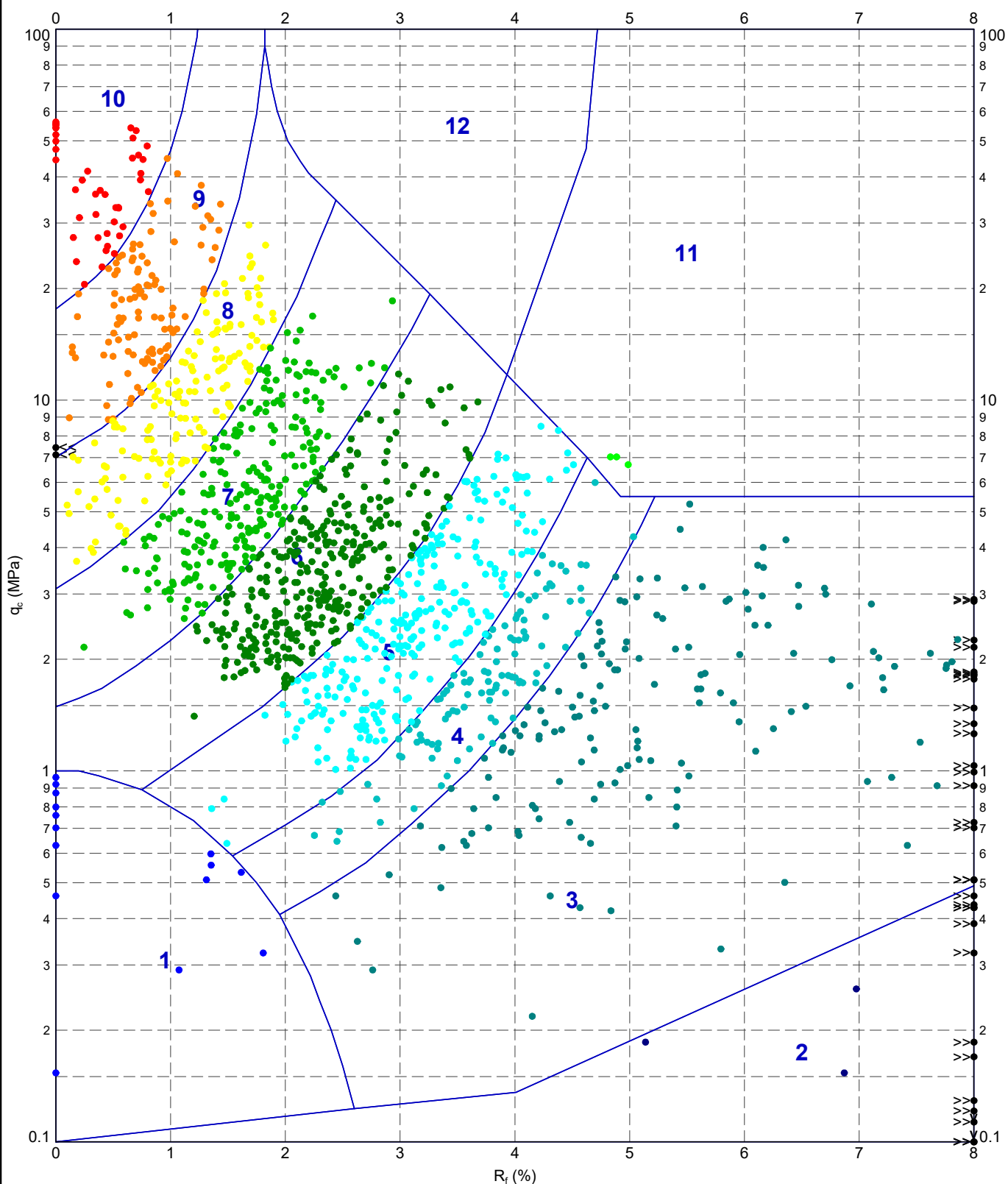


210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MAP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 10:16 10:02:00.04 Dated Lab and In Situ Tool - In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT108

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

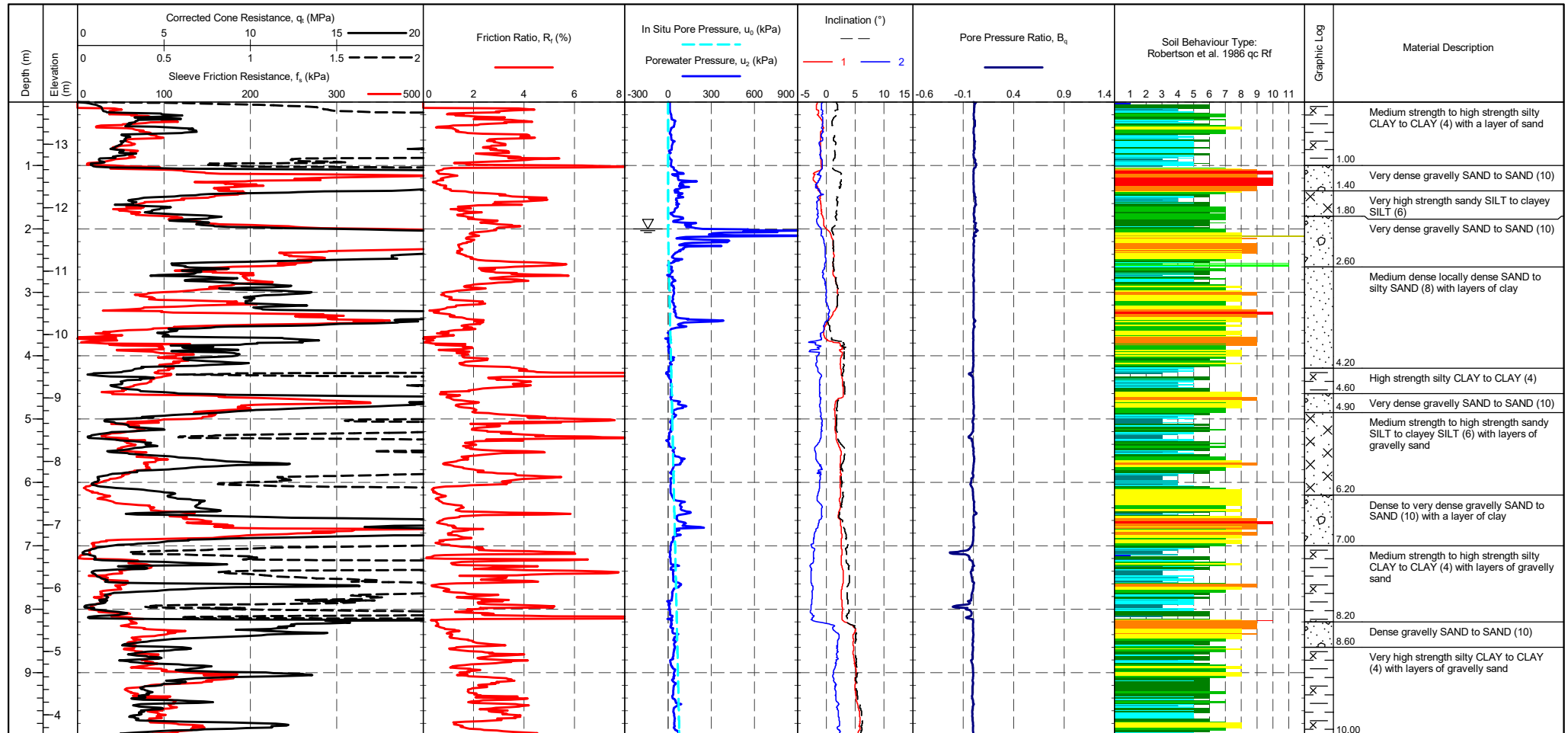
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf						Groundwater Level
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	RIG : CPT 022	OPERATOR : AL	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND			
CONE MODEL : Subtraction	WEATHER : Overcast & Mild	GROUNDWATER DEPTH : Assumed for calculation purposes	FRICITION REDUCER : None	Tip (MPa)	0.436	0.444	-0.008077	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND	Dissipation Test		
CONE AREA : 15cm ²				Sleeve (kPa)	0.0860	0.0856	0.000323	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained			
CONE AREA RATIO : 0.75				u2 (kPa)	-0.00615	0.000820	-0.00697	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND			
FILTER POSITION : u2				Inclinometer 1 (°)	-1.50	-1.23	-0.273223						
FILTER TYPE : HDPE				Inclinometer 2 (°)	-0.639	-0.507	-0.132159						

PointID

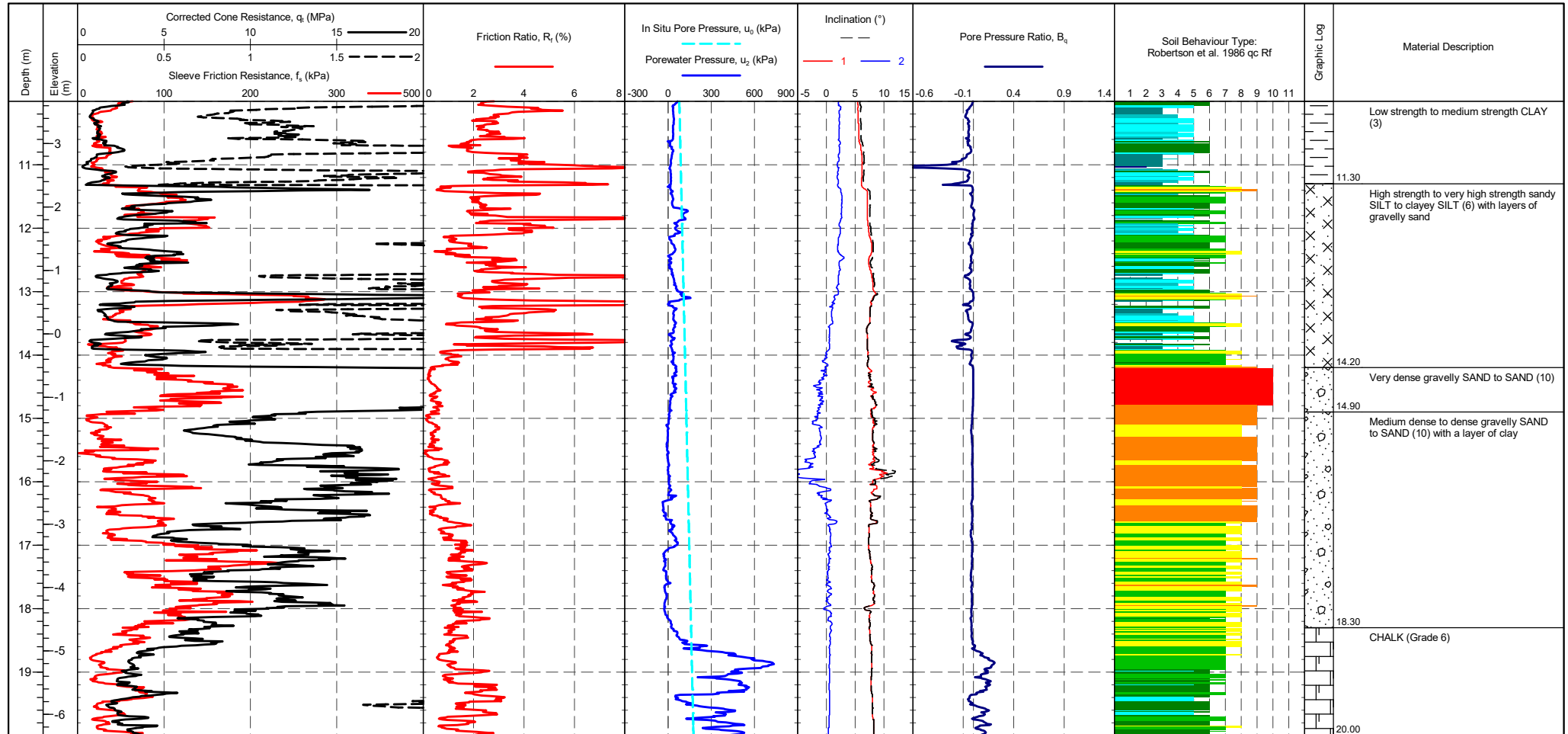
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 $q_c R_f$			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.436	0.444	-0.008077	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0860	0.0856	0.000323	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u_2 (kPa)	-0.00615	0.000820	-0.00697	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (i)	-1.50	-1.23	-0.273223		9 - SAND	
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (i)	-0.639	-0.507	-0.132159		10 - Gravelly SAND to SAND	
									11 - Very stiff fine grained	
									12 - SAND to clayey SAND	

PointID

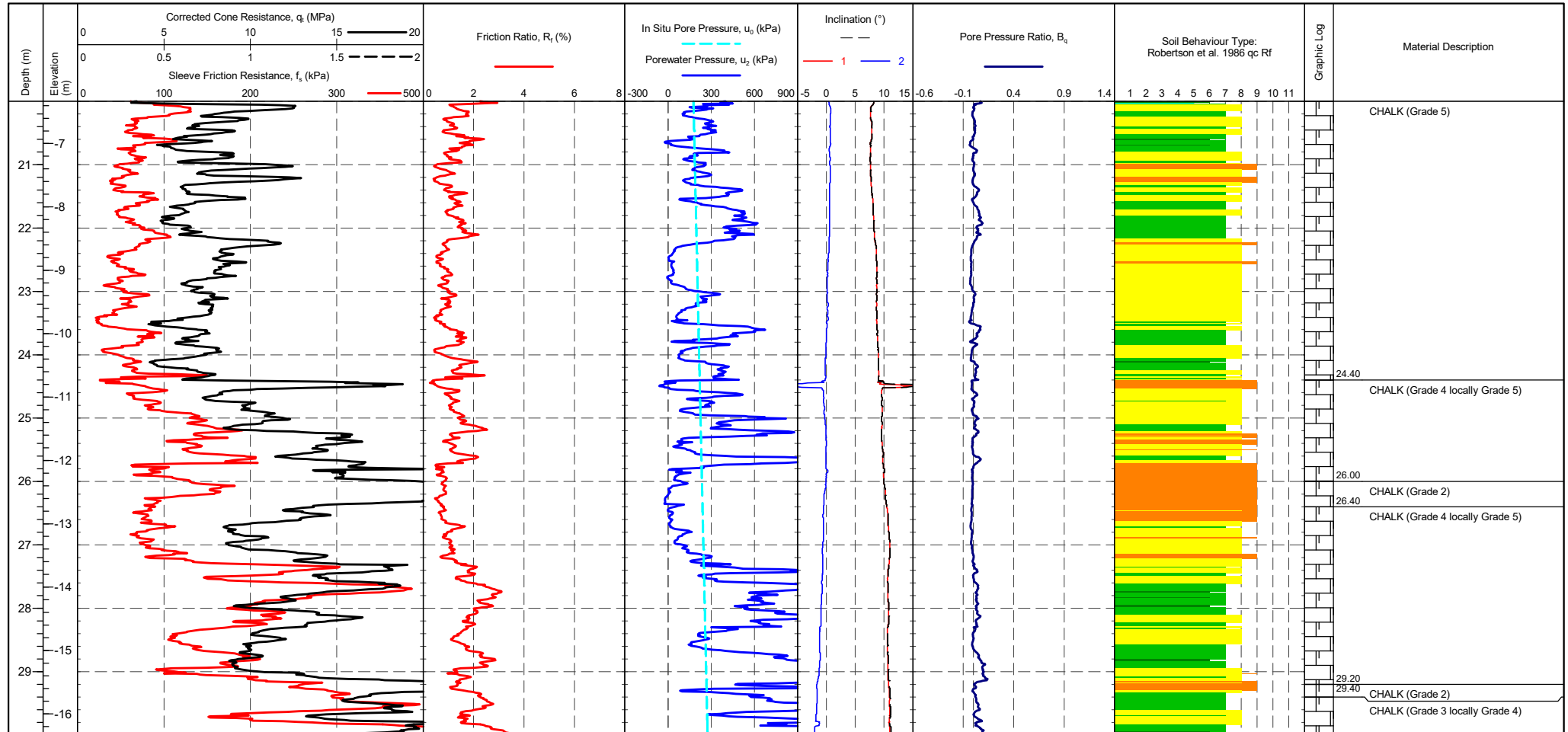
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 $q_c R_f$			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.436	0.444	-0.008077	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0860	0.0856	0.000323	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u_2 (kPa)	-0.00615	0.000820	-0.00697	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 ($^\circ$)	-1.50	-1.23	-0.273223		9 - SAND	10 - Gravelly SAND to SAND
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 ($^\circ$)	-0.639	-0.507	-0.132159		11 - Very stiff fine grained	12 - SAND to clayey SAND

PointID

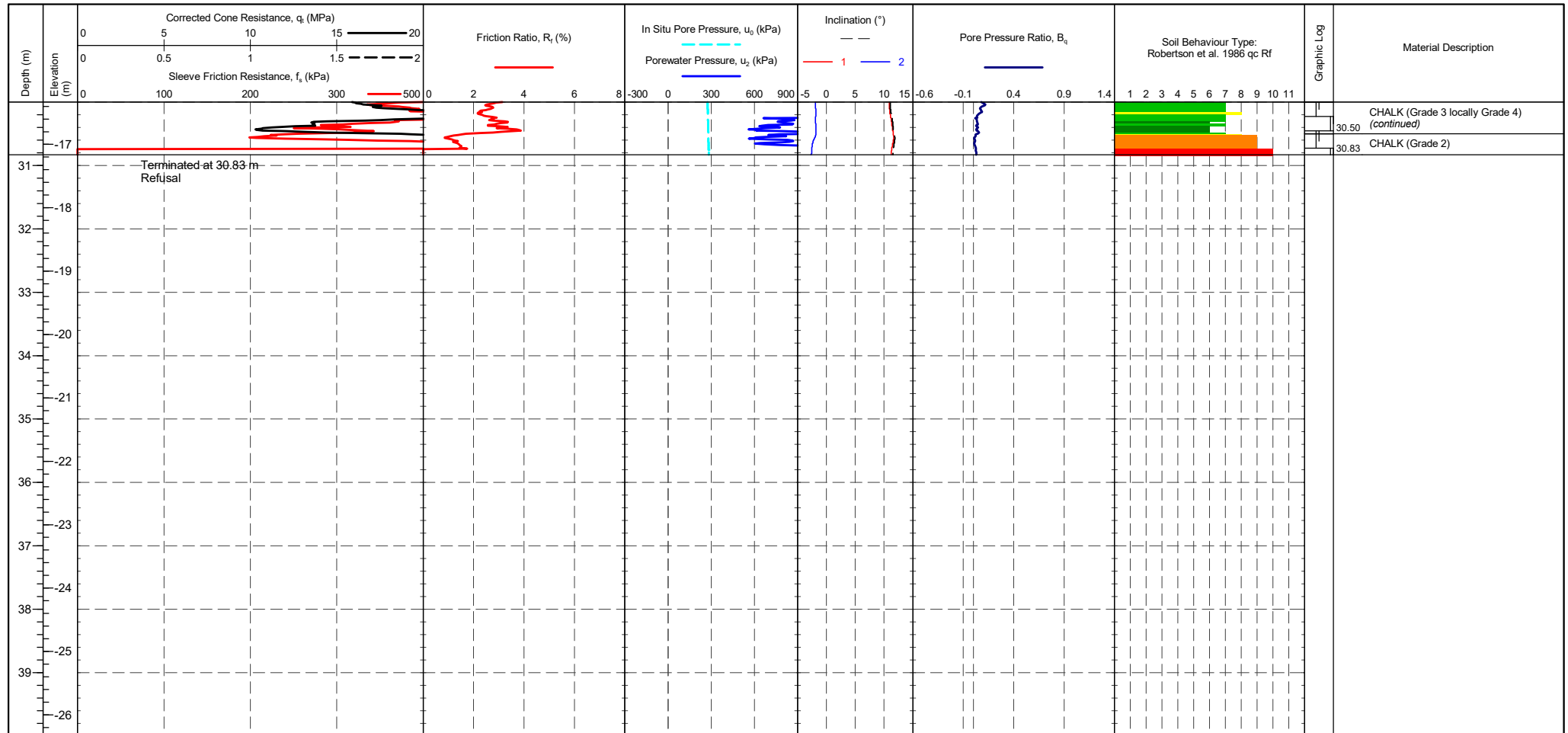
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf		
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.436	0.444	-0.008077	2 - Organic material	6 - Sandy SILT to clayey SILT
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0860	0.0856	0.000323	3 - CLAY	7 - Silty SAND to sandy SILT
CONE AREA RATIO : 0.75	FRICTION REDUCER : None	u2 (kPa)	-0.00615	0.000820	-0.00697	4 - Silty CLAY to CLAY	8 - SAND to silty SAND
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 ($^\circ$)	-1.50	-1.23	-0.273223		9 - SAND
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 ($^\circ$)	-0.639	-0.507	-0.132159		10 - Gravelly SAND to SAND
							11 - Very stiff fine grained
							12 - SAND to clayey SAND

Groundwater Level

Dissipation Test

PointID

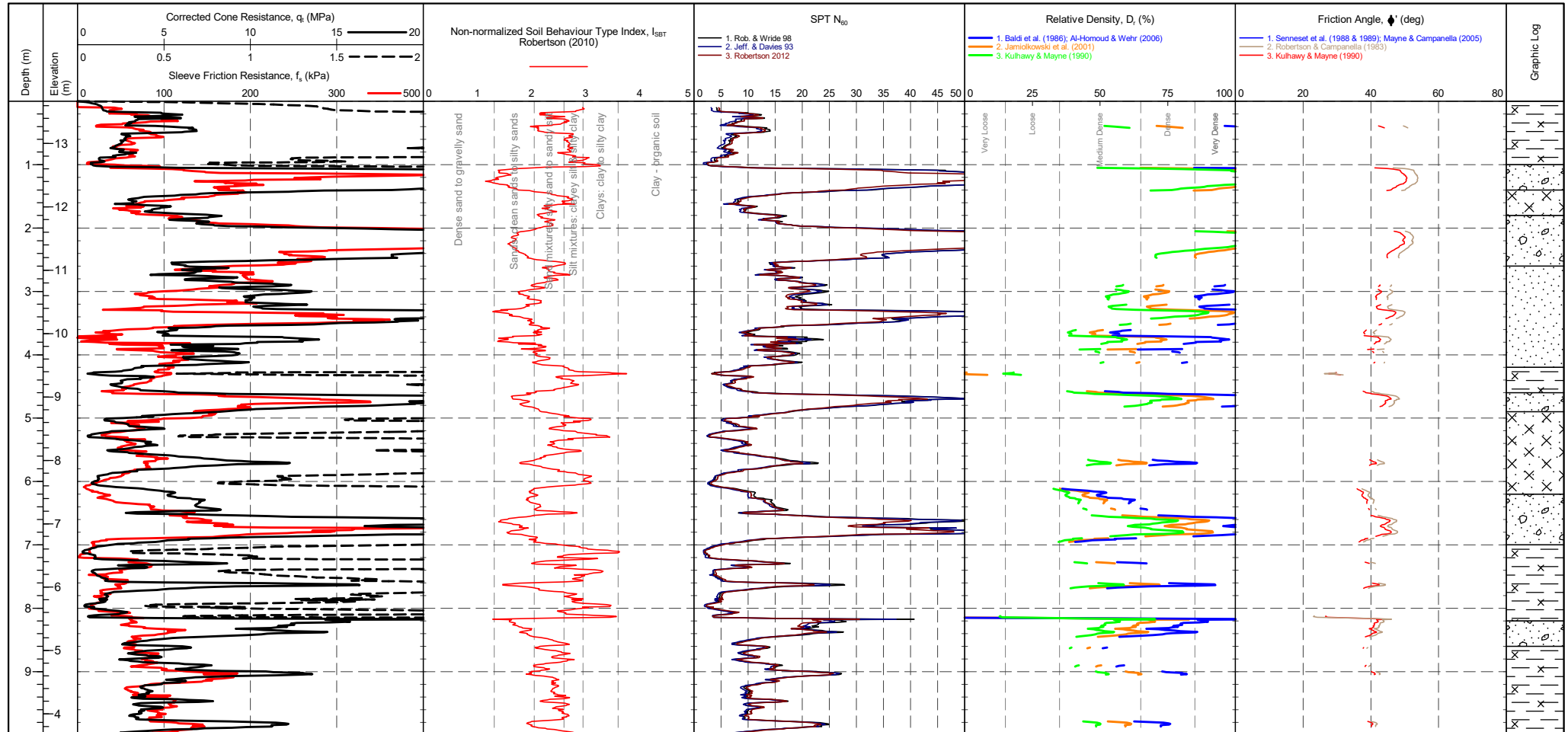
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

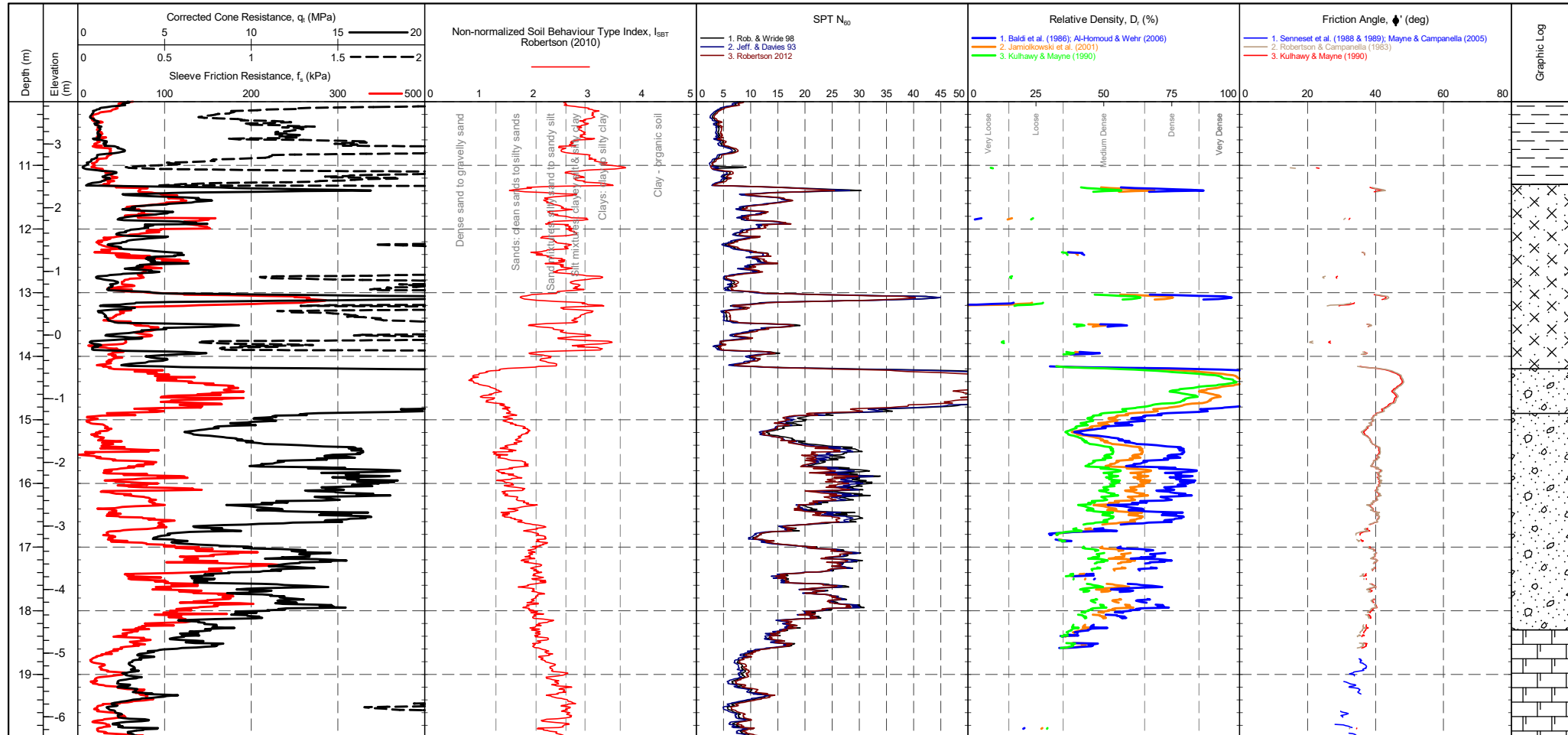
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I _c	Description	SPT N value, NSPT	Description	Relative Density D _r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

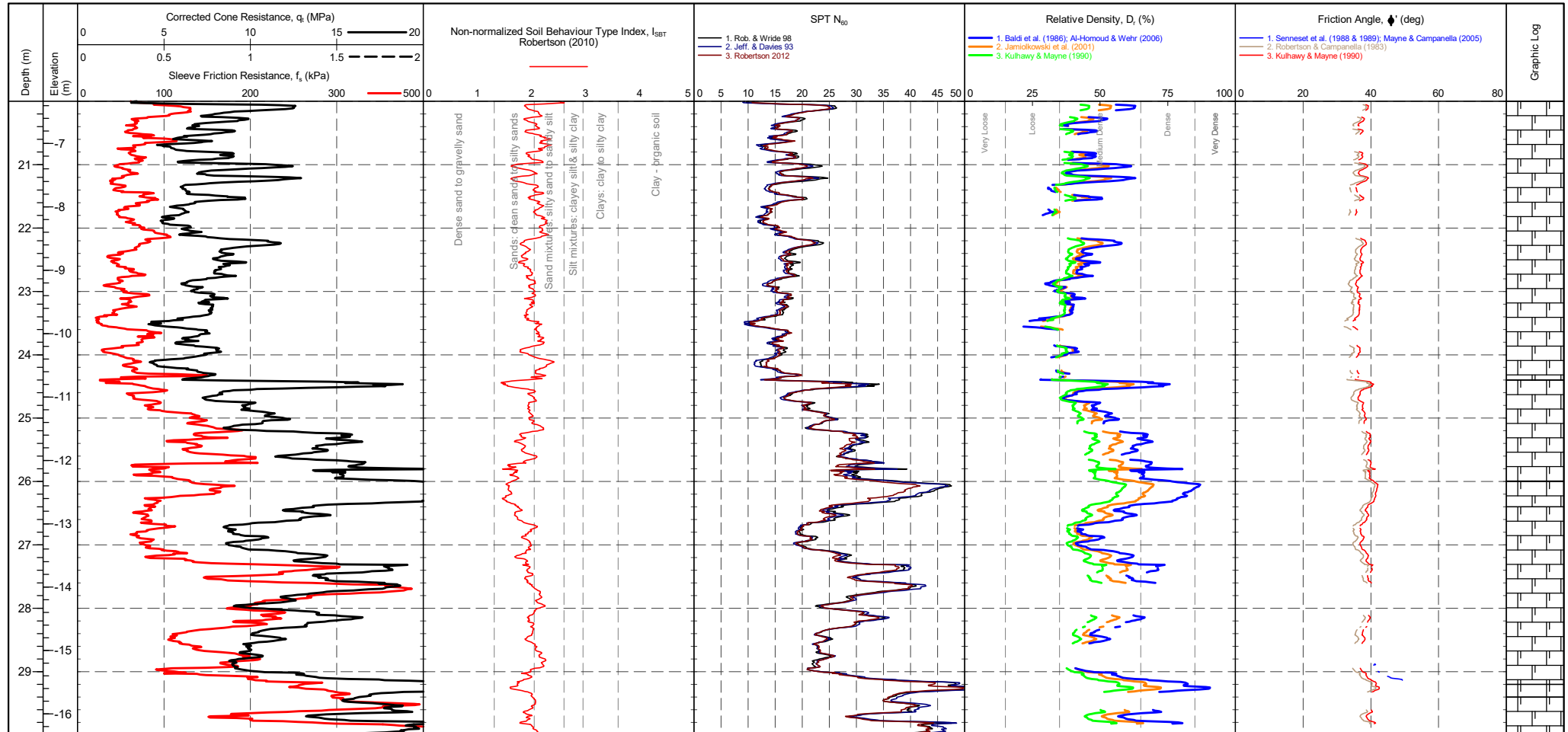
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density Dr (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

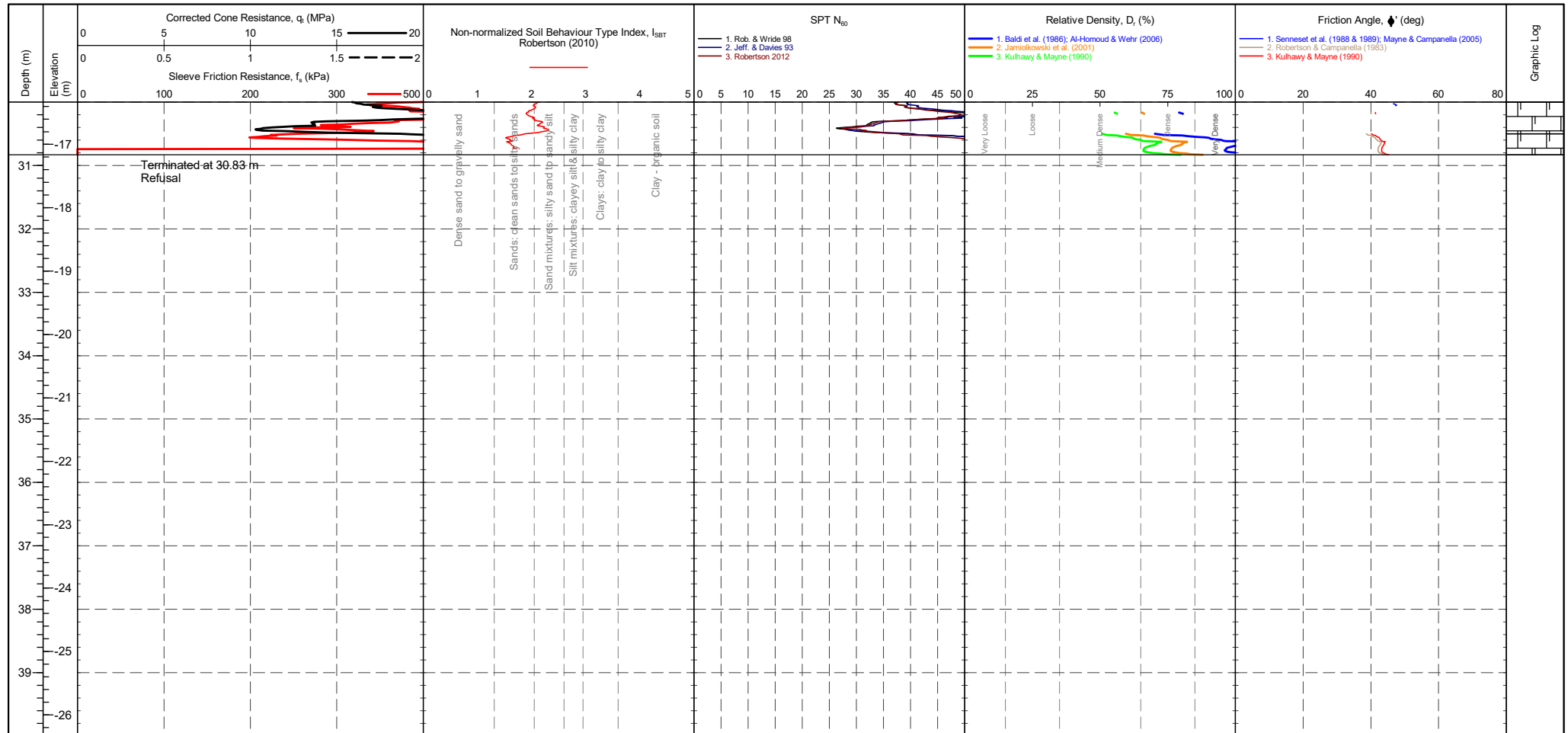
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

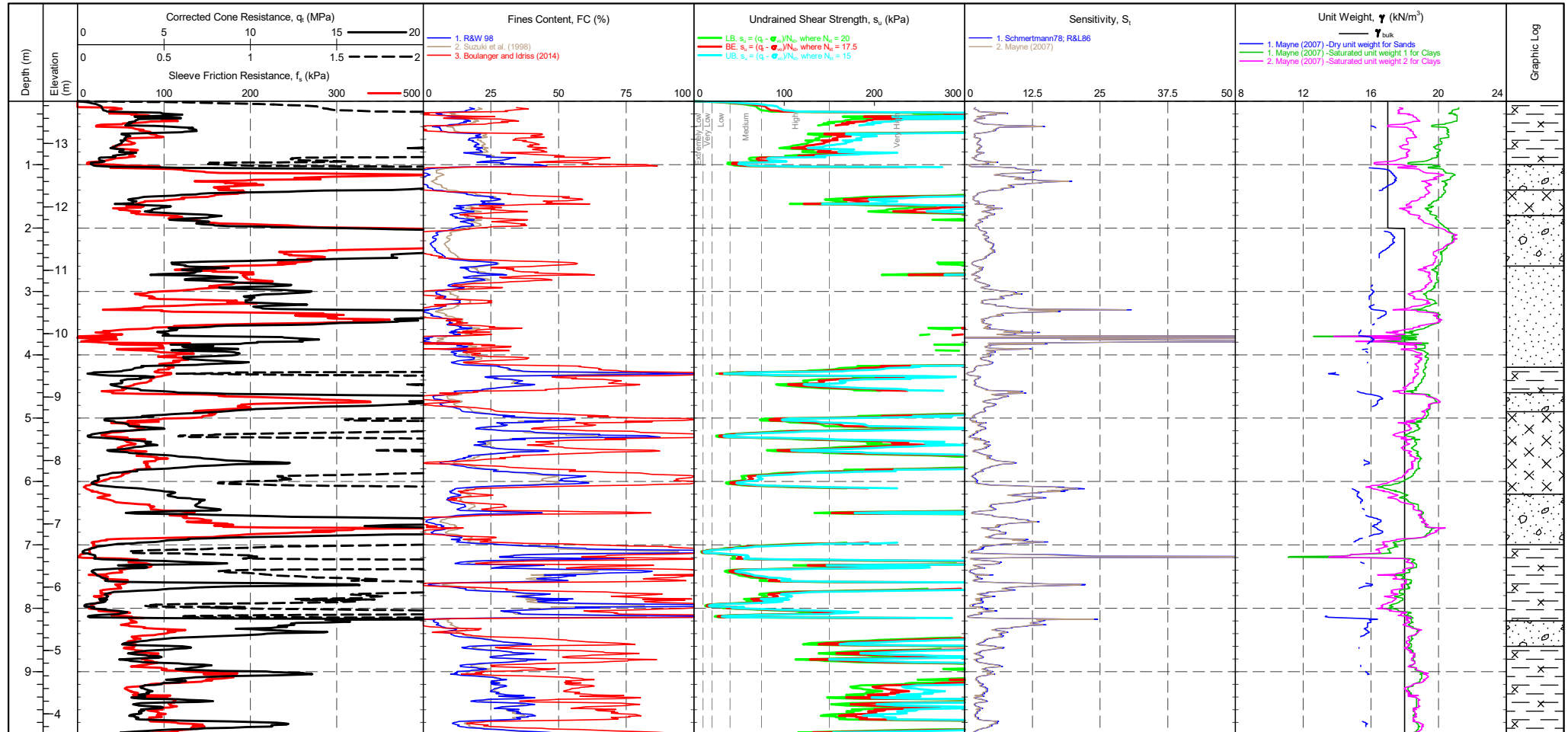
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.436 0.444 -0.008077
Sleeve (kPa) 0.0860 0.0856 0.000323
u2 (kPa) -0.00615 0.000820 -0.00697
Inclinometer 1 (°) -1.50 -1.23 -0.273223
Inclinometer 2 (°) -0.639 -0.507 -0.132159

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

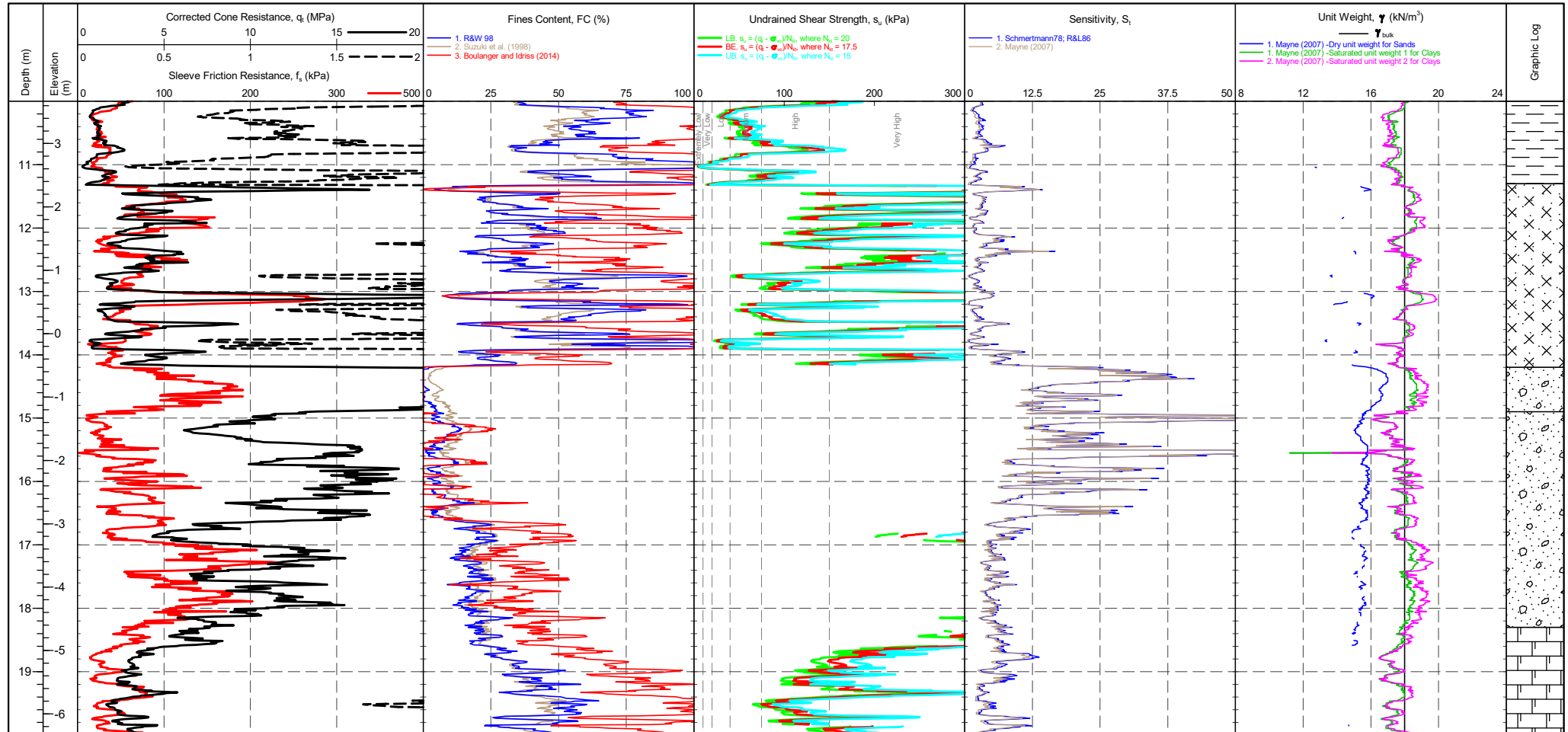
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID			TEST TYPE			CPTU ZERO VALUES				COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11				Groundwater Level
CONE MODEL			APPLICATION CLASS			Transducer			Term based on measurement		Term based on measurement			
: DP15-CFPTxy.71069			: TE2			Pre			su (kPa)		su (kPa)		Dissipation Test	
: Subtraction			: 2			0.436			Extremely low strength		Medium strength			
: 15cm ²			RIG : CPT 022			0.0860			Very low strength		High strength			
: 0.75			OPERATOR : AL			-0.00615			Low strength		Very high strength			
: u2			FRICION REDUCER : None			Inclinometer 1 (°)					Extremely high strength			
: HDPE			WEATHER : Overcast & Mild			Inclinometer 2 (°)								

PointID

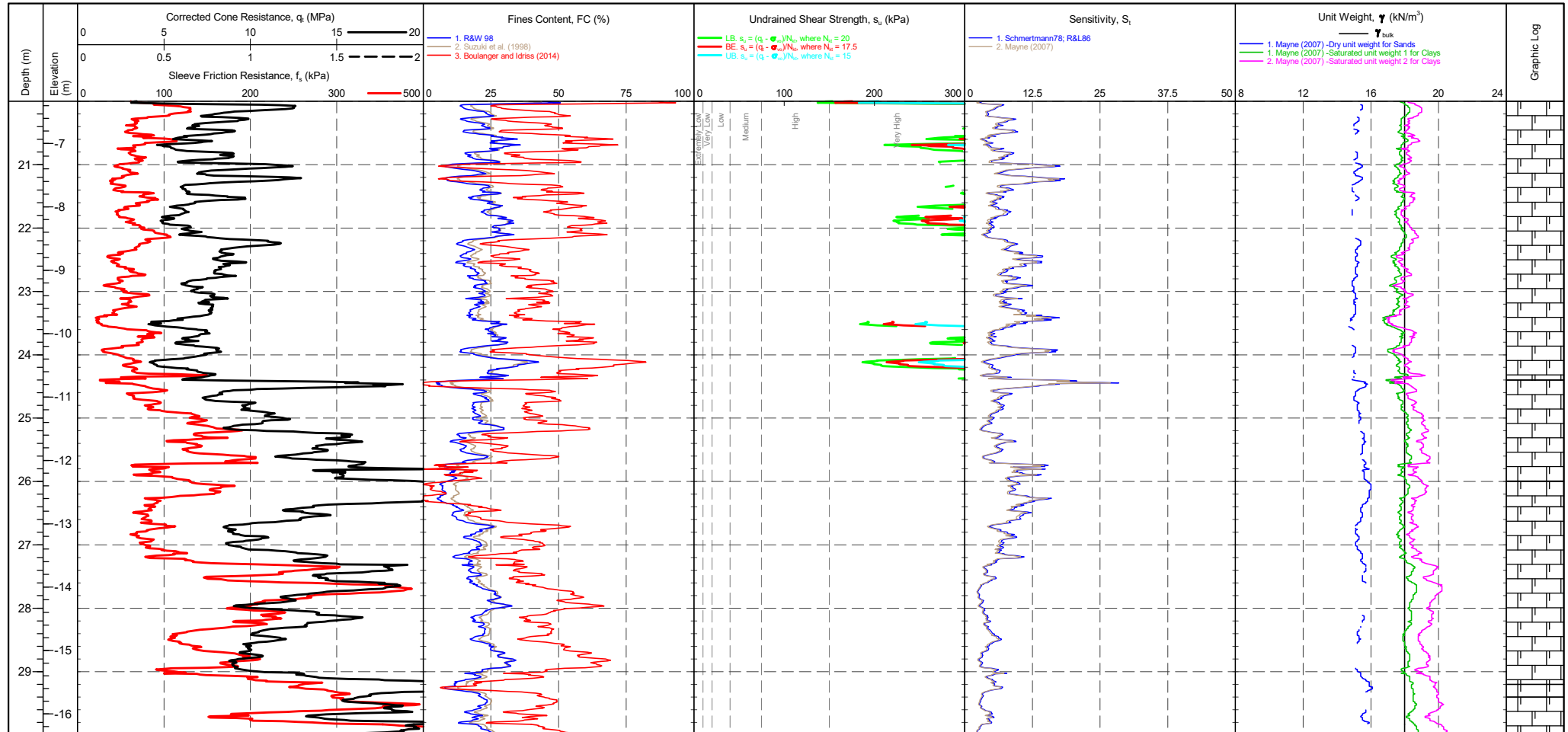
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

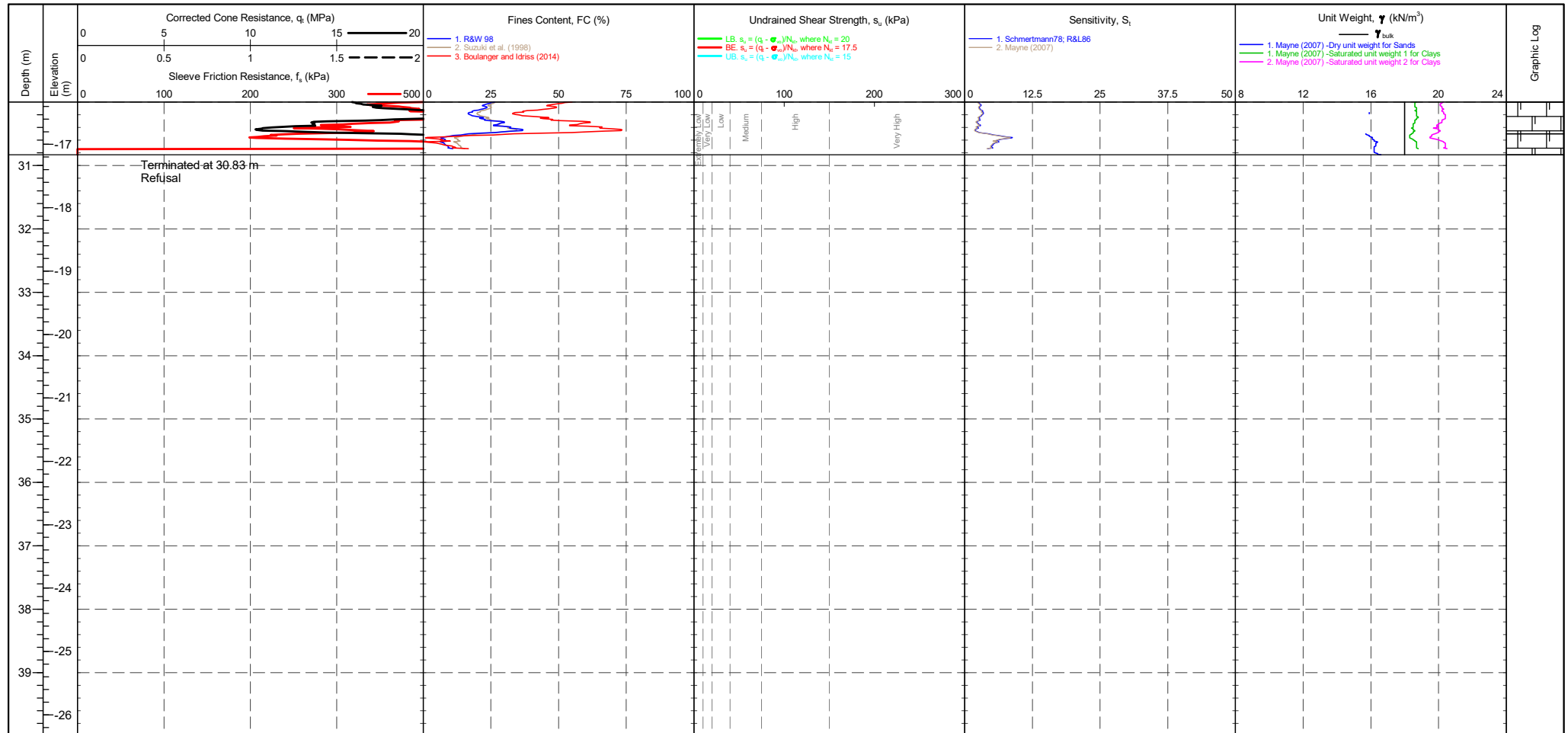
CPT108A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
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Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES
Transducer Pre Post Difference
Tip (MPa) 0.436 0.444 -0.008077
Sleeve (kPa) 0.0860 0.0856 0.000323
u2 (kPa) -0.00615 0.000820 -0.00697
Inclinometer 1 (°) -1.50 -1.23 -0.273223
Inclinometer 2 (°) -0.639 -0.507 -0.132159

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11
Term based on measurement su (kPa) Term based on measurement su (kPa)
Extremely low strength <10 Medium strength 40-75
Very low strength 10-20 High strength 75-150
Low strength 20-40 Very high strength 150-300
Extremely high strength >300

Groundwater Level
Dissipation Test

PointID

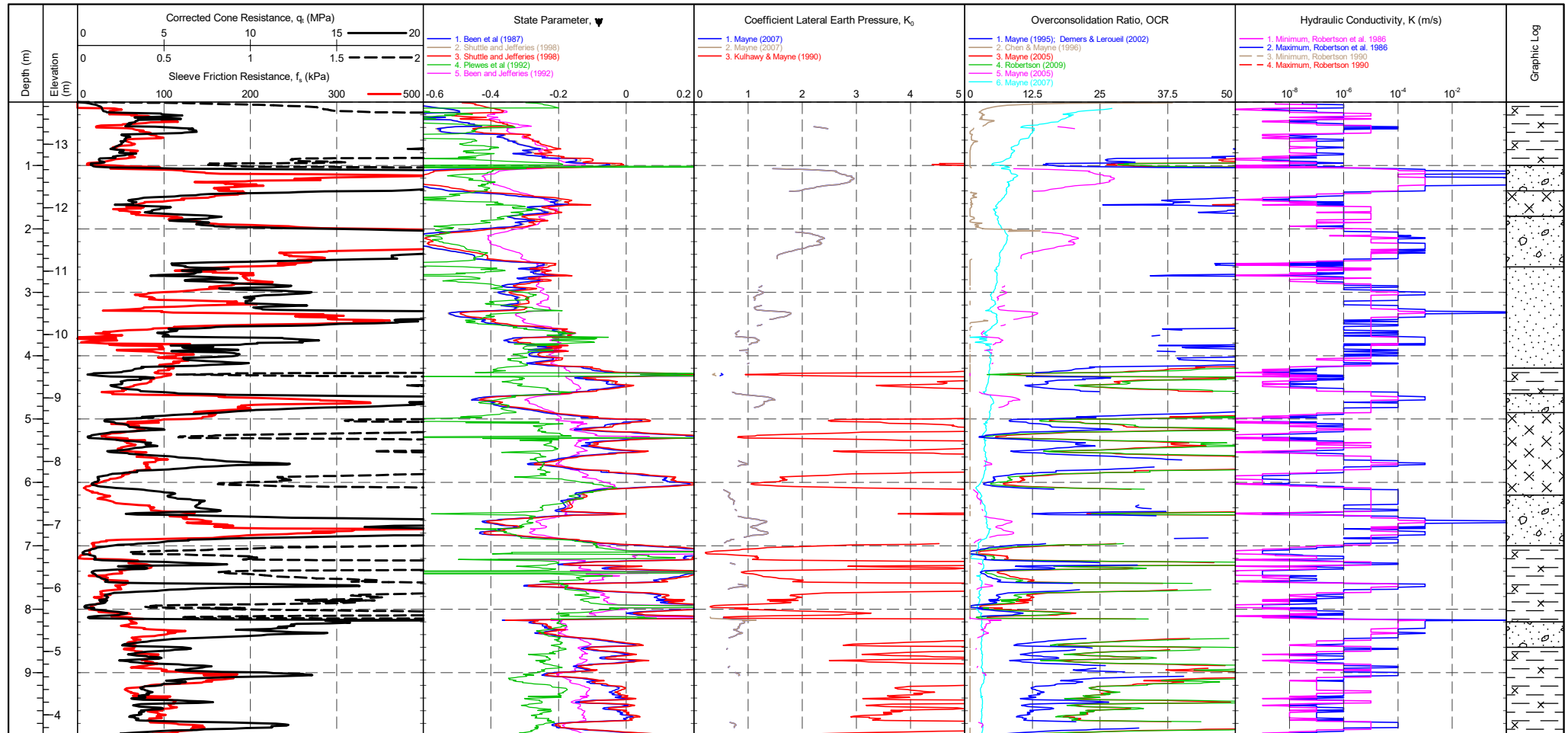
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

Groundwater Level
Dissipation Test

PointID

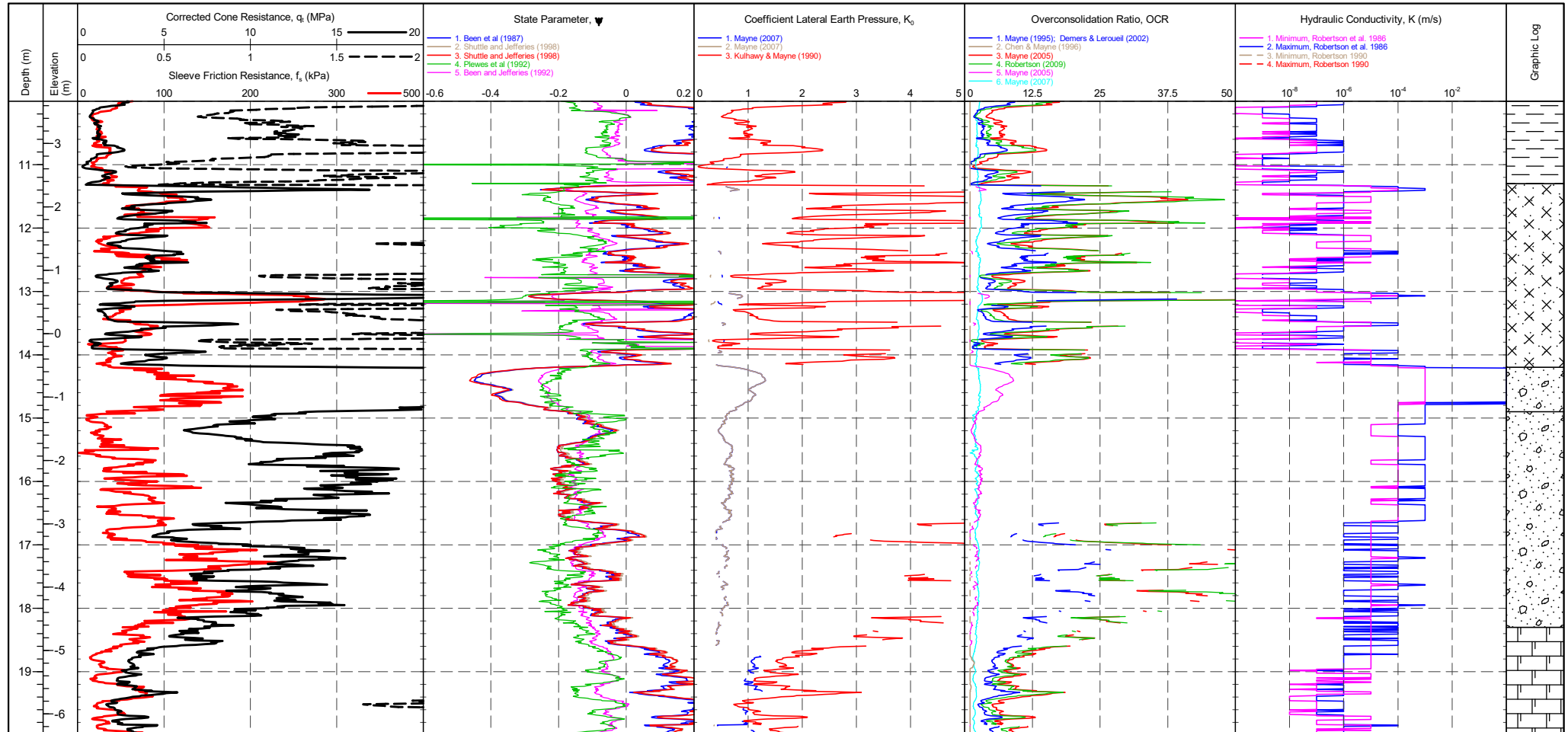
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

Groundwater Level
Dissipation Test

PointID

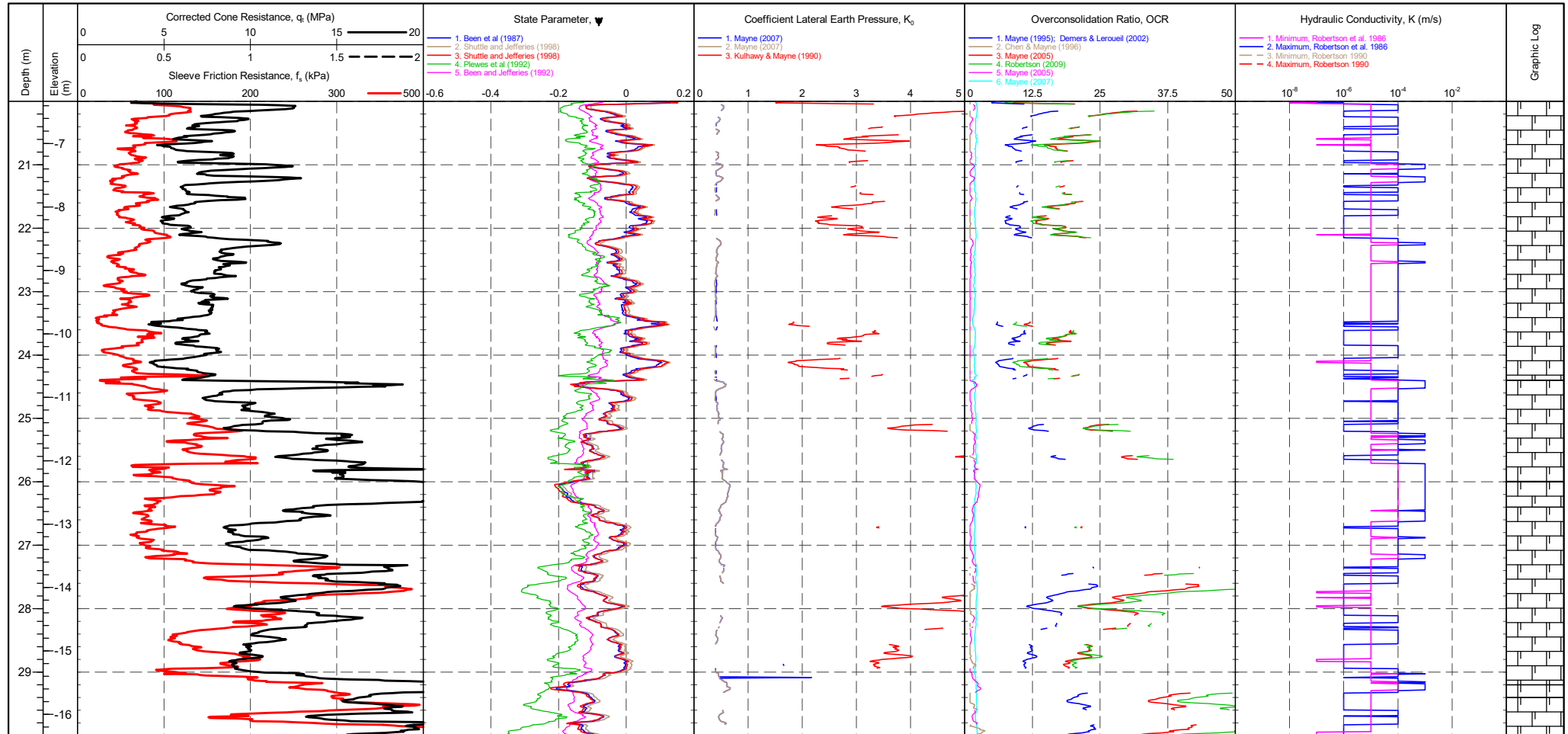
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

Groundwater Level
Dissipation Test

PointID

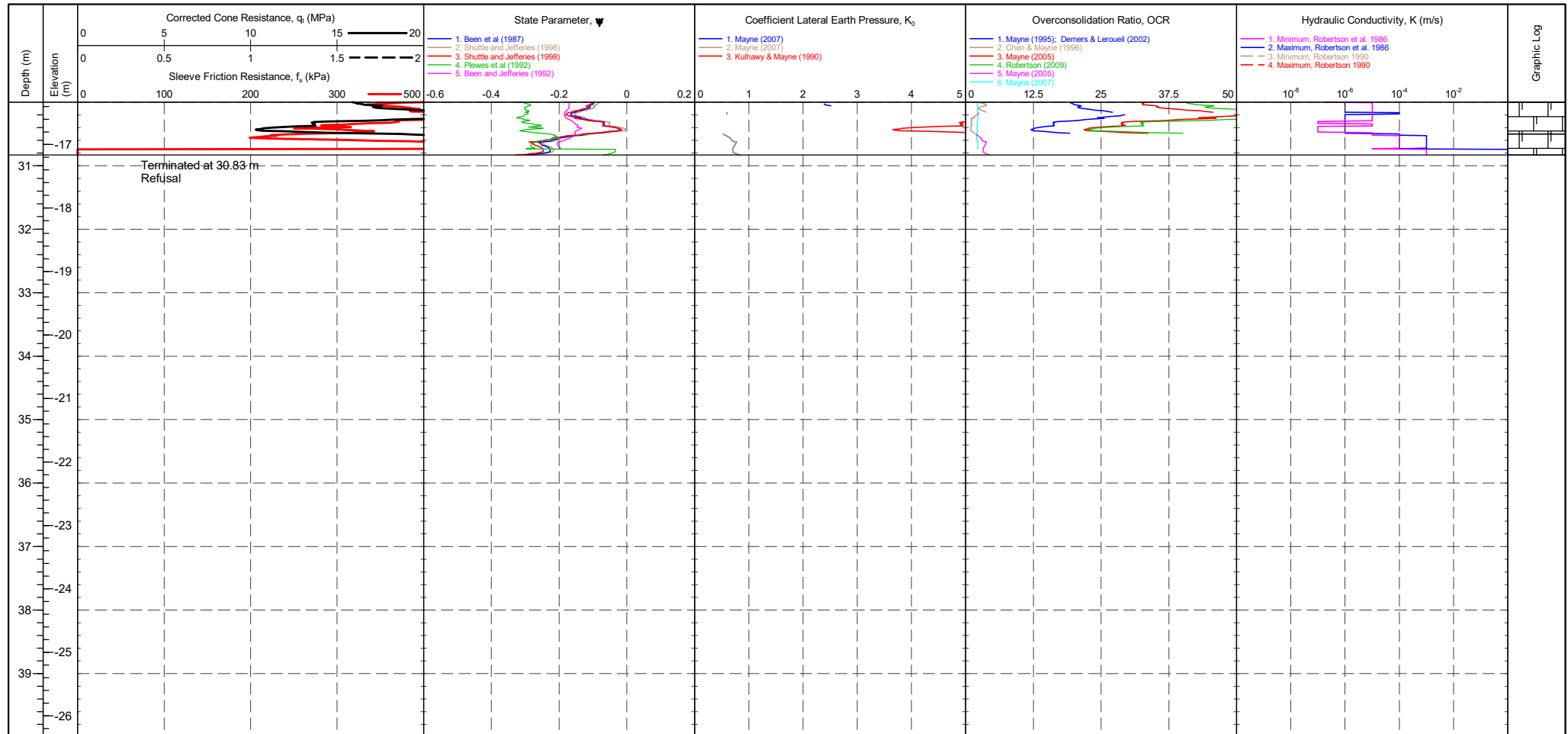
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

Groundwater Level
Dissipation Test

PointID

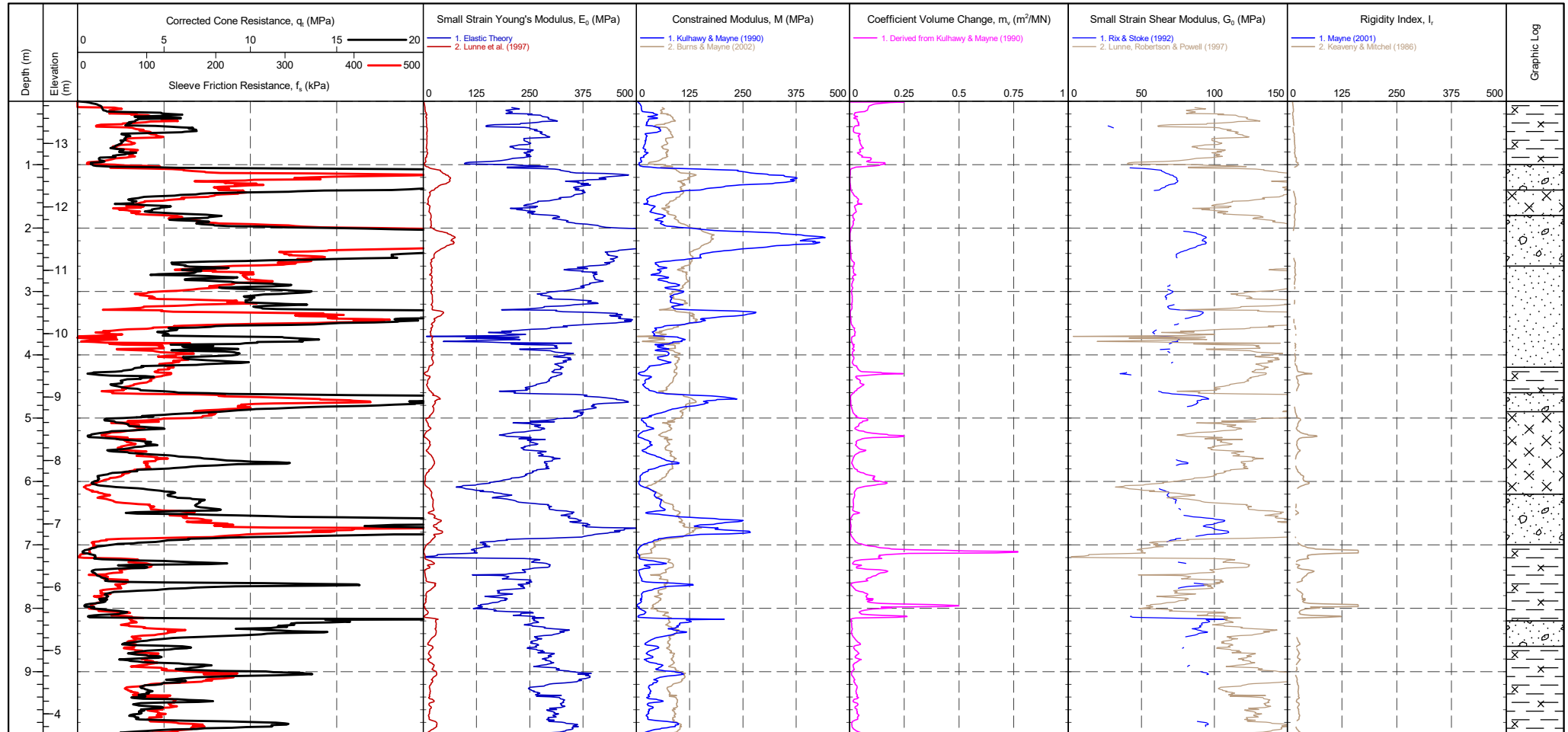
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

Groundwater Level
Dissipation Test

PointID

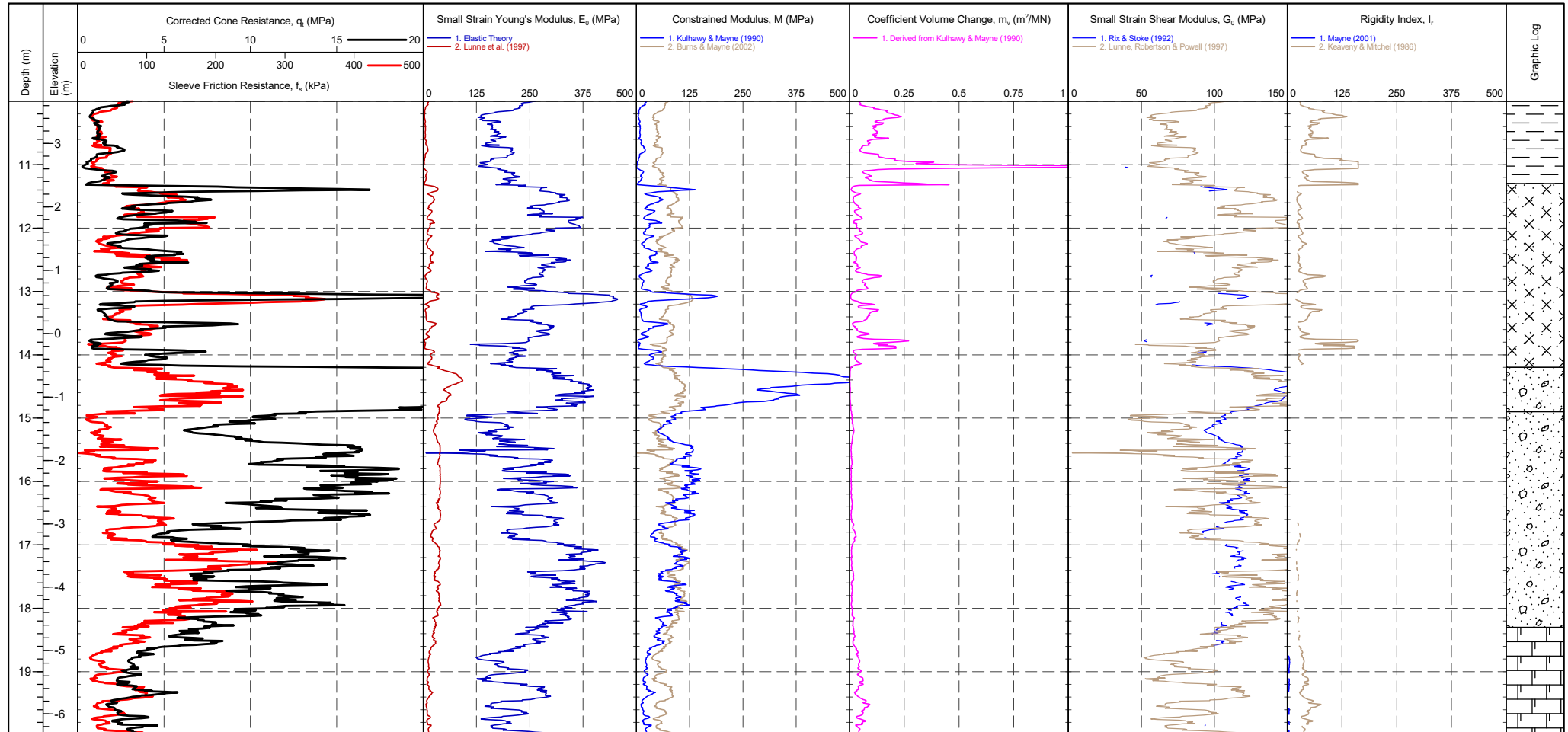
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

Groundwater Level
Dissipation Test

PointID

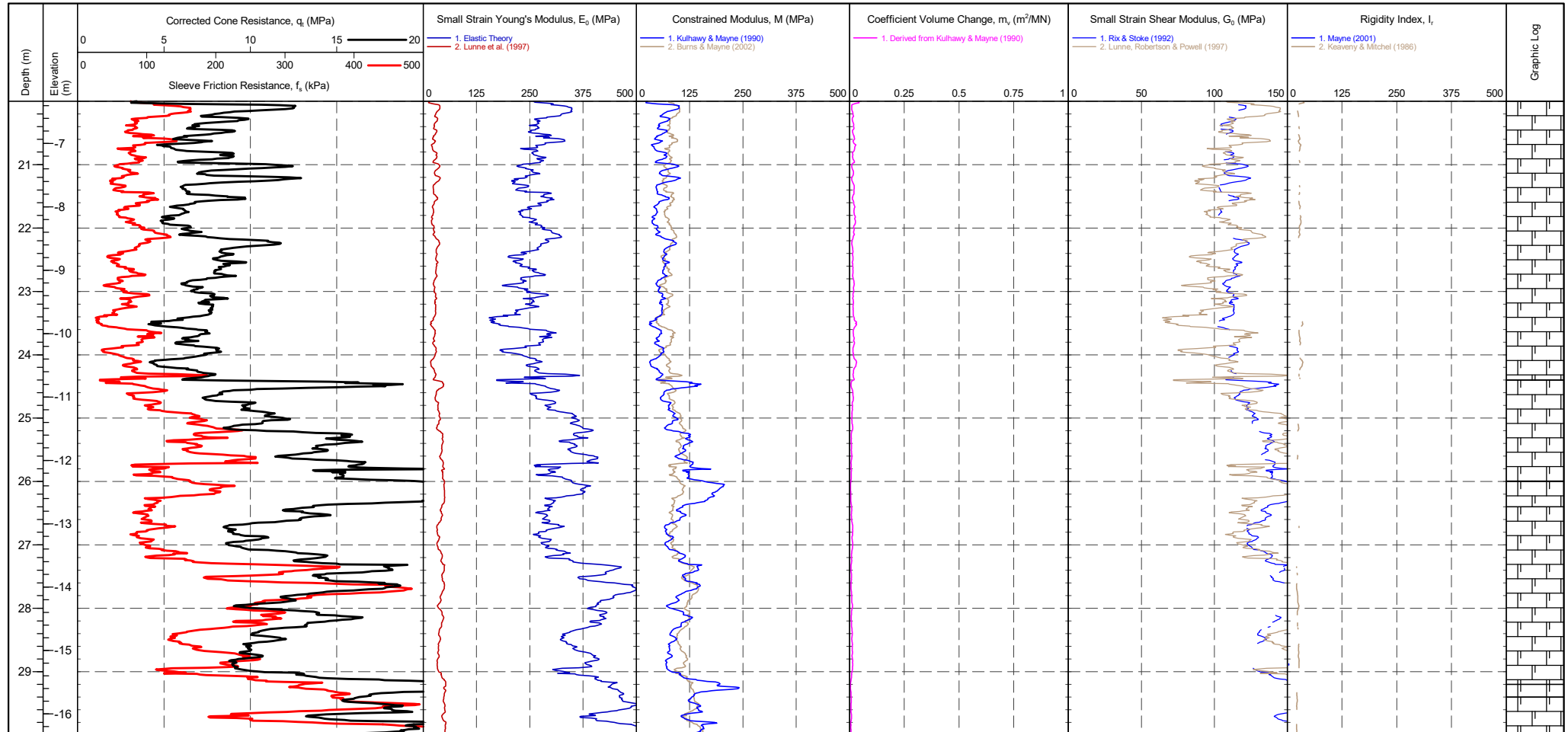
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

Groundwater Level
Dissipation Test

PointID

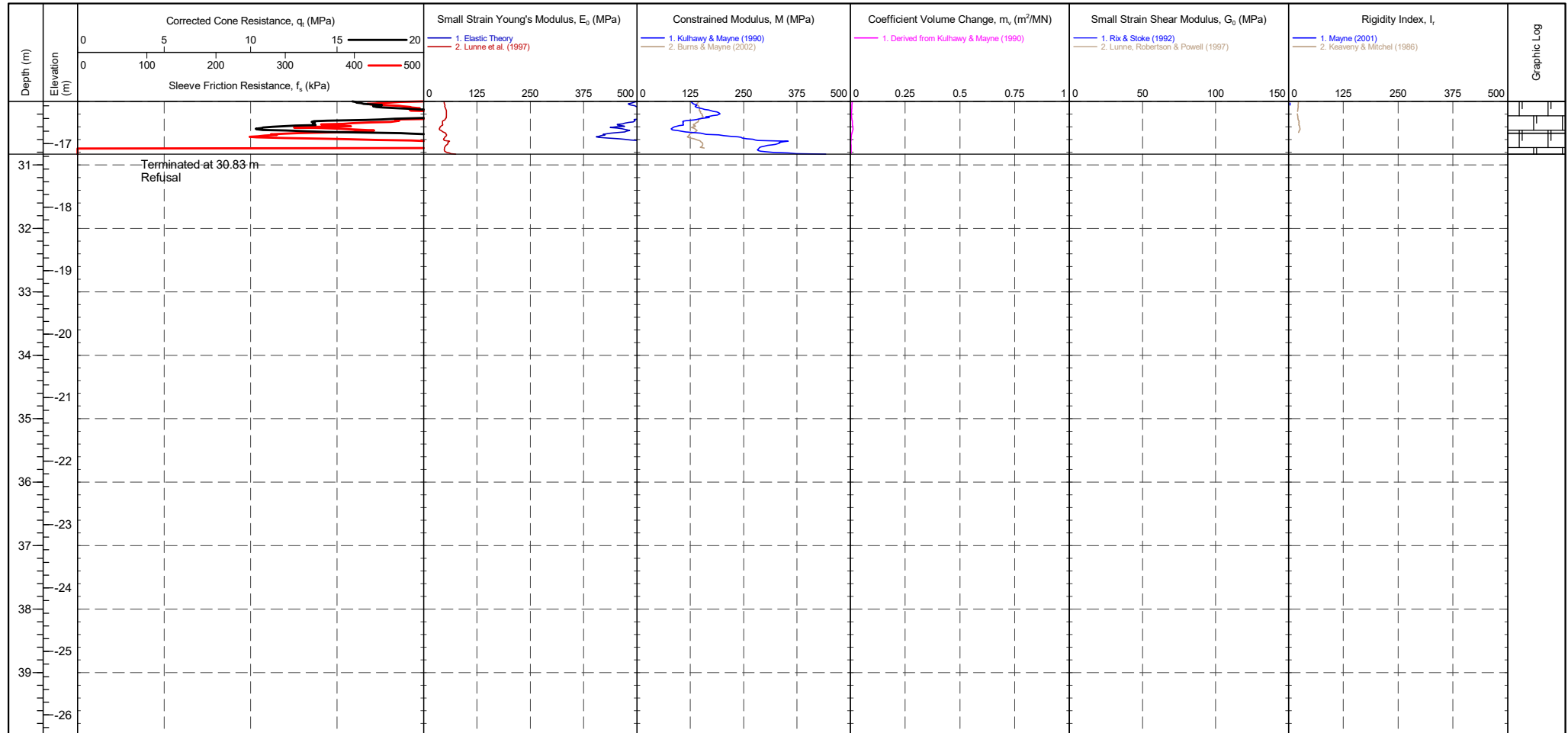
CPT108A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

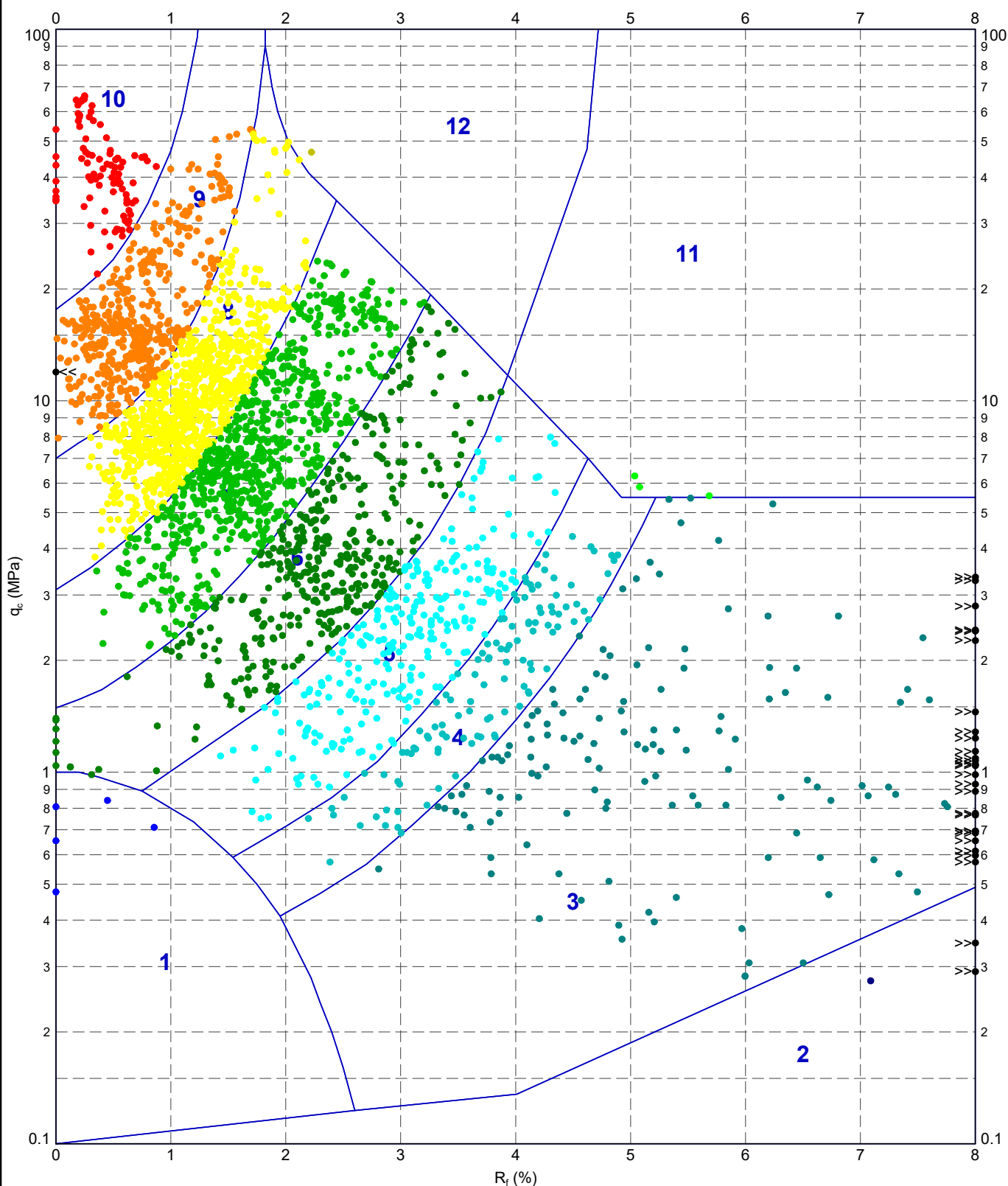
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.436	0.444	-0.008077
Sleeve (kPa)	0.0860	0.0856	0.000323
u2 (kPa)	-0.00615	0.000820	-0.00697
Inclinometer 1 (°)	-1.50	-1.23	-0.273223
Inclinometer 2 (°)	-0.639	-0.507	-0.132159

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLEB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 10:25 10:02:00.04 Datag Lab and In Situ Tool - In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT108A

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

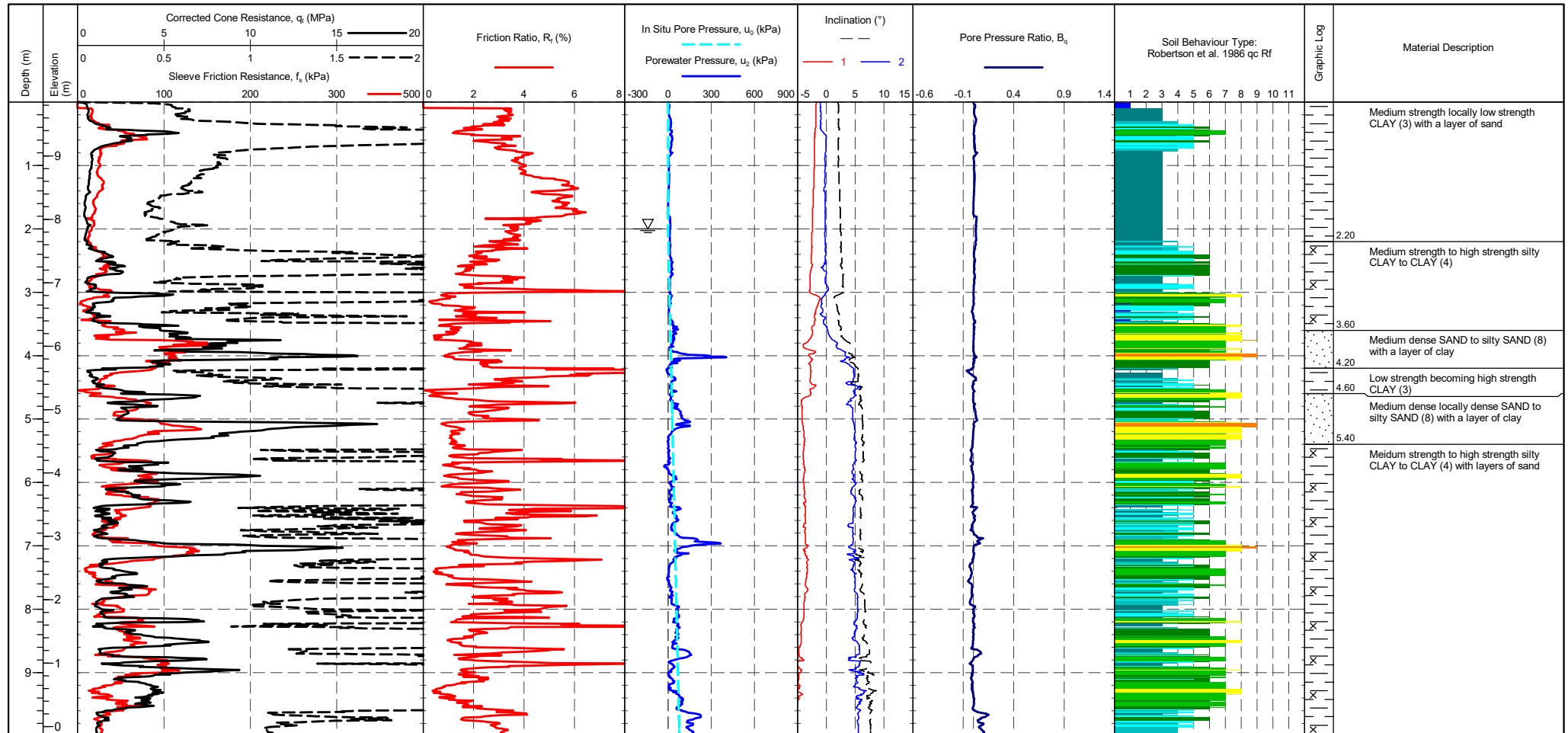
CPT109

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.459	0.455	0.004038	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0914	0.0921	-0.000753	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75	FRICITION REDUCER : None	u2 (kPa)	-0.00779	0.00984	-0.01763	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 ($^\circ$)	-1.84	-1.84	0		9 - SAND	10 - Gravelly SAND to SAND 11 - Very stiff fine grained 12 - SAND to clayey SAND
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 ($^\circ$)	-0.852	-0.507	-0.345082			

PointID

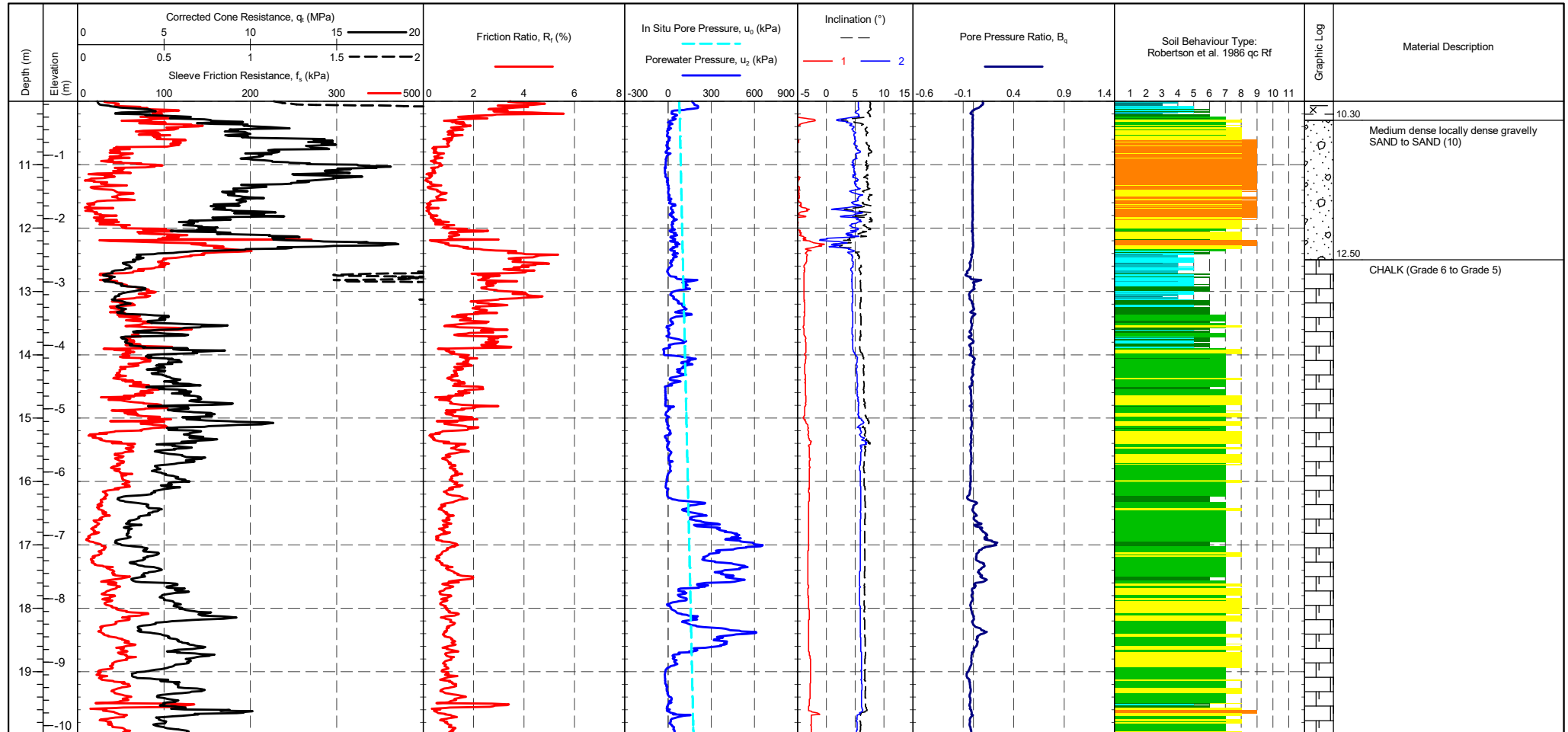
CPT109

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.459	0.455	0.004038	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0914	0.0921	-0.000753	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00779	0.00984	-0.01763	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-1.84	-1.84	0		9 - SAND	10 - Gravelly SAND to SAND 11 - Very stiff fine grained 12 - SAND to clayey SAND
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.852	-0.507	-0.345082			

PointID

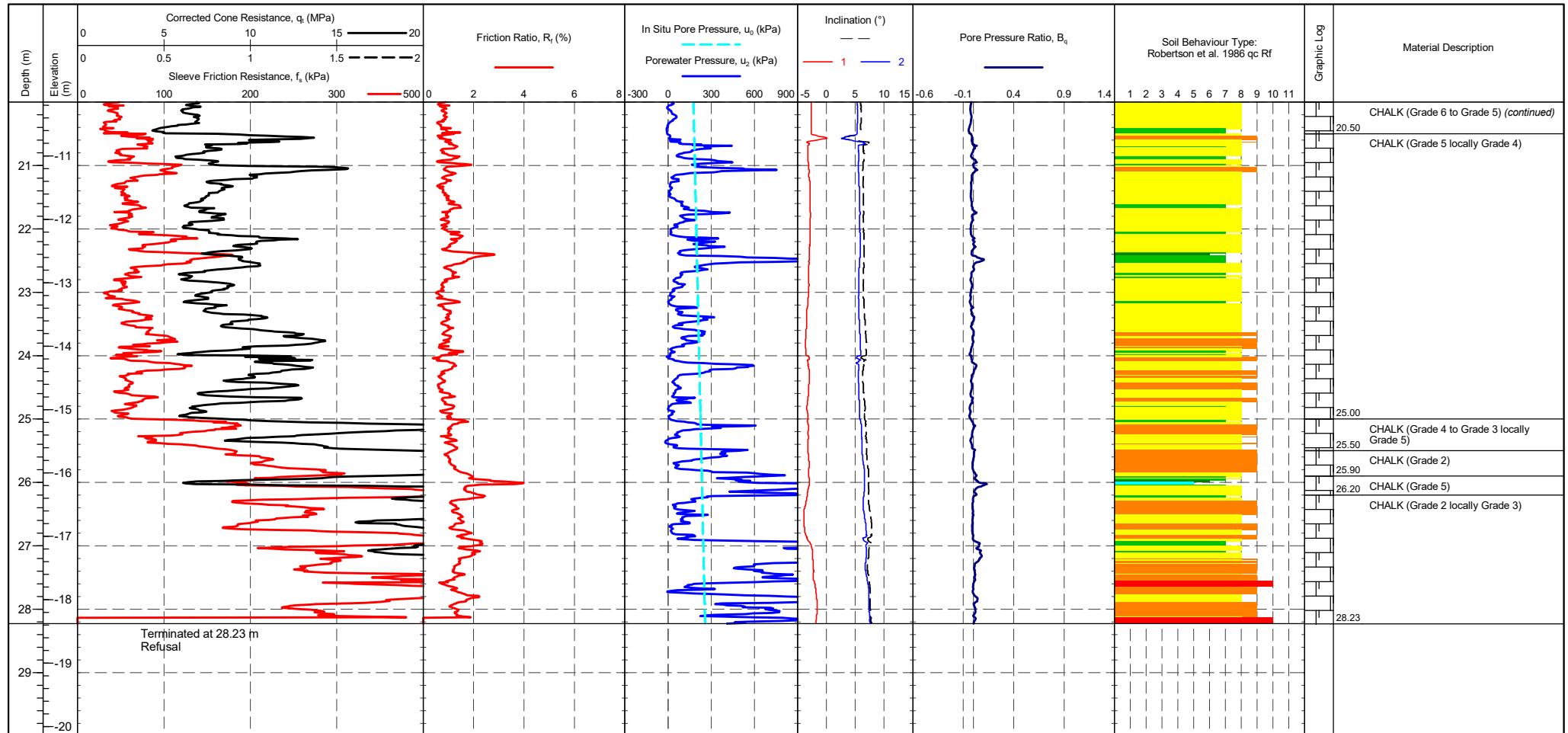
CPT109

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf	Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.459	0.455	0.004038	
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0914	0.0921	-0.000753	
CONE AREA RATIO : 0.75	FRICITION REDUCER : None	u2 (kPa)	-0.00779	0.00984	-0.01763	
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 (°)	-1.84	-1.84	0	1 - Sensitive fine grained material 2 - Organic material 3 - CLAY 4 - Silty CLAY to CLAY 5 - Clayey SILT to silty CLAY 6 - Sandy SILT to clayey SILT 7 - Silty SAND to sandy SILT 8 - SAND to silty SAND 9 - SAND 10 - Gravelly SAND to SAND 11 - Very stiff fine grained 12 - SAND to clayey SAND
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 (°)	-0.852	-0.507	-0.345082	

PointID

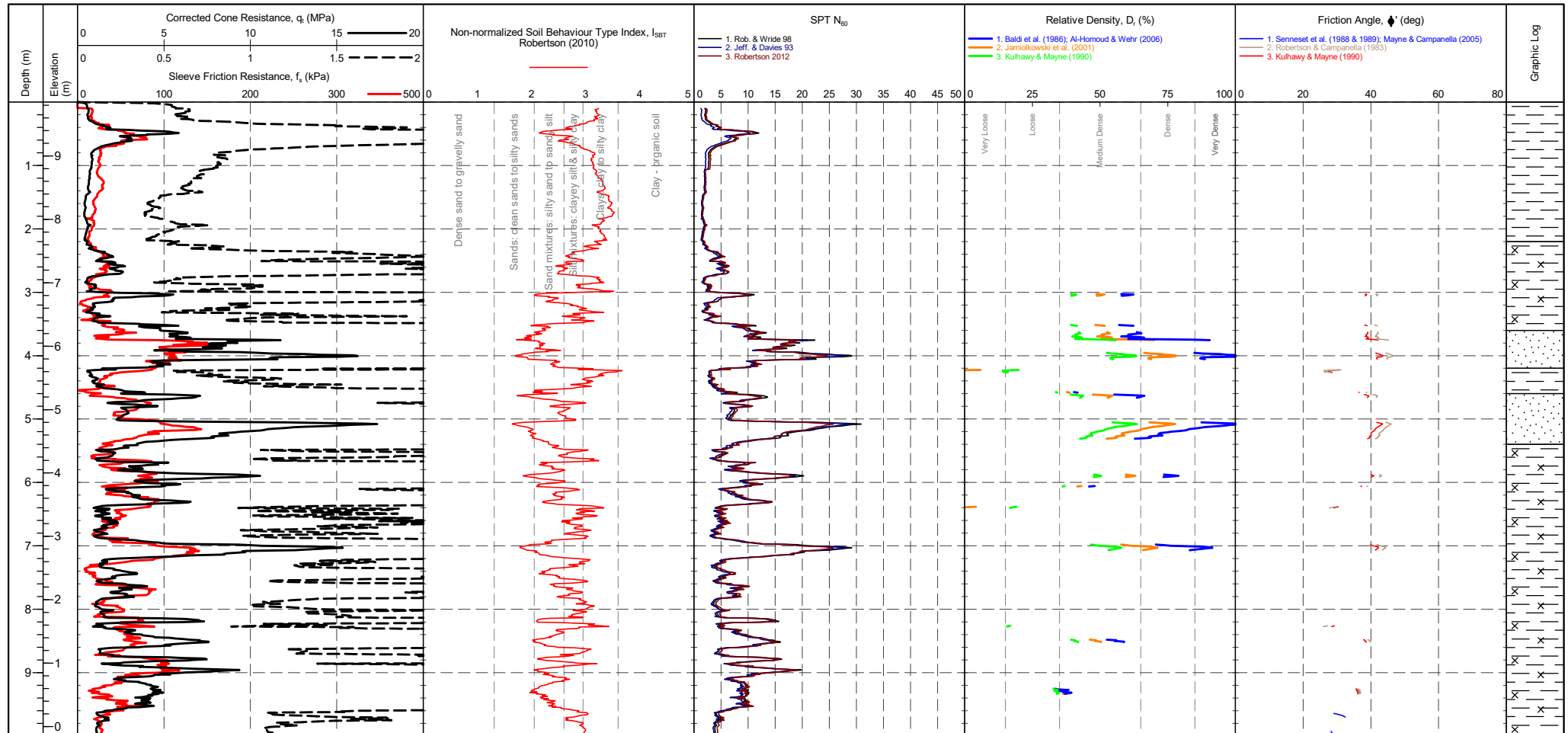
CPT109

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

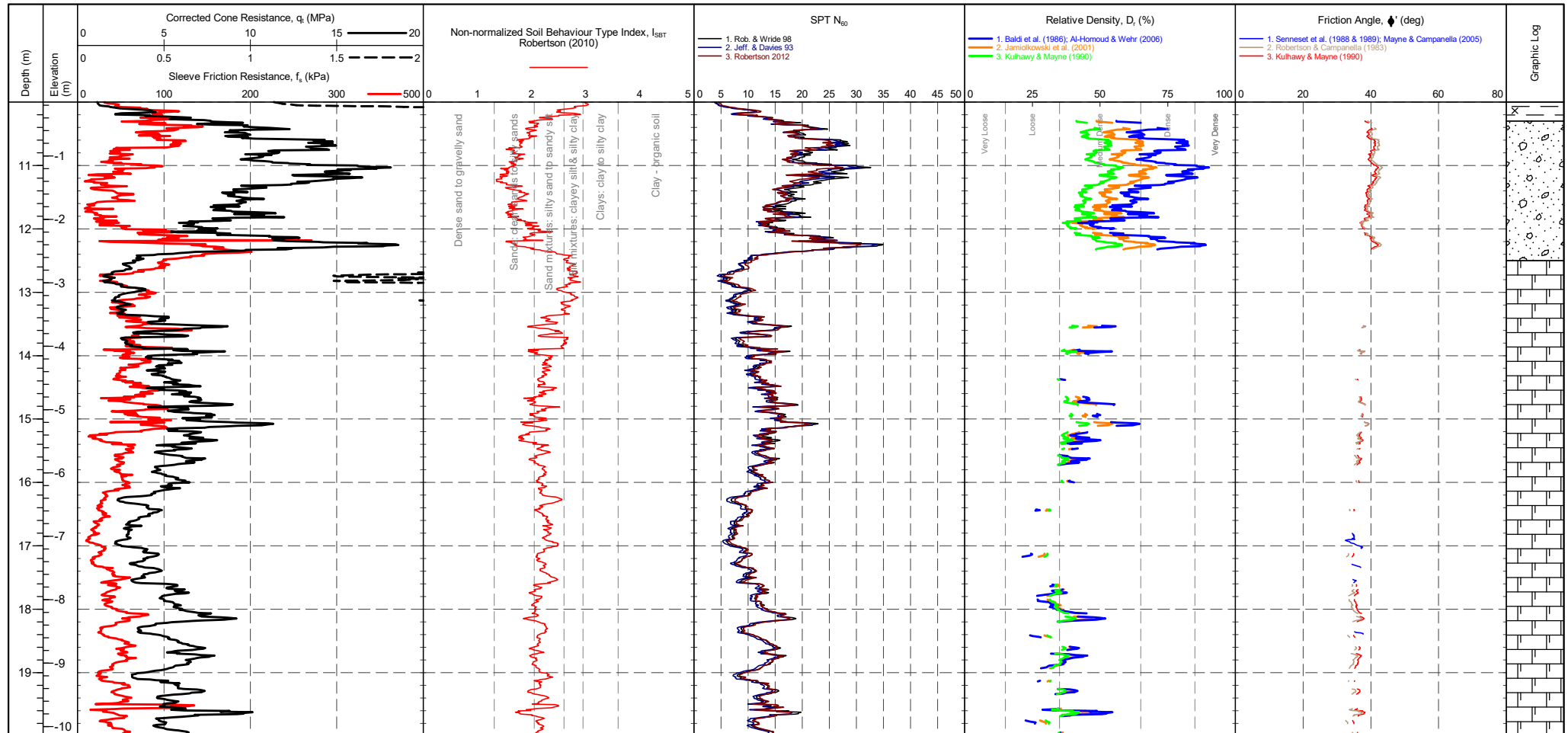
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

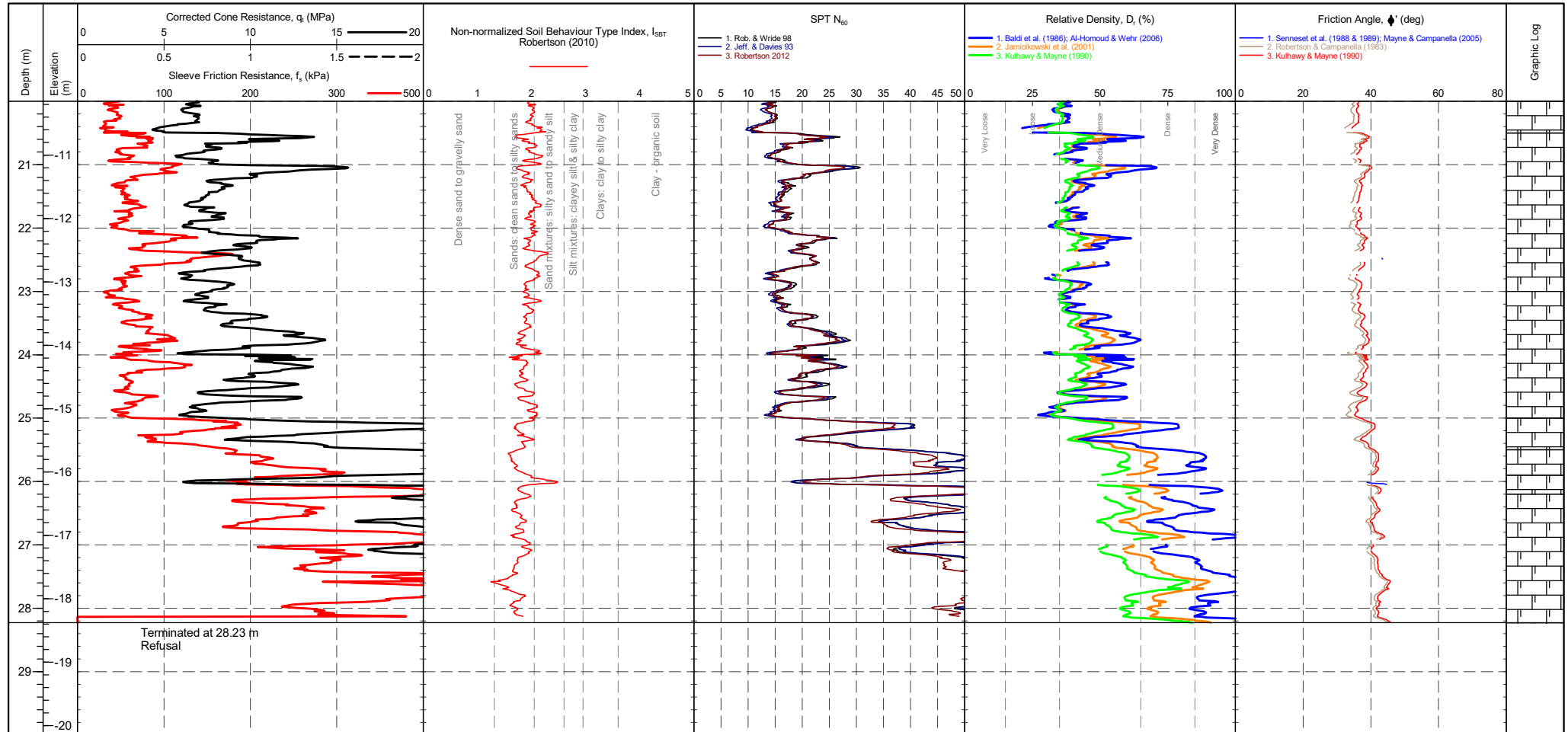
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

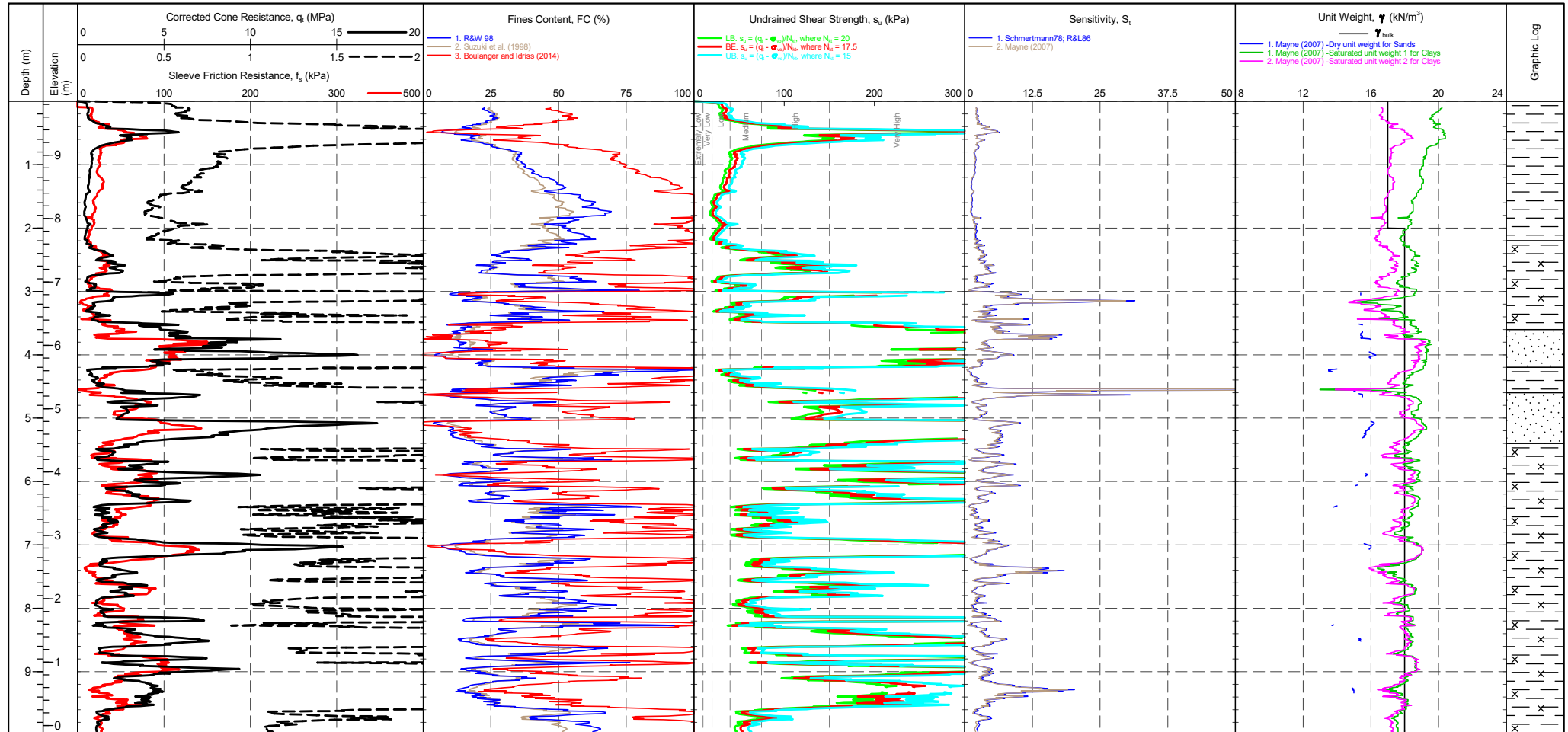
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

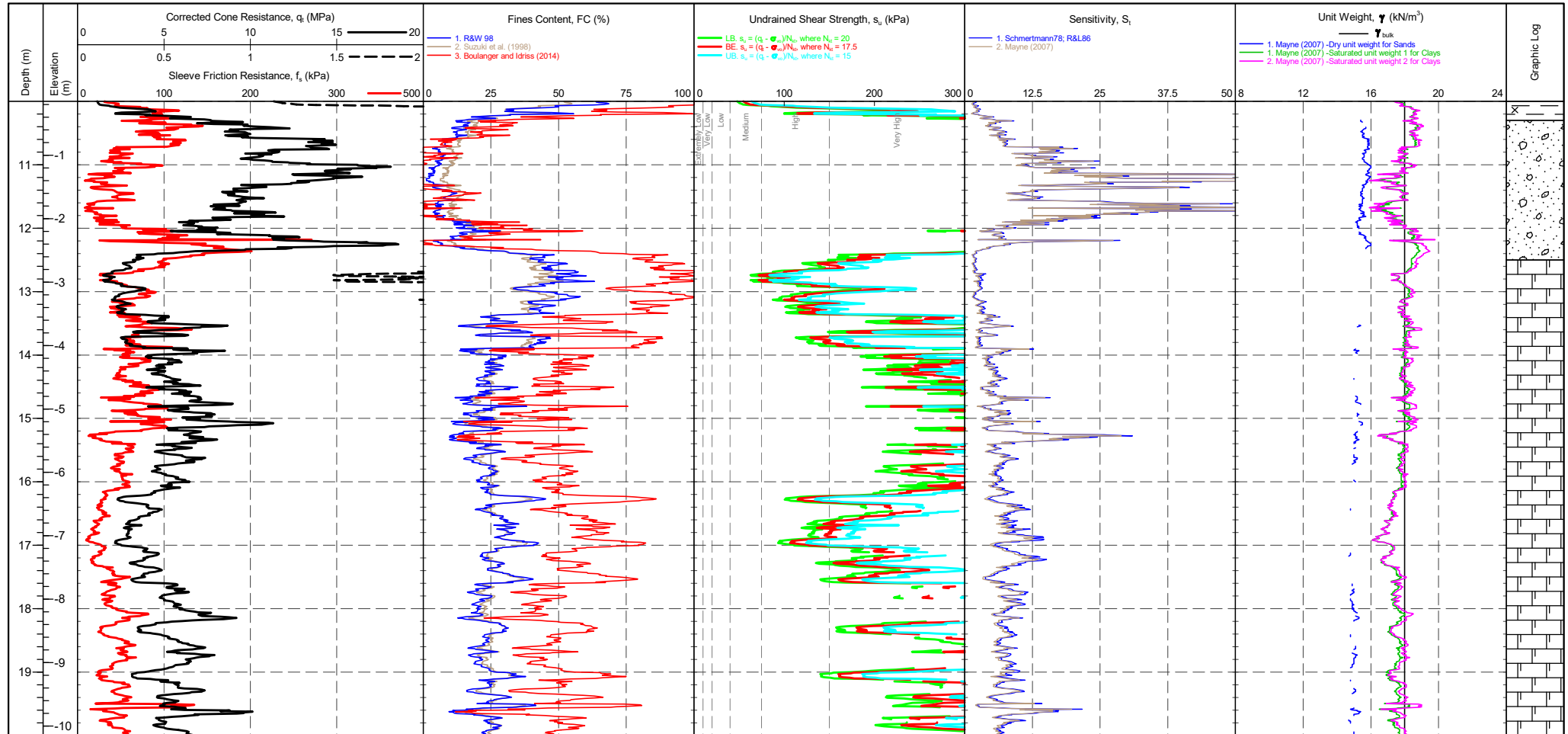
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.459 0.455 0.004038
Sleeve (kPa) 0.0914 0.0921 -0.000753
u2 (kPa) -0.00779 0.00984 -0.01763
Inclinometer 1 (°) -1.84 -1.84 0
Inclinometer 2 (°) -0.852 -0.507 -0.345082

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

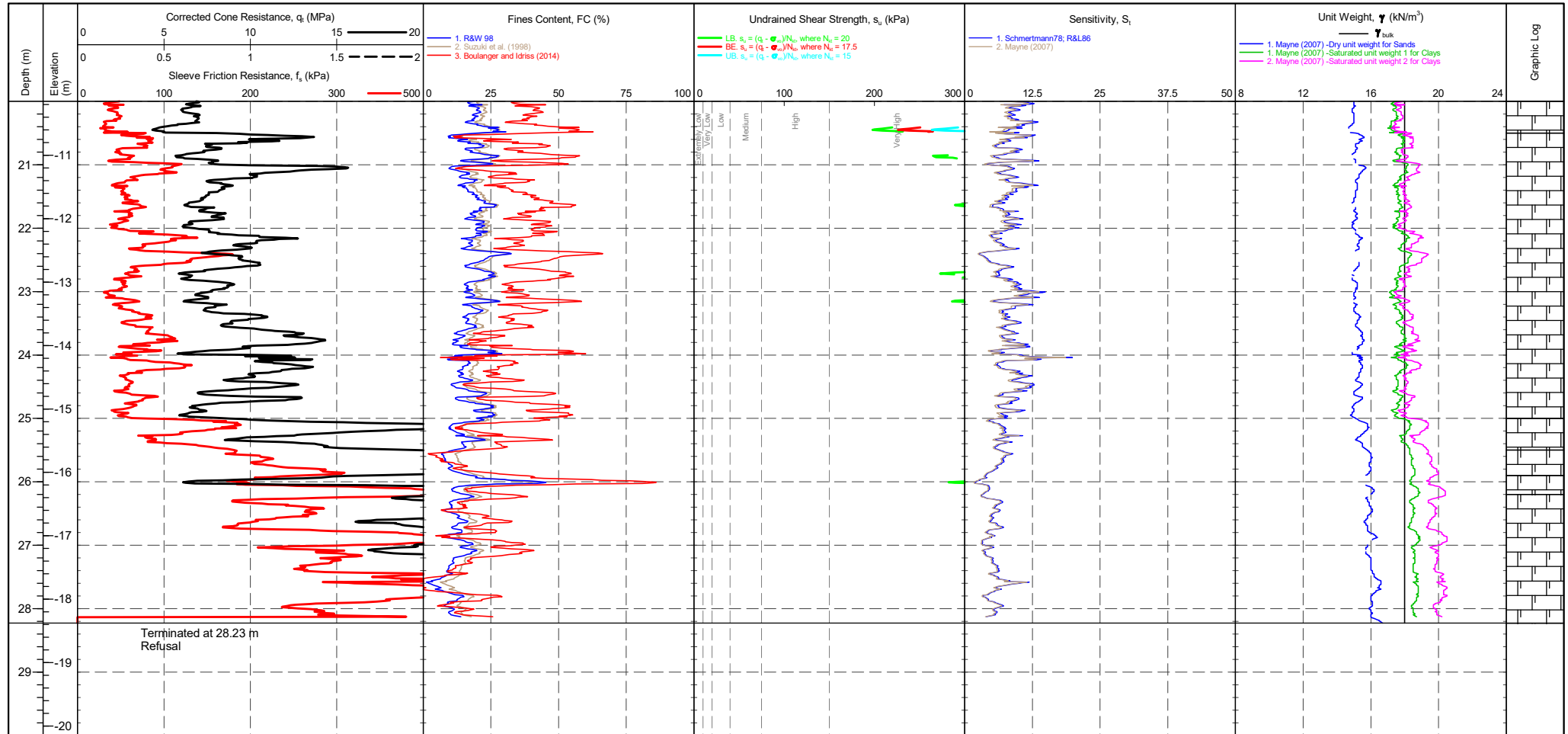
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

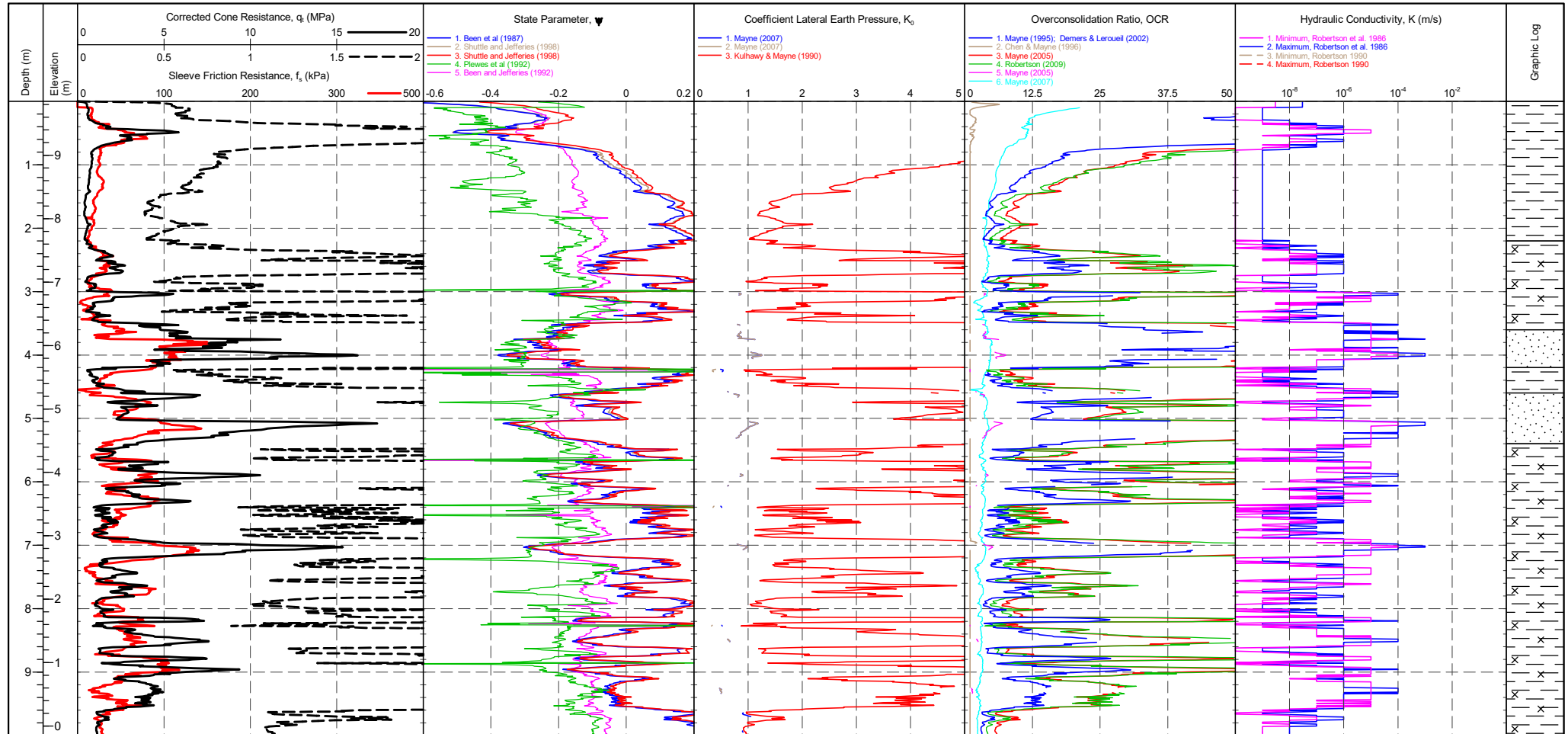
CPT109

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

Groundwater Level
Dissipation Test

PointID

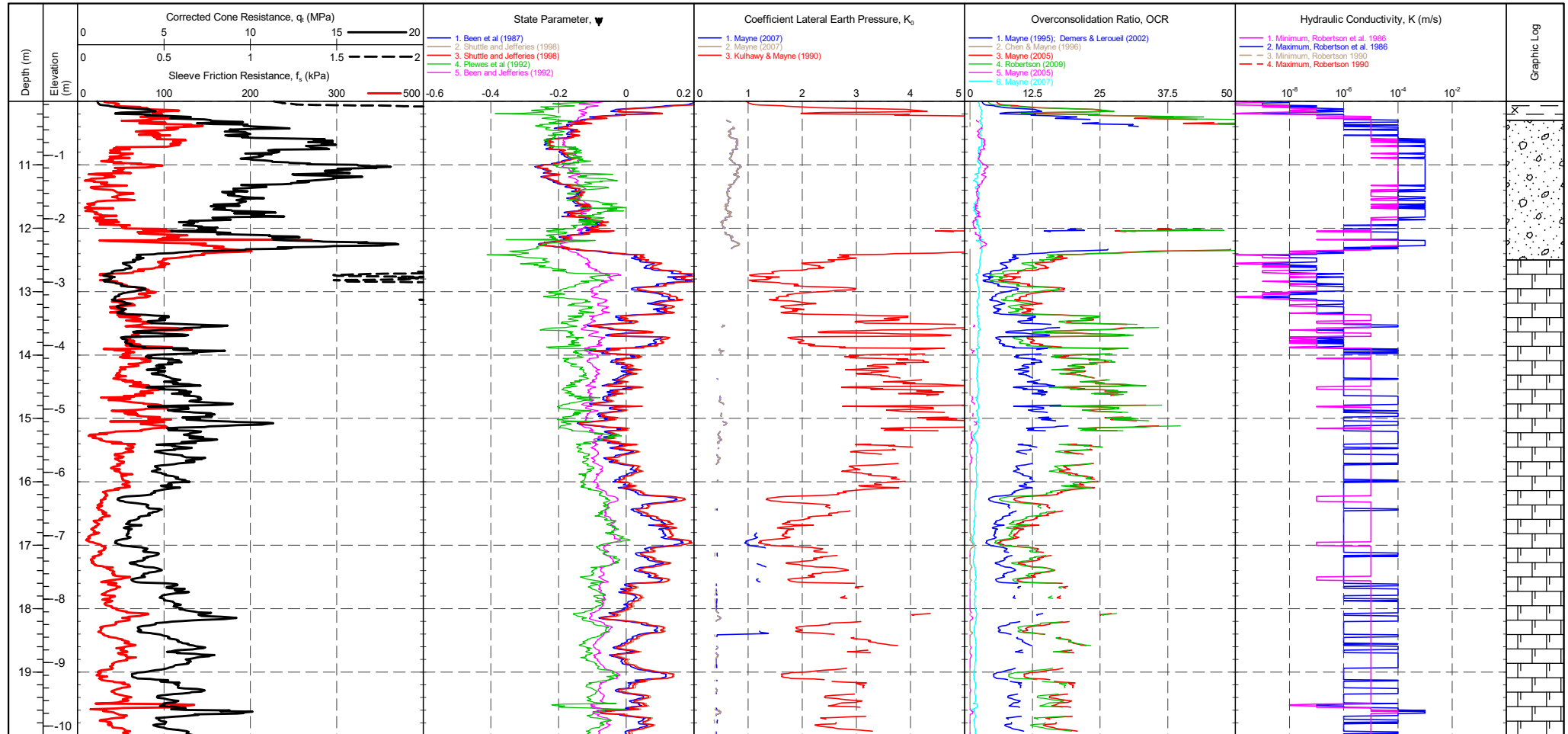
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES			
Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

Groundwater Level
Dissipation Test

PointID

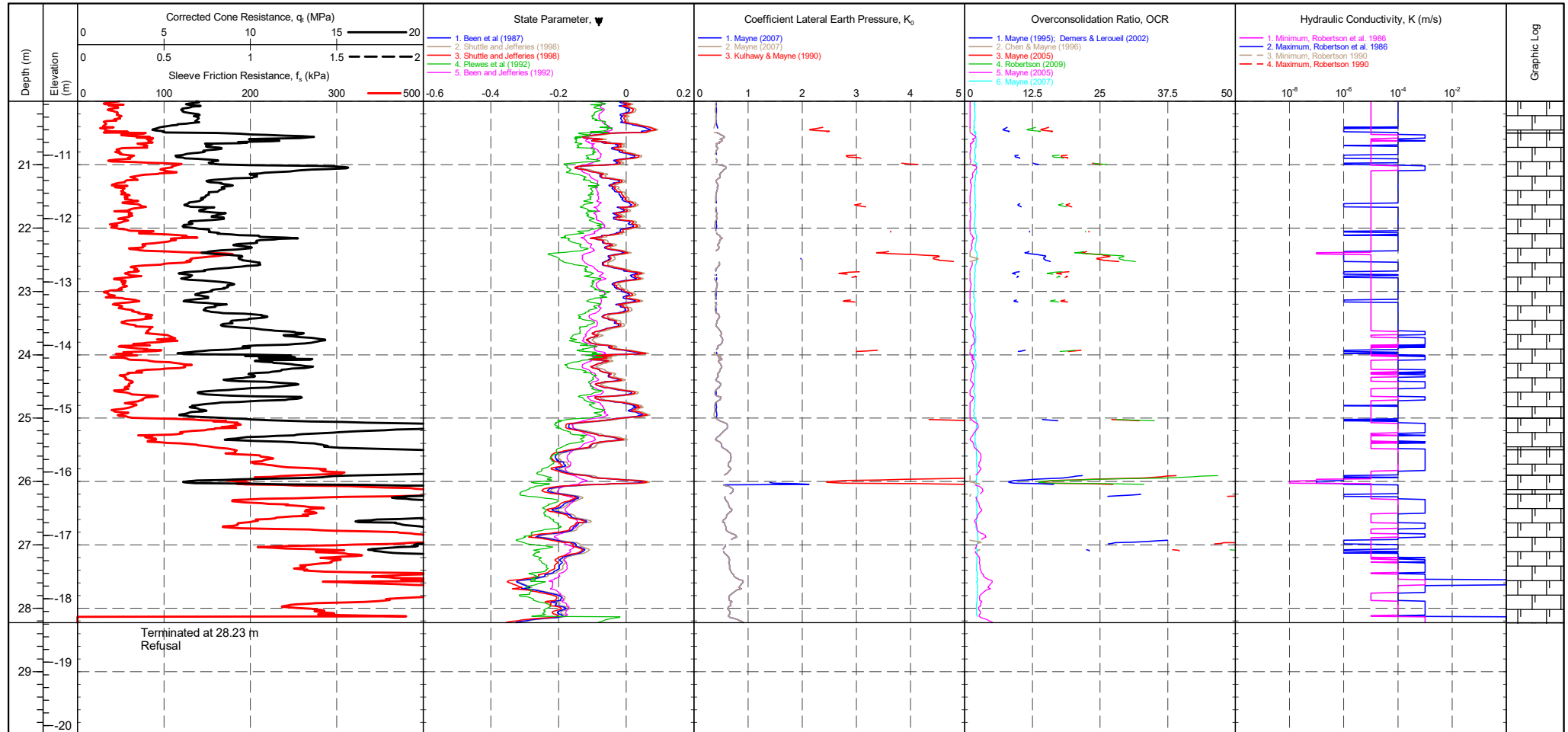
CPT109

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

Groundwater Level
Dissipation Test

PointID

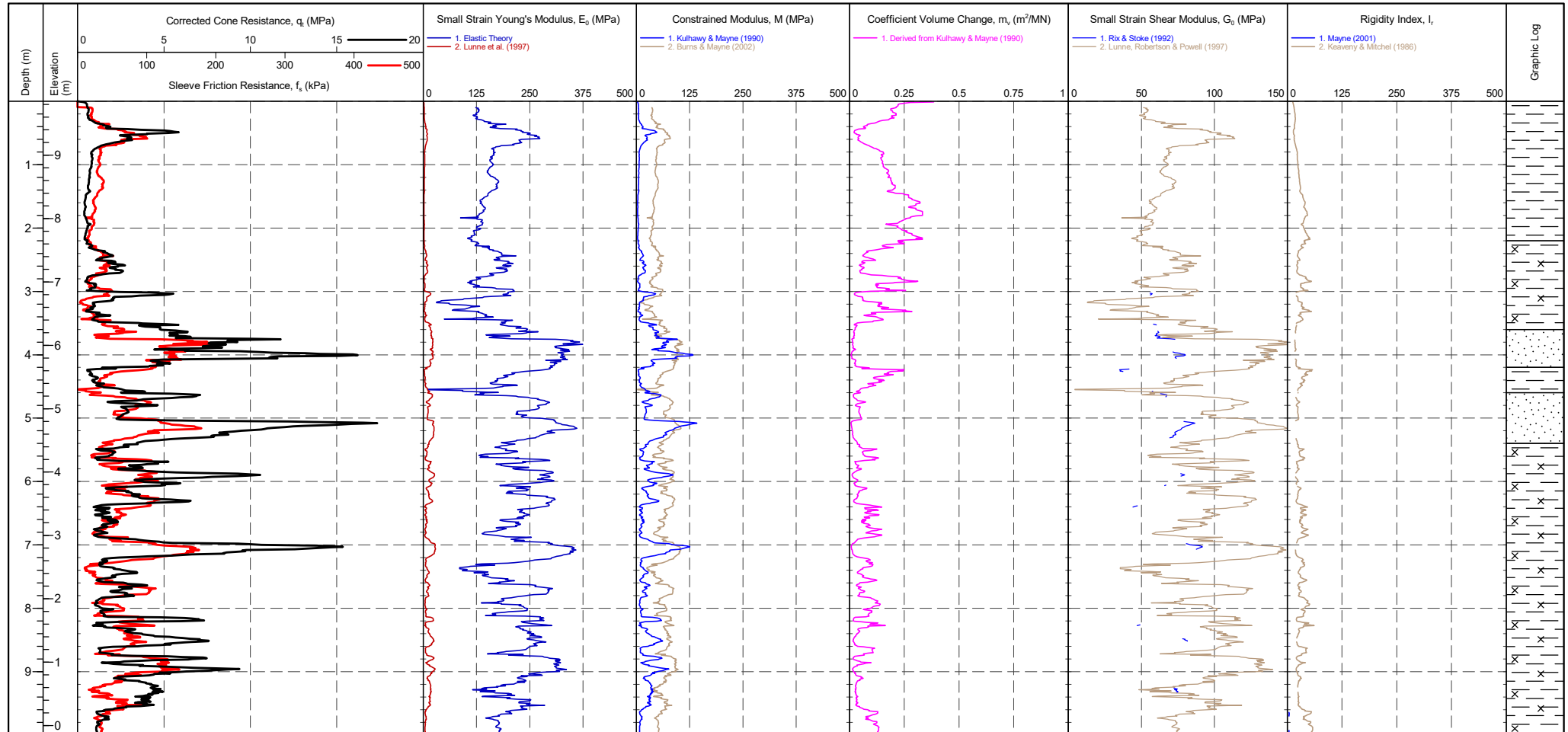
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

Groundwater Level
Dissipation Test

PointID

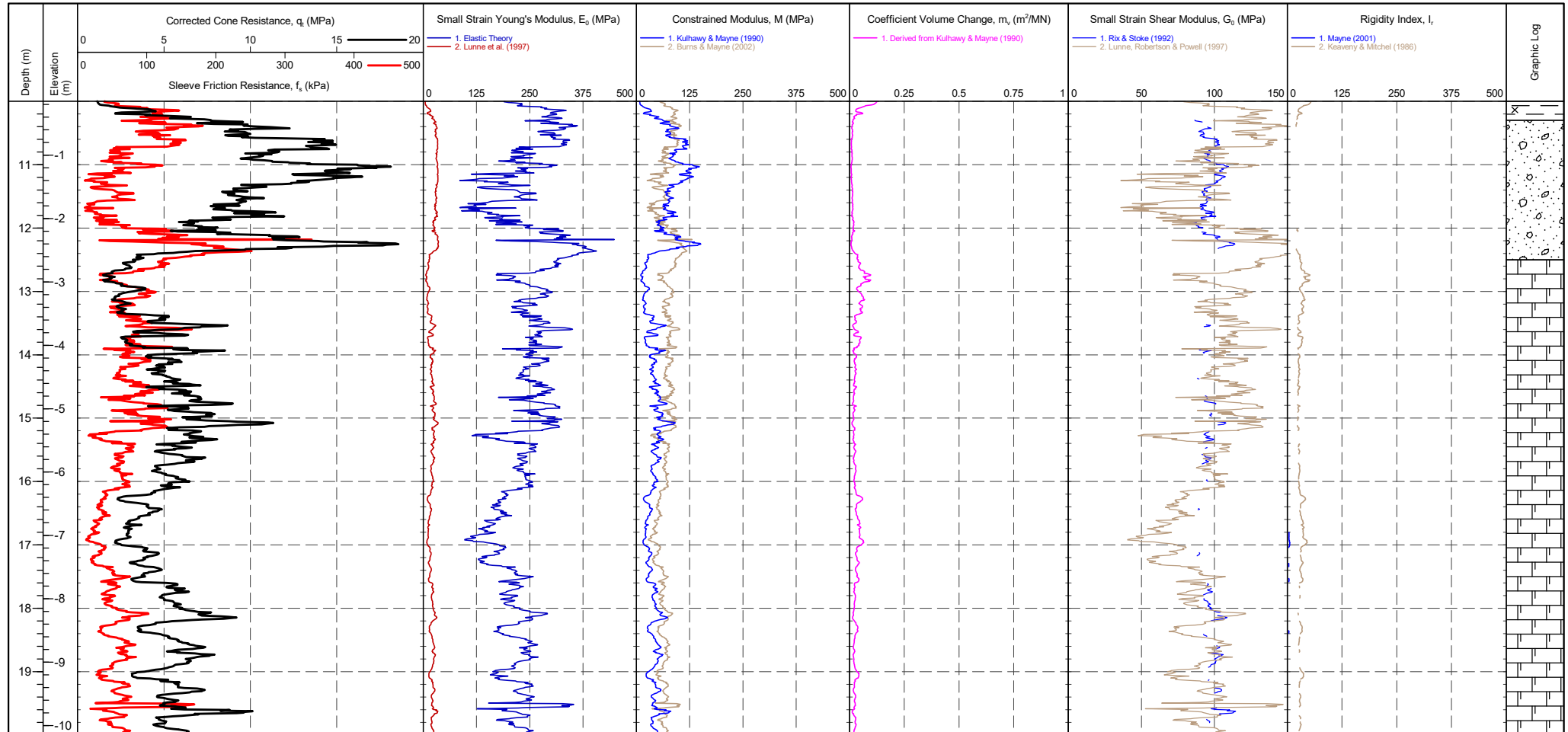
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

Groundwater Level
Dissipation Test

PointID

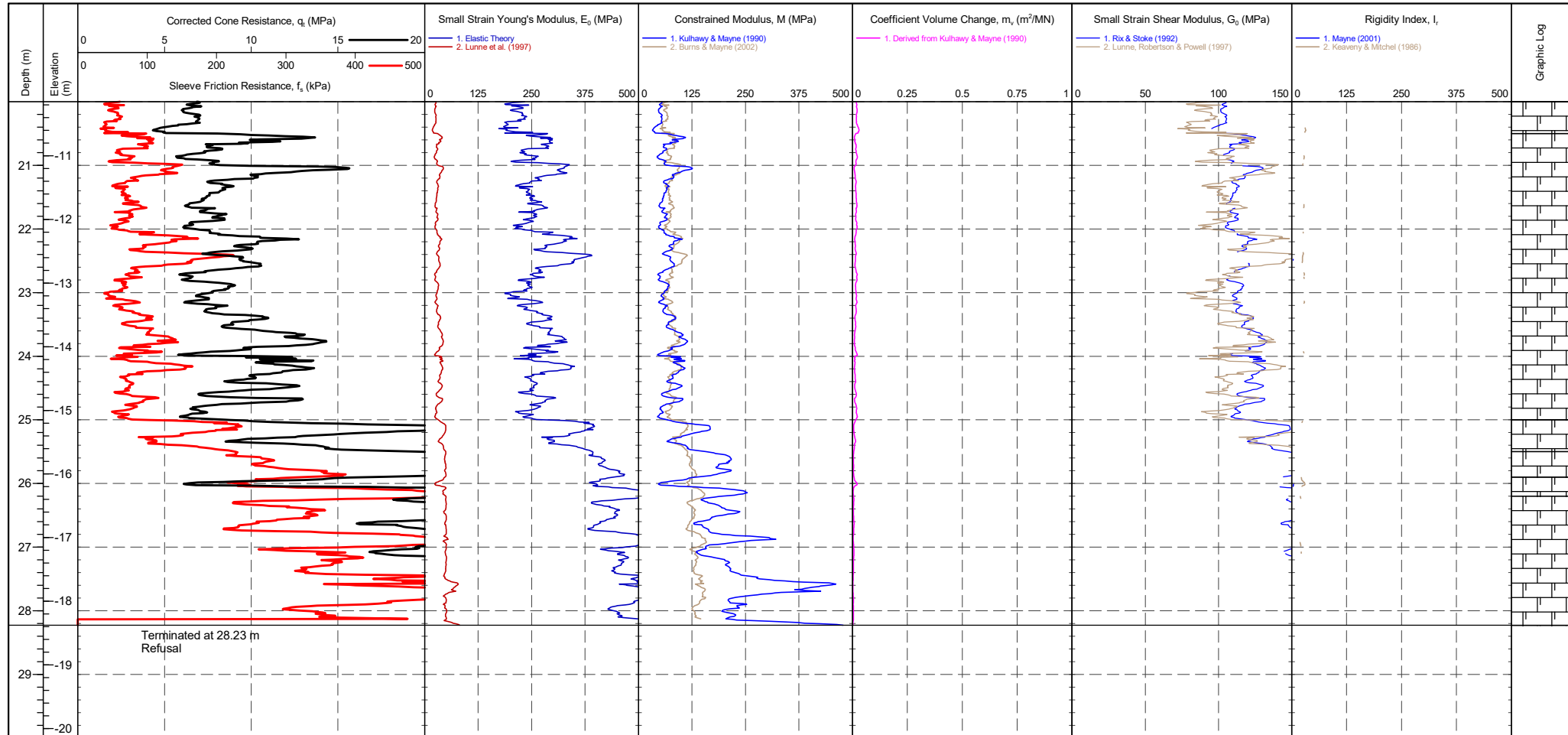
CPT109

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470148.8 m
NORTHING : 105718.3 m
ELEVATION : 9.85 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

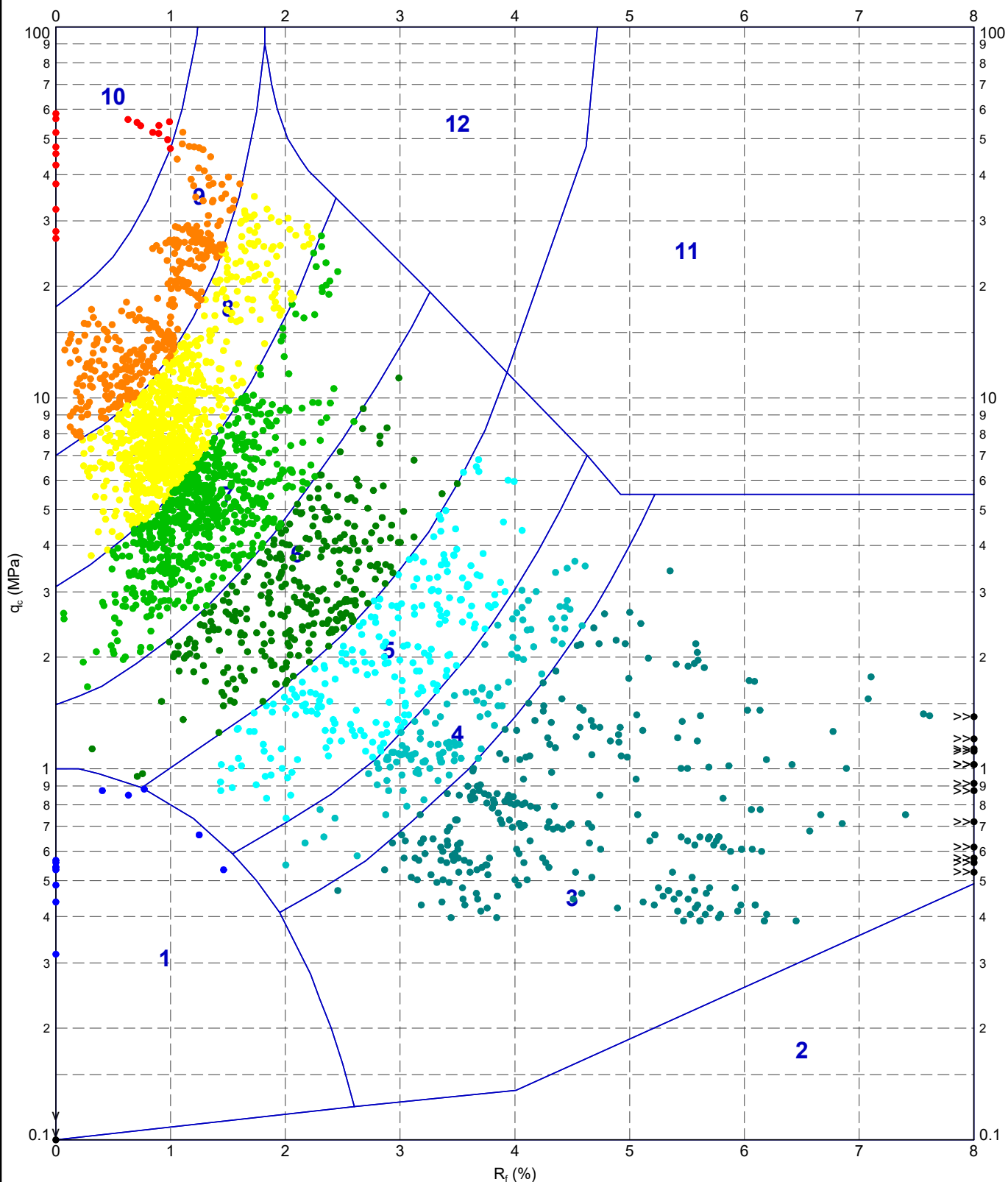
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.459	0.455	0.004038
Sleeve (kPa)	0.0914	0.0921	-0.000753
u2 (kPa)	-0.00779	0.00984	-0.01763
Inclinometer 1 (°)	-1.84	-1.84	0
Inclinometer 2 (°)	-0.852	-0.507	-0.345082

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE.GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF AMP 1210220 - BROCKHAMPTON - DELTA SIMONS CPT <<DrawingFile>> 25/05/2021 10:33 10:02:00.04 Datag Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Pj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT109

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

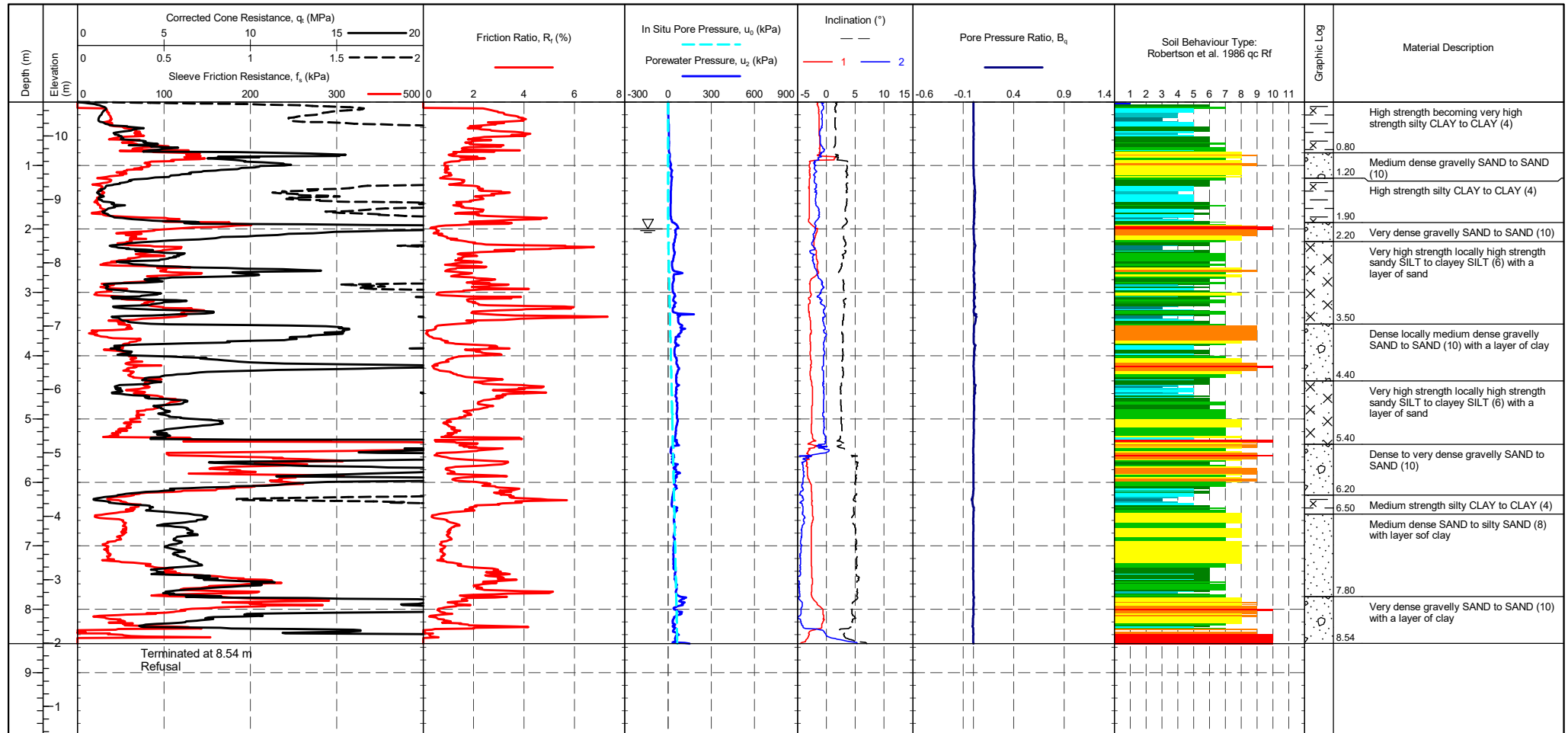
CPT110

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470271.9 m
NORTHING : 105676.7 m
ELEVATION : 10.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2	CPTU ZERO VALUES				METHOD: Robertson et al. 1986 qc Rf			Groundwater Level
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	RIG : CPT 022	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND	
CONE MODEL : Subtraction	OPERATOR : AL	WEATHER : Overcast & Mild	Tip (MPa)	0.468	0.469	-0.001615	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND	Dissipation Test
CONE AREA : 15cm ²	FRICITION REDUCER : None	GROUNDWATER DEPTH : Assumed for calculation purposes	Sleeve (kPa)	0.0911	0.0914	-0.000323	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained	
CONE AREA RATIO : 0.75			u2 (kPa)	-0.00697	0.00656	-0.01353	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND	
FILTER POSITION : u2			Inclinometer 1 (°)	-1.73	-2.41	0.686964				
FILTER TYPE : HDPE			Inclinometer 2 (°)	-0.954	0.547	-1.501412				

PointID

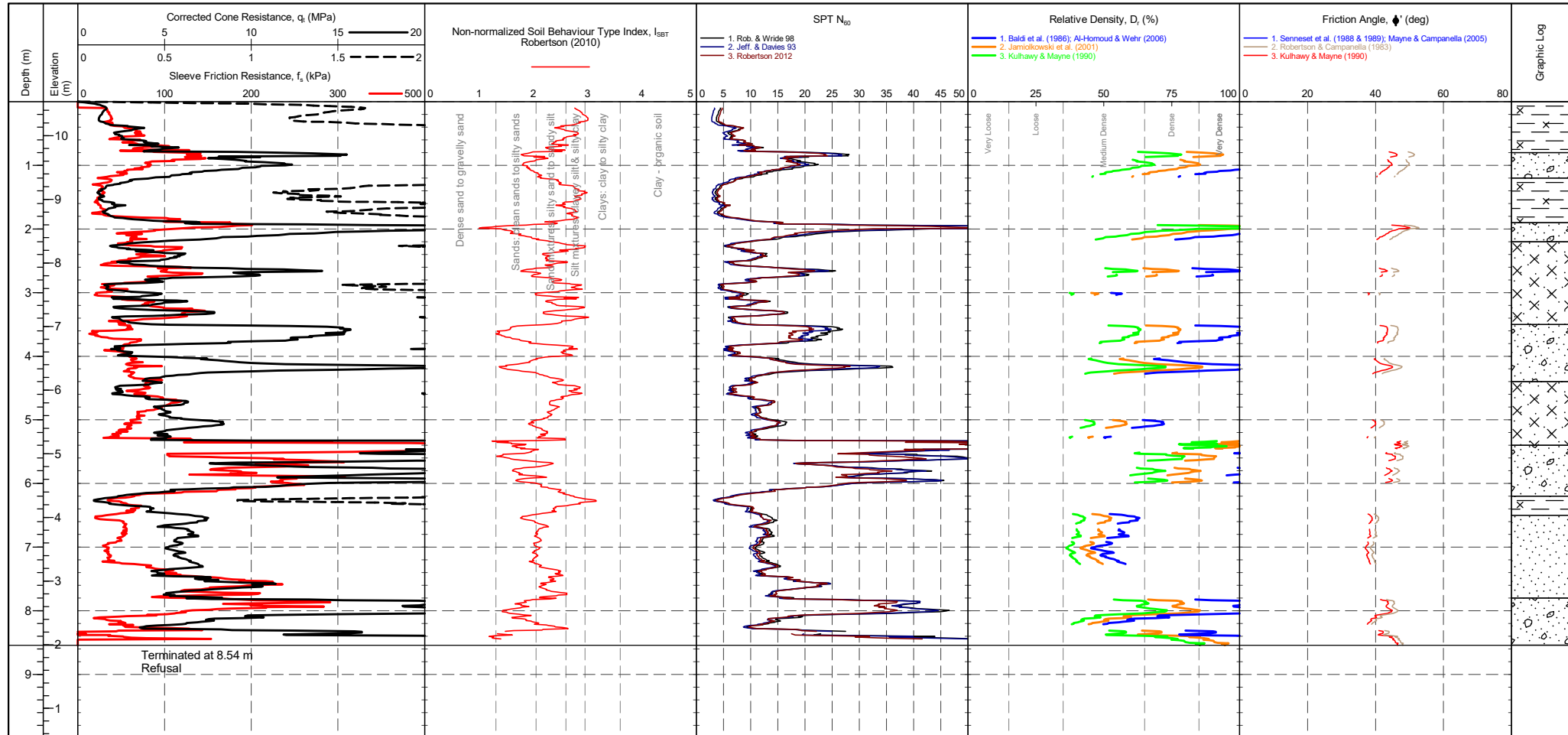
CPT110

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470271.9 m
NORTHING : 105676.7 m
ELEVATION : 10.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.468	0.469	-0.001615
Sleeve (kPa)	0.0911	0.0914	-0.000323
u2 (kPa)	-0.00697	0.00656	-0.01353
Inclinometer 1 (°)	-1.73	-2.41	0.686964
Inclinometer 2 (°)	-0.954	0.547	-1.501412

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

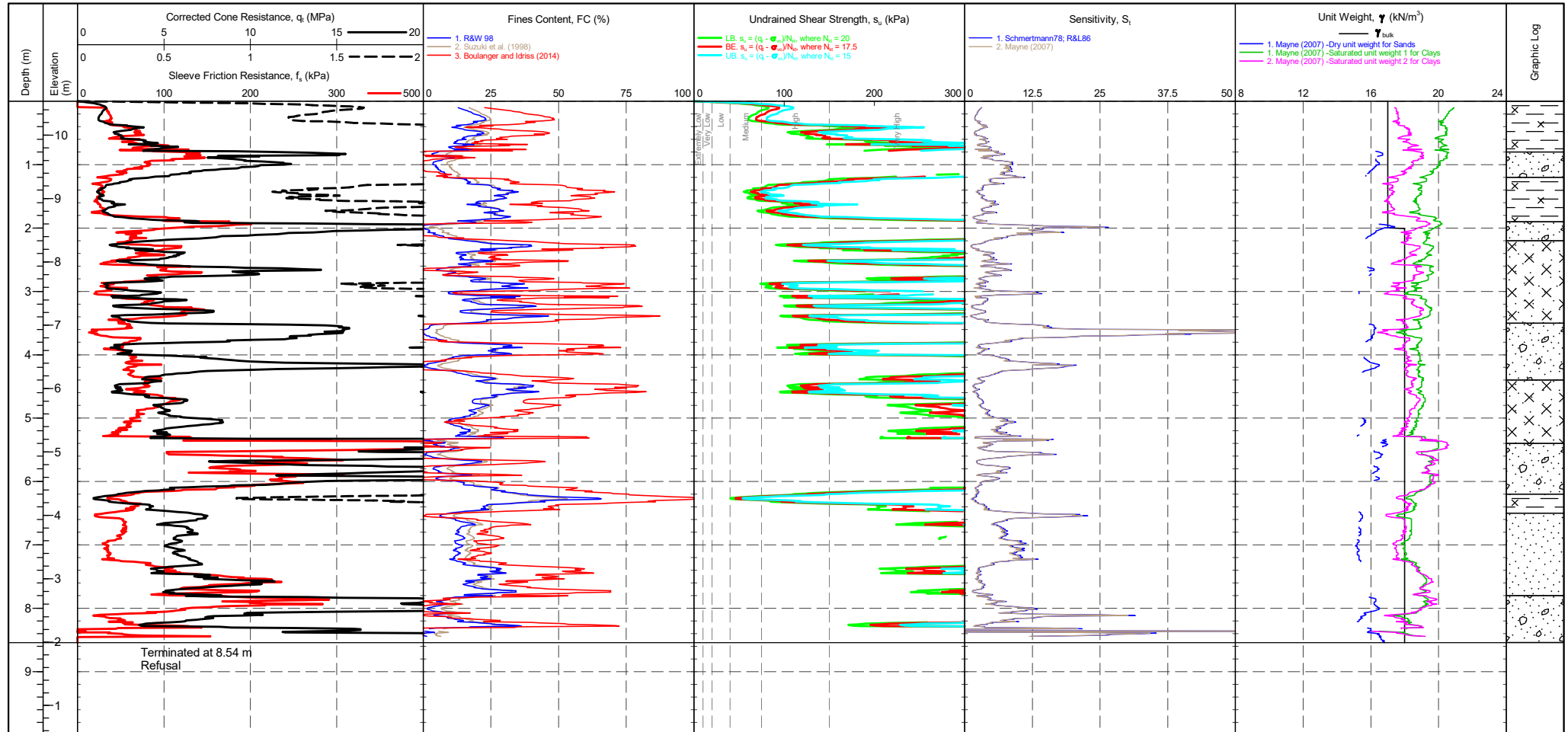
CPT110

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470271.9 m
NORTHING : 105676.7 m
ELEVATION : 10.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.468	0.469	-0.001615
Sleeve (kPa)	0.0911	0.0914	-0.000323
u2 (kPa)	-0.00697	0.00656	-0.01353
Inclinometer 1 (°)	-1.73	-2.41	0.686964
Inclinometer 2 (°)	-0.954	0.547	-1.501412

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

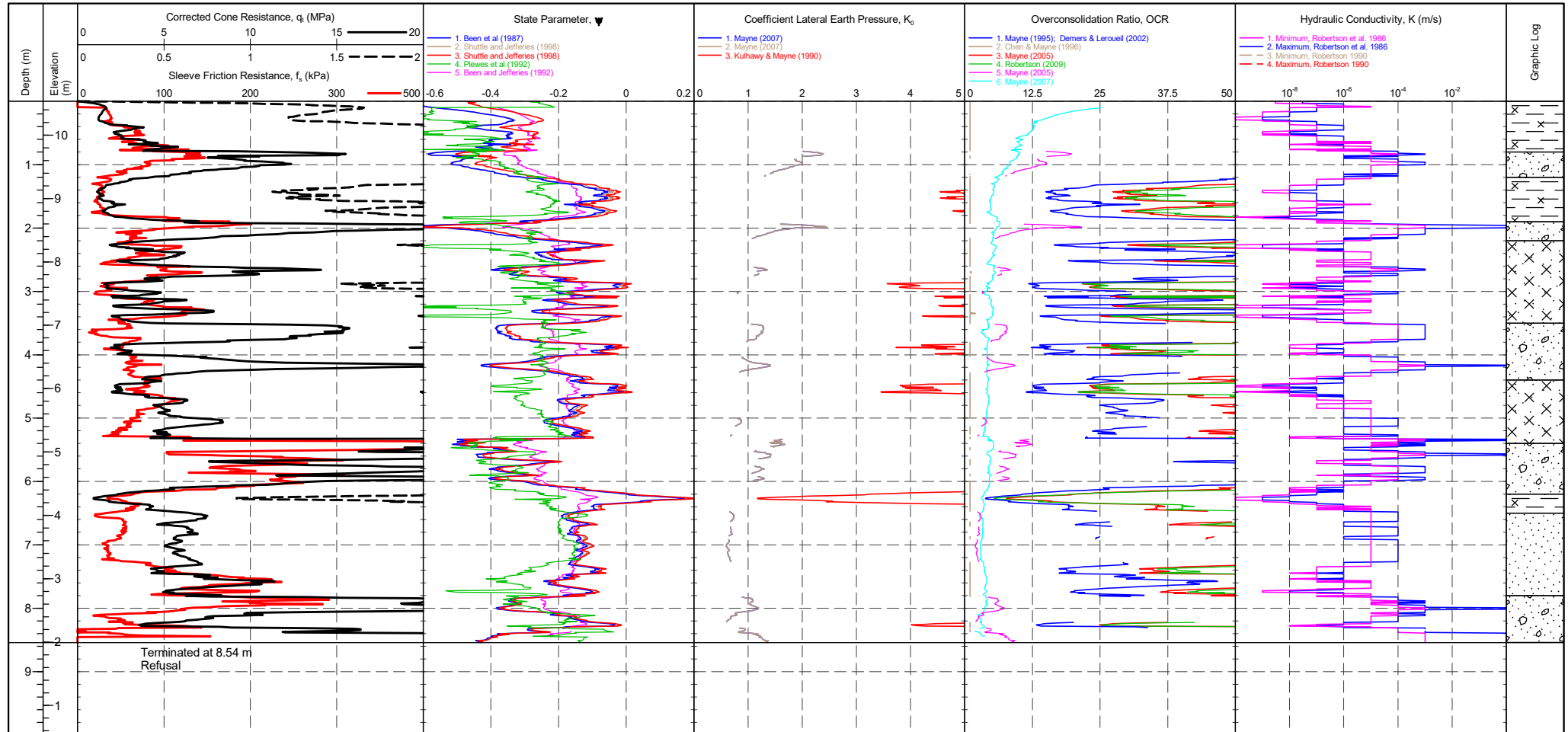
CPT110

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470271.9 m
NORTHING : 105676.7 m
ELEVATION : 10.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.468	0.469	-0.001615
Sleeve (kPa)	0.0911	0.0914	-0.000323
u2 (kPa)	-0.00697	0.00656	-0.01353
Inclinometer 1 (°)	-1.73	-2.41	0.686964
Inclinometer 2 (°)	-0.954	0.547	-1.501412

Groundwater Level
Dissipation Test

PointID

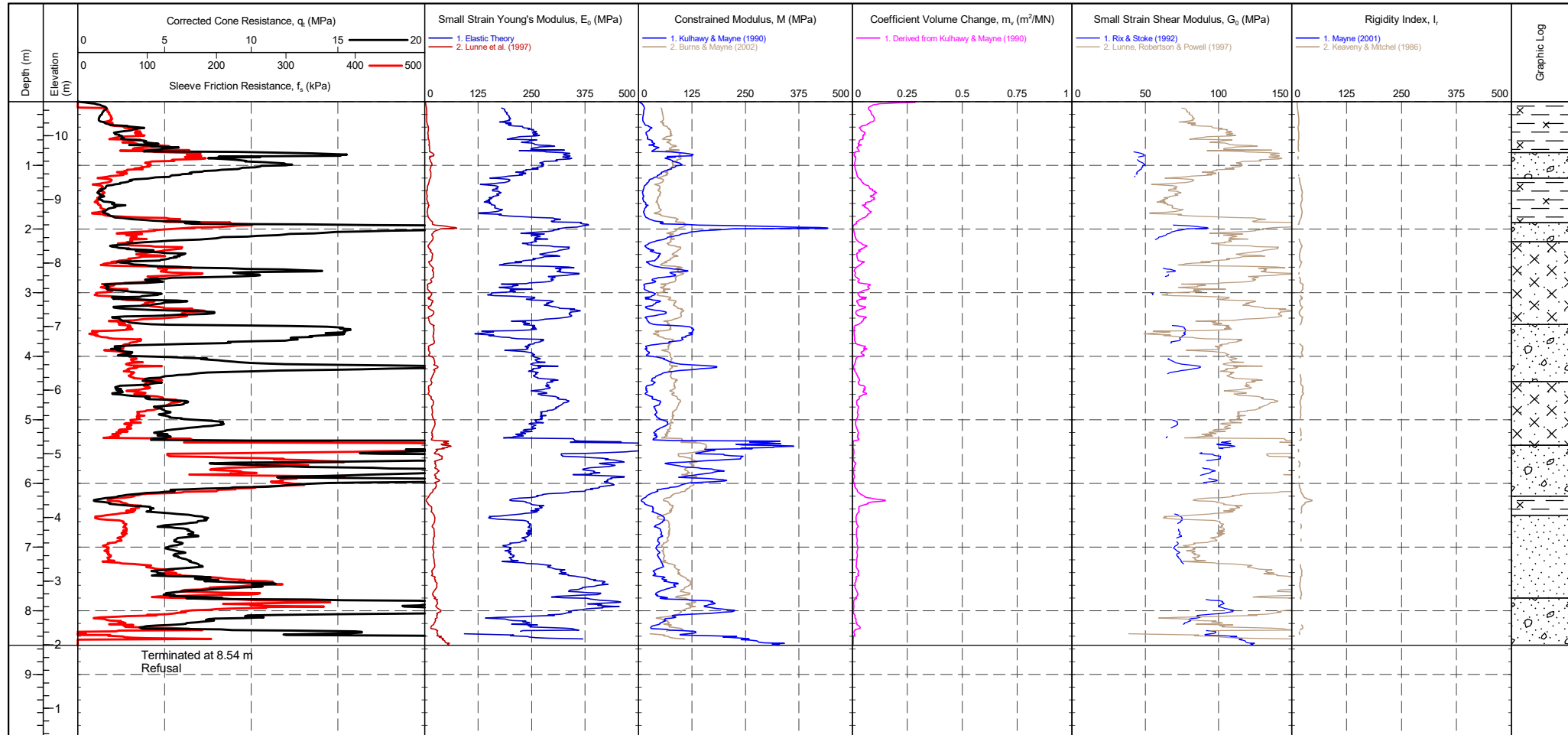
CPT110

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470271.9 m
NORTHING : 105676.7 m
ELEVATION : 10.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

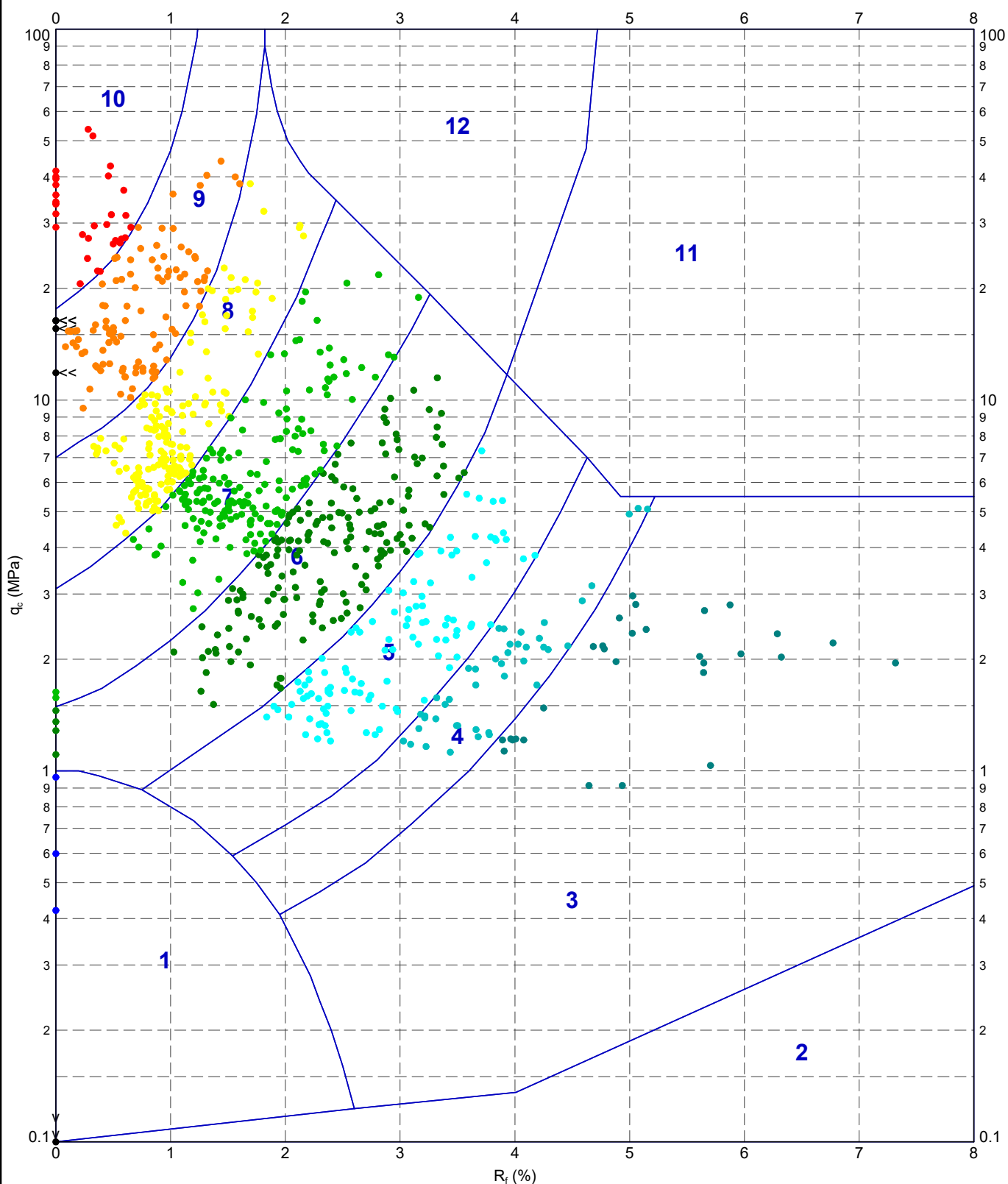
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.468	0.469	-0.001615
Sleeve (kPa)	0.0911	0.0914	-0.000323
u2 (kPa)	-0.00697	0.00656	-0.01353
Inclinometer 1 (°)	-1.73	-2.41	0.686964
Inclinometer 2 (°)	-0.954	0.547	-1.501412

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF AMP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 10:37 10.02.00.04 Dated Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Proj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT110

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

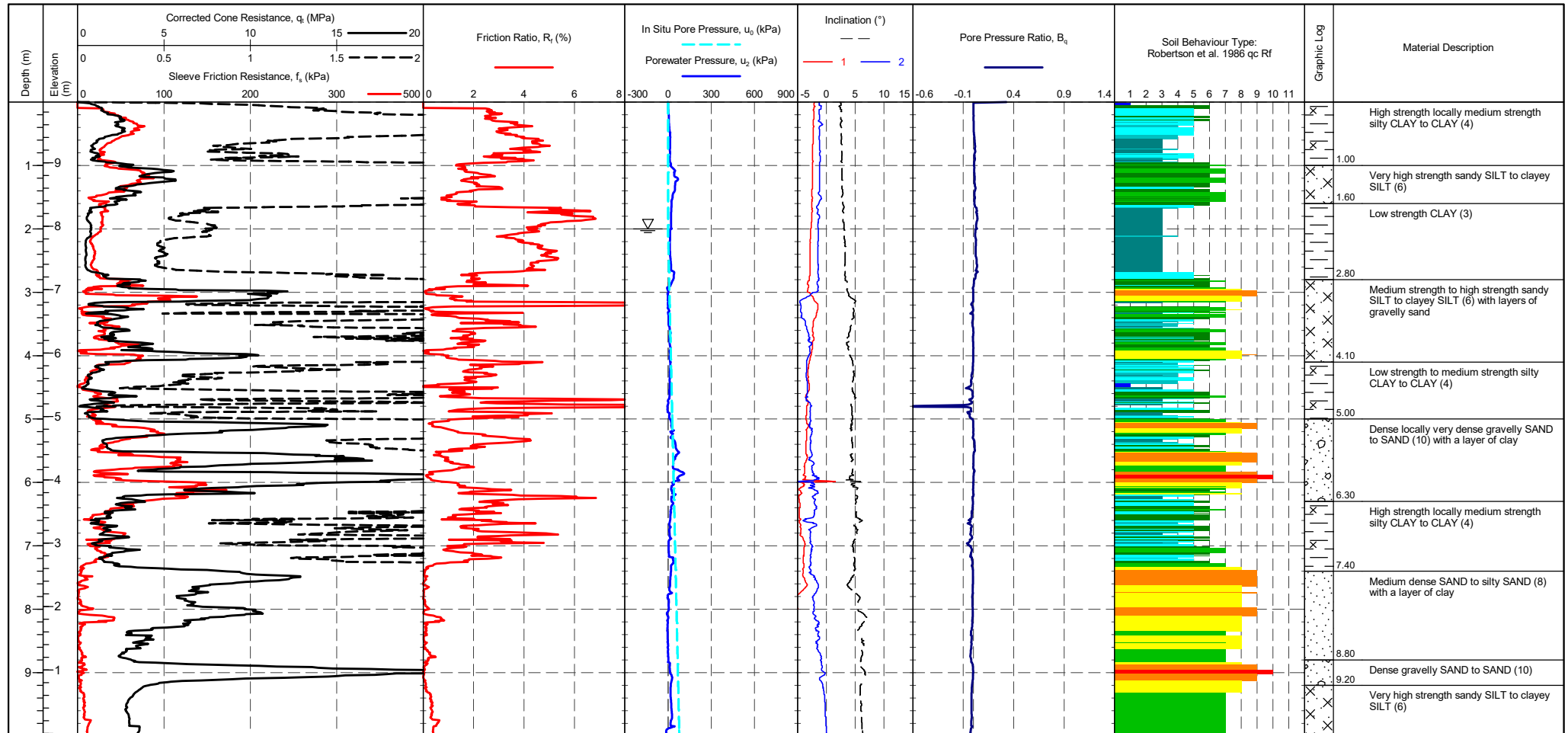
CPT111

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.437	0.436	0.000808	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0782	0.0799	-0.00172	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00791	-0.00369	-0.004223	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-2.07	-2.07	0		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-1.06	-1.28	0.220264		10 - Gravelly SAND to SAND	
									12 - SAND to clayey SAND	

PointID

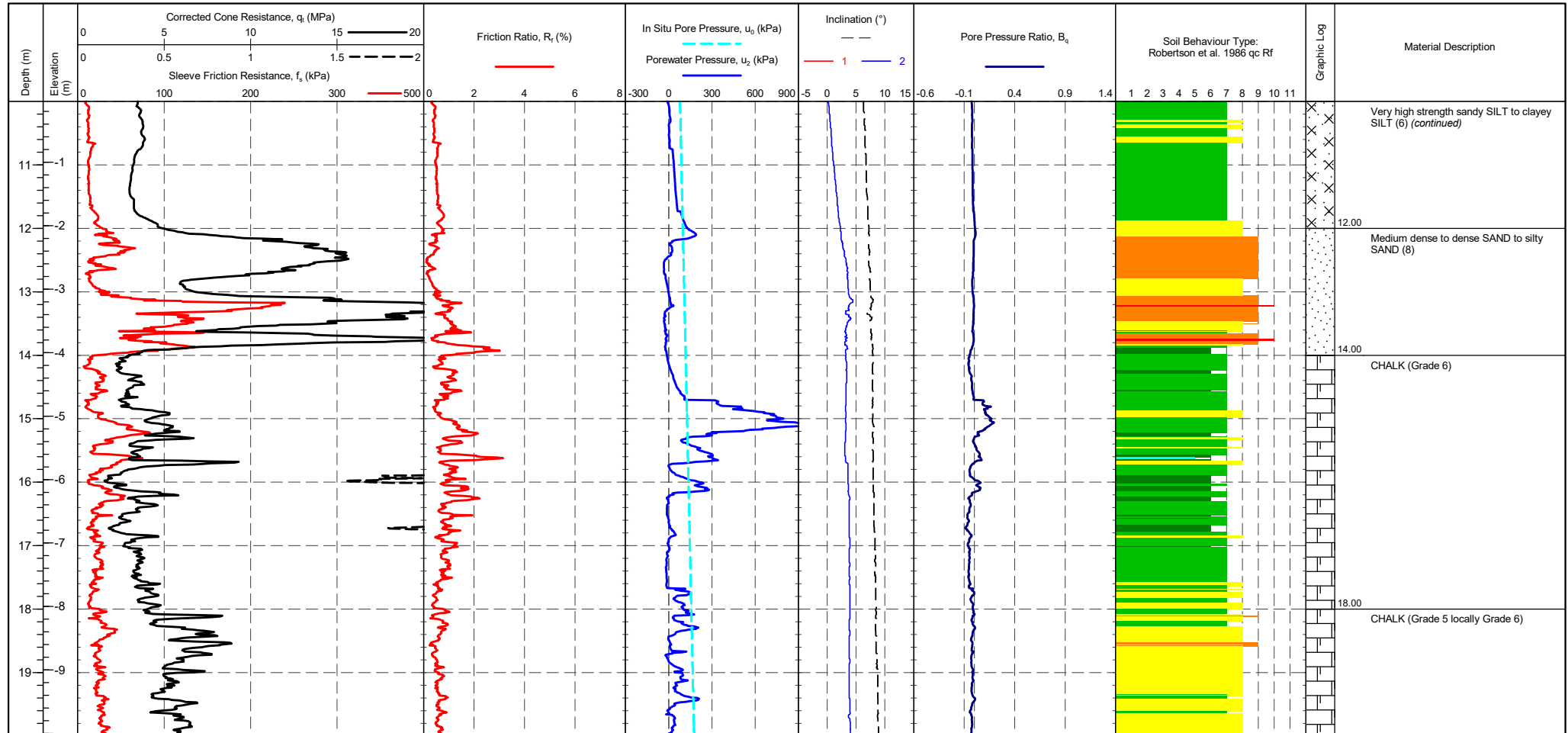
CPT111

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 $q_c R_f$			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.437	0.436	0.000808	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0782	0.0799	-0.00172	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u_2 (kPa)	-0.00791	-0.00369	-0.004223	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (i)	-2.07	-2.07	0		9 - SAND	10 - Gravelly SAND to SAND 11 - Very stiff fine grained 12 - SAND to clayey SAND
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (i)	-1.06	-1.28	0.220264		10 - Gravelly SAND to SAND	

PointID

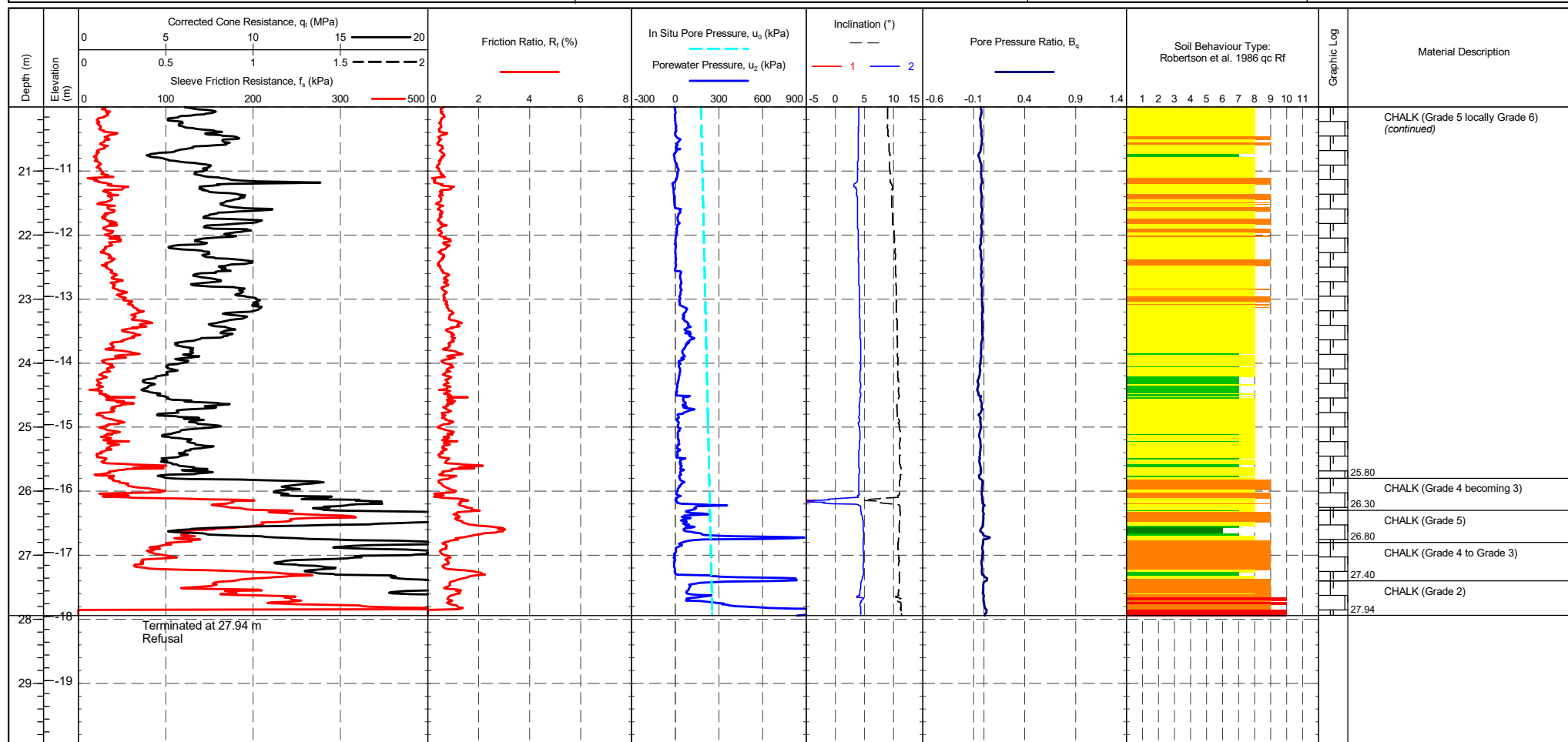
CPT111

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID	: DP15-CFPTxy.71069	TEST TYPE	: TE2	CPTU ZERO VALUES				METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE	: 13/11/2020	APPLICATION CLASS	: 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND	
CONE MODEL	: Subtraction	RIG	: CPT 022	Tip (MPa)	0.437	0.436	0.000808	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND	
CONE AREA	: 15cm ²	OPERATOR	: AL	Sleeve (kPa)	0.0782	0.0799	-0.00172	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained	
CONE AREA RATIO	: 0.75	FRICTION REDUCER	: None	u2 (kPa)	-0.00791	-0.00369	-0.004223	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND	
FILTER POSITION	: u2	WEATHER	: Overcast & Mild	Inclinometer 1 (°)	-2.07	-2.07	0				
FILTER TYPE	: HDPE	GROUNDWATER DEPTH	: Assumed for calculation purposes	Inclinometer 2 (°)	-1.06	-1.28	0.220264				

Groundwater Level

Dissipation Test

PointID

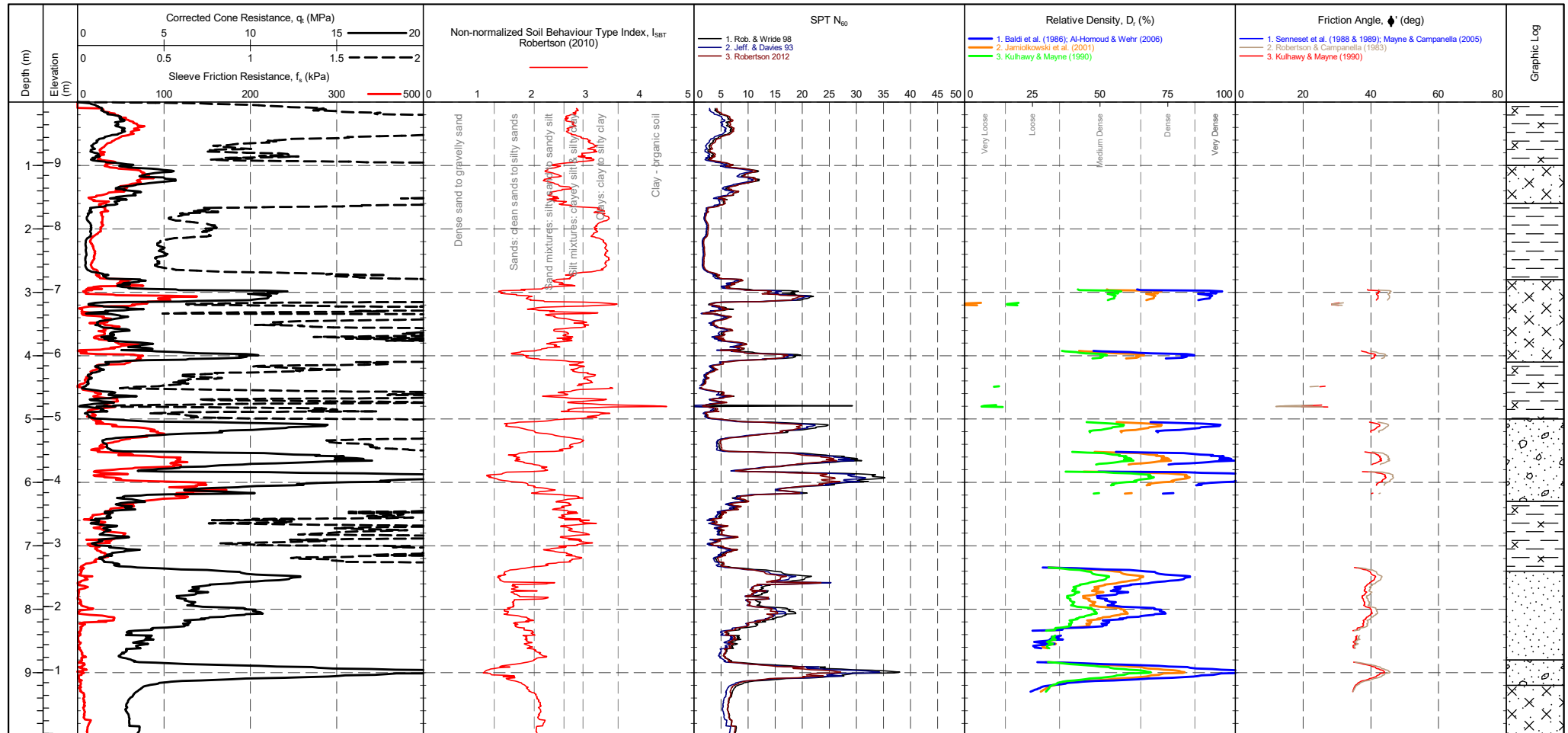
CPT111

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPT ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

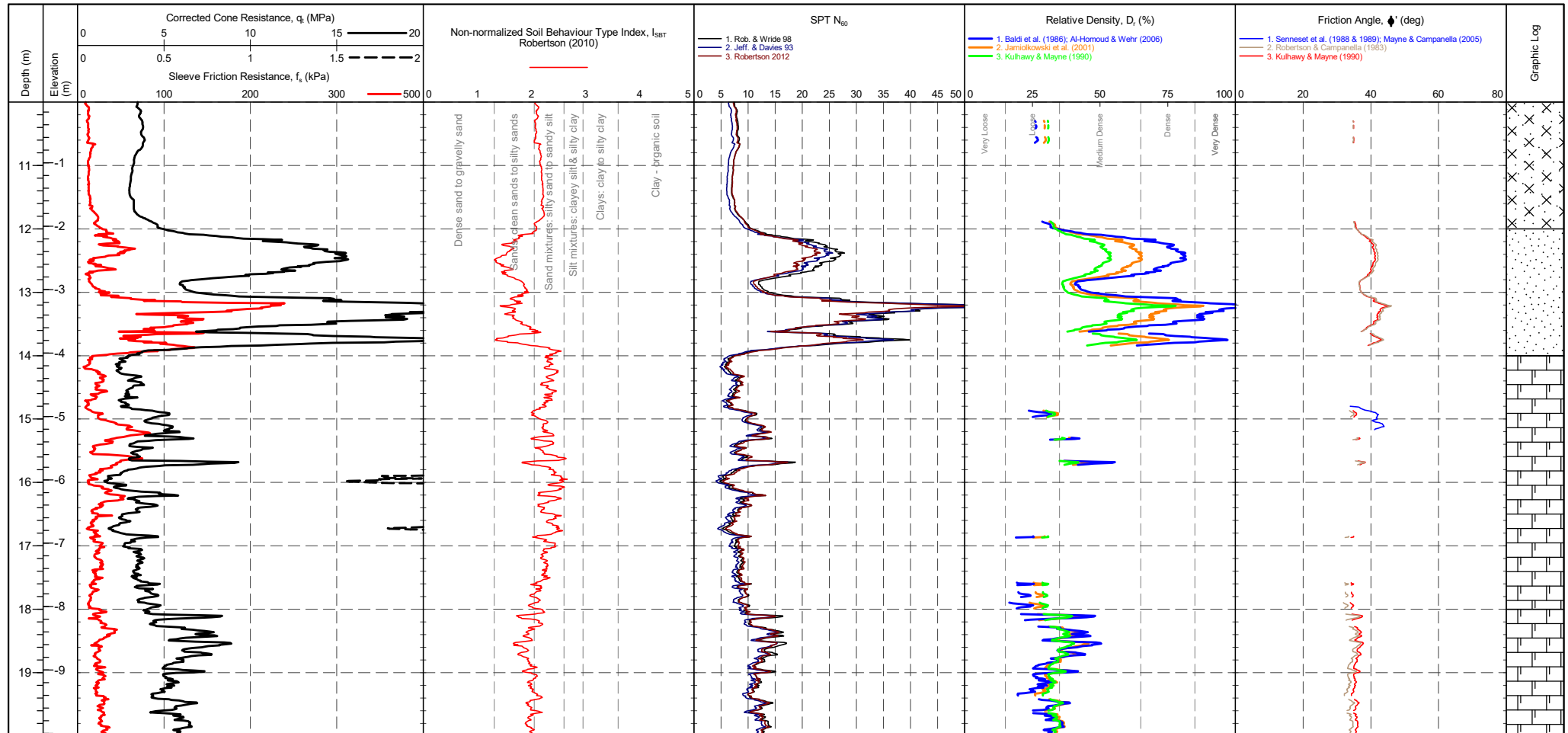
CPT111

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES
Transducer Pre Post Difference
Tip (MPa) 0.437 0.436 0.000808
Sleeve (kPa) 0.0782 0.0799 -0.00172
u2 (kPa) -0.00791 -0.00369 -0.004223
Inclinometer 1 (°) -2.07 -2.07 0
Inclinometer 2 (°) -1.06 -1.28 0.220264

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I _c	Description	SPT N value, NSPT	Description	Relative Density Dr (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

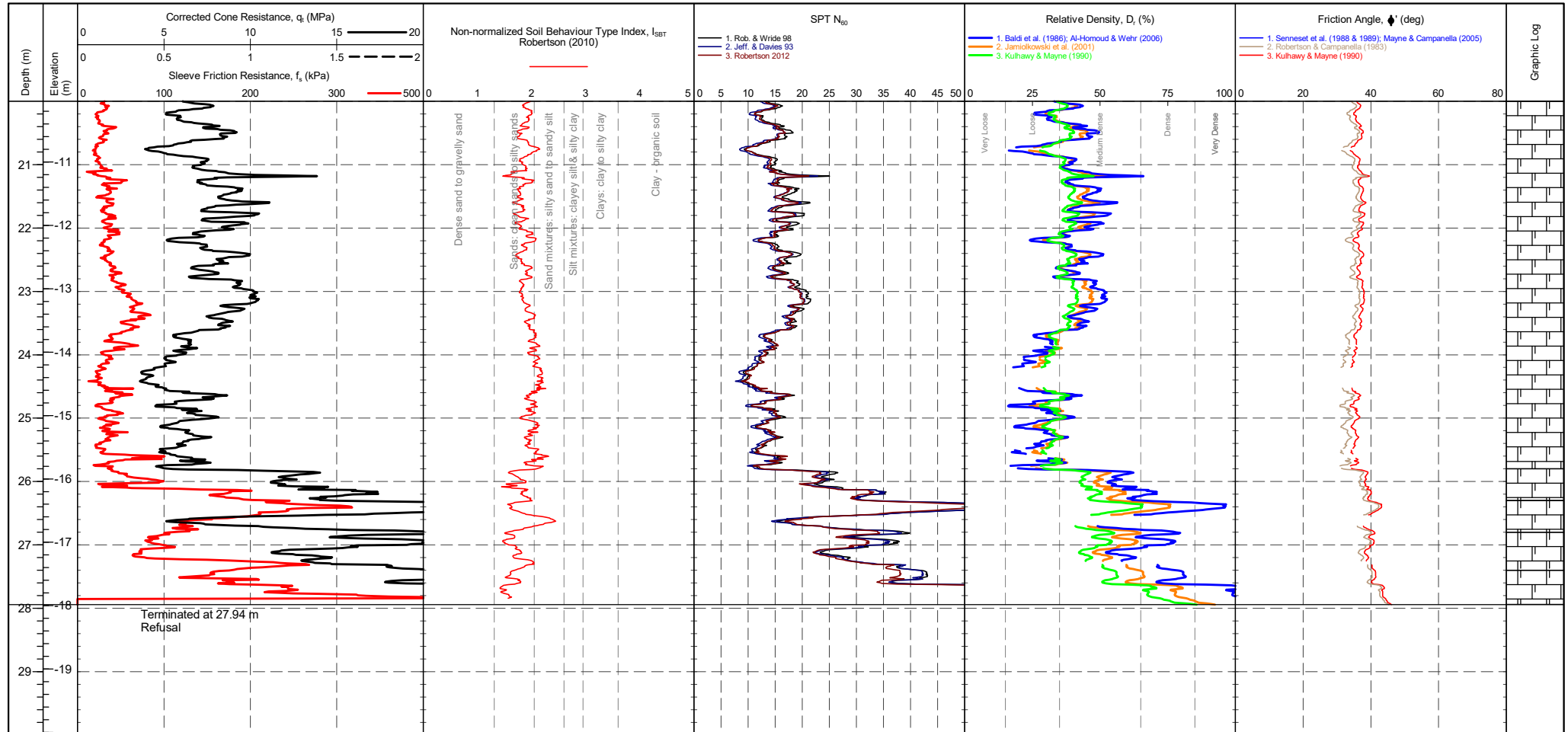
CPT111

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

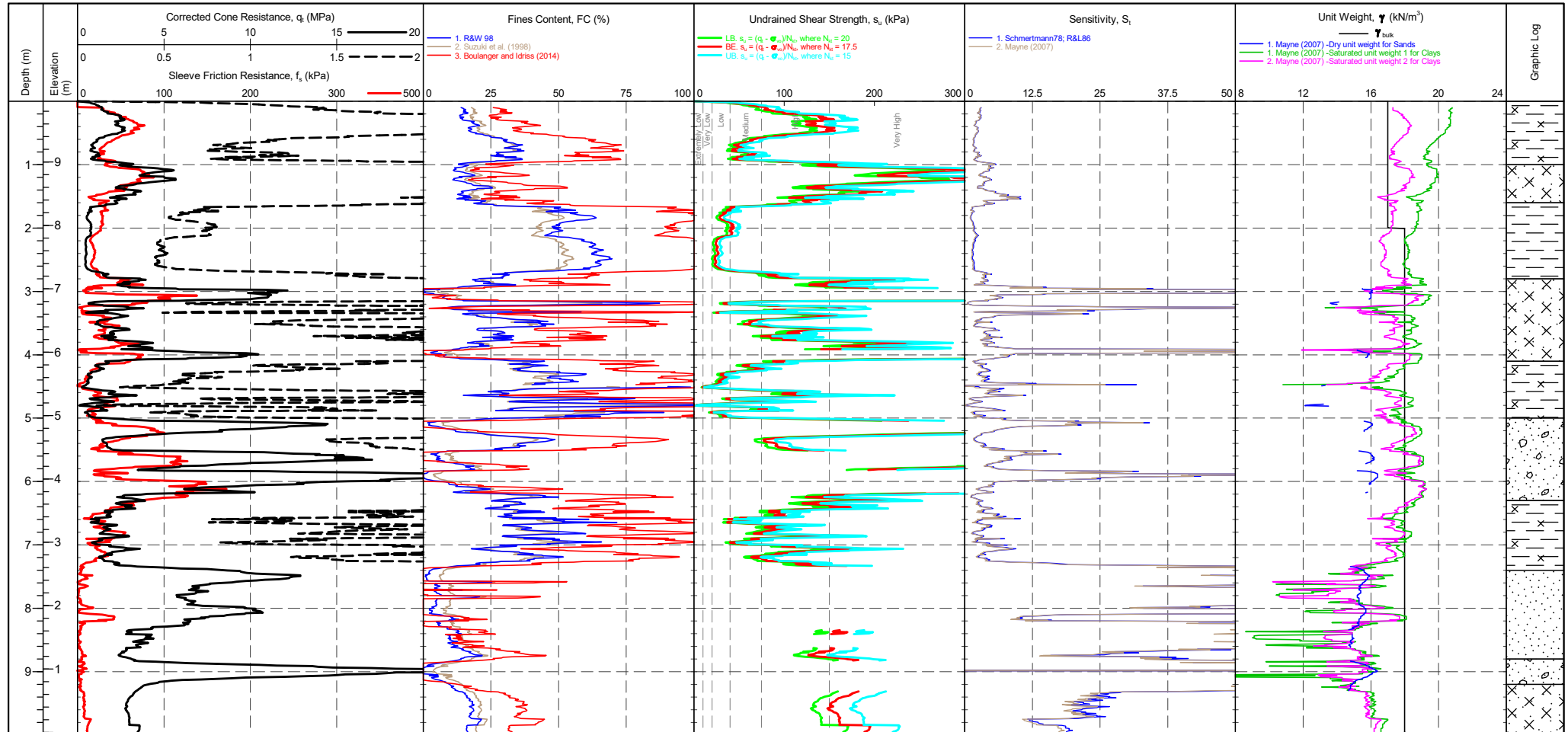
CPT111

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.437 0.436 0.000808
Sleeve (kPa) 0.0782 0.0799 -0.00172
u2 (kPa) -0.00791 -0.00369 -0.004223
Inclinometer 1 (°) -2.07 -2.07 0
Inclinometer 2 (°) -1.06 -1.28 0.220264

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

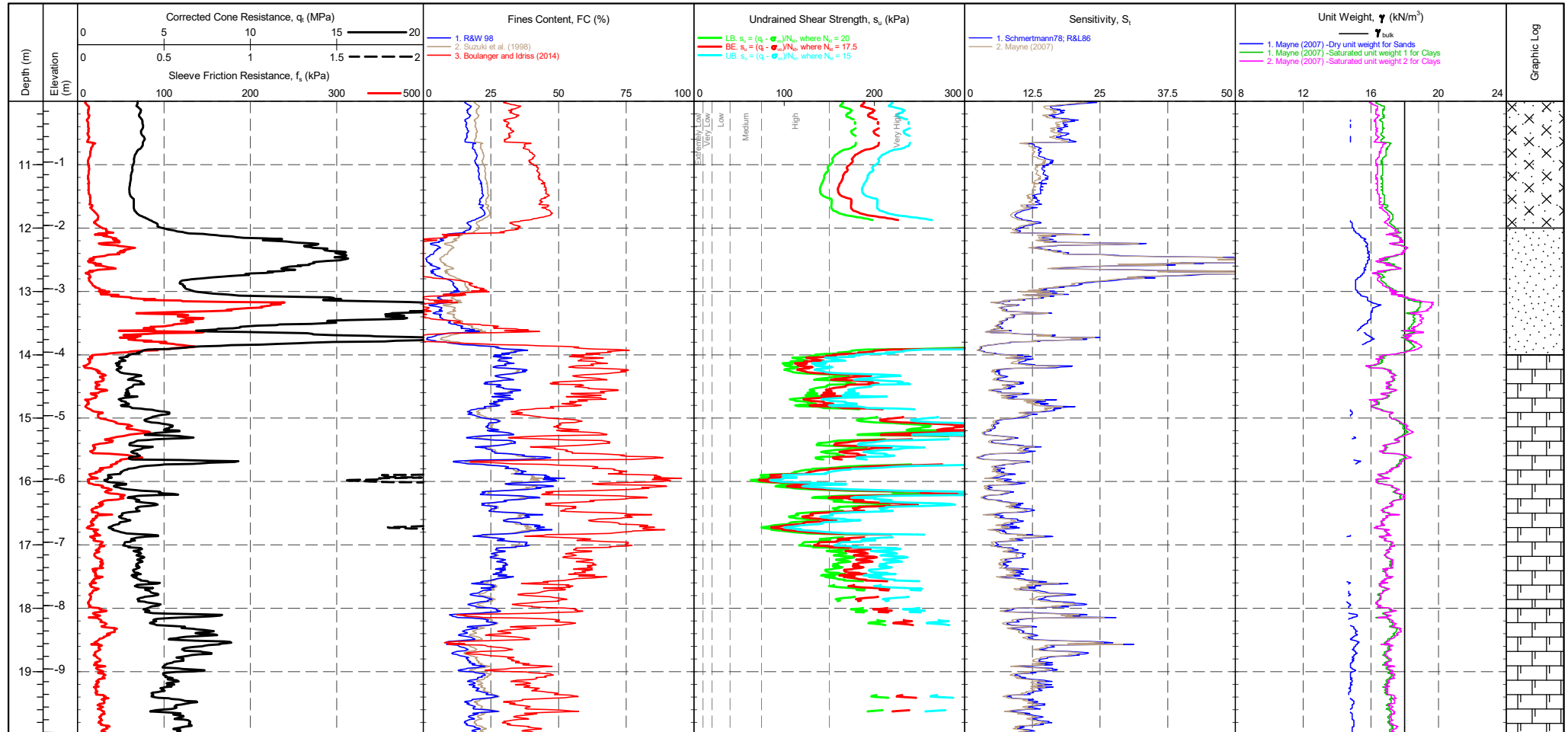
CPT111

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

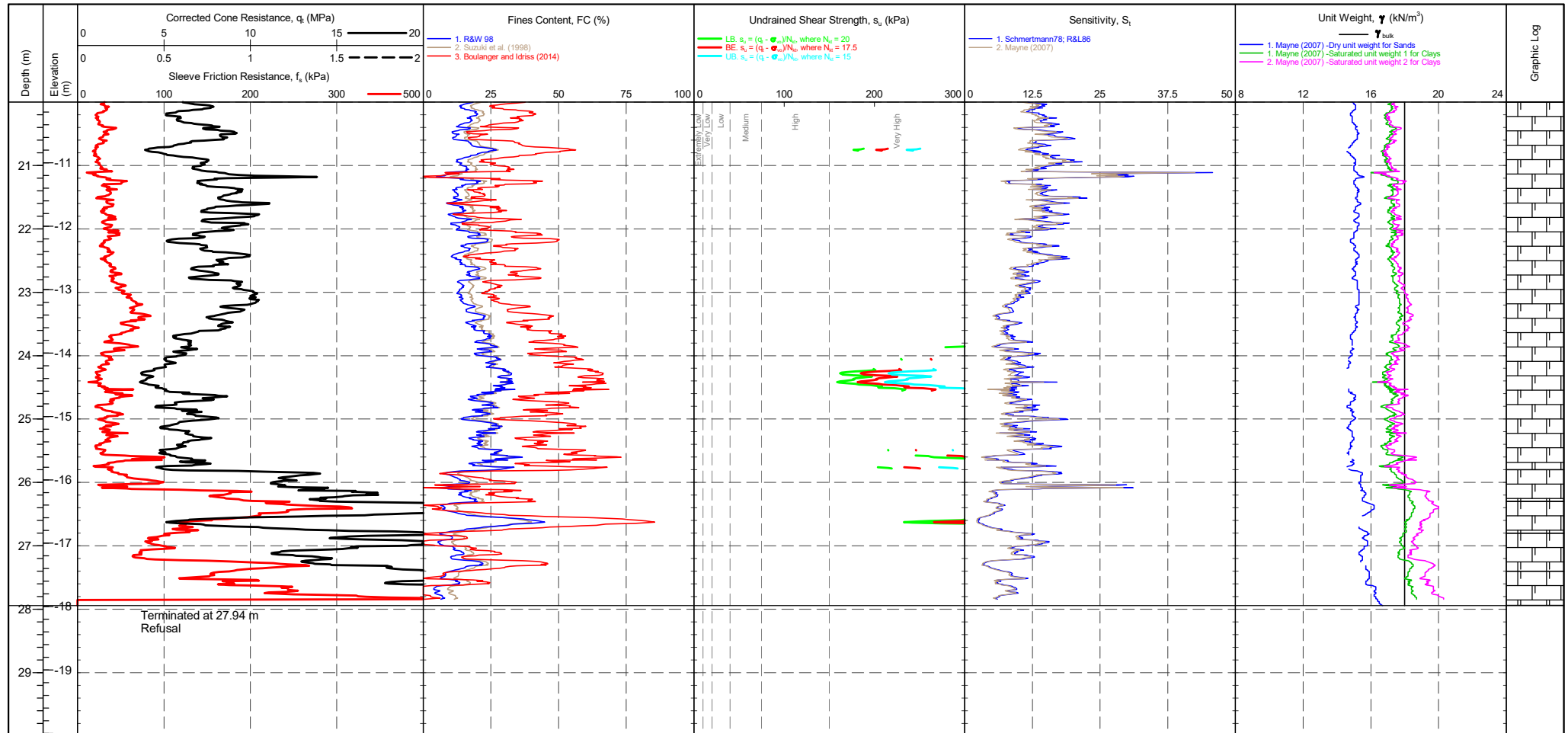
CPT111

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

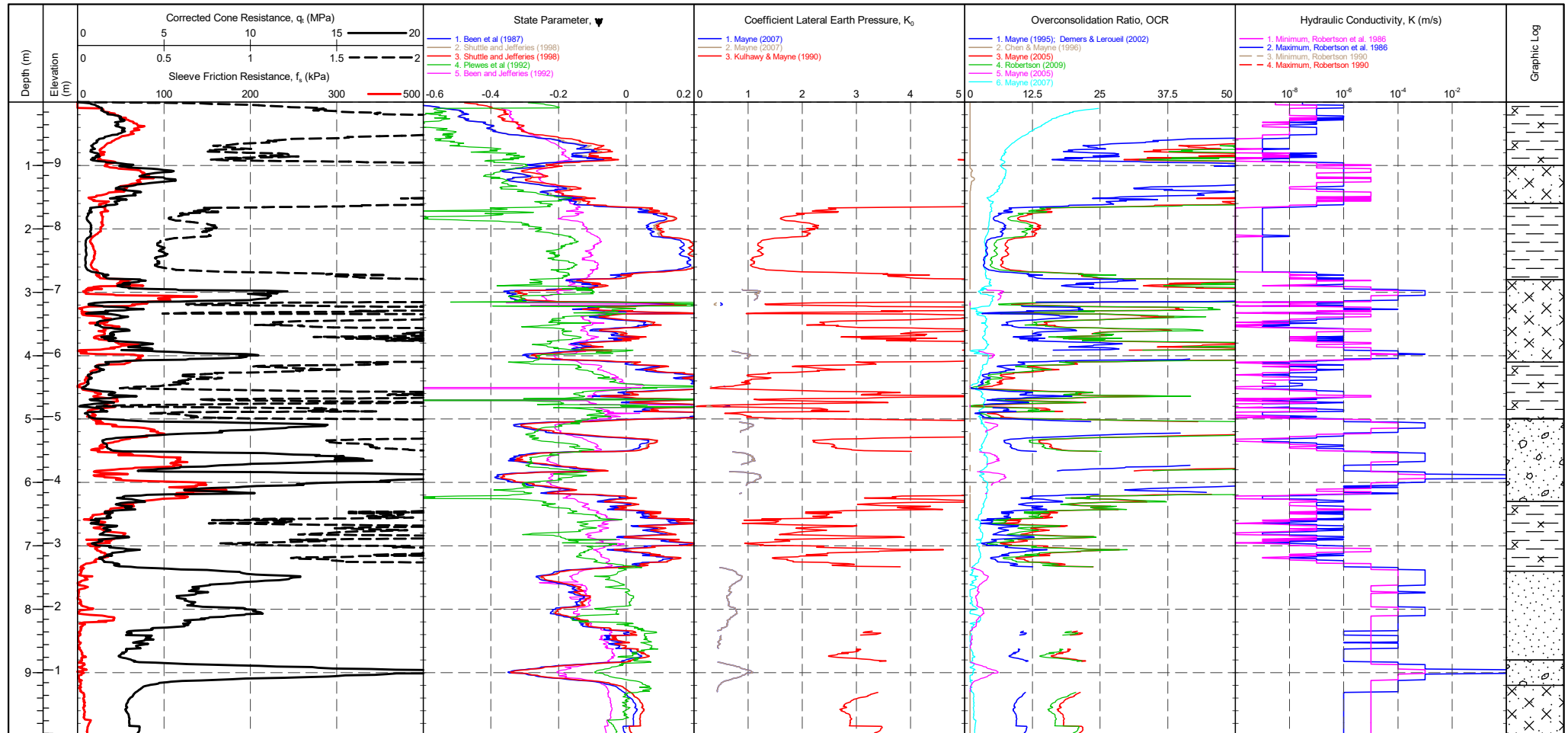
CPT111

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

Groundwater Level
Dissipation Test

PointID

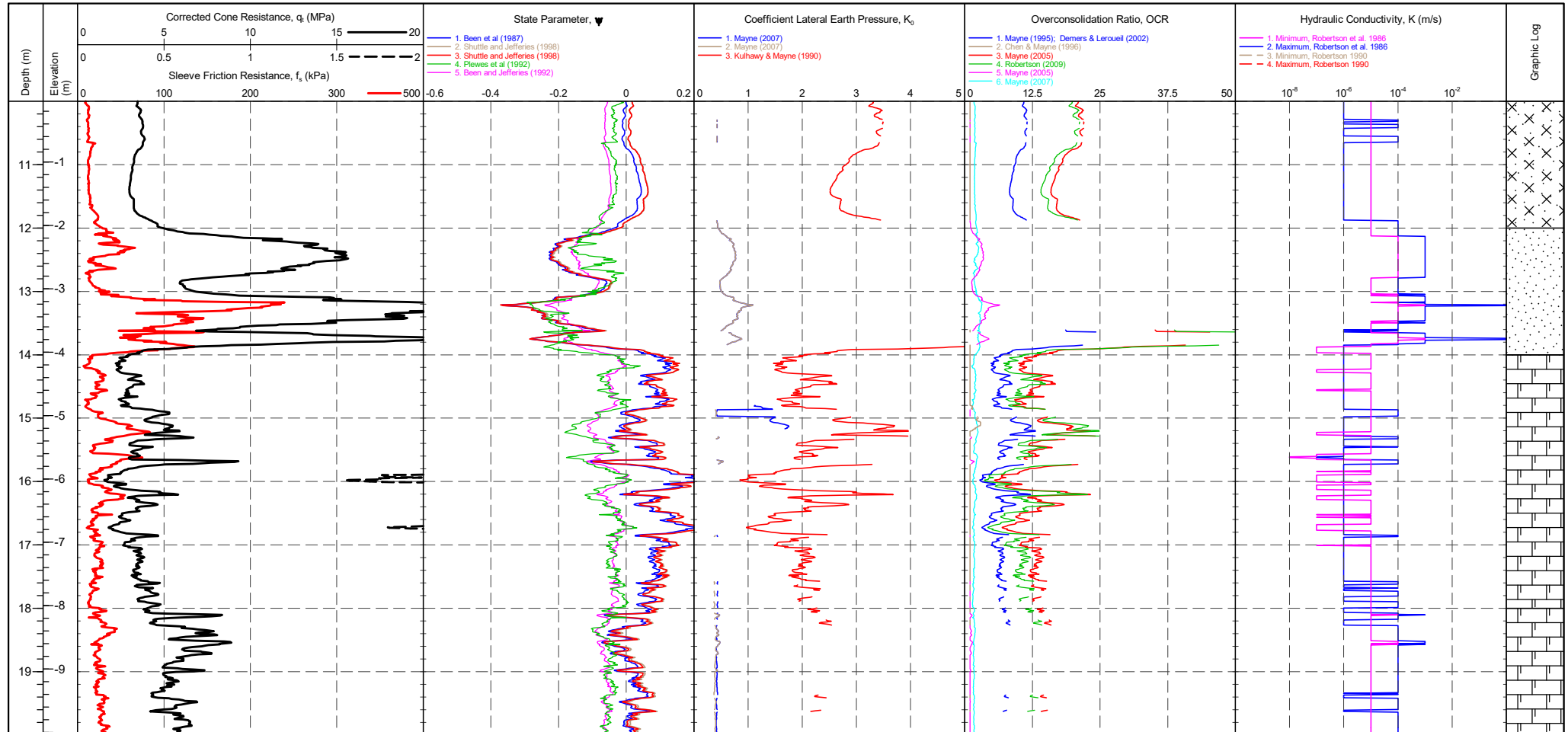
CPT111

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES			
Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0762	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

Groundwater Level
Dissipation Test

PointID

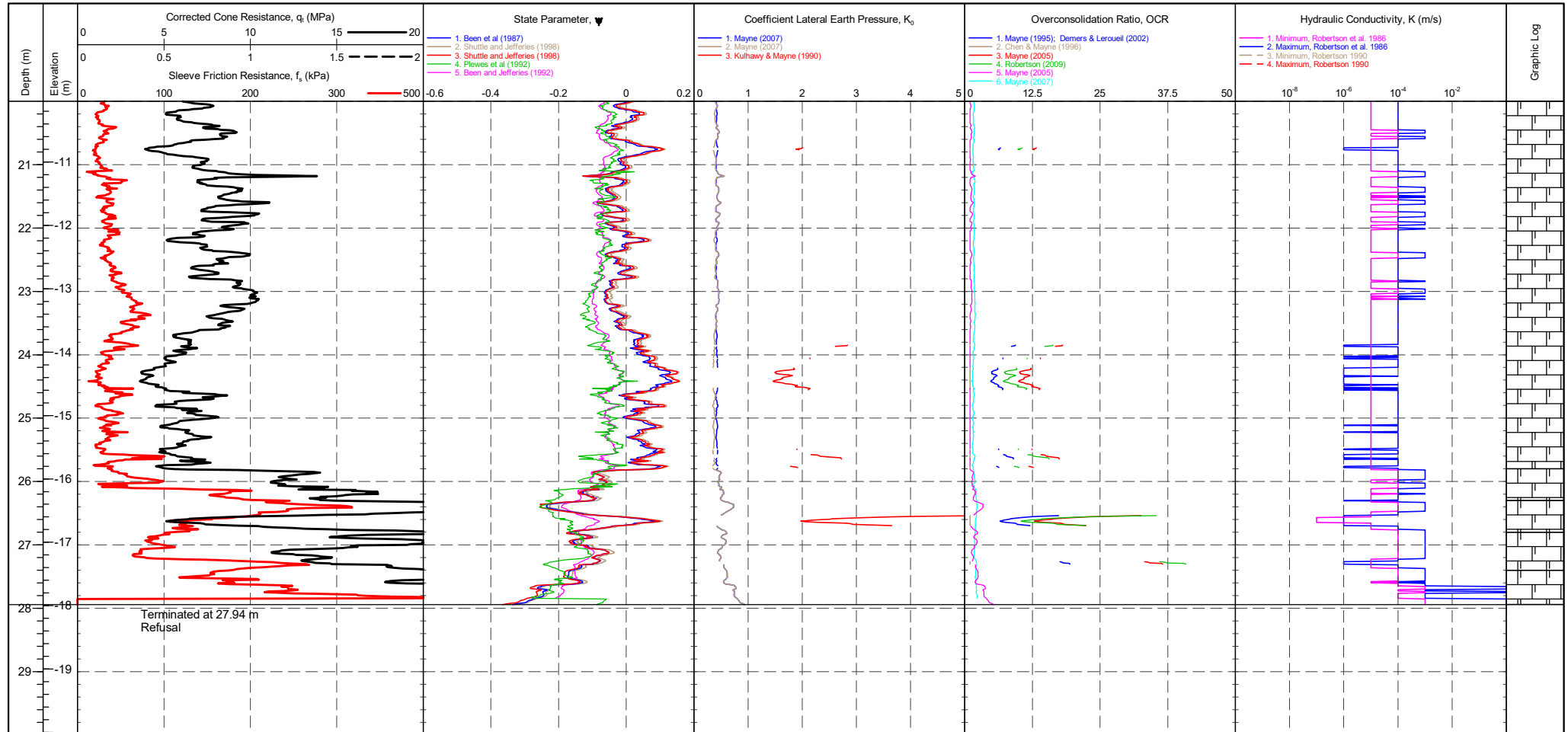
CPT111

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

Groundwater Level
Dissipation Test

PointID

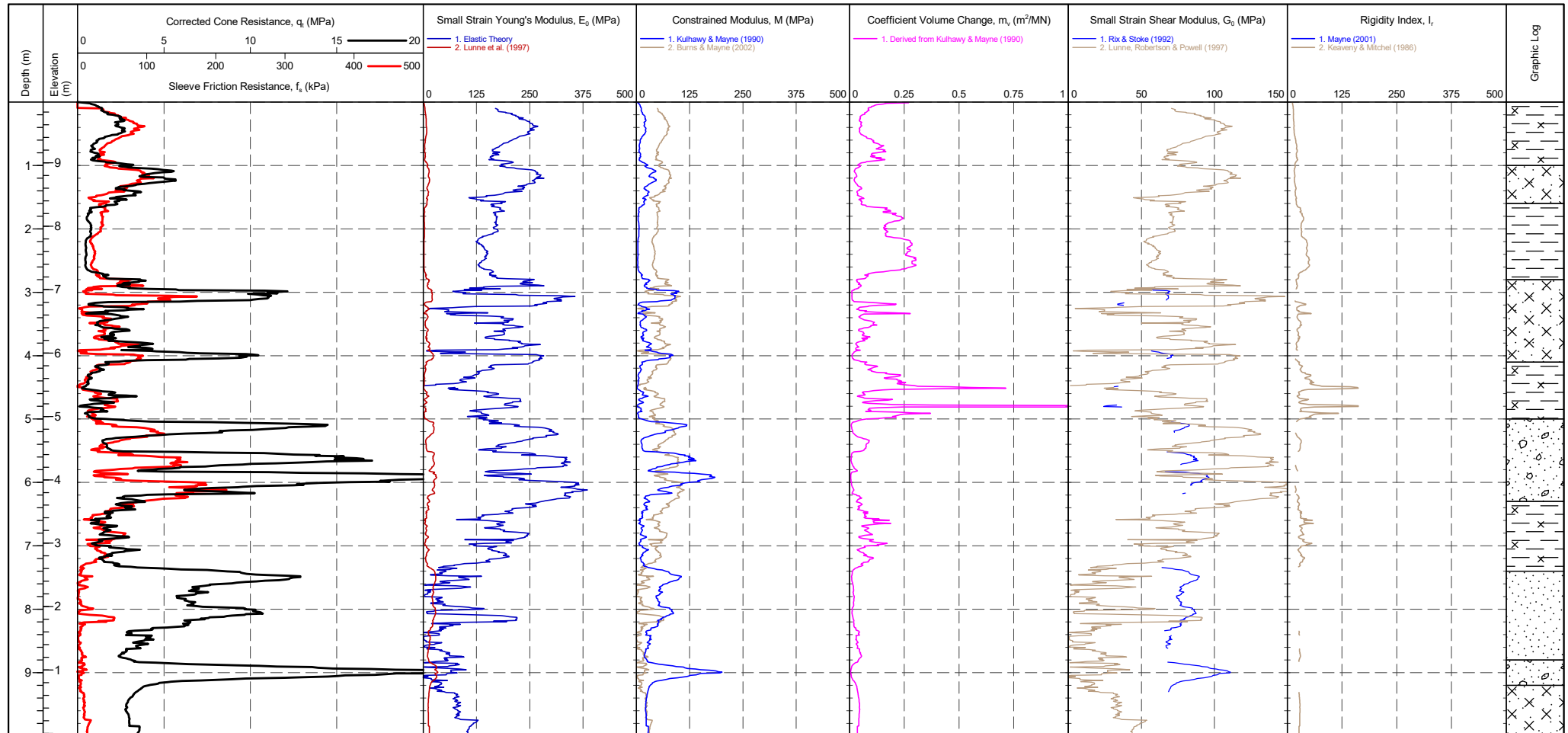
CPT111

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

Groundwater Level
Dissipation Test

PointID

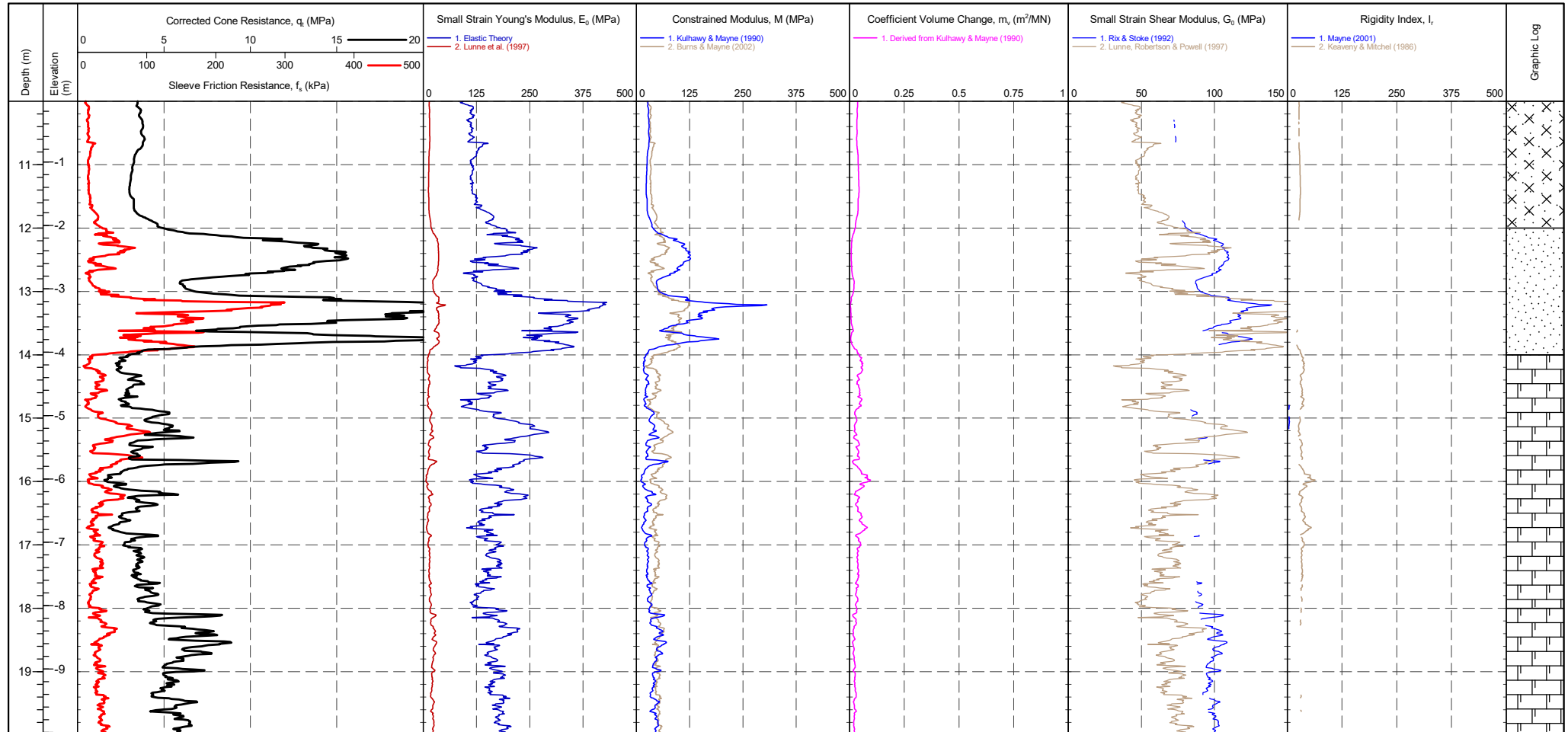
CPT111

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

Groundwater Level
Dissipation Test

PointID

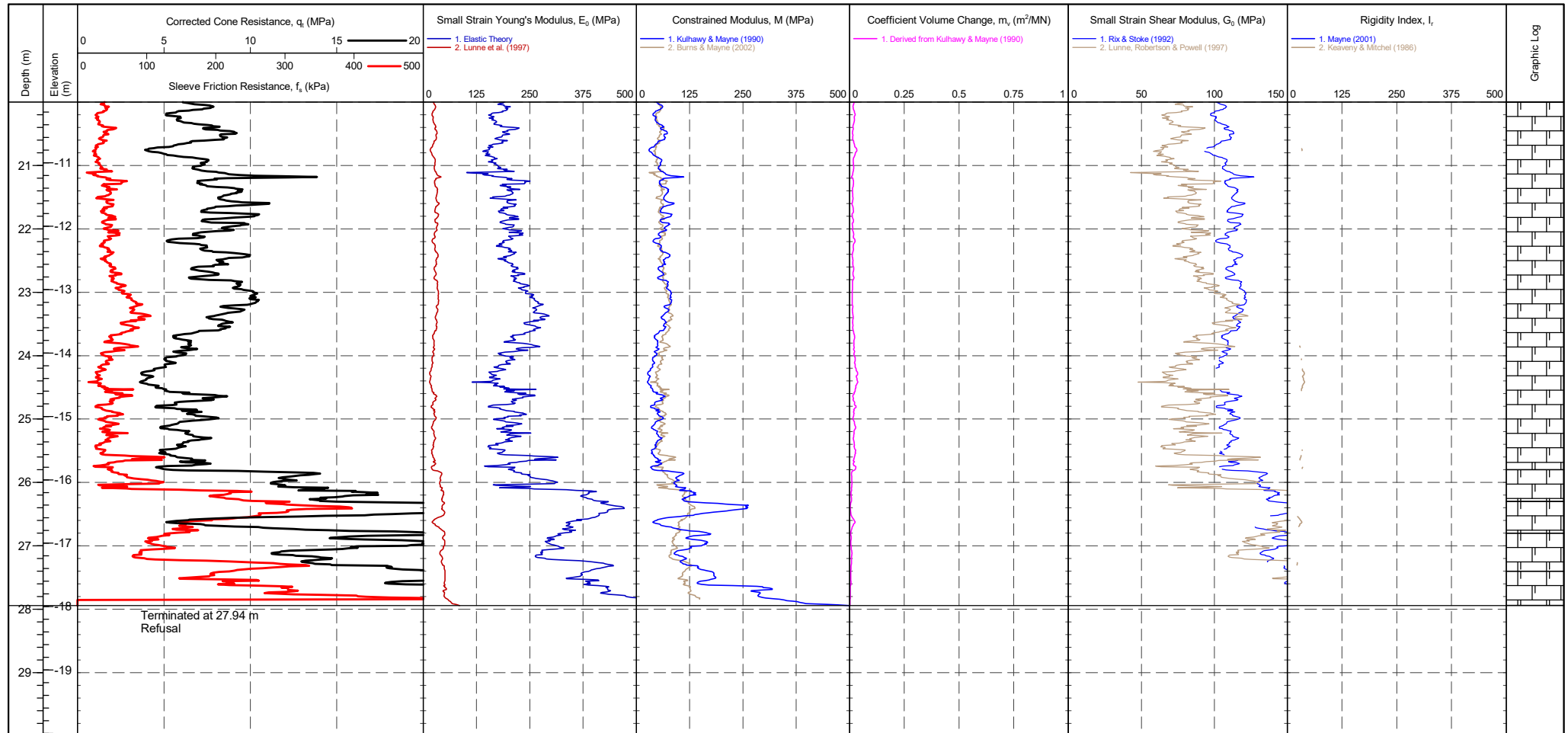
CPT111

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470097.5 m
NORTHING : 105621.3 m
ELEVATION : 9.96 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

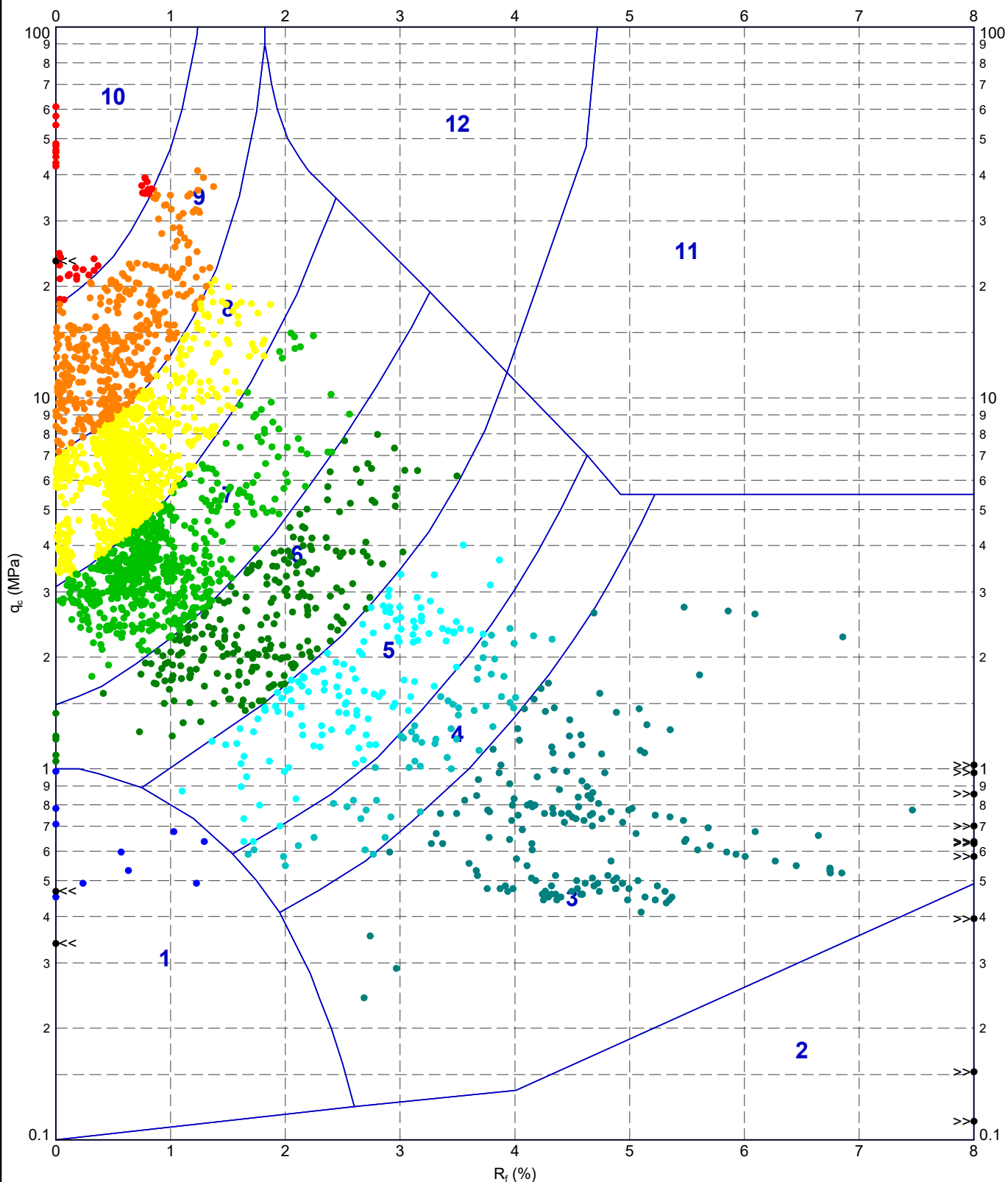
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.437	0.436	0.000808
Sleeve (kPa)	0.0782	0.0799	-0.00172
u2 (kPa)	-0.00791	-0.00369	-0.004223
Inclinometer 1 (°)	-2.07	-2.07	0
Inclinometer 2 (°)	-1.06	-1.28	0.220264

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 10:46 10:02 00.04 Datag Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Pj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT111

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

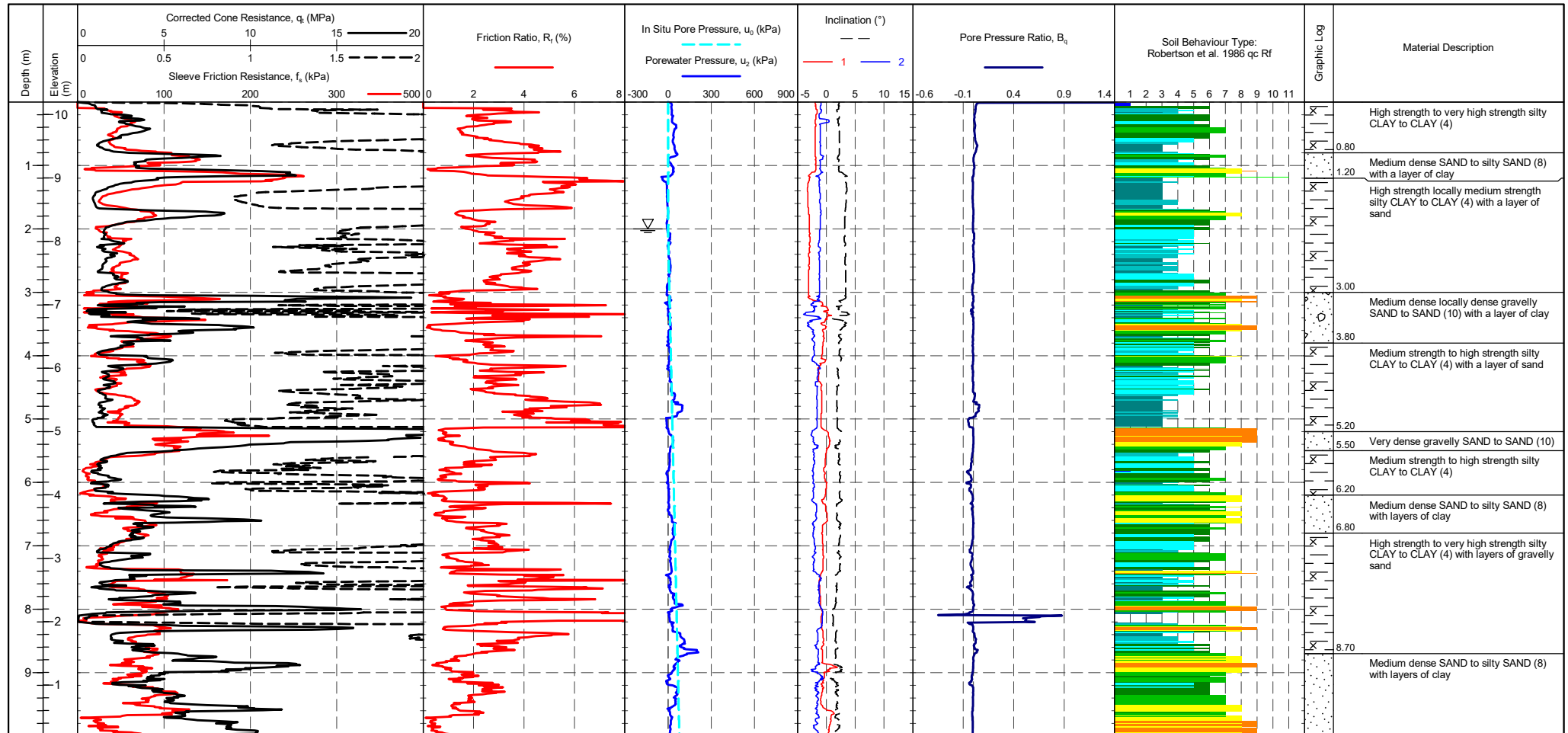
CPT112

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.444	0.466	-0.021808	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0811	0.0836	-0.002527	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00738	-0.00287	-0.00451	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-1.95	-1.95	0		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.954	-1.28	0.330396		10 - Gravelly SAND to SAND	
									12 - SAND to clayey SAND	

PointID

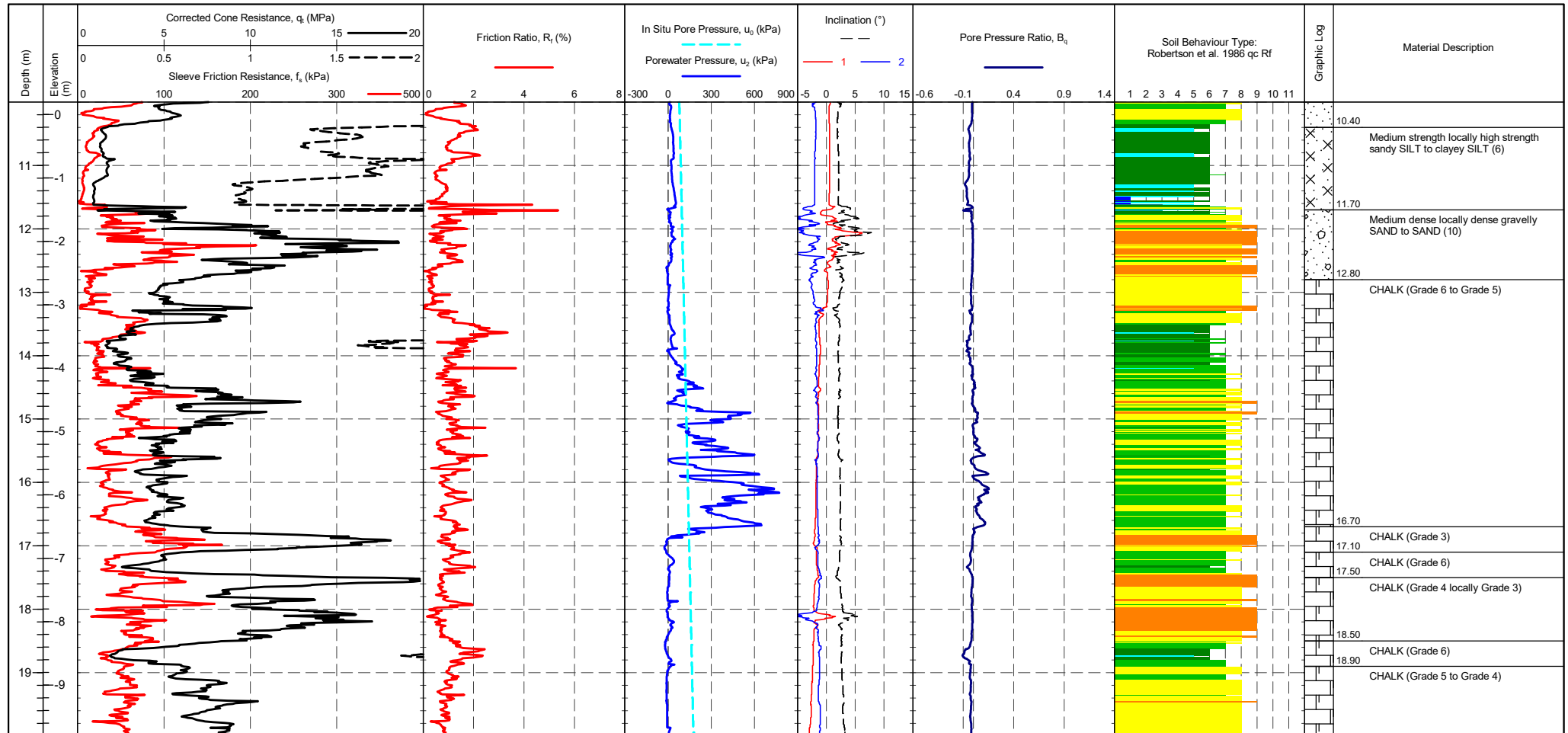
CPT112

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.444	0.466	-0.021808	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0811	0.0836	-0.002527	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00738	-0.00287	-0.00451	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-1.95	-1.95	0		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.954	-1.28	0.330396		10 - Gravelly SAND to SAND	
									12 - SAND to clayey SAND	

PointID

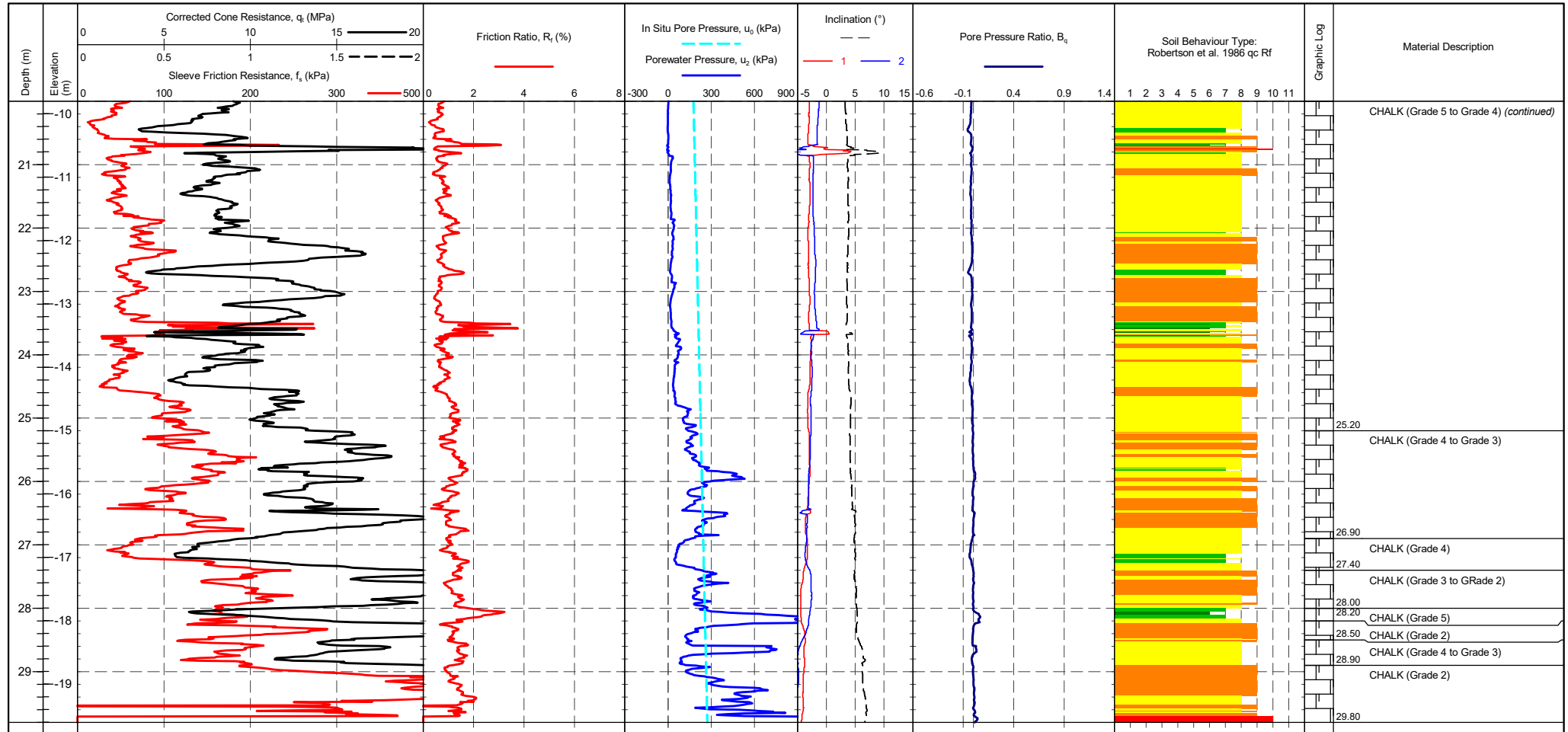
CPT112

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.444	0.466	-0.021808	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0811	0.0836	-0.002527	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00738	-0.00287	-0.00451	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-1.95	-1.95	0		9 - SAND	10 - Gravelly SAND to SAND
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.954	-1.28	0.330396		11 - Very stiff fine grained	
									12 - SAND to clayey SAND	

PointID

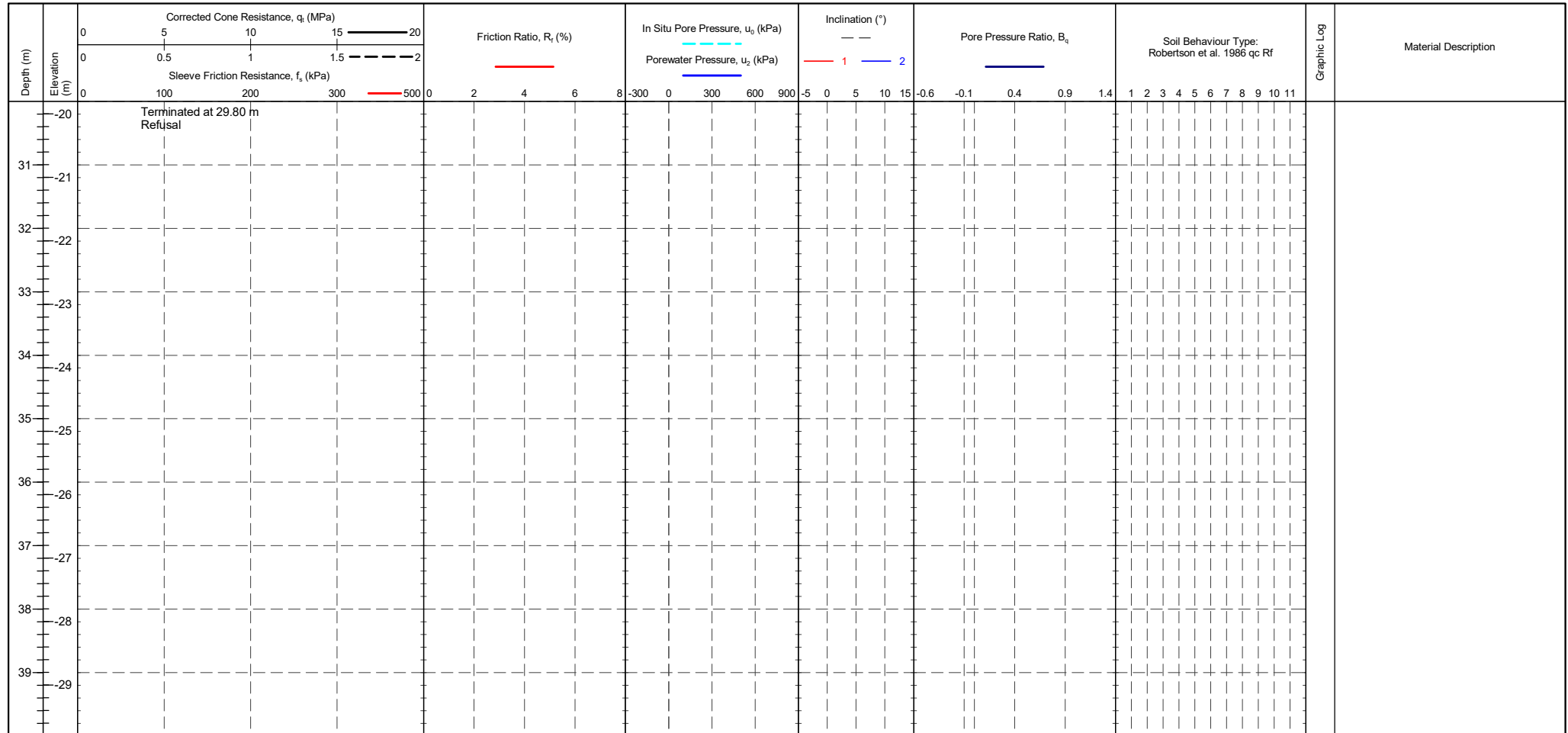
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.444	0.466	-0.021808	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0811	0.0836	-0.002527	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75	FRICTION REDUCER : None	u2 (kPa)	-0.00738	-0.00287	-0.00451	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 (°)	-1.95	-1.95	0		9 - SAND	
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 (°)	-0.954	-1.28	0.330396		10 - Gravelly SAND to SAND	
							11 - Very stiff fine grained	
							12 - SAND to clayey SAND	

PointID

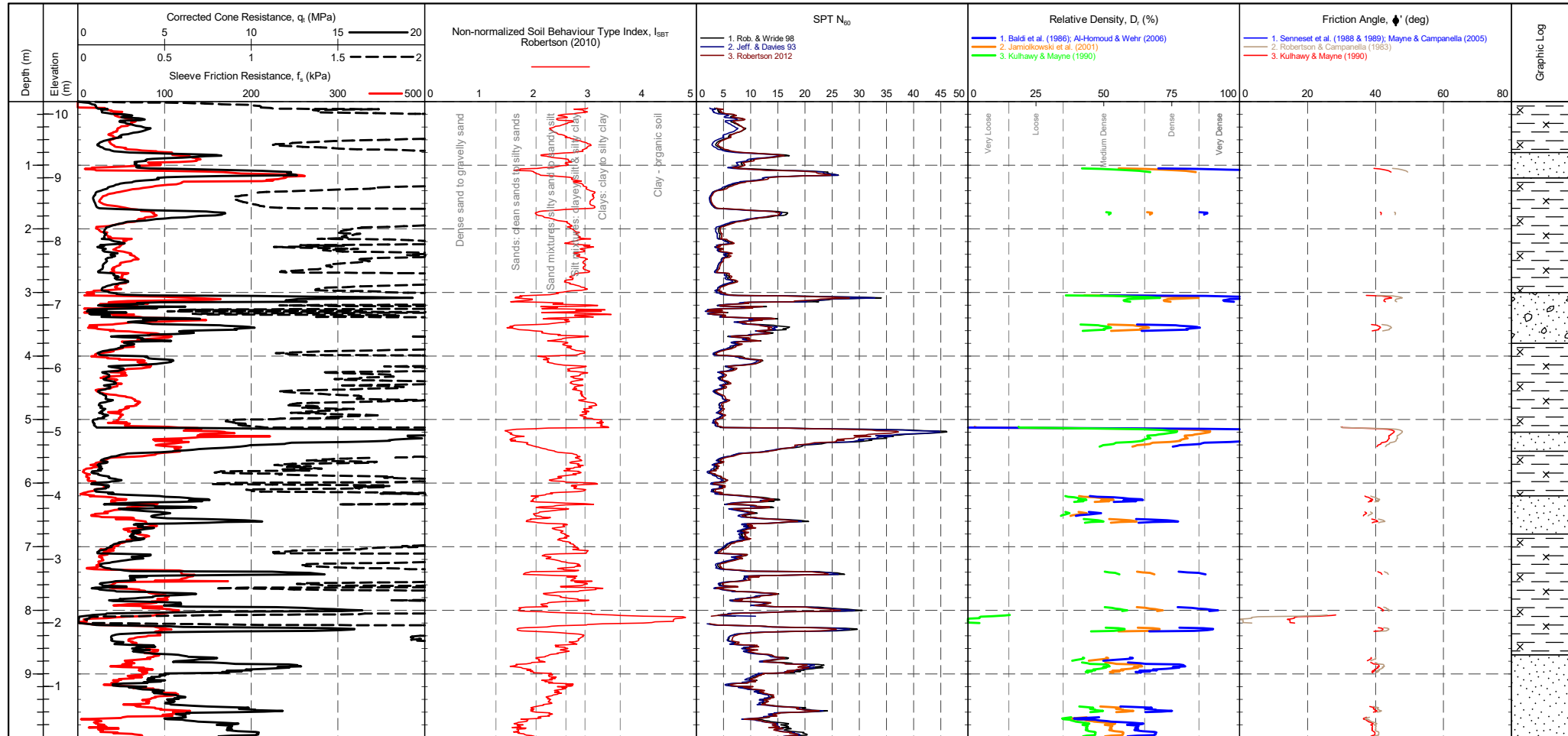
CPT112

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

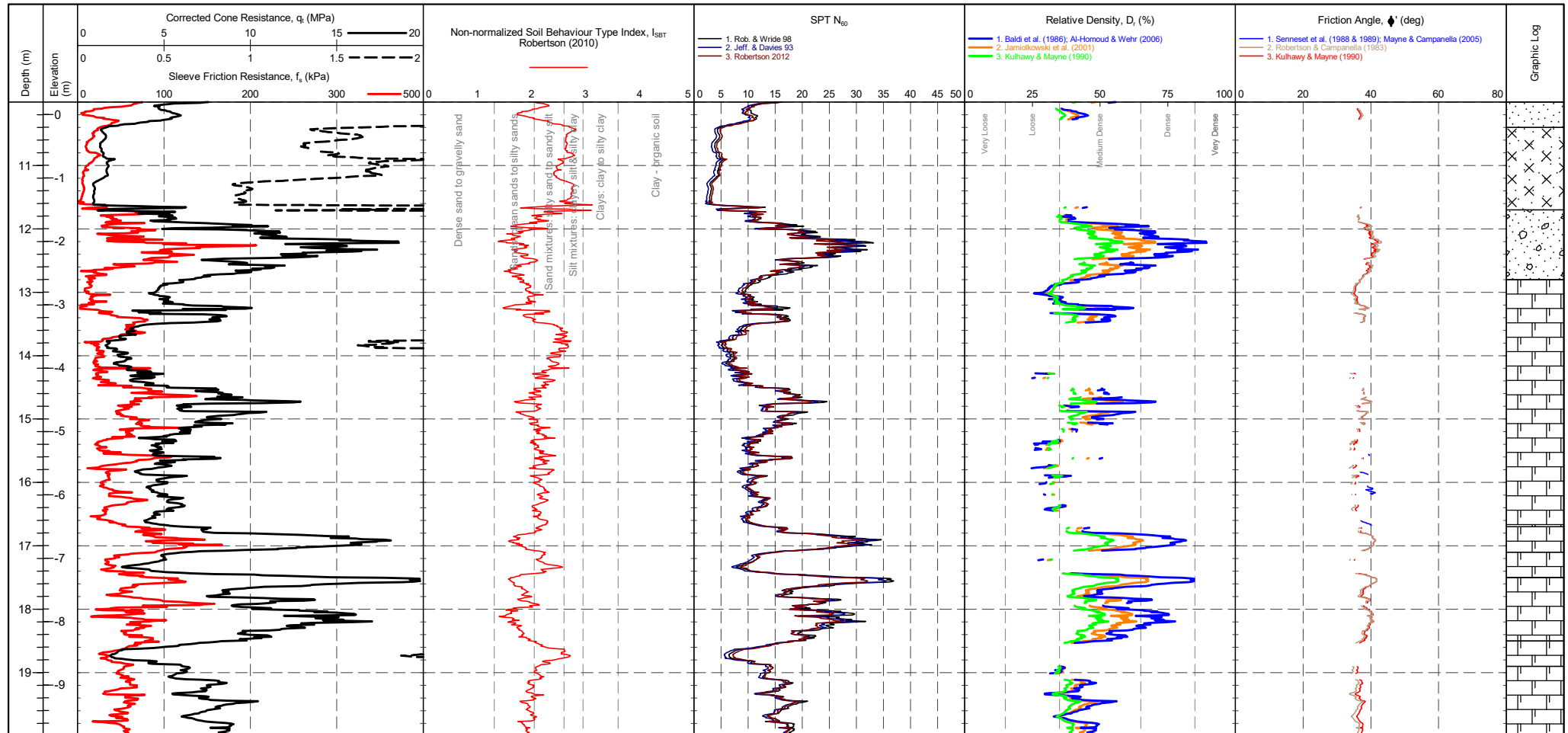
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

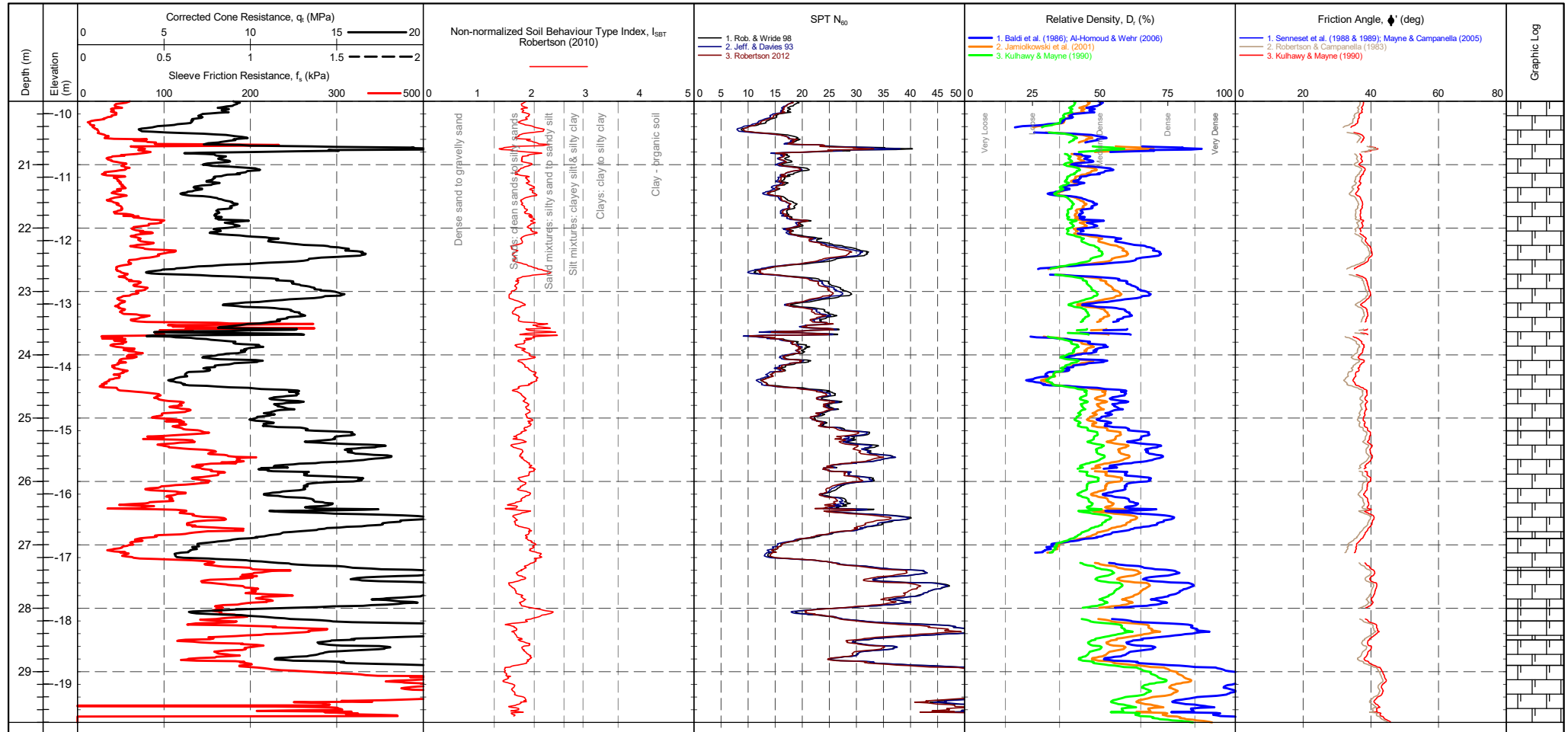
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

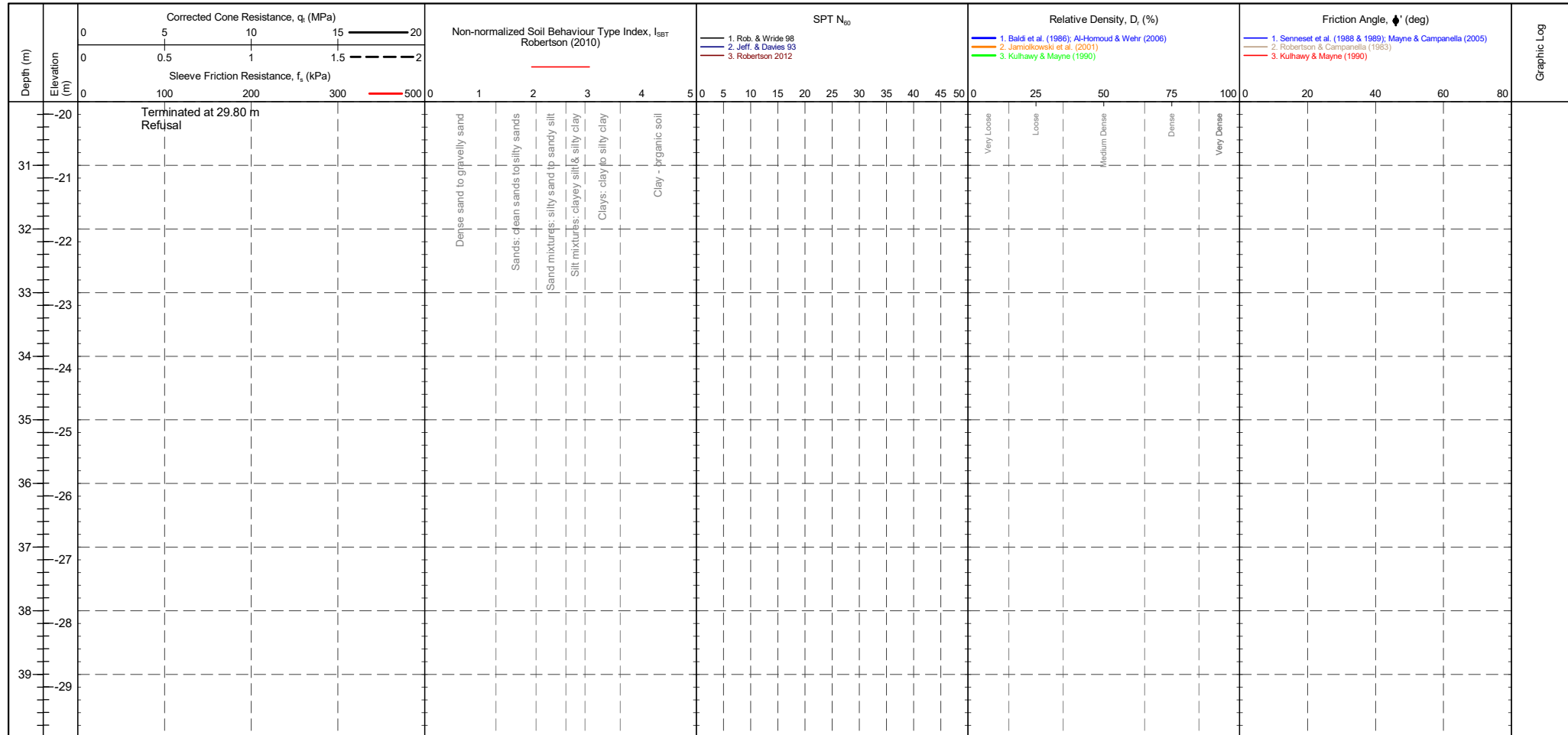
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

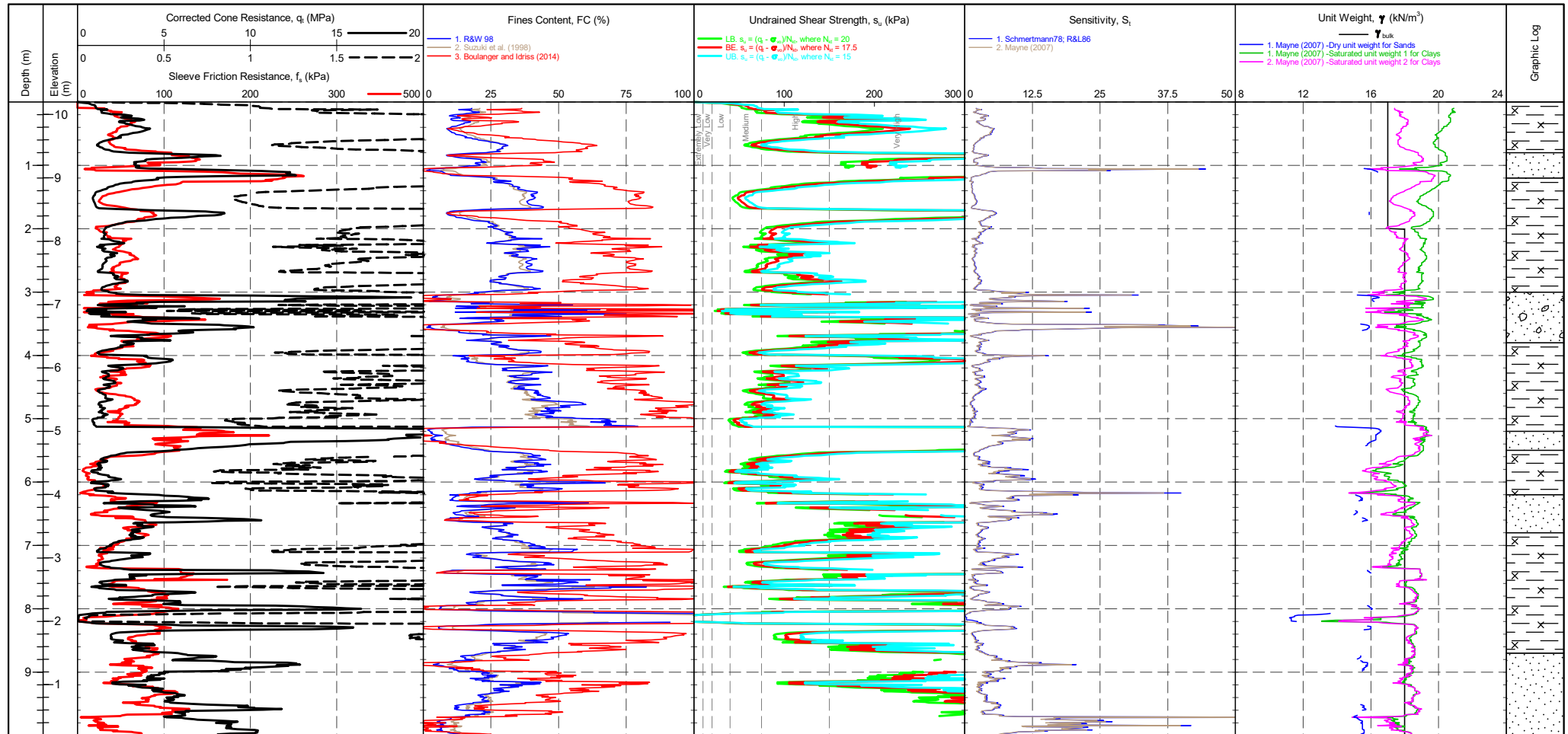
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

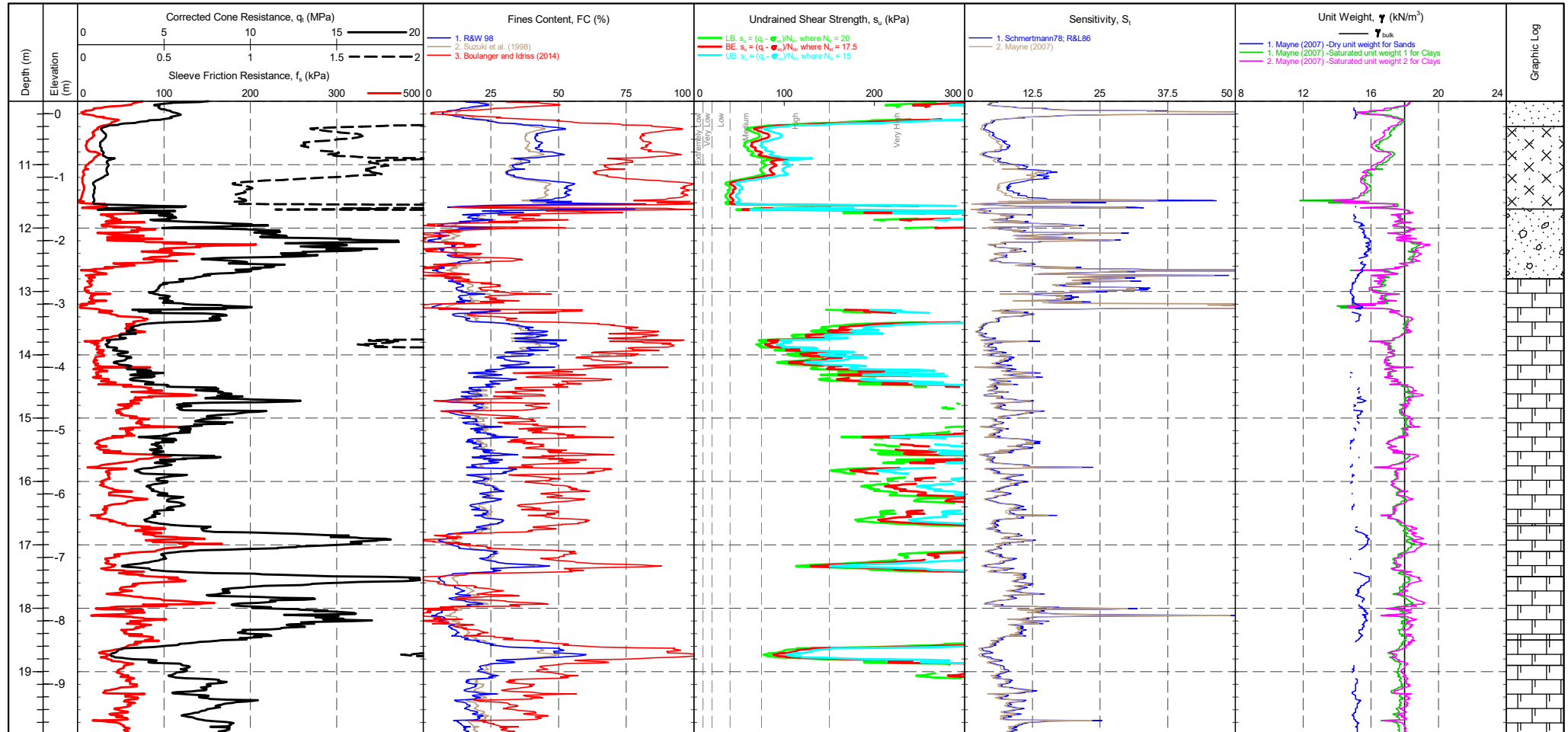
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

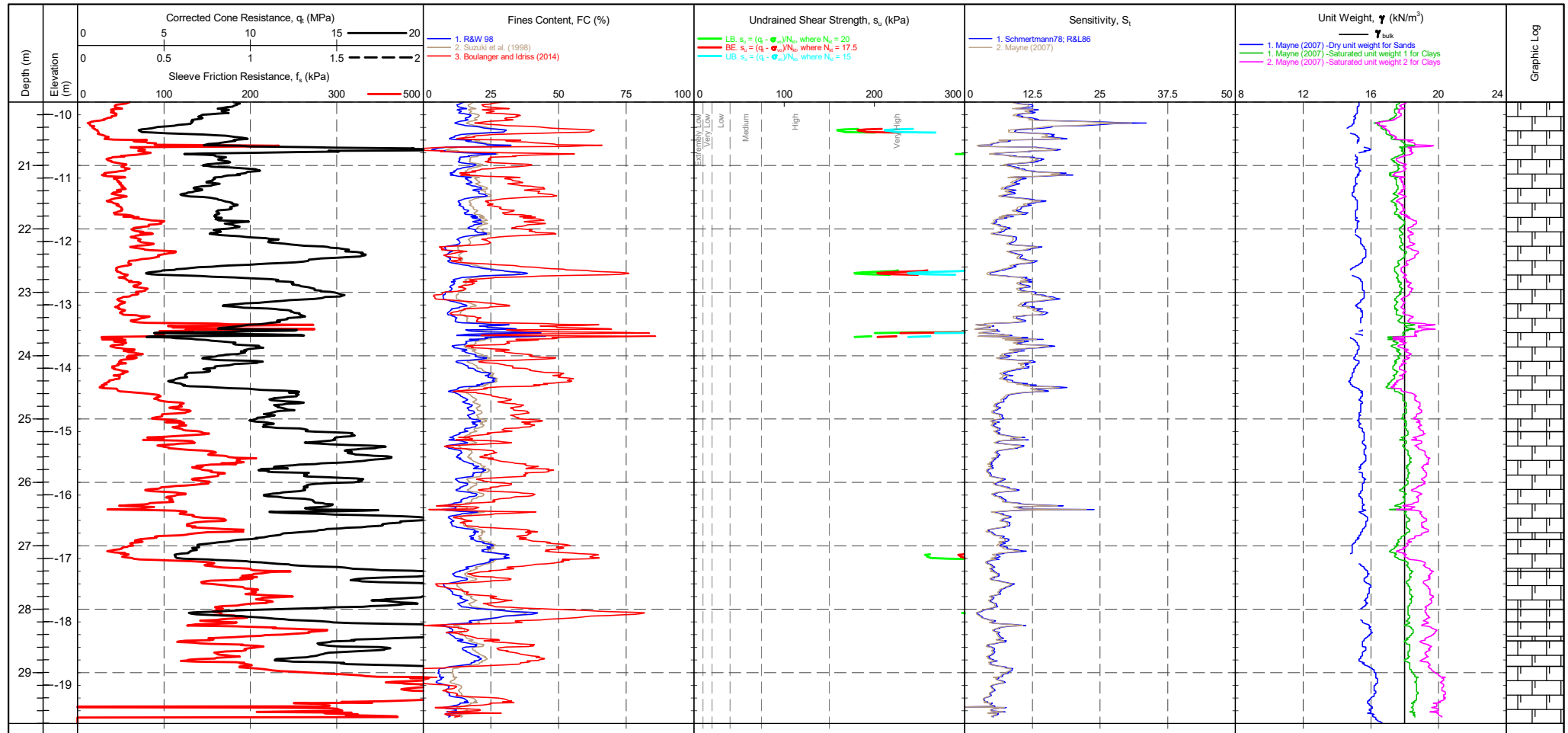
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.444 0.466 -0.021808
Sleeve (kPa) 0.0811 0.0836 -0.002527
u2 (kPa) -0.00738 -0.00287 -0.00451
Inclinometer 1 (°) -1.95 -1.95 0
Inclinometer 2 (°) -0.954 -1.28 0.330396

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

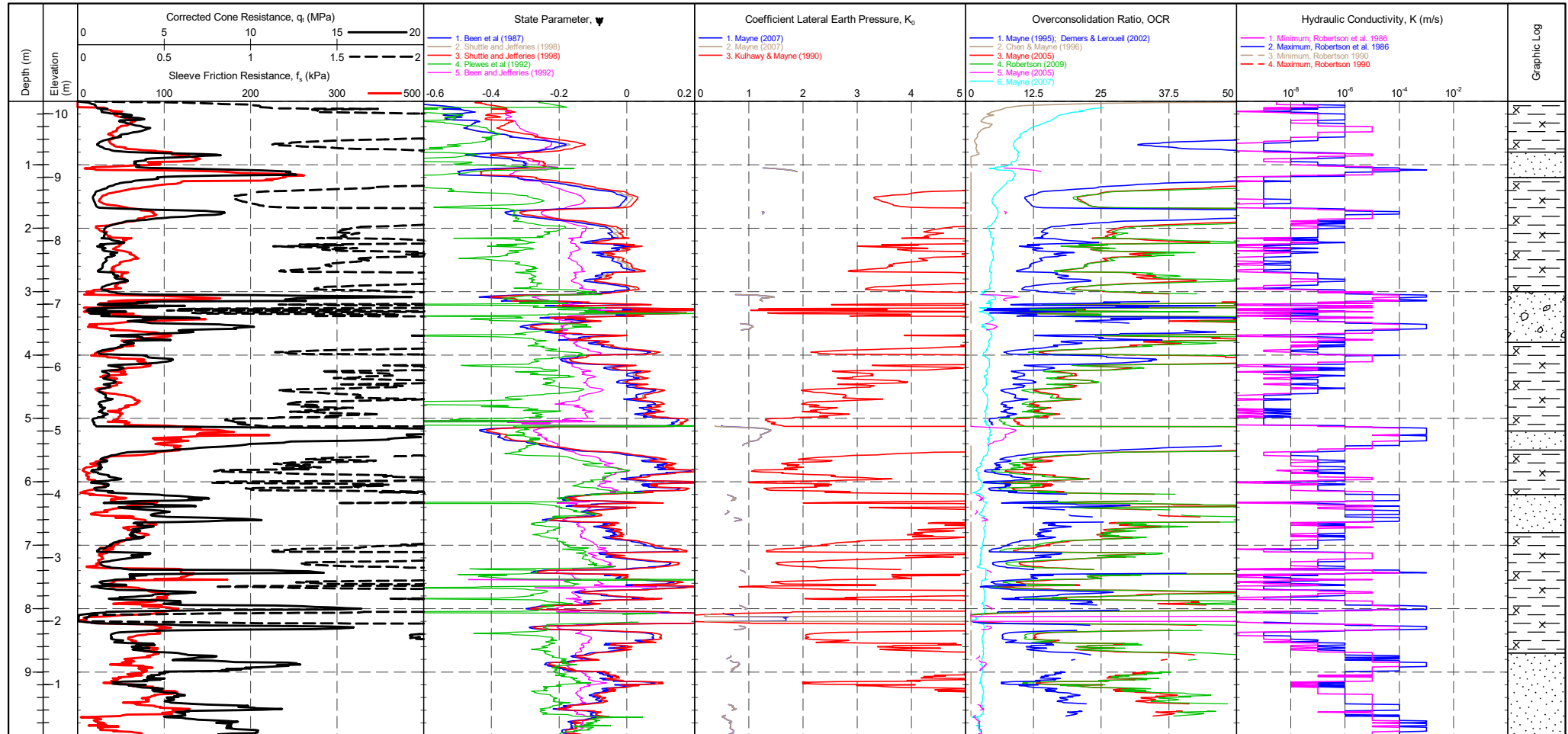
CPT112

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

Groundwater Level
Dissipation Test

PointID

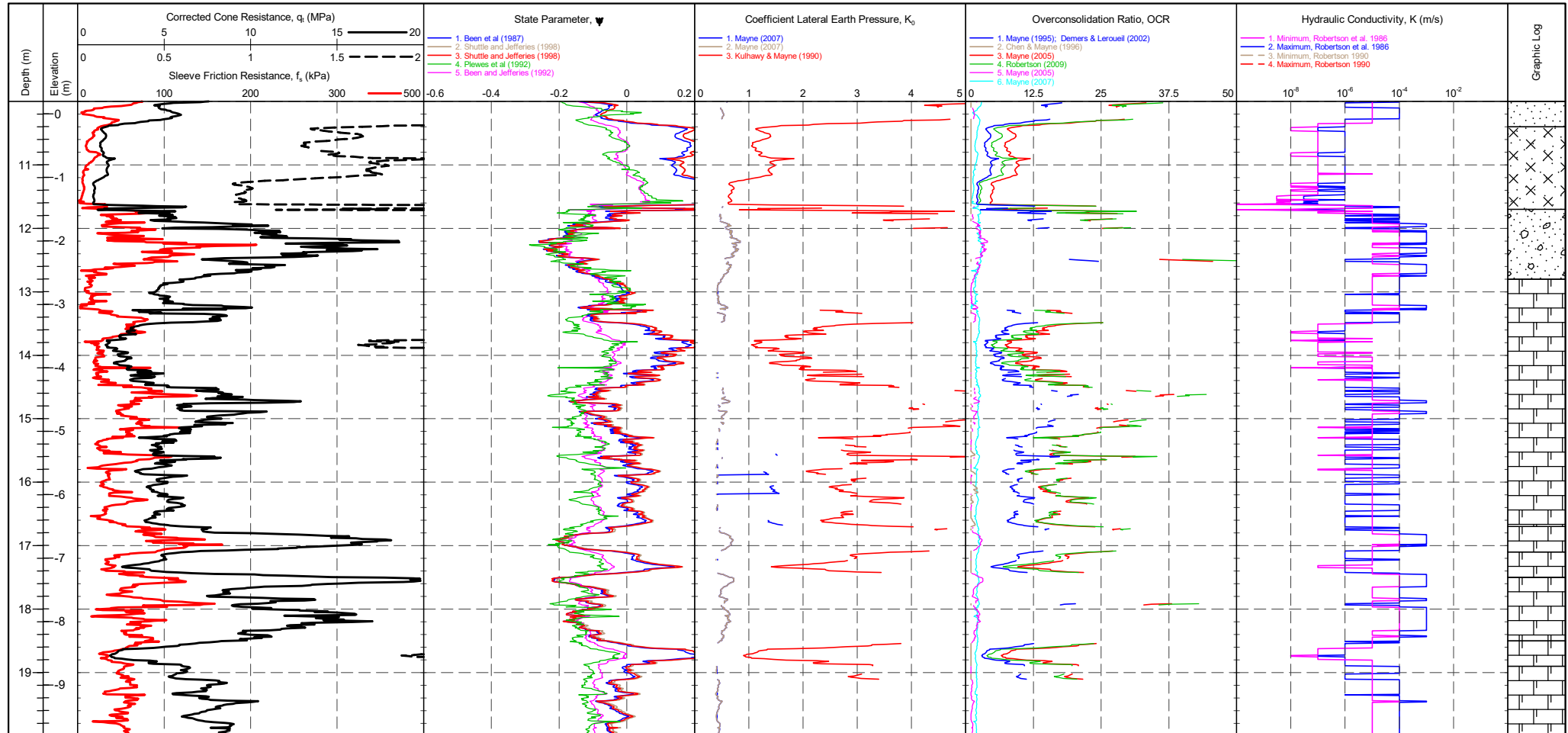
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

Groundwater Level
Dissipation Test

PointID

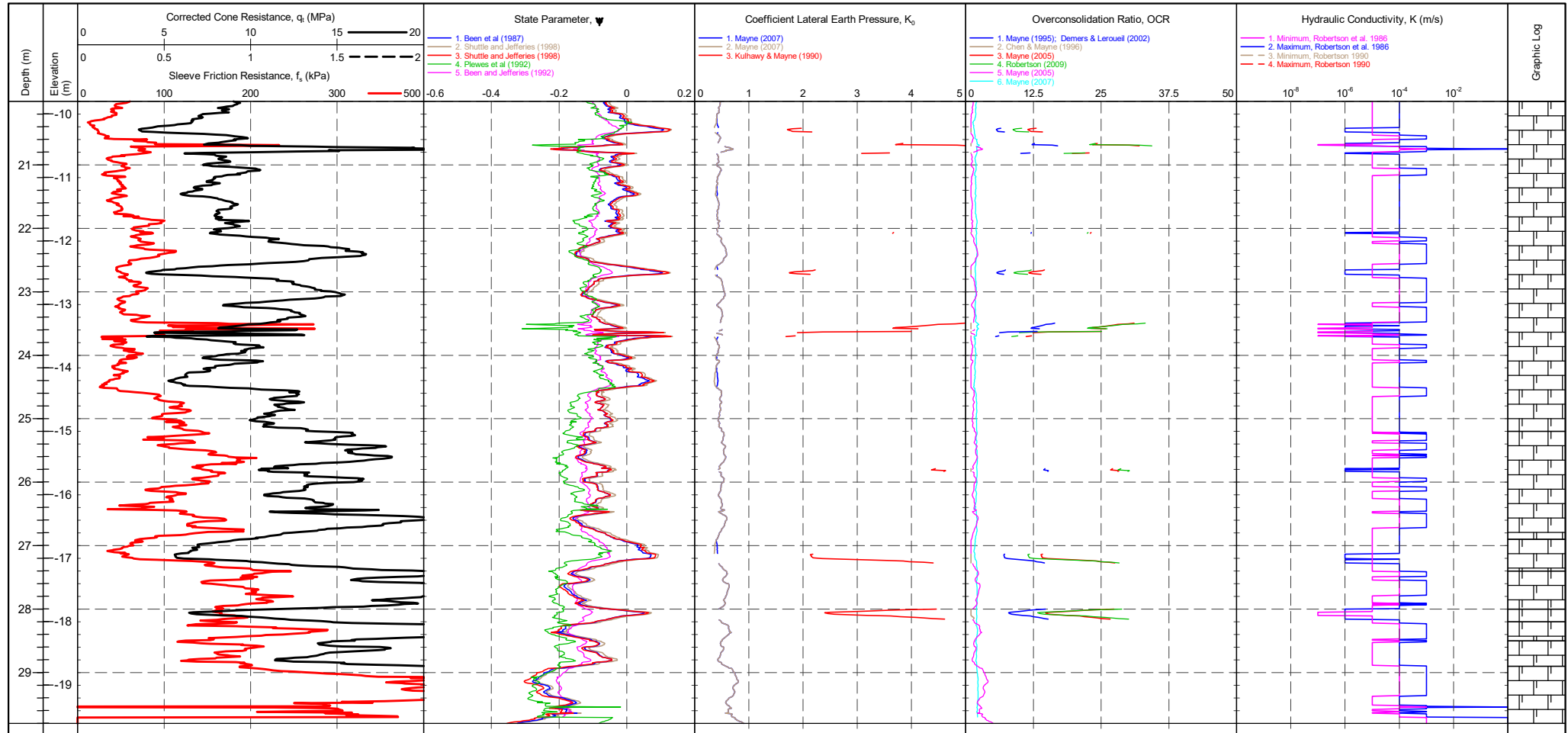
CPT112

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

Groundwater Level
Dissipation Test

PointID

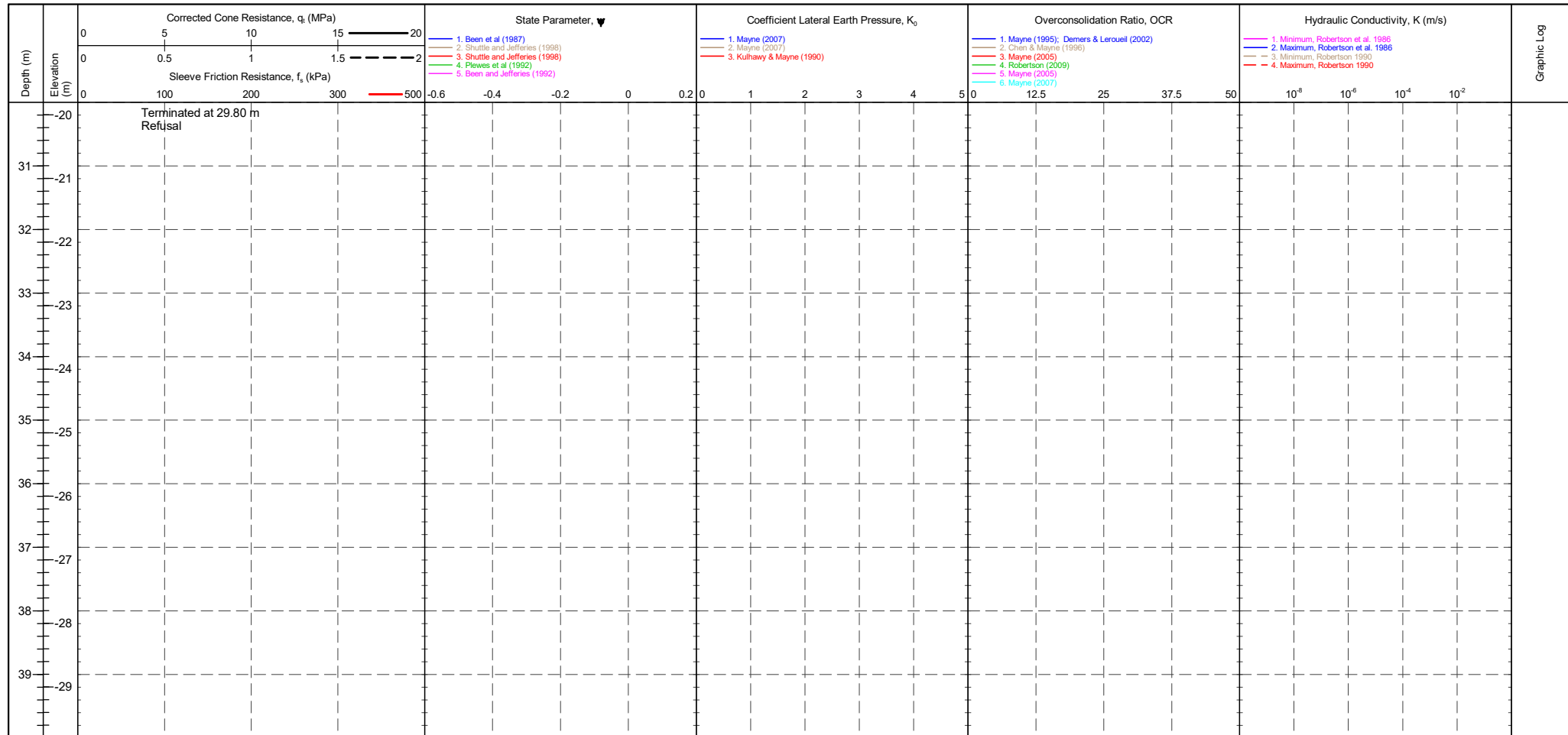
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

Groundwater Level
Dissipation Test

PointID

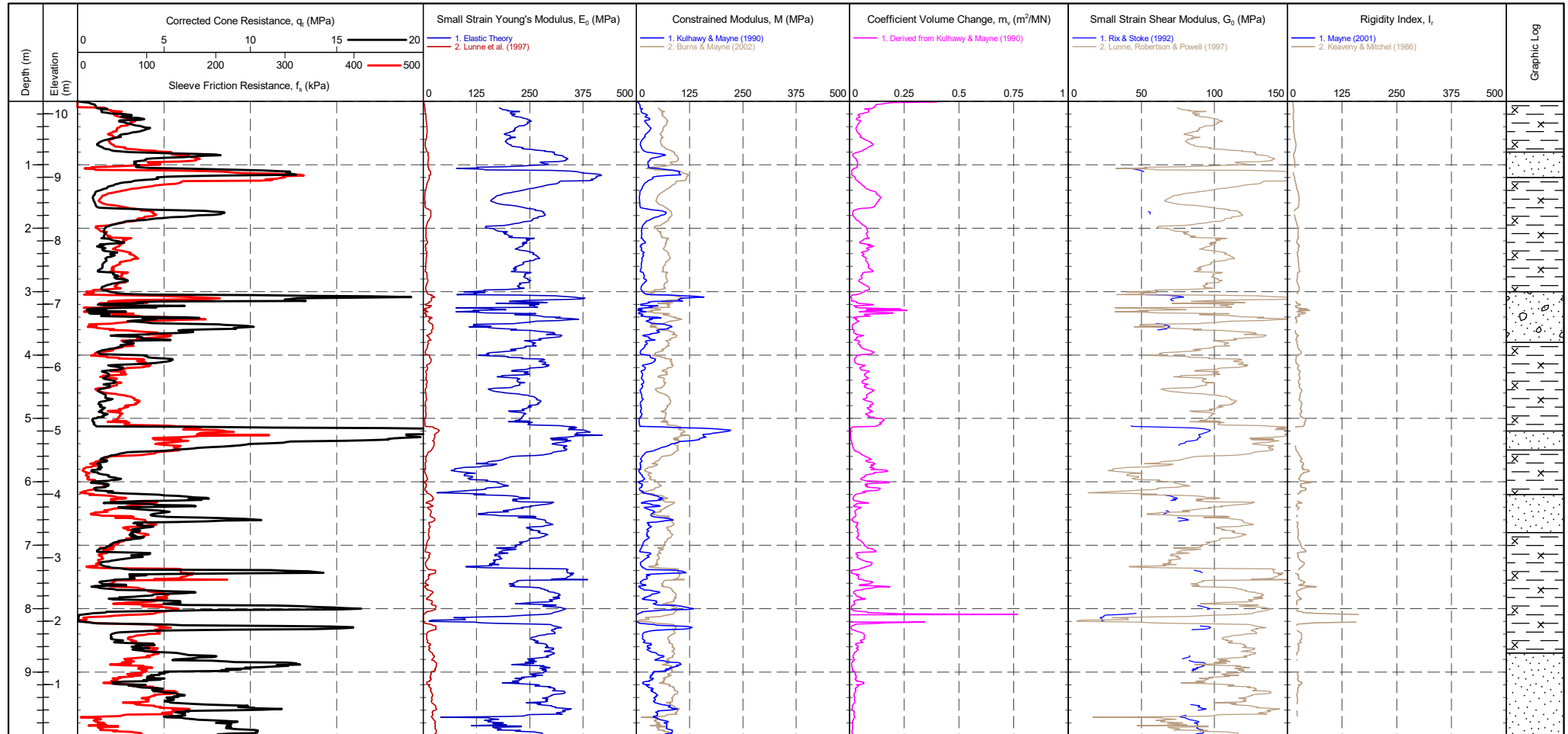
CPT112

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

Groundwater Level
Dissipation Test

PointID

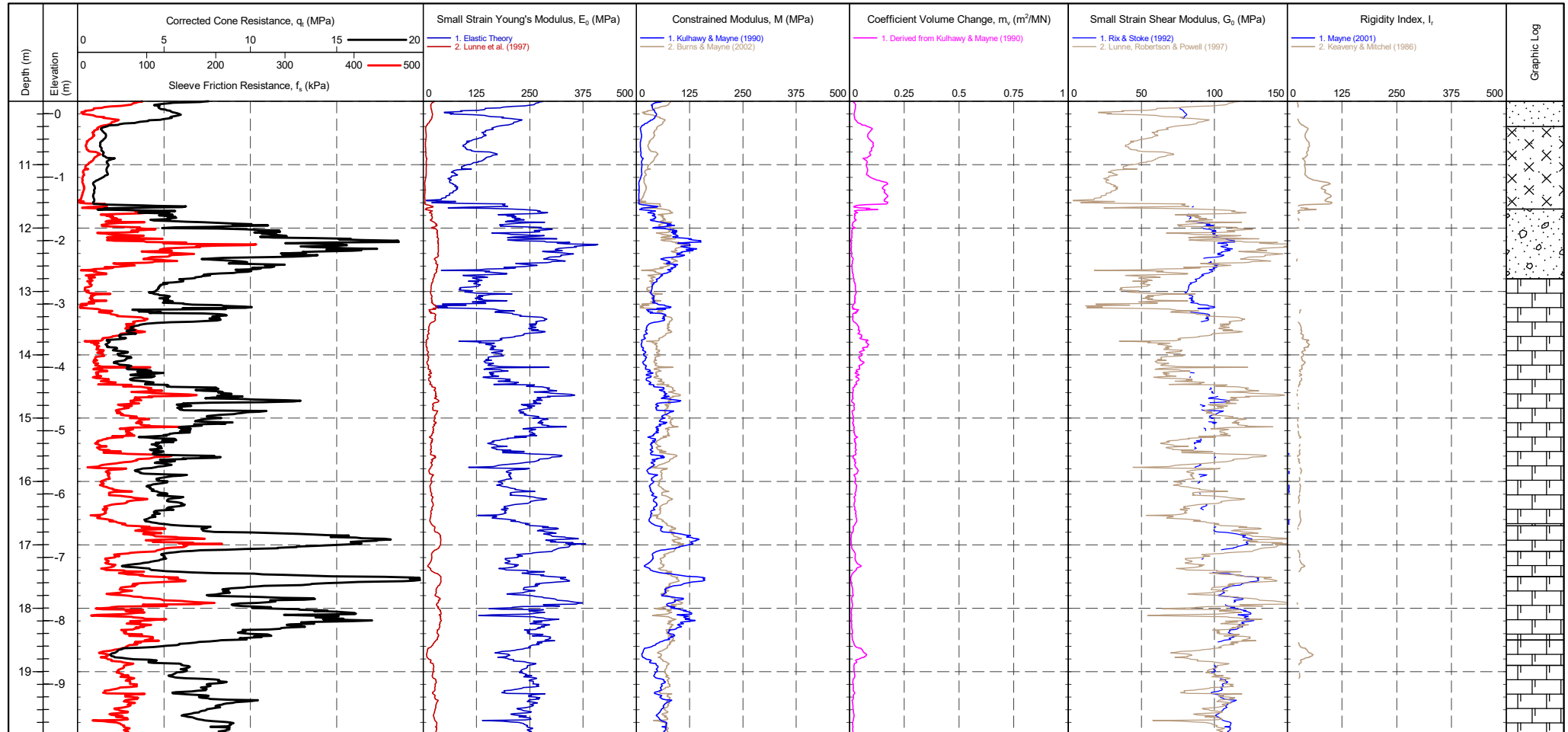
CPT112

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

Groundwater Level
Dissipation Test

PointID

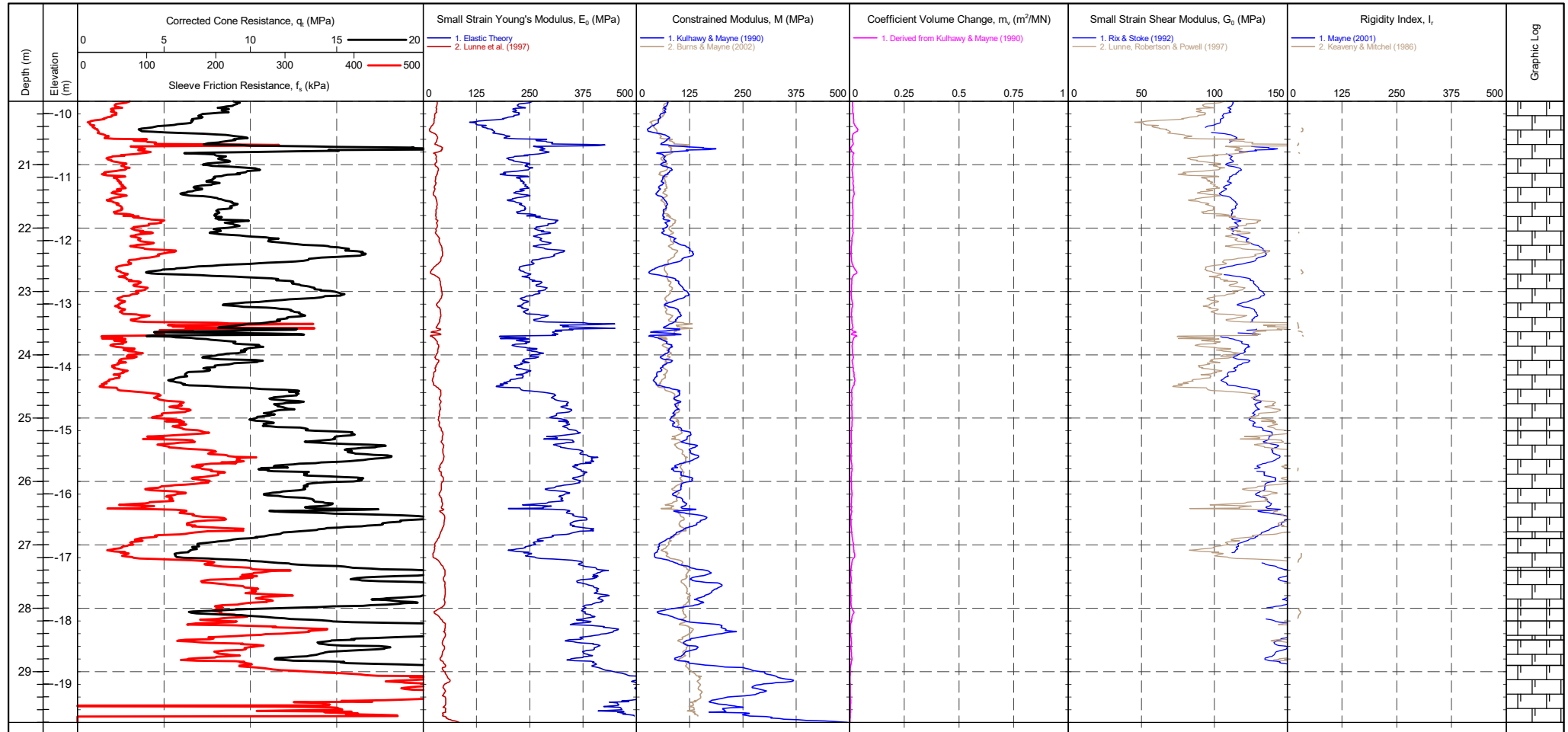
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

Groundwater Level
Dissipation Test

PointID

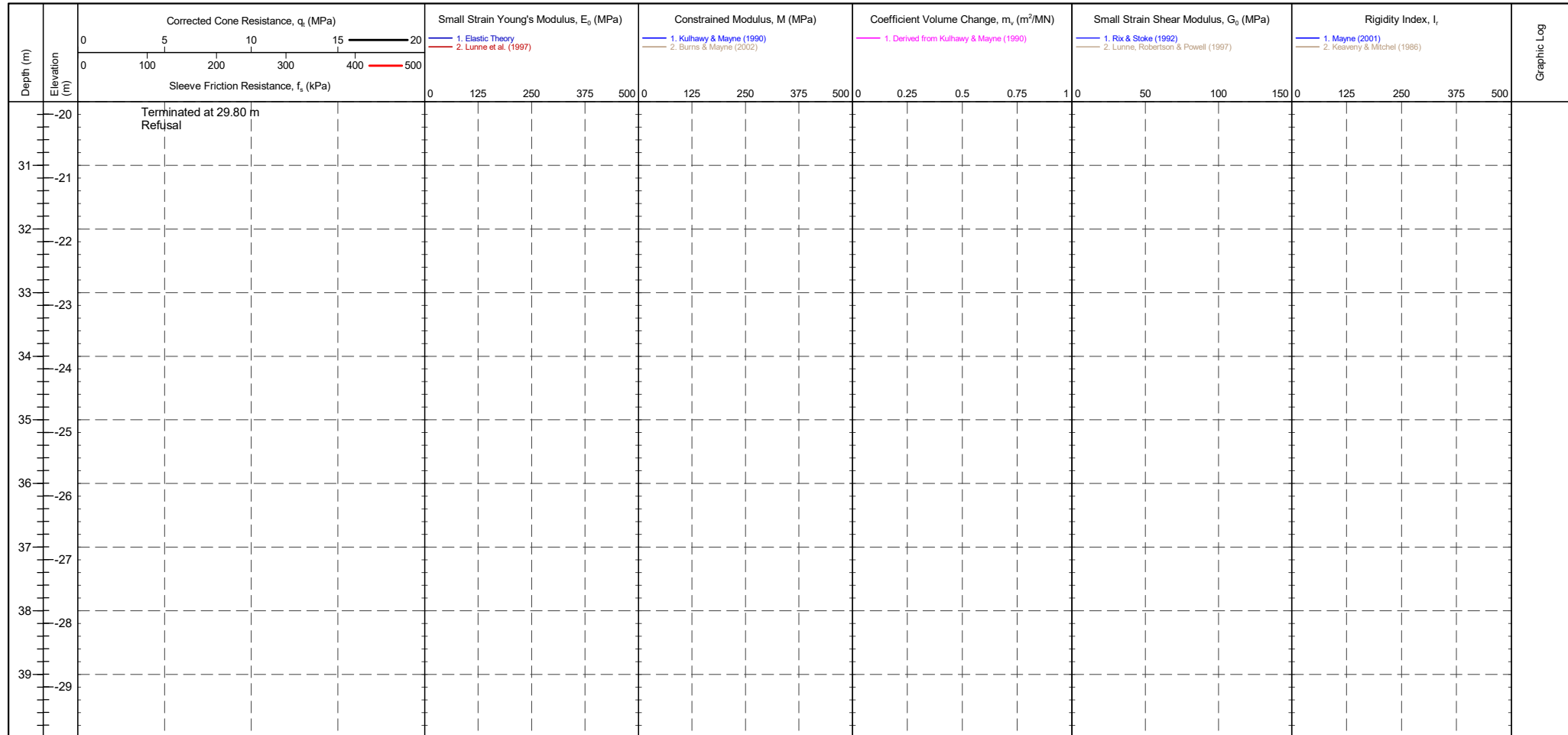
CPT112

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470029.3 m
NORTHING : 105595.0 m
ELEVATION : 10.20 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

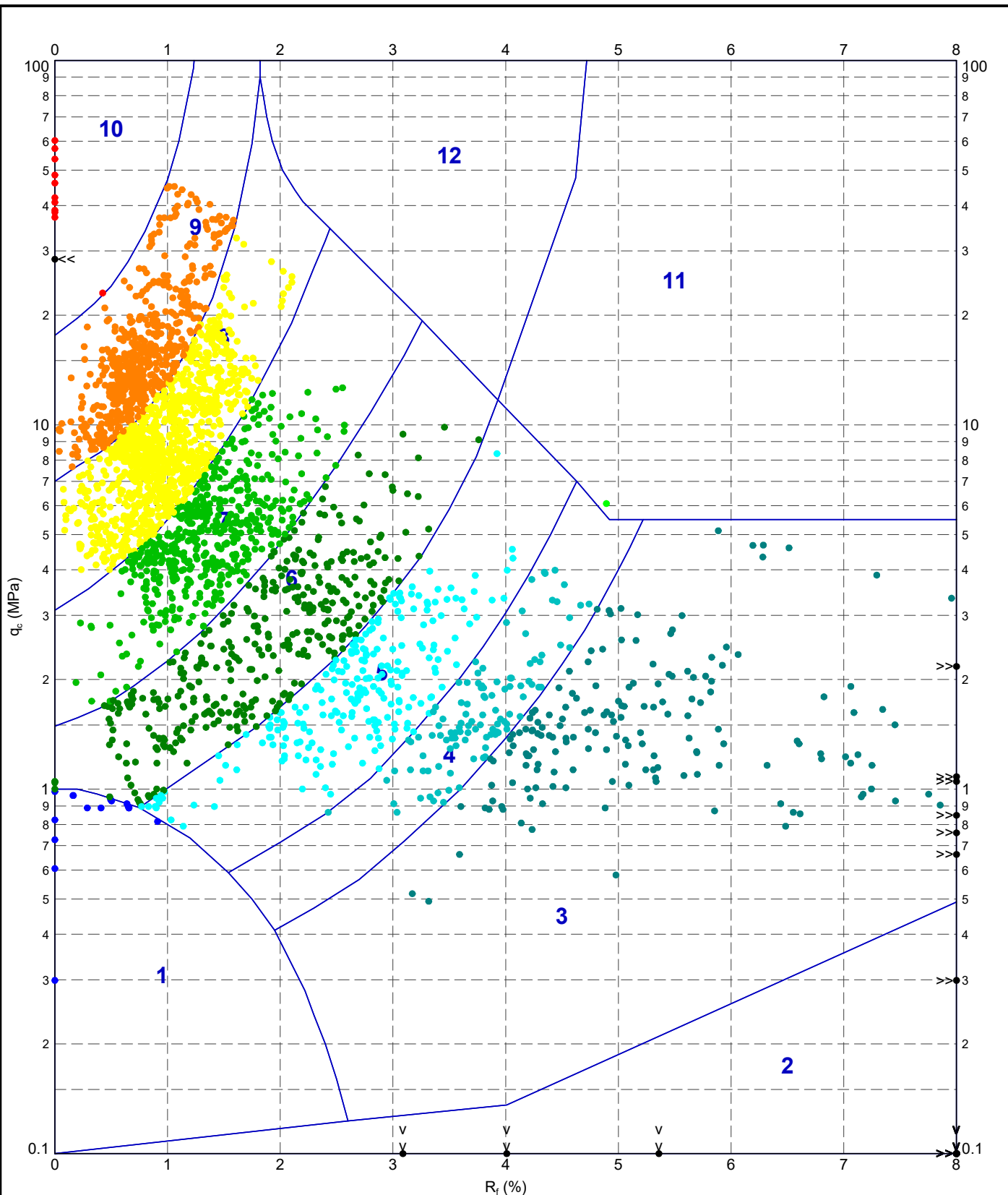
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.444	0.466	-0.021808
Sleeve (kPa)	0.0811	0.0836	-0.002527
u2 (kPa)	-0.00738	-0.00287	-0.00451
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-0.954	-1.28	0.330396

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 10:02:00.04 Dated Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Pj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT112

DRAWN	DATE	25/05/2021
CHECKED	DATE	25/05/2021
SCALE	Not To Scale	
PROJECT No	FIGURE No	A4
1210220		

PointID

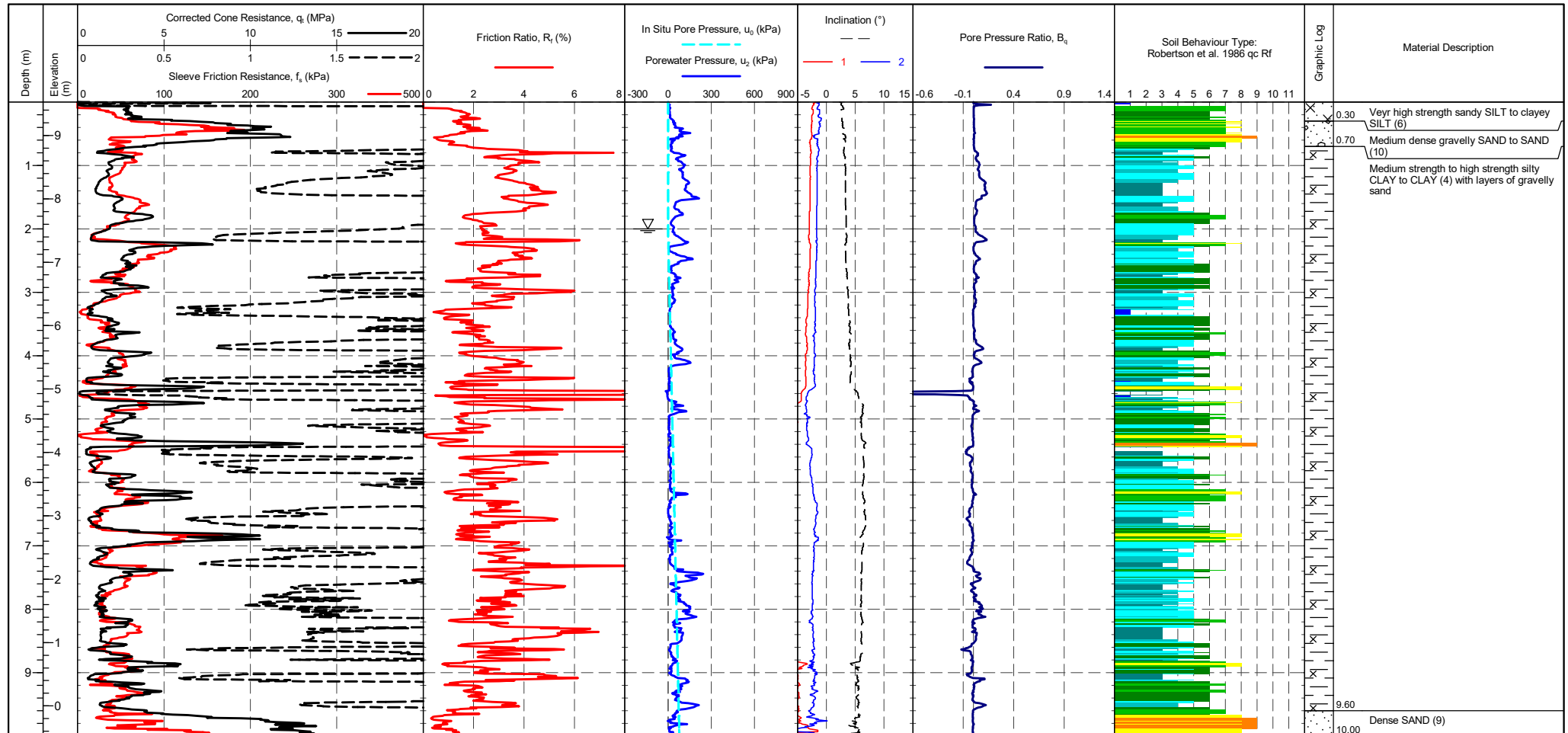
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 $q_c R_f$			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.443	0.435	0.008886	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0782	0.0785	-0.000269	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u_2 (kPa)	-0.00738	-0.00615	-0.00123	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 ($^\circ$)	-1.95	-1.95	0		9 - SAND	
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 ($^\circ$)	-1.17	-0.954	-0.220264		10 - Gravelly SAND to SAND	
									11 - Very stiff fine grained	
									12 - SAND to clayey SAND	

PointID

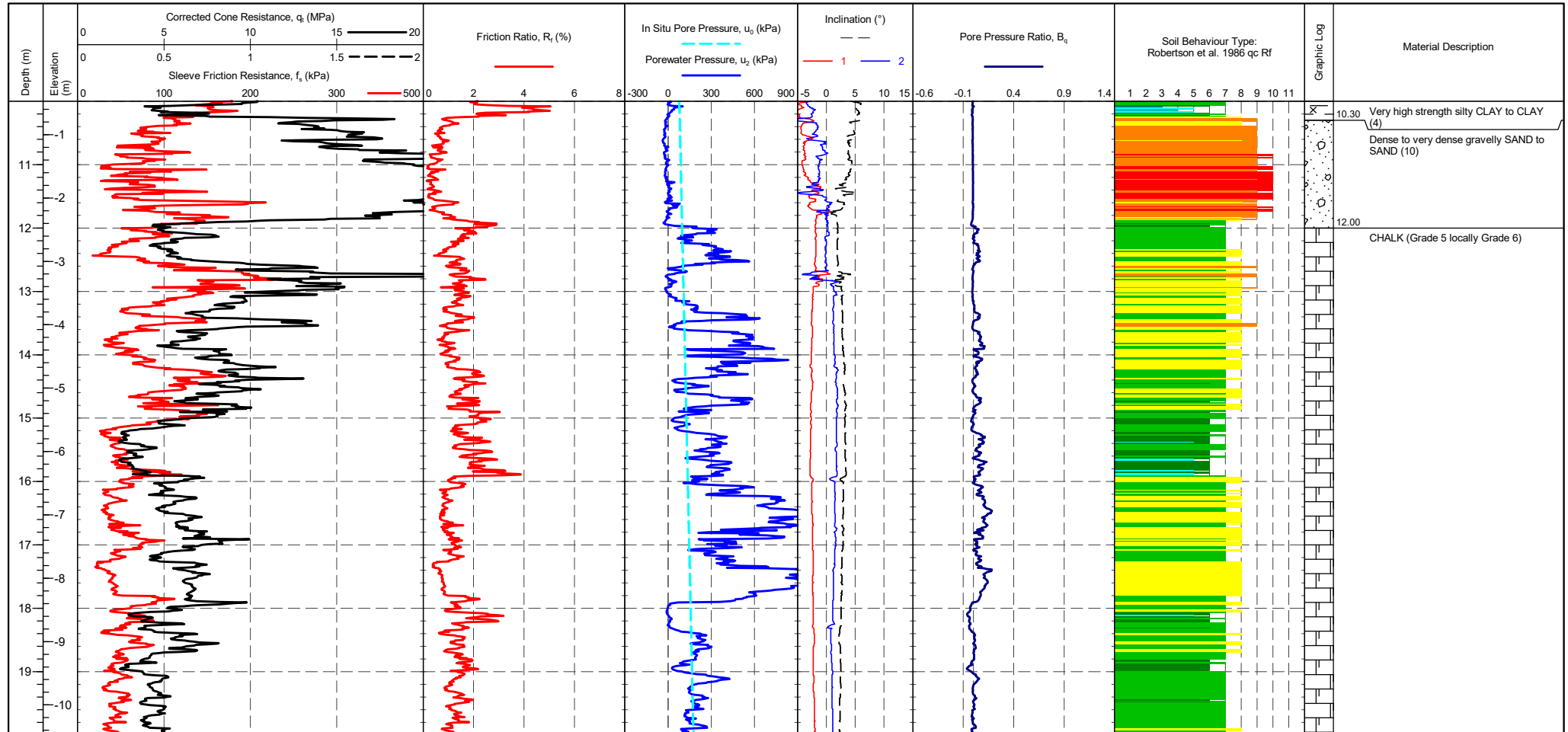
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.443	0.435	0.008886	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0782	0.0785	-0.000269	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u_2 (kPa)	-0.00738	-0.00615	-0.00123	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (i)	-1.95	-1.95	0		9 - SAND	
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (i)	-1.17	-0.954	-0.220264		10 - Gravelly SAND to SAND	
									11 - Very stiff fine grained	
									12 - SAND to clayey SAND	

PointID

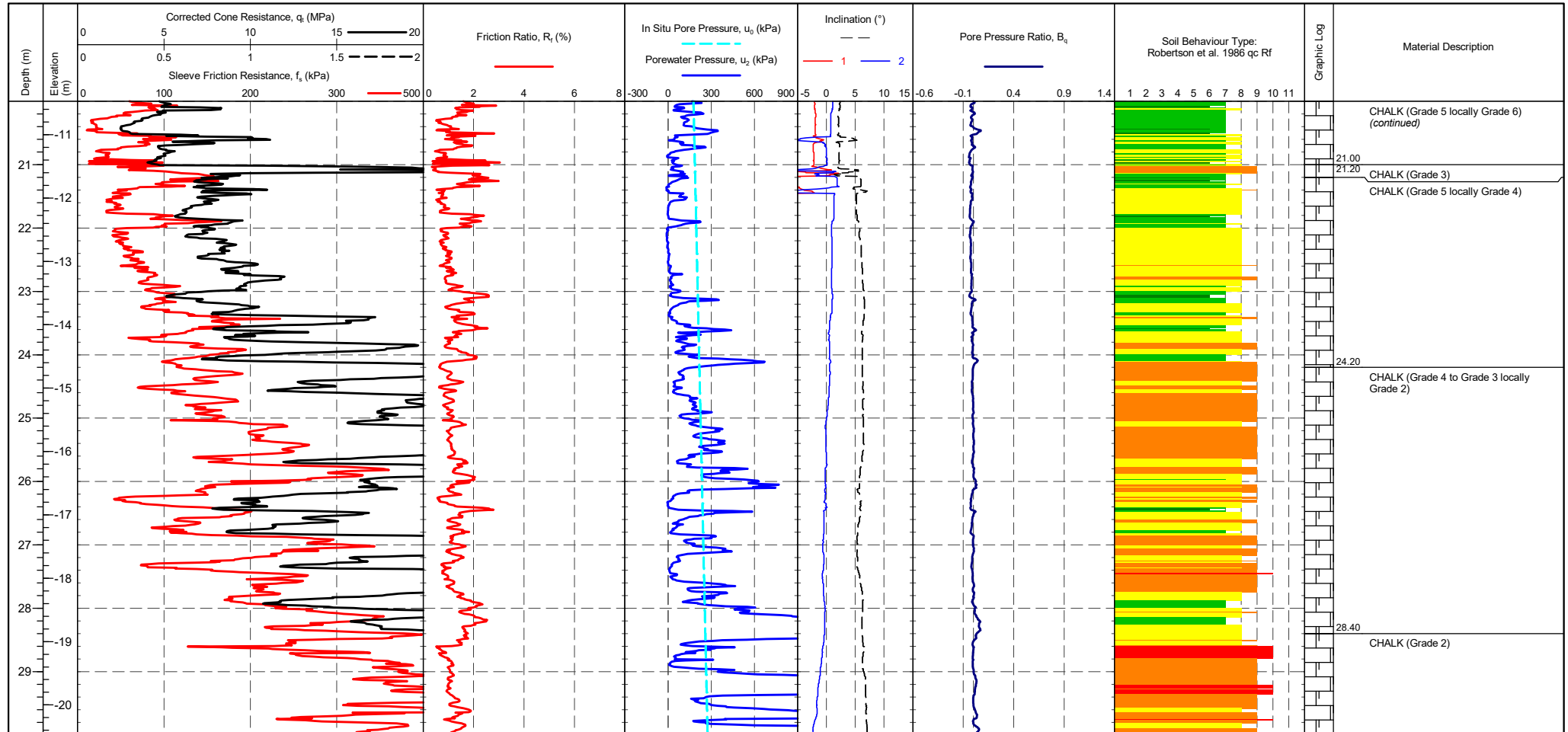
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf		
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.443	0.435	0.008886	2 - Organic material	6 - Sandy SILT to clayey SILT
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0782	0.0785	-0.000269	3 - CLAY	7 - Silty SAND to sandy SILT
CONE AREA RATIO : 0.75	FRICTION REDUCER : None	u2 (kPa)	-0.00738	-0.00615	-0.00123	4 - Silty CLAY to CLAY	8 - SAND to silty SAND
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 ($^\circ$)	-1.95	-1.95	0		9 - SAND
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 ($^\circ$)	-1.17	-0.954	-0.220264		10 - Gravelly SAND to SAND
							11 - Very stiff fine grained
							12 - SAND to clayey SAND

Groundwater Level

Dissipation Test

PointID

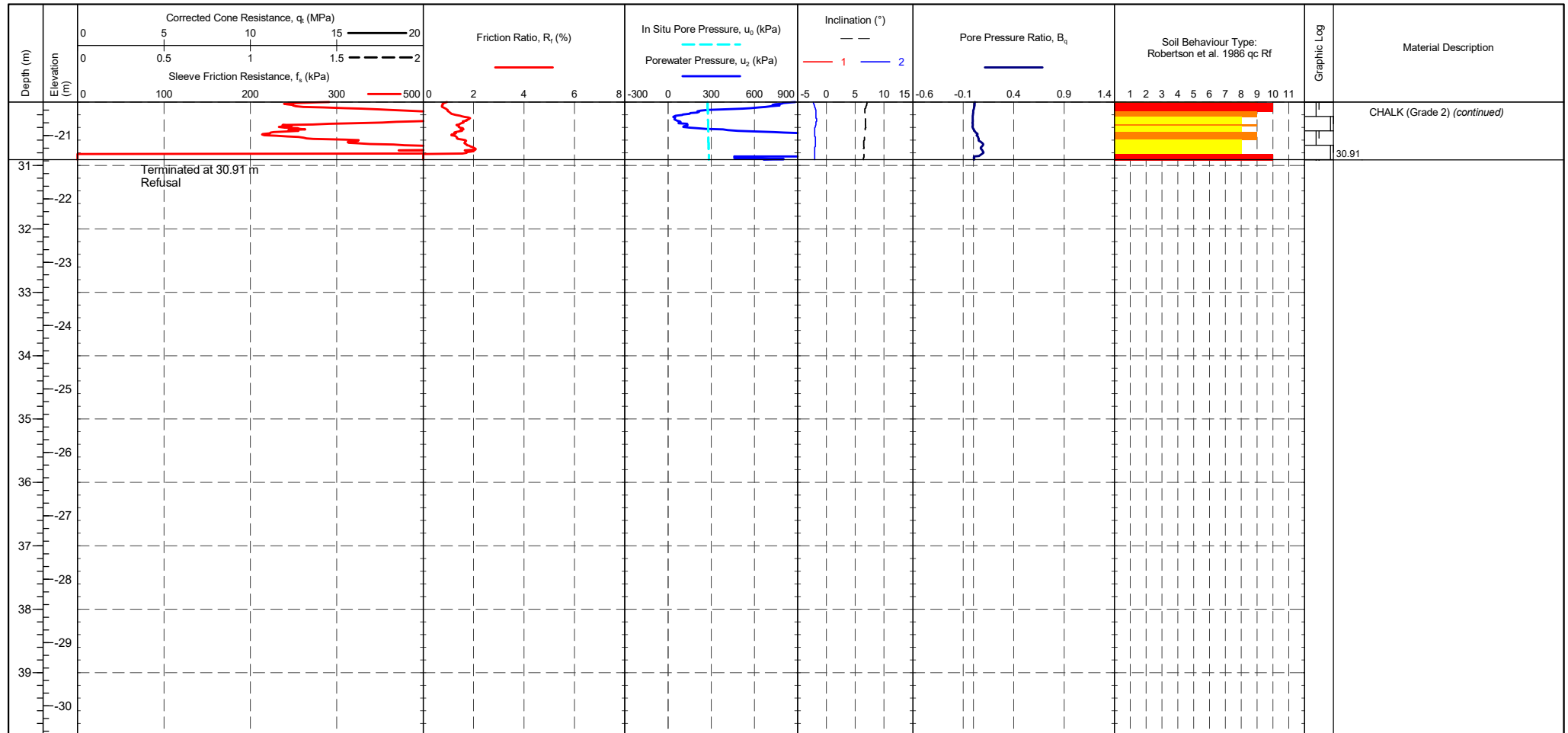
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.443	0.435	0.008886	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0782	0.0785	-0.000269	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained
CONE AREA RATIO : 0.75	FRICTION REDUCER : None	u2 (kPa)	-0.00738	-0.00615	-0.00123	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 ($^\circ$)	-1.95	-1.95	0			
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 ($^\circ$)	-1.17	-0.954	-0.220264			

PointID

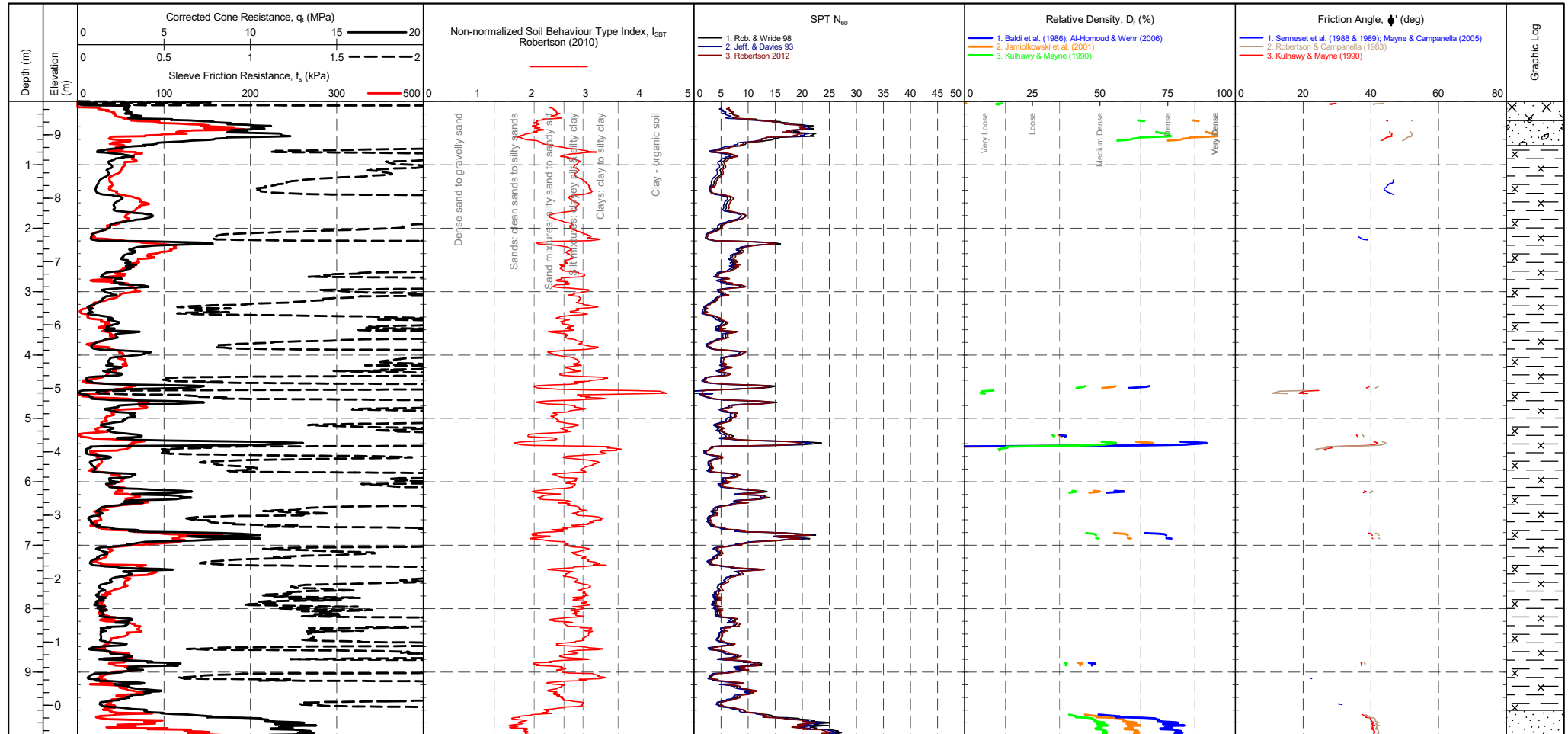
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (")	-1.95	-1.95	0
Inclinometer 2 (")	-1.17	-0.954	-0.220264

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density Dr (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

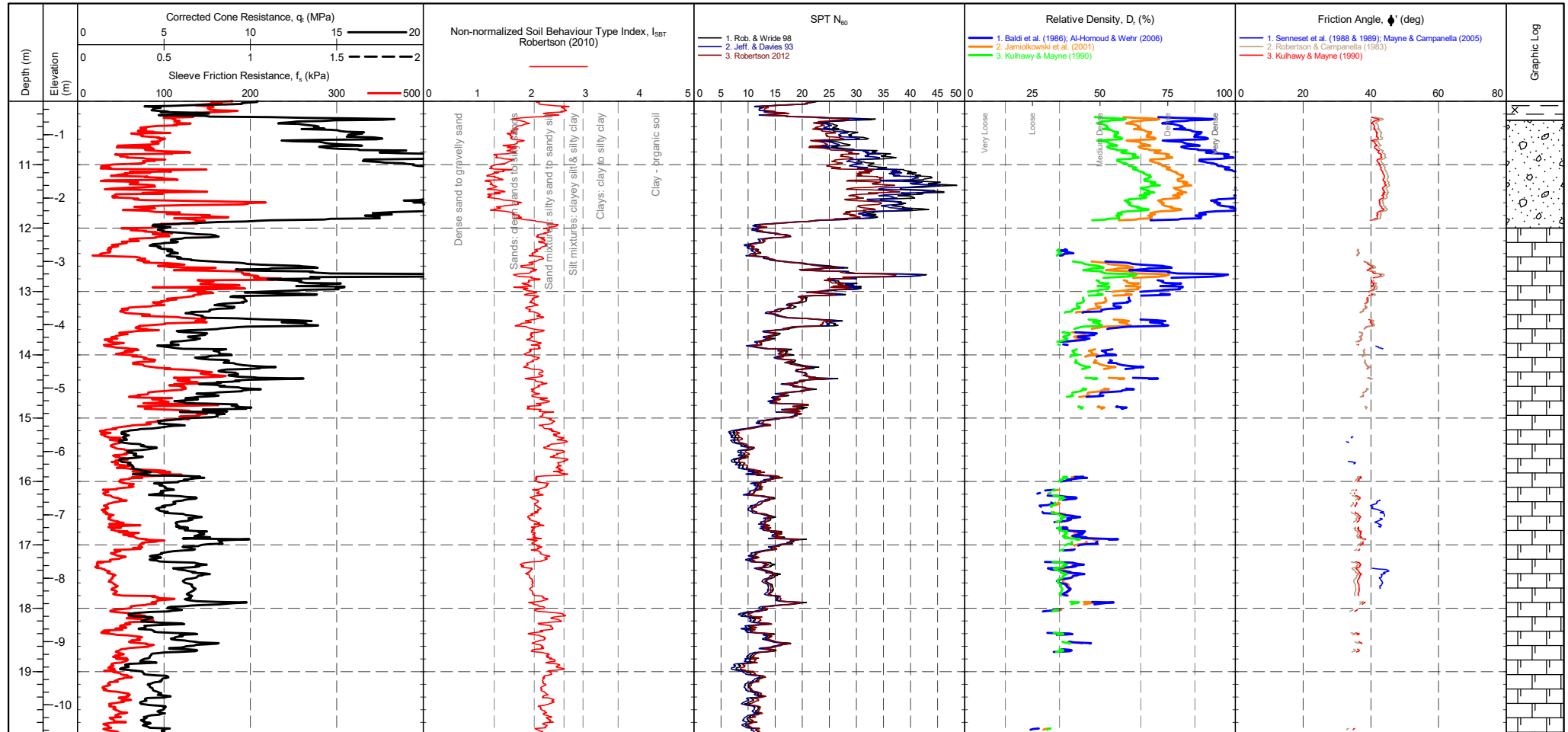
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

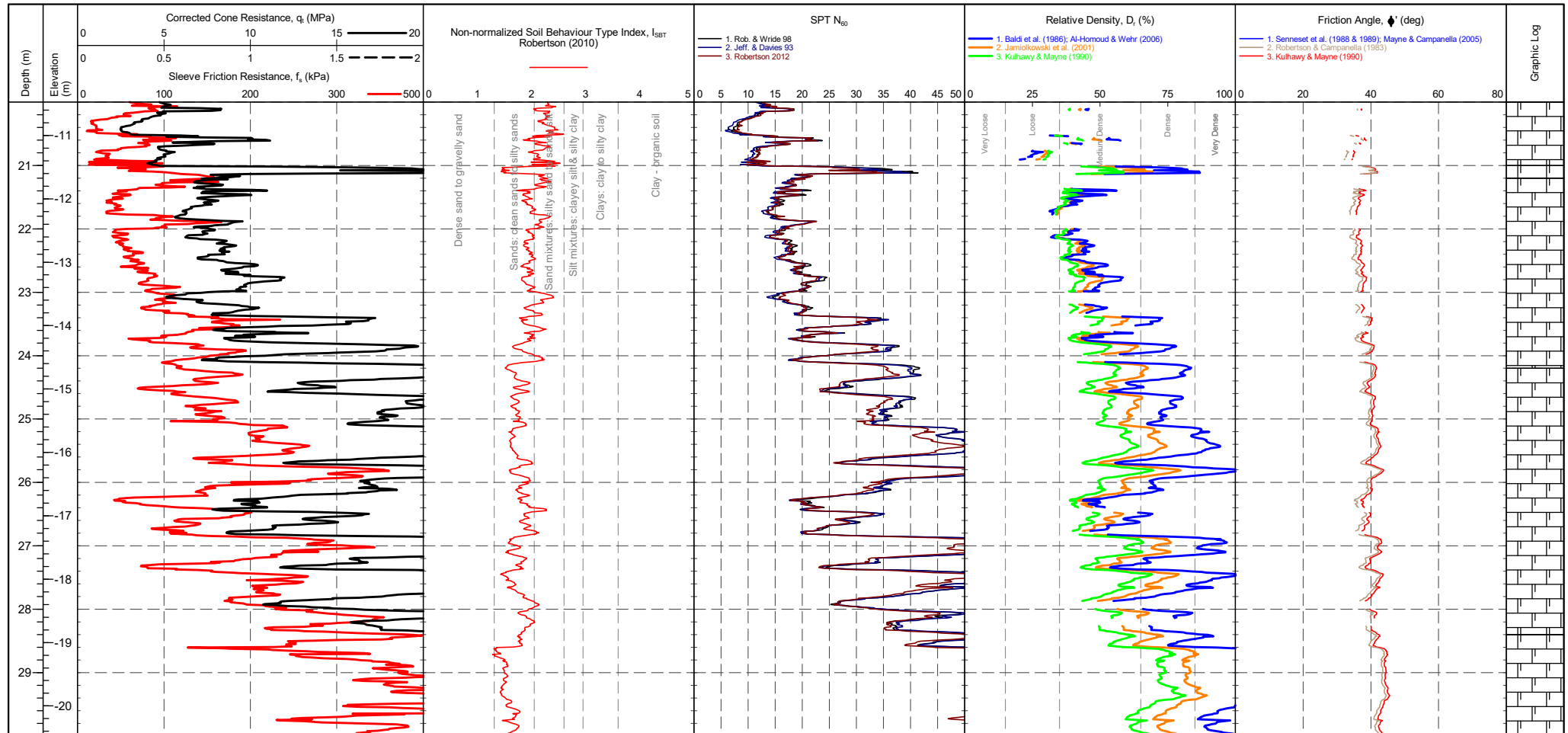
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

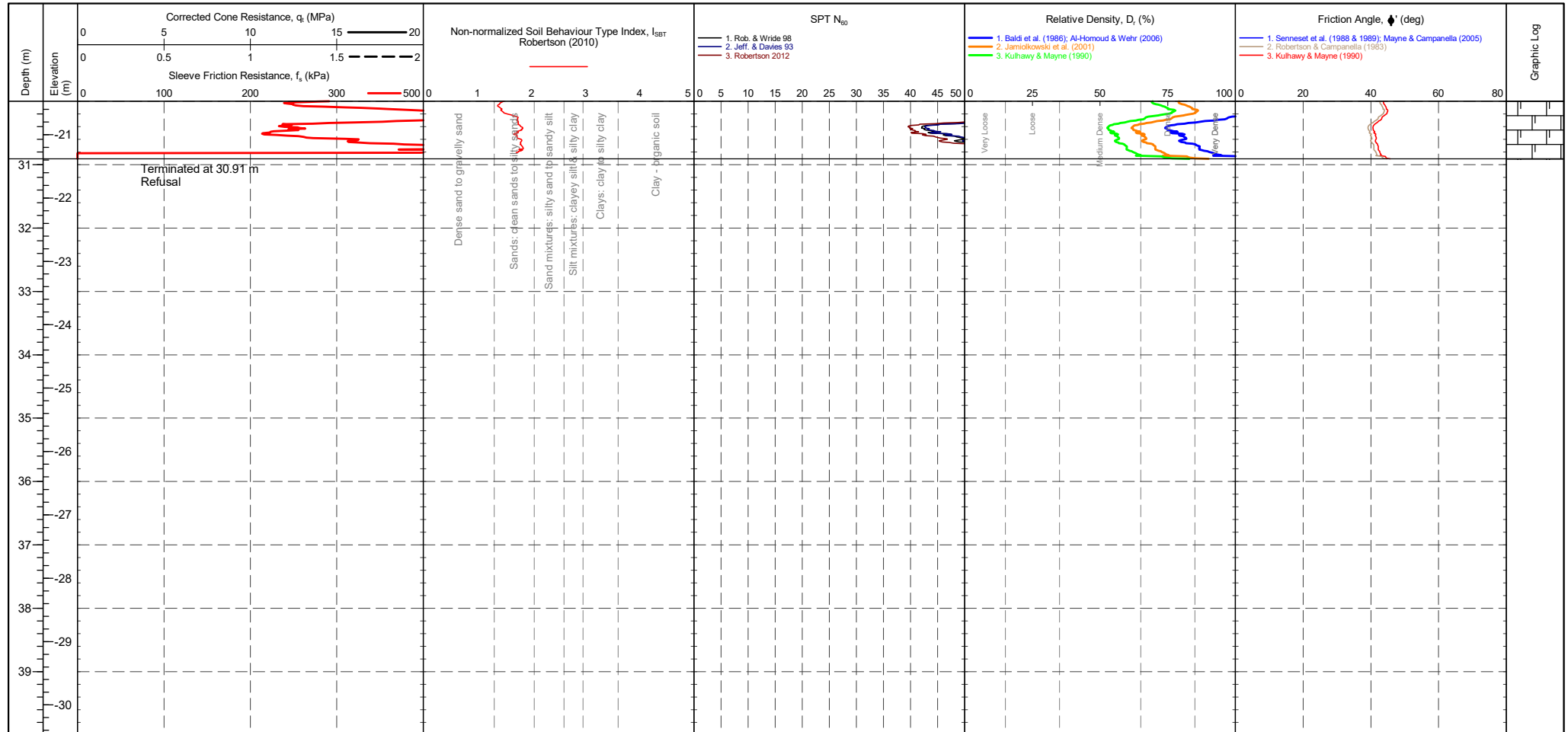
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

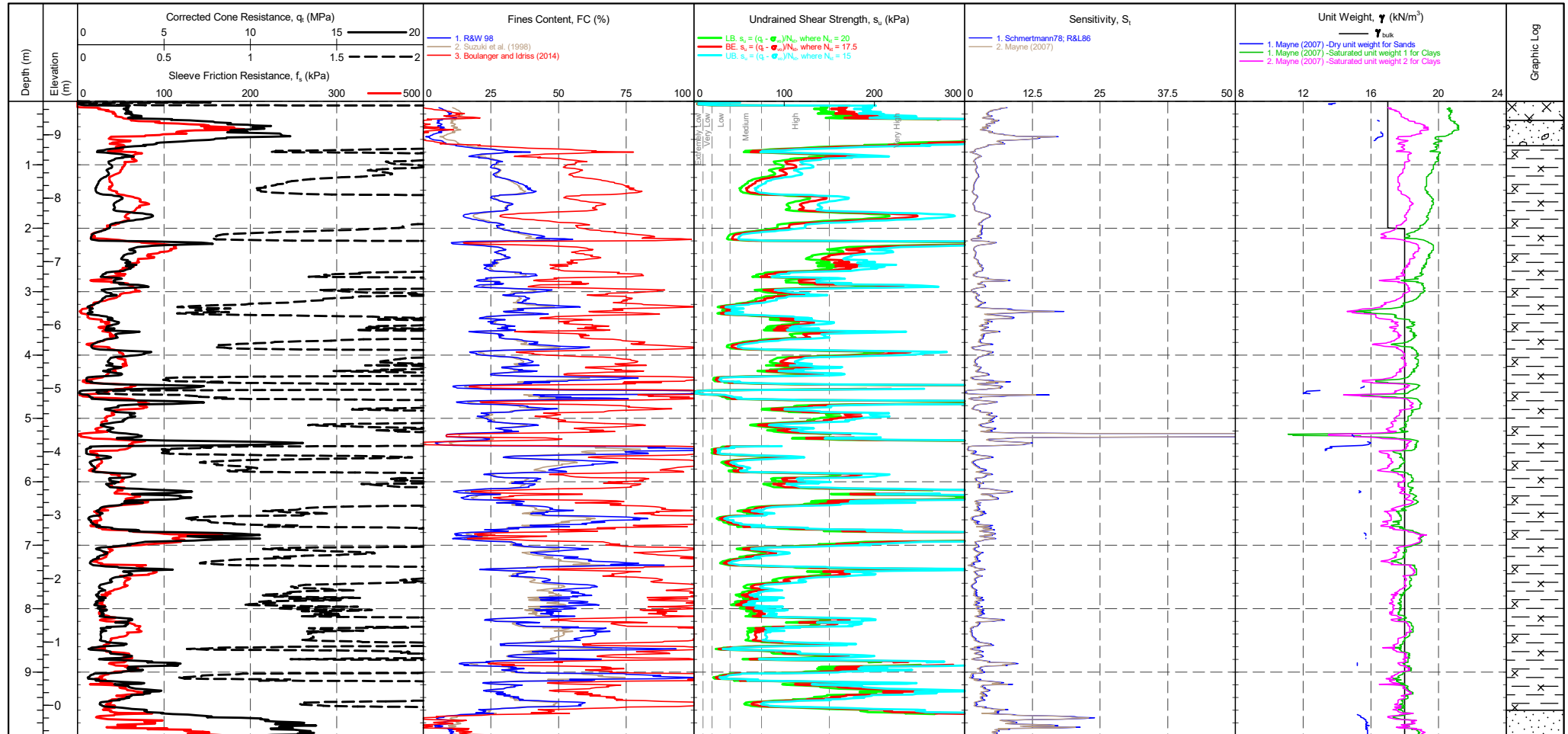
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.443 0.435 0.00886
Sleeve (kPa) 0.0782 0.0785 -0.000269
u2 (kPa) -0.00738 -0.00615 -0.00123
Inclinometer 1 (°) -1.95 -1.95 0
Inclinometer 2 (°) -1.17 -0.954 -0.220264

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

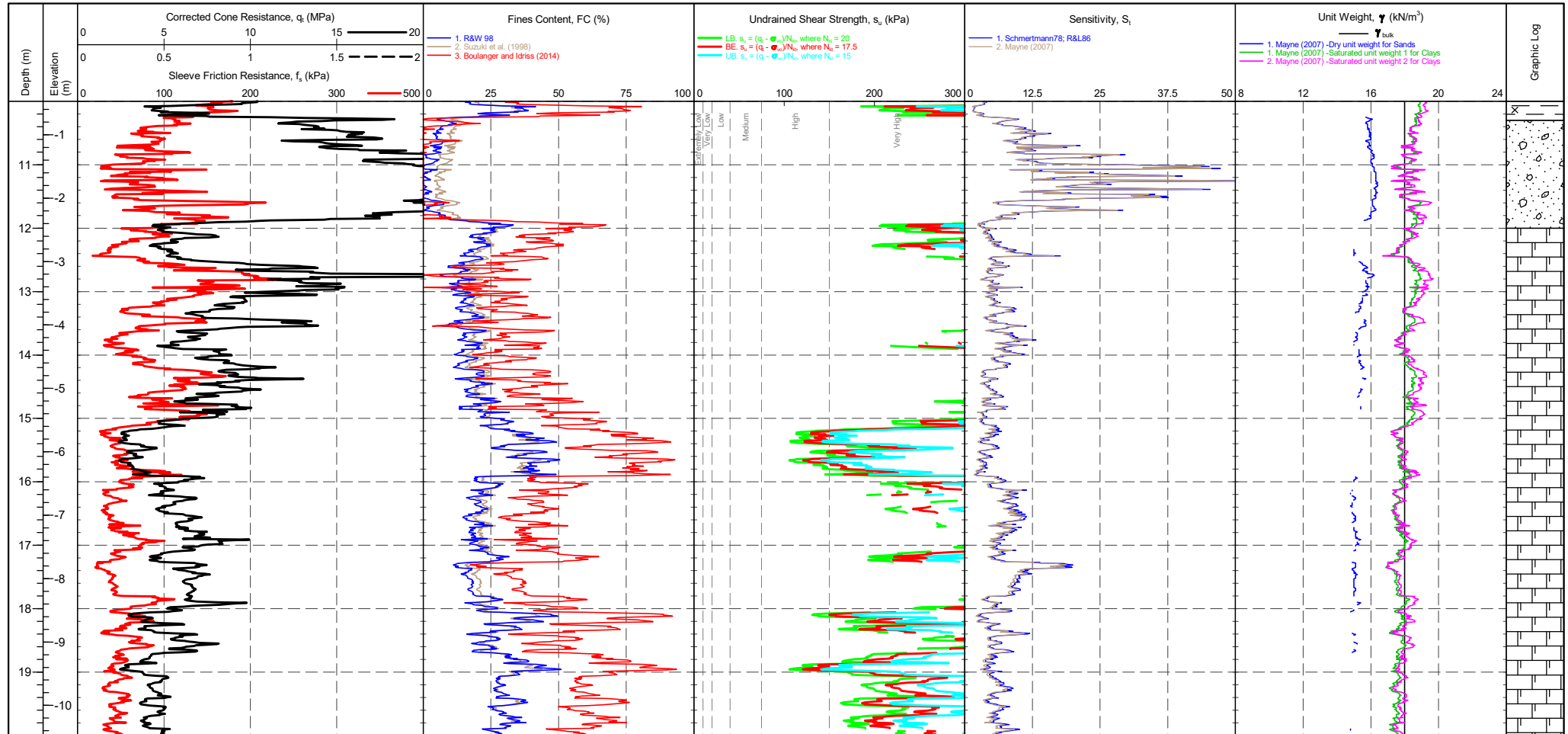
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

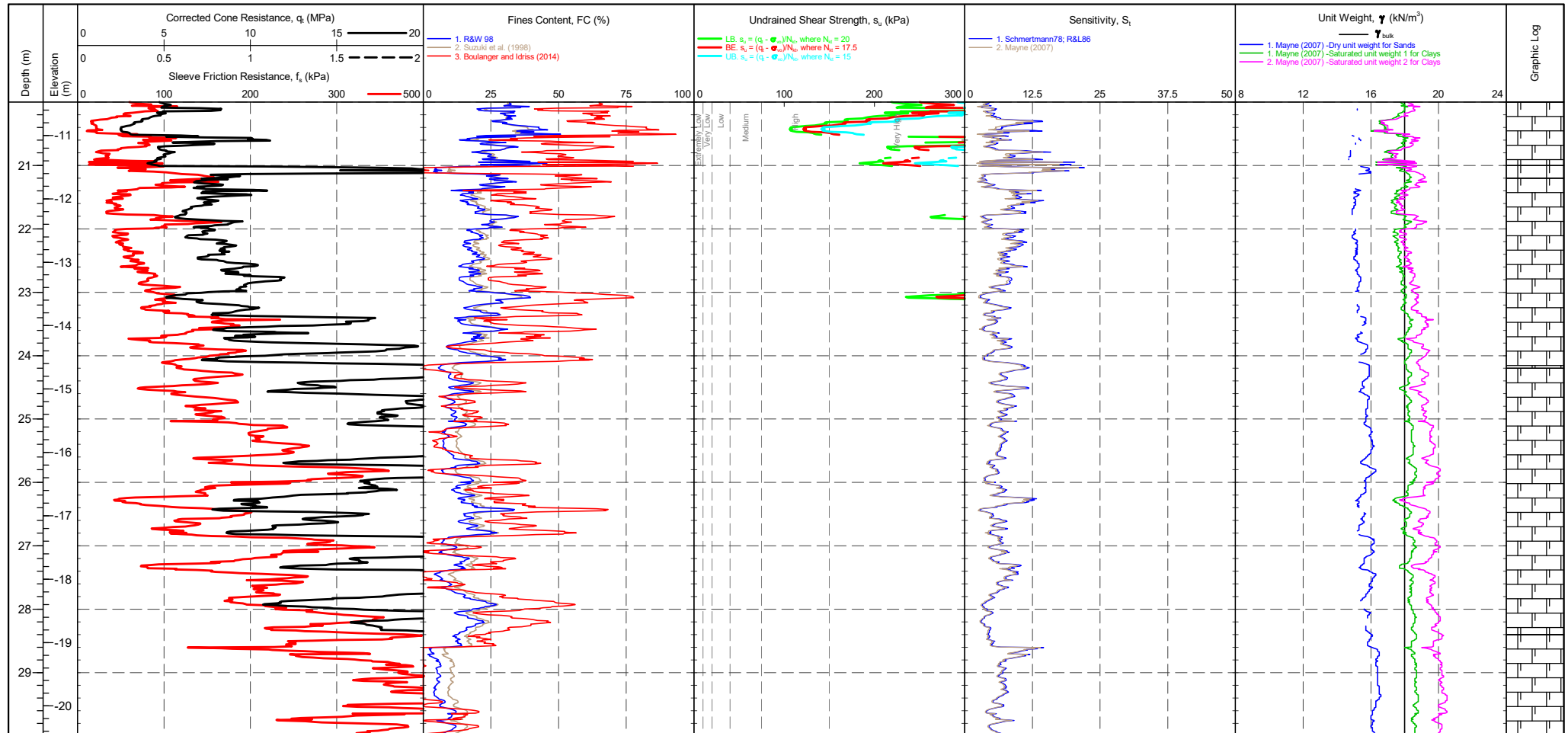
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.443 0.435 0.00886
Sleeve (kPa) 0.0782 0.0785 -0.000269
u2 (kPa) -0.00738 -0.00615 -0.00123
Inclinometer 1 (°) -1.95 -1.95 0
Inclinometer 2 (°) -1.17 -0.954 -0.220264

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

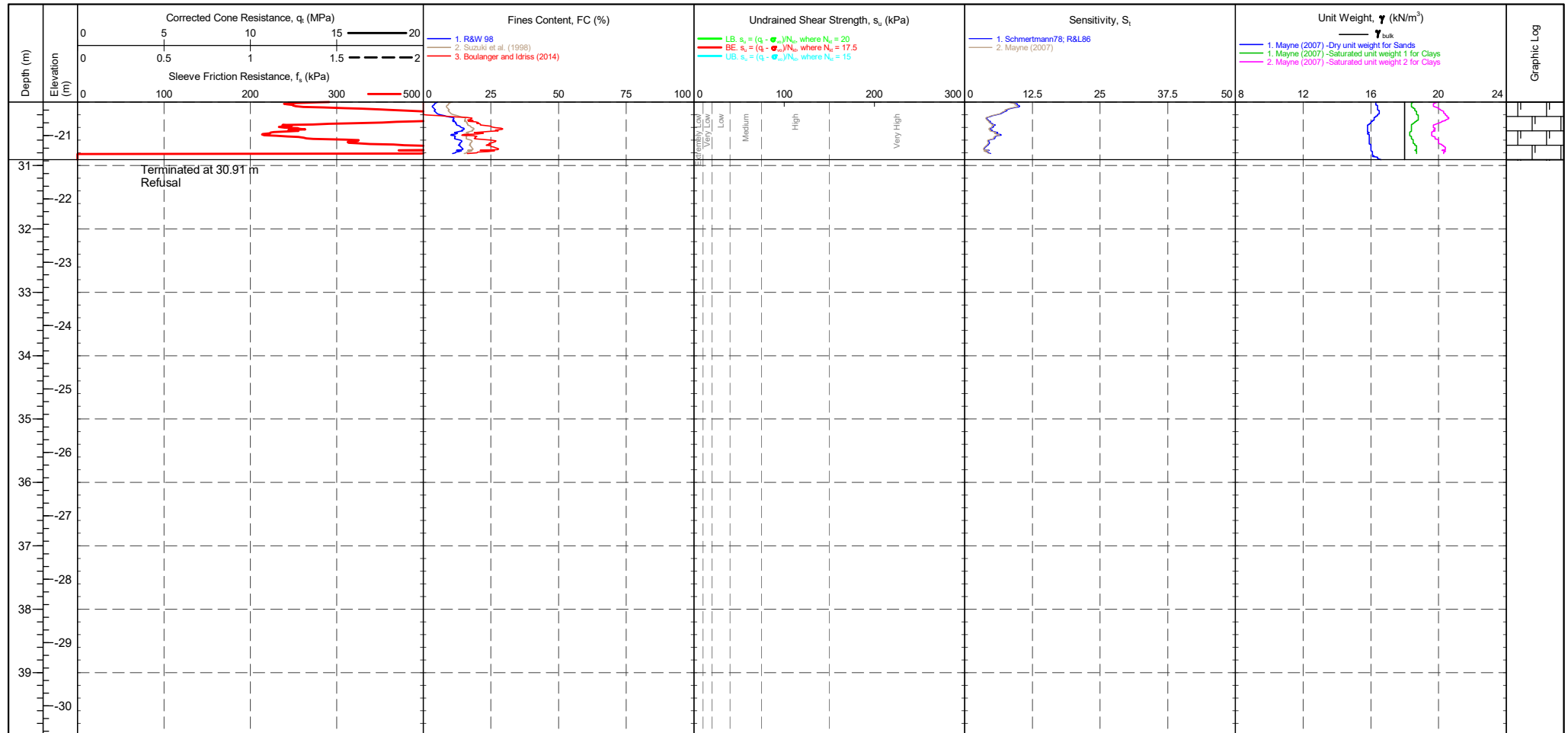
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

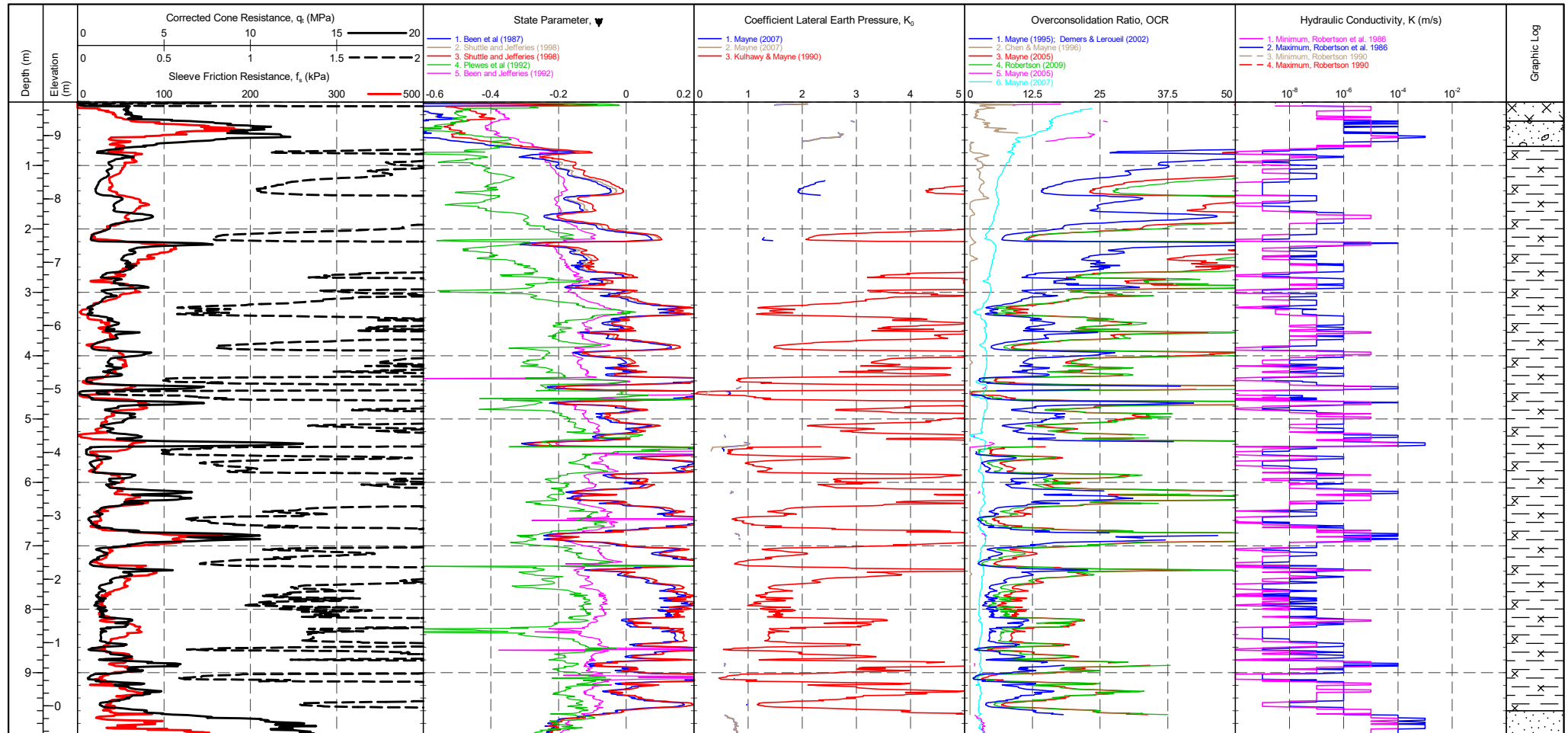
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

Groundwater Level
Dissipation Test

PointID

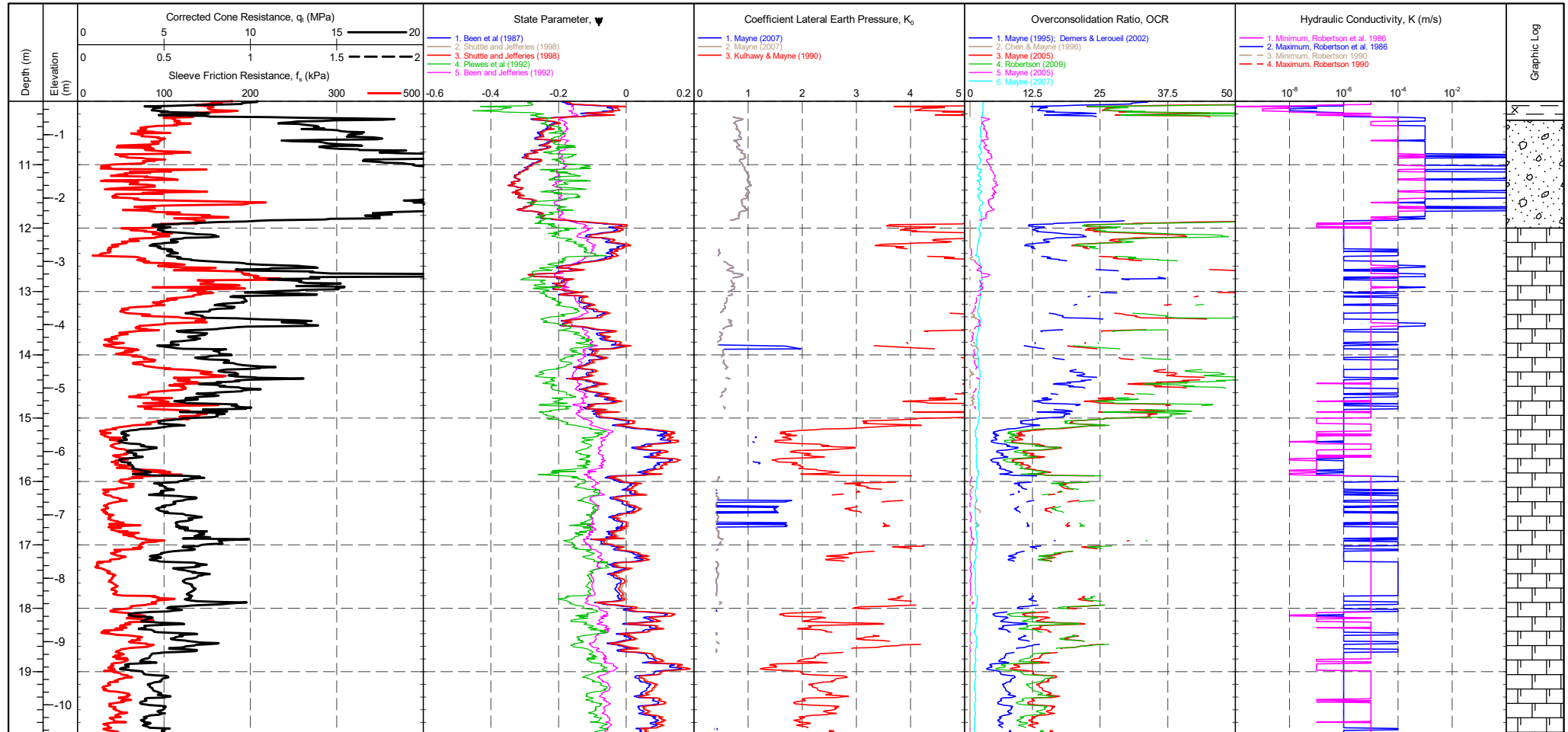
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

Groundwater Level
Dissipation Test

PointID

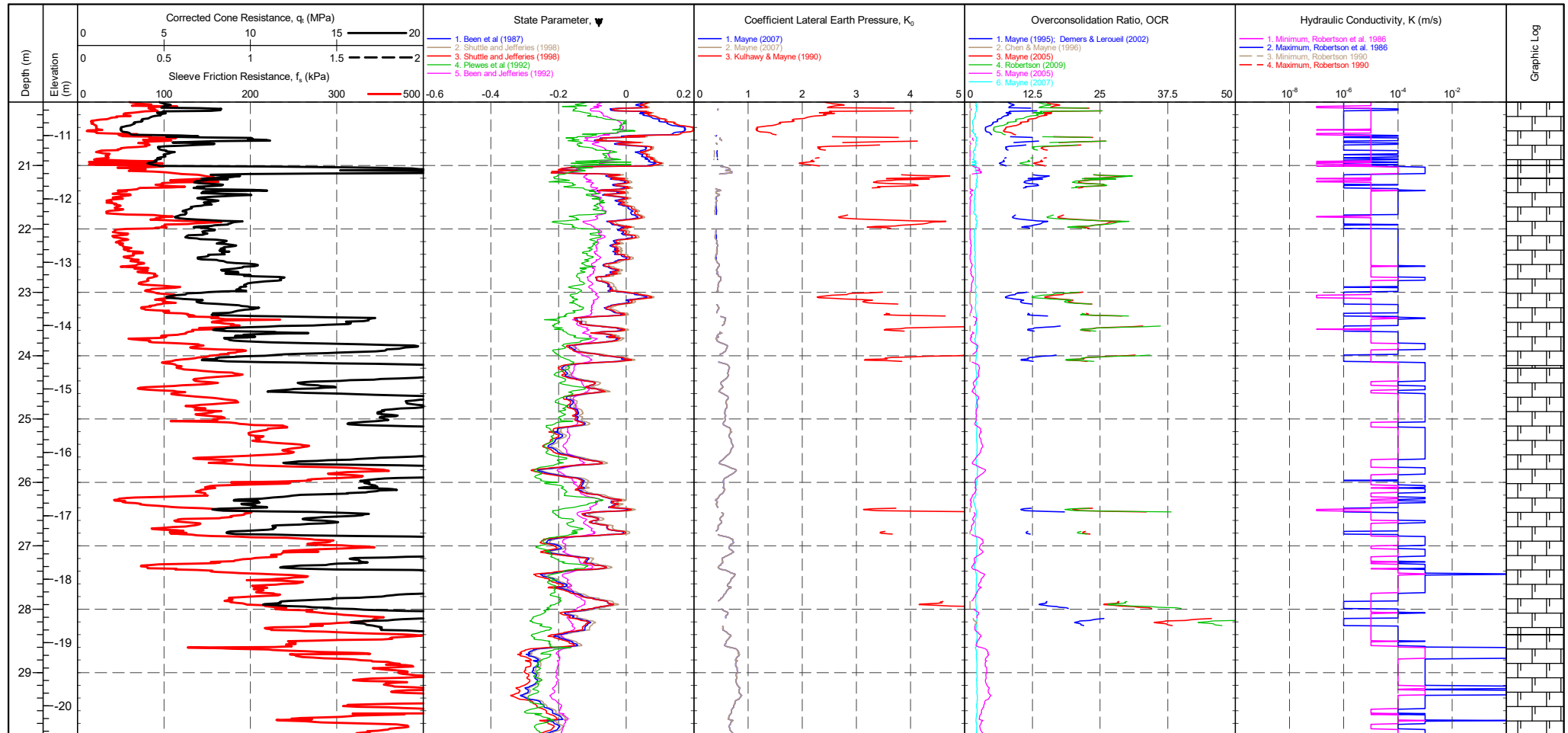
CPT113

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.008886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

Groundwater Level
Dissipation Test

PointID

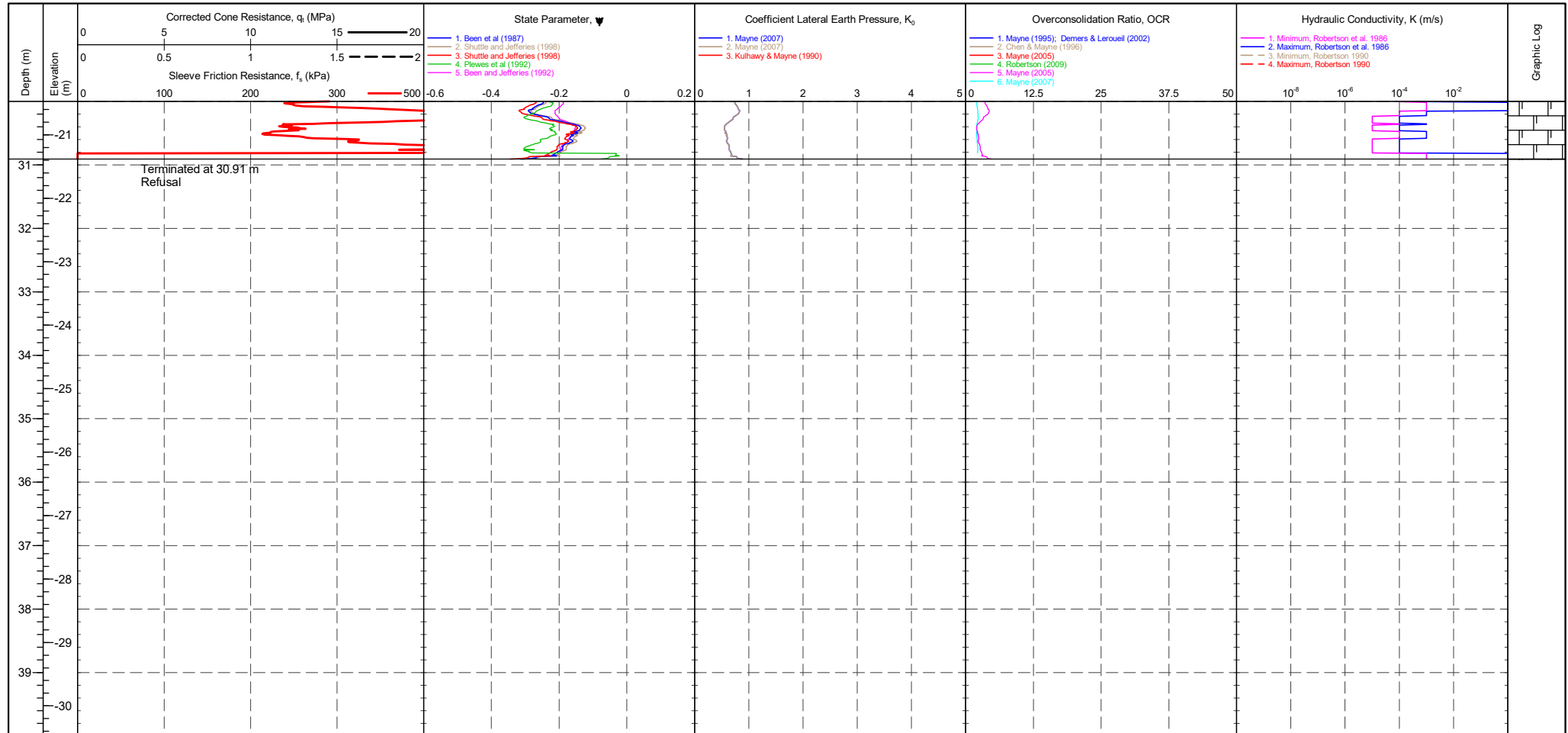
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

Groundwater Level
Dissipation Test

PointID

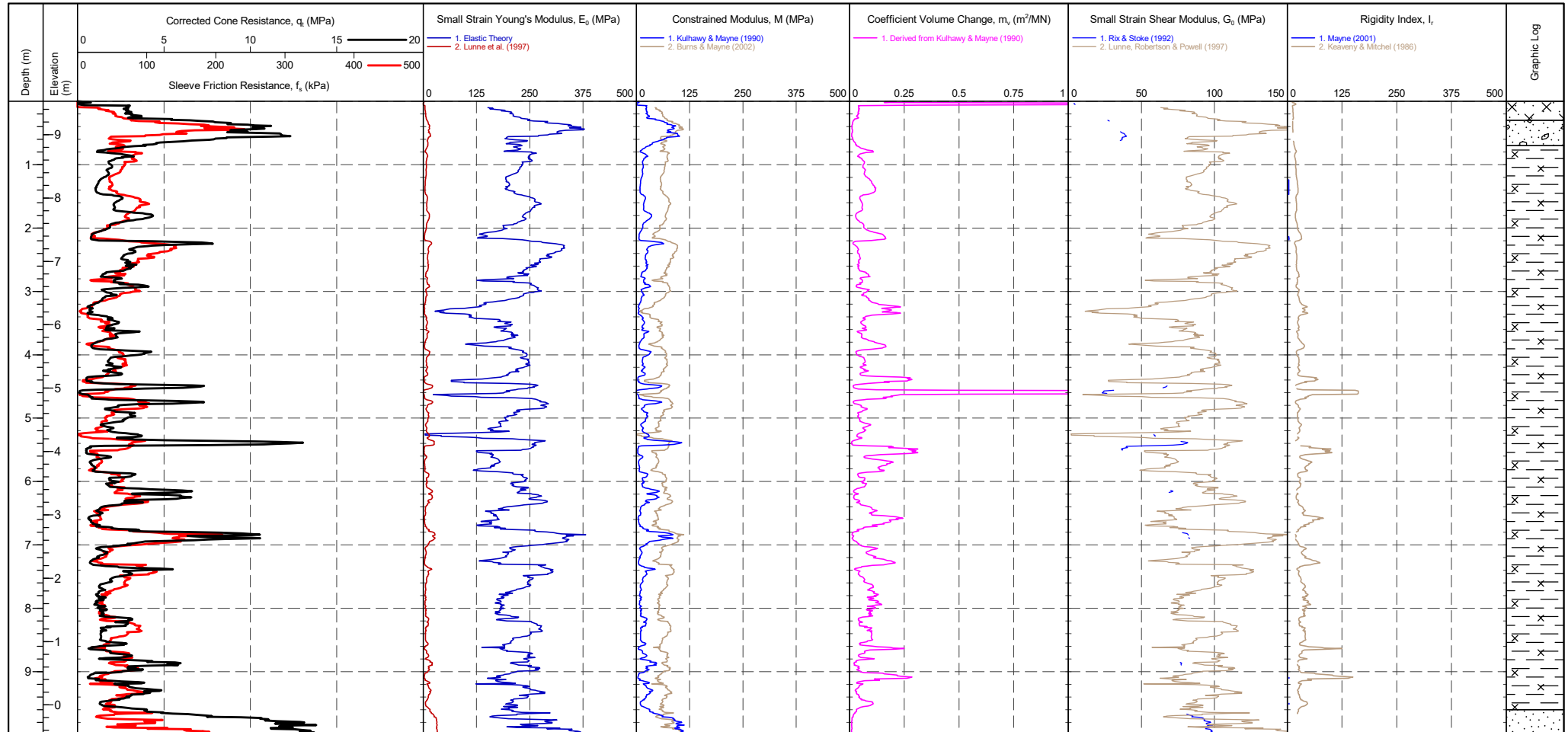
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

Groundwater Level
Dissipation Test

PointID

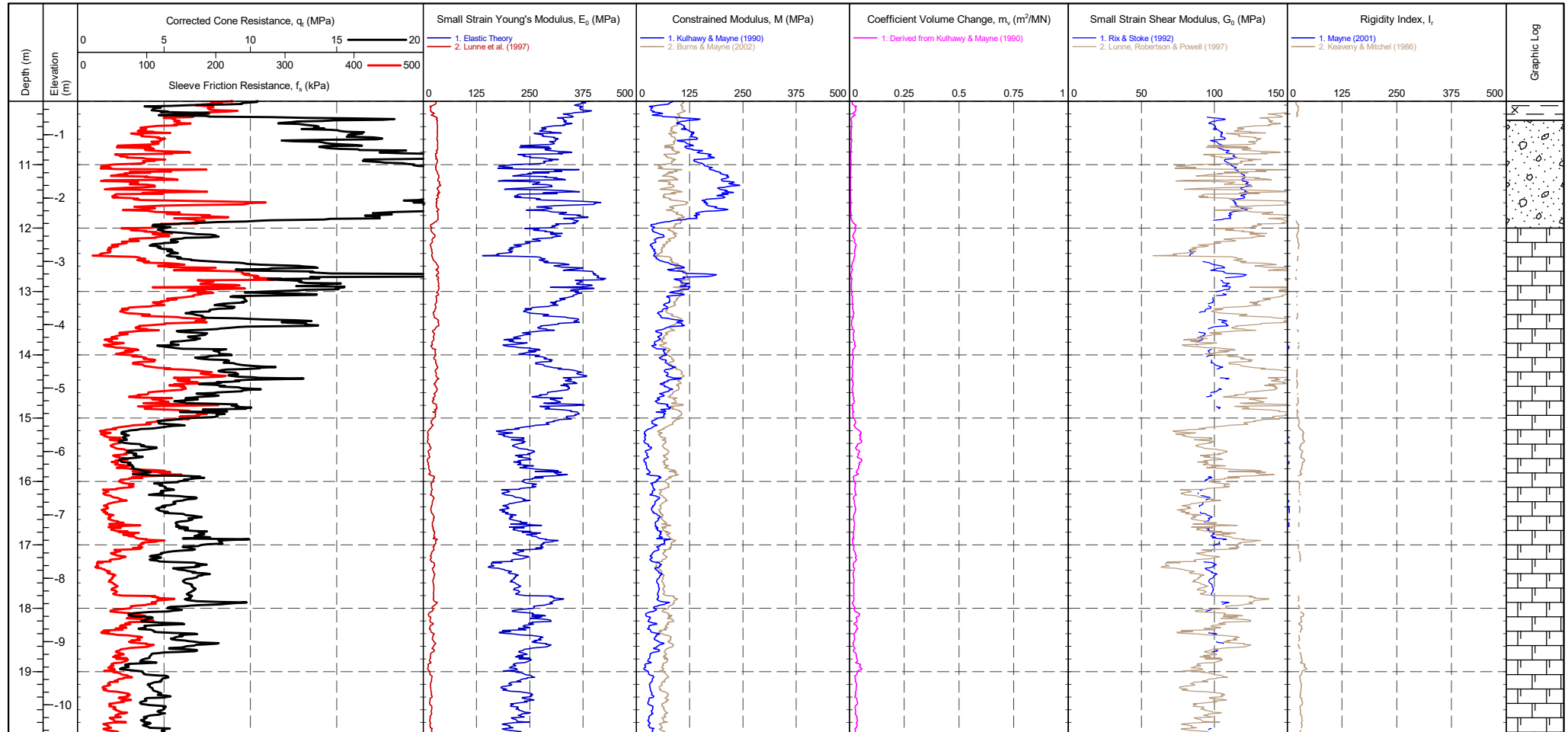
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

Groundwater Level
Dissipation Test

PointID

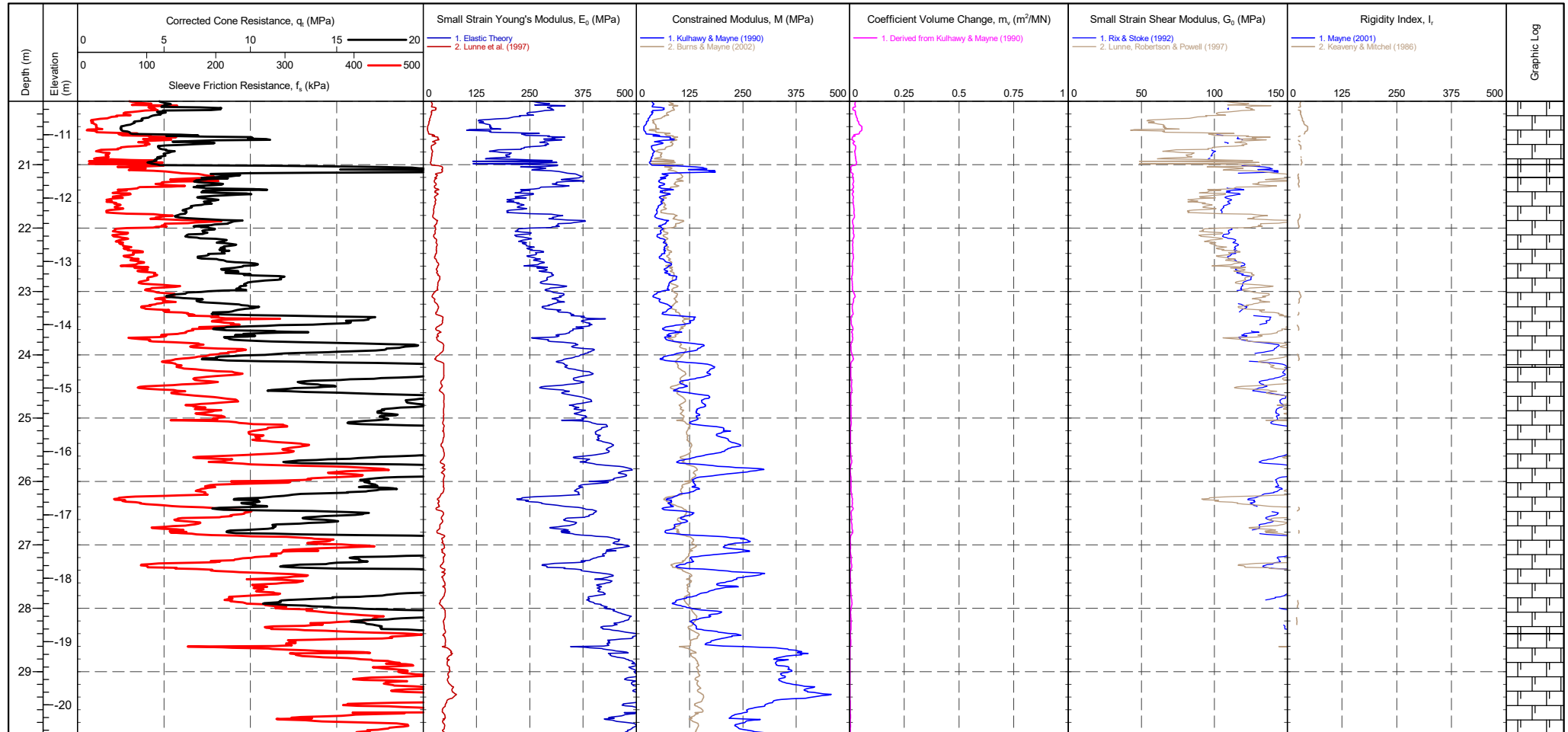
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

Groundwater Level
Dissipation Test

PointID

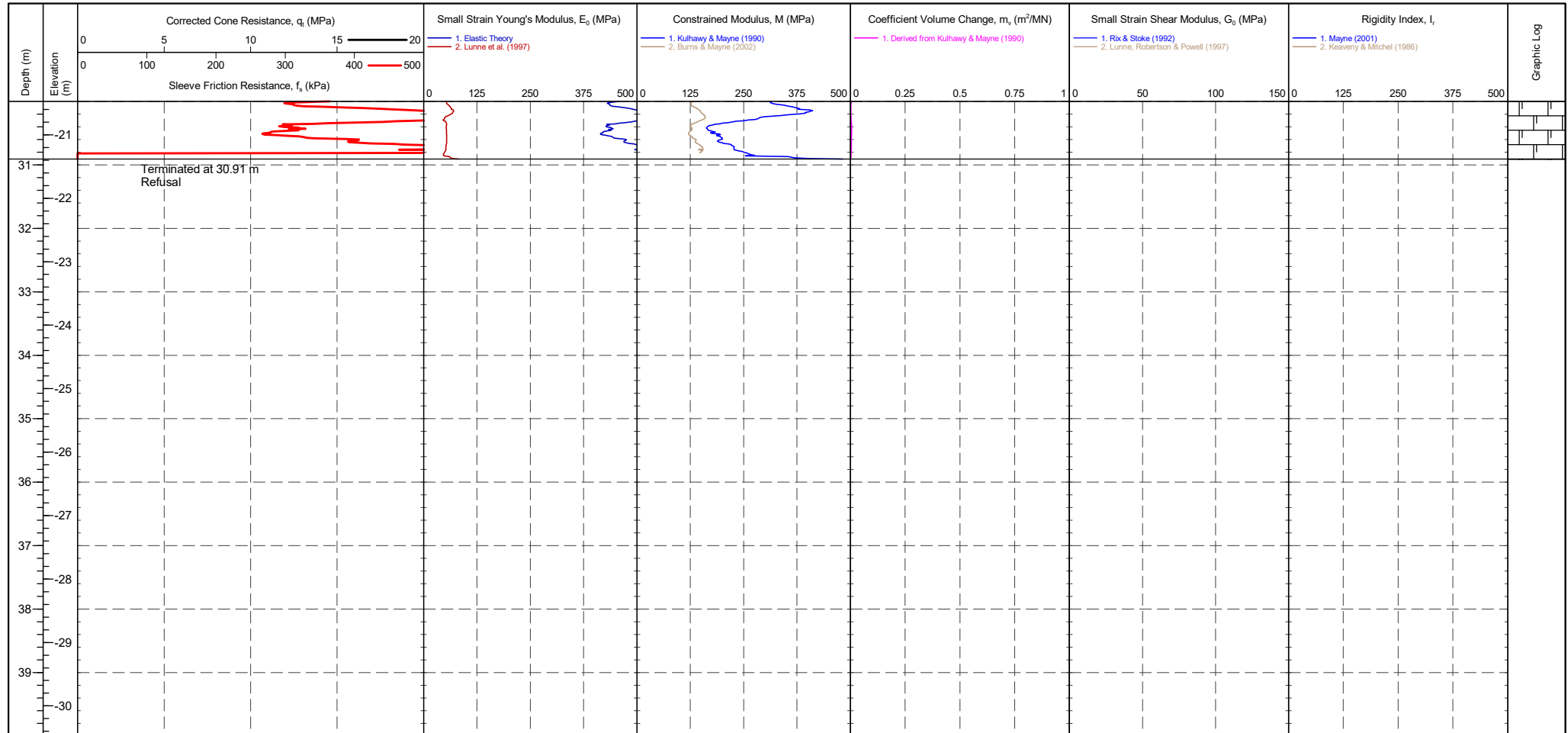
CPT113

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470150.7 m
NORTHING : 105631.8 m
ELEVATION : 9.53 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

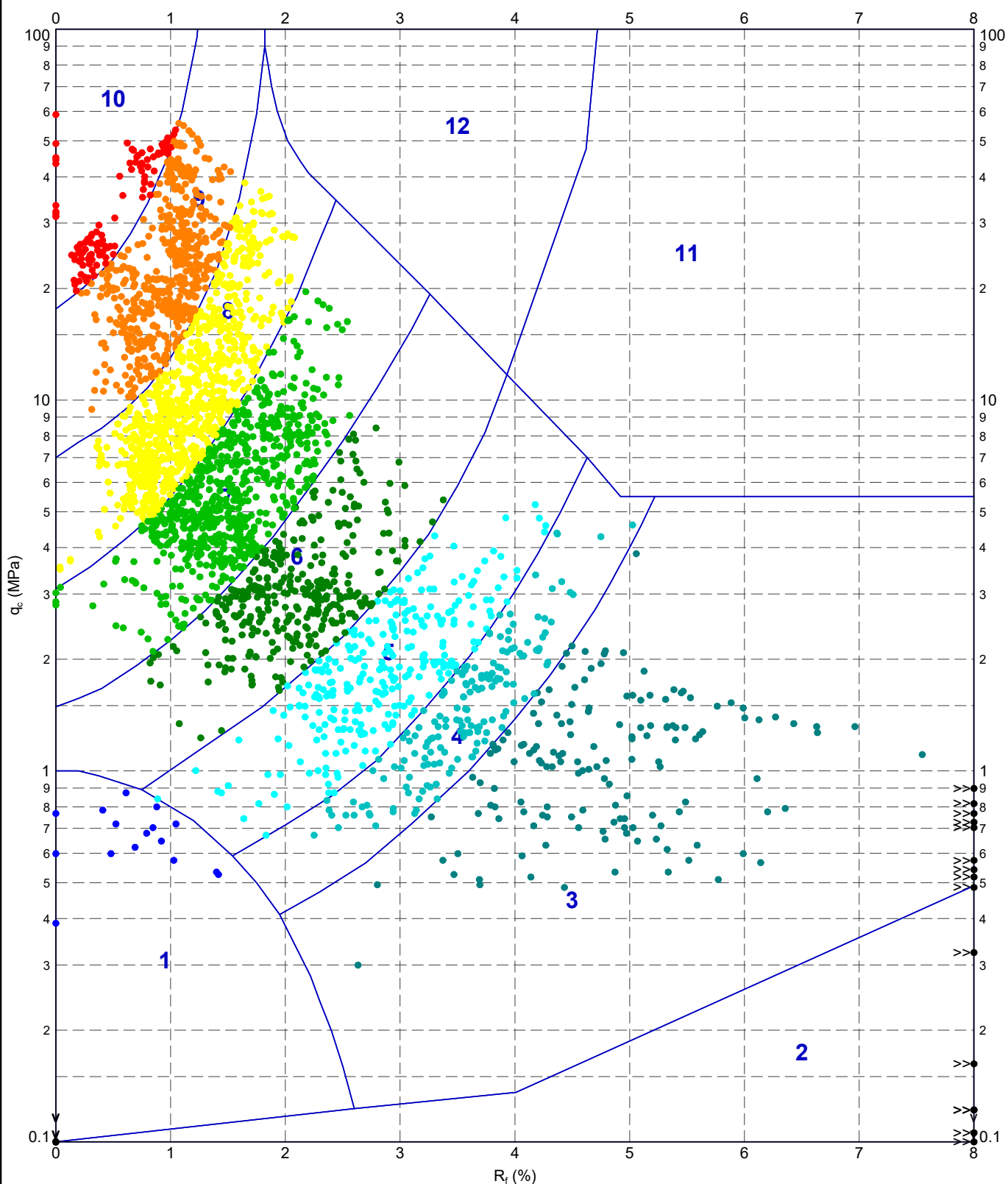
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.443	0.435	0.00886
Sleeve (kPa)	0.0782	0.0785	-0.000269
u2 (kPa)	-0.00738	-0.00615	-0.00123
Inclinometer 1 (°)	-1.95	-1.95	0
Inclinometer 2 (°)	-1.17	-0.954	-0.220264

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MAP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 11:12:10 10:02:00.04 Datagel Lab and In Situ Tool - In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT113

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No



IN SITU SITE INVESTIGATION

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Centre,
Highfield Drive
St. Leonards on Sea, East Sussex,
TN38 9UH, U.K.

Company No.: 6339499
VAT No.: 922 3561 41