Handheld GPS Elevation: 60.75m Structure & Other Observations Material Description Defect Drilling Method/ Support Consistency/ Relative Density Estimated Samples & Insitu Tests Material Description

Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)

Rock: Colour; fabric; rock name; additional comments. (origin/geological unit) Weathering Spacing Moisture Condition Recovery $\widehat{\mathbf{E}}$ (mm) Discontinuities: Depth: Defect Graphic L Rad Well Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Groundy Depth 귐 Depth Type & Results SPT: N* = 23 (4, 4 / 5, 5, 6, 7) 10.5 at 10.50m, Becoming greenish arev and brown. 8 SPT т/наз 100 4 100 는 얼 극 100 SPT: N* = 31 (3, 6 / 6, 8, 8, 9) 12 100 SPT НДЗ 9 9 13 47.6 È Moderately weathered, light grey and grey, massive SILTSTONE: Extremely weak. Trace fine to medium gravel sized silt clasts SPT: N* = 47 (5, 5 / 8, 11, 13, 15) 13.5 (Mangakahia Complex) 100 SPT 14 at 14.00m, Becoming grey mottled brown. НÖЗ 100 100 È Moderately weathered, brown and 45.9 greenish grey, massive MUDSTONE : Extremely weak 15.0 SPT: Nc = 17 15 (2, 2 / 4, 4, 4, 5)(Hukerenui Mudstone)
Moderately weathered, light grey
and grey, massive SILTSTONE: 9 SPT Extremely weak. Trace fine gravel sized silt clasts, subangular. (Mangakahia Complex) HQ3 00 100 SPT: Nc = 50+ (8, 9 / 10, 12, 17, 11 for 45mm) from 16.50m to 17.30m, Becoming dark brown. SPT 0 17 17.1-17.2m:1,IS,IF,(CL),CS, 8 8 È SPT: Nc = 50+ (7, 18 / 18, 22, 10 for 18.0 18 SPT 0 25mm) TT/HQ3 9 100 19 19.5 SPT: Nc = 50+ (8, 11 / 12, 19, 19 for 20 Borehole terminated at 19.95 m

Termination Reason: Target Depth Reached. Shear Vane No: DCP No: Remarks: Groundwater not encountered.

PHOTOGRAPH SHEET - MH02-25

Client: Fulton Hogan Land Development Limited

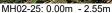
Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:14/01/2025









MH02-25: 2.55m - 5.55m

PHOTOGRAPH SHEET - MH02-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:14/01/2025



Project No. AKL2024 - 0257

BH No. MH02-25

Brank From: S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

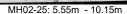
Brank From: S. S. S. To 10.15

CANN Geodelenes

Project No. AKL2024 - 0257

Brank From: S. S. S. To 10.15

B





MH02-25: 10.15m - 13.95m

PHOTOGRAPH SHEET - MH02-25

Client: Fulton Hogan Land Development Limited

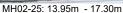
Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:14/01/2025









MH02-25: 17.30m - 19.50m

BOREHOLE LOG - MH03-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 16/01/2025



Great People | Practical Solutions

Borehole Location: Refer to Site Plan Logged by: JH Checked by: MJC Scale: 1:50 Sheet 1 of 2

Position: 388549.1mE: 829539.8mN Projection: EDENTM2000

Position: 388549.1mE; 829539.8mN Datum: AUCKHT1946 Survey Source: Handheld GPS Elevation: 63.30m Structure & Other Observations Material Description Defect Drilling Method/ Support Consistency/ Relative Density Estimated Samples & Insitu Tests Material Description
Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)
Rock: Colour, fabric; rock name; additional comments. (origin/geological unit) Weathering Spacing Moisture Condition Recovery $\widehat{\mathbf{E}}$ (mm) Discontinuities: Depth: Defect RQD Well Graphic Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Groundy Depth 귐 Depth Type & Results 63.3 OL: Organic Clayey SILT : Dark PQ3 brown. Low plasticity. Trace 63.0 8 rootlets. OB/ (Topsoil)
Clayey SILT : Yellowish brown PQ3 mottled grey. Low plasticity. Trace limonite staining. (Hukerenui Mudstone) 001 OB/ PQ3 9 at 1.20m, Becoming grey 0B/ mottled yellowish brown. SPT: N* = 4 (1, 0 / 1, 1, 1, 1) VSt 9 SPT at 2.00m, Minor decomposing tree roots. PQ3 100 OB) М 60.5 Completely to highly weathered, greenish grey and brown, massive MUDSTONE: Extremely weak. SPT: N* = 16 (1, 3 / 3, 4, 4, 5) 3.0 3 100 SPT Recovered as Clayey SILT. Trace fine to medium sized silt clasts, subangular. (Hukerenui Mudstone) ... from 3.50m to 4.50m, With brown bands dipping at НÖЗ 9 approximately 30 degrees. È SPT: N* = 19 (2, 2 / 3, 5, 5, 6) 4.5 90 SPT 58.3 5 Highly to moderately weathered, greenish grey and brown, massive MUDSTONE: Extremely weak. Н Trace fine to medium gravel sized 8 silt clasts, subangular È (Hukerenui Mudstone) from 5.40m to 5.60m, Brown. 6.0 SPT: N* = 30 (3, 5 / 7, 7, 8, 8) 100 SPT HQ3 9 È SPT: N* = 25 (1, 3 / 4, 6, 7, 8) 100 SPT 8 НОЗ 001 from 8 50m to 9 00m With È orange brown bands dipping at approximately 20 to 30 degrees SPT: N* = 25 9.0 9 (3, 5 / 6, 6, 6, 7)9 SPT TT / HQ3 90

Termination Reason: Target Depth Reached.
Shear Vane No: DCP No:
Remarks: Groundwater not encountered.

BOREHOLE LOG - MH03-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 16/01/2025



Great People | Practical Solutions

Borehole Location: Refer to Site Plan Logged by: JH Checked by: MJC Scale: 1:50 Sheet 2 of 2

Position: 388549.1mE; 829539.8mN Projection: EDENTM2000

Datum: AUCKHT1946 Survey Source: Handheld GPS Elevation: 63.30m Structure & Other Observations Material Description Defect Drilling Method/ Support Consistency/ Relative Density Estimated Samples & Insitu Tests Material Description

Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)

Rock: Colour; fabric; rock name; additional comments. (origin/geological unit) Weathering Spacing Moisture Condition Recovery $\widehat{\mathbf{E}}$ (mm) Discontinuities: Depth: Defect Rad Well Graphic Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Groundy Depth 귒 Depth Type & Results SPT: N* = 28 (3, 4 / 4, 7, 7, 10) 10.5 10.5m:1,DI,15°,VW, 8 SPT 11 52.2 Highly to moderately weathered, grey and dark grey, massive SILTSTONE: Extremely weak. /HQ3 8 9 Minor fine to medium gravel sized limestone nodules, subangular. È (Mangakahia Complex) SPT: N* = 50+ (8, 11 / 15, 18, 17 for 50mm) 12 100 SPT 12.4-12.5m:1,IS, HQ3 9 13 È SPT: Nc = 25 (3, 5 / 5, 5, 6, 9) 13.5 SPT 14 49.0 ğ Moderately weathered, greenish 100 100 grey and brown, massive MUDSTONE: Extremely weak. È (Hukerenui Mudstone) SPT: Nc = 36 (9, 12 / 11, 10, 8, 7) 15.0 15 SPT 47.8 Highly to moderately weathered, greenish grey, massive MUDSTONE : Extremely weak. (Hukerenui Mudstone) 00 100 16.0-16.3m:1,CN,5°, SPT: Nc = 50+ (6, 9 / 10, 12, 13, 15 for 55mm) 0 SPT 17 46.1 Completely to highly weathered. H H greenish grey, massive MUDSTONE: Extremely weak. 8 86 Minor fine to medium gravel sized limestone nodules, subangular. (Mangakahia Complex) SPT: Nc = 36 (4, 5 / 6, 7, 11, 12) 18.0 18 SPT 0 HQ3 100 19 È 19.5 SPT: Nc = 24 (3, 3 / 4, 5, 6, 9) SPT 20 Borehole terminated at 19.95 m

Termination Reason: Target Depth Reached.
Shear Vane No: DCP No:
Remarks: Groundwater not encountered.

PHOTOGRAPH SHEET - MH03-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:16/01/2025



Project Na. AKL2024 - 0257

Introduction

The Mildole Fost Track Application

Double Fost Tra

MH03-25: 0.00m - 2.70m



MH03-25: 2.70m - 6.45m

PHOTOGRAPH SHEET - MH03-25

Client: Fulton Hogan Land Development Limited

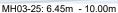
Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:16/01/2025









PHOTOGRAPH SHEET - MH03-25

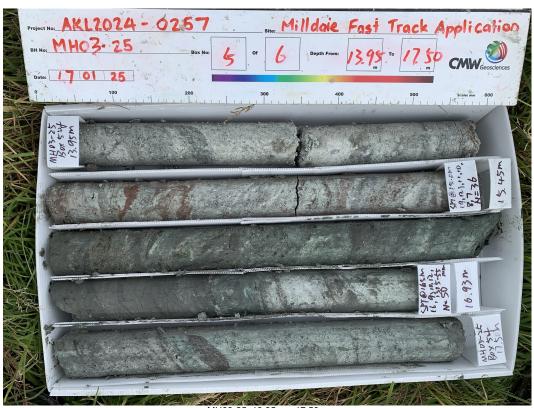
Client: Fulton Hogan Land Development Limited

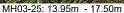
Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:16/01/2025









MH03-25: 17.50m - 19.50m

BOREHOLE LOG - MH04-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 17/01/2025



Great People | Practical Solutions

Borehole Location: Refer to Site Plan Logged by: JH Checked by: MJC Scale: 1:50 Sheet 1 of 3

Projection: EDENTM2000 Position: 388553.5mE; 829329.9mN Datum: AUCKHT1946 Survey Source: Handheld GPS Elevation: 77.50m Structure & Other Observations Material Description Defect Drilling Method/ Support Consistency/ Relative Density Estimated Samples & Insitu Tests Material Description
Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)
Rock: Colour, fabric; rock name; additional comments. (origin/geological unit) Weathering Spacing Moisture Condition Recovery $\widehat{\mathbf{E}}$ (mm) Discontinuities: Depth: Defect R Well Graphic Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Groundy Depth 귐 Depth Type & Results SW HW SW 77.5 OL: Organic Clayey SILT : Dark PQ3 brown. Low plasticity. Trace 77.3 2 rootlets. OB/ (Topsoil)
ML: Clayey SILT : Dark yellowish PQ3 brown. Low plasticity. 001 (Hukerenui Mudstone) OB/ at 0.75m, Becoming mottled light grey. Trace limonite staining. PQ3 9 76.2 0B/ ML: SILT with trace clay: Light SPT: N* = 5 (0, 1 / 1, 1, 1, 2) grey streaked trace yellowish brown. Low plasticity. Minor VSt 9 SPT limonite staining. (Hukerenui Mudstone) PQ3 8 OB) SPT: N* = 14 (1, 2 / 2, 3, 4, 5) 3.0 3 100 SPT 74.0 ML: Sandy SILT : Grey. Low plasticity. Sand is fine to medium PQ3 100 grained. 0B/ (Hukerenui Mudstone) 73.5 4 ... at 3.80m, Becoming dark grey.
Completely weathered, dark grey,
massive SANDSTONE: Extremely
weak. Sand is fine to medium НÖЗ 100 È SPT: N* = 16 (2, 4 / 4, 4, 4, 4) 4.5 grained. Recovered as Silty SAND. (Hukerenui Mudstone) 90 SPT HQ3 7 È 6.0 SPT: N* = 18 (3, 4 / 4, 4, 5, 5) 100 SPT Moderately weathered, grey, massive SANDSTONE: Extremely weak. Sand is fine grained. HQ3 (Northland Allochthon) 9 9 at 7.00m, Lens of dark grey È clayey SILT infill. SPT: N* = 50+ (4, 9 / 11, 12, 14, 14 for 45mm) 00 SPT 8 HQ3 65 65 È 9.0 SPT: N* = 40 9 (5, 6 / 7, 9, 11, 13) 9 SPT 100 100 9.8-10.0m:1,CN,80°,CL 10

Termination Reason: Target Depth Reached.
Shear Vane No: DCP No:
Remarks: Groundwater not encountered.

BOREHOLE LOG - MH04-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 17/01/2025



Great People | Practical Solutions

Borehole Location: Refer to Site Plan Logged by: JH Checked by: MJC Scale: 1:50 Sheet 2 of 3

Projection: EDENTM2000 Position: 388553.5mE; 829329.9mN Datum: AUCKHT1946 Survey Source: Handheld GPS Elevation: 77.50m Structure & Other Observations Material Description Defect Drilling Method/ Support Consistency/ Relative Density Estimated Samples & Insitu Tests Material Description

Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)

Rock: Colour; fabric; rock name; additional comments. (origin/geological unit) Weathering Spacing Moisture Condition Recovery $\widehat{\mathbf{E}}$ (mm) Discontinuities: Depth: Defect Graphic L RQD Well Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Groundy Depth 귐 Depth Type & Results SPT: N* = 50+ (6, 12 / 13, 14, 14, 9 for 35mm) 10.5 9 SPT 66.5 11 Moderately weathered, grey and brown, interbedded MUDSTONE: Extremely weak. Interbedded with TT/HQ3 9 100 SANDSTONE. Sand is fine (Hukerenui Mudstone) SPT: N* = 39 (4, 5 / 9, 9, 9, 12) 12 100 SPT HQ3 22 57 13 È SPT: N* = 23 (2, 2 / 5, 5, 6, 7) 13.5 100 SPT 14 НÖЗ 100 100 È SPT: N* = 20 (3, 3 / 4, 4, 5, 7) 15.0 15 9 SPT Н 00 100 61.4 Moderately weathered, light grey, massive SANDSTONE: Extremely weak. Minor grey streaks. Sand is 16.5 SPT: N* = 28 (6, 6 / 6, 7, 7, 8) fine grained (Northland Allochthon) 9 SPT 60.6 Moderately weathered, brown and grey, tightly interlocked MUDSTONE: Extremely weak Trace light grey streaks. Minor fine 8 100 100 to medium sized silt clasts. subangular. (Hukerenui Mudstone) 17.8-18.0m:1,CN,80°,CL at 17.80m, Becoming grey with SPT: N* = 50+ (4, 6 / 9, 11, 14, 16 for 50mm) 18.0 18 100 SPT НÖЗ 9 100 19 È SPT: N* = 50+ 19.5 (4, 6 / 12, 16, 22 for 35mm) 100 SPT Moderately weathered, grey, massive SANDSTONE: Extremely 57.5 20 weak. Sand is fine grained. (Northland Allochthon)

Termination Reason: Target Depth Reached. Shear Vane No: DCP No: Remarks: Groundwater not encountered.

BOREHOLE LOG - MH04-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Site Location: Wainui East Project No.: AKL2024-0257

Date: 17/01/2025



Borehole Location: Refer to Site Plan

Logged by: JH

Checked by: MJC Scale: 1:50

Sheet 3 of 3

Projection: EDENTM2000 Position: 388553.5mE; 829329.9mN Datum: AUCKHT1946 Elevation: 77.50m Survey Source: Handheld GPS Material Description
Soil: Soil symbol; soil type; colour; structure; bedding; plasticity; sensitivity; additional comments. (origin/geological unit)
Rock: Colour, fabric; rock name; additional comments. (origin/geological unit) Structure & Other Observations Consistency/ Relative Density Defect Drilling Method/ Support Estimated Weathering Samples & Insitu Tests Spacing (mm) Moisture Condition Recovery $\widehat{\mathbf{E}}$ Discontinuities: Depth: Defect Graphic L R Well Groundw Number; Defect Type; Dip; Defect Shape; Roughness; Aperture; Infill; Seepage; Spacing; Block Size; Block Shape; Remarks Depth R Depth Type & Results 8 & M € & S 100 100 56.8 È 20.7-20.8m:1,CN,45°,CL Moderately weathered, brown, blocky MUDSTONE: Extremely weak. Trace fine to medium gravel SPT: N* = 46 (4, 6 / 6, 9, 11, 20) 21.0 sized silt clasts, subangular. 8 SPT (Hukerenui Mudstone) Borehole terminated at 21.45 m 22 23 24 25 27 28 29 30

Termination Reason: Target Depth Reached.
Shear Vane No: DCP No:
Remarks: Groundwater not encountered.

PHOTOGRAPH SHEET - MH04-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:17/01/2025



SAESIVI IST DDILLING FNGINEERS LIFT WITH

MH04-25: 0.00m - 3.00m



MH04-25: 3.00m - 6.45m

PHOTOGRAPH SHEET - MH04-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:17/01/2025





MH04-25: 6.45m - 10.40m



MH04-25: 10.40m - 14.60m

PHOTOGRAPH SHEET - MH04-25

Client: Fulton Hogan Land Development Limited

Project: Milldale Fast Track Application

Location: Wainui East Project ID: AKL2024-0257

Date:17/01/2025



Sheet 3 of 3



MH04-25: 14.60m - 18.00m

