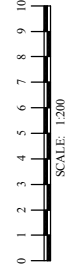
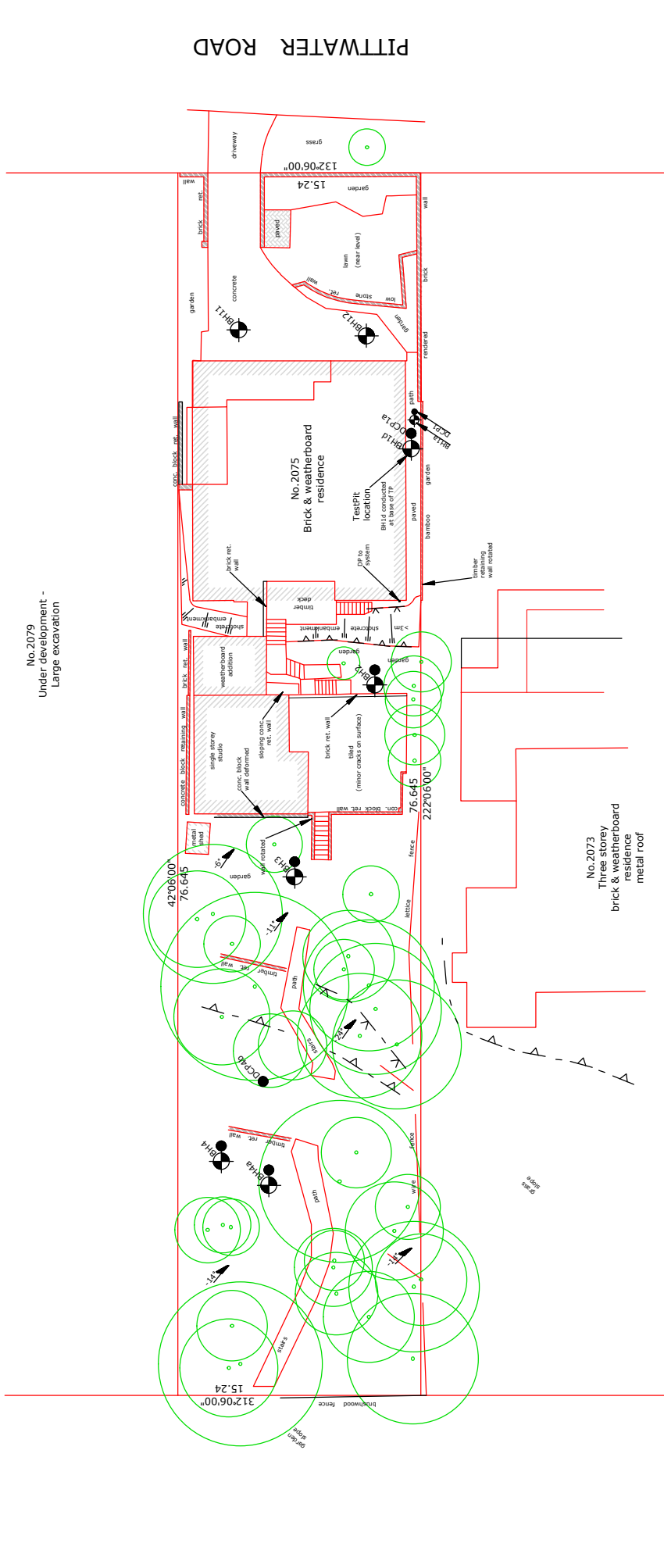


Appendix 2



SITE PLAN & TEST LOCATIONS **FIGURE 1.**

	Crozier Geotechnical Unit 12, 42-46 Watlie Road Brookside NSW 2100 Crozier Geotechnical is a division of PJC Geo-Engineering Pty Ltd ABN: 96 113 435 624 Phone: (02) 9939 1882 Fax: (02) 9939 1883	LEGEND TOP OF SLOPE BASE OF SLOPE AUGER LOCATIONS DYNAMIC PENETROMETER TEST SLOPE ANGLE SURFACE WATER FLOW	SCALE: 1:200 @ A3 DRAWING: FIG. 1 DRAWN: JB DATE: JAN 2016 APPROVED BY: PROJECT: 2012-176	PREPARED FOR: Mr. JOHN SIMMONDS	SITE ADDRESS: 2075 PITWATER ROAD BAYVIEW, NSW
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FIELD TEST BORE REPORT

CLIENT: Simmonds

DATE: 24/08/2012

BORE No.: 1c

PROJECT: Alterations and Additions

PROJECT No.: 2012-176

SHEET: 1 of 6

LOCATION: 2075 Pittwater Road,
Bayview

SURFACE LEVEL: R.L. 3.70

Depth (m)	Description of Strata	Sampling		In Situ Testing	
		Depth (m)	Type	Type	Results
0.00	PAVERS				
0.08	FILL - Brown, medium to coarse grained, moist, sand fill				
0.14	FILL- Brown & red-brown, medium to coarse grained, damp, sand, clay & gravel fill	D	0.20		
0.50	Auger refusal on cobble in fill				
1.00					
2.00					

RIG: Hand Auger

DRILLER: AW LOGGED: TMC

METHOD: 100mm diameter open auger

GROUND WATER OBSERVATIONS: No free groundwater observed

REMARKS:

CHECKED:

FIELD TEST BORE REPORT

CLIENT: Simmonds

DATE: 24/08/2012

BORE No.: 1d

PROJECT: Alterations and Additions

PROJECT No.: 2012-176

SHEET: 2 of 6

LOCATION: 2075 Pittwater Road,
Bayview

SURFACE LEVEL: R.L. 3.70

Depth (m)	Description of Strata	Sampling		In Situ Testing		
		Depth (m)	Type	Type	Results	
0.00	PAVERS					
0.08	FILL - Brown, medium to coarse grained, moist, sand fill					
0.14	FILL- Brown & red-brown, medium to coarse grained, damp, sand, clay & gravel fill					
		D	0.50			
0.70	FILL- Brown & red-brown, clay fill with sandstone gravel					
0.85	SILTY CLAY- Black, damp, silty clay to clayey silt with plant roots * silty fine grained sand	D	0.90			
1.00						
1.20	CLAYEY SAND - Dark brown & black mottle, fine grained moist, clayey sand	D	1.25			
1.30	SANDY CLAY- Brown with grey & orange-brown plastic, moist, fine grained, sandy clay * wet at 1.50m (seepage only above ironstone)	D	1.40			
1.60	*ironstone band					
1.80	CLAYEY SAND- Brown, fine grained, wet clayey sand * becoming light brown & slightly clayey sand					
2.00						
2.05	SANDY CLAY/CLAYEY SAND- Yellow brown, fine grained, moist to wet clayey sand/sandy clay. * grey & yellow brown below 2.10m					
2.20	HAND AUGER REFUSAL at 2.20m depth on an ironstone band					

RIG: Hand Auger

DRILLER: AW

LOGGED: TMC

METHOD: 100mm diameter open auger

GROUND WATER OBSERVATIONS: No free groundwater observed

REMARKS: Bore drilled adjacent to test pit 1

CHECKED: _____

FIELD TEST BORE REPORT

CLIENT: Simmonds

DATE: 24/08/2012

BORE No.: 2

PROJECT: Alterations and Additions

PROJECT No.: 2012-176

SHEET: 3 of 6

LOCATION: 2075 Pittwater Road,
Bayview

SURFACE LEVEL: R.L. 8.70

Depth (m)	Description of Strata	Sampling		In Situ Testing		
		Depth (m)	Type	Type	Results	
0.00	Garden					
	FILL- Dark brown-black, silty sand topsoil & organic fill * clay fragments below 0.25m					
0.30	CLAY- Yellow brown & orange brown, damp, plastic clay (residual)					
	* grey silty clay bands below 0.45m * dominantly light grey with orange brown & red brown, weak ironstone gravel					
1.00	* hard ironstone bands					
1.10	HAND AUGER REFUSAL at 2.20m depth on an ironstone band					
2.00						

RIG: Hand Auger

DRILLER: AW LOGGED: TMC

METHOD: 100mm diameter open auger

GROUND WATER OBSERVATIONS: No free groundwater observed

REMARKS:

CHECKED:

FIELD TEST BORE REPORT

CLIENT: Simmonds

DATE: 24/08/2012

BORE No.: 3

PROJECT: Alterations and Additions

PROJECT No.: 2012-176

SHEET: 4 of 6

LOCATION: 2075 Pittwater Road,

SURFACE LEVEL: R.L. 12.3

Bayview[illegible]

RIG: Hand Auger

DRILLER: AW

LOGGED: TMC

METHOD: 100mm diameter open auger

GROUND WATER OBSERVATIONS: No free groundwater observed

REMARKS:

CHECKED:

FIELD TEST BORE REPORT

CLIENT: Simmonds

DATE: 24/08/2012

BORE No.: 4a

PROJECT: Alterations and Additions

PROJECT No.: 2012-176

SHEET: 5 of 6

LOCATION: 2075 Pittwater Road,

SURFACE LEVEL: R.L. 16.19

Bayview

Depth (m)	Description of Strata PRIMARY SOIL TYPE - strength or density, colour, grainsize or plasticity, moisture, soil type incl. secondary constituents, other remarks	Sampling		In Situ Testing		
		Depth (m)	Type	Type	Results	
0.00	FILL- Brown, fine to coarse grained, damp silty sand fill with sandstone gravel & pipe fragments					
0.25	SAND- Brown-grey medium, fine- medium grained, sand with sandstone gravel					
0.50	HAND AUGER REFUSAL at 0.50m depth on sandstone boulder					
1.00						
2.00						

RIG: Hand Auger

DRILLER: AW

LOGGED: TMC

METHOD: 100mm diameter open auger

GROUND WATER OBSERVATIONS: No free groundwater observed

REMARKS: Bore attempted in three locations with similar results

CHECKED: _____

DYNAMIC PENETROMETER TEST RESULTS

CLIENT: Simmonds

DATE: 24/08/2012

PROJECT: Alterations and Additions

PROJECT No.: 2012-176

LOCATION: 2075 Pittwater Road, Bayview

SHEET: 6 of 6

TEST LOCATION	PENETRATION RESISTANCE BLOWS / 150 mm							
	1	1a	2	2a	3	4	4a	4b
Depth (m)								
0.00 - 0.15	-	-	1	-	1	0	0	1
0.15 - 0.30	-	-	4	-	3	2	4	9
0.30 - 0.45	-	-	6	-	14	4	5	5
0.45 - 0.60	8	-	4	-	6	2	5	15
0.60 - 0.75	9	3	5	-	6	3	6	15
0.75 - 0.90	4	2	6	-	6	6	8	10
0.90 - 1.05	5	1	6	-	8	18 ref (B) 100mm	15 ref (B) 120mm	15
1.05 - 1.20	7	4	7	9	13			10 ref (B) @ 0mm
1.20 - 1.35	9	5		17	7			
1.35 - 1.50	9	3		18	7			
1.50 - 1.65	9	4			8			
1.65 - 1.80	6	5			13			
1.80 - 1.95	5	7			20			
1.95 - 2.10	7	7			25			
2.10 - 2.25	7	6						
2.25 - 2.40	10	8						
2.40 - 2.55		11						
2.55 - 2.70		8						
2.70 - 2.85		11						
2.85 - 3.00								

TEST METHOD: AS 1289. F3.2, CONE PENETROMETER
AS 1289. F3.3, SAND PENETROMETER

All

REMARKS: DCP 1 through BH 1a, DCP 1a conducted through the base of BH1d
DCP 2a conducted through base of borehole

FIELD TEST BORE REPORT

CLIENT: John Simmonds

DATE: 15/04/2013

BORE No.: 11

PROJECT: Proposed New Development

PROJECT No.: 2012-176A

SHEET: 1 of 2

LOCATION: 2075 Pittwater Road, Bayview

SURFACE LEVEL: RL $\approx$ 3.45m

Depth (m)	Description of Strata PRIMARY SOIL TYPE - strength or density, colour, grainsize or plasticity, moisture, soil type incl. secondary constituents, other remarks	Sampling		In Situ Testing	
		Type	Depth (m)	Type	Results
0.00					
0.10	CONCRETE DRIVEWAY SLAB				
	FILL: Light grey, moist, sandy clay fill				
0.70					
	FILL: Very loose, brown and grey, moist, clay fill with a trace of sand				
1.00		SPT	1.00		
1.30		2/1/2			
		N*=3			
1.30					
	CLAY: Soft, dark brown, moist to wet, silty clay with some sand (possible marine sediments)				
2.00		SPT	2.00		
2.30		C/O/3			
		N*=3			
2.30					
	Sandy CLAY: Grey, low plasticity, moist, sandy clay				
2.50					
	CLAY: Brown, moist to wet, silty clay with some sand				
3.00		SPT	3.00		
3.00	SANDSTONE: Extremely to highly weathered, very low strength, light grey and red-brown, sandstone bedrock	1C/14/8			
	BEGIN CORED BOREHOLE AT 3.15m DEPTH	for 80mm			
4.00		N*=Ref.			

RIG: Track mounted

DRILLER: Ben (TT) LOGGED: JB

METHOD: Auger

GROUND WATER OBSERVATIONS: Water seepage on top of rock noted at 2.90m depth.

REMARKS:

CHECKED: TMC

Primary Soil Type CLAY / SILT / SAND / GRAVEL / FILL

Secondary Constituents

0 to 5%	with trace	i.e. SAND with trace clay
5 to 12%	with some	i.e. SAND with some clay
12 to 20%	slightly	i.e. slightly clayey SAND
20 to <50%	modifier	i.e. clayey SAND

Moisture Content

Dry	Friable, free running, powdery
Moist	Feels cool, tends to adhere
Wet	Feels cold, makes hands wet
Saturated	Below water table

Test Bore - Diamond Core Bore Logs

Client: John Simmonds

Date: 15/04/2013 Borehole: 11

Project: Proposed New Development

Project No.: 2012-176A Dip: 90 Azimuth:

Location: 2075 Pittwater Road, Bayview

Surface Level: RL ≈ 3.50m Sheet: 2 of 2

Depth (m)	Description of Core Rock name, strength, weathering, grain size, texture/fabric, colour	Degree of Weathering						Discontinuities B- Bedding S- Shear J- Joint D- Drill Break	Rock Strength Ex. Low Very Low Low Medium High Very High Ex. High	Fracture Spacing 1.00 0.50 0.10 0.05 0.01	Sampling and In Situ Testing			
		FR	FS	SW	MW	RW	EW				Sample Type	Core Rec. %	RQD %	Test Results and Comments
3.00														
3.15	BEGIN CORED BOREHOLE AT 3.15m													
	SANDSTONE - Extremely weathered, extremely low strength, light grey with highly weathered, low strength, iron rich (red) bands							3.15-3.60 SM, CI				100%	0%	
3.60	SANDSTONE - Highly weathered, very low to low strength, light grey with some red-brown iron oxide staining, fine grained sandstone. Indistinct bedding.							3.90 DB				3.95		
4.00								4.0 DB						
								4.12 - T 25°, Fe, FR, RF						
								4.17-4.23 SM, CI						
4.25	SHALE - Extremely low to very low strength, extremely weathered, light grey							4.33-4.47 SM, CI						
4.50								4.47 & 4.54 DB				100%	37%	
	SANDSTONE - Highly weathered, very low to low strength, light grey with some red-brown iron oxide staining, fine grained sandstone. Indistinct bedding.							4.60 DB						
								4.70 DB						
								4.81-4.89 SM, CI						
5.00								5.0 DB						
5.04	SANDSTONE - Highly weathered, low strength, fine grained sandstone. Dark-red iron stained through core, indistinct bedding.							5.05-5.20 DB's						
								5.21-5.28 SM, CI						
								5.34 DB						
5.45								5.45 DB				5.45		
	SANDSTONE - Highly to moderately weathered, low strength, fine to medium grained sandstone, light grey with red-brown iron oxide staining							5.61 & 5.64 DB						
								5.76 DB						
								5.84 DB						
6.00								6.0 DB				100%	67%	
								6.07 DB						
								6.20 - T 75°, Fe, FR						
								6.34 DB						
								6.45 DB						
6.60	SHALE - Moderately to slightly weathered, medium strength, thinly laminated shale. Light grey with dark grey laminations							6.60 BP 5°, Fe, FR, RF						
								6.87 DB						
6.95														
7.00	CORED BOREHOLE DISCONTINUED AT 6.95m													
8.00														

Rig: Track mounted

Driller: Ben (TT)

Logged By: JB

Type of Boring: NMLC

Casing:

Water Observations:

Comments:

